

## Fortress Biotech (NASDAQ/FBIO)

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### BUY: Fortress – Mustang, Alexion – Caelum – News

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*Mustang (MBIO-Not Rated) announces updated Interim Phase 1/2 Data for MB-106 CD20-Targeted CAR T in Patients with Relapsed or Refractory B-cell Non-Hodgkin Lymphomas and Chronic Lymphocytic Leukemia. Also, news today from Caelum and Alexion (ALXN-Not Covered) - Additional Phase 2 data on safety and tolerability of CAEL-101 in AL Amyloidosis at the European Hematology Association Congress 2021.*

### Investment Highlights

**MB-106 (CD20-targeted CAR T Cell Therapy) Partner Company - Mustang:** In May 2021, Fortress announced that the FDA approved Mustang Bio's IND application to initiate a multicenter Phase 1/2 clinical trial investigating the safety and efficacy of MB-106, a CD20-targeted CAR T for relapsed or refractory B-cell non-Hodgkin lymphomas ("B-NHL") and chronic lymphocytic leukemia ("CLL").

**CAEL-101 (Light Chain Fibril-reactive Monoclonal Antibody for AL Amyloidosis) - Partner Company Caelum:** Now in two Phase 3 studies for AL amyloidosis. Recall that Caelum formed a collaboration with Alexion in 2019, which includes an option to acquire Caelum. AstraZeneca announced the execution of a definitive agreement to purchase Alexion Pharmaceuticals, Inc. In the event of the closing of such transaction, the timeline for a potential exercise of the option to purchase Caelum will be accelerated to six months following the date of acquisition closing.

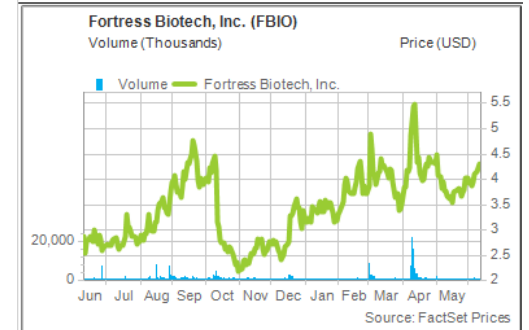
**MB-107 and MB-207 (Lentiviral Gene Therapies for X-linked Severe Combined Immunodeficiency) - Partner Company Mustang:** In February 2021, Fortress announced encouraging MB-107 and MB-207 clinical updates from its investigator-IND X-linked severe combined immunodeficiency ("XSCID") trials, as well as additional consistent safety and efficacy data. On January 28, 2021, the FDA removed a CMC hold on the MB-107 Phase 2 clinical trial Investigational New Drug application after reviewing a comprehensive CMC package that was submitted in late December 2020. The company expects to enroll the first patient in this pivotal multicenter trial in 2Q21, which should lead to top-line data later in the year. An IND is expected in the 2H21 for the pivotal multicenter Phase 2 clinical trial of MB-207.

**CUTX-101 (Copper Histidinate for Menkes disease) - Partner Company Cyprium:** Fortress partner Cyprium and Sentyln signed a Development and Asset Purchase Agreement for CUTX-101 for the treatment of Menkes disease. Under the terms of the agreement, Cyprium received \$8 million upfront to fund the development of CUTX-101 and could receive up to \$12 million in regulatory milestone payments through NDA approval, and it is eligible to receive sales milestones plus royalties. Royalties start from mid single digits, scaling up to 25% on sales exceeding \$100 million annually. Cyprium will retain 100% ownership over any FDA priority review voucher that may be issued at NDA approval for CUTX-101. Cyprium is responsible for the development of CUTX-101 through approval of the NDA by the FDA, and Sentyln will be responsible for commercialization of CUTX-101, as well as progressing newborn screening activities. Fortress plans to begin the rolling submission of the NDA for CUTX-101 to the FDA in the second half of 2021.

Current Price		\$4.30	
Price Target		\$24.00	
Commercial	Late Clinical	Early Clinical	Preclinical
Targacep	CUTX-101	MB-102	ATVS-001 Gene Therapy
Intune	Coibrotamab	OX-101	AAV-AFP1A Gene Therapy
Exelixis	CAEL-101	MB-101	Abi-GTR
Onasent	Iv Tramadol	MB-106	Abi-CAIX
Luxturna	MB-107	MB-103	OX-103
Acetate	MB-207	MB-108	CEVA-102
Zincpro	CEVA-101	MB-104	Conifer
		MB-105	KRAS G12D ONCologics
		BHER-101	Multiple Other ONCologics
		Triplex	
		Doliprad	

Source: Fortress

Stock Data			
52-Week Range	\$2.12	-	\$6.10
Shares Outstanding (mil.)	97.3		
Market Capitalization (mil.)	\$418		
Enterprise Value (mil.)	\$343		
Debt to Capital	18%		
Book Value/Share	\$1.03		
Price/Book	3.0		
Average Three Months Trading Volume (K)	674		
Insider Ownership	25.7%		
Institutional Ownership	28.1%		
Short interest (mil.)	1.2%		
Dividend / Yield	\$0.00/0.0%		



**Cosibelimab (formerly CK-301, an anti-PD-L1 antibody) - Partner company Checkpoint:** Currently in a registration-enabling study in metastatic cutaneous squamous cell carcinoma (fully enrolled) and on track to report top-line results by year-end. With a potentially favorable safety profile versus anti-PD-1 therapy and a plan to commercialize at a substantially lower price. A Phase 3 registration-enabling trial is planned to begin in first-line metastatic non-small cell lung cancer in mid-2021.

**Dotinurad (Urate Transporter (URAT1) Inhibitor) - Partner company FBIO Acquisition Corp:** In May, Fortress announced an exclusive license agreement with Fuji Yakuhin Co. Ltd. to develop Dotinurad in North America and Europe. Dotinurad is a potential best-in-class urate transporter (URAT1) inhibitor for gout and possibly other hyperuricemic indications including chronic kidney disease and heart failure. Dotinurad (URECE® tablet) was approved in Japan in 2020 as a once-daily oral therapy for gout and hyperuricemia. Dotinurad was efficacious and well-tolerated in more than 500 Japanese patients treated for up to 58 weeks in Phase 3 clinical trials.

**IV Tramadol - Partner Company Avenue Therapeutics:** In October 2020, Avenue Therapeutics announced that it had received a Complete Response Letter from the FDA regarding Avenue's NDA for IV tramadol. The FDA held a Type A meeting with Avenue in November 2020 to discuss the issues outlined in the CRL. On February 12, 2021, Avenue resubmitted its NDA to the FDA for IV tramadol. The NDA resubmission followed the receipt of the official minutes from Avenue's Type A meeting with the FDA. The NDA resubmission included revised language relating to the proposed product label and a report relating to terminal sterilization validation. On February 26, 2021, Avenue received an acknowledgment letter from the FDA stating that Avenue's resubmission of its NDA is a complete, class 1 response to the CRL, and a Prescription Drug User Free Act ("PDUFA") goal date was set for April 12, 2021. On April 13, 2021, Avenue announced that the FDA was still reviewing its NDA for IV tramadol and had not provided a decision regarding the NDA. As of May 1, 2021, Avenue had not received approval from the FDA for IV tramadol. Accordingly, under the Stock Purchase and Merger Agreement ("SPMA"), InvaGen retains an option to consummate the second stage closing until October 31, 2021 (after which Avenue can choose to terminate the SPMA), and also retains the option to terminate the SPMA.

**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.

**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 Analysis section of this report.

### 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	\$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%
<b>Adjusted Revenues (000)</b>		<b>\$ 14,042</b>	<b>\$ 42,168</b>	<b>\$ 85,265</b>	<b>\$ 143,673</b>	<b>\$ 290,510</b>	<b>\$ 440,562</b>	<b>\$ 519,648</b>	<b>\$ 600,423</b>	<b>\$ 682,912</b>	<b>\$ 690,431</b>
<b>Mustang Bio</b>	<b>2020A</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>
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%
<b>Royalty revenue (000)</b>			<b>\$ 2,278</b>	<b>\$ 4,860</b>	<b>\$ 6,910</b>	<b>\$ 7,518</b>	<b>\$ 7,214</b>	<b>\$ 8,859</b>	<b>\$ 8,100</b>	<b>\$ 7,062</b>	<b>\$ 5,822</b>
<b>CheckPoint PD-L1 in NSCLC</b>	<b>2020A</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>
<b>Cosibelimab (NSCLC)</b>											
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%
<b>Royalty revenue (000)</b>				<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,348</b>	<b>\$ 4,235</b>	<b>\$ 8,470</b>	<b>\$ 12,705</b>	<b>\$ 16,940</b>	<b>\$ 21,175</b>
<b>CheckPoint TKI in NSCLC</b>	<b>2020A</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>
<b>CK-101 (EGFR mutation + LC)</b>											
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	8,898	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%
<b>Royalty revenue (000)</b>				<b>\$ 7,323</b>	<b>\$ 14,645</b>	<b>\$ 17,574</b>	<b>\$ 20,503</b>	<b>\$ 21,968</b>	<b>\$ 23,432</b>	<b>\$ 24,897</b>	<b>\$ 26,361</b>
<b>Cyprium Therapeutics (private)</b>	<b>2020A</b>	<b>2021E</b>	<b>2022E</b>	<b>2023E</b>	<b>2024E</b>	<b>2025E</b>	<b>2026E</b>	<b>2027E</b>	<b>2028E</b>	<b>2029E</b>	<b>2030E</b>
<b>CUTX-101 (Menkes Disease)</b>											
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%
<b>Royalty revenue (000)</b>				<b>\$ -</b>	<b>\$ 1,350</b>	<b>\$ 11,475</b>	<b>\$ 28,125</b>	<b>\$ 39,375</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>
Milestone Revenues				\$ 11,000	\$ 9,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000

Source: Dawson James estimates, company reports

**Exhibit 2. Income Statement**

	2019A	2020A	1Q21A	2Q21E	3Q21E	4Q21E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
<b>Probability Revenue Forecast: ('000)</b>																
Avenue Therapeutics: IV Tramadol end use sales			\$ -	\$ -	\$ -	\$ -	\$ -	\$ 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	-	-	-	-	-	-	-	13,494	27,285	45,975	92,963	140,980	166,288	192,135	218,532	220,938
Mustang Bio - Bubble Boy (MB-107)								\$ 50,625	\$ 108,000	\$ 153,563	\$ 167,063	\$ 160,313	\$ 196,875	\$ 180,000	\$ 156,938	\$ 129,375
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	0	0	0	0	0	15,188	32,400	46,069	50,119	48,094	59,063	54,000	47,081	38,813
Cyprium - CUTX-101 - Menkes Disease								\$ 22,500	\$ 67,500	\$ 112,500	\$ 157,500	\$ 180,000	\$ 180,000	\$ 180,000	\$ 180,000	\$ 180,000
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 (Cosibelmab PD-L1)								\$ -	\$ 29,945	\$ 94,112	\$ 188,224	\$ 282,336	\$ 376,448	\$ 470,559	\$ 564,671	\$ 658,783
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								\$ 162,724	\$ 325,448	\$ 390,537	\$ 455,627	\$ 488,172	\$ 520,716	\$ 553,261	\$ 585,806	\$ 618,351
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	156,215	166,629	177,044	187,458	197,872
Journey Medical Corporation (Dermatology)	34,921	44,531	10,719	13,894	12,825	15,999	53,437	58,780	64,659	71,124	78,237	86,061	94,667	104,133	114,547	126,001
Percent Owned by Fortress	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Revenues Attributed back to Fortress	34,921	44,531	10,719	13,894	12,825	15,999	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	868	282	294	(269)	1,175	1,292	1,422	1,564	1,720	1,892	2,081	2,289	2,518	2,770
<b>Fortress Revenues</b>	<b>36,629</b>	<b>45,599</b>	<b>11,587</b>	<b>14,176</b>	<b>13,119</b>	<b>15,731</b>	<b>54,613</b>	<b>108,779</b>	<b>247,494</b>	<b>399,116</b>	<b>548,417</b>	<b>673,374</b>	<b>758,976</b>	<b>829,966</b>	<b>900,616</b>	<b>946,990</b>
Avenue Therapeutic (IV Tramadol) Royalties (4.5% on sales > \$325M) Associate Milestones							\$ -									
Mustang Bio - Bubble Boy (MB-107) Prob. Adj. Royalties - 4.5% Associate Milestones								\$ 2,278	\$ 4,860	\$ 6,910.31	\$ 7,518	\$ 7,214	\$ 8,859	\$ 8,100	\$ 7,062	\$ 5,822
Cyprium - CUTX-101 Menke's Disease - Prob. Adj. Royalties - 4.5% Associate Milestones								\$ 1,350	\$ 11,475	\$ 28,125	\$ 39,375	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000	\$ 45,000
Checkpoint (Cosibelmab PD-L1) - Prob. Adj. Royalties - 4.5% Associate Milestones								\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Checkpoint (CK-101 - TKI) - Prob. Adj. Royalties -25% Associate Milestones				11,000			\$ 11,000	\$ 9,000	\$ 7,323	\$ 14,645	\$ 17,574	\$ 20,503	\$ 21,968	\$ 23,432	\$ 24,897	\$ 26,361
<b>Total Royalties &amp; Milestones</b>	<b>-</b>	<b>-</b>	<b>11,587</b>	<b>11,000</b>	<b>-</b>	<b>-</b>	<b>22,587</b>	<b>22,628</b>	<b>83,658</b>	<b>109,680</b>	<b>125,815</b>	<b>136,952</b>	<b>129,297</b>	<b>99,237</b>	<b>103,899</b>	<b>108,358</b>
<b>Expenses:</b>																
<b>Fortress</b>																
Costs of Goods Sold (Journey Medical) %COGS	10,532 29%	14,594 33%	3,908 20%	2,779 20%	2,565 20%	3,200 20%	12,452 23%	11,756 20%	12,932 20%	14,225 20%	15,647 20%	17,212 20%	18,933 20%	20,827 20%	22,909 20%	25,200 20%
<b>Research and Development (Consolidated)</b>	<b>75,236</b>	<b>64,108</b>	<b>20,154</b>	<b>16,155</b>	<b>17,501</b>	<b>18,175</b>	<b>67,313</b>	<b>70,679</b>	<b>74,213</b>	<b>77,924</b>	<b>81,820</b>	<b>85,911</b>	<b>90,206</b>	<b>94,717</b>	<b>99,453</b>	<b>104,425</b>
Fortress																
Avenue																
Checkpoint																
Mustang																
Other**																
Research and Development- licenses acquired	6,090	1,820	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	
<b>General and Administrative (Consolidated)</b>	<b>55,590</b>	<b>61,166</b>	<b>17,542</b>	<b>16,221</b>	<b>14,350</b>	<b>14,277</b>	<b>62,389</b>	<b>63,637</b>	<b>64,910</b>	<b>66,208</b>	<b>67,532</b>	<b>68,883</b>	<b>70,261</b>	<b>71,666</b>	<b>73,099</b>	<b>74,561</b>
Fortress																
Avenue																
Checkpoint																
Journey Medical Corp. (SG&A)																
Mustang																
Other**																
<b>Total Operating expenses</b>	<b>147,448</b>	<b>142,146</b>	<b>41,604</b>	<b>38,035</b>	<b>37,536</b>	<b>38,891</b>	<b>156,066</b>	<b>162,072</b>	<b>168,855</b>	<b>175,997</b>	<b>183,521</b>	<b>191,454</b>	<b>199,821</b>	<b>208,651</b>	<b>217,975</b>	<b>227,826</b>
<b>Total Operating expenses (Adjusted)</b>	<b>69,164</b>	<b>69,164</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Operating Income (Loss)</b>	<b>110,819</b>	<b>(96,546)</b>	<b>(30,017)</b>	<b>(12,859)</b>	<b>(24,417)</b>	<b>(23,160)</b>	<b>(90,454)</b>	<b>(30,665)</b>	<b>162,297</b>	<b>332,800</b>	<b>490,710</b>	<b>618,873</b>	<b>688,452</b>	<b>720,553</b>	<b>786,541</b>	<b>827,523</b>
<b>Operating Income (Loss) adjusted</b>	<b>-</b>	<b>(23,565)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Interest income (expense), net	2,559	2,687	227	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)	(2,189)	(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			5,913				5,913									
Change in FV of subsidiary convertible note	(27)	533														
Change in FV of investments	18,476															
Gain on deconsolidation of Caelum																
<b>Total Other Income</b>	<b>9,159</b>	<b>(10,369)</b>	<b>3,951</b>	<b>(2,458)</b>	<b>(2,663)</b>	<b>(2,765)</b>	<b>(4,329)</b>	<b>(10,754)</b>	<b>(11,292)</b>	<b>(11,857)</b>	<b>(12,449)</b>	<b>(13,072)</b>	<b>(13,726)</b>	<b>(14,412)</b>	<b>(15,132)</b>	<b>(15,889)</b>
<b>Pretax Income (loss from continuing operations)</b>	<b>(101,660)</b>	<b>(130,490)</b>	<b>(26,066)</b>	<b>(15,317)</b>	<b>(27,080)</b>	<b>(25,926)</b>	<b>(94,783)</b>	<b>(41,419)</b>	<b>151,005</b>	<b>320,943</b>	<b>478,261</b>	<b>605,801</b>	<b>674,727</b>	<b>706,141</b>	<b>771,409</b>	<b>811,634</b>
Income Tax Benefit (Provision)										32,094	71,739	109,044	134,945	148,290	177,424	202,908
<b>Tax Rate</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>10%</b>	<b>15%</b>	<b>18%</b>	<b>20%</b>	<b>21%</b>	<b>23%</b>	<b>25%</b>
<b>GAAP Net Income (Loss)</b>	<b>(101,660)</b>	<b>(130,490)</b>	<b>(26,066)</b>	<b>(15,317)</b>	<b>(27,080)</b>	<b>(25,926)</b>	<b>(94,783)</b>	<b>(41,419)</b>	<b>151,005</b>	<b>288,849</b>	<b>406,522</b>	<b>496,757</b>	<b>539,781</b>	<b>557,851</b>	<b>593,985</b>	<b>608,725</b>
<b>Adjusted (Non-GAAP) Loss</b>	<b>(35,842)</b>	<b>(35,842)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Less: net loss attributable to non-controlling interests	61,700	55,264	17,244	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
<b>Net Income (loss) attributable to common stockholders</b>	<b>(39,960)</b>	<b>(53,560)</b>	<b>(8,822)</b>	<b>(1,391)</b>	<b>(11,993)</b>	<b>(10,259)</b>	<b>(32,464)</b>	<b>14,867</b>	<b>203,914</b>	<b>338,584</b>	<b>453,272</b>	<b>540,702</b>	<b>581,090</b>	<b>596,682</b>	<b>630,485</b>	<b>643,036</b>
<b>GAAP-EPS</b>	<b>(0.73)</b>	<b>(0.76)</b>	<b>(0.11)</b>	<b>(0.02)</b>	<b>(0.15)</b>	<b>(0.13)</b>	<b>(0.40)</b>	<b>0.18</b>	<b>2.50</b>	<b>4.13</b>	<b>5.51</b>	<b>6.55</b>	<b>7.01</b>	<b>7.17</b>	<b>7.54</b>	<b>7.66</b>
<b>GAAP-EPS (Dil)</b>	<b>(0.60)</b>	<b>(0.76)</b>	<b>(0.11)</b>	<b>(0.02)</b>	<b>(0.15)</b>	<b>(0.13)</b>	<b>(0.40)</b>	<b>0.18</b>	<b>2.50</b>	<b>4.13</b>	<b>5.51</b>	<b>6.55</b>	<b>7.01</b>	<b>7.17</b>	<b>7.54</b>	<b>7.66</b>
<b>Adjusted Non-GAAP EPS (DIL)</b>	<b>(0.50)</b>	<b>(0.50)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Wgtd Avg Shrs (Bas) - '000s</b>	<b>54,711</b>	<b>71,077</b>	<b>80,852</b>	<b>80,933</b>	<b>81,013</b>	<b>81,094</b>	<b>80,973</b>	<b>81,297</b>	<b>81,623</b>	<b>81,950</b>	<b>82,278</b>	<b>82,608</b>	<b>82,939</b>	<b>83,271</b>	<b>83,605</b>	<b>83,940</b>
<b>Wgtd Avg Shrs (Dil) - '000s</b>	<b>65,502</b>	<b>71,077</b>	<b>80,852</b>	<b>80,933</b>	<b>81,013</b>	<b>81,094</b>	<b>80,973</b>	<b>81,297</b>	<b>81,623</b>	<b>81,950</b>	<b>82,278</b>	<b>82,608</b>	<b>82,939</b>	<b>83,271</b>	<b>83,605</b>	<b>83,940</b>

\*\* Includes the following partner companies: Aevitas, Cellvation, Cyprium, Helocyte and Tamid (a Fortress partner company that discontinued development and terminated the related licenses and clinical trial agreements with the University of North Carolina at Chapel Hill for all three of its preclinical product candidates).

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).

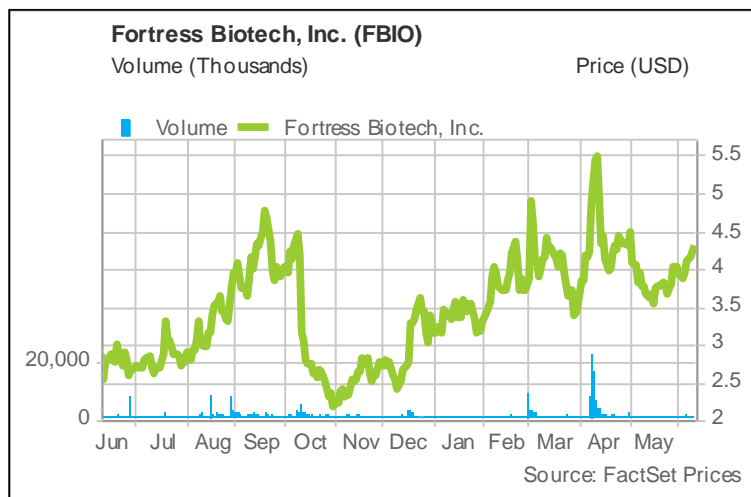
Journey Medical Corporation (internal Fortress company).

Cyprium Therapeutics (Private).

Fuji Yakuhin (subsidiary of Fuji-Japan – Not Covered)

**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
- Update – Buy May 10, 2021, Price Target \$24.00
- Update – Buy May 20, 2021, Price Target \$24.00
- Update – Buy June 11, 2021, Price Target \$24.00

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

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**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.

As of: 17-May-21

Ratings Distribution	Company Coverage		Investment Banking	
	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	24	71%	5	21%
Market Perform (Neutral)	10	29%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Total	34	100%	5	15%

**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.