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13 UNITED STATES DISTRICT COURT
14 NORTHERN DISTRICT OF CALIFORNIA
15 SAN JOSE DIVISION
16

17 UNITED STATES OF AMERICA,) Case No. CR-18-00258-EJD
18 Plaintiff,)
19 v.) **MS. HOLMES’ SENTENCING MEMORANDUM**
20 ELIZABETH HOLMES and) **AND MOTION FOR DOWNWARD**
RAMESH “SUNNY” BALWANI,) **DEPARTURE**
21 Defendants.) Date: November 18, 2022
22) Time: 10:00 AM
23) CTRM: 4, 5th Floor
24) Hon. Edward J. Davila
25) **REDACTED PUBLIC VERSION**
26) **UPDATED TO REMOVE CERTAIN REDACTIONS**
27)

28 MS. HOLMES’ SENTENCING MEMORANDUM
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TABLE OF AUTHORITIES

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FEDERAL CASES

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4 *Gall v. United States*, 552 U.S. 38 (2007)28, 47, 48

5 *Kimbrough v. United States*, 552 U.S. 85 (2007)47, 48

6 *Koon v. United States*, 518 U.S. 81, 113 (1996).....62

7 *United States v. Adelson*, 441 F. Supp. 2d 506 (S.D.N.Y. 2006) *passim*

8 *United States v. Atilla*, 1:15-cr-00867-RMB (S.D.N.Y.).....70

9 *United States v. Avila*, 95 F.3d 887 (9th Cir. 1996).....41

10 *United States v. Block*, 16-cr-595 (S.D.N.Y. Dec. 4, 2017)39

11 *United States v. Burgum*, 633 F.3d 810 (9th Cir. 2011)72

12 *United States v. Connors*, 2007 WL 2955612 (E.D. Pa. Oct. 9, 2007).....60

13 *United States v. Corsey*, 723 F.3d 366 (2d Cir. 2013).....62

14 *United States v. Dorvee*, 616 F.3d 174 (2d Cir. 2010).....48, 49

15 *United States v. Edwards*, 595 F.3d 1004 (9th Cir. 2010).....66

16 *United States v. Egge*, 223 F.3d 1128 (9th Cir. 2000).....43

17 *United States v. Executive Recycling, Inc.*, 953 F. Supp. 2d 1138 (D. Colo. 2013)32, 33

18 *United States v. Gupta*, 904 F. Supp. 2d 349 (S.D.N.Y. 2012) *passim*

19 *United States v. Hicks*, 217 F.3d 1038 (9th Cir. 2000)32

20 *United States v. Holden*, 908 F.3d 395 (9th Cir. 2018)28, 42

21 *United States v. Holmes*, 2021 WL 2044470 (N.D. Cal. May 22, 2021).....33

22 *United States v. Hussain*, 2019 WL 1995764 (N.D. Cal May 6, 2019)35, 38, 39, 40

23 *United States v. Johnson*, 2018 WL 1997975 (E.D.N.Y. Apr. 27, 2018).....62

24 *United States v. Jordan*, 256 F.3d 922 (9th Cir. 2001).....30

25 *United States v. Lonich*, 23 F.4th 881 (9th Cir. 2022).....30, 31, 32

26 *United States v. McClellan*, 1:16-cr-10094 (D. Mass.).....70

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1 *United States v. McFarland*, 1:17-cv-00600 (S.D.N.Y.).....70

2 *United States v. Nesbeth*, 188 F. Supp. 3d 179 (E.D.N.Y. 2016)65

3 *United States v. Parris*, 573 F. Supp. 2d 744 (E.D.N.Y. 2008).....62

4 *United States v. Prosperi*, 686 F.3d 32 (1st Cir. 2012).....60

5 *United States v. Rowan*, No. 1:16-cr-10343 (D. Mass.)71

6 *United States v. Shor*, 1:18-cr-00328 (S.D.N.Y.)70

7 *United States v. Showalter*, 569 F.3d 1150 (9th Cir. 2009).....40

8 *United States v. Stein*, 846 F.3d 1135 (11th Cir. 2017)32

9 *United States v. Taylor*, 1:19-cr-00850-JSR (S.D.N.Y.)69

10 *United States v. Tuzman*, No. 1:15-cr-00536 (S.D.N.Y.)70

11 *United States v. Wang*, 1:16-cr-10268 (D. Mass.)70

12 *United States v. Zolp*, 479 F.3d 715 (9th Cir. 2007).....35, 36

14 **STATUTES AND RULES**

15 18 U.S.C. § 3553(a) *passim*

16 Cal. Civ. Code § 3426.1(d)(2)54

17 U.S.S.G. § 2B1.1..... *passim*

18 U.S.S.G. § 3B1.1..... *passim*

19 U.S.S.G. § 3E1.1.....43, 47

20 **OTHER AUTHORITIES**

21 1 Melvin F. Jager, Trade Secrets Law §§ 5:21, 5:26, 13:3 (2022)54, 68

22 *A Mixed-Methods Examination of Sexual Coercion and Degradation Among Women in Violent*

23 *Relationships Who Do and Do Not Report Forced Sex*, 22 *Violence and Victims* 71 (2007)

2415

25 Deborah K. Anderson & Daniel G. Saunders, *Leaving an Abusive Partner: An Empirical Review*

26 *of Predictors, the Process of Leaving, and Psychological Well-Being*, 4 *Trauma, Violence, &*

27 *Abuse* (2003).....16

28 Elizabeth Szockyj, *Imprisoning White-Collar Criminals?*, 23 *S. Ill. Univ. L. J.* 485

(1999).....67

1 Francis T. Cullen., *Prisons Do Not Reduce Recidivism: The High Cost of Ignoring Science*, 91
 2 Prison J. 48S, 50S, 60S (2011).....64

3 Frank O. Bowman, III, *Sentencing High-Loss Corporate Insider Frauds After*, 20 Fed. Sent’g
 4 Rep. 167 (2008)61

5 Hamberger et al., *Coercive Control in Intimate Partner Violence*, 37 Aggression & Violent
 6 Behavior 1 (2017)14

7 Jed S. Rakoff, *Why the Federal Sentencing Guidelines Should Be Scrapped*, Fed. Sent’g Rep.
 8 226 (2017).....61

9 Jessica R. Goodkind et al., *A Contextual Analysis of Battered Women’s Safety Planning*, 10
 10 Violence Against Women 514 (2004)16

11 Jillian Hewitt, *Fifty Shades of Gray: Sentencing Trends in Major White-Collar Cases*, 125 Yale
 12 L. J. 1018 (2016).....61

13 Logan et al., *Silenced Suffering: The Need for a Better Understanding of Partner Sexual
 14 Violence*, 16 Trauma, Violence, & Abuse 111 (2015).....15

15 Mark H. Allenbaugh, *“Drawn from Nowhere”: A Review of the U.S. Sentencing Commission’s
 16 White-Collar Sentencing Guidelines and Loss Data*, 26 Fed. Sent’g Rep. 19 (2013)61

17 Mary Ann Dutton & Lisa A. Goodman, *Coercion in Intimate Partner Violence: Toward a New
 18 Conceptualization*, 52 Sex Roles 743 (2005).....12

19 Mirko Bagaric, *A Rational Theory of Mitigation and Aggravation in Sentencing: Why Less Is
 20 More When It Comes to Punishing Criminals*, 62 Buff. L. Rev. 1159 (2014).....67

21 Nicolas Rabener, *“Portfolio Construction in Venture Capital,” Harvest*, at 3 (May 24, 2021)....50

22 Paul A. Gompers et al., *How Do Venture Capitalists Make Decisions?*, 135 J. Fin. Econ. 169
 23 (2020).....51, 52

24 Richard Frase, *Punishment Purposes*, 58 Stanford L. Rev. 67 (2005)67

25 S. Rep. No. 98-225 (1983).....66

26 Shannon B. Nicholson & David J. Lutz, *The Importance of Cognitive Dissonance in
 27 Understanding and Treating Victims of Intimate Partner Violence*, 26 Journal of Aggression,
 28 Maltreatment, & Trauma 475 (2017).....17

United States Department of Justice National Institute of Justice, *5 Things About Deterrence*
 (2016).....67

1 **MEMORANDUM OF POINTS AND AUTHORITIES**

2 **I. PRELIMINARY STATEMENT**

3 Elizabeth Holmes stands before the Court having been convicted of conspiracy to commit wire
4 fraud and three individual counts of wire fraud with respect to certain sophisticated investors in her
5 company, Theranos. In sentencing her, the Court's task is a heavy one. Ms. Holmes was 19 when she
6 founded her company, her first business experience; in 2010, the beginning of the charged period, she
7 was 25 and turned 26; and when her company shut down in 2018 she was just 34 years old. She
8 founded and built Theranos for indisputably good reasons. She worked tirelessly along with hundreds of
9 brilliant and committed employees to improve access to affordable health information. The company
10 achieved incredibly valuable inventions for which the United States government is still issuing patents
11 as recently as July of *this year*. Ex. B.¹ She suffered substantial trauma throughout the time period of
12 the offense. When criticisms arose, she committed fully to identifying, acknowledging, and fixing
13 errors. She never cashed out, and she went down with the ship when the company failed. And
14 regardless of the sentence the Court imposes, for the rest of her life, she and her family will be punished.
15 As her partner knows all too well, "[t]here is no avoiding the scorn that accompanies Elizabeth Holmes."
16 Ex. A at 7-8 (B. Evans Ltr. at 7-8).

17 Among the countless people in our society who do not know Elizabeth Holmes yet think they
18 know about her case from the unusually intense media coverage of it, Ms. Holmes has become a
19 caricature to be mocked and vilified. The Court has the opportunity (and obligation) here to look
20 beyond that caricature, as it has throughout this case, and examine Ms. Holmes the human being. More
21 than 130 individuals who actually know Ms. Holmes have written to the Court to help in that process.
22 Among them are friends, family, Theranos investors, Theranos Board members, and former employees
23 who served in a variety of roles at Theranos, all of whom submit these letters despite the risk that they
24 will be criticized for their support. These are people who know Ms. Holmes and her character, remorse,
25 and capacity to do good.

26
27 ¹ All Exhibits cited herein as "Ex." are exhibits to the Declaration of Katherine Trefz. Admitted
28 trial exhibits are cited as "TX."

1 The real Elizabeth Holmes is “a compassionate friend who is there for the people around her—to
2 support, comfort, cheer on, problem solve, and connect.” Ex. A at 62 (G. Bianchini Ltr. at 1).

3 The real Elizabeth Holmes is the friend who writes “letters that I still keep and read again
4 anytime I need to be reminded of my purpose and inner strength.” Ex. A at 181 (J. Lamping Ltr. at 2).

5 The real Elizabeth Holmes is a devoted mother who “turns . . . ordinary moments into magical
6 experiences of unbounded love and wonder” for her son. Ex. A at 6 (B. Evans Ltr. at 6).

7 The real Elizabeth Holmes is “[e]xtremely genuine, giving, and selfless,” “unlike anyone else
8 I’ve met in Silicon Valley.” Ex. A at 271 (Y. Yu Ltr. at 1).

9 The real Elizabeth Holmes was an “approachable, attentive, and supportive” “employee focused
10 CEO[.]” Ex. A at 78 (T. Brumett Ltr.).

11 The real Elizabeth Holmes faced the challenges at Theranos from 2016 to 2018 with “steadfast
12 ethical principles, complete dedication to what was best for Theranos, and admirable courage.” Ex. A at
13 74 (F. Bonanni Ltr. at 3).

14 The real Elizabeth Holmes is “driven by a single and simple purpose; she wants to make the
15 world a better place than it would have been without her.” Ex. A at 96 (T. Cooper Ltr. at 1).

16 The real Elizabeth Holmes “has within her a sincere desire to help others, to be of meaningful
17 service, and possesses the capacity to redeem herself.” Ex. A at 77 (C. Booker Ltr. at 2).

18 * * *

19 Section 3553(a) requires the Court to fashion a sentence “sufficient, but not greater than
20 necessary,” to serve the purposes of sentencing. If a period of confinement is necessary, the defense
21 suggests that a term of eighteen months or less, with a subsequent supervised release period that requires
22 community service, will amply meet that charge. But the defense believes that home confinement with a
23 requirement that Ms. Holmes continue her current service work is sufficient. We acknowledge that this
24 may seem a tall order given the public perception of this case—especially when Ms. Holmes is viewed
25 as the caricature, not the person; when the company is viewed as a house of cards, not as the ambitious,
26 inventive, and indisputably valuable enterprise it was; and when the media vitriol for Ms. Holmes is
27 taken into account. But the Court’s difficult task is to look beyond those surface-level views when it

1 fashions its sentence. In doing so, we ask that the Court consider, as it must, the real person, the real
 2 company and the complex circumstances surrounding the offense conduct, and the important principle
 3 that “no defendant should be made a martyr to public passion.” *United States v. Gupta*, 904 F. Supp. 2d
 4 349, 355 (S.D.N.Y. 2012) (Rakoff, J.). As discussed in more detail in the pages that follow, this is a
 5 unique case and this defendant is a singular human with much to give.

6 **II. MS. HOLMES’ PERSONAL HISTORY AND CHARACTERISTICS**

7 As the more than 130 letters submitted on her behalf attest, Ms. Holmes is a warm, thoughtful
 8 friend; a loving and dedicated mother and partner; a good listener; a mentor to young women and
 9 entrepreneurs; a boss who cared about the company’s employees; a chief executive dedicated to her
 10 company’s mission; an intelligent and inventive problem solver; and a humble, hardworking, and
 11 compassionate woman who deeply wants to give what she can to the world. Her positive impact on her
 12 friends, family, and former employees and advisors is evident in this outpouring of support. Despite her
 13 current circumstances, she is an “ardently resilient optimist”—a person whose “devotion to constructive
 14 impact remains natural, profound, and inspirational” even as she faces the prospect of a profound loss of
 15 liberty. Ex. A at 95 (A. & S. Kiessig Ltr.).

16 **A. Ms. Holmes’ Personal History**

17 **1. Childhood**

18 Ms. Holmes began developing her good qualities through a childhood for which she has always
 19 been grateful. Born in Washington, D.C. in 1984, Ms. Holmes was raised primarily in Washington,
 20 D.C. and Houston, Texas with her brother Christian, two years her junior. Her parents were both public
 21 servants. Her mother, Noel, worked on Capitol Hill for Members of Congress and Committees in the
 22 House of Representatives. Ex. A at 31 (N. Holmes Ltr. at 2). Her father, Chris, spent years working at
 23 the Environmental Protection Agency, the United States Agency for International Development
 24 (USAID), and the State Department, focused on issues related to disaster relief. Chris was Ms. Holmes’
 25 personal hero. PSR ¶ 124. He would return from his work abroad with stories about responding to
 26 disease, genocide, war, and natural disasters and imparted the view that the most important thing he
 27 could do with his life was to help others. Ex. A at 16 (C. Holmes Ltr. at 4). From her father, Ms.

1 Holmes learned the lessons of stoicism and sacrifice in service of the greater good, and she took them to
2 heart early in her childhood as a foundational trait. Her parents “instilled in her that life should not be
3 wasted.” PSR ¶ 124.

4 Ms. Holmes was a studious and hard-working child. She had, as her mother describes, a “gritty
5 determination.” Ex. A at 30 (N. Holmes Ltr. at 1); *see also* PSR ¶ 124. She was naturally curious with
6 “a deep hunger for knowledge,” Ex. A at 20 (C. Holmes Ltr. at 8), which she explored as a young child
7 through talking about nature and the world with her parents, *id.* at 14 (C. Holmes Ltr. at 2), 32 (N.
8 Holmes Ltr. at 3). As a teenager, she poured that curiosity into schoolwork and extracurriculars, such as
9 spending part of her Saturdays taking Chinese lessons from the time she was a pre-teen. *Id.* at 20 (C.
10 Holmes Ltr. at 8), 31, 33 (N. Holmes Ltr. at 2, 4), 133 (G. Fan Ltr. at 1). Ms. Holmes’ brother Christian
11 describes her focus and work ethic as a teenager:

12 She was driven and goal-oriented and thrived in whatever she set her mind to, whether it
13 was academics, personal challenges she set for herself, developing a new skill, etc. She
14 had an extraordinary work ethic and has always excelled as a student. She never cut corners
15 It was critical to her to apply herself fully to whatever she took on. . . . She especially
16 valued the relationships with people she felt she could learn from and be challenged by.
17 Teachers and mentors were just as important as friends, and she actively sought out
18 direction from people with experience who she could learn from.

19 Ex. A at 162 (Christian Holmes Ltr. at 1).

20 Beyond academics, Ms. Holmes channeled that determination and work ethic into what she
21 could do to help others. As longtime family friend Mary Crane describes: “I often had the sense that
22 [Elizabeth and Christian] knew ‘to whom much is given, much is expected.’” Ex. A at 100 (M. Crane
23 Ltr. at 1). Indeed, Ms. Holmes’ childhood letters to her parents express a deep gratitude for the life she
24 was given. Ex. A at 32 (N. Holmes Ltr. at 3); Ex. C (letter). In addition to her compassion towards
25 individuals, Ms. Holmes looked to what she could do for the world. “Even in high school, her idealism
26 and drive to help people stood out. During sophomore year, Liz led efforts to help victims of the
27 Kosovo War—a world away from Houston.” Ex. A at 273 (C. Zygourakis Ltr. at 1); *see id.* at 193 (C.
28 McCormack Ltr.). As she told her friend in an interview for her high school newspaper, she believed
that “[w]e have the potential to reform and to prevent the horrors of this world if we simply learn and
act.” *Id.* at 273 (C. Zygourakis Ltr. at 1). She organized similar campaigns for other causes, including

1 Turkey earthquake relief. Ms. Holmes' Chinese tutor describes how, after she "read a story about how
2 children in the remote areas of China lacked access to education," "[s]he immediately started
3 contemplating how she could help" and "took action," developing "a plan to work with major software
4 companies in the United States to provide software to schools in China at a low cost." Ex. A at 133 (G.
5 Fan Ltr. at 1). "What inspired her was the story, but what made her work so hard . . . was her generous
6 heart." *Id.* at 134 (G. Fan Ltr. at 2).

7 Ms. Holmes was also a source of support within her own family. Her father describes how,
8 when Enron collapsed during Ms. Holmes' senior year of high school, he lost his job, savings, and
9 healthcare. "During that time, Elizabeth was not just my daughter; she was my wise friend and helper."
10 Ex. A at 20 (C. Holmes Ltr. at 8).

11 2. College

12 Ms. Holmes began attending college at Stanford University in the fall of 2002. Consistent with
13 her longtime interest in science, Ms. Holmes focused on chemical engineering with an eye toward
14 combining several engineering disciplines. She brought to those difficult classes her deep work ethic
15 and sound moral compass. As her college friend Lauren Stat describes, Ms. Holmes insisted that there
16 was no need to rely on study groups who had inherited the answers to problem sets, "those relics of
17 dubious morality. And so with her leadership, we proceeded to learn the right way, the hard way." Ex.
18 A at 246 (L. Stat Ltr. at 1). Ms. Holmes started auditing graduate-level courses and working in the
19 laboratory of Professor Channing Robertson, where she was part of a team developing microfluidic
20 sensors.

21 Ms. Holmes also enjoyed the social aspects of college life, including the friends she made there.
22 Her mother describes that in her regular calls "she was full of joy and enthusiasm about her life." Ex. A
23 at 34 (N. Holmes Ltr. at 5). Her brother Christian recalls how she came out of her academic shell
24 towards the end of high school and that in the first year at Stanford "she seemed happy and well-
25 adjusted to college life." Ex. A at 162 (Christian Holmes Ltr. at 1). Her friends describe her as a caring
26 person who believed in the genuine goodness of people and loved to talk about ideas. She was "full of
27 vibrancy, curiosity, kindness, and warmth," "extremely intellectual yet unpretentious and always

1 looking to better herself and those around her.” Ex. A at 180 (J. Lamping Ltr. at 1). As friend Prerna
2 Gupta describes:

3 We spent countless hours traversing the Stanford hills and discussing the meaning of life.
4 She was raised as a Christian, and I as a Hindu, but we found common ground in our
5 explorations of Buddhism. We shared a belief that we were meant to do good in the world.
6 That the purpose of life was love. That we could achieve anything we set our mind and
7 hearts to, as long as we didn’t give up. And that, most of all, we must dedicate our lives to
8 having a positive impact on the world.

9 Ex. A at 154 (P. Gupta Ltr. at 1); *see id.* at 130 (J. Ewing Ltr. at 1) (“While fraternity boys puked on
10 carpets and tried to coerce us into endless games of beer pong, Elizabeth whispered in the corner about
11 things like philosophy, psychology, consciousness, and the meaning of life.”); *id.* at 255 (A. Sutro Ltr.).
12 This period was one of the happiest of Ms. Holmes’ life. PSR ¶ 128.

13 The summer following her freshman year at Stanford, Ms. Holmes interned at the Genome
14 Institute in Singapore. Ex. A at 35 (N. Holmes Ltr. at 6). Putting together concepts from various types
15 of research she had conducted, she came up with the idea that would form the basis for her first patent
16 application. When she returned home from the summer abroad, she holed up in her room with her
17 research and filed the provisional patent application with a mind to build something from the invention
18 that would make early detection of disease easier. Ex. A at 35 (N. Holmes Ltr. at 6).

19 Stanford’s autumn quarter began in September 2003. Ms. Holmes had moved into her sorority
20 house at Kappa Alpha Theta, surrounded by friends. Less than two weeks into the quarter, Ms. Holmes
21 attended a fraternity party with some of her sorority sisters. While intoxicated and initially unconscious,
22 she was raped by a friend who was a member of one of the Stanford-affiliated fraternities. PSR ¶ 127;
23 *see also* Ex. A at 180 (J. Lamping Ltr. at 1), 154 (P. Gupta Ltr. at 1).

24 Following the rape, Ms. Holmes experienced acute self-blame, isolation, and depression, and
25 struggled with suicidal thoughts. PSR ¶ 128. Her demeanor “instantly changed.” Ex. A at 162
26 (Christian Holmes Ltr. at 1). She moved out of the sorority house to a smaller dorm across campus,
27 where she lived alone.² As a coping mechanism, Ms. Holmes devoted all of her energy and focus into

28 ² During this time period, Ms. Holmes also felt isolated from her parents because of the extreme
self-blame and shame she felt. She felt she had disappointed them because she had been drinking and
had been at a party the night she was raped. *See* Ex. D (10/16/2003 “Elizabeth’s Formula” written by C.
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1 starting a company based around her invention. PSR ¶ 128. Her brother observes that after the assault,
 2 she “became more withdrawn, less social, and mono-focused on the next venture.” Ex. A at 162
 3 (Christian Holmes Ltr. at 1). “After her rape, she was both broken and resolute, using her anger and hurt
 4 as an impetus to make the changes she so strongly believed in.” Ex. A at 247 (L. Stat Ltr. at 2). Rather
 5 than seeking to heal, she came to view the assault as a crucible that would help drive her work as she
 6 turned to the higher purpose of helping solve difficult health care challenges through the company she
 7 was forming. *See* Holmes 11/29/21 Tr. 7848:21-7849:6; Ex. A at 22 (C. Holmes Ltr. at 10); *id.* at 197
 8 (S. Mantri Ltr.).

9 After the winter quarter of 2004, Ms. Holmes chose to take a leave of absence from Stanford to
 10 focus on building the nascent company she was forming around her invention. Holmes 11/29/21 Tr.
 11 7848:21-24. That company, originally called RealTime Cures, became Theranos.

12 3. CEO of Theranos

13 When Ms. Holmes started the company that became Theranos, she was a teenager who had four
 14 quarters of college and some laboratory research experience under her belt but no business or
 15 management experience. She learned how to navigate that complex world without the benefit of
 16 completing college, studying for a Masters in Business Administration, or obtaining years of industry
 17 experience, like most CEOs. She relied instead on her personal determination, advisors, employees, and
 18 lessons learned from her own mistakes and successes. She served as CEO from the company’s founding
 19 until her June 2018 indictment. At the time she was indicted, two and a half years after significant
 20 public controversy about Theranos had arisen, Ms. Holmes was just 34 years old, still a relative
 21 newcomer to the business world.

22 Though she lacked business and management experience, Ms. Holmes brought to Theranos the
 23 qualities she had developed in her childhood—a deeply held interest in improving lives and doing good;
 24

25 _____
 26 Holmes for E. Holmes) (indicating that no drinking, no associating with bad quality people, and no
 27 laziness would lead to creativity and achievement, which was the formula for happiness); Ex. E at 1, 2
 28 (1/4/2004 Ltr. from C. Holmes to E. Holmes) (“You have taken a critical step by moving into the
 dormitory but there could be tremendous temptation to return to old ways. . . . So, put the past behind
 you, begin anew in your new room.”).

1 an unmatched work ethic; a creative mind and willingness to learn; and kindness, compassion, and
2 gratitude. Ms. Holmes recognized (at least some of) her limits and sought out advice from those who
3 could provide the expertise that she lacked. Sunny Balwani was one of them, and became her most
4 important advisor. *See* § II(A)(4). But there were others as well. A consultant who worked with Ms.
5 Holmes in 2004 observes that Ms. Holmes “was very good to acknowledge where she did have expertise
6 but also to respect when she didn’t and to defer to those who did.” Ex. A at 85 (A. Cavers Ltr. at 1); *see*
7 *id.* at 53 (A. Ashton Ltr. at 2). As time went on, Ms. Holmes hired experienced scientists and other
8 personnel with appropriate experience. Over the company’s life, it had hundreds of employees: dozens
9 of scientists and engineers with Ph.Ds, M.D.s, and Masters degrees; employees who had previously
10 worked at medical device, pharmaceutical, and software companies; manufacturing personnel who
11 worked on machining, injection molding, and assembly; experienced marketing personnel; and in-house
12 lawyers who had worked at major law firms. Theranos also hired outside law firms, including Wilson
13 Sonsini, Boies Schiller, and Hyman Phelps for corporate, intellectual property, and regulatory work;
14 outside accounting firms; a leading laboratory consultant to help start and advise on Theranos’ clinical
15 laboratory; and outside marketing firms. Ms. Holmes accepted recommendations for Board members
16 whom she believed would provide an appropriate mix of business, public policy, legal, and medical
17 expertise, and who also had experience making sweeping changes to institutional structures that could
18 help Theranos in its journey to fulfill its grand but challenging aspirations.³ Ms. Holmes was a visionary
19 without a college degree who was learning how to be a CEO, but she surrounded herself with
20 employees, directors, advisors, mentors, and consultants whom she believed had the right experience to
21 make Theranos successful.

22 People who worked with her describe Ms. Holmes as an enthusiastic, inspiring, compassionate,
23 and humble CEO. Ms. Holmes’ “drive and ambition was infectious.” Ex. A at 109 (C. Dillon Ltr.).
24 During some of Theranos’ most difficult periods, “[w]hile there were without question more difficult
25

26 ³ For example, by Fall 2015, the Board of Directors included the former CEOs of Wells Fargo
27 and Bechtel Corp., the Chairman and Managing Partner of a prominent national law firm, two medical
28 doctors, multiple members of the boards of other companies, and multiple individuals with government
experience.

1 days than not, Elizabeth came to the office every single day with a highly engaging and positive energy
2 that created the foundation of an environment that allowed us to focus on ‘doing our very best work.’”
3 Ex. A at 96 (T. Cooper Ltr. at 1). Dr. Fabrizio Bonanni, a former Amgen executive who served on
4 Theranos’ Board of Directors from 2016 to 2018, was “struck” by Ms. Holmes’ ability to listen: “She is
5 really interested in hearing feedback, particularly when the feedback is critical of her, her actions, or her
6 company. She listens intently and internalizes the message for further processing. She may ask
7 clarifying questions but never interjects biases or defensiveness.” Ex. A at 74 (F. Bonanni Ltr. at 3).
8 Craig Josephson, who was a member of Theranos’ executive team in the last year of the company,
9 echoes these sentiments, describing Ms. Holmes as focused on making decisions with integrity, doing
10 the right thing for the patient, and being responsive to suggested changes. Ex. A at 169 (C. Josephson
11 Ltr. at 1).

12 Former Theranos employees observe that Ms. Holmes genuinely cared about the people who
13 worked for her company. *See* Ex. A at 78 (T. Brumett Ltr.) (Over decades-long career, “I found
14 Elizabeth to be one of the most employee focused CEOs I have ever worked for. She was approachable,
15 attentive, and supportive.”); *id.* at 87 (L. Cheng Ltr. at 1) (“polite, genuine, and naturally empathetic”);
16 *id.* at 192 (J. Lu Ltr.) (“She is a hard working woman and was nothing but kind to her employees.”); *id.*
17 at 204 (J. Moalli Ltr. at 2) (“I personally witnessed Elizabeth working with her team on a daily basis,
18 and despite the enormous amount of pressure she was under, she was always empathetic, understanding,
19 and open to new ideas.”). Former Theranos Vice President of Hardware Manufacturing Tim Cooper
20 notes: “Her display of genuine care for employees drove a tremendous sense of value and worth within
21 many of us.” Ex. A at 97 (T. Cooper Ltr. at 2). “She also reached out, to her best ability, to thank the
22 employees for their dedication to the company.” Ex. A at 266 (H. Vu Ltr. at 1). Whether it was
23 addressing an employee’s health or personal loss or considering difficult staffing decisions at key points
24 in the company’s history, Ms. Holmes demonstrated “care and compassion” about individual employees.
25 *Id.* at 98 (T. Cooper Ltr. at 3); *id.* at 266 (H. Vu Ltr. at 1) (“One thing I had noticed was that she cares so
26 much about the employees and their families.”). One former employee describes how, when Ms.
27 Holmes heard about [REDACTED], she “came to the Newark facility where I

1 worked, sought me out, embraced me and said she would completely support me in every way possible
2 [REDACTED].” *Id.* at 199 (M. McCarthy Ltr.).

3 When staffing reductions were necessary, “Elizabeth struggled with the implications of these
4 decisions on the individual and was never comfortable with the negative consequences for those
5 affected, regardless of the business rationalization or justification.” *Id.* at 98 (T. Cooper Ltr. at 3). This
6 care did not go unnoticed. A former security supervisor for Theranos’ Arizona operations recalls:
7 “Elizabeth was there for every employee, especially when Theranos closed. Elizabeth made it a point to
8 be there and show significant support during a sudden and arduous job search. Theranos provided every
9 employee with a separation package, resume support services, and job placement before it closed its
10 doors.” Ex. A at 207 (B. Morel Ltr.). Former Theranos Laboratory Director Donald Tschirhart summed
11 it up: “Everyone at Theranos liked her; she was strong, she fought for us and she treated us well until the
12 last moments.” Ex. A at 262 (D. Tschirhart Ltr. at 2).

13 Ms. Holmes did not build Theranos for nefarious reasons—indeed, the opposite is true. PSR ¶
14 194. The company’s mission was to provide access to actionable health information to improve human
15 health on an equitable basis. Ms. Holmes was fundamentally committed to this lofty purpose, and not to
16 her own monetary gain. As former Board Member Bill Foege, former Director of the Centers for
17 Disease Control and Prevention (CDC), puts it in his letter to the Court: “Ms. Holmes was not interested
18 in money.” Ex. A at 136 (W. Foege Ltr. at 2); *see also id.* at 75 (F. Bonanni Ltr. at 4). Former Vice
19 President of Hardware Manufacturing Tim Cooper notes that through his many interactions with Ms.
20 Holmes, “it is my view and strong belief that she has never been motivated by anything other than
21 realizing this vision. She never brought financial considerations into our discussions and always placed
22 a heavy emphasis and focus on ensuring that a positive experience and outcome for the individual
23 (patient) was at the forefront of our work.” Ex. A at 97 (T. Cooper Ltr. at 2); *id.* at 109 (C. Dillon Ltr.)
24 (over 12 years on Theranos’ research and development team, “I never felt that the love of money or
25 greed was ever a motivation for her hard work and dedication. In fact, I only knew her to be
26 compassionate wanting to help people receive better and more accurate healthcare.”).

1 Ms. Holmes did not personally profit from the investments of others into Theranos. Those
2 investments were used to pay for research and development of groundbreaking inventions and the
3 company's operations—not to enrich Ms. Holmes or anyone else. Ex. A at 136 (W. Foege Ltr. at 2).
4 Although Ms. Holmes was touted as a billionaire in the media, her purported “fortune” was entirely on
5 paper based on the Theranos stock she owned. She never cashed in that ownership; in fact, she never
6 sold a share of stock, despite the opportunity to do so at several points over the years. *See* Holmes
7 11/29/21 Tr. 7914:23-7915:23 (testimony of E. Holmes); *see* Ex. A at 241 (D. Sokol Ltr. at 4) (“In the
8 2015 timeframe, Ms. Holmes was offered the opportunity to sell hundreds of millions of dollars in her
9 stock holdings in Theranos. She turned down that opportunity because she felt that she should not profit
10 until all of her investors had returned their investment profitably.”). She asked to be paid in Theranos
11 shares rather than cash for her work as CEO, *see* TX 10510, a request that the Theranos Board denied.
12 *See also* Ex. A at 74 (F. Bonanni Ltr at 3) (describing how Ms. Holmes was “far from being the most
13 compensated employee” at Theranos and the Board’s efforts to increase her compensation were met by
14 “her strong resistance”). Near the end of the company’s life, “she volunteered even to give up her
15 ownership of the company in hopes of saving it.” Ex. A at 262 (D. Tschirhart Ltr. at 2), and voluntarily
16 gave investors a “good portion of her own shares,” *see id.* at 74 (F. Bonanni Ltr. at 3). Nor did Ms.
17 Holmes use corporate resources inappropriately for her own benefit. Dr. Foege, who was a member of
18 the Board of Directors from 2014 through 2018, recalls: “The Board had an audit performed which
19 found no evidence of fraud nor diversion of money.” Ex. A at 136 (W. Foege Ltr. at 2).

20 “She always put the interests of the company ahead of her own,” notes Daniel Warmenhoven, a
21 technology industry executive who served on Theranos’ Board from 2016 to 2018. Ex. A at 269 (D.
22 Warmenhoven Ltr.). Dr. Fabrizio Bonanni, also a Board member from 2016 to 2018, observes: “In my
23 almost fifty years in business, I have not seen or heard of a more selfless CEO.” Ex. A at 74 (F.
24 Bonanni Ltr.) at 3.

25 4. Relationship with Mr. Balwani

26 It is impossible to understand Ms. Holmes’ experience at Theranos, and particularly with respect
27 to the offense conduct, without closely examining her relationship with Sunny Balwani. In the wake of

1 her rape, around the time she was considering leaving Stanford, Ms. Holmes reconnected with Mr.
2 Balwani. Ms. Holmes first met Mr. Balwani just after she graduated from high school on the Stanford-
3 sponsored trip to China. Ex. F (photo); Holmes 11/29/21 Tr. 7847:4-7. She was eighteen, and he was
4 thirty-eight. *Id.* at 7847:8-11. She understood that he was a successful businessman who had built and
5 sold his own company and had worked with Microsoft, and she viewed him as a potential advisor and
6 mentor during that summer. *Id.* at 7847:12-24. As Ms. Holmes was thinking about leaving Stanford,
7 she responded to outreach from Mr. Balwani. Mr. Balwani encouraged and supported her decision and
8 offered his business advice. Ms. Holmes confided her trauma and depression to him. He told her she
9 was safe now that she was with him. *Id.* at 7849:10-7850:3. They began a romantic relationship.

10 The relationship between Ms. Holmes and Mr. Balwani was characterized by severe emotional,
11 psychological, and sexual abuse perpetrated by Mr. Balwani.

12 Mr. Balwani expressed his desire to help Ms. Holmes develop as a person and a leader. As time
13 went on, that expressed love and desire manifested as progressively controlling behavior. *See What is*
14 *Domestic Violence*, U.S. Department of Justice Office of Violence Against Women,
15 <https://www.justice.gov/ovw/domestic-violence> (last visited Nov. 8, 2022) (“Domestic violence is a
16 pattern of abusive behavior in any relationship that is used by one partner to gain or maintain power and
17 control over another intimate partner.”); Mary Ann Dutton & Lisa A. Goodman, *Coercion in Intimate*
18 *Partner Violence: Toward a New Conceptualization*, 52 *Sex Roles* 743, 747 (2005) (describing intimate
19 partner abuse as multifaceted and centered around coercive control). Some (but not all) of that behavior
20 is described below.

21 Mr. Balwani demanded that Ms. Holmes follow a series of prescriptions, including keeping a
22 strict schedule with little sleep, limiting her food intake, refraining from alcohol, and maintaining a
23 particular manner and personality style. Mr. Balwani prescribed tenets for Ms. Holmes to follow, which
24 he wrote for her, *see, e.g.*, TX 7734, and Ms. Holmes was required to write out her schedule regularly
25 and confirm her commitment to his teachings, *see, e.g.*, TX 7731.

26 Mr. Balwani also insisted, in the form of verbal and written berating, that Ms. Holmes was
27 incompetent, fundamentally flawed as a person and a leader, and needed to change who she was—in his

1 words, “kill” the current Elizabeth and become a new one—to become a worthy leader. Holmes
 2 11/29/21 Tr. 7859:16-21, 7863:11-23. The “advice” he provided was large and small—from live
 3 criticisms of her manner of speaking, *see* TX 5387F at -148 (“You are speaking with everyone in your
 4 giddy voice”), -246 (“U r rambling now. Let’s stay focused”), to lengthy diatribes that went to her core
 5 as a leader. Ms. Holmes’ assistant from 2014 through 2018 confirms: “[Mr. Balwani] would constantly
 6 go into her office, shut the door, and then kick out whoever was in her office. He would then scream at
 7 her. I could overhear the screaming.” *See* Ex. A at 116 (L. Durkin Ltr.). Because Mr. Balwani insisted
 8 that she write down and repeat back to him what he was saying, Ms. Holmes captured some of these
 9 tirades in iPhone notes, such as one modified April 5, 2015. *See* TX 7534 at 2 (“Toughen up. Become
 10 masculine be in battle [*sic*]. Masculine game. Business masculine game.”); *id.* (“I’m so sick and tired of
 11 this mediocrity you create. It’s astonishing. You’ll never hold anybody responsible for any actions.
 12 You’ll never do that. . . . Monkey’s [*sic*] can’t fly spaceships.”). Text messages also show Ms. Holmes
 13 seeking Mr. Balwani’s approval as she repeated back his lessons. *See* TX 5387F at -63 (Ms. Holmes:
 14 “My new life as of this night and forever more: - total confidence in myself best business person of the
 15 year - focus - details excellent - don’t give what anyone thinks – engage employees in meetings by
 16 stories and making it about them (ie prepare well)” . . . Mr. Balwani: “Awesome. U r listening and
 17 paying attention.”).

18 Ms. Holmes believed Mr. Balwani’s criticisms of her and sought to do better. She likewise
 19 believed he was fundamentally important to the company: in her mind, as in his screeds, setbacks were
 20 due to her failures, but success was due to him—after all, according to him: “I have molded you.” TX
 21 5387F at -207. Although the precise contours evolved over time, this pattern played out on a regular
 22 basis throughout the relationship, including when Mr. Balwani was at the company.⁴ Dynamics such as
 23 these are common in abusive relationships and especially effective at creating a culture of control. *E.g.*,

25 ⁴ Mr. Balwani’s rage was not solely directed at Ms. Holmes. Ms. Holmes’ sister-in-law, who
 26 began dating Ms. Holmes’ brother Christian while he was working at Theranos, observed that “the
 27 Sunny I saw was certainly controlling. . . . In the communications I witnessed first hand, it was clear he
 28 was adept at belittling people and making them feel stupid.” Ex. A at 152 (C. Gualy Ltr. at 1). Others
 whom the government interviewed but chose not to call at trial made similar observations.

1 Hamberger et al., *Coercive Control in Intimate Partner Violence*, 37 *Aggression & Violent Behavior* 1,
2 3 (2017) (“[I]t is important to note that vulnerabilities and related threats are not limited to violence. For
3 example, the systematic tearing down of the target’s self confidence and trust in her own decisions,
4 opinions and abilities commonly seen in IPV may make her vulnerable to threats of abandonment . . . ,
5 judgment, humiliation, or failure if the perpetrator’s desires are not met. In this way, the consequences
6 of a pattern of emotional abuse may make a target more vulnerable to coercive control.”).

7 Over the first several years of their relationship, Ms. Holmes became increasingly isolated from
8 friends and family. *See* Holmes 11/29/21 Tr. 7860:13-7861:8. Friends describe losing contact with Ms.
9 Holmes. Ex. A at 154 (P. Gupta Ltr. at 1) (“She also fell into an all-consuming relationship with Sunny,
10 who seemed to pull her farther away from me. She became reserved and withdrawn, and strangely
11 secretive. I was worried about the effect Sunny was having on her, and I urged her to take caution, but
12 to no avail.”); *id.* at 130 (J. Ewing Ltr. at 1) (“Sunny was significantly older than we were, to an
13 alarming degree, but Elizabeth was very taken in by him. He struck me at the time like a father figure,
14 someone she trusted, who could guide and mentor her, who could validate her, as she shouldered this
15 incredible undertaking she felt was necessary for the world. I lost contact with Elizabeth after that.”).

16 Ms. Holmes’ parents recall their own discomfort and concern with their daughter’s relationship
17 with Mr. Balwani. They were aware that Mr. Balwani insisted on listening when they spoke with their
18 daughter on the phone, and they witnessed Mr. Balwani criticize and yell at Ms. Holmes until she cried,
19 along with other behavior that made them uncomfortable. *See generally* Ex. A at 35-37 (N. Holmes Ltr.
20 at 6-8), 22 (C. Holmes Ltr.) at 10. Noel Holmes recalls a trip she took with Ms. Holmes:

21 In January 2007, we were finally able to go away to Big Sur for two days over the weekend
22 with just our family. Although it was difficult to connect by phone there[,] Sunny kept
23 calling and berating Elizabeth. He had her in tears and she insisted we needed to leave.
24 When we started driving back and the connection was better, I could hear him yelling at
25 her for not working. She became very nervous and kept asking if we could somehow drive
26 faster to get home.

27 Ex. A at 36 (N. Holmes Ltr. at 7). Ms. Holmes’ brother Christian similarly recalls how his relationship
28 with Ms. Holmes changed after she began her relationship with Mr. Balwani:

In the years that followed, my relationship with my sister was reduced to a series of
formalities around her work. She spent all her time with Sunny and rarely included our

1 family. She stopped coming to family gatherings and became more remote. I lived within
2 driving distance from Elizabeth for about 5 years during this time period and worked with
3 her for a number of years, and can't remember sharing a meal with just the two of us more
4 than a handful of times, let alone many meaningful conversations.

5 Ex. A at 162 (Christian Holmes Ltr. at 2); *see also* Ex. A at 152 (C. Gualy Ltr. at 1); *id.* at 116 (L.
6 Durkin Ltr.) (“Elizabeth was not allowed to have lunch or dinner with anyone but Mr. Balwani because
7 Mr. Balwani would not allow otherwise.”); *id.* at 166 (M. Holmes Ltr.). Isolating behavior is a hallmark
8 abuse tactic.⁵

9 Mr. Balwani’s abuse involved severe sexual elements that caused Ms. Holmes particular
10 distress, including thoughts of suicide. These events occurred in the home they shared, [REDACTED]

11 [REDACTED] Contemporaneous records
12 corroborate the aftermath: after a February 2015 incident, Ms. Holmes both expressed her personal
13 despair in an iPhone note, and also apologized to Mr. Balwani for her inability to be strong for him. *See*
14 TX 7517; TX 5387F at -121 (Ms. Holmes: “I’m sorry I wasn’t stronger for you this morning. That is
15 my responsibility and my role. I will never let that happen again.” . . . Ms. Holmes: “My job is to love
16 you when you’re stressed.” Mr. Balwani: “I know.”). [REDACTED]

17 [REDACTED]
18 [REDACTED] Research
19 on abusive relationships identifies sexual violence as deeply impactful because it “attack[s] core aspects
20 of bodily integrity, autonomy, and trust.” Logan et al., *Silenced Suffering: The Need for a Better*
21 *Understanding of Partner Sexual Violence*, 16 *Trauma, Violence, & Abuse* 111, 115 (2015); *see also*
22 Logan et al., *A Mixed-Methods Examination of Sexual Coercion and Degradation Among Women in*
23 *Violent Relationships Who Do and Do Not Report Forced Sex*, 22 *Violence and Victims* 71 (2007).

24 That Ms. Holmes trusted Mr. Balwani and offered expressions of love to him while
25 simultaneously suffering from his abuse should not come as a surprise. Research on abusive

26 _____
27 ⁵ *See generally* Dutton & Goodman, 52 *Sex Roles* at 749 (noting that “interfering with victims’
28 social networks . . . wear down one’s ability or will to resist”).

1 relationships makes clear that the coexistence of love and abuse is a central conundrum of such
2 relationships. See Deborah K. Anderson & Daniel G. Saunders, *Leaving an Abusive Partner: An*
3 *Empirical Review of Predictors, the Process of Leaving, and Psychological Well-Being*, 4 Trauma,
4 Violence, & Abuse 163, 170-71, 172, 175-78 (2003). Ms. Holmes was fearful of Mr. Balwani's wrath
5 and sought to please him, but she also trusted him completely, believed he had her best interests at heart,
6 and loved him. The text messages between them show expressions of love, apologies, and attempts to
7 appease—placating strategies well-recognized in the literature. *E.g.*, TX 5387F at -42-43. See, *e.g.*,
8 Jessica R. Goodkind et al., *A Contextual Analysis of Battered Women's Safety Planning*, 10 Violence
9 Against Women 514, 528 (2004) (describing placating strategies used by abused women and effects).

10 The severe abuse Ms. Holmes suffered at the hands of Mr. Balwani affected her deeply,
11 including in her role as CEO of Theranos. As she testified, the abuse occurred throughout the
12 relationship, including during the period when they both worked at Theranos and in the course of and
13 with regard to that work. See Holmes 11/29/21 Tr. 7860:4-8, 7870-7872; see also TX 7534; Ex. A at
14 116 (L. Durkin Ltr.). At Theranos, Mr. Balwani took primary responsibility for “operational” aspects of
15 the company. That included preparing the company's financial statements (including revenues and
16 revenue projections), managing the retail partnership with Walgreens, overseeing operations of the
17 clinical laboratory, as well as manufacturing operations and general personnel matters. Mr. Balwani
18 was also responsible for following up with potential investors after an initial meeting, as he was the best
19 positioned to answer questions about Theranos' financial model and projections, as well as the
20 operational issues that are often the topics of due diligence requests. Mr. Balwani not only ran
21 Theranos' operations but was also Ms. Holmes' most important advisor, and he had outsized influence
22 given the circumstances of their relationship. That is reflected in the government's most recent
23 assessment of the relationship:

24 Besides his position that we talked about, you can also infer that his close relationship with
25 Ms. Holmes would have given him a lot of influence over her, more than just his title alone
26 would provide. Remember also that Mr. Balwani was older and more experienced than
27 Ms. Holmes. So it would be no surprise that his advise [*sic*], his input would carry a lot of
28 weight with her. And that's what showed up in the text messages.

1 Balwani 6/24/22 Tr. 7652:9-17 (government rebuttal closing in S. Balwani trial). Until late 2015 or
2 early 2016, Ms. Holmes trusted Mr. Balwani completely. Holmes 11/29/21 Tr. 7875:15-25, 7876:1-
3 7877:10, 7879:16-21. As Ms. Holmes explained, between 2010 and 2016, Mr. Balwani “had taught me
4 everything that I thought I knew about business, and I thought he was the best business person that I
5 knew. And I think that I didn’t question him in the way that I otherwise would have.” *Id.* at 7875:21-
6 25. Ms. Holmes is still processing what effect the relationship had on her. As she testified, Mr. Balwani
7 “impacted everything about who I was, and I don’t fully understand that.” *Id.* at 7879:12-15.⁶ The fact
8 that the abusive dynamic affected their workplace relationship and the fact that Ms. Holmes deferred to
9 Mr. Balwani, especially in areas where he was formally responsible, is consistent with research on
10 intimate partner abuse. *E.g.*, Logan et al., 16 *Trauma, Violence, & Abuse* at 121 (“In essence, coercive
11 control erodes an individual’s capacity for independent decision making or personal agency. . . . Stark
12 (2007) argues that the net effect of coercive control on a victim is global: Victims suffer from
13 cumulative harms rather than just suffering from injuries resulting from specific and definable
14 incidents.”); Dutton & Goodman, 52 *Sex Roles* at 748-752; Hamberger et al., 37 *Aggression & Violent
15 Behavior* at 2-3 (“Multiple authors agree that coercive control impacts virtually all dimensions of the
16 target’s life, including everyday actions, use of economic resources, relationships with family and
17 friends, educational and occupational opportunities, sexuality, and general life activities.”).

18 Ms. Holmes was finally able to leave her relationship with Mr. Balwani once he left the
19 company. When he was on a trip abroad, Ms. Holmes enlisted her brother to help her move out of their
20 shared residence. Ex. A at 152 (C. Gualy Ltr. at 2); *id.* at 116 (L. Durkin Ltr.). Once Mr. Balwani
21 understood what was happening, he began to text and call Ms. Holmes—he insisted she wait until he
22 came home, told her she was making a mistake, and moved up his international travel to fly back to
23 California from Asia as soon as possible. TX 5387F at -440.

24
25 ⁶ This makes sense. *See, e.g.*, Dutton & Goodman, 52 *Sex Roles* at 751-52 (“The day-to-day
26 ‘rules’ imposed by an abusive partner may be those that one becomes accustomed to as a personal risk
27 management strategy—even without recognizing the extent of compliance.”); Shannon B. Nicholson &
28 David J. Lutz, *The Importance of Cognitive Dissonance in Understanding and Treating Victims of
Intimate Partner Violence*, 26 *Journal of Aggression, Maltreatment, & Trauma* 475 (2017).

1 Since leaving the relationship, Ms. Holmes has been able to begin processing its effects and
2 healing from it. *See* Ex. A at 249 (D. Sterling Glasband Ltr. at 2). Part of that has been supporting
3 friends and family who have had similar experiences as they work through their own trauma. Ex. A at
4 180, 181 (J. Lamping Ltr. at 1, 2); *id.* at [REDACTED]; *id.* at 123-24 (G. Evans Ltr. at 1-2).

5 **5. Ms. Holmes' Current Family Life**

6 Ms. Holmes began dating her partner, Billy Evans, in the first half of 2018. Mr. Evans and
7 multiple friends who have submitted letters describe their initial hesitation in befriending Ms. Holmes
8 once they realized who she was, and how the woman they came to know despite their trepidation was a
9 “gentle and naive,” hopeful, loving, humble, patient, and dedicated “beyond what most people have ever
10 experienced.” Ex. A at 1-2, 8 (B. Evans Ltr. at 1-2, 8); *see also id.* at 126 (S. Evans Ltr. at 1), 212 (T.
11 Offer Ltr. at 1). To Mr. Evans, Ms. Holmes has become a supportive partner and coparent. “She
12 approaches my greatest mistakes the same as my limited triumphs, with an unwavering love and gentle
13 touch.” Ex. A at 4 (B. Evans Ltr. at 4).

14 Ms. Holmes and Mr. Evans seek to live a private, quiet life with meaningful relationships with
15 family and friends. Family has always been important to Ms. Holmes, and she brings that value into her
16 new family—Billy’s family—as well. Mr. Evans describes how Ms. Holmes helps keep him close to his
17 original nuclear family. Sometimes this is through seemingly small things, like sending individually
18 curated sets of photos to each of their son’s grandparents each day “because she knows how much it
19 means to our parents to be a part of our lives.” Ex. A at 4 (B. Evans Ltr. at 4). But she has had a more
20 significant role as well. Mr. Evans describes how Ms. Holmes’ love and patience helped heal his
21 relationship with his brother, who had gone through his own hardships: “My closeness to my brother is
22 all thanks to her. . . . I am so proud of the man he has become, in no small part because of Liz’s
23 determination and patience.” *Id.* at 4 (B. Evans Ltr. at 4); *see id.* at 214 (K. O’Neill Ltr. at 1). Others in
24 the Evans family agree that Ms. Holmes has been an overwhelmingly positive addition to the family,
25 describing her as having “a soft-spoken manner and a generous heart,” a person who “is happy to give
26 her time to other family members when they need her help or advice,” a person who “lift[s] others up
27 and help[s] to make room at the table for one another,” a “comforter” who is “very attentive to the needs

1 of others and is often helping with advice or just lending a listening ear.” Ex. A at 64 (A. Billings Ltr),
2 120 (A. Evans Ltr.), 70 (G. Bolster Ltr.), 126 (S. Evans Ltr. at 1). “All these characteristics make me
3 very proud to know Elizabeth and to have her join our family circle,” say Mr. Evans’ mother. Ex. A at
4 127 (S. Evans Ltr. at 2).

5 Ms. Holmes and Mr. Evans welcomed their son, W [REDACTED] Evans in July 2021.
6 Family and friends observe Ms. Holmes’ total love for and devotion to this little boy. Mr. Evans
7 describes Ms. Holmes in this new role of mother:

8 I wish you could see his happiness; his deep belly laughs that Liz helps encourage and the
9 confidence of a young mind who does not yet appreciate some of the difficulties this
10 world has to offer him. His bond with Liz is incredible . . . I wish you could hear how
11 she sings to him every morning when she brings him out of his crib and tells him how his
12 day and the life ahead has so much good in store for him. I wish you could walk with us
13 in the mornings and see how she has turned the fear he once had for the neighbors’ horses
14 into a carrot feeding frenzy . . . I wish you could see Liz and I dancing in the kitchen,
15 W [REDACTED] in our arms, giving him “doubles” as we kiss both sides of his cheeks. . . . I wish
16 you could see how she is as enthusiastic to change his diaper as she is to paint with him
17 and read to him. . . . I wish you could see how she rocks him to sleep every night while
18 singing Amazing Grace and telling him the tales of a boy who values kindness, honesty,
19 and generosity above all else. I wish you could hear how quickly she can turn his cries of
20 exasperation to giggles as she helps calm his tired mind.

21 Ex. A at 5 (B. Evans Ltr. at 5).

22 Friends and family concur with Mr. Evans. “To join Elizabeth, Billy, and their son W [REDACTED] on a
23 Sunday afternoon at their home in Woodside is to experience a family with strong roots at peace in a
24 loving atmosphere.” *Id.* at 138 (J. Fogelsong Ltr.); *id.* at 198 (N. Mason Ltr.). “I have been witness to a
25 mother falling completely and utterly head over heels in love with her son,” says one friend. Ex. A at
26 194 (T. MacNiven Ltr. at 1). She is a “hands-on, loving, attentive mother,” with W [REDACTED] “waddl[ing] after
27 her like a baby satellite,” notes another. Ex. A at 258 (M. Thompson Ltr. at 2). *See also* Ex. A at 127
28 (S. Evans Ltr. at 2) (“Elizabeth is the most nurturing and loving parent to W [REDACTED].”), 37 (N. Holmes Ltr. at
8), 157 (J. Hamilton Ltr. at 2) (“I watched Elizabeth sit with little W [REDACTED] for hours on the outside patio
of their home, overlooking the trees in the distance, explaining to him the sights and sounds of the
beauty in front of him. . . . And despite this incredibly difficult stage in her life, Elizabeth has continued
to build a beautiful life for W [REDACTED] where he is loved with all the adoration and support one could
imagine providing this little human being.”); 150 (H. Grenier Ltr. at 1); 176 (J. Koch Ltr. at 2) (“Liz sees

1 the world through W [sic] eyes and helps him to engage with his surroundings. Liz creates a caring,
 2 calm, and loving environment for W”; 223 (B. & T. Raleigh Ltr.). Ms. Holmes has “spared” W
 3 “any inkling of her worry and sadness” related to this case: “All he has experienced is his mother’s joy
 4 to be with him and her love for him.” Ex. A at 27 (C. Holmes Ltr. at 15).

5 6. Volunteer Work

6 Despite her current circumstances, Ms. Holmes has worked to find ways to continue contributing
 7 what she can to the world. Dr. Foege, the former Director of the CDC who served on Theranos’ Board
 8 from 2014 to 2018, describes a conversation with Ms. Holmes after Theranos shut down, after her
 9 indictment, in which “she was still asking for advice on how her skills could be used for good. . . . Her
 10 questions revolved around what else could she do that would be of benefit to society. She was not trying
 11 to revive Theranos, but was looking for alternative ways of contributing to the world.” Ex. A at 137 (W.
 12 Foege Ltr. at 3). She can’t help but think about solutions to the problems she learned so much about and
 13 tried to solve while at Theranos, and has ideas about how technology can make it easier for consumers
 14 to access and control their health care records. PSR ¶¶ 137, 138.

15 More immediately, however, Ms. Holmes has dedicated herself to help those who have suffered
 16 from traumas similar to her own. After her conviction, Ms. Holmes became certified as a rape crisis
 17 counselor and advocate, and has spent over five hundred hours volunteering in support of sexual assault
 18 survivors, including victims of domestic violence, with the [REDACTED]
 19 [REDACTED]. Ex. A at 46 ([REDACTED] Ltr. at 1).⁷ This work has included scores of shifts manning a
 20 recently launched statewide helpline [REDACTED] that provides survivors with trauma advocacy and support
 21 and, as appropriate, connects survivors to resources they need, including law enforcement, government
 22 agencies, and shelters. *Id.*; PSR ¶ 136. “She has worked with a variety of callers, including calls with
 23 actively suicidal victims of sexual assault, calls with community professionals, and calls to local law
 24 enforcement and/or [the Division of Child and Family Services] when necessary.” Ex. A at 47 ([REDACTED])

25
 26
 27 ⁷ Ms. Holmes applied to volunteer with several organizations local to the Bay Area, but those
 28 organizations declined to work with her.

1 Ltr. at 2). Her work on the helpline has received praise from callers and law enforcement alike. *Id.* at
2 46-47 (██████████ Ltr. at 1-2).

3 The organization reports that Ms. Holmes has also worked on “assisting with the compilation of
4 sexual assault and domestic violence resources statewide for callers as well as identifying gaps in
5 resources available to ██████████ victims of crime throughout the state.” Ex. A at 47 ██████████ Ltr. at 2). This
6 includes hours working on draft legislation to support survivors’ rights and resources. *See* Ex. A at 6 (B.
7 Evans Ltr. at 6).

8 This work is deeply personal to Ms. Holmes. She sees it as a way to try to help others, and apply
9 learnings from her own journey toward being there for people in their hardest moments. According to
10 ██████████: “The hours that Elizabeth has volunteered over the past months have filled a great need in the
11 community.” Ex. A at 47 (██████████ Ltr. at 2).

12 **B. Personal Characteristics**

13 “There has been a great deal said and written about the fictional Elizabeth Holmes.” Ex. A at 13
14 (C. Holmes Ltr. at 1). Ms. Holmes has been the subject of caricature in extensive and intrusive media
15 portrayals, whether that portrayal is couched as a nonfiction book or a fictionalized dramedy. Those
16 caricatures, presented by people who do not know Ms. Holmes, are strikingly false, as the scores of
17 people who actually know Ms. Holmes make clear in their letters to the Court. “I’ve been taken aback
18 by just how dramatically divergent the fictional character of Elizabeth Holmes presented in the media is
19 from the entrepreneur, woman, partner, mother, and friend I have come to know and care about.” Ex. A
20 at 62 (G. Bianchini Ltr. at 1); *id.* at 101 (M. Crane Ltr. at 2) (“I am offended by these portrayals of her
21 and find them infuriating and tragic.”). One of Ms. Holmes’ friends describes the contrast between a
22 caricature who is “robotic, devoid of emotions” and the real human being: “She puts on a stoic face in
23 public, as she was trained to do, but with her trusted friends and family, Elizabeth is full of love,
24 empathy, kindness, and grace. Sadness and despair, too. When I dropped her off for court one morning,
25 . . . the tears welled up in her eyes as the unimaginable gravity of what she was facing hit her yet again.”
26 Ex. A at 181 (J. Lamping Ltr. at 2).

1 The collection of letters attached as Exhibit A paint a consistent picture of Ms. Holmes as a
2 compassionate, generous, optimistic, honest, and thoughtful person. The fact, volume, and substance of
3 those letters is particularly meaningful given their context in this sensationalized case. As Mr. Evans
4 notes: “The fact that Liz still has the support she does despite the risks of associating with her is a
5 testament to her goodness. Many of the letters you will read were written and submitted by loyal people
6 who know their careers and public standing will be put in jeopardy because of their public support for
7 her. . . . But the ones you’ll see nonetheless feel compelled to . . . tell you what otherwise might be
8 missed.” Ex. A at 8 (B. Evans Ltr. at 8). One of Ms. Holmes’ childhood friends emphasizes: “There are
9 so many people who genuinely know and love Elizabeth, who is a real person with a resilience I have
10 never seen in anyone else.” Ex. A at 58 (M. Thompson Ltr. at 2).

11 Friends, family, former employees, advisors, and others who know her describe her in positive
12 terms. She is “incredibly warm, intelligent, engaging, with a kind and gentle demeanor,” Ex. A at 57 (E.
13 Batzoglou Ltr.); a person of strong faith in God, *id.* at 60 (P. Berloty Ltr. at 1); “the kindest soul,” “the
14 kind of person who picks something up when she sees it has fallen,” *id.* at 117 (L. Durso Ltr. at 1);
15 “humble, extremely curious about others, always willing to put her priorities second, a bit quiet and very
16 gracious,” *id.* at 209 (R. Gross Ltr. at 2). Several additional aspects of her character also stand out in the
17 letters.

18 **1. Deep Interest in Making the World a Better Place**

19 Ms. Holmes’ heartfelt desire to do good in the world is core to her character. As Senator Cory
20 Booker, a champion of criminal justice reform and restorative justice, writes: “I’ve always been struck
21 by the way our conversations focused on her desires to make a positive impact on the world. . . . Her
22 focus was always thoughtful, demonstrating a depth of knowledge about such issues, a curiosity to know
23 more, and a determination to make a difference herself.” Ex. A at 76 (C. Booker Ltr. at 1). Friends,
24 family, former coworkers, and advisors from all facets of her life consistently emphasize Ms. Holmes’
25 intent to make the world a better place from the time she was a child to today and talk about the projects
26 she has pursued to do so. For example:

- 1 • A former employee notes: “Elizabeth is and has always been driven by a single and simple
2 purpose; she wants to make the world a better place than it would have been without her.” Ex. A
3 at 96 (T. Cooper Ltr. at 1); *see also id.* at 75 (F. Bonanni Ltr. at 4) (“[T]he Elizabeth Holmes I
4 met in May 2016 and whom I got to know well and admire over the following years is a
5 principled, deeply ethical, intelligent, hardworking, selfless woman, dedicated to the worthwhile
6 mission of improving health care.”).
- 7 • A former government official who first met Ms. Holmes in the hopes of a government
8 partnership on widespread disease testing and tracking opines: “I believe the reason Elizabeth
9 has so much passion about promoting this vision is her deep sense of humanitarian purpose. She
10 cares deeply about making the world a healthier and better place for future generations.” Ex. A
11 at 270 (A. Weber Ltr.).
- 12 • An intellectual property attorney who served as an outside advisor observes that Ms. Holmes
13 “had the right intentions—she wanted to put out a quality, accurate product that would expedite
14 diagnosing ailments and thus improve our collective public health.” Ex. A at 82 (T. Carroll Ltr.
15 at 1).
- 16 • A college friend explains: “That has always been her goal and the driving force behind her work.
17 To serve people and make the world a better place.” Ex. A at 255 (A. Sutro Ltr.); *see id.* at 197
18 (S. Mantri Ltr.).
- 19 • A longtime family friend describes: “She wanted to learn things to do things and to make an
20 important contribution to society.” Ex. A at 139 (S. Freeman Ltr. at 1); *see also* Ex. A at 218 (C.
21 Perez-Rubio Ltr.).
- 22 • A friend since 2019 says: “The woman who sits in front of you is humble, thoughtful, and a
23 committed citizen of this country who truly and passionately wants to make the world a better
24 place.” Ex. A at 245 (E. Sorgi Ltr. at 2); *see also id.* at 50 (I. Aboyeji Ltr. at 3) (“[T]he Liz I
25 know is a kind, driven young woman who only seeks to leverage technology and innovation to
26 change the world by making health care more accessible to billions of people . . .”).

1 These letters also describe how Ms. Holmes’ devotion to doing good persists to this day, part of her
2 authentic core.

3 Ms. Holmes combines this desire to do good with a persistent optimism and determination that
4 friends and family find especially notable given her current circumstances. Mr. Evans explains: “Liz
5 has always approached life through the lens of what is possible. . . . She approaches hard problems and
6 easy alike, constantly in search of a solution and with a belief in doing what most others would deem
7 impossible.” Ex. A at 2 (B. Evans Ltr. at 2). “She believes deeply in the goodness of the world and all
8 those around her.” *Id.* at 3 (B. Evans Ltr. at 3). One letter describes the handwritten note Ms. Holmes
9 wrote for her friends’ newborn shortly after her indictment, which ends “Welcome to a wonderful
10 world”—a testament to Ms. Holmes’ “ardently resilient optimis[m].” Ex. A at 95 (A. & S. Kiessig Ltr.).
11 Ms. Holmes’ mother observes that the technology developed at Theranos is “out there in the world, and
12 someone will finish doing it and make Elizabeth’s vision come true. . . . Maybe that is why she remains
13 so full of gratitude and optimism about the future of this world.” Ex. A at 39 (N. Holmes Ltr. at 10).

14 2. Caring and Reliable Friend

15 Ms. Holmes’ desire to do good in the world does not come at the expense of touching the lives of
16 individuals she loves. “[T]he thing about her is that she is not all about herself; she is into ‘you.’ When
17 you are speaking to her, it’s as if she ‘disappears’ herself to focus on you and what you are saying.” Ex.
18 A at 139 (S. Freeman Ltr. at 1). It is therefore perhaps not surprising that, as Mr. Evans notes, “in
19 reading these letters you will come to realize how Liz is the go-to person for so many that are dealing
20 with life’s hard moments.” Ex. A at 3 (B. Evans Ltr. at 3).

21 Numerous letters describe Ms. Holmes’ thoughtful commitment to being there for her friends
22 despite her personal travails. Ex. A at 62 (G. Bianchini Ltr. at 1); *see also* Ex. A at 143 (K. Gavrieli Ltr.
23 at 1). She is a person who drives hours to ensure a friend [REDACTED]
24 [REDACTED]; who offers her support to a friend [REDACTED]
25 [REDACTED] who leaves an event on a moment’s notice to let a
26 friend vent frustrations about that friend’s professional life, *see* Ex. A at 274 (C. Zygourakis Ltr. at 2);
27 and who supports a friend in the aftermath of personal tragedy, *see* Ex. A at [REDACTED] As one

1 friend explains: “When I went through a deeply broken heart in 2018, Elizabeth could feel my pain from
 2 all the way across the country without me saying a word. She sent flowers, called every day for weeks,
 3 and held space for me, never rushing away to deal with managing her own challenges. During another
 4 difficult life event, she sent a teddy bear because she couldn’t be there to hug me in person.” Ex. A at
 5 181 (J. Lamping Ltr. at 2); *see id.* at 231-32 (J. Randolph Ltr. at 1-2). Mr. Evans’ sister Grace describes
 6 how Ms. Holmes was there for her “[d]espite the chaos going on in [Ms. Holmes’] world”:

7 She would send me heartfelt messages reminding me of my worth or a simple call to see
 8 how I was doing. Her calmness talked me through panic attacks when I was unable to get
 9 off my bathroom floor or say a coherent word. She had patience with me – she was always
 there. She became my escape, when I needed a place to go, I was always welcome at her
 home. During this time, she showed me her inherent kindness and empathy.

10 Ex. A at 124 (G. Evans Ltr. at 2). Another friend notes that “small as they may be compared to hers, my
 11 life’s needs and challenges have often taken center stage in our friendship,” including navigating
 12 professional challenges and “several difficult personal situations.” Ex. A at 271 (Y. Yu Ltr. at 1).
 13 Another writes: “You truly get a sense of someone’s character and heart when they are going through
 14 intense adversity. Elizabeth was always there for me even as she was progressing through the toughest
 15 time of her life. No matter how small or big of an issue I was dealing with, Elizabeth consistently
 16 listened to me and provided me with the support/guidance to overcome the issue.” Ex. A at 145 (A.
 17 Goldberg Ltr. at 1). Other friends echo these sentiments. *E.g.*, Ex. A at 248 (D. Sterling Glasband Ltr.
 18 at 1) (“Liz is a thoughtful and loyal friend – the kind of person who calls you on your birthday, who
 19 remembers when you have a big pitch meeting and checks in to see how it went.”). Mr. Evans’ father
 20 succinctly observes: “In her world she comes last.” Ex. A at 121 (W. Evans Ltr. at 1).

21 **3. Advisor and Mentor**

22 Consistent with Ms. Holmes’ desire to help others and make a difference, she makes time to
 23 mentor and advise others—whether it is reflecting on and sharing her own mistakes and lessons learned,
 24 helping connect individuals who may face social barriers to the resources they need, or just encouraging
 25 a young person to pursue his or her entrepreneurial dream. Mr. Evans’ sister notes: “I often say I should
 26 write a book – everything I have learned through Elizabeth being in my life. It would certainly be a
 27 page turner but endless.” Ex. A at 123 (G. Evans Ltr. at 1). One friend describes how Ms. Holmes’

1 “mentorship and advice” “contributed considerably” to the success of a young Kenyan entrepreneur who
2 was working to bring greater medical care to small African clinics. Ex. A at 49 (I. Aboyeji Ltr. at 2).
3 Another attributes her own literacy startup to the role model she found in Ms. Holmes: “Elizabeth
4 inspired me to start my own company, Literati, which helps kids find books and become stronger
5 readers. We all need heroes that look like us.” *Id.* at 131 (J. Ewing Ltr. at 2). One writer tells how, at
6 Theranos’ apex, Ms. Holmes encouraged her young daughter in scientific pursuits and continued an
7 email relationship with her, “inspir[ing] her to dream at a critical time.” *Id.* at 201 (B. McIntyre Ltr. at
8 1); *see also id.* at 207 (B. Morel Ltr.) (describing Ms. Holmes’ efforts to mentor female entrepreneurs
9 while she was CEO of Theranos). A family friend similarly notes that Ms. Holmes met virtually with
10 her “10 year old niece who declared that she wanted to start her own business.” *Id.* at 219 (V. Perez-
11 Rubio Maffia Ltr.). And a female venture investor recounts how Ms. Holmes “took time away from her
12 trial preparations to help me recruit advisors to support my career (with incredible insights as a function
13 of her own experience on who can truly be valuable versus who I might perceive to be valuable).” Ex.
14 A at 271 (Y. Yu Ltr. at 1).

15 4. Intelligent and Visionary

16 Those who know her also describe Ms. Holmes as a brilliant thinker whose vision has
17 contributed to the scientific community. Her talents lie in bringing concepts from different scientific
18 contexts together for a new use. Former Theranos Technology Advisory Board Member Dr. John
19 Moalli views Ms. Holmes as “the most intelligent person I have ever met. The depth and breadth of her
20 brilliance cannot be overstated, and, perhaps more importantly, should not be overshadowed by mistakes
21 she has made in the business environment.” Ex. A at 203 (J. Moalli Ltr. at 1). A lawyer who reviewed
22 Theranos’ patent portfolio explains that “Elizabeth created valuable technologies; she contributed
23 greatly to science; and she is a brilliant innovator.” Ex. A at 83 (T. Carroll Ltr. at 2). Theranos Board
24 members Dr. Foege and Dr. Bonanni agree. Ex. A at 137 (W. Foege Ltr. at 3) (noting “scientific gifts”);
25 *id.* at 74 (F. Bonanni Ltr. at 3) (noting company’s valuable technological developments). Theranos
26 Laboratory Director Donald Tschirhart, who joined the company in 2016, asks that the Court “consider
27 the immense contributions that she has made to the field of laboratory medicine and to humanity, even if

1 at this point they don't understand what they have been given. I hope in some way that you can find her
2 redemption in these good deeds." Ex. A at 262 (D. Tschirhart Ltr. at 2).

3 **5. Positive Impact on Others**

4 Ms. Holmes' positive qualities have the effect of inspiring those around her. Former employees
5 describe how her dedication, mission, and gratitude inspired them to work hard. For example, one
6 Theranos employee explains how Ms. Holmes inspired her colleagues by "develop[ing] and foster[ing] a
7 special energy within many of us to think differently about our work and impact it has on others," a
8 worldview that he and others have taken with them to other endeavors: "I know of several colleagues
9 who pivoted their experiences at Theranos into much the same with a higher motivation than before to
10 make lasting positive change on those they work with and the world around us." Ex. A at 98 (T. Cooper
11 Ltr. at 3).

12 This is true for her friends as well. As her friend Lauren Stat puts it: "She learns the hard way,
13 and challenges those around her to grow and learn as well." Ex. A at 247 (L. Stat Ltr. at 2). Another
14 college friend emphasizes the point: "In my journey as a young professional woman facing challenges in
15 the business world of healthcare, Elizabeth has always extended a hand to motivate me to take small
16 steps while thoughtfully dreaming big." Ex. A at 235 (S. Samagh Ltr.); *see id.* at 237 (B. Smith Ltr.)
17 ("Throughout the years she has been there for me when I faced a headwind in my own career and her
18 own strength has inspired and motivated me to persevere and pursue my ambitions and dreams.").

19 Mr. Evans reflects that because of his partnership with Ms. Holmes

20 I finally like the person who I have become. I'm proud of the father Liz has helped me
21 become, I am proud of the relationship we have with our families and friends, I am proud
22 of many things now that I was not before I met her. She may have ultimately failed to
23 change the world in the way she set out, but she has undeniably changed mine. She
continues to hold me accountable, not with harsh words or criticism but with a love and
acceptance that caused me deep reflection on the improvements I can make in my life to
begin to reciprocate the immense unjudging and unwavering support she has shown me.

24 *Id.* at 6 (B. Evans Ltr. at 6). Friends of Mr. Evans confirm the positive effect she has had on him. Ex. A
25 at 253 (J. Stern Ltr.) ("I recall when Elizabeth and Billy returned from a months long camping trip
26 across the western United States, he displayed a new level of compassion in his demeanor, a strong
27 sense of intention with his actions, and a heightened desire to listen to and look at others with purpose. I

1 attribute these changes, at least in part, to Elizabeth’s ability to have a positive impact on those around
 2 her.”).

3 **III. CALCULATION OF THE SENTENCING GUIDELINES RANGE AND OBJECTIONS**
 4 **TO PRESENTENCE REPORT**

5 “[A] district court should begin all sentencing proceedings by correctly calculating the applicable
 6 Guidelines range.” *Gall v. United States*, 552 U.S. 38, 49 (2007). The Presentence Report (“PSR”)
 7 calculates the Guidelines range as follows:

Base Offense Level	7
Loss Enhancement (§ 2B1.1(b)(1)(P)):	+ 30
Enhancement for Number of Victims (§ 2B1.1(b)(2)(A)(i)):	+ 2
Adjustment for Role in Offense (§ 3B1.1(a)):	+ 4
<hr/>	
Total Offense Level	43
Criminal History	Category I

14
 15 PSR ¶¶ 102-113, 117. Based on a criminal history category of I and an offense level of 43, as well as
 16 the statutory maximum of 20 years for each count, the PSR calculates the Guidelines range as “960
 17 months (80 years), which is essentially a life sentence for someone who is 38 years old.” *Id.* ¶ 194.

18 Ms. Holmes objects to the PSR’s Guidelines calculations with respect to each of the
 19 enhancements applied to the PSR’s calculation, and believes that additional downward adjustments are
 20 warranted here. *First*, as the PSR acknowledges, the offense level is primarily driven by the PSR’s
 21 calculation of loss. As discussed in detail below, Ms. Holmes objects to that calculation, which is based
 22 entirely on a spreadsheet provided by the government, for several reasons. *See infra* Section III(A).
 23 *Second*, Ms. Holmes objects to the enhancement for the number of victims because it is based on the
 24 same flawed methodology as the loss calculation. *See infra* Section III(B). *Third*, Ms. Holmes objects
 25 to the adjustment for the role in the offense as inconsistent with *United States v. Holden*, 908 F.3d 395,
 26 402 (9th Cir. 2018), and the meaning of that enhancement. *See infra* Section III(C). *Fourth*, Ms.
 27 Holmes should receive credit for her substantial acceptance of responsibility in this case, despite the fact

1 that she has contested guilt. *See infra* Section III(D). Ms. Holmes captures her remaining objections to
 2 the PSR in the attached Appendix.

3 **A. Ms. Holmes Objects to the PSR’s Calculation of Loss.**

4 The PSR relies on Section 2B1.1(b)(1)(P) of the Guidelines to increase the offense level on the
 5 basis of loss by 30 levels. PSR ¶ 105. As a matter of policy, Ms. Holmes objects to the application of
 6 § 2B1.1(b)(1) to increase her offense level in any amount. For the reasons discussed in more detail in
 7 Section IV(A)(5), below, loss is unhelpful in assessing the statutory sentencing factors.

8 Although the PSR calculates loss over Ms. Holmes’ objection, its calculation is incorrect. The
 9 PSR appears to calculate loss by using the total amount purportedly invested in Theranos by all of the
 10 investors who participated in the so-called C-1 and C-2 fundraising rounds, based on a spreadsheet
 11 provided by the government and apparently using a preponderance of the evidence standard.⁸ *See* PSR
 12 ¶¶ 47, 105; PSR Addendum ¶¶ 7, 9, 16. This approach to calculating loss is incorrect and insufficient.
 13 Because the loss calculation has an extreme effect on the ultimate offense level, extra care—and a
 14 higher burden of proof—must be applied to the calculation. But regardless of whether a preponderance
 15 or “clear and convincing” standard applies, the evidence does not meet it. Here, the calculation of loss
 16 must consider the particulars of each individual investment and look beyond the total investment amount
 17 to properly assess whether and to what extent loss has been proven, and whether (and, if so, the extent to
 18 which) that loss was caused by the alleged fraudulent misrepresentations. It is not appropriate to assume
 19 that every C-1 and C-2 investor in Theranos is properly included in the loss calculation. At trial,
 20 witnesses associated with the investments charged in counts 3-8 testified about those investments, and
 21 the jury reached a verdict only as to counts 6-8. While evidence as to certain other investors was
 22 introduced at trial, none of the evidence introduced as to those other investors would even arguably
 23 support a finding of fraud, much less meet the causation elements required for loss. Finally, as even the
 24

25
 26 ⁸ This spreadsheet was not an exhibit in Ms. Holmes’ trial and was not produced by the
 27 government prior to its sentencing disclosures. It appears to be a document that was created by the
 28 government for sentencing purposes.

1 government appears to concede, calculating loss is complex in a case like this one, where the company
 2 (and therefore investments in it) indisputably had substantial value regardless of any fraud. As
 3 discussed in the sections that follow, the government has not and cannot meet its burden to prove loss.
 4 Accordingly, no loss enhancement should apply.

5 **1. Loss Must Be Proven by Clear and Convincing Evidence.**

6 Given its dominant effect on the ultimate offense level and Guidelines range, the government
 7 must show loss by clear and convincing evidence. “[C]lear and convincing evidence is required for
 8 proof of disputed enhancements” when “the challenged sentencing factors [have] an extremely
 9 disproportionate effect on [the defendant’s] sentence relative to the offense of conviction.” *United*
 10 *States v. Jordan*, 256 F.3d 922, 927, 929 (9th Cir. 2001). The Ninth Circuit has articulated a non-
 11 exhaustive six-factor test to determine when “due process may require the government to demonstrate
 12 facts underlying disputed enhancements by clear and convincing evidence.” *United States v. Lonich*, 23
 13 F.4th 881, 910 (9th Cir. 2022).⁹ Key among those factors are the last two, which focus on the increase
 14 in the number of offense levels caused by the disputed enhancements, and the increase in the sentence
 15 caused by the disputed enhancements. *See id.* at 911-12. Those concerns militate in favor of applying
 16 the higher standard. The PSR’s Guidelines calculation is driven primarily by the loss amount, which
 17 more than quintuples the offense level, and leads to a staggering increase to the Guidelines range.

18
 19
 20 ⁹ “In determining when the government must meet a clear and convincing standard of proof,” the
 21 Ninth Circuit looks to the “totality of the circumstances.” *Lonich*, 23 F.4th at 910. The “six non-
 exhaustive factors” that have been articulated are:

- 22 (1) whether the enhanced sentence falls within the maximum sentence for the crime alleged
 23 in the indictment; (2) whether the enhanced sentence negates the presumption of innocence
 24 or the prosecution’s burden of proof for the crime alleged in the indictment; (3) whether
 25 the facts offered in support of the enhancement create new offenses requiring separate
 26 punishment; (4) whether the increase in sentence is based on the extent of a conspiracy;
 27 (5) whether the increase in the number of offense levels is less than or equal to four; and
 (6) whether the length of the enhanced sentence more than doubles the length of the
 sentence authorized by the initial sentencing guideline range in a case where the defendant
 would otherwise have received a relatively short sentence.

28 *Id.* at 910-11 (quoting *Jordan*, 256 F.3d at 928) (internal quotation marks and alterations omitted).

1 In *Lonich*, the Ninth Circuit noted that the question of which standard applies becomes more
2 difficult in conspiracy cases because it can be difficult to determine what conduct was part of the
3 conviction. 23 F.4th at 913. That difficulty is present here. Count 1 charged an investor conspiracy
4 lasting from 2010 to 2015, but Ms. Holmes was only convicted of three of the six individual wire fraud
5 counts that went to the jury, all of which were for investments made in 2014. Additionally, the PSR
6 appears to calculate loss based on a government-created spreadsheet of C-1 and C-2 investors, but the
7 evidence at trial was significantly more limited. There was *no evidence* as to why the vast majority of
8 the investments the government seeks to include in the loss amount (\$517.8 million) were made—even
9 though, as discussed below, each investor’s investment experience was different. Because of these
10 questions, as well as the fact that the application of this enhancement has such a dramatic effect on the
11 offense level, the government must meet a clear and convincing standard in order to prove a loss
12 amount for consideration at sentencing. The PSR’s use of a preponderance standard is erroneous. Even
13 under that lower standard, however, the government has not proven loss, as discussed below.

14 **2. Each Investor and Associated Loss Must Be Considered Separately.**

15 The PSR’s loss calculation rests on the assumption that every investment listed in a government-
16 created spreadsheet of purported C-1 and C-2 investments during a set time period was the result of the
17 offense conduct. Basing loss on such an assumption is factually and legally erroneous in this case.
18 Instead, a transaction-by-transaction inquiry is required to determine whether the transactions identified
19 were but-for and proximately caused by the offense. The information provided by the government is not
20 sufficient to make that showing (even under the lower preponderance standard) for the transactions
21 referenced on the spreadsheet on which the PSR’s loss calculation relies.

22 As a matter of law, the government must prove that the offense conduct—here, wire fraud with
23 respect to investor victims—was the but-for and proximate cause of the loss. *Lonich*, 23 F.4th at 916
24 (“The term ‘resulted from’ establishes a causation requirement, which includes both cause-in-fact (but-
25 for causation) and proximate cause. . . . These basic causation requirements apply to loss
26 enhancements.” (internal quotation marks omitted)). To prove “but-for” causation where fraudulent
27 investments are concerned, the government generally must show that an investor relied on fraudulent

1 information in making the investment, *see United States v. Stein*, 846 F.3d 1135, 1153 (11th Cir. 2017)
2 (assessing but-for causation for loss under § 2B1.1(b)(1) for a securities fraud conviction), or, put
3 differently, that the fraud was material to the particular investment argued to constitute loss, *see United*
4 *States v. Executive Recycling, Inc.*, 953 F. Supp. 2d 1138, 1146 (D. Colo. 2013) (assessing loss in the
5 context of a wire fraud conviction). Intervening causes, meanwhile, can lead to the failure to prove
6 proximate cause. *Lonich*, 23 F.4th at 917-18; *United States v. Hicks*, 217 F.3d 1038, 1048-49 (9th Cir.
7 2000). Where the government fails to produce sufficient evidence to show proximate or but-for
8 causation for asserted loss amounts, a sentence based on those loss amounts cannot stand. *Lonich*, 23
9 F.4th at 916.

10 The government has not proven that the fraud was a but-for or proximate cause of any loss.
11 There are at least two issues with the PSR's approach based on the particular facts and circumstances of
12 this case:

13 *First*, this is a case where the circumstances of each individual investment were different. The
14 PSR erroneously reasons that at trial the evidence showed that "the C-1 and C-2 investors received the
15 same information from Theranos before they invested[.]" PSR Addendum ¶ 7. This is simply incorrect.
16 *E.g.*, 9/2/22 Hr'g Tr. 28:15-21 (gov't arguing different investors heard different information). For
17 example, none of the C-1 investors who testified at trial were provided financial models, while the C-2
18 investors whose representatives testified at trial were provided such models.

19 The trial record made clear that this is *not* a case where all investors received the same
20 information or spoke to the same people, nor did their investments happen at the same time. Some
21 investors spoke with Ms. Holmes, some didn't. Some investors received financial models, some didn't.
22 Some investors received demonstrations of the proprietary technology that Theranos was developing,
23 some didn't. Some conducted extensive due diligence, some didn't. Some invested multiple times over
24 many years, some invested once. Some anticipated forming a broader business or strategic partnership
25 with Theranos, some didn't. Some had detailed and privileged information about the company because
26 they were members of the Board of Directors, some didn't. Because the circumstances of each
27 investment were different, and because different investors received different information, the

1 government has not shown and cannot show that each of the transactions that it has identified, much less
2 all transactions from 2010 through 2015, were part of a conspiracy to defraud investors. The jury’s
3 verdict confirms this understanding. While the jury found Ms. Holmes guilty of Counts 6, 7, and 8—
4 each a specific and unique C-2 transaction that took place *in 2014*—the jury was unable to reach
5 agreement on Counts 3, 4, and 5, which were separate C-1 transactions with different individuals under
6 different circumstances that all took place in 2013. *See Executive Recycling, Inc.*, 953 F. Supp. 2d at
7 1146 (“The fact that the jury only convicted Defendants on half of the fraud counts shows that it
8 carefully considered the evidence related to each Count and the customer named in that Count and, in
9 the process, clearly determined that the Government’s evidence was adequate with respect to some
10 customers, and lacking with regard to others.”). In situations like this one, each transaction must be
11 considered on its own merits.

12 To be clear, even the convictions for wire fraud do not satisfy this standard. Unlike its current
13 burden in connection with proving loss under § 2B1.1, at trial the government was not required to prove
14 causation or reliance as to any particular investment in order to prove wire fraud. *United States v.*
15 *Holmes*, No. 5:18-CR-00258-EJD-1, 2021 WL 2044470, at *30 (N.D. Cal. May 22, 2021) (“Causation is
16 not an element of wire fraud that the Government must prove.”); *Holmes* 10/26/21 Tr. 4609:12 (“We
17 don’t need to prove reliance.”) (gov’t argument). Additionally, at trial, the government did not
18 introduce *any* evidence regarding the vast majority of the individuals and entities listed on the
19 government’s spreadsheet—much less information about the circumstances of their investment, any
20 representations made to them, or what they relied on in choosing to invest.

21 A review of the government’s spreadsheet itself makes plain the problem with assuming that any
22 C-1 or C-2 investor was a person who suffered loss as a result of a material misstatement by Ms.
23 Holmes. As noted, the proof at trial addressed only a handful of the investments made by particular
24 outside investors. But the government’s spreadsheet includes investments from persons with substantial
25 knowledge about the company, including board members and outside counsel. The spreadsheet
26 identifies investments from entities associated with at least four Theranos Board Members—Richard
27 Kovacevich, David Boies, Riley Bechtel, and Henry Kissinger. None of these individuals testified, and

1 no evidence was presented regarding the circumstances of their investments. But all of these individuals
2 had access to special information, including privileged information, that was not available to other
3 investors. Indeed, David Boies and his law firm Boies, Schiller & Flexner LLP, represented Theranos
4 and Ms. Holmes as outside counsel (including in intellectual property matters, such as efforts to protect
5 Theranos' trade secrets, and in interactions with regulators).¹⁰ While the trial record contains passing
6 references to certain other investors, such as Andreas Dracopoulos, there was no evidence whatsoever
7 about why either of those individuals chose to invest. And some investors on the government's list
8 made or offered to make additional investments in the company well after the alleged fraud was
9 revealed, such as Mr. Bechtel and Cox Investment Holdings, Inc.

10 *Second*, the nature of the investment opportunity further explains why a specific showing as to
11 each investor is necessary. Theranos was a start-up company with limited operating and commercial
12 history. It also was a privately held company with securities that never traded on a public market and it
13 did not issue market-wide statements. Investors expressly acknowledged at the time of their investment
14 that the opportunity was unique and speculative in nature, that there were serious risks of investing in
15 the company, that the financial projections were speculative and unreliable, and the investors were
16 themselves sophisticated actors. *See, e.g.*, TX 3530 at 7-8, §§ 4.3, 4.4, 4.5, 4.6. It cannot be assumed
17 that all of the sophisticated, wealthy investors who knew about these risks but proceeded to invest
18 anyway would say that they relied on projections they previously affirmed in writing were inherently
19 speculative—if they received financial projections at all. As recent events have revealed, the reasons
20 why sophisticated investors invest in an enterprise may have nothing to do with the representations
21 made by a company, and instead be driven “more by vibes and grievances than due diligence.” Charlie
22 Warzel, “Elon Musks’ s Texts Shatter the Myth of the Tech Genius,” *The Atlantic* (Sept. 30, 2022)¹¹; *see*
23 *id.* (“Looking at these texts, it seems much easier to understand Andreessen Horowitz’s recent \$350
24

25 ¹⁰ Whether the amount attributed to Boies Schiller is even appropriately considered an
26 investment is a further question. The firm was paid for its legal work in part through shares and in part
27 through cash.

28 ¹¹ *Available at* <https://www.theatlantic.com/technology/archive/2022/09/elon-musk-texts-twitter-trial-jack-dorsey/671619/>.

1 million investment in WeWork founder Adam Neumann’s new real-estate start-up, or [Samuel]
2 Bankman-Fried’s admission that most venture-capitalist investments are not ‘the paragon of efficient
3 markets’ and driven primarily by FOMO and hype. ‘Like, all the models are made up, right?’ he
4 infamously told *Bloomberg* last April.”).

5 Rather than relying on a government-created spreadsheet, the loss calculation requires a showing
6 that each investor the government contends suffered loss received and relied on the fraudulent
7 misrepresentations alleged in the indictment. If the government fails to make that showing, the loss
8 cannot be counted. The government did not present sufficient information to the Office of Probation to
9 make that showing, and the trial record does not supply it.

10 **3. The Entirety of Each Investment Is Not An Appropriate Measure of Loss**
11 **and the Government Has Not Shown a Reasonable Estimate by Clear and**
12 **Convincing Evidence or a Preponderance of the Evidence.**

13 Ms. Holmes also objects to calculating loss based on the entire amount invested by any purported
14 victim-investor, as the PSR does, because the investments retained considerable and indisputable value
15 well after the purported fraud was revealed. This changes the nature of the analysis under § 2B1.1.
16 “The Guidelines do not present a single universal method for loss calculation under § 2B1.1—nor could
17 they, given the fact-intensive and individualized nature of the inquiry.” *United States v. Zolp*, 479 F.3d
18 715, 718 (9th Cir. 2007). The law distinguishes between the loss calculation involving investments in a
19 “sham” company, in which a security is “literally worthless after the fraudulent scheme is exposed,” and
20 the loss calculation involving an “otherwise legitimate company.” *Id.* at 719. In the case of an
21 otherwise legitimate company, “because the stock continues to have residual value after the fraudulent
22 scheme is revealed, the court may not assume that the loss inflicted equals the full pre-disclosure value
23 of the stock; rather, the court must disentangle the underlying value of the stock, inflation of that value
24 due to the fraud, and either inflation or deflation of that value due to unrelated causes.” *Id.*; *see also*
25 *United States v. Hussain*, No. 16-cr-00462-CRB-1, 2019 WL 1995764, at *4-6 (May 6, 2019) (analyzing
26 complexity of calculating loss for a wire fraud related to investments in an otherwise legitimate
27 company that was overvalued as a result of the fraud).

1 This case fits into the latter type: Unlike a Ponzi scheme, Theranos was a real company—a fact
2 which the government does not dispute. *See* Holmes 9/8/21 Tr. 553:7-8 (gov’t opening). It developed
3 valuable, innovative technology (assays, hardware, and software), including inventions and
4 advancements that were recognized as innovative by the United States Patent & Trademark Office. It
5 had real commercial relationships and provided real services to customers. The investments were not
6 used to line Ms. Holmes’ pockets or those of anyone else; to the contrary, the investments went toward
7 the company’s mission to make health information more accessible.

8 For these reasons, it would be legally incorrect to assess the loss as the entire amount invested in
9 this case, as the PSR does. *See Zolp*, 479 F.3d at 719. Instead, the Guidelines suggest an appropriate
10 measure can be “[t]he reduction that resulted from the offense in the value of equity securities or other
11 corporate assets.” U.S.S.G. § 2B1.1 cmt. n.3(C)(v). Calculating loss in such a circumstance is complex,
12 even impossible to do with any reasonable degree of certainty at this point given the backward-looking,
13 assumption-driven nature of such an analysis. But there are indicators of substantial value in the
14 company.

15 Theranos developed a highly valuable intellectual property portfolio over time. As of the second
16 half of 2017, the value of that intellectual property was assessed by multiple outside parties to be at least
17 in the hundreds of millions of dollars, and potentially over one billion dollars. In 2017, an outside law
18 firm, Perkins Coie, performed an analysis of Theranos’ patent portfolio to “see if there was an
19 opportunity to use it for licensing and whether the portfolio had significant value.” Ex. A at 82 (T.
20 Carroll Ltr. at 1). The lawyer who led that charge explains the breadth of the portfolio in both number of
21 assets and different technologies: the team “discovered that Theranos had more than 1200 patent assets
22 across the globe” and “a vast number of patents in the Theranos patent portfolio were directed to
23 invention other than a testing machine,” including real-time influenza detection and patents “that solved
24 technical problems related to aspects of blood testing.” *Id.* at 82, 83 (T. Carroll Ltr. at 1, 2). “Theranos
25 had scores of inventions like these that were valuable on their own, even if they were never successfully
26 aggregated into a full and accurate testing machine.” *Id.* at 83 (T. Carroll Ltr. at 2). Ultimately, Perkins
27 Coie prepared a series of analyses, in the form of PowerPoint presentations, which valued the potential

1 licensing opportunities for various subsets of patents and various potentially infringing companies. One
2 such presentation dated August 2017 showed licensing opportunities at between \$700 and \$800 million
3 based on a small subset of Theranos' large asset portfolio and the products of eight companies. Ex. G at
4 46 (Overview of Theranos' IP Assets and Near-Term Licensing Opportunities). Notably, all of the
5 patents assessed in that presentation were issued by the end of 2014. *Id.* at 9-15.¹²

6 An outside counterparty also valued Theranos' patent portfolio at several hundred million
7 dollars. In November 2017, with Theranos in distress after two years of unrelenting public criticism,
8 Fortress Credit Corporation agreed to give a loan of \$100 million in cash to Theranos, secured by the
9 value of the patent portfolio. Ex. I (Term Sheet) at Dynasty003471-72. Fortress had done its own
10 independent due diligence on the patent portfolio and "believe[d] that Theranos' patents are
11 foundational patents in the POC [Point of Care] field." Ex. J (Fortress investment analysis) at SEC-
12 DEPO-004683. A Fortress executive testified under oath in a separate proceeding that Fortress would
13 have expected to receive a return on its investment in the event Theranos defaulted and Fortress took
14 ownership of the patents, Ex. K (E. Levy Dep. Tr.) at 29:12-31:14; the return targeted by the Theranos-
15 related investment fund was "two to three times the money invested at a rate of return of about 25
16 percent," *id.* at 90:2-24; and Fortress "will not do the deal unless it meets certain return criteria," *id.* at
17 92:24-25. *See also* Ex. A at 74 (F. Bonanni Ltr. at 3). Other outside analyses also indicated that
18 Theranos' device had the potential to generate a substantial return. Ex. A at 261 (D. Tschirhart Ltr. at 1)
19 ("Near the end, we had an independent third party consultant evaluate the business case for the machine
20 as it actually was and they concluded it would generate a billion dollars in revenue in the first ten
21 years.").¹³ In fact, "[t]he technology and clinical concepts that Theranos[] championed are becoming a
22 reality today." Ex. A at 128 (Dr. Evans Ltr. at 1).

23
24
25 ¹² Perkins Coie completed analyses that included additional patents and additional potentially
26 infringing products identified an even greater potential revenue amount. *See* Ex. H (2018 CIM with
cover email cc'ing Perkins Coie), at Slides 83-103.

27 ¹³ The C-2 investors, including RDV, approved the Fortress loan from Theranos' side in
28 November 2017.

1 Theranos also had hundreds of millions of dollars cash on hand several months after the alleged
2 fraud was revealed. On April 17, 2016, six months after the *Wall Street Journal* had begun publishing
3 articles on Theranos and two and half months after CMS’s report on Theranos’ laboratory became
4 public, Theranos had over \$367 million in cash on hand. TX 5172 at col. JQ, row 16. After Walgreens
5 announced it was terminating the relationship with Theranos in June 2016, Ex. L, Theranos still had
6 over \$334 million of cash on hand, TX 5172 at col. JZ, row 16.

7 The government acknowledges both the complexity of assessing the company’s value and the
8 substantial value in the company through its commission of an expert report (“the Saba Report”) that
9 argues the total loss to all C-1 and C-2 investors as somewhere between \$237 and \$316 million. *See*
10 Ex. M (Saba Report) ¶¶ 15, 120-21. In coming to that opinion, the Saba Report argues that the true
11 value of the C-1 and C-2 investments at the time they were made was 58% to 71% of what investors
12 paid for them—far from a worthless investment. *See id.* In other words, even under the government-
13 commissioned analysis, Theranos was an extremely valuable company and a majority of that value was
14 not the product of fraud. (The PSR does not address the Saba Report, though it was provided to the
15 Probation Officer and was discussed in Ms. Holmes’ objections to the Draft PSR.)

16 But even a cursory read of the Saba Report makes clear that it still overstates the loss. The
17 Report’s effort to assign a value to the investments is flawed, inherently speculative, and unreliable.
18 The Report does not establish a “reasonable estimate of the loss” by clear and convincing evidence or
19 even a preponderance of the evidence such that the government can meet its burden. § 2B1.1 cmt.
20 n.3(C). Several examples highlight why that is the case. *First*, the use of a loss range of nearly \$100
21 million—which cuts across § 2B1.1(b)(1) loss levels—cannot reflect a reasonably determined loss
22 amount. *See Hussain*, 2019 WL 1995764, at *5 (rejecting government’s proposal of a loss range as
23 sufficient because “a range is not an amount” and the “staggeringly large range” of a billion dollars does
24 not meet the standard for a loss “reasonably ... determined”). That the Saba Report could not reach a
25 specific amount confirms the futility of this project. *Second*, the valuation of a private company with
26 limited operational history is inherently theoretical and speculative. That is demonstrated by the Saba
27 Report, which considers a variety of potential approaches and lacks a single defined and accepted

1 methodology. The constraints on valuing a non-public start-up company is not a problem unique to
2 Theranos, but is inherent within the entire venture capital industry. *See* Gompers et al., *How Do Venture*
3 *Capitalists Make Decisions?*, 135 J. Fin. Econ. 169, 170-71 (2020) (“The paucity of historical operating
4 information and the uncertainty of future cash flows makes VCs’ investment decisions difficult and less
5 like those in the typical setting taught in MBA finance curricula.”). *Third*, the report overstates the loss
6 because it does not include the value of intellectual property that could be achieved through licensing.
7 *See supra* pp. 36-37 (discussing value of patent portfolio). *Fourth*, the report calculates the loss to
8 investors as a whole when that must be addressed on an investor-by-investor basis, as discussed above.

9 To be clear, it is the government’s burden to prove loss, and *not* Ms. Holmes’ burden to disprove
10 it. Even courts that have expressed a view that a defendant’s conduct was “brazen” have declined to
11 find loss where the government has failed to prove it. For example, in *United States v. Block*, the court
12 noted that the defendant, the Chief Financial Officer of a publicly traded real estate investment trust, had
13 “brazenly” inflated values “by simply making up numbers to plug a gap that resulted from what would
14 have been a proper calculation of the company’s numbers.” Dkt No. 169 at 68, No. 16-cr-595 (S.D.N.Y.
15 Dec. 4, 2017) (Sentencing Tr.). The court nevertheless determined that the government had failed to
16 prove the \$300 million loss it sought, declined to apply the loss enhancement, and gave the defendant an
17 18-month sentence in view of, among other things, the defendant’s personal circumstances, the complex
18 circumstances surrounding the offense, and the court’s view that a longer sentence would not
19 meaningfully affect general deterrence. *Id.* at 68-72.

20 Because total invested amount is an inappropriate measure of loss, and because the government
21 has failed to meet its burden of proof under an alternative reasonable estimate, another approach must be
22 considered.

23 **4. Gain To Ms. Holmes As An Alternative Measure**

24 Where loss amount cannot be reasonably estimated, the Guidelines indicate that the proper
25 measure is gain to the defendant from the offense. U.S.S.G. § 2B1.1 cmt. n.3(B); *see Hussain*, 2019 WL
26 1995764, at *7 (calculating gain as the premium on the stock that the defendant owned and sold). Here,
27 the appropriate measure of gain is \$0. Ms. Holmes never sold any of her equity in the company. Ms.

1 Holmes received a total of \$1,546,025.37 in salaried compensation over the six years from 2010 through
 2 2015. See Ex. N (E. Holmes Interrogatory Resp. in *Partner Investments, L.P. v. Theranos, Inc.*) at
 3 No. 8. But as the *Hussain* court pointed out, salaried compensation in a case where the company was
 4 engaged in legitimate business activities presents challenges because the Court may only include gain
 5 that “resulted from the offense.” U.S.S.G. § 2B1.1 cmt. n.3(B); *Hussain*, 2019 WL 1995764, at *6-7.
 6 Here, the government has not proven and cannot prove that Ms. Holmes’ salary resulted from the
 7 offense conduct as opposed to the legitimate activities of Theranos.

8 **5. If the Court Accepts the PSR’s Calculation of Loss, A Downward Departure**
 9 **is Warranted Under Section 2B1.1, Application Note 21(C).**

10 If the Court finds that the PSR’s calculation of loss is correct, Ms. Holmes moves for a
 11 downward departure based on the fact that the offense level resulting from the application of this
 12 Guideline “substantially overstates the seriousness of the offense.” U.S.S.G. § 2B1.1 cmt. n.21(C). In
 13 his recommendation, the Probation Officer notes: “It is the undersigned’s opinion that the guideline
 14 range is drastically overrepresented based solely on the amount of financial loss, which carries a 30-
 15 level increase.” PSR Sentencing Recommendation at 2. For that reason, as well as the reasons
 16 described in Sections III(A)(1) and IV(A), many complex circumstances surround the offense conduct
 17 which causes the PSR’s loss calculation to overstate the seriousness of the offense. Indeed, applying *all*
 18 of the other enhancements the PSR applies, but not the loss enhancement, the resulting offense level is
 19 13, which puts the resulting Guidelines range at 12-18 months.

20 **B. Ms. Holmes Objects to the Calculation of the Number of Victims.**

21 The PSR erroneously includes a 2-level increase pursuant to § 2B1.1(b)(2) based on the number
 22 of alleged victims. PSR ¶ 106. “The Guidelines do not ... allow a district court to ‘estimate’ the number
 23 of victims to enhance a sentence under § 2B1.1(b)(2).” *United States v. Showalter*, 569 F.3d 1150, 1160
 24 (9th Cir. 2009). A “victim” under § 2B1.1 is a person (including corporations) “who sustained any part
 25 of the actual loss determined under subsection (b)(1).” § 2B1.1 cmt n.1.

26 For the reasons the government cannot show loss pursuant to § 2B1.1(b)(1), it also cannot prove
 27 that there were ten or more “victims” as defined by § 2B1.1. The Addendum to the PSR explains that its

1 calculation of the number of victims relied on the same spreadsheet discussed above. *See supra* Section
 2 III(A)(2); PSR Addendum ¶ 7. For the reasons discussed above, that approach is flawed. Even
 3 assuming that every victim impact statement provided by an individual or entity who invested between
 4 2010 and 2015 satisfies the elements for proving a “victim”—which it does not—only eight such entities
 5 that are included on the government’s spreadsheet have submitted statements claiming to be victims:
 6 PFM, RDV Corp., the Shultz Great Grandfather Trust, Hall Group, Alan Eisenman, Cox Investment
 7 Holdings, Inc., Crofton Capital, and Gordon Family Trust. Because § 2B1.1 defines a victim as a person
 8 who suffered actual loss pursuant to § 2B1.1(b)(1), Ms. Holmes objects to any calculation of victims
 9 that does not meet the standards discussed above with respect to loss.

10 **C. Ms. Holmes Should Not Receive a 4-Level Increase for Her Role.**

11 Ms. Holmes objects to the PSR’s upward adjustment of her offense level based on her role in the
 12 offense pursuant to U.S.S.G. § 3B1.1. PSR ¶ 108; PSR Addendum ¶ 22. This adjustment only applies if
 13 the defendant “was an organizer or leader of a criminal activity” and that criminal activity “involved five
 14 or more participants or was otherwise extensive.” U.S.S.G. § 3B1.1(a). Theranos was not a criminal
 15 enterprise, the PSR has not identified more than two participants who were at most co-equals, and the
 16 criminal activity was not “otherwise extensive.”

17 **1. Ms. Holmes Was Not a Leader of “Criminal Activity.”**

18 Section 3B1.1 cannot be applied merely because Ms. Holmes was the CEO of or had decision-
 19 making authority within *Theranos*. As the Guideline makes clear, the leadership position at issue in the
 20 rule is leadership in criminal activity, not merely leadership in a company. U.S.S.G. § 3B1.1(a) (stating
 21 adjustment may apply to “organizer or leader of a criminal activity”). “[T]o sustain a finding that a
 22 defendant was an organizer or a leader, there must be evidence that the defendant exercised some
 23 control over others involved *in the commission of the offense* [or was] responsible for organizing others
 24 for the *purpose of carrying out the crime.*” *United States v. Avila*, 95 F.3d 887, 889 (9th Cir. 1996)
 25 (emphasis added) (internal quotation marks omitted). There is no dispute Theranos was a “real
 26 company” with legitimate commercial activities. Holmes 9/8/21 Tr. 553:7-8 (gov’t opening). The fact
 27 that Ms. Holmes had some decision-making authority for aspects of the *company* or that she was a

1 hands-on CEO of the *company* is not a sufficient basis to apply the adjustment. *See* PSR Addendum ¶
 2 22 (explaining that the enhancement was applied because Ms. Holmes was “a ‘hands-on’ CEO who was
 3 always present at the company, and Ms. Holmes even said, ‘The buck stopped with her.’”).

4 **2. The Adjustment Does Not Apply Because Ms. Holmes Was Co-Equal or Less**
 5 **Responsible Than Her Co-Defendant, the Other “Participant.”**

6 Additionally, Ms. Holmes did not have a higher level of responsibility than other participants in
 7 the alleged crime, i.e., Mr. Balwani.¹⁴ “This adjustment is included primarily because of concerns about
 8 relative responsibility.” U.S.S.G. § 3B1.1 cmt. background. Thus, where the record demonstrates that
 9 the criminally responsible participants were “co-equal,” the adjustment does not apply. *United States v.*
 10 *Holden*, 908 F.3d 395, 402 (9th Cir. 2018) (finding organizer adjustment was inapplicable when record
 11 demonstrated that participants were “co-equal”). While at some points the government has taken the
 12 position that Ms. Holmes and Mr. Balwani “controlled Theranos as equals,” Holmes 9/8/21 Tr. 552:23-
 13 553:5 (gov’t opening), in its case against Mr. Balwani it argued that Mr. Balwani had outsized influence
 14 on Ms. Holmes, Balwani 6/24/22 Tr. 7652:9-17 (gov’t rebuttal), and Mr. Balwani was convicted of
 15 every count in the applicable indictment. It is undisputed that there were areas of the company for
 16 which Mr. Balwani and not Ms. Holmes had primary responsibility, such as the Clinical Laboratory
 17 Improvement Amendments (“CLIA”) laboratory, the Walgreens relationship, and the financial
 18 projections that went to the investors—all of which were central to the government’s allegations. Under
 19 the government’s positions at *either* trial, the adjustment does not apply to Ms. Holmes. Without
 20 sufficient evidence that Ms. Holmes had a higher level of responsibility for criminal activity such that
 21 she could be said to be a leader, the adjustment cannot apply. For this reason, the alternative identified
 22 in the Addendum to the PSR—that the two-level adjustment under § 3B1.1(c) might apply instead—is
 23 also not supported by the record. PSR Addendum ¶ 22.¹⁵

24
 25 ¹⁴“A ‘participant’ is a person who is criminally responsible for the commission of the offense,
 26 but need not have been convicted. A person who is not criminally responsible for the commission of the
 27 offense . . . is not a participant.” U.S.S.G. § 3B1.1 cmt. n.1. The PSR does not identify any other
 “participant” in the crime beyond Mr. Balwani.

28 ¹⁵ Additionally, Ms. Holmes neither profited from the offense nor is at risk of committing an
 offense in the future, both concerns expressed by the comments to the Guidelines. *See* U.S.S.G. § 3B1.1
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1 **3. The “Otherwise Extensive” Provision Does Not Apply.**

2 The PSR’s conclusion that the fraud “involved 5 or more participants or was otherwise
3 extensive” is based on three potential arguments: (1) the number of people employed by and scope of
4 activities of the company, (2) the size of the investments, and (3) the number of victims. *See* PSR ¶ 108;
5 PSR Addendum ¶ 22. As to the first, the PSR errs because it relies on the activities of a legitimate
6 enterprise, as opposed to focusing on the *criminal* activity (alleged misstatements to investors), and
7 identifies no participant in that activity other than Ms. Holmes and Mr. Balwani. The second and third
8 arguments, meanwhile, present a number of issues. For one, finding the conduct “otherwise extensive”
9 based on the loss and number of victims infects this enhancement with the problems identified above in
10 Sections III(A) and (B). Additionally, even if the number of victims and the loss amount were correct
11 (which they are not), using the number of victims or loss amount to justify the adjustment would
12 constitute double-counting. The PSR already includes adjustments for both the loss amount and the
13 number of victims involved in the crime. Moreover, even if those factors could be considered, they
14 should not be the sole basis for applying the adjustment because neither of those factors have anything
15 to do with relative responsibility—the purpose of this adjustment. *See* U.S.S.G. § 3B1.1 cmt.
16 background (“Th[e] adjustment [of § 3B1.1] is included primarily because of concerns about relative
17 responsibility. . . . [I]t is also likely that persons who exercise a supervisory or managerial role in the
18 commission of an offense tend to profit more from it”); *see also United States v. Egge*, 223 F.3d
19 1128, 1133 (9th Cir. 2000) (“Section 3B1.1 attempts to apportion *relative* responsibility where an
20 offense involves multiple participants” (emphasis added)).

21 **D. Ms. Holmes Should Receive Credit for Acceptance of Responsibility Pursuant to**
22 **U.S.S.G. § 3E1.1(a).**

23 Ms. Holmes should receive a two-level credit for “clearly demonstrat[ing] acceptance of
24 responsibility for [her] offense.” U.S.S.G. § 3E1.1(a); *see* PSR ¶ 112; PSR Addendum ¶ 24. Ms.
25 Holmes maintains her innocence with respect to fraud and exercised her Constitutional rights—an

26 _____
27 cmt. background (“[I]t is also likely that persons who exercise a supervisory or managerial role in the
28 commission of an offense tend to profit more from it and present a greater danger to the public and/or
are more likely to recidivate.”).

1 exercise that was plainly warranted given her acquittal on Counts 2 and 10-12 and the lack of a
2 conviction on Counts 3, 4, and 5. But both before she was charged and repeatedly during the trial, she
3 made extensive efforts to uncover and acknowledge responsibility for errors made by her or the
4 company, including with respect to issues the government has argued were criminal.

5 In response to criticisms that began in late 2015, Ms. Holmes embarked on a broad, resource-
6 intensive effort to bring outside voices into Theranos and to identify, acknowledge, and correct errors or
7 missteps, and restructure the company as appropriate. Testimony, documents, and letters to the Court
8 from reform-era Board members, employees, and consultants describe some of these efforts. *See, e.g.*,
9 Ex. A at 97 (T. Cooper Ltr. at 2).

- 10 • **Reconstituted Board:** In 2016, Mr. Balwani left the company and Ms. Holmes reconstituted the
11 Board of Directors in response to criticisms that its members lacked appropriate knowledge. The
12 new Board included physician and former head of the CDC Dr. William Foege (who had been on
13 the Board previously); former Amgen senior executive Dr. Fabrizio Bonanni, who had expertise
14 in medical devices; and technology industry executive Daniel Warmenhoven, who was asked to
15 join the Board to help Ms. Holmes by a Board member who was retiring for medical reasons.
16 All three members of that reconstituted Board of Directors have written letters in support of
17 leniency. Ex. A at 72 (F. Bonanni Ltr.), 135 (W. Foege Ltr.), 269 (D. Warmenhoven Ltr.).
- 18 • **Scientific and Technical Advisory Boards:** Ms. Holmes invited into the company new
19 advisory boards whose members consisted of outside experts. Dr. Susan Evans (no relation to
20 Billy Evans), who has spent her career in diagnostics product development and technology
21 assessment, was a member of the new Scientific and Medical Advisory Board. She observes that
22 “when the SAB was created in 2016 to help the company, I found a CEO who took ownership of
23 previous missteps and shortfalls, and genuinely sought advice, input and guidance from
24 advisors.” Ex. A at 128 (Dr. Evans Ltr. at 1); *see* Ex. A at 136 (W. Foege Ltr. at 2) (“[Ms.
25 Holmes] had outside experts spend time at the Theranos facility. She allowed them to talk to
26 anyone. She allowed those experts to inspect the hardware, and make suggestions.”). Dr. John
27 Moalli, who was a member of the Technical Advisory Board (also formed around the same

1 time), notes: “As a member of the TAB, I found that Elizabeth received advice openly and was
 2 constantly looking to fix things she recognized had been done incorrectly.” Ex. A at 203 (J.
 3 Moalli Ltr. at 2).

- 4 • **New, Experienced Staff Focused on Compliance and Quality Control:** “Elizabeth hired
 5 additional staff with extensive diagnostic industry experience in engineering, assay development,
 6 and quality systems, and worked to establish a culture based on a quality management system.”
 7 Ex. A at 128 (Dr. Evans Ltr. at 1); *see* Ex. O (July 2016 Press Release). One of those consultants
 8 observes: “During my committee involvement, Ms. Elizabeth Holmes was thoroughly engaged,
 9 wanted to learn and make improvements at Theranos. She embraced our recommendations,
 10 worked hard to implement the recommendations, and understood what went wrong previously. I
 11 felt her openness to continuous improvement was adopted within the company and was
 12 extremely helpful in making rapid changes and continuous improvements.” Ex. A at 265 (M.
 13 VanTrieste Ltr.); *see also* Ex. A at 187 (B. Liptzin Ltr.) (“She did not avoid difficult
 14 conversations and demonstrated an understanding and care about doing the right thing.”). Dr.
 15 Bonanni reiterates: “As the board committee and the newly hired executives developed the
 16 quality system and compliance program, Elizabeth Holmes absorbed the relative concepts
 17 rapidly, as a sponge, and became their champion serving as a role model for the rest of the
 18 organization.” Ex. A at 73 (F. Bonanni Ltr. at 2).
- 19 • **New, Experienced Laboratory Directors to “Turn Over Rocks”:** Theranos hired new
 20 laboratory directors, Dr. Kingshuk Das and Dr. Donald Tschirhart. Ms. Holmes gave them the
 21 imprimatur to “turn over rocks,” to look into errors and make any and all needed corrections,
 22 with her full support—reporting, for the first time in the company’s history, to Ms. Holmes
 23 directly. Holmes 11/10/21 Tr. 5933:18-20, 5996:12-18, 5997:1-3 (testimony of laboratory
 24 director Dr. Das). Ultimately, Theranos shut down its clinical laboratory business and refocused
 25 its work on the small sample technology.
- 26 • **Openness with the Scientific Community:** Theranos made efforts to explain and share its
 27 inventions with the scientific community. In August 2016, Ms. Holmes presented the miniLab to
 28

1 a hostile audience at the American Association of Clinical Chemistry conference. TX 7673A.¹⁶
2 Additionally, Theranos worked to publish papers on its research. *E.g.*, TX 7695, TX 7717,
3 TX 7718, TX 7719.

4 Ms. Holmes' recognition, acknowledgement, and assumption of responsibility of her mistakes as
5 Theranos' CEO were central to her reform efforts. She took public personal responsibility for Theranos'
6 failings as early as April 2016—more than two years before her indictment—in an interview with NBC
7 News correspondent Maria Shriver.¹⁷ She told Ms. Shriver: “I feel devastated that we did not catch and
8 fix these issues faster.” And when asked directly by Ms. Shriver what she held herself responsible for,
9 Ms. Holmes said: “I’m the Founder and CEO of this company. Anything that happens in this company
10 is my responsibility at the end of the day.” She did the same in her SEC testimony, before her
11 indictment in this case. *See* Ex. T (SEC Tr.) at 347:12-13 (“I was the CEO of the company, so I take
12 responsibility for this company.”); *id.* at 353:12-13, 353:19-22, 620:22-621:2, 689:19-20, 697:2-3.

13 Ms. Holmes also did the same on the witness stand in this case. *See* Holmes 11/30/21 Tr.
14 8005:13-15 (testimony on cross-examination) (“Q. And you take responsibility for the company; is that
15 your testimony? A. I do.”). For example, with respect to the company’s response to the *Wall Street*
16 *Journal*’s 2015 investigation, Ms. Holmes told the jury repeatedly that she wishes Theranos had handled
17 its interactions with specific employees, and the entire response to the *Wall Street Journal*’s inquiries,
18 differently. Holmes 11/30/21 Tr. 7973:17-18, 7978:23-25, 7998:13-15 (testimony of E. Holmes); *see*
19 *also id.* at 8136:18 (“There are many things that I wish I did differently.”). Ms. Holmes also did not shy
20 away from personally acknowledging her role in conduct that the government questioned. For example,
21 with respect to pharmaceutical reports, Ms. Holmes testified about her own role in affixing pharma
22 company logos to the reports, and also acknowledged she wishes she had handled it differently. *Id.* at
23 8140:13, 8155:5-7; *see* Holmes 11/23/21 Tr. 7479:2-10.

24
25
26 ¹⁶ This presentation is available at <https://www.youtube.com/watch?v=n6JRG733ReQ&t=1s> (last
accessed Oct. 20, 2022).

27 ¹⁷ The video of that interview is available at [https://www.today.com/video/theranos-ceo-
28 elizabeth-holmes-i-m-devastated-about-blood-test-issues-43442757745](https://www.today.com/video/theranos-ceo-elizabeth-holmes-i-m-devastated-about-blood-test-issues-43442757745) (last accessed Sept. 25, 2022).

1 Letters from Ms. Holmes’ friends and family make clear that in her personal life she regularly
2 acknowledges her errors with sincere reflection and remorse. *See, e.g.*, Ex. A at 268 (J. Walker Ltr. at 1)
3 (“Her contrition is real and appreciable”), 271 (Y. Yu Ltr. at 1) (“Liz showed more introspection and
4 remorse than what I’d personally witnessed in any other failed founder, and I had seen many in my
5 decade of investing.”), 143 (K. Gavrieli Ltr. at 1), 140 (S. Freeman Ltr. at 2), 148 (K. Goldman Ltr. at
6 1), 160 (S. Heuser Ltr.), 197 (S. Mantri Ltr.), 250 (D. Sterling Glasband Ltr. at 3).

7 Ms. Holmes’ efforts to root out and fix mistakes as well as her consistent acknowledgement of
8 responsibility and errors should be considered acceptance of responsibility in this case. A defendant is
9 not required to accept the government’s view of every fact in a complex case—especially when the
10 government’s view is at odds with the facts—or give up her constitutional rights in order to receive
11 credit for her sincere recognition of errors and remorse. *See* U.S.S.G. § 3E1.1 cmt. n.2. Ms. Holmes’
12 actions prior to and at trial and in her personal life are well within the spirit of § 3E1.1.

13 **IV. 18 U.S.C. § 3553(a) SUPPORTS SUBSTANTIAL LENIENCY FOR MS. HOLMES.**

14 The Court’s task in sentencing is to identify and “impose a sentence sufficient, but not greater
15 than necessary, to comply with the purposes” of sentencing. 18 U.S.C. § 3553(a). Although the
16 Sentencing Guidelines are the starting point for the calculation of an appropriate sentence, a district
17 court “may not presume that the Guidelines range is reasonable.” *Gall v. United States*, 552 U.S. 38, 50
18 (2007). Instead, the Court “must make an individualized assessment based on the facts” of each case,
19 recognizing that a within-Guidelines sentence may be greater than necessary to serve the purposes of
20 sentencing. *Id.*; *Kimbrough v. United States*, 552 U.S. 85, 91 (2007); *see United States v. Gupta*, 904 F.
21 Supp. 2d 349, 350 (S.D.N.Y. 2012) (“Imposing a sentence on a fellow human being is a formidable
22 responsibility. It requires a court to consider, with great care and sensitivity, a large complex of facts
23 and factors.”). If the Guidelines calculation in a given case results in an “inordinate emphasis” on
24 “putatively measurable quantities,” like financial loss, a court should focus more on the statutory factors
25 set forth in 18 U.S.C. § 3553(a) to determine an appropriate sentence. *United States v. Adelson*, 441 F.
26 Supp. 2d 506, 509-12 (S.D.N.Y. 2006), *aff’d*, 301 F. App’x. 93 (2d Cir. 2008). Indeed, the Court “may
27

1 vary [from Guidelines ranges] based solely on policy considerations, including disagreements with the
2 Guidelines.” *Kimbrough*, 552 U.S. at 101.

3 The Court must make an assessment of what sentence is reasonable based on all the factors,
4 including: (1) the nature and circumstances of the offense and history and characteristics of the
5 defendant; (2) the purposes of sentencing, including the need for deterrence and to protect the public; (3)
6 the kinds of sentences available; (4) the Sentencing Guidelines; (5) any relevant policy statements issued
7 by the Sentencing Commission; (6) the need to avoid unwarranted sentence disparities; and (7) the need
8 to provide restitution to any victims of the offense. 18 U.S.C. § 3553(a). “[T]he amount by which a
9 sentence deviates from the applicable Guidelines range is not a measure of how ‘reasonable’ a sentence
10 is. Reasonableness is determined instead by the district court’s individualized application of the
11 statutory sentencing factors.” *United States v. Dorvee*, 616 F.3d 174, 184 (2d Cir. 2010) (citing *Gall*,
12 552 U.S. at 46-47). These factors support a sentence with no to minimal incarceration.

13 **A. The Nature and Circumstances of the Offense Strongly Support Leniency.**

14 Ms. Holmes has been convicted of defrauding certain sophisticated investors who knew they
15 were investing in a company with a big, world-changing dream and substantial potential that had not yet
16 been, and might never be, realized. Far from a house of cards, Theranos was well on its way to
17 achieving its mission: it was a technology company that developed substantial, innovative technology
18 over its fourteen-year life through the research and development efforts funded by investments and
19 performed by Theranos’ many qualified, brilliant scientists and engineers. Ms. Holmes, whose first real
20 job was CEO of this company she founded at 19, was all-in on the company’s mission to increase access
21 to health information: she worked constantly, never sold any stock, and remained firmly committed to
22 the company’s mission until the company’s end. For the reasons discussed below, the circumstances of
23 the offense strongly support a lenient sentence.

24 **1. The Offense Conduct Occurred Within a Unique World of Investments in**
25 **Start-Up Companies.**

26 Theranos was never a public company. It had limited operational history and had never paid
27 dividends to its shareholders. Both Theranos and the offense conduct are best understood through the

1 lens of a Silicon Valley start-up company. That is the environment in which Theranos was founded, in
2 which it was built, and in which investors decided whether and how much to invest. Theranos had
3 massive potential, but its success was uncertain—even highly unlikely, in light of the overall odds for
4 start-ups.¹⁸ The company and Ms. Holmes faced the typical challenges that confront such companies
5 and their inexperienced CEOs. No one is arguing these factors excuse fraud, but they do situate the
6 offense conduct in context, as § 3553(a) requires.

7 It is common sense that investing in any uncertain venture brings with it substantial risk.
8 Investors know that is especially true with investments in startups, the majority of which fail. Tim
9 Draper is a venture capitalist with 35 years of experience whose company backed some of Silicon
10 Valley’s greatest technology success stories and was an early investor in Theranos. Ex. A at 112 (T.
11 Draper Ltr. at 1). Mr. Draper makes the simple observation that some companies succeed and some fail.
12 *Id.* David Sokol, an experienced venture capital investor who has built and led several companies,
13 including for Berkshire Hathaway, echoes that sentiment: “Through my career, I have invested in
14 venture capital transactions which have been failures and successes.” Ex. A at 239 (D. Sokol Ltr. at 2).
15 He goes on to explain that because a venture investment usually relies on estimates of the business’s
16 value *if* it succeeds, “[v]enture capital is inherently very risky investing and often only 1 out of 10 such
17 investments prove successful. The reason is obvious in that most venture capital ideas are attempting to
18 do something never before tried or achieved.” *Id.* Yinne Yu, an investor in early-stage companies,
19 similarly observes: “A few of my first-time founders made it; most did not. . . . Even with the best of
20 intentions, all can go wrong.” Ex. A at 271 (Y. Yu Ltr. at 1). Alex Moore, also a venture capitalist,
21 agrees: “90% of my ‘bets’ (they are bets, nothing is certain) fail and go to 0. This is expected.” *Id.* at
22 206 (A. Moore Ltr. at 2).

23 Academic research supports these points: “On average, seven out of ten portfolio companies will
24 not return even the money invested in those startups; the majority will need to be written off. . . . Two
25

26 ¹⁸ *E.g.*, Patel, Neil, “90% Of Startups Fail: Here’s What You Need to Know About the 10%,”
27 *Forbes*, Jan. 16, 2015, *available at* <https://www.forbes.com/sites/neilpatel/2015/01/16/90-of-startups-will-fail-heres-what-you-need-to-know-about-the-10/?sh=559e79966792> (last visited 11/7/2022).

1 are expected to return enough to cover all the losses; the third to provide the 20 to 30 percent internal
2 rate of return (IRR) investors [in a venture fund] anticipate.” Hassan, Kama et al., “The Pervasive,
3 Head-Scratching, Risk-Exploding Problem With Venture Capital, *Institutional Investor*, at 1 (Sept. 29,
4 2020). Venture capitalists “are keenly aware of [the] asymmetrical return distribution” in which the
5 results of a portfolio are explained by the performance of a minority of the stocks—in particular, the
6 small number of winners. Nicolas Rabener, “Portfolio Construction in Venture Capital,” *Harvest*, at 3
7 (May 24, 2021). Well-established investment theories explain why (even in an efficient capital market)
8 a sophisticated investor may choose to include a high-risk investment like venture investing in a Silicon
9 Valley startup as part of a broader portfolio of assets. *See* B. Raasch & W. Cafero, 58 N.Y.U. Annual
10 Institute on Fed’l Taxation § 22.02 (2022) (“adding a riskier asset class . . . could actually reduce the
11 risk of a portfolio”).

12 “All but the most naïve of investors know there are risks that go along with potential rewards of
13 investments.” Ex. A at 67 (L. Blue Ltr. at 2). Theranos did not seek investments from naïve investors,
14 but it nevertheless made sure that investors understood and could take on the risks that came with
15 investing in it. *Cf.* Ex. A at 101 (M. Crane Ltr. at 2) (“We were certainly aware of the risks involved as
16 in any such venture, and having weighted those risks, we were comfortable in the amount we invested. .
17 . . We believe no one should invest more than they are prepared to lose.”). To that end, investors
18 expressly acknowledged at the time of their investment that the opportunity was unique and speculative
19 in nature, that there were serious risks of investing in the company, that the projections were unreliable,
20 and the investors were themselves sophisticated actors. TX 1505 §§ 4.3, 4.4, 4.5, 4.6.

21 Ms. Holmes’ conduct should also be considered in the context of this world, and filtered through
22 her role as a young, first-time founder without independent business experience. Venture investors,
23 advisors, and founders describe the unique challenges faced by a founder and CEO and the unique
24 perspective required to bring a new venture to success. “Inventing the future is hard. Founders are
25 called upon to strike the incredibly difficult balance between painting a picture of the world as it could
26 be, and as it actually is.” Ex. A at 81 (J. Carr Ltr. at 1); *id.* at 217 (J. Orr Ltr. at 2) (noting the “delicate
27 balance” involved in seeking investments). “The CEO and founder must carry the torch of the vision

1 through every obstacle and terrain and protect its flame from naysayers, doubters, and challengers day in
2 and day out to create an environment for innovation to take hold.” Ex. A at 143 (K. Gavrieli Ltr. at 1).

3 Set against that backdrop is the role that optimism and lack of experience play in business
4 challenges faced by start-up founders, who may not anticipate the setbacks. “Most first-time founders
5 are visionary but naïve about how to build a business and how long it takes to build a business”—
6 especially the latter. Ex. A at 271 (Y. Yu Ltr. at 1). “For example, recently one of my companies gave
7 me a set of financial projections to review before fundraising. I cut the numbers by over 50% because I
8 see operational hiccups that the first time CEO doesn’t yet have the foresight to see.” *Id.*; see Paul A.
9 Gompers et al., *How Do Venture Capitalists Make Decisions?*, 135 J. of Fin. Econ. 160, 181 (2020)
10 (“VCs report that fewer than 30% of the companies meet projections.”). Dr. Susan Evans, a member of
11 Theranos’ Scientific and Medical Advisory Board (SMAB) beginning in 2016, has spent her career in
12 product development and technology assessment in the diagnostics industry. She writes: “I have met
13 many young entrepreneurs who have a dream and many if not most, oversell what they have, and when
14 it will be ready for market. This optimism is what often drives innovation, and the development of new
15 products that go beyond what is the norm.” Ex. A at 128 (Dr. Evans Ltr. at 1); see also *id.* at 112 (T.
16 Draper Ltr at 1) (“Venture-backed startup companies often announce and deliver products to the market
17 before they are ready.”).

18 These challenges are only compounded for female founders, as letters by female founders
19 explain in sharing those writers’ experiences. For example:

20 Liz and I attended some of the same entrepreneurship events in Silicon Valley while
21 she was at Theranos. These events often featured panels and fireside chats, where
22 prominent people in business would make the case that a key reason less than 2%
23 of venture capital goes to women is because female founders don’t present bold
24 enough visions. The advice at these conferences was to picture what massive
25 success would look like in 5 or 10 years, and sell *that* vision, because *that’s* what
26 male founders were doing, and *that’s* what venture capitalists expect to see. When
27 I think back on my younger days as a CEO, I was frequently told that my financial
28 projections were too conservative.

Ex. A at 250 (D. Glasband Sterling Ltr. at 3). Likewise:

Speaking as a woman who has raised \$60M in venture capital, I can confirm it is
not easy. It is not easy for anyone, but I feel it’s worth noting that approximately
3% of venture capital goes to women CEOs. The only scientific evidence I have

1 encountered between men and women when it comes to raising capital is that men
2 are more frequently asked about opportunities and women are more frequently
asked about risks.

3 Ex. A at 131 (J. Ewing Ltr. at 2). “The nuanced elements of Elizabeth being a female CEO cannot be
4 overstated.” Ex. A at 182 (J. Lamping Ltr. at 3); *see also id.* at 145 (A. Goldberg Ltr. at 1).

5 While they do not excuse fraud, these perspectives provide useful context for the circumstances
6 of the offense conduct, as § 3553(a) requires. First, they provide relevant context for the aspirational
7 way Ms. Holmes spoke to investors: as she explained when she testified, Ms. Holmes was frequently
8 speaking about projects Theranos was working on, ambitions, and the next generation device. Holmes
9 11/19/21 Tr. 7238:22-25; Holmes 11/23/21 Tr. 7619:22-7620:3, 7623:19-23; Holmes 12/8/21
10 Tr. 8586:11-14; Holmes 11/29/21 Tr. 7912:12-7914:11. Industry context and expectations help place
11 Ms. Holmes’ focus on the company’s vision and future in its environment and explain how such efforts
12 were perceived by Ms. Holmes as focusing the conversation on what investors in Silicon Valley startups
13 expect to and were asking to hear from her. They also help explain why she may have viewed a
14 proactive detailed discussion of risks and uncertainties as less important to sophisticated investors
15 investing in her company who would have been used to seeing failure in the vast majority of startup
16 companies. Second, the challenges that inexperienced CEOs have in setting financial projections and
17 anticipating operational hurdles provide additional context for Ms. Holmes’ reliance on Mr. Balwani to
18 create and convey financial models that investors appropriately understand and to run Theranos’
19 operations. Third, they contextualize the challenges that surround making statements about the expected
20 course of the development and commercialization of new technology, which could be set back by
21 scientific, regulatory, and operational hurdles that a new CEO may not see.

22 **2. Theranos Developed Innovative Technology and Provided Real Services to**
23 **Real Customers in Furtherance of Its Mission to Improve Access to**
24 **Healthcare.**

25 Also crucial to understanding the nature and circumstances of the offense is the fact that
26 Theranos “was a real company.” Holmes 9/8/21 Tr. 553:7 (government opening). This was not an
27 empty vehicle for Ms. Holmes’ gain. Money that was invested went into the research and development
and operations of the company with real results.

1 **a. Theranos developed real, valuable technology.**

2 Theranos spent most of its efforts developing products and improving the products it had
3 developed. Financial records show that the majority of the company’s funds were spent on research and
4 development and operations. Holmes 9/14/21 Tr. 780:13-781:18 (testimony of Theranos controller S.
5 Spivey). Theranos also built and improved its sophisticated manufacturing capabilities in California to
6 have the infrastructure to build its inventions as products. The technology Theranos invented can be
7 broadly categorized into three categories:

- 8 • Assays: Assays include the chemicals and processes for testing blood samples for particular
9 substances. Theranos developed hundreds of small sample assays over its many years of
10 research and development, and also developed the ability to manufacture the chemicals in-house.
- 11 • Hardware: This set of technology included the various versions of Theranos Sample Processing
12 Units (“TSPU”), as well as the small sample collection device (called the nanotainer) and various
13 other hardware and components that Theranos developed to perform analysis of blood, urine,
14 swabs, and other samples (and to complete other tasks). Between 2010 and 2015, the time
15 period at issue here, Theranos was working to build, perfect, and continuously improve its 4-
16 series TSPU (the minilab), which had the capability to run a host of different types of assays at
17 once. Theranos submitted an application for approval of this device and one blood test to the
18 FDA in 2014, and the FDA approved that application in 2015. Theranos planned to put the 4-
19 series TSPU into operation when a sufficient number of assays were approved. Other hardware
20 inventions, including other versions of the TSPU, were also developed.
- 21 • Software: Theranos’ software developments included medical recordkeeping software,
22 laboratory applications, diagnostic tracking, patient- and doctor-specific applications, and
23 infectious disease modeling.

24 *See generally* Ex. H (2018 CIM) (describing some assay, hardware, and software inventions Theranos
25 had developed).

26 The company obtained hundreds of patents in the United States and across the world covering
27 many of its inventions. *See* Ex. A at 82 (T. Carroll Ltr. at 1); Ex G at 3 (Overview of Theranos’ IP

1 Assets and Near-Term Licensing Opportunities).¹⁹ The company chose to protect other innovative
 2 breakthroughs as trade secrets. Holmes 11/23/21 Tr. 7584:6-7585:19 (testimony of E. Holmes). To
 3 receive such protection under California law, Theranos was required to make “efforts that are reasonable
 4 under the circumstances” to ensure the continued secrecy of its technology. Cal. Civ. Code §
 5 3426.1(d)(2). Theranos employed common methods, including nondisclosure agreements, security
 6 measures, limiting knowledge to “need to know,” and legal enforcement of breaches of nondisclosure
 7 agreements. *See* 1 Melvin F. Jager, Trade Secrets Law §§ 5:21, 5:26, 13:3 (2022); 1 Roger M. Milgrim
 8 & Eric E. Benson, Milgrim on Trade Secrets § 1.04 (2020).

9 **b. Theranos was on its way to achieving its mission to make health**
 10 **information more accessible through its commercial activities.**

11 The company also executed real contracts and provided real services to real customers. In its
 12 early years, it worked with 10 pharmaceutical companies. TX 7742 at 6-7; TX 7753. Many of the
 13 pharmaceutical companies praised what Theranos had developed. Theranos also ran studies in
 14 conjunction with leading academic medical institutions, including the Mayo Clinic. TX 7742 at 6, 7. It
 15 ultimately formed retail partnerships with Walgreens and Safeway in 2010 and, beginning in fall 2013,
 16 offered tests to customers in retail stores. TX 372 (Walgreens); TX 387 (Safeway); TX 12464 (noting
 17 November 2013 public launch).

18 Theranos worked toward its goal of making health information more accessible through a
 19 number of different avenues. Making the process of drawing blood more comfortable and humane,
 20 including by drawing smaller samples, was one. Advocating to allow patients to order their own tests
 21 directly, without a doctor’s visit, was another.²⁰ Working to bring the lab testing equipment to retail

23 ¹⁹ The United States has continued to issue patents on which Ms. Holmes is an inventor based on
 24 Theranos’ inventions after Ms. Holmes was indicted and, indeed, after her conviction. In the past four
 25 years, nearly 100 U.S. patents have been issued on Theranos’ inventions. At least 15 have been issued
 this year, with the most recent issued on July 12, 2022. *See* Ex. B (U.S. Patent No. 11,385,252 B2).

26 ²⁰ Theranos worked with Arizona legislators on a law that would allow patients to order their
 27 own blood work without a doctor’s prescription. The goal was to give patients control over their own
 28 health information and to ensure that patients were not prevented from doing so because they did not
 have access to, or could not afford, a visit with a primary care physician. Ms. Holmes testified to
 lawmakers in support of that law. The Arizona legislature passed the law nearly unanimously and HB
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1 locations was a third. While Theranos’ brand symbol became the small sample collection device known
2 as the nanotainer, Theranos learned that what was most important to patient-consumers was *cost*. In that
3 arena, Theranos was revolutionary: Theranos offered tests at substantially lower prices than the industry
4 leaders; it offered the same price to insured and uninsured patients; and it posted the prices on its
5 website—a practice that was unusual at the time. Theranos’ offering was so groundbreaking with regard
6 to cost that customers *flew from other states* to get their blood tested at Theranos, and still paid less
7 (including airfare) than what they would have paid to the industry incumbents. Ex. U at 1 (“[Bot
8 Anecdote] Mother and daughter came from California for a day to visit there [*sic*] Dr. and he sent them
9 here for labs because at Quest Diagnostics the labs were \$2,400 (she showed me the print out of the
10 cost!) and they paid \$177.00 and \$192.00. With there [*sic*] plane tickets, taxi, and labs they spent a total
11 of 300.00 they said. That isn’t even half of what there [*sic*] labs would have been. They were so
12 thankful and love everything about Theranos[.]”); *see also* Ex. V, Ex. W. The vast majority of
13 Theranos’ tests were processed using FDA-approved machines and processes. All tests were processed
14 in government-certified Theranos laboratories. Customers raved about the experience in feedback
15 provided to Ms. Holmes. *See, e.g.*, Ex. U at 50 (“The main reason I went was because of the cost. I am
16 often sent a high bill for my bloodwork with insurance. When I got there, the service was fast, the ladies
17 were super and professional and I must say, it was the best experience I have ever had. Plus, no bruising
18 whatsoever! I will continue going there for my bloodwork from now on and thank you!”).

19 **c. Theranos employed hundreds of employees.**

20 These technological and commercial accomplishments were the work of hundreds of individual
21 members of the community employed by Theranos over its life. Investments in Theranos also paid the
22 salaries of the many brilliant, talented, and committed members of the Theranos employee family
23 working to achieve its mission. As former employees describe, Ms. Holmes was personally invested in
24 the well-being of these individuals and their families, and took their personal circumstances and
25 professional accomplishments seriously. *See* § II(A)(3), *supra*.

26
27 _____
28 2645 went into effect on July 1, 2015. *See* <https://apps.azleg.gov/BillStatus/BillOverview/66902>.

1 **d. Theranos' technology and operations involved scientific and**
 2 **regulatory complexity.**

3 Theranos operated in a space that involved serious scientific and regulatory complexities—
 4 challenges that were known or knowable to investors through public research, beyond the information
 5 they got from Theranos (if any). Ms. Holmes did not work to address these complexities alone.
 6 Company scientists—all more highly educated and experienced than she was—reported on the state of
 7 the technology, including successes, efforts to resolve challenges, and response to criticisms or questions
 8 from those now considered whistleblowers. The company worked through regulatory questions and
 9 solutions with sophisticated partners and experienced outside lawyers. And policies and procedures
 10 were also in place. None of this is to say that Theranos operated without error; it is simply context to
 11 understand (i) that Ms. Holmes did not sit at the top of a company that simply implemented her
 12 commands and (ii) that Ms. Holmes understood there were teams and processes in place to address
 13 issues. This ambitious venture was full of the complications that come with launching any business,
 14 with the added complexities of scientific advancement and government regulatory schemes.

15 One regulatory challenge was how Theranos and its retail partners would operate the testing as a
 16 practical matter. Early in the retail partnerships, the parties had envisioned putting Theranos devices in
 17 retail locations. Those partners and Theranos soon recognized the potential regulatory barriers to that
 18 approach—namely, a risk the devices might need to be FDA-approved or each retail location would
 19 need to be certified as a high-complexity CLIA laboratory—and shifted the rollout strategy. Theranos
 20 and Walgreens agreed that Phase I of the company's retail operations would involve shipping samples
 21 back to certified central CLIA laboratories and Phase II, putting Theranos devices in retail locations,
 22 would occur once the Theranos devices had been FDA-approved. As a result of this shift, during Phase
 23 I, because the samples were being shipped to the Theranos laboratory for processing, the device used for
 24 testing a sample was less important to the commercial project than the experience customers had in
 25 stores. Theranos shared the details of this strategic plan with the FDA shortly after it publicly
 26 announced its partnership with Walgreens. TX 7751 at 2, 3.²¹

27 ²¹ Walgreens understood that Theranos had commercial equipment and would run samples
 28 requiring venipuncture “on a traditional lab test machine or perhaps outsourced to a lab” and that such
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1 Laboratory testing is also highly regulated. By 2015, Theranos had two laboratories certified by
 2 authorities in California and Arizona (working under the authority of federal agency CMS (Centers for
 3 Medicaid & Medicare Studies)). Those laboratories, which were staffed with qualified employees,
 4 processed blood samples collected at retail locations (such as the Walgreens locations). The vast
 5 majority of the eight million-plus test results produced by Theranos were generated on FDA-approved
 6 methods²²; tests performed on lab-developed methods had been validated under appropriate standards,
 7 with validation reports signed by a qualified laboratory director. *See* Holmes 9/28/21 Tr. 1990:12-18,
 8 1991:3-13, 2087:15-18, 2621:17-21 (testimony of lab director Dr. A. Rosendorff). Ms. Holmes, who
 9 does not have a college degree, was not qualified to and did not process patient samples. Nor did she
 10 determine what methods were appropriate for patient use. *Id.* at 1986:23-1987:13, 1991:6-13, 2087:1-18
 11 (testimony of Dr. Rosendorff).

12 In addition to being highly regulated, blood testing is scientifically complex. Laboratory testing
 13 has inherent imprecision and imperfections. Even FDA-approved tests can produce inaccuracies for a
 14 particular patient at a particular time. Government regulations indicate that test results can be
 15 considered “accurate” even if they differ from a target by large percentages. *See, e.g.*, TX 7603 at
 16 § 493.931 (criteria for acceptable performance of HDL is plus or minus 30%), § 493.933 (criteria for
 17 acceptable performance of hCG is plus or minus three standard deviations), § 493.941 (criteria for
 18 acceptable performance of platelet count is plus or minus 25% of the target). Every test has some
 19 expected inaccuracy rate, as its associated FDA labeling information makes clear. Ex. P (FDA label for
 20 FDA-approved HIV assay) at 12. Even among well-accepted testing methodologies, different
 21 measurement procedures can lead to different results that are difficult to compare. *See* Myers, Gary L.
 22 & W. Greg Miller, *The International Consortium for Harmonization of Clinical Laboratory Results*

23
 24 samples “would not be run on the Edison.” Ex. X (W. Miquelon testimony in AZ litigation) at 237:13-
 25 238:9. Walgreens also had physical possession of an Edison machine for its own use.

26 ²² For example, patient E.T.’s blood test for HIV, which forms the basis of acquitted Count 10,
 27 was performed using FDA-approved methods and following the CDC’s recommended testing algorithm.
 TX 14259; *see* Holmes 9/29/21 Tr. 2264:18-20 (testimony of Dr. Rosendorff).

1 (*ICHCLR*) – a pathway for harmonization, 27 *The Journal of the International Federation of Clinical*
2 *Chemistry and Laboratory Medicine* 30, 30 (2016) (“A basic problem in laboratory medicine is that
3 different laboratory measurement procedures that intend to measure the same measurand may give
4 different results for the same specimen.”). And for some tests the risks of inaccuracy are common
5 enough that physicians’ groups recommend against giving the test in many circumstances because the
6 risks of an inaccurate test outweigh the benefits. *E.g.*, Holmes 11/18/21 Tr. 6879:20-6880:7, 6881:3-6;
7 Ex. Q (TX 12332, American College of Physicians Statement re: PSA). Additionally, even companies
8 that make FDA-approved assays sometimes produce faulty chemicals or errant calculations that lead to
9 erroneous results. *E.g.*, Ex. R (Siemens HbA1C), S (Siemens Estradiol). Whether and why any
10 particular laboratory test result is incorrect is a deeply technical scientific issue. These scientific
11 complexities provide context for the impact that any anecdotal potential errors and inaccuracies that
12 were brought to Ms. Holmes’ attention may have had on her own beliefs in the state of Theranos’
13 laboratory when she spoke to investors.

14 **e. Theranos’ wide-ranging operations presented both promise and**
15 **challenges.**

16 In addition to the scientific and regulatory complexities, Ms. Holmes’ lack of prior executive or
17 operational experience created challenges as Theranos grew. Without a disciplined operational
18 approach, Theranos’ operations became scattered and overburdened as the company tried to achieve all
19 of its potential use cases concurrently. For example, at the same time that Theranos began rolling out its
20 retail offering, the company was also working on several other projects for different phases of the
21 company, including working to scale manufacturing operations and designing technology for low cost
22 testing in developing countries. Additionally, Theranos had a number of other projects that aligned with
23 its broader mission: it was exploring infectious disease testing and tracking projects with international
24 aid organizations, and it put millions of dollars of resources into customizing and improving its devices
25 for potential future military use. Over the course of 2016, when Ms. Holmes narrowed the company’s
26 operational focus at the suggestion of experienced executives and Board members she brought in, the
27 company returned to being a manageable endeavor, though it then faced other challenges.

* * *

The very real assets and commercial operations of Theranos, combined with the serious complexities of its business, made the company's financial health and upcoming challenges all more difficult to understand, measure, and communicate—especially for a first-time CEO with vision and determination but no business experience. One employee who worked at Theranos from 2013 through 2018 describes how Ms. Holmes grew as a leader as she started to understand the challenges that faced Theranos:

I observed Elizabeth mature during this time and develop a deeper appreciation for the importance and quality of interim milestones towards end objectives. She made necessary changes that broadened responsibilities and decentralized decision-making while also holding individual leaders to a higher accountability standard. Elizabeth made difficult leadership changes in the later stages of the company's life and surrounded herself with individuals that were proven capable of navigating the organization under such challenging and complex conditions. While she remained committed to the purpose and vision, she realized the importance and need to shift the approach and strategy based on changing assumptions and circumstances.

Ex. A at 97 (T. Cooper Ltr. at 2).

3. The Company Retained Substantial Value Even After the Alleged Fraud Was Revealed.

Although difficult to measure with precision, there is no question that Theranos had substantial value, both at the time of the investments at issue and after the revelation of the fraud. As discussed above, *see* Section III(A)(3), *supra*, Theranos was not a worthless investment after alleged misstatements were brought to light. To the contrary, the company had valuable intellectual property, substantial cash and capital goods, and a product with FDA approval for one assay, with more applications and technology in the pipeline. *See* Section III(A)(3), *supra*. The fact that Theranos had and retained substantial value is a mitigating factor with respect to the seriousness of the offense.

4. The Circumstances Show Ms. Holmes To Be a Founder and CEO Deeply Committed to the Company's Mission, Rather Than Her Own Personal Gain.

Ms. Holmes' actions showed her to be a selfless CEO focused on the success of the company and its mission, and not on increasing her own wealth. As the Court knows, Ms. Holmes did not personally

1 profit from the investments Theranos received, never sold any of her stock, and was, as Dr. Bonanni
 2 described it, a “selfless CEO.” Additionally, Ms. Holmes’ actions in the wake of criticism that began in
 3 late 2015 show a CEO interested in identifying errors, fixing them, and learning from them—not
 4 running from them. She did not flee the enterprise when the company faced criticism. To the contrary,
 5 as described in section III(E), above, Ms. Holmes embarked on a broad, resource-intensive effort to
 6 bring outside voices into Theranos and to identify, acknowledge, and correct errors or missteps, and
 7 went down with the ship when the company shuttered. Ms. Holmes’ extensive efforts in this regard are
 8 relevant to consider when weighing the circumstances of the offense, especially given her youth and the
 9 fact that her role as CEO of Theranos was her first business experience. The fact that Ms. Holmes was
 10 not motivated by personal gain or greed is a mitigating factor under § 3553(a)(2). *See, e.g., United*
 11 *States v. Prosperi*, 686 F.3d 32, 50 (1st Cir. 2012) (affirming district court’s sentence, including based
 12 on finding that the defendants had not “sought to enrich themselves”); *United States v. Connors*, 2007
 13 WL 2955612, at *3 (E.D. Pa. Oct. 9, 2007) (considering as a mitigating factor the fact that the defendant
 14 was “motivated by a desire to save the company and to save the jobs of its employees,” in contrast to
 15 “greed and pure personal gain,” which “are usually the driving force for many, if not most, fraud
 16 offenders”).

17 **5. Because of Their Extreme Focus on Loss, the Guidelines Are Unhelpful in**
 18 **Fashioning a Fair, Just, and Reasonable Sentence.**

19 As described above, *see* Section III(A), the PSR’s Guidelines Calculation is driven principally by
 20 the alleged loss it attributes to the offense conduct pursuant to § 2B1.1, which quintuples the offense
 21 level and dramatically increases the Guidelines range. As noted above, the PSR’s calculation of the
 22 Guidelines is erroneous. But in the event the Court finds the government has proven loss under § 2B1.1,
 23 the Court should decline to impose any sentence primarily driven by the calculation of loss.

24 First, because of the high loss amount alleged by the government and the PSR, this is the type of
 25 case where the impact of the loss enhancement means that the Guidelines fail to “provide reasonable
 26 guidance,” and are of no “help to any judge in fashioning a sentence that is fair, just, and reasonable.”
 27 *United States v. Adelson*, 441 F. Supp. 2d 506, 515 (S.D.N.Y. 2006), *aff’d*, 301 F. App’x 93 (2d Cir.

1 2008). “For the small class of defendants... convicted of fraud offenses associated with very large
2 guidelines loss calculations, the guidelines now are divorced both from the objectives of Section 3553(a)
3 and, frankly, from common sense. Accordingly, the guidelines calculations in such cases are of
4 diminished value to sentencing judges.” Frank O. Bowman, III, *Sentencing High-Loss Corporate Insider*
5 *Frauds After Booker*, 20 Fed. Sent’g Rep. 167, 168 (2008). Across the country, judges seem to agree:
6 the Sentencing Commission’s own data shows that there is an “increasing divergence between the
7 average Guidelines minimum and the average sentence actually imposed as loss amount grows.” Mark
8 H. Allenbaugh, “*Drawn from Nowhere*”: *A Review of the U.S. Sentencing Commission’s White-Collar*
9 *Sentencing Guidelines and Loss Data*, 26 Fed. Sent’g Rep. 19, 22 (2013); see Jillian Hewitt, *Fifty*
10 *Shades of Gray: Sentencing Trends in Major White-Collar Cases*, 125 Yale L. J. 1018, 1025 (2016)
11 (concluding that review of the post-*Booker* sentencing data “empirically corroborate[d] scholarly
12 criticism that the loss table often vastly overstates the seriousness of an offense”). Indeed, the Probation
13 Officer’s own opinion that the loss guideline leads to a “drastic[] overrepresent[ation]” of the
14 appropriate sentencing range in this case serves to emphasize the point. PSR Sentencing
15 Recommendation at 2.

16 Second, more generally, the loss guideline does not bear the weight the Sentencing Guidelines
17 give it. Under § 2B1.1, in any modern white-collar case, loss has an inordinate and inappropriate effect
18 on the calculation of a Guidelines sentence that flies in the face of the statutory considerations in 18
19 U.S.C. § 3553(a). The loss table “frequently produces arbitrary and unduly severe sentences for two
20 related reasons”: (1) loss is “defined so broadly that it can produce lifelong sentencing ranges for
21 defendants who neither cause much economic harm nor derive much economic benefit from their
22 crimes” and (2) “the loss table’s enhancements are so large that, in practice, they dwarf other potentially
23 more relevant considerations.” Hewitt, 125 Yale L.J. at 1032, 1033. As result, like with narcotics
24 sentences, “[s]omewhere between 50 and 70 percent of the Sentencing Guidelines calculation . . . is
25 based on a single factor[.]” Jed S. Rakoff, *Why the Federal Sentencing Guidelines Should Be Scrapped*,
26 29 Fed. Sent’g Rep. 226, 227 (2017). “But it should be obvious that in a great many, perhaps most,
27 cases, . . . the amount of the loss does not fairly convey the reality of the crime or the criminal.” *Id.*

1 “By making a Guidelines sentence turn, for all practical purposes, on this single factor, the . . .
 2 Commission effectively guaranteed that many such sentences would be irrational on their face.”
 3 *United States v. Gupta*, 904 F. Supp. 2d 349, 351 (S.D.N.Y. 2012); *see also United States v. Johnson*,
 4 2018 WL 1997975, at *3 (E.D.N.Y. Apr. 27, 2018); *United States v. Parris*, 573 F. Supp. 2d 744
 5 (E.D.N.Y. 2008). As a result, “[t]he higher the loss amount, the more distorted the guideline’s advice to
 6 sentencing judges.” *United States v. Corsey*, 723 F.3d 366, 380 (2d Cir. 2013) (Underhill, J.,
 7 concurring). These issues are compounded by the fact that the loss Guideline “was not developed by the
 8 Sentencing Commission using an empirical approach based on data about past sentencing practices.” *Id.*
 9 at 379; *see id.* at 380 (describing the history of amendments to the Guideline and noting that “[t]he
 10 history of bracket inflation directed by Congress renders the loss guideline fundamentally flawed”).

11 As Judge Rakoff has observed:

12 Where the Sentencing Guidelines provide reasonable guidance, they are of considerable
 13 help to any judge in fashioning a sentence that is fair, just, and reasonable. But where, as
 14 here, the calculations under the guidelines have so run amok that they are patently absurd
 15 on their face, a Court is forced to place greater reliance on the more general considerations
 set forth in section 3553(a), as carefully applied to the particular circumstances of the case
 and of the human being who will bear the consequences.

16 *Adelson*, 441 F. Supp. 2d at 515; *see also id.* at 509 (Guidelines place an “inordinate emphasis” on
 17 “putatively measurable quantities, such as . . . the amount of financial loss in fraud cases,” but they have
 18 failed to “explain[] why it is appropriate to accord such huge weight to such factors.”); *Corsey*, 723 F.3d
 19 at 380 (“[T]he low marginal utility of the guideline in this very high intended loss case should have
 20 prompted greater, not lesser, reliance on the section 3553(a) factors other than the Guidelines.”). Ms.
 21 Holmes urges the Court to focus on the § 3553(a) factors that allow the Court to engage in the “uniform
 22 and constant” exercise “in the federal judicial tradition” of “consider[ing] every convicted person as an
 23 individual and every case as a unique study in the human failings that sometimes mitigate, sometimes
 24 magnify, the crime and the punishment to ensue.” *Koon v. United States*, 518 U.S. 81, 113 (1996).

25 **B. Ms. Holmes’ Personal History and Characteristics Strongly Support Leniency.**

26 “[I]f ever a [person] is to receive credit for the good [she] has done, and [her] immediate conduct
 27 assessed in the context of [her] overall life hitherto, it should be at the moment of [her] sentencing, when

1 [her] very future hangs in the balance.” *Adelson*, 441 F. Supp. 2d at 513-14. Described by over [130]
2 different letters as a compassionate, honest, and humble woman with much to give the world and a deep
3 commitment to doing so, Ms. Holmes’ personal history and characteristics (outlined in section II, above)
4 strongly counsel against a lengthy incarceration. “Anyone who knows Liz recognizes that she is a
5 genuine and generous person who cares deeply for those around her,” someone to rely on “for an honest
6 opinion, words of encouragement, and a selfless interest in [their] life and well-being.” Ex. A at 198 (N.
7 Mason Ltr.).

8 Ms. Holmes asks the Court to consider the words of those who know her when weighing the
9 importance of § 3553(a)(1) in this case, including on the following points:

- 10 • Ms. Holmes is no danger to the public. She has no criminal history, has a perfect pretrial
11 services compliance record, and is described by the people who know her repeatedly as a gentle
12 and loving person who tries to do the right thing.
- 13 • Ms. Holmes is deeply devoted to her partner and son, and plays an integral and irreplaceable role
14 in their lives.
- 15 • Ms. Holmes has lived her life with a purpose to change the world for the better, on scales large
16 and small. These basic qualities motivated her in founding and leading Theranos, and they
17 continue to shine in the way she lives her life today. She is the person her friends turn to when
18 they need support, regardless of what is going on in her life.
- 19 • Ms. Holmes lives with this kindness, purpose, and selflessness despite significant personal
20 trauma that occurred before and during the time period of the offense, and from which she is still
21 recovering.
- 22 • Friends and family note with admiration that she has handled her indictment and trial with grace
23 and without expressing and indeed discouraging ill-will towards the prosecutors who seek to
24 incarcerate her, the media that has vilified her, or those who have been unwilling to stand by her.
25 *E.g.*, Ex. A at 121 (W. Evans Ltr. at 1); *id.* at 157 (J. Hamilton Ltr. at 2).

26 Additionally, the letters are striking in showing how Ms. Holmes wholeheartedly commits to the things
27 that matter to her—today, the people she loves and the service work she cares about.

1 Courts in other cases have exercised their discretion to impose non-Guidelines sentences based
 2 on the personal characteristics of the defendant. *E.g.*, *United States v. Gupta*, 904 F. Supp. 2d 349, 353
 3 (S.D.N.Y. 2012) (premising downward variance, in part, on defendant’s “big heart and helping hand,
 4 which he extended without fanfare or self-promotion, to all with whom he came in contact”); *Adelson*,
 5 441 F. Supp. 2d at 513 (premising downward variance, in part, on letters from “persons from all walks
 6 of life . . . attesting, from personal knowledge, to [defendant’s] good works and deep humanity,” his
 7 “generosity of spirit,” and his “integrity and generosity”). Similar considerations are present here. Ms.
 8 Holmes’ mother “beg[s] you to see her goodness, her unique circumstances and her promise.” Ex. A at
 9 39 (N. Holmes Ltr. at 10).

10 **C. Incarceration Is Not Necessary to Afford Adequate Deterrence or Protect the**
 11 **Public.**

12 The needs “to afford adequate deterrence to criminal conduct” and “protect the public from
 13 further crimes of the defendant,” 18 U.S.C. § 3553(a)(2)(B)-(C), are not served by a custodial sentence
 14 for Ms. Holmes.

15 **1. Incarceration Is Not Necessary for Specific Deterrence.**

16 Incarceration is not necessary to either protect the public from Ms. Holmes or to deter her from
 17 committing future offenses.²³ Ms. Holmes is not a danger to society. She has been out of custody, with
 18 a perfect pretrial services record, for more than four years. PSR ¶ 195. And there is no reason to believe
 19 she would commit another fraud—or that she will ever be in a position to do so. Ms. Holmes has readily
 20 and repeatedly acknowledged the many mistakes she made while serving as CEO of Theranos—in
 21 interviews, *see* n.17, *supra*; to the SEC, Ex. T (SEC Tr.) at 347:12-13, 353:12-13, 353:19-22, 620:22-
 22 621:2, 689:19-20, 697:2-3; on the witness stand in front of the jury, *e.g.*, Holmes 11/30/21 Tr. 8005:13-
 23 15; and to friends and family, *see* p. 47, *supra*.

24 “Elizabeth understands what has been lost.” Ex. A at 129 (Dr. Evans Ltr. at 2). Ms. Holmes has
 25 suffered the consequences of the offense daily for years, in ways large and small. She has been formally

26 _____
 27 ²³ Social science research makes clear that “across all offenders, prisons do not have a specific
 28 deterrent effect.” Francis T. Cullen et al., *Prisons Do Not Reduce Recidivism: The High Cost of Ignoring Science*, 91 Prison J. 48S, 50S, 60S (2011).

1 penalized for her mistakes in other forums—through the administrative state by CMS and by this Court
2 in connection with her settlement with the SEC. Ms. Holmes spent her entire adult life building
3 Theranos until its collapse—a personal and public failure she feels deeply. *E.g.*, Ex. A at 25, 26 (C.
4 Holmes Ltr. at 13, 14). Beyond that failure and loss of this company she loved so much, eight years of
5 investigations and lawsuits have taken their toll. Having never cashed in on the value of Theranos to her
6 own benefit, Ms. Holmes has incurred substantial debt from which she is unlikely to recover. *See* PSR
7 ¶¶ 165-166; Ex. A at 243 (D. Sokol Ltr. at 6). She is unable to get a job and was prevented from
8 investing what money she did have when her trading accounts were repeatedly closed by financial
9 institutions as a result of her indictment. PSR ¶ 165. She has lost personal friendships to the process
10 surrounding investigations, lawsuits, and lawyers, Ex. A at 6-7 (B. Evans Ltr. at 6-7), and it is difficult
11 to make new ones, *id.* at 274 (C. Zygourakis Ltr. at 2). Her conviction also brings with it so-called
12 “civil death,” the operation of the “[m]yriad laws, rules, and regulations” which prevent the reintegration
13 of offenders into society, even after they have served their sentence. *United States v. Nesbeth*, 188 F.
14 Supp. 3d 179, 180 (E.D.N.Y. 2016) (internal quotation marks omitted); *id.* at 184-86 (describing the
15 “nearly 50,000 federal and state statutes and regulations that impose penalties, disabilities, or
16 disadvantages on convicted felons” covering a “range of subject matter” that “can be particularly
17 disruptive to an ex-convict’s efforts at rehabilitation and integration into society”).

18 Moreover, the incessant drum of media criticism has ensured Ms. Holmes will be punished for
19 the rest of her life. The Court is well aware of the unusually intense media attention on this case before,
20 during, and after Ms. Holmes’ trial. The coverage of her as a person is universally negative. Portrayals
21 of Ms. Holmes are at best unflattering caricature and at worst dehumanizingly cruel. Almost all depict
22 her—inaccurately, as the scores of letters submitted with this filing make clear—as unfeeling and self-
23 absorbed. Even putting aside the fact that her appearance and voice are considered appropriate for
24 mockery (a gender-specific punishment), her worst personal traumas have been treated as appropriate
25 for derision as well. Following Ms. Holmes’ testimony about the psychological and sexual abuse she
26 endured at the hands of Mr. Balwani, one outlet ran a *humor* column in which the author wondered
27 whether she would have been able to comply with Mr. Balwani’s demands. Alexandra Petri, “Opinion:

1 I tried the Elizabeth Holmes schedule, and here is how it went,” *Wash. Post* (Dec. 3, 2021), available at
2 <https://www.washingtonpost.com/opinions/interactive/2021/elizabeth-holmes-schedule-tried-myself/>.
3 Ms. Holmes will never be able to seek another job or meet a new friend without the negative caricature
4 acting as a barrier. She worries about how her notoriety affects friends and family—and those effects
5 are meaningful. *See, e.g.*, Ex. A at 7-8 (B. Evans Ltr. at 7-8), 38 (N. Holmes Ltr. at 9), 153 (C. Gualy
6 Ltr. at 2), 122 (W. Evans Ltr. at 2). Several letters describe how Ms. Holmes avoids friends’ life events
7 and social occasions because she does not want to be a distraction. “I cannot overemphasize the degree
8 to which Liz is ostracized by people who do not know her and the degree to which this social isolation
9 has affected Liz, Billy, and their families.” Ex. A at 274 (C. Zygourakis Ltr. at 2).

10 Ms. Holmes has also suffered a substantial loss of privacy, despite her best attempts to stay out
11 of the public eye and to respect the legal process around this case. Mr. Evans describes the precautions
12 he and Ms. Holmes have taken in furtherance of their own privacy and safety, from dressing in hats and
13 glasses to using P.O. boxes for mail to living in private buildings or a secluded location. Yet members
14 of the press have taken dramatic steps to identify and publish Ms. Holmes’ address, leading to cameras,
15 visits from the press and the public (as well as a recent visit from a key government witness), and
16 threats. Ex. A at 7 (B. Evans Ltr. at 7). Ms. Holmes and Mr. Evans have moved several times as a
17 result. *Id.*; PSR ¶ 135. Threats are also ever-present online.

18 These forms of punishment, including the extrajudicial collateral consequences going well
19 beyond “civil death” that Ms. Holmes will endure for the rest of her life regardless of her sentence, make
20 clear why incarceration is unnecessary and unhelpful in achieving specific deterrence in this case.

21 **2. Incarceration Is Not Necessary for General Deterrence.**

22 Nor does incarceration of Ms. Holmes serve the goal of general deterrence of crime. Section
23 3553(a)(2)(B) “does not require the goal of general deterrence be met through a period of incarceration.”
24 *United States v. Edwards*, 595 F.3d 1004, 1016 (9th Cir. 2010) (not unreasonable for district court to
25 reject prison sentence to promote general deterrence; defendant sentenced to five years of probation with
26 seven months of home confinement on Guidelines range of 27-33 months); *see also* S. Rep. No. 98-225,
27 at 92 (1983) (“It may very often be that release on probation under conditions designed to fit the

1 particular situation will adequately satisfy any appropriate deterrent or punitive purpose.”). This makes
2 sense. As the Department of Justice recognizes: “Sending an individual convicted of a crime to prison
3 isn’t a very effective way to deter crime.” United States Department of Justice National Institute of
4 Justice, *5 Things About Deterrence* (2016), at 1; *see also* Mirko Bagaric, *A Rational Theory of*
5 *Mitigation and Aggravation in Sentencing: Why Less Is More When It Comes to Punishing Criminals*,
6 62 *Buff. L. Rev.* 1159, 1205 (2014) (“[D]eterrence properly informs sentencing only to the extent that it
7 requires a hardship to be imposed for criminal offending. It does not require a particularly burdensome
8 penalty, merely one that people would seek to avoid.”). While some courts take the view that some
9 period of incarceration serves the goal of general deterrence, “there is a considerable evidence that even
10 relatively short sentences can have a strong deterrent effect on prospective ‘white collar’ offenders.”
11 *Adelson*, 441 F. Supp. 2d at 514; *see* Richard Frase, *Punishment Purposes*, 58 *Stanford L. Rev.* 67, 80
12 (2005) (“White-collar and regulatory offenders are more likely to be deterred, even by selective
13 enforcement and modest penalties; such offenders have many lawful alternatives and much to lose from
14 being convicted, regardless of the penalty.”); Elizabeth Szockyj, *Imprisoning White-Collar Criminals?*,
15 23 *S. Ill. Univ. L. J.* 485, 493 (1999) (finding empirical research on general deterrence “inconsistent”).
16 The intense media scrutiny on this matter does not change the dynamic. *See* Biz Carson, “Guilty or not,
17 the Elizabeth Holmes verdict won’t change Silicon Valley,” *Protocol* (Dec. 21, 2021), *available at*
18 <https://www.protocol.com/theranos-elizabeth-holmes-verdict-impact> (“For Holmes, the verdict will have
19 obvious personal consequences, including the threat of up to 20 years of prison. But for the rest of tech,
20 experts outside the Silicon Valley bubble say it’s unlikely there will be some dramatic revelation or
21 change in behavior, regardless of the outcome.”).²⁴

22
23
24
25
26 ²⁴ The Probation Officer’s recommended sentence of 108 months appears to be primarily driven
27 by a perceived need to serve the goal of general deterrence. Respectfully, the research indicates that a
28 much lower sentence would equally serve that goal, and the Court’s statutory obligation is to impose a
sentence “no greater than necessary” to serve the purposes of sentencing.

1 **D. Just Punishment and Respect for the Law Are Not Served by a Lengthy**
 2 **Incarceration.**

3 Section 3553(a)(2)'s goals "to promote respect for the law" and "to provide just punishment for
 4 the offense" are likewise not achieved by the incarceration of Ms. Holmes. "Where offenders appear to
 5 have been unfairly singled out, respect for the law and law enforcement suffers." Frase, *Punishment*
 6 *Purposes*, 58 Stanford L. Rev. at 80.

7 The prosecutorial and cultural focus on punishing Ms. Holmes stands out. As numerous letters
 8 observe, the decision to prosecute Ms. Holmes and the associated vilification of her stands in stark
 9 contrast to the treatment of other prominent entrepreneurs who have been accused in media of fraud.
 10 *See* Ex. A at 131 (J. Ewing Ltr. at 2); *see also id.* at 221 (J. Pfeffer Ltr. at 2). Take Adam Neumann, the
 11 founder of WeWork, who was accused of diverting millions of corporate assets for personal gain and
 12 walked away from his first company with hundreds of millions of dollars. Mr. Neumann recently
 13 received a *\$350 million investment* in his next venture.²⁵ Even observers who believe Ms. Holmes was
 14 rightly the subject of prosecution cannot help but notice the discrepant treatment.²⁶ And within the
 15 Theranos story, Ms. Holmes has borne the brunt of the vitriol despite the fact that many factors—some
 16 failures of judgment on her part, some simply the operational hurdles of a complex endeavor, and some
 17 no doubt the missteps of others—contributed to Theranos' failures. The government's decision to
 18 charge Ms. Holmes personally with wire fraud in connection with Theranos' laboratory practices is one
 19 example of that singling-out, given the regulatory and personnel structures that governed Theranos'
 20 laboratory operations. Its attempt to paint Theranos' trade secrets practices as nefarious when such
 21 practices are commonplace and required by law is another. *See, e.g.*, 1 Melvin F. Jager, Trade Secrets

22
 23
 24 ²⁵ *See* Sean Harper, "Adam Neumann Gets A \$350 Million Do-Over and Diverse Entrepreneurs
 25 Barely Get a Start," *Forbes* (Aug. 16, 2022), *available at*
 26 [https://www.forbes.com/sites/shaunharper/2022/08/16/entrepreneurial-inequity-is-exacerbated-with-](https://www.forbes.com/sites/shaunharper/2022/08/16/entrepreneurial-inequity-is-exacerbated-with-new-investment-into-failed-wework-founder-adam-neumann/?sh=622add8243c5)
 26 [new-investment-into-failed-wework-founder-adam-neumann/?sh=622add8243c5](https://www.forbes.com/sites/shaunharper/2022/08/16/entrepreneurial-inequity-is-exacerbated-with-new-investment-into-failed-wework-founder-adam-neumann/?sh=622add8243c5) (last accessed Nov. 8,
 26 2022).

27 ²⁶ Ellen Pao, "The Elizabeth Holmes Trial Is a Wake-Up Call for Sexism in Tech," *New York*
 28 *Times* (Sept. 15, 2021).

1 Law §§ 5.21, 5.26, 13.3; 1 Roger M. Milgrim & Eric E. Benson, *Milgrim on Trade Secrets* § 1.04
2 (2020).

3 **E. Section 3553(a)(6) Supports a Downward Variance from the Guidelines.**

4 The “need to avoid unwarranted sentence disparities among defendants with similar records who
5 have been found guilty of similar conduct” counsels in favor of a below-Guidelines sentence. 18 U.S.C.
6 § 3553(a)(6). In this district, the majority of defendants convicted of crimes for which the main
7 Guideline is § 2B1.1 have received below-Guidelines sentences. Exs. Y-1, Y-2 (Sentencing
8 Commission Data Capture). From 2015 through 2021, in this district, the median sentence for a
9 defendant convicted of fraud, with no criminal history, and in Zone D of the guidelines received a
10 sentence that included a term of incarceration of 24 months. Ex. Z (Sentencing Commission Data
11 Capture). The national statistics are similar. Exs. AA-1, AA-2 (Sentencing Commission Data Export);
12 Ex. BB (Sentencing Commission Data Capture).

13 Even if the Court determines—over Ms. Holmes’ objection—that the government has proven a
14 substantial loss, the Court would be in good and abundant company in varying downward from the
15 Guidelines range. Given the numerous and duplicative enhancements that apply to cases driven by
16 § 2B1.1, courts frequently sentence defendants with high loss figures and no criminal history to
17 substantially below-Guidelines sentences. For example:

- 18 • In February 2021, the COO of a publicly traded biopharmaceutical company was sentenced after
19 a trial guilty verdict on one count of wire fraud to 12 months in custody in light of the ongoing
20 economic hardship he would face in the future, his general good works, his comparatively lower
21 culpability than his codefendant, and the need for some prison time to address general
22 deterrence; the “[b]izarre, barbaric,” and “absurd” Guidelines range was the statutory maximum
23 of 20 years (on an initial range of 262 to 327 months). *United States v. Taylor*, 1:19-cr-00850-
24 JSR (S.D.N.Y.), Sentencing Tr., Dkt. 157, at 2.
- 25 • In November 2019, a hedge fund trader who was found guilty after trial of overinflating the
26 hedge fund’s assets by \$100 million was sentenced to 40 months’ imprisonment; the government
27

1 and the Probation Office had calculated a Guidelines range of 168 to 210 months. *See United*
2 *States v. Shor*, 1:18-cr-00328 (S.D.N.Y.), Dkt. Nos. 297, 301.

- 3 • In November 2018, an individual who was convicted of securities fraud after trial in the District
4 of Massachusetts, was sentenced to a term of six months' imprisonment where the government
5 had calculated a Guidelines prison sentence of 63 to 78 months. *See United States v. Wang*, 1:16-
6 cr-10268 (D. Mass.), Dkt. Nos. 346, 429.
- 7 • In October 2018, a former State Street executive who was convicted after trial of securities fraud,
8 was sentenced to a term of 18 months' imprisonment; the government had calculated a
9 Guidelines sentence of 14 to 17 years. *See United States v. McClellan*, 1:16-cr-10094 (D. Mass.),
10 Dkt. Nos. 517, 520.
- 11 • In October 2018, a serial fraudster who committed additional crimes while awaiting sentencing
12 after his fraud guilty plea, was sentenced to 72 months' imprisonment where the government
13 calculated a Guidelines sentence of 188 to 235 months and the government requested a sentence
14 of 15 or more years. *See United States v. McFarland*, 1:17-cv-00600 (S.D.N.Y.), Dkt. Nos. 63,
15 68.
- 16 • In May 2018, a defendant convicted at trial of four conspiracies, including conspiracy to commit
17 bank fraud, and facing a PSR Guidelines range of life and a Court-determined Guidelines range
18 of 97 to 121 months was sentenced to 32 months based on his otherwise exemplary life and
19 relative role. *United States v. Atilla*, 1:15-cr-00867-RMB (S.D.N.Y.), Sentencing Tr., Dkt. 520.

20 Even in cases where the conduct at issue has centered around personal greed, defendants have received
21 substantially below-Guidelines sentences based on the totality of the § 3553(a) factors. For example, in
22 *United States v. Tuzman*, No. 1:15-cr-00536 (S.D.N.Y.), after a hard-fought case and trial, defendant
23 Kaleil Tuzman was convicted of multiple different securities fraud and wire fraud schemes related to the
24 publicly-traded company he founded and of which he served as CEO. The court found that the frauds
25 were motivated by the defendant's desire to make the company an attractive acquisition target, "sell the
26 company[,] and become fantastically wealthy." Sentencing Tr., Dkt. No. 1216, at 62. The guidelines
27 range was 210-262 months. Based on his service work while on pretrial release, the lack of a criminal

1 record, and severe trauma he experienced in a Colombian prison after his arrest, the court sentenced him
2 to time served. *Id.* at 66-67. In *United States v. Rowan*, No. 1:16-cr-10343 (D. Mass.), defendant
3 Joseph Rowan was convicted after trial with respect to his role in a racketeering conspiracy to bribe
4 doctors to prescribe Insys Therapeutics Inc.’s fentanyl spray and to defraud insurance companies. The
5 government and probation calculated his Guidelines range at 324-405 months, and the government
6 sought a sentence of 10 years. Dkt. No. 1064, at 1. The court calculated the Guidelines range at 135-
7 168 months and imposed a sentence of 26 months’ imprisonment, noting that the defendant had
8 otherwise lived a “good life and a respectful life” marked by “real decency.” Sentencing Tr., Dkt. No.
9 1167, at 40.

10 Ultimately, the touchstone of this factor is the idea of treating defendants who are found to have
11 committed similar crimes similarly. It is nearly impossible to do that here given the unique
12 circumstances of the offense—the sophisticated investors investing in a non-public, novel technology
13 company with limited history seeking to change a complex, established industry and the indisputable
14 value of that company regardless of the offense conduct—and of Ms. Holmes—her intent to do good,
15 her lack of greed, her commitment to fixing her errors, and her positive personal qualities. “Whereas
16 apples and oranges may have but a few salient qualities, human beings in their interactions with society
17 are too complicated to be treated like commodities, and the attempt to do so can only lead to bizarre
18 results.” *United States v. Gupta*, 904 F. Supp. 2d 349, 350 (S.D.N.Y. 2012).

19 **F. Section 3553(a)(7) Does Not Counsel In Favor of Incarceration.**

20 The potential need for restitution in this case should not weigh in favor of incarceration, for at
21 least three reasons. First, this is not a case where restitution would be required to return vulnerable
22 victims to their proper status. Theranos did not solicit investments from members of the general
23 investing public or from vulnerable and unsophisticated parties. To the contrary, Theranos’ investors
24 were required to represent that they were sophisticated, that they understood the limited operating
25 history and uncertain future of the company, and that they could afford to lose their entire investment
26 without suffering financial harm. Second, although she did not personally benefit from the investments,
27 Ms. Holmes took dramatic and meaningful steps to give value to her investors following the *Wall Street*

1 *Journal's* investigation—including several at her own personal expense and risk. Those included
 2 offering to give up ownership, actually giving some of her shares to investors, and settling with those
 3 who sought to bring civil claims; transferring her liability insurance coverage proceeds back to Theranos
 4 in order to conserve company assets, rather than saving that policy for her own future legal fees; and
 5 involving investors (including RDV) in decisions such as whether to agree to the Fortress loan and
 6 whether to allow additional investments in the company to support its work or instead force bankruptcy.
 7 Ex. A at 74 (F. Bonanni Ltr. at 3). Third, Ms. Holmes does not have the assets to pay restitution to any
 8 investors, *see* PSR ¶¶ 165-166, and, despite her sincere desire to do so, *see* Ex. A at 203-04 (J. Moalli
 9 Ltr. at 1-2), faces likely insurmountable hurdles in acquiring sufficient wealth to do so in light of her
 10 conviction and notoriety.²⁷

11 **G. Ms. Holmes' Capacity to Do Good Supports a Sentence That, In Part, Orders Ms.
 12 Holmes to Engage in Significant Community Service.**

13 Despite her mistakes, Ms. Holmes' personal characteristics—including her deeply held desire to
 14 make the world a better place, her self-reflection, her determination and work ethic, and her visionary
 15 and creative mind—leave her with capacity and potential to positively contribute to the world. While
 16 the over 130 letters attached to this memorandum are consistent in believing that “society is better off
 17 with her in it,” Ex. A at 95 (A. & S. Kiessig Ltr.), it is noteworthy how many different opportunities
 18 there are for Ms. Holmes to be a force for good. Whether it is working with individual survivors of
 19 sexual assault, teaching the lessons of her own errors, inventing new technologies, developing projects
 20 that have the potential to help solve social health problems, or something else entirely, the chorus of
 21 letters emphasize a belief among those who know her that society's best use of Ms. Holmes is “out in
 22 the world working on the next thing to improve the lives of others.” Ex. A at 111 (M. Downes Ltr.); *see*
 23 *id.* at 74-75 (F. Bonanni Ltr. at 3-4) (“Her lessons learned through success and failure are precious.
 24 They will be invaluable if shared with the broader community of young entrepreneurs.”), 50 (I. Aboyeji
 25 Ltr. at 3 (“I believe America and indeed the world has a lot to lose by keeping an entrepreneur like

26
 27 ²⁷ The Court cannot use Ms. Holmes' inability to pay to support a longer sentence. *See United*
 28 *States v. Burgum*, 633 F.3d 810, 814 (9th Cir. 2011) (“[I]t is well established that the Constitution
 forbids imposing a longer term of imprisonment based on a defendant's inability to pay restitution.”).

1 Elizabeth Holmes behind bars instead of out in the world helping other young entrepreneurs learn from
2 her painful experience at Theranos.”), 163 (Christian Holmes Ltr. at 2) (“While she is brutally self-
3 aware of her situation and the uncertainty of her future, she focuses on how she can possibly find a path
4 in her coming years to bring some good to others from all she’s learned and weathered.”), 113 (T.
5 Draper Ltr. at 2) (“Her vision for healthcare was only partially portrayed in her efforts at Theranos, and
6 her ideas could save millions of lives over the course of the next few decades. Restraining her would be
7 a travesty.”), 203 (J. Moalli Ltr. at 1) (“I am unequivocally certain that, given the space and opportunity,
8 she is such a prolific inventor that she will continue to create technology that will greatly benefit
9 humankind.”). Dr. Foege, the Presidential Medal of Freedom-winning former Director of the CDC,
10 expresses his hope that the Court is “able to develop a creative approach that permits her to use her
11 abilities to provide public benefits. She could not make those contributions while incarcerated.” Ex. A
12 at 137 (W. Foege Ltr. at 3). The letters are replete with friends and former colleagues who would
13 support her efforts. “Elizabeth Holmes has so much more to give.” Ex. A at 58 (R. & A. Bergeron Ltr.
14 at 1). Whatever combination of opportunities to make a difference Ms. Holmes takes up (pursuant to
15 Court order or her own initiative), Ms. Holmes’ personal history makes clear she will approach them
16 with total dedication.

17 One meaningful approach would permit Ms. Holmes to continue the work she has done over the
18 past several months volunteering in support of sexual assault survivors. ██████ welcomes Ms.
19 Holmes’ continued services helping “the ever-increasing number of callers on the statewide sexual
20 assault helpline” and “research[ing] gaps in services and resources for victims, while working to
21 increase access to services throughout the state.” *Id.* at 47 (██████ Ltr. at 2). Requiring Ms. Holmes to
22 continue these efforts as part of her sentence would be a better use of society’s resources than
23 incarcerating her. Such an approach would allow her to fulfill the promise Senator Booker, a champion
24 of criminal justice reform and restorative justice, sees: “I believe that Ms. Holmes has within her a
25 sincere desire to help others, to be of meaningful service, and possesses the capacity to redeem herself. .
26 . . I pray that in the coming years she is able to fulfill her desires and more humble hopes to be of
27 meaningful service to the world.” Ex. A at 77 (C. Booker Ltr. at 2).

1 **CONCLUSION**

2 “In the end we have an intelligent, fearless woman who took on a huge project that should have
 3 changed the world and nearly succeeded.” Ex. A at 262 (D. Tschirhart Ltr. at 2). “[N]o public good
 4 will be served by incarcerating Ms. Holmes. She poses no danger to anyone. She openly acknowledges
 5 her business mistakes and she did not benefit in any material way notwithstanding the opportunity to do
 6 so. Her suffering, including among other things extreme public ignominy, financial bankruptcy and the
 7 terrifying prospect of incarceration while the mother of a new baby, provides more than ample
 8 deterrence to others.” Ex. A at 243 (D. Sokol Ltr. at 6). “We need more people like Elizabeth whose
 9 unique combination of intelligence, grit and compassion makes this world a better place.” Ex. A at 124
 10 (G. Evans Ltr. at 2). The Court’s charge is to fashion a sentence that is “sufficient, but not greater than
 11 necessary,” to serve the purposes of sentencing in this case. 18 U.S.C. § 3553(a). Although the defense
 12 views incarceration as unnecessary to meet that directive, if incarceration is deemed necessary, a period
 13 of incarceration of eighteen months or less followed by supervised release that includes a community
 14 service condition will more than capture the retributive and deterrent goals of sentencing while ensuring
 15 that our society’s resources are not wasted incarcerating someone who poses no danger to it, who in the
 16 eyes of the public will never be truly free of even the counts on which she has been exonerated, and who
 17 will devote her life to meaningfully serving her fellow human beings. As one friend says: “I am
 18 confident that on the other side of this Elizabeth will do amazing things for society with her talents and
 19 boundless passion for changing the world for the better, and I can’t wait to see how she rewards your
 20 possible leniency.” Ex. A at 144 (K. Gavrieli Ltr. at 2).

21 DATED: November 10, 2022

22 

23 _____
 24 KEVIN DOWNEY
 25 LANCE WADE
 26 AMY MASON SAHARIA
 27 KATHERINE TREFZ
 28 Attorneys for Elizabeth Holmes

CERTIFICATE OF SERVICE

I hereby certify that on November 10, 2022, this under seal filing was delivered to the Court via ECF and by email and secure file transfer on government counsel of record.

/s/ Kevin Downey
Kevin Downey
Attorney for Elizabeth Holmes

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10
11 UNITED STATES DISTRICT COURT
12 NORTHERN DISTRICT OF CALIFORNIA
13 SAN JOSE DIVISION

14 UNITED STATES OF AMERICA,) Case No. CR-18-00258-EJD
15)
16 Plaintiff,) **DECLARATION OF KATHERINE TREFZ IN**
17) **SUPPORT OF MS. HOLMES’ SENTENCING**
v.) **MEMORANDUM**
18)
ELIZABETH HOLMES and)
19 RAMESH “SUNNY” BALWANI,) Hon. Edward J. Davila
20) **UPDATED TO REMOVE REDACTIONS**
21)
22)
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1 I, KATHERINE TREFZ, declare as follows:

2 1. I represent Defendant Elizabeth Holmes and am a member of the Bar of this Court.

3 Pursuant to Criminal Local Rule 56-1(c) and Civil Local Rule 7-11, I submit this declaration in support
4 of Ms. Holmes' Sentencing Memorandum.

5 2. Attached as Exhibit A is a true and correct copy of a collection of letters addressed to the
6 Court submitted in support of Ms. Holmes. (A redacted version is being filed publicly. An unredacted
7 version is being filed under seal.)

8 3. Attached as Exhibit B is a true and correct copy of U.S. Patent No. 11,385,252 B2, issued
9 by the United States Patent and Trademark Office on July 12, 2022.

10 4. Attached as Exhibit C is a true and correct copy of a letter from Ms. Holmes to her
11 parents written when Ms. Holmes was in high school

12 5. Attached as Exhibit D is a true and correct copy of a handwritten note written by Ms.
13 Holmes' father dated October 16, 2003.

14 6. Attached as Exhibit E is a true and correct copy of a handwritten letter written from Ms.
15 Holmes' father to her dated January 4, 2004.

16 7. Attached as Exhibit F is a true and correct copy of a photo of Sunny Balwani, Ms.
17 Holmes, and another individual taken in China in August 2002.

18 8. Attached as Exhibit G is a true and correct copy of document bearing the Bates label
19 PC0000001 through PC0000047, as produced by Perkins Coie LLP. The redactions appeared in the
20 produced version.

21 9. Attached as Exhibit H is a true and correct copy of an email dated May 8, 2018, from
22 David Taylor to Erez Levy, cc'ing Elizabeth Holmes and Jeffrey Finger, and its attachment.

23 10. Attached as Exhibit I is a true and correct copy a document bearing the Bates labels
24 Dynasty003466 through Dynasty003475.

25 11. Attached as Exhibit J is a true and correct copy of a document bearing the Bates labels
26 SEC-DEPO-004639 through SEC-DEPO-004704.

27 12. Attached as Exhibit K is a true and correct copy of excerpts of the deposition of Fortress

28 DECLARATION OF KATHERINE TREFZ
CR-18-00258-EJD

1 executive Erez Levy, bearing the Bates labels SEC-DEPO-004615, SEC-DEPO-004622, and SEC-
2 DEPO-004637.

3 13. Attached as Exhibit L is a true and correct copy of a June 12, 2016 press release issued
4 by Walgreens.

5 14. Attached as Exhibit M is a true and correct copy of the Expert Report of Carl S. Saba,
6 served on Ms. Holmes by the government on September 9, 2022. Exhibit M does not have a cover
7 sheet, as the underlying file is secured. (Filed under seal.) [no longer under seal]

8 15. Attached as Exhibit N is a true and correct copy of an excerpt from Ms. Holmes'
9 Objections and Responses to Plaintiffs' First Set of Interrogatories in *Partner Investments, L.P., et al. v.*
10 *Theranos, Inc. et al.*, Delaware Court of Chancery Civil Action Number 12816-VCL.

11 16. Attached as Exhibit O is a true and correct copy of a July 20, 2016 email and attachment
12 bearing the Bates labels THER-1498421 through THER-1498424.

13 17. Attached as Exhibit P is a true and correct copy of the FDA label for the Siemens HIV
14 1/O/2 Enhanced EHIV downloaded from the FDA's website ([https://www.fda.gov/vaccines-blood-](https://www.fda.gov/vaccines-blood-biologics/approved-blood-products/advia-centaur-hiv-1o2-enhanced-readypack-reagents)
15 [biologics/approved-blood-products/advia-centaur-hiv-1o2-enhanced-readypack-reagents](https://www.fda.gov/vaccines-blood-biologics/approved-blood-products/advia-centaur-hiv-1o2-enhanced-readypack-reagents) (last visited
16 November 7, 2022)).

17 18. Attached as Exhibit Q is a true and correct copy of an April 9, 2013 statement by the
18 American College of Physicians regarding prostate cancer screening, as available on the organization's
19 website as of August 9, 2021.

20 19. Attached as Exhibit R is a true and correct copy of a document bearing the Bates label
21 THPFM0004198593 through THPFM0004198594, also referenced on the FDA's website at
22 <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfres/res.cfm?id=140899> (last visited November 7,
23 2022).

24 20. Attached as Exhibit S is a true and correct copy of a document bearing the Bates label
25 THER-AZ-05097313, also referenced on the FDA's website at
26 <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfres/res.cfm?id=143007> (last visited November 7,
27 2022).

28 DECLARATION OF KATHERINE TREFZ
CR-18-00258-EJD

1 21. Attached as Exhibit T is a true and correct copy of excerpts of Ms. Holmes' testimony in
2 the SEC investigation.

3 22. Attached as Exhibit U is a true and correct copy of an email dated June 7, 2015 from
4 Ryan Karpel to Elizabeth Holmes, copying Daniel Edlin, and its attachments. Patient names have been
5 redacted.

6 23. Attached as Exhibit V is a true and correct copy of an email dated March 15, 2015 from
7 Ryan Karpel to Elizabeth Holmes, copying Daniel Edlin, and its attachments. Patient names have been
8 redacted.

9 24. Attached as Exhibit W is a true and correct copy of an email dated August 23, 2015 from
10 Ryan Karpel to Elizabeth Holmes, copying Daniel Edlin, and its attachments. Patient names have been
11 redacted.

12 25. Attached as Exhibit X is a true and correct copy of excerpts of the deposition testimony
13 of Wade Miquelon taken in *In re Arizona Theranos, Inc. Litigation* on August 9, 2019. (Filed under
14 seal.) [no longer under seal]

15 26. Attached as Exhibits Y-1 and Y-2 are true and correct copies of a screen capture of
16 results of the United States Sentencing Commission's Interactive Data Analyzer titled "Sentence
17 Imposed Relative to the Guideline Range Over Time" for fiscal years 2015-2021. Based on the filters
18 used, this data reflects the Sentencing Commission's data for the North District of California where the
19 primary guideline was § 2B1.1. Exhibit Y-1 includes all criminal history categories, while Exhibit Y-2
20 includes only criminal history category I.

21 27. Exhibit Z is a true and correct copy of a screen capture of results of the United States
22 Sentencing Commission's Interactive Data Analyzer titled "Average and Median Sentence Length" and
23 "Average and Median Imprisonment Length" for fiscal years 2015-2021. Based on the filters used, this
24 data reflects the Sentencing Commission's data for the Northern District of California where the primary
25 guideline was § 2B1.1, the sentencing zone was Zone D, and the criminal history category was I.

26 28. Exhibits AA-1 and AA-2 are true and correct copies of screen captures of results of the
27 United States Sentencing Commission's Interactive Data Analyzer titled "Sentence Imposed Relative to

1 the Guideline Range Over Time” for fiscal years 2015-2021. Based on the filters used, this data reflects
2 the Sentencing Commission’s data for cases nationwide where the primary guideline was § 2B1.1.
3 Exhibit AA-1 includes all criminal history categories, while Exhibit AA-2 includes only criminal history
4 category I.

5 29. Exhibit BB is a true and correct copy of a screen capture of results of the United States
6 Sentencing Commission’s Interactive Data Analyzer titled “Average and Median Sentence Length” and
7 “Average and Median Imprisonment Length” for fiscal years 2015-2021. Based on the filters used, this
8 data reflects the Sentencing Commission’s data for cases nationwide where the primary guideline was §
9 2B1.1, the sentencing zone was Zone D, and the criminal history category was I.

10 I declare under penalty of perjury under the laws of the United States that the foregoing is true
11 and correct to the best of my knowledge.

12 Executed this 10th day of November 2022 in Washington, D.C.

13
14
15 

16 KATHERINE TREFZ
Attorney for Elizabeth Holmes

Exhibit M

(PREVIOUSLY FILED UNDER SEAL)

United States v. Holmes, et al.

Case # 18-CR-00258

Expert Report of Carl S. Saba, MBA, CVA, ASA, ABV

Confidential

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I. Qualifications

1. I am a Partner in the Financial and Forensic Consulting Group at Hemming Morse, LLP. I received a Bachelor of Science degree in Business Administration and Finance from The Haas School of Business at the University of California (Berkeley) in 1995. I received an M.B.A. with an emphasis in Finance from the Marshall School of Business at the University of Southern California, where I graduated with honors in 2003. I have been designated as a Certified Valuation Analyst (CVA) by the National Association of Certified Valuators and Analysts (NACVA). I am an Accredited Senior Appraiser ("ASA") by the American Society of Appraisers and Accredited in Business Valuation ("ABV") by the American Institute of Certified Public Accountants. Prior to Hemming Morse, I was the Partner in Charge of the valuation and financial Consulting Practice at Burr Pilger Mayer, Inc., a regional certified public accounting firm with approximately 400 employees.

2. I have twenty-six years of experience in the valuation of businesses, analyzing the financial condition of businesses, and consulting to businesses and business owners. The last eighteen years of my experience have focused on business valuation, economic damages analyses, transaction due diligence support, and fraud and forensic investigations. In that period, I have been retained to prepare over eight hundred valuations of businesses, intellectual property, debt instruments, and complex derivatives. These valuations have been prepared for litigation, tax reporting, financial reporting, and transaction support purposes, including bankruptcy. The majority of my valuations have focused on my expertise

with technology, life sciences, and medical device companies, from very early stages of development through late stage publicly traded companies.

3. I am the Co-Founder and Chair of the Fair Value Forum, a San Francisco Bay Area based business valuation expert group that meets periodically to discuss technical issues and best practices in the profession. I was formerly on the Board of the Valuation Roundtable of San Francisco for several years and served a term as President of that organization. I have presented in a number of national conferences on the topic of business valuation and have authored articles and publications on the same. Many of my presentations and publications are focused on the valuation issues specific to technology, life sciences, and medical device companies. As an example, in 2013 I co-authored the valuation section of *The 409A Administration Handbook, Compliance and Company Valuation*, published by Thomson Reuters. My current curriculum vitae is attached to this report as Appendix Exhibit H and provides additional details.

4. My employer Hemming Morse, LLP is being compensated at an hourly rate of \$560 for my time, and at hourly rates ranging from \$280 to \$400 for employees who assisted me on this assignment.

II. Assignment

5. I have been retained through my employer, Hemming Morse, LLP, Certified Public Accountants and Financial and Forensic Consultants by the U.S. Attorney's Office, Northern District of California ("USAO" or "Counsel") in the matter of United States v. Holmes, et al.,

to estimate the fair market values of 100% of the equity in Theranos, Inc. (referred to as "Theranos" or "Company"), on a controlling, marketable basis as of the following dates:

- February 7, 2014 (the "2/7/2014 Valuation Date");
- December 31, 2014 (the "12/31/2014 Valuation Date"); and
- October 15, 2015 (the "10/15/2015 Valuation Date"); (collectively, the "Valuation Dates").

6. My assignment included allocating the above equity values of Theranos to all of the securities in the Company's capital structure. I have also been asked to calculate the loss to Theranos Series C-1 and Series C-2 Preferred Stock investors resulting from the difference between my concluded values for their shares and their initial investment purchase price of \$15.00 and \$17.00 per share, respectively.

7. In carrying out my assignment, my objective was to define a minimum range of loss to investors, and I have applied several assumptions that provide a favorable interpretation of the equity value of Theranos on the Valuation Dates. These assumptions include adopting optimistic management forecasts that assume Theranos' significant technology challenges will be successfully resolved, that the Company will realize high revenue growth in the near term, and that it will earn significantly above industry margins. I have further applied target investor rates of return that are on the low end of the applicable range for these forecasts.

8. Another favorable set of assumptions I have made is that Theranos' historical expenditures were primarily directed towards research and development efforts, that such expenditures were productively spent and created value, and the large majority of such

expenditures do not relate to technology that is obsolete on the Valuation Dates. Wherever I have faced limitations in information available to conduct this assignment, I have applied an interpretation that is most favorable to the value of Theranos, and that leads to a minimum range of investor loss. My significant valuation assumptions are more fully explained throughout this report.

9. This report summarizes my current opinions given the information available to me to date; I may consider any additional materials that become available and amend or supplement my opinions and this report, if appropriate.

10. In connection with my anticipated testimony, I may be asked to create, from various documents produced in this litigation and obtained through independent research, demonstrative schedules which refer or relate to the matters discussed in this report. I have not yet created such demonstrative schedules.

11. In my work I have been assisted by others in my firm who have acted under my direction and control. However, the opinions in this report are my own.

12. I understand that this report may be made available to other parties in this litigation, to their counsel and experts, as well as to the Court in connection with sentencing. It has been prepared for use in this action. In all other respects, this report is confidential. It should not be used, reproduced or circulated for any other purpose, in whole or in part, without my prior written consent. No other party is entitled to rely on this report for any purpose whatsoever.

III. Evidence Relied Upon

13. My understanding of the relevant facts comes from the documents provided by Counsel, transcripts of interviews and trial testimony, and materials I gathered through my research¹. I have been provided internal Company and investor communications, transcripts of trial testimony by employees, investors, prospective and actual business partners to Theranos, and significant documents with regards to the Company's assets and liabilities, historical and future performance, and business operations. I was not able to interview Theranos' management or employees directly. The documents I considered or relied upon are identified in Appendix Exhibit I.

IV. Summary of Opinions

14. My opinions of value are based on consideration and application of the three categories of widely accepted valuation methods; the income, market, and asset / cost approaches. I applied the discounted cash flow method (income approach) in combination with the guideline public company method (market approach) to define the upper bound of Theranos' value on the three Valuation Dates. I also applied the adjusted net asset value method and the cost to recreate method² to define the lower bound of Theranos' value on the Valuation Dates, resulting in a range of value. Finally, I applied the back-solve method (market approach) to infer the value of Theranos based on the price paid by investors for their Series C-2 Preferred Stock. This back-solve method value is not my opinion of Theranos' fair market value, it was prepared to demonstrate the implied value placed on the Company

¹ My research includes information available through a subscription to the S&P Capital IQ database.

² Also referred to as "reproduction cost new" in business valuation guidance.

by investors. A summary of my estimated fair market values is outlined below, and these include the Company's substantial cash balances:

100% Company Equity Value Range (In Thousands)	Cash Balance Included in Equity Value (Thousands)	Series C-1 Per Share Value Range	Series C-2 Per Share Value Range	Valuation Date	Report Exhibit
\$ 378,000 - \$ 431,000	\$ 151,912	\$ 8.77 - \$ 9.39	\$ 9.90 - \$ 10.59	02-07-14	Exhibit A.3
\$ 827,000 - \$ 951,000	\$ 465,933	\$ 9.61 - \$ 10.36	\$ 10.80 - \$ 11.63	12-31-14	Exhibit A.4
\$ 1,051,000 - \$ 1,184,000	\$ 496,919	\$ 10.14 - \$ 10.81	\$ 11.37 - \$ 12.11	10-15-15	Exhibit A.5

15. One method to calculate the loss to Theranos investors is to determine the difference between their initial investment price and their ultimate recovery in the dissolution of the Company³. The method I applied is based on my estimates of the above fair market values for Theranos' equity, which leads to a smaller loss figure. I have calculated the aggregate Series C-1 and C-2 investor losses to range between **\$277.965 million** and **\$315.884 million** per Exhibit A.1 to this report. This loss is measured as the difference between the price paid by investors and my estimated value above on the date closest to when the investment was made. I have been asked to prepare an alternate calculation of investor loss based on my estimated values as of only the 10/15/2015 Valuation Date, which results in a range of aggregate loss between **\$237.323 million** and **\$273.646 million**.

16. The above equity values and investor loss calculation are based on the favorable premise that Theranos will continue to operate as a going concern, as explained in the next section of this report. If the Company were facing near term dissolution on the Valuation

³ I understand that many investors did not recover any portion of their initial purchase price. The method discussed here is not meant to reflect any specific legal guidance on loss calculations.

Dates, its recoverable equity value would be substantially lower. In such a scenario, the Company would be forced to sell its technology assets under distressed sale conditions. In addition, the Company's Edison device capabilities were still far behind that of conventional laboratory equipment⁴.

17. One data point that is informative as to the value of Theranos' technology under such a scenario is a loan extended to the Company by Fortress Credit Corporation in December 2017. The loan totaled \$65 million in initial funds disbursed, with the remaining \$35 million contingent on the Company achieving development milestones. The loan was secured with all assets of the Company including its patents and patent applications⁵. Fortress made this loan based on their consideration of the value of Theranos' intellectual property collateral in a potential default scenario.⁶

18. Under a liquidation premise and if the maximum loan amount of \$100 million were assumed to be the recoverable value of Theranos' technology in a dissolution, the Company's resulting equity values would be approximately \$138 million, \$416 million, and \$448 million respectively on 2/7/14, 12/31/14, and 10/15/15⁷. This would result in larger investor losses than my calculations above.

19. Because I am using a going-concern premise, it is important to note that even if the value of the Company exceeds the liquidation preference of the Series C-1 and C-2 shares,

⁴ Refer to Theranos Background section of this report for discussion on state of the Company's technology.

⁵ Exhibit 191 to Deposition of Erez Levy, Fortress Credit Corp Investment Memorandum, December 2, 2017.

⁶ Deposition of Erez Levy, Managing Director at Fortress, September 24, 2019, p.31:7-14, p. 68:16-25.

⁷ These values are based on my adjusted net asset value methods on Exhibits E.1, H.1, and K.1, with a substitution of intangible asset value in those methods with \$100 million.

that does not mean the Series C-1 and C-2 investors have not incurred losses as of the Valuation Dates. This is because, as a going concern, there are a wide range of possible future outcomes for the Company. Some outcomes may be extremely favorable and some may result in no return for any of the investors. The standard way of valuing specific classes of stock is to use option pricing theory which is what I have done. This makes it is possible to consider the range of outcomes and derive a value for each class of stock. This is more fully described in the "Equity Allocation Models" section of this report.

V. Introduction

A. Standard and Premise of Value

20. As the standard of value for this report, I have employed a definition of fair market value used in appraisal practice,⁸ originally found in Section 20.2031-1(b) of the Estate Tax Regulations and Section 25.2512-1 of the Gift Tax Regulations and incorporated into Section 2.02 of Revenue Ruling 59-60. That definition is:

"The price at which the property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts."

⁸ This definition, or one very similar, has been adopted by The Institute of Business Appraisers, The National Association of Certified Valuation Analysts, The American Society of Appraisers, and The Appraisal Foundation.

21. Court decisions frequently state⁹ in addition that the hypothetical buyer and seller are assumed to be able, as well as willing, to trade and to be well informed about the property and concerning the market for such property. Fair market value is defined in the U.S. tax regulations, and it is a widely used standard of value for non-tax related matters. Although I assume a buyer of Theranos was accurately informed as to its financial condition, its state of development, and the capabilities of its technology, I ignore for purposes of my valuation the occurrence of misrepresentations made by Company management to investors and other third parties. Such misrepresentations can damage a company's brand image, its ability to raise capital and continue operating as a going concern, and may result in significant litigation related liabilities. These negative factors are excluded from my estimates of value¹⁰.

22. I have appraised Theranos's stock under a going concern premise. This premise assumes that the Company is an ongoing business enterprise with management operating in a rational way with a goal of maximizing owner value¹¹. This will be discussed more fully in the valuation section of this report. And, as mentioned above, using a liquidation premise as of the Valuation Dates would result in a substantially lower values for Theranos' equity and the Series C-1 and C-2 shares.

⁹ In the *Estate of Kaufman*, TCM 1999-119, the court noted that "[t]he hypothetical willing buyer and the hypothetical willing seller both aim to maximize their profit from the hypothetical sale of the property."

¹⁰ Excluding these factors results in a higher estimated value, and a lower investor loss calculation.

¹¹ A going concern premise assumes the business is not about to be dissolved or liquidated.

B. Statement of Scope and Limitations

23. This Summary Report was prepared, and my analyses, opinion and conclusions were developed, in conformity with the American Institute of Certified Public Accountants' Statement on Standards for Valuation Services No. 1 ("SSVS") and USPAP of the Appraisal Foundation.

24. This report was prepared subject to certain Assumptions and Limiting Conditions included in the appendix to this report. My Certifications and Representations are also included in the appendix to this report.

25. I obtained a variety of financial, operational, economic, and industry documents and information from Counsel as well as from outside sources. I have assumed all information is accurate and complete. I was unable to have direct communication with management and employees of Theranos in this assignment.

26. This report reflects my understanding of facts and conditions existing at the Valuation Dates. Subsequent events have not been considered unless they were known or knowable on the Valuation Dates¹², and I have no obligation to update my report for such events and conditions. However, I reserve the right to update my report for new information that is provided to me.

¹² I have also considered subsequent events that provide evidence of facts and conditions existing as of the valuation date.

C. Statement of Disinterest

27. I have no present or contemplated future interest in the subject property of this Appraisal Report. I have no interest in or bias with respect to the subject property or the owners thereof.

VI. Theranos Background

28. On the Valuation Dates, Theranos operated clinical laboratories in Newark, California, and Scottsdale, Arizona. In addition, Theranos was in continued development of its immunoassay blood testing device (the Edison), with the objective of providing faster, more accurate results at a lower price point to patients than traditional laboratories, while requiring patient samples with only a few drops of blood. Historically, Theranos had entered into contracts with pharmaceutical companies to provide testing services in support of clinical trials. On the Valuation Dates, these agreements and related revenues had terminated.

29. Theranos' business model on the Valuation dates encompassed a vision for its Edison device to provide a wide variety of tests to patients in the retail market with the following advantages over reference labs such as Labcorp and Quest Diagnostics¹³:

- *Faster Results* – four hours for test results in a retail setting and one hour in a hospital setting

¹³ Trial testimony of Brian Grossman, November 16, 2021, 6379:8 – 6382:1, 6392:16 – 6395:10, 6404:19 -6406:24

- *Higher Accuracy* – less variability in test results than conventional lab, due to higher automation of processes within the device and less exposure to human error.
- *Lower Pricing* – at 50% of Medicare reimbursement rates.
- Ability to run a large array of tests, and to match the broad menu of tests offered by Labcorp and Quest Diagnostics.
- Use of few drops of blood obtained through a finger prick rather than a traditional venipuncture procedure requiring larger blood draw from patients.
- A processing device that was much smaller than traditional lab equipment and that could eventually be placed in locations outside a laboratory¹⁴ such as retail pharmacies.

30. As of the Valuation Dates, Theranos had not achieved the above capabilities for its technology, and significant development and operational risks faced the company. Ms. Holmes testified that only 12 assays were offered when the analysis was performed on the miniaturized Theranos device, in the CLIA laboratory,¹⁵ and that this was one of the central issues raised by the Wall Street Journal regarding the state of development of Theranos' technology.¹⁶ Ms. Holmes also testified that its newest device the Minilab, which was part of the 4 series, was never used for patient testing, was never put in use in the CLIA laboratory in California, and as of October 15, 2015, had been approved by the FDA in use for a single

¹⁴ Placing the Company's device outside of its laboratory would have required FDA approval, which Theranos had not obtained on the Valuation Dates.

¹⁵ Trial Cross-examination of Elizabeth Holmes, November 30, 2021, 8003:7-15.

¹⁶ Cross-examination of Elizabeth Holmes, 8003:16-8004:21.

assay, the Herpes test assay.¹⁷ Ms. Holmes also testified that the only Theranos manufactured analyzer that was ever used in the CLIA laboratory in California was the Edison 3.5, which was used for immunoassays only, rather than for general chemistry, cytometry or nucleic acid amplification.¹⁸

31. Ms. Holmes further testified that it was the Edison 3.5, one of Theranos' earlier models, rather than the Minilab, that was used to perform 12 assays in the CLIA laboratory in California between September 2013 and June 2015, and that by the time of the CMS inspection in September 2015, Theranos was not using any of its manufactured analyzers in the CLIA laboratory.¹⁹ Similarly, Ms. Holmes testified that Theranos did not use its own technology, including the Minilab, to run tests at its Arizona Moderate Complexity Laboratory, but rather used commercially available equipment.²⁰ Mrs. Holmes further explained that in order to perform the majority of the 200-some tests on its menu (beyond the 12 tests discussed above), Theranos was dependent on machines from third parties such as Siemens, Beckman Coulter or Becton Dickinson.²¹

32. Testimony from Surekha Gangakhedkar and Erika Cheung was similar regarding the state of the Company's technology. Ms. Gangakhedkar testified that the Edison 3.0 and the Minilab 4.0 was not ready due to reliability issues that were unresolved²². Ms. Cheung testified that the Edison could only run one type of assay on one patient at a time while third

¹⁷Trial cross-examination of Elizabeth Holmes, November 30, 2021, 8014:24-8015:20 and 8018:6-8.

¹⁸ Cross-examination of Elizabeth Holmes, 8015:21-8016:11.

¹⁹ Cross-examination of Elizabeth Holmes, 8016:12-8017:25.

²⁰ Cross-examination of Elizabeth Holmes, 8019:4-8020:13.

²¹ Cross-examination of Elizabeth Holmes, 8018:9-8019:3

²² Trial testimony of Surekha Gangakhedkar, September 17, 2021, 1185:5-1188:12.

party machines could process 30-40 patients at one time while conducting several different tests for each patient²³. In addition, the Edison could run “between 4 and max 12”²⁴ immunoassay tests, not the hundreds management had envisioned.

33. Starting in February 2014, and ending in April 2015, Theranos raised \$734 million in capital from various investors through the sale of Series C-2 Preferred stock. In addition, the Company raised \$112.5 million in Series C-1 Preferred stock capital between August 2011 and January 2014²⁵. Because it is my understanding that these capital raises were based on misrepresentations to investors regarding the capabilities of the Company’s technology and progress with the Company’s business model, I did not rely on these transactions to estimate the fair market value of Theranos on the Valuation Dates.

VII. Industry Analysis²⁶

34. Theranos operates in the Scientific Research and Development industry in the US which includes companies and organizations that are involved in physical, engineering or life sciences research and development (R&D).

35. Over the past five years, the industry has performed well despite challenging conditions presented by the recession, which have caused many industries to decline. Indeed, industry growth is expected to be limited in the next two years, before strengthening in the second half of the next five-year period as falling federal funding for defense and weak government

²³ Trial testimony of Erika Cheung, September 14, 2021, 807:19-809:9

²⁴ Trial testimony of Erika Cheung, September 14, 2021, 805:21-24, 812:10-11

²⁵ This figure includes promissory notes convertible to Series C-1 Preferred Stock. The majority of C-1 sales occurred in calendar year 2013.

²⁶ IBISWorld, *IBISWorld Industry Report 54171, Scientific Research & Development in the US*, December 2014.

investment will mitigate industry growth. That said, improving private investment from major industries, such as oil and health, will help long-term growth. The industry is projected to continue to grow at an average annual rate of 2.4%²⁷ to \$147.3 billion over the five years to 2019.

VIII. Economic Conditions²⁸

36. The relevant time periods for a review of the state of the U.S. economy are the Valuation Dates. Throughout 2014, the majority of U.S. economic indicators continued to improve.

37. Although growth in gross domestic product ("GDP") declined slightly in the first quarter of 2014, by year end GDP growth had rebounded to 2.6% following two quarters of rapid growth (4.6% and 5.0%, respectively). Health care spending as a share of GDP remained stable for the past two years. Unemployment which wavered around 6.7% in February continued to decline through December to 5.6%. Construction starts, manufacturing activity and productivity were improved in both periods and throughout 2014. Personal income and consumer spending improved in February which continued through December. Despite some intra-year fluctuation, all major stock market indices ended 2014 higher than at the end of 2013. Inflation remained subdued and these trends were expected to remain steady through 2015.

²⁷ This represents an inflation adjusted real growth figure. Forecasts in an income approach to valuation make use of nominal figures that include inflation.

²⁸ KeyValueData, "National Economic Report", February 2014 and December 2014; JT Research LLC, "Overview of the U.S. Economy", Fourth Quarter 2014; and Federal Reserve Bank of Philadelphia Research Department, "Survey of Professional Forecasters", Fourth Quarter 2014.

IX. Financial Review

38. In valuing Theranos, it is useful to examine the financial position of the company. This allows the appraiser to review the history of Theranos, compare it to its industry, and use the analysis to assist in assessing the future prospects of the company.

39. I have analyzed Theranos's financial statements for the years ended December 31, 2007, to December 31, 2015, the period closest to the last of my three Valuation Dates.²⁹ Interim financial statements between calendar year ends 2013 and 2015 were not available.

40. Theranos's historical financial statements are presented in Exhibits B.1 through B.6 which include common size presentations and comparative industry metrics. My analysis includes a comparison of Theranos to industry averages of a guideline public company peer group, and industry data published by RMA and Bizminer as shown in Exhibits B.4 – B.6.³⁰ I have used data for companies defined in Exhibit D.3 as a peer group to Theranos.

41. I note that because Theranos was not a mature company and had not reached profitability or meaningful revenues from core services on the Valuation Dates, future results were expected to deviate from past results. In the valuation section of this report, I discuss in greater detail the financial projections used for valuing Theranos.

²⁹ The 2007 – 2008 financial statements were audited, the remainder are internally prepared [KPMG_Theranos_000164-000188].

³⁰ The guideline public company data was obtained from S&P Capital IQ, and the selection of these companies is discussed in the estimate of value section of this report.

<https://www.spglobal.com/marketintelligence/en/solutions/sp-capital-iq-platform>

A. Adjustments to Reported Financial Statements

42. In analyzing a company's historical earnings as a guide to estimating the company's earnings base, it is important to make the distinction between past earnings that represent ongoing earning power and those that do not. Financial statements should be adjusted to eliminate the effect of past items that would tend to distort the company's current and future earning power, such as items that are unusual or non-recurring in nature, occur infrequently, are discretionary, or are derived from non-operating sources, such as interest income.

43. Based on my review, I identified items that require adjustments in Theranos's financial statements. These adjustments to the income statement were related to removing non-recurring or non-operating expenses, and included interest and other income. These adjustments provide a consistent basis (by only considering operating income) by which to compare Theranos to other publicly traded companies whose financials were reported by Capital IQ using the same method. It is noted that these adjustments to the financial statements were very small in relation to the total revenues and expenses for each period, and are shown in Exhibit B.3.

44. In addition to the above adjustments, I also adjusted out a "miscellaneous receipts liability", that equals a portion of proceeds from the 2013 and 2014 capital raises, and compensation of service providers with preferred stock, for which I understand the stock was not yet issued. Since Theranos would satisfy the miscellaneous receipts liability by issuing the corresponding stock, and such stock was included the capitalization tables as of

my Valuation Dates, I removed these liabilities. The amount of these liabilities totaled \$45.187 million as of 12/31/13 and \$390.375 million as of 12/31/14.³¹

B. Balance Sheet Review

45. Theranos's adjusted historical balance sheet is shown in Exhibit B.4.

46. **Assets.** Theranos's assets were primarily comprised of cash generated by proceeds from the sale of preferred and common shares. Compared to its peer group, Theranos was far heavier in its cash holdings, at \$424 million at 12/31/15. Theranos also carried low levels of inventory on its balance sheet, similar to its peer group. Adding non-current receivables of \$27 million, Theranos' assets summed to \$535 million at 12/31/15.

47. **Liabilities and Equity.** Theranos had little current liabilities in relation to its cash holdings. Theranos did carry significant amounts of long term liabilities in the form of customer deposits / deferred revenue of \$136 million, notes payable in the amount \$41 million and other non-current liabilities of \$35 million at 12/31/15, for total liabilities of \$250 million. As a result, Theranos' equity was significantly positive at 12/31/14 and 12/31/15. For a company that was not mature and still investing in growth, this conservatively levered balance sheet appears appropriate. Compared to its peer group, Theranos was similarly heavy on equity versus both current liabilities and debt.

³¹ The \$45.187 liability as of 12/31/13 reconciles closely to the proceeds of 2.683 million Series C-1 shares issued between 8/1/13 and 12/31/13 at \$15 per share, plus additional shares issued to directors and legal service providers [THPFM0004648099, lines 82-88 of Excel KPMG auditor workpaper]. The \$390.375 million liability as of 12/31/14 reconciles closely to the proceeds of 22.838 million Series C-2 shares issued 10/31/14 through 12/31/14 at \$17 per share and marked as "subscribed" in Theranos capitalization tables.

C. Income Statement Review

48. Theranos's historical income statement, adjusted as described above, is shown in Exhibit B.5.

49. **Sales and Cost of Goods Sold.** Theranos' revenue was minimal in the years leading to 12/31/14 and 12/31/14, in keeping with the fact that Theranos was a near pre-revenue and pre-profit company. Revenues in the period 2009-2011, at under \$3 million per annum, resulted from contracts with pharmaceutical companies such as Celgene to provide testing services that would support clinical trials. These revenues terminated in 2011 and did not recur thereafter.

50. **Operating Expenses.** Operating expenses were significant and increasing in the years leading up to 12/31/14 and 12/31/15, with research & development, and general and administrative costs of \$97 million and \$76 million in 2015, respectively.

51. **Net Income.** Like many growing and young companies, Theranos had incurred significant losses through 2015, with losses of \$184 million in 2015.

D. Financial Ratios Review

52. I have reviewed Theranos's financial ratios shown in Exhibit B.6 and compared them to a peer group.³² The purpose of financial ratios review is to compare Theranos' historic financial performance with benchmark data available in the marketplace, i.e., the peer group I have selected. The financial ratios reflect the fact that Theranos was a near pre-revenue

³² The peer group is comprised of public companies identified as having similar characteristics to Theranos, as shown in Exhibit D.3.

and pre-profit company as of 12/31/14 and 12/31/15 and that it retained large amounts of cash proceeds from investor financings. Its current ratio was well above that of its peers. Certain other metrics were not meaningful, as Theranos had negative earnings and operational metrics, and low levels of fixed assets.

53. **Summary:** In conclusion, Theranos's financial metrics and financial condition at the Valuation Dates are in keeping with the fact that it was an early stage near pre-revenue and pre-profit company.

X. Estimate of Value

54. The value of a closely held business is derived not from a formula, but from the relevant facts and circumstances of a company and is based on informed judgment with regard to those facts. In determining fair market value, I considered available financial data, as well as all relevant factors affecting the fair market value. One of the first issues to address in valuing an interest is whether that interest has control and is marketable. As discussed directly below, the 100% equity interests I valued in Theranos were considered both controlling and marketable at the Valuation Dates.

Controlling Interest Consideration

55. The 100% interests being valued in Theranos on the Valuation Dates represented majority ownership interests in the entire company, and therefore possessed the ability to control management and financial decisions impacting the entire company or the business segment. These decisions included the ability to elect directors and appoint management, determine management compensation and perquisites, set policy, acquire and liquidate

assets, determine dividend distribution policy, and other significant policies. Accordingly, I have considered valuation methods which yield an estimate of value on a controlling basis.

56. It is noted that when I allocated Theranos' value to different share classes, the investors in these shares did not hold controlling interests in the Company³³. I did not discount the preferred shares held by investors for lack of control, which results in a higher fair market value for their shares, and lower calculated investor loss than had I applied such a discount. Preferred stock investors in early-stage companies often collectively exert elements of influence or control over the companies they invest in³⁴.

Marketability Consideration

57. A major component of a security being valued is its marketability. All other things being equal, an investment is worth more if it is marketable than if it is not, since investors prefer liquidity over lack of liquidity. Investments that lack the inherent liquidity of publicly traded securities are, all else being equal, less attractive investments. Given that the 100% equity interests that I valued in Theranos are controlling interests in the entire company, the owner of such interests would have had control over the decision to sell the entire company to achieve liquidity. As such, I applied valuation methods that yielded an estimate of value on a marketable basis, and no lack of marketability discount was applied.

³³ Mrs. Holmes testified that she was the founder of Theranos, the only CEO Theranos had ever had, and that at various points in time before 2016 she owned a majority of the voting shares in Theranos. At the end of 2016, Mrs. Holmes owned more than 51% of the Class B common stock in Theranos [Cross-examination of Elizabeth Holmes, 8004:22-8005:6, 8013:18-8014:15].

³⁴ AICPA Practice Aid: Valuation of Privately-Held-Company Equity Securities Issued as Compensation, 2013, Sections 7.08, 7.11 [accessed via Commerce Clearing House Accounting Research Manager Subscription]

58. The investors in Series C-1 and C-2 shares did not hold controlling interests in the Company as noted above, and could not make a decision to sell the entire company to achieve liquidity. Under valuation theory, it is generally accepted that the level of marketability of senior preferred securities and the entire early-stage enterprise (such as Theranos) are comparable³⁵. The entire early-stage enterprise is less liquid than an established, profitable company due to negative cash flows and a more limited pool of prospective buyers. The senior preferred securities such Series C-1 and C-2 shares in Theranos have significant liquidation preferences in first order of priority ahead of all of other securities, which render them more marketable. In addition, preferred investors typically have access to information that would make it easier to access an exit market for their securities. As such, I have not applied a lack of marketability discount to Series C-1 and C-2 preferred shares as compared to entire value of Theranos' equity.

Valuation Methodologies

59. The appraisal profession generally recognizes three primary approaches to determine value: the income approach, the market approach, and the asset approach. Each approach is distinctive and contains many variations. While all valuation approaches are generally considered, not all may be used; which approach or approaches are used depends upon the specific facts of that engagement.

60. In valuing the Interest in Theranos, I considered several valuation methods:

³⁵ AICPA Practice Aid: Valuation of Privately-Held-Company Equity Securities Issued as Compensation, 2013, Sections 7.18 – 7.19 [accessed via Commerce Clearing House Accounting Research Manager Subscription]

Income Approaches:

Capitalization of Earnings Method

Discounted Cash Flow Method

Market Approaches:

Guideline Public Company Method

Merger and Acquisition Method

Back-Solve Method (Investor Financing)

Asset and Cost Approaches:

Net Asset Value Method

Adjusted Net Asset Value Method

Cost To Recreate Method (Technology and Branding Assets)

61. Income approaches value a company with reference to various measures of the earnings or cash flows generated by that company, with the assumption that such earnings or cash flows sooner or later will be paid out to shareholders in the form of dividends.

62. Market approaches value a company by comparison with transactions in similar businesses, business interests, or securities.

63. Asset approaches value a company, often one that is capital-intensive, with reference to the stated or calculated net worth of that company, with the assumption that such net worth sooner or later will be paid out to shareholders in liquidation.

64. The focus on liquidation value utilized by asset-based approaches tends to limit their applicability to the value of a non-operating business such as a holding company, early stage enterprises with an unproven product or service, or one that will be liquidated. In the alternative, income and market approaches are most appropriate when valuing ongoing businesses.

Selection of Valuation Methods

65. In valuing Theranos, I considered the methods listed above. I chose the discounted flow method combined with the guideline public company method (to support the Company's exit value), and the adjusted net asset value method combined with the cost to recreate method (for the Company's technology and branding assets) as suitable methods for valuing the Company's equity.

66. As discussed in the appendix to this report, I explain my use of the back-solve method to infer the value Theranos based on certain Series C-2 financing rounds. Because it is my understanding that investors were provided inaccurate information regarding Theranos' business operations and capabilities of its technology, I did not rely on this method to define the value of the Company. The following summarizes the methods considered and my reasoning for my selection.

Capitalization of Earnings Method

67. The capitalization of earnings method is an abridged version of the discounted cash flow method. This method seeks to determine an estimate of value by projecting a single period's expected economic amount and converting that amount to a value by dividing it by a "capitalization rate." The capitalization rate is a derivative of the discount rate, i.e., the

discount rate minus the annually compounded expected growth rate, in perpetuity, of the variable being capitalized.

68. This method is appropriate when the projected single period expected economic amount is indicative of future operations, assuming a normal and constant growth rate. On the Valuation Dates, Theranos was a young pre-profit development stage company that had a small revenue base, and that had not reached long term mature growth levels or margins. The capitalization of earnings method cannot accommodate changing growth rates or margin assumptions in future periods. Accordingly, I did not consider the capitalization of earnings method an appropriate valuation method for Theranos.

Discounted Cash Flow Method

69. The discounted cash flow method is based on the theory that the total value of a business is the present value of the projected future earnings plus the present value of the terminal value. This method requires that a terminal value assumption be made. The amounts of projected earnings and the terminal value are discounted to the present using an appropriate discount rate. The discounted cash flow method relies on the ability of the appraiser and management to reasonably forecast cash flows and assess the risks associated with those cash flows.

70. I was provided with detailed forecasts that reflected management's contemporaneous expectations at the Valuation Dates³⁶. It is my opinion that at the Valuation Dates the

³⁶ The forecasts spanned the 2014 – 2018 calendar years, and were contained in IRC 409A valuation prepared for Theranos by Aranca. The 409A valuation dates were 9/30/13, 12/15/14, and 3/25/15. Email correspondence between the Theranos management team and Aranca indicated that management provided input regarding forecast expectations that were integrated into the valuation approaches [examples include Trial Exhibits 5206, 5085, 3527]

projections in the Aranca 409(a) Reports provided the best estimate of future anticipated operating results that were available on the Valuation dates, and that the discounted cash flow method is an appropriate method for valuing Theranos. I note that I do not consider the Aranca forecasts to represent a realistic estimate of future results for reasons discussed later in this report, they represented the best choice available of management prepared forecasts.

Guideline Public Company Method

71. The guideline public company method develops an estimate of value based on prices at which stocks of similar companies are trading in a public market. The estimate of value is derived by value multipliers such as price to earnings and price to cash flow. These value multipliers are then adjusted and applied to the subject company's fundamental data to reach an estimate of value for the subject company.

72. Application of the guideline public company method requires the selection of sufficient "comparable companies" to facilitate the determination of a value conclusion for the subject company. In selecting comparable guideline companies, "the standard sought is usually one of reasonable and justifiable similarity."³⁷

73. I have not used the guideline public company method to value Theranos as of any of the valuation dates. I did however use this method to estimate the terminal value of Theranos at the end of the projection period in 2018, under the discounted cash flow method. The 2014-2018 forecasts provided to me assume that Theranos will continue to experience high

³⁷ Frank M. Burke Jr., *Valuation and Valuation Planning for Closely Held Businesses* (Englewood Cliffs, NJ: Prentice-Hall, 1981), p. 49.

revenue growth in 2018, and a standard perpetuity formula for the terminal value cannot accommodate varying future growth rates. In addition, if Theranos were to achieve its forecasts, it would be significantly more comparable at the end of 2018 to the guideline public companies I selected than it is on the Valuation Dates. Accordingly, the guideline public company method is an appropriate method for valuing Theranos as of 12/31/2018, at the end of management and Aranca's forecast horizon.

Merger and Acquisition Method

74. The merger and acquisition method derives an estimate of value of the subject company based on merger and acquisition transactions involving companies or operating units of companies in similar industries to the subject company. I did not apply this method because Theranos did not have meaningful revenues or positive earnings to which valuation multiples could be applied on the Valuation Dates.

The Back-Solve (Investor Transactions) Method

75. I applied the back-solve method to infer the value of Theranos' equity based on purchases by investors of Series C-2 Preferred Stock at \$17 per share. Because it is my understanding that these capital raises were based on misrepresentations to investors regarding the capabilities of the Company's technology and progress with the Company's business model, I did not consider the back-solve method to provide a reliable indication of the Company's fair market value. The implementation of this method is discussed in the appendix to this report.

Net Asset Value Method

76. The net asset value method values a company at the book value of its stockholders' equity. The historical cost bases of assets, however, usually bear very little relationship to true market values. The method only reflects accounting history expressed in nominal dollars and not the potential of a going concern. Because of this limitation inherent in the net asset value method and because I was able to apply more appropriate methods, I did not use the net asset value method to value Theranos.

Adjusted Net Asset Method

77. Under the adjusted net asset method, the assets and liabilities of Theranos are expressed at their current market values with an offsetting adjustment to equity. The adjusted net asset method is generally appropriate for businesses that are early stages of development with unproven products or services (such as Theranos), about to be liquidated, or that have substantial capital investments in tangible assets such as real property. I have used the net asset value method to value Theranos. In applying this method, Theranos' underlying technology and brand intangible assets were adjusted to estimated fair market values by applying the cost to recreate method. This method considers that a buyer of the assets would contemplate the cost of developing such assets as an alternative to purchasing them.³⁸

³⁸ AICPA Practice Aid: Valuation of Privately-Held-Company Equity Securities Issued as Compensation, 2013, Sections 4.42 – 4.44 [accessed via Commerce Clearing House Accounting Research Manager Subscription]

XI. Value of Theranos at February 7, 2014

78. The following discussion describes my process in estimating the fair market value of a 100% equity interest in Theranos as of February 7, 2014.

A. Income Approach – Discounted Cash Flow Method

79. As discussed previously, the discounted cash flow method is based upon the theory that the total value of a business is equal to the present value of the forecast future cash flows plus the present value of the terminal value. The present value determination is based on using a discount rate that reflects the expected rate of return that the market requires in order to attract funds to the particular investment. This rate is often referred to as a company's "cost of capital."

Earnings Base

80. My determination of value was calculated using a free cash flow to invested capital³⁹ earnings base. An invested capital earnings base considers the cash flows of the subject company available to both debt and equity holders, which permits comparability of firms with differing capital structures. For my calculations, I defined debt as all interest-bearing debt, which includes capital leases. These invested capital earnings-based cash flows are calculated for a period through 2018 as shown in Exhibit C.6.

³⁹ Invested Capital is defined as "...the sum of equity and debt in a business enterprise. Debt is typically either (a) all interest-bearing debt or (b) long-term interest-bearing debt. When the term is used, it should be supplemented by a specific definition in the given valuation context." In the International Glossary of Business Valuation Terms as published in *Valuing a Business: The Analysis and Appraisal of Closely Held Companies* by Shannon P. Pratt and Alina V. Niculita, 5th Edition, Appendix A, p. 1072.

81. The fair market value of Theranos's invested capital was equal to the present value of Theranos's free cash flow to invested capital. Theranos's free cash flow to invested capital was determined as follows for a five-year period (as shown in Exhibit C.5):

	Net Income (after tax, excluding interest expense)
+	Depreciation and Amortization
+/-	Increases or Decreases in Working Capital
-	Capital Expenditures
=	Free Cash Flow to Invested Capital

82. For the free cash flow to invested calculation, I established a Weighted Average Cost of Capital ("WACC") using the Modified Capital Asset Pricing Model ("CAPM") for the cost of equity component of the WACC. The terminal value was determined by applying a market derived exit multiple to Theranos' projected revenue and earnings before interest, taxes, depreciation, and amortization ("EBITDA"). The guideline public company peer group selection and analysis to support the terminal value is discussed in the next section of this report.

Selection of Forecasts

83. For purposes of my analysis, I requested from Counsel any available forecasts that the Company prepared in close proximity to the Valuation Dates. The available documents contained forecasts that were provided to investors⁴⁰, forecasts that appeared to be

⁴⁰ Mosley Materials, pp. 370-372, Summary Cap and Projected Income -KRM, pp. 3-5, Theranos Revenue Model_PFM, Trial Exhibit 4859 Projected Statement of Income, 2_SEC-USAO-EPROD-001215410_native

internally prepared for which I did not have record that they were provided to investors⁴¹, and the forecasts contained within the Aranca IRC 409A valuations as of 9/30/13, 12/15/14, and 3/25/15⁴².

84. The forecasts provided to investors who participated in the 2014 and early 2015 financings were much more aggressive in terms of revenue growth than the forecasts applied by Aranca in the same time periods. Because these forecasts are associated with misrepresentations made to investors, and reflect extremely optimistic assumptions regarding near term revenue growth and profitability, I did not consider them reliable for implementing an income approach to the valuation of Theranos.

85. The internally prepared forecasts that I reviewed and did not have evidence as to whether they were provided to investors, contained revenue growth and operating margin assumptions that were very similar to the investor forecasts. I did not consider these forecasts to be reliable for the same reason as that cited above for investor forecasts.

86. The Aranca forecasts contained optimistic assumptions of high revenue growth and above industry operating margins, however their growth assumptions were orders of magnitude lower than those in the investor forecasts. A comparison is contained in Appendix Exhibits B.1 through B.3. Management prepared and accepted these forecasts for purposes of determining the fair market value of Theranos stock, and as a basis for Federal tax reporting for compensatory grants made to employees. In addition, I noted that Theranos'

⁴¹ Projected Statement on Income_Jan 2015, Projected Statement on Income_Jan 2015-1, SEC-USAO-EPROD-000808915, SEC-USAO-EPROD-000809708, SEC-USAO-EPROD-000875621, SEC-USAO-EPROD-001247904, SEC-USAO-EPROD-001519025, 10.08.13 board docs.

⁴² Trial Exhibits 5141, 5190, 5206 Attachment, 5209.

Board of Directors was presented forecasts in October 2013⁴³ that were very similar to those adopted by Aranca in their 9/30/13 409A⁴⁴, and that these forecasts were much lower than those presented to investors in January 2014⁴⁵. Finally, I observed that the Aranca forecasts were relatively consistent across the three IRC 409A reports that I reviewed with valuation dates between September 2013 and March 2015. For all of these reasons, I determined that the Aranca forecasts most closely aligned with management's expectations on the Valuation Dates⁴⁶. I relied on these forecasts as a starting point for applying my discounted cash flow method.

Key Assumptions

87. The key assumptions incorporated in the cash flow forecasts are set forth in Exhibit C.1 to C.3. My assumptions are based balance sheet, income, expense, and capital expenditure forecasts that were developed in communications between Theranos management and Aranca⁴⁷. In vetting these forecasts, I considered the historical operations of Theranos, the Company's stage of development, historical and forecast industry growth information, and economic conditions.

88. My key assumptions as shown in Exhibits C.1 through C.3 and in D.1 are explained as follows:

⁴³ 10.08.13 Board Docs, pp. 15-16, NUNN_THERANOS_0000665 - 0000666

⁴⁴ Trial Exhibit 5141, p. 59.

⁴⁵ Theranos Revenue Model_PFM (this document contains worksheet tabs that represent the two year forecast provided by Theranos management to PFM in January 2014).

⁴⁶ Despite the Aranca forecasts being the best choice available among management prepared projections, I still considered them overly optimistic for reasons explained in the discount rate selection section of this report.

⁴⁷ Trial Exhibits 3527, 5190.

89. **Revenue:** Revenue was forecast to grow significantly through 2018, at which point it would still be higher than a long-term sustainable level, at 55.6% annual growth. Revenues are based on laboratory test services provided through retail pharmacies, physician's offices, and hospitals. Because Theranos' Edison device was not FDA approved, and could not perform many of the tests offered, the ability to generate these revenues in the near term were dependent on operation of Theranos' laboratories in CA and AZ, with significant use of third party purchased equipment⁴⁸. In the long term, Theranos' ability to successfully capture market share from companies such as Quest Diagnostics was highly dependent on successful development of its device, FDA approval, and ability to deliver a superior alternative to conventional laboratory tests.

90. **Cost of Revenues:** Cost of revenues was forecast to be equal to 35.3% in of revenue in 2014, decreasing to 30% in 2018.

91. **Operating Expenses:** Operating expense levels were forecast to decrease from being significantly greater than revenue in 2014 to 24.7% of revenue in 2018. The forecasted operated expenses and cost of revenues result in an EBITDA margin of 45.3% in 2018 which is significantly above BizMiner and RMA industry medians of 11.2% and 8.8% respectively (Exhibit B.5). In addition, Theranos' forecasted EBITDA margin is more than twice the upper quartile range of the guideline public companies of 20.7% (Exhibit D.2). I did not alter these very optimistic margin assumptions applied by Aranca and Theranos management, however

⁴⁸ Cross-examination of Elizabeth Holmes, 8016:12-8017:25, 8019:4-8020:13.

I did consider this variable in determining the appropriate WACC discount rate to apply to the forecasts.

92. **Capital Expenditures:** Capital expenditures (“Capex”) were forecast to decrease from being significantly greater than revenue in 2014 to 11.8% of revenue in 2018. Over the forecast period, the projected capital expenditures significantly exceed industry metrics as a percentage of revenue. The upper quartile of the public company peer group is 6.5% of revenue (Exhibit D.2). I noted that Theranos appeared to classify its Edison “manufactured device” as a fixed asset rather than as consumable inventory. This along with its large investment in manufacturing equipment for the device may explain why the Company required significantly higher capital expenditures than its peer group. This factor also mitigates to a limited extent the Company’s very optimistic EBITDA margins as discussed above.

93. **Depreciation and Amortization:** As shown in Exhibit C.3, depreciation was forecast to decrease from significantly greater than revenue to 5.7% in 2018. Projected depreciation is based on an estimated economic life of 7.5 years for new purchases, and 5 years of existing fixed assets. These lives were inferred based on an analysis of historical depreciation and accumulated depreciation relative to cost basis for the Company’s fixed assets.

94. **Income Tax Rate:** I applied a 40% income tax rate which approximates combined CA State and Federal statutory corporate tax rates on the Valuation Dates.

95. **Working Capital:** Theranos’ forecasted working capital was based on the projected difference between current operating assets and operating liabilities adopted by Aranca.

Aranca's analysis did not include required operating cash which I added to the forecasts based on 180 days of operating expenses. This results in working capital stabilizing at 18.6% of revenue in 2018, as shown in Exhibit C.3. This is at the lower bound of the 22.8% to 48.7% range based on industry comparable data.

96. Exit Multiple - Guideline Public Companies: The Company's projected high revenue growth rate in 2018 is the reason why I estimated Theranos' terminal value at 12/31/2018 using an exit multiple under the guideline public company method, as shown in Exhibit D.1. Exhibit D.3 outlines the guideline public companies that I deem comparable to Theranos. I selected publicly traded companies that offer medical diagnostic tests in a laboratory setting, or rapid point of care tests outside of laboratory. These selected companies included Quest Diagnostics and Labcorp Diagnostics, which were discussed as comparators in Company management discussions with Mr. Grossman during Partner Fund Management's ("PFM") due diligence for its February 2014 investment in Theranos⁴⁹. I also selected companies that developed diagnostic equipment for medical testing, such as Cepheid or Illumina, which were also discussed as comparators between Mr. Grossman and Theranos management. My selected peer group has a large degree of overlap with the guideline public companies selected by Aranca and Company management for IRC 409A purposes.

97. Exit Multiple Selection: In Exhibit D.4, I compare Theranos at the end of the forecast period in 12/31/18 to the guideline public companies for a series of financial metrics, as of the 2/7/2014 Valuation Date. In Exhibit D.2, I have listed financial metrics of the guideline

⁴⁹ Trial testimony of Brian Grossman, November 16, 2021, 6381:5-11.

public companies as of 2/7/2014 and indicated with bordering those combinations of public guideline company and metrics that I consider most comparable to Theranos.

98. If Theranos were to meet its forecasts through 2018, it would be of similar revenue size to the guideline public companies, it would have experienced higher growth in the historical period, it would be expected to realize modestly higher growth in the near future, it would generate higher profit margins than the peer group, and it would require significantly larger capital expenditures to sustain the Company compared to the peer group. I selected a MVIC (market value of invested capital)/Revenue multiple of 6.10x, which is near the mean of the peer group, and significantly above the median and upper quartile. This recognizes the higher assumed profitability and growth of Theranos in 2018 compared to the peer group, while accounting for the higher required capital expenditures of the Company. I selected 12.60x MVIC/EBITDA multiple that is between the median and lower quartile of the peer group. Theranos' higher profitability is inherent in the EBITDA figure, and should not be reflected in the multiple. In addition, the higher capital expenditure requirements for Theranos have a negative impact on the applicable multiple.

Discount Rate

99. When considering any investment, an investor is exposed to various risks. These include company, industry, economic, market, interest rate, and credit risks. The riskier the investment, the higher the return expected. Discount and capitalization rates, as used in an Income Approach to value a business, represent the return an investor would require in order to choose a particular investment. It represents anticipated future return; past returns, however, are often used to help determine a reasonable future rate.

100. In order to determine the appropriate discount rate that equity investors in Theranos required - the cost of equity of Theranos – I considered several commonly accepted approaches. Two widely used approaches for privately held companies are the Modified Capital Asset Pricing Model (“Modified CAPM”), and the Ibbotson’s Build-Up Model. Given the level of risk, and the resulting required rate of return of investor for an early-stage investment such as Theranos, I did not use either of the above methods, and instead estimated Theranos’ WACC using venture capital rates of return from several studies that are widely cited.⁵⁰

101. As shown in Exhibit C.4, I selected a venture capital cost of equity of 45%. The next step was to develop a WACC. This was derived by weighting the cost of equity and the after-tax cost of debt by their respective amounts in Theranos’s invested capital (based on industry capital structure). Because the industry use of debt was so low (only 3.0% of invested capital), the WACC ended up being 44% (rounded).

102. Table 1 of Exhibit C.4 presents actual rates of return achieved on venture backed portfolio companies at different stages of development, and over different time horizons. The annual rates of return for a Seed/Early-Stage company such as Theranos are 25.5% to 34.9% over a 10-year period. Such returns are appropriate if a forecast reflects expected value, which is a weighted average of possible future results. The Aranca forecasts I adopted are the most realistic version that was available in the documents that I reviewed, but they do not represent expected value.

⁵⁰ See footnotes 1 through 7 of Exhibit C.7.

103. The Aranca forecasts do not consider downside risk, and early-stage companies face significant statistical risk of failure or under-performance⁵¹. In addition, the forecasted revenues are predicated on Theranos' ability to implement on its vision to offer very broad array of faster, lower cost, more accurate tests in a miniaturized device that would displace traditional labs such as Quest Diagnostics. As discussed in the background section to this report, this vision was unrealized on the Valuation Dates and the Company faced significant remaining development risk. I further note that the Edison was not FDA approved, and Theranos lab operations were likely not in compliance with CLIA quality standards on all of the Valuation Dates⁵², and the forecasts assumed that Theranos would realize outsized 45% EBITDA margins that were far above industry norms. For all of these reasons, the Aranca forecasts did not reflect expected value, and therefore the applicable rate of return required an upwards adjustment to those demonstrated in Table 1 of Exhibit C.4.

104. Tables 2 and 3 of Exhibit C.4 demonstrate *target* rates of return; the returns expected by Venture Capital investors if the investment is successful. These higher *target* rates of return (compared to *actual* returns) compensate for downside risk that is not included in a "success scenario" forecast such as the one applied by Aranca that I relied upon. The range of most target annual rates of return for Seed, Start-up and "early development" companies such as Theranos on the Valuation Dates is between 28% and 75%. When I derived the implied

⁵¹ AICPA Accounting and Valuation Guide, *Valuation of Portfolio Company Investments of Venture Capital and Private Equity Funds and Other Investment Companies*, May 1, 2019, Part II- Appendixes A-C, B.04.04. Also refer to graphic entitled "Venture Capital is an Unusual Creature" directly following this section.

⁵² Therano-no: Key CLIA Compliance Issues, Loyola University Chicago School of Law, May 5, 2022. <http://blogs.luc.edu/compliance/?p=4681>

annual rates of return that would reconcile forecasts provided by Theranos to investors to prices paid by those same investors in 2014 and 2015⁵³, the resulting range was similar at 36% to 82% (Exhibit C.4). Based on this data for target rates of return applicable to Theranos on the Valuation Dates, I selected a cost of equity of 45% with a resulting WACC of 44%. My cost of equity selection is in the low end of the applicable target rates of return, as well as those inferred from investor forecasts. This favorable assumption results in a higher value for a Theranos, and a lower calculated investor loss.

105. Utilizing a discounted cash flow to invested capital method with a WACC of 44.0%, I derived an estimate of value for Theranos of **\$431 million** (rounded), on a 100% -controlling, marketable interest basis, as shown in Exhibit C.6. This is inclusive of Series C-1 and C-2 financing proceeds through 2/7/2014 not included on the 12/31/2013 balance sheet. This is also net of interest-bearing debt.

B. Asset Approach – Adjusted Net Asset Value

106. In Exhibit E.1, I have estimated the value of Theranos using the adjusted net asset value method combined with a cost to recreate approach for Theranos' technology and branding assets. The basis for application of this method is that Theranos was a near pre-revenue⁵⁴, pre-profit early-stage company with largely unproven technology on the Valuation Dates.

The Company's stage of development renders going concern income and market approaches

⁵³ Please refer to Appendix for an explanation of reconciliation of discounted cash flow approaches based on forecasts provided to investors, to the \$17 per share they agreed to invest at for Theranos Series C-2 Preferred Stock.

⁵⁴ Theranos had revenues of \$116,000 and \$391,000 in calendar years 2014 and 2015, which were far below its near-term management forecast expectations.

to valuation less reliable, as future results may deviate significantly from forecasted expectations, due to development delays, technical failures, inability to obtain regulatory approvals, low market adoption and other factors. For such early-stage companies, adjusted net asset approaches are often applied, which reflect the fair market value of the company's assets less its liabilities. In addition, intangible assets of such early-stage companies are often measured through cost approaches⁵⁵, which measure the cost to obtain or reproduce functionally similar or identical assets.

107. I started with Theranos' 12/1/2013 balance sheet and made three adjustments. I have added to cash those Series C-1 and C-2 financing proceeds through 2/7/2014 not included on the 12/31/2013 balance sheet. I have removed from other current liabilities the "miscellaneous receipts" liability that represents proceeds from the 2013 capital raises for which stock was not yet issued (for the reasons explained earlier in this report). Finally, I added the value of Theranos' technology and branding assets, which I have estimated using the cost to recreate method, as shown in Exhibit E.2.

108. In Exhibit E.2, I have categorized Theranos' historical operating expenses based on trial balances prepared by the Company. My objective was to include any historical expenses that related to development of Theranos' technology, and to developing recognition of the Theranos brand⁵⁶. I excluded any expenses that related to capital raising for Theranos, as

⁵⁵ AICPA *Intangible Asset Valuation Cost Approach Methods and Procedures*, p.25. Reasons to use the cost approach include "if the subject intangible asset is not the type of asset that generates a measurable amount of income".

⁵⁶ Inclusion of expenditures related to developing Theranos brand recognition is favorable to the Company's value as it ignores the impact of management misrepresentations made to investors and business partners that would damage the brand and potentially render it worthless.

this would not create an intangible asset, and the cash proceeds of capital raises are included in my adjusted net asset method. Theranos' largest categories of operating expenses such as salaries and wages did not include functional allocations to categories research and development, capital raising and investor relations, and general and administrative support. In such instances, I made a favorable assumption by including all expenses in my cost approach. This results in a higher valuation for Theranos and a lower calculated investor loss.

109. Exhibit E.2 details my allocations of historical costs incurred by Theranos to the value of its technology and brand, and they result in capture of over 95% of Theranos operating expenses between 2004 and the Valuation Dates. I have then grown the allocated expenses at historical inflation rates to the Valuation Dates, deducted a 4% functional obsolescence adjustment which represents 50% of 2004-2006 expenses⁵⁷, and added a 14% developer profit margin⁵⁸ to result in a cost to recreate value for Theranos' technology and brand of \$340.370 million. My valuation of Theranos' technology and brand through a cost approach makes a favorable assumption that the Company's significant historical expenditures into these assets have been productively spent, and that less than 5% of these expenditures are obsolete on the valuation date. The final step was to integrate this value into the adjusted net asset approach in Exhibit E.1 to result in a value of Theranos' equity of **\$378 million** (rounded) as of the 2/7/2014 Valuation Date.

⁵⁷ It is my understanding that Theranos began development of the Edison in 2007, and carried forward some of the technology from the prior version of its device.

⁵⁸ This is based on the upper quartile of the guideline public company peer group EBIT margins in Exhibit D.2.

C. Conclusion of 100% Equity Value

110. My analysis results in a fair market value of Theranos on the 2/7/2014 Valuation Date in the range of **\$378 million to \$431 million** per Exhibit A.3. Allocation of these values to the different share classes (including Series C-2 Preferred Stock), warrants and options is also shown in Exhibit A.3, based on the equity allocation models developed in Exhibits L.1 and L.2, and Exhibits M.1 and M.2 which explained in the following section.

D. Equity Allocation Models

111. After I concluded my estimate of Theranos' entire equity value, I allocated the Company's value to its capital structure. The methodology that is commonly applied to allocate value to a complex capital structure for a going concern business is the option pricing equity allocation model ("OPM"), where common stock and each security in a company are treated as a call option on total company value.⁵⁹ The OPM will model future possible exit values for the company on a lognormal (bell shaped) distribution curve,⁶⁰ based on an estimated current equity value for the company, and an estimated volatility of the company's equity in the future. The key inputs that the OPM requires to estimate a distribution of future possible exit values from a liquidity event include equity value on the valuation date, a risk-free rate of return, an estimated term to a future liquidity event, and an estimated volatility of the underlying equity value of the company. The higher the

⁵⁹ AICPA Practice Aid: Valuation of Privately-Held-Company Equity Securities Issued as Compensation, 2013, Sections 6.30 – 6.41. [accessed via Commerce Clearing House Accounting Research Manager Subscription]

⁶⁰ The distribution of percentage returns on the stock are normally distributed in the option pricing model, creating a symmetrical bell shaped curve. The distribution of stock prices (or company exit values) are lognormally distributed creating a bell shaped curve that is asymmetrical, with a longer tail on the right side of the curve. This occurs because as stock prices are constrained at zero on the left side of the curve, they cannot become negative.

volatility input and the longer the term to liquidity, the more widely dispersed will be the resulting possible exit values on the bell-shaped distribution curve.

112. The OPM considers the rights and preferences of each security, and at each possible future total exit value (typically from an IPO or sale of the company) it will allocate proceeds from that exit value to each class of securities. At high exit values, preferred stock will convert to common⁶¹. At low exit values preferred stock will not convert to retain their liquidation preferences that exceed the value of common stock. At very low exit values, there may be zero payout to common stock and the preferred securities may not recover their full liquidation preferences. As a final step, the OPM will aggregate all the payouts to each security under future possible exits to determine the probability weighted present value of each class of securities. All the securities will sum to the total value of the company on the valuation date.

113. I applied the OPM to allocate Theranos' equity value to its securities, taking into account the first priority liquidation preferences of Series C, C-1 and C-2⁶², the second priority liquidation preferences of Series A and B⁶³, and the fact that all preferred stock had participation rights with common stock in a liquidity event⁶⁴. I estimated an approximate 4 year term to a liquidity event from the 2/7/2014 Valuation Date based on observation that

⁶¹ In the case of Theranos, preferred stock retains participation rights with common stock. Preferred stock holders receive their liquidation preferences + equal sharing with common stock in any residual exit value that exceeds these preferences.

⁶² Series C, C-1, C-2 preferred stock are repaid first in a liquidation or sale of the company, for an amount equal to their initial investment prices of \$0.564, \$3.00 & \$15.00, and \$17.00 respectively. [Articles_Jan 2014, pp. 5-6, *Liquidation Rights*. Certificate of Designation of Series C-2 Preferred Stock_2014.02.07, pp. 1-2, *Liquidation Rights*]

⁶³ Series A, B preferred stock are repaid second in a liquidation or sale of the company, for an amount equal to their initial investment prices of \$0.15 and \$0.1846 respectively. [Articles_Jan 2014, pp. 5-6, *Liquidation Rights*]

⁶⁴ All preferred stock share in any remaining residual liquidation or sale value equally with common stock without having to convert to common stock. [Articles_Jan 2014, pp. 5-6, *Liquidation Rights*]

the Company's forecasts estimated mature operating profit margins between 2017 and 2018, that the Company would become more attractive and saleable to an industry buyer within that timeframe, that Aranca in their discussions with management had assumed a company exit in 2018, and a 4 year term to liquidity in their 12/15/14 IRC 409A valuation.

114. Another significant input into the OPM is an estimate of Theranos' future equity volatility between the Valuation Dates and the date of the estimated liquidity event. I analyzed the asset and equity volatilities of the same 22 guideline public company peer group discussed earlier in this report. The median and average asset volatility of the peer group was between 39% and 40%, and the upper quartile was 47% per Exhibit R.1. I selected an asset volatility of 50% for Theranos, taking into account that it was earlier stage and significantly smaller than the peer group companies as measured by revenues and market value. Earlier stage companies are generally more volatile due to higher remaining development and implementation risks. This is confirmed by the smallest companies in the public peer group having asset volatilities that range between 47% and 101%. My final step was to calculate the corresponding equity volatility of 55% for Theranos given the proportion of financing debt and equity in its capital structure.

115. My analysis results in a range of per share values on a controlling marketable basis for Theranos securities on the 2/7/14 Valuation Date shown in the lower section of Exhibit A.3.

XII. Value of Theranos at December 31, 2014

116. Using the same adjusted net asset value and discounted cash flow methods as those used to value Theranos at the 2/7/2014 Valuation Date, including identical Aranca IRC 409A

forecasts, the resulting fair market value of Theranos's equity on the 12/31/2014 Valuation Date was in the range **\$827 million to \$951 million** as shown in Exhibit A.4. Allocation of these values to the different share classes, warrants and options is also shown in Exhibit A.4, based on the equity allocation models developed in Exhibits N.1 and N.2, and Exhibits O.1 and O.2. The volatility used in the equity allocations was developed in Exhibit R.2.

117. The discounted cash flow and guideline public company methods are outlined in Exhibits F and G respectively. The adjusted net asset method combined with the cost to recreate method are outlined in Exhibits H.1 and H.2.

XIII. Value of Theranos at October 15, 2015

118. Using the same adjusted net asset value and the discounted cash flow methods as those used to value Theranos at the 2/7/2014 Valuation Date, which included nearly identical Aranca IRC 409A forecasts⁶⁵, the resulting fair market value of Theranos on the 10/15/2015 Valuation Date was in the range of **\$1,051 million to \$1,184 million** as shown in Exhibit A.5. Allocation of these values to the different share classes, warrants and options is also shown in Exhibit A.5, based on the equity allocation models developed in Exhibits P.1 and P.2, and Exhibits Q.1 and Q.2. The volatility used in the equity allocations was developed in Exhibit R.3.

⁶⁵ I applied the Aranca 3/25/15 IRC 409A forecasts to this valuation date, which are nearly identical to the 12/15/14 IRC 409A forecasts.

119. The discounted cash flow and guideline public company methods are outlined in Exhibits I and J respectively. The adjusted net asset method combined with the cost to recreate method are outlined in Exhibits K.1 and K.2.

XIV. Conclusion of Values

120.. A summary of my estimated fair market values is outlined below, and these include the Company's substantial cash balances:

100% Company Equity Value Range (In Thousands)	Cash Balance Included in Equity Value (Thousands)	Series C-1 Per Share Value Range	Series C-2 Per Share Value Range	Valuation Date	Report Exhibit
\$ 378,000 - \$ 431,000	\$ 151,912	\$ 8.77 - \$ 9.39	\$ 9.90 - \$ 10.59	02-07-14	Exhibit A.3
\$ 827,000 - \$ 951,000	\$ 465,933	\$ 9.61 - \$ 10.36	\$ 10.80 - \$ 11.63	12-31-14	Exhibit A.4
\$ 1,051,000 - \$ 1,184,000	\$ 496,919	\$ 10.14 - \$ 10.81	\$ 11.37 - \$ 12.11	10-15-15	Exhibit A.5

121. The aggregate Series C-1 and C-2 investor losses based on the Company values in the tables above range between **\$277.964 million** and **\$315.884 million** per Exhibit A.1 to this report. I have been asked to prepare an alternate calculation of investor loss based on my estimated values as of only the 10/15/2015 Valuation Date, which results in a range of aggregate loss between **\$237.323 million** and **\$273.646 million**.

Dated: September 8, 2022



Carl S. Saba, MBA, CVA, ASA, ABV

XV. Appendix

A. Investor Financings – Back-solve Methods

122. There are two general processes for establishing the value of an enterprise and its associated classes of stock. The first is a top-down process that establishes the fair market value of the enterprise and then allocates this value among the various classes of equity.

The second, and the way that I used under the back-solve method, is a bottom-up process that uses the pricing of a recent stock transaction to infer the value of the other classes of equity. This in turn establishes an implied total equity value for the subject company.

Inferring value from investments in a company is a form of the market approach referred to as the back-solve method. This approach is frequently applied to early stage companies and is discussed in the AICPA Practice Aid on *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*. The back-solve method utilizes the same OPM framework discussed earlier in this report that I used to allocate my estimated values for Theranos to its securities.

123. I applied the back-solve method with the same OPM assumptions used for the equity allocation models previously described on the three Valuation Dates. The primary difference in this analysis is that I did not have an established value for Theranos' equity. I instead solved for the implied value of Theranos' equity based on the \$17.00 per share paid by Series C-2 investors throughout 2014. I performed this analysis as of the 2/7/14 Valuation Date, and 12/31/14 Valuation Date. In addition, I approximated the implied equity value of Theranos as of 2/13/15, the investment date for Mr. Murdoch, by adding his \$125 million investment amount to the 12/31/14 back-solve value. The resulting implied equity values for

Theranos based on investor pricing of Series C-2 preferred stock is **\$1,510 million, \$2,250 million and \$2,375 million**⁶⁶ as of 2/7/14, 12/31/14, and 2/13/15 respectively (Appendix Exhibit A). The supporting back-solve models are contained in the Appendix Exhibits C.1 – C.3, and D.1 – D.3 respectively for the first two valuation dates.

B. Investor Forecasts – DCF Models

124. As part of my analysis, I have also reviewed the forecasts provided to investors as part of their due diligence process at various points in time in the period from February 2014 to April 2015. As discussed earlier in this report, the forecasts provided to investors presented revenue growth rates and thresholds that were orders of magnitude higher than those provided to Aranca for IRC 409A purposes (and also shared with the Theranos Board in October 2013) in the same approximate time frame. The comparison of revenues, gross margin, and EBITDA margin between forecasts provided to investors vs. Aranca is contained in Appendix Exhibits B.1 – B.3. An example of the significant discrepancies is a comparison of projected revenues in Exhibit B.1 for calendar year 2015. Forecasts provided to investors assumed Theranos' revenue would range between \$990 million and \$1,677 million, which is approximately *9 to 15 times higher* than the forecasts provided to Aranca with revenues of \$112 to \$113 million.

⁶⁶ These are not my opinions of the equity value of Theranos, they represent the values assigned to the Company based on investors' willingness to pay the \$17 per share for Series C-2 preferred offered by Theranos management. There are a number of references in press articles to a valuation for Theranos of approximately \$9 billion in this timeframe. My inferred values are substantially lower due to the back-solve model's recognition of superior economic rights (such as liquidation preferences) to Series C-2 preferred stock as compared to all other inferior securities. The approximate \$9 billion figure can be achieved by multiplying *all* shares outstanding for Theranos on these dates by the \$17 per share paid for Series C-2. This simplified post-money approach would incorrectly assume that all securities have equal value to the most senior Series C-2 preferred stock.

125. Given that investors reviewed the forecasts provided to them as one of the factors that they considered in their decision to invest in Series C-2 at \$17 per share, I considered that it would be informative to estimate the implied annual rates of return that investors placed on those forecasts, and to compare those rates of return to the target VC rates of return study data. This would provide additional information to consider in selecting my discount rate for the income approach described in the main section of this report.

126. I applied income approaches with a market derived exit multiple (similar to that discussed in the main section of this report) using the following investor forecasts:

- Management prepared two-year forecasts provided to PFM in January 2014 for their 2/7/14 investment (Appendix Exhibit E.1 – E.3).
- Financial model developed by PFM based on the management forecasts above, which extend the two-year forecast horizon to a ten year period. I relied on PFM’s “base case” version of the model (Appendix Exhibit E.4 – E.5).
- Management prepared two-year forecasts provided to Daniel Mosley and RDV Corporation for their October 2014 investment (Appendix Exhibit F.1 -F.3).
- Management prepared two-year forecasts provided to Rupert Murdoch for his February 2015 investment (Appendix Exhibit G.1 – G.3).

127. In each instance, I translated the investor two-year forecasts into a discounted cash flow method, and estimated a market exit multiple of revenue or EBITDA applicable to Theranos at the end each forecast period (similar to that described in the main section of this report).

For the PFM financial model, I did not apply a market exit multiple as the forecast horizon

was extended far enough to allow for Theranos to reach steady state growth rates and margins. This allowed me to apply a standard perpetuity formula to capture all cash flows that would follow the discrete forecast period.

128. My final step was to solve for the rate of return that would be required to reconcile the Theranos equity value resulting from investor forecast discounted cash flow methods to the back-solve values of Theranos from investor pricing discussed earlier. That reconciliation is shown on Exhibit A, and results in annual rates of return on investor proceeds ranging from 36% to 82%. As discussed in the section of this report where I explained my selection of the discount rate under the income approach, these rates of return are generally consistent with target VC rates of return study data for companies at early stages of development (refer to Exhibit C.4 for comparison).

C. Assumptions and Limiting Conditions

In addition to those cited elsewhere in this report, other assumptions and limiting conditions pertaining to the estimate of value stated in this report are summarized below.

1. The estimates of value arrived at herein are valid only for the stated purpose as of the dates of the valuations.
2. Public information and industry and statistical information have been obtained from sources I believe to be reliable. However, I make no representation as to the accuracy or completeness of such information and have performed no procedures to corroborate the information.
3. No change of any item in this report shall be made by anyone other than Hemming Morse, LLP, and I shall have no responsibility for any unauthorized change.
4. I have not conducted interviews with the management of Theranos concerning the past, present, and prospective operating results of the Company. I have instead relied upon materials itemized in Appendix Exhibit I, Evidence Relied Upon in the determination of my opinions of value.
5. This report reflects facts and conditions existing at the Valuation Dates. Subsequent events have not been considered unless they evidence facts and circumstances that were known or knowable on the Valuation Dates, and I have no obligation to update my report for such events.
6. This report is designed to give estimates of value. It does not purport to be a comprehensive list of all of the considerations undertaken in order to arrive at my estimates

of value. It is not an accounting report, and it should not be relied on to disclose unreported assets or liabilities, or to verify financial reporting.

7. This report contains a review and discussion of information contained in trial balances, financial statements, and tax returns prepared by Theranos. The majority of this financial data is not CPA Audited, Reviewed, or Compiled. I have applied some procedures to corroborate financial information on the Company between different sources, and have generally assumed this information to be a reliable representation of Theranos' books and records.

D. Certifications and Representation

I certify and represent that, to the best of my knowledge and belief:

1. the statements of fact in this report are true and correct;
2. the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, unbiased professional analyses, opinions, and conclusions;
3. Hemming Morse, LLP and its employees have no present or prospective interest in or bias with respect to the property that is the subject of this report, and the employees of Hemming Morse, LLP and I have no personal interest or bias with respect to the parties involved;
4. I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment;
5. my engagement in this assignment was not contingent upon developing or reporting predetermined results;
6. my fee for completing this assignment is not contingent upon the development or reporting of a predetermined values or direction in values that favor the cause of the client, the amount of the value opinions, the attainment of stipulated results, or the occurrence of any subsequent events directly related to the intended use of this appraisal;

7. my analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with Uniform Standards of Professional Appraisal Practice and with the American Institute of Certified Public Accountants' Statement on Standards for Valuation Services No. 1 ("SSVS");
8. Brian Zacharias, Claudia Stern, and Sacha Zadmehrhan provided significant business and/or intangible asset appraisal assistance to the person signing this certification/representation;
9. the analyses, opinions, and conclusions of value included in the valuation report are subject to the specified assumptions and limiting conditions, and they are the personal analyses, opinions, and conclusions of value of the valuation analyst;
10. the economic and industry data included in the valuation report have been obtained from various printed or electronic reference sources that the valuation analyst believes to be reliable. The valuation analyst has not performed any corroborating procedures to substantiate that data;
11. the parties, for whom the information and use of the valuation report is restricted, are identified; the valuation report is not intended to be and should not be used by anyone other than such parties;
12. I have no obligation to update the report or the opinions of value for information that comes to my attention after the date of the report;

Dated: September 8, 2022



Carl S. Saba, MBA, CVA, ASA, ABV

XVI. Exhibit List

Investor Loss Calculation	Exhibit A.1
Series C-1 & C-2 Investor Details List	Exhibit A.2
Value Summary 2/7/14	Exhibit A.3
Value Summary 12/31/14	Exhibit A.4
Value Summary 10/15/15	Exhibit A.5

2/7/2014 Valuation Date

Historical Balance Sheets	Exhibit B.1
Historical Income Statements	Exhibit B.2
Adjustments to Financial Statements	Exhibit B.3
Adjusted Balance Sheets	Exhibit B.4
Adjusted Income Statements	Exhibit B.5
Comparative Financial Ratios	Exhibit B.6

Discounted Cash Flow Key Assumptions	Exhibit C.1
Adjusted Working Capital Analysis	Exhibit C.2
Depreciation & Capital Expenditure Analysis	Exhibit C.3
Discount Rate - Venture Capital Rates of Return	Exhibit C.4
Forecast Free Cash Flow to Invested Capital	Exhibit C.5
Discounted Cash Flow Method Value Summary	Exhibit C.6

Guideline Public Company Method	Exhibit D.1
Guideline Public Company Key Financial Ratios	Exhibit D.2
Guideline Public Company Descriptions	Exhibit D.3
Guideline Public Company Ranking	Exhibit D.4

Adjusted Net Asset Value	Exhibit E.1
Cost to Recreate Method - Technology and Branding Assets	Exhibit E.2

12/31/2014 Valuation Date

Discounted Cash Flow Key Assumptions	Exhibit F.1
Adjusted Working Capital Analysis	Exhibit F.2
Depreciation & Capital Expenditure Analysis	Exhibit F.3
Discount Rate - Venture Capital Rates of Return	Exhibit F.4
Forecast Free Cash Flow to Invested Capital	Exhibit F.5
Discounted Cash Flow Method Value Summary	Exhibit F.6

Guideline Public Company Method	Exhibit G.1
Guideline Public Company Key Financial Ratios	Exhibit G.2
Guideline Public Company Descriptions	Exhibit G.3
Guideline Public Company Ranking	Exhibit G.4

Adjusted Net Asset Value	Exhibit H.1
Cost to Recreate Method - Technology and Branding Assets	Exhibit H.2

10/15/2015 Valuation Date

Discounted Cash Flow Key Assumptions	Exhibit I.1
Adjusted Working Capital Analysis	Exhibit I.2
Depreciation & Capital Expenditure Analysis	Exhibit I.3
Discount Rate - Venture Capital Rates of Return	Exhibit I.4
Forecast Free Cash Flow to Invested Capital	Exhibit I.5
Discounted Cash Flow Method Value Summary	Exhibit I.6

Guideline Public Company Method	Exhibit J.1
Guideline Public Company Key Financial Ratios	Exhibit J.2
Guideline Public Company Descriptions	Exhibit J.3
Guideline Public Company Ranking	Exhibit J.4

Adjusted Net Asset Value	Exhibit K.1
Cost to Recreate Method - Technology and Branding Assets	Exhibit K.2
Equity Allocation Models	
NAV Equity Allocation 2/7/14 - Step 1	Exhibit L.1
NAV Equity Allocation 2/7/14 - Step 2	Exhibit L.2
DCF Equity Allocation 2/7/14 - Step 1	Exhibit M.1
DCF Equity Allocation 2/7/14 - Step 2	Exhibit M.2
NAV Equity Allocation 12/31/14 - Step 1	Exhibit N.1
NAV Equity Allocation 12/31/14 - Step 2	Exhibit N.2
DCF Equity Allocation 2/7/14 - Step 1	Exhibit O.1
DCF Equity Allocation 2/7/14 - Step 2	Exhibit O.2
NAV Equity Allocation 10/15/15 - Step 1	Exhibit P.1
NAV Equity Allocation 10/15/15 - Step 2	Exhibit P.2
DCF Equity Allocation 10/15/15 - Step 1	Exhibit Q.1
DCF Equity Allocation 10/15/15 - Step 2	Exhibit Q.2
Volatility Models	
Volatility Analysis 2/7/14	Exhibit R.1
Volatility Analysis 12/31/14	Exhibit R.2
Volatility Analysis 10/15/15	Exhibit R.3
Appendix	
Summary of Investor Values	Appendix Exhibit A
Summary of Revenue Forecasts	Appendix Exhibit B.1
Summary of Gross Profit Forecasts	Appendix Exhibit B.2
Summary of EBITDA Forecasts	Appendix Exhibit B.3
Backsolve Method Value Summary 2/7/14	Appendix Exhibit C.1
Backsolve Method 2/7/14 - Step 1	Appendix Exhibit C.2
Backsolve Method 2/7/14 - Step 2	Appendix Exhibit C.3
Backsolve Method Value Summary 12/31/14	Appendix Exhibit D.1
Backsolve Method 12/31/14 - Step 1	Appendix Exhibit D.2
Backsolve Method 12/31/14 - Step 2	Appendix Exhibit D.3
PFM Forecast - Depreciation & Capital Expenditure Analysis	Appendix Exhibit E.1
PFM Forecast Free Cash Flow to Invested Capital	Appendix Exhibit E.2
PFM Forecast - Discounted Cash Flow Method	Appendix Exhibit E.3
PFM (Base Model) Forecast Free Cash Flow to Invested Capital	Appendix Exhibit E.4
PFM (Base Model) Forecast - Discounted Cash Flow Method	Appendix Exhibit E.5
Mosley-RDV Forecast - Depreciation & Capital Expenditure Analysis	Appendix Exhibit F.1
Mosley-RDV Forecast Free Cash Flow to Invested Capital	Appendix Exhibit F.2
Mosley-RDV Forecast - Discounted Cash Flow Method	Appendix Exhibit F.3
Murdoch Forecast - Depreciation & Capital Expenditure Analysis	Appendix Exhibit G.1
Murdoch Forecast Free Cash Flow to Invested Capital	Appendix Exhibit G.2
Murdoch Forecast - Discounted Cash Flow Method	Appendix Exhibit G.3
Carl Saba Curriculum Vitae	Appendix Exhibit H
Documents Considered or Relied Upon	Appendix Exhibit I

US v. Elizabeth Holmes
Valuation of Theranos, Inc.

Exhibit A.1
Investor Loss Calculation
(USD)

Incremental Loss Date	Series C-1 Shares [1]	Series C-2 Shares [2]	Investor Loss Value Range [3]		Series C-1 Purchase Price	Series C-2 Purchase Price	Investor Loss Value Range [3]	
			Low Value	High Value			Low	High
2/7/2014		9,669,998	\$ 9.90	\$ 10.59		\$ 17.00	\$ 62,004,902	- \$ 68,689,534
2/7/2014	7,500,032		8.77	9.39	15.00		42,100,107	46,740,488
12/31/2014	N/A	32,808,227	10.80	11.63	N/A	17.00	124,318,072	- 143,386,658
10/15/2015	N/A	42,947,639	11.37	12.11	N/A	17.00	49,541,379	- 57,067,784
Total Loss							\$ 277,964,460	- \$ 315,884,464
10/15/2015	6,563,232		10.14	10.81	\$ 15.00		\$ 27,479,453	\$ 31,923,063
10/15/2015		42,947,639	11.37	12.11		17.00	209,843,062	- 241,722,753
Total Loss, Alternate Calculation [4]							\$ 237,322,514	- \$ 273,645,817

Notes:

[1] Preferred Series C-1 shares with an issue price and liquidation preference of \$15.0 per share.

[2] Preferred Series C-2 shares with an issue price and liquidation preference of \$17.0 per share.

[3] Losses calculated at each date based on incremental increase in share count relative to prior date.

[4] The alternate calculation measures loss based on the value of all Series C-1 and C-2 shares as of 10/15/15, rather than the valuation date closest to when the investment was made.

[5] Share counts presented above do not include shares held by Defendant.

US v. Elizabeth Holmes
Valuation of Theranos, Inc.

Exhibit A.2
Series C-1 & C-2 Investor Details List
(USD)

Investor Name	Class of Stock	Certificate Date	Shares	Investment Amount	Price Paid Per Share	Fair Market Value Per Share	Investor Loss	Notes	
Walgreen	Series C-2	01/07/14	2,941,176	\$ 49,999,992	\$ 17.00	\$ 9.90	\$ 18,859,086	Convertible Note	
CENTRAL VALLEY ADMINISTRATORS INC	Series C-2	02/07/14	294,117	4,999,989	17.00	9.90	1,885,905		
PARTNER INVESTMENTS, LP	Series C-2	02/07/14	3,263,529	55,479,993	17.00	9.90	20,926,043		
PEER VENTURES GROUP IV L.P.	Series C-2	02/07/14	779,411	13,249,987	17.00	9.90	4,997,654		
PFM HEALTHCARE MASTER FUND, LP	Series C-2	02/07/14	2,255,096	38,336,632	17.00	9.90	14,459,879		
PFM HEALTHCARE PRINCIPALS FUND, LP	Series C-2	02/07/14	136,669	2,323,373	17.00	9.90	876,334		
RILEY P. BECHTEL & SUSAN P. BECHTEL	Series C-2	03/18/14	8,823	149,991	17.00	10.80	47,405		
RILEY P. BECHTEL & SUSAN P. BECHTEL	Series C-2	03/18/14	291,177	4,950,009	17.00	10.80	1,564,448		
ANDREAS C. DRACOPOULOS	Series C-2	10/31/14	1,470,588	24,999,996	17.00	10.80	7,901,238		
LAKESHORE CAPTL MGMT	Series C-2	10/31/14	5,882,352	99,999,984	17.00	10.80	31,604,954		
MOSLEY FAMILY HOLDINGS LLC	Series C-2	10/31/14	352,941	5,999,997	17.00	10.80	1,896,297		
Cox Investment Holdings, Inc.	Series C-2	11/03/14	5,882,352	99,999,984	17.00	10.80	31,604,954		
MADRONE PARTNERS, LP	Series C-2	12/15/14	5,882,352	99,999,984	17.00	10.80	31,604,954		
SODA SPRING PARTNERS, LP	Series C-2	12/15/14	2,941,176	49,999,992	17.00	10.80	15,802,477		
THE HENRY A. KISSINGER 2014	Series C-2	12/15/14	176,470	2,999,990	17.00	10.80	948,146		
BENDEL FUND	Series C-2	12/31/14	249,998	4,249,966	17.00	10.80	1,343,200		
K. R. Murdoch	Series C-2	02/13/15	7,352,941	124,999,997	17.00	11.37	35,926,623		
David Boies	Series C-2	03/06/15	17,647	299,999	17.00	11.37	86,224		
EOson Investments M Ltd.	Series C-2	03/30/15	1,058,823	17,999,991	17.00	11.37	5,173,431		
EOson Investments N Ltd.	Series C-2	03/30/15	117,647	1,999,999	17.00	11.37	574,826		
Robert Kraft Attn: Michael Joyce	Series C-2	03/31/15	58,823	999,991	17.00	11.37	287,410		
INMOBILIARIA CARSO, SA de CV	Series C-2	04/16/15	1,764,705	29,999,985	17.00	11.37	8,622,386		
TOTAL			43,178,813	\$ 734,039,821			\$ 236,993,874	\$ 270,445,096	[1]
Safeway	Series C-1	08/19/11	1,000,000	\$ 15,000,000	\$ 15.00	\$ 8.77	\$ 5,613,324	Convertible Note	
Walgreen	Series C-1	06/14/12	2,000,000	30,000,000	15.00	8.77	11,226,647	Convertible Note	
George Shultz	Series C-1	02/19/13	200,000	3,000,000	15.00	8.77	1,122,665		
PEER VENTURES GROUP IV, L.P.	Series C-1	06/10/13	1,180,000	17,700,000	15.00	8.77	6,623,722		
Richard Kovacevich	Series C-1	08/01/13	10,000	150,000	15.00	8.77	56,133		
Richard Kovacevich	Series C-1	08/02/13	133,333	1,999,995	15.00	8.77	748,441		
Lucas Venture Group XI	Series C-1	09/30/13	261,334	3,920,010	15.00	8.77	1,466,952		
Lucas Venture Group IV LP	Series C-1	09/30/13	33,334	500,010	15.00	8.77	187,115		
PEER VENTURES GROUP IV, L.P.	Series C-1	09/30/13	1,000,000	15,000,000	15.00	8.77	5,613,324		
Lucas Venture Group XI	Series C-1	10/01/13	126,666	1,899,990	15.00	8.77	711,017		
Lucas Venture Group XI	Series C-1	10/02/13	45,000	675,000	15.00	8.77	252,600		
Lucas Venture Group XI	Series C-1	10/07/13	15,000	225,000	15.00	8.77	84,200		
Lucas Venture Group XI	Series C-1	10/09/13	11,667	175,005	15.00	8.77	65,491		
Lucas Venture Group XI	Series C-1	10/15/13	10,000	150,000	15.00	8.77	56,133		
Lucas Venture Group XI	Series C-1	10/30/13	1,666	24,990	15.00	8.77	9,352		
Alan Eisenman	Series C-1	12/30/13	6,666	99,990	15.00	8.77	37,418		
Gordon Family Trust	Series C-1	12/30/13	20,000	300,000	15.00	8.77	112,266		
Crofton Capital GP	Series C-1	12/30/13	20,000	300,000	15.00	8.77	112,266		
Sherrie Eisenman	Series C-1	12/30/13	3,333	49,995	15.00	8.77	18,709		
PEER VENTURES GROUP IV, L.P.	Series C-1	12/31/13	169,995	2,549,925	15.00	8.77	954,237		
Hall Black Diamond II, LLC	Series C-1	12/31/13	325,000	4,875,000	15.00	8.77	1,824,330		
Black Diamond Ventures XII-B, LLC	Series C-1	12/31/13	356,660	5,349,900	15.00	8.77	2,002,048		
Richard Kovacevich	Series C-1	12/18/13	133,333	1,999,995	15.00	8.77	748,441		
Colin Carter	Series C-1	01/06/14	16,666	249,990	15.00	8.77	93,552		
Daniel C. Carter	Series C-1	01/07/14	5,000	75,000	15.00	8.77	28,067		
Mendenhall TF Partners	Series C-1	01/14/14	87,500	1,312,500	15.00	8.77	491,166		
Kendra Fadil	Series C-1	01/14/14	5,000	75,000	15.00	8.77	28,067		
Boies, Schiller & Flewler LLP	Series C-1	01/14/14	322,879	4,843,185	15.00	8.77	1,812,424		
TOTAL			7,500,032	\$ 112,500,480			\$ 42,100,107	\$ 46,740,488	

Notes:

[1] Series C-2 shares per investor detail above exceed share count in Aranca 3/25/15 409A by 231,174 shares.

US v. Elizabeth Holmes**Exhibit A.3**Valuation of Theranos, Inc.
As of February 7, 2014Value Summary 2/7/14
(thousands of USD, except Per Share Value)**Equity Value**

Valuation Methods	Ref.	Indicated Value Range		
		Low	--	High
Adjusted Net Asset Value Method	Exhibit E.1	\$ 378,000		
Discounted Cash Flow Method	Exhibit C.6			\$ 431,000

Per Share Value

Share Classes	Shares Outstanding	Adj. Net Asset Value Method Value Allocation		Discounted Cash Flow Method Value Allocation	
		Present Value Marketable	Present Value Per Share Marketable	Present Value Marketable	Present Value Per Share Marketable
Preferred Shares					
Series A @ \$0.150	46,320,045	\$ 15,971,798	\$ 0.34	\$ 19,704,031	\$ 0.43
Series B @ \$0.1846	54,162,965	19,200,011	0.35	23,640,024	0.44
Series C @ \$0.564	58,896,105	36,586,427	0.62	42,179,901	0.72
Series C-1 @ \$3.00	25,175,001	50,247,440	2.00	54,863,296	2.18
Series C-1 @ \$15.00	7,500,032	65,759,992	8.77	70,400,373	9.39
Series C-2 @ \$17.00	9,669,998	95,700,432	9.90	102,385,064	10.59
Total Preferred Shares	201,724,146	283,466,099		313,172,690	
Warrants on Common					
Exercise Price @ \$0.072	741,665	202,862	0.27	254,789	0.34
Common - Outstanding	302,640,465	91,674,991	0.30	114,224,663	0.38
Options on Common					
Exercise Price @ \$0.015	350,000	104,602	0.30	130,472	0.37
Exercise Price @ \$0.030	1,227,125	359,949	0.29	449,631	0.37
Exercise Price @ \$0.066	552,500	155,386	0.28	194,741	0.35
Exercise Price @ \$0.072	3,092,715	845,929	0.27	1,062,459	0.34
Exercise Price @ \$0.094	312,500	81,901	0.26	103,201	0.33
Exercise Price @ \$0.170	3,990,167	953,270	0.24	1,209,524	0.30
Exercise Price @ \$0.206	703,195	155,010	0.22	197,832	0.28
Total Options Outstanding	10,228,202	2,656,047		3,347,859	
Total Outstanding	515,334,478	\$ 378,000,000		\$ 431,000,000	

US v. Elizabeth Holmes**Exhibit A.4**Valuation of Theranos, Inc.
As of December 31, 2014

Value Summary 12/31/14

*(thousands of USD, except Per Share Value)***Equity Value**

Valuation Methods	Ref.	Indicated Value Range		
		Low	—	High
Adjusted Net Asset Value Method	Exhibit H.1	\$ 827,000		
Discounted Cash Flow Method	Exhibit F.6			\$ 951,000

Per Share Value

Share Classes	Shares Outstanding	Adj. Net Asset Value Method Value Allocation		Discounted Cash Flow Method Value Allocation	
		Present Value Marketable	Present Value Per Share Marketable	Present Value Marketable	Present Value Per Share Marketable
Preferred Shares					
Series A @ \$0.150	46,320,045	\$ 32,977,000	\$ 0.71	\$ 41,348,789	\$ 0.89
Series B @ \$0.1846	54,134,965	39,131,429	0.72	49,002,864	0.91
Series C @ \$0.564	58,896,105	58,956,625	1.00	70,461,233	1.20
Series C-1 @ \$3.00	25,175,001	61,774,321	2.45	69,038,049	2.74
Series C-1 @ \$15.00	7,500,032	72,077,495	9.61	77,684,547	10.36
Series C-2 @ \$17.00	32,808,227	354,428,619	10.80	381,466,406	11.63
Total Preferred Shares	224,834,375	619,345,489		689,001,888	
Warrants on Common					
Exercise Price @ \$0.072	741,665	466,518	0.63	591,355	0.80
Common - Outstanding	302,965,725	201,372,919	0.66	254,016,501	0.84
Options on Common					
Exercise Price @ \$0.015	350,000	231,008	0.66	291,581	0.83
Exercise Price @ \$0.030	1,170,875	765,136	0.65	966,622	0.83
Exercise Price @ \$0.066	547,500	349,798	0.64	442,794	0.81
Exercise Price @ \$0.072	2,579,175	1,622,338	0.63	2,056,464	0.80
Exercise Price @ \$0.094	312,500	191,946	0.61	243,815	0.78
Exercise Price @ \$0.170	3,972,457	2,317,274	0.58	2,956,570	0.74
Exercise Price @ \$0.206	606,365	337,573	0.56	432,410	0.71
Total Options Outstanding	9,538,872	5,815,073		7,390,256	
Total Outstanding	538,080,637	\$ 827,000,000		\$ 951,000,000	

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of October 15, 2015

Exhibit A.5
Value Summary 10/15/15
(thousands of USD, except Per Share Value)

Equity Value

Valuation Methods	Ref.	Indicated Value Range	
		Low	High
Adjusted Net Asset Value Method	Exhibit K.1	\$ 1,051,000	
Discounted Cash Flow Method	Exhibit I.6		\$ 1,184,000

Per Share Value

Share Classes	Shares Outstanding	Adj. Net Asset Value Method Value Allocation		Discounted Cash Flow Method Value Allocation	
		Present Value Marketable	Present Value Per Share Marketable	Present Value Marketable	Present Value Per Share Marketable
<u>Preferred Shares</u>					
Series A @ \$0.150	46,320,045	\$ 42,593,795	\$ 0.92	\$ 51,570,875	\$ 1.11
Series B @ \$0.1846	54,162,965	50,438,016	0.93	61,011,415	1.13
Series C @ \$0.564	58,896,105	71,702,077	1.22	83,840,633	1.42
Series C-1 @ \$3.00	21,947,001	59,748,688	2.72	66,016,108	3.01
Series C-1 @ \$15.00	6,563,232	66,525,417	10.14	70,969,027	10.81
Series C-2 @ \$17.00	42,947,639	488,387,110	11.37	520,266,801	12.11
Total Preferred Shares	230,836,987	779,395,102		853,674,858	
<u>Warrants on Common</u>					
Exercise Price @ \$0.072	741,665	615,782	0.83	751,426	1.01
Common - Outstanding	302,965,725	263,274,450	0.87	320,141,665	1.06
<u>Options on Common</u>					
Exercise Price @ \$0.015	350,000	302,400	0.86	367,883	1.05
Exercise Price @ \$0.030	1,170,875	1,003,355	0.86	1,221,403	1.04
Exercise Price @ \$0.066	547,500	460,518	0.84	561,402	1.03
Exercise Price @ \$0.072	2,579,175	2,141,411	0.83	2,613,120	1.01
Exercise Price @ \$0.094	312,500	254,377	0.81	310,879	0.99
Exercise Price @ \$0.170	3,972,457	3,097,888	0.78	3,798,228	0.96
Exercise Price @ \$0.206	606,365	454,717	0.75	559,136	0.92
Total Options Outstanding	9,538,872	7,714,666		9,432,051	
Total Outstanding	544,083,249	\$ 1,051,000,000		\$ 1,184,000,000	

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit B.1

Historical Balance Sheets
(thousands of USD)

	As of 12-31-07	As of 12-31-08	As of 12-31-09	As of 12-31-10	As of 12-31-11	As of 12-31-12	As of 12-31-13	As of 12-31-14	As of 12-31-15
Assets									
Current Assets									
Current Operating Assets									
Cash & Equivalents	\$ 14,509	\$ 1,884	\$ 3,690	\$ 36,718	\$ 88,056	\$ 51,785	\$ 30,966	\$ 465,933	\$ 424,278
Accounts Receivable	-	215	29	55	-	-	-	-	-
Inventory	-	-	581	-	-	1,733	3,777	2,383	13,331
Other Current Assets	412	250	195	827	665	1,852	1,780	12,788	5,114
Total Current Operating Assets	14,921	2,349	4,495	37,600	88,721	55,401	36,523	481,104	442,723
Total Current Non-Operating Assets	-	-	-	-	-	-	-	-	-
Total Current Assets	14,921	2,349	4,495	37,600	88,721	55,401	36,523	481,104	442,723
Total Fixed Assets - Net	1,795	2,211	1,766	2,630	4,648	19,557	22,021	53,366	64,803
Non Current Assets									
Total Intangible Assets - Net	-	-	-	-	-	-	-	-	-
Total Long Term Receivables	-	-	-	-	-	-	-	27,045	27,513
Total Other Non-Current Assets	-	-	-	-	-	-	-	-	-
Total Non Current Assets	-	-	-	-	-	-	-	27,045	27,513
Total Assets	\$ 16,716	\$ 4,560	\$ 6,260	\$ 40,230	\$ 93,369	\$ 74,958	\$ 58,543	\$ 561,515	\$ 535,039
Liabilities and Equity:									
Liabilities									
Current Liabilities									
Current Operating Liabilities									
Accounts Payable	\$ 1,683	\$ 549	\$ 560	\$ 440	\$ 1,238	\$ 7,669	\$ 7,430	\$ 16,633	\$ 18,692
Deferred Revenue	500	244	1,663	257	7	7	7	-	-
Other Current Liabilities	1,821	1,306	950	1,298	2,845	7,714	50,017	400,359	19,175
Total Current Operating Liabilities	4,004	2,099	3,173	1,995	4,090	15,390	57,454	416,992	37,867
Total Current Debt Obligations	-	-	8,061	-	-	-	-	-	-
Total Current Liabilities	4,004	2,099	11,234	1,995	4,090	15,390	57,454	416,992	37,867
Non Current Liabilities									
Long Term Debt									
Note Payable 1	-	-	-	-	-	-	-	-	-
Note Payable 2	-	-	-	-	-	40,173	40,489	40,805	41,121
Noncurrent capital lease	3	-	-	42	101	231	1,897	-	-
Total Long Term Debt	3	-	-	42	101	40,404	42,386	40,805	41,121
Other Non Current Liabilities									
Deferred Rent	-	643	723	759	767	1,572	1,857	-	-
Deferred Revenue, LT	-	-	2,146	3,808	3,801	3,801	3,801	-	-
Customer Deposits	-	-	-	-	73,500	69,500	80,000	143,846	136,346
Other Non-current liabilities	29	73	807	1,847	5,959	3,425	1,866	33,750	34,508
Total Other Non Current Liabilities	29	716	3,676	6,414	84,027	78,297	87,525	177,596	170,854
Total Non Current Liabilities	32	716	3,676	6,456	84,128	118,702	129,911	218,401	211,975
Total Liabilities	4,036	2,815	14,910	8,451	88,218	134,092	187,365	635,393	249,842
Total Equity	12,680	1,745	(8,649)	31,779	5,151	(59,134)	(128,821)	(73,878)	285,197
Total Liabilities and Equity	\$ 16,716	\$ 4,560	\$ 6,260	\$ 40,230	\$ 93,369	\$ 74,958	\$ 58,543	\$ 561,515	\$ 535,039

US v. Elizabeth HolmesValuation of Theranos, Inc.
As of February 7, 2014**Exhibit B.2**Historical Income Statements
(thousands of USD)

	FYE 12-31-07	FYE 12-31-08	FYE 12-31-09	FYE 12-31-10	FYE 12-31-11	FYE 12-31-12	FYE 12-31-13	FYE 12-31-14	FYE 12-31-15
Total Revenue	\$ -	\$ 1,799	\$ 2,794	\$ 1,401	\$ 518	\$ -	\$ -	\$ 116	\$ 391
Total Cost of Sales	-	-	-	-	-	-	-	-	-
Gross Profit	-	1,799	2,794	1,401	518	-	-	116	391
Total Operating Expenses	16,728	12,615	13,597	16,801	27,173	64,015	85,605	122,756	173,246
EBITDA	(16,728)	(10,816)	(10,804)	(15,399)	(26,655)	(64,015)	(85,605)	(122,640)	(172,855)
Depreciation & Amortization	-	-	-	-	-	-	-	-	-
Depreciation	672	740	626	771	1,025	2,654	5,573	7,247	10,162
Amortization	-	-	-	-	-	-	-	-	-
Total Depreciation & Amortization	672	740	626	771	1,025	2,654	5,573	7,247	10,162
EBIT	(17,400)	(11,556)	(11,430)	(16,170)	(27,680)	(66,670)	(91,178)	(129,888)	(183,017)
Gain/(Loss) on Sale of Fixed Assets	-	-	-	-	-	(9)	(849)	(1)	-
Total Misc Inc/(Exp)	1,132	264	8	42	146	27	(807)	528	1,984
Interest Expense	3	1	46	88	3	196	383	474	537
Pre-Tax Income	(16,271)	(11,294)	(11,467)	(16,216)	(27,536)	(66,838)	(92,368)	(129,834)	(181,570)
Less: Income Taxes/(Benefit)	-	-	-	-	-	-	-	-	-
Net Income/(Loss)	\$ (16,271)	\$ (11,294)	\$ (11,467)	\$ (16,216)	\$ (27,536)	\$ (66,838)	\$ (92,368)	\$ (129,834)	\$ (181,570)

US v. Elizabeth HolmesValuation of Theranos, Inc.
As of February 7, 2014**Exhibit B.3**Adjustments to Financial Statements
(thousands of USD)

	FYE 12-31-09	FYE 12-31-10	FYE 12-31-11	FYE 12-31-12	FYE 12-31-13	FYE 12-31-14	FYE 12-31-15
Balance Sheet Adjustments:							
Cash & Equivalents	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Receipts Liability	-	-	-	-	45,187	390,375	-
Other	-	-	-	-	-	-	-
Total Balance Sheet Adjustments	\$ -	\$ -	\$ -	\$ -	\$ 45,187	\$ 390,375	\$ -
Income Statement Adjustments:							
Revenue							
Revenue 1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue 2	-	-	-	-	-	-	-
Revenue 3	-	-	-	-	-	-	-
Total Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Cost of Sales	-	-	-	-	-	-	-
Gross Profit	-	-	-	-	-	-	-
Total Operating Expenses	-	-	-	-	-	-	-
Total Officers' Compensation	-	-	-	-	-	-	-
EBITDA	-	-	-	-	-	-	-
Total Depreciation & Amortization	-	-	-	-	-	-	-
EBIT	-	-	-	-	-	-	-
Miscellaneous Income/(Expense)							
Interest Income	(8)	(42)	(146)	(37)	(42)	(529)	(1,984)
Gain/(Loss) on Sale of Fixed Assets	-	-	-	9	849	1	-
Other Income/(Expense)	-	-	-	-	-	-	-
Total Misc Inc/(Exp)	(8)	(42)	(146)	(27)	807	(528)	(1,984)
Interest Expense	-	-	-	-	-	-	-
Pre-Tax Income	(8)	(42)	(146)	(27)	807	(528)	(1,984)
Less: Income Taxes/(Benefit)	-	-	-	-	-	-	-
Total Income Statement Adjustments	\$ (8)	\$ (42)	\$ (146)	\$ (27)	\$ 807	\$ (528)	\$ (1,984)

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit B.4

Adjusted Balance Sheets
(thousands of USD)

	Subject Company - Adjusted						Subject Company Common Size					Benchmark Common Size			
	As of 12-31-09	As of 12-31-10	As of 12-31-11	As of 12-31-12	As of 12-31-13	As of 12-31-14	As of 12-31-16	As of 12-31-11	As of 12-31-12	As of 12-31-13	As of 12-31-14	As of 12-31-15	Comp. [1] LTM	RMA [2] 2016-16	BizMiner [3] 2017
Assets															
Current Assets															
Current Operating Assets															
Cash & Equivalents	\$ 3,690	\$ 36,718	\$ 88,056	\$ 51,785	\$ 30,966	\$ 465,933	\$ 424,278	94.3%	69.1%	52.9%	83.0%	79.3%	16.3%	24.7%	15.9%
Accounts Receivable	29	55	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	10.1%	12.2%	12.0%
Inventory	581	-	-	1,733	3,777	2,383	13,331	0.0%	2.3%	6.5%	0.4%	2.5%	5.1%	1.1%	3.0%
Other Current Assets	195	827	665	1,882	1,780	12,788	5,114	0.7%	2.5%	3.0%	2.3%	1.0%	2.1%	7.5%	12.4%
Total Current Operating Assets	4,495	37,600	88,721	55,401	36,523	481,104	442,723	95.0%	73.9%	62.4%	85.7%	82.7%	33.6%	45.5%	43.2%
Total Current Non-Operating Assets	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	NA	NA	NA
Total Current Assets	4,495	37,600	88,721	55,401	36,523	481,104	442,723	95.0%	73.9%	62.4%	85.7%	82.7%	33.6%	45.5%	43.2%
Total Fixed Assets - Net	1,766	2,630	4,648	19,557	22,021	53,366	64,803	5.0%	26.1%	37.6%	9.5%	12.1%	8.3%	25.0%	21.9%
Non Current Assets															
Total Intangible Assets - Net	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	31.8%	9.9%	NA
Total Long Term Receivables	-	-	-	-	-	27,045	27,513	0.0%	0.0%	0.0%	4.8%	5.1%	NA	NA	NA
Total Other Non-Current Assets	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	26.2%	19.6%	34.9%
Total Non Current Assets	-	-	-	-	-	27,045	27,513	0.0%	0.0%	0.0%	4.8%	5.1%	58.1%	29.5%	34.9%
Total Assets	\$ 6,260	\$ 40,230	\$ 93,369	\$ 74,968	\$ 58,543	\$ 561,516	\$ 536,039	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Liabilities and Equity:															
Liabilities															
Current Liabilities															
Current Operating Liabilities															
Accounts Payable	\$ 560	\$ 440	\$ 1,238	\$ 7,669	\$ 7,430	\$ 16,633	\$ 18,692	1.3%	10.2%	12.7%	3.0%	3.5%	3.0%	10.2%	5.4%
Deferred Revenue	1,663	257	7	7	7	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	NA	NA
Other Current Liabilities	950	1,298	2,845	7,714	4,830	9,984	19,175	3.0%	10.3%	8.3%	1.8%	3.6%	5.8%	10.5%	18.0%
Total Current Operating Liabilities	3,173	1,995	4,090	15,390	12,267	26,617	37,867	4.4%	20.5%	21.0%	4.7%	7.1%	9.3%	20.7%	23.4%
Total Current Debt Obligations	8,061	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	2.0%	4.2%
Total Current Liabilities	11,234	1,995	4,090	15,390	12,267	26,617	37,867	4.4%	20.5%	21.0%	4.7%	7.1%	9.4%	22.7%	27.6%
Non Current Liabilities															
Total Long Term Debt	-	42	101	40,404	42,386	40,805	41,121	0.1%	53.9%	72.4%	7.3%	7.7%	0.6%	11.3%	26.2%
Other Non Current Liabilities															
Deferred Rent	723	759	767	1,572	1,857	-	-	0.8%	2.1%	3.2%	0.0%	0.0%	NA	NA	NA
Deferred Revenue, LT	2,146	3,808	3,801	3,801	3,801	-	-	4.1%	5.1%	6.5%	0.0%	0.0%	NA	NA	NA
Customer Deposits	-	-	73,500	69,500	80,000	143,846	136,346	78.7%	92.7%	136.7%	25.6%	25.5%	NA	NA	NA
Other Non-current liabilities	807	1,847	5,959	3,425	1,866	33,750	34,508	6.4%	4.6%	3.2%	6.0%	6.4%	17.5%	3.4%	NA
Total Other Non Current Liabilities	3,676	6,414	84,027	78,297	87,525	177,596	170,854	90.0%	104.5%	149.5%	31.6%	31.9%	17.5%	3.4%	NA
Total Non Current Liabilities	3,676	6,456	84,128	118,702	129,911	218,401	211,975	90.1%	158.4%	221.9%	38.9%	39.6%	18.1%	14.7%	26.2%
Total Liabilities	14,910	8,451	88,218	134,092	142,178	245,018	249,842	94.5%	178.9%	242.9%	43.6%	46.7%	27.5%	37.4%	53.8%
Total Equity	(8,649)	31,779	5,151	(59,134)	(83,634)	316,497	285,197	5.5%	-78.9%	-142.9%	56.4%	53.3%	72.5%	62.7%	46.2%
Total Liabilities and Equity	\$ 6,260	\$ 40,230	\$ 93,369	\$ 74,968	\$ 58,543	\$ 561,516	\$ 536,039	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.2%	100.0%

Notes:

[1] Source: Refer to report for selection of public comparables group. Figures represent median of dataset as reported by S&P CapitalQ.

[2] Source: The Risk Management Association; NAICS 54171N. Research and Development in the Physical, Engineering, and Life Sciences (non-Cost of Sales) for firms with annual revenues greater than \$25MM.

[3] Source: BizMiner Industry Financial Analysis Profile; NAICS 5417: Scientific Research & Development Services for firms with annual revenues between \$100MM - \$250MM.

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit B.5
Adjusted Income Statements
(thousands of USD)

	Subject Company - Adjusted						Subject Company Common Size					Benchmark Common Size			
	FYE 12-31-09	FYE 12-31-10	FYE 12-31-11	FYE 12-31-12	FYE 12-31-13	FYE 12-31-14	FYE 12-31-15	FYE 12-31-11	FYE 12-31-12	FYE 12-31-13	FYE 12-31-14	FYE 12-31-15	Comp. [1] LTM	RMA [2] 2015-16	BizMiner [3] 2017
Total Revenue	2,794	1,401	518	-	-	116	391	100.0%	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Cost of Sales	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	50.7%	0.0%	28.6%
Gross Profit	2,794	1,401	518	-	-	116	391	100.0%	0.0%	0.0%	100.0%	100.0%	49.3%	100.0%	71.4%
Operating Expenses															
Research & Development	10,257	13,594	22,018	52,890	66,757	73,459	97,159	4246.5%	0.0%	0.0%	63326.4%	24849.9%	NA	NA	NA
General and Administrative	3,341	3,206	5,155	11,125	18,848	49,298	76,087	994.8%	0.0%	0.0%	42498.1%	19459.6%	NA	NA	NA
Total Operating Expenses	13,597	16,801	27,173	64,015	85,605	122,756	173,246	5243.3%	0.0%	0.0%	105824.5%	44308.5%	33.7%	84.4%	57.8%
Total Officers' Compensation	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	NA	6.8%	2.4%
EBITDA	(10,804)	(16,399)	(26,655)	(64,015)	(85,605)	(122,640)	(172,855)	-5143.3%	0.0%	0.0%	-105724.5%	-44208.5%	16.6%	8.8%	11.2%
Depreciation & Amortization															
Depreciation	626	771	1,025	2,654	5,573	7,247	10,162	197.7%	0.0%	0.0%	6247.6%	2598.9%	NA	NA	NA
Amortization	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	NA	NA	NA
Total Depreciation & Amortization	626	771	1,025	2,654	5,573	7,247	10,162	197.7%	0.0%	0.0%	6247.6%	2598.9%	11.5%	2.4%	4.2%
EBIT	(11,430)	(16,170)	(27,680)	(66,670)	(91,178)	(129,888)	(183,017)	-5341.0%	0.0%	0.0%	-111972.1%	-46807.4%	4.2%	8.8%	7.1%
Gain/(Loss) on Sale of Fixed Assets	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	NA	NA	NA
Total Miscellaneous Income/(Expense)	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	-2.1%	0.8%	0.0%
Interest Expense	46	88	3	196	383	474	537	0.5%	0.0%	0.0%	408.6%	137.3%	1.2%	NA	2.9%
Pre-Tax Income	(11,476)	(16,258)	(27,682)	(66,865)	(91,561)	(130,362)	(183,554)	-5341.5%	0.0%	0.0%	-112380.7%	-46944.8%	0.8%	9.6%	4.2%
Less: Income Taxes/(Benefit)	-	-	-	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	-4.4%	NA	2.6%
Net Income/(Loss)	\$ (11,476)	\$ (16,258)	\$ (27,682)	\$ (66,865)	\$ (91,561)	\$ (130,362)	\$ (183,554)	-5341.5%	0.0%	0.0%	-112380.7%	-46944.8%	5.2%	9.6%	1.8%

Growth Analysis:

		Revenue Growth					EBITDA Margin Growth				
								#DIV/0!	#DIV/0!		
Subject - 1 year	n/a	-63.0%	-100.0%	NA	NA	237.1%	362.9%	-100.0%	-3.5%	-58.2%	
Guideline Public Company Group [4] - 1 year		8.4%	6.5%	10.6%	3.7%	4.2%	11.3%	5.6%	-2.3%	5.5%	
Industry [5] - 1 year [Nominal Growth Rate]	n/a	9.7%	3.2%	-1.6%	0.0%	1.1%	NA	NA	NA	NA	
Subject - 3 year			-100.0%	-100.0%	-39.3%	NA	-100.0%	-100.0%	173.9%	NA	
Guideline Public Company Group - 3 year			5.5%	7.2%	4.9%	9.2%	4.7%	8.7%	2.6%	-0.9%	
Industry [5] - 3 year [Nominal Growth Rate]			NA	3.7%	0.5%	-0.2%	NA	NA	NA	NA	

Notes:

[1] Source: Refer to report for selection of public comparables group. Figures represent median of dataset as reported by S&P CapitalIQ.

[2] Source: The Risk Management Association; NAICS 54171N: Research and Development in the Physical, Engineering, and Life Sciences (non-Cost of Sales) for firms with annual revenues greater than \$25MM.

[3] Source: BizMiner Industry Financial Analysis Profile; NAICS 5417: Scientific Research & Development Services for firms with annual revenues between \$100MM - \$250MM.

[4] Figures represent median of dataset as reported by S&P CapitalIQ.

[5] Source: IBISWorld; NAICS 54171 (real growth) plus inflation from <https://www.usinflationcalculator.com/inflation/current-inflation-rates/>.

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit B.6

Comparative Financial Ratios

	Subject Company						Benchmark		
	FYE 12-31-10	FYE 12-31-11	FYE 12-31-12	FYE 12-31-13	FYE 12-31-14	FYE 12-31-15	Comp. [1] LTM	RMA [2] 2015-16	BizMiner [3] 2017
Liquidity Ratios									
Current Ratio	18.8	21.7	3.6	3.0	18.1	11.7	3.5	2.2	1.6
Quick (Acid-Test) Ratio	18.4	21.5	3.4	2.5	17.5	11.2	2.2	1.5	1.0
Working Capital as a % of Revenue	2083.1%	116.6%	N/A	N/A	262013.8%	66883.6%	48.7%	36.1%	22.8%
Days' Receivables	10.8	19.3	NA	NA	NA	NA	57.8	37.2	63.3
Days' Inventory	NA	NA	NA	NA	NA	NA	103.6	N/A	55.7
Days' Payables	NA	NA	NA	NA	NA	NA	42.3	N/A	100.3
Coverage Ratios									
Times Interest Earned	(183.9)	(10,229.0)	(340.4)	(238.4)	(274.0)	(340.8)	5.3	20.4	3.9
NI+Non-Cash Expenditures / Current L.T. Debt	NA	NA	NA	NA	NA	NA	NA		1.51
Leverage Ratios									
Fixed Assets/Tangible Worth	0.1	0.9	-0.3	-0.3	0.2	0.2	0.2	0.3	0.5
Debt-to-Equity	0.0	0.0	-0.7	-0.5	0.1	0.1	0.1	0.2	0.7
Operating Ratios									
EBT/Tangible Worth	-51.2%	-537.4%	113.1%	109.5%	-41.2%	-64.4%	NA	7.7%	11.4%
EBT/Total Assets	-40.4%	-29.6%	-89.2%	-156.4%	-23.2%	-34.3%	NA	4.9%	5.3%
Fixed Asset Turnover	0.5	0.1	0.0	0.0	0.0	0.0	7.5	10.3	3.1
Total Asset Turnover	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.7	0.7
Total Officers' Compensation		0.0%	0.0%	0.0%	0.0%	0.0%	NA	6.8%	2.4%

Notes:

[1] Source: Refer to report for selection of public comparables group. Figures represent median of dataset as reported by S&P CapitalIQ.

[2] Source: The Risk Management Association; NAICS 54171N: Research and Development in the Physical, Engineering, and Life Sciences (non-Cost of Sales) for firms with annual revenues greater than \$25MM.

[3] Source: BizMiner Industry Financial Analysis Profile; NAICS 5417: Scientific Research & Development Services for firms with annual revenues between \$100MM - \$250MM.

US v. Elizabeth HolmesValuation of Theranos, Inc.
As of February 7, 2014**Exhibit C.1**Discounted Cash Flow Key Assumptions
(thousands of USD)

	Basis	For the Twelve Month Period Ending December 31,				
		2014	2015	2016	2017	2018
Total Revenue	Annual Growth Rate	N/A	75534.7%	97.0%	44.8%	55.6%
Terminal Value	Exit Multiple, Ex. D.1					4.0%
Total Cost of Revenue	% of Revenue	35.3%	35.0%	32.0%	32.0%	30.0%
Total Operating Expenses	% of Revenue	66687.3%	85.5%	44.7%	33.7%	24.7%
Depreciation & Amortization	Exhibit C.3	3041.6%	6.8%	5.8%	6.3%	5.7%
Interest Expense	N/A	N/A	N/A	N/A	N/A	N/A
Income Taxes	% of Pre-Tax Net Income	40.0%	40.0%	40.0%	40.0%	40.0%
Adjusted Operating Working Capital	Exhibit C.2	-19704.4%	4.0%	10.5%	14.8%	18.6%
Adjusted Operating Working Capital		(29,557)	4,593	23,523	47,806	93,778
Yr/yr Working Capital (Increase)/Reduction		(33,712)	(34,150)	(18,930)	(24,283)	(45,972)
Capital Expenditures	% of Revenue	5502.0%	29.2%	20.6%	20.3%	11.8%
Interest-Bearing Debt	Down Sch, If Used Enter # on Ex. List					

US v. Elizabeth HolmesValuation of Theranos, Inc.
As of February 7, 2014**Exhibit C.2**Adjusted Working Capital Analysis
(thousands of USD)

	FYE 12-31-09	FYE 12-31-10	FYE 12-31-11	FYE 12-31-12	FYE 12-31-13	For the Twelve Month Period Ending December 31,				
						2014	2015	2016	2017	2018
Working Capital										
Total Revenue	[1] \$ 2,794	\$ 1,401	\$ 518	\$ -	\$ -	\$ 150	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452
Total COS	-	-	-	-	-	53	39,708	71,505	103,505	151,036
Total Operating Expenses	13,597	16,801	27,173	64,015	85,605	100,031	97,025	99,961	108,977	124,401
Operating Assets										
Cash & Equivalents	[2] \$ 3,690	\$ 36,718	\$ 88,056	\$ 51,785	\$ 30,966	\$ 49,330	\$ 47,848	\$ 49,296	\$ 53,742	\$ 61,348
Accounts Receivable	29	55	-	-	-	-	-	-	-	-
Inventory	581	-	-	1,733	3,777	8,874	3,404	6,704	9,704	15,104
Other Current Assets	195	827	665	1,882	1,780	18,362	4,838	5,080	5,334	5,601
Note Receivable	-	-	-	-	-	27,236	57,539	60,055	42,303	58,453
Total Operating Assets	4,495	37,600	88,721	55,401	36,523	103,802	113,629	111,135	111,083	140,506
Operating Liabilities										
Accounts Payable	560	440	1,238	7,669	7,430	8,340	13,879	16,480	16,174	22,774
Deferred Revenue	1,663	257	7	7	7	-	-	-	-	-
Other Current Liabilities	950	1,298	2,845	7,714	4,830	12,239	7,073	8,265	9,453	11,521
Deferred Rent	723	759	767	1,572	1,857	-	-	-	-	-
Deferred Revenue, LT	2,146	3,808	3,801	3,801	3,801	-	-	-	-	-
Customer Deposits	-	-	73,500	69,500	80,000	93,808	70,356	46,904	23,452	-
Other Non-current liabilities	807	1,847	5,959	3,425	1,866	18,972	17,728	15,963	14,198	12,433
Total Operating Liabilities	6,849	8,409	88,117	93,687	99,791	133,359	109,036	87,612	63,277	46,728
Net Operating Working Capital	\$ (2,354)	\$ 29,191	\$ 604	\$ (38,287)	\$ (63,268)	\$ (29,557)	\$ 4,593	\$ 23,523	\$ 47,806	\$ 93,778
Net Operating Working Capital as a % of Revenue	-84.3%	2083.1%	116.6%	0.0%	0.0%	-19704.4%	4.0%	10.5%	14.8%	18.6%
Yrlyr Working Capital (Increase)/Reduction	-	(31,545)	28,587	38,891	24,981	(33,712)	(34,150)	(18,930)	(24,283)	(45,972)
BizMiner Working Capital as a % of Revenue						22.8%				
RMA Working Capital as a % of Revenue						36.1%				
Comparable Group Working Capital as a % of Revenue						48.7%				
Days' Operating Expenses in Cash	99	798	1,183	295	132	180	180	180	180	180
Days' Sales Outstanding	4	14	-	-	-	-	-	-	-	-
Days' Inventory	-	-	-	-	-	61,113	31	34	34	37
Other Current Assets as a % of Revenue	7.0%	59.0%	128.4%	0.0%	0.0%	12241.3%	4.3%	2.3%	1.6%	1.1%
Note Receivable as a % of Revenue	0.0%	0.0%	0.0%	0.0%	0.0%	18157.3%	50.7%	22.4%	13.1%	11.6%
Days' Payables	-	-	-	-	-	57,436	128	84	57	55
Deposits & Deferred Revenue as a % of Revenue	136.3%	290.1%	14917.2%	0.0%	0.0%	62538.7%	62.0%	21.0%	7.3%	0.0%
Other Current Liabilities as a % of Opex	7.0%	7.7%	10.5%	12.1%	5.6%	12.2%	7.3%	8.3%	8.7%	9.3%
Deferred Rent as a % of Opex	5.3%	4.5%	2.8%	2.5%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Non-current liabilities as a % of Opex	5.9%	11.0%	21.9%	5.4%	2.2%	19.0%	18.3%	16.0%	13.0%	10.0%

Notes:

[1] Historical balances are per Adjusted Income Statement. Refer to Exhibit B.5. Operating Expenses exclude Depreciation & Amortization.

[2] Estimated operating cash levels equal to 6 months of operating expenses

US v. Elizabeth Holmes

Exhibit C.3

Valuation of Theranos, Inc.
As of February 7, 2014Depreciation & Capital Expenditure Analysis
(thousands of USD)

Forecast Depreciation	For the Twelve Month Period Ending December 31,				
	2014	2015	2016	2017	2018
Total Revenue	\$ 150	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452
Beginning Balance - Total Fixed Assets	22,021	25,711	51,123	84,125	129,327
Capital Expenditures	8,253	33,134	45,970	65,569	59,240
Fixed Assets	30,274	58,845	97,093	149,694	188,567
Capital Expenditures as a % of Revenue	5502.04%	29.21%	20.57%	20.27%	11.77%
Depreciation					
Assumptions as to Depreciable Lives:					
Beg. Dep. Existing Fixed Assets - avg life	5.0				
Capital Additions - avg life	7.5				
Beginning Balance	\$ 4,061	\$ 4,430	\$ 4,430	\$ 4,430	\$ 4,430
2014 Additions	502	1,095	1,095	1,095	1,095
2015 Additions		2,198	4,395	4,395	4,395
2016 Additions			3,049	6,098	6,098
2017 Additions				4,349	8,698
2018 Additions					3,929
Total Depreciation	\$ 4,562	\$ 7,722	\$ 12,969	\$ 20,366	\$ 28,644
As a % of Revenue	3041.6%	6.8%	5.8%	6.3%	5.7%
Net Fixed Assets	\$ 25,711	\$ 51,123	\$ 84,125	\$ 129,327	\$ 159,923
As a % of Revenue	17140.8%	45.1%	37.6%	40.0%	31.8%
Historical Capital Expenditure Analysis					
	FYE	FYE	FYE	FYE	FYE
	12-31-09	12-31-10	12-31-11	12-31-12	12-31-13
Net FA	\$ 1,766	\$ 2,630	\$ 4,648	\$ 19,557	\$ 22,021
Chg from PY	N/A	864	2,018	14,909	2,463
Depreciation	626	771	1,025	2,654	5,573
(Gain)/Loss	-	-	-	9	849
Capital Expenditures	N/A	1,635	3,043	17,572	8,885
	Average				
Fixed Assets	\$ 10,124	\$ 2,630	\$ 4,648	\$ 19,557	\$ 22,021
Fixed Assets as a % of Revenue	1074.0%	63.2%	187.7%	896.9%	N/A
Capital Expenditures	7,784	N/A	1,635	17,572	8,885
Capital Expenditures as a % of Revenue	825.7%	N/A	116.7%	587.1%	N/A

Company Name	Ticker Symbol	Market Capitalization	Interest Bearing Debt	Trading Volume [7]	LTM Revenue	1-Year Growth Rate	Equity as a % of Total Capital
OraSure Technologies, Inc.	DSUR	\$ 337,504	\$ -	713	\$ 98,940	12.7%	100.0%
Trinity Biotech plc	TRIB	545,805	-	69	91,216	10.6%	100.0%
Enzo Biochem, Inc.	ENZ	136,102	3,992	209	92,629	-7.3%	97.2%
QuidelOrtho Corporation	QDEL	964,525	5,567	193	177,325	13.9%	95.4%
Exact Sciences Corporation	EXAS	865,903	1,711	739	4,144	0.0%	99.8%
OPKO Health, Inc.	OPK	3,106,222	227,744	4,324	96,530	105.2%	93.2%
PerkinElmer, Inc.	PKI	4,920,548	934,728	829	2,157,566	2.5%	84.0%
Quest Diagnostics Incorporated	DGX	7,315,200	3,366,000	2,520	7,146,000	-3.2%	68.5%
Laboratory Corporation of America Holdings	LH	7,791,710	3,000,400	1,101	5,808,300	2.4%	72.2%
Myriad Genetics, Inc.	MYGN	2,351,966	-	2,462	737,115	35.2%	100.0%
Illumina, Inc.	ILMN	19,831,532	868,593	1,595	1,421,178	23.7%	95.8%
Qiagen N.V.	QGEN	5,280,947	850,202	892	1,301,984	3.8%	85.1%
Alere Inc.	IQT2622336	2,819,163	3,841,104	654	2,608,636	8.9%	42.3%
Lumina Corporation	IQT2627430	734,789	1,657	170	213,423	5.4%	99.9%
Abaxis, Inc.	IQT2686525	824,250	706	187	179,781	0.6%	99.9%
CombiMatrix Corporation	IQT36309071	25,342	233	75	5,367	19.0%	99.1%
Allymetrx Inc.	IQT2587418	518,522	144,461	1,231	330,399	11.8%	78.2%
Genomic Health, Inc.	IQT24111615	815,172	-	218	261,595	11.2%	100.0%
Cepheid	IQT2599314	3,328,663	-	609	401,292	21.2%	100.0%
Nanosphere, Inc.	IQT38720096	169,146	11,815	33	10,002	97.0%	93.5%
GenMark Diagnostics, Inc.	IQT106626443	513,559	37	240	27,404	33.9%	100.0%
Bio-Reference Laboratories, Inc.	IQT2594421	723,947	52,630	424	735,368	15.5%	93.2%
Average		2,905,528	805,072	886	1,086,705	19.3%	91.0%
Median		845,076	4,780	632	237,509	11.5%	98.1%
Selected							97.0%

Industry Capital Structure

Equity	97.0%
Interest Bearing Debt	3.0%
Tax Rate	40.0%

Cost of Equity

Stage of Development	5-year Return		10-year Return		20-year Return		Ref.
	2002	2008	2002	2008	2002	2008	
Seed/Early Stage	51.4%	3.0%	34.9%	25.5%	20.4%	22.1%	[1]
Balanced	20.9%	7.5%	20.9%	12.0%	14.3%	14.8%	
Later Stage	10.6%	8.1%	21.6%	7.3%	15.3%	14.7%	
All Ventures	28.3%	5.7%	26.3%	13.4%	16.6%	17.2%	

Table 2: Target Rates of Return

Stage of Development	Plummer	Scharis and Sahlman	Sahlman, Stevenson, and Bhide	Everett	Everett Median Returns
Start-up	50% - 70%	50% - 70%	50% - 100%	30% - 40%	33.0%
First stage or "early development"	40% - 60%	40% - 60%	40% - 60%	23% - 38%	28.0%
Second stage or "expansion"	35% - 50%	30% - 50%	30% - 40%	19% - 32%	25.0%
Bridge/IPO	25% - 35%	20% - 35%	20% - 30%	18% - 36%	25.0%

Table 3: Target Rates of Return

Stage of Development	Ruhinka / Young	Wetzel	Plummer / Qed Range of Discount Rates Used	
			High	Low
Seed	73.0%	50.0%	75.4%	49.2%
Start-up	54.8%	50.0%	59.6%	40.6%
3rd Stage	42.2%	37.5%	49.3%	34.7%
Fourth Stage	35.0%	30.0%	45.7%	31.2%
Exit Stage	35.0%	22.5%	40.8%	28.1%

Table 4: Theranos Investor Forecasts Implied Internal Rates of Return (Feb 2014 - Feb 2015)

Investor Group	IRR
PFM Forecast	75.5%
PFM Model	35.5%
Mosley and RDV Forecast	54.0%
Murdoch Forecast	82.0%

Selected Venture Capital Cost of Equity **45.0%**

Weighted Average Cost of Capital

Equity as a % of total capital	97.0%
Cost of Equity (above)	45.0%
Weighted Cost of Equity	43.7%
Debt as a % of total capital	3.0%
Cost of Debt [4]	25.0%
After Tax Cost of Debt (tax rate above)	15.0%
Weighted After Tax Cost of Debt	0.5%
Weighted Average Cost of Capital	44.1%
Weighted Average Cost of Capital (rounded)	44.0%

Notes:

- [1] Source: Thomson Financial. The average annual return is based upon Thomson Financials' Private Equity Performance Index (PEPI). The PEPI is based on the latest quarterly statistics from Thomson Financials' Private Equity Performance Database analyzing the cashflows and returns for over 1400 US venture capital and private equity partnerships.
- [2] Plummer, James L., QED Report on Venture Capital Financial Analysis.
- [3] Scharis, Daniel R. and William A. Sahlman, "A Method for Valuing High-Risk, Long Term, Investments: The Venture Capital Method," Harvard Business School Teaching Note 9-288-006, Boston: Harvard Business School Publishing, 1989.
- [4] William A. Sahlman, Howard H. Stevenson, Amar V. Bhide, et al., "Financing Entrepreneurial Ventures," Business Fundamental Series (Boston: Harvard Business School Publishing, 1998).
- [5] Craig R. Everett, "2021 Private Capital Markets Report" (Malibu: Pepperdine University Graziadio School of Business and Management, 2021), Table 1, p. 5. Note that this publication also includes rates of return for many other types of private capital investments, as well as summaries of other information captured in Pepperdine's annual industry survey.
- [6] Dorsey, Terry, "A Portfolio Model for Venture Capital Performance Measurement and Investment Selection," Polaris Group, Inc. January 2000.
- [7] Refer to the report for discussion of the selected Venture Capital Rate of Return.

US v. Elizabeth Holmes**Exhibit C.5**Valuation of Theranos, Inc.
As of February 7, 2014Forecast Free Cash Flow to Invested Capital
(thousands of USD)

	For the Twelve Month Period Ending December 31,				
	2014	2015	2016	2017	2018
Total Revenue	\$ 150	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452
Total Cost of Revenue	53	39,708	71,505	103,505	151,036
Gross Margin	97	73,744	151,947	219,947	352,416
GM %	64.7%	65.0%	68.0%	68.0%	70.0%
Total Operating Expenses	100,031	97,025	99,961	108,977	124,401
Operating Expense %	66687.3%	85.5%	44.7%	33.7%	24.7%
EBITDA	(99,934)	(23,281)	51,986	110,970	228,015
EBITDA %	-66622.7%	-20.5%	23.3%	34.3%	45.3%
Less: Partial Period Adjustment	8,328	-	-	-	-
Adjusted EBITDA	(91,606)	(23,281)	51,986	110,970	228,015
Depreciation & Amortization	4,562	7,722	12,969	20,366	28,644
EBIT	(96,169)	(31,003)	39,017	90,604	199,371
EBIT %	-64112.3%	-27.3%	17.5%	28.0%	39.6%
Interest Expense	-	-	-	-	-
Earnings Before Taxes	(96,169)	(31,003)	39,017	90,604	199,371
Income Taxes	-	-	-	-	42,265
Forecast After-Tax Income	\$ (96,169)	\$ (31,003)	\$ 39,017	\$ 90,604	\$ 157,106
NPAT %	-64112.3%	-27.3%	17.5%	28.0%	31.2%
Cash Flow					
Add: Depreciation & Amortization	4,562	7,722	12,969	20,366	28,644
After-Tax Gross Cash Flow	(91,606)	(23,281)	51,986	110,970	185,750
Decrease / (Increase) in Working Capital	(33,712)	(34,150)	(18,930)	(24,283)	(45,972)
Less: Capital Expenditures	(8,253)	(33,134)	(45,970)	(65,569)	(59,240)
Free Cash Flow	\$ (133,571)	\$ (90,565)	\$ (12,914)	\$ 21,118	\$ 80,538

US v. Elizabeth Holmes**Exhibit C.6**Valuation of Theranos, Inc.
As of February 7, 2014Discounted Cash Flow Method Value Summary
(thousands of USD)

<u>Forecast Period</u>	<u>Base Cash Flow</u>	<u>Period</u>	<u>Discount Rate</u>	<u>PV Factor [2]</u>	<u>Discounted Cash Flow [3]</u>
2014	\$ (133,571)	0.45	44.0%	0.8494	\$ (113,454)
2015	(90,565)	1.40	44.0%	0.6012	(54,450)
2016	(12,914)	2.40	44.0%	0.4175	(5,392)
2017	21,118	3.40	44.0%	0.2899	6,123
2018	80,538	4.40	44.0%	0.2013	16,216
Terminal Value [1]	3,000,000	4.90	44.0%	0.1678	503,372
Indicated Value					\$ 352,416
Add: C-2 Financing Proceeds not on 12/31/13 balance sheet					114,390
Add: C-1 Financing Proceeds not on 12/31/13 balance sheet					6,556
Deduct: Interest Bearing Debt					(42,386)
Total Equity Value - Controlling, Marketable Basis					\$ 430,975
Total Equity Value - Controlling, Marketable Basis (rounded)					\$ 431,000

Notes:

[1] Refer to Exhibit D.1

[2] $1 / (1 + \text{Discount Rate}) ^ \text{Period}$.

[3] Base Cash Flow x PV Factor.

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit D.1
Guideline Public Company Method
(thousands of USD)

Name	Ticker	Market Cap	Debt, Pref Shr & Min Int.	Cash	MVIC [1]	Revenue					Market Value of Invested Capital /				
						Revenue		EBITDA		EBIT	Revenue		EBITDA		EBIT
						LTM	2014E	LTM	2014E	LTM	LTM	2014E	LTM	2014E	LTM
OraSure Technologies, Inc.	OSUR	\$ 337,504	\$ -	\$ 93,191	\$ 244,313	\$ 98,940	\$ 104,732	\$ (13,910)	\$ (11,967)	\$ (20,462)	2.47x	2.33x	NA	NA	NA
Trinity Biotech plc	TRIB	545,805	-	22,317	523,488	91,216	110,443	18,006	NA	15,416	5.74x	4.74x	27.54x	NA	33.96x
Enzo Biochem, Inc.	ENZ	138,102	3,992	7,621	134,473	92,929	97,348	(11,277)	(9,200)	(15,573)	1.45x	1.38x	NA	NA	NA
QuidelOrtho Corporation	QDEL	964,525	5,567	8,388	961,704	177,325	199,864	30,867	53,570	6,667	5.42x	4.81x	31.16x	17.95x	144.25x
Exact Sciences Corporation	EXAS	865,903	1,711	133,259	734,355	4,144	28,311	(45,343)	(49,052)	(46,761)	NA	25.94x	NA	NA	NA
OPKO Health, Inc.	OPK	3,106,222	224,313	185,798	3,144,737	96,530	102,743	(57,469)	NA	(72,665)	32.58x	30.61x	NA	NA	NA
PerkinElmer, Inc.	PKI	4,920,548	934,728	173,242	5,682,034	2,157,586	2,283,690	389,970	444,503	263,091	2.63x	2.49x	14.57x	12.78x	21.60x
Quest Diagnostics Incorporated	DGX	7,315,200	3,391,000	187,000	10,519,200	7,146,000	7,204,659	1,439,000	1,425,874	1,155,000	1.47x	1.46x	7.31x	7.38x	9.10x
Laboratory Corporation of America Holdings	LH	7,791,710	3,019,800	404,000	10,407,510	5,808,300	5,920,847	1,203,500	1,176,931	1,012,700	1.79x	1.76x	8.65x	8.84x	10.28x
Myriad Genetics, Inc.	MYGN	2,351,966	-	353,595	1,998,371	737,115	712,147	300,472	239,869	291,227	2.71x	2.81x	6.65x	8.33x	6.86x
Illumina, Inc.	ILMN	19,831,532	868,593	1,165,603	19,534,522	1,421,178	1,671,408	363,622	493,335	265,697	13.75x	11.69x	53.72x	39.60x	73.52x
Qiagen N.V.	QGEN	5,280,047	859,741	380,226	5,759,562	1,301,984	1,371,150	382,685	457,917	188,130	4.42x	4.20x	15.05x	12.58x	30.61x
Alere Inc.	IQT2622336	2,819,163	4,452,454	356,289	6,915,328	2,608,636	3,085,505	546,428	673,094	171,771	2.65x	2.24x	12.66x	10.27x	40.25x
Luminex Corporation	IQT2627430	734,789	1,657	72,441	664,005	213,423	230,083	25,707	50,037	9,785	3.11x	2.89x	25.83x	13.27x	67.85x
Abaxis, Inc.	IQT2586525	824,250	706	101,830	723,126	179,781	191,556	31,289	33,025	23,944	4.02x	3.78x	23.11x	21.90x	30.20x
CombiMatrix Corporation	IQT38309071	25,342	233	14,036	11,539	8,367	9,959	(5,353)	NA	(6,051)	1.81x	1.66x	NA	NA	NA
Affymetrix Inc.	IQT2587418	518,522	144,461	57,128	605,855	330,399	335,643	45,802	43,787	6,814	1.83x	1.81x	13.23x	13.84x	88.91x
Genomic Health, Inc.	IQT24111615	815,172	-	105,350	709,822	261,595	286,115	(6,508)	(18,086)	(11,832)	2.71x	2.48x	NA	NA	NA
Cepheid	IQT2599314	3,328,663	-	74,909	3,253,754	401,292	456,698	8,477	16,305	(14,710)	8.11x	7.12x	NA	NA	NA
Nanosphere, Inc.	IQT38720096	169,146	11,815	41,467	139,494	10,002	19,719	(31,689)	(29,322)	(33,721)	13.95x	7.07x	NA	NA	NA
GenMark Diagnostics, Inc.	IQT106626443	513,558	37	105,589	408,007	27,404	26,812	(27,134)	(33,133)	(29,362)	14.89x	15.22x	NA	NA	NA
Bio-Reference Laboratories, Inc.	IQT2594421	723,947	52,630	14,533	762,044	735,368	801,467	93,075	115,197	72,094	1.04x	0.95x	8.19x	6.62x	10.57x
Correlation to MVIC						0.65	0.67	0.61	0.66	0.57					
Correlation to Price						0.49	0.51	0.44	0.48	0.44					

Upper Quartile	5.74x	6.51x	25.83x	14.87x	67.86x
Mean	6.12x	6.34x	19.05x	14.45x	43.59x
Median	2.71x	2.85x	14.57x	12.68x	30.61x
Lower Quartile	1.83x	1.91x	8.65x	8.71x	10.57x
Selected Multiple	6.10x	12.60x			
Subject Company Base Value	\$ 503,452	\$ -	\$ 228,015	\$ -	\$ 199,371
Indicated Equity Value	\$ 3,071,067	\$ -	\$ 2,872,989	\$ -	\$ -
Weighting	33.3%	0.0%	66.7%	0.0%	0.0%
Indicated Value					\$ 2,939,012
Add: Subject Company Cash					61,348
Total Invested Capital Value at 12/31/18 Exit - Controlling, Marketable Basis					\$ 3,000,360
Total Invested Capital Value at 12/31/18 Exit - Controlling, Marketable Basis (rounded)					\$ 3,000,000

Notes:

Source: S&P Capital IQ.

[1] MVIC = Market Value of Invested Capital. Presented as net of cash.

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit D.2
Guideline Public Company Key Financial Ratios
(thousands of USD)

Name	Ticker	Market Cap	Trading Volume [1]	LTM Revenue	CAGR Revenue [2]		Forward Growth			As a % of Revenue					Current Ratio	Debt to Equity	Debt to TNW	
					1 Year	3 Year	2014E	2015E	2016E	GM	EBITDA	D&A	EBIT	Capex				WC [3]
OraSure Technologies, Inc.	OSUR	\$ 337,504	713	\$ 98,940	12.7%	9.7%	5.9%	14.5%	10.9%	59.2%	-14.1%	0.0%	-20.7%	2.5%	195.9%	6.30	0.0%	0.0%
Trinity Biotech plc	TRIB	545,805	69	91,216	10.6%	0.6%	21.1%	14.5%	NA	-49.6%	20.8%	0.0%	16.9%	4.9%	61.1%	3.66	0.0%	0.0%
Enzo Biochem, Inc.	ENZ	138,102	209	92,929	-7.3%	-1.8%	4.8%	12.4%	15.2%	41.8%	-12.1%	0.0%	-16.8%	0.9%	8.6%	1.35	12.4%	25.5%
QuidelOrtho Corporation	QDEL	964,525	193	177,325	13.9%	16.1%	12.7%	18.0%	13.2%	62.2%	17.4%	4.6%	3.8%	11.7%	30.8%	3.27	2.5%	6.9%
Exact Sciences Corporation	EXAS	865,903	739	4,144	NA	-8.1%	N/A	212.6%	90.4%	100.0%	N/A	0.0%	-1128.4%	N/A	3081.7%	17.47	1.3%	1.3%
OPKO Health, Inc.	OPK	3,106,222	4,324	96,530	105.2%	50.2%	6.4%	41.0%	62.2%	31.1%	-59.5%	11.5%	-75.3%	4.1%	156.3%	2.64	26.1%	-102.9%
PerkinElmer, Inc.	PKI	4,920,548	829	2,157,586	2.5%	8.2%	5.8%	5.3%	5.1%	45.3%	18.1%	0.0%	12.2%	1.8%	20.5%	1.73	46.9%	-153.5%
Quest Diagnostics Incorporated	DGX	7,315,200	2,520	7,146,000	-3.2%	-0.5%	0.8%	1.1%	0.5%	40.1%	20.1%	1.1%	16.2%	3.2%	3.5%	1.22	84.7%	-130.9%
Laboratory Corporation of America I	LH	7,791,710	1,101	5,808,300	2.4%	5.1%	1.9%	2.1%	2.6%	38.3%	20.7%	1.4%	17.4%	3.5%	12.0%	1.95	119.5%	-144.0%
Myriad Genetics, Inc.	MYGN	2,351,966	2,462	737,115	35.2%	25.0%	-3.4%	9.7%	-18.1%	87.2%	40.8%	0.0%	39.5%	1.7%	52.5%	6.74	0.0%	0.0%
Illumina, Inc.	ILMN	19,831,532	1,595	1,421,178	23.7%	16.3%	17.6%	18.3%	19.0%	68.3%	25.6%	2.4%	18.7%	5.6%	91.2%	5.02	56.7%	181.3%
Qiagen N.V.	QGEN	5,280,047	892	1,301,984	3.8%	6.2%	5.3%	6.2%	6.1%	65.7%	29.4%	2.7%	14.4%	6.5%	44.8%	2.73	31.2%	1093.2%
Alera Inc.	IQT2622336	2,819,163	654	2,608,636	8.9%	6.6%	18.3%	5.4%	4.1%	50.6%	20.9%	0.0%	6.6%	3.8%	38.4%	2.30	184.8%	-151.0%
Luminex Corporation	IQT2627430	734,789	170	213,423	5.4%	14.7%	7.8%	8.8%	8.7%	68.5%	12.0%	1.9%	4.6%	8.5%	55.2%	5.14	0.6%	1.0%
Abaxis, Inc.	IQT2586525	824,250	187	179,781	0.6%	8.7%	6.5%	12.3%	NA	49.1%	17.4%	0.0%	13.3%	3.1%	84.0%	9.42	0.4%	0.4%
CombiMatrix Corporation	IQT36309071	25,342	75	6,367	19.0%	21.5%	9.3%	16.2%	16.3%	44.6%	-84.1%	2.4%	-95.0%	4.8%	218.7%	7.62	1.6%	1.6%
Affymetrix Inc.	IQT2587418	518,522	1,231	330,399	11.8%	2.1%	1.6%	2.7%	2.5%	59.3%	13.9%	0.0%	2.1%	1.5%	29.9%	2.28	53.2%	-682.8%
Genomic Health, Inc.	IQT24111615	815,172	218	261,595	11.2%	13.7%	9.4%	12.8%	30.6%	79.6%	-2.1%	0.0%	-4.5%	4.2%	44.0%	4.86	0.0%	0.0%
Cepheid	IQT2599314	3,328,663	609	401,292	21.2%	23.6%	13.8%	15.5%	15.5%	48.5%	2.1%	0.0%	-3.7%	11.8%	37.0%	2.56	0.0%	0.0%
Nanosphere, Inc.	IQT38720096	169,146	33	10,002	97.0%	70.3%	97.1%	70.7%	64.2%	-149.9%	N/A	0.0%	-337.1%	14.0%	465.0%	8.17	27.4%	29.0%
GenMark Diagnostics, Inc.	IQT106626443	513,559	240	27,404	33.9%	120.3%	-2.2%	57.7%	78.2%	47.5%	-99.0%	0.0%	-107.1%	15.6%	368.1%	10.85	0.0%	0.0%
Bio-Reference Laboratories, Inc.	IQT2594421	723,947	424	735,368	15.5%	15.2%	9.0%	NA	NA	46.3%	12.7%	2.9%	9.8%	3.1%	22.2%	2.20	19.1%	23.5%
Upper Quartile		\$ 3,273,053	1,049	\$ 1,160,767	21.2%	20.2%	12.7%	18.0%	24.8%	64.9%	20.7%	2.3%	14.2%	6.5%	140.0%	6.63	43.0%	5.6%
Mean		2,905,528	886	1,086,705	20.2%	19.3%	11.9%	26.6%	22.5%	47.0%	0.1%	1.4%	-73.3%	5.6%	232.8%	4.98	30.4%	-0.1%
Median		845,076	632	237,509	11.8%	11.7%	6.5%	12.8%	13.2%	49.3%	15.6%	0.0%	4.2%	4.1%	48.7%	3.47	7.4%	0.0%
Lower Quartile		525,342	197	93,829	3.8%	5.4%	4.8%	6.2%	4.6%	44.8%	-4.6%	0.0%	-19.7%	3.1%	30.1%	2.29	0.1%	-77.2%
Theranos, Inc. (at 12/31/18)		NA	NA	\$ 503,452	55.6%	64.3%	28.0%	NA	NA	70.0%	45.3%	5.7%	39.6%	11.8%	18.6%	2.39	N/A	N/A

Notes:

Source: S&P Capital IQ.

[1] Represents trailing 3-month average daily trading volume (in thousands)

[2] CAGR = Compound Annual Growth Rate

[3] Working capital excludes cash

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit D.3
Guideline Public Company Descriptions

Name	Ticker	Description
OraSure Technologies, Inc.	OSUR	OraSure Technologies, Inc., together with its subsidiaries, develops, manufactures, markets, and sells oral fluid diagnostic products and specimen collection devices in the United States, Europe, and internationally.
Trinity Biotech plc	TRIB	Trinity Biotech plc acquires, develops, manufactures, and markets medical diagnostic products for the clinical laboratory and point-of-care (POC) segments of the diagnostic market in the Americas, Africa, Asia, and Europe.
Enzo Biochem, Inc.	ENZ	Enzo Biochem, Inc., an integrated diagnostics, clinical lab, and life sciences company, researches, develops, manufactures, and markets diagnostic and research products based on genetic engineering, biotechnology, and molecular biology.
QuidelOrtho Corporation	QDEL	QuidelOrtho Corporation focuses on the development and manufacture of diagnostic testing technologies across the continuum of healthcare testing needs.
Exact Sciences Corporation	EXAS	Exact Sciences Corporation provides cancer screening and diagnostic test products in the United States and internationally.
OPKO Health, Inc.	OPK	OPKO Health, Inc., a healthcare company, engages in the diagnostics and pharmaceuticals businesses in the United States, Ireland, Chile, Spain, Israel, Mexico, and internationally.
PerkinElmer, Inc.	PKI	PerkinElmer, Inc. provides products, services, and solutions to the diagnostics, life sciences, and applied services markets worldwide.
Quest Diagnostics Incorporated	DGX	Quest Diagnostics Incorporated provides diagnostic testing, information, and services in the United States and internationally.
Laboratory Corporation of America Holdings	LH	Laboratory Corporation of America Holdings operates as a global life sciences company that provides vital information to help doctors, hospitals, pharmaceutical companies, researchers, and patients make clear and confident decisions.
Myriad Genetics, Inc.	MYGN	Myriad Genetics, Inc., a genetic testing and precision medicine company, develops and commercializes genetic tests in the United States and internationally.
Illumina, Inc.	ILMN	Illumina, Inc. provides sequencing and array-based solutions for genetic and genomic analysis.
Qiagen N.V.	QGEN	QIAGEN N.V. offers sample to insight solutions that transform biological materials into molecular insights worldwide.
Alere Inc.	IQT2622336	Alere Inc. provides diagnostic tests for infectious disease, cardiometabolic disease, and toxicology in the United States and internationally.
Luminex Corporation	IQT2627430	Luminex Corporation develops, manufactures, and sells proprietary biological testing technologies and products for the diagnostics, pharmaceutical, and research industries worldwide.
Abaxis, Inc.	IQT2586525	Abaxis, Inc. develops, manufactures, markets, and sells portable blood analysis systems for use in human or veterinary patient care to provide rapid blood constituent measurements for clinicians worldwide.
CombiMatrix Corporation	IQT36309071	CombiMatrix Corporation provides clinical molecular diagnostic laboratory services in the United States.
Affymetrix Inc.	IQT2587418	Affymetrix, Inc. provides life science products and molecular diagnostic products that enable parallel analysis of biological systems at the gene, protein, and cell level.
Genomic Health, Inc.	IQT24111615	Genomic Health, Inc., a healthcare company, provides clinically actionable genomic information to personalize cancer treatment decisions in the United States and internationally.
Cepheid	IQT2599314	Cepheid, a molecular diagnostics company, develops, manufactures, and markets integrated systems for testing in the clinical and non-clinical markets.
Nanosphere, Inc.	IQT38720096	Nanosphere, Inc. develops, manufactures, and markets molecular diagnostic tests for infectious diseases and associated drug resistance markers for earlier disease detection, optimal patient treatment, and improved healthcare economics.
GenMark Diagnostics, Inc.	IQT106626443	GenMark Diagnostics, Inc. designs and manufactures multiplex molecular diagnostic solutions to enhance patient care, improve quality metrics, and reduce the total cost-of-care for laboratory professionals, healthcare providers, and customers in the United States and internationally.
Bio-Reference Laboratories, Inc.	IQT2594421	Bio-Reference Laboratories, Inc. provides clinical laboratory testing services for the detection, diagnosis, evaluation, monitoring, and treatment of diseases in the United States.

Notes:
Source: S&P Capital IQ.



US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit D.4

Guideline Public Company Ranking
(thousands of USD)

Size (Revenue, millions)		Liquidity (Operating Net Working Capital-to-Revenue)		Liquidity (Current Ratio)	
Quest Diagnostics Incorporated	\$ 7,146,000	Quest Diagnostics Incorporated	3.5%	Exact Sciences Corporation	17.47
Laboratory Corporation of America Holdr	5,808,300	Enzo Biochem, Inc.	8.8%	GenMark Diagnostics, Inc.	10.85
Alera Inc.	2,608,636	Laboratory Corporation of America Holdr	12.0%	Abaxis, Inc.	9.42
PerkinElmer, Inc.	2,157,586	Theranos, Inc. (at 12/31/18)	18.6%	Nanosphere, Inc.	8.17
illumina, Inc.	1,421,178	PerkinElmer, Inc.	20.5%	CombiMatrix Corporation	7.62
Qiagen N.V.	1,301,984	Bio-Reference Laboratories, Inc.	22.2%	Myriad Genetics, Inc.	6.74
Myriad Genetics, Inc.	737,115	Affymetrix Inc.	28.9%	OraSure Technologies, Inc.	6.30
Bio-Reference Laboratories, Inc.	735,368	QuidelOrtho Corporation	30.8%	Luminex Corporation	5.14
Theranos, Inc. (at 12/31/18)	603,452	Cepheid	37.0%	illumina, Inc.	5.02
Cepheid	401,292	Alera Inc.	38.4%	Genomic Health, Inc.	4.86
Affymetrix Inc.	330,399	Genomic Health, Inc.	44.0%	Trinity Biotech plc	3.66
Genomic Health, Inc.	261,595	Qiagen N.V.	44.8%	QuidelOrtho Corporation	3.27
Luminex Corporation	213,423	Myriad Genetics, Inc.	52.5%	Qiagen N.V.	2.73
Abaxis, Inc.	179,781	Luminex Corporation	55.2%	OPKO Health, Inc.	2.64
QuidelOrtho Corporation	177,325	Trinity Biotech plc	61.1%	Cepheid	2.56
OraSure Technologies, Inc.	98,940	Abaxis, Inc.	64.0%	Theranos, Inc. (at 12/31/18)	2.39
OPKO Health, Inc.	96,530	illumina, Inc.	91.2%	Alera Inc.	2.30
Enzo Biochem, Inc.	92,929	OPKO Health, Inc.	156.3%	Affymetrix Inc.	2.28
Trinity Biotech plc	91,216	OraSure Technologies, Inc.	195.9%	Bio-Reference Laboratories, Inc.	2.20
GenMark Diagnostics, Inc.	27,404	CombiMatrix Corporation	218.7%	Laboratory Corporation of America Holdr	1.95
Nanosphere, Inc.	10,002	GenMark Diagnostics, Inc.	268.1%	PerkinElmer, Inc.	1.73
CombiMatrix Corporation	6,267	Nanosphere, Inc.	465.0%	Enzo Biochem, Inc.	1.35
Exact Sciences Corporation	4,144	Exact Sciences Corporation	3081.7%	Quest Diagnostics Incorporated	1.22

Operational Efficiency (Capital Expenditures)		Growth (Historical 1-year Growth Rate)		Growth (Historical 3-year CAGR)	
Enzo Biochem, Inc.	0.9%	OPKO Health, Inc.	105.2%	GenMark Diagnostics, Inc.	120.3%
Affymetrix Inc.	1.5%	Nanosphere, Inc.	97.0%	Nanosphere, Inc.	70.3%
Myriad Genetics, Inc.	1.7%	Theranos, Inc. (at 12/31/18)	56.6%	Theranos, Inc. (at 12/31/18)	64.3%
PerkinElmer, Inc.	1.8%	Myriad Genetics, Inc.	35.2%	OPKO Health, Inc.	50.2%
OraSure Technologies, Inc.	2.5%	GenMark Diagnostics, Inc.	33.9%	Myriad Genetics, Inc.	25.0%
Abaxis, Inc.	3.1%	illumina, Inc.	23.7%	Cepheid	23.6%
Bio-Reference Laboratories, Inc.	3.1%	Cepheid	21.2%	CombiMatrix Corporation	21.5%
Quest Diagnostics Incorporated	3.2%	CombiMatrix Corporation	19.0%	illumina, Inc.	16.3%
Laboratory Corporation of America Holdr	3.5%	Bio-Reference Laboratories, Inc.	15.5%	QuidelOrtho Corporation	16.1%
Alera Inc.	3.8%	QuidelOrtho Corporation	13.9%	Bio-Reference Laboratories, Inc.	15.2%
OPKO Health, Inc.	4.1%	OraSure Technologies, Inc.	12.7%	Luminex Corporation	14.7%
Genomic Health, Inc.	4.2%	Affymetrix Inc.	11.8%	Genomic Health, Inc.	13.7%
CombiMatrix Corporation	4.8%	Genomic Health, Inc.	11.2%	OraSure Technologies, Inc.	9.7%
Trinity Biotech plc	4.9%	Trinity Biotech plc	10.6%	Abaxis, Inc.	8.7%
illumina, Inc.	5.6%	Alera Inc.	8.9%	PerkinElmer, Inc.	8.2%
Qiagen N.V.	5.5%	Luminex Corporation	5.4%	Alera Inc.	6.6%
Luminex Corporation	8.5%	Qiagen N.V.	3.8%	Qiagen N.V.	6.2%
QuidelOrtho Corporation	11.7%	PerkinElmer, Inc.	2.5%	Laboratory Corporation of America Holdr	5.1%
Theranos, Inc. (at 12/31/18)	11.8%	Laboratory Corporation of America Holdr	2.4%	Affymetrix Inc.	2.1%
Cepheid	11.8%	Abaxis, Inc.	0.6%	Trinity Biotech plc	0.6%
Nanosphere, Inc.	14.0%	Quest Diagnostics Incorporated	-3.2%	Quest Diagnostics Incorporated	-0.5%
GenMark Diagnostics, Inc.	15.6%	Enzo Biochem, Inc.	-7.3%	Enzo Biochem, Inc.	-1.8%
		Exact Sciences Corporation		Exact Sciences Corporation	-8.1%

Growth (Forward 1-year Growth Rate)		Profitability (Historical EBITDA Margin 1-year)		Operational Efficiency (Return on Equity)	
Nanosphere, Inc.	97.1%	Theranos, Inc. (at 12/31/18)	46.3%	Myriad Genetics, Inc.	27.2%
Theranos, Inc. (at 12/31/18)	28.0%	Myriad Genetics, Inc.	40.8%	Bio-Reference Laboratories, Inc.	15.3%
Trinity Biotech plc	21.1%	Qiagen N.V.	29.4%	Laboratory Corporation of America Holdr	11.6%
Alera Inc.	16.3%	illumina, Inc.	25.6%	Quest Diagnostics Incorporated	9.7%
illumina, Inc.	17.6%	Alera Inc.	20.9%	Abaxis, Inc.	8.5%
Cepheid	13.8%	Trinity Biotech plc	20.8%	illumina, Inc.	7.3%
QuidelOrtho Corporation	12.7%	Laboratory Corporation of America Holdr	20.7%	PerkinElmer, Inc.	5.7%
Genomic Health, Inc.	9.4%	Quest Diagnostics Incorporated	20.1%	Trinity Biotech plc	5.5%
CombiMatrix Corporation	9.3%	PerkinElmer, Inc.	18.1%	Qiagen N.V.	3.3%
Bio-Reference Laboratories, Inc.	9.0%	QuidelOrtho Corporation	17.4%	Luminex Corporation	2.3%
Luminex Corporation	7.8%	Abaxis, Inc.	17.4%	QuidelOrtho Corporation	1.9%
Abaxis, Inc.	6.5%	Affymetrix Inc.	13.9%	Alera Inc.	1.8%
OPKO Health, Inc.	6.4%	Bio-Reference Laboratories, Inc.	12.7%	Affymetrix Inc.	1.0%
OraSure Technologies, Inc.	5.9%	Luminex Corporation	12.0%	Theranos, Inc. (at 12/31/18)	0.0%
PerkinElmer, Inc.	5.8%	Cepheid	2.1%	Cepheid	-3.4%
Qiagen N.V.	5.3%	Genomic Health, Inc.	-2.1%	Genomic Health, Inc.	-5.5%
Enzo Biochem, Inc.	4.8%	Enzo Biochem, Inc.	-12.1%	OPKO Health, Inc.	-5.8%
Laboratory Corporation of America Holdr	1.9%	OraSure Technologies, Inc.	-14.1%	OraSure Technologies, Inc.	-7.7%
Affymetrix Inc.	1.6%	OPKO Health, Inc.	-59.5%	GenMark Diagnostics, Inc.	-22.1%
Quest Diagnostics Incorporated	0.8%	CombiMatrix Corporation	-84.1%	Exact Sciences Corporation	-24.6%
GenMark Diagnostics, Inc.	-2.2%	GenMark Diagnostics, Inc.	-99.0%	Enzo Biochem, Inc.	-25.1%
Myriad Genetics, Inc.	-3.4%			Nanosphere, Inc.	-43.4%
				CombiMatrix Corporation	-51.6%

US v. Elizabeth Holmes**Exhibit E.1**Valuation of Theranos, Inc.
As of February 7, 2014Adjusted Net Asset Value
(thousands of USD)

	12/31/2013 Unadjusted	Adjustments	Adjusted
Assets:			
Current Assets			
Current Operating Assets			
Cash & Equivalents	[1] \$ 30,966	\$ 120,946	\$ 151,912
Accounts Receivable	-	-	-
Inventory	3,777	-	3,777
Other Current Assets	1,780	-	1,780
Total Current Operating Assets	36,523	120,946	157,469
Total Current Non-Operating Assets	-	-	-
Total Current Assets	36,523	120,946	157,469
Total Fixed Assets - Net	22,021	-	22,021
Other Assets			
Intangible Assets			
Goodwill	-	-	-
Other Intangible Assets	[2] -	340,370	340,370
Total Intangible Assets - Net	-	340,370	340,370
Total Long Term Receivables	-	-	-
Total Other Non-Current Assets	-	-	-
Total Non Current Assets	-	340,370	340,370
Total Assets	\$ 58,543	\$ 461,316	\$ 519,859
Liabilities and Equity:			
Liabilities			
Current Liabilities			
Current Operating Liabilities			
Accounts Payable	\$ 7,430	-	\$ 7,430
Deferred Revenue	7	-	7
Other Current Liabilities	[3] 50,017	(45,187)	4,830
Total Current Operating Liabilities	57,454	(45,187)	12,267
Total Current Debt Obligations	-	-	-
Total Current Liabilities	57,454	(45,187)	12,267
Non Current Liabilities			
Total Long Term Debt	42,386	-	42,386
Other Non Current Liabilities			
Deferred Rent	1,857	-	1,857
Deferred Revenue, LT	3,801	-	3,801
Customer Deposits	80,000	-	80,000
Other Non-current liabilities	1,866	-	1,866
Total Other Non Current Liabilities	87,525	-	87,525
Total Non Current Liabilities	129,911	-	129,911
Total Liabilities	\$ 187,365	\$ (45,187)	\$ 142,178
Total Equity Value - Controlling, Marketable Basis			\$ 377,682
Total Equity Value - Controlling, Marketable Basis (rounded)			\$ 378,000

Notes:

[1] Add Series C-1 and C-2 Preferred Stock proceeds through 2/7/14 that are not on 12/31/13 balance sheet.

[2] Add value of technology and branding assets under cost to recreate method (Exhibit E.2)

[3] Adjust out "miscellaneous receipts" liability that represents proceeds received from 2013 capital raises, for which stock had not been issued yet.

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit E.2
Cost to Recreate Method - Technology and Branding Assets
(USD)

Functional Category	Calendar Year 2008			Calendar Year 2010			Calendar Year 2011		
	Allocation to Technology and Brand [2]		Allocated Cost	Allocation to Technology and Brand [2]		Allocated Cost	Allocation to Technology and Brand [2]		Allocated Cost
	Total Cost [1]	%		Total Cost [1]	%		Total Cost [1]	%	
Salaries, Wages & SBC	\$ 6,717,962	100%	\$ 6,717,962	\$ 7,485,029	100%	\$ 7,485,029	\$ 10,069,033	100%	\$ 10,069,033
Payroll Taxes & Processing	483,606	100%	483,606	568,593	100%	568,593	784,642	100%	784,642
Health Insurance	417,083	100%	417,083	493,926	100%	493,926	767,508	100%	767,508
Other benefits	114,239	100%	114,239	180,253	100%	180,253	773,318	100%	773,318
Sales Commissions	5,000	0%	-	-	0%	-	-	0%	-
Subtotal Employees	\$ 7,737,890		\$ 7,737,890	\$ 8,727,402		\$ 8,727,402	\$ 12,394,591		\$ 12,394,591
Contractor Services	488,192	100%	488,192	518,786	100%	518,786	1,637,549	100%	1,637,549
Subtotal for All Labor Costs	\$ 8,226,082		\$ 8,226,082	\$ 9,246,188		\$ 9,246,188	\$ 14,032,050		\$ 14,032,050
Facility Costs	\$ 2,145,779	99.9%	\$ 2,144,392	\$ 2,064,230	100.0%	\$ 2,064,230	\$ 2,724,300	100.0%	\$ 2,724,300
R&D Materials, Parts, Biological Compounds	935,138	100%	935,138	3,786,184	100%	3,786,184	5,955,745	100%	5,955,745
Conf. Website, Market Studies, Trademark Costs	56,925	100%	56,925	75,422	100%	75,422	13,452	100%	13,452
Legal, Tax, Accounting Services - General	120,697	50%	60,349	284,805	50%	142,303	339,185	50%	169,583
Legal Regulatory and Patents Costs	313,058	100%	313,058	492,136	100%	492,136	1,307,265	100%	1,307,265
Legal Costs for Litigation	-	0%	-	-	0%	-	865,895	0%	-
Expensed Equip., Software, and Maintenance	148,010	100%	148,010	226,101	100%	226,101	620,302	100%	620,302
Dues, Subscriptions, Licenses and Supplies	85,853	100%	85,853	233,858	100%	233,858	447,386	100%	447,386
Recruiting Costs	192,343	99.9%	192,219	212,706	100.0%	212,706	300,466	100.0%	300,466
Travel Expenses	226,711	50%	113,355	154,949	50%	77,474	396,822	50%	198,411
Interest (Income), Expense & Bank Charges	109,143	0%	-	70,077	0%	-	(132,632)	0%	-
Supporting G&A Expenses	274,158	99.9%	273,981	361,955	100.0%	361,955	455,201	100.0%	455,201
Relocation Expenses	27,220	0%	-	5,272	0%	-	65,194	0%	-
Supplies for Manufacturing / Operations	754,146	100%	754,146	432,293	100%	432,293	77,929	100%	77,929
Inventory	-	100%	-	(13,583)	100%	-	(5,337)	100%	(5,337)
Capital Expenditures	180,627	100%	180,627	1,635,110	100%	1,635,110	3,042,848	100%	3,042,848
Other Costs	17,441	0%	-	17,845	0%	-	15,927	0%	-
Subtotal for Indirect Costs	\$ 5,889,248		\$ 5,260,052	\$ 10,040,161		\$ 9,738,772	\$ 16,290,629		\$ 15,307,450
Inflation Adjusted Total Expenses [4]	2.3%	Yrs 4.61	\$ 14,983,679	2.3%	Yrs 3.61	\$ 20,623,946	2.3%	Yrs 2.61	\$ 31,148,641

Functional Category	Calendar Year 2012			Calendar Year 2013			Calendar Year 2014		
	Allocation to Technology and Brand [2]		Allocated Cost	Allocation to Technology and Brand [2]		Allocated Cost	Allocation to Technology and Brand [2]		Allocated Cost
	Total Cost [1]	%		Total Cost [1]	%		Total Cost [1]	%	
Salaries, Wages & SBC	\$ 20,238,277	100%	\$ 20,238,277	\$ 29,829,686	100%	\$ 29,829,686	\$ 46,389,000	8%	\$ 3,864,083
Payroll Taxes & Processing	1,561,634	100%	1,561,634	2,246,298	100%	2,246,298	3,450,000	8%	287,500
Health Insurance	1,429,986	100%	1,429,986	2,161,519	100%	2,161,519	3,325	8%	277
Other benefits	2,374,572	100%	2,374,572	3,255,991	100%	3,255,991	8,112,675	8%	676,056
Sales Commissions	-	0%	-	78	0%	-	312,000	0%	-
Subtotal Employees	\$ 25,604,469		\$ 25,604,469	\$ 37,483,572		\$ 37,483,494	\$ 58,247,000		\$ 4,827,917
Contractor Services	3,073,543	100%	3,073,543	5,372,096	100%	5,372,096	7,885,000	8%	657,083
Subtotal for All Labor Costs	\$ 28,678,011		\$ 28,678,011	\$ 42,855,668		\$ 42,855,590	\$ 66,132,000		\$ 5,485,000
Facility Costs	\$ 7,375,865	100.0%	\$ 7,375,865	\$ 7,140,622	100.0%	\$ 7,140,617	\$ 16,776,000	8%	\$ 1,390,512
R&D Materials, Parts, Biological Compounds	11,136,524	100%	11,136,524	10,069,736	100%	10,069,736	10,638,000	8%	866,500
Conf. Website, Market Studies, Trademark Costs	1,274,910	100%	1,274,910	7,654,778	100%	7,684,778	3,087,000	8%	257,250
Legal, Tax, Accounting Services - General	1,400,908	50%	700,454	709,756	50%	354,878	1,051,000	4%	43,792
Legal Regulatory and Patents Costs	1,750,963	100%	1,750,963	1,913,373	100%	1,913,373	2,199,000	8%	183,250
Legal Costs for Litigation	1,829,174	0%	-	8,197,019	0%	-	3,869,000	0%	-
Expensed Equip., Software, and Maintenance	1,084,748	100%	1,084,748	1,657,745	100%	1,657,745	1,792,000	8%	149,333
Dues, Subscriptions, Licenses and Supplies	1,211,873	100%	1,211,873	1,522,924	100%	1,522,924	3,583,000	8%	298,583
Recruiting Costs	796,875	100.0%	796,875	552,947	100.0%	552,946	1,147,000	8%	95,071
Travel Expenses	267,524	50%	133,762	787,042	50%	393,521	1,170,000	4%	48,750
Interest (Income), Expense & Bank Charges	143,830	0%	-	382,053	0%	-	(27,000)	0%	-
Supporting G&A Expenses	934,674	100.0%	934,674	1,185,138	100.0%	1,185,135	2,335,000	8%	193,541
Relocation Expenses	65,756	0%	-	24,763	0%	-	43,000	0%	-
Supplies for Manufacturing / Operations	855,721	100%	855,721	1,574,094	100%	1,574,094	1,992,000	0%	-
Inventory	6,865,924	100%	6,865,924	1,742,894	100%	1,742,894	1,145,000	8%	95,417
Capital Expenditures	17,572,491	100%	17,572,491	8,864,769	100%	8,884,769	38,594,066	8%	3,216,172
Other Costs	90,432	0%	-	(44,941)	0%	-	30,000	0%	-
Subtotal for Indirect Costs	\$ 54,657,993		\$ 51,694,585	\$ 51,984,722		\$ 44,677,410	\$ 89,414,056		\$ 6,858,171
Inflation Adjusted Total Expenses [2]	2.3%	Yrs 1.61	\$ 83,390,064	2.3%	Yrs 0.61	\$ 86,771,777	2.3%	Yrs 0	\$ 12,343,171

2004-2006 Expenses, Inflation Adjusted [4]	\$ 23,743,086
2007 Expenses, Inflation Adjusted [5]	20,247,539
2008 Expenses, Inflation Adjusted [5]	15,187,171
2009-2014 Expenses, Inflation Adjusted	251,261,278
Total Direct and Indirect Development Costs	\$ 310,439,074
Obsolescence Adjustment [6]	4% (11,871,543)
Subtotal Cost	\$ 298,567,531
Add Developer Profit Margin [7]	14% 41,799,454
Total Pretax Development Cost	\$ 340,366,985
Total Pretax Development Cost (Rounded)	\$ 340,370,000

Notes
 [1] Per company prepared trial balances.
 [2] Allocations based on relevance of costs to developing Theranos technology and branding assets. 2014 is adjusted for partial period to valuation date.
 [3] Adjust allocated expenses for average annual inflation of 2.3% over historical period.
 [4] 2004 - 2006 expenses based on retained earnings deficit at 12/31/07 less operating loss reported for calendar year 2007. Expenses are adjusted for inflation of 2.3% from midpoint of period to valuation date.
 [5] 2007 - 2008 expenses based on audited financial statements. Excludes financing costs and interest income. Expenses are adjusted for inflation of 2.3% from midpoint of each period to valuation date.
 [6] Adjusted for estimated 50% of historical development efforts between 2004-2006 that represent obsolete technology on valuation date.
 [7] Developer margin based on median EBIT margin of peer group of firms in Exhibit D.2.

US v. Elizabeth Holmes
 Valuation of Theranos, Inc.
 As of December 31, 2014

Exhibit F.1

Discounted Cash Flow Key Assumptions
 (thousands of USD)

	Basis	For the Twelve Month Period Ending December 31,			
		2015	2016	2017	2018
Total Revenue	Annual Growth Rate	97703.4%	97.0%	44.8%	55.6%
Terminal Value	Exit Multiple, Ex. G.1				4.0%
Total Cost of Revenue	% of Revenue	35.0%	32.0%	32.0%	30.0%
Total Operating Expenses	% of Revenue	85.5%	44.7%	33.7%	24.7%
Depreciation & Amortization	Exhibit F.3	9.3%	6.9%	7.0%	6.0%
Interest Expense	N/A	N/A	N/A	N/A	N/A
Income Taxes	% of Pre-Tax Net Income	40.0%	40.0%	40.0%	40.0%
Adjusted Operating Working Capital	Exhibit F.2	4.0%	10.5%	14.8%	18.6%
Adjusted Operating Working Capital		4,593	23,523	47,806	93,778
Yr/yr Working Capital (Increase)/Reduction		299,343	(18,930)	(24,283)	(45,972)
Capital Expenditures	% of Revenue	29.2%	20.6%	20.3%	11.8%

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of December 31, 2014

Exhibit F.2

Adjusted Working Capital Analysis
(thousands of USD)

Working Capital	FYE	FYE	FYE	FYE	FYE	FYE	For the Twelve Month Period Ending December 31,			
	12-31-09	12-31-10	12-31-11	12-31-12	12-31-13	12-31-14	2015	2016	2017	2018
Total Revenue	(1) \$ 2,794	\$ 1,401	\$ 518	\$ -	\$ -	\$ 116	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452
Total COS	-	-	-	-	-	-	39,708	71,505	103,505	151,036
Total Operating Expenses	13,597	16,801	27,173	64,015	85,605	122,756	97,025	99,961	108,977	124,401
Operating Assets										
Cash & Equivalents	(2) \$ 3,690	\$ 36,718	\$ 88,056	\$ 51,785	\$ 30,966	\$ 465,933	\$ 47,848	\$ 49,296	\$ 53,742	\$ 61,348
Accounts Receivable	29	55	-	-	-	-	-	-	-	-
Inventory	581	-	-	1,733	3,777	2,383	3,404	6,704	9,704	15,104
Other Current Assets	195	827	665	1,882	1,780	12,788	4,838	5,080	5,334	5,601
Note Receivable	-	-	-	-	-	27,045	57,539	50,055	42,303	58,453
Total Operating Assets	4,495	37,600	88,721	55,401	36,523	508,149	113,629	111,135	111,083	140,506
Operating Liabilities										
Accounts Payable	560	440	1,238	7,669	7,430	16,633	13,879	16,480	16,174	22,774
Deferred Revenue	1,663	257	7	7	7	-	-	-	-	-
Other Current Liabilities	950	1,298	2,845	7,714	4,830	9,984	7,073	8,265	9,453	11,521
Deferred Rent	723	759	767	1,572	1,857	-	-	-	-	-
Deferred Revenue, LT	2,146	3,808	3,801	3,801	3,801	-	-	-	-	-
Customer Deposits	-	-	73,500	69,500	80,000	143,846	70,356	46,904	23,452	-
Other Non-current liabilities	807	1,847	5,959	3,425	1,866	33,750	17,728	15,963	14,198	12,433
Total Operating Liabilities	6,849	8,409	88,117	93,687	99,791	204,213	109,036	87,612	63,277	46,728
Net Operating Working Capital	\$ (2,354)	\$ 29,191	\$ 604	\$ (38,287)	\$ (63,268)	\$ 303,936	\$ 4,593	\$ 23,523	\$ 47,806	\$ 93,778
Net Operating Working Capital as % of Revenue	-84.3%	2083.1%	116.6%	0.0%	0.0%	262013.8%	4.0%	10.5%	14.8%	18.6%
Yrlyr Working Capital (Increase)/Reduction	-	(31,545)	28,587	38,891	24,981	(367,204)	299,343	(18,930)	(24,283)	(45,972)
BizMiner Working Capital as a % of Revenue							22.8%			
RMA Working Capital as a % of Revenue							35.1%			
Comparable Group Working Capital as a % of Revenue							58.0%			
Days' Operating Expenses in Cash	99	798	1,183	295	132	1,385	180	180	180	180
Days' Sales Outstanding	4	14	-	-	-	-	-	-	-	-
Days' Inventory	-	-	-	-	-	-	31	34	34	37
Other Current Assets as a % of Revenue	7.0%	59.0%	128.4%	0.0%	0.0%	11024.1%	4.3%	2.3%	1.6%	1.1%
Note Receivable as a % of Revenue	0.0%	0.0%	0.0%	0.0%	0.0%	23314.7%	50.7%	22.4%	13.1%	11.6%
Days' Payables	-	-	-	-	-	-	128	84	57	55
Deposits & Deferred Revenue as a % of Revenue	136.3%	290.1%	14917.2%	0.0%	0.0%	124005.2%	62.0%	21.0%	7.3%	0.0%
Other Current Liabilities as a % of Opex	7.0%	7.7%	10.5%	12.1%	5.6%	8.1%	7.3%	8.3%	8.7%	9.3%
Deferred Rent as a % of Opex	5.3%	4.5%	2.8%	2.5%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Non-current liabilities as a % of Opex	5.9%	11.0%	21.9%	5.4%	2.2%	27.5%	18.3%	16.0%	13.0%	10.0%

Notes:

[1] Historical balances are per Adjusted Income Statement. Refer to Exhibit B.5. Operating Expenses exclude Depreciation & Amortization.

[2] Estimated operating cash levels equal to 6 months of operating expenses

US v. Elizabeth Holmes**Exhibit F.3**Valuation of Theranos, Inc.
As of December 31, 2014Depreciation & Capital Expenditure Analysis
(thousands of USD)

Forecast Depreciation	For the Twelve Month Period Ending December 31,				
	2015	2016	2017	2018	
Total Revenue	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452	
Beginning Balance - Total Fixed Assets	53,366	75,963	106,437	149,519	
Capital Expenditures	33,134	45,970	65,569	59,240	
Fixed Assets	86,500	121,933	172,006	208,759	
Capital Expenditures as a % of Revenue	29.21%	20.57%	20.27%	11.77%	
Depreciation					
Assumptions as to Depreciable Lives:					
Beg. Dep. Existing Fixed Assets - avg life	6.3				
Capital Additions - avg life	8.0				
Beginning Balance	\$ 8,460	\$ 8,460	\$ 8,460	\$ 8,460	
2015 Additions	2,077	4,154	4,154	4,154	
2016 Additions		2,881	5,763	5,763	
2017 Additions			4,110	8,220	
2018 Additions				3,713	
Total Depreciation	\$ 10,537	\$ 15,496	\$ 22,487	\$ 30,310	
As a % of Revenue	9.3%	6.9%	7.0%	6.0%	
Net Fixed Assets	\$ 75,963	\$ 106,437	\$ 149,519	\$ 178,448	
As a % of Revenue	67.0%	47.6%	46.2%	35.4%	
Historical Capital Expenditure Analysis	FYE	FYE	FYE	FYE	FYE
	12-31-10	12-31-11	12-31-12	12-31-13	12-31-14
Net FA	2,630	4,648	19,557	22,021	53,366
Chg from PY	N/A	2,018	14,909	2,463	31,345
Depreciation	771	1,025	2,654	5,573	7,247
(Gain)/Loss	-	-	9	849	1
Capital Expenditures	N/A	3,043	17,572	8,885	38,594
	Average				
Fixed Assets	20,444	2,630	4,648	19,557	22,021
Fixed Assets as a % of Revenue	5021.8%	187.7%	896.9%	N/A	N/A
Capital Expenditures	17,024	N/A	3,043	17,572	8,885
Capital Expenditures as a % of Revenue	4181.6%	N/A	587.1%	N/A	N/A



US v. Elizabeth Holmes
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 As of December 31, 2014

Exhibit F.4
 Discount Rate - Venture Capital Rates of Return

Company Name	Ticker Symbol	Market Capitalization	Interest Bearing Debt	Trading Volume (7)	LTM Revenue	1-Year Growth Rate	Equity as a % of Total Capital
DraSura Technologies, Inc.	DSUR	\$ 568,416	\$ -	641	\$ 106,464	7.6%	100.0%
Trinity Biotech plc	TRIG	392,493	-	135	104,872	15.0%	100.0%
Enzo Biochem, Inc.	ENZ	218,928	4,038	188	96,637	4.8%	98.2%
QuidelOrthe Corporation	QDEL	995,160	143,094	302	184,158	3.9%	87.4%
Exact Sciences Corporation	EKAS	2,430,718	3,760	1,974	1,798	-56.6%	98.8%
OPKO Health, Inc.	OPK	4,337,104	147,343	2,446	91,125	-5.6%	95.7%
PerkinElmer, Inc.	PKI	4,939,852	1,046,468	1,017	2,089,880	-4.1%	82.5%
Quest Diagnostics Incorporated	DGX	8,892,486	3,770,000	1,637	7,435,000	4.0%	92.0%
Laboratory Corporation of America Holdings	LH	9,117,550	3,029,800	1,264	6,011,800	3.5%	75.1%
Myriad Genetics, Inc.	MYGN	2,485,880	-	749	724,873	-1.7%	100.0%
Illumina, Inc.	ILMN	26,210,360	1,291,036	1,158	1,861,358	31.0%	95.3%
Qiagen N.V.	QGEN	5,425,829	1,173,204	705	1,344,777	3.3%	82.2%
Alere Inc.	IQT2623336	3,175,128	3,729,094	493	2,577,001	-1.2%	46.0%
Luminex Corporation	IQT2627430	803,551	-	243	226,993	6.4%	100.0%
Abaxis, Inc.	IQT2586525	1,280,721	605	202	162,777	1.7%	100.0%
CombiMatrix Corporation	IQT36309071	14,271	405	7	8,042	26.3%	97.2%
Affymetrix Inc.	IQT2587418	726,274	127,950	703	349,019	5.6%	85.0%
Genomic Health, Inc.	IQT24111615	1,014,152	-	151	275,706	5.4%	100.0%
Cepheid	IQT2599314	3,815,841	278,213	620	470,141	17.2%	93.2%
Nanosphere, Inc.	IQT38720096	45,675	9,716	117	14,290	42.9%	82.5%
GenMark Diagnostics, Inc.	IQT106626443	568,004	-	185	30,594	11.6%	100.0%
Bio-Reference Laboratories, Inc.	IQT2594421	890,901	55,429	212	632,282	16.3%	94.1%
Average		3,597,694	673,052	689	1,136,335	8.2%	90.3%
Median		1,147,437	32,573	556	251,345	5.1%	96.0%
Selected							97.0%

Industry Capital Structure

Equity	95.0%
Interest Bearing Debt	5.0%
Tax Rate	40.0%

Cost of Equity

Table 1: Venture Capital Average Actual Rates of Return for the Period ended September 30, 2008

Stage of Development	5-year Return		10-year Return		20-year Return	
	2002	2008	2002	2008	2002	2008
Seed/Early Stage	51.4%	3.0%	34.5%	25.5%	20.4%	22.1%
Balanced	20.9%	7.5%	20.9%	12.0%	14.3%	14.6%
Later Stage	10.6%	6.1%	21.6%	7.3%	15.3%	14.7%
All Ventures	28.3%	5.7%	26.3%	13.4%	16.6%	17.2%

Table 2: Target Rates of Return

Stage of Development	Plummer	Scherlis and Sahlman		Everett	Everett Median Returns
		Scherlis and Sahlman	Sahlman, Stevenson, and Bhide		
Start-up	50% - 70%	50% - 70%	50% - 100%	30% - 40%	33.0%
First stage or "early development"	40% - 60%	40% - 60%	40% - 60%	23% - 38%	28.0%
Second stage or "expansion"	35% - 50%	30% - 50%	30% - 40%	19% - 32%	25.0%
Bridge/IPO	25% - 35%	20% - 35%	20% - 30%	18% - 38%	25.0%

Table 3: Target Rates of Return

Stage of Development	Ruhka / Young	Wetzel	Plummer / Qed Range of Discount Rates Used	
			High	Low
Seed	73.0%	50.0%	75.4%	49.2%
Start-up	54.8%	50.0%	59.6%	40.6%
3rd Stage	42.2%	37.5%	49.3%	34.7%
Fourth Stage	35.0%	30.0%	45.7%	31.2%
Exit Stage	35.0%	22.5%	40.8%	28.1%

Table 4: Theranos Investor Forecasts Implied Internal Rates of Return (Feb 2014 - Feb 2015)

Investor Group	IRR
PFM Forecast	75.6%
PFM Model	35.5%
Mosley and RDV Forecast	54.0%
Murdoch Forecast	82.0%

Selected Venture Capital Cost of Equity 45.0%

Weighted Average Cost of Capital

Equity as a % of total capital	95.0%	
Cost of Equity (above)	45.0%	
Weighted Cost of Equity		42.8%
Debt as a % of total capital		5.0%
Cost of Debt (4)	25.00%	
After Tax Cost of Debt (tax rate above)		15.0%
Weighted After Tax Cost of Debt		0.8%
Weighted Average Cost of Capital		<u>43.5%</u>
Weighted Average Cost of Capital (rounded)		<u>44.0%</u>

Notes:

- Source: Thomson Financial. The average annual return is based upon Thomson Financials' Private Equity Performance Index (PEPI). The PEPI is based on the latest quarterly statistics from Thomson Financials' Private Equity Performance Database analyzing the cashflows and returns for over 1400 US venture capital and private equity partnerships.
- Plummer, James L., QED Report on Venture Capital Financial Analysis.
- Scherlis, Daniel R. and William A. Sahlman, "A Method for Valuing High-Risk, Long Term, Investments: The Venture Capital Method," Harvard Business School Teaching Note 9-288-006, Boston: Harvard Business School Publishing, 1989.
- William A. Sahlman, Howard H. Stevenson, Amar V. Bhide, et al., "Financing Entrepreneurial Ventures," Business Fundamental Series (Boston: Harvard Business School Publishing, 1998).
- Craig R. Everett, "2021 Private Capital Markets Report" (Malibu: Pepperdine University Graziadio School of Business and Management, 2021), Table 1, p. 5. Note that this publication also includes rates of return for many other types of private capital investments, as well as summaries of other information captured in Pepperdine's annual industry survey.
- Doissey, Terry, "A Portfolio Model for Venture Capital Performance Measurement and Investment Selection," Polaris Group, Inc. January 2000.
- Refer to the report for discussion of the selected Venture Capital Rate of Return.

US v. Elizabeth Holmes**Exhibit F.5**

Valuation of Theranos, Inc.

Forecast Free Cash Flow to Invested Capital

As of December 31, 2014

(thousands of USD)

	For the Twelve Month Period Ending December 31,			
	2015	2016	2017	2018
Total Revenue	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452
Total Cost of Revenue	39,708	71,505	103,505	151,036
Gross Margin	73,744	151,947	219,947	352,416
GM %	65.0%	68.0%	68.0%	70.0%
Total Operating Expenses	97,025	99,961	108,977	124,401
Operating Expense %	85.5%	44.7%	33.7%	24.7%
EBITDA	(23,281)	51,986	110,970	228,015
EBITDA %	-20.5%	23.3%	34.3%	45.3%
Less: Partial Period Adjustment	-	-	-	-
Adjusted EBITDA	(23,281)			
Depreciation & Amortization	10,537	15,496	22,487	30,310
EBIT	(33,818)	36,490	88,483	197,705
EBIT %	-29.8%	16.3%	27.4%	39.3%
Interest Expense	-	-	-	-
Earnings Before Taxes	(33,818)	36,490	88,483	197,705
Income Taxes	-	-	-	32,350
Forecast After-Tax Income	\$ (33,818)	\$ 36,490	\$ 88,483	\$ 165,354
NPAT %	-29.8%	16.3%	27.4%	32.8%
Cash Flow				
Add: Depreciation & Amortization	10,537	15,496	22,487	30,310
After-Tax Gross Cash Flow	(23,281)	51,986	110,970	195,665
Decrease / (Increase) in Working Capital	299,343	(18,930)	(24,283)	(45,972)
Less: Capital Expenditures	(33,134)	(45,970)	(65,569)	(59,240)
Free Cash Flow	\$ 242,928	\$ (12,914)	\$ 21,118	\$ 90,453



US v. Elizabeth Holmes**Exhibit F.6**Valuation of Theranos, Inc.
As of December 31, 2014Discounted Cash Flow Method Value Summary
(thousands of USD)

<u>Forecast Period</u>	<u>Base Cash Flow</u>	<u>Period</u>	<u>Discount Rate</u>	<u>PV Factor [2]</u>	<u>Discounted Cash Flow [3]</u>
2015	\$ 242,928	0.50	44.0%	0.8334	\$ 202,464
2016	(12,914)	1.50	44.0%	0.5788	(7,475)
2017	21,118	2.50	44.0%	0.4020	8,489
2018	90,453	3.50	44.0%	0.2791	25,250
Terminal Value [1]	3,282,000	4.00	44.0%	0.2326	763,471
Indicated Value					\$ 992,199
Add: C-2 Financing Proceeds					-
Deduct: Interest Bearing Debt					(40,805)
Add: Other non-operating assets					-
Total Equity Value - Controlling, Marketable Basis					\$ 951,394
Total Equity Value - Controlling, Marketable Basis (rounded)					\$ 951,000

Notes:

[1] Refer to Exhibit G.1

[2] $1 / (1 + \text{Discount Rate}) ^ \text{Period}$.

[3] Base Cash Flow x PV Factor.

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of December 31, 2014

Exhibit G.1
Guideline Public Company Method
(Thousands of USD)

Name	Ticker	Market Cap	Debt, Pref Shr & Min Int.	Cash	MVIC [1]	Revenue		EBITDA		EBIT	Market Value of Invested Capital /							
						LTM		2015E		LTM	2015E		LTM	Revenue		EBITDA		EBIT
						LTM	2015E	LTM	2015E	LTM	LTM	2015E	LTM	2015E	LTM	2015E	LTM	
OraSure Technologies, Inc.	OSUR	\$ 568,416	\$ -	\$ 97,867	\$ 470,549	\$ 108,464	\$ 121,370	\$ (3,995)	\$ 9,167	\$ (10,302)	4.42x	3.88x	NA	51.33x	NA			
Trinity Biotech plc	TRIB	392,493	-	9,102	363,391	104,872	113,729	19,933	28,853	15,438	3.66x	3.37x	19.23x	13.29x	24.83x			
Enzo Biochem, Inc.	ENZ	218,928	4,038	16,591	206,375	96,637	104,929	(8,660)	NA	(12,544)	2.14x	1.97x	NA	NA	NA			
QuidelOrino Corporation	QDEL	995,160	143,084	200,895	937,349	184,156	204,235	20,540	37,389	(6,560)	5.09x	4.59x	45.84x	25.07x	NA			
Exact Sciences Corporation	EXAS	2,430,718	3,760	262,756	2,151,722	78,142	(96,829)	(98,942)	(100,539)	NA	27.54x	NA	NA	NA	NA			
OPKO Health, Inc.	OPK	4,337,104	140,940	96,907	4,381,137	91,125	136,930	(94,367)	(102,500)	(109,314)	48.08x	32.00x	NA	NA	NA			
PerkinElmer, Inc.	PKI	4,939,852	1,046,466	174,821	5,811,499	2,089,880	2,339,190	291,561	466,729	181,096	2.81x	2.46x	19.93x	12.45x	32.05x			
Quest Diagnostics Incorporated	DGX	9,692,466	3,799,000	192,000	13,299,466	7,435,000	7,571,861	1,433,000	1,507,392	1,119,000	1.79x	1.76x	9.28x	8.82x	11.89x			
Laboratory Corporation of America Holdings	LH	9,117,550	3,047,500	580,000	11,585,050	6,011,600	6,532,839	1,152,500	1,262,404	945,500	1.93x	1.77x	10.05x	9.05x	12.25x			
Mynad Genetics, Inc.	MYGN	2,485,860	-	165,115	2,320,765	724,873	879,860	191,786	258,525	170,797	3.20x	2.84x	12.10x	8.98x	13.59x			
Illumina, Inc.	ILMN	26,210,360	1,291,036	1,338,371	26,163,025	1,881,356	2,260,107	604,746	767,868	492,172	14.05x	11.58x	43.26x	34.07x	53.16x			
Qiagen N.V.	QGEN	5,425,828	1,181,459	576,703	6,030,584	1,344,777	1,424,763	395,375	482,240	200,793	4.48x	4.23x	15.25x	12.51x	30.03x			
Alere Inc.	IQT262336	3,175,128	4,336,708	379,720	7,133,118	2,577,001	2,773,166	505,722	569,942	169,693	2.77x	2.57x	14.10x	12.52x	42.04x			
Luminex Corporation	IQT2627430	803,551	-	91,894	711,857	226,983	243,469	45,424	52,461	31,219	3.14x	2.92x	15.67x	13.57x	23.80x			
Abaxis, Inc.	IQT2586525	1,280,721	605	109,278	1,172,048	182,777	229,201	43,819	45,639	36,400	8.41x	5.11x	26.75x	25.68x	32.20x			
CombiMatrix Corporation	IQT36309071	14,271	405	5,240	9,436	6,042	10,972	(6,137)	NA	(6,454)	1.17x	0.86x	NA	NA	NA			
Allymetrix Inc.	IQT2587418	726,274	127,950	79,923	774,301	349,019	357,448	42,566	50,812	11,889	2.22x	2.17x	16.19x	15.24x	65.13x			
Genomic Health, Inc.	IQT24111615	1,014,152	-	103,690	910,482	275,706	311,059	(16,757)	(9,280)	(23,627)	3.30x	2.93x	NA	NA	NA			
Cepheid	IQT2599314	3,815,841	278,213	293,392	3,800,662	470,141	543,880	12,257	22,071	(14,066)	8.08x	8.99x	NA	NA	NA			
Nanosphere, Inc.	IQT38720096	45,675	9,719	21,053	34,338	23,424	(35,822)	(31,355)	(37,690)	(27,690)	2.40x	1.47x	NA	NA	NA			
GenMark Diagnostics, Inc.	IQT106626443	568,004	-	70,506	497,498	30,594	38,324	(36,398)	(46,700)	(39,054)	16.26x	12.98x	NA	NA	NA			
Bio-Reference Laboratories, Inc.	IQT2594421	890,901	55,429	17,507	928,823	832,282	978,442	108,589	NA	83,425	1.12x	0.95x	8.55x	NA	11.13x			
Correlation to MVIC						0.63	0.65	0.68	0.73	0.66								
Correlation to Price						0.50	0.53	0.56	0.61	0.57								

Upper Quartile	5.09x	4.98x	19.93x	25.07x	34.86x
Mean	8.60x	6.22x	19.85x	18.66x	29.26x
Median	3.20x	2.93x	15.67x	13.25x	27.43x
Lower Quartile	2.22x	2.02x	12.10x	12.45x	13.25x
Selected Multiple	6.60x		13.90x		
Subject Company Base Value	\$ 503,452	\$ -	\$ 226,015	\$ -	\$ -
Indicated Value	3,322,783		3,169,409		
Interest Bearing Debt	N/A	N/A	N/A	N/A	N/A
Indicated Equity Value	\$ 3,322,783	\$ -	\$ 3,169,409	\$ -	\$ -
Weighting	33.3%	0.0%	66.7%	0.0%	0.0%
Indicated Value					\$ 3,220,633
Add: Subject Company Cash					61,348
Total Invested Capital Value at 12/31/18 Exit - Controlling, Marketable Basis					\$ 3,281,982
Total Invested Capital Value at 12/31/18 Exit - Controlling, Marketable Basis (rounded)					\$ 3,282,000

Notes:
Source: S&P Capital IQ
[1] MVIC = Market Value of Invested Capital. Presented as net of cash.

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Valuation of Theranos, Inc.
As of December 31, 2014

Exhibit G.2

Guideline Public Company Key Financial Ratios
(thousands of USD)

Name	Ticker	Market Cap	Trading Volume [1]	LTM Revenue	CAGR Revenue [2]		Forward Growth			As a % of Revenue					Current Ratio	Debt to Equity	Debt to TNW
					1 Year	3 Year	2015E	2016E	2017E	GM	EBITDA	EBIT	Capex	WC [3]			
OraSure Technologies, Inc.	OSUR	\$ 568,416	641	\$ 106,464	7.6%	9.1%	14.0%	13.4%	44.6%	62.6%	-3.8%	-9.7%	2.8%	190.3%	4.96	0.0%	0.0%
Trinity Biotech plc	TRIB	392,493	135	104,872	15.0%	10.4%	8.4%	9.5%	NA	47.1%	19.0%	14.7%	7.9%	44.7%	3.13	0.0%	0.0%
Enzo Biochem, Inc.	ENZ	218,928	188	96,637	4.8%	-1.8%	8.6%	7.4%	8.1%	43.6%	-9.0%	-13.0%	0.8%	15.8%	1.62	11.2%	19.1%
QuidelOrtho Corporation	QDEL	995,160	302	184,158	3.9%	5.1%	10.9%	8.7%	6.3%	59.2%	11.2%	-3.6%	6.1%	129.3%	7.54	58.4%	116.9%
Exact Sciences Corporation	EXAS	2,430,718	1,974	1,798	-56.6%	-24.4%	N/A	189.9%	68.1%	-140.5%	N/A	-5591.7%	N/A	#####	16.65	1.3%	1.3%
OPKO Health, Inc.	OPK	4,337,104	2,446	91,125	-5.6%	48.2%	50.3%	141.4%	178.9%	3.5%	-103.6%	-120.0%	5.2%	65.6%	1.72	17.6%	-60.3%
PerkinElmer, Inc.	PKI	4,939,852	1,017	2,069,880	-4.1%	2.6%	13.0%	4.5%	4.2%	45.3%	14.1%	8.7%	1.3%	22.8%	1.79	51.2%	-142.9%
Quest Diagnostics Incorporated	DGX	9,692,466	1,637	7,435,000	4.0%	0.2%	1.8%	2.3%	4.6%	38.3%	19.3%	15.1%	4.1%	-1.4%	0.94	87.1%	-136.0%
Laboratory Corporation of America Holdi	LH	9,117,550	1,264	6,011,600	3.5%	2.7%	8.7%	0.0%	0.8%	36.6%	19.2%	15.7%	3.4%	11.9%	1.73	106.8%	-174.4%
Myriad Genetics, Inc.	MYGN	2,485,880	749	724,873	-1.7%	17.8%	21.4%	-3.7%	6.5%	62.0%	26.5%	23.6%	3.3%	35.9%	5.35	0.0%	0.0%
illumina, Inc.	ILMN	26,210,360	1,158	1,861,358	31.0%	20.8%	21.4%	19.9%	14.9%	71.8%	32.5%	26.4%	5.7%	62.7%	2.62	88.3%	304.9%
Qiagen N V	QGEN	5,425,828	705	1,344,777	3.3%	4.8%	5.9%	7.2%	7.5%	66.3%	29.4%	14.9%	6.4%	53.3%	2.66	44.1%	2720.7%
Alere Inc.	IQT2622336	3,175,128	493	2,577,001	-1.2%	2.6%	7.6%	1.8%	NA	47.5%	19.6%	6.6%	3.9%	41.1%	2.37	194.4%	-159.9%
Luminex Corporation	IQT2627430	803,551	243	226,983	6.4%	7.2%	7.3%	10.0%	10.9%	71.0%	20.0%	13.8%	7.5%	64.6%	5.83	0.0%	0.0%
Abaxis, Inc.	IQT2586525	1,280,721	202	182,777	1.7%	6.5%	25.4%	13.0%	NA	56.0%	24.0%	19.9%	3.4%	85.5%	8.12	0.3%	0.3%
CombitMatrix Corporation	IQT36309071	14,271	7	8,042	26.3%	20.0%	36.4%	39.6%	29.2%	44.9%	-76.3%	-80.3%	2.6%	82.6%	6.19	5.7%	5.7%
Alfymetrix Inc.	IQT2587418	726,274	703	349,019	5.6%	9.3%	2.4%	4.0%	2.6%	60.3%	12.2%	3.4%	2.3%	35.6%	2.87	47.0%	1283.9%
Genomic Health, Inc.	IQT24111615	1,014,152	151	275,706	5.4%	10.2%	12.8%	13.7%	12.0%	81.1%	-6.1%	-8.6%	3.8%	40.0%	3.87	0.0%	0.0%
Cepheid	IQT2599314	3,815,841	620	470,141	17.2%	19.2%	15.6%	18.1%	16.3%	51.2%	2.6%	-3.0%	10.0%	81.1%	3.77	78.5%	98.3%
Nanosphere, Inc.	IQT38720096	45,675	117	14,290	42.9%	78.0%	63.9%	27.1%	75.1%	-111.1%	N/A	-263.8%	17.7%	136.1%	2.24	38.4%	39.5%
GenMark Diagnostics, Inc.	IQT106626443	568,004	185	30,594	11.6%	82.8%	25.3%	58.5%	61.6%	57.1%	-119.0%	-127.7%	18.7%	215.1%	6.35	0.0%	0.0%
Bio-Reference Laboratories, Inc.	IQT2594421	890,901	212	832,282	16.3%	16.8%	17.6%	10.1%	NA	46.8%	13.0%	10.0%	1.9%	24.9%	2.43	17.4%	20.6%
Upper Quartile		\$ 4,206,788	950	\$ 1,216,653	14.1%	18.9%	21.4%	19.5%	40.7%	62.0%	19.7%	14.9%	6.4%	84.8%	5.71	56.6%	34.8%
Mean		3,597,694	689	1,136,335	6.2%	15.8%	18.0%	27.1%	30.8%	37.3%	-2.8%	-274.9%	5.7%	758.4%	4.22	38.4%	179.0%
Median		1,147,437	556	251,345	5.1%	9.2%	13.0%	10.0%	11.5%	49.4%	13.6%	5.0%	3.9%	58.0%	3.00	17.5%	0.1%
Lower Quartile		607,881	192	98,686	2.1%	3.2%	8.4%	5.2%	6.3%	43.9%	-4.3%	-12.2%	2.8%	35.7%	2.27	0.1%	0.0%
Theranos, Inc. (at 12/31/18)		NA	NA	\$ 503,462	55.6%	64.3%	28.0%	NA	NA	0.0%	45.3%	39.3%	11.8%	18.6%	2.39	N/A	N/A

Notes:

Source: S&P Capital IQ.

[1] Represents trailing 3-month average daily trading volume (in thousands).

[2] CAGR = Compound Annual Growth Rate

[3] Working capital excludes cash

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of December 31, 2014

Exhibit G.3
Guideline Public Company Descriptions

Name	Ticker	Description
OraSure Technologies, Inc.	OSUR	OraSure Technologies, Inc., together with its subsidiaries, develops, manufactures, markets, and sells oral fluid diagnostic products and specimen collection devices in the United States, Europe, and internationally.
Trinity Biotech plc	TRIB	Trinity Biotech plc acquires, develops, manufactures, and markets medical diagnostic products for the clinical laboratory and point-of-care (POC) segments of the diagnostic market in the Americas, Africa, Asia, and Europe.
Enzo Biochem, Inc.	ENZ	Enzo Biochem, Inc., an integrated diagnostics, clinical lab, and life sciences company, researches, develops, manufactures, and markets diagnostic and research products based on genetic engineering, biotechnology, and molecular biology.
QuidelOrtho Corporation	QDEL	QuidelOrtho Corporation focuses on the development and manufacture of diagnostic testing technologies across the continuum of healthcare testing needs.
Exact Sciences Corporation	EXAS	Exact Sciences Corporation provides cancer screening and diagnostic test products in the United States and internationally.
OPKO Health, Inc.	OPK	OPKO Health, Inc., a healthcare company, engages in the diagnostics and pharmaceuticals businesses in the United States, Ireland, Chile, Spain, Israel, Mexico, and internationally.
PerkinElmer, Inc.	PKI	PerkinElmer, Inc. provides products, services, and solutions to the diagnostics, life sciences, and applied services markets worldwide.
Quest Diagnostics Incorporated	DGX	Quest Diagnostics Incorporated provides diagnostic testing, information, and services in the United States and internationally.
Laboratory Corporation of America Holdings	LH	Laboratory Corporation of America Holdings operates as a global life sciences company that provides vital information to help doctors, hospitals, pharmaceutical companies, researchers, and patients make clear and confident decisions.
Myriad Genetics, Inc.	MYGN	Myriad Genetics, Inc., a genetic testing and precision medicine company, develops and commercializes genetic tests in the United States and internationally.
Illumina, Inc.	ILMN	Illumina, Inc. provides sequencing and array-based solutions for genetic and genomic analysis.
Qiagen N.V.	QGEN	QIAGEN N.V. offers sample to insight solutions that transform biological materials into molecular insights worldwide.
Alere Inc.	IQT2622336	Alere Inc. provides diagnostic tests for infectious disease, cardiometabolic disease, and toxicology in the United States and internationally.
Luminex Corporation	IQT2627430	Luminex Corporation develops, manufactures, and sells proprietary biological testing technologies and products for the diagnostics, pharmaceutical, and research industries worldwide.
Abaxis, Inc.	IQT2586525	Abaxis, Inc. develops, manufactures, markets, and sells portable blood analysis systems for use in human or veterinary patient care to provide rapid blood constituent measurements for clinicians worldwide.
CombiMatrix Corporation	IQT36309071	CombiMatrix Corporation provides clinical molecular diagnostic laboratory services in the United States.
Affymetrix Inc.	IQT2587418	Affymetrix, Inc. provides life science products and molecular diagnostic products that enable parallel analysis of biological systems at the gene, protein, and cell level.
Genomic Health, Inc.	IQT24111615	Genomic Health, Inc., a healthcare company, provides clinically actionable genomic information to personalize cancer treatment decisions in the United States and internationally.
Cepheid	IQT2598314	Cepheid, a molecular diagnostics company, develops, manufactures, and markets integrated systems for testing in the clinical and non-clinical markets.
Nanosphere, Inc.	IQT38720086	Nanosphere, Inc. develops, manufactures, and markets molecular diagnostic tests for infectious diseases and associated drug resistance markers for earlier disease detection, optimal patient treatment, and improved healthcare economics.
GenMark Diagnostics, Inc.	IQT106626443	GenMark Diagnostics, Inc. designs and manufactures multiplex molecular diagnostic solutions to enhance patient care, improve quality metrics, and reduce the total cost-of-care for laboratory professionals, healthcare providers, and customers in the United States and internationally.
Bio-Reference Laboratories, Inc.	IQT2594421	Bio-Reference Laboratories, Inc. provides clinical laboratory testing services for the detection, diagnosis, evaluation, monitoring, and treatment of diseases in the United States.

Notes:
Source: S&P Capital IQ.

US v. Elizabeth Holmes Valuation of Theranos, Inc. As of December 31, 2014 Exhibit G.4
Guideline Public Company Ranking
(thousands of USD)

Size (Revenue, millions)	Liquidity (Operating Net Working Capital-to-Revenue)	Liquidity (Current Ratio)
Quest Diagnostics Incorporated	7,435,000	-1.4%
Laboratory Corporation of America Holdings	6,011,600	11.9%
Alere Inc.	2,577,001	15.8%
PerkinElmer, Inc.	2,069,880	18.6%
Theranos, Inc. (at 12/31/18)	1,861,358	22.8%
illumina, inc.	1,344,777	24.9%
Qiagen N.V.	832,282	35.6%
Bio-Reference Laboratories, Inc.	724,873	35.9%
Myriad Genetics, Inc.	603,462	40.0%
Theranos, Inc. (at 12/31/18)	470,141	41.1%
Cepheid	349,019	44.7%
Affymetrix Inc.	275,706	53.3%
Genomic Health, Inc.	226,983	62.7%
Luminex Corporation	184,158	64.8%
QuidelOrtho Corporation	182,777	65.6%
Abaxis, Inc.	106,464	81.1%
OraSure Technologies, Inc.	104,872	82.6%
Trinity Biotech plc	95,637	85.5%
Enzo Biochem, Inc.	91,125	129.3%
OPKO Health, Inc.	80,894	136.1%
GenMark Diagnostics, Inc.	30,894	190.3%
Nanosphere, Inc.	14,290	215.1%
CombiMatrix Corporation	8,042	15247.8%
Exact Sciences Corporation	1,798	

Operational Efficiency (Capital Expenditures)	Growth (Historical 1-year Growth Rate)	Growth (Historical 3-year CAGR)
Enzo Biochem, Inc.	0.8%	82.8%
PerkinElmer, Inc.	1.3%	78.0%
Bio-Reference Laboratories, Inc.	1.9%	
Affymetrix Inc.	2.3%	64.3%
CombiMatrix Corporation	2.6%	46.2%
OraSure Technologies, Inc.	2.8%	20.8%
Myriad Genetics, Inc.	3.3%	20.0%
Laboratory Corporation of America Holdings	3.4%	19.2%
Abaxis, Inc.	3.4%	17.8%
Genomic Health, Inc.	3.8%	16.8%
Alere Inc.	3.9%	10.4%
Quest Diagnostics Incorporated	4.1%	10.2%
OPKO Health, Inc.	5.2%	9.3%
illumina, inc.	5.7%	9.1%
QuidelOrtho Corporation	6.1%	7.2%
Qiagen N.V.	6.4%	6.5%
Luminex Corporation	7.5%	5.1%
Trinity Biotech plc	7.9%	4.8%
Cepheid	10.0%	2.7%
Theranos, Inc. (at 12/31/18)	11.0%	2.6%
Nanosphere, Inc.	17.7%	2.6%
GenMark Diagnostics, Inc.	18.7%	0.2%
		-1.8%
		-24.4%

Growth (Forward 1-year Growth Rate)	Profitability (Historical EBITDA Margin 1-year)	Operational Efficiency (Return on Equity)
Nanosphere, Inc.	63.9%	15.6%
OPKO Health, Inc.	50.3%	15.1%
CombiMatrix Corporation	36.4%	11.9%
Theranos, Inc. (at 12/31/18)	28.0%	11.5%
Abaxis, Inc.	25.4%	10.4%
GenMark Diagnostics, Inc.	25.3%	9.1%
illumina, inc.	21.4%	6.6%
Myriad Genetics, Inc.	21.4%	5.1%
Bio-Reference Laboratories, Inc.	17.6%	5.1%
Cepheid	15.6%	3.8%
OraSure Technologies, Inc.	14.0%	3.4%
PerkinElmer, Inc.	13.0%	1.8%
Genomic Health, Inc.	12.6%	1.8%
QuidelOrtho Corporation	10.9%	0.0%
Laboratory Corporation of America Holdings	8.7%	-1.3%
Enzo Biochem, Inc.	8.6%	-1.9%
Trinity Biotech plc	8.4%	-4.0%
Alere Inc.	7.6%	-6.6%
Luminex Corporation	7.3%	-10.2%
Qiagen N.V.	5.9%	-20.1%
Affymetrix Inc.	2.4%	-26.1%
Quest Diagnostics Incorporated	1.8%	-29.2%
		-36.0%
		-51.6%

US v. Elizabeth Holmes**Exhibit H.1**Valuation of Theranos, Inc.
As of December 31, 2014Adjusted Net Asset Value
(thousands of USD)

	12/31/2014 Unadjusted	Adjustments	Adjusted
Assets:			
Current Assets			
Current Operating Assets			
Cash & Equivalents	\$ 465,933	\$ -	\$ 465,933
Accounts Receivable	-	-	-
Inventory	2,383	-	2,383
Other Current Assets	12,788	-	12,788
Total Current Operating Assets	481,104	-	481,104
Total Current Non-Operating Assets	-	-	-
Total Current Assets	481,104	-	481,104
Total Fixed Assets - Net	53,366	-	53,366
Other Assets			
Intangible Assets			
Goodwill	-	-	-
Other Intangible Assets	-	510,570	510,570
Total Intangible Assets - Net	-	510,570	510,570
Total Long Term Receivables	27,045	-	27,045
Total Other Non-Current Assets	-	-	-
Total Non Current Assets	27,045	510,570	537,615
Total Assets	\$ 561,515	\$ 510,570	\$ 1,072,085
Liabilities and Equity:			
Liabilities			
Current Liabilities			
Current Operating Liabilities			
Accounts Payable	\$ 16,633	-	\$ 16,633
Deferred Revenue	-	-	-
Other Current Liabilities	400,359	(390,375)	9,984
Total Current Operating Liabilities	416,992	(390,375)	26,617
Total Current Debt Obligations	-	-	-
Total Current Liabilities	416,992	(390,375)	26,617
Non Current Liabilities			
Total Long Term Debt	40,805	-	40,805
Other Non Current Liabilities			
Deferred Rent	-	-	-
Deferred Revenue, LT	-	-	-
Customer Deposits	143,846	-	143,846
Other Non-current liabilities	33,750	-	33,750
Total Other Non Current Liabilities	177,596	-	177,596
Total Non Current Liabilities	218,401	-	218,401
Total Liabilities	\$ 635,393	\$ (390,375)	\$ 245,018
Total Equity Value - Controlling, Marketable Basis			\$ 827,067
Total Equity Value - Controlling, Marketable Basis (rounded)			\$ 827,000

Notes:

[1] Add value of technology and branding assets under cost to recreate method (Exhibit H.2)

[2] Adjust out "miscellaneous receipts" liability that represents proceeds received from 2014 capital raises, for which stock had not been issued yet.

US v. Elizabeth Holmes
 Valuation of Theranos, Inc.
 As of December 31, 2014

Exhibit H.2
 Cost to Recreate Method - Technology and Branding Assets
 (USD)

Functional Category	Calendar Year 2009			Calendar Year 2010			Calendar Year 2011		
	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost
Salaries, Wages & SBC	\$ 6,717,962	100%	\$ 6,717,962	\$ 7,485,029	100%	\$ 7,485,029	\$ 10,099,033	100%	\$ 10,099,033
Payroll Taxes & Processing	483,908	100%	483,908	588,593	100%	588,593	784,842	100%	784,842
Health Insurance	417,083	100%	417,083	493,526	100%	493,526	767,508	100%	767,508
Other benefits	114,239	100%	114,239	180,253	100%	180,253	773,318	100%	773,318
Sales Commissions	5,000	0%	-	-	0%	-	-	0%	-
Subtotal Employees	\$ 7,737,890		\$ 7,732,890	\$ 8,727,402		\$ 8,727,402	\$ 12,384,501		\$ 12,384,501
Contractor Services	488,192	100%	488,192	518,786	100%	518,786	1,637,549	100%	1,637,549
Subtotal for All Labor Costs	\$ 8,226,082		\$ 8,221,082	\$ 9,246,188		\$ 9,246,188	\$ 14,022,050		\$ 14,022,050
Facility Costs	\$ 2,145,779	99.9%	\$ 2,144,392	\$ 2,064,230	100.0%	\$ 2,064,230	\$ 2,724,300	100.0%	\$ 2,724,300
R&D Materials, Parts, Biological Compounds	935,138	100%	935,138	3,786,184	100%	3,786,184	5,955,745	100%	5,955,745
Conf. Website, Market Studies, Trademark Costs	58,925	100%	58,925	75,422	100%	75,422	13,452	100%	13,452
Legal, Tax, Accounting Services - General	120,697	50%	60,349	384,605	50%	192,303	338,165	50%	169,083
Legal Regulatory and Patents Costs	313,058	100%	313,058	492,136	100%	492,136	1,307,365	100%	1,307,365
Legal Costs for Litigation	-	0%	-	-	0%	-	865,695	0%	-
Expensed Equip., Software, and Maintenance	148,010	100%	148,010	226,101	100%	226,101	620,302	100%	620,302
Dues, Subscriptions, Licenses and Supplies	85,853	100%	85,853	233,858	100%	233,858	447,386	100%	447,386
Recruiting Costs	192,343	99.9%	192,216	212,706	100.0%	212,706	300,466	100.0%	300,466
Travel Expenses	226,711	50%	113,355	154,948	50%	77,474	396,822	50%	198,411
Interest (Income), Expense & Bank Charges	109,143	0%	-	70,077	0%	-	(132,632)	0%	-
Supporting G&A Expenses	274,156	99.9%	273,581	361,855	100.0%	361,855	458,201	100.0%	455,201
Relocation Expenses	27,220	0%	-	6,272	0%	-	66,194	0%	-
Supplies for Manufacturing / Operations	754,146	100%	754,146	432,293	100%	432,293	77,829	100%	77,829
Inventory	-	100%	-	(13,553)	100%	-	(5,337)	100%	-(5,337)
Capital Expenditures	180,627	100%	180,627	1,835,110	100%	1,835,110	3,042,848	100%	3,042,848
Other Costs	17,441	0%	-	17,845	0%	-	15,927	0%	-
Subtotal for Indirect Costs	\$ 5,889,248		\$ 5,280,952	\$ 10,040,161		\$ 9,739,772	\$ 16,290,629		\$ 15,307,450
Inflation Adjusted Total Expenses (4)	2.3%	Yrs 5.51	\$ 15,294,493	2.3%	Yrs 4.51	\$ 21,051,759	2.3%	Yrs 3.51	\$ 31,794,773

Functional Category	Calendar Year 2012			Calendar Year 2013			Calendar Year 2014		
	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost
Salaries, Wages & SBC	\$ 20,238,277	100%	\$ 20,238,277	\$ 29,829,686	100%	\$ 29,829,686	\$ 48,369,000	100%	\$ 48,369,000
Payroll Taxes & Processing	1,561,634	100%	1,561,634	2,246,298	100%	2,246,298	3,450,000	100%	3,450,000
Health Insurance	1,429,986	100%	1,429,986	2,161,519	100%	2,161,519	3,325	100%	3,325
Other benefits	2,374,572	100%	2,374,572	3,255,991	100%	3,255,991	8,112,675	100%	8,112,675
Sales Commissions	-	0%	-	78	0%	-	312,000	0%	-
Subtotal Employees	\$ 25,604,469		\$ 25,604,469	\$ 37,493,572		\$ 37,493,494	\$ 68,247,000		\$ 57,935,000
Contractor Services	3,073,543	100%	3,073,543	5,372,096	100%	5,372,096	7,885,000	100%	7,885,000
Subtotal for All Labor Costs	\$ 28,678,011		\$ 28,678,011	\$ 42,865,668		\$ 42,865,590	\$ 66,132,000		\$ 65,820,000
Facility Costs	\$ 7,375,685	100.0%	\$ 7,375,685	\$ 7,140,632	100.0%	\$ 7,140,617	\$ 16,776,000	99.5%	\$ 16,686,139
R&D Materials, Parts, Biological Compounds	11,136,524	100%	11,136,524	10,069,736	100%	10,069,736	10,638,000	100%	10,638,000
Conf. Website, Market Studies, Trademark Costs	1,274,910	100%	1,274,910	7,684,778	100%	7,684,778	3,087,000	100%	3,087,000
Legal, Tax, Accounting Services - General	1,400,908	50%	700,454	709,756	50%	354,878	1,051,000	50%	525,500
Legal Regulatory and Patents Costs	1,750,963	100%	1,750,963	1,913,373	100%	1,913,373	2,199,000	100%	2,199,000
Legal Costs for Litigation	1,829,174	0%	-	6,197,019	0%	-	3,689,000	0%	-
Expensed Equip., Software, and Maintenance	1,084,748	100%	1,084,748	1,857,745	100%	1,657,745	1,792,000	100%	1,792,000
Dues, Subscriptions, Licenses and Supplies	1,211,873	100%	1,211,873	1,522,924	100%	1,522,924	3,583,000	100%	3,583,000
Recruiting Costs	796,875	100.0%	796,875	652,947	100.0%	652,948	1,147,000	99.5%	1,140,856
Travel Expenses	287,524	50%	133,762	787,042	50%	393,521	1,170,000	50%	585,000
Interest (Income), Expense & Bank Charges	143,830	0%	-	382,053	0%	-	(27,000)	0%	-
Supporting G&A Expenses	934,674	100.0%	934,674	1,165,138	100.0%	1,165,135	2,335,000	99.5%	2,322,493
Relocation Expenses	65,756	0%	-	24,763	0%	-	43,000	0%	-
Supplies for Manufacturing / Operations	855,721	100%	855,721	1,574,094	100%	1,574,094	1,952,000	100%	1,952,000
Inventory	6,865,524	100%	6,865,524	1,742,894	100%	1,742,894	1,145,000	100%	1,145,000
Capital Expenditures	17,572,491	100%	17,572,491	8,884,769	100%	8,884,769	38,594,066	100%	38,594,066
Other Costs	90,432	0%	-	(44,941)	0%	-	30,000	0%	-
Subtotal for Indirect Costs	\$ 54,657,993		\$ 51,694,585	\$ 51,984,722		\$ 44,677,410	\$ 89,414,066		\$ 84,250,054
Inflation Adjusted Total Expenses (3)	2.3%	Yrs 2.50	\$ 85,119,867	2.3%	Yrs 1.50	\$ 90,613,216	2.3%	Yrs 0.50	\$ 151,813,833

2004-2006 Expenses, Inflation Adjusted (4)	\$ 24,235,601
2007 Expenses, Inflation Adjusted (5)	20,687,544
2008 Expenses, Inflation Adjusted (5)	15,502,206
2009-2014 Expenses, Inflation Adjusted	399,887,942
Total Direct and Indirect Development Costs	\$ 456,093,294
Obsolescence Adjustment (6)	3% (12,117,801)
Subtotal Cost	\$ 443,975,493
Add Developer Profit Margin (7)	15% 66,596,324
Total Pretax Development Cost	\$ 510,571,817
Total Pretax Development Cost (Rounded)	\$ 510,570,000

Notes
 (1) Per company prepared trial balances
 (2) Allocations based on relevance of costs to developing Theranos technology and branding assets.
 (3) Adjust allocator expenses for average annual inflation of 2.3% over historical period
 (4) 2004 - 2006 expenses based on retained earnings deficit at 12/31/07 less operating loss reported for calendar year 2007. Expenses are adjusted for inflation of 2.3% from midpoint of period to valuation date
 (5) 2007 - 2008 expenses based on audited financial statements. Excludes financing costs and interest income. Expenses are adjusted for inflation of 2.3% from midpoint of each period to valuation date
 (6) Adjusted for estimated 50% of historical development efforts between 2004-2008 that represent obsolete technology on valuation date
 (7) Developer margin based on median EBIT margin of peer group of firms in Exhibit G.2

US v. Elizabeth Holmes**Exhibit I.1**Valuation of Theranos, Inc.
As of October 15, 2015Discounted Cash Flow Key Assumptions
(thousands of USD)

	Basis	For the Twelve Month Period Ending December 31,			
		2015	2016	2017	2018
Total Revenue	Annual Growth Rate	97703.4%	97.0%	44.8%	55.6%
Terminal Value	Exit Multiple, Ex. J.1				4.0%
Total Cost of Revenue	% of Revenue	35.0%	32.0%	32.0%	30.0%
Total Operating Expenses	% of Revenue	85.4%	44.6%	33.6%	24.7%
Depreciation & Amortization	Exhibit I.3	1.7%	6.2%	6.6%	6.0%
Interest Expense	N/A	N/A	N/A	N/A	N/A
Income Taxes	% of Pre-Tax Net Income	40.0%	40.0%	40.0%	40.0%
Adjusted Operating Working Capital	Exhibit I.2	19.6%	14.4%	21.3%	19.2%
Adjusted Operating Working Capital		22,272	32,154	68,786	96,480
Yr/yr Working Capital (Increase)/Reduction		281,664	(9,883)	(36,631)	(27,694)
Capital Expenditures	% of Revenue	10.3%	27.8%	17.8%	16.9%

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of October 15, 2015Exhibit I.2
Adjusted Working Capital Analysis
(thousands of USD)

Working Capital	FYE 12-31-09	FYE 12-31-10	FYE 12-31-11	FYE 12-31-12	FYE 12-31-13	FYE 12-31-14	For the Twelve Month Period Ending December 31,			
							2015	2016	2017	2018
Total Revenue	[1] \$ 2,794	\$ 1,401	\$ 518	\$ -	\$ -	\$ 116	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452
Total COS	-	-	-	-	-	-	39,708	71,505	103,505	151,036
Total Operating Expenses	13,597	16,601	27,173	64,015	85,605	122,756	96,881	99,764	108,780	124,204
Operating Assets										
Cash & Equivalents	[2] \$ 3,590	\$ 36,718	\$ 88,056	\$ 51,785	\$ 30,966	\$ 465,933	\$ 95,554	\$ 98,397	\$ 107,290	\$ 122,503
Accounts Receivable	29	55	-	-	-	-	-	-	-	-
Inventory	581	-	-	1,733	3,777	2,383	3,404	6,704	9,704	15,104
Other Current Assets	195	827	665	1,882	1,780	12,788	4,838	5,080	5,334	5,601
Note Receivable	-	-	-	-	-	27,045	27,512	9,585	9,735	-
Total Operating Assets	4,495	37,600	88,721	55,401	36,523	508,149	131,308	119,766	132,063	143,208
Operating Liabilities										
Accounts Payable	560	440	1,236	7,669	7,430	16,633	13,879	16,480	16,174	22,774
Deferred Revenue	1,663	257	7	7	7	-	-	-	-	-
Other Current Liabilities	950	1,298	2,845	7,714	4,830	9,984	7,073	8,265	9,453	11,521
Deferred Rent	723	759	767	1,572	1,857	-	-	-	-	-
Deferred Revenue, LT	2,146	3,808	3,801	3,801	3,801	-	-	-	-	-
Customer Deposits	-	-	73,500	69,500	80,000	143,846	70,356	46,904	23,452	-
Other Non-current liabilities	807	1,847	5,959	3,425	1,866	33,750	17,728	15,963	14,198	12,433
Total Operating Liabilities	6,849	8,409	88,117	93,687	99,791	204,213	109,036	87,612	63,277	46,728
Net Operating Working Capital	\$ (2,354)	\$ 29,191	\$ 604	\$ (38,287)	\$ (63,268)	\$ 303,936	\$ 22,272	\$ 32,154	\$ 68,786	\$ 96,480
Net Operating Working Capital as % of Revenue	-84.3%	2083.1%	116.6%	0.0%	0.0%	262013.8%	19.6%	14.4%	21.3%	19.2%
Yrlyr Working Capital (Increase)/Reduction	-	(31,545)	28,587	38,891	24,981	(367,204)	281,664	(9,883)	(36,631)	(27,694)
BizMiner Working Capital as a % of Revenue							22.8%			
RMA Working Capital as a % of Revenue							36.1%			
Comparable Group Working Capital as a % of Revenue							60.2%			
Days' Operating Expenses in Cash	99	798	1,183	295	132	1,385	360	360	360	360
Days' Sales Outstanding	4	14	-	-	-	-	-	-	-	-
Days' Inventory	-	-	-	-	-	-	31	34	34	37
Other Current Assets as a % of Revenue	7.0%	59.0%	128.4%	0.0%	0.0%	11024.1%	4.3%	2.3%	1.6%	1.1%
Note Receivable as a % of Revenue	0.0%	0.0%	0.0%	0.0%	0.0%	23314.7%	24.2%	4.3%	3.0%	0.0%
Days' Payables	-	-	-	-	-	-	128	84	57	55
Deposits & Deferred Revenue as a % of Revenue	136.3%	290.1%	14917.2%	0.0%	0.0%	124005.2%	62.0%	21.0%	7.3%	0.0%
Other Current Liabilities as a % of Opex	7.0%	7.7%	10.5%	12.1%	5.6%	8.1%	7.3%	8.3%	8.7%	9.3%
Deferred Rent as a % of Opex	5.3%	4.5%	2.8%	2.5%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Non-current liabilities as a % of Opex	5.9%	11.0%	21.9%	5.4%	2.2%	27.5%	18.3%	16.0%	13.1%	10.0%

Notes:

[1] Historical balances are per Adjusted Income Statement. Refer to Exhibit B.5. Operating Expenses exclude Depreciation & Amortization.

[2] Estimated operating cash levels equal to 6 months of operating expenses

US v. Elizabeth Holmes**Exhibit I.3**

Valuation of Theranos, Inc.

Depreciation & Capital Expenditure Analysis

As of October 15, 2015

(thousands of USD)

Forecast Depreciation	For the Twelve Month Period Ending December 31,				
	2015	2016	2017	2018	
Total Revenue	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452	
Beginning Balance - Total Fixed Assets	53,366	63,121	111,409	147,752	
Capital Expenditures	11,670	62,104	57,667	85,125	
Fixed Assets	65,036	125,225	169,076	232,877	
Capital Expenditures as a % of Revenue	10.29%	27.79%	17.83%	16.91%	
Depreciation					
Assumptions as to Depreciable Lives:					
Beg. Dep. Existing Fixed Assets - avg life	6.3				
Capital Additions - avg life	8.0				
Beginning Balance	\$ 1,763	\$ 8,460	\$ 8,460	\$ 8,460	
2015 Additions	152	1,463	1,463	1,463	
2016 Additions		3,893	7,786	7,786	
2017 Additions			3,615	7,229	
2018 Additions				5,336	
Total Depreciation	\$ 1,915	\$ 13,816	\$ 21,324	\$ 30,274	
As a % of Revenue	1.7%	6.2%	6.6%	6.0%	
Net Fixed Assets	\$ 63,121	\$ 111,409	\$ 147,752	\$ 202,603	
As a % of Revenue	55.6%	49.9%	45.7%	40.2%	
Historical Capital Expenditure Analysis					
	FYE	FYE	FYE	FYE	FYE
	12-31-10	12-31-11	12-31-12	12-31-13	12-31-14
Net FA	\$ 2,630	\$ 4,648	\$ 19,557	\$ 22,021	\$ 53,366
Chg from PY	N/A	2,018	14,909	2,463	31,345
Depreciation	771	1,025	2,654	5,573	7,247
(Gain)/Loss	-	-	9	849	1
Capital Expenditures	N/A	3,043	17,572	8,885	38,594
	Average				
Fixed Assets	\$ 20,444	\$ 4,648	\$ 19,557	\$ 22,021	\$ 53,366
Fixed Assets as a % of Revenue	5021.8%	187.7%	896.9%	N/A	46005.2%
Capital Expenditures	17,024	N/A	3,043	8,885	38,594
Capital Expenditures as a % of Revenue	4181.6%	N/A	587.1%	N/A	33270.7%

Company Name	Ticker Symbol	Market Capitalization	Interest Bearing Debt	Trading Volume (7)	LTM Revenue	1-Year Growth Rate	Equity as a % of Total Capital
OraSure Technologies, Inc	OSUR	\$ 267,159	\$ -	585	\$ 116,018	8.9%	100.0%
Trimy Biotech plc	TRIB	271,382	99,089	121	101,392	-1.5%	73.3%
Enzo Biochem, Inc.	ENZ	181,945	3,586	135	97,599	1.7%	98.1%
QuidelOrtho Corporation	QDEL	620,241	146,697	240	205,670	22.0%	80.9%
Exact Sciences Corporation	EXAS	713,931	6,156	2,658	26,521	1836.1%	99.1%
OPKO Health, Inc.	NasdaqGS:OPK	5,015,072	145,354	5,704	241,060	179.4%	97.2%
PerkinElmer, Inc.	PKI	5,470,749	1,028,376	753	2,262,633	1.9%	84.2%
Quest Diagnostics Incorporated	DGX	9,197,441	3,731,000	1,043	7,527,000	3.0%	71.1%
Laboratory Corporation of America Holdings	LH	11,664,918	6,681,200	1,063	7,773,600	31.0%	63.8%
Myriad Genetics, Inc.	MYGN	2,711,591	-	817	737,800	-0.9%	100.0%
Illumina, Inc.	ILMN	21,971,248	1,110,101	1,950	2,140,593	23.3%	95.2%
Qiagen N.V.	QGEN	5,912,561	1,058,906	862	1,292,856	-3.9%	84.8%
Aleix Inc.	IQT2622339	3,975,232	3,601,525	602	2,483,662	-4.0%	52.5%
Luminex Corporation	IQT2627430	789,484	-	258	235,365	5.1%	100.0%
Abaxis, Inc.	IQT2586525	1,017,036	530	177	217,133	29.6%	99.9%
CombiMatrix Corporation	IQT36309071	13,695	344	2	9,621	27.0%	97.5%
Allymetrx Inc.	IQT2587418	714,389	124,950	688	357,744	2.8%	85.1%
Genomic Health, Inc.	IQT24111615	715,559	-	221	281,451	2.2%	100.0%
Cepheid	IQT2599314	2,388,029	285,406	1,075	523,099	15.8%	89.3%
Nanosphere, Inc.	IQT38720096	16,632	15,474	245	19,871	44.5%	51.8%
GenMark Diagnostics, Inc.	IQT106626443	353,067	9,794	225	36,051	34.0%	97.3%
Bio-Reference Laboratories, Inc.	IQT2594421	-	89,849	376	882,467	16.1%	0.0%
Average		3,362,788	823,560	899	1,253,101	106.0%	82.8%
Median		752,522	84,459	584	261,266	12.3%	92.3%
Selected							97.0%

Industry Capital Structure

Equity	95.0%
Interest Bearing Debt	5.0%
Tax Rate	40.0%

Cost of Equity

Table 1: Venture Capital Average Actual Rates of Return for the Period ended September 30, 2008

Stage of Development	5-year Return		10-year Return		20-year Return	
	2002	2008	2002	2008	2002	2008
Seed/Early Stage	51.4%	3.0%	34.9%	25.5%	20.4%	22.1%
Balanced	20.9%	7.5%	20.9%	12.0%	14.3%	14.6%
Later Stage	10.6%	8.1%	21.6%	7.3%	15.3%	14.7%
All Ventures	28.3%	5.7%	26.3%	13.4%	16.6%	17.2%

Table 2: Target Rates of Return

Stage of Development	Plummer	Scherlis and Sahlman	Sahlman, Stevenson, and Bhide		Everett	Everett Median Returns
			50% - 100%	30% - 40%		
Start-up	50% - 70%	50% - 70%	50% - 100%	30% - 40%	30%	33.0%
First stage of "early development"	40% - 60%	40% - 60%	40% - 60%	23% - 38%	30%	30.0%
Second stage or "expansion"	35% - 50%	30% - 50%	30% - 40%	19% - 32%	25%	25.0%
Bridge/PO	25% - 35%	20% - 35%	20% - 30%	18% - 36%	23%	23.0%

Table 3: Target Rates of Return

Stage of Development	Ruhnka / Young	Wetzel	Plummer / Qed Range of Discount Rates Used	
			High	Low
Seed	73.0%	50.0%	75.4%	49.2%
Start-up	54.8%	50.0%	59.6%	40.6%
3rd Stage	42.2%	37.5%	49.3%	34.7%
Fourth Stage	35.0%	30.0%	45.7%	31.2%
Exit Stage	35.0%	22.5%	40.8%	28.1%

Table 4: Theranos Investor Forecasts Implied Internal Rates of Return (Feb 2014 - Feb 2015)

Investor Group	IRR
PFM Forecast	75.5%
PFM Model	35.5%
Mosley and RDV Forecast	54.0%
Murdoch Forecast	82.0%

Selected Venture Capital Cost of Equity 45.0%

Weighted Average Cost of Capital

Equity as a % of total capital	95.0%
Cost of Equity (above)	45.0%
Weighted Cost of Equity	42.8%
Debt as a % of total capital	5.0%
Cost of Debt [4]	25.00%
After Tax Cost of Debt (tax rate above)	15.0%
Weighted After Tax Cost of Debt	0.8%
Weighted Average Cost of Capital	43.5%
Weighted Average Cost of Capital (rounded)	44.0%

Notes:

- [1] Source: Thomson Financial. The average annual return is based upon Thomson Financials' Private Equity Performance Index (PEPI). The PEPI is based on the latest quarterly statistics from Thomson Financials' Private Equity Performance Database analyzing the cashflows and returns for over 1400 US venture capital and private equity partnerships.
- [2] Plummer, James L., QED Report on Venture Capital Financial Analysis.
- [3] Scherlis, Daniel R. and William A. Sahlman, "A Method for Valuing High-Risk, Long Term, Investments: The Venture Capital Method." Harvard Business School Teaching Note 9-288-006. Boston: Harvard Business School Publishing, 1989.
- [4] William A. Sahlman, Howard H. Stevenson, Amar V. Bhide, et al., "Financing Entrepreneurial Ventures," Business Fundamental Series (Boston: Harvard Business School Publishing, 1998).
- [5] Craig R. Everett, "2021 Private Capital Markets Report" (Malibu: Pepperdine University Graziadio School of Business and Management, 2021), Table 1, p. 5. Note that this publication also includes rates of return for many other types of private capital investments, as well as summaries of other information captured in Pepperdine's annual industry survey.
- [6] Dorsey, Terry, "A Portfolio Model for Venture Capital Performance Measurement and Investment Selection," Polaris Group, Inc. January 2000.
- [7] Refer to the report for discussion of the selected Venture Capital Rate of Return.

US v. Elizabeth Holmes**Exhibit I.5**Valuation of Theranos, Inc.
As of October 15, 2015Forecast Free Cash Flow to Invested Capital
(thousands of USD)

	For the Twelve Month Period Ending December 31,			
	2015	2016	2017	2018
Total Revenue	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452
Total Cost of Revenue	39,708	71,505	103,505	151,036
Gross Margin	73,744	151,947	219,947	352,416
GM %	65.0%	68.0%	68.0%	70.0%
Total Operating Expenses	96,881	99,764	108,780	124,204
Operating Expense %	85.4%	44.6%	33.6%	24.7%
EBITDA	(23,137)	52,183	111,167	228,212
EBITDA %	-20.4%	23.4%	34.4%	45.3%
Less: Partial Period Adjustment	18,317	-	-	-
Adjusted EBITDA	(4,820)			
Depreciation & Amortization	1,915	13,816	21,324	30,274
EBIT	(6,735)	38,367	89,843	197,938
EBIT %	-5.9%	17.2%	27.8%	39.3%
Interest Expense	-	-	-	-
Earnings Before Taxes	(6,735)	38,367	89,843	197,938
Income Taxes	-	-	-	-
Forecast After-Tax Income	\$ (6,735)	\$ 38,367	\$ 89,843	\$ 197,938
NPAT %	-5.9%	17.2%	27.8%	39.3%
Cash Flow				
Add: Depreciation & Amortization	1,915	13,816	21,324	30,274
After-Tax Gross Cash Flow	(4,820)	52,183	111,167	228,212
Decrease / (Increase) in Working Capital	281,664	(9,883)	(36,631)	(27,694)
Less: Capital Expenditures	(11,670)	(62,104)	(57,667)	(85,125)
Free Cash Flow	\$ 265,174	\$ (19,804)	\$ 16,869	\$ 115,393

US v. Elizabeth Holmes**Exhibit I.6**Valuation of Theranos, Inc.
As of October 15, 2015Discounted Cash Flow Method Value Summary
(thousands of USD)

<u>Forecast Period</u>	<u>Base Cash Flow</u>	<u>Period</u>	<u>Discount Rate</u>	<u>PV Factor [2]</u>	<u>Discounted Cash Flow [3]</u>
2015	\$ 265,174	0.11	44.0%	0.9623	\$ 255,175
2016	(19,804)	0.71	44.0%	0.7717	(15,282)
2017	16,869	1.71	44.0%	0.5359	9,040
2018	115,393	2.71	44.0%	0.3721	42,943
Terminal Value [1]	2,909,000	3.21	44.0%	0.3101	902,132
Indicated Value					\$ 1,194,008
Add: C-2 Financing Proceeds not on 12/31/14 Balance Sheet					176,300
Operating Losses for 2015 prorated to 10/15/15					(145,314)
Deduct: Interest Bearing Debt					(40,805)
Total Equity Value - Controlling, Marketable Basis					\$ 1,184,189
Total Equity Value - Controlling, Marketable Basis (rounded)					\$ 1,184,000

Notes:

[1] Refer to Exhibit J.1

[2] $1 / (1 + \text{Discount Rate}) ^ \text{Period}$.

[3] Base Cash Flow x PV Factor.

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of October 15, 2015

Exhibit J.1
Guideline Public Company Method
(Thousands of USD)

Name	Ticker	Market Cap	Debt Pref Shv & Min Int.	Cash	MVIC [1]	Price [1]	Revenue		EBITDA		EBIT		Market Value of Invested Capital /					
							3-year LTM	5-year LTM	2016E	LTM	2016E	LTM	Revenue	2016E	EBITDA	2018E	EBIT	
OraSure Technologies, Inc.	OSUR	\$ 267,159	\$ -	\$ 108,189	\$ 158,970	\$ 158,970	\$ 100,050	\$ 96,505	\$ 116,018	\$ 129,598	\$ 7,237	\$ 12,850	\$ 1,403	1.37x	1.22x	21.97x	12.37x	113.31x
Trinity Biotech plc	TRIB	271,362	59,069	104,269	266,142	167,073	99,362	94,508	101,392	115,039	17,162	24,972	12,657	2.62x	2.31x	15.45x	10.66x	21.03x
Enzo Biochem, Inc.	ENZ	181,245	3,586	18,109	167,422	163,836	96,400	97,407	97,599	NA	(8,875)	NA	(12,664)	1.72x	NA	NA	NA	NA
QuidelOrtho Corporation	QDEL	620,241	146,697	382,560	584,378	437,881	188,888	178,185	205,670	224,952	36,098	52,014	12,039	2.84x	2.60x	16.19x	11.24x	48.54x
Exact Sciences Corporation	EXAS	713,931	6,156	343,509	376,578	370,422	14,395	10,877	26,521	117,061	(144,373)	(154,902)	(151,231)	NA	3.22x	NA	NA	NA
OPKO Health, Inc.	HOOD	5,015,072	143,854	212,144	4,946,802	4,802,928	164,731	128,548	241,060	1,239,762	(64,542)	76,008	(88,273)	20.52x	3.99x	NA	63.41x	NA
PerkinElmer, Inc.	PKI	5,470,749	1,028,376	195,096	6,304,059	5,275,863	2,227,989	2,174,950	2,262,633	2,374,847	365,149	485,963	241,485	2.79x	2.65x	17.75x	12.91x	26.10x
Quest Diagnostics Incorporated	DGX	5,197,441	3,832,000	123,000	12,906,441	9,074,441	7,393,534	7,370,292	7,527,000	7,822,205	1,448,000	1,521,683	1,140,000	1.71x	1.69x	8.91x	8.48x	11.32x
Laboratory Corporation of America Holdings	LH	11,664,918	6,696,700	712,000	17,648,618	10,951,918	8,828,200	8,445,160	7,773,600	9,131,565	1,578,200	1,878,324	1,213,700	2.27x	1.93x	11.18x	9.40x	14.54x
Myriad Genetics, Inc.	MYGN	2,711,591	-	155,400	2,556,191	2,556,191	730,777	678,158	737,800	779,683	193,300	227,461	167,500	3.46x	3.28x	13.22x	11.24x	15.26x
Illumina, Inc.	ILMN	21,971,248	1,142,229	1,439,406	21,874,071	20,531,842	1,872,918	1,861,529	2,140,593	2,576,267	766,572	913,442	642,962	10.13x	8.41x	28.27x	23.73x	33.71x
Qiagen N.V.	QGEN	5,912,561	1,061,204	429,529	6,544,236	5,483,032	1,309,484	1,287,628	1,292,856	1,402,013	364,361	471,991	179,795	5.06x	4.67x	17.96x	13.87x	36.40x
Alere Inc.	IOT262233	3,975,232	4,212,525	479,538	7,708,219	3,496,694	391	196	2,483,662	2,652,810	533,132	605,209	214,215	3.10x	2.91x	14.46x	12.74x	35.98x
Lumena Corporation	IOT262743	789,484	-	131,559	657,925	657,925	-	-	235,365	249,841	52,993	48,894	39,990	2.80x	2.64x	12.42x	13.46x	16.45x
Abata, Inc.	IOT25852	1,017,038	530	133,141	884,425	883,695	391	-	217,133	243,580	46,272	53,433	39,654	4.07x	3.63x	19.11x	16.55x	22.30x
CombiMatrix Corporation	IT363001	13,895	344	5,549	8,490	8,146	-	-	9,621	15,845	(5,995)	NA	(6,304)	0.88x	0.54x	NA	NA	NA
Affymetrix Inc.	IOT258741	714,389	124,950	137,693	701,746	576,795	-	-	357,744	374,030	46,244	66,154	26,487	1.96x	1.87x	15.04x	10.61x	24.83x
Genomic Health, Inc.	IT2411161	715,558	-	96,013	817,546	817,546	-	-	281,451	335,207	(24,877)	10,950	(31,426)	2.19x	1.84x	NA	56.40x	NA
Cepheid	IOT259931	2,388,029	285,406	326,184	2,347,251	2,061,845	(514)	(2,645)	523,099	626,028	6,250	50,077	(24,425)	4.48x	3.75x	NA	46.87x	NA
Nanosphere, Inc.	IT3872005	16,632	15,474	12,339	19,767	4,293	16,647	18,759	18,871	24,880	(29,703)	NA	(31,532)	1.05x	0.79x	NA	NA	NA
GenMark Diagnostics, Inc.	JT1066264	353,067	9,794	54,178	308,853	298,889	(9,936)	(10,406)	36,051	52,729	(38,446)	(44,875)	(41,732)	8.56x	5.85x	NA	NA	NA
Bio-Reference Laboratories, Inc.	IOT259442	-	69,849	25,146	44,703	(25,146)	28,752	27,994	882,467	NA	115,980	NA	89,519	0.05x	NA	0.39x	NA	0.50x
Correlation to MVIC							0.71	0.69	0.77	0.80	0.85	0.87	0.85					
Correlation to Price							0.58	0.55	0.63	0.65	0.71	0.73	0.73					

Upper Quartile	4.07x	3.66x	17.91x	16.35x	35.42x
Mean	3.98x	2.92x	15.17x	20.87x	36.01x
Median	2.79x	2.65x	15.27x	12.85x	23.47x
Lower Quartile	1.72x	1.87x	12.62x	11.09x	15.56x
Selected Multiple	4.00x		13.50x		
Subject Company Base Value	\$ 503,452	\$ -	\$ 276,212	\$ -	\$ -
Indicated Value	2,013,808	-	3,172,147	-	-
Interest Bearing Debt	N/A	N/A	N/A	N/A	N/A
Indicated Equity Value	\$ 2,013,808	\$ -	\$ 3,172,147	\$ -	\$ -
Weighting	33.3%	0.0%	66.7%	0.0%	0.0%
Indicated Value			\$ 2,746,934		
Add: Subject Company Cash			122,503		
Total Invested Capital Value at 12/31/18 - Controlling, Marketable Basis			\$ 2,869,437		
Total Invested Capital Value at 12/31/18 - Controlling, Marketable Basis (rounded)			\$ 2,909,000		

Notes:
Source: S&P Capital IQ.
[1] MVIC = Market Value of Invested Capital. Presented as % of cash.

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of October 15, 2015

Exhibit J.2
Guideline Public Company Key Financial Ratios
(thousands of USD)

Name	Ticker	Market Cap	Trading Volume [1]	LTM Revenue	CAGR Revenue [2]		Forward Growth			As a % of Revenue					Current Ratio	Debt to Equity	Debt to TNW
					1 Year	3 Year	2016E	2017E	2018E	GM	EBITDA	EBIT	Capex	WC [3]			
OraSure Technologies, Inc.	OSUR	\$ 267,159	566	\$ 116,018	8.9%	9.1%	12.0%	10.8%	NA	65.8%	6.2%	1.2%	2.2%	1.89898	4.78	0.0%	0.0%
Trinity Biotech plc	TRIB	271,362	121	101,392	-1.5%	7.5%	13.5%	16.1%	NA	47.5%	16.9%	12.5%	8.3%	1.46681	8.54	47.0%	181.2%
Enzo Biochem, Inc.	ENZ	181,945	135	97,599	1.7%	-1.8%	NA	NA	NA	43.9%	-9.1%	-13.0%	1.8%	0.23082	1.94	8.4%	12.4%
QuidelOrtho Corporation	QDEL	620,241	240	205,670	22.0%	13.6%	9.4%	8.4%	NA	64.1%	17.6%	5.9%	7.1%	1.04418	6.91	66.9%	140.3%
Exact Sciences Corporation	EXAS	713,931	2,658	26,521	1894.1%	85.6%	N/A	96.5%	71.7%	23.7%	N/A	-570.2%	N/A	12.6631	15.28	1.7%	1.7%
OPKO Health, Inc.	NasdaqGS:OPK	5,015,072	5,704	241,080	179.4%	87.5%	414.3%	26.5%	30.0%	38.3%	-26.8%	-36.6%	2.2%	0.66296	1.45	7.4%	-54.9%
PerkinElmer, Inc.	PKI	5,470,749	753	2,262,633	1.9%	2.8%	5.0%	4.5%	5.5%	45.5%	15.7%	10.7%	1.1%	0.22963	1.94	50.1%	-164.8%
Quest Diagnostics Incorporated	DGX	9,197,441	1,043	7,527,000	3.0%	0.7%	1.3%	2.3%	4.1%	38.2%	19.3%	15.1%	3.4%	0.06842	1.45	79.6%	-168.9%
Laboratory Corporation of America Holc	LH	11,664,918	1,063	7,773,600	31.0%	11.3%	17.5%	4.9%	3.2%	34.9%	20.3%	15.6%	2.8%	0.11098	1.47	135.5%	-142.1%
Myriad Genetics, Inc.	MYGN	2,711,591	817	737,800	-0.9%	12.4%	5.7%	0.7%	22.1%	79.8%	26.2%	22.7%	1.8%	0.33654	5.21	0.0%	0.0%
Illumina, Inc.	ILMN	21,971,248	1,950	2,140,593	23.3%	25.3%	20.4%	16.5%	14.9%	73.3%	35.8%	30.0%	6.6%	0.75987	3.79	58.4%	119.9%
Qiagen N.V.	QGEN	5,912,561	862	1,292,856	-3.9%	1.3%	8.4%	6.8%	6.5%	65.3%	28.2%	13.9%	7.3%	0.54094	3.52	42.0%	2753.9%
Alere Inc.	IQT2622335	3,975,232	602	2,483,662	-4.0%	-2.9%	6.8%	3.7%	8.0%	47.1%	21.5%	8.6%	3.8%	0.30628	1.68	171.3%	-197.6%
Luminex Corporation	IQT2627430	789,484	258	235,365	5.1%	6.5%	5.7%	8.2%	22.6%	71.5%	22.5%	17.0%	8.7%	0.74435	7.57	0.0%	0.0%
Abaxis, Inc.	IQT2586525	1,017,036	177	217,133	29.6%	9.2%	12.2%	NA	NA	54.6%	21.3%	18.3%	2.2%	0.83556	7.33	0.2%	0.2%
CombiMatrix Corporation	IQT36309071	13,695	2	9,821	27.0%	23.4%	64.7%	38.8%	34.5%	45.1%	-62.3%	-65.5%	1.3%	0.70835	4.77	4.7%	4.7%
Affymetrix Inc.	IQT2587418	714,389	688	357,744	2.8%	9.0%	4.7%	3.5%	5.4%	63.3%	13.0%	8.0%	3.6%	0.5037	3.54	37.6%	177.0%
Genomic Health, Inc.	IQT24111615	715,559	221	281,451	2.2%	7.3%	19.1%	11.8%	13.0%	78.2%	-8.8%	-11.2%	7.4%	0.34992	3.26	0.0%	0.0%
Cepheid	IQT2599314	2,388,029	1,075	523,099	15.8%	17.9%	19.7%	16.1%	17.2%	50.7%	1.6%	-4.7%	7.4%	0.79631	3.88	77.8%	95.0%
Nanosphere, Inc.	IQT38720096	16,632	245	18,871	44.5%	63.3%	31.8%	84.8%	NA	-57.8%	N/A	-167.1%	8.2%	0.21424	1.18	107.2%	123.5%
GenMark Diagnostics, Inc.	IQT106626443	353,067	225	36,051	34.0%	40.3%	46.3%	57.9%	56.2%	59.9%	-106.6%	-115.8%	13.6%	1.40426	5.41	18.1%	18.9%
Bio-Reference Laboratories, Inc.	IQT2594421	-	376	852,467	16.1%	14.4%	NA	NA	NA	47.4%	13.1%	10.1%	2.7%	0.24663	2.34	20.7%	24.3%
Upper Quartile		\$ 4,755,112	997	\$ 1,190,259	28.9%	22.0%	20.0%	21.5%	26.3%	65.0%	21.3%	14.8%	7.4%	82.7%	5.36	64.2%	113.7%
Mean		3,362,788	899	1,253,101	106.0%	20.2%	37.8%	21.0%	21.0%	49.1%	3.3%	-36.1%	4.9%	118.8%	4.42	42.4%	132.9%
Median		752,522	584	261,266	12.3%	10.3%	12.2%	10.6%	14.9%	49.1%	16.3%	8.3%	3.6%	60.2%	3.66	29.2%	3.2%
Lower Quartile		291,789	229	105,049	2.0%	6.7%	6.3%	4.7%	6.0%	44.2%	-1.0%	-12.5%	2.2%	26.2%	1.94	2.5%	0.0%
Theranos, Inc. (at 12/31/18)		NA	NA	\$ 503,452	55.6%	64.3%	28.0%	NA	NA	0.0%	45.3%	39.3%	16.9%	19.2%	2.39	N/A	N/A

Notes:

Source: S&P Capital IQ.

[1] Represents trailing 3-month average daily trading volume (in thousands).

[2] CAGR = Compound Annual Growth Rate

[3] Working capital excludes cash

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Exhibit J.3

Valuation of Theranos, Inc.
As of October 15, 2015

Guideline Public Company Descriptions

Name	Ticker	Description
OraSure Technologies, Inc.	OSUR	OraSure Technologies, Inc., together with its subsidiaries, develops, manufactures, markets, and sells oral fluid diagnostic products and specimen collection devices in the United States, Europe, and internationally.
Trinity Biotech plc	TRIB	Trinity Biotech plc acquires, develops, manufactures, and markets medical diagnostic products for the clinical laboratory and point-of-care (POC) segments of the diagnostic market in the Americas, Africa, Asia, and Europe.
Enzo Biochem, Inc.	ENZ	Enzo Biochem, Inc., an integrated diagnostics, clinical lab, and life sciences company, researches, develops, manufactures, and markets diagnostic and research products based on genetic engineering, biotechnology, and molecular biology.
QuidelOrtho Corporation	QDEL	QuidelOrtho Corporation focuses on the development and manufacture of diagnostic testing technologies across the continuum of healthcare testing needs.
Exact Sciences Corporation	EXAS	Exact Sciences Corporation provides cancer screening and diagnostic test products in the United States and internationally.
OPKO Health, Inc.	NasdaqGS:OPK	OPKO Health, Inc., a healthcare company, engages in the diagnostics and pharmaceuticals businesses in the United States, Ireland, Chile, Spain, Israel, Mexico, and internationally.
PerkinElmer, Inc.	PKI	PerkinElmer, Inc. provides products, services, and solutions to the diagnostics, life sciences, and applied services markets worldwide.
Quest Diagnostics Incorporated	DGX	Quest Diagnostics Incorporated provides diagnostic testing, information, and services in the United States and internationally.
Laboratory Corporation of America Holdings	LH	Laboratory Corporation of America Holdings operates as a global life sciences company that provides vital information to help doctors, hospitals, pharmaceutical companies, researchers, and patients make clear and confident decisions.
Myriad Genetics, Inc.	MYGN	Myriad Genetics, Inc., a genetic testing and precision medicine company, develops and commercializes genetic tests in the United States and internationally.
Illumina, Inc.	ILMN	Illumina, Inc. provides sequencing and array-based solutions for genetic and genomic analysis.
Qiagen N.V.	QGEN	QIAGEN N.V. offers sample to insight solutions that transform biological materials into molecular insights worldwide.
Alera Inc.	IQT2622336	Alera Inc. provides diagnostic tests for infectious disease, cardiometabolic disease, and toxicology in the United States and internationally.
Luminex Corporation	IQT2627430	Luminex Corporation develops, manufactures, and sells proprietary biological testing technologies and products for the diagnostics, pharmaceutical, and research industries worldwide.
Abaxis, Inc.	IQT2586525	Abaxis, Inc. develops, manufactures, markets, and sells portable blood analysis systems for use in human or veterinary patient care to provide rapid blood constituent measurements for clinicians worldwide.
CombiMatrix Corporation	IQT36309071	CombiMatrix Corporation provides clinical molecular diagnostic laboratory services in the United States.
Affymetrix Inc.	IQT2587418	Affymetrix, Inc. provides life science products and molecular diagnostic products that enable parallel analysis of biological systems at the gene, protein, and cell level.
Genomic Health, Inc.	IQT24111615	Genomic Health, Inc., a healthcare company, provides clinically actionable genomic information to personalize cancer treatment decisions in the United States and internationally.
Cepheid	IQT2599314	Cepheid, a molecular diagnostics company, develops, manufactures, and markets integrated systems for testing in the clinical and non-clinical markets.
Nanosphere, Inc.	IQT38720096	Nanosphere, Inc. develops, manufactures, and markets molecular diagnostic tests for infectious diseases and associated drug resistance markers for earlier disease detection, optimal patient treatment, and improved healthcare economics.
GenMark Diagnostics, Inc.	IQT106626443	GenMark Diagnostics, Inc. designs and manufactures multiplex molecular diagnostic solutions to enhance patient care, improve quality metrics, and reduce the total cost-of-care for laboratory professionals, healthcare providers, and customers in the United States and internationally.
Bio-Reference Laboratories, Inc.	IQT2594421	Bio-Reference Laboratories, Inc. provides clinical laboratory testing services for the detection, diagnosis, evaluation, monitoring, and treatment of diseases in the United States.

Notes:

Source: S&P Capital IQ.

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Exhibit J.4

Valuation of Theranos, Inc.
As of October 15, 2015

Guideline Public Company Ranking
(thousands of USD)

Size (Revenue, millions)	Liquidity (Operating Net Working Capital-to-Revenue)	Liquidity (Current Ratio)
Laboratory Corporation of America Holdi	7,773,600	15.2%
Quest Diagnostics Incorporated	7,527,000	6.5%
Alere Inc.	2,483,662	7.5%
PerkinElmer, Inc.	2,262,633	7.3%
illumina, Inc.	2,140,593	6.9%
Qiagen N.V.	1,292,856	5.4%
Bio-Reference Laboratories, Inc.	882,467	5.2%
Myriad Genetics, Inc.	737,800	4.7%
Cepheid	523,099	4.7%
Theranos, Inc. (at 12/31/18)	603,452	3.9%
Affymetrix Inc.	357,744	3.7%
Genomic Health, Inc.	281,451	3.5%
OPKO Health, Inc.	241,080	3.5%
Luminex Corporation	238,365	3.2%
Abaxis, Inc.	217,133	2.3%
QuidelOrtho Corporation	205,670	2.3%
OraSure Technologies, Inc.	116,018	1.9%
Trinity Biotech plc	101,392	1.9%
Enzo Biochem, Inc.	97,599	1.6%
GenMark Diagnostics, Inc.	36,051	1.4%
Exact Sciences Corporation	26,521	1.4%
Nanosphere, Inc.	18,871	1.4%
CombiMatrix Corporation	9,621	1.1%

Operational Efficiency (Capital Expenditures)	Growth (Historical 1-year Growth Rate)	Growth (Historical 3-year CAGR)
PerkinElmer, Inc.	1.1%	87.5%
CombiMatrix Corporation	1.3%	85.6%
Myriad Genetics, Inc.	1.8%	64.3%
Enzo Biochem, Inc.	1.8%	63.3%
OPKO Health, Inc.	2.2%	40.3%
OraSure Technologies, Inc.	2.2%	25.3%
Abaxis, Inc.	2.2%	23.4%
Bio-Reference Laboratories, Inc.	2.7%	17.9%
Laboratory Corporation of America Holdi	2.8%	14.4%
Quest Diagnostics Incorporated	3.4%	13.6%
Affymetrix Inc.	3.6%	12.4%
Alere Inc.	3.8%	11.3%
illumina, Inc.	6.6%	9.2%
QuidelOrtho Corporation	7.1%	9.1%
Qiagen N.V.	7.3%	9.0%
Cepheid	7.4%	7.5%
Genomic Health, Inc.	7.4%	7.3%
Nanosphere, Inc.	8.2%	6.5%
Trinity Biotech plc	8.3%	2.8%
Luminex Corporation	8.7%	1.3%
GenMark Diagnostics, Inc.	13.6%	0.7%
Theranos, Inc. (at 12/31/18)	16.9%	-1.8%
		-2.9%

Growth (Forward 1-year Growth Rate)	Profitability (Historical EBITDA Margin 1-year)	Operational Efficiency (Return on Equity)
OPKO Health, Inc.	414.3%	15.0%
CombiMatrix Corporation	64.7%	14.8%
GenMark Diagnostics, Inc.	46.3%	14.3%
Nanosphere, Inc.	31.8%	11.4%
Theranos, Inc. (at 12/31/18)	28.0%	8.7%
illumina, Inc.	20.4%	8.6%
Cepheid	19.7%	7.8%
Genomic Health, Inc.	19.1%	5.0%
Laboratory Corporation of America Holdi	17.5%	4.2%
Trinity Biotech plc	13.5%	3.1%
Abaxis, Inc.	12.2%	3.0%
OraSure Technologies, Inc.	12.0%	2.6%
QuidelOrtho Corporation	9.4%	2.4%
Qiagen N.V.	8.4%	0.5%
Alere Inc.	6.8%	0.0%
Luminex Corporation	5.7%	-2.4%
Myriad Genetics, Inc.	5.7%	-3.5%
PerkinElmer, Inc.	5.0%	-14.2%
Affymetrix Inc.	4.7%	-18.2%
Quest Diagnostics Incorporated	1.3%	-32.4%
		-35.1%
		-47.1%
		-65.6%

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Exhibit K.1

Valuation of Theranos, Inc.
As of October 15, 2015Adjusted Net Asset Value
(thousands of USD)

	12/31/2014 Unadjusted	Adjustments	Adjusted
Assets:			
Current Assets			
Current Operating Assets			
Cash & Equivalents	[1] \$ 465,933	\$ 30,986	\$ 496,919
Accounts Receivable	-	-	-
Inventory	2,383	-	2,383
Other Current Assets	12,788	-	12,788
Total Current Operating Assets	481,104	30,986	512,090
Total Current Non-Operating Assets	-	-	-
Total Current Assets	481,104	30,986	512,090
Total Fixed Assets - Net	53,366	-	53,366
Other Assets			
Intangible Assets			
Goodwill	-	-	-
Other Intangible Assets	[2] -	703,330	703,330
Total Intangible Assets - Net	-	703,330	703,330
Total Long Term Receivables	27,045	-	27,045
Total Other Non-Current Assets	-	-	-
Total Non Current Assets	27,045	703,330	730,375
Total Assets	\$ 561,515	\$ 734,316	\$ 1,295,831
Liabilities and Equity:			
Liabilities			
Current Liabilities			
Current Operating Liabilities			
Accounts Payable	\$ 16,633	\$ -	\$ 16,633
Deferred Revenue	-	-	-
Other Current Liabilities	[3] 400,359	(390,375)	9,984
Total Current Operating Liabilities	416,992	(390,375)	26,617
Total Current Debt Obligations	-	-	-
Total Current Liabilities	416,992	(390,375)	26,617
Non Current Liabilities			
Total Long Term Debt	40,805	-	40,805
Other Non Current Liabilities			
Deferred Rent	-	-	-
Deferred Revenue, LT	-	-	-
Customer Deposits	143,846	-	143,846
Other Non-current liabilities	33,750	-	33,750
Total Other Non Current Liabilities	177,596	-	177,596
Total Non Current Liabilities	218,401	-	218,401
Total Liabilities	\$ 635,393	\$ (390,375)	\$ 245,018
Total Equity Value - Controlling, Marketable Basis			\$ 1,050,813
Total Equity Value - Controlling, Marketable Basis (rounded)			\$ 1,051,000

Notes:

- [1] Add proceeds from 2015 capital raises of C-2 Preferred not on 12/31/14 balance sheet, minus pro-rated operating loss through 10/15/15.
- [2] Add value of technology and branding assets under cost to recreate method (Exhibit K.2).
- [3] Adjust out "miscellaneous receipts" liability that represents proceeds received from 2014 capital raises, for which stock had not been issued yet.

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 Valuation of Theranos, Inc.
 As of October 15, 2015

Exhibit K.2
 Cost to Recreate Method - Technology and Branding Assets
 (USD)

Functional Category	Calendar Year 2008			Calendar Year 2010			Calendar Year 2011		
	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost
Salaries, Wages & SBC	\$ 6,717,962	100%	\$ 6,717,962	\$ 7,485,029	100%	\$ 7,485,029	\$ 10,009,033	100%	\$ 10,009,033
Payroll Taxes & Processing	483,606	100%	483,606	509,593	100%	509,593	784,642	100%	784,642
Health Insurance	417,083	100%	417,083	493,529	100%	493,529	787,508	100%	787,508
Other benefits	114,239	100%	114,239	180,253	100%	180,253	173,318	100%	173,318
Sales Commissions	\$ 0.00	0%	\$ 0.00	\$ 0.00	0%	\$ 0.00	\$ 0.00	0%	\$ 0.00
Subtotal Employees	\$ 7,737,890		\$ 7,737,890	\$ 8,227,422		\$ 8,227,422	\$ 12,994,901		\$ 12,994,901
Contractor Services	488,192	100%	488,192	518,788	100%	518,788	1,637,549	100%	1,637,549
Subtotal for All Labor Costs	\$ 8,226,082		\$ 8,226,082	\$ 9,246,198		\$ 9,246,198	\$ 14,632,450		\$ 14,632,450
Facility Costs	2,145,778	99.9%	\$ 2,144,392	\$ 2,064,239	100.0%	\$ 2,064,239	\$ 2,724,350	100.0%	\$ 2,724,350
R&D Materials, Parts, Biological Components	935,138	100%	935,138	3,786,184	100%	3,786,184	5,855,743	100%	5,855,743
Cont., Website, Market Studies, Trademark Costs	58,925	100%	58,925	75,422	100%	75,422	13,452	100%	13,452
Legal, Tax, Accounting Services - General	130,697	50%	60,349	284,605	50%	142,303	339,165	50%	169,582
Legal Regulatory and Patents Costs	313,058	100%	313,058	492,135	100%	492,135	1,307,265	100%	1,307,265
Legal Costs for Litigation	-	0%	-	-	0%	-	665,695	0%	-
Expensed Equip., Software, and Maintenance	148,010	100%	148,010	226,101	100%	226,101	620,302	100%	620,302
Dues, Subscriptions, Licenses and Supplies	85,853	100%	85,853	233,858	100%	233,858	447,386	100%	447,386
Recruiting Costs	192,343	99.9%	192,219	212,706	100.0%	212,706	309,496	100.0%	309,496
Travel Expenses	226,711	50%	113,355	154,949	50%	77,474	396,822	50%	198,411
Interest (Income), Expense & Bank Charges	109,143	0%	-	70,777	0%	-	(132,622)	0%	-
Supporting G&A Expenses	274,158	99.9%	273,881	361,985	100.0%	361,985	495,201	100.0%	495,201
Relocation Expenses	27,220	0%	-	8,272	0%	-	66,194	0%	-
Supplies for Manufacturing / Operations	754,146	100%	754,146	432,293	100%	432,293	77,829	100%	77,829
Inventory	-	100%	-	(13,563)	100%	-	(5,337)	100%	(5,337)
Capital Expenditures	180,627	100%	180,627	1,835,110	100%	1,835,110	3,042,848	100%	3,042,848
Other Costs	17,481	0%	-	17,845	0%	-	15,927	0%	-
Subtotal for Indirect Costs	\$ 5,589,548		\$ 5,260,062	\$ 10,040,161		\$ 9,739,772	\$ 16,290,629		\$ 15,307,450
Inflation Adjusted Total Expenses (4)	2.3%	6.30	\$ 15,573,573	2.3%	5.30	\$ 21,438,892	2.3%	4.30	\$ 32,374,935

Functional Category	Calendar Year 2012			Calendar Year 2013			Calendar Year 2014			Calendar Year 2015		
	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost	Total Cost (1)	Allocation to Technology and Brand (2)	Allocated Cost
Salaries, Wages & SBC	\$ 20,238,277	100%	\$ 20,238,277	\$ 29,829,888	100%	\$ 29,829,888	\$ 46,369,000	100%	\$ 46,369,000	\$ 64,277,000	88%	\$ 56,238,000
Payroll Taxes & Processing	1,561,834	100%	1,561,834	2,246,298	100%	2,246,298	3,450,000	100%	3,450,000	4,573,000	88%	4,001,275
Health Insurance	1,429,896	100%	1,429,896	2,161,519	100%	2,161,519	3,325	100%	3,325	4,900	88%	4,300
Other benefits	2,374,572	100%	2,374,572	3,265,991	100%	3,265,991	8,112,675	100%	8,112,675	11,562,200	88%	10,158,925
Sales Commissions	-	0%	-	78	0%	-	312,000	0%	-	453,000	0%	-
Subtotal Employees	\$ 25,604,499		\$ 25,604,499	\$ 37,493,572		\$ 37,493,494	\$ 68,247,000		\$ 57,935,000	\$ 90,865,000		\$ 79,960,000
Contractor Services	3,073,543	100%	3,073,543	5,372,096	100%	5,372,096	7,885,000	100%	7,885,000	9,673,000	88%	8,463,675
Subtotal for All Labor Costs	\$ 28,678,041		\$ 28,678,041	\$ 42,865,668		\$ 42,865,590	\$ 66,132,000		\$ 65,820,000	\$ 90,838,000		\$ 78,424,375
Facility Costs	2,375,685	100.0%	\$ 2,375,685	\$ 7,140,822	100.0%	\$ 7,140,817	\$ 10,775,000	99.5%	\$ 10,666,139	\$ 15,980,000	87.0%	\$ 14,724,268
R&D Materials, Parts, Biological Components	11,136,524	100%	11,136,524	10,069,736	100%	10,069,736	10,638,000	100%	10,638,000	13,621,000	88%	11,918,375
Cont., Website, Market Studies, Trademark Costs	1,274,910	100%	1,274,910	7,884,778	100%	7,884,778	3,087,000	100%	3,087,000	7,974,000	88%	6,977,250
Legal, Tax, Accounting Services - General	1,400,908	50%	700,454	709,756	50%	354,878	1,951,000	50%	975,500	15,181,000	44%	6,641,688
Legal Regulatory and Patents Costs	1,750,963	100%	1,750,963	1,913,373	100%	1,913,373	2,199,000	100%	2,199,000	3,612,000	88%	4,910,500
Legal Costs for Litigation	1,829,174	0%	-	8,197,019	0%	-	3,899,000	0%	-	4,872,000	0%	-
Expensed Equip., Software, and Maintenance	1,084,748	100%	1,084,748	1,657,745	100%	1,657,745	1,792,000	100%	1,792,000	2,691,000	88%	2,354,625
Dues, Subscriptions, Licenses and Supplies	1,211,873	100%	1,211,873	1,522,924	100%	1,522,924	3,583,000	100%	3,583,000	4,508,000	88%	3,944,300
Recruiting Costs	798,975	100.0%	798,975	952,947	100.0%	952,946	1,147,000	99.9%	1,140,856	1,537,000	87.0%	1,163,321
Travel Expenses	267,524	50%	133,762	787,042	50%	393,521	1,170,000	50%	585,000	3,004,000	44%	1,314,250
Interest (Income), Expense & Bank Charges	143,830	0%	-	362,063	0%	-	(27,000)	0%	-	(1,336,000)	0%	-
Supporting G&A Expenses	934,674	100.0%	934,674	1,185,138	100.0%	1,185,135	2,335,000	99.9%	2,322,493	3,041,000	87.0%	2,645,969
Relocation Expenses	66,756	0%	-	24,763	0%	-	43,000	0%	-	167,000	0%	-
Supplies for Manufacturing / Operations	805,721	100%	805,721	1,474,094	100%	1,474,094	1,952,000	100%	1,952,000	2,286,000	88%	2,000,250
Inventory	8,665,924	100%	8,665,924	1,742,694	100%	1,742,694	1,145,000	100%	1,145,000	1,959,000	88%	1,714,125
Capital Expenditures	17,572,491	100%	17,572,491	8,884,769	100%	8,884,769	38,984,066	100%	38,984,066	21,584,615	88%	18,868,788
Other Costs	90,432	0%	-	(44,841)	0%	-	30,000	0%	-	294,000	0%	-
Subtotal for Indirect Costs	\$ 44,897,893		\$ 41,894,888	\$ 51,394,722		\$ 44,677,410	\$ 89,414,066		\$ 84,290,064	\$ 103,784,815		\$ 79,287,911
Inflation Adjusted Total Expenses (5)	2.3%	3.29	\$ 86,673,059	2.3%	2.29	\$ 82,208,644	2.3%	1.29	\$ 154,983,895	2.3%	0.39	\$ 189,818,037

Notes

- (1) Per company provided trial balances.
- (2) Allocations based on relevance of costs to developing Theranos technology and branding assets. 2015 adjusted for partial year.
- (3) Adjust allocated expenses for average annual inflation of 2.3% over historical period.
- (4) 2004 - 2006 expenses based on inflation main entry deficit at 12.31.07 less operating loss reported for calendar year 2007. Expenses are adjusted for inflation of 3.3% from midpoint of period to valuation date.
- (5) 2007 - 2008 expenses based on audited financial statements. Excludes financing costs and interest income. Expenses are adjusted for inflation of 2.3% from midpoint of each period to valuation date.
- (6) Adjusted for estimated 50% of historical development efforts between 2004-2006 that represent obsolete technology on valuation date.
- (7) Developer margin based on median EBIT margin of peer group of firms in Exhibit J.2.

2004-2006 Expenses, Inflation Adjusted (4)	\$ 24,677,830
2007 Expenses, Inflation Adjusted (5)	21,044,667
2008 Expenses, Inflation Adjusted (5)	15,745,877
2009-2015 Expenses, Inflation Adjusted	507,426,134
Total Direct and Indirect Development Costs	\$ 823,935,798
Obsolescence Adjustment (6)	2% (12,336,915)
Subtotal Cost	\$ 811,598,783
Aid Developer Profit Margin (7)	15% 91,239,219
Total Pretax Development Cost	\$ 720,359,564
Total Pretax Development Cost (Rounded)	\$ 720,320,000

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit L.1
NAV Equity Allocation 2/7/14 - Step 1
(USD)

Break Point Calculation				\$0.015	\$0.030	\$0.066	\$0.072	\$0.094	\$0.170	\$0.206
Share Class	Number of Shares	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Preferred Share Classes										
Series A @ \$0.150	46,320,045	\$ -	\$ 6,948,007	\$ 7,642,807	\$ 9,032,409	\$ 12,089,532	\$ 15,424,575	\$ 19,778,659	\$ 27,653,067	\$ 37,194,996
Series B @ \$0.1846	54,162,965	-	10,000,000	10,812,444	12,437,333	16,012,089	19,911,822	25,003,141	34,210,845	45,368,416
Series C @ \$0.564	58,896,105	33,217,403	33,217,403	34,100,845	35,867,728	39,754,871	43,995,390	49,531,624	59,543,962	71,676,560
Series C-1 @ \$3.00	25,175,001	75,525,003	75,525,003	75,902,628	76,657,878	78,319,428	80,132,028	82,498,478	86,778,228	91,964,279
Series C-1 @ \$15.00	7,500,032	112,500,480	112,500,480	112,612,980	112,837,981	113,332,984	113,872,986	114,577,989	115,852,994	117,398,001
Series C-2 @ \$17.00	9,669,998	164,389,968	164,389,968	164,535,018	164,825,116	165,463,336	165,159,576	167,068,555	168,712,455	170,704,475
Warrants on Common										
Exercise Price @ \$0.072	741,665	-	-	-	-	-	-	16,317	72,683	99,383
Common	302,640,465	-	-	4,539,607	9,079,214	19,974,271	21,790,113	28,448,204	51,448,879	62,343,936
Options on Common										
Exercise Price @ \$0.015	350,000	-	-	-	5,250	17,850	19,950	27,650	54,250	66,850
Exercise Price @ \$0.030	1,227,125	-	-	-	-	44,177	51,539	78,536	171,798	215,974
Exercise Price @ \$0.066	552,500	-	-	-	-	-	3,315	15,470	57,460	77,350
Exercise Price @ \$0.072	3,092,715	-	-	-	-	-	-	68,040	303,086	414,424
Exercise Price @ \$0.094	312,500	-	-	-	-	-	-	-	23,750	35,000
Exercise Price @ \$0.170	3,990,167	-	-	-	-	-	-	-	-	143,646
Exercise Price @ \$0.206	703,195	-	-	-	-	-	-	-	-	-
	515,334,478	385,632,852	402,580,859	410,146,328	420,742,909	445,008,536	461,361,295	487,112,663	544,883,458	597,703,289
Inputs										
		Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Stock Price Now	\$ 378,000,000	\$ 378,000,000	\$ 378,000,000	\$ 378,000,000	\$ 378,000,000	\$ 378,000,000	\$ 378,000,000	\$ 378,000,000	\$ 378,000,000	\$ 378,000,000
Volatility	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Riskfree Rate - Annual	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%
Exercise Price	\$ 0.00	\$ 385,632,852	\$ 402,580,859	\$ 410,146,328	\$ 420,742,909	\$ 445,008,536	\$ 461,361,295	\$ 487,112,663	\$ 544,883,458	\$ 597,703,289
Time To Maturity - Years	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Outputs										
d1	37.38	0.57	0.53	0.51	0.49	0.44	0.41	0.36	0.26	0.17
d2	36.28	(0.53)	(0.57)	(0.59)	(0.61)	(0.66)	(0.69)	(0.74)	(0.84)	(0.93)
N(d1)	1.000	0.716	0.702	0.697	0.688	0.670	0.658	0.640	0.601	0.568
N(d2)	1.000	0.298	0.285	0.279	0.271	0.255	0.244	0.229	0.199	0.177
Call Price (V _c)	\$ 378,000,000	\$ 160,373,387	\$ 155,639,607	\$ 153,595,412	\$ 150,800,657	\$ 144,686,429	\$ 140,776,792	\$ 134,938,116	\$ 123,102,911	\$ 113,598,649
-d1	-37.383	-0.571	-0.531	-0.515	-0.491	-0.440	-0.408	-0.358	-0.256	-0.172
-d2	-36.283	0.529	0.569	0.585	0.609	0.660	0.692	0.742	0.844	0.928
N(-d1)	0.000	0.284	0.298	0.303	0.312	0.330	0.342	0.360	0.399	0.432
N(-d2)	0.000	0.702	0.715	0.721	0.729	0.745	0.756	0.771	0.801	0.823
Put Price (P _p)	\$ 0	\$ 151,923,279	\$ 163,430,682	\$ 168,636,436	\$ 175,996,328	\$ 193,135,721	\$ 204,896,844	\$ 223,735,566	\$ 267,261,803	\$ 308,374,502
Fair Market Value	\$ 378,000,000	\$ 160,373,387	\$ 155,639,607	\$ 153,595,412	\$ 150,800,657	\$ 144,686,429	\$ 140,776,792	\$ 134,938,116	\$ 123,102,911	\$ 113,598,649

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit L.2
NAV Equity Allocation 2/7/14 - Step 2
(USD)

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise	All Classes Participate
High call option	\$ 378,000,000	\$ 160,373,387	\$ 155,639,607	\$ 153,595,412	\$ 150,800,657	\$ 144,686,429	\$ 140,776,792	\$ 134,938,116	\$ 123,102,911	\$ 113,598,649
Less low call option	160,373,387	155,639,607	153,595,412	150,800,657	144,686,429	140,776,792	134,938,116	123,102,911	113,598,649	
Total Value to Allocate	\$ 217,626,613	\$ 4,733,780	\$ 2,044,195	\$ 2,794,755	\$ 6,114,228	\$ 3,909,638	\$ 5,838,675	\$ 11,835,205	\$ 9,504,262	\$ 113,598,649
Preferred Share Classes										
Series A @ \$0.150	-	8,948,007	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045
Series B @ \$0.1846	-	10,000,000	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965
Series C @ \$0.564	33,217,403	-	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105
Series C-1 @ \$3.00	75,525,003	-	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001
Series C-1 @ \$15.00	112,800,480	-	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032
Series C-2 @ \$17.00	164,389,968	-	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	741,665	741,665	741,665	741,665
Common	-	-	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465
Options on Common										
Exercise Price @ \$0.015	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Exercise Price @ \$0.030	-	-	-	-	1,227,125	1,227,125	1,227,125	1,227,125	1,227,125	1,227,125
Exercise Price @ \$0.066	-	-	-	-	-	552,500	552,500	552,500	552,500	552,500
Exercise Price @ \$0.072	-	-	-	-	-	-	3,092,715	3,092,715	3,092,715	3,092,715
Exercise Price @ \$0.094	-	-	-	-	-	-	-	312,500	312,500	312,500
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	3,890,167	3,890,167
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	703,195
	385,632,852	16,948,007	504,364,611	504,714,611	505,941,736	506,494,236	510,328,616	510,641,116	514,631,283	515,334,478
Distribution Percentage										
Preferred Share Classes										
Series A @ \$0.150	0.0%	41.0%	9.2%	9.2%	9.2%	9.1%	9.1%	9.1%	9.0%	9.0%
Series B @ \$0.1846	0.0%	59.0%	10.7%	10.7%	10.7%	10.6%	10.6%	10.6%	10.5%	10.5%
Series C @ \$0.564	8.6%	0.0%	11.7%	11.7%	11.6%	11.6%	11.5%	11.5%	11.4%	11.4%
Series C-1 @ \$3.00	19.6%	0.0%	5.0%	5.0%	5.0%	4.9%	4.9%	4.9%	4.9%	4.9%
Series C-1 @ \$15.00	29.2%	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Series C-2 @ \$17.00	42.6%	0.0%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Warrants on Common										
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common	0.0%	0.0%	60.0%	60.0%	59.8%	59.8%	59.3%	59.3%	58.8%	58.7%
Options on Common										
Exercise Price @ \$0.015	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.030	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Exercise Price @ \$0.066	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.6%	0.6%	0.6%
Exercise Price @ \$0.094	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Exercise Price @ \$0.170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%
Exercise Price @ \$0.206	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Allocation of Value										
Preferred Share Classes										
Series A @ \$0.150	\$ -	\$ 1,940,661	\$ 187,736	\$ 256,488	\$ 559,771	\$ 357,545	\$ 529,946	\$ 1,073,567	\$ 855,443	\$ 10,210,639
Series B @ \$0.1846	-	2,793,119	219,523	299,916	654,551	418,085	619,679	1,255,343	1,000,287	11,939,507
Series C @ \$0.564	18,745,786	-	238,706	326,125	711,750	454,620	673,631	1,365,044	1,087,660	12,662,865
Series C-1 @ \$3.00	42,621,500	-	102,035	139,401	304,236	194,326	286,027	583,485	464,934	5,549,485
Series C-1 @ \$15.00	63,488,104	-	30,388	41,530	90,637	57,893	85,808	173,829	138,511	1,653,283
Series C-2 @ \$17.00	92,771,224	-	39,193	53,546	116,660	74,643	110,635	224,123	178,586	2,131,623
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	8,485	17,190	13,697	163,490
Common	-	-	1,228,605	1,875,810	3,657,363	2,356,087	3,462,513	7,014,343	5,589,195	66,713,075
Options on Common										
Exercise Price @ \$0.015	-	-	-	1,938	4,230	2,702	4,004	8,112	6,464	77,153
Exercise Price @ \$0.030	-	-	-	-	14,830	9,472	14,040	26,441	22,683	270,503
Exercise Price @ \$0.066	-	-	-	-	-	4,265	6,321	12,805	10,204	121,791
Exercise Price @ \$0.072	-	-	-	-	-	-	35,384	71,680	57,117	681,748
Exercise Price @ \$0.094	-	-	-	-	-	-	-	7,243	5,771	68,886
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	73,691	879,579
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	155,010
	\$ 217,626,613	\$ 4,733,780	\$ 2,044,195	\$ 2,794,755	\$ 6,114,228	\$ 3,909,638	\$ 5,838,675	\$ 11,835,205	\$ 9,504,262	\$ 113,598,649

Share Class	Number of Shares	Total Value	Per Share Marketable
Preferred Share Classes			
Series A @ \$0.150	46,320,045	\$ 15,971,798	\$ 0.34
Series B @ \$0.1846	54,162,965	19,200,011	0.35
Series C @ \$0.564	58,896,105	26,586,427	0.62
Series C-1 @ \$3.00	25,175,001	50,247,440	2.00
Series C-1 @ \$15.00	7,500,032	65,759,992	8.77
Series C-2 @ \$17.00	9,669,998	\$ 96,700,432	\$ 9.90
Warrants on Common			
Exercise Price @ \$0.072	741,665	202,862	0.27

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Exhibit M.1
DCF Equity Allocation 2/7/14 - Step 1
(USD)

Break Point Calculation				\$0.015	\$0.030	\$0.066	\$0.072	\$0.094	\$0.170	\$0.206
Share Class	Number of Shares	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Preferred Share Classes										
Series A @ \$0.150	46,320,045	\$ -	\$ 6,948,007	\$ 7,642,807	\$ 9,032,409	\$ 12,089,532	\$ 15,424,575	\$ 19,778,659	\$ 27,653,067	\$ 37,194,896
Series B @ \$0.1846	54,162,965	-	10,000,000	10,812,444	12,437,333	16,012,089	19,911,822	25,003,141	34,210,845	45,368,416
Series C @ \$0.564	58,896,105	33,217,403	33,217,403	34,100,845	35,867,728	39,754,871	43,995,390	49,531,624	59,543,962	71,676,580
Series C-1 @ \$3.00	25,175,001	75,525,003	75,525,003	75,902,628	76,657,878	78,319,428	80,132,028	82,498,478	86,778,228	91,954,279
Series C-1 @ \$15.00	7,500,032	112,500,480	112,500,480	112,612,980	112,837,981	113,332,984	113,872,986	114,577,989	115,852,994	117,398,001
Series C-2 @ \$17.00	9,689,998	164,389,966	164,389,966	164,535,016	164,825,116	165,463,336	166,159,576	167,068,555	168,712,455	170,704,475
Warrants on Common										
Exercise Price @ \$0.072	741,665	-	-	-	-	-	-	16,317	72,683	99,383
Common	302,640,465	-	-	4,539,607	9,079,214	19,974,271	21,790,113	28,448,204	51,448,879	62,343,936
Options on Common										
Exercise Price @ \$0.015	350,000	-	-	-	5,250	17,850	19,950	27,650	54,250	66,850
Exercise Price @ \$0.030	1,227,125	-	-	-	-	44,177	51,539	78,536	171,798	215,974
Exercise Price @ \$0.066	552,500	-	-	-	-	-	3,315	15,470	57,460	77,350
Exercise Price @ \$0.072	3,092,715	-	-	-	-	-	-	68,040	303,086	414,424
Exercise Price @ \$0.094	312,500	-	-	-	-	-	-	-	23,750	35,000
Exercise Price @ \$0.170	3,980,167	-	-	-	-	-	-	-	-	143,646
Exercise Price @ \$0.206	703,195	-	-	-	-	-	-	-	-	-
	515,334,478	385,632,852	402,580,859	410,146,328	420,742,909	445,008,536	461,361,295	487,112,663	544,883,458	597,703,289
Inputs										
Stock Price Now	\$ 431,000,000	\$ 431,000,000	\$ 431,000,000	\$ 431,000,000	\$ 431,000,000	\$ 431,000,000	\$ 431,000,000	\$ 431,000,000	\$ 431,000,000	\$ 431,000,000
Volatility	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Riskfree Rate - Annual	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%
Exercise Price	\$ 0.00	\$ 385,632,852	\$ 402,580,859	\$ 410,146,328	\$ 420,742,909	\$ 445,008,536	\$ 461,361,295	\$ 487,112,663	\$ 544,883,458	\$ 597,703,289
Time To Maturity - Years	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Outputs										
d1	37.50	0.69	0.65	0.63	0.61	0.56	0.53	0.48	0.38	0.29
d2	36.40	(0.41)	(0.45)	(0.47)	(0.49)	(0.54)	(0.57)	(0.62)	(0.72)	(0.81)
N(d1)	1.000	0.755	0.742	0.737	0.729	0.712	0.701	0.683	0.646	0.615
N(d2)	1.000	0.341	0.327	0.321	0.312	0.294	0.283	0.267	0.234	0.209
Call Price (V _c)	\$ 431,000,000	\$ 199,382,497	\$ 193,963,436	\$ 191,617,587	\$ 188,404,768	\$ 181,352,863	\$ 176,826,793	\$ 170,042,554	\$ 156,196,002	\$ 144,980,775
-d1	-37.502	-0.690	-0.651	-0.634	-0.611	-0.560	-0.527	-0.477	-0.376	-0.291
-d2	-36.402	0.410	0.449	0.466	0.489	0.540	0.573	0.623	0.724	0.809
N(-d1)	0.000	0.245	0.258	0.263	0.271	0.286	0.299	0.317	0.354	0.385
N(-d2)	0.000	0.659	0.673	0.679	0.688	0.706	0.717	0.733	0.766	0.791
Put Price (P _p)	\$ 0	\$ 137,932,389	\$ 148,754,512	\$ 153,658,611	\$ 160,600,439	\$ 176,802,154	\$ 187,946,845	\$ 205,840,004	\$ 247,354,895	\$ 286,756,628
Fair Market Value	\$ 431,000,000	\$ 199,382,497	\$ 193,963,436	\$ 191,617,587	\$ 188,404,768	\$ 181,352,863	\$ 176,826,793	\$ 170,042,554	\$ 156,196,002	\$ 144,980,775

US v. Elizabeth Holmes
 Valuation of Theranos, Inc.
 As of February 7, 2014

Exhibit M.2
 DCF Equity Allocation 2/7/14 - Step 2
 (USD)

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.178 Options Exercise	\$0.206 Options Exercise	All Classes Participate
High call option	\$ 431,000,000	\$ 199,382,497	\$ 193,963,436	\$ 191,617,587	\$ 188,404,788	\$ 181,352,863	\$ 176,826,793	\$ 170,042,554	\$ 156,196,002	\$ 144,980,775
Less low call option	199,382,497	193,963,436	191,617,587	188,404,788	181,352,863	176,826,793	170,042,554	156,196,002	144,980,775	144,980,775
Total Value to Allocate	\$ 231,617,503	\$ 5,419,061	\$ 2,345,849	\$ 3,212,819	\$ 7,051,905	\$ 4,526,070	\$ 6,784,239	\$ 13,848,551	\$ 11,215,227	\$ 144,980,775
Preferred Share Classes										
Series A @ \$0.150	-	6,948,007	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045
Series B @ \$0.1846	-	10,000,000	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965
Series C @ \$0.564	33,217,403	-	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105
Series C-1 @ \$3.00	75,525,003	-	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001
Series C-1 @ \$15.00	112,500,480	-	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032
Series C-2 @ \$17.00	164,399,988	-	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	741,665	741,665	741,665	741,665
Common	-	-	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465
Options on Common										
Exercise Price @ \$0.015	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Exercise Price @ \$0.030	-	-	-	-	1,227,125	1,227,125	1,227,125	1,227,125	1,227,125	1,227,125
Exercise Price @ \$0.066	-	-	-	-	-	552,500	552,500	552,500	552,500	552,500
Exercise Price @ \$0.072	-	-	-	-	-	-	3,092,715	3,092,715	3,092,715	3,092,715
Exercise Price @ \$0.094	-	-	-	-	-	-	-	312,500	312,500	312,500
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	3,990,167	3,990,167
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	703,195
	385,632,852	16,948,007	504,364,611	504,714,611	505,941,738	506,494,236	510,328,616	510,641,116	514,631,283	515,334,478

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.178 Options Exercise	\$0.206 Options Exercise	All Classes Participate
Distribution Percentage										
Preferred Share Classes										
Series A @ \$0.150	0.0%	41.0%	8.2%	9.2%	8.2%	8.1%	8.1%	8.1%	9.0%	9.0%
Series B @ \$0.1846	0.0%	59.0%	10.7%	10.7%	10.7%	10.7%	10.6%	10.6%	10.5%	10.5%
Series C @ \$0.564	8.6%	0.0%	11.7%	11.7%	11.6%	11.6%	11.5%	11.4%	11.4%	11.4%
Series C-1 @ \$3.00	19.6%	0.0%	5.0%	5.0%	5.0%	4.9%	4.9%	4.9%	4.9%	4.9%
Series C-1 @ \$15.00	29.2%	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Series C-2 @ \$17.00	42.8%	0.0%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Warrants on Common										
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common	0.0%	0.0%	60.0%	60.0%	59.8%	59.8%	59.3%	59.3%	58.8%	58.7%
Options on Common										
Exercise Price @ \$0.015	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.030	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Exercise Price @ \$0.066	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.6%	0.6%	0.6%
Exercise Price @ \$0.094	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Exercise Price @ \$0.170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	0.8%
Exercise Price @ \$0.206	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.178 Options Exercise	\$0.206 Options Exercise	All Classes Participate
Allocation of Value										
Preferred Share Classes										
Series A @ \$0.150	\$ -	\$ 2,221,589	\$ 215,430	\$ 294,856	\$ 645,617	\$ 413,919	\$ 615,772	\$ 1,256,015	\$ 1,009,441	\$ 13,031,373
Series B @ \$0.1846	-	3,197,462	251,917	344,781	754,933	484,004	720,035	1,468,684	1,180,380	15,237,848
Series C @ \$0.564	19,950,925	-	273,932	374,910	820,904	526,300	782,957	1,597,028	1,263,506	16,569,439
Series C-1 @ \$3.00	45,361,572	-	117,091	160,254	350,694	224,666	334,673	682,646	548,632	7,082,567
Series C-1 @ \$15.00	67,569,659	-	34,883	47,742	104,537	67,021	99,704	203,371	163,446	2,110,009
Series C-2 @ \$17.00	98,735,347	-	44,976	61,555	134,782	86,412	128,552	262,212	210,736	2,720,493
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	9,860	20,111	16,163	208,655
Common	-	-	1,407,611	1,926,493	4,218,256	2,704,418	4,023,261	8,206,403	6,595,366	85,142,856
Options on Common										
Exercise Price @ \$0.015	-	-	-	2,228	4,876	3,128	4,653	9,491	7,627	98,467
Exercise Price @ \$0.030	-	-	-	-	17,104	10,966	16,313	33,275	26,742	345,231
Exercise Price @ \$0.066	-	-	-	-	-	4,937	7,345	14,982	12,040	155,437
Exercise Price @ \$0.072	-	-	-	-	-	-	41,114	83,862	67,389	870,084
Exercise Price @ \$0.094	-	-	-	-	-	-	-	8,474	8,810	87,917
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	86,957	1,122,567
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	197,832
	\$ 231,617,503	\$ 5,419,061	\$ 2,345,849	\$ 3,212,819	\$ 7,051,905	\$ 4,526,070	\$ 6,784,239	\$ 13,848,551	\$ 11,215,227	\$ 144,980,775

Share Class	Number of Shares	Total Value	Per Share Marketable
Preferred Share Classes			
Series A @ \$0.150	46,320,045	\$ 19,704,031	\$ 0.43
Series B @ \$0.1846	54,162,965	23,640,024	0.44
Series C @ \$0.564	58,896,105	42,179,501	0.72
Series C-1 @ \$3.00	25,175,001	54,863,296	2.18
Series C-1 @ \$15.00	7,500,032	70,400,373	9.39
Series C-2 @ \$17.00	9,669,998	102,385,064	10.59
Warrants on Common			
Exercise Price @ \$0.072	741,665	254,789	0.34

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Exhibit N.1
NAV Equity Allocation 12/31/14 - Step 1
(USD)

Break Point Calculation				\$0.015	\$0.030	\$0.066	\$0.072	\$0.094	\$0.170	\$0.206
Share Class	Number of Shares	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Preferred Share Classes										
Series A @ \$0.150	46,320,045	\$ -	\$ 6,948,007	\$ 7,642,807	\$ 9,032,409	\$ 12,089,532	\$ 15,424,575	\$ 19,778,659	\$ 27,653,067	\$ 37,194,996
Series B @ \$0.1846	54,134,965	-	9,994,830	10,806,855	12,430,904	16,003,811	19,901,529	24,990,216	34,193,160	45,344,962
Series C @ \$0.564	58,896,105	33,217,403	33,217,403	34,100,845	35,867,728	39,754,871	43,995,390	49,531,624	59,543,962	71,676,560
Series C-1 @ \$3.00	25,175,001	75,525,003	75,525,003	75,902,628	76,657,878	78,319,428	80,132,028	82,498,478	86,778,228	91,964,279
Series C-1 @ \$15.00	7,500,032	112,500,480	112,500,480	112,612,980	112,837,981	113,332,984	113,872,986	114,577,989	115,852,994	117,398,001
Series C-2 @ \$17.00	32,808,227	557,739,859	557,739,859	558,231,982	559,216,229	561,381,572	563,743,765	566,827,738	572,405,136	579,163,631
Warrants on Common										
Exercise Price @ \$0.072	741,665	-	-	-	-	-	-	16,317	72,683	99,383
Common	302,965,725	-	-	4,544,486	9,088,972	19,995,738	21,813,532	28,478,778	51,504,173	62,410,939
Options on Common										
Exercise Price @ \$0.015	350,000	-	-	-	5,250	17,850	19,950	27,650	54,250	66,850
Exercise Price @ \$0.030	1,170,875	-	-	-	-	42,152	49,177	74,936	163,923	206,074
Exercise Price @ \$0.066	547,500	-	-	-	-	-	3,285	15,330	56,940	76,650
Exercise Price @ \$0.072	2,579,175	-	-	-	-	-	-	56,742	252,759	345,609
Exercise Price @ \$0.094	312,500	-	-	-	-	-	-	-	23,750	35,000
Exercise Price @ \$0.170	3,972,457	-	-	-	-	-	-	-	-	143,008
Exercise Price @ \$0.206	606,365	-	-	-	-	-	-	-	-	-
	538,080,637	778,982,745	795,925,582	803,842,584	815,137,351	840,937,937	858,956,217	886,874,457	948,555,026	1,006,125,944
Inputs										
Stock Price Now	\$ 827,000,000	\$ 827,000,000	\$ 827,000,000	\$ 827,000,000	\$ 827,000,000	\$ 827,000,000	\$ 827,000,000	\$ 827,000,000	\$ 827,000,000	\$ 827,000,000
Volatility	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%
Riskfree Rate - Annual	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%
Exercise Price	\$ 0.00	\$ 778,982,745	\$ 795,925,582	\$ 803,842,584	\$ 815,137,351	\$ 840,937,937	\$ 858,956,217	\$ 886,874,457	\$ 948,555,026	\$ 1,006,125,944
Time To Maturity - Years	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Outputs										
d1	39.50	0.64	0.62	0.61	0.60	0.57	0.55	0.52	0.45	0.40
d2	38.44	(0.42)	(0.44)	(0.45)	(0.46)	(0.49)	(0.51)	(0.54)	(0.61)	(0.66)
N(d1)	1.000	0.738	0.732	0.729	0.724	0.714	0.708	0.697	0.675	0.654
N(d2)	1.000	0.337	0.329	0.326	0.321	0.311	0.304	0.293	0.272	0.254
Call Price (V _c)	\$ 827,000,000	\$ 362,434,456	\$ 357,095,687	\$ 354,641,163	\$ 351,182,763	\$ 343,468,924	\$ 338,230,551	\$ 330,345,757	\$ 313,865,295	\$ 299,558,358
-d1	-39.503	-0.638	-0.618	-0.609	-0.596	-0.566	-0.546	-0.516	-0.453	-0.397
-d2	-38.443	0.422	0.442	0.451	0.464	0.494	0.514	0.544	0.607	0.663
N(-d1)	0.000	0.262	0.268	0.271	0.276	0.286	0.292	0.303	0.325	0.346
N(-d2)	0.000	0.663	0.671	0.674	0.679	0.689	0.696	0.707	0.728	0.746
Put Price (P _p)	\$ -	\$ 272,730,055	\$ 283,427,430	\$ 288,466,230	\$ 295,698,159	\$ 312,404,192	\$ 324,219,853	\$ 342,759,259	\$ 384,658,539	\$ 424,841,621
Fair Market Value	\$ 827,000,000	\$ 362,434,456	\$ 357,095,687	\$ 354,641,163	\$ 351,182,763	\$ 343,468,924	\$ 338,230,551	\$ 330,345,757	\$ 313,865,295	\$ 299,558,358

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As of December 31, 2014

Exhibit N.2
NAV Equity Allocation 12/31/14 - Step 2
(USD)

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.084 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise	All Classes Participate
High call option	\$ 827,000,000	\$ 362,434,456	\$ 357,095,687	\$ 354,841,163	\$ 351,182,763	\$ 343,468,924	\$ 338,230,551	\$ 330,345,757	\$ 313,865,295	\$ 299,558,358
Less low call option	362,434,456	357,095,687	354,641,163	351,182,763	343,468,924	338,230,551	330,345,757	313,865,295	299,558,358	
Total Value to Allocate	\$ 464,565,544	\$ 5,338,769	\$ 2,454,524	\$ 3,458,400	\$ 7,713,839	\$ 5,238,373	\$ 7,884,794	\$ 16,480,462	\$ 14,306,937	\$ 299,558,358
Preferred Share Classes										
Series A @ \$0.150	-	6,948,007	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045
Series B @ \$0.1846	-	9,994,830	54,134,985	54,134,985	54,134,985	54,134,985	54,134,985	54,134,985	54,134,985	54,134,985
Series C @ \$0.564	33,217,403	-	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105
Series C-1 @ \$3.00	75,529,003	-	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001
Series C-1 @ \$15.00	112,500,480	-	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032
Series C-2 @ \$17.00	557,739,859	-	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	741,685	741,685	741,685	741,685
Common	-	-	302,985,725	302,985,725	302,985,725	302,985,725	302,985,725	302,985,725	302,985,725	302,985,725
Options on Common										
Exercise Price @ \$0.015	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Exercise Price @ \$0.030	-	-	-	-	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875
Exercise Price @ \$0.066	-	-	-	-	-	547,500	547,500	547,500	547,500	547,500
Exercise Price @ \$0.072	-	-	-	-	-	-	2,579,175	2,579,175	2,579,175	2,579,175
Exercise Price @ \$0.094	-	-	-	-	-	-	-	312,500	312,500	312,500
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	3,972,457	3,972,457
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	606,365
	778,992,745	16,942,837	527,800,100	528,150,100	529,320,975	529,868,475	533,189,315	533,501,815	537,474,272	536,080,637

Distribution Percentage

	Series C, C-1, C-2	Series A, B Liq.	\$0.015 Options	\$0.03 Options	\$0.066 Options	\$0.072 Warrants / Options on Common Ex.	\$0.084 Options	\$0.170 Options	\$0.206 Options	All Classes
Preferred Share Classes										
Series A @ \$0.150	0.0%	41.0%	8.8%	8.8%	8.8%	8.7%	8.7%	8.7%	8.6%	8.6%
Series B @ \$0.1846	0.0%	59.0%	10.3%	10.2%	10.2%	10.2%	10.2%	10.1%	10.1%	10.1%
Series C @ \$0.564	4.3%	0.0%	11.2%	11.2%	11.1%	11.1%	11.0%	11.0%	11.0%	10.9%
Series C-1 @ \$3.00	9.7%	0.0%	4.8%	4.8%	4.8%	4.7%	4.7%	4.7%	4.7%	4.7%
Series C-1 @ \$15.00	14.4%	0.0%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Series C-2 @ \$17.00	71.6%	0.0%	6.2%	6.2%	6.2%	6.2%	6.1%	6.1%	6.1%	6.1%
Warrants on Common										
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common	0.0%	0.0%	57.4%	57.4%	57.2%	57.2%	56.8%	56.8%	56.4%	56.3%
Options on Common										
Exercise Price @ \$0.015	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.030	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Exercise Price @ \$0.066	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	0.5%
Exercise Price @ \$0.094	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Exercise Price @ \$0.170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%
Exercise Price @ \$0.206	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Allocation of Value

	Series C, C-1, C-2	Series A, B Liq.	\$0.015 Options	\$0.03 Options	\$0.066 Options	\$0.072 Warrants / Options on Common Ex.	\$0.084 Options	\$0.170 Options	\$0.206 Options	All Classes
Preferred Share Classes										
Series A @ \$0.150	\$ -	\$ 2,189,350	\$ 215,410	\$ 303,310	\$ 675,026	\$ 457,928	\$ 684,980	\$ 1,430,877	\$ 1,232,985	\$ 25,787,132
Series B @ \$0.1846	-	3,149,419	251,754	354,483	788,913	535,188	800,547	1,672,289	1,441,010	30,137,827
Series C @ \$0.564	19,810,016	-	273,895	385,680	858,298	582,257	870,955	1,819,366	1,567,745	32,788,432
Series C-1 @ \$3.00	45,041,195	-	117,076	164,849	386,877	248,684	372,267	777,684	670,129	14,015,338
Series C-1 @ \$15.00	67,092,432	-	34,879	49,111	109,299	74,147	110,910	231,684	199,642	4,175,391
Series C-2 @ \$17.00	332,621,900	-	152,574	214,833	478,117	324,348	485,197	1,013,482	873,317	16,264,881
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	10,968	22,911	19,742	412,897
Common	-	-	1,406,936	1,963,852	4,415,145	2,955,172	4,480,252	9,358,947	8,064,594	168,865,012
Options on Common										
Exercise Price @ \$0.015	-	-	-	2,292	5,101	3,460	5,176	10,912	9,317	194,851
Exercise Price @ \$0.030	-	-	-	-	17,063	11,575	17,315	36,170	31,167	851,845
Exercise Price @ \$0.066	-	-	-	-	-	5,413	8,096	18,913	14,574	304,802
Exercise Price @ \$0.072	-	-	-	-	-	-	38,141	79,674	68,655	1,435,869
Exercise Price @ \$0.094	-	-	-	-	-	-	-	9,653	8,318	173,974
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	105,742	2,211,532
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	337,573
	\$ 464,565,544	\$ 5,338,769	\$ 2,454,524	\$ 3,458,400	\$ 7,713,839	\$ 5,238,373	\$ 7,884,794	\$ 16,480,462	\$ 14,306,937	\$ 299,558,358

Share Class	Number of Shares	Total Value	Per Share Marketable
Preferred Share Classes			
Series A @ \$0.150	46,320,045	\$ 32,977,000	\$ 0.71
Series B @ \$0.1846	54,134,985	39,131,428	0.72
Series C @ \$0.564	58,896,105	58,956,625	1.00
Series C-1 @ \$3.00	25,175,001	61,774,321	2.45
Series C-1 @ \$15.00	7,500,032	72,077,495	9.61
Series C-2 @ \$17.00	32,808,227	354,428,819	10.80
Warrants on Common			
Exercise Price @ \$0.072	741,685	469,518	0.63

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of December 31, 2014

Exhibit O.1
DCF Equity Allocation 2/7/14 - Step 1
(USD)

Break Point Calculation				\$0.016	\$0.030	\$0.066	\$0.072	\$0.094	\$0.170	\$0.206
Share Class	Number of Shares	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.016 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Preferred Share Classes										
Series A @ \$0.150	46,320,045	\$ -	\$ 6,948,007	\$ 7,642,807	\$ 9,032,409	\$ 12,089,532	\$ 15,424,575	\$ 19,778,659	\$ 27,553,067	\$ 37,194,996
Series B @ \$0.1846	54,134,965	-	9,994,830	10,806,855	12,430,904	16,003,811	19,901,529	24,990,216	34,193,160	45,344,962
Series C @ \$0.564	58,896,105	33,217,403	33,217,403	34,100,845	35,867,728	39,754,871	43,995,390	49,531,624	59,543,962	71,676,560
Series C-1 @ \$3.00	25,175,001	75,525,003	75,525,003	75,902,628	76,657,878	78,319,428	80,132,028	82,498,478	86,778,228	91,964,279
Series C-1 @ \$15.00	7,500,032	112,500,480	112,500,480	112,612,980	112,837,981	113,332,984	113,872,986	114,577,989	115,852,994	117,398,001
Series C-2 @ \$17.00	32,808,227	557,739,859	557,739,859	558,231,982	559,216,229	561,381,572	563,743,765	566,827,738	572,405,136	579,163,631
Warrants on Common										
Exercise Price @ \$0.072	741,665	-	-	-	-	-	-	16,317	72,683	99,383
Common	302,965,725	-	-	4,544,486	9,088,972	19,995,738	21,813,532	28,478,778	51,504,173	62,410,939
Options on Common										
Exercise Price @ \$0.015	350,000	-	-	-	5,250	17,850	19,950	27,650	54,250	66,850
Exercise Price @ \$0.030	1,170,875	-	-	-	-	42,152	49,177	74,936	163,923	206,074
Exercise Price @ \$0.066	547,500	-	-	-	-	-	3,285	15,330	56,940	76,650
Exercise Price @ \$0.072	2,579,175	-	-	-	-	-	-	58,742	252,759	345,609
Exercise Price @ \$0.094	312,500	-	-	-	-	-	-	-	23,750	35,000
Exercise Price @ \$0.170	3,972,457	-	-	-	-	-	-	-	-	143,008
Exercise Price @ \$0.206	606,365	-	-	-	-	-	-	-	-	-
	538,080,637	778,982,745	795,925,582	803,842,584	815,137,351	840,937,937	858,956,217	886,874,457	948,555,026	1,006,125,944
Inputs										
Stock Price Now	\$ 951,000,000	\$ 951,000,000	\$ 951,000,000	\$ 951,000,000	\$ 951,000,000	\$ 951,000,000	\$ 951,000,000	\$ 951,000,000	\$ 951,000,000	\$ 951,000,000
Volatility	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%
Riskfree Rate - Annual	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%
Exercise Price	\$ 0.00	\$ 778,982,745	\$ 795,925,582	\$ 803,842,584	\$ 815,137,351	\$ 840,937,937	\$ 858,956,217	\$ 886,874,457	\$ 948,555,026	\$ 1,006,125,944
Time To Maturity - Years	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Outputs										
d1	39.63	0.77	0.75	0.74	0.73	0.70	0.68	0.65	0.58	0.53
d2	38.57	(0.29)	(0.31)	(0.32)	(0.33)	(0.36)	(0.38)	(0.41)	(0.48)	(0.53)
N(d1)	1.000	0.779	0.773	0.770	0.766	0.757	0.751	0.741	0.720	0.702
N(d2)	1.000	0.386	0.378	0.375	0.370	0.359	0.351	0.340	0.317	0.298
Call Price (V _c)	\$ 951,000,000	\$ 456,633,546	\$ 450,506,701	\$ 447,685,948	\$ 443,707,334	\$ 434,815,355	\$ 428,762,774	\$ 419,630,618	\$ 400,456,912	\$ 383,715,353
-d1	-39.635	-0.770	-0.750	-0.740	-0.727	-0.698	-0.678	-0.648	-0.584	-0.529
-d2	-38.575	0.290	0.310	0.320	0.333	0.362	0.382	0.412	0.476	0.531
N(-d1)	0.000	0.221	0.227	0.230	0.234	0.243	0.249	0.259	0.280	0.298
N(-d2)	0.000	0.614	0.622	0.625	0.630	0.641	0.649	0.660	0.683	0.702
Put Price (P _p)	\$ -	\$ 242,929,144	\$ 252,838,444	\$ 257,511,015	\$ 264,222,730	\$ 279,750,623	\$ 290,752,076	\$ 308,044,119	\$ 347,250,156	\$ 384,998,615
Fair Market Value	\$ 951,000,000	\$ 456,633,546	\$ 450,506,701	\$ 447,685,948	\$ 443,707,334	\$ 434,815,355	\$ 428,762,774	\$ 419,630,618	\$ 400,456,912	\$ 383,715,353

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of December 31, 2014

Exhibit O.2
DCF Equity Allocation 2/7/14 - Step 2
(USD)

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise	All Classes Participate
High call option	\$ 991,000,000	\$ 456,833,548	\$ 450,506,701	\$ 447,685,948	\$ 443,707,334	\$ 434,815,355	\$ 428,762,774	\$ 419,630,618	\$ 400,456,912	\$ 383,715,353
Less low call option	456,633,546	450,506,701	447,685,948	443,707,334	434,815,355	428,762,774	419,630,618	400,456,912	383,715,353	383,715,353
Total Value to Allocate	\$ 494,366,454	\$ 6,126,844	\$ 2,820,753	\$ 3,978,614	\$ 8,891,979	\$ 6,052,581	\$ 9,132,156	\$ 18,173,706	\$ 16,741,559	\$ 383,715,353
Preferred Share Classes										
Series A @ \$0.150	-	6,948,007	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045
Series B @ \$0.1846	-	9,994,830	54,134,985	54,134,985	54,134,985	54,134,985	54,134,985	54,134,985	54,134,985	54,134,985
Series C @ \$0.564	33,217,403	-	58,866,105	58,866,105	58,866,105	58,866,105	58,866,105	58,866,105	58,866,105	58,866,105
Series C-1 @ \$3.00	75,525,003	-	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001
Series C-1 @ \$15.00	112,500,480	-	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032
Series C-2 @ \$17.00	557,739,859	-	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	741,665	741,665	741,665	741,665
Common	-	-	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725
Options on Common										
Exercise Price @ \$0.015	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Exercise Price @ \$0.030	-	-	-	-	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875
Exercise Price @ \$0.066	-	-	-	-	-	547,500	547,500	547,500	547,500	547,500
Exercise Price @ \$0.072	-	-	-	-	-	-	2,579,175	2,579,175	2,579,175	2,579,175
Exercise Price @ \$0.094	-	-	-	-	-	-	-	312,500	312,500	312,500
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	3,972,457	3,972,457
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	606,365
	776,982,745	16,942,637	527,800,100	529,150,100	529,320,975	529,666,475	533,189,315	533,501,815	537,474,272	538,080,637
Distribution Percentage										
Preferred Share Classes										
Series A @ \$0.150	0.0%	41.0%	8.8%	8.8%	8.6%	8.7%	8.7%	8.7%	8.6%	8.6%
Series B @ \$0.1846	0.0%	59.0%	10.3%	10.2%	10.2%	10.2%	10.2%	10.2%	10.1%	10.1%
Series C @ \$0.564	4.3%	0.0%	11.2%	11.2%	11.1%	11.1%	11.0%	11.0%	11.0%	10.9%
Series C-1 @ \$3.00	9.7%	0.0%	4.8%	4.8%	4.8%	4.7%	4.7%	4.7%	4.7%	4.7%
Series C-1 @ \$15.00	14.4%	0.0%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Series C-2 @ \$17.00	71.6%	0.0%	6.2%	6.2%	6.2%	6.2%	6.2%	6.1%	6.1%	6.1%
Warrants on Common										
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common	0.0%	0.0%	57.4%	57.4%	57.2%	57.2%	56.8%	56.8%	56.4%	56.3%
Options on Common										
Exercise Price @ \$0.015	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.030	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Exercise Price @ \$0.066	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	0.5%
Exercise Price @ \$0.094	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Exercise Price @ \$0.170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%
Exercise Price @ \$0.206	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Allocation of Value										
Preferred Share Classes										
Series A @ \$0.150	\$ -	\$ 2,512,526	\$ 247,551	\$ 348,834	\$ 778,123	\$ 529,105	\$ 793,343	\$ 1,664,712	\$ 1,442,804	\$ 33,031,689
Series B @ \$0.1846	-	3,614,316	289,317	407,805	909,405	618,373	927,192	1,945,575	1,686,227	38,604,655
Series C @ \$0.564	21,080,785	-	314,762	443,671	389,386	672,758	1,008,738	2,116,687	1,834,530	41,959,913
Series C-1 @ \$3.00	47,930,494	-	134,544	189,646	422,911	287,569	431,163	904,773	784,165	17,952,763
Series C-1 @ \$15.00	71,396,271	-	40,083	56,499	125,592	85,671	128,456	289,545	233,615	5,348,413
Series C-2 @ \$17.00	353,958,901	-	175,339	247,148	551,140	374,762	561,920	1,179,106	1,021,930	23,396,159
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	12,703	26,855	23,102	528,895
Common	-	-	1,619,157	2,282,275	5,089,473	3,460,717	5,189,020	10,868,390	9,436,952	216,050,517
Options on Common										
Exercise Price @ \$0.015	-	-	-	2,637	5,680	3,598	5,995	12,579	10,902	249,592
Exercise Price @ \$0.030	-	-	-	-	19,869	-	20,054	42,080	36,471	834,973
Exercise Price @ \$0.066	-	-	-	-	-	6,254	9,377	19,677	17,054	390,432
Exercise Price @ \$0.072	-	-	-	-	-	-	44,175	92,694	80,338	1,839,298
Exercise Price @ \$0.094	-	-	-	-	-	-	-	11,231	9,734	222,850
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	123,736	2,832,833
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	432,410
	\$ 494,366,454	\$ 6,126,844	\$ 2,820,753	\$ 3,978,614	\$ 8,891,979	\$ 6,052,581	\$ 9,132,156	\$ 19,173,706	\$ 16,741,559	\$ 383,715,353

Share Class	Number of Shares	Total Value	Per Share Marketable
Preferred Share Classes			
Series A @ \$0.150	46,320,045	\$ 41,348,789	\$ 0.89
Series B @ \$0.1846	54,134,985	49,002,864	0.91
Series C @ \$0.564	58,866,105	70,461,233	1.20
Series C-1 @ \$3.00	25,175,001	69,038,049	2.74
Series C-1 @ \$15.00	7,500,032	77,664,547	10.36
Series C-2 @ \$17.00	32,808,227	381,466,406	11.63
Warrants on Common			
Exercise Price @ \$0.072	741,665	591,355	0.80

US v. Elizabeth Holmes

Exhibit P.1

Valuation of Theranos, Inc.
As of October 15, 2015

NAV Equity Allocation 10/15/15 - Step 1
(USD)

Break Point Calculation				\$0.015	\$0.030	\$0.066	\$0.072	\$0.094	\$0.170	\$0.206
Share Class	Number of Shares	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Preferred Share Classes										
Series A @ \$0.150	46,320,045	\$ -	\$ 6,948,007	\$ 7,642,807	\$ 9,032,409	\$ 12,089,532	\$ 15,424,575	\$ 19,778,659	\$ 27,653,067	\$ 37,194,996
Series B @ \$0.1846	54,162,965	-	10,000,000	10,812,444	12,437,333	16,012,089	19,911,822	25,003,141	34,210,845	45,368,416
Series C @ \$0.564	58,896,105	33,217,403	33,217,403	34,100,845	35,867,728	39,754,871	43,995,390	49,531,624	59,543,962	71,676,560
Series C-1 @ \$3.00	21,947,001	65,841,003	65,841,003	66,170,208	66,828,618	68,277,120	69,857,304	71,920,322	75,651,312	80,172,395
Series C-1 @ \$15.00	6,563,232	98,448,480	98,448,480	98,546,928	98,743,825	99,176,999	99,649,551	100,266,495	101,382,245	102,734,270
Series C-2 @ \$17.00	42,947,639	730,109,863	730,109,863	730,754,078	732,042,507	734,877,051	737,969,281	742,006,359	749,307,458	758,154,671
Warrants on Common										
Exercise Price @ \$0.072	741,665	-	-	-	-	-	-	16,317	72,683	99,383
Common	302,965,725	-	-	4,544,486	9,088,972	19,995,738	21,813,532	28,478,778	51,504,173	62,410,939
Options on Common										
Exercise Price @ \$0.015	350,000	-	-	-	5,250	17,850	19,950	27,650	54,250	66,850
Exercise Price @ \$0.030	1,170,875	-	-	-	-	42,152	49,177	74,936	163,923	206,074
Exercise Price @ \$0.066	547,500	-	-	-	-	-	3,285	15,330	56,940	76,650
Exercise Price @ \$0.072	2,579,175	-	-	-	-	-	-	56,742	252,759	345,609
Exercise Price @ \$0.094	312,500	-	-	-	-	-	-	-	23,750	35,000
Exercise Price @ \$0.170	3,972,457	-	-	-	-	-	-	-	-	143,008
Exercise Price @ \$0.206	606,355	-	-	-	-	-	-	-	-	-
	544,083,249	927,616,749	944,564,756	952,571,797	964,046,642	990,243,401	1,008,693,868	1,037,176,354	1,099,877,367	1,158,684,823
Inputs										
Stock Price Now	\$ 1,051,000,000	\$ 1,051,000,000	\$ 1,051,000,000	\$ 1,051,000,000	\$ 1,051,000,000	\$ 1,051,000,000	\$ 1,051,000,000	\$ 1,051,000,000	\$ 1,051,000,000	\$ 1,051,000,000
Volatility	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%
Riskfree Rate - Annual	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%
Exercise Price	\$ 0.00	\$ 927,616,749	\$ 944,564,756	\$ 952,571,797	\$ 964,046,642	\$ 990,243,401	\$ 1,008,693,868	\$ 1,037,176,354	\$ 1,099,877,367	\$ 1,158,684,823
Time To Maturity - Years	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Outputs										
d1	39.72	0.69	0.67	0.67	0.65	0.63	0.61	0.58	0.53	0.48
d2	38.66	(0.37)	(0.39)	(0.39)	(0.41)	(0.43)	(0.45)	(0.48)	(0.53)	(0.58)
N(d1)	1.000	0.755	0.750	0.747	0.743	0.735	0.729	0.721	0.702	0.684
N(d2)	1.000	0.356	0.349	0.346	0.342	0.333	0.327	0.317	0.298	0.281
Call Price (V _c)	\$ 1,051,000,000	\$ 477,913,125	\$ 472,200,133	\$ 469,536,516	\$ 465,758,297	\$ 457,301,157	\$ 451,481,656	\$ 442,712,541	\$ 424,280,684	\$ 408,011,420
-d1	-39.720	-0.690	-0.673	-0.665	-0.654	-0.628	-0.611	-0.585	-0.529	-0.480
-d2	-38.660	0.370	0.387	0.395	0.406	0.432	0.449	0.475	0.531	0.580
N(-d1)	0.000	0.245	0.250	0.253	0.257	0.265	0.271	0.279	0.298	0.316
N(-d2)	0.000	0.644	0.651	0.654	0.658	0.667	0.673	0.683	0.702	0.719
Put Price (P _p)	\$ -	\$ 313,889,779	\$ 324,382,279	\$ 329,374,905	\$ 336,568,803	\$ 353,160,708	\$ 364,983,335	\$ 383,448,851	\$ 424,970,994	\$ 464,932,755
Fair Market Value	\$ 1,051,000,000	\$ 477,913,125	\$ 472,200,133	\$ 469,536,516	\$ 465,758,297	\$ 457,301,157	\$ 451,481,656	\$ 442,712,541	\$ 424,280,684	\$ 408,011,420

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of October 15, 2015

Exhibit P.2
NAV Equity Allocation 10/15/15 - Step 2
(USD)

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise	All Classes Participate
High call option	\$ 1,051,000,000	\$ 477,913,125	\$ 472,200,133	\$ 469,536,516	\$ 465,758,297	\$ 457,301,157	\$ 451,481,656	\$ 442,712,541	\$ 424,280,684	\$ 408,011,420
Less low call option	477,913,125	472,200,133	469,536,516	465,758,297	457,301,157	451,481,656	442,712,541	424,280,684	408,011,420	-
Total Value to Allocate	\$ 573,086,875	\$ 5,712,992	\$ 2,663,616	\$ 3,778,219	\$ 8,457,140	\$ 5,819,502	\$ 8,769,115	\$ 18,431,857	\$ 16,269,264	\$ 408,011,420
Preferred Share Classes										
Series A @ \$0.150	-	5,948,007	46,320,045	48,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045
Series B @ \$0.1846	-	10,000,000	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965
Series C @ \$0.564	33,217,403	-	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105
Series C-1 @ \$3.00	55,841,003	-	21,947,001	21,947,001	21,947,001	21,947,001	21,947,001	21,947,001	21,947,001	21,947,001
Series C-1 @ \$15.00	98,448,480	-	6,563,232	6,563,232	6,563,232	6,563,232	6,563,232	6,563,232	6,563,232	6,563,232
Series C-2 @ \$17.00	730,109,863	-	42,947,639	42,947,639	42,947,639	42,947,639	42,947,639	42,947,639	42,947,639	42,947,639
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	741,665	741,665	741,665	741,665
Common	-	-	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725
Options on Common										
Exercise Price @ \$0.015	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Exercise Price @ \$0.030	-	-	-	-	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875
Exercise Price @ \$0.066	-	-	-	-	-	547,500	547,500	547,500	547,500	547,500
Exercise Price @ \$0.072	-	-	-	-	-	-	-	-	-	-
Exercise Price @ \$0.094	-	-	-	-	-	-	2,579,175	2,579,175	2,579,175	2,579,175
Exercise Price @ \$0.170	-	-	-	-	-	-	-	312,500	312,500	312,500
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	3,972,457	3,972,457
										606,365
	927,616,749	16,948,007	533,802,712	534,152,712	535,323,567	535,871,087	539,191,927	539,504,427	543,476,884	544,083,249
Distribution Percentage										
Preferred Share Classes										
Series A @ \$0.150	0.0%	41.0%	8.7%	8.7%	8.7%	8.6%	8.6%	8.6%	8.5%	8.5%
Series B @ \$0.1846	0.0%	59.0%	10.1%	10.1%	10.1%	10.0%	10.0%	10.0%	10.0%	10.0%
Series C @ \$0.564	3.6%	0.0%	11.0%	11.0%	11.0%	11.0%	10.9%	10.8%	10.8%	10.8%
Series C-1 @ \$3.00	7.1%	0.0%	4.1%	4.1%	4.1%	4.1%	4.1%	4.0%	4.0%	4.0%
Series C-1 @ \$15.00	10.6%	0.0%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Series C-2 @ \$17.00	78.7%	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	7.9%	7.9%
Warrants on Common										
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common	0.0%	0.0%	56.8%	56.7%	56.8%	56.5%	56.2%	56.2%	55.7%	55.7%
Options on Common										
Exercise Price @ \$0.015	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.030	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Exercise Price @ \$0.066	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	0.5%
Exercise Price @ \$0.094	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Exercise Price @ \$0.170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%
Exercise Price @ \$0.206	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Allocation of Value										
Preferred Share Classes										
Series A @ \$0.150	\$ -	\$ 2,342,099	\$ 231,132	\$ 327,635	\$ 731,773	\$ 501,031	\$ 753,323	\$ 1,582,498	\$ 1,386,615	\$ 34,735,690
Series B @ \$0.1846	-	3,370,893	270,267	383,111	855,676	586,204	880,876	1,850,446	1,621,397	40,617,145
Series C @ \$0.564	20,521,900	-	293,885	416,589	930,451	539,605	957,653	2,012,151	1,763,086	44,166,556
Series C-1 @ \$3.00	40,876,944	-	109,513	155,238	349,723	236,342	356,934	749,807	656,995	16,458,193
Series C-1 @ \$15.00	80,822,028	-	32,750	46,424	103,687	71,276	106,741	224,229	196,474	4,921,809
Series C-2 @ \$17.00	451,066,003	-	214,304	303,781	678,495	466,407	698,476	1,467,281	1,285,660	32,206,702
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	12,062	25,339	22,202	556,179
Common	-	-	1,511,765	2,142,965	4,786,308	3,290,175	4,927,264	10,350,649	9,069,437	227,195,866
Options on Common										
Exercise Price @ \$0.015	-	-	-	2,476	5,529	3,801	6,692	11,958	10,477	282,487
Exercise Price @ \$0.030	-	-	-	-	18,498	12,716	19,042	40,002	35,651	878,046
Exercise Price @ \$0.066	-	-	-	-	-	5,946	8,904	18,705	16,380	410,574
Exercise Price @ \$0.072	-	-	-	-	-	-	41,946	88,116	77,209	1,934,139
Exercise Price @ \$0.094	-	-	-	-	-	-	-	10,876	9,355	234,346
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	118,918	2,978,970
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	454,717
	\$ 573,086,875	\$ 5,712,992	\$ 2,663,616	\$ 3,778,219	\$ 8,457,140	\$ 5,819,502	\$ 8,769,115	\$ 18,431,857	\$ 16,269,264	\$ 408,011,420

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of October 15, 2015

Exhibit Q.1
DCF Equity Allocation 10/15/15 - Step 1
(USD)

Break Point Calculation				\$0.015	\$0.030	\$0.066	\$0.072	\$0.094	\$0.170	\$0.206
Share Class	Number of Shares	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Preferred Share Classes										
Series A @ \$0.150	46,320,045	\$ -	\$ 6,948,007	\$ 7,642,807	\$ 9,032,409	\$ 12,069,532	\$ 15,424,575	\$ 19,778,659	\$ 27,653,067	\$ 37,194,996
Series B @ \$0.1846	54,162,965	-	10,000,000	10,812,444	12,437,333	16,012,089	19,911,822	25,003,141	34,210,845	45,368,416
Series C @ \$0.564	58,896,105	33,217,403	33,217,403	34,100,845	35,867,728	39,754,871	43,995,390	49,531,624	59,543,962	71,676,560
Series C-1 @ \$3.00	21,947,001	65,841,003	65,841,003	66,170,208	66,828,618	68,277,120	69,857,304	71,920,322	75,651,312	80,172,395
Series C-1 @ \$15.00	6,563,232	98,448,480	98,448,480	98,546,928	98,743,825	99,176,999	99,649,551	100,266,495	101,382,245	102,734,270
Series C-2 @ \$17.00	42,947,639	730,109,863	730,109,863	730,754,078	732,042,507	734,877,051	737,969,281	742,006,359	749,307,458	758,154,671
Warrants on Common										
Exercise Price @ \$0.072	741,665	-	-	-	-	-	-	16,317	72,683	99,383
Common	302,965,725	-	-	4,544,486	9,088,972	19,995,738	21,813,532	28,478,778	51,504,173	62,410,939
Options on Common										
Exercise Price @ \$0.015	350,000	-	-	-	5,250	17,850	19,950	27,650	54,250	66,850
Exercise Price @ \$0.030	1,170,875	-	-	-	-	42,162	49,177	74,936	163,923	206,074
Exercise Price @ \$0.066	547,500	-	-	-	-	-	3,285	15,330	56,940	76,650
Exercise Price @ \$0.072	2,579,175	-	-	-	-	-	-	56,742	252,759	345,609
Exercise Price @ \$0.094	312,500	-	-	-	-	-	-	-	23,750	35,000
Exercise Price @ \$0.170	3,972,457	-	-	-	-	-	-	-	-	143,008
Exercise Price @ \$0.206	606,365	-	-	-	-	-	-	-	-	-
	544,083,249	927,616,749	944,564,756	952,571,797	964,046,642	990,243,401	1,008,693,868	1,037,176,354	1,099,877,367	1,158,684,823
Inputs										
Stock Price Now	\$ 1,184,000,000	\$ 1,184,000,000	\$ 1,184,000,000	\$ 1,184,000,000	\$ 1,184,000,000	\$ 1,184,000,000	\$ 1,184,000,000	\$ 1,184,000,000	\$ 1,184,000,000	\$ 1,184,000,000
Volatility	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%
Riskfree Rate - Annual	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%	1.12%
Exercise Price	\$ 0.00	\$ 927,616,749	\$ 944,564,756	\$ 952,571,797	\$ 964,046,642	\$ 990,243,401	\$ 1,008,693,868	\$ 1,037,176,354	\$ 1,099,877,367	\$ 1,158,684,823
Time To Maturity - Years	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Outputs										
d1	39.83	0.80	0.79	0.78	0.77	0.74	0.72	0.70	0.64	0.59
d2	38.77	(0.26)	(0.27)	(0.28)	(0.29)	(0.32)	(0.34)	(0.36)	(0.42)	(0.47)
N(d1)	1.000	0.789	0.784	0.782	0.778	0.771	0.765	0.757	0.739	0.723
N(d2)	1.000	0.398	0.392	0.389	0.384	0.375	0.368	0.358	0.338	0.320
Call Price (V _c)	\$ 1,184,000,000	\$ 580,651,525	\$ 574,248,897	\$ 571,260,795	\$ 567,019,077	\$ 557,510,633	\$ 550,956,552	\$ 541,083,210	\$ 520,199,568	\$ 501,705,043
-d1	-39.832	-0.802	-0.785	-0.777	-0.766	-0.741	-0.723	-0.697	-0.642	-0.593
-d2	-38.772	0.258	0.275	0.283	0.294	0.319	0.337	0.363	0.418	0.467
N(-d1)	0.000	0.211	0.216	0.218	0.222	0.229	0.235	0.243	0.261	0.277
N(-d2)	0.000	0.602	0.608	0.611	0.616	0.625	0.632	0.642	0.662	0.680
Put Price (P _p)	\$ -	\$ 283,628,179	\$ 293,431,043	\$ 298,099,184	\$ 304,829,583	\$ 320,370,184	\$ 331,458,231	\$ 348,799,520	\$ 387,889,878	\$ 425,626,378
Fair Market Value	\$ 1,184,000,000	\$ 580,651,525	\$ 574,248,897	\$ 571,260,795	\$ 567,019,077	\$ 557,510,633	\$ 550,956,552	\$ 541,083,210	\$ 520,199,568	\$ 501,705,043

US v. Elizabeth Holmes Valuation of Theranos, Inc. As of October 15, 2015 Exhibit Q.2 DCF Equity Allocation 10/15/15 - Step 2 (USD)

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise	All Classes Participate
High call option	\$ 1,184,000,000	\$ 580,651,525	\$ 574,248,897	\$ 571,260,795	\$ 567,019,077	\$ 557,510,633	\$ 550,956,552	\$ 541,063,210	\$ 520,199,568	\$ 501,705,043
Less low call option	580,651,525	574,248,897	571,260,795	567,019,077	557,510,633	550,956,552	541,063,210	520,199,568	501,705,043	-
Total Value to Allocate	\$ 603,348,475	\$ 6,402,628	\$ 2,988,102	\$ 4,241,718	\$ 9,508,444	\$ 6,554,081	\$ 9,893,342	\$ 20,863,642	\$ 18,494,525	\$ 501,705,043
Preferred Share Classes										
Series A @ \$0.150	-	6,948,007	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045
Series B @ \$0.1846	-	10,000,000	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965
Series C @ \$0.564	33,217,403	-	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105
Series C-1 @ \$3.00	65,841,003	-	21,947,001	21,947,001	21,947,001	21,947,001	21,947,001	21,947,001	21,947,001	21,947,001
Series C-1 @ \$15.00	98,448,480	-	6,563,232	6,563,232	6,563,232	6,563,232	6,563,232	6,563,232	6,563,232	6,563,232
Series C-2 @ \$17.00	730,109,863	-	42,947,639	42,947,639	42,947,639	42,947,639	42,947,639	42,947,639	42,947,639	42,947,639
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	741,665	741,665	741,665	741,665
Common	-	-	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725
Options on Common										
Exercise Price @ \$0.015	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Exercise Price @ \$0.030	-	-	-	-	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875
Exercise Price @ \$0.066	-	-	-	-	-	547,500	547,500	547,500	547,500	547,500
Exercise Price @ \$0.072	-	-	-	-	-	-	2,579,175	2,579,175	2,579,175	2,579,175
Exercise Price @ \$0.094	-	-	-	-	-	-	-	312,500	312,500	312,500
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	3,972,457	3,972,457
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	606,365
	927,616,749	16,948,007	533,802,712	534,152,712	535,323,567	535,871,087	539,191,927	539,504,427	543,476,884	544,083,249
Distribution Percentage										
Preferred Share Classes										
Series A @ \$0.150	0.0%	41.0%	8.7%	8.7%	8.7%	8.6%	8.6%	8.6%	8.5%	8.5%
Series B @ \$0.1846	0.0%	59.0%	10.1%	10.1%	10.1%	10.1%	10.0%	10.0%	10.0%	10.0%
Series C @ \$0.564	3.6%	0.0%	11.0%	11.0%	11.0%	11.0%	10.9%	10.9%	10.8%	10.8%
Series C-1 @ \$3.00	7.1%	0.0%	4.1%	4.1%	4.1%	4.1%	4.1%	4.1%	4.0%	4.0%
Series C-1 @ \$15.00	10.6%	0.0%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%	1.2%
Series C-2 @ \$17.00	78.7%	0.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	7.8%	7.8%
Warrants on Common										
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common	0.0%	0.0%	56.8%	56.7%	56.6%	56.5%	56.2%	56.2%	55.7%	55.7%
Options on Common										
Exercise Price @ \$0.015	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.030	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Exercise Price @ \$0.066	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	0.5%
Exercise Price @ \$0.094	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Exercise Price @ \$0.170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%
Exercise Price @ \$0.206	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Allocation of Value										
Preferred Share Classes										
Series A @ \$0.150	\$ -	\$ 2,624,822	\$ 259,289	\$ 267,828	\$ 222,739	\$ 586,527	\$ 849,902	\$ 1,791,282	\$ 1,576,272	\$ 42,712,214
Series B @ \$0.1846	-	3,777,806	303,191	430,109	962,045	862,451	993,807	2,084,583	1,843,166	49,944,255
Series C @ \$0.564	21,605,548	-	329,886	467,695	1,046,116	720,341	1,080,653	2,277,622	2,004,235	54,308,735
Series C-1 @ \$3.00	42,824,872	-	122,854	174,282	389,624	268,427	402,694	848,731	746,857	20,237,567
Series C-1 @ \$15.00	64,033,708	-	36,739	52,119	116,576	80,273	120,425	253,812	223,347	6,052,027
Series C-2 @ \$17.00	474,884,345	-	240,411	341,048	762,838	525,280	788,023	1,660,865	1,461,509	39,602,482
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	13,806	28,682	25,239	683,897
Common	-	-	1,695,931	2,405,657	5,381,292	3,705,484	5,558,955	11,716,249	10,309,927	279,367,969
Options on Common										
Exercise Price @ \$0.015	-	-	-	2,779	6,217	4,281	8,422	13,635	11,811	322,739
Exercise Price @ \$0.030	-	-	-	-	20,797	14,321	21,484	45,280	39,845	1,079,676
Exercise Price @ \$0.066	-	-	-	-	-	6,696	10,046	21,173	18,631	504,856
Exercise Price @ \$0.072	-	-	-	-	-	-	47,324	99,742	87,769	2,378,285
Exercise Price @ \$0.094	-	-	-	-	-	-	-	12,085	10,834	288,160
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	135,183	3,663,046
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	559,136
	\$ 603,348,475	\$ 6,402,628	\$ 2,988,102	\$ 4,241,718	\$ 9,508,444	\$ 6,554,081	\$ 9,893,342	\$ 20,863,642	\$ 18,494,525	\$ 501,705,043

US v. Elizabeth Holmes
Business Valuation
As of February 7, 2014

Exhibit R.1
Volatility Analysis 2/7/14
(thousands of USD)

Guideline Companies	Ticker	LTM Rev. Size	Market Capitalization	Revenue Growth		Enterprise Value	Debt	Equity Volatility [1]	Asset Volatility
				1 Year	3 Year				
Quest Diagnostics Incorporated	DGX	\$ 7,146,000	\$ 7,315,200	-3.2%	-0.5%	\$ 10,681,200	\$ 3,366,000	21.1%	15.0%
Enzo Biochem, Inc.	ENZ	92,929	138,102	-7.3%	-1.8%	142,094	3,992	52.1%	50.7%
Exact Sciences Corporation	EXAS	4,144	865,903	0.0%	-8.1%	867,614	1,711	46.9%	46.8%
Illumina, Inc.	ILMN	1,421,178	19,831,532	23.7%	16.3%	20,700,125	868,593	43.6%	41.9%
Standard BioTools Inc.	LAB	71,183	1,104,200	36.0%	28.5%	1,104,200	-	38.7%	38.7%
Laboratory Corporation of America Holdings	LH	5,808,300	7,791,710	2.4%	5.1%	10,792,110	3,000,400	18.2%	13.3%
Myriad Genetics, Inc.	MYGN	737,115	2,351,966	35.2%	25.0%	2,351,966	-	40.0%	40.0%
OraSure Technologies, Inc.	OSUR	98,940	337,504	12.7%	9.7%	337,504	-	50.0%	50.0%
PerkinElmer, Inc.	PKI	2,157,586	4,920,548	2.5%	8.2%	5,855,276	934,728	27.0%	22.9%
QuidelOrtho Corporation	QDEL	177,325	964,525	13.9%	16.1%	970,092	5,567	31.5%	31.3%
Qiagen N.V.	QGEN	1,301,984	5,280,047	3.8%	6.2%	6,130,249	850,202	25.0%	21.6%
Trinity Biotech plc	TRIB	91,216	545,805	10.6%	0.6%	545,805	-	27.8%	27.8%
Alere Inc.	IQT2622336	2,608,636	2,819,163	8.9%	6.6%	6,660,267	3,841,104	37.0%	21.5%
Luminex Corporation	IQT2627430	213,423	734,789	5.4%	14.7%	736,446	1,657	34.5%	34.4%
Abaxis, Inc.	IQT2586525	179,781	824,250	0.6%	8.7%	824,956	706	35.6%	35.6%
CombiMatrix Corporation	IQT36309071	6,367	25,342	19.0%	21.5%	25,575	233	101.9%	101.1%
Affymetrix Inc.	IQT2587418	330,399	518,522	11.8%	2.1%	662,983	144,461	56.4%	46.8%
Genomic Health, Inc.	IQT24111615	261,595	815,172	11.2%	13.7%	815,172	-	39.3%	39.3%
Cepheid	IQT2599314	401,292	3,328,663	21.2%	23.6%	3,328,663	-	42.2%	42.2%
Nanosphere, Inc.	IQT38720096	10,002	169,146	97.0%	70.3%	180,961	11,815	73.8%	69.8%
GenMark Diagnostics, Inc.	IQT106626443	27,404	513,559	33.9%	120.3%	513,596	37	49.7%	49.7%
Bio-Reference Laboratories, Inc.	IQT2594421	735,368	723,947	15.5%	15.2%	776,577	52,630	40.1%	37.5%

Upper Quartile	46.8%
Lower Quartile	28.7%
Average	39.9%
Median	39.0%

Selected Asset Volatility 50.0%

Relevered for Subject Company Capital Structure

Theranos, Inc.	\$ -	\$ 404,500	NA	NA	\$ 446,886	\$ 42,386	55.0%	50.2%
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Selected Equity Volatility 55.0%

Notes:

[1] Source: Capital IQ.

[2] Note: Ticker symbols beginning with IQT represent companies that have been acquired since the valuation date and necessary to access the historical data using CapitalIQ.

US v. Elizabeth Holmes
Business Valuation
As of December 31, 2014

Exhibit R.2
Volatility Analysis 12/31/14
(thousands of USD)

Guideline Companies	Ticker	LTM Rev. Size	Market Capitalization	Revenue Growth		Enterprise Value	Debt	Equity Volatility [1]	Asset Volatility
				1 Year	3 Year				
Quest Diagnostics Incorporated	DGX	\$ 7,435,000	\$ 9,692,466	4.0%	0.2%	\$ 13,462,466	\$ 3,770,000	20.8%	15.6%
Enzo Biochem, Inc.	ENZ	96,637	218,928	4.8%	-1.8%	222,966	4,038	52.1%	51.3%
Exact Sciences Corporation	EXAS	1,798	2,430,718	-56.6%	-24.4%	2,434,478	3,760	45.0%	44.9%
Illumina, Inc.	ILMN	1,861,358	26,210,360	31.0%	20.8%	27,501,396	1,291,036	44.1%	42.1%
Standard BioTools Inc.	LAB	116,456	953,006	63.6%	39.5%	1,148,461	195,455	43.8%	37.1%
Laboratory Corporation of America Holdings	LH	6,011,600	9,117,550	3.5%	2.7%	12,147,350	3,029,800	18.7%	14.3%
Myriad Genetics, Inc.	MYGN	724,873	2,485,880	-1.7%	17.8%	2,485,880	-	40.5%	40.5%
OraSure Technologies, Inc.	OSUR	106,464	568,416	7.6%	9.1%	568,416	-	50.3%	50.3%
PerkinElmer, Inc.	PKI	2,069,880	4,939,852	-4.1%	2.6%	5,986,320	1,046,468	25.1%	21.0%
QuidelOrtho Corporation	QDEL	184,158	995,160	3.9%	5.1%	1,138,244	143,084	31.9%	28.1%
Qiagen N.V.	QGEN	1,344,777	5,425,828	3.3%	4.8%	6,599,032	1,173,204	23.8%	19.8%
Trinity Biotech plc	TRIB	104,872	392,493	15.0%	10.4%	392,493	-	25.5%	25.5%
Alere Inc.	IQT2622336	2,577,001	3,175,128	-1.2%	2.6%	6,901,222	3,726,094	35.8%	21.3%
Luminex Corporation	IQT2627430	226,983	803,551	6.4%	7.2%	803,551	-	35.2%	35.2%
Abaxis, Inc.	IQT2586525	182,777	1,280,721	1.7%	6.5%	1,281,326	605	34.5%	34.6%
CombiMatrix Corporation	IQT36309071	8,042	14,271	26.3%	20.0%	14,676	405	100.5%	98.5%
Affymetrix Inc.	IQT2587418	349,019	726,274	5.6%	9.3%	854,224	127,950	50.6%	43.9%
Genomic Health, Inc.	IQT24111615	275,706	1,014,152	5.4%	10.2%	1,014,152	-	36.7%	36.7%
Cepheid	IQT2599314	470,141	3,815,841	17.2%	19.2%	4,094,054	278,213	39.2%	36.6%
Nanosphere, Inc.	IQT38720096	14,290	45,675	42.9%	78.0%	55,391	9,716	82.1%	73.6%
GenMark Diagnostics, Inc.	IQT106626443	30,594	568,004	11.6%	82.8%	568,004	-	46.7%	46.7%
Bio-Reference Laboratories, Inc.	IQT2594421	832,282	890,901	16.3%	16.8%	946,330	55,429	39.7%	37.5%

Upper Quartile	44.7%
Lower Quartile	26.2%
Average	38.9%
Median	36.9%

Selected Asset Volatility 50.0%

Relevered for Subject Company Capital Structure

US v. Elizabeth Holmes	\$ -	\$ 889,000	NA	NA	\$ 929,805	\$ 40,805	52.6%	50.4%
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Selected Equity Volatility 53.0%

Notes:

[1] Source: Capital IQ.

[2] Note: Ticker symbols beginning with IQT represent companies that have been acquired since the valuation date and necessary to access the historical data using CapitalIQ.

US v. Elizabeth Holmes
Business Valuation
As of October 15, 2015

Exhibit R.3
Volatility Analysis 10/15/15
(thousands of USD)

Guideline Companies	Ticker	LTM Rev. Size	Market Capitalization	Revenue Growth		Enterprise Value	Debt	Equity Volatility [1]	Asset Volatility
				1 Year	3 Year				
Quest Diagnostics Incorporated	DGX	\$ 7,527,000	\$ 9,197,441	3.0%	0.7%	\$ 12,928,441	\$ 3,731,000	20.7%	15.3%
Enzo Biochem, Inc.	ENZ	97,599	181,945	1.7%	-1.8%	185,531	3,586	51.2%	50.2%
Exact Sciences Corporation	EXAS	26,521	713,931	1894.1%	85.6%	720,087	6,156	57.5%	57.0%
Illumina, Inc.	ILMN	2,140,593	21,971,248	23.3%	25.3%	23,081,349	1,110,101	37.8%	36.0%
Standard BioTools Inc.	LAB	117,480	266,171	13.1%	33.2%	461,797	195,626	53.0%	38.3%
Laboratory Corporation of America Holdings	LH	7,773,800	11,664,918	31.0%	11.3%	18,346,118	6,681,200	18.3%	12.0%
Myriad Genetics, Inc.	MYGN	737,800	2,711,591	-0.9%	12.4%	2,711,591	-	40.2%	40.2%
OraSure Technologies, Inc.	OSUR	116,018	267,159	8.9%	9.1%	267,159	-	46.9%	46.9%
PerkinElmer, Inc.	PKI	2,262,633	5,470,749	1.9%	2.8%	6,499,125	1,028,376	22.9%	19.5%
QidelOrtho Corporation	QDEL	205,670	620,241	22.0%	13.6%	766,936	146,697	32.3%	26.4%
Qiagen N.V.	QGEN	1,292,856	5,912,561	-3.9%	1.3%	6,971,467	1,058,906	22.3%	19.0%
Trinity Biotech plc	TRIB	101,392	271,362	-1.5%	7.5%	370,431	99,069	27.3%	20.4%
Alere Inc.	IQT2622336	2,483,662	3,975,232	-4.0%	-2.9%	7,576,757	3,601,525	32.8%	19.9%
Luminex Corporation	IQT2627430	235,365	789,484	5.1%	6.5%	789,484	-	33.0%	33.0%
Abaxis, Inc.	IQT2586525	217,133	1,017,036	29.6%	9.2%	1,017,566	530	31.8%	31.9%
CombiMatrix Corporation	IQT36309071	9,621	13,895	27.0%	23.4%	14,039	344	100.5%	98.6%
Affymetrix Inc.	IQT2587418	357,744	714,389	2.8%	9.0%	839,339	124,950	45.1%	38.9%
Genomic Health, Inc.	IQT24111615	281,451	715,559	2.2%	7.3%	715,559	-	35.8%	35.8%
Cepheid	IQT2599314	523,099	2,388,029	15.8%	17.9%	2,673,435	285,406	36.7%	32.9%
Nanosphere, Inc.	IQT38720096	18,871	16,632	44.5%	63.3%	32,106	15,474	81.6%	66.3%
GenMark Diagnostics, Inc.	IQT106626443	36,051	353,067	34.0%	40.3%	362,861	9,794	46.6%	45.4%
Bio-Reference Laboratories, Inc.	IQT2594421	882,467	-	16.1%	14.4%	69,849	69,849	41.4%	20.5%

Upper Quartile	44.1%
Lower Quartile	20.4%
Average	36.6%
Median	34.4%

Selected Asset Volatility 50.0%

Relevered for Subject Company Capital Structure

US v. Elizabeth Holmes	\$	-	\$ 1,117,500	NA	NA	\$ 1,158,305	\$ 40,805	52.3%	50.5%
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Selected Equity Volatility 53.0%

Notes:

[1] Source: Capital IQ.

[2] Note: Ticker symbols beginning with IQT represent companies that have been acquired since the valuation date and necessary to access the historical data using CapitalIQ.

US v. Elizabeth HolmesValuation of Theranos, Inc.
Feb 2014 - Feb 2015**Appendix Exhibit A**Summary of Investor Values
(thousands of USD)

Method	Reference	Value	Implied Annual Internal Rate of Return	Implied MVIC / EBITDA Exit Multiple
Investor Financing - Backsolve Method as of 2/7/14	Appendix Exhibit C.2	\$ 1,510,000	N/A	
PFM Forecast - Income Approach with Market Exit as of 2/7/14	Appendix Exhibit E.3	1,490,000	76%	11.60x
PFM Model - Income Approach as of 2/7/14	Appendix Exhibit E.5	1,500,000	36%	
Investor Financing - Backsolve Method as of 12/31/14	Appendix Exhibit D.2	\$ 2,250,000	N/A	
Mosley and RDV Forecast - Income Approach with Market Exit as of 12/31/14	Appendix Exhibit F.3	2,250,000	54%	13.90x
Investor Financing - Backsolve Method as of 2/13/15	[1]	\$ 2,375,000	N/A	
Murdoch Forecast - Income Approach with Market Exit as of 2/13/15	Appendix Exhibit G.3	2,370,000	82%	12.10x

Notes:

[1] 12/31/14 Backsolve Value + \$125 million additional C-2 proceeds.

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
Feb 2014 - Feb 2015

Appendix Exhibit B.1
Summary of Revenue Forecasts
(thousands of USD)

	11 Mo. Ended 12/31/2014	For the Twelve Month Period Ending December 31,				
		2015	2016	2017	2018	2019
Management Forecasts Provided to PFM - Feb 2014 Investment						
Lab Services from US Retail Pharmacies	\$ 109,000	\$ 750,000				
Lab Services Revenue from Physicians Offices (courier)	72,000	342,000				
Lab Services Revenue from Hospitals (courier)	50,000	225,000				
OnSite Services Revenue from Hospitals	-	240,000				
Pharmaceuticals Services	30,000	120,000				
Total Revenue	\$ 261,000	\$ 1,677,000	N/A	N/A	N/A	N/A
PFM Financial Model (Base Case) - Feb 2014 Investment						
Retail Revenue	\$ 198,986	\$ 1,063,582	\$ 2,172,705	\$ 2,871,036	\$ 2,914,101	\$ 2,960,241
Physicians Office Revenue	32,571	222,965	346,500	388,080	429,660	469,455
Hospital (Courier) Revenue	43,313	134,009	167,511	192,638	215,754	238,408
Hospital (OnSite) Revenue	-	122,400	360,000	432,000	504,000	576,520
Pharmaceutical Services Revenue	30,000	120,000	170,000	220,000	270,000	323,386
Total Revenue	\$ 304,869	\$ 1,662,956	\$ 3,216,716	\$ 4,103,754	\$ 4,333,516	\$ 4,568,011
Management Forecasts Provided to Daniel Mosley - Oct 2014						
Lab Services from US Retail Pharmacies	\$ 42,000	\$ 470,000				
Lab Services Revenue from Physicians Offices	11,000	161,000				
Lab Services Revenue from Hospitals	47,000	290,000				
OnSite Services Revenue from Hospitals	-	11,000				
Pharmaceuticals Services	40,000	62,000				
Total Revenue	\$ 140,000	\$ 994,000	N/A	N/A	N/A	N/A
Management Forecasts Provided to RDV Corporation - Oct 2014						
Lab Services from US Retail Pharmacies	\$ 42,000	\$ 470,000				
Lab Services Revenue from Physicians Offices	11,000	160,000				
Lab Services Revenue from Hospitals	47,000	290,000				
OnSite Services Revenue from Hospitals	-	10,000				
Pharmaceuticals Services	40,000	60,000				
Total Revenue	\$ 140,000	\$ 990,000	N/A	N/A	N/A	N/A
Management Forecasts Provided to Rupert Murdoch - Feb 2015						
Lab Services from US Retail Pharmacies		\$ 425,376	\$ 993,720			
Lab Services Revenue from Physicians Offices		193,920	380,160			
Lab Services Revenue from Hospitals		301,500	489,600			
OnSite Services Revenue from Hospitals		15,000	20,160			
Pharmaceuticals Services		58,500	93,600			
Total Revenue	N/A	\$ 994,296	\$ 1,977,240	N/A	N/A	N/A
Management Forecasts Provided to Aranca - 9/30/13 Valuation						
Total Revenue	\$ 89,702	\$ 112,202	\$ 131,702	\$ 143,402	N/A	N/A
Management Forecasts Provided to Aranca - 12/15/14 Valuation						
Total Revenue	\$ 150	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452	N/A
Management Forecasts Provided to Aranca - 3/25/15 Valuation						
Total Revenue	N/A	\$ 113,452	\$ 223,452	\$ 323,452	\$ 503,452	N/A

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
Feb 2014 - Feb 2015

Appendix Exhibit B.2

Summary of Gross Profit Forecasts
(thousands of USD)

	11 Mo. Ended 12/31/2014	For the Twelve Month Period Ending December 31,				
		2016	2016	2017	2018	2019
Management Forecasts Provided to PFM - Feb 2014 Investment						
Lab Services from US Retail Pharmacies	\$ 55,000	\$ 412,000				
Lab Services Revenue from Physicians Offices (courier)	50,000	239,000				
Lab Services Revenue from Hospitals (courier)	35,000	157,000				
OnSite Services Revenue from Hospitals	-	168,000				
Pharmaceutical Services	25,000	102,000				
Total Gross Profit	\$ 165,000	\$ 1,078,000	N/A	N/A	N/A	N/A
Margin %	63%	64%				
PFM Financial Model (Base Case) - Feb 2014 Investment						
Retail Revenue	\$ 100,406	\$ 584,261	\$ 1,215,266	\$ 1,634,576	\$ 1,688,236	\$ 1,744,569
Physicians Office Revenue	22,619	155,815	242,145	271,202	300,259	328,069
Hospital (Courier) Revenue	30,319	93,508	116,886	134,418	150,549	166,356
Hospital (OnSite) Revenue	-	85,680	252,000	302,400	352,800	403,564
Pharmaceutical Services Revenue	25,000	102,000	144,500	187,000	229,500	274,878
Total Gross Profit	\$ 178,343	\$ 1,021,264	\$ 1,970,797	\$ 2,629,697	\$ 2,721,344	\$ 2,917,437
Margin %	58%	61%	61%	62%	63%	64%
Management Forecasts Provided to Daniel Mosley - Oct 2014						
Lab Services from US Retail Pharmacies	\$ 26,000	\$ 282,000				
Lab Services Revenue from Physicians Offices	7,000	97,000				
Lab Services Revenue from Hospitals	33,000	203,000				
OnSite Services Revenue from Hospitals	-	8,000				
Pharmaceutical Services	35,000	50,000				
Total Gross Profit	\$ 101,000	\$ 640,000	N/A	N/A	N/A	N/A
Margin %	72%	64%				
Management Forecasts Provided to RDV Corporation - Oct 2014						
Lab Services from US Retail Pharmacies	\$ 26,000	\$ 282,000				
Lab Services Revenue from Physicians Offices	7,000	96,000				
Lab Services Revenue from Hospitals	33,000	203,000				
OnSite Services Revenue from Hospitals	-	7,000				
Pharmaceutical Services	35,000	48,000				
Total Gross Profit	\$ 101,000	\$ 636,000	N/A	N/A	N/A	N/A
Margin %	72%	64%				
Management Forecasts Provided to Rupert Murdoch - Feb 2015						
Lab Services from US Retail Pharmacies		\$ 255,226	\$ 645,918			
Lab Services Revenue from Physicians Offices		135,744	285,120			
Lab Services Revenue from Hospitals		211,050	342,720			
OnSite Services Revenue from Hospitals		10,500	14,112			
Pharmaceutical Services		46,800	74,880			
Total Gross Profit	N/A	\$ 669,320	\$ 1,362,750	N/A	N/A	N/A
Margin %		66%	69%			
Management Forecasts Provided to Aranca - 9/30/13 Valuation						
Total Gross Profit	\$ 77,478	\$ 95,978	\$ 108,161	\$ 118,169	N/A	N/A
Margin %	86%	86%	82%	82%		
Management Forecasts Provided to Aranca - 12/16/14 Valuation						
Total Gross Profit	\$ 97	\$ 73,744	\$ 161,947	\$ 219,947	\$ 362,416	N/A
Margin %	65%	65%	68%	68%	70%	
Management Forecasts Provided to Aranca - 3/26/15 Valuation						
Total Gross Profit	N/A	\$ 73,744	\$ 161,947	\$ 219,947	\$ 362,416	N/A
Margin %		65%	68%	68%	70%	

US v. Elizabeth HolmesValuation of Theranos, Inc.
Feb 2014 - Feb 2015**Appendix Exhibit B.3**Summary of EBITDA Forecasts
(thousands of USD)

	For the Twelve Month Period Ending December 31,					
	2014	2015	2016	2017	2018	2019
Management Forecasts Provided to PFM - Feb 2014 Investment						
Total EBITDA	\$ (36,000)	\$ 408,000	N/A	N/A	N/A	N/A
Margin %	-14%	24%				
PFM Financial Model (Base Case) - Feb 2014 Investment						
Total EBITDA	\$ (22,657)	\$ 351,264	\$ 1,146,797	\$ 1,623,197	\$ 1,758,932	\$ 1,895,357
Margin %	-7%	21%	36%	40%	41%	41%
Management Forecasts Provided to Daniel Mosley - Oct 2014						
Total EBITDA	\$ (1,000)	\$ 241,000	N/A	N/A	N/A	N/A
Margin %	-1%	24%				
Management Forecasts Provided to RDV Corporation - Oct 2014						
Total EBITDA	\$ (1,000)	\$ 237,000	N/A	N/A	N/A	N/A
Margin %	-1%	24%				
Management Forecasts Provided to Rupert Murdoch - Feb 2015						
Total EBITDA	N/A	\$ 338,411	\$ 861,192	N/A	N/A	N/A
Margin %		34%	44%			
Management Forecasts Provided to Aranca - 9/30/13 Valuation						
Total EBITDA	\$ 8,827	\$ 22,566	\$ 31,850	\$ 38,793	N/A	N/A
Margin %	10%	20%	24%	27%		
Management Forecasts Provided to Aranca - 12/15/14 Valuation						
Total EBITDA	\$ (99,934)	\$ (23,281)	\$ 51,986	\$ 110,970	\$ 228,015	N/A
Margin %	-66623%	-21%	23%	34%	45%	
Management Forecasts Provided to Aranca - 3/25/15 Valuation						
Total Gross Profit	N/A	\$ (23,137)	\$ 52,183	\$ 111,167	\$ 228,212	N/A
Margin %		-20%	23%	34%	45%	

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Appendix Exhibit C.1
Backsolve Method Value Summary 2/7/14
(thousands of USD, except Per Share Value)

	Ref.	Fair Market Value
Indicated Value – 100% Controlling, Marketable Interest Basis	Appendix Exhibit C.3	\$ 1,510,461
Indicated Value – 100% Controlling, Marketable Interest Basis (rounded)		\$ 1,510,000

Per Share Value

Share Classes	Shares Outstanding	Present Value Marketable	Present Value Per Share Marketable
<u>Preferred Shares</u>			
Series A @ \$0.150	46,320,045	\$ 109,791,828	\$ 2.37
Series B @ \$0.1846	54,162,965	129,749,930	2.40
Series C @ \$0.564	58,896,105	161,956,174	2.75
Series C-1 @ \$3.00	25,175,001	122,398,158	4.86
Series C-1 @ \$15.00	7,500,032	114,495,374	15.27
Series C-2 @ \$17.00	9,669,998	164,389,966	17.00
Total Preferred Shares	201,724,146	802,781,429	
<u>Warrants on Common</u>			
Exercise Price @ \$0.072	741,665	1,616,109	2.18
Common - Outstanding	302,640,465	684,230,716	2.26
<u>Options on Common</u>			
Exercise Price @ \$0.015	350,000	787,519	2.25
Exercise Price @ \$0.030	1,227,125	2,742,677	2.24
Exercise Price @ \$0.066	552,500	1,216,223	2.20
Exercise Price @ \$0.072	3,092,715	6,739,113	2.18
Exercise Price @ \$0.094	312,500	670,277	2.14
Exercise Price @ \$0.170	3,990,167	8,264,639	2.07
Exercise Price @ \$0.206	703,195	1,411,858	2.01
Total Options Outstanding	10,228,202	21,832,305	
Total Outstanding	515,334,478	\$ 1,510,460,559	

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Appendix Exhibit C.2
Backsolve Method 2/7/14 - Step 1
(USD)

Break Point Calculation				\$0.015	\$0.030	\$0.066	\$0.072	\$0.094	\$0.170	\$0.206
Share Class	Number of Shares	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Preferred Share Classes										
Series A @ \$0.150	46,320,045	\$ -	\$ 6,948,007	\$ 7,642,807	\$ 9,032,409	\$ 12,089,532	\$ 15,424,575	\$ 19,778,659	\$ 27,653,067	\$ 37,194,996
Series B @ \$0.1846	54,162,965	-	10,000,000	10,812,444	12,437,333	16,012,089	19,911,822	25,003,141	34,210,845	45,368,416
Series C @ \$0.564	58,896,105	33,217,403	33,217,403	34,100,845	35,867,728	39,754,871	43,995,390	49,531,624	59,543,982	71,676,560
Series C-1 @ \$3.00	25,175,001	75,525,003	75,525,003	75,902,628	76,657,878	78,319,428	80,132,028	82,498,478	86,778,228	91,964,279
Series C-1 @ \$15.00	7,500,032	112,500,480	112,500,480	112,612,980	112,837,981	113,332,984	113,872,986	114,577,989	115,852,994	117,398,001
Series C-2 @ \$17.00	9,669,998	164,369,966	164,369,966	164,535,016	164,825,116	165,463,336	166,159,576	167,068,555	168,712,455	170,704,475
Warrants on Common										
Exercise Price @ \$0.072	741,665	-	-	-	-	-	-	16,317	72,683	99,383
Common	302,640,465	-	-	4,539,607	9,079,214	19,974,271	21,790,113	28,448,204	51,448,879	62,343,936
Options on Common										
Exercise Price @ \$0.015	350,000	-	-	-	5,250	17,850	19,950	27,650	54,250	66,850
Exercise Price @ \$0.030	1,227,125	-	-	-	-	44,177	51,539	78,536	171,798	215,974
Exercise Price @ \$0.066	552,500	-	-	-	-	-	3,315	15,470	57,460	77,350
Exercise Price @ \$0.072	3,092,715	-	-	-	-	-	-	68,040	303,086	414,424
Exercise Price @ \$0.094	312,500	-	-	-	-	-	-	-	23,750	35,000
Exercise Price @ \$0.170	3,990,167	-	-	-	-	-	-	-	-	143,646
Exercise Price @ \$0.206	703,195	-	-	-	-	-	-	-	-	-
	515,334,478	385,632,852	402,580,859	410,146,328	420,742,909	445,008,536	461,361,295	487,112,663	544,883,458	597,703,289
Inputs										
Stock Price Now	\$ 1,510,460,559	\$ 1,510,460,559	\$ 1,510,460,559	\$ 1,510,460,559	\$ 1,510,460,559	\$ 1,510,460,559	\$ 1,510,460,559	\$ 1,510,460,559	\$ 1,510,460,559	\$ 1,510,460,559
Volatility	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%	55.0%
Riskfree Rate - Annual	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%	1.07%
Exercise Price	\$ 0.00	\$ 385,632,852	\$ 402,580,859	\$ 410,146,328	\$ 420,742,909	\$ 445,008,536	\$ 461,361,295	\$ 487,112,663	\$ 544,883,458	\$ 597,703,289
Time To Maturity - Years	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Outputs										
d1	38.64	1.83	1.79	1.77	1.75	1.70	1.67	1.62	1.52	1.43
d2	37.54	0.73	0.69	0.67	0.65	0.60	0.57	0.52	0.42	0.33
N(d1)	1,000	0.966	0.963	0.962	0.960	0.955	0.952	0.947	0.935	0.924
N(d2)	1,000	0.767	0.755	0.750	0.742	0.726	0.715	0.698	0.661	0.630
Call Price (V _c)	\$ 1,510,460,559	\$ 1,176,113,924	\$ 1,163,751,179	\$ 1,158,295,777	\$ 1,150,719,580	\$ 1,133,651,949	\$ 1,122,367,229	\$ 1,104,943,326	\$ 1,067,342,573	\$ 1,034,676,463
-d1	-38.642	-1.830	-1.791	-1.774	-1.751	-1.700	-1.667	-1.618	-1.516	-1.432
-d2	-37.542	-0.730	-0.691	-0.674	-0.651	-0.600	-0.567	-0.518	-0.416	-0.332
N(-d1)	0.000	0.034	0.037	0.038	0.040	0.045	0.048	0.053	0.065	0.076
N(-d2)	0.000	0.233	0.245	0.250	0.258	0.274	0.285	0.302	0.339	0.370
Put Price (P _p)	\$ -	\$ 35,203,257	\$ 39,081,695	\$ 40,876,242	\$ 43,454,692	\$ 49,640,681	\$ 54,026,722	\$ 61,280,217	\$ 79,040,906	\$ 96,991,757
Fair Market Value	\$ 1,510,460,559	\$ 1,176,113,924	\$ 1,163,751,179	\$ 1,158,295,777	\$ 1,150,719,580	\$ 1,133,651,949	\$ 1,122,367,229	\$ 1,104,943,326	\$ 1,067,342,573	\$ 1,034,676,463

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Appendix Exhibit C.3
Backsolve Method 2/7/14 - Step 2
(USD)

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.016 Options Exercise	\$0.03 Options Exercise	\$0.086 Options Exercise	\$0.073 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise	All Classes Participate
High call option	\$ 1,510,460,559	\$ 1,176,113,924	\$ 1,163,751,179	\$ 1,158,295,777	\$ 1,150,719,580	\$ 1,133,651,949	\$ 1,122,367,229	\$ 1,104,943,326	\$ 1,067,342,573	\$ 1,034,676,463
Less low call option	1,176,113,924	1,183,751,179	1,158,295,777	1,150,719,580	1,133,651,949	1,122,367,229	1,104,943,326	1,067,342,573	1,034,676,463	1,034,676,463
Total Value to Allocate	\$ 334,346,635	\$ 12,362,745	\$ 5,455,402	\$ 7,576,197	\$ 17,067,632	\$ 11,284,720	\$ 17,423,903	\$ 37,800,793	\$ 32,666,109	\$ 1,034,676,463
Preferred Share Classes										
Series A @ \$0.150	-	6,948,007	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045
Series B @ \$0.1846	-	10,000,000	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965	54,162,965
Series C @ \$0.564	33,217,403	-	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105
Series C-1 @ \$3.00	75,525,003	-	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001
Series C-1 @ \$15.00	112,500,480	-	7,800,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032
Series C-2 @ \$17.00	164,389,966	-	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998	9,669,998
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	741,665	741,665	741,665	741,665
Common	-	-	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465	302,640,465
Options on Common										
Exercise Price @ \$0.015	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Exercise Price @ \$0.030	-	-	-	-	1,227,125	1,227,125	1,227,125	1,227,125	1,227,125	1,227,125
Exercise Price @ \$0.066	-	-	-	-	-	552,500	552,500	552,500	552,500	552,500
Exercise Price @ \$0.072	-	-	-	-	-	-	3,092,715	3,092,715	3,092,715	3,092,715
Exercise Price @ \$0.094	-	-	-	-	-	-	-	312,500	312,500	312,500
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	3,990,167	3,990,167
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	703,195
	385,632,652	16,948,007	504,364,611	504,714,611	505,941,736	506,494,236	510,328,616	510,641,116	514,631,283	515,334,478

	Series A @ \$0.150	Series B @ \$0.1846	Series C @ \$0.564	Series C-1 @ \$3.00	Series C-1 @ \$15.00	Series C-2 @ \$17.00	Warrants on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common
Distribution Percentage																				
Preferred Share Classes																				
Series A @ \$0.150	0.0%	41.0%	9.2%	9.2%	9.2%	9.1%	9.1%	9.1%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
Series B @ \$0.1846	0.0%	59.0%	10.7%	10.7%	10.7%	10.6%	10.6%	10.6%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%	10.5%
Series C @ \$0.564	8.6%	0.0%	11.7%	11.7%	11.8%	11.8%	11.8%	11.8%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%	11.4%
Series C-1 @ \$3.00	19.6%	0.0%	6.0%	5.0%	5.0%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%	4.9%
Series C-1 @ \$15.00	29.2%	0.0%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Series C-2 @ \$17.00	42.6%	0.0%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Warrants on Common																				
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Common	0.0%	0.0%	60.0%	60.0%	60.0%	59.8%	59.8%	59.3%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%
Options on Common																				
Exercise Price @ \$0.015	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.030	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Exercise Price @ \$0.066	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Exercise Price @ \$0.094	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Exercise Price @ \$0.206	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

	Series A @ \$0.150	Series B @ \$0.1846	Series C @ \$0.564	Series C-1 @ \$3.00	Series C-1 @ \$15.00	Series C-2 @ \$17.00	Warrants on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common	Options on Common
Allocation of Value																				
Preferred Share Classes																				
Series A @ \$0.150	\$ -	\$ 5,068,232	\$ 501,015	\$ 695,303	\$ 1,562,578	\$ 1,032,013	\$ 1,581,483	\$ 3,410,749	\$ 2,940,155	\$ 93,000,299										
Series B @ \$0.1846	-	7,294,513	585,847	813,032	1,827,154	1,206,754	1,849,260	3,988,258	3,437,982	108,747,129										
Series C @ \$0.564	26,799,743	-	637,043	884,081	1,986,824	1,312,208	2,010,861	4,336,779	3,738,418	118,250,217										
Series C-1 @ \$3.00	65,480,756	-	272,302	377,888	849,263	580,900	859,538	1,853,746	1,597,978	50,545,776										
Series C-1 @ \$15.00	97,538,777	-	81,123	112,582	253,009	167,101	256,070	552,260	476,063	15,058,368										
Series C-2 @ \$17.00	142,527,359	-	104,594	145,155	326,211	215,448	330,158	712,045	613,801	19,415,195										
Warrants on Common																				
Exercise Price @ \$0.072	-	-	-	-	-	-	-	25,322	94,612	47,077	1,489,098									
Common	-	-	3,273,476	4,542,892	10,209,389	6,742,846	10,332,907	22,284,750	19,210,038	607,634,419										
Options on Common																				
Exercise Price @ \$0.015	-	-	-	5,254	11,807	7,798	11,950	25,772	32,216	702,722										
Exercise Price @ \$0.030	-	-	-	-	41,396	27,340	41,697	90,359	77,891	2,463,793										
Exercise Price @ \$0.066	-	-	-	-	-	12,310	18,664	40,683	35,070	1,109,297										
Exercise Price @ \$0.072	-	-	-	-	-	-	105,593	227,730	196,309	6,209,481										
Exercise Price @ \$0.094	-	-	-	-	-	-	-	23,011	19,836	627,430										
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	253,275	8,011,364										
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	1,411,858										
	\$ 334,346,635	\$ 12,362,745	\$ 5,455,402	\$ 7,576,197	\$ 17,067,632	\$ 11,284,720	\$ 17,423,903	\$ 37,800,793	\$ 32,666,109	\$ 1,034,676,463										

Share Class	Number of Shares	Total Value	Per Share Marketable
Preferred Share Classes			
Series A @ \$0.150	46,320,045	\$ 109,791,828	\$ 2.37
Series B @ \$0.1846	54,162,965	129,749,930	2.40
Series C @ \$0.564	58,896,105	161,956,174	2.75
Series C-1 @ \$3.00	25,175,001	122,398,158	4.86
Series C-1 @ \$15.00	7,500,032	114,495,374	15.27
Series C-2 @ \$17.00	9,669,998	164,389,966	17.00
Warrants on Common			
Exercise Price @ \$0.072	741,665	1,816,109	2.18

US v. Elizabeth Holmes**Appendix Exhibit D.1**

Valuation of Theranos, Inc.

Backsolve Method Value Summary 12/31/14

As of December 31, 2014

(thousands of USD, except Per Share Value)

	Ref.	Fair Market Value
Indicated Value – 100% Controlling, Marketable Interest Basis	Appendix Exhibit D.3	\$ 2,247,529
Indicated Value – 100% Controlling, Marketable Interest Basis (rounded)		\$ 2,250,000

Per Share Value

Share Classes	Shares Outstanding	Present Value Marketable	Present Value Per Share Marketable
<u>Preferred Shares</u>			
Series A @ \$0.150	46,320,045	\$ 141,823,753	\$ 3.06
Series B @ \$0.1846	54,134,965	166,985,536	3.08
Series C @ \$0.564	58,896,105	201,942,073	3.43
Series C-1 @ \$3.00	25,175,001	136,956,824	5.44
Series C-1 @ \$15.00	7,500,032	115,114,977	15.35
Series C-2 @ \$17.00	32,808,227	557,739,835	17.00
Total Preferred Shares	<u>224,834,375</u>	<u>1,320,562,999</u>	
<u>Warrants on Common</u>			
Exercise Price @ \$0.072	741,665	2,140,841	2.89
Common - Outstanding	302,965,725	897,714,632	2.96
<u>Options on Common</u>			
Exercise Price @ \$0.015	350,000	1,033,652	2.95
Exercise Price @ \$0.030	1,170,875	3,441,670	2.94
Exercise Price @ \$0.066	547,500	1,592,180	2.91
Exercise Price @ \$0.072	2,579,175	7,444,876	2.89
Exercise Price @ \$0.094	312,500	891,811	2.85
Exercise Price @ \$0.170	3,972,457	11,056,985	2.78
Exercise Price @ \$0.206	606,365	1,649,600	2.72
Total Options Outstanding	<u>9,538,872</u>	<u>27,110,774</u>	
Total Outstanding	<u>538,080,637</u>	<u>\$ 2,247,529,245</u>	

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of December 31, 2014

Appendix Exhibit D.2
Backsolve Method 12/31/14 - Step 1
(USD)

Break Point Calculation				\$0.015	\$0.030	\$0.066	\$0.072	\$0.094	\$0.170	\$0.206
Share Class	Number of Shares	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Preferred Share Classes										
Series A @ \$0.150	46,320,046	\$ -	\$ 6,848,007	\$ 7,642,807	\$ 9,032,409	\$ 12,089,532	\$ 15,424,575	\$ 19,778,659	\$ 27,853,067	\$ 37,194,996
Series B @ \$0.1845	54,134,965	-	9,994,830	10,806,856	12,430,904	16,003,811	19,901,529	24,990,216	34,193,160	45,344,962
Series C @ \$0.564	58,896,105	33,217,403	33,217,403	34,100,845	35,867,728	39,754,871	43,995,390	49,531,624	59,543,962	71,676,560
Series C-1 @ \$3.00	25,175,001	75,525,003	75,525,003	75,902,628	78,657,878	78,319,428	80,132,028	82,498,478	86,778,228	91,964,278
Series C-1 @ \$15.00	7,500,032	112,500,480	112,500,480	112,612,980	112,837,981	113,332,984	113,872,985	114,577,989	115,852,994	117,398,001
Series C-2 @ \$17.00	32,808,227	557,739,859	557,739,859	558,231,982	559,216,229	561,381,572	563,743,765	566,827,738	572,405,136	579,163,631
Warrants on Common										
Exercise Price @ \$0.072	741,665	-	-	-	-	-	-	16,317	72,683	99,383
Common	302,985,725	-	-	4,544,486	9,088,972	19,995,738	21,813,532	28,478,778	51,504,173	62,410,939
Options on Common										
Exercise Price @ \$0.015	350,000	-	-	-	5,250	17,850	19,950	27,650	54,250	66,850
Exercise Price @ \$0.030	1,170,875	-	-	-	-	42,152	49,177	74,936	163,923	206,074
Exercise Price @ \$0.066	547,500	-	-	-	-	-	3,285	15,330	56,940	76,650
Exercise Price @ \$0.072	2,579,175	-	-	-	-	-	-	56,742	252,759	345,609
Exercise Price @ \$0.094	312,500	-	-	-	-	-	-	-	23,750	35,000
Exercise Price @ \$0.170	3,972,457	-	-	-	-	-	-	-	-	143,008
Exercise Price @ \$0.206	606,365	-	-	-	-	-	-	-	-	-
	538,080,637	778,982,745	795,925,582	803,842,584	815,137,351	840,937,937	858,956,217	886,874,457	948,555,026	1,006,125,944
Inputs										
		Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.015 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.206 Options Exercise
Stock Price Now	\$ 2,247,529,245	\$ 2,247,529,245	\$ 2,247,529,245	\$ 2,247,529,245	\$ 2,247,529,245	\$ 2,247,529,245	\$ 2,247,529,245	\$ 2,247,529,245	\$ 2,247,529,245	\$ 2,247,529,245
Volatility	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%	53.0%
Riskfree Rate - Annual	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%	1.38%
Exercise Price	\$ 0.00	\$ 778,982,745	\$ 795,925,582	\$ 803,842,584	\$ 815,137,351	\$ 840,937,937	\$ 858,956,217	\$ 886,874,457	\$ 948,555,026	\$ 1,006,125,944
Time To Maturity - Years	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Outputs										
d1	40.45	1.58	1.56	1.55	1.54	1.51	1.49	1.46	1.40	1.34
d2	39.39	0.52	0.50	0.49	0.48	0.45	0.43	0.40	0.34	0.28
N(d1)	1.000	0.943	0.941	0.940	0.938	0.934	0.932	0.928	0.919	0.910
N(d2)	1.000	0.699	0.692	0.689	0.684	0.673	0.668	0.655	0.631	0.610
Call Price (V _c)	\$ 2,247,529,245	\$ 1,604,322,756	\$ 1,593,170,677	\$ 1,587,998,486	\$ 1,580,662,164	\$ 1,564,089,715	\$ 1,552,667,500	\$ 1,535,211,428	\$ 1,497,662,066	\$ 1,463,834,334
-d1	-40.446	-1.582	-1.561	-1.552	-1.539	-1.509	-1.489	-1.459	-1.396	-1.340
-d2	-39.386	-0.522	-0.501	-0.492	-0.479	-0.449	-0.429	-0.399	-0.336	-0.280
N(-d1)	0.000	0.057	0.059	0.060	0.062	0.066	0.068	0.072	0.081	0.090
N(-d2)	0.000	0.301	0.308	0.311	0.316	0.327	0.334	0.345	0.369	0.390
Put Price (P _p)	\$ -	\$ 94,089,110	\$ 98,973,174	\$ 101,294,307	\$ 104,648,315	\$ 112,495,738	\$ 118,127,557	\$ 127,095,684	\$ 147,926,065	\$ 168,588,351
Fair Market Value	\$ 2,247,529,245	\$ 1,604,322,756	\$ 1,593,170,677	\$ 1,587,998,486	\$ 1,580,662,164	\$ 1,564,089,715	\$ 1,552,667,500	\$ 1,535,211,428	\$ 1,497,662,066	\$ 1,463,834,334

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of December 31, 2014

Appendix Exhibit D.3
Backsolve Method 12/31/14 - Step 2
(USD)

	Series C, C-1, C-2 Liq. Preference	Series A, B Liq. Preference	\$0.016 Options Exercise	\$0.03 Options Exercise	\$0.066 Options Exercise	\$0.072 Warrants / Options on Common Ex.	\$0.094 Options Exercise	\$0.170 Options Exercise	\$0.296 Options Exercise	All Classes Participate
High call option	\$ 2,247,529,245	\$ 1,804,322,756	\$ 1,593,170,677	\$ 1,547,998,486	\$ 1,580,662,184	\$ 1,564,089,715	\$ 1,552,087,500	\$ 1,535,211,428	\$ 1,497,662,066	\$ 1,463,834,334
Less low call option	-1,604,322,756	-1,593,170,677	-1,587,998,486	-1,580,662,184	-1,584,089,715	-1,552,667,500	-1,535,211,428	-1,497,662,066	-1,463,834,334	-
Total Value to Allocate	\$ 643,206,489	\$ 11,152,079	\$ 5,172,191	\$ 7,336,322	\$ 16,572,449	\$ 11,422,215	\$ 17,458,072	\$ 37,549,362	\$ 33,827,732	\$ 1,463,834,334
Preferred Share Classes										
Series A @ \$0.150	-	6,948,007	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045	46,320,045
Series B @ \$0.1846	-	9,994,830	54,134,965	54,134,965	54,134,965	54,134,965	54,134,965	54,134,965	54,134,965	54,134,965
Series C @ \$0.564	33,217,403	-	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105	58,896,105
Series C-1 @ \$3.00	75,525,003	-	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001	25,175,001
Series C-1 @ \$15.00	112,500,480	-	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032	7,500,032
Series C-2 @ \$17.00	557,739,859	-	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227	32,808,227
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	741,665	741,665	741,665	741,665
Common	-	-	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725	302,965,725
Options on Common										
Exercise Price @ \$0.015	-	-	-	350,000	350,000	350,000	350,000	350,000	350,000	350,000
Exercise Price @ \$0.030	-	-	-	-	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875	1,170,875
Exercise Price @ \$0.066	-	-	-	-	-	547,500	547,500	547,500	547,500	547,500
Exercise Price @ \$0.072	-	-	-	-	-	-	2,579,175	2,579,175	2,579,175	2,579,175
Exercise Price @ \$0.094	-	-	-	-	-	-	-	312,500	312,500	312,500
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	3,972,457	3,972,457
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	806,365
	776,982,745	16,942,837	527,800,100	526,150,100	529,320,975	529,968,475	533,189,315	533,501,815	537,474,272	538,080,637
Distribution Percentage										
Preferred Share Classes										
Series A @ \$0.150	0.0%	41.0%	8.8%	8.8%	8.6%	8.7%	8.7%	8.7%	8.8%	8.8%
Series B @ \$0.1846	0.0%	59.0%	10.3%	10.2%	10.2%	10.2%	10.2%	10.2%	10.1%	10.1%
Series C @ \$0.564	4.3%	0.0%	11.2%	11.2%	11.1%	11.1%	11.0%	11.0%	11.0%	10.9%
Series C-1 @ \$3.00	9.7%	0.0%	4.8%	4.8%	4.8%	4.8%	4.7%	4.7%	4.7%	4.7%
Series C-1 @ \$15.00	14.4%	0.0%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Series C-2 @ \$17.00	71.8%	0.0%	6.2%	6.2%	6.2%	6.2%	6.1%	6.1%	6.1%	6.1%
Warrants on Common										
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Common	0.0%	0.0%	57.4%	57.4%	57.2%	57.2%	56.8%	56.8%	56.4%	56.3%
Options on Common										
Exercise Price @ \$0.015	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.030	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Exercise Price @ \$0.066	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.072	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	0.5%	0.5%
Exercise Price @ \$0.094	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%
Exercise Price @ \$0.170	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%
Exercise Price @ \$0.206	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Allocation of Value										
Preferred Share Classes										
Series A @ \$0.150	\$ -	\$ 4,573,303	\$ 453,915	\$ 643,413	\$ 1,450,229	\$ 998,507	\$ 1,516,471	\$ 3,260,135	\$ 2,915,308	\$ 126,012,474
Series B @ \$0.1846	-	6,578,777	530,497	751,567	1,894,905	1,166,071	1,772,323	3,810,171	3,407,164	147,272,780
Series C @ \$0.564	27,427,626	-	577,194	818,102	1,843,571	1,269,606	1,928,198	4,145,274	3,708,822	160,225,517
Series C-1 @ \$3.00	62,361,037	-	246,703	349,690	788,201	542,690	824,204	1,771,888	1,584,472	68,487,933
Series C-1 @ \$15.00	92,801,709	-	73,497	104,180	234,818	161,676	245,543	527,873	472,039	20,403,641
Series C-2 @ \$17.00	460,526,114	-	321,505	455,726	1,027,189	707,237	1,074,108	2,309,136	2,084,895	89,253,926
Warrants on Common										
Exercise Price @ \$0.072	-	-	-	-	-	-	24,281	52,200	46,679	2,017,680
Common	-	-	2,988,821	4,208,376	9,485,519	6,530,841	9,918,787	21,323,582	19,068,156	824,210,350
Options on Common										
Exercise Price @ \$0.015	-	-	-	4,862	10,958	7,545	11,459	24,634	22,028	892,166
Exercise Price @ \$0.030	-	-	-	-	36,858	25,240	38,333	82,409	73,693	3,185,335
Exercise Price @ \$0.066	-	-	-	-	-	11,802	17,925	38,535	34,459	1,489,459
Exercise Price @ \$0.072	-	-	-	-	-	-	84,440	181,530	162,329	7,016,578
Exercise Price @ \$0.094	-	-	-	-	-	-	-	21,995	19,686	850,148
Exercise Price @ \$0.170	-	-	-	-	-	-	-	-	250,020	10,806,996
Exercise Price @ \$0.206	-	-	-	-	-	-	-	-	-	1,649,600
	\$ 643,206,489	\$ 11,152,079	\$ 5,172,191	\$ 7,336,322	\$ 16,572,449	\$ 11,422,215	\$ 17,458,072	\$ 37,549,362	\$ 33,827,732	\$ 1,463,834,334

Share Class	Number of Shares	Total Value	Per Share Marketable
Preferred Share Classes			
Series A @ \$0.150	46,320,045	\$ 141,823,753	\$ 3.06
Series B @ \$0.1846	54,134,965	168,985,336	3.08
Series C @ \$0.564	58,896,105	201,942,073	3.43
Series C-1 @ \$3.00	25,175,001	136,956,824	5.44
Series C-1 @ \$15.00	7,500,032	115,114,977	15.35
Series C-2 @ \$17.00	32,808,227	\$ 667,739,835	\$ 17.00
Warrants on Common			
Exercise Price @ \$0.072	741,665	2,140,841	2.89

US v. Elizabeth HolmesValuation of Theranos, Inc.
As of February 7, 2014**Appendix Exhibit E.1**PFM (Base) Forecasts - Depreciation & Capital Expenditure Analysis
(thousands of USD)

Forecast Depreciation	11 Mo. Ended 12/31/2014	For the Twelve Month Period Ending December 31,				
		2015	2016	2017	2018	2019
Total Revenue	\$ 239,250	\$ 1,677,000	\$ -	\$ -	\$ -	\$ -
Beginning Balance - Total Fixed Assets	22,021	62,901	240,017	202,545	165,074	127,603
Capital Expenditures	47,850	201,240	-	-	-	-
Fixed Assets	69,871	264,141	240,017	202,545	165,074	127,603
Capital Expenditures as a % of Revenue	20.00%	12.00%	0.00%	0.00%	0.00%	0.00%

US v. Elizabeth HolmesValuation of Theranos, Inc.
As of February 7, 2014**Appendix Exhibit E.2**PFM (Base) Forecast Free Cash Flow to Invested Capital
(thousands of USD)

	11 Mo. Ended 12/31/2014	For the Twelve Month Period Ending December 31, 2015
Total Revenue	\$ 261,000	\$ 1,677,000
Total Cost of Revenue	96,000	599,000
Gross Margin	165,000	1,078,000
GM %	63.2%	64.3%
Total Operating Expenses	201,000	670,000
Operating Expense %	77.0%	40.0%
EBITDA	(36,000)	408,000
EBITDA %	-13.8%	24.3%
Partial period Adjustment	3,000	-
Adjusted EBITDA	(33,000)	
Depreciation & Amortization	3,667	21,000
EBIT	(36,667)	387,000
EBIT %	-14.0%	23.1%
Interest Expense	-	-
Earnings Before Taxes	(36,667)	387,000
Income Taxes	40% -	101,670
Forecast After-Tax Income	\$ (36,667)	\$ 285,330
NPAT %	-14.0%	17.0%
Cash Flow		
Add: Depreciation & Amortization	3,667	21,000
After-Tax Gross Cash Flow	(33,000)	306,330
Decrease / (Increase) in Working Capital	(111,885)	(263,760)
Less: Capital Expenditures	(47,850)	(201,240)
Free Cash Flow	\$ (192,735)	\$ (158,670)

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of February 7, 2014

Appendix Exhibit E.3

PFM (Base) Forecast - Discounted Cash Flow Method
(thousands of USD)

Forecast Period	Base Cash Flow	Period	Discount Rate	PV Factor [1]	Discounted Cash Flow [2]
2014 - Mar to Dec	\$ (192,735)	0.45	75.5%	0.7773	\$ (149,809)
2015	(158,670)	1.40	75.5%	0.4561	(72,362)
Terminal Value	4,732,800	1.90	75.5%	0.3443	1,629,279
					\$ 1,407,108
					114,390
					6,556
					(40,489)
					(1,897)
Total Equity Value - Non-Controlling, Marketable Basis					\$ 1,485,668
Total Equity Value - Non-Controlling, Marketable Basis (rounded)					\$ 1,490,000

Indicated Value

Add: Series C-2 proceeds not on balance sheet

Add: Series C-1 proceeds not on balance sheet

Deduct: Note Payable, Long Term

Deduct: Capital Lease, LT Portion

	LTM Revenue	1YR Growth Revenue	1YR Forward Revenue Growth	EBITDA Margin	D&A Margin	EBIT Margin	Capex % Revenue	Working Capital % Revenue
Upper Quartile	1,160,767	21.2%	12.7%	20.7%	2.3%	14.2%	6.5%	140.0%
Mean	1,086,705	20.2%	11.9%	0.1%	1.4%	-73.3%	5.6%	232.8%
Median	237,509	11.8%	6.5%	15.6%	0.0%	4.2%	4.1%	48.7%
Lower Quartile	93,829	3.8%	4.8%	-4.6%	0.0%	-19.7%	3.1%	30.1%
Theranos, Inc. (at 12/31/15)	\$ 1,677,000	542.5%	N/A	24.3%	1.3%	23.1%	12.0%	18.6%

	MVIC / LTM Revenue	MVIC / LTM EBITDA
Upper Quartile	5.74x	25.83x
Mean	6.12x	19.05x
Median	2.71x	14.57x
Lower Quartile	1.83x	8.65x
Selected Multiple	4.40x	11.60x
Subject Company Base Value	\$ 1,677,000	\$ 408,000
Indicated Value at 12/31/15	7,378,800	4,732,800

Notes:

[1] $1 / (1 + \text{Discount Rate})^{\text{Period}}$

[2] Base Cash Flow x PV Factor

US v. Elizabeth Holmes
Valuation of Theranos, Inc.
As of February 7, 2014

Appendix Exhibit E.4
PFM (Model) Forecast Free Cash Flow to Invested Capital
(thousands of USD)

	11 Mo. Ended	For the Twelve Month Period Ending December 31,				
	12/31/2014	2015	2016	2017	2018	2019
Revenue						
Lab Services from US Retail Pharmacies	\$ 198,986	\$ 1,063,582	\$ 2,172,705	\$ 2,871,036	\$ 2,914,101	\$ 2,960,241
Lab Services Revenue from Physicians Offices (courier)	32,571	222,965	346,500	388,080	429,660	469,455
Lab Services Revenue from Hospitals (courier)	43,313	134,009	167,511	192,638	215,754	238,408
OnSite Services Revenue from Hospitals	-	122,400	360,000	432,000	504,000	576,520
Pharmaceuticals Services	30,000	120,000	170,000	220,000	270,000	323,386
Total Revenue	\$ 304,869	\$ 1,662,956	\$ 3,216,716	\$ 4,103,754	\$ 4,333,516	\$ 4,568,011
Total Cost of Revenue	126,526	641,692	1,245,920	1,574,157	1,612,172	1,650,574
Gross Margin	178,343	1,021,264	1,970,797	2,529,597	2,721,344	2,917,437
GM %	58.5%	61.4%	61.3%	61.6%	62.8%	63.9%
Total Operating Expenses	201,000	670,000	824,000	906,400	962,412	1,022,080
Operating Expense %	65.9%	40.3%	25.6%	22.1%	22.2%	22.4%
EBITDA	(22,657)	351,264	1,146,797	1,623,197	1,758,932	1,895,357
EBITDA %	-7.4%	21.1%	35.7%	39.6%	40.6%	41.5%
Partial period Adjustment	1,888					
Adjusted EBITDA	(20,769)					
Depreciation & Amortization	3,667	21,000	96,501	205,188	216,676	228,401
EBIT	(24,435)	330,264	1,050,295	1,418,009	1,542,256	1,666,956
EBIT %	-8.0%	19.9%	32.7%	34.6%	35.6%	36.5%
Interest Expense	-	-	-	-	-	-
Earnings Before Taxes	(24,435)	330,264	1,050,295	1,418,009	1,542,256	1,666,956
Income Taxes	40%	83,868	420,118	567,204	616,903	666,782
Forecast After-Tax Income	\$ (24,435)	\$ 246,396	\$ 630,177	\$ 850,805	\$ 925,354	\$ 1,000,174
NPAT %	-8.0%	14.8%	19.6%	20.7%	21.4%	21.9%
Cash Flow						
Add: Depreciation & Amortization	3,667	21,000	96,501	205,188	216,676	228,401
After-Tax Gross Cash Flow	(20,769)	267,396	726,679	1,055,993	1,142,030	1,228,574
Decrease / (Increase) in Working Capital	(9,146)	(49,889)	(96,501)	(123,113)	(130,005)	(137,040)
Less: Capital Expenditures	(30,800)	(134,750)	(160,836)	(205,188)	(216,676)	(228,401)
Free Cash Flow	\$ (60,715)	\$ 82,757	\$ 469,341	\$ 727,693	\$ 795,348	\$ 863,133

US v. Elizabeth Holmes**Appendix Exhibit E.5**

Valuation of Theranos, Inc.

PFM (Model) Forecast - Discounted Cash Flow Method

As of February 7, 2014

(thousands of USD)

<u>Forecast Period</u>	<u>Base Cash Flow</u>	<u>Period</u>	<u>Discount Rate</u>	<u>PV Factor [1]</u>	<u>Discounted Cash Flow [2]</u>
2014 - Mar to Dec	\$ (60,715)	0.45	35.5%	0.8728	\$ (52,990)
2015	82,757	1.40	35.5%	0.6544	54,154
2016	469,341	2.40	35.5%	0.4829	226,661
2017	727,693	3.40	35.5%	0.3564	259,356
2018	795,348	4.40	35.5%	0.2630	209,202
2019	863,133	5.40	35.5%	0.1941	167,551
Terminal Value	2,849,710	5.40	35.5%	0.1941	553,185
Indicated Value					\$ 1,417,121
Add: Series C-2 proceeds not on balance sheet					114,390
Add: Series C-1 proceeds not on balance sheet					6,556
Deduct: Note Payable, Long Term					(40,489)
Deduct: Capital Lease, LT Portion					(1,897)
Total Equity Value - Non-Controlling, Marketable Basis					\$ 1,495,680
Total Equity Value - Non-Controlling, Marketable Basis (rounded)					\$ 1,500,000

Notes:[1] $1 / (1 + \text{Discount Rate})^{\text{Period}}$

[2] Base Cash Flow x PV Factor.

US v. Elizabeth HolmesValuation of Theranos, Inc.
As of December 31, 2014**Appendix Exhibit F.1**Mosley-RDV Forecast - Depreciation & Capital Expenditure Analysis
(thousands of USD)

Forecast Depreciation	For the Twelve Month Period Ending December 31,				
	2015	2016	2017	2018	2019
Total Revenue	\$ 990,000	\$ -	\$ -	\$ -	\$ -
Beginning Balance - Total Fixed Assets	53,366	164,287	148,528	132,769	117,010
Capital Expenditures	118,800	-	-	-	-
Fixed Assets	172,166	164,287	148,528	132,769	117,010
Capital Expenditures as a % of Revenue	12.00%	0.00%	0.00%	0.00%	0.00%

US v. Elizabeth Holmes**Appendix Exhibit F.2**Valuation of Therasys, Inc.
As of December 31, 2014Mosley-RDV Forecast Free Cash Flow to Invested Capital
(thousands of USD)

	For the Twelve Month Period Ending December 2015
Revenue	
Lab Services from US Retail Pharmacies	\$ 470,000
Lab Services Revenue from Physicians Offices (courier)	160,000
Lab Services Revenue from Hospitals (courier)	290,000
OnSite Services Revenue from Hospitals	10,000
Pharmaceuticals Services	60,000
Total Revenue	\$ 990,000
Cost of Revenue	
Lab Services from US Retail Pharmacies	188,000
Lab Services Revenue from Physicians Offices (courier)	64,000
Lab Services Revenue from Hospitals (courier)	87,000
OnSite Services Revenue from Hospitals	3,000
Pharmaceuticals Services	12,000
Total Cost of Revenue	354,000
Gross Margin	636,000
GM %	64.2%
Operating Expenses	
Research & Development (including Killer software apps & support)	127,000
CLIA Lab Operations	76,000
Data Center	25,000
Sales, Marketing & Branding	76,000
G&A	95,000
Total Operating Expenses	399,000
Operating Expense %	40.3%
EBITDA	237,000
EBITDA %	23.9%
Depreciation & Amortization	21,000
EBIT	216,000
EBIT %	21.8%
Interest Expense	-
Earnings Before Taxes	216,000
Income Taxes 40%	47,937
Forecast After-Tax Income	\$ 168,063
NPAT %	17.0%
Cash Flow	
Add: Depreciation & Amortization	21,000
After-Tax Gross Cash Flow	189,063
Decrease / (Increase) in Working Capital	119,528
Less: Capital Expenditures	(118,800)
Free Cash Flow	\$ 189,791

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of December 31, 2014

Appendix Exhibit F.3

Mosley-RDV Forecast - Discounted Cash Flow Method
(thousands of USD)

Forecast Period	Base Cash Flow	Period	Discount Rate	PV Factor [1]	Discounted Cash Flow [2]
2015	189,791	0.50	54.0%	0.8058	152,938
Terminal Value	3,294,300	1.00	54.0%	0.6494	2,139,156
					\$ 2,292,094
Add: Series C-2 proceeds					-
Deduct: Note Payable, Long Term					(40,805)
Deduct: Capital Lease, LT Portion					-
Total Equity Value - Non-Controlling, Marketable Basis					\$ 2,251,289
Total Equity Value - Non-Controlling, Marketable Basis (rounded)					\$ 2,250,000

	LTM Revenue	1YR Growth Revenue	1YR Forward Revenue Growth	EBITDA Margin	D&A Margin	EBIT Margin	Capex % Revenue	Working Capital % Revenue
Upper Quartile	1,216,653	14.1%	21.4%	19.7%	1.6%	14.9%	6.4%	84.8%
Mean	1,136,335	6.2%	18.0%	-2.8%	1.3%	-274.9%	5.7%	758.4%
Median	251,345	5.1%	13.0%	13.6%	0.0%	5.0%	3.9%	58.0%
Lower Quartile	98,696	2.1%	8.4%	-4.3%	0.0%	-12.2%	2.8%	35.7%
Theranos, Inc. (at 12/31/15)	\$ 990,000	607.1%	N/A	23.9%	2.1%	21.8%	12.0%	18.6%

	MVIC / LTM Revenue	MVIC / LTM EBITDA
Upper Quartile	5.09x	19.93x
Mean	6.60x	19.85x
Median	3.20x	15.67x
Lower Quartile	2.22x	12.10x
Selected Multiple	4.90x	13.90x
Subject Company Base Value	\$ 990,000	\$ 237,000
Indicated Value at 12/31/15	4,851,000	3,294,300

Notes:[1] $1 / (1 + \text{Discount Rate})^{\text{Period}}$

[2] Base Cash Flow x PV Factor

US v. Elizabeth HolmesValuation of Theranos, Inc.
As of February 13, 2015**Appendix Exhibit G.1**Murdoch Forecast - Depreciation & Capital Expenditure Analysis
(thousands of USD)

Forecast Depreciation	11 Mo. Ended	For the Twelve Month Period Ending December 31,				
	12/31/15	2016	2017	2018	2019	2020
Total Revenue	\$ 911,438	\$ 1,977,240	\$ -	\$ -	\$ -	\$ -
Beginning Balance - Total Fixed Assets	22,021	120,683	323,277	272,866	222,454	172,043
Capital Expenditures	109,373	237,269	-	-	-	-
Fixed Assets	131,393	357,952	323,277	272,866	222,454	172,043
<i>Capital Expenditures as a % of Revenue</i>	12.00%	12.00%	0.00%	0.00%	0.00%	0.00%

US v. Elizabeth Holmes**Appendix Exhibit G.2**

Valuation of Theranos, Inc.

Murdoch Forecast Free Cash Flow to Invested Capital

As of February 13, 2015

(thousands of USD)

	11 Mo. Ended 12/31/15	For the Twelve Month Period Ending December 2016
Total Revenue	\$ 994,296	\$ 1,977,240
Total Cost of Revenue	334,976	614,490
Gross Margin	659,320	1,362,750
GM %	66.3%	68.9%
Total Operating Expenses	320,909	501,558
Operating Expense %	32.3%	25.4%
EBITDA	338,411	861,192
EBITDA %	34.0%	43.6%
Partial period Adjustment	(28,201)	-
Adjusted EBITDA	310,210	
Depreciation & Amortization	8,000	19,772
EBIT	302,210	841,420
EBIT %	30.4%	42.6%
Interest Expense	-	-
Earnings Before Taxes	302,210	841,420
Income Taxes	40% 82,421	336,568
Forecast After-Tax Income	\$ 219,789	\$ 504,852
NPAT %	22.1%	25.5%
Cash Flow		
Add: Depreciation & Amortization	8,000	19,772
After-Tax Gross Cash Flow	227,789	524,624
Decrease / (Increase) in Working Capital	118,728	(183,094)
Less: Capital Expenditures	(109,373)	(237,269)
Free Cash Flow	\$ 237,144	\$ 104,262

US v. Elizabeth Holmes

Valuation of Theranos, Inc.
As of February 13, 2015

Appendix Exhibit G.3

Murdoch Forecast - Discounted Cash Flow Method
(thousands of USD)

Forecast Period	Base Cash Flow	Period	Discount Rate	PV Factor [1]	Discounted Cash Flow [2]
2015 - Mar to Dec	\$ 237,144	0.44	82.0%	0.7685	\$ 182,244
2016	104,262	1.38	82.0%	0.4378	45,642
Terminal Value	6,327,168	1.88	82.0%	0.3245	2,053,136
Indicated Value					\$ 2,281,022
Add: Series C-2 proceeds					125,000
Deduct: Note Payable, Long Term					(40,805)
Deduct: Capital Lease, LT Portion					-
Total Equity Value - Non-Controlling, Marketable Basis					\$ 2,365,217
Total Equity Value - Non-Controlling, Marketable Basis (rounded)					\$ 2,370,000

	LTM Revenue	1YR Growth Revenue	1YR Forward Revenue Growth	EBITDA Margin	D&A Margin	EBIT Margin	Capex % Revenue	Working Capital % Revenue
Upper Quartile	1,216,653	14.1%	21.4%	19.7%	1.6%	14.9%	6.4%	84.8%
Mean	1,136,335	6.2%	18.0%	-2.8%	1.3%	-274.9%	5.7%	758.4%
Median	251,345	5.1%	13.0%	13.6%	0.0%	5.0%	3.9%	58.0%
Lower Quartile	98,696	2.1%	8.4%	-4.3%	0.0%	-12.2%	2.8%	35.7%
Theranos, Inc. (at 12/31/16)	\$ 1,977,240	98.9%	N/A	43.6%	1.0%	42.6%	12.0%	18.6%

	MVIC / LTM Revenue	MVIC / LTM EBITDA
Upper Quartile	5.09x	19.93x
Mean	6.60x	19.85x
Median	3.20x	15.67x
Lower Quartile	2.22x	12.10x
Selected Multiple	3.20x	12.10x
Subject Company Base Value	\$ 1,977,240	\$ 861,192
Indicated Value at 12/31/15	6,327,168	10,420,429

Notes:

[1] $1 / (1 + \text{Discount Rate})^{\text{Period}}$

[2] Base Cash Flow x PV Factor



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Appendix Exhibit H

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Executive Summary

Carl Saba is a Partner in the Forensic and Financial Consulting Service Group at Hemming Morse, LLP. He is a recognized leader within the business valuation community, with over twenty three years of experience advising companies on complex financial analysis and valuation issues for litigation, mergers and acquisitions, tax, and financial reporting matters. His valuation expertise spans business valuation, valuation of intellectual property and other intangible assets, and valuation of options and other derivatives.

Carl has led in excess of 800 valuation engagements over the last fifteen years across a broad range of industries with niche expertise in the areas of Technology, Life Sciences, and Medical Device. He has assisted clients as a valuation expert in initial public offerings, acquisitions, corporate restructure transactions, and bankruptcy reorganizations with transaction values exceeding \$1 billion. He has also assisted clients with resolving valuation disputes with the Internal Revenue Service (IRS), and addressing valuation inquiries and reviews by the Public Companies Oversight Board (PCAOB), and Securities and Exchange Commission (SEC).

On litigation matters, Carl has served as an expert and testified on a wide range of complex business disputes involving economic damages. These have included shareholder dissolution actions, business interruption, unfair competition, patent infringement, alter ego, lost wages, and fraud claims. In most cases, he has been successful in contributing to a favorable award for clients and out of court settlement of the dispute.

Carl also has significant financial advisory experience in mergers and acquisitions due diligence and turnaround management. He has lead due diligence efforts that have assisted his clients in negotiating key deal terms, negotiated with creditors to recapitalize companies, and helped management teams define strategic direction.

Contributing to thought leadership within the valuation community is something Carl is passionate about. He co-founded and currently Chairs the Executive Committee of the Fair Value Forum, a business valuation expert group dedicated to defining best practices within the profession. He also served a term as President of the Valuation Roundtable of San Francisco and was a board member for several years. Carl has authored several articles on cutting edge valuation topics, and teaches and lectures on the topic frequently.

Carl has an MBA from the Marshall School of Business at the University of Southern California where he graduated with Honors. He earned his Bachelor's degree at U.C. Berkeley's Haas School of Business. He is a Certified Valuation Analyst with the National Association of Certified Valuators and Analysts. He is also an Accredited Senior Appraiser with the American Society of Appraisers, and Accredited in Business Valuation with the American Institute of Certified Public Accountants.



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Employment & Education

- | | |
|----------------|--|
| 2013 – Present | <p>Hemming Morse, LLP
Certified Public Accountants, Forensic and Financial Consultants
Partner</p> |
| 2004 – 2013 | <p>Burr Pilger Mayer, Inc.
Certified Public Accountants and Consultants
Shareholder, Consulting Practice Group Leader</p> |
| 2003 – 2004 | <p>Comerica Bank, Palo Alto
Vice President / Team Leader</p> |
| 2003 | <p>University of Southern California
MBA, Finance Emphasis
– Graduated in top tier of class with honors
– Extensive graduate level coursework in finance theory, valuation, options and decision analysis, statistics, and business strategy</p> |
| 2002 | <p>Decision Education Foundation, Menlo Park
Strategy Consultant, Strategic Decisions Group (Summer Internship)</p> |
| 1999 – 2001 | <p>Comerica Bank, Palo Alto
Vice President / Corporate Banking Officer</p> |
| 1996 – 1999 | <p>Manufacturers Bank, San Jose
Assistant Vice President / Corporate Banking Officer</p> |
| 1995 | <p>University of California, Berkeley
Bachelors degree in Business Administration and Finance</p> |



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Professional Credentials

- Accredited in Business Valuation (ABV)
American Institute of Certified Public Accountants
- Accredited Senior Appraiser (ASA)
American Society of Appraisers
- Certified Valuation Analyst (CVA)
National Association of Certified Valuators and Analysts
- Graduate of Leadership San Francisco
Class of 2008

Professional Affiliations

- Fair Value Forum
 - Co-Founder
 - Chair, Executive Committee, 2012-Present
 - Executive Committee, 2006-Present
- Valuation Roundtable of San Francisco
 - President, 2011-2012
 - Board Member, 2009-2014
- National Association of Certified Valuation Analysts
- American Society of Appraisers
- American Institute of Certified Public Accountants
- Community Legal Services, East Palo Alto
 - Executive Committee Board Member
 - Treasurer
- Beta Gamma Sigma – National Business Honor Society

Publications

- "Quantifying Personal Goodwill by Analyzing Customer Retention", BVR Business Valuation Update Vol. 23 No. 11, November 2017
- Co-author of the valuation section of The 409A Administration Handbook, Thomson Reuters, 2013 Edition
- "Due Diligence Can Attract, Support an Acquisition", North Bay Business Journal, April 2013
- "Purchase Price Allocations Under ASC 805", A Guide to Allocating Purchase Price for Business Combinations, BPM Insights, July 2012
- "A Fresh Start for Your Financials After Chapter 11, Fair Value Measurements in Reorganization", BPM Insights, March 2012
- "Valuation Challenges for Early Stage Companies", BV Wire Issue 97-4, October 2010



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Publications continued

- "Valuation Challenges for Early Stage Companies", BV Wire Issue 97-4, October 2010
- "Stock Options for Life Science Companies, Understanding the Risks, Realizing the Rewards", CFO.com, 2009
- "Future Equity Financing in Early Stage Company Valuations", Fair Value Forum Whitepaper, 2009
- "Finding Value in Valuations" – The Importance of Valuations for Biotech Companies, Smart Business, 2008
- "Accounting Practices for Medical Technology", MX Magazine, July/August 2007
- "Hot Issues in Biotech and Life Sciences", California CPA, March/April 2006.

Instructions and Seminars

- "Preparing your Business for a Successful 2022", Associated General Contractors (AGC) California, June 2022
- "Experts In Uncharted Waters", Association of Business Trial Lawyers Conference , October 2021
- "Auditing IRC 409A and ASC 805 Valuations", OUM & CO, September 2020
- "Fair Value Forum Case Study – Unpacking Differences Between Diverse Valuation Opinions", American Society of Appraisers 2018 Fair Value Summit, November 2018
- "Case Studies in 409A Valuations", American Society of Appraisers 2017 Fair Value Summit, November 2017
- "To Dissolve or Not to Dissolve, Navigating the Waters of Shareholder Disputes", Beverly Hills Bar Association, June 2017
- "To Dissolve or Not to Dissolve, Overview of Section 2000 of the California Corporations Code", Ventura County Bar Association, May 2017
- "To Dissolve or Not to Dissolve, the Pros and Cons of Section 2000 of the California Corporations Code", ProVisors Lawyers and Legal Professionals Affinity Group, April 2017
- "409A and Private Companies Valuation Update", American Society of Appraisers 2016 Fair Value Summit, November 2016
- "Developments in the Valuation of Early Stage Companies", AICPA Webcast, June 2016
- "Business Valuation in Litigation: Overview and Case Studies", American Society of Appraisers Northern California Chapter, June 2016
- "Hot Topics in Early Stage Company Valuations", Montgomery & Hansen LLP, April 2016



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Instructions and Seminars continued

- "What CPAs Should Know About Business Valuation for Estate and Gift Tax Matters", Crawford Pimentel, January 2016
- "409A Valuation Issues Update", American Society of Appraisers 2015 Fair Value Summit, November 2015
- "Developments in the Valuation of Early Stage Companies", AICPA Forensic and Valuation Services Conference, November 2015
- "Stock Transactions as an Indication of Fair Value in Common Stock Valuations", American Society of Appraisers 2014 Fair Value Summit, November 2014
- "Valuation of Winery Brand and Operations, Building Value in the Wine Business", The Seminar Group, November 2014
- "Valuation in Dissenting Shareholder Actions, Estate and Gift Tax Matters, and Transactions", McCormick Barstow LLP, September 2014
- "Damages and Valuation for New or Unestablished Businesses", Winston & Strawn, May 2014
- "The Continued Appraisal Attack", 2013 California Tax Policy Conference of the California Tax Bar, November 2013
- "Equity Compensation Valuation Issues - Addressing Situational Requirements When the Guidance is Insufficient", American Society of Appraisers 2013 Fair Value Summit, November 2013
- "Mergers & Acquisitions: Better Decision Making Through Financial Modeling", AICPA Controllers Conference, November 2013
- "Auditing Fair Value Measurements under IRC 409, ASC 718, and ASC 805", OUM & Co. LLP, September 2013
- "Valuation Issues in Chapter 11 Reorganizations, Inns of Court", San Jose Federal Courthouse, July 2013
- "Panelist on Valuation Issues in Bankruptcy and Financial Reporting", Association of Insolvency and Restructuring Advisors National Conference, June 2011
- "Alternative Investments, Fair Value Issues", San Francisco Nonprofit Roundtable, 2009
- "The Guideline Public Company Valuation Method and Minority versus Control Value Conclusion", Valuation Roundtable of San Francisco, 2009
- "Modeling Techniques for Future Rounds of Equity Financing in Early Stage Technology and Biotech Companies", Fair Value Forum, 2009
- "Acquired Intangible Assets and Impairment Testing Under FAS 141, 142, 144", San Francisco State University, 2008
- "FAS 157 and Mark-to-Market or Mark-to-Make Believe Accounting?", Golden Gate University, 2008



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Instructions and Seminars continued

- "Analyzing Financial Statements, and Interpreting Financial Ratios", Building Owners and Managers Association (BOMA), 2005-2007
- "Audits of Investments in Private Equity Securities, Are you Ready?", San Francisco Nonprofit Roundtable, 2007
- "Valuations of Early Stage Companies", Frost, and Sullivan Medical Devices Conference, 2007
- "Valuation and Accounting under FAS 123R", Cal Society East Bay Business & Industry Group, 2006
- "Complex Capital Structures – DCF with Future Capital Requirements and the Impact of Existing Shareholders", Valuation Roundtable of San Francisco Annual Seminar, 2007
- "Panelist on Implementation and Valuation Considerations Under FAS 123R", Cal Society Life Sciences Industry Group, 2006

Testimony

Trial and Arbitration

- Facebook, Inc. & Subsidiaries v. Commissioner of Internal Revenue (2022), United States Tax Court, San Francisco, California, Docket No. 21959-16
- Omega Electric Supply, LLC, et al. v. Estate of Todd G. Lewis, et al. (2019) JAMS Arbitration, Case No. 1100091778
- Dr. Albert Cha v. Vivo Capital, LLC and Vivo Ventures VII, LLC (2022), JAMS Arbitration, San Francisco, California, Case No. 1100110703
- David Senescu v. The Keating Group, Inc., et al. (2019), JAMS Arbitration, Case No. 1110022437
- Jaspindar Sandhu v. Eximius Design, LLC, et. al. (2021) JAMS Arbitration, Case No. 1100104731
- San Jose, California Unlimited Prepaid, Inc. v. Air Voice Wireless, LLC (2018), JAMS Arbitration, Case No. 1220055749
- Shasikant Patel v. Nitin Desai, Town Green Enterprises, LLC, Windsor Hospitality Group. LLC (2021) JAMS Arbitration, San Francisco, California, Case No. 1100107540
- Robert Kindrachuk v. Norcal Urology Medical Group, Inc. (2018), ADR Services, Inc., Case No. 17-7127-HD
- Yuhui Chen v. Zining Wu, InnoGrit Corporation, Shanghai Yingren Chuang Information Technology Co., Ltd. (2020) JAMS Arbitration, San Jose, California, Case No. 1110024169
- Domain Associates, L.L.C, et al. v. Nimesh S. Shah (2018), Court of Chancery Delaware, Case No. 12921-VCL



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Testimony continued

Trial and Arbitration continued

- Michael DiSanto v. Bingham McCutchen LLP (2016), JAMS Arbitration, San Francisco County, California, Case No. 1110017742
- Gerald Laurence Trebesch v. Fall Line Capital LLC (2015), American Arbitration Association (AAA), San Francisco County, California, Arbitration No. 01-14-001-0482
- Ellen Pao v. Kleiner Perkins Caufield & Byers (2015), Superior Court, San Francisco County, California, Case Number CGC-12-520719
- Roxanne E. Doherty v. Michael Doherty (2015), Superior Court, Calaveras County, California, Case Number 11CV37584
- Lehman Brothers Holdings Inc., as Assignee of Lehman Brothers Inc. v. Christopher J. Clifford (2014), Financial Industry Regulatory Authority (FINRA), San Francisco County, California, Arbitration No. 10-04109
- Evan MacMillan v. Groupon, Inc. (2014, American Arbitration Association, San Francisco County, California, Case Number 74 460 00054 13
- Scomas Restaurant, Inc. (2009) San Francisco County, California

Deposition

- Annette P. Cowan v. Allergy Asthma Clinic Burlingame, Inc. et al. (2021), Superior Court San Mateo County, California, Case No. 19-CIV-00235
- Dr. Albert Cha v. Vivo Capital, LLC and Vivo Ventures VII, LLC (2021), JAMS Arbitration, San Francisco, California, Case No. 1100110703
- Jaspindar Sandhu v. Eximius Design, LLC, et. al. (2021) JAMS Arbitration, Case No. 1100104731
- Kouji Yamada v. Lateef Management, LLC (2021), JAMS Arbitration, Case No. 1100109005
- Jaspindar Sandhu v. Eximius Design, LLC, et al. (2021), JAMS Arbitration, Case No. 1100104731
- Anthony Scott Levandowski v. Uber Technologies, Inc. (2021), United States Bankruptcy Court, Northern District of California, San Francisco Division, Case No. 20-30242 (HLB)
- Graystone Mortgage, LLC v. Network Funding, L.P. (2021), United States District Court, District of Utah Central Division, Case No. 2:19-cv-00383-JNP
- John Nypl, et al. v. JP Morgan Chase & CO., et al. (2021), United States District Court, Southern District of New York, Case No. 15 Civ. 9300 (LGS)
- Yuhui Chen v. Zining Wu, InnoGrit Corporation, Shanghai Yingren Chuang Information Technology Co., Ltd. (2020) JAMS Arbitration, San Jose, California, Case No. 1110024169



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Testimony continued

Deposition continued

- Matthew Pliskin, Trustee of ICPW Nevada Trust v. BDO USA, LLP (2020), American Arbitration Association (AAA) Dallas, Texas, Case No. 01-19-0000-4459
- Zwick Partners, LP and Aparna Rao v. Quorum Health Corporation, et al. (2019), United States District Court Middle District of Tennessee, Case No. 3:16-cv-02475
- MD Anis Uzzaman and Fenox Venture Capital Inc. v. Brandon Hill (2019), Superior Court San Mateo County, California, Case No. 17-CIV-02443
- Omega Electric Supply, LLC, et al. v. Estate of Todd G. Lewis, et al. (2019), JAMS Arbitration, Case No. 1100091778
- Donald Norman v. Patrick Strateman, et al. and Intersango LLC (2019), Superior Court San Francisco County, California, Case Number CGC-17-556483
- David Senescu v. The Keating Group, Inc., et al. (2019), JAMS Arbitration, San Jose, California, Case No. 1110022437
- Unlimited Prepaid, Inc. v. Air Voice Wireless, LLC (2018), JAMS Arbitration, Case No. 1220055749
- Julia Bernstein, et al. v. Virgin America, Inc, et al. (2018), United States District Court, Northern District of California, Case No. 15-cv-02277-JST
- Domain Associates, L.L.C, et al. v. Nimesh S. Shah (2017), Court of Chancery Delaware, Case No. 12921-VCL
- State of California, et al. v. BP America Production Company, et al. (2017), Superior Court, San Francisco County, California, Case No CGC-12-522063
- Tamara B. Pow v. Mark Figueiredo (2017), Superior Court, Santa Clara County, California, Case Number 1-15-CV-282824
- Glen Ocal v. Kenneth S. Thom, Pier 39 Maritime Business Facilities, LLC dba SOMACentral (2017), Superior Court Santa Clara County, California, Case Number 114CV266597
- Stacy Guthmann v. CC-Palo Alto, Inc. D/B/A VI at Palo Alto; Classic Residence Management Limited Partnership, et al (2017), United States District Court, Northern District of California San Jose Division, Case Number 16-CV-02680-LHK
- Crossfit, Inc. v. Jeff Martin, et al. (2017), United States District Court, District of Arizona, Case Number 2:14-cv- 02277-JJT
- Joel Simkhai and Grindr Holdings Company v. KL Grindr Holdings Inc., et al. (2017), American Arbitration Association, Los Angeles County, California, Case Number 01-16-0003-7637
- Clyde Berg v. Speech Morphing Systems (2016), Superior Court, San Francisco County, California, Case Number 2014-1-CV-264586



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Testimony continued

Deposition continued

- California Crane School Incorporated v. National Commission for the Certification of Crane Operators (2016), Superior Court, Tuolumne County, California, Case Number CV53859
- Dellon Chen v. Standard Fiber LLC (2015), Superior Court San Mateo County, California, Case Number CIV521306
- Lloyds TSB Bank, PLC v. Michael J. Kilroy (2015), Superior Court, Riverside County, California, Case Number INC 1202040
- Ellen Pao v. Kleiner Perkins Caufield & Byers (2015), Superior Court, San Francisco County, California, Case Number CGC-12-520719
- Biotechnology Value Fund, L.P. v. Celera Corporation, Credit Suisse Securities LLC (2014), United States District Court, Northern District of California San Francisco Division, Case Number CV-13-3248-DMR
- Saul R. Flores v. Group One Construction Inc (2014), Superior Court, Santa Clara County, California, Case Number 112CV215989
- John K. Palladino v. John Palladino Jr. (2014), Superior Court, San Mateo County, California, Case Number CIV512247
- Roxanne E. Doherty v. Michael Doherty (2014), Superior Court, Calaveras County, California, Case Number 11CV37584
- Evan MacMillan v. Groupon, Inc. (2013), American Arbitration Association, San Francisco County, California, Case Number 74 460 00054 13
- Margery Raffanti v. Estate of Robert Raffanti (2010), Superior Court, Santa Clara County, California
- Scomas Restaurant, Inc. (2009) San Francisco County, California

List of Documents Considered

File Name	File name
0578N	FTR 2013
0792	FTR 2014
0792N-1	FTR 2015
1901	Mosley Materials 2
1901N	Mosley Materials 3
3233	Mosley Materials 4
3283	Mosley Materials 5
3283N	Mosley Materials 6
3527	Mosley Materials 7
3533	Mosley Materials
4859	Confidential Disclosure Agreement
5085	Confidential Overview 2_KRM
5141	Confidential Overview 3_KRM
5172	Confidential Overview 4_KRM
5190	Confidential Overview 5_KRM
5206 Attachment	Confidential Overview 6_KRM
5206	Confidential Overview 7_KRM
5209	Confidential Overview 8_KRM
5209n	Confidential Overview 9_KRM
5797	Confidential Overview 10_KRM
7753	Confidential Overview 11_KRM
7753N	Confidential Overview_KRM
7753N2	Murcoch Letter and Docs
13711	Summary Cap and Projected Income-KRM
040522(Vol 13)	Theranos Summary
Trial Ex. 2623 Email from DY to EAH	Master Signature Page_PFM
Trial Ex. 5454 Email	Summary Cap Table_2014.02.03
2021.11.12 Expert Disclosures	Theranos Revenue Model_PFM
2021.11.13 Supplemental Expert Disclosures	Trial Ex. 4077 Email
27084	Series C-1 Transaction Documents_PVP
27085	Master Signature Page_RDV
27086	Theranos Slide Deck_RDV
27087	Trial Ex. 4859 Projected Statement of Income
27088	Amended and Restated Certificate of Inc_2010.06.30
27089	Amended and Restated Certificate of Inc_2013.03.28
27090	Amended and Restated Investor Rights Agreement_2014.01.14
27091	Amended and Restated Investor Rights Agreement_2014.02.07
27092	Amended and Restated Series C-1 Preferred Stock Purchase Agreement_2010.07.01
27093	Amended and restated Voting Agreement
27094	Amendment No 2 to the Series C-2 Preferred Stock Purchase Agreement_July 2014
27095	Amendment No 3 to the Series C-2 Preferred Stock Purchase Agreement_July 2015
27096	C-2 Certificate of Designation_2014.02.07
27097	C-2 Preferred Stock Purchase Agreement_2017.02.03
27098	C-2 Preferred Stock Purchase Agreement_2017.02.07
27099	Certificate of Amendment of Amended and Restated Certificate of Incorporation_2015.03.06
27100	Certificate of Correction_2014.01.14
27101	Certificate of Designation of Series C-2 Preferred Stock_2014.02.07
27102	Certificate of Increase of Series C-2 Preferred Stock_2015.03.06
27103	Investor Deck_DEC 2016
27104	Stockholder Confidentiality Agreement_2014.02.07
27105	Projected Statement on Income_Jan 2015
27106	Projected Statement on Income_Jan 2015-1

List of Documents Considered

File Name	File name
27107	SEC-USAO-EPROD-000808915
27108	SEC-USAO-EPROD-000809708
27109	SEC-USAO-EPROD-000875621
27110	SEC-USAO-EPROD-001247904
27111	SEC-USAO-EPROD-001519025
27112	2_SEC-USAO-EPROD-001215410_native
27113	Cleveland Clinic Financials_Mar 2015
27114	SEC-USAO-EPROD-001028741
27115	01.14.13 - Board Meeting Docs including cap tables and articles
27116	10.08.13 board docs
27117	BOD Meeting Binder_2014.07.15
27118	BOD Meeting Minutes_2013.01.14
27119	BOD Meeting Minutes_compilation 2013-2014
27120	BOD Meeting Minutes_Jan and Apr 2015
27121	BOD Presentation_2014.07.15
27122	Financials for BOD_Jan 2015
27123	Amended and Restated...Jun 2010
27124	Amended and Restated...March 2013
Balwani-USAO	Articles_Jan 2014
FIG 703	Certificate of Amendment...March 2015
FIG 704	Certificate_Dec 2014
FIG 914	Certificate_Mar 2015
FIG 915	Cap Summary_Feb 2014
FIG 920	SEC2-USAO-EPROD-000509036
FIG 921	SEC2-USAO-EPROD-000550002
FIG 1137	SEC-USAO-EPROD-001038026
FIG 1139	SEC-USAO-EPROD-001064861
FIG 1140	SEC-USAO-EPROD-001240711
FIG 1141	SEC-USAO-EPROD-002733592
FIG 1143	SEC-USAO-EPROD-002788863
FIG 1143 (excel)	SEC-USAO-EPROD-002788979
FIG 1285	SEC-USAO-EPROD-003873663
FIG 1287	SEC-USAO-EPROD-005037217
FIG 1288	SEC-USAO-EPROD-005071687
FIG 1290	THER-2393504
FIG 1291	TS-0939601
FIG 1307	6379-6382
FIG 1331	6392-6393
FIG 1372	6394-6395
FIG 1461	6396
FIG 1463	6401
FIG 1476	6404-6406
FIG 1478	6408
FIG 1479	6413-6414
FIG 1484	6416-6417
FIG 1488	6418-6419
FIG 1720	6420-6422
FIG 1722	6425-6429
FIG 1723	6435
FIG 1725	111621TT(vol 33)public
FIG 1731	Trial Exh. 0504 Email
FIG 1781	Trial Exh. 1633 email
FIG 1783	Trial Exh. 3231 email
FIG 1845	page 17
FIG 1849	page 19
FIG 1855	page 21
FIG 1860	page 64

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File Name	File name
FIG 2070	page 66
FIG 2072	page 67
FIG 2083	page 69
FIG 2290	page 95
FIG 2292	Trial Exh. 4077 email
FIG 2298	Trial Exh. 4182 email
FIG 2301	Trial Exh. 4533 email
FIG 2309	Copy of Trial Exh. 5127 Native
FIG 2310	Trial Exh. 5127 email
FIG 2379	Trial Exh. 5421 email
FIG 2394	2021.10.22 TT(Vol 23) - Shane Weber & Bryan Tolbert
FIG 2246	2021.10.26 TT(Vol 24)PUBLIC - Lisa Peterson
FIG 2447	2021.11.02 TT(Vol 26) - Lisa Peterson & Dr. Connie Cullen & Dan Mosley
FIG 2448	2021.11.03 TT(Vol 27) - Dan Mosley
FIG 2449	2021.11.04 TT(Vol 28) - Chris Lucas & Dr. Lynette Sawyer
FIG 2450	2021.11.10 TT(Vol 31) - Dr. Kingshuk Das & Alan Eisenman
FIG 2451	2021.11.15 TT(Vol 32) - Alan Eisenman
FIG 2452	2021.11.16 TT(Vol 33)PUBLIC - Danise Yam (recall) & Brian Grossman
FIG 2453	2021.11.17 TT(Vol 34) - Brian Grossman & Erin Tompkins
FIG 2468	2022.04.26 (Vol 22) - Dr. Adam Rosendorff & Lisa Peterson
FIG 6419	2022.04.27 (Vol 23) - Lisa Peterson & Dr. Sunil Dhawan
FIG 6420	2022.04.29 (Vol 24) - Patrick Mendenhall & Bryan Tolbert
FIG 6538	2022.05.10 (Vol 27) - Sarah Bennett & Daniel Mosley
FIG 6539	2022.05.11 (Vol 28) - Daniel Mosley & Alan Eisenman & Dr. Lynette Sawyer
FIG 6543	2022.05.13 (Vol 29) - Dr. Lynette Sawyer & Chris Lucas & Dr. Audra Zachman & Brittany Gould
FIG 6544	2022.05.20 (Vol 32) - Brian Grossman & Defense Witness Dr. Tracy Wooten
FIG 6548	SEC-TX-000002116_image
FIG 6706	2021.09.08 TT(Vol 4) - Opening Statements & Danise Yam
FIG 6707	2021.09.14 TT(Vol 6) - Danise Yam & Erika Cheung
FIG 6735	2022.04.05 (Vol 13) - Danise Yam
FIG 6736	07753 Attachment 1
FIG 6801	07753 Attachment 2
FIG 7680	07753 D. Yam Email 11.03.2016
FIG 7685	Interview_of_CASS_GRANDONE
FIG 7690	Trial Exh. 7098 Email
FIG 7752	SEC3-USA-EPROD-000010390_image
FIG 7774	SEC3-USA-EPROD-000016979_image
FIG 8151	SEC-EMAIL-2441_image
FIG 8152	SEC2-USAO-EPROD-001071042
FIG 8168	SEC2-USAO-EPROD-001071047
FIG 8227	SEC2-USAO-EPROD-001071050
FIG 8384	SEC2-USAO-EPROD-001071051
FIG 8385	SEC2-USAO-EPROD-005034793
FIG 8394	SEC2-USAO-EPROD-005034794
FIG 8396	SEC2-USAO-EPROD-005034795
FIG 8409	SEC2-USAO-EPROD-005034796
FIG 8413	SEC2-USAO-EPROD-005034797
FIG 8426	TS-0272877
FIG 8413	THPFM000306874
FIG 8426	THPGM0004648099
FIG 8431	TS-0338670
FIG 8443	TS-00338703

List of Documents Considered

File Name	File name
Transcripts-001962 8412	TS-0341544
2008 Financial Statements	MOI_TShultz_2018.01.10
FTR 2010	SHULTZ_TYLER-02-10-21
FTR 2011	091721TT(Vol 8)
FTR 2012	113021(Vol 40)
S&P Capital IQ; https://www.spglobal.com/marketintelligence/en/solutions/sp-capital-iq-platform	IBISWorld, <i>IBISWorld Industry Report 54171, Scientific Research & Development in the US</i> , December 2014
AICPA Statement on Standards for Valuation Services No. 1	Appraisal Foundation, Uniform Standards of Professional Appraisal Practice (USPAP)
<i>Estate of Kaufman</i> , TCM 1999-119	KeyValueData, "National Economic Report", February 2014 and December 2014
https://www.nacva.com/cvaqualifications	JT Research LLC, "Overview of the U.S. Economy", Fourth Quarter 2014
AICPA Accounting and Valuation Guide, <i>Valuation of Portfolio Company Investments of Venture Capital and Private Equity Funds and Other Investment Companies</i> , 2019, [accessed via Commerce Clearing House Accounting Research Manager Subscription]	Federal Reserve Bank of Philadelphia Research Department, "Survey of Professional Forecasters", Fourth Quarter 2014
AICPA <i>Intangible Asset Valuation Cost Approach Methods and Procedures</i>	AICPA Practice Aid: <i>Valuation of Privately-Held-Company Equity Securities Issued as Compensation</i> , 2013, [accessed via Commerce Clearing House Accounting Research Manager Subscription]
Frank M. Burke Jr., <i>Valuation and Valuation Planning for Closely Held Businesses</i> (Englewood Cliffs, NJ: Prentice-Hall, 1981).	Therano-no: Key CLIA Compliance Issues, Loyola University Chicago School of Law, May 5, 2022. http://blogs.luc.edu/compliance/?p=4681
International Glossary of Business Valuation Terms as published in <i>Valuing a Business: The Analysis and Appraisal of Closely Held Companies</i> by Shannon P. Pratt and Alina V. Niculita, 5th Edition, Appendix A.	CMS, Letter to Theranos, July 7, 2016
BizMiner Industry Financial Analysis Profile; NAICS 5417: Scientific Research & Development Services	Plummer, James L., QED Report on Venture Capital Financial Analysis
The Risk Management Association; NAICS 54171N: Research and Development in the Physical, Engineering, and Life Sciences (non-Cost of Sales)	Scherlis, Daniel R. and William A. Sahlman, "A Method for Valuing High-Risk, Long Term, Investments: The Venture Capital Method," Harvard Business School Teaching Note 9-288-006, Boston: Harvard Business School Publishing, 1989
IBISWorld, NAICS 54171 (real growth)	William A. Sahlman, Howard H. Stevenson, Amar V. Bhide, et al., "Financing Entrepreneurial Ventures," Business Fundamental Series (Boston: Harvard Business School Publishing, 1998)
https://www.usinflationcalculator.com/inflation/current-inflation-rates/	Craig R. Everett, "2021 Private Capital Markets Report" (Malibu: Pepperdine University Graziadio School of Business and Management, 2021)
Thomson Financials Private Equity Performance Index	Dorsey, Terry, "A Portfolio Model for Venture Capital Performance Measurement and Investment Selection," Polaris Group, Inc. January 2000
Thomson Financials Private Equity Performance Database	

Exhibit X

(PREVIOUSLY FILED UNDER SEAL)

Page 1

1 IN THE UNITED STATES DISTRICT COURT
 2 FOR THE DISTRICT OF ARIZONA
 3 IN RE:)
 4) Civil Action No.
 5 THERANOS INC.,) No. 2:16-cv-2138-HRH
 6 LITIGATION,)
 7
 8
 9 *** CONFIDENTIAL ***
 10
 11 VIDEOTAPED DEPOSITION OF WADE MIQUELON
 12 August 9, 2019
 13 Chicago, Illinois
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23 REPORTED BY:
 Sheri E. Liss,
 24 CSR, RPR, CRR, CLR
 25 JOB NO. 10057960

Page 2

1 Videotaped deposition of WADE MIQUELON,
 2 taken at the offices of Sidley Austin LLP,
 3 One South Dearborn Street, Chicago, Illinois,
 4 Before Sheri E. Liss, IL-CSR, RPR, and
 5 CRR, commencing at the hour of 9:08 a.m. on
 6 Friday, August 9, 2019
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Page 3

1 APPEARANCES:
 2
 3 ON BEHALF OF THE CONSUMER PLAINTIFFS:
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 13 kseeger@sidley.com
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 15 One South Dearborn Street
 16 Chicago, Illinois 60603
 17 ON BEHALF OF SUNNY BALWANI:
 18 DAVIS WRIGHT TREMAINE LLP
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 22 920 Fifth Avenue, Suite 3300
 23 Seattle, WA 98104-1610
 24
 25

Page 4

1 APPEARANCES (continued):
 2 ON BEHALF OF ELIZABETH HOLMES:
 3 COOLEY LLP
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 5 jlombard@cooley.com
 6 206.452.8796
 7 1700 Seventh Avenue, Suite 1900
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 9 ON BEHALF OF THE WITNESS:
 10 LAURENCE H. LEVINE LAW OFFICES
 11 BY: LAURENCE H. LEVINE, ESQ.
 12 laurence.levine@lhlevine.com
 13 312.927.0625
 14 189 East Lake Shore Drive, 16th Floor
 15 Chicago, IL 60611
 16
 17
 18 ALSO PRESENT:
 19 SLAWOMIR KOJRO, videographer
 20
 21
 22
 23
 24
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1 Foundation.
 2 BY THE WITNESS:
 3 A. I don't recall.
 4 BY MS. HOWARD:
 5 **Q. Did you have any understanding of how**
 6 **Theranos when it was partnering with Walgreens was**
 7 **addressing throughput issues as you were rolling out**
 8 **more and more testing locations?**
 9 MR. LEVINE: Objection. Foundation.
 10 BY THE WITNESS:
 11 A. I was not involved in that.
 12 BY MS. HOWARD:
 13 **Q. Did you have any understanding as to**
 14 **whether Theranos was using commercial testing**
 15 **equipment?**
 16 A. I had a limited understanding.
 17 **Q. And what was your understanding?**
 18 A. My understanding was that two things,
 19 one is that they had some commercial equipment which
 20 was used to be able to do, again, I don't know if
 21 calibration is the right word, but this back and
 22 forth checking of traditional equipment versus
 23 Theranos equipment. And I also recall that Sunny
 24 and Elizabeth saying that when we started up that
 25 there might always be some tests that require venous


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1 STATE OF ILLINOIS)
 2) SS:
 3 COUNTY OF C O O K)
 4 I, SHERI E. LISS, CSR NO. 084-002600, a
 5 Certified Shorthand Reporter within and for the
 6 State of Illinois, Registered Professional Reporter,
 7 Certified Realtime Reporter, do hereby certify that
 8 previous to the commencement of the examination,
 9 said witness was duly sworn by me to testify; that
 10 the said deposition was taken at the time and place
 11 aforesaid; that the testimony given by said witness
 12 was reduced to writing by means of shorthand and
 13 thereafter transcribed into typewritten form; and
 14 that the foregoing is a true, correct and complete
 15 transcript of my shorthand notes so taken as
 16 aforesaid.
 17 I further certify that there were present
 18 at the taking of the said deposition the persons and
 19 parties as indicated on the appearance page made a
 20 part of this deposition.
 21
 22
 23
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 25

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1 puncture by their very nature but over time this
 2 should be very, very small.
 3 **Q. And what was your understanding about**
 4 **how those tests that required venous puncture would**
 5 **be analyzed?**
 6 A. My understanding is the ones that
 7 required venous puncture would be done on a
 8 traditional lab test machine or perhaps outsourced
 9 to a lab. They would not be run on the Edison.
 10 MS. HOWARD: I don't have any further
 11 questions. Thank you.
 12 MR. LEVINE: None here.
 13 MS. SEEGER: We'll reserve signature.
 14 MS. GARDNER: Plaintiffs object to three
 15 exhibits that don't have Bates numbers for this
 16 litigation, and request that Balwani's counsel
 17 substitute and produce copies or meet an confer
 18 about the issue.
 19 MS. HOWARD: For clarity, those are
 20 Exhibit Nos. 285, 286 and 289; is that correct?
 21 MS. GARDNER: Yes, that is correct.
 22 THE VIDEOGRAPHER: This concludes the
 23 deposition. The time is 4:38. Off the record.
 24 (Whereupon, the proceedings
 25 were concluded.)

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1 I further certify that I am not counsel
 2 for nor in any way related to any of the parties to
 3 this suit, nor am I in any way interested in the
 4 outcome thereof.
 5 I further certify that this certificate
 6 applies to the original signed and certified
 7 transcripts only. I assume no responsibility for
 8 the accuracy of any reproduced copies not made under
 9 my control or direction.
 10 IN TESTIMONY WHEREOF I have hereunto set
 11 my hand this 19th day of August, 2019.
 12
 13
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 15
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 17 
 18
 19 Sheri E. Liss, CSR, RPR, CRR, CLR
 20
 21
 22
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 24
 25