

Fortress Biotech (NASDAQ/FBIO)

April 13, 2021

BUY: FBIO – Looking for Tramadol

Jason Kolbert

Healthcare Research

jkolbert@dawsonjames.com

Avenue Therapeutics (part of Fortress) announced that the FDA is still reviewing the New Drug Application for IV tramadol (the PDUFA date was yesterday). The resubmission package included revised language relating to the proposed product label and a report relating to terminal sterilization validation. We are not concerned. It is worth noting that CIPLA has a deal with Fortress, which could expire (4.30.21), and which leaves CIPLA with a first right of refusal to acquire the company (until 10.30.21). Should CIPLA fail to purchase the company – product, we see a more significant opportunity for Fortress to make a new deal (with an approved product) in hand.

Investment Highlights

In February 2021, the NDA for IV Tramadol was resubmitted. The submission followed a Type A meeting with the FDA that we believe clarified the issues. The company addressed the label concerns around “opioid stacking,” and we are aware the CMC issues (ensuring product sterility) were also addressed. Our understanding is that the response (clarified as Type 1), suggests the PDUFA date has passed. An expired PDUFA date is not uncommon and the company may very well hear back from the FDA “soon.”

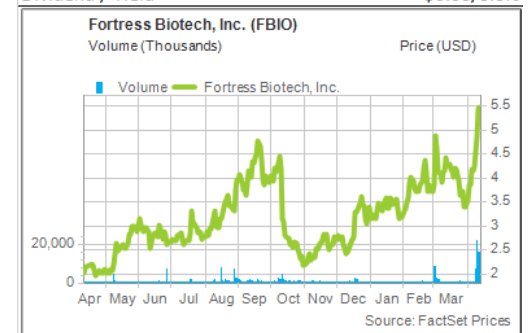
Background: In October 2020, Avenue Therapeutics’s Tramadol received a Complete Response Letter (CRL), which stated that “although the pivotal Phase 3 clinical trials demonstrated statistically significant outcomes for all of the primary and many secondary endpoints, the FDA has determined that it cannot approve the application in its present form.” The CRL stated that IV tramadol, intended to treat patients in acute pain who require an opioid, is not safe for the intended patient population. Specifically, if a patient requires an analgesic between the first dose of IV tramadol and the onset of analgesia, a rescue analgesic would be needed. The likely choice would be another opioid, which would result in opioid “stacking” and increase the likelihood of opioid-related adverse effects. Other than this potential safety concern, the FDA did not identify a safety signal in Avenue’s clinical development program.

CIPLA - InvaGen (Private): In 2018, Avenue Therapeutics announced an acquisition agreement with InvaGen to acquire a 33.3% stake in the company for \$35 million, to be followed by a second stage closing in 2021, which will acquire the remaining shares for up to \$180 million, subject to FDA approval and other specific terms. Last year InvaGen began “posturing,” which included statements that the newly proposed label in certain circumstances constitutes a “Material Adverse Effect” as defined in the Stock Purchase and Merger Agreement on the purported basis that the change makes the product commercially unviable. As we expected, Fortress – Avenue has notified InvaGen that it disagrees with this assertion. The deal that requires the acquisition expires at the end of the month, leaving them the first right of refusal. We view this as a positive, as we believe Fortress can find an even better deal once Tramadol is approved.

Valuation: Please see our detailed discussion of valuation on the following pages.

Risks to our thesis include the following: (1) commercial; (2) regulatory; (3) clinical; (4) financial; and (5) intellectual property. We review these and other risks in the risk section of this report.

Current Price	\$5.48		
Price Target	\$24.00		
Estimates	F2019A	F2020A	F2021E
Expenses (\$000s)	\$ 147,448	\$ 142,146	\$ 152,390
1Q March	\$ 39,085	\$ 34,446	\$ 36,298
2Q June	\$ 34,540	\$ 34,853	\$ 38,035
3Q September	\$ 32,312	\$ 32,518	\$ 37,536
4Q December	\$ 41,511	\$ 40,329	\$ 40,521
	F2019A	F2020A	F2021E
EPS (diluted)	\$ (0.73)	\$ (0.76)	\$ (0.45)
1Q March	\$ 0.09	\$ (0.19)	\$ (0.15)
2Q June	\$ (0.24)	\$ (0.19)	\$ (0.00)
3Q September	\$ (0.23)	\$ (0.20)	\$ (0.14)
4Q December	\$ (0.35)	\$ (0.16)	\$ (0.15)
EBITDA/Share	(\$1.43)	(\$0.15)	(\$1.21)
EV/EBITDA (x)	0.0	0.0	-1.2
Stock Data			
52-Week Range	\$1.89	-	\$6.10
Shares Outstanding (mil.)	94.9		
Market Capitalization (mil.)	\$520		
Enterprise Value (mil.)	\$445		
Debt to Capital	14%		
Book Value/Share	\$1.03		
Price/Book	3.0		
Average Three Months Trading Volume (K)	538		
Insider Ownership	29.0%		
Institutional Ownership	30.7%		
Short interest (mil.)	1.3%		
Dividend / Yield	\$0.00/0.0%		



Model Assumptions

1. We recently increased our revenue assumptions for Journey's dermatology franchise.
2. We have adjusted our royalty and milestone rates for CUTX-101.
3. We recently adjusted our probability of success for Tramadol to 70% with commercialization possible in 2021.
4. We model five late-stage therapeutic products (below) and apply to each one its own probability of success factor.
5. Each model assumes launch timing, market share, and pricing.
6. Models are based on available statistics for prevalence and incidence of the target therapeutic indication.
7. Price is based on our understanding of the market and the duration of therapy annually.
8. Our model assumes certain milestones are achieved, for example, a voucher associated with Menkes disease program is monetized.

Exhibit 1. Product Models

Avenue Therapeutics	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
IV Tramadol											
IV pain relievers market	10,020,010	10,030,030	10,040,060	10,050,100	10,060,150	10,070,210	10,080,281	10,090,361	10,100,451	10,110,552	10,120,662
Cost of Therapy		\$200.00	\$200.00	\$202.00	\$204.02	\$206.06	\$208.12	\$210.20	\$212.30	\$214.43	\$216.57
Price Change			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Market share		1%	3%	6%	10%	20%	30%	35%	40%	45%	45%
Patients Treated with a Course		100,300	301,202	603,006	1,006,015	2,014,042	3,024,084	3,531,626	4,040,180	4,549,748	4,554,298
Revenues (000)		20,060	60,240	121,807	205,247	415,014	629,375	742,355	857,747	975,589	986,330
Probability of Success (Phase 3)		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Adjusted Revenues (000)		\$ 14,042	\$ 42,168	\$ 85,265	\$ 143,673	\$ 290,510	\$ 440,562	\$ 519,648	\$ 600,423	\$ 682,912	\$ 690,431
Mustang Bio	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
MB-107 "Bubble Boy"											
Current "Reservoir" patients (U.S. and ex-U.S. markets)			1,050	1,125	900	600	500	575	475	375	275
New Cases a year (U.S. and ex-U.S. markets)			75	75	75	75	75	75	75	75	75
Market Share - Prevalance			10%	20%	35%	55%	60%	65%	70%	75%	80%
Market Share New Cases			10%	20%	35%	55%	75%	85%	90%	90%	90%
Total patients treated			113	240	341	371	356	438	400	349	288
Cost of Therapy (one-time)			\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000
Revenues (M)			168,750	360,000	511,875	556,875	534,375	656,250	600,000	523,125	431,250
Probability of Success (Phase 2/3)			30%	30%	30%	30%	30%	30%	30%	30%	30%
Adjusted Revenues (M)			\$ 50,625	\$ 108,000	\$ 153,563	\$ 167,063	\$ 160,313	\$ 196,875	\$ 180,000	\$ 156,938	\$ 129,375
Royalty assumed			4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Royalty revenue (000)			\$ 2,278	\$ 4,860	\$ 6,910	\$ 7,518	\$ 7,214	\$ 8,859	\$ 8,100	\$ 7,062	\$ 5,822
CheckPoint PD-L1 in NSCLC	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Cosibelimab (NSCLC)											
New cases of lung cancer/year	228,150	228,150	228,150	228,150	228,150	228,150	228,150	228,150	228,150	228,150	228,150
Patients - PDL1 Option	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Target patient population	171,113	171,113	171,113	171,113	171,113	171,113	171,113	171,113	171,113	171,113	171,113
Market share			1%	2%	4%	6%	8%	10%	12%	14%	14%
Patients treated				1,711	3,422	6,845	10,267	13,689	17,111	20,534	23,956
Costs				\$ 35,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000	\$ 55,000
Revenues (000)				\$ 59,889	\$ 188,224	\$ 376,448	\$ 564,671	\$ 752,895	\$ 941,119	\$ 1,129,343	\$ 1,317,566
Probability of Success				50%	50%	50%	50%	50%	50%	50%	50%
Adjusted Revenues (M)				\$ 29,945	\$ 94,112	\$ 188,224	\$ 282,336	\$ 376,448	\$ 470,559	\$ 564,671	\$ 658,783
Royalty assumed				4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Royalty revenue (000)				\$ -	\$ -	\$ 1,348	\$ 4,235	\$ 8,470	\$ 12,705	\$ 16,940	\$ 21,175
CheckPoint TKI in NSCLC	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
CK-101 (EGFR mutation + LC)											
New cases of lung cancer/year	228,150	228,150	228,150	228,150	228,150	228,150	228,150	228,150	228,150	228,150	228,150
Total Lung Cancer Market size (M)	19,478,150	19,706,300	19,934,450	20,162,600	20,390,750	20,618,900	20,847,050	21,075,200	21,303,350	21,531,500	21,759,650
Total NSCLC lung cancer	16,556,428	16,750,355	16,944,283	17,138,210	17,332,138	17,526,065	17,719,993	17,913,920	18,107,848	18,301,775	18,495,703
% of patients with EGFR/NSCLC patients	26%	26%	26%	26%	26%	26%	26%	26%	26%	26%	26%
Patients with EGFR/NSCLC patients				59,319	59,319	59,319	59,319	59,319	59,319	59,319	59,319
Market share				5%	10%	12%	14%	15%	16%	17%	18%
Treated patients (000)				2,966	5,932	7,118	8,305	8,998	9,491	10,084	10,677
Cost (competition=\$15,240/month)				\$ 182,880	\$ 182,880	\$ 182,880	\$ 182,880	\$ 182,880	\$ 182,880	\$ 182,880	\$ 182,880
Revenues (000)				\$ 542,413	\$ 1,084,826	\$ 1,301,791	\$ 1,518,756	\$ 1,627,239	\$ 1,735,721	\$ 1,844,204	\$ 1,952,687
Probability of Success				30%	30%	30%	30%	30%	30%	30%	30%
Adjusted Revenues (000)				\$ 162,724	\$ 325,448	\$ 390,537	\$ 455,627	\$ 488,172	\$ 520,716	\$ 553,261	\$ 585,806
Royalty assumed				4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
Royalty revenue (000)				\$ 7,323	\$ 14,645	\$ 17,574	\$ 20,503	\$ 21,968	\$ 23,432	\$ 24,897	\$ 26,361
Cyprum Therapeutics (private)	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
CUTX-101 (Menkes Disease)											
Prevalance (USA)	2,720	2,720	2,720	2,720	2,720	2,720	2,720	2,720	2,720	2,720	2,720
Incidence annually (USA)	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Target patient population	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Market share	0%	0%	10%	30%	50%	70%	80%	80%	80%	80%	80%
Patients treated				250	750	1,250	1,750	2,000	2,000	2,000	2,000
Price				\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Revenues (000)				75,000	225,000	375,000	525,000	600,000	600,000	600,000	600,000
Probability of Success				30%	30%	30%	30%	30%	30%	30%	30%
Adjusted Revenues (M)				\$ 22,500	\$ 67,500	\$ 112,500	\$ 157,500	\$ 180,000	\$ 180,000	\$ 180,000	\$ 180,000
Royalty assumed				25.0%	6.0%	17.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Royalty revenue (000)				\$ -	\$ 1,350	\$ 11,475	\$ 28,125	\$ 39,375	\$ 45,000	\$ 45,000	\$ 45,000
Milestone Revenues				\$ 11,000	\$ 9,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000

Source: Dawson James estimates, company reports

Valuation: How to value Fortress? As a reminder, Fortress, as the controlling entity, reports consolidated statements. Our valuation expenses are based on GAAP numbers, but we recognize this is conservative. If we substituted Non-GAAP projections, it would actually result in a higher valuation. There are multiple ways to value a "platform therapeutics company" such as Fortress that has a majority ownership in multiple public companies with the rights to royalties and milestones (such as monetization of a priority voucher), plus the company has its own internal products that are generating revenues and internal private companies that have their own therapeutic pipeline candidates. We choose to model the key products as they exist (inside and outside the company) and project them based on the ownership percentage to the Fortress income statement. We recognize that this is a "model." It is a method to forecast future value, i.e., reporting the revenues of outside companies based on the percentage ownership (not as a 100% consolidated entity), but we do show the consolidated expenses as they are currently reported by Fortress. We view our method as doubly conservative; that is, we cut the revenues but not the expenses. One might argue we need to assess each outside company, determine net income, and apply valuation metrics, based on the projected value of the external company. We leave that for "others" to do, as our purpose is to determine: is their upside to Fortress based on the value of the holding in the external companies, the product royalties, the annual stock dividend, and the internal companies and P&L metrics of Fortress itself? We conclude yes. In our model, we do separate and show our projected revenues, royalties, and milestones. We model external and internal products. We then assume R&D, SG&A based on the current consolidated numbers. We project the share count as well as revenues, expenses, and, ultimately, net income out to 2030. For each individual product, we make certain assumptions about the timing and probability of success and apply these assumptions to our model. We apply a probability of success in our therapeutic models. This ranges from as low as 30% to as high as 70% based on what we feel is the therapeutic risk that the product will advance. In addition to the success factor, we apply a 15% discount rate (r) in our Free Cash Flow to the Firm (FCFF), Discounted EPS (dEPS), and Sum of the Parts (SOP) models. We then average the result and round to the nearest whole number to derive our \$24.00 12-month price target.

Exhibit 2. Free Cash Flow Model (\$)

Average	24
Price Target	33
Year	2021

DCF Valuation Using FCF (mln):												
units ('000)	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
EBIT	(101,660)	(130,480)	(92,526)	(41,419)	151,005	320,943	478,261	605,801	674,727	706,141	771,409	811,634
Tax Rate	0%	0%	0%	0%	0%	10%	15%	18%	20%	21%	21%	21%
EBIT (1-t)	(101,660)	(130,480)	(92,526)	(41,419)	151,005	288,849	406,522	496,757	539,781	557,851	609,413	641,191
CapEx												
Depreciation												
Change in NWC												
FCF	(101,660)	(130,480)	(92,526)	(41,419)	151,005	288,849	406,522	496,757	539,781	557,851	609,413	641,191
PV of FCF	(134,445)	(150,052)	(92,526)	(36,017)	114,181	189,923	232,430	246,976	233,362	209,717	199,218	182,266
Discount Rate								15%				
Long Term Growth Rate								1%				
Terminal Cash Flow											4,625,734	
Terminal Value YE2030											1,314,922	
NPV											2,644,402	
NPV-Debt											9,396	
Shares out ('000)											79,158	2030E
NPV Per Share											33	

Source: Dawson James estimates, company reports

Exhibit 3. Discounted-EPS Model

Current Year	2021
Year of EPS	2030
Earnings Multiple	10
Discount Factor	15%
Selected Year EPS	\$ 8.12
NPV	23

		Discount Rate and Earnings Multiple Varies, Year is Constant					
		5%	10%	15%	20%	25%	30%
Earnings Multiple	1	5.24	3.44	2.31	1.57	1.09	0.77
	5	26.18	17.22	11.55	7.87	5.45	3.83
	10	52.36	34.45	23.09	15.74	10.90	7.66
	15	78.54	51.67	34.64	23.61	16.35	11.49
	20	104.72	68.90	46.18	31.49	21.81	15.32
	25	130.91	86.12	57.73	39.36	27.26	19.15
	30	157.09	103.35	69.27	47.23	32.71	22.98
	35	183.27	120.57	80.82	55.10	38.16	26.81

Source: Dawson James estimates

Exhibit 4. Sum-of-the-Parts Model

	LT Gr	Discount Rate	Yrs to Peak	% Success	Peak Sales (MM's)	Term Val
Fortress Biotech						
Avenue Tramadol IV (Pain)	1%	30%	4	70%	\$986	\$3,401
NPV						\$3.2
Mustang MB-107 (bubble Boy)	1%	15%	3	70%	\$431	\$3,080
NPV						\$5.4
Cyprium CUTX-101 (Menke's Disease)	1%	30%	4	70%	\$600	\$2,069
NPV						\$2
CheckPoint Cosibelimab (PD-L1)	1%	30%	4	70%	\$1,318	\$4,543
NPV						\$4
CheckPoint CK-101 (TRK)	1%	30%	3	70%	\$1,953	\$6,733
NPV						\$8.1
Net Margin (Products)						30%
MM Shrs OS (2030E)						79
Product Total NPV						\$15
Product Royalties NPV	1%	15%	4	70%	\$155	\$1,106
NPV						\$1.7
NPV - Royalties & Products						\$16.4
Milestones	1%	10%	2	70%	\$100	\$1,111
NPV						\$2.4
NPV - Royalties & Products & Milestones						\$18.8

Source: Dawson James estimates

Exhibit 5. Income Statement

	2019A	2020A	1Q21E	2Q21E	3Q21E	4Q21E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Probability Revenue Forecast: ('000)																
Avenue Therapeutics: IV Tramadol end use sales			\$ 3,230	\$ 3,791	\$ 3,089	\$ 3,932	\$ 14,042	\$ 42,168	\$ 85,265	\$ 143,673	\$ 290,510	\$ 440,562	\$ 519,648	\$ 600,423	\$ 682,912	\$ 690,431
Percent Owned by Fortress	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%
Revenues Attributed back to Fortress	-	-	1,033	1,213	989	1,258	4,493	13,494	27,265	45,975	92,963	140,990	166,288	192,135	218,532	220,938
Mustang Bio - Bubble Boy (MB-107)																
Percent Owned by Fortress	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%	30%
Revenues Attributed back to Fortress	0	0	-	-	-	-	-	15,188	32,400	46,069	50,119	48,094	59,063	54,000	47,081	38,813
Cyprum - CUTX-101 - Menkes Disease																
Percent Owned by Fortress	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%	89%
Revenues Attributed back to Fortress	1	1	0	0	0	0	1	20,025	60,075	100,125	140,175	160,200	160,200	160,200	160,200	160,200
CheckPoint (Cosibelimab PD-L1)																
Percent Owned by Fortress	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%
Revenues Attributed back to Fortress	-	-	-	-	-	-	-	-	9,582	30,116	60,232	90,347	120,463	150,579	180,695	210,811
CK-101 end use sales																
Percent Owned by Fortress	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%
Revenues Attributed back to Fortress	-	-	-	-	-	-	-	-	52,072	104,143	124,972	145,801	156,629	177,448	187,458	
Journey Medical Corporation (Dermatology)																
Percent Owned by Fortress	34,921	44,531	12,290	13,894	12,825	14,428	53,437	58,780	64,659	71,124	78,237	86,061	94,667	104,133	114,547	126,001
Revenues Attributed back to Fortress	34,921	44,531	12,290	13,894	12,825	14,428	53,437	58,780	64,659	71,124	78,237	86,061	94,667	104,133	114,547	126,001
Other Revenue Back to Fortress	1,708	1,068	270	282	294	329	1,175	1,292	1,422	1,564	1,720	1,892	2,081	2,289	2,518	2,770
Fortress Revenues	36,629	45,599	13,594	15,389	14,107	16,015	59,106	108,779	247,494	399,116	548,417	673,374	758,976	829,966	900,616	946,990
Expenses:																
Fortress																
Costs of Goods Sold (Journey Medical)	10,532	14,594	2,458	2,779	2,565	2,886	10,687	11,756	12,932	14,225	15,647	17,212	18,933	20,827	22,909	25,200
%COGS	29%	33%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Research and Development (Consolidated)	75,236	64,108	15,482	16,155	17,501	18,175	67,313	70,679	74,213	77,924	81,820	85,911	90,206	94,717	99,453	104,425
Fortress		2,780														
Avenue		2,866														
Checkpoint		11,735														
Mustang		39,475														
Other**		1,806														
Research and Development-licenses acquired	6,090	1,820	2,760	2,880	3,120	3,240	12,000	16,000	16,800	17,640	18,522	19,448	20,421	21,442	22,514	23,639
General and Administrative (Consolidated)	55,590	61,166	15,597	16,221	14,350	16,221	62,389	63,637	64,910	66,208	67,532	68,883	70,261	71,666	73,099	74,561
Fortress		23,341														
Avenue		2,347														
Checkpoint		6,518														
Journey Medical Corp. (SG&A)		25,659														
Mustang		6,810														
Other**		1,184														
Total Operating expenses	147,448	142,146	36,298	38,035	37,536	40,521	152,390	162,072	168,855	175,997	183,521	191,454	199,821	208,651	217,975	227,826
Total Operating expenses (Adjusted)		69,164														
Operating Income (Loss)	110,819	(96,546)	(22,703)	(11,646)	(23,429)	(24,506)	(82,284)	(30,665)	162,297	332,800	490,710	618,873	688,452	720,553	786,541	827,523
Operating Income (Loss) adjusted	-	(23,565)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest income (expense), net	2,559	2,687	649	677	734	762	2,821	2,962	3,110	3,266	3,429	3,601	3,781	3,970	4,168	4,377
Interest expense and financing fee	(11,849)	(12,441)	(3,005)	(3,135)	(3,397)	(3,527)	(13,064)	(13,717)	(14,403)	(15,123)	(15,879)	(16,673)	(17,506)	(18,382)	(19,301)	(20,266)
Change in FV of derivative liability		(1,147)														
Change in FV of subsidiary convertible note																
Change in FV of investments	(27)	533														
Gain on deconsolidation of Caelum	18,476															
Total Other Income	9,159	(10,369)	(2,356)	(2,458)	(2,663)	(2,765)	(10,242)	(10,754)	(11,292)	(11,857)	(12,449)	(13,072)	(13,726)	(14,412)	(15,132)	(15,889)
Pretax Income (loss from continuing operations)	(101,680)	(130,480)	(25,059)	(14,104)	(26,092)	(27,272)	(92,526)	(41,419)	151,005	320,943	478,261	605,801	674,727	708,141	771,409	811,634
Income Tax Benefit (Provision)										32,094	71,739	109,044	134,945	148,290	177,424	202,908
Tax Rate	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	15%	18%	20%	21%	23%	25%
GAAP Net Income (Loss)	(101,680)	(130,480)	(25,059)	(14,104)	(26,092)	(27,272)	(92,526)	(41,419)	151,005	288,849	406,522	496,757	539,781	557,851	593,985	608,725
Adjusted (Non-GAAP) Loss		(35,842)														
Less: net loss attributable to non-controlling interests	61,700	55,264	13,346	13,927	15,087	15,667	58,027	56,286	52,909	49,735	46,751	43,946	41,309	38,830	36,500	34,310
Net Income (loss) attributable to common stockholders	(39,980)	(53,580)	(11,713)	(178)	(11,005)	(11,604)	(34,499)	(14,867)	203,914	338,584	453,272	540,702	581,090	596,682	630,485	643,036
GAAP-EPS	(0.73)	(0.76)	(0.15)	(0.00)	(0.14)	(0.15)	(0.45)	0.19	2.65	4.38	5.84	6.94	7.43	7.60	8.00	8.12
GAAP-EPS (Dil)	(0.60)	(0.76)	(0.15)	(0.00)	(0.14)	(0.15)	(0.45)	0.19	2.65	4.38	5.84	6.94	7.43	7.60	8.00	8.12
Adjusted Non-GAAP EPS (DIL)		(0.50)														
Wgtd Avg Shrs (Bas) - '000s	54,711	71,077	76,245	76,322	76,398	76,474	76,360	76,666	76,973	77,281	77,591	77,902	78,214	78,527	78,842	79,158
Wgtd Avg Shrs (Dil) - '000s	65,502	71,077	76,245	76,322	76,398	76,474	76,360	76,666	76,973	77,281	77,591	77,902	78,214	78,527	78,842	79,158

Source: Dawson James estimates and company reports

Risk Analysis

In addition to the typical risks associated with development stage specialty pharmaceutical companies, potential risks specific to Fortress Biotech are as follows:

Financial risk. The company may need to raise capital in the marketplace in order to successfully push its products into the next phase, and there can be no assurances that the company will be able to successfully raise capital and or do so on favorable terms.

Clinical and regulatory risk. Lead products must start and complete clinical trials. Trials may not produce results sufficient for regulatory approval.

Partnership risk. Fortress Biotech may seek partnerships for clinical development support and commercialization. We have no specific knowledge of any discussions with possible partners today, and there can be no assurances that the company will be able to secure a favorable partnership.

Commercial risk. There are no assurances that the company will be able to secure favorable pricing, commercially launch products, and achieve significant market share to become profitable.

Legal and intellectual property risk. The company may have to defend its patents and technical know-how, and there can be no assurances that the patents will not be infringed or will be held as valid if challenged, and or that the company may infringe on third parties' patents.

Companies mentioned in this report, working with Fortress and/or part of valuation discussion:

Alexion (ALXN/NASDAQ)-Not covered.

InvaGen Pharmaceuticals – (Private).

St. Jude Children’s Research Hospital (Private).

Mustang Bio (MBIO/NASDAQ) – Not covered.

Checkpoint Therapeutics (CKPT/NASDAQ) – Not covered.

Avenue Therapeutics (ATXI/ NASDAQ) – Not covered.

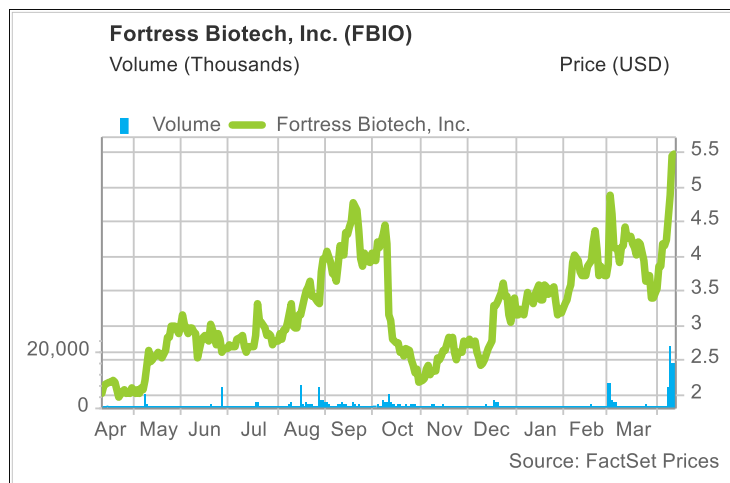
Caelum Biosciences (Private).

Journey Medical Corporation (internal Fortress company).

Cyprium Therapeutics (Private).

Important Disclosures:

Price Chart:



Price target and rating changes over the past three years:

- Initiated – Buy August 26, 2019, Price Target \$19.00
- Update – Buy September 17, 2019, Price Target \$19.00
- Update – Buy November 4, 2019, Price Target \$19.00
- Update – Buy December 11, 2019, Price Target \$19.00
- Update – Buy December 23, 2019, Price Target \$19.00
- Update – Buy January 15, 2020, Price Target \$19.00
- Update – Buy February 14, 2020, Price Target \$19.00
- Update – Buy February 20, 2020, Price Target \$19.00
- Update – Buy March 30, 2020, Price Target \$19.00
- Update – Buy May 14, 2020, Price Target \$19.00
- Update – Buy July 31, 2020, Price Target \$19.00
- Update – Buy September 8, 2020, Price Target \$19.00
- Price Target Change – Buy October 12, 2020, Price Target \$15.00
- Update – Buy October 20, 2020, Price Target \$15.00
- Price Target Change – Buy November 10, 2020, Price Target \$16.00
- Update – Buy December 14, 2020, Price Target \$16.00
- Update – Buy February 2, 2021, Price Target \$16.00
- Price Target Change – Buy February 17, 2021, Price Target \$21.00
- Price Target Change – Buy February 24, 2021, Price Target \$22.00
- Price Target Change – Buy April 7, 2021, Price Target \$24.00
- Update – Buy April 13, 2021, Price Target \$24.00

Dawson James Securities, Inc. (the “Firm”) is a member of the Financial Industry Regulatory Authority (“FINRA”) and the Securities Investor Protection Corporation (“SIPC”).

The Firm does not make a market in the securities of the subject company(s). The Firm has engaged in investment banking relationships with the subject company in the prior twelve months, as a manager or co-manager of a public offering and has received compensation resulting from those relationships. The Firm may seek compensation for investment banking services in the future from the subject company(s). The Firm has not received other compensation from the subject company(s) in the last 12 months for services unrelated to managing or co-managing of a public offering.

Neither the research analyst(s) whose name appears on this report nor any member of his (their) household is an officer, director or advisory board member of these companies. The Firm and/or its directors and employees may own securities of the company(s) in this report and may increase or decrease holdings in the future. As of March 31, 2021, the Firm as a whole did not beneficially own 1% or more of any class of common equity securities of the subject company(s) of this report. The Firm, its officers, directors, analysts or employees may affect transactions in and have long or short positions in the securities (or options or warrants related to those securities) of the company(s) subject to this report. The Firm may affect transactions as principal or agent in those securities.

Analysts receive no direct compensation in connection with the Firm's investment banking business. All Firm employees, including the analyst(s) responsible for preparing this report, may be eligible to receive non-product or service-specific monetary bonus compensation that is based upon various factors, including total revenues of the Firm and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.

Although the statements in this report have been obtained from and are based upon recognized statistical services, issuer reports or communications, or other sources that the Firm believes to be reliable, we cannot guarantee their accuracy. All opinions and estimates included in this report constitute the analyst's judgment as of the date of this report and are subject to change without notice.

Information about valuation methods and risks can be found in the "VALUATION" and "RISK ANALYSIS" sections of this report.

The securities of the company discussed in this report may be unsuitable for investors depending on their specific investment objectives and financial position. This report is offered for informational purposes only and does not constitute an offer or solicitation to buy or sell any securities discussed herein in any jurisdiction where such would be prohibited. Additional information is available upon request.

Rating Definitions:

- 1) **Buy:** the analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months;
- 2) **Neutral:** the analyst believes the price of the stock is fairly valued for the next 12-18 months;
- 3) **Sell:** the analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

The following chart reflects the range of current research report ratings for all companies, followed by the analysts of the Firm. The chart also reflects the research report ratings relating to those companies for which the Firm has performed investment banking services.

	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	20	69%	6	30%
Market Perform (Neutral)	9	31%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	29	100%	6	21%

Analyst Certification:

The analyst(s) whose name appears on this research report certifies that 1) all of the views expressed in this report accurately reflect his (their) personal views about any and all of the subject securities or issuers discussed; and 2) no part of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst in this research report; and 3) all Dawson James employees, including the analyst(s) responsible for preparing this research report, may be eligible to receive non-product or service-specific monetary bonus compensation that is based upon various factors, including total revenues of Dawson James and its affiliates as well as a portion of the proceeds from a broad pool of investment vehicles consisting of components of the compensation generated by investment banking activities, including but not limited to shares of stock and/or warrants, which may or may not include the securities referenced in this report.