UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K/A

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2020

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from ____ to _____.

Commission File No. 001-35366

FORTRESS BIOTECH, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**20-5157386**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
2 Gansevoort Street, 9th Floor New York, New York 10014	**10014**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's telephone number, including area code: (781) 652-4500

Securities registered pursuant to Section 12(b) of the Act:

Title of Class	Trading Symbol(s)	Exchange Name
Common Stock	FBIO	Nasdaq Capital Market
9.375% Series A Cumulative Redeemable Perpetual Preferred Stock	FBIOP	Nasdaq Capital Market

Securities registered pursuant to section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐
Non-accelerated filer ☒
Accelerated filer ☐
Smaller reporting company ☒
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter: $ 173,878,853 based upon the closing sale price of our common stock of $2.68 on that date. Common stock held by each officer and director and by each person known to own in excess of 5% of outstanding shares of our common stock has been excluded in that such persons may be deemed to be affiliates. The determination of affiliate status in not necessarily a conclusive determination for other purposes.

Class of Stock	Outstanding Shares as of March 18, 2021
Common Stock, $0.001 par value	94,907,448
9.375% Series A Cumulative Redeemable Perpetual Preferred Stock, $0.001 par value	3,427,138

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its 2020 Annual Meeting of Stockholders are incorporated by reference into Part III hereof.

EXPLANATORY NOTE

Fortress Biotech, Inc., a Delaware corporation (the "Company"), is filing this Amendment No. 1 on Form 10-K/A (the "10-K/A") to amend the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2020 (the "10-K"), originally filed with the Securities and Exchange Commission (the "SEC") on March 31, 2021, solely to correct the date of the independent auditor opinion. No other amendments have been made to the 10-K or to the audited financial statements for the fiscal year ending December 31, 2020.

This 10-K/A does not reflect events that may have occurred subsequent to the initial filing of the 10-K and does not modify or update the disclosure contained therein in any way, other than as required to reflect the amendments discussed above.

Item 8. Financial Statements and Supplementary Data.

The information required by this Item is set forth in the consolidated financial statements and notes thereto beginning at page F-1 of this Annual Report on Form 10-K/A.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) Financial Statements.

The following financial statements are filed as part of this report:

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Fortress Biotech, Inc. and subsidiaries
New York, New York

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Fortress Biotech, Inc. and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2020**,** in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Accounting for Oaktree Note

As described in Note 2 and Note 10 to the consolidated financial statements, in August 2020, the Company entered into a $60.0 million senior secured credit agreement with Oaktree ("Note"). In connection with the Oaktree Note, the Company issued warrants to Oaktree and certain of its affiliates to purchase up to 1,749,450 shares of common stock (see Note 14)

with a relative fair value of $4.4 million. In accounting for the Oaktree Note, the Company analyzed the Note and warrants and their related features for the appropriate accounting of the arrangement, including assessment of potential embedded derivatives.

We identified the accounting for the Oaktree Note as a critical audit matter. The principal considerations that led us to determine this matter was a critical audit matter included the inherent complexity in assessing the accounting for the Note and related embedded derivatives. Auditing these elements required complex auditor judgment and an increased level of audit effort, including the need for specialized knowledge and skill in assessing these elements.

The procedures we performed to address this critical audit matter included:

- Evaluating management's accounting policies and practices including the appropriateness of management's evaluation of various terms and conditions in the debt agreement, and assessment of embedded derivatives.
- Inspecting the underlying agreements and testing management's evaluation and application of the relevant accounting guidance to the terms of the agreements.
- Utilizing personnel with specialized knowledge and skill with complex debt instruments to assist in assessing the analysis and accounting for the Note and its features including the warrants.

We have served as the Company's auditor since 2016.

/s/ BDO USA, LLP
Boston, Massachusetts
March 31, 2021

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Balance Sheets
($ in thousands except for share and per share amounts)

	December 31, 2020	December 31, 2019
ASSETS		
Current assets		
Cash and cash equivalents	$ 233,351	$ 136,858
Accounts receivable, net	19,349	13,539
Inventory	1,404	857
Other receivables - related party	744	865
Prepaid expenses and other current assets	6,723	4,133
Total current assets	261,571	156,252
Property and equipment, net	11,923	12,433
Operating lease right-of-use asset, net	20,487	21,480
Restricted cash	1,645	16,574
Long-term investment, at fair value	17,566	11,148
Intangible asset, net	14,629	7,377
Other assets	1,013	1,158
Total assets	**$ 328,834**	**$ 226,422**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	$ 40,674	$ 35,451
Interest payable	—	1,042
Interest payable - related party	—	92
Income taxes payable	136	—
Notes payable, short-term	—	7,220
Operating lease liabilities, short-term	1,849	1,784
Derivative warrant liability	—	27
Partner company note payable, short-term	5,300	—
Total current liabilities	47,959	45,616
Notes payable, long-term (net of debt discount of $ 8,323 and $ 5,086 at December 31, 2020 and December 31, 2019, respectively)	51,677	77,436
Operating lease liabilities, long-term	22,891	23,712
Partner company note payable, long-term	7,359	4,990
Other long-term liabilities	1,949	2,136
Total liabilities	**131,835**	**153,890**
Commitments and contingencies		
Stockholders' equity		
Cumulative redeemable perpetual preferred stock, $.001 par value, 15,000,000 authorized, 5,000,000 designated Series A shares, 3,427,138 and 1,341,167 shares issued and outstanding as of December 31, 2020 and December 31, 2019, respectively; liquidation value of $25.00 per share	3	1
Common stock, $.001 par value, 150,000,000 and 100,000,000 shares authorized, 94,877,492 and 74,027,425 shares issued and outstanding as of December 31, 2020 and December 31, 2019, respectively	95	74
Common stock issuable, 0 and 251,337 shares as of December 31, 2020 and December 31, 2019, respectively	—	500
Additional paid-in-capital	583,000	461,874
Accumulated deficit	(482,760)	(436,234)
Total stockholders' equity attributed to the Company	100,338	26,215
Non-controlling interests	96,661	46,317
Total stockholders' equity	196,999	72,532
Total liabilities and stockholders' equity	**$ 328,834**	**$ 226,422**

The accompanying notes are an integral part of these consolidated financial statements.

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Operations
($ in thousands except for share and per share amounts)

	Year Ended December 31,	
	2020	**2019**
Revenue		
Product revenue, net	$ 44,531	$ 34,921
Revenue - related party	1,068	1,708
Net revenue	45,599	36,629
Operating expenses		
Cost of goods sold - product revenue	14,594	10,532
Research and development	61,275	75,236
Research and development - licenses acquired	2,834	6,090
Selling, general and administrative	61,166	55,590
Total operating expenses	139,869	147,448
Loss from operations	(94,270)	(110,819)
Other income (expense)		
Interest income	1,518	2,559
Interest expense and financing fee	(15,326)	(11,849)
Change in fair value of derivative liability	(1,189)	(27)
Change in fair value of investments	6,418	—
Gain on deconsolidation of Caelum	—	18,476
Total other income (expense)	(8,579)	9,159
Loss before income tax expense	(102,849)	(101,660)
Income tax expense	136	—
Net loss	**(102,985)**	**(101,660)**
Less: net loss attributable to non-controlling interests	56,459	61,700
Net loss attributable to common stockholders	**$ (46,526)**	**$ (39,960)**
Net loss per common share - basic and diluted	$ (1.43)	$ (1.86)
Net loss per common share attributable to non - controlling interests - basic and diluted	$ (0.78)	$ (1.13)
Net loss per common share attributable to common stockholders - basic and diluted	$ (0.65)	$ (0.73)
Weighted average common shares outstanding - basic and diluted	72,005,181	54,711,838

The accompanying notes are an integral part of these consolidated financial statements.

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Changes in Stockholders' Equity
($ in thousands except for share amounts)

	Series A Preferred Stock		Common Stock		Common Shares Issuable	Treasury Stock	Additional Paid-In Capital	Accumulated Deficit	Non-Controlling Interests	Total Stockholders' Equity
	Shares		Shares	Amount						
Balance at December 31, 2018	**1,000,000**	**$ 1**	**57,845,447**	**$ 58**	**$ 659**	**$ —**	**$ 397,408**	**$ (396,274)**	**$ 17,891**	**$ 19,743**
Stock-based compensation expense	—	—	—	—	—	—	13,188	—	—	13,188
Settlement of restricted stock units into common stock	—	—	1,905,367	2	—	—	(2)	—	—	—
Issuance of common stock under ESPP	—	—	98,007	—	—	—	123	—	—	123
Issuance of common stock for at-the-market offering, net	—	—	11,798,468	12	—	—	20,235	—	—	20,247
Issuance of Series A preferred stock for at-the-market offering, net	39,292	—	—	—	—	—	788	—	—	788
Issuance of Series A preferred stock for cash, net	301,875	—	—	—	—	—	5,307	—	—	5,307
Preferred A dividends declared and paid	—	—	—	—	—	—	(2,559)	—	—	(2,559)
Partner company's offering, net	—	—	—	—	—	—	78,607	—	—	78,607
Partner company's at-the-market offering, net	—	—	—	—	—	—	29,785	—	—	29,785
Issuance of partner company's common shares for license expenses	—	—	—	—	(164)	—	164	—	—	—
Issuance of partner company's common shares for research and development expenses	—	—	—	—	—	—	90	—	—	90
Issuance of partner company warrants in conjunction with Horizon Notes	—	—	—	—	—	—	888	—	—	888
Common shares issuable for 2017 Subordinated Note Financing interest expense	—	—	—	—	500	—	—	—	—	500
Common shares issued for 2017 Subordinated Note Financing interest expense	—	—	1,637,936	2	(495)	—	1,967	—	—	1,474
Common shares issuable for Opus interest expense	—	—	—	—	281	—	—	—	—	281
Common shares issued for Opus interest expense	—	—	345,375	—	(281)	—	662	—	—	381
Common shares issued for Opus debt	—	—	396,825	—	—	—	500	—	—	500
Non-controlling interest in subsidiaries	—	—	—	—	—	—	(85,277)	—	85,277	—
Deconsolidation of Caelum non-controlling interest	—	—	—	—	—	—	—	—	4,849	4,849
Net loss attributable to non-controlling interest	—	—	—	—	—	—	—	—	(61,700)	(61,700)
Net loss attributable to common stockholders	—	—	—	—	—	—	—	(39,960)	—	(39,960)
Balance at December 31, 2019	**1,341,167**	**$ 1**	**74,027,425**	**$ 74**	**$ 500**	**$ —**	**$ 461,874**	**$ (436,234)**	**$ 46,317**	**$ 72,532**

The accompanying notes are an integral part of these consolidated financial statements.

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Changes in Stockholders' Equity
($ in thousands except for share amounts)

	Series A Preferred Stock		Common Stock		Common Shares Issuable	Treasury Stock	Additional Paid-In Capital	Accumulated Deficit	Non-Controlling Interests	Total Stockholders' Equity
	Shares		Shares	Amount						
Balance at December 31, 2019	**1,341,167**	**$ 1**	**74,027,425**	**$ 74**	**$ 500**	**$ —**	**$ 461,874**	**$ (436,234)**	**$ 46,317**	**$ 72,532**
Stock-based compensation expense	—	—	—	—	—	—	13,451	—	—	13,451
Issuance of common stock related to equity plans	—	—	2,335,808	2	—	—	16	—	—	18
Issuance of common stock under ESPP	—	—	122,786	—	—	—	253	—	—	253
Issuance of common stock for at-the-market offering, net	—	—	17,409,257	18	—	—	45,809	—	—	45,827
Preferred A dividends declared and paid	—	—	—	—	—	—	(6,515)	—	—	(6,515)
Repurchase of Series A preferred stock, net	(5,000)	—	—	—	—	(70)	(2)	—	—	(72)
Retirement of Series A preferred stock	—	—	—	—	—	70	(70)	—	—	—
Issuance of Series A preferred stock for cash, net	2,090,971	2	—	—	—	—	35,541	—	—	35,543
Partner company's offering, net	—	—	—	—	—	—	53,749	—	—	53,749
Partner companies' at-the-market offering, net	—	—	—	—	—	—	70,988	—	—	70,988
Partner company's preferred stock offering, net	—	—	—	—	—	—	7,074	—	—	7,074
Issuance of common stock under partner company's ESPP	—	—	—	—	—	—	349	—	—	349
Partner company's dividends declared and paid	—	—	—	—	—	—	(237)	—	—	(237)
Partner company's exercise of warrants for cash	—	—	—	—	—	—	13	—	—	13
Partner company's exercise of options for cash	—	—	—	—	—	—	13	—	—	13
Reclass partner company's warrants from liability to equity	—	—	—	—	—	—	1,216	—	—	1,216
Issuance of partner company's common shares for research and development expenses	—	—	—	—	—	—	46	—	—	46
Common shares issued for 2017 Subordinated Note Financing interest expense	—	—	982,216	1	(500)	—	1,816	—	—	1,317
Issuance of warrants in conjunction with Oaktree Note	—	—	—	—	—	—	4,419	—	—	4,419
Non-controlling interest in partner companies	—	—	—	—	—	—	(106,803)	—	106,803	—
Net loss attributable to non-controlling interest	—	—	—	—	—	—	—	—	(56,459)	(56,459)
Net loss attributable to common stockholders	—	—	—	—	—	—	—	(46,526)	—	(46,526)
Balance at December 31, 2020	**3,427,138**	**$ 3**	**94,877,492**	**$ 95**	**$ —**	**$ —**	**$ 583,000**	**$ (482,760)**	**$ 96,661**	**$ 196,999**

The accompanying notes are an integral part of these consolidated financial statements.

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
($ in thousands)

	For the Year Ended December 31,	
	2020	**2019**
Cash Flows from Operating Activities:		
Net loss	$ (102,985)	$ (101,660)
Reconciliation of net loss to net cash used in operating activities:		
Depreciation expense	2,280	1,922
Bad debt expense	49	100
Amortization of debt discount	5,622	3,321
Non-cash interest	697	—
Amortization of product revenue license fee	1,420	1,174
Amortization of operating lease right-of-use assets	1,625	1,558
Stock-based compensation expense	13,451	13,188
Issuance of common stock for service	18	—
Issuance of partner company's common shares for research and development expenses	46	90
Common shares issuable for 2017 Subordinated Note Financing interest expense	—	500
Common shares issued for 2017 Subordinated Note Financing interest expense	1,317	1,474
Common shares issuable for 2019 Notes interest expense	—	281
Common shares issued for 2019 Notes interest expense	—	381
Change in fair value of derivative liability	1,189	27
Change in fair value of investment	(6,418)	—
Gain on deconsolidation of Caelum	—	(18,476)
Research and development-licenses acquired, expense	2,788	6,000
Increase (decrease) in cash and cash equivalents resulting from changes in operating assets and liabilities:		
Accounts receivable	(5,859)	(8,141)
Inventory	(547)	(179)
Other receivables - related party	121	1,230
Prepaid expenses and other current assets	(2,590)	1,798
Other assets	145	(882)
Accounts payable and accrued expenses	6,522	2,095
Accounts payable and accrued expenses - related party	—	(149)
Interest payable	(1,042)	8
Interest payable - related party	(92)	(5)
Income taxes payable	136	—
Lease liabilities	(1,388)	(1,365)
Other long-term liabilities	(187)	749
Net cash used in operating activities	(83,682)	(94,961)
Cash Flows from Investing Activities:		
Purchase of research and development licenses	(4,038)	(4,650)
Purchase of property and equipment	(1,926)	(2,345)
Purchase of intangible asset	(1,200)	(2,400)
Purchase of short-term investment (certificates of deposit)	—	(5,000)
Redemption of short-term investment (certificates of deposit)	—	22,604
Deconsolidation of Caelum	—	(1,201)
Net cash provided by (used in) continuing investing activities	(7,164)	7,008
Net cash provided by discontinued investing activities	—	13,089
Net cash provided by (used in) investing activities	(7,164)	20,097

The accompanying notes are an integral part of these consolidated financial statements.

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
($ in thousands)

	For the Year Ended December 31,	
	2020	**2019**
Cash Flows from Financing Activities:		
Payment of Series A preferred stock dividends	$ (6,515)	$ (2,559)
Purchase of treasury stock	(70)	—
Payment of costs related to purchase of treasury stock	(2)	—
Proceeds from issuance of Series A preferred stock	39,075	6,038
Payment of costs related to issuance of Series A preferred stock	(3,535)	(578)
Proceeds from issuance of common stock for at-the-market offering	47,509	20,680
Payment of costs related to issuance of common stock for at-the-market offering	(1,658)	(427)
Proceeds from issuance of Series A preferred stock for at-the-market offering	—	812
Payment of costs related to issuance of Series A preferred stock for at-the-market offering	—	(24)
Proceeds from issuance of common stock under ESPP	253	123
Proceeds from partner companies' ESPP	349	—
Partner company’s dividends declared and paid	(237)	—
Proceeds from partner companies' sale of stock	57,729	86,180
Payment of costs related to partner companies' sale of stock	(4,049)	(6,671)
Proceeds from partner companies' at-the-market offering	72,570	30,526
Payment of costs related to partner companies' at-the-market offering	(1,498)	(741)
Proceeds from partner company's preferred stock offering	8,000	—
Payment of costs related to partner company's preferred stock offering	(913)	—
Proceeds from exercise of partner company’s warrants	13	—
Proceeds from exercise of partner company’s options	13	—
Payment of debt issuance costs associated with 2017 Subordinated Note Financing	(93)	(118)
Payment of debt issuance costs associated with 2018 Venture Notes	(58)	(134)
Proceeds from partner company's Horizon Notes	—	15,000
Payment of debt issuance costs associated with partner company's Horizon Notes	—	(1,393)
Proceeds from Oaktree Note	60,000	—
Payment of debt issuance costs associated with Oaktree Note	(4,302)	—
Repayment of 2017 Subordinated Note Financing	(28,356)	—
Repayment of 2018 Venture Notes	(21,707)	—
Repayment of 2019 Notes	(9,000)	—
Repayment of partner company's Horizon Notes	(15,750)	—
Repayment of IDB Note	(14,858)	—
Installment payment related to intangible asset	(500)	—
Net cash provided by financing activities	172,410	146,714
Net increase in cash and cash equivalents and restricted cash	81,564	71,850
Cash and cash equivalents and restricted cash at beginning of period	153,432	81,582
Cash and cash equivalents and restricted cash at end of period	$ 234,996	$ 153,432
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 8,204	$ 5,444
Cash paid for interest - related party	$ 617	$ 456

The accompanying notes are an integral part of these consolidated financial statements.

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
($ in thousands)

	Year Ended December 31,	
	2020	**2019**
Supplemental disclosure of non-cash financing and investing activities:		
Settlement of restricted stock units into common stock	$ 2	$ 2
Common shares issuable for license acquired	$ —	$ 164
Issuance of partner company warrants in conjunction with Horizon Notes	$ —	$ 888
Issuance of warrants in conjunction with Oaktree Note	$ 4,419	$ —
Common shares issued from 2017 Subordinated Note Financing interest expense	$ 500	$ —
Common shares issued for 2019 Notes	$ —	$ 500
Unpaid fixed assets	$ 31	$ 187
Partner company's unpaid intangible assets	$ 7,472	$ 4,734
Partner company's previous paid offering cost	$ —	$ 833
Reclass partner company's warrants from liability to equity	$ 1,216	$ —
Unpaid partner company’s offering cost	$ —	$ 69
Unpaid partner company’s at-the-market offering cost	$ 84	$ —
Unpaid partner company’s preferred stock offering cost	$ 13	$ —
Unpaid debt offering cost	$ 13	$ 26
Unpaid at-the-market offering cost	$ 30	$ 6
Unpaid Series A preferred stock offering cost	$ —	$ 153
Unpaid research and development licenses acquired	$ —	$ 1,350
Retirement of Series A preferred stock	$ 70	$ —

The accompanying notes are an integral part of these consolidated financial statements.

1. Organization and Description of Business

Fortress Biotech, Inc. ("Fortress" or the "Company") is a biopharmaceutical company dedicated to acquiring, developing and commercializing pharmaceutical and biotechnology products and product candidates, which the Company does at the Fortress level, at its majority-owned and majority-controlled subsidiaries and joint ventures, and at entities the Company founded and in which it maintains significant minority ownership positions. Fortress has a talented and experienced business development team, comprising scientists, doctors and finance professionals, who identify and evaluate promising products and product candidates for potential acquisition by new or existing partner companies. Fortress through its partner companies has executed such arrangements in partnership with some of the world's foremost universities, research institutes and pharmaceutical companies, including City of Hope National Medical Center, Fred Hutchinson Cancer Research Center, St. Jude Children's Research Hospital, Dana-Farber Cancer Institute, Nationwide Children's Hospital, Cincinnati Children's Hospital Medical Center, Columbia University, the University of Pennsylvania, and AstraZeneca plc.

Following the exclusive license or other acquisition of the intellectual property underpinning a product or product candidate, Fortress leverages its business, scientific, regulatory, legal and finance expertise to help the partners achieve their goals. Partner companies then assess a broad range of strategic arrangements to accelerate and provide additional funding to support research and development, including joint ventures, partnerships, out-licensings, and public and private financings; to date, three partner companies are publicly-traded, and two have consummated strategic partnerships with industry leaders Alexion Pharmaceuticals, Inc. and InvaGen Pharmaceuticals, Inc. (a subsidiary of Cipla Limited).

Several of our partner companies possess licenses to product candidate intellectual property, including Aevitas Therapeutics, Inc. ("Aevitas"), Avenue Therapeutics, Inc. ("Avenue"), Baergic Bio, Inc. ("Baergic"), Caelum Biosciences, Inc. ("Caelum"), Cellvation, Inc. ("Cellvation"), Checkpoint Therapeutics, Inc. ("Checkpoint"), Cyprium Therapeutics, Inc. ("Cyprium"), Helocyte, Inc. ("Helocyte"), Journey Medical Corporation ("Journey" or "JMC"), Mustang Bio, Inc. ("Mustang") and Oncogenuity, Inc. ("Oncogenuity").

Liquidity and Capital Resources

Since inception, the Company's operations have been financed primarily through the sale of equity and debt securities, from the sale of partner companies, the proceeds from the exercise of warrants and stock options. The Company has incurred losses from operations and negative cash flows from operating activities since inception and expects to continue to incur substantial losses for the next several years as it continues to fully develop and prepare regulatory filings and obtain regulatory approvals for its existing and new product candidates. The Company's current cash and cash equivalents are sufficient to fund operations for at least the next 12 months. However, the Company will need to raise additional funding through strategic relationships, public or private equity or debt financings, sale of a partner company, grants or other arrangements to fully develop and prepare regulatory filings and obtain regulatory approvals for the existing and new product candidates, fund operating losses, and, if deemed appropriate, establish or secure through third parties manufacturing for the potential products, sales and marketing capabilities. If such funding is not available or not available on terms acceptable to the Company, the Company's current development plan and plans for expansion of its selling, general and administrative infrastructure will be curtailed. The Company also has the ability, subject to limitations imposed by Rule 144 of the Securities Act of 1933 and other applicable laws and regulations, to raise money from the sale of common stock of the public companies in which it has ownership positions. In addition to the foregoing, the Company does not expect any material impact on its development timelines, revenue levels and its liquidity due to the worldwide spread of COVID-19 (except as may be implicated by the Material Adverse Effect claimed by InvaGen in connection with their agreement with Avenue). However, the Company is continuing to assess the impact the spread of COVID-19 may have on its operations. Avenue will also continue to assess the alleged Material Adverse Effect claimed by InvaGen.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The Company's consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). The Company's consolidated financial statements include the accounts of the Company and the accounts of the Company's subsidiaries, listed above. All intercompany balances and transactions have been eliminated.

The accompanying consolidated financial statements include the accounts of the Company's subsidiaries. For consolidated entities where the Company owns less than 100% of the subsidiary, the Company records net loss attributable to non-controlling interests in its consolidated statements of operations equal to the percentage of the economic or ownership interest retained in such entities by the respective non-controlling parties. The Company also consolidates subsidiaries in which it owns less than 50% of the subsidiary but maintains voting control. The Company continually assesses whether changes to existing relationships or future transactions may result in the consolidation or deconsolidation of partner companies.

Use of Estimates

The Company's consolidated financial statements include certain amounts that are based on management's best estimates and judgments. The Company's significant estimates include, but are not limited to, useful lives assigned to long-lived assets, fair value of stock options and warrants, stock-based compensation, common stock issued to acquire licenses, investments, accrued expenses, provisions for income taxes and contingencies. Due to the uncertainty inherent in such estimates, actual results may differ from these estimates.

Revenue Recognition

The Company recognizes revenue under Accounting Standards Codification ("ASC") Topic 606, *Revenue from Contracts with Customers* ("ASC 606"). The core principle of this revenue standard is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The following five steps are applied to achieve that core principle:

Step 1: Identify the contract with the customer
Step 2: Identify the performance obligations in the contract
Step 3: Determine the transaction price
Step 4: Allocate the transaction price to the performance obligations in the contract
Step 5: Recognize revenue when the company satisfies a performance obligation

In order to identify the performance obligations in a contract with a customer, a company must assess the promised goods or services in the contract and identify each promised good or service that is distinct. A performance obligation meets ASC 606's definition of a "distinct" good or service (or bundle of goods or services) if both of the following criteria are met:

The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e., the good or service is capable of being distinct).

The entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e., the promise to transfer the good or service is distinct within the context of the contract).

If a good or service is not distinct, the good or service is combined with other promised goods or services until a bundle of goods or services is identified that is distinct.

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both. Variable consideration is included in the transaction price only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

The transaction price is allocated to each performance obligation on a relative standalone selling price basis. The transaction price allocated to each performance obligation is recognized when that performance obligation is satisfied, at a point in time or over time as appropriate.

The Company recognizes product revenue from sales of Ximino®, Targadox®, Exelderm®, Luxamend® and Ceracade®. The Company's performance obligation to deliver products is satisfied at the point in time that the goods are delivered to the customer, which is when the customer obtains title to and has the risks and rewards of ownership of the products.

The Company has variable consideration in the form of rights of return, coupons, and price protection to customers. The Company uses an expected value method to estimate variable consideration and whether the transaction price is constrained. Payment is due within months of when the customer is invoiced, with discounts for prompt payment. The Company recorded expense related to returns reserve of $1.3 million and $2.9 million for the years ended December 31, 2020 and December 31, 2019, respectively.

Because the Company's agreements for sales of product to its distributors can be cancelled early, prior to the termination date, they are deemed to have an expected duration of one year or less, and as such, the Company has elected the practical expedient in ASC 606-10-50-14(a) to not disclose information about its remaining performance obligations.

Discontinued Operations

Pursuant to the discontinued operations criteria set forth in ASC Subtopic 205-20-45,*Presentation of Financial Statements*, proceeds received from the Company's sale of its holdings in National Holding Corporation were classified as cash provided by discontinued investing activities in the Company's cash flow statement for the year ended December 31, 2019. See Note 3 for more information relating to the Company's discontinued operations.

Fair Value Measurement

The Company follows accounting guidance on fair value measurements for financial assets and liabilities measured at fair value on a recurring basis. Under the accounting guidance, fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability.

The accounting guidance requires fair value measurements be classified and disclosed in one of the following three categories:

Level 1: Quoted prices in active markets for identical assets or liabilities.
Level 2: Observable inputs other than Level 1 prices for similar assets or liabilities that are directly or indirectly observable in the marketplace.
Level 3: Unobservable inputs which are supported by little or no market activity and that are financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

Certain of the Company's financial instruments are not measured at fair value on a recurring basis but are recorded at amounts that approximate their fair value due to their liquid or short-term nature, such as accounts payable, accrued expenses and other current liabilities.

Segment Reporting

The Company operates in two operating and reportable segments, Dermatology Product Sales and Pharmaceutical and Biotechnology Product Development. The Company evaluates the performance of each segment based on operating profit or loss. There is no inter-segment allocation of interest expense and income taxes.

Cash and Cash Equivalents

The Company considers highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash and cash equivalents at December 31, 2020 and at December 31, 2019 consisted of cash and certificates of deposit in institutions in the United States. Balances at certain institutions have exceeded Federal Deposit Insurance Corporation insured limits and U.S. government agency securities.

Short-term Investments

The Company classifies its certificates of deposit as cash and cash equivalents or held to maturity in accordance with ASC 320,*Investments - Debt and Equity Securities*. The Company reassesses the appropriateness of the classification of its investments at the end of each reporting period.

At December 31, 2020, the Company had approximately $76.8 million and $15.0 million, respectively, in certificates of deposit, which the Company classified as cash and cash equivalents. There were no short term investments classified as held-to-maturity as of December 31, 2020.

Property and Equipment

Computer equipment, furniture & fixtures and machinery & equipment are recorded at cost and depreciated using the straight-line method over the estimated useful life of each asset. Leasehold improvements are amortized over the shorter of the estimated useful lives or the term of the respective leases.

In connection with Mustang's cell processing facility, Mustang incurred costs for the design and construction of the facility and the purchase of equipment; $0.5 million and $1.2 million are recorded in fixed assets – construction in process on the balance sheet at December 31, 2020 and 2019, respectively. Upon completion of the facility's construction, all costs associated with the buildout will be recorded as leasehold improvements and amortized over the shorter of the estimated useful lives or the term of the respective leases, upon the improvement being placed in service.

Restricted Cash

The Company records cash held in trust or pledged to secure certain debt obligations as restricted cash. As of December 31, 2020, the Company had $1.6 million of restricted cash representing pledges to secure letters of credit in connection with certain office leases. As of December 31, 2019, the Company had $16.6 million of restricted cash collateralizing a note payable of $15.0 million and $1.6 million in certain pledges to secure letters of credit in connection with certain office leases.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash from the consolidated balance sheets to the consolidated statements of cash flows for the years ended 2020, and 2019:

($ in thousands)	December 31, 2020	2019
Cash and cash equivalents	$ 233,351	$ 136,858
Restricted cash	1,645	16,574
Total cash and cash equivalents and restricted cash	$ 234,996	$ 153,432

Inventories

Inventories comprise finished goods, which are valued at the lower of cost and net realizable value, on a first-in, first-out basis. The Company evaluates the carrying value of inventories on a regular basis, taking into account anticipated future sales compared with quantities on hand, and the remaining shelf life of goods on hand.

Accounts Receivable, net

Accounts receivable consists of amounts due to the Company for product sales of JMC. The Company's accounts receivable reflects discounts for estimated early payment and for product estimated returns. Accounts receivable are stated at amounts due from customers, net of an allowance for doubtful accounts that are outstanding longer than the contractual payment terms are considered past due. The Company determines its allowance for doubtful accounts by considering a number of factors, including the length of time trade accounts receivable are past due and the customer's current ability to pay its obligation to the Company. The Company writes off accounts receivable when they become uncollectible. For the years ended December 31, 2020 and 2019 the allowance for doubtful accounts was approximately $0.1 million and $0.1 million, respectively.

The allowance for product estimated returns were $4.6 million and $5.4 million at December 31, 2020 and 2019, respectively, representing constrained revenue.

Investments at Fair Value

The Company elects the fair value option for its long-term investments at fair value (see Note 6). The decision to elect the fair value option, which is irrevocable once elected, is determined on an instrument by instrument basis and applied to an entire instrument. The net gains or losses, if any, on an investment for which the fair value option has been elected are recognized as a change in fair value of investments on the Consolidated Statements of Operations.

The Company has various processes and controls in place to ensure that fair value is reasonably estimated. While the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

Accounting for Warrants at Fair Value

The Company classifies as liabilities any contracts that (i) require net-cash settlement (including a requirement to net-cash settle the contract if an event occurs and if that event is outside the control of the Company) or (ii) give the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement).

The accounting treatment of derivative financial instruments requires that the Company record the warrants at their fair values as of the inception date of the agreement and at fair value as of each subsequent balance sheet date. Any change in fair value is recorded as non-operating, non-cash income or expense for each reporting period at each balance sheet date. The Company reassesses the classification of its derivative instruments at each balance sheet date. If the classification changes as a result of events during the period, the contract is reclassified as of the date of the event that caused the reclassification.

The Company assessed the classification of warrants issuable in connection with 2018 Venture Notes and determined that the Cyprium Contingently Issuable Warrants met the criteria for liability classification. Accordingly, the Company classified the Cyprium Contingently Issuable Warrants as a liability at their fair value and adjusted the instruments to fair value at each balance sheet date until the warrants were issued. Any change in the fair value of the Cyprium Contingently Issuable Warrants is recognized as "change in the fair value of derivative liabilities" in the Consolidated Statements of Operations.

During the year ended December 31, 2020, Cyprium raised approximately$8.0 million in Cumulative Redeemable Perpetual Preferred Shares ("Cyprium Offering," see Note 14). The Cyprium Offering coupled with the repayment of the 2018 Venture Debt (see Note 10), triggered the issuance of the Cyprium Warrant, in that a price per share could be established. As such these events resulted in Cyprium recording the Cyprium Warrant as issued rather than contingently issuable.

Opus Credit Facility, with Detachable Warrants

The Company accounted for the Opus Credit Facility (see Note 10) with detachable warrants in accordance with ASC 470,*Debt*. The Company assessed the classification of its common stock purchase warrants as of the date of the transaction and determined that such instruments met the criteria for equity classification. The warrants were reported on the Consolidated Balance Sheets as a component of additional paid in capital within stockholders' equity.

The Company recorded the related issue costs and value ascribed to the warrants as a debt discount of the Opus Credit Facility. The discount was amortized utilizing the effective interest method over the term of the Opus Credit Facility. The unamortized discount, if any, upon repayment of the Opus Credit Facility would be expensed to interest expense. In accordance with ASC Subtopic 470-20, the Company determined the weighted average effective interest rate of the debt was approximately 16% at December 31, 2019. The Company also evaluated the Opus Credit Facility and warrants in accordance with the provisions of ASC 815, *Derivatives and Hedging*, including consideration of embedded derivatives requiring bifurcation.

As of December 31, 2019, Opus dissolved and distributed its assets among its Limited Partners. The dissolution did not impact any of the terms under the Opus Credit Facility. During the year ended December 31, 2020, the Company used certain proceeds from the Oaktree Note to pay off the $9.0 million balance previously outstanding under the Opus Credit Facility/2019 Notes (see Note 10).

Issuance of Debt and Equity

The Company issues complex financial instruments which include both equity and debt features. The Company analyzes each instrument under ASC 480, *Distinguishing Liabilities from Equity,* ASC 815, *Derivatives and Hedging* and, ASC 470, *Debt*, in order to establish whether such instruments include any embedded derivatives.

The Company accounted for the Oaktree Note with detachable warrants in accordance with ASC 470,*Debt.* The Company assessed the classification of its common stock purchase warrants as of the date of the transaction and determined that such instruments met the criteria for equity classification. The note proceeds were allocated between the Oaktree Note and the warrants on a relative fair value basis. The warrants were reported on the Consolidated Balance Sheets as a component of additional paid in capital within stockholders' equity.

The Company recorded the related issue costs and value ascribed to the warrants as a debt discount of the Oaktree Note. The discount was amortized utilizing the effective interest method over the term of the Oaktree Note. The unamortized discount, if any, upon repayment of the Oaktree Note would be expensed to interest expense. In accordance with ASC Subtopic 470-20, the Company determined the weighted average effective interest rate of the debt was approximately 15.13% at December 31, 2020. The Company also evaluated the Oaktree Note and warrants in accordance with the provisions of ASC 815, *Derivatives and Hedging*, including consideration of embedded derivatives requiring bifurcation.

Long-Lived Assets

Long-lived assets, primarily fixed assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets might not be recoverable. The Company will perform a periodic assessment of assets for impairment in the absence of such information or indicators. Conditions that would necessitate an impairment assessment include a significant decline in the observable market value of an asset, a significant change in the extent or manner in which an asset is used, or a significant adverse change that would indicate that the carrying amount of an asset or group of assets is not recoverable. For long-lived assets to be held and used, the Company would recognize an impairment loss only if its carrying amount is not recoverable through its undiscounted cash flows and measures the impairment loss based on the difference between the carrying amount and estimated fair value. As of December 31, 2020 and 2019 there were no indicators of impairment.

Research and Development

Research and development costs are expensed as incurred. Advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made. Upfront and milestone payments due to third parties that perform research and development services on the Company's behalf will be expensed as services are rendered or when the milestone is achieved.

Research and development costs primarily consist of personnel related expenses, including salaries, benefits, travel, and other related expenses, stock-based compensation, payments made to third parties for license and milestone costs related to in-licensed products and technology, payments made to third party contract research organizations for preclinical and clinical studies, investigative sites for clinical trials, consultants, the cost of acquiring and manufacturing clinical trial materials, and costs associated with regulatory filings, laboratory costs and other supplies.

In accordance with ASC 730-10-25-1, *Research and Development*, costs incurred in obtaining technology licenses are charged to research and development expense if the technology licensed has not reached commercial feasibility and has no alternative future use. Such licenses purchased by the Company require substantial completion of research and development, regulatory and marketing approval efforts in order to reach commercial feasibility and has no alternative future use. Accordingly, the total purchase price for the licenses acquired during the period was reflected as research and development - licenses acquired on the Consolidated Statements of Operations for the years ended December 31, 2020 and 2019.

Contingencies

The Company records accruals for contingencies and legal proceedings expected to be incurred in connection with a loss contingency when it is probable that a liability has been incurred and the amount can be reasonably estimated.

If a loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, would be disclosed.

Leases

Effective January 1, 2019, the Company accounts for its leases under ASC 842, *Leases*. Under this guidance, arrangements meeting the definition of a lease are classified as operating or financing leases and are recorded on the consolidated balance sheet as both a right-of-use asset and lease liability, calculated by discounting fixed lease payments over the lease term at the rate implicit in the lease or the Company's incremental borrowing rate. Lease liabilities are increased by interest and reduced by payments each period, and the right-of-use asset is amortized over the lease term. For operating leases, interest on the lease liability and the amortization of the right-of-use asset result in straight-line rent expense over the lease term. For finance leases, interest on the lease liability and the amortization of the right-of-use asset results in front-loaded expense over the lease term. Variable lease expenses are recorded when incurred.

In calculating the right-of-use asset and lease liability, the Company elects to combine lease and non-lease components. The Company continues to account for leases in the prior period consolidated financial statements under ASC Topic 840, *Leases*.

Stock-Based Compensation

The Company expenses stock-based compensation to employees and non-employees over the requisite service period based on the estimated grant-date fair value of the awards and forfeitures, which are recorded upon occurence.

For stock-based compensation awards to non-employees, prior to the adoption of ASU 2018-07 on January 1, 2019, the Company remeasured the fair value of the non-employee awards at each reporting period prior to vesting and finally at the vesting date of the award. Changes in the estimated fair value of these non-employee awards were recognized as compensation expense in the period of change. Subsequent to the adoption of ASU 2018-07, the Company recognizes non-employees compensation costs over the requisite service period based on a measurement of fair value for each stock award at the time the award is granted.

The Company estimates the fair value of stock option grants using the Black-Scholes option pricing model. The assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment.

Income Taxes

The Company accounts for income taxes under ASC 740, *Income Taxes* ("ASC 740"). ASC 740 requires the recognition of deferred tax assets and liabilities for both the expected impact of differences between the financial statement and tax basis of assets and liabilities and for the expected future tax benefit to be derived from tax loss and tax credit carry forwards. ASC 740 additionally requires a valuation allowance to be established when it is more likely than not that all or a portion of deferred tax assets will not be realized.

ASC 740 also clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements and prescribes a recognition threshold and measurement process for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more-likely-than-not to be sustained upon examination by taxing authorities. ASC 740 also provides guidance on de-recognition, classification, interest and penalties, accounting in interim period, disclosure and transition. Based on the Company's evaluation, it has been concluded that there are no significant uncertain tax positions requiring recognition in the Company's financial statements. The 2017 through 2019 tax years are the only periods subject to examination upon filing of appropriate tax returns. The Company believes that its income tax positions and deductions would be sustained on audit and does not anticipate any adjustments that would result in a material change to its financial position.

The Company's policy for recording interest and penalties associated with audits is to record such expense as a component of income tax expense. There were no amounts accrued for penalties or interest as of or during the years ended December 31, 2020 and 2019. Management is currently unaware of any issues under review that could result in significant payments, accruals or material deviations from its position.

Non-Controlling Interests

Non-controlling interests in consolidated entities represent the component of equity in consolidated entities held by third parties. Any change in ownership of a subsidiary while the controlling financial interest is retained is accounted for as an equity transaction between the controlling and non-controlling interests.

Comprehensive Loss

The Company's comprehensive loss is equal to its net loss for all periods presented.

Recently Adopted Accounting Pronouncements

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820), - Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement*, which makes a number of changes meant to add, modify or remove certain disclosure requirements associated with the movement amongst or hierarchy associated with Level 1, Level 2 and Level 3 fair value measurements. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted upon issuance of the update. The Company adopted ASU No. 2018-13 as of January 1, 2020. The adoption of this update did not have a material impact on the Company's consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, *"Improvements to Nonemployee Share-Based Payment Accounting"*, which simplifies the accounting for share-based payments granted to nonemployees for goods and services. Under the ASU, most of the guidance on such payments to nonemployees would be aligned with the requirements for share-based payments granted to employees. The changes take effect for public companies for fiscal years starting after December 15, 2018, including interim periods within that fiscal year. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606. The Company adopted ASU No. 2018-07 as of January 1, 2019. The adoption of this update did not have a material impact on the Company's consolidated financial statements.

In July 2017, the FASB issued ASU 2017-11, *Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815): I. Accounting for Certain Financial Instruments with Down Round Features; II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*. Part I of this update addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. Part II of this update addresses the difficulty of navigating Topic 480, Distinguishing Liabilities from Equity, because of the existence of extensive pending content in the FASB Accounting Standards Codification. This pending content is the result of the indefinite deferral of accounting requirements about mandatorily redeemable financial instruments of certain nonpublic entities and certain mandatorily redeemable noncontrolling interests. The amendments in Part II of this update do not have an accounting effect. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. The adoption of this ASU on January 1, 2019, did not have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* in order to increase transparency and comparability among organizations by, among other provisions, recognizing lease assets and lease liabilities on the balance sheet for those leases classified as operating leases under previous GAAP. For public companies, ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 (including interim periods within those periods) using a modified retrospective approach and early adoption is permitted. In transition, entities may also elect a package of practical expedients that must be applied in its entirety to all leases commencing before the adoption date, unless the lease is modified, and permits entities to not reassess (a) the existence of a lease, (b) lease classification or (c) determination of initial direct costs, as of the adoption date, which effectively allows entities to carryforward accounting conclusions under previous U.S. GAAP. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides entities an optional transition method to apply the guidance under Topic 842 as of the adoption date, rather than as of the earliest period presented. The Company adopted Topic 842 on January 1, 2019, using the optional transition method by recording a right of use asset of $23.0 million, a lease liability of $26.8 million and eliminated deferred rent of approximately $3.8 million; there was no effect on opening retained earnings, and the Company continues to account for leases in the prior period financial statements under ASC Topic 840. In adopting the new standard, the Company elected to apply the practical expedients regarding the identification of leases, lease classification, indirect costs, and the combination of lease and non-lease components.

Recent Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, *"Financial Instruments – Credit Losses"*. The ASU sets forth a "current expected credit loss" (CECL) model which requires the Company to measure all expected credit losses for financial instruments held at the reporting date based on historical experience, current conditions, and reasonable supportable forecasts. This replaces the existing incurred loss model and is applicable to the measurement of credit losses on financial assets measured at amortized cost and applies to some off-balance sheet credit exposures. This ASU is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, with early adoption permitted. Recently, the FASB issued the final ASU to delay adoption for smaller reporting companies to calendar year 2023. The Company is currently assessing the impact of the adoption of this ASU on its consolidated financial statements.

In December 2019, the FASB issued ASU No. 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes ("ASU 2019-12"), which is intended to simplify various aspects related to accounting for income taxes. ASU 2019-12 removes certain exceptions to the general principles in Topic 740 and also clarifies and amends existing guidance to improve consistent application. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. The Company adopted the new guidance in the first quarter of 2021 and the adoption of this guidance did not to have a material impact on the financial statements.

3. Discontinued Operations

On November 14, 2018, the Company announced that it had reached an agreement with NHC Holdings, LLC ("NHC") to sell all of its shares of National Holdings Corporation, a diversified independent brokerage company (together with its subsidiaries, herein referred to as "NHLD" or "National") for total consideration of $22.9 million. Pursuant to the terms of the agreement with NHC the sale of the shares was subject to two closings. The first closing occurred on November 14, 2018 in which the Company sold approximately 3.0 million of its shares in NHLD and received $9.8 million in proceeds. The second closing occurred on February 11, 2019 upon the receipt of FINRA approval of the sale in which the Company received $13.1 million in proceeds for the sale of its remaining4.0 million shares of NHLD to NHC and two other minority holders. At December 31, 2019, the Company had no ownership interest in National.

The table below depicts the cash flows from the transaction for the year ended December 31, 2019:

($ in thousands)	For the Year Ended December 31, 2019
Investing activities	
Proceeds from sale of National	$ 13,089
Total cash provided by discontinued investing activities	$ 13,089

4. Collaboration and Stock Purchase Agreements

Caelum

Agreement with Alexion

In January 2019, Caelum, a subsidiary of the Company at that time, entered into a Development, Option and Stock Purchase Agreement (the "DOSPA") and related documents by and among Caelum, Alexion Therapeutics, Inc. ("Alexion"), the Company and Caelum security holders parties thereto (including Fortress, the "Sellers"). Under the terms of the agreement, Alexion purchased a 19.9% minority equity interest in Caelum for $30 million. Additionally, Alexion has agreed to make potential payments to Caelum upon the achievement of certain developmental milestones, in exchange for which Alexion obtained a contingent exclusive option to acquire the remaining equity in Caelum. The agreement also provides for potential additional payments, in the event Alexion exercises the purchase option, for up to $500 million, which includes an upfront option exercise payment and potential regulatory and commercial milestone payments. Alexion's 19.9% ownership does not participate in the potential additional payments.

The Company deconsolidated its holdings in Caelum immediately prior to the execution of the DOSPA. Following the DOSPA execution, the Company owns approximately 40% of the issued and outstanding capital stock of Caelum. The following table provides a summary of the assets and liabilities of Caelum impacted by the deconsolidation:

($ in thousands)	January 2019
ASSETS	
Current assets	
Cash and cash equivalents	$ 1,201
Prepaid expenses and other current assets	6
Total current assets	$ 1,207
LIABILITIES	
Current liabilities	
Accounts payable and accrued expenses	$ 2,246
Interest payable	198
Interest payable - related party	106
Note payable - related party	929
Note payable	9,914
Warrant liability	991
Total current liabilities	14,384
Net liability impacted by deconsolidation	**$ 13,177**

In connection with this transaction the Company recorded a gain resulting from the deconsolidation of Caelum on its consolidated financial statements for the year ended December 31, 2019:

($ in thousands)	Gain on deconsolidation of Caelum
Fair value of Caelum	$ 11,148
Net liabilities deconsolidated	13,177
Non-controlling interest share	(4,849)
Write off of MSA fees due Fortress	(1,000)
Gain on deconsolidation of Caelum	**$ 18,476**

In December 2019, following FDA feedback which resulted in the redesign and expansion of Caelum's planned clinical development program for CAEL-101, Caelum entered into an Amended and Restated DOSPA ("A&R DOSPA"), which amended the terms of the existing agreement with Alexion. The amendment modified the terms of Alexion's option to acquire the remaining equity in Caelum based on data from the expanded Phase II/III trials. The amendment also modified the development-related milestone events associated with the initial $30.0 million in contingent payments, provided for an additional $20.0 million in upfront funding, as well as funding of $60.0 million in exchange for an additional equity interest in Caelum at fair value upon achievement of a specific development-related milestone event.

On December 12, 2020, AstraZeneca ("AZ") announced its intention to acquire Alexion, with the acquisition expected to close by the third quarter of 2021, as the acquisition is subject to approval by both AZ and Alexion shareholders, as well as certain regulatory approvals, share listing approvals, and other customary closing conditions. The acquisition of Alexion by AZ triggers the Change of Control clause in the A&R DOSPA, such that Alexion's purchase option expires on the date that is six months after the closing of any Change of Control.

Avenue

Agreement with InvaGen

On November 12, 2018, Avenue entered into a Stock Purchase and Merger Agreement (the "Avenue SPMA") with InvaGen Pharmaceuticals Inc. ("InvaGen"), and Madison Pharmaceuticals Inc. (the "Merger Sub"), under which Avenue would be sold to InvaGen in a two-stage transaction. The first stage of the strategic transaction between InvaGen and Avenue closed in February 2019. InvaGen acquired approximately 5.8 million shares of Avenue's common stock at $ 6.00 per share for total gross consideration of $35.0 million, representing a 33.3% stake in Avenue's capital stock on a fully diluted basis. At the second stage closing, InvaGen would acquire the remaining shares of Avenue's common stock, pursuant to a reverse triangular merger with Avenue remaining as the surviving entity. The second stage closing is subject to the satisfaction of certain closing conditions, including conditions pertaining to the FDA approval, labeling, scheduling and the absence of any Risk Evaluation and Mitigation Strategy or similar restrictions in effect with respect to IV Tramadol, as well as the expiration of any waiting period applicable to the acquisition under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended ("HSR").

In October 2020, InvaGen communicated to Avenue that it believes a Material Adverse Effect (as defined in the Avenue SPMA) has occurred due to the impact of the COVID-19 pandemic on potential commercialization and projected sales of IV Tramadol, which means it is possible InvaGen could attempt to avoid its obligation to consummate the second stage closing under the Avenue SPMA, terminate the Avenue SPMA, and/or pursue monetary claims against Avenue and/or Fortress. Avenue disagrees with InvaGen's assertion that a Material Adverse Effect has occurred and has advised InvaGen of this position.

In February 2020, the U.S. Food and Drug Administration ("FDA") accepted the submission of Avenue's' New Drug Application ("NDA") for IV Tramadol for review and assigned a Prescription Drug User Fee Act ("PDUFA") date of October 10, 2020. In October 2020, Avenue announced that it had received a Complete Response Letter ("CRL") 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 acknowledgement letter from the FDA that Avenue's resubmission of its NDA is a complete, class 1 response to the CRL, and a PDUFA goal date was set for April 12, 2021.

In connection with the resubmission of Avenue's NDA, InvaGen communicated to Avenue that it believes the proposed label for IV Tramadol under certain circumstances would constitute a Material Adverse Effect on the purported basis that the proposed label for IV Tramadol would make the product commercially unviable, and in addition that the indiciation that the FDA approves may fail to satisfy a condition precedent to InvaGen's obligation to consummate the second stage closing of the Avenue SPMA. Avenue has notified InvaGen that it disagrees with InvaGen's assertions. Nevertheless, InvaGen may seek to avoid its obligation to consummate the second stage closing under the Avenue SPMA, terminate the Avenue SPMA, and/or pursue monetary claims against Avenue and/or Fortress.

Over the past several months, Avenue has communicated with InvaGen relating to InvaGen's assertions. Nevertheless, InvaGen has communicated to Avenue its desire to consider all options on the proposed merger, including the option to not consummate the merger. This indicates that InvaGen may attempt to avoid its obligations under the Avenue SPMA to consummate the merger, terminate the Avenue SPMA, and/or pursue monetary claims against Avenue and/or Fortress. As a result, the possible timing and likelihood of the completion of the merger are uncertain, and, accordingly, there can be no assurance that such transaction will be completed on the expected terms, anticipated schedule, or at all. During the pendency of any dispute regarding these matters, Avenue may be, and so long as the Avenue SPMA remains in place Avenue will be, prohibited from engaging in a change-of-control transaction, selling its rights to IV Tramadol or effecting an equity or debt financing, in each case without the prior written consent of InvaGen.

Subject to the terms and conditions described in the Avenue SPMA, InvaGen may also provide interim financing to Avenue in an amount of up to $7.0 million during the time period between February 8, 2019 and the Merger Transaction. Any amounts drawn on the interim financing will be deducted from the aggregate consideration payable to Company stockholders by virtue of the Merger Transaction. There have been no amounts drawn upon this interim financing as of December 31, 2020.

Prior to the closing of the Merger Transaction, Avenue will enter into a Contingent Value Rights Agreement (the "CVR Agreement") with a trust company as rights agent, pursuant to which holders of common shares of Avenue, other than InvaGen (each, a "Holder"), will be entitled to receive on Contingent Value Right ("CVR") for each share held immediately prior to the Merger Transaction.

Each CVR represents the right of its holder to receive a contingent cash payment pursuant to the CVR Agreement upon the achievement of certain milestones. If, during the period commencing on the day following the closing of the Merger Transaction until December 31, 2028, IV Tramadol generates at least $325 million or more in Net Sales (as defined in the CVR Agreement) in a calendar year, each Holder shall be entitled to receive their pro rata share of (i) if the product generated less than $400 million in Net Sales during such calendar year, 10% of Gross Profit (as defined in the CVR Agreement), (ii) if the product generated between $400 million and $500 million in Net Sales during such calendar year, 12.5% of Gross Profit, or (iii) if the product generated more than $500 million in Net Sales during such calendar year, 15% of Gross Profit. Additionally, at any time beginning on January 1, 2029 that IV Tramadol has generated at least $1.5 billion in aggregate Net Sales, then with respect to each calendar year in which IV Tramadol generates $100 million or more in Net Sales, each Holder shall be entitled to receive their pro rata share of an amount equal to 20% of the Gross Profit generated by IV Tramadol. These additional payments will terminate on the earlier of December 31, 2036 and the date (which may be extended by up to 6 months) that any person has received approval from the FDA for an Abbreviated New Drug Application or an FDA AP-rated 505(b)(2) NDA using IV Tramadol.

5. Property and Equipment

Fortress' property and equipment consisted of the following:

($ in thousands)	Useful Life (Years)	December 31, 2020	December 31, 2019
Computer equipment	3	$ 663	$ 648
Furniture and fixtures	5	1,199	1,162
Machinery & equipment	5	5,748	4,594
Leasehold improvements	2-15	10,580	9,358
Construction in progress [1]	N/A	499	1,157
Total property and equipment		18,689	16,919
Less: Accumulated depreciation		(6,766)	(4,486)
Property and equipment, net		$ 11,923	$ 12,433

Note 1: Relates to the Mustang cell processing facility.

Depreciation expenses of Fortress' property and equipment for the years ended December 31, 2020 and 2019 was $2.3 million and $1.9 million, respectively, and was recorded in research and development, and selling, general and administrative expense in the Consolidated Statements of Operations.

6. Fair Value Measurements

Certain of the Company's financial instruments are not measured at fair value on a recurring basis but are recorded at amounts that approximate their fair value due to their liquid or short-term nature, such as accounts payable, accrued expenses and other current liabilities.

Fair Value of Caelum

The Company values its investment in Caelum in accordance with ASC Topic 820,*Fair Value Measurements and Disclosures*, and as of December 31, 2020, estimated the fair value to be $17.6 million based on a per share value of $2.43. As of December 31, 2020, the following inputs were utilized to derive the value: risk free rate of return of 0.36%, volatility of 70% and a discount for lack of marketability of 21.0% to 31.0% based on maturity dates of various scenerios. Further, the Company considered the impact of the acquisition of Alexion by AZ, which if consummated, will shorten the timeframe in which the option will be exercised in accordance with the A&R DOSPA.

As of December 31, 2019, the estimated fair value of the Company's investment in Caelum was $11.1 million based on a per share value of $1.54. As of December 31, 2019, the following inputs were utilized to derive the value: risk free rate of return of 1.6%, volatility of 70% and a discount for lack of marketability of 28.7%.

Caelum Warrant Liability

The fair value of Caelum's warrant liability, which was issued in connection with Caelum's convertible note, was written up to the full value of the liability prior to the conversion of the notes in January 2019 (see Note 10). The fair value was measured using a Monte Carlo simulation valuation methodology. A summary of the weighted average (in aggregate) significant unobservable inputs (Level 3 inputs) used in measuring Caelum's warrant liabilities that are categorized within Level 3 of the fair value hierarchy as of January 2019 was as follows:

	January 2019
Risk-free interest rate	2.905% - 2.909 %
Expected dividend yield	— %
Expected term in years	3.84 - 3.96
Expected volatility	70 %

In connection with the DOSPA Caelum's convertible notes automatically converted into common shares of Caelum and the warrant liability payable to the placement agent in connection with the placement of the convertible notes was also issued (see Note 10).

($ in thousands)	Fair Value of Derivative Warrant Liability
Beginning balance at January 1, 2019	$ 991
Issuance of warrant due to conversion of note	(991)
Ending balance at December 31, 2019	$ —

Caelum Convertible Notes

Caelum's convertible debt was measured at fair value using the Monte Carlo simulation valuation methodology. A summary of the weighted average (in aggregate) significant unobservable inputs (Level 3 inputs) used in measuring Caelum's convertible debt that is categorized within Level 3. As of December 31, 2018, conversion of the Caelum Convertible Notes was probable and as such the fair value approximated cost. The Caelum Convertible Notes were converted during 2019. As of January 2019 the following inputs were utilized to derive the notes' fair value:

	January 2019
Risk-free interest rate	2.302 %
Expected dividend yield	— %
Expected term in years	0.32
Expected volatility	67 %

($ in thousands)	Caelum Convertible Notes, at fair value
Beginning balance at January 1, 2019	$ 9,914
Change in fair value of convertible notes	(9,914)
Ending balance at December 31, 2019	$ —

Cyprium Warrant Liability

The fair value of the Cyprium Contingently Issuable Warrants in connection with the 2018 Venture Debt was determined by applying management's estimate of the probability of issuance of the Contingently Issuable Warrants together with an option-pricing model, with the following key assumptions:

	December 31,	
	2020	2019
Risk-free interest rate	0.69 %	1.92 %
Expected dividend yield	—	—
Expected term in years	10.0	10
Expected volatility	85 %	93 %
Probability of issuance of the warrant	100 %	5 %

($ in thousands)	Cyprium Contingently Issuable Warrant Liability
Beginning balance at January 1, 2019	$ —
Change in fair value	27
Ending balance at December 31, 2019	$ 27
Change in fair value	1,189
Reclass partner company's warrants from liability to equity	(1,216)
Ending balance at December 31, 2020	$ —

The following tables classify into the fair value hierarchy of Fortress' financial instruments, measured at fair value on a recurring basis on the Consolidated Balance Sheets as of December 31, 2020 and 2019:

	Fair Value Measurement as of December 31, 2020			
($ in thousands)	Level 1	Level 2	Level 3	Total
Assets				
Fair value of investment in Caelum	$ —	$ —	$ 17,566	$ 17,566
Total	$ —	$ —	$ 17,566	$ 17,566

($ in thousands)	Fair Value Measurement as of December 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets				
Fair value of investment in Caelum	$ —	$ —	$ 11,148	$ 11,148
Total	$ —	$ —	$ 11,148	$ 11,148

($ in thousands)	Fair Value Measurement as of December 31, 2019			
	Level 1	Level 2	Level 3	Total
Liabilities				
Warrant liabilities	$ —	$ —	$ 27	$ 27
Total	$ —	$ —	$ 27	$ 27

The table below provides a roll forward of the changes in fair value of Level 3 financial instruments for the years ended December 31, 2020 and 2019:

($ in thousands)	Investment in Caelum	Warrant Liabilities	Total
Balance at December 31, 2019	$ 11,148	$ 27	$ 11,175
Change in fair value	—	1,189	1,189
Reclass partner company's warrants from liability to equity	—	(1,216)	(1,216)
Change in fair value of investments	6,418	—	6,418
Balance at December 31, 2020	$ 17,566	$ —	$ 17,566

($ in thousands)	Investment in Caelum	Caelum Convertible Notes	Warrants liabilities	Total
Balance at December 31, 2018	$ —	$ 9,914	$ 991	$ 10,905
Conversion of convertible notes	—	(9,914)	—	(9,914)
Issuance of warrant	—	—	(991)	(991)
Fair value of investment	11,148	—	—	11,148
Change in fair value of derivative liability	—	—	27	27
Balance at December 31, 2019	$ 11,148	$ —	$ 27	$ 11,175

7. Licenses Acquired

In accordance with ASC 730-10-25-1, *Research and Development*, costs incurred in obtaining technology licenses are charged to research and development expense if the technology licensed has not reached commercial feasibility and has no alternative future use. The licenses purchased by the Company require substantial completion of research and development, regulatory and marketing approval efforts in order to reach commercial feasibility and has no alternate use. As such, for the years ended December 31, 2020 and 2019, the total purchase price of licenses acquired, totaling approximately $2.8 million and $6.1 million, respectively, was classified as research and development-licenses acquired in the Consolidated Statements of Operations.

For the years ended December 31, 2020 and 2019, the Company's research and development-licenses acquired are comprised of the following:

	For the Year Ended December 31,	
($ in thousands)	**2020**	**2019**
Partner companies:		
Avenue	$ —	$ 1,000
Aevitas	62	—
Baergic	11	3,290
Cellvation	1	—
Helocyte	—	450
Mustang	2,489	1,350
Oncogenuity	271	—
Total	$ 2,834	$ 6,090

Aevitas

License Agreement with University of Massachusetts

On December 17, 2020, Aevitas entered into an exclusive license agreement (the "UMass license") with the University of Massachusetts to obtain an exclusive license to the University's intellectual property rights which relate to gene therapy for Factor H deficiency. For the year ended December 31, 2020, Aevitas recorded $0.1 million in connection with the execution of the UMass License.

Development milestone payments totaling approximately $1.0 million in the aggregate are due upon achievement of each milestone. Four net sales milestones totaling $4.0 million are due on licensed products as are high single digit royalties due on aggregate, annual, worldwide net sales of licensed products.

Avenue

License Agreement with Revogenex Ireland Ltd

In 2015, the Company purchased an exclusive license to IV Tramadol for the U.S. market from Revogenex, a privately held company in Dublin, Ireland, for an upfront fee of $3.0 million. The Company then assigned all of its right, title and interest to the exclusive license to Avenue. Under the terms of the license agreement assumed by Avenue, Revogenex is eligible to receive additional milestone payments upon the achievement of certain development milestones. As of December 31, 2020, one remaining development milestone of $3.0 million for approval of IV Tramadol by the FDA has not been achieved. In addition, royalty payments ranging from high single digit to low double digits are due on net sales of the approved product.

No expense was recorded in connection with this agreement in 2020. For the year ended December 31, 2019, Avenue recorded $1.0 million in connection with the filing of its NDA for IV Tramadol.

Baergic

AstraZeneca AB License Agreement

On December 17, 2019, Baergic entered intotwo license agreements: (i) a License Agreement (the "AZ License") with AstraZeneca AB ("AZ") to acquire an exclusive license to patent and related intellectual property rights pertaining to their proprietary compound Gamma-aminobutyric acid receptor A alpha 2 & 3 (GABAA α2,3) positive allosteric modulators (collectively, the "AZ IP"); and (ii) an Exclusive License Agreement (the "Cincinnati License") with Cincinnati Children's Hospital Medical Center ("Cincinnati") to acquire patent and related intellectual property rights pertaining to a GABA inhibitor program for neurological disorders (the "Cincinnati IP").

Pursuant to the terms of the AZ License, Baergic paid an upfront fee of $3.0 million and issued 2,492,192 common shares equal to 19.95% of Baergic to AZ as consideration for AZ License. In connection with the issuance of the shares, Baergic also provided AZ with anti-dilution protection up to $75 million. Baergic valued the stock grant to AZ utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.6%, weighted average cost of capital of 20.5%, and net of debt utilized, resulting in a value of $0.029 per share or $0.1 million on December 31, 2019.

Development milestone payments totaling approximately $75 million in the aggregate are due upon achievement of each milestone. Three net sales milestones totaling $130 million are due on licensed products as are high single digit royalties due on aggregate, annual, worldwide net sales of licensed products.

For the years ended December 31, 2020 and 2019, Baergic recorded expense of approximately $9,000 and nil, respectively, in connection with its licenses with AZ.

Cincinnati Children's License Agreement

Pursuant to the terms of the Cincinnati License, Baergic paid an upfront fee of $0.2 million as well as $30,000 for reimbursement of past patent expenses and issued 624,922 common shares equal to 5% of Baergic to Cincinnati as consideration for the license. In connection with the issuance of the shares, Baergic also provided Cincinnati with anti-dilution protection up to $15.0 million. Baergic valued the stock grant to Cincinnati utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.6%, weighted average cost of capital of 20.5%, and net of debt utilized, resulting in a value of $0.029 per share or $0.1 million on December 31, 2019.

Two development milestone payments of approximately $6.5 million are payable upon milestone achievements. Four net sales milestones totaling $21.0 million are due on licensed products as are low single digit royalties due on aggregate, annual, worldwide net sales of licensed products.

For the years ended December 31, 2020 and 2019, Baergic recorded expense of approximately $2,000 and nil, respectively, in connection with its Cincinnati License.

Cellvation

University of Texas Health Science Center at Houston License Agreement

In October 2016, Cellvation entered into a license agreement with the University of Texas Health Science Center at Houston ("University of Texas") for the treatment of traumatic brain injury using Autologous Bone Marrow Mononuclear Cells (the "Initial TBI License") for an upfront cash fee of approximately $0.3 million and the issuance of 500,000 common shares representing 5% of the outstanding shares of Cellvation. An additional 9 development milestones approximating $6.2 million are due in connection with the development of adult indications, and an additional 8 development milestones approximating $6.0 million are due in connection with the development of pediatric indications, as well as single digit royalty net sales and royalty milestones are due for the term of the contract. An additional minimum annual royalty ranging from $50,000 to $0.2 million is due, depending on the age of the license.

In addition, Cellvation entered into a secondary license with the University of Texas for a method and apparatus for conditioning cell populations for cell therapies (the "Second TBI License"). Cellvation paid an upfront fee of $50,000 in connection with the Second TBI License, and a minimum annual royalty of $0.1 million is payable beginning in the year after first commercial sale occurs (which minimum annual royalty is creditable against actual royalties paid under the Second TBI License). Additional payments of $0.3 million are due for the completion of certain development milestones and single digit royalties upon the achievement of net sales. In connection with the two University of Texas licenses, Cellvation granted each of two University of Texas researchers acting as consultants to Cellvation 500,000 shares of Cellvation common stock.

For the years ended December 31, 2020 and 2019, Cellvation recorded expense of approximately $1,000 and nil, respectively, in connection with its licenses with the University of Texas.

Checkpoint

Dana-Farber Cancer Institute License Agreement

In March 2015, Checkpoint entered into an exclusive license agreement with Dana-Farber Cancer Institute ("Dana-Farber") to develop a portfolio of fully human immuno-oncology targeted antibodies. The portfolio of antibodies licensed from Dana-Farber include antibodies targeting PD-L1, GITR and CAIX. Under the terms of the agreement, Checkpoint paid Dana-Farber an up-front licensing fee of $1.0 million in 2015 and, on May 11, 2015, granted Dana-Farber 500,000 shares of Checkpoint common stock, valued at $32,500 or $0.065 per share. The agreement included an anti-dilution clause that maintained Dana-Farber's ownership at 5% until such time that Checkpoint raised $10.0 million in cash in exchange for common shares. Pursuant to this provision, on September 30, 2015, Checkpoint granted to Dana-Farber an additional 136,830 shares of common stock valued at approximately $0.6 million and the anti-dilution clause thereafter expired. Dana-Farber is eligible to receive payments of up to an aggregate of approximately $21.5 million for each licensed product upon Checkpoint's successful achievement of certain clinical development, regulatory and first commercial sale milestones. In addition, Dana-Farber is eligible to receive up to an aggregate of $60.0 million upon Checkpoint's successful achievement of certain sales milestones based on aggregate net sales, in addition to royalty payments based on a tiered low to mid-single digit percentage of net sales. Dana-Farber receives an annual license maintenance fee of $50,000, which is creditable against future milestone payments or royalties. The portfolio of antibodies licensed from Dana-Farber include antibodies targeting PD-L1, GITR and CAIX.

In connection with the license agreement with Dana-Farber, Checkpoint entered into a collaboration agreement with TGTX, which was amended and restated in June 2019, to develop and commercialize the anti-PD-L1 and anti-GITR antibody research programs in the field of hematological malignancies, while Checkpoint retains the right to develop and commercialize these antibodies in the field of solid tumors. Michael Weiss, Chairman of the Board of Directors of Checkpoint is also the Executive Chairman, President and Chief Executive Officer and a stockholder of TGTX. Under the terms of the original agreement, TGTX paid Checkpoint $0.5 million, representing an upfront licensing fee. Upon the signing of the amended and restated collaboration agreement in June 2019, TGTX paid Checkpoint an additional $1.0 million upfront licensing fee. Checkpoint is eligible to receive substantive potential milestone payments for the anti-PD-L1 program of up to an aggregate of approximately $27.6 million upon TGTX's successful achievement of certain clinical development, regulatory and first commercial sale milestones. This is comprised of up to approximately $8.4 million upon TGTX's successful completion of clinical development milestones, and up to approximately$19.2 million upon regulatory filings and first commercial sales in specified territories. Checkpoint is also eligible to receive substantive potential milestone payments for the anti-GITR antibody program of up to an aggregate of approximately $21.5 million upon TGTX's successful achievement of certain clinical development, regulatory and first commercial sale milestones. This is comprised of up to approximately $7.0 million upon TGTX's successful completion of clinical development milestones, and up to approximately $14.5 million upon first commercial sales in specified territories. In addition, Checkpoint is eligible to receive up to an aggregate of $60.0 million upon TGTX's successful achievement of certain sales milestones based on aggregate net sales for both programs, in addition to royalty payments based on a tiered low double-digit percentage of net sales. Checkpoint also receives an annual license maintenance fee, which is creditable against future milestone payments or royalties. TGTX also pays Checkpoint for its out-of-pocket costs of material used by TGTX for their development activities. For the years ended December 31, 2020 and 2019, Checkpoint recognized approximately $1.0 million and $1.6 million, respectively, in revenue related to the collaboration agreement in the Consolidated Statements of Operations. The revenue for the year ended December 31, 2020 included a milestone of $925,000 upon the 12th patient dosed in a phase 1 clinical trial for the anti-PD-L1 antibody cosibelimab during March 2020.

Adimab, LLC Collaboration Agreement

In October 2015, Fortress entered into a collaboration agreement with Adimab to discover and optimize antibodies using their proprietary core technology platform. Under this agreement, Adimab optimized cosibelimab, Checkpoint's anti-PD-L1 antibody which it originally licensed from Dana-Farber. In January 2019, Fortress transferred the rights to the optimized antibody to Checkpoint, and Checkpoint entered into a collaboration agreement directly with Adimab on the same day. Under the terms of the agreement, Adimab is eligible to receive payments up to an aggregate of approximately $7.1 million upon the Checkpoint's successful achievement of certain clinical development and regulatory milestones, of which $4.8 million are due upon various filings for regulatory approvals to commercialize the product. In addition, Adimab is eligible to receive royalty payments based on a tiered low single digit percentage of net sales.

NeuPharma, Inc. License Agreement

In March 2015, the Company entered into an exclusive license agreement with NeuPharma, Inc. ("NeuPharma") to develop and commercialize novel irreversible, 3rd generation epidermal growth factor receptor ("EGFR") inhibitors including CK-101, on a worldwide basis (other than certain Asian countries). On the same date, the Company assigned all of its right and interest in the EGFR inhibitors to Checkpoint. Under the terms of the agreement, Checkpoint paid NeuPharma an up-front licensing fee of $1.0 million in 2015, and NeuPharma is eligible to receive payments of up to an aggregate of approximately $40.0 million upon Checkpoint's successful achievement of certain clinical development and regulatory milestones in up to three indications, of which $22.5 million are due upon various regulatory approvals to commercialize the products. In addition, NeuPharma is eligible to receive payments of up to an aggregate of $40 million upon Checkpoint's successful achievement of certain sales milestones based on aggregate net sales, in addition to royalty payments based on a tiered mid to high-single digit percentage of net sales.

Jubilant Biosys Limited License Agreement

In May 2016, Checkpoint entered into a license agreement with Jubilant Biosys Limited ("Jubilant"), whereby Checkpoint obtained an exclusive, worldwide license (the "Jubilant License") to Jubilant's family of patents covering compounds that inhibit BRD4, a member of the BET domain for cancer treatment, including CK-103. Under the terms of the Jubilant License, Checkpoint paid Jubilant an up-front licensing fee of $2.0 million, and Jubilant is eligible to receive payments up to an aggregate of approximately $89.0 million upon Checkpoint's successful achievement of certain preclinical, clinical development, and regulatory milestones, of which $59.5 million are due upon various regulatory approvals to commercialize the products. In addition, Jubilant is eligible to receive payments up to an aggregate of $89.0 million upon Checkpoint's successful achievement of certain sales milestones based on aggregate net sales, in addition to royalty payments based on a tiered low to mid-single digit percentage of net sales.

In connection with the Jubilant License, Checkpoint entered into a sublicense agreement with TGTX (the "Sublicense Agreement"), a related party, to develop and commercialize the compounds licensed in the field of hematological malignancies, with Checkpoint retaining the right to develop and commercialize these compounds in the field of solid tumors. Under the terms of the Sublicense Agreement, TGTX paid Checkpoint $1.0 million, representing an upfront licensing fee, recorded as collaboration revenue – related party and Checkpoint is eligible to receive substantive potential milestone payments up to an aggregate of approximately $87.2 million upon TGTX's successful achievement of clinical development and regulatory milestones. Such potential milestone payments may approximate $25.5 million upon TGTX's successful completion of three clinical development milestones for two licensed products, and up to approximately $61.7 million upon the achievement of five regulatory approvals and first commercial sales in specified territories for two licensed products. In addition, Checkpoint is eligible to receive potential milestone payments up to an aggregate of $89.0 million upon TGTX's successful achievement of three sales milestones based on aggregate net sales by TGTX, for two licensed products, in addition to royalty payments based on a mid-single digit percentage of net sales by TGTX. TGTX also pays Checkpoint for 50% of IND enabling costs and patent expenses. Checkpoint recognized $0.1 million and $0.1 million in revenue related to this arrangement during the year ended December 31, 2020 and 2019, respectively.

The collaborations with TGTX each contain single material performance obligations under Topic 606, which is the granting of a license that is functional intellectual property. Checkpoint's performance obligation was satisfied at the point in time when TGTX had the ability to use and benefit from the right to use the intellectual property. The performance obligations of the original agreements were satisfied prior to the adoption of Topic 606. The performance obligation of the amendment to the collaboration agreement was satisfied in June 2019.

The milestone payments are based on successful achievement of clinical development, regulatory, and sales milestones. Because these payments are contingent on the occurrence of a future event, they represent variable consideration and are constrained and included in the transaction price only when it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur. The sales-based royalty payments are recognized as revenue when the subsequent sales occur. Checkpoint also receives variable consideration for certain research and development, out-of-pocket material costs and patent maintenance related activities that are dependent upon the Company's actual expenditures under the collaborations and are constrained and included in the transaction price only when it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur. Revenue is recognized approximately when the amounts become due because it relates to an already satisfied performance obligation. For the year ended December 31, 2020, Checkpoint recognized the achievement of a clinical development milestone under its collaboration agreement with TGTX based upon their dosing of a 12th patient in a phase 1 clinical trial of cosibelimab. For the year ended December 31, 2019, Checkpoint did not receive any milestone or royalty payments.

Cyprium

License Agreement with the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development

In March 2017, Cyprium and the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (“NICHD”), part of the National Institutes of Health (“NIH”), entered into a Cooperative Research and Development Agreement to advance the clinical development of Phase 3 candidate CUTX-101 (copper histidinate injection) for the treatment of Menkes disease. Cyprium and NICHD also entered into a worldwide, exclusive license agreement to develop and commercialize AAV-based ATP7A gene therapy for use in combination with CUTX-101 for the treatment of Menkes disease and related copper transport disorders. Cyprium made an upfront payment of $0.1 million to NICHD upon execution of the exclusive license. NICHD is eligible to receive payments of up to an aggregate of approximately $1.7 million upon Cyprium’s successful achievement of certain clinical development and regulatory milestones for each licensed product, in addition to $1 million upon first commercial sale of a product candidate. In addition, in the event Cyprium sells a Priority Review Voucher that it receives from the FDA in connection with the approval of one of its product candidates (a "PRV") to a third party, it is obligated to pay to NIH 20% of the proceeds that it receives from such third party with respect to the first PRV sold, and 15% of the proceeds with respect to the second PRV sold. In the alternative, in the event Cyprium redeems a PRV in connection with seeking priority review for one of its product candidates, Cyprium will be obligated to pay NIH $15 million. For the years ended December 31, 2020 and 2019, no expense was recorded in connection with this license.

Helocyte

License Agreement with the City of Hope

Helocyte entered into the original license agreement with City of Hope National Medical Center (“COH”) on March 31, 2015, to secure: (i) an exclusive worldwide license for two immunotherapies for Cytomegalovirus (“CMV”) control in the post-transplant setting (known as Triplex and PepVax). In consideration for the license and option, Helocyte made an upfront payment of $0.2 million. In March 2016, Helocyte entered into amended and restated license agreements for each of its PepVax and Triplex immunotherapies programs with its licensor COH. The amended and restated licenses expand the intellectual property and other rights granted to Helocyte by COH in the original license agreement without modifying the financial terms. In 2018, Helocyte discontinued the development of PepVax and terminated the related license and clinical trial agreements with COH.

If Helocyte successfully develops and commercializes Triplex, COH is eligible to receive up to $3.7 million related to three financial milestones, $7.5 million in development milestones for the remaining two development milestones and up to $26.0 million in three milestones related to net sales for each licensed product. To date Helocyte has completed a Phase 2 clinical trial program for Triplex.

In April 2015, Helocyte secured the exclusive worldwide rights to an immunotherapy for the prevention of congenital CMV: ConVax (formerly Pentamer) from COH for an upfront payment of $45,000. If Helocyte successfully develops and commercializes Pentamer, COH could receive up to $5.5 million for the achievement of four development milestones, $26.0 million for three sales milestones, single digit royalties based on net sales reduced by certain factors and a minimum annual royalty of $0.75 million per year following a first marketing approval. For the year ended December 31, 2020 and 2019, Helocyte recorded nil and nil respectively in research and development - licenses acquired on the Consolidated Statement of Operations in connection with this license.

License with the National Institute of Allergy and Infectious Disease (NIAD)

In December 2019, Helocyte entered into a non-exclusive license agreement with the National Institute of Allergy and Infectious Disease (a division of the National Institutes of Health ("NIAID")) for the use of certain material pertaining to one of its product candidates. Helocyte agreed to pay an upfront fee of $0.5 million, which is payable in three separate installments, as well as a minimum annual royalty of $55,000. Additional payments of up to $1,050,000 in the aggregate are due upon the achievement of four developmental milestones, and royalties in the low single digits are due on net sales of licensed products.

For the year ended December 31, 2020 and 2019, Helocyte recordednil and $0.5 million, respectively, in research and development - licenses acquired on the Consolidated Statement of Operations in connection with this license.

Mustang

For the years ended December 31, 2020 and 2019 Mustang recorded the following expense in research and development – licenses acquired:

	For the Year Ended December 31,	
($ in thousands)	**2020**	**2019**
City of Hope National Medical Center		
CD123 (MB-102)[3]	$ 334	$ 250
IL13Rα2 (MB-101)[3]	334	—
HER2 (MB-103)[1]	500	—
CS1 (MB-104)	200	200
PSCA (MB-105)[3]	200	200
Spacer	334	—
Fred Hutch - CD20 (MB-106)[2]	300	—
Nationwide Children's Hospital - C134 (MB-108)	—	200
CSL Behring (Calimmune)	170	200
UCLA	—	300
SIRION LentiBOOST™	117	—
Total	$ 2,489	$ 1,350

License Agreement with City of Hope

In March 2015, Mustang entered into an exclusive license agreement with COH to acquire intellectual property rights pertaining to chimeric antigen receptor ("CAR") engineered T cell ("CAR T") technologies (the "COH License"). Pursuant to the COH License, Mustang paid COH an upfront fee of $2.0 million in April 2015 (included in *research and development-licenses acquired expenses* on the Consolidated Statement of Operations) and granted COH 1.0 million shares of Mustang's Class A Common Stock, representing 10% ownership of Mustang. Additional payments totaling $2.0 million are due upon the completion of two financial milestones, and payments totaling $14.5 million are due upon the completion of six development goals. Future mid-single digit royalty payments are due on net sales of licensed products, with a minimum annual royalty of $1.0 million.

In February 2017, the Company and COH amended and restated the COH License by entering into three separate amended and restated exclusive license agreements, one relating to CD123 (MB-102), one relating to IL13Rα2 (MB-101) and one relating to the Spacer technology, that amended the COH License in certain other respects, and collectively replace the COH License in its entirety. The total potential consideration payable to COH by the Company, in equity or cash, did not, in the aggregate, change materially from the COH License.

CD123 License with City of Hope (MB-102)

Pursuant to the CD123 License, Mustang and COH acknowledge that an upfront fee was paid under the COH License. In addition, an annual maintenance fee will continue to apply. COH is eligible to receive up to approximately $14.5 million in milestone payments upon and subject to the achievement of certain milestones. Royalty payments in the mid-single digits are due on net sales of licensed products. Mustang is obligated to pay COH a percentage of certain revenues received in connection with a sublicense in the mid-teens to mid-thirties, depending on the timing of the sublicense in the development of any product. In addition, equity grants made under the COH License were acknowledged, and the anti-dilution provisions of the COH License were carried forward. For the year ended December 31, 2020, Mustang expensed a non-refundable milestone payment of $0.3 million in connection with their public underwritten offerings. For the year ended December 31, 2019, Mustang expensed a non-refundable milestone payment of $0.3 million upon the twelfth patient dosed in a Phase 1 clinical study of CD123.

Nationwide Children's Hospital License Agreement (MB-108)

In February 2019, Mustang announced that it partnered and entered into an exclusive worldwide license agreement with Nationwide Children's Hospital ("Nationwide") to develop their C134 oncolytic virus (MB-108) for the treatment of glioblastoma multiforme ("GBM"). Mustang intends to combine MB-108 with MB-101 (IL13Rα2-specific CAR T) to potentially enhance efficacy in treating GBM. There were no expenses recorded in 2020 in connection with this license. For the year ended December 31, 2019, Mustang paid $0.2 million in consideration for the license to exclusive, worldwide rights to develop and commercialize products that incorporate data, know-how and/or patents related to MB-108 that were developed at Nationwide. Additional payments are due to Nationwide upon achievement of development and commercialization milestones totaling $152.8 million. Royalty payments in the low-single digits are due on net sales of licensed products.

CS1 License with City of Hope (MB-104)

On May 31, 2017, Mustang entered into an exclusive license agreement with the COH for the use of CS1-specific CAR T technology to be directed against multiple myeloma. Pursuant to the agreement, Mustang paid an upfront fee of $0.6 million on July 3, 2017, and owes an annual maintenance fee of $50,000, which began in 2019. Additional payments of up to $14.9 million are due upon and subject to the achievement of ten development milestones, and royalty payments in the mid-single digits are due on net sales of licensed products. During the year ended December 31, 2020, Mustang expensed a non-refundable milestone payment of $0.2 million in connection with this license for the issuance of the first patent related to the CS1 technology. During the year ended December 31, 2019, Mustang expensed a non-refundable milestone payment of $0.2 million upon the first patient dosed in a Phase 1 clinical study of the CS1 CAR T.

PSCA License with City of Hope (MB-105)

On May 31, 2017, Mustang entered into an exclusive license agreement with the COH for the use of prostate stem cell antigen ("PSCA") CAR T technology to be used in the treatment of prostate cancer. Pursuant to the agreement, Mustang paid an upfront fee of $0.3 million on July 3, 2017, and owes an annual maintenance fee of $50,000, which began in 2019. Additional payments of up to $14.9 million are due upon and subject to the achievement of ten development milestones, and royalty payments in the mid-single digits are due on net sales of licensed products. During the years ended December 31, 2020 and 2019, Mustang recorded an expense of $0.2 million and nil, respectively, in connection with the acquisition of this license.

CSL Behring (Calimmune) License (MB-107)

On August 23, 2019, Mustang entered into a non-exclusive license agreement with CSL Behring (Calimmune, Inc.) ("Calimmune License") for the Cytegrity™ stable producer cell line for the production of viral vector for Mustang's lentiviral gene therapy program for the treatment of XSCID. Mustang had previously licensed the XSCID gene therapy program from St. Jude in August 2018. Mustang paid $0.2 million in consideration for the Calimmune license. CSL Behring is eligible to receive additional payments totaling $1.2 million upon the achievement of three development and commercialization milestones. Royalty payments in the low-single digits are due on net sales of licensed products. Upon the execution of the Calimmune License, Mustang expensed a non-refundable milestone payment of $0.2 million and $0.2 million in the Consolidated Statement of Operations for the years ended December 31, 2020 and 2019, respectively.

University of California License

On March 17, 2017, Mustang entered into an exclusive license agreement with the Regents of the University of California ("UCLA License") to acquire intellectual property rights in patent applications related to the engineered anti-prostate stem cell antigen antibodies for cancer targeting and detection. Pursuant to the UCLA License, Mustang paid UCLA an upfront fee of $0.2 million on April 25, 2017. Annual maintenance fees also apply; additional payments are due upon achievement of certain development milestones totaling $14.3 million, and royalty payments in the mid-single digits are due on net sales of licensed products. In September 2019, COH commenced its Phase 1 clinical trial resulting in the achievement of a development milestone, and as a result Mustang recorded an expense of $0.3 million. There were no expenses recorded in 2020 in connection with this license.

HER2 License with City of Hope (MB-103)

On May 31, 2017, Mustang entered into an exclusive license agreement with the COH for the use of human epidermal growth factor receptor 2 ("HER2") CAR T technology ("HER2 Technology"), which will be applied in the treatment of glioblastoma multiforme. Pursuant to the agreement, Mustang paid an upfront fee of $0.6 million and owes an annual maintenance fee of $50,000, which began in 2019. Additional payments of up to $14.9 million are due upon and subject to the achievement of ten development milestones, and royalty payments in the mid-single digits are due on net sales of licensed products. During the year ended December 31, 2020, Mustang recorded a non-refundable milestone payment of $0.5 million in connection with the twelfth patient treated in the Phase 1 clinical study of HER2 CAR T technology at COH. For the year ended December 31, 2019, Mustang expensed a non-refundable milestone payment of $0.2 million upon the first patient dosed in the Phase 1 clinical study of HER2.

St. Jude Children's Research Hospital License (MB-107 and MB-207)

On August 2, 2018, Mustang entered into an exclusive worldwide license agreement with St. Jude for the development of a first-in-class *ex vivo* lentiviral gene therapy for the treatment of X-linked severe combined immunodeficiency ("XSCID"). Mustang paid $1.0 million in consideration for the exclusive license in addition to an annual maintenance fee of $0.1 million (which began in 2019). St. Jude is eligible to receive payments totaling $13.5 million upon the achievement of five development and commercialization milestones. Royalty payments in the mid-single digits are due on net sales of licensed products. During the years ended December 31, 2020 and 2019 Mustang did not record any expenses in connection with this license.

Manufacturing License with City of Hope

On January 3, 2018, Mustang entered into a non-exclusive license agreement with COH to acquire patent and licensed know-how rights related to developing, manufacturing, and commercializing licensed products. The Company paid $0.1 million in consideration for the licenses to the patent rights and the licensed know-how in addition to an annual maintenance fee. Royalty payments in the low-single digits are due on net sales of licensed products. During the years ended December 31, 2020 and 2019, respectively, Mustang recorded no expense in connection with the COH license.

IL13Rα2 License with City of Hope (MB-101)

Pursuant to the IL13Rα2 License, Mustang and COH acknowledge that an upfront fee was paid under the Original License. In addition, an annual maintenance fee will continue to apply. COH is eligible to receive up to approximately $14.5 million in milestone payments upon and subject to the achievement of certain milestones. Royalty payments in the mid-single digits are due on net sales of licensed products. Mustang is obligated to pay COH a percentage of certain revenues received in connection with a sublicense in the mid-teens to mid-thirties, depending on the timing of the sublicense in the development of any product. In addition, equity grants made under the Original License were acknowledged, and the anti-dilution provisions of the Original License were carried forward. For the year ended, December 31, 2020, Mustang expensed a non-refundable milestone payment of $0.3 million in connection with their public underwritten offerings. There wasno expense recorded for the year ended December 31, 2019.

Spacer License with City of Hope

Pursuant to the Spacer License, Mustang and COH acknowledge that an upfront fee was paid under the Original License. In addition, an annual maintenance fee will continue to apply. No royalties are due if the Spacer technology is used in conjunction with a CD123 CAR or an IL13Rα2 CAR, and royalty payments in the low single digits are due on net sales of licensed products if the Spacer technology is used in conjunction with other intellectual property. Mustang is obligated to pay COH a percentage (in the mid-thirties) of certain revenues received in connection with a sublicense. In addition, equity grants made under the Original License were acknowledged, and the anti-dilution provisions of the Original License were carried forward. For the year ended December 31, 2020, Mustang expensed a non-refundable milestone payment of $0.3 million in connection with their public underwritten offerings. There was no expense recorded for the year ended December 31, 2019.

IV/ICV Agreement with City of Hope

On February 17, 2017, Mustang entered into an exclusive license agreement (the "IV/ICV Agreement") with COH to acquire intellectual property rights in patent applications related to the intraventricular and intracerebroventricular methods of delivering T cells that express CARs. Pursuant to the IV/ICV Agreement, Mustang paid COH an upfront fee of $0.1 million in March 2017. COH is eligible to receive up to approximately $0.1 million in milestone payments upon the achievement of a certain milestone as well as an annual maintenance fee. Royalty payments in the low-single digits are due on net sales of licensed products and services. During the years ended December 31, 2020 and 2019, Mustang recorded no expense in connection with the IV/ICV Agreement.

Fred Hutchinson Cancer Research Center License (MB-106)

On July 3, 2017, Mustang entered into an exclusive, worldwide licensing agreement with Fred Hutchinson Cancer Research Center ("Fred Hutch") for the use of a CAR T therapy related to autologous T cells engineered to express a CD20-specific chimeric antigen receptor ("CD20 Technology License"). Pursuant to the CD20 Technology License, Mustang paid Fred Hutch an upfront fee of $0.3 million and will owe an annual maintenance fee of $50,000 on each anniversary of the license until the achievement by Mustang of regulatory approval of a licensed product using CD20 Technology. Additional payments are due for the achievement of certain development milestones totaling $ 39.1 million and royalty payments in the mid-single digits are due on net sales of licensed products. During the years ended December 31, 2020 and 2019 Mustang recorded expenses totaling $0.3 million and nil, respectively, in connection with the CD20 Technology License.

Harvard College License

On November 20, 2017, Mustang entered into an exclusive, worldwide license agreement with President and Fellows of Harvard College (the "Harvard Agreement") for the use of gene editing, via the use of CRISPR/Cas9, to be used in enhancing the efficacy of chimeric antigen receptor T (CAR T) cell therapies for solid tumor indications and to generate universal off the shelf CAR T cell therapies for both liquid and solid tumor indications. Pursuant to the Harvard Agreement, Mustang paid Harvard College an upfront fee of $0.3 million and will owe an annual maintenance fee of $25,000 and $50,000 for calendar years 2018 and 2019, respectively, and $100,000 for each subsequent calendar year during the term of the agreement. Additional payments are due for the achievement of seven development milestones totaling $16.7 million and royalty payments in the low-single digits are due on the net sales of licensed products. During the years ended December 31, 2020 and 2019, Mustang recorded no expense in connection with the Harvard Agreement.

Mustang terminated the Harvard Agreement in January 2020.

SIRION Biotech GmbH - LentiBOOST™ (MB-207)

In October, 2020, Mustang announced a worldwide licensing agreement with SIRION Biotech ("SIRION") for the rights to SIRION's LentiBOOST™ technology for the development of MB-207, Mustang's lentiviral gene therapy for the treatment of previously transplanted patients with X-linked severe combined immunodeficiency (the "SIRION Technology License"). Pursuant to the SIRION Technology License, which requires payment in Euro, the Company paid SIRION a one-time upfront fee of $0.1 million (€0.1 million) during 2020. In addition, five future development milestone payments totaling up to approximately $5.6 million (€4.7 million) in the aggregate are due upon achievement of certain milestones. Additional milestone payments totaling up to $4.1 million (€3.5 million) in the aggregate are due in connection with the achievement of three commercial milestones and low- to mid-single digit royalties are due on aggregate cumulative worldwide net sales of licensed products.

For the year ended December 31, 2020, Mustang expensed an up-front payment of $0.1 million. There was no expense recorded for the year ended December 31, 2019.

Oncogenuity

Effective May 6, 2020, Oncogenuity entered into a license agreement with the Trustees of Columbia University in the City of New York ("Columbia") to develop novel oligonucleotides for the treatment of genetically driven cancers (the "Columbia License"). The proprietary platform produces oligomers, known as "ONCOlogues."

As consideration for the Columbia License, Oncogenuity paid an upfront fee of $0.3 million, and Fortress transferred to Columbia 1,000,000 shares of Oncogenuity common stock, representing 10.00% ownership of Oncogenuity. In connection with the share transfer, Oncogenuity also provided Columbia with limited anti-dilution protection. Oncogenuity valued the stock grant to Columbia utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 41.7%, weighted average cost of capital of 20.5%, and net of debt utilized, resulting in a value of $0.021 per share or $21,000 for the year ended December 31, 2020. Since a portion of the acquisition of the license was settled through the transfer of shares of Oncogenuity's common stock, this transaction fell within the scope of ASC Topic 718, *Compensation-Stock Compensation*, since equity was transferred in exchange for goods (the license). Specifically, Oncogenuity recorded the cost of the license as a non-employee share based payment, measured at the grant date fair value of the common stock. The common shares were equity-classified. The anti-dilution provision was concluded to represent a performance condition tied to a future liquidity event, which was not considered as probable to occur at December 31, 2020, because it was deemed outside of Oncogenuity's control.

Development milestone payments totaling up to approximately $18.0 million in the aggregate are due upon achievement of certain milestones in connection with the initial indication. Additional milestone payments totaling up to $15.3 million in the aggregate are due in connection with product development milestones for subsequent indications. A $15.0 million sales milestone is due upon the achievement of a licensed product sales threshold, and low- to mid-single digit royalties are due on aggregate cumulative worldwide net sales of licensed products.

For the year ended December 31, 2020, Oncogenuity recorded expense of $0.3 million in research and development - licenses acquired in the Company's Consolidated Statement of Operations.

Tamid

Licenses with the University of North Carolina

On November 30, 2017, Tamid entered into three exclusive AAV gene therapies licensing arrangements with the University of North Carolina at Chapel Hill ("UNC"). The preclinical product candidates acquired through these licenses target ocular manifestations of Mucopolysaccharidosis type 1 (MPS1), dysferlinopathies and corneal transplant rejections. The three therapies were developed in the lab of Matthew Hirsch, Ph.D., Assistant Professor, Ophthalmology at the UNC Gene Therapy center. In December 2019, Tamid discontinued the development of all three candidates and terminated the related licenses and clinical trial agreements with UNC. For the years ended December 31, 2020 and 2019, Tamid recorded no expense in connection with these licenses.

8. Sponsored Research and Clinical Trial Agreements

Aevitas

	For the Year Ended December 31,	
($ in thousands)	**2020**	**2019**
UMass - adeno-associated virus ("AAV")	$ 381	$ —
UPenn - AAV	567	1,067
Duke - AAV	—	66
Total	$ 948	$ 1,133

On January 25, 2018, Aevitas entered into a Sponsored Research Agreement with the University of Massachusetts ("UMass SRA") for certain continued research and development activities related to the development of adeno-associated virus ("AAV") gene therapies in complement-mediated diseases. The total amount to be funded by Aevitas under the UMass SRA is $0.8 million. Pursuant to the terms of the UMass SRA, Aevitas paid $0.8 million which was due upon execution. On May 31, 2020, a First Amendment to the UMass SRA was signed and the total amount to be funded was $0.7 million, including $0.4 million due within 30 days of execution. For the years ended December 31, 2020 and 2019, Aevitas recorded expense of approximately $0.4 million and nil, respectively, in connection with the UMass SRA. The expense was recorded in research and development expenses in the Company's Consolidated Statement of Operations.

On July 24, 2018, Aevitas entered into a Sponsored Research Agreement with the Trustees of the University of Pennsylvania ("UPenn SRA") for certain continued research and development activities related to the development of AAV gene therapies in complement-mediated diseases. The total amount to be funded by Aevitas under the UPenn SRA is $2.0 million. Pursuant to the terms of the UPenn SRA, Aevitas paid $0.3 million which was due upon execution. For the years ended December 31, 2020 and 2019, Aevitas recorded expense of approximately $0.6 million and $1.1 million, respectively, in connection with the UPenn SRA. The expense was recorded in research and development expenses in the Company's Consolidated Statement of Operations.

On September 1, 2019, Aevitas entered into a Sponsored Research Arrangement ("SRA") with Duke University School of Medicine ("Duke"). For the years ended December 31, 2020 and 2019, Aevitas recorded approximately nil and $0.1 million, respectively, for the purpose of conducting a study to identify a dose range for AAV8 vectors in Dry Age-related Macular Degeneration ("Dry AMD") in research and development expense on the Consolidated Statement of Operations.

Cellvation

In October 2016, Cellvation entered research funding agreement with the University of Texas in connection with the license for a method and apparatus for conditioning cell populations for cell therapies. In connection with this agreement Cellvation agreed to fund $0.8 million of research quarterly through March 31, 2018. The agreement was revised effective May 1, 2017, with quarterly payments extended through December 31, 2018. For the years ended December 31, 2020 and 2019, Cellvation recorded an expense of nil and $0.1 million, respectively, representing amounts due under this arrangement.

Mustang

For the years ended December 31, 2020 and 2019 Mustang recorded the following expense in research and development for sponsored research and clinical trial agreements:

	For the Year Ended December 31,	
($ in thousands)	**2020**	**2019**
City of Hope National Medical Center	$ 500	$ 2,000
CD123 (MB-102)	433	1,202
IL13Rα2 (MB-101)	530	876
Manufacturing	—	457
CS1 (MB-104)	885	—
HER2 (MB-103)	1,519	—
PSCA (MB-105)	204	—
Beth Israel Deaconess Medical Center - CRISPR	—	69
St. Jude Children's Research Hospital - XSCID (MB-107)	1,842	777
Fred Hutchinson Cancer Research Center - CD20 (MB-106)	1,804	762
Total	$ 7,717	$ 6,143

City of Hope Sponsored Research Agreement

In March 2015, in connection with Mustang's license with COH for the development of CAR T, Mustang entered into a Sponsored Research Agreement in which Mustang will fund continued research in the amount of $2.0 million per year, payable in four equal annual installments, until 2020. The research covered under this arrangement is for IL13Rα2 (MB-101), CD123 (MB-102) and the Spacer technology. For the years ended December 31, 2020 and 2019, Mustang incurred expense of $0.5 million and $2.0 million, respectively and recorded as research and development expense in the Company's Consolidated Statement of Operations.

CD123 (MB-102) Clinical Research Support Agreement

On February 17, 2017, Mustang entered into a Clinical Research Support Agreement for CD123. Pursuant to the terms of this agreement, Mustang made an upfront payment of approximately $20,000 and will contribute an additional $0.1 million per patient in connection with the on-going investigator-initiated study. Further, Mustang agreed to fund approximately $ 0.2 million over three years pertaining to the clinical development of CD123. For the years ended December 31, 2020 and 2019, Mustang recorded approximately $0.4 million and $1.2 million, respectively, in research and development expenses in the Company's Consolidated Statements of Operations.

CS1(MB-104) Clinical Research Support Agreement

In June 2020, Mustang entered into a clinical research and support agreement with COH in connection with an Investigator-sponsored study conducted under an Institutional Review Board-approved, investigator-initiated protocol entitled: "Phase I Study to Evaluate Cellular Immunotherapy Using Memory-Enriched T Cells Lentivirally Transduced to Express a CS1-Targeting, Hinge-Optimized, 41BB-Costimulatory Chimeric Antigen Receptor and a Truncated EGFR Following Lymphodepleting Chemotherapy in Adult Patients with CS1+ Multiple Myeloma." The CAR T being studied under this protocol has been designated by Mustang as MB-104. Under the terms of the agreement Mustang will reimburse COH for costs associated with this trial not to exceed $2.4 million. The agreement will expire upon the delivery of the final study report or earlier. During the year ended December 31, 2020, Mustang recorded approximately $0.9 million in research and development expenses in the Company's Consolidated Statement of Operations pursuant to this agreement.

IL13Rα2 (MB-101) Clinical Research Support Agreements

On February 17, 2017, Mustang entered into a Clinical Research Support Agreement for IL13Rα2 (the "IL13Rα2 GBM CRA"). Pursuant to the terms of this agreement Mustang made an upfront payment of approximately $9,300 and will contribute an additional $0.1 million per patient in connection with the on-going investigator-initiated study. Further, Mustang agreed to fund approximately $ 0.2 million over three years pertaining to the clinical development of IL13Rα2.

In October 2020, Mustang entered into a Clinical Research Support Agreement for the IL13Rα2 directed CAR T program for adult patients with Leptomeningeal Glioblastoma, Ependymoma or Medulloblastoma (the "IL13Rα2 Leptomeningeal CRA"). Pursuant to the terms of the IL13Rα2 Leptomeningeal CRA, Mustang made an upfront payment of $29,375 and will contribute an additional $0.1 million per patient in connection with the on-going investigator-initiated study. Further, the Company agreed to fund approximately $0.2 million annually pertaining to the clinical development of IL13Rα2.

For the years ended December 31, 2020 and 2019, Mustang recorded approximately $0.5 million and $0.9 million, respectively, in research and development expenses under the IL13Rα2 CRAs in the Company's Consolidated Statement of Operations.

HER2 (MB-103) Clinical Research Support Agreement

In September 2020, Mustang entered into a clinical research support agreement with COH in connection with an Investigator-sponsored study conducted under an Institutional Review Board-approved, investigator-initiated protocol entitled: "Phase I Study of Cellular Immunotherapy using Memory-Enriched T Cells Lentivirally Transduced to Express a HER2-Specific, Hinge-Optimized, 41BB-Costimulatory Chimeric Receptor and a Truncated CD19 for Patients with Recurrent/Refractory Malignant Glioma." The CAR T being studied under this protocol has been designated as MB-103. Under the terms of the agreement Mustang will pay COH $29,375 upon execution and will reimburse COH for costs associated with this trial not to exceed $3.0 million. The agreement will expire upon the delivery of a final study report or earlier. For the year ended December 31, 2020, Mustang recorded $1.5 million in research and development expenses in the Company's Consolidated Statement of Operations pursuant to this agreement.

PSCA (MB-105) Clinical Research Support Agreement

In October 2020, Mustang entered into a clinical research support agreement with COH in connection with an Investigator-sponsored study conducted under an Institutional Review Board-approved, investigator-initiated protocol entitled: "A Phase 1b study to evaluate PSCA-specific chimeric antigen receptor (CAR)-T cells for patients with metastatic castration resistant prostate cancer." The CAR T being studied under this protocol has been designated as MB-105. Under the terms of the agreement Mustang will pay COH $33,000 upon execution and will reimburse COH for costs associated with this trial not to exceed $2.3 million. The agreement will expire upon the delivery of a final study report or earlier. For the year ended December 31, 2020, Mustang recorded $0.2 million in research and development expenses in the Company's Consolidated Statement of Operations pursuant to this agreement.

City of Hope Sponsored Research Agreement - Manufacturing

On January 3, 2018, Mustang entered into a Sponsored Research Agreement ("SRA") with COH to optimize and develop CAR T cell processing procedures. Pursuant to the SRA, Mustang funded continued research in the amount of $0.9 million for the program, with an initial term oftwo (2) years. The SRA expired in January 2020. For the years ended December 31, 2020 and 2019, Mustang recorded approximately nil and $0.5 million, respectively, in research and development expenses in the Company's Consolidated Statements of Operations.

CRISPR Sponsored Research Agreement with Beth Israel Deaconess Medical Center, Inc.

On November 28, 2017, Mustang entered into a Sponsored Research Agreement with Beth Israel Deaconess Medical Center Inc. ("BIDMC") to perform research relating to gene editing, via the use of CRISPR/Cas9, to be used in enhancing the efficacy of CAR T cell therapies for solid tumor indications and to generate universal off the shelf CAR T cell therapies for both liquid and solid tumor indications. Mustang agreed to fund approximately $0.8 million over a three-year period. Mustang recordednil and $0.1 million in 2020 and 2019, respectively, related to this agreement in research and development expenses in the Company's Consolidated Statements of Operations. In January 2019, Mustang terminated the SRA with BIDMC due to the departure of key personnel from BIDMC.

CD20 (MB-106) Clinical Trial Agreement with Fred Hutch

On July 3, 2017, in conjunction with the CD20 Technology License from Fred Hutch, Mustang entered into an investigator-initiated clinical trial agreement ("CD20 CTA") to provide partial funding for a Phase 1/2 clinical trial at Fred Hutch evaluating the safety and efficacy of the CD20 Technology in patients with relapsed or refractory B-cell non-Hodgkin lymphomas. In connection with the CD20 CTA, Mustang agreed to fund up to $5.3 million of costs associated with the clinical trial, which commenced during the fourth quarter of 2017. In November 2020, the CD20 CTA was amended to include additional funding of approximately $0.8 million for the treatment of five patients with chronic lymphocytic leukemia. For the years ended December 31, 2020 and 2019 Mustang recorded $1.8 million and $0.6 million of expense, respectively, related to this agreement in research and development expenses in the Company's Consolidated Statements of Operations.

CD20 (MB-106) Sponsored Research Agreement – Manufacturing with Fred Hutch

On March 17, 2018, Mustang entered into a Sponsored Research Agreement ("SRA") with Fred Hutch related to developing and optimizing processes and systems associated with CD20 cell processing. Pursuant to the SRA, Mustang funded research in the amount of $0.6 million during the term of the SRA, which expired in March 2019. For the years ended December 31, 2020 and 2019, Mustang recorded expense of nil and $0.2 million, respectively, in research and development expenses in the Statements of Operations pursuant to the terms of this agreement.

XSCID (MB-107) Data Transfer Agreement with St. Jude

In June 2020, Mustang entered into a Data Transfer Agreement with St. Jude under which Mustang will reimburse St. Jude for costs associated with St. Jude's clinical trial for the treatment of infants with XSCID. Pursuant to the terms of this agreement and for the year ended December 31, 2020, Mustang paid an upfront fee of $1.1 million, which was recorded in research and development expenses in the Company's Consolidated Statement of Operations. Mustang will continue to reimburse St. Jude for costs incurred in connection with this trial.

MB-107 (XSCID) Non-Interventional Services Agreement with Children's CGMP

In December 2019, Mustang entered into a Non-Interventional Services Agreement with Children's CGMP, LLC ("Children's"), an affiliate of St. Jude Children's Research Hospital, pursuant to which Children's provides lentiviral vector for non-clinical XSCID research purposes, as well as related advisory services. Mustang agreed to fund approximately $0.8 million upon execution of the agreement, which was recorded in research and development expenses for the year ended December 31, 2019 in the Company's Consolidated Statement of Operations.

Oncogenuity

Columbia Sponsored Research Agreement

Pursuant to the terms of the Columbia License, Oncogenuity will make semi-annual research payments to Columbia over a five year period ending in November 2024; such payments not to exceed $4.8 million. For the year ended December 31, 2020, Oncogenuity recorded expense of $0.5 million in research and development in the Company's Consolidated Statements of Operations. No expense was recorded in 2019.

University of Oxford Sponsorship Agreement

On December 16, 2020 Oncogenuity entered into an agreement with The Chancellor Masters and Scholars of the University of Oxford ("Oxford"). Under the terms of the agreement Oxford will engage in preclinical development of antisense oligonulcleotides as a therapy in certain indications. In connection with the agreement Oncogenuity agreed to fund research for approximately 18 months for up to of $0.6 million (£0.4 million). Oncogenuity made an up-front payment of $0.1 million (£0.1 million) in January 2021.

Tamid

On November 30, 2017, in connection with its three separate license agreements with UNC, Tamid entered into a Sponsored Research Agreement with UNC ("UNC SRA") for certain continued research and development activities related to Nanodysferlin for treatment of Dysferlinopathy, and AAV-HLA-G for corneal transplant rejection. Total amount to be funded by Tamid under the UNC SRA is $ 2.3 million over a term of three years. Pursuant to the terms of the UNC SRA, Tamid paid $0.8 million which was due upon execution. For the years ended December 31, 2020 and 2019, Tamid recorded expense of nil and nil respectively in connection with the UNC SRA. The expense was recorded in research and development expenses in the Company's Consolidated Statements of Operations. Effective December 2019, Tamid returned the license to UNC and ceased to incur costs associated with the development of products under this license.

9. Intangibles

On December 18, 2020, Journey entered an Asset Purchase Agreement with a third party (the "Anti-itch Product Agreement") for a topical product that is indicated to treat scabies and skin itch conditions ("Anti-itch Product"). Pursuant to the terms and conditions of the Anti-itch Product Agreement, Journey agreed to pay $4.0 million, comprised of a non-refundable deposit of $0.2 million upon the execution of the term sheet, a cash upfront payment of $1.8 million on January 1, 2021 and additional future payments of $0.5 million on April 1, 2021, $0.5 million on July 1, 2021, and $1.0 million on January 1, 2022. There are no subsequent milestone payments or royalties beyond the aforementioned payments. Commercial launch of this product is expected in the third quarter of 2021.

The Company, in accordance with ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, determined the purchase of the Anti-itch Product did not constitute the purchase of a business, and therefore recorded the purchase price of the Anti-itch Product as an asset, to be amortized over the life of the product, which is deemed to be three years.

On July 29, 2020, Journey entered into a License and Supply Agreement with a third party to acquire intellectual property rights to an oral acne product that is indicated for the treatment of severe acne (the "Isotretinoin Agreement"). Pursuant to the terms and conditions of the Isotretinoin Agreement, Journey agreed to pay $5.0 million, comprised of an upfront payment of $1.0 million paid upon execution with remaining payments due as follows: $0.5 million upon achievement of a regulatory approval milestone and $0.5 million upon the delivery of the first order and $3.0 million due in $1.0 million installments, on the 18-month anniversary, the 24-month anniversary and the 36-month anniversary of execution of the Isotretinoin Agreement. Three additional milestone payments totaling $17.0 million are contingent upon the achievement of certain net sales milestones. Royalties in the low-double digits based on net sales, subject to specified reductions are also due. Commercial launch of this product is expected in the second quarter of 2021.

The Company, in accordance with ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, determined the purchase of the Isotretinoin Agreement did not constitute the purchase of a business, and therefore recorded the purchase price of the Isotretinoin Agreement as an asset, to be amortized over the life of the product, which is deemed to be five years.

On July 22, 2019 Journey purchased Ximino®, a minocycline hydrochloride used to treat acne from a third party. Pursuant to the terms and conditions of the Asset Purchase Agreement ("APA"), total consideration for the APA is $ 9.4 million, comprised of an upfront payment of $2.4 million payable within 60 days after execution on September 22, 2019. The remaining four payments totaling $7.0 million are due in consecutive years commencing on the second anniversary of execution of the APA. In addition, Journey is obligated to pay royalties in the mid-single digits based on net sales of Ximino, subject to specified reductions.

The Company, in accordance with ASU 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, determined the purchase of Ximino did not constitute the purchase of a business, and therefore recorded the purchase price of Ximino as an asset, to be amortized over the life of the product, which is deemed to be seven years. In addition, the Company determined pursuant to ASC 450, *Contingencies,* that royalty payments in connection with the APA will be recorded when they become payable with a corresponding charge to cost of goods sold.

In accordance with the terms of the APA Journey will incur interest expense in the event of payment default. As such per ASC 835-30 *Interest-Imputed Interest,* Journey recorded an initial discount for imputed interest of $2.3 million. As of December 31, 2019, Journey recorded an intangible asset related to this transaction of $7.1 million which was recorded on the Consolidated Balance Sheet of Fortress.

On August 31, 2018, JMC entered into an agreement with a third party to acquire the exclusive rights to Exelderm®, a topical antifungal available in a cream and solution. This acquisition was recorded as an intangible asset and expense will be recognized over the expected life of Exelderm® of 3 years. JMC commenced the sale of Exelderm® in September 2018 and accordingly commenced the amortization of this cost.

In January 2016, JMC entered into a licensing agreement with a third party to distribute its prescription wound cream Luxamend ® and paid an upfront fee of $50,000. Additionally, in January 2016, JMC entered into a licensing agreement with a third party to distribute its prescription emollient Ceracade ® for the treatment of various types of dermatitis and paid an upfront fee of $0.3 million. JMC commenced the sale of both of these products during the year ended December 31, 2016 and accordingly commenced the amortization of these costs over their respective three year estimated useful life.

In March 2015, JMC entered into a license and supply agreement to acquire the rights to distribute Targadox® a dermatological product for the treatment of acne. JMC made an upfront payment of $1.3 million. Further payments will be made based on a revenue sharing arrangement. JMC received FDA approval for the manufacturing of this product in July 2016 and commenced sales of this product in October 2016.

The table below provides a summary of intangible assets as of December 31, 2020 and 2019, respectively:

($ in thousands)	Estimated Useful Lives (Years)	December 31, 2020	December 31, 2019
Total Intangible assets – asset purchases	3 to 7	$ 18,606	$ 9,934
Accumulated amortization		(3,977)	(2,557)
Net intangible assets		$ 14,629	$ 7,377

The table below provides a summary for the years ended December 31, 2020 and 2019, of recognized expense related to product licenses, which was recorded in costs of goods sold on the Consolidated Statement of Operations (see Note 19):

($ in thousands)	Intangible Assets, Net
Beginning balance at December 31, 2018	$ 1,417
Additions:	
Purchase of Ximino[1]	7,134
Amortization expense	(1,174)
Beginning balance at December 31, 2019	7,377
Additions:	
Isotretinoin Agreement[2]	4,727
Anti-itch product license acquisition[3]	3,945
Amortization expense	(1,420)
Ending balance at December 31, 2020	$ 14,629

Note 1: Includes an upfront payment of $2.4 million and four payments totaling $7.0 million due in consecutive years commencing on the second anniversary of the execution of the APA. Such payments were discounted by $2.3 million as a result of the long-term nature of such payments.

Note 2: Includes an upfront payment of $1.0 million and a milestone payment of $0.5 million in 2020 and three payments totaling $3.5 million due at various points between 2021 through 2023. Such payments were discounted by $0.3 million as a result of the long-term nature of such payments. As of December 31, 2020, this asset has not yet been placed in service, therefore no amortization expense was recognized on this asset for the year ended December 31, 2020. Journey expects the asset to be placed in service in the first half of 2021. Once the asset is placed in service Journey will amortize the asset over five years, which represents its expected useful life.

Note 3: Includes an upfront payment of $0.2 million and three payments totaling $2.8 million in 2021 and $1.0 million in 2022. Such payments were discounted by $0.1 million as a result of the long-term nature of such payments. As of December 31, 2020, this asset has not yet been placed in service, therefore no amortization expense was recognized on this asset for the year ended December 31, 2020. The Company expects to launch this asset in Q3 2021. Once the asset is placed in service Journey will amortize the asset over three years, which represents its expected useful life.

The future amortization of these intangible assets is as follows:

($ in thousands)	Ximino®	Exelderm®	Total Amortization
Year Ended December 31, 2021	$ 1,019	$ 267	$ 1,286
Year Ended December 31, 2022	1,019	—	1,019
Year Ended December 31, 2023	1,019	—	1,019
Year Ended December 31, 2024	1,019	—	1,019
Year Ended December 31, 2025	1,019	—	1,019
Thereafter	595	—	595
Sub-total	5,690	267	5,957
Intangible assets not yet placed in service	—	—	8,672
Total	$ 5,690	$ 267	$ 14,629

10. Debt and Interest

Debt

Total debt consists of the following:

($ in thousands)	December 31, 2020	2019	Interest rate	Maturity
IDB Note	$ —	$ 14,929	2.25 %	Aug - 2021
2017 Subordinated Note Financing[3]	—	3,254	8.00 %	March - 2022
2017 Subordinated Note Financing[3]	—	13,893	8.00 %	May - 2022
2017 Subordinated Note Financing[3]	—	1,820	8.00 %	June - 2022
2017 Subordinated Note Financing[3]	—	3,018	8.00 %	August - 2022
2017 Subordinated Note Financing[3]	—	6,371	8.00 %	September - 2022
2018 Venture Notes[4]	—	6,517	8.00 %	August - 2021
2018 Venture Notes[4]	—	15,190	8.00 %	September - 2021
2019 Notes[1]	—	9,000	12.00 %	September - 2021
Mustang Horizon Notes[2]	—	15,750	9.00 %	October - 2022
Oaktree Note	60,000	—	11.00 %	August - 2025
Total notes payable	60,000	89,742		
Less: Discount on notes payable	8,323	5,086		
Total notes payable	$ 51,677	$ 84,656		

Note 1: Formerly the Opus Credit Facility (see Note 17).
Note 2: Interest rate is 9.0% plus one-month LIBOR Rate in excess of 2.5%; at December 31, 2019, $1.2 million is included in Notes payable, short-term on the Consolidated Balance Sheet.
Note 3: As a result of a one year maturity date extension, the interest rate of 9.0% takes effect in year 4 of the note.
Note 4: At December 31, 2019, $6.0 million is included in Notes payable, short-term on the Consolidated Balance Sheet.

Oaktree Note

On August 27, 2020 (the "Closing Date"), Fortress, as borrower, entered into a $60.0 million senior secured credit agreement (the "Oaktree Agreement") with Oaktree. The Company borrowed the full $60.0 million in connection with the terms of the Oaktree Note on the Closing Date and used the bulk of the proceeds to repay its outstanding debt to other lenders (2017 Subordinated Notes, 2018 Venture Notes and 2019 Notes (previously the "Opus Credit Facility")).

The Oaktree Note bears interest at a fixed annual rate of 11.0%, payable quarterly and maturing on the fifth anniversary of the Closing Date, August 27, 2025, the ("Maturity Date"). The Company is required to make quarterly interest-only payments until the Maturity Date, at which point the outstanding principal amount is due. The Company may voluntarily prepay the Oaktree Note at any time subject to a Prepayment Fee. The Company is also required to make mandatory prepayments of the Oaktree Note under various circumstances. No amounts paid or prepaid may be reborrowed without Oaktree consent.

The Oaktree Agreement contains customary representations and warranties and customary affirmative and negative covenants, including, among other things, restrictions on indebtedness, liens, affiliate transactions, investments, acquisitions, mergers, dispositions, prepayment of permitted indebtedness, and dividends and other distributions, subject to certain exceptions. These affirmative and negative covenants apply in different instances to Fortress itself, its private subsidiaries, its public subsidiaries, or certain combinations of the foregoing. The limitations on dividends and other distributions have the practical effect of preventing any further issuances by the Company or its private subsidiaries of equity securities with cash dividends or redemption features.

In addition, the Oaktree Agreement contains certain financial covenants, including, among other things, (i) maintenance of minimum liquidity and (ii) a minimum revenue test that requires Journey's annual revenue to be equal to or to exceed annual revenue projections set forth in the agreement. Failure by the Company or Journey, as applicable, to comply with the financial covenants will result in an event of default, subject to certain cure rights of the Company. The Company was in compliance with all applicable covenants under the Oaktree Note as of December 31, 2020.

The Oaktree Agreement contains customary events of default, in certain circumstances subject to customary cure periods. These events of default apply in different instances to Fortress itself, its private subsidiaries, its public subsidiaries, or a certain combination of the foregoing. Following an event of default and any cure period, if applicable, the Agent will have the right upon notice to accelerate all amounts outstanding under the Oaktree Agreement, in addition to other remedies available to the lenders as secured creditors of the Company.

The Oaktree Agreement grants a security interest in favor of the Agent, for the benefit of the lenders, in substantially all of the Company's assets (consisting principally of the Company's shareholdings in, and in some cases debt owing from, its partner companies) as collateral securing the Company's obligations under the Oaktree Agreement, except for: (i) certain interests in controlled foreign corporation subsidiaries of the Company; (ii) the Company's holdings in Avenue; and (iii) those portions of the Company's holdings in certain subsidiaries (plus Caelum) that are encumbered by pre-existing equity pledges to certain of the Company's officers. None of Fortress' subsidiaries or partner companies is a party to the Oaktree Agreement, and the collateral package does not include the asets of any such subsidiaries or partner companies.

Pursuant to the terms of the Oaktree Agreement, on the Closing Date the Company paid Oaktree an upfront commitment fee equal to 3% of the $60.0 million, or $1.8 million. In addition, the Company paid a $35,000 Agency fee to the Agent, which was due on the Closing Date and will be due annually, together with fees of $2.5 million directly to third parties involved in the transaction.

In connection with the Oaktree Note, the Company issued warrants to Oaktree and certain of its affiliates to purchase up to 1,749,450 shares of common stock of the Company (see Note 14) with a relative fair value of $4.4 million.

As of December 31, 2020, the Company recorded the fees totaling $8.7 million ($1.8 million to Oaktree, $2.5 million of expenses paid to third-parties and $4.4 million representing the relative fair value of the Oaktree Warrants) to debt discount. These costs will be amortized over the term of the Oaktree Note.

IDB Note

On February 13, 2014, the Company executed a promissory note in favor of IDB in the amount of $15.0 million (the "IDB Note"). The Company borrowed $14.0 million against this note and used it to repay its prior loan from Hercules Technology Growth Capital, Inc. The Company could request revolving advances under the IDB Note in a minimum amount of $0.1 million (or the remaining amount of the undrawn balance under the IDB Note if such amount were less than $0.1 million). All amounts advanced under the IDB Note were due in full at the earlier of: (i) August 1, 2020, as extended or (ii) on the IDB's election following the occurrence and continuation of an event of default. The unpaid principal amount of each advance shall bear interest at a rate per annum equal to the rate payable on the Company's money market account plus a margin of 150 basis points. The interest rate at December 31, 2019 was 2.25%. The IDB Note contains various representations and warranties customary for financings of this type.

The obligations of the Company under the IDB Note were collateralized by a security interest in, a general lien upon, and a right of set-off against the Company's money market account of $15.0 million, which was recorded as restricted cash in the Company's Consolidated Balance Sheets, pursuant to the Assignment and Pledge of Money Market Account, dated as of February 13, 2014 (the "Pledge Agreement"). Pursuant to the Pledge Agreement, the Bank may, after the occurrence and continuation of an event of default under the IDB Note, recover from the money market account all amounts outstanding under the IDB Note. The Pledge Agreement contained various representations, warranties, and covenants customary for pledge agreements of this type.

The Company could default on the IDB Note if, among other things, it failed to pay outstanding principal or interest when due. Following the occurrence of an event of default under the IDB Note, the Bank may: (i) declare the entire outstanding principal balance of the IDB Note, together with all accrued interest and other sums due under the IDB Note, to be immediately due and payable; (ii) exercise its right of setoff against any money, funds, credits or other property of any nature in possession of, under control or custody of, or on deposit with IDB; (iii) terminate the commitments of IDB; and (iv) liquidate the money market account to reduce the Company's obligations to IDB.

On September 18, 2017, the maturity on the IDB Note was extended toAugust 1, 2020. In January 2020, the maturity on the IDB Note was extended to August 1, 2021. The Company applied the 10% cash flow test pursuant to ASC 470 to calculate the difference between the present value of the amended IDB Note's cash flows and the present value of the original remaining cash flow and concluded that the results didn't exceed the 10% factor, the debt modification is not considered substantially different and therefore did not apply extinguishment accounting, rather it accounted for the modification on a prospective basis pursuant to ASC 470. The Company only paid interest on the IDB Note through maturity.

During August 2020, the Company repaid the IDB Note utilizing the cash collateral securing the IDB Note, which was classified as restricted cash on the Company's Consolidated Balance Sheet.

At December 31, 2020 and 2019, the Company had approximately nil and $14.9 million, respectively, outstanding under its promissory note with IDB.

2019 Notes (formerly the Opus Credit Facility)

On September 14, 2016, Fortress entered into a Credit Facility Agreement (the "Opus Credit Facility") with Opus Point Healthcare Innovations Fund, LP ("OPHIF"). Since Fortress's Chairman, President and Chief Executive Officer (Lindsay A. Rosenwald) and Fortress's Executive Vice President, Strategic Development (Michael S. Weiss), are Co-Portfolio Managers and Partners of Opus Point Partners Management, LLC ("Opus"), an affiliate of OPHIF, all of the disinterested directors of Fortress's board of directors approved the terms of the Credit Facility Agreement and accompanying Pledge and Security Agreement and forms of Note and Warrant (collectively, the "Financing Documents").

Pursuant to the Opus Credit Facility, Fortress was eligible to borrow up to a maximum aggregate amount of $25.0 million from OPHIF and any other lender that joins the Credit Facility Agreement from time to time (OPHIF and each subsequent lender, a "Lender") under one or more convertible secured promissory notes (each a "Note") from September 14, 2016 until September 1, 2017 (the "Commitment Period"). All amounts borrowed under the Credit Facility Agreement were required to be paid in full by September 14, 2018 (the "Maturity Date"), however Fortress had the right to prepay the Notes at any time without penalty.

Pursuant to the Opus Credit Facility and form of Note, each Note will bear interest at12% per annum and interest will be paid quarterly in arrears commencing on December 1, 2016 and on the first business day of each September, December, March and June thereafter until the Maturity Date. Upon the occurrence and continuance of an event of default (as specified in Credit Facility Agreement and form of Note), each Note will bear interest at 14% and be payable on demand. The Lenders may elect to convert the principal and interest of the Notes at any time into shares of Fortress's common stock ("Common Stock") at a conversion price of $10.00 per share. All Notes are secured by shares of capital stock currently held by Fortress in certain Fortress Companies as set forth in the Pledge and Security Agreement entered into between Fortress, its wholly owned subsidiary, FBIO Acquisition, Inc., and OPHIF (as collateral agent on behalf of all the Lenders) on September 14, 2016 (the "Pledge and Security Agreement").

Fortress may terminate the Opus Credit Facility upon notice to the Lenders and payment of all outstanding obligations under the Credit Facility Agreement. Notwithstanding any early termination of the Credit Facility Agreement, within 15 days after termination of the Commitment Period, Fortress will issue each Lender warrants (each a "Warrant") pursuant to the terms of the Credit Facility Agreement and form of Warrant to purchase their pro rata share of (a) 1,500,000 shares of Common Stock; and (b) that number of shares of Common Stock equal to the product of (i)1,000,000, times (ii) the principal amount of all Notes divided by 25,000,000. The Warrants will have a five-year term and will be exercisable at a price of $3.00 per share.

On March 12, 2018, the Company and OPHIF amended and restated the Opus Credit Facility (the "A&R Opus Credit Facility"). The A&R Opus Credit Facility extended the maturity date of the notes issued under the Opus Credit Facility from September 14, 2018 by one year to September 14, 2019. In September 2019 the A&R Opus Credit Facility was amended to extend the maturity of the notes under the Opus Credit Facility from September 14, 2019 to September 14, 2021. The A&R Opus Credit Facility also permits the Company to make portions of interest and principal repayments in the form of shares of the Company's common stock and/or in common stock of the Company's publicly traded subsidiaries, subject to certain conditions. Fortress retains the ability to prepay the Notes at any time without penalty. The notes payable under the A&R Opus Credit Facility continue to bear interest at 12% per annum. The A&R Opus Credit Facility was accounted for as a debt modification for the year ended December 31, 2018.

On July 18, 2019, Fortress issued 396,825 common shares of Fortress at $1.26 per share to Dr. Rosenwald. The shares were issued as a prepayment by Fortress of $500,000 of debt owed to Dr. Rosenwald that was held in the name of OPHIF. The prepayment was made in the form of Fortress common stock, measured at the closing price on July 18, 2019, under that certain A&R Opus Credit Facility.

Effective December 31, 2019, OPHIF dissolved and distributed it assets among its limited partners. Following the distribution, the $9.0 million facility comprised of separate notes (collectively, the "2019 Notes") held by DAK Capital Inc. ($3.8 million); Fortress' Chairman, President and Chief Executive Officer Lindsay A. Rosenwald, M.D. ($0.3 million); Fortress's Executive Vice President, Strategic Development Michael S. Weiss ($2.0 million); and various entities and individuals affiliated with Dr. Rosenwald and Mr. Weiss ($2.9 million). The terms of the 2019 Notes did not change in connection with such reallocations.

In August, 2020, the Company used certain proceeds from the Oaktree Note to pay off the $9.0 million balance previously outstanding under the 2019 Notes. As of December 31, 2020 and 2019, nil and $9.0 million, respectively, was outstanding under the 2019 Notes.

IDB Letters of Credit

The Company has several letters of credit ("LOC") with IDB securing rent deposits for lease facilities totaling approximately $1.6 million. The LOC's are secured by cash, which is included in restricted cash on the Company's Consolidated Balance Sheet. Interest paid on the letters of credit is 2% per annum.

2017 Subordinated Note Financing

On March 31, 2017, the Company entered into Note Purchase Agreements (the "Purchase Agreements") with NAM Biotech Fund II, LLC I ("NAM Biotech Fund") and NAM Special Situations Fund I QP, LLC ("NAM Special Situations Fund"), both of which are accredited investors, and sold subordinated promissory notes (the "Notes") of the Company (the "2017 Subordinated Note Financing") in the aggregate principal amount of $3.25 million. The Notes bear interest at the rate of 8% per annum; additionally, the Notes accrue paid-in-kind interest at the rate of 7% per annum, which will be paid quarterly in shares of the Company's common stock and/or shares of common stock of one of the Company's subsidiaries that are publicly traded, in accordance with the terms of the Notes. Each Note is due on the third anniversary of its issuance, provided that the Company may extend the maturity date for two one-year periods in its sole discretion. The 2017 Subordinated Note Financing is for a maximum of $40.0 million (which the Company may, in its sole discretion, increase to $50.0 million).

National Securities Corporation ("NSC"), a subsidiary of National and a related party, (see Note 17), pursuant to a Placement Agency Agreement entered into between the Company, NAM Biotech Fund and NSC (the "NAM Placement Agency Agreement") and a Placement Agency Agreement entered into between the Company, NAM Special Situations Fund and NSC (together with the NAM Placement Agency Agreement, the "Placement Agency Agreements") acts as placement agent in the 2017 Subordinated Note Financing. Pursuant to the terms of the Placement Agency Agreements, NSC receives (in addition to reimbursement of certain expenses) an aggregate cash fee equal to 10% of the aggregate sales price of the Notes sold in the 2017 Subordinated Note Financing to NAM Biotech Fund and NAM Special Situations Fund. The Placement Agent also receives warrants equal to 10% of the aggregate principal amount of the Notes sold in the 2017 Subordinated Note Financing divided by the closing share price of the Company's common stock on the date of closing (the "Placement Agent Warrants"). The Placement Agent Warrants are exercisable immediately at such closing share price for a period of five years. The Placement Agent will have a right of first offer for a period of 12 months for any proposed issuance of the Company's capital stock in a private financing, subject to certain exceptions, and will also have the right to participate as an investor in subsequent financings.

On March 31, 2017, the Company held its first closing of the 2017 Subordinated Note Financing and received gross proceeds of $3.2 million. NSC received a cash fee of approximately $0.3 million and warrant to purchase 87,946 shares of the Company's common stock at an exercise price of per share $3.70.

On May 1, 2017, the Company held a second closing of the 2017 Subordinated Note Financing and received gross proceeds of $8.6 million, before expenses. NSC received a placement agent fee of approximately $0.9 million in the second closing and warrants to purchase 234,438 shares of the Company's common stock at an exercise price of $3.65 per share.

On May 31, 2017, the Company held a third closing of the 2017 Subordinated Note Financing and received gross proceeds of $5.3 million, before expenses. NSC received a placement agent fee of approximately $0.5 million in the third closing and warrants to purchase 147,806 shares of the Company's common stock at an exercise price of $3.61 per share.

On June 30, 2017, the Company held a fourth closing of the 2017 Subordinated Note Financing and received gross proceeds of $1.8 million, before expenses. NSC received a placement agent fee of approximately $0.2 million in the fourth closing and warrants to purchase 38,315 shares of the Company's common stock at an exercise price of $4.75 per share.

On August 31, 2017, the Company held a fifth closing of the 2017 Subordinated Note Financing and received gross proceeds of $3.0 million, before expenses. NSC received a placement agent fee of approximately $0.3 million in the fifth closing and warrants to purchase 63,526 shares of the Company's common stock at an exercise price of $4.75 per share.

On September 30, 2017, the Company held a sixth closing of the 2017 Subordinated Note Financing and received gross proceeds of $6.4 million, before expenses. NSC received a placement agent fee of approximately $0.6 million in the sixth closing and warrants to purchase 144,149 shares of the Company's common stock at an exercise price of $4.42 per share.

In August, 2020, the Company used certain proceeds from the Oaktree Note to pay off the $28.4 million balance previously outstanding under the 2017 Subordinated Note Financing. As of December 31, 2020 and 2019, nil and $28.4 million, respectively, was outstanding under the 2017 Subordinated Note Financing.

2018 Venture Notes

During the year ended December 31, 2018, the Company closed a private placement of promissory notes for an aggregate of $21.7 million (the "2018 Venture Notes") through NSC. The Company intends to use the proceeds from the 2018 Venture Notes to acquire and license medical technologies and products through existing or recently formed Company subsidiaries. The Company may also use the proceeds to finance its subsidiaries. The notes mature 36 months from issuance, provided that during the first 24 months the Company may extend the maturity date by six months.No principal amount will be due for the first 24 months (or the first 30 months if the maturity date is extended). Thereafter, the note will be repaid at the rate of 1/12 of the principal amount per month for a period of 12 months. Interest on the note is 8% payable quarterly during the first 24 months (or the first 30 months if the note is extended) and monthly during the last 12 months.

NSC acted as the sole placement agent for the 2018 Venture Notes. The Company paid NSC a fee of $1.7 million during the three months ended March 31, 2018 in connection with its placement of the 2018 Venture Notes.

The 2018 Venture Notes allows the Company to transfer a portion of the proceeds from the 2018 Venture Notes to a Fortress subsidiary upon the completion by such subsidiary of an initial public offering in which it raises sufficient equity capital so that it has cash equal to five times the amount of the portion of the proceeds of the 2018 Venture Notes so transferred (the "SubCo Funding Threshold").

Through December 31, 2019, the Company had transferred $3.8 million to Aevitas, $1.6 million to Tamid, $2.2 Million to Cyprium and $2.0 million to Cellvation. Notwithstanding such transfers, the Company continued to hold such debt balances as liabilities on its own balance sheet on a consolidated basis, until such time as the SubCo Funding Threshold is met with respect to a particular subsidiary.

In connection with this transfer NSC received warrants to purchase each such subsidiary's stock equal to 25% of that subsidiary's proceeds of the 2018 Venture Notes divided by the lowest price at which the subsidiary sells its equity in its first third party equity financing. The warrants issued have a term of 10 years and an exercise price equal to the par value of the Fortress subsidiary's common stock. As of December 31, 2019, the warrants were contingently issuable as neither an initial public offering nor a third-party financing had occurred at any such subsidiary.

In August, 2020, the Company used certain proceeds from the Oaktree Note to pay off the $21.7 million balance previously outstanding under the 2018 Venture Notes. As of December 31, 2020 and 2019, nil and $21.7 million, respectively, was outstanding under the 2018 Venture Notes.

Mustang Horizon Notes

On March 29, 2019 (the "Closing Date"), Mustang entered into a $20.0 million Loan Agreement with Horizon Technology Finance Corporation ("Horizon"), herein referred to as the "Mustang Horizon Notes". In accordance with the Loan Agreement, $15.0 million of the $20.0 million loan was funded on the Closing Date, with the remaining $5.0 million fundable upon Mustang achieving certain predetermined milestones.

Each advance under the Mustang Horizon Notes will mature 42 months from the first day of the month following the funding of the advance. The first three advances will mature on October 1, 2022 (the "Loan Maturity Date"). Each advance accrues interest at a per annum rate of interest equal to 9.00% plus the amount by which the one-month LIBOR Rate, as reported in the Wall Street Journal, exceeds 2.50%. The Loan Agreement provides for interest-only payments commencing May 1, 2019, through and including October 1, 2020. The interest-only period may be extended to April 1, 2021, if the Company satisfies the Interest Only Extension Milestone (as defined in the Loan Agreement). Thereafter, commencing May 1, 2021, amortization payments will be payable monthly in eighteen installments of principal and interest. At its option, upon ten business days' prior written notice to Horizon, the Company may prepay all or any portion greater than or equal to $500,000 of each of the outstanding advances by paying the entire principal balance (or portion thereof) and all accrued and unpaid interest, subject to a prepayment charge of 4.0% of the then outstanding principal balance of each advance if such advance is prepaid on or before the Loan Amortization Date (as defined in the Loan Agreement), 3% if such advance is prepaid after the Loan Amortization Date applicable to such Loan, but on or prior to twelve months following the Loan Amortization Date, and 2% thereafter. In addition, a final payment equal to $250,000 for each advance (i.e., $750,000 in aggregate with respect to the initial $15.0 million) is due on the maturity date or other date of payment in full. Amounts outstanding during an event of default shall be payable on demand and shall accrue interest at an additional rate of 5.0% per annum of the past due amount outstanding.

Each advance of the loan is secured by a lien on substantially all of the assets of Mustang, other than Intellectual Property and Excluded Collateral (in each case as defined in the Loan Agreement), and contains customary covenants and representations, including a liquidity covenant, financial reporting covenant and limitations on dividends, indebtedness, collateral, investments, distributions, transfers, mergers or acquisitions, taxes, corporate changes, deposit accounts, and subsidiaries.

The events of default under the Loan Agreement include, among other things, without limitation, and subject to customary grace periods, (1) Mustang's failure to make any payments of principal or interest under the Loan Agreement, promissory notes or other loan documents, (2) the Mustang's breach or default in the performance of any covenant under the Loan Agreement, (3) the occurrence of a material adverse change, (4) Mustang making a false or misleading representation or warranty in any material respect, (5) the Mustang's insolvency or bankruptcy, (6) certain attachments or judgments on the Mustang's assets, (7) the occurrence of any material default under certain agreements or obligations of Mustang involving indebtedness in excess of $250,000, or (8) failing to maintain certain minimum monthly cash balances which range from approximately $8 to $13 million over the term of the loan ($13.0 million as of December 31, 2019). If an event of default occurs, Horizon is entitled to take enforcement action, including acceleration of amounts due under the Loan Agreement.

The Loan Agreement also contains warrant coverage of 5% of the total amount funded. Four warrants (the "Warrants") were issued by Mustang to Horizon to purchase a combined 288,184 shares of Mustang's common stock with an exercise price of $3.47 and a fair value of $0.9 million. The Warrants are exercisable for ten years from the date of issuance. Horizon may exercise the Warrant either by (a) cash or check or (b) through a net issuance conversion. The shares of the Company's common stock will, upon request by Horizon, be registered and freely tradable following a period of six months after issuance.

Mustang paid Horizon an initial commitment fee of $0.2 million and reimbursed Horizon for $30,000 of legal fees in connection with the Loan Agreement. Mustang incurred approximately $1.2 million of legal and other direct costs in connection with the Loan Agreement.

All fees, warrants and costs paid to Horizon and all direct costs incurred by Mustang are recognized as a debt discount to the funded loans and are amortized to interest expense using the effective interest method over the term of the Loan Agreement.

On September 30, 2020, Mustang repaid the amount outstanding under the Horizon Notes in full, which was comprised of $15.0 million face value of the outstanding notes, $0.1 million in accrued and unpaid interest, a $0.8 million final payment fee and prepayment penalties of $0.6 million.

Interest Expense

The following table shows the details of interest expense for all debt arrangements during the periods presented. Interest expense includes contractual interest and amortization of the debt discount and amortization of fees represents fees associated with loan transaction costs, amortized over the life of the loan:

	Year Ended December 31,					
	2020			2019		
($ in thousands)	*Interest*	*Fees*	Total	*Interest*	*Fees*	Total
IDB Note	$ 246	$ —	$ 246	$ 356	$ -	$ 356
2017 Subordinated Note Financing[1]	2,870	1,890	4,760	4,220	1,381	5,601
2019 Notes	710	—	710	1,113	336	1,449
2018 Venture Notes[1]	1,253	1,000	2,253	1,737	639	2,376
LOC Fees	34	—	34	60	—	60
Mustang Horizon Notes[1,3]	1,585	2,321	3,906	1,042	710	1,752
Oaktree Note[1]	2,311	411	2,722	—	—	—
Note Payable[2]	697	—	697	—	255	255
Other	(2)	—	(2)	—	—	—
Total Interest Expense and Financing Fee	$ 9,704	$ 5,622	$ 15,326	$ 8,528	$ 3,321	$ 11,849

Note 1:For the year ended December 31, 2020, includes $1.2 million expense of unamortized debt discount fees for the 2017 Subordinated Note Financing, $0.3 million for the 2018 Venture Notes and $1.8 million for the Mustang Horizon Notes.
Note 2: Imputed interest expense related to Ximino purchase (see Note 9).
Note 3: Includes $0.6 million of prepayment penalties included in interest expense for the Mustang Horizon Notes.

11. Accrued Liabilities and other Long-Term Liabilities

Accrued expenses and other long-term liabilities consisted of the following:

($ in thousands)	December 31, 2020	2019
Accrued expenses:		
Professional fees	$ 1,236	$ 1,153
Salaries, bonus and related benefits	6,701	6,683
Research and development	5,007	4,215
Research and development - manufacturing	518	1,017
Research and development - license maintenance fees	461	361
Research and development - milestones	600	—
Accrued royalties payable	2,682	2,320
Accrued coupon funding expense	10,869	8,391
Other	1,188	1,259
Total accrued expenses	$ 29,262	$ 25,399
Other long-term liabilities:		
Deferred rent and long-term lease abandonment charge[1]	$ 1,949	$ 2,136
Partner company note payable, long-term		
Ximino agreement[2]	3,622	4,990
Isotretinoin agreement[3]	2,792	—
Anti-itch product agreement[4]	945	—
Total other long-term liabilities and partner company note payable, long-term	$ 9,308	$ 7,126

Note 1: Balance consists of deferred charges related to build-out of the New York facility

Note 2: As of December 31, 2019, Journey recorded a note payable, net of an imputed interest discount of $2.3 million, of $4.7 million in connection with its acquisition of Ximino, see Note 9. The imputed interest discount was calculating utilizing an 11.96% effective interest rate based upon a non-investment grade "CCC" rate over a five-year period. Amortization of interest discount was $0.6 million and $0.3 million for the years ended December 31, 2020 and 2019, respectively. At December 31, 2020, $2.0 million was classified as Partner company note payable, short-term on the Company's Consolidated Balance Sheet.

Note 3: As of December 31, 2020, Journey recorded a note payable, net of an imputed interest discount of $0.3 million, of $3.7 million in connection with its acquisition of the Isotretinoin agreement, see Note 9. The imputed interest discount was calculated utilizing a 4.00% effective rate, which represents the market rate for an asset-backed three year loan, secured by receivables. Amortization of interest discount was $0.1 million for the year ended December 31, 2020. At December 31, 2020, $0.5 million of note payable was classified as Partner company note payable, short-term on the Company's Consolidated Balance Sheet.

Note 4: As of December 31, 2020, Journey recorded a note payable, net of an imputed interest discount of $0.1 million, of $3.7 million in connection with its acquisition of an anti-itch product, see Note 9. The imputed interest discount was calculated utilizing a 4.25% effective rate, which represents the market rate for an asset-backed three year loan, secured by receivables. Amortization of interest discount was negligible for the year ended December 31, 2020. As of December 31, 2020, $2.8 million of note payable was classified as Partner company note payable, short-term on the Company's Consolidated Balance Sheet.

12. Non-Controlling Interests

Non-controlling interests in consolidated entities are as follows:

($ in thousands)	As of December 31, 2020 NCI equity share	For the year ended December 31, 2020 Net loss attributable to non-controlling interests	As of December 31, 2020 Non-controlling interests in consolidated entities	Non-controlling ownership
Acquisition Corp VIII	$ (7)	$ (27)	$ (34)	10.0 %
Aevitas	(2,370)	(823)	(3,193)	39.0 %
Avenue [2]	5,800	(3,974)	1,826	77.4 %
Baergic	(1,662)	(97)	(1,759)	39.5 %
Cellvation	(1,089)	(182)	(1,271)	22.1 %
Checkpoint [1]	41,704	(13,265)	28,439	80.4 %
Coronado SO	(290)	—	(290)	13.0 %
Cyprium	567	(1,478)	(911)	30.5 %
Helocyte	(4,986)	(259)	(5,245)	18.8 %
JMC	138	491	629	7.1 %
Mustang [2]	116,060	(36,429)	79,631	80.9 %
Oncogenuity	(82)	(376)	(458)	25.3 %
Tamid	(663)	(40)	(703)	22.8 %
Total	$ 153,120	$ (56,459)	$ 96,661	

($ in thousands)	As of December 31, 2019 NCI equity share	For the year ended December 31, 2019 Net loss attributable to non-controlling interests	As of December 31, 2019 Non-controlling interests in consolidated entities	Non-controlling ownership
Aevitas	$ (1,249)	$ (694)	$ (1,943)	35.8 %
Avenue [2]	24,269	(19,011)	5,258	77.3 %
Baergic	23	(1,162)	(1,139)	33.0 %
Cellvation	(732)	(158)	(890)	20.6 %
Checkpoint [1]	29,389	(14,687)	14,702	78.0 %
Coronado SO	(290)	—	(290)	13.0 %
Cyprium	(320)	(99)	(419)	10.6 %
Helocyte	(4,322)	(402)	(4,724)	19.3 %
JMC	(211)	325	114	6.9 %
Mustang [2]	62,025	(25,727)	36,298	70.3 %
Tamid	(565)	(85)	(650)	22.8 %
Total	$ 108,017	$ (61,700)	$ 46,317	

Note 1: Checkpoint is consolidated with Fortress' operations because Fortress maintains voting control through its ownership of Checkpoint's Class A Common Shares which provide super-majority voting rights.

Note 2: Avenue and Mustang are consolidated with Fortress' operations because Fortress maintains voting control through its ownership of Preferred Class A Shares which provide super-majority voting rights.

13. Net Loss per Common Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of shares of Common Stock outstanding during the period, without consideration for Common Stock equivalents. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of Common Stock and Common Stock equivalents outstanding for the period.

The following shares of potentially dilutive securities, weighted during the years ended December 31, 2020 and 2019 have been excluded from the computations of diluted weighted average shares outstanding as the effect of including such securities would be antidilutive:

	Year Ended December 31,	
	2020	2019
Warrants to purchase Common Stock	3,419,812	2,729,186
Options to purchase Common Stock	1,103,643	1,179,680
Convertible preferred stock	—	1,038,251
Unvested Restricted Stock	14,302,004	12,625,144
Unvested Restricted Stock Units	391,336	721,478
Total	19,216,795	18,293,739

14. Stockholders' Equity

Common Stock

At the Company's 2020 Annual Meeting of Stockholders held on June 17, 2020, its stockholders approved an amendment to its certificate of incorporation to increase the number of authorized shares of common stock available to issue by 50,000,000 to 150,000,000 with a par value of $0.001 per share. The amendment was filed with the Secretary of State of the State of Delaware on June 18, 2020.94,877,492 and 74,027,425 shares of common stock are outstanding at December 31, 2020 and 2019, respectively.

The terms, rights, preference and privileges of the Common Stock are as follows:

Voting Rights

Each holder of Common Stock is entitled to one vote per share of Common Stock held on all matters submitted to a vote of the stockholders,f including the election of directors. The Company's certificate of incorporation and bylaws do not provide for cumulative voting rights.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, the holders of the Company's outstanding shares of Common Stock are entitled to receive dividends, if any, as may be declared from time to time by the Company's Board of Directors out of legally available funds.

Liquidation

In the event of the Company's liquidation, dissolution or winding up, holders of Common Stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of the Company's debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of Preferred Stock.

Rights and Preference

Holders of the Company's Common Stock have no preemptive, conversion or subscription rights, and there is no redemption or sinking fund provisions applicable to the Common Stock. The rights, preferences and privileges of the holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of the Company's preferred stock that are or may be issued.

Fully Paid and Nonassessable

All of the Company's outstanding shares of Common Stock are fully paid and nonassessable.

Series A Preferred Stock

On October 26, 2017, the Company designated 5,000,000 shares of $0.001 par value preferred stock as Series A Preferred Stock. As of December 31, 2020, and 2019, 3,427,138 and 1,341,167 shares, respectively, of Series A Preferred Stock were issued and outstanding.

The terms, rights, preference and privileges of the Series A Preferred Stock are as follows:

Voting Rights

Except as may be otherwise required by law, the voting rights of the holders of the Series A Preferred Stock are limited to the affirmative vote or consent of the holders of at least two-thirds of the votes entitled to be cast by the holders of the Series A Preferred Stock outstanding at the time in connection with the: (1) authorization or creation, or increase in the authorized or issued amount of, any class or series of capital stock ranking senior to the Series A Preferred Stock with respect to payment of dividends or the distribution of assets upon liquidation, dissolution or winding up or reclassification of any of the Company's authorized capital stock into such shares, or creation, authorization or issuance of any obligation or security convertible into or evidencing the right to purchase any such shares; or (2) amendment, alteration, repeal or replacement of the Company's certificate of incorporation, including by way of a merger, consolidation or otherwise in which the Company may or may not be the surviving entity, so as to materially and adversely affect and deprive holders of Series A Preferred Stock of any right, preference, privilege or voting power of the Series A Preferred Stock.

Dividends

Dividends on Series A Preferred Stock accrue daily and will be cumulative from, and including, the date of original issue and shall be payable monthly at the rate of 9.375% per annum of its liquidation preference, which is equivalent to $2.34375 per annum per share. The first dividend on Series A Preferred Stock sold in the offering was payable on December 31, 2017 (in the amount of $ 0.299479 per share) to the holders of record of the Series A Preferred Stock at the close of business on December 15, 2017 and thereafter for each subsequent quarter in the amount of $ 0.5839375 per share. The Company recorded approximately $6.5 million and $2.6 million of dividends in Additional Paid in Capital on the Consolidated Balance Sheets as of December 31, 2020 and 2019, respectively.

No Maturity Date or Mandatory Redemption

The Series A Preferred Stock has no maturity date, and the Company is not required to redeem the Series A Preferred Stock. Accordingly, the Series A Preferred Stock will remain outstanding indefinitely unless the Company decides to redeem it pursuant to its optional redemption right or its special optional redemption right in connection with a Change of Control (as defined below), or under the circumstances set forth below under "Limited Conversion Rights Upon a Change of Control" and elect to convert such Series A Preferred Stock. The Company is not required to set aside funds to redeem the Series A Preferred Stock.

Optional Redemption

The Series A Preferred Stock may be redeemed in whole or in part (at the Company's option) any time on or after December 15, 2022, upon not less than 30 days nor more than 60 days' written notice by mail prior to the date fixed for redemption thereof, for cash at a redemption price equal to $25.00 per share, plus any accumulated and unpaid dividends to, but not including, the redemption date.

Special Optional Redemption

Upon the occurrence a Change of Control (as defined below), the Company may redeem the shares of Series A Preferred Stock, at its option, in whole or in part, within one hundred twenty (120) days of any such Change of Control, for cash at $25.00 per share, plus accumulated and unpaid dividends (whether or not declared) to, but excluding, the redemption date. If, prior to the Change of Control conversion date, the Company has provided notice of its election to redeem some or all of the shares of Series A Preferred Stock (whether pursuant to the Company's optional redemption right described above under "Optional Redemption" or this special optional redemption right), the holders of shares of Series A Preferred Stock will not have the Change of Control conversion right with respect to the shares of Series A Preferred Stock called for redemption. If the Company elects to redeem any shares of the Series A Preferred Stock as described in this paragraph, the Company may use any available cash to pay the redemption price.

A "Change of Control" is deemed to occur when, after the original issuance of the Series A Preferred Stock, the following have occurred and are continuing:

- the acquisition by any person, including any syndicate or group deemed to be a "person" under Section 13(d)(3) of the Exchange Act of beneficial ownership, directly or indirectly, through a purchase, merger or other acquisition transaction or series of purchases, mergers or other acquisition transactions of the Company's stock entitling that person to exercise more than 50% of the total voting power of all the Company's stock entitled to vote generally in the election of the Company's directors (except that such person will be deemed to have beneficial ownership of all securities that such person has the right to acquire, whether such right is currently exercisable or is exercisable only upon the occurrence of a subsequent condition); and
- following the closing of any transaction referred to in the bullet point above, neither the Company nor the acquiring or surviving entity has a class of common equity securities (or American Depositary Receipts representing such securities) listed on the NYSE, the NYSE American LLC or the Nasdaq Stock Market, or listed or quoted on an exchange or quotation system that is a successor to the NYSE, the NYSE American LLC or the Nasdaq Stock Market.

Conversion, Exchange and Preemptive Rights

Except as described below under "Limited Conversion Rights upon a Change of Control," the Series A Preferred Stock is not subject to preemptive rights or convertible into or exchangeable for any other securities or property at the option of the holder.

Limited Conversion Rights upon a Change of Control

Upon the occurrence of a Change of Control, each holder of shares of Series A Preferred Stock will have the right (unless, prior to the Change of Control Conversion Date, the Company has provided or provides irrevocable notice of its election to redeem the Series A Preferred Stock as described above under "Optional Redemption," or "Special Optional Redemption") to convert some or all of the shares of Series A Preferred Stock held by such holder on the Change of Control Conversion Date, into the Common Stock Conversion Consideration, which is equal to the lesser of:

- the quotient obtained by dividing (i) the sum of the $25.00 liquidation preference per share of Series A Preferred Stock plus the amount of any accumulated and unpaid dividends (whether or not declared) to, but not including, the Change of Control Conversion Date (unless the Change of Control Conversion Date is after a record date for a Series A Preferred Stock dividend payment and prior to the corresponding Dividend Payment Date, in which case no additional amount for such accumulated and unpaid dividend will be included in this sum) by (ii) the Common Stock Price (such quotient, the "Conversion Rate"); and
- 13.05483 shares of common stock, subject to certain adjustments.

In the case of a Change of Control pursuant to which the Company's common stock will be converted into cash, securities or other property or assets, a holder of Series A Preferred Stock will receive upon conversion of such Series A Preferred Stock the kind and amount of Alternative Form Consideration which such holder would have owned or been entitled to receive upon the Change of Control had such holder held a number of shares of the Company's common stock equal to the Common Stock Conversion Consideration immediately prior to the effective time of the Change of Control.

Notwithstanding the foregoing, the holders of shares of Series A Preferred Stock will not have the Change of Control Conversion Right if the acquiror has shares listed or quoted on the NYSE, the NYSE American LLC or Nasdaq Stock Market or listed or quoted on an exchange or quotation system that is a successor to the NYSE, the NYSE American LLC or Nasdaq Stock Market, and the Series A Preferred Stock becomes convertible into or exchangeable for such acquiror's listed shares upon a subsequent Change of Control of the acquiror.

Liquidation Preference

In the event the Company liquidates, dissolves or is wound up, holders of the Series A Preferred Stock will have the right to receive $25.00 per share, plus any accumulated and unpaid dividends to, but not including, the date of payment, before any payment is made to the holders of the Company's common stock.

Ranking

The Series A Preferred Stock will rank, with respect to rights to the payment of dividends and the distribution of assets upon the Company's liquidation, dissolution or winding up, (1) senior to all classes or series of the Company's common stock and to all other equity securities issued by the Company other than equity securities referred to in clauses (2) and (3); (2) on a par with all equity securities issued by the Company with terms specifically providing that those equity securities rank on a par with the Series A Preferred Stock with respect to rights to the payment of dividends and the distribution of assets upon the Company's liquidation, dissolution or winding up; (3) junior to all equity securities issued by the Company with terms specifically providing that those equity securities rank senior to the Series A Preferred Stock with respect to rights to the payment of dividends and the distribution of assets upon the Company liquidation, dissolution or winding up; and (4) junior to all of the Company's existing and future indebtedness.

Stock-Based Compensation

As of December 31, 2020, the Company had four equity compensation plans: the Fortress Biotech, Inc. 2007 Stock Incentive Plan (the "2007 Plan"), the Fortress Biotech, Inc. 2013 Stock Incentive Plan, as amended (the "2013 Plan"), the Fortress Biotech, Inc. 2012 Employee Stock Purchase Plan (the "ESPP") and the Fortress Biotech, Inc. Long Term Incentive Plan ("LTIP"). In 2007, the Company's Board of Directors adopted and stockholders approved the 2007 Plan authorizing the Company to grant up to 6,000,000 shares of Common Stock to eligible employees, directors, and consultants in the form of restricted stock, stock options and other types of grants. In 2013, the Company's Board of Directors adopted and stockholders approved the 2013 Plan authorizing the Company to grant up to 2,300,000 shares of Common Stock to eligible employees, directors, and consultants in the form of restricted stock, stock options and other types of grants. In 2015, the Company's Board of Directors and stockholders approved an increase of 7,700,000 shares for the 2013 Plan and in 2020, the Company's Board of Directors and stockholders approved an increase of 3,000,000 shares bringing the total number of shares approved under this plan to13,000,000, with the aggregate total of authorized shares available for grants under the 2007 Plan and the 2013 Plan of up to 19,000,000 shares. An aggregate 14,721,911 shares were granted under both the Company's 2007 and 2013 plans, net of cancellations, and 4,278,089 shares were available for issuance as of December 31, 2020.

Certain partner companies have their own equity compensation plan under which shares are granted to eligible employees, directors and consultants in the form of restricted stock, stock options, and other types of grants of stock of the respective partner company's common stock. The table below provides a summary of those plans as of December 31, 2020:

Partner Company	Stock Plan	Shares Authorized	Shares available at December 31, 2020
Aevitas	Aevitas Therapeutics, Inc. 2018 Long Term Incentive Plan	2,000,000	1,602,000
Avenue	Avenue Therapeutics, Inc. 2015 Stock Plan	2,000,000	229,436
Baergic	FBIO Acquisition Corp. III 2017 Incentive Plan	2,000,000	1,150,000
Cellvation	Cellvation Inc. 2016 Incentive Plan	2,000,000	300,000
Checkpoint	Checkpoint Therapeutics, Inc. Amended and Restated 2015 Stock Plan	9,000,000	4,288,465
Cyprium	Cyprium Therapeutics, Inc. 2017 Stock Plan	2,000,000	575,000
Helocyte	DiaVax Biosciences, Inc. 2015 Incentive Plan	2,000,000	341,667
Journey	Journey Medical Corporation 2015 Stock Plan	3,642,857	34,000
Mustang	Mustang Bio, Inc. 2016 Incentive Plan	5,000,000	1,180,085
Oncogenuity, Inc.	FBIO Acquisition Corp. VII 2017 Incentive Plan	2,000,000	1,600,000
Tamid	FBIO Acquisition Corp. V 2017 Incentive Plan	2,000,000	1,600,000

The purpose of the Company's and partner company's equity compensation plans is to provide for equity awards as part of an overall compensation package of performance-based rewards to attract and retain qualified personnel. Such awards include, without limitation, options, stock appreciation rights, sales or bonuses of restricted stock, restricted stock units or dividend equivalent rights, and an award may consist of one such security or benefit, or two or more of them in any combination or alternative. Vesting of awards may be based upon the passage of time, the occurrence of one or more events, or the satisfaction of performance criteria or other conditions.

Incentive and non-statutory stock options are granted pursuant to option agreements adopted by the plan administrator. Options generally have 10-year contractual terms and vest in three equal annual installments commencing on the grant date.

The Company estimates the fair value of stock option grants using a Black-Scholes option pricing model. In applying this model, the Company uses the following assumptions:

- *Risk-Free Interest Rate*: The risk-free interest rate is based on the yields of United States Treasury securities with maturities similar to the expected term of the options for each option group.
- *Volatility*: The Company utilizes the trading history of its Common Stock to determine the expected stock price volatility for its Common Stock.
- *Expected Term*: Due to the limited exercise history of the Company's stock options, the Company determined the expected term based on the Simplified Method under SAB 107 and the expected term for non-employees is the remaining contractual life for both options and warrants.
- *Expected Dividend Rate*: The Company has not paid and does not anticipate paying any cash dividends in the near future on its common stock.

The fair value of each option award was estimated on the grant date using the Black-Scholes option-pricing model and expensed under the straight-line method.

The following table summarizes the stock-based compensation expense from stock option, employee stock purchase programs and restricted Common Stock awards and warrants for the years ended December 31, 2020 and 2019

	Year Ended December 31,	
($ in thousands)	2020	2019
Employee awards	$ 4,991	$ 3,666
Executive awards of Fortress Companies' stock	1,504	1,428
Non-employee awards	159	121
Warrants	130	97
Partner Companies:		
Avenue	710	1,839
Checkpoint	2,780	3,121
Mustang	2,987	2,664
Other	190	252
Total stock-based compensation expense	$ 13,451	$ 13,188

For the years ended 2020 and 2019, $3.2 million and $2.8 million was included in research and development expenses, and $10.3 million and $10.4 million was included in selling, general and administrative expenses, respectively.

Options

The following table summarizes Fortress stock option activities excluding activities related to partner companies:

	Shares	Weighted average exercise price	Total weighted average intrinsic value	Weighted average remaining contractual life (years)
Options vested and expected to vest at December 31, 2018	1,285,501	$ 3.75	$ —	2.93
Granted	125,000	1.18	173,750	
Options vested and expected to vest at December 31, 2019	1,410,501	$ 4.30	$ 684,752	2.33
Exercised	(100,000)	1.18	—	—
Forfeited	(257,011)	2.57	—	—
Options vested and expected to vest at December 31, 2020	1,053,490	$ 5.02	$ 647,482	2.63

During the years ended December 31, 2020 and 2019, there were no exercises of stock options.

As of December 31, 2020, the Company had no unrecognized stock-based compensation expense related to options.

Restricted Stock

Stock-based compensation expense from restricted stock awards and restricted stock units for the years ended December 31, 2020 and 2019 was $12.5 million and $11.5 million, respectively.

During 2020, the Company granted 1.9 million restricted shares of its Common Stock to executives and directors of the Company and0.6 million restricted stock units to employees and non-employees of the Company. The fair value of the restricted stock awards issued during 2020 of $4.8 million and the fair value of the restricted stock unit awards issued during 2020 of $2.4 million were estimated on the grant date using the Company's stock price as of the grant date. The 2020 restricted stock awards and restricted stock unit awards vest upon both the passage of time as well as meeting certain performance criteria. Restricted stock awards and restricted stock unit awards are expensed under the straight-line method over the vesting period. Expense for awards with performance-based vesting criteria will be measured and recorded if and when it becomes probable that the milstone will be achieved.

During 2019, the Company granted 1.5 million restricted shares of its Common Stock to executives and directors of the Company and 0.3 million restricted stock units to employees and non-employees of the Company. The fair value of the restricted stock awards issued during 2019 of $1.4 million and the fair value of the restricted stock unit awards issued during 2019 of $0.4 million were estimated on the grant date using the Company's stock price as of the grant date. The 2019 restricted stock awards and restricted stock unit awards vest upon both the passage of time as well as meeting certain performance criteria. Restricted stock awards and restricted stock unit awards are expensed under the straight-line method over the vesting period. Expense for awards with performance-based vesting criteria will be measured and recorded if and when it becomes probable that the milstone will be achieved.

The following table summarizes Fortress restricted stock awards and restricted stock units activities, excluding activities related to Fortress subsidiaries:

	Number of shares	Weighted average grant price
Unvested balance at December 31, 2018	12,645,982	$ 2.72
Restricted stock granted	1,546,408	0.88
Restricted stock vested	(220,000)	3.16
Restricted stock units granted	290,000	1.49
Restricted stock units forfeited	(135,416)	3.91
Restricted stock units vested	(358,960)	3.61
Unvested balance at December 31, 2019	13,768,014	$ 2.46
Restricted stock granted	1,873,072	2.57
Restricted stock vested	(230,000)	2.78
Restricted stock units granted	630,126	3.82
Restricted stock units forfeited	(148,750)	3.30
Restricted stock units vested	(384,958)	3.49
Unvested balance at December 31, 2020	15,507,504	$ 2.49

The total fair value of restricted stock units and awards that vested during the years ended December 31, 2020 and 2019 was $2.0 million and $2.0 million, respectively. As of December 31, 2020, the Company had unrecognized stock-based compensation expense related to all unvested restricted stock and restricted stock unit awards of $12.6 million and $3.1 million, respectively, which is expected to be recognized over the remaining weighted-average vesting period of 4.1 years and 2.8 years, respectively. This amount does not include 0.1 million restricted stock units as of December 31, 2020 which are performance-based and vest upon achievement of certain corporate milestones. Stock-based compensation for these awards will be measured and recorded if and when it is probable that the milestone will be achieved.

Deferred Compensation Plan

On March 12, 2015, the Company's Compensation Committee approved the Deferred Compensation Plan allowing all non-employee directors the opportunity to defer all or a portion of their fees or compensation, including restricted stock and restricted stock units. During the year ended December 31, 2020 and 2019, certain non-employee directors elected to defer an aggregate of 230,000 and 230,000 restricted stock awards, respectively, under this plan.

Employee Stock Purchase Plan

Eligible employees can purchase the Company's Common Stock at the end of a predetermined offering period at 85% of the lower of the fair market value at the beginning or end of the offering period. The ESPP is compensatory and results in stock-based compensation expense.

As of December 31, 2020, 577,301 shares have been purchased and 422,699 shares are available for future sale under the Company's ESPP. The Company recognized share-based compensation expense of $0.1 million and $0.1 million for the years ended December 31, 2020 and 2019, respectively.

Warrants

The following table summarizes Fortress warrant activities, excluding activities related to partner companies:

	Number of shares	Weighted average exercise price	Total weighted average intrinsic value	Weighted average remaining contractual life (years)
Outstanding as of December 31, 2018	2,754,189	$ 3.28	$ —	3.49
Granted	60,000	1.92	39,000	—
Forfeited	(73,009)	5.65	—	—
Outstanding as of December 31, 2019	2,741,180	$ 3.19	$ 111,000	2.73
Granted	1,849,450	3.14	101,000	—
Forfeited	(9)	3.00	2	—
Outstanding as of December 31, 2020	4,590,621	$ 3.17	$ 607,848	4.85
Exercisable as of December 31, 2020	4,430,621	$ 3.21	$ 452,848	4.80

During 2020, in connection with the issuance of the Oaktree Note, the Company issued warrants to purchase1,749,450 shares of common stock; in connection with a consulting agreement the Company issued warrants to purchase 100,000 shares of common stock. The relative fair value of the Oaktree warrants was recorded to debt discount and will be amortized over the term of the Oaktree Note (see Note 10). As of December 31, 2020, the Company had no unrecognized stock-based compensation expense related to warrants.

Long-Term Incentive Program ("LTIP")

On July 15, 2015, the stockholders approved the LTIP for the Company's Chairman, President and Chief Executive Officer, Dr. Rosenwald, and Executive Vice Chairman, Strategic Development, Mr. Weiss. The LTIP consists of a program to grant equity interests in the Company and in the Company's subsidiaries, and a performance-based bonus program that is designed to result in performance-based compensation that is deductible without limit under Section 162(m) of the Internal Revenue Code of 1986, as amended.

On January 1, 2020 and 2019, the Compensation Committee granted801,536 and 648,204 shares each to Dr. Rosenwald and Mr. Weiss, respectively. These equity grants, made in accordance with the LTIP, represent 1% of total outstanding shares of the Company as of the dates of such grants and were granted in recognition of their performance in 2019 and 2018. The shares are subject to repurchase by the Company until both of the following conditions are met: (i) the Company's market capitalization increases by a minimum of $100.0 million, and (ii) the employee is either in the service of the Company as an employee or as a Board member (or both) on the tenth anniversary of the LTIP, or the eligible employee has had an involuntary separation from service (as defined in the LTIP). The Company's repurchase option on such shares will also lapse upon the occurrence of a corporate transaction (as defined in the LTIP) if the eligible employee is in service on the date of the corporate transaction. The fair value of each grant on the grant date was approximately $2.1 million for the 2020 grant and $0.6 million for the 2019 grant. For the year ended December 31, 2020 and 2019, the Company recorded stock compensation expense of approximately $2.5 million and $1.4 million, respectively related to the LTIP grants on the Consolidated Statements of Operations.

Capital Raise

2019 Common Stock At the Market Offering

On June 28, 2019, the Company entered into an At Market Issuance Sales Agreement ("2019 Common ATM"), with Cantor Fitzgerald & Co., Oppenheimer & Co., Inc., H.C. Wainwright & Co. Inc., Jones Trading Institutional Services LLC and B. Riley, as selling agents, governing potential sales of the Company's common stock. For the years ended December 31, 2020 and 2019, the Company issued approximately 17.4 million and 3.8 million shares of common stock, respectively, for gross proceeds of $47.5 million and $5.6 million, respectively, at an average selling price of $2.73 and $1.49, respectively. Under the 2019 Common ATM, the Company pays the agents a commission rate of up to 3.0% of the gross proceeds from the sale of any shares of common stock, and in connection with these sales, with respect to the years ended December 31, 2020 and 2019, the Company paid aggregate fees of approximately $1.4 million and $0.2 million, respectively.

Common Stock At the Market Offering

On August 17, 2016, the Company entered into an Amended and Restated At Market Issuance Sales Agreement, or Sales Agreement, with MLV & Co. LLC, or MLV, and FBR Capital Markets & Co., or FBR ("ATM"). On August 18, 2016, the Company filed a Registration Statement on Form S-3, which became effective on December 1, 2016 and permits the Company to issue and sell shares of its common stock having an aggregate offering price of up to $53.0 million from time to time through MLV and FBR, as sales agents under the Sales Agreement. The Sales Agreement terminated on August 17, 2019.

Pursuant to the terms of the ATM, for the year ended December 31, 2019, the Company issued approximately 8.0 million shares of common stock, respectively, at an average price of $1.88 per share for gross proceeds of $15.1 million. In connection with these sales, the Company paid aggregate fees of approximately $0.3 million, respectively.

2019 9.375% Series A Cumulative Redeemable Perpetual Preferred Stock Offering

In November 2019, the Company completed an underwritten public offering of 262,500 shares of its 9.375% Series A Cumulative Redeemable Perpetual Preferred Stock, (Nasdaq: FBIOP) (the "Preferred Stock"), (plus a 45-day option to purchase up to an additional 39,375 shares, which was exercised in November, 2019) at a price of $20 per share for gross proceeds of approximately $6.0 million, before deducting underwriting discounts and commissions and offering expenses.

On February 14, 2020, the Company announced the closing of an underwritten public offering, whereby it sold 625,000 shares of its Preferred Stock, (plus a 45-day option to purchase up to an additional 93,750 shares, which was exercised in February 2020) at a price of $20.00 per share for gross proceeds of approximately $14.4 million, before deducting underwriting discounts and commissions and offering expenses of approximately $1.3 million.

On May 29, 2020, the Company closed on an underwritten public offering whereby it sold 555,556 shares of its Preferred Stock, (plus a 45-day option to purchase up to an additional 83,333 shares, which was exercised in May 2020) at a price of $18.00 per share for gross proceeds of approximately $11.5 million, before deducting underwriting discounts and commissions and offering expenses of approximately $1.1 million.

On August 26, 2020, the Company closed on an underwritten public offering whereby it sold 666,666 shares of its Preferred Stock, (plus a 45-day option to purchase up to an additional 66,666 shares, which was exercised in August 2020) at a price of $18.00 per share for gross proceeds of approximately $13.2 million, before deducting underwriting discounts and commissions and offering expenses of approximately $1.1 million.

2018 9.375% Series A Cumulative Redeemable Perpetual Preferred Stock At the Market Offering

On April 5, 2018, the Company entered into an At Market Sales Agreement (the "2018 Preferred ATM"), with B. Riley, National Securities Corporation, LifeSci Capital LLC, Maxim Group LLC and Noble Capital Markets, Inc. as selling agents, governing the issuance of the Company's 9.375% Series A Cumulative Redeemable Perpetual Preferred Stock ("Perpetual Preferred Stock"). For the year ended December 31, 2019, the Company issued 39,292 shares of Perpetual Preferred Stock for gross proceeds $0.8 million at an average selling price of $20.67. No shares of Perpetual Preferred Stock were issued in 2018. Under the 2018 Preferred ATM, the Company pays the agents a commission rate of up to 7.0% of the gross proceeds from the sale of any shares of Perpetual Preferred Stock, and in connection with these sales, with respect to the year ended December 31, 2019, the Company paid aggregate fees of approximately $24,000.

The above-mentioned shares of Perpetual Preferred Stock were sold under the 2016 Shelf. The 2016 Shelf expired on December 1, 2019.

2019 Shelf

The 2019 offerings of both common stock and preferred stock were sold under the Company's shelf registration statement on Form S-3 originally filed on July 6, 2018 and declared effective July 23, 2019 (the "2019 Shelf"). The shares of common stock were sold under the Company's shelf registration statement on Form S-3 originally filed on July 6, 2018 and declared effective July 23, 2019 (the "2019 Shelf") through May 27, 2020.

2020 Shelf

On May 18, 2020, the Company filed a new shelf registration statement on Form S-3, which was declared effective on May 26, 2020 (the "2020 Shelf"). In connection with the 2020 Shelf, the Company entered into an At Market Issuance Sales Agreement ("2020 Common ATM"), with Cantor Fitzgerald & Co., Oppenheimer & Co., Inc., H.C. Wainwright & Co. Inc., B. Riley and Dawson James Securities, Inc., as selling agents, governing potential sales of the Company's common stock. ATM sales commencing on June 1, 2020 were made under the 2020 Shelf as were Perpetual Preferred Offerings. Approximately $26.7 million of securities remain available for sale under the 2020 Shelf at December 31, 2020.

Cyprium 9.375% Series A Cumulative Redeemable Perpetual Preferred Stock Offering

On August 28, 2020, Cyprium closed on an underwritten public offering whereby it sold 255,400 shares of its 9.375% Series A Cumulative Redeemable Perpetual Preferred Stock ("Cyprium Perpetual Preferred Stock" or "Cyprium PPS"), plus an overallotment of an additional 64,600 shares, which was exercised on September 18, 2020, at a price of $25.00 per share for gross proceeds of $8.0 million, before deducting underwriting discounts and commissions and offering expenses of approximately $0.9 million (the "Cyprium Offering").

Pursuant to the terms of the Cyprium PPS, shareholders on the record date are entitled to receive a monthly cash dividend of $0.19531 per share which yields an annual dividend of $2.34375 per share. The Cyprium PPS will automatically be redeemed upon the first (and only the first) bona fide, arm's-length sale of a Priority Review Voucher (a "PRV") issued by the FDA in connection with the approval of CUTX-101, Cyprium's lead product candidate. Upon the PRV sale, each share of Cyprium PPS will be automatically redeemed in exchange for a payment equal to twice (2x) the $25.00 liquidation preference, *plus* accumulated and unpaid dividends to, but excluding, the redemption date.

An optional exchange to Company Preferred Stock is available after 24 months from the issuance date so long as a sale of the PRV has not occurred. Additionally, if a PRV Sale has not occurred by September 30, 2024 the Cyprium PPS is either automatically exchanged for Company Preferred Stock or cash at the discretion of Fortress. The Cyprium PPS is fully and unconditionally guaranteed by Fortress.

Cyprium paid an initial dividend of $49,883 ($0.19531 per share) to shareholders of record on September 30, 2020. Cyprium paid $0.2 million in dividends for the year ended December 31, 2020.

Checkpoint Therapeutics, Inc.

In November 2017, the Checkpoint filed a shelf registration statement on Form S-3 (No. 333-221493) (the "Checkpoint 2017 S-3"), which was declared effective in December 2017. Under the Checkpoint S-3, Checkpoint may sell up to a total of $100 million of its securities. In connection with the Checkpoint S-3, Checkpoint entered into an At-the-Market Issuance Sales Agreement (the "Checkpoint 2017 ATM") with Cantor Fitzgerald & Co., Ladenburg Thalmann & Co. Inc. and H.C. Wainwright & Co., LLC (each an "Agent" and collectively, the "Agents"), relating to the sale of shares of common stock. Under the Checkpoint 2017 ATM, Checkpoint pays the Agents a commission rate of up to 3.0% of the gross proceeds from the sale of any shares of common stock. The Checkpoint 2017 S-3 expired in December 2020.

During the year ended December 31, 2020, Checkpoint sold a total of5,104,234 shares of common stock under the Checkpoint ATM for aggregate total gross proceeds of approximately $12.8 million at an average selling price of $2.50 per share, resulting in net proceeds of approximately $12.4 million after deducting commissions and other transaction costs.

During the year ended December 31, 2019, Checkpoint sold a total of2,273,189 shares of common stock under the Checkpoint ATM for aggregate total gross proceeds of approximately $8.0 million at an average selling price of $3.52 per share, resulting in net proceeds of approximately $7.8 million after deducting commissions and other transaction costs.

In September 2020, Checkpoint completed an underwritten public offering in which it sold7,321,429 shares of its common stock at a price of $2.80 per share for gross proceeds of approximately $20.5 million. Total net proceeds from the offering were approximately $18.9 million, net of underwriting discounts and offering expenses of approximately $1.6 million. The shares were sold under the Checkpoint 2017 S-3.

In November 2019, Checkpoint completed an underwritten public offering of15,400,000 shares of its common stock at a price of $1.27 per share for gross proceeds of approximately $19.6 million. Total net proceeds from the offering were approximately $17.6 million, net of underwriting discounts and offering expenses of approximately $2.0 million. The shares were sold under the Checkpoint 2017 S-3.

In November 2020, Checkpoint filed a shelf registration statement on Form S-3 (the “Checkpoint 2020 S-3”), which was declared effective in December 2020. Under the Checkpoint 2020 S-3, Checkpoint may sell up to a total of $100 million of its securities. In connection with the Checkpoint S-3, Checkpoint entered into an ATM (the "Checkpoint 2020 ATM") with Cantor Fitzgerald & Co., Ladenburg Thalmann & Co. Inc. and H.C. Wainwright & Co., LLC (each an “Agent” and collectively, the “Agents”), relating to the sale of shares of common stock. Under the ATM, Checkpoint pays the Agents a commission rate of up to 3.0% of the gross proceeds from the sale of any shares of common stock.

As of December 31, 2020, approximately $83.6 million of the shelf remains available for sale under the Checkpoint 2020 S-3.

Mustang Bio, Inc.

On July 13, 2018, Mustang filed a shelf registration statement No. 333-226175 on Form S-3 , as amended on July 20, 2018 (the "2018 Mustang S-3"), which was declared effective in August 2018. Under the 2018 Mustang S-3, Mustang may sell up to a total of $75.0 million of its securities. In connection with the 2018 Mustang S-3, Mustang entered into an At-the-Market Issuance Sales Agreement (the "Mustang ATM") with B. Riley Securities, Inc. (Formerly B. Riley FBR, Inc.), Cantor Fitzgerald & Co., National Securities Corporation, and Oppenheimer & Co. Inc. (each an "Agent" and collectively, the "Agents"), relating to the sale of shares of common stock. Under the Mustang ATM, Mustang pays the Agents a commission rate of up to 3.0% of the gross proceeds from the sale of any shares of common stock.

During the year ended December 31, 2020, Mustang issued approximately17.6 million shares of common stock at an average price of $3.40 per share for gross proceeds of $59.8 million under the Mustang ATM. In connection with these sales, Mustang paid aggregate fees of approximately $1.1 million for net proceeds of approximately $58.7 million.

During the year ended December 31, 2019, Mustang issued approximately 3.5 million shares of common stock at an average price of $6.42 per share for gross proceeds of $22.5 million under the Mustang ATM. In connection with these sales, Mustang paid aggregate fees of approximately $0.5 million for net proceeds of approximately $22.0 million.

On June 11, 2020, Mustang entered into an underwriting agreement (the "Mustang Underwriting Agreement") with Cantor Fitzgerald & Co., as representative of the underwriters named therein (each, an "Underwriter" and collectively with Cantor Fitzgerald & Co., the "Underwriters"). In connection with the Mustang Underwriting Agreement, Mustang issued 10,769,231 shares of common stock (plus a 30-day option to purchase up to an additional 1,615,384 shares of common stock, of which 686,373 were exercised) at a price of $3.25 per share for gross proceeds of approximately $37.2 million, before deducting underwriting discounts and commissions and offering expenses. In connection with the public offering, Mustang paid aggregate fees of approximately $2.4 million for net proceeds of approximately $34.8 million. The shares were sold under the Mustang S-3 registrations filed with the Securities and Exchange Commission. The offering closed on June 15, 2020, and the over-allotment closed on June 25, 2020.

In April 2019, Mustang completed an underwritten public offering of 6,875,000 shares of its common stock, (plus a 30-day option to purchase up to an additional 1,031,250 shares of common stock, which was exercised in May 2019) at a price of $4.00 per share for gross proceeds of approximately $31.6 million, before deducting underwriting discounts and commissions and offering expenses. The shares were sold under the 2018 Mustang S-3. Mustang paid aggregate fees of approximately $2.1 million and received approximately $29.5 million of net proceeds.

On October 23, 2020, Mustang filed a shelf registration statement No. 333-249657 on Form S-3 (the "2020 Mustang S-3"), which was declared effective on December 4, 2020. Under the 2020 Mustang S-3, Mustang may sell up to a total of $100.0 million of its securities. As of December 31, 2020, approximately $85.7 million of the 2020 Mustang S-3 remains available for sales of securities.

On August 16, 2019, Mustang filed a shelf registration statement No. 333-233350 on Form S-3 (the "2019 Mustang S-3"), which was declared effective on September 30, 2019. Under the 2019 Mustang S-3, Mustang may sell up to a total of $75.0 million of its securities. As of December 31, 2020, the 2019 S-3 is no longer available for sales of securities.

15. Commitments and Contingencies

Leases

On October 3, 2014, the Company entered into a 15-year lease for office space at 2 Gansevoort Street, New York, NY 10014, at an average annual rent of $2.5 million. The Company took possession of this space, which serves as its principal executive offices, in December 2015, and took occupancy in April 2016. Total rent expense, over the full term of the lease for this space will approximate $ 40.7 million. In conjunction with the lease, the Company entered into Desk Space Agreements with two related parties: OPPM and TGTX, to occupy 10% and 45%, respectively, of the office space that requires them to pay their share of the average annual rent of $0.3 million and $1.1 million, respectively. The total net rent expense will approximate $16.0 million over the lease term. These initial rent allocations will be adjusted periodically for each party based upon actual percentage of the office space occupied. Additionally, the Company has reserved the right to execute desk space agreements with other third parties and those arrangements will also affect the cost of the lease actually borne by us.

In October 2015, the Company entered into a 5-year lease for approximately 6,100 square feet of office space in Waltham, MA at an average annual rent of approximately $0.2 million. The Company took occupancy of this space in January 2016. In December 2020, we amended our lease and entered into a new two-year extension of the same office space in Waltham, MA at an average annual rent of $0.2 million. The term of this amended lease commences on April 1, 2021 and will expire on March 31, 2023.

Journey

In June 2017, Journey extended its lease for 2,295 square feet of office space in Scottsdale, AZ by one year, at an average annual rent of approximately $55,000. Journey originally took occupancy of this space in November 2014. In August 2018, Journey amended their lease and entered into a new two-year extension for 3,681 square feet of office space in the same location in Scottsdale, AZ at an annual rate of approximately $94,000. The term of this amended lease commenced on December 1, 2018 and will expire on November 30, 2020. In August 2020, Journey amended their lease and entered into a new 25-month extension of the same office space in Scottsdale, AZ at an average annual rent of $0.1 million. The term of this amended lease commenced on December 1, 2020 and will expire on December 31, 2022.

Mustang

On October 27, 2017, Mustang entered into a lease agreement with WCS - 377 Plantation Street, Inc., a Massachusetts nonprofit corporation ("Landlord"). Pursuant to the terms of the lease agreement, Mustang agreed to lease 27,043 square feet from the Landlord, located at 377 Plantation Street in Worcester, MA (the "Facility"), through November 2026, subject to additional extensions at Mustang's option. Base rent, net of abatements of $0.6 million over the lease term, totals approximately $3.6 million, on a triple-net basis.

The terms of the lease also require that Mustang post an initial security deposit of $0.8 million, in the form of $0.5 million letter of credit and $0.3 million in cash, which increased to $1.3 million ($1.0 million letter of credit, $0.3 million in cash) on November 1, 2019. After the fifth lease year, the letter of credit obligation is subject to reduction.

The Facility began operations for the production of personalized CAR T and gene therapies in 2018.

The Company leases copiers under agreements classified as operating leases that expire on various dates through 2024.

Most of the Company's lease liabilities result from the lease of its New York City, NY office, which expires in 2031 and Mustang's Worcester, MA cell processing facility lease, which expires in 2026. Such leases do not require any contingent rental payments, impose any financial restrictions, or contain any residual value guarantees. Certain of the Company's leases include renewal options and escalation clauses; renewal options have not been included in the calculation of the lease liabilities and right of use assets as the Company is not reasonably certain to exercise the options. The Company does not act as a lessor or have any leases classified as financing leases. At December 31, 2020, the Company had operating lease liabilities of $24.7 million and right of use assets of $20.5 million, which were included in the Consolidated Balance Sheet.

During the years ended December 31, 2020 and 2019, the Company recorded $3.2 million and $3.2 million, respectively, as lease expense to current period operations.

	Year Ended December 31,	
($ in thousands)	**2020**	**2019**
Lease Cost		
Operating lease cost	$ 3,246	$ 3,199
Shared lease costs	(1,873)	(1,876)
Variable lease cost	593	801
Total lease expense	$ 1,966	$ 2,124

The following tables summarize quantitative information about the Company's operating leases, under the adoption of ASC Topic 842 *Leases*:

($ in thousands)	Year Ended December 31, 2020	2019
Operating cash flows from operating leases	$ (2,958)	$ (3,001)
Right-of-use assets exchanged for new operating lease liabilities	634	—
Weighted-average remaining lease term – operating leases (years)	5.7	6.3
Weighted-average discount rate – operating leases	6.3 %	6.2 %

($ in thousands)	Future Lease Liability
Year Ended December 31, 2021	$ 3,353
Year Ended December 31, 2022	3,461
Year Ended December 31, 2023	3,233
Year Ended December 31, 2024	3,193
Year Ended December 31, 2025	3,244
Other	17,028
Total operating lease liabilities	33,512
Less: present value discount	(8,772)
Net operating lease liabilities, short-term and long-term	$ 24,740

The Company recognizes rent expense on a straight-line basis over the non-cancellable lease term. Rent expense for the years ended December 31, 2020 and 2019 was $2.0 million and $2.1 million, respectively.

Indemnification

In accordance with its certificate of incorporation, bylaws and indemnification agreements, the Company has indemnification obligations to its officers and directors for certain events or occurrences, subject to certain limits, while they are serving at the Company's request in such capacity. There have been no claims to date, and the Company has director and officer insurance to address such claims. Pursuant to agreements with clinical trial sites, the Company provides indemnification to such sites in certain conditions.

Legal Proceedings

In the ordinary course of business, the Company and its subsidiaries may be subject to both insured and uninsured litigation. Suits and claims may be brought against the Company by customers, suppliers, partners and/or third parties (including tort claims for personal injury arising from clinical trials of the Company's product candidates and property damage) alleging deficiencies in performance, breach of contract, etc., and seeking resulting alleged damages.

In November 2020, a purported securities class action complaint was filed in the U.S. District Court for the Eastern District of New York, putatively on behalf of all shareholders who purchased or otherwise acquired Fortress securities between December 11, 2019 and October 9, 2020 (the "Class Period"), and who were allegedly damaged in connection therewith. The case is captioned *Cushman v. Fortress Biotech, Inc., et al*, Case No. 1:20-cv-05767, and names as defendants the Company and two of our officers. The complaint alleges that, throughout the Class Period, the Company made false and/or misleading statements and/or failed to disclose various facts and circumstances with respect to a New Drug Application filed by Avenue Therapeutics, Inc., our partner company, regarding IV Tramadol, Avenue's lead product candidate. The complaint alleges violations of the Securities Exchange Act of 1934 and Rule 10b-5 promulgated thereunder, and seeks damages as well as attorneys' fees, expert fees and other costs. The action is in the early stages of litigation, and the Company intends to vigorously contest the claims.

16. Employee Benefit Plan

On January 1, 2008, the Company adopted a defined contribution 401(k) plan which allows employees to contribute up to a percentage of their compensation, subject to IRS limitations and provides for a discretionary Company match up to a maximum of 4% of employee compensation. For the years ended December 31, 2020 and 2019, the Company paid a matching contribution of $0.5 million and $0.4 million, respectively.

17. Related Party Transactions

The Company's Chairman, President and Chief Executive Officer, individually and through certain trusts over which he has voting and dispositive control, beneficially owned approximately 9.9% and 11.6% of the Company's issued and outstanding Common Stock as of December 31, 2020 and 2019, respectively. The Company's Executive Vice Chairman, Strategic Development individually owns approximately 10.8% and 12.7% of the Company's issued and outstanding Common Stock at December 31, 2020 and 2019, respectively.

Shared Services Agreement with TGTX

In July 2015, TGTX and the Company entered into an arrangement to share the cost of certain research and development employees. The Company's Executive Vice Chairman, Strategic Development, is Executive Chairman and Interim Chief Executive Officer of TGTX. Under the terms of the Agreement, TGTX will reimburse the Company for the salary and benefit costs associated with these employees based upon actual hours worked on TGTX related projects. In connection with the shared services agreement, the Company invoiced TGTX $0.6 million and $0.5 million, and received payments of $0.5 million and $0.5 million for the years ended December 31, 2020 and 2019, respectively.

Desk Share Agreements with TGTX and OPPM

In September 2014, the Company entered into Desk Share Agreements with TGTX and Opus Point Partners Management, LLC ("OPPM") to occupy 40% and 20% of the New York, NY office space that requires TGTX and OPPM to pay their share of the average annual rent. These initial rent allocations will be adjusted periodically for each party based upon actual percentage of the office space occupied. Additionally, the Company has reserved the right to execute desk share agreements with other third parties and those arrangements will also affect the cost of the lease actually borne by the Company. Each initial Desk Share Agreement has a term of five years. The Company took possession of the New York, NY office space in December 2015, commenced build out of the space shortly thereafter and took occupancy of the space in April 2016. The Desk Share Agreement was amended in May 2016, adjusting the initial allocations to 45% for TGTX and 10% for OPPM. The Desk Share Agreement was amended again in 2020, adjusting the rent allocations to 65% for TGTX and 0% for OPPM.

In connection with the Company's Desk Space Agreements for the New York, NY office space, for the years ended December 31, 2020 and 2019, the Company had paid $2.6 million and $2.6 million in rent, respectively, and invoiced TGTX and OPPM approximately $1.6 million and $1.3 million and nil and $0.2 million respectively, for their prorated share of the rent base. At December 31, 2020, the amount due related to this arrangement from TGTX and OPPM approximated nil and $0.4 million, respectively.

As of July 1, 2018, TGTX employees began to occupy desks in the Waltham, MA office under the Desk Share Agreement. TGTX began to pay their share of the rent based on actual percentage of the office space occupied on a month by month basis. For the years ended December 31, 2020 and 2019, the Company had paid approximately $0.3 million and $0.2 million in rent for the Waltham, MA office, and invoiced TGTX approximately $0.1 million and $0.1 million, respectively.

As of December 31, 2020 and 2019, the Company had paid a total of $2.9 million and $2.8 million, respectively, in rent under the Desk Share Agreements for both the New York, NY office and the Waltham, MA office combined, and invoiced TGTX approximately $ 1.7 million and $1.4 million, respectively, for their prorated share of the rents.

Checkpoint Collaborative Agreements with TGTX

Checkpoint has entered into various agreements with TGTX to develop and commercialize certain assets in connection with its licenses, including a collaboration agreement for some of the Dana Farber licensed antibodies, and a sublicense agreement for the Jubilant family of patents. Checkpoint believes that by partnering with TGTX to develop these compounds in therapeutic areas outside of its business focus, it may substantially offset its preclinical costs and milestone costs related to the development and marketing of these compounds in solid tumor indications.

2019 Notes (formerly the Opus Credit Facility)

On September 14, 2016, the Company and Opus Point Health Innovations Fund ("OPHIF") entered into a Credit Facility Agreement (the "Opus Credit Facility"). Fortress's Chairman, President and Chief Executive Officer (Lindsay A. Rosenwald) and Fortress's Executive Vice President, Strategic Development (Michael Weiss), are Co-Portfolio Managers and Partners of OPPM, an affiliate of OPHIF. As such, all of the disinterested directors of Fortress's board of directors approved the terms of the Opus Credit Facility and related agreements.

On March 12, 2018, the Company and OPHIF amended and restated the Opus Credit Facility (the "A&R Opus Credit Facility"). The A&R Opus Credit Facility extended the maturity date of the notes issued under the Opus Credit Facility from September 14, 2018 by one year to September 14, 2019. On September 13, 2019, the Company and OPHIF extended the maturity dates of the notes from September 14, 2019 by two years to September 14, 2021. Fortress retained the ability to prepay the Notes at any time without penalty. The notes payable under the A&R Opus Credit Facility bear interest at 12% per annum.

Effective December 31, 2019, OPHIF dissolved and distributed it assets among its limited partners. Following the distribution, the $9.0 million facility comprised of separate notes (collectively, the "2019 Notes") held by DAK Capital Inc. ($3.8 million); Fortress' Chairman, President and Chief Executive Officer Lindsay A. Rosenwald, M.D. ($0.3 million); Fortress's Executive Vice President, Strategic Development Michael S. Weiss ($2.0 million); and various entities and individuals affiliated with Dr. Rosenwald and Mr. Weiss ($2.9 million). The terms of the 2019 Notes did not change in connection with such reallocations.

During the year ended December 31, 2020, the Company used certain proceeds from the Oaktree Note to pay off the $9.0 million balance previously outstanding under the 2019 Notes. For the year ended December 31, 2020, in connection with the 2019 Notes pay off, the Company paid $0.5 million in interest on the portion of the 2019 Notes held by the Company's Chairman, President and Chief Executive Officer and the Company's Executive Vice President, Strategic Development.

2018 Venture Notes

For the year ended December 31, 2018, the Company raised approximately $21.7 million in promissory notes. National Securities Corporation ("NSC"), a wholly owned subsidiary of National, and a related party as a result of the Company's ownership of National, acted as the sole placement agent for the 2018 Venture Notes. In November 2018, the Company announced that it had an agreement to sell its majority holding in National, the sale was completed in February of 2019, see Note 3. During the year ended December 31, 2020, the Company used certain proceeds from the Oaktree Note to pay off the $21.7 million balance previously outstanding under the 2018 Venture Notes.

2017 Subordinated Note Financing

On March 17, 2017, the Company and NSC entered into placement agency agreements with NAM Biotech Fund and NAM Special Situation Fund in connection with the sale of subordinated promissory notes (see Note 10). Pursuant to the terms of the agreements, NSC received a placement agent fee in cash of 10% of the debt raised and warrants equal to 10% of the aggregate principal amount of debt raised divided by the closing share price of the Company's common stock on the date of closing.

For the year ended December 31, 2017, NSC earned a placement agent fee of $2.8 million and a Placement Agent Warrant to purchase 716,180 shares of the Company's common stock, all of which are outstanding, with exercise prices ranging from $3.61 to $4.75. During the year ended December 31, 2020, the Company used certain proceeds from the Oaktree Note to pay off the $28.4 million balance previously outstanding under the 2017 Subordinated Note Financing.

Avenue Credit Facility Agreement

On June 12, 2020, Avenue, the Company and InvaGen entered into a Facility Agreement ("Avenue Facility Agreement"), under which, beginning on October 1, 2020, Avenue may borrow up to $ 2.0 million collectively from the Company and InvaGen, subject to certain conditions set forth therein. The Company's commitment amount is $0.8 million, and InvaGen's is $1.2 million, and a 7% per annum interest rate applies (payable on the last day of each fiscal quarter). Repayment of the loan is due upon the earliest to occur of: (i) the Second Stage Closing Date, as defined in the Avenue SPMA; (ii) April 29, 2021; and (iii) the date that is 30 days following the termination of the Avenue SPMA. As of December 31, 2020, there have been no amounts drawn by Avenue on the Avenue Facility Agreement.

Founders Agreement and Management Services Agreement

The Company has entered into Founders Agreements with each of the Fortress partner companies listed in the table below. Pursuant to each Founders Agreement, in exchange for the time and capital expended in the formation of each partner company and the identification of specific assets the acquisition of which result in the formation of a viable emerging growth life science company, the Company will loan each such partner company an amount representing the up-front fee required to acquire assets. Each Founders Agreement has a term of 15 years, which upon expiration automatically renews for successive one-year periods unless terminated by the Company or a Change in Control (as defined in the Founders Agreement) occurs. In connection with each Founders Agreement the Company receives 250,000 Class A Preferred shares (except for that with Checkpoint, in which the Company holds Class A Common Stock).

The Class A Preferred Stock (Class A Common Stock with respect to Checkpoint) is identical to common stock other than as to voting rights, conversion rights and the PIK Dividend right (as described below). Each share of Class A Preferred Stock (Class A Common Stock with respect to Checkpoint) is entitled to vote the number of votes that is equal to one and one-tenth (1.1) times a fraction, the numerator of which is the sum of (A) the shares of outstanding common stock and (B) the whole shares of common stock into which the shares of outstanding Class A Preferred Stock (Class A Common Stock with respect to Checkpoint) are convertible and the denominator of which is the number of shares of outstanding Class A Preferred Stock (Class A Common Stock with respect to Checkpoint). Thus, the Class A Preferred Stock (Class A Common Stock with respect to Checkpoint) will at all times constitute a voting majority. Each share of Class A Preferred Stock (Class A Common Stock with respect to Checkpoint) is convertible, at the holder's option, into one fully paid and nonassessable share of common stock of such partner company, subject to certain adjustments.

The holders of Class A Preferred Stock (and the Class A Common Stock with respect to Checkpoint), as a class, are entitled receive on each effective date or "Trigger Date" (defined as the date that the Company first acquired, whether by license or otherwise, ownership rights to a product) of each agreement (each a "PIK Dividend Payment Date") until the date all outstanding Class A Preferred Stock (Class A Common Stock with respect to Checkpoint) is converted into common stock or redeemed (and the purchase price is paid in full), pro rata per share dividends paid in additional fully paid and nonassessable shares of common stock ("PIK Dividends") such that the aggregate number of shares of common stock issued pursuant to such PIK Dividend is equal to two and one-half percent (2.5%) of such partner company's fully-diluted outstanding capitalization on the date that is one (1) business day prior to any PIK Dividend Payment Date. The Company has reached agreements with several of the partner companies to change the PIK Dividend Interest Payment Date to January 1 of each year - a change that has not and will not result in the issuance of any additional partner company common stock beyond that amount to which the Company would otherwise be entitled absent such change(s). The Company owns 100% of the Class A Preferred Stock (Class A Common Stock with respect to Checkpoint) of each partner company that has a Founders Agreement with the Company.

As additional consideration under the Founders Agreement, each partner company with which the Company has entered into a Founders Agreement will also: (i) pay an equity fee in shares of the common stock of such partner company, payable within five (5) business days of the closing of any equity or debt financing for each partner company or any of its respective subsidiaries that occurs after the effective date of the Founders Agreement and ending on the date when the Company no longer has majority voting control in such partner company's voting equity, equal to two and one-half (2.5%) of the gross amount of any such equity or debt financing; and (ii) pay a cash fee equal to four and one-half percent (4.5%) of such partner company's annual net sales, payable on an annual basis, within ninety (90) days of the end of each calendar year. In the event of a Change in Control, each such partner company will pay a one-time change in control fee equal to five (5x) times the product of (A) net sales for the twelve (12) months immediately preceding the change in control and (B) four and one-half percent (4.5%).

The following table summarizes, by subsidiary, the effective date of the Founders Agreements and PIK dividend or equity fee payable to the Company in accordance with the terms of the Founders Agreements, Exchange Agreements and the partner companies' certificates of incorporation.

Fortress Partner Company	Effective Date [1]	PIK Dividend as a % of fully diluted outstanding capitalization	Class of Stock Issued
Helocyte	March 20, 2015	2.5 %	Common Stock
Avenue	February 17, 2015	0.0 %[2]	Common Stock
Mustang	March 13, 2015	2.5 %	Common Stock
Checkpoint	March 17, 2015	0.0 %[3]	Common Stock
Cellvation	October 31, 2016	2.5 %	Common Stock
Caelum	January 1, 2017	0.0 %[4]	Common Stock
Baergic	December 17, 2019[5]	2.5 %	Common Stock
Cyprium	March 13, 2017	2.5 %	Common Stock
Aevitas	July 28, 2017	2.5 %	Common Stock
Oncogenuity	April 22, 2020 [5]	2.5 %	Common Stock

Note 1: Represents the effective date of each subsidiary's Founders Agreement. Each PIK dividend and equity fee is payable on the annual anniversary of the effective date of the original Founders Agreement or has since been amended to January 1 of each calendar year.

Note 2: Pursuant to the terms of the agreement between Avenue and InvaGen Pharmaceuticals, Inc. during the term of the Avenue SPMA PIK dividends will not be paid or accrued.

Note 3: Instead of a PIK dividend, Checkpoint pays the Company an annual equity fee in shares of Checkpoint's common stock equal to 2.5% of Checkpoint's fully diluted outstanding capitalization.

Note 4: Effective January 31, 2019 the Caelum Founders Agreement and MSA with Fortress were terminated in conjunction with the execution of the DOSPA between Caelum and Alexion (See Note 4).

Note 5: Represents the Trigger Date, the date that the Fortress partner company first acquires, whether by license or otherwise, ownership rights in a product.

Equity Fees

The following table summarizes, by subsidiary, the PIK dividend or equity fee recorded by the Company in accordance with the terms of the Founders Agreements, Exchange Agreements and the partner companies' certificates of incorporation for the years ended December 31, 2020 and 2019 ($ in thousands):

Partner company	PIK Dividend Date	Year Ended December 31, 2020[1]	Year Ended December 31, 2019
Aevitas	January 1	$ 11	$ 6
Caelum[2]	January 1	—	—
Cellvation	January 1	7	7
Checkpoint	January 1	4,617	2,510
Cyprium	January 1	711	5
Helocyte	January 1	138	131
Mustang	January 1	7,577	4,923
Tamid	January 1	—	7
Fortress		(13,061)	(7,589)
Total		$ —	$ —

Note 1: Includes 2021 PIK dividend accrued for the year ended December 31, 2020, as Type 1 subsequent event.

Note 2: Pursuant to the terms of the Amended and Restated Mutual Conditional Termination Agreement between Fortress and Caelum, the Founders Agreement dated January 1, 2017 was terminated upon signing of the DOSPA with Alexion on January 30, 2019.

Management Services Agreements

The Company has entered into Management Services Agreements (the "MSAs") with certain of its partner companies. Pursuant to each MSA, the Company's management and personnel provide advisory, consulting and strategic services to each partner company that has entered into an MSA with Fortress for a period of five (5) years. Such services may include, without limitation, (i) advice and assistance concerning any and all aspects of each such partner company's operations, clinical trials, financial planning and strategic transactions and financings and (ii) conducting relations on behalf of each such partner company with accountants, attorneys, financial advisors and other professionals (collectively, the "Services"). Each such partner company is obligated to utilize clinical research services, medical education, communication and marketing services and investor relations/public relation services of companies or individuals designated by Fortress, provided those services are offered at market prices. However, such partner companies are not obligated to take or act upon any advice rendered from Fortress, and the Company shall not be liable to any such partner company for its actions or inactions based upon the Company's advice. The Company and its affiliates, including all members of Fortress' Board of Directors, have been contractually exempted from fiduciary duties to each such partner company relating to corporate opportunities.

The following table summarizes, by partner company, the effective date of the MSA and the annual consulting fee payable by the subsidiary to the Company in quarterly installments ($ in thousands):

		Year Ended December 31,	
Fortress partner company	**Effective Date**	**2020**	**2019**
Helocyte	March 20, 2015	$ 500	$ 500
Avenue [1]	February 17, 2015	—	—
Mustang	March 13, 2015	500	500
Checkpoint	March 17, 2015	500	500
Cellvation	October 31, 2016	500	500
Baergic	March 9, 2017	500	500
Cyprium	March 13, 2017	500	500
Aevitas	July 28, 2017	500	500
Tamid[2]	November 30, 2017	—	500
Oncogenuity[3]	February 10, 2017	500	—
Fortress - MSA Income		(4,000)	(4,000)
Consolidated (Income)/Expense		$ —	$ —

Note 1: Pursuant to the terms of the agreement between Avenue and InvaGen Pharmaceuticals, Inc. during the term of the Avenue SPMA fees under the MSA will not be due or accrued.
Note 2: In December 2019, Tamid discontinued development and terminated its' licenses and clinical trial agreements with UNC.
Note 3: Oncogenuity license was purchased in the year ended December 31, 2020.

Fees and Stock Grants Received by Fortress

Fees recorded in connection with the Company's agreements with its subsidiaries are eliminated in consolidation. These include management services fees, issuance of common shares of partner companies in connection with third party raises and annual stock dividend or issuances on the anniversary date of respective Founders Agreements.

18. Income Taxes

Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating losses and tax credit carryforwards.

The components of the income tax provision (benefit) are as follows:

	For the Year Ended December 31,	
($ in thousands)	**2020**	**2019**
Current		
Federal	$ —	$ —
State	136	—
Deferred		
Federal	—	—
State	—	—
Total	$ 136	$ —

For the years ended December 31, 2020 and 2019, income tax expense was $0.1 million and nil, respectively, resulting in an effective income tax rate of 0.13% and 0%. The increase in income tax expense in 2020 is due to additional state tax return filings.

The Company has incurred net operating losses since inception. The Company has not reflected any benefit of such net operating loss carryforwards ("NOL") in the accompanying consolidated financial statements and has established a valuation allowance of $203.9 million against its net deferred tax assets. Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating losses and tax credit carryforwards.

The significant components of the Company's deferred taxes consist of the following:

	As of December 31,	
($ in thousands)	**2020**	**2019**
Deferred tax assets:		
Net operating loss carryforwards	$ 152,295	$ 125,657
Amortization of license fees	20,628	17,077
Amortization of in-process R&D	415	449
Stock compensation	14,732	13,280
Lease liability	7,306	7,454
Accruals and reserves	1,570	1,810
Tax credits	16,326	12,716
Startup costs	54	58
Unrealized gain/loss on investments	1,075	716
State taxes	41	—
Reserve on Sales Return, Discount and Bad Debt	1,455	—
Total deferred tax assets	215,897	179,217
Less: valuation allowance	(203,930)	(168,223)
Net deferred tax assets	$ 11,967	$ 10,994
Deferred tax liabilities:		
Right of use asset	$ (6,050)	$ (6,280)
Fair Value adjustment on investment in Caelum	(4,804)	(2,879)
Basis in subsidiary	(1,113)	(1,835)
Total deferred tax assets, net	$ —	$ —

A reconciliation of the statutory tax rates and the effective tax rates is as follows:

	For the Year Ended December 31,	
	2020	**2019**
Percentage of pre-tax income:		
U.S. federal statutory income tax rate	21 %	21 %
State taxes, net of federal benefit	11 %	12 %
Credits	4 %	3 %
Non-deductible items	(1)%	— %
Provision to return	1 %	1 %
Stock based compensation shortfall	(1)%	(1)%
Change in state rate	— %	3 %
Deconsolidation of Caelum	— %	(3)%
Change in valuation allowance	(35)%	(36)%
Change in subsidiary basis	1 %	(1)%
Other	(1)%	1 %
Effective income tax rate	— %	— %

The Company files a consolidated income tax return with subsidiaries for which the Company has an80% or greater ownership interest. subsidiaries for which the Company does not have an 80% or more ownership are not included in the Company's consolidated income tax group and file their own separate income tax return. As a result, certain corporate entities included in these financial statements are not able to combine or offset their taxable income or losses with other entities' tax attributes.

ASC 740 requires a valuation allowance to reduce the deferred tax assets reported if, based on the weight of all positive and negative evidence, it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. Realization of the deferred tax assets is substantially dependent on the Company's ability to generate sufficient taxable income within certain future periods. Management has considered the Company's history of cumulative tax and book losses incurred since inception, and the other positive and negative evidence, and has concluded that it is more likely than not that the Company will not realize the benefits of the net deferred tax assets as of December 31, 2020 and 2019. Accordingly, a full valuation allowance has been established against the net deferred tax assets as of December 31, 2020 and 2019. The valuation allowance increased by a net $35.7 million during the current year.

The Company has incurred net operating losses ("NOLs") since inception. At December 31, 2020, the Company had federal NOLs of $525.7 million, which will begin to expire in the year 2026, state NOLs of $648.2 million, which will begin to expire in2022, and federal income tax credits of $15.4 million and state income tax credits of $1.2 million, which will begin to expire in2028. Approximately $284.8 million of the federal NOLs and $4.5 million of the state NOLs can be carried forward indefinitely. Under the provisions of Section 382 of the Internal Revenue Code, a corporation that undergoes an "ownership change", as defined therein, is subject to limiatations on its use of pre-change NOLs and income tax credits carryforwards to offset future tax liabilities. The Company is currently evaluating the impact of Section 382 on its tax attributes. The Company has recorded a full valuation allowance on all of its deferred tax assets as it believes that it is more likely than not that the deferred tax assets will not be realized regardless of whether an "ownership change" has occurred.

As of December 31, 2020, th Company hadno unrecognized tax benefits and does not anticipate any significant change to the unrecognized tax benefit balance. The Company would classify interest and penalties related to uncertain tax positions as income tax expense, if applicable. There was no interest expense or penalties related to unrecognized tax benefits recorded through December 31, 2020. The NOLs from tax years 2008 through 2019 remain open to examination (and adjustment) by the Internal Revenue Service and state taxing authorities. In addition, federal tax years ending December 31, 2017, 2018 and 2019 are open for assessment of federal taxes. The expiration of the statute of limitations related to the various state income and franchise tax returns varies by state.

In January 2019, in connection with the Alexion DOSPA, the Company ceased to consolidate Caelum (see Note 4). As a result of the deconsolidation of Caelum, the Company has eliminated Caelum's deferred tax assets and the valuation allowance for a net tax expense charge or benefit of zero for the year ended December 31, 2019.

Coronavirus Aid, Relief and Economic Security Act ("CARES Act")

In response to the COVID-19 pandemic, the Coronavirus Aid, Relief and Economic Security Act ("CARES Act") was signed into law on March 27, 2020. The CARES Act, among other things, includes tax provisions relating to refundable payroll tax credits, deferment of employer's social security payments, net operating loss utilization and carryback periods and modifications to the net interest deduction limitations. The CARES Act did not have a material impact on the Company's income tax provision for 2020. The Company will continue to evaluate the impact of the CARES Act on its financial position, results of operations and cash flows.

On December 27, 2020, the President of the United States signed the Consolidated Appropriations Act, 2021 ("Consolidated Appropriations Act") into law. The Consolidated Appropriations Act is intended to enhance and expand certain provisions of the CARES Act, allows for the deductions of expenses related to the Paycheck Protection Program funds received by companies, and provides an update to meals and entertainment expensing for 2021. The Consolidated Appropriations Act did not have a material impact to the Company's income tax provision for 2020.

19. Segment Information

The Company operates in two reportable segments, Dermatology Product Sales and Pharmaceutical and Biotechnology Product Development. The accounting policies of the Company's segments are the same as those described in Note 2. The following tables summarize, for the periods indicated, operating results from continued operations by reportable segment:

($ in thousands) **Year Ended December 31, 2020**	**Dermatology Products Sales**	**Pharmaceutical and Biotechnology Product Development**	**Consolidated**
Net revenue	$ 44,531	$ 1,068	$ 45,599
Direct cost of goods	(14,594)	—	(14,594)
Sales and marketing costs	(17,384)	—	(17,384)
Research and development	—	(64,109)	(64,109)
General and administrative	(4,716)	(39,066)	(43,782)
Other expense	(697)	(7,882)	(8,579)
Income tax expense	(96)	(40)	(136)
Segment income (loss)	$ 7,044	$ (110,029)	$ (102,985)
Segment assets			
Intangible assets, net	14,629	—	14,629
Tangible assets	30,843	283,362	314,205
Total segment assets	$ 45,472	$ 283,362	$ 328,834

($ in thousands) **Year Ended December 31, 2019**	**Dermatology Products Sales**	**Pharmaceutical and Biotechnology Product Development**	**Consolidated**
Net revenue	$ 34,921	$ 1,708	$ 36,629
Direct cost of goods	(10,532)	—	(10,532)
Sales and marketing costs	(17,120)	—	(17,120)
Research and development	—	(81,326)	(81,326)
General and administrative	(2,556)	(35,914)	(38,470)
Other income	—	9,159	9,159
Segment income (loss)	$ 4,713	$ (106,373)	$ (101,660)
Segment assets			
Intangible assets, net	7,377	—	7,377
Tangible assets	19,946	199,099	219,045
Total segment assets	$ 27,323	$ 199,099	$ 226,422

20. Revenues from Contracts and Significant Customers

Disaggregation of Total Revenues

The Company has five marketed products, Targadox®, Ximino®, Exelderm®, Luxamend® and Ceracade®. Substantially all of the Company's product revenues are recorded in the U.S. Substantially all of the Company's collaboration revenues are from its collaboration with TGTX.

The table below summarizes the Company's revenue for the years ended December 31, 2020 and 2019:

($ in thousands)	Year Ended December 31, 2020	2019
Revenue		
Product revenue, net	$ 44,531	$ 34,921
Revenue – related party	1,068	1,708
Net revenue	$ 45,599	$ 36,629

Significant Customers

For the year ended December 31, 2020, none of the Company's Dermatology Products customers accounted for more than 10.0% of its total gross product revenue.

For the year ended December 31, 2019, two of the Company's Dermatology Products customers each accounted for more than 10.0% of its total gross product revenue, accounting for approximately 50% and 10%, respectively. The revenue from these customers is captured in the product revenue, net line item within the Consolidated Statements of Operations.

At December 31, 2020, one of the Company's Dermatology Products customers accounted for 12% of its total accounts receivable balance.

At December 31, 2019, two of the Company's Dermatology Products customers accounted for more than 10% of its total accounts receivable balance at 21% and 18%, respectively.

Included in Product revenue, net, for the years ended December 31, 2020 and 2019 was $.4 million and nil, respectively, of revenue that was constrained in a prior period.

Revenue – related party represents collaboration revenue from TGTX in connection with Checkpoint.

21. Subsequent Events

Cyprium

On February 24, 2021, Cyprium announced the execution of an asset purchase agreement with Sentynl Therapeutics, Inc. ("Sentynl"), a U.S.-based specialty pharmaceutical company owned by the Zydus Group. The asset purchase agreement commits Sentynl to an upfront cash payment to Cyprium of $8.0 million for development, a $3.0 million cash milestone payment at NDA acceptance, the purchase price of $9.0 million, as well as potential sales milestones totaling $255.0 million. Royalties on CUTX-101 net sales range from the mid-single digits up to the mid-twenties are also payable. Cyprium will retain development responsibility of CUTX-101 through approval of the NDA by the FDA, and Sentynl will be responsible for commercialization of CUTX-101 as well as progressing newborn screening activities. Continued development of CUTX-101 will be overseen by a Joint Steering Committee consisting of representatives from Cyprium and Sentynl. Cyprium will retain 100% ownership over any FDA priority review voucher that may be issued at NDA approval for CUTX-101.

Avenue

On February 12, 2021, Avenue resubmitted its NDA to the FDA for IV Tramadol. The NDA for IV Tramadol was resubmitted following the receipt of official minutes from a Type A meeting with the FDA, which was conducted following a CRL issued by the FDA in October 2020. The 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 acknowledgement letter from the FDA that Avenue's resubmission of its NDA is a complete, class 1 response to the CRL, and a Prescription Drug User Fee Act goal date has been set for April 12, 2021.

Journey

8% Cumulative Convertible Class A Preferred Offering

In March 2021, our partner company Journey is conducting an offering to accredited investors of8% Cumulative Convertible Class A Preferred Stock in an aggregate minimum amount of $12.5 million and an aggregate maximum amount of $30.0 million, which may be increased if Journey and the placement agent agree to do so. Dividends on the Journey preferred stock will be paid quarterly in shares of the Company's common based upon a 7.5% discount to the average trading price over the 10-day period preceding the dividend payment date. The approximate number of shares issuable as a dividend per quarter, based upon the Company's common stock price as of March 26, 2021, would be 72,849 shares if the minimum amount is raised and 174,838 if the maximum amount is raised.

In addition, if the Journey preferred stock has not been converted into Journey common stock upon a sale of Journey or a financing of Journey in an amount of at least $25.0 million within a year of the closing (extendable by another six months at Journey's option), the Journey preferred stock will be exchanged for shares of the Company's common stock, also based upon a 7.5% discount to the average Company common stock trading price over the 10-day period preceding such exchange. The approximate number of the Company's common shares issuable upon such exchange would be approximately 3.4 million shares if the minimum amount is sold and 8.1 million if the maximum amount is sold, in each case based upon the Company's common stock price as of March 26, 2021. The Company will be obligated to file one or more registration statements covering the issuance of shares that result from such dividends/exchange. As consideration for the foregoing Journey will issue to the Company additional shares of Journey common stock, debt securities, or a combination of the foregoing. From the initial closing on March 31, 2021, the Company raised gross proceeds of $12.5 million.

(b) Exhibits.

Exhibit Number	Exhibit Title
23.1	Consent of Independent Registered Public Accounting Firm.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Fortress Biotech, Inc.

April 9, 2021

By: /s/ Lindsay A. Rosenwald, M.D.
Lindsay A. Rosenwald, M.D.
Chairman, President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Fortress Biotech, Inc.
New York, New York

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-238327) and Form S-8 (Nos. 333-194588, 333-20664, 333-221458, 333-233195 and 333-249985) of Fortress Biotech, Inc. of our report dated March 31, 2021 relating to the consolidated financial statements, which appears in this Annual Report on Form 10-K/A.

/s/ BDO USA, LLP

Boston, Massachusetts
April 9, 2021