

Equity Research

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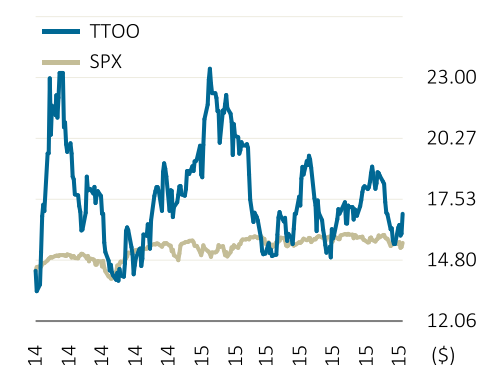
TTOO

\$14.36

NEUTRAL

52 week range \$13.40 - \$23.40
Market Cap (m) \$288

Price Performance



Source: IDC

Medical Technology

T2 Biosystems, Inc.

Progress Being Made on U.S. Placements; Time Will Tell Whether Current T2Candida Pricing Is Too High

8 U.S. contracts in Q2 exceeded our est. and likely buy-side expectations; though we expect shares to trade up today, we remain at Neutral.

- **Despite Q2 placements coming in better than we had anticipated, our thesis remains largely unchanged.** In Q2, T2 secured contracts with 8 more hospitals in the U.S.; this compares to our estimate of 4 and one contract signed in Q1. Though these 8 accounts included a four-hospital health system, this placement number exceeded our expectations and we do believe the company is making progress among early adopters who are less price sensitive. While we view this progress favorably, we remain concerned that pricing of \$200-250/test will be a hurdle to broader T2Candida adoption and that 2016 and 2017 consensus sales numbers need to come down.
- **So was our survey wrong? Not necessarily; time will tell.** Without knowing exact contract terms or how each contracted hospital plans to adopt T2Candida, it is difficult to forecast future revenue. Our discussions with mgmt indicate that T2 is not being any more flexible with contract terms (i.e. test ASP or sample minimums) today than months ago, yet placements clearly improved. Multiple factors could explain the jump from one to eight systems q/q, including increased awareness, a higher number of reps being productive, additional economic data, timing, etc. and though placements matter, utilization is more important to future revenue and remains a wildcard. With a 3-6 month lag expected between contract signing and patient testing, we should be able to glean some details on early system utilization among T2's initial customers starting in Q4.
- **We continue to look favorably at T2's pipeline, which remains on track.** We expect the T2Bacteria trial to commence in coming months and reiterate that an early 2017 launch is feasible. (See Valuation, p. 3.)

Estimates

	1Q14 A	2Q14 A	3Q14 A	4Q14 A	FY14 A	1Q15 A	2Q15 A	3Q15 E	4Q15 E	FY15 E	FY16 E
Sales	0	0	0	0	0	0	1	0	1	2	5
Gross Margin (%)	-	-	-	-	-	-	-	10.0%	15.0%	55.8%	32.3%
EBIT	(7)	(7)	(8)	(9)	(31)	(10)	(11)	(11)	(12)	(44)	(52)
Net Income (Adj.)	(9)	(9)	(9)	(9)	(36)	(11)	(11)	(12)	(12)	(45)	(57)
Diluted EPS (GAAP)	(6.25)	0.00	(0.71)	(0.45)	(4.15)	(0.53)	(0.54)	(0.58)	(0.59)	(2.24)	(2.45)

Source: BTIG Research Estimates and Company Documents (\$ in millions, except per share amount)

TTOO US Equity

Please Read: Important disclosures and analyst's certification appear in Appendix

Variance Analysis

Eight U.S. accounts were added in Q2 vs. our expectation of four. Four hospitals within one healthcare system were included among these eight contracted accounts. While one may believe that a hospital system should only count as one contract towards mgmt's goal of 30 accounts by year end, in our view since recurring revenue will be derived from the utilization of each individual instrument, a placement is a placement. Though no product revenue was reported in the quarter, research revenue of ~\$600k was recognized.

On the P&L, operating expenses were in line with our projections. SG&A spend below our model was offset by R&D spend above our forecast. All told, TTOO's LPS of (\$0.54) was three cents better than our estimate due to higher-than-expected revenue.

Exhibit 1: Variance Analysis

	Variance Analysis 2Q15		
	Actuals	BTIG Est.	% Variance
US Placements/Contracts	8	4	4 placements/contracts
OUS Placements/Contracts	0	0	0 placements/contracts
Product Revenue (\$ millions)	\$0.0	\$0.2	NM
Research and Grant Revenue (\$ millions)	\$0.6	\$0.0	NM
Total Revenue (\$ millions)	\$0.6	\$0.2	276.0%
COGS (\$ millions)	\$0.0	\$0.1	NM
SG&A (\$ millions)	\$4.4	\$5.0	-11.3%
R&D (\$ millions)	\$6.7	\$6.0	10.9%
Oper. Exp. (\$ millions)	\$11.1	\$11.0	0.8%
Tax Exp. (\$ millions)	\$0.0	\$0.0	NM
Net Income (\$ millions)	-\$11.0	-\$11.4	-3.9%
EPS	(\$0.54)	(\$0.57)	-4.5%
Gross margin	NM	10.0%	NM
SG&A spend %	NM	NM	NM
R&D spend %	NM	NM	NM
EBIT margin	NM	NM	NM
Tax rate	NM	NM	NM

Source: BTIG research estimates and company filings

Model Changes

Our 2015 revenue rises as a result of ~\$600k of research revenue being recognized in Q2. Our 2016 revenue moves higher due to a higher number of systems now expected to be active in light of Q2 placements of eight vs. our estimate of four and our revised Q3 estimate of eight placements (up from six). We leave our estimates for instruments placed beyond 2015 unchanged. We

tweak our forecasts for utilization per instrument slightly going forward but do not make material changes.

On the P&L, we lower our operating expenses per mgmt's comments on operating expense growth. All told, our 2015 LPS estimate moves to (\$2.24) vs. our prior (\$2.34).

Exhibit 2: Model Changes

	New			Old			% Change		
	FY15	FY16	FY17	FY15	FY16	FY17	FY15	FY16	FY17
Total Rev (\$ millions)	\$1.5	\$5.1	\$22.1	\$0.9	\$4.4	\$22.7	80%	16%	-3%
Net Income (\$ millions)	-\$45.4	-\$56.9	-\$63.0	-\$47.1	-\$60.1	-\$68.6	4%	5%	8%
EPS	(\$2.24)	(\$2.45)	(\$2.44)	(\$2.34)	(\$2.60)	(\$2.66)	4%	6%	9%
Gross margin	55.8%	32.3%	53.6%	15.7%	32.6%	53.6%	255%	-1%	0%
EBIT margin	NM	NM	NM	NM	NM	NM	NM	NM	NM

Source: BTIG research estimates and company filings

Valuation

Our T2 Biosystems rating is Neutral. We believe a DCF is the most appropriate way to value T2OO at this time. We assume T2Bacteria obtains FDA approval in early 2017, but use a 20% discount rate to reflect both development and regulatory risk. We do not include revenue for T2Stat or T2Lyme in our model at this time, leaving both pipeline products as potential sources of upside. We plan to incorporate these pipeline products as additional data becomes available, should such data be favorable.

Our DCF suggests that T2OO's current fair value is ~\$330M, which is within 15% of current levels. Given our more bullish view on T2Bacteria, if we were to take our modelled 2018 (likely the first full year of T2Bacteria commercialization in the U.S.) revenue of ~\$80M and assign a revenue multiple of 6-8x, we would get to a valuation of ~\$480M - \$640M, which represents meaningful upside to the company's current market cap. However, given our product sales estimates for 2015, 2016, and 2017 are \$800k, ~\$5M, and ~\$22M, respectively, and we have one year ratings and price targets, we feel reported revenue over the next 3-24 months is more likely to impact T2OO's stock price than 2018 sales forecasts and thus use a DCF to value the company at this time. BTIG does not provide price targets on Neutral-rated stocks.

Risks include: commercial execution, competition, clinical data, M&A, need for additional capital, regulatory, and IP.

TTOO Income Statement	Dec-12	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Dec-16	Dec-17	Dec-18
\$ millions	FY12 A	FY13 A	1Q14 A	2Q14 A	3Q14 A	4Q14 A	FY14 A	1Q15 A	2Q15 A	3Q15 E	4Q15 E	FY15 E	1Q16 E	2Q16 E	3Q16 E	4Q16 E	FY16 E	FY17 E	FY18 E
Product Revenue	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.17	0.62	0.79	0.54	0.95	1.42	2.17	5.08	22.11	80.74
Research and Grant Revenue	0.02	0.27	0.00	0.00	0.00	0.12	0.12	0.18	0.56	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Revenue	0.02	0.27	0.00	0.00	0.00	0.12	0.12	0.19	0.56	0.16	0.61	1.54	0.54	0.95	1.42	2.17	5.08	22.11	80.74
y/y growth		1300.0%					-55.3%				414.3%	1191.6%	186.8%	68.3%	769.4%	254.5%	230.5%	335.3%	265.2%
COGS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.52	0.68	0.43	0.71	0.99	1.30	3.44	10.27	31.77
Gross Profit	0.02	0.27	0.00	0.00	0.00	0.12	0.12	0.19	0.56	0.01	0.09	0.86	0.11	0.24	0.43	0.87	1.64	11.84	48.98
R&D	11.73	14.94	5.07	4.70	4.80	5.21	19.78	5.87	6.65	6.70	6.90	26.12	7.00	7.10	7.20	7.30	28.60	30.80	37.00
SG&A	2.95	5.02	1.84	2.45	2.98	3.75	11.02	4.47	4.44	4.60	4.80	18.31	5.50	6.00	6.50	7.00	25.00	36.00	50.00
Total Operating Expenses	14.67	19.96	6.91	7.15	7.79	8.96	30.80	10.34	11.09	11.30	11.70	44.42	12.50	13.10	13.70	14.30	53.60	66.80	87.00
EBIT	-14.65	-19.69	-6.91	-7.15	-7.79	-8.84	-30.68	-10.15	-10.52	-11.29	-11.61	-43.57	-12.39	-12.86	-13.27	-13.43	-51.96	-54.96	-38.02
Other (expense) income	0.20	-0.92	-0.01	-0.15	-0.30	-0.24	-0.71	-0.47	-0.47	-0.45	-0.45	-1.84	-0.45	-0.45	-2.00	-2.00	-4.90	-8.00	-8.00
Pretax Income	-14.46	-20.61	-6.92	-7.30	-8.09	-9.08	-31.39	-10.62	-11.00	-11.74	-12.06	-45.40	-12.84	-13.31	-15.27	-15.43	-56.86	-62.96	-46.02
Income taxes (benefit)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Income (loss)	-14.46	-27.52	-8.83	-9.21	-8.85	-9.08	-35.96	-10.62	-11.00	-11.74	-12.06	-45.40	-12.84	-13.31	-15.27	-15.43	-56.86	-62.96	-46.02
EPS		-19.72	-6.25		-0.71	-0.45	-4.15	-0.53	-0.54	-0.58	-0.59	-2.24	-0.56	-0.58	-0.66	-0.66	-2.45	-2.44	-1.50
Diluted Shares Outstanding		1.40	1.41		12.38	20.04	8.67	20.08	20.26	20.31	20.35	20.25	23.08	23.14	23.19	23.25	23.17	25.85	30.74
EBIT	-14.65	-19.69	-6.91	-7.15	-7.79	-8.84	-30.68	-10.15	-10.52	-11.29	-11.61	-43.57	-12.39	-12.86	-13.27	-13.43	-51.96	-54.96	-38.02
D&A	0.57	0.58	0.14	0.30	0.02	0.23	0.69	0.25	0.34	0.41	0.43	1.43	0.46	0.47	0.50	0.53	1.97	2.61	3.70
EBITDA	-14.08	-19.11	-6.76	-6.85	-7.77	-8.61	-29.99	-9.90	-10.18	-10.88	-11.18	-42.13	-11.93	-12.39	-12.78	-12.90	-49.99	-52.35	-34.33
Margins																			
Gross Profit	NM	NM	NM	NM	NM	NM	NM	NM	NM	10.0%	15.0%	55.8%	20.0%	25.0%	30.0%	40.0%	32.3%	53.6%	60.7%
EBIT	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-2298.0%	-1355.1%	-933.8%	-619.1%	-1023.0%	-248.6%	-47.1%
EBITDA	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-2212.5%	-1305.1%	-898.8%	-594.5%	-984.2%	-236.8%	-42.5%
Pretax Income	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-2381.5%	-1402.5%	-1074.5%	-711.3%	-1119.4%	-284.7%	-57.0%
Net Income	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-2381.5%	-1402.5%	-1074.5%	-711.3%	-1119.4%	-284.7%	-57.0%
Expenses																			
COGS as a % of revenue	NM	NM	NM	NM	NM	NM	NM	NM	NM	92.2%	85.8%	44.2%	80.0%	75.0%	70.0%	60.0%	67.7%	46.4%	39.3%
SG&A as a % of revenue	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1019.9%	632.1%	457.3%	322.6%	492.2%	162.8%	61.9%
R&D as a % of revenue	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1298.1%	748.0%	506.5%	336.5%	563.1%	139.3%	45.8%
Total Operating Expenses	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	2318.0%	1380.1%	963.8%	659.1%	1055.2%	302.1%	107.7%
Tax Expense (income)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net operating losses							-84.80	-95.42	-106.41	-118.15	-130.21	-130.21	-143.06	-156.37	-171.64	-187.07	-187.07	-250.03	-296.06

Source: BTIG Research estimates and company reports

TT00 Placement/Revenue Model	Mar-15	Jun-15	Sep-15	Dec-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Dec-17	Mar-18	Jun-18	Sep-18	Dec-18	Dec-18
	1Q15 A	2Q15 A	3Q15 E	4Q15 E	FY15 E	1Q16 E	2Q16 E	3Q16 E	4Q16 E	FY16 E	1Q17 E	2Q17 E	3Q17 E	4Q17 E	FY17 E	1Q18 E	2Q18 E	3Q18 E	4Q18 E	FY18 E
United States:																				
<i>Capital Equipment</i>																				
T2 Instruments Placed	1	8	8	12	29	6	8	8	14	36	7	12	16	24	59	16	20	24	30	90
y/y growth						500.0%	0.0%	0.0%	16.7%	24.1%	16.7%	50.0%	100.0%	71.4%	63.9%	128.6%	66.7%	50.0%	25.0%	52.5%
% penetration of target group of hospitals	0.2%	2.0%	3.8%	6.4%	6.4%	7.8%	9.6%	11.3%	14.4%	14.4%	16.0%	18.7%	22.2%	27.6%	27.6%	31.1%	35.6%	40.9%	47.6%	47.6%
T2 Instruments Active	0	0	1	9	9	17	29	35	43	43	51	65	72	84	84	100	124	140	160	160
y/y growth						88.9%	70.6%	3400.0%	377.8%	377.8%	200.0%	124.1%	105.7%	95.3%	95.3%	96.1%	90.8%	94.4%	90.5%	90.5%
seq. growth						20.7%	22.9%				18.6%	27.5%	10.8%	16.7%		19.0%	24.0%	12.9%	14.3%	
additions (assumes 6 month lag from contract)		0	1	8	9	8	12	6	8	34	8	14	7	12	41	16	24	16	20	76
% reagent rental	100%	100%	80%	80%		80%	80%	80%	80%		80%	80%	80%	80%		80%	80%	80%	80%	
% sale	0%	0%	20%	20%		20%	20%	20%	20%		20%	20%	20%	20%		20%	20%	20%	20%	
# of instruments sold	0	0	1	3	4	1	1	2	4	8	0	2	2	5	9	2	2	3	6	13
ASP of instrument sold (000s)	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150
# of instruments being shipped/undergoing validation	1	9	16	20	20	18	14	16	22	22	21	19	28	40	40	40	36	44	54	54
Revenue from sale of instruments (\$M)	0.0	0.0	0.2	0.5	0.6	0.2	0.2	0.3	0.6	1.2	0.0	0.3	0.3	0.8	1.4	0.3	0.3	0.5	0.9	2.0
<i>Consumables</i>																				
Active Instruments	0	0	1	9	9	17	29	35	43	43	51	65	72	84	84	100	124	140	160	160
Tests/day/active system	0.0	0.0	0.6	0.8	0.4	1.0	1.2	1.4	1.6	1.3	1.8	2.5	3.5	4.5	3.1	5.2	5.7	6.2	6.7	6.0
Price/test	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250	\$250
Revenue Per Active System	\$0	\$0	\$13,500	\$18,000	\$31,500	\$22,500	\$27,000	\$31,500	\$36,000	\$117,000	\$40,500	\$56,250	\$78,750	\$101,250	\$276,750	\$117,000	\$128,250	\$139,500	\$150,750	\$535,500
y/y growth								133.3%	100.0%	271.4%	80.0%	108.3%	150.0%	181.3%	136.5%	188.9%	128.0%	77.1%	48.9%	93.5%
Est. Total U.S. Consumables Revenue (\$M)	0.0	0.0	0.0	0.2	0.2	0.4	0.8	1.1	1.5	3.8	2.1	3.7	5.7	8.5	19.9	11.7	15.9	19.5	24.1	71.3
Total U.S. Revenue (\$M)	0.0	0.0	0.2	0.6	0.8	0.5	0.9	1.4	2.1	5.0	2.1	4.0	6.0	9.3	21.2	12.0	16.2	20.0	25.0	73.2
Outside the U.S.																				
<i>Capital Equipment</i>																				
T2 Instruments Placed	1	0	0	1	2	0	0	1	1	2	3	5	5	8	21	5	7	8	12	32
y/y growth										0.0%	NA	NA	400.0%	700.0%	950.0%	66.7%	40.0%	60.0%	50.0%	52.4%
T2 Instruments Active	1	1	1	1	1	1	2	2	2	2	3	4	7	12	12	17	25	30	37	37
y/y growth										100.0%	200.0%	100.0%	250.0%	500.0%	500.0%	466.7%	525.0%	328.6%	208.3%	208.3%
seq. growth						0.0%	100.0%	0.0%	0.0%		50.0%	33.3%	75.0%	71.4%		41.7%	47.1%	20.0%	23.3%	
additions (assumes 6 month lag from contract signing)		0	0	0	0	0	1	0	0	1	1	1	3	5	10	5	8	5	7	25
% reagent rental	100%	0%	50%	50%		50%	50%	50%	50%		50%	50%	50%	50%		50%	50%	50%	50%	
% sale	0%	0%	50%	50%		50%	50%	50%	50%		50%	50%	50%	50%		50%	50%	50%	50%	
# of instruments sold	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	1	1	0	2	4
ASP of instrument sold (000s)	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120
# of instruments being shipped/undergoing validation	0	0	0	1	1	1	0	1	2	2	4	8	10	13	13	13	12	15	20	20
Revenue from sale of instruments (\$M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.2	0.5
<i>Consumables</i>																				
Active Instruments	1	1	1	1	1	1	2	2	2	2	3	4	7	12	12	17	25	30	37	37
Tests/day/active system	0.0	0.0	0.3	0.4	0.2	0.5	0.6	0.7	0.8	0.7	0.9	1.3	1.7	2.2	1.5	3.0	4.0	5.0	6.0	4.5
Price/test	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150
Revenue Per Active System	\$0	\$0	\$4,050	\$5,400	\$9,450	\$6,750	\$8,100	\$9,450	\$10,800	\$35,100	\$12,150	\$17,550	\$22,950	\$29,700	\$82,350	\$40,500	\$54,000	\$67,500	\$81,000	\$243,000
y/y growth								133.3%	100.0%	271.4%	80.0%	116.7%	142.9%	175.0%	134.6%	233.3%	207.7%	194.1%	172.7%	195.1%
Est. Total OUS Consumables Revenue (\$M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.4	0.6	0.7	1.4	2.0	3.0	7.1
Total OUS Revenue (\$M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.2	0.5	0.9	0.8	1.5	2.0	3.2	7.5
Worldwide:																				
<i>Capital Equipment</i>																				
T2 Instruments Placed	2	8	8	13	31	6	8	9	15	38	10	17	21	32	80	21	27	32	42	122
y/y growth						200.0%	0.0%	12.5%	15.4%	22.6%	66.7%	112.5%	133.3%	113.3%	110.5%	110.0%	58.8%	52.4%	31.3%	52.5%
T2 Instruments Active	1	1	2	10	10	18	31	37	45	45	54	69	79	96	96	117	149	170	197	197
y/y growth						1700.0%	3000.0%	1750.0%	350.0%	350.0%	200.0%	122.6%	113.5%	113.3%	113.3%	116.7%	115.9%	115.2%	105.2%	105.2%
seq. growth		0.0%	100.0%	400.0%		80.0%	72.2%	19.4%	21.6%		20.0%	27.8%	14.5%	21.5%		21.9%	27.4%	14.1%	15.9%	
# of instruments being shipped/undergoing validation	1	9	16	21	21	19	14	17	24	24	25	27	38	53	53	53	48	59	74	74
Consumables Revenue Per Active System	\$0	\$0	\$8,775	\$16,740	\$25,515	\$21,625	\$25,781	\$30,308	\$34,880	\$112,594	\$38,925	\$54,007	\$73,806	\$92,306	\$259,043	\$105,885	\$115,792	\$126,794	\$137,650	\$486,120
y/y growth																				
WW Total Consumables Revenue (est.) (\$M)	0.0	0.0	0.0	0.2	0.2	0.4	0.8	1.1	1.6	3.9	2.1	3.7	5.8	8.9	20.5	12.4	17.3	21.6	27.1	78.3
Total Product Revenue (\$M)	0.0	0.0	0.2	0.6	0.8	0.5	0.9	1.4	2.2	5.1	2.1	4.1	6.1	9.7	22.1	12.8	17.7	22.0	28.3	80.7

Source: BTIG Research estimates and company reports

Appendix: Analyst Certification and Other Important Disclosures

Analyst Certification

I, Karen Koski, hereby certify that the views about the companies and securities discussed in this report are accurately expressed and that I have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report.

I, Sean Lavin, MD, hereby certify that the views about the companies and securities discussed in this report are accurately expressed and that I have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report.

I, Andrea Alfonso, hereby certify that the views about the companies and securities discussed in this report are accurately expressed and that I have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report.

Regulatory Disclosures

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SELL – A stock that is expected at initiation to produce a negative total return of 15% or greater over the next 12 months following the initial recommendation. The SELL rating may be maintained following initiation as long as it is deemed appropriate, notwithstanding price fluctuations that would cause the target to fall outside of the 15% return.

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Company-Specific Regulatory Disclosures

T2 Biosystems, Inc. (TTOO)

Valuation

Our T2 Biosystems rating is Neutral. We believe a DCF is the most appropriate way to value TTOO at this time. We assume T2Bacteria obtains FDA approval in early 2017, but use a 20% discount rate to reflect both development and regulatory risk. We do not include revenue for T2Stat or T2Lyme in our model at this time, leaving both pipeline products as potential sources of upside. We plan to incorporate these pipeline products as additional data becomes available, should such data be favorable.

Our DCF suggests that TTOO's current fair value is ~\$330M, which is within 15% of current levels. Given our more bullish view on T2Bacteria, if we were to take our modelled 2018 (likely the first full year of T2Bacteria commercialization in the U.S.) revenue of ~\$80M and assign a revenue multiple of 6-8x, we would get to a valuation of ~\$480M - \$640M, which represents meaningful upside to the company's current market cap. However, given our product sales estimates for 2015, 2016, and 2017 are \$800k, ~\$5M, and ~\$22M, respectively, and we have one year ratings and price targets, we feel reported revenue over the next 3-24 months is more likely to impact TTOO's stock price than 2018 sales forecasts and thus use a DCF to value the company at this time. BTIG does not provide price targets on Neutral-rated stocks.

Risks

Risks include: commercial execution, competition, clinical data, M&A, need for additional capital, regulatory, and IP.

Other Disclosures

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