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Spring Bank Pharmaceuticals (Nasdaq/SBPH)
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BUY Q2/17 shows Progress in HBV, Oncology programs

Spring Bank is a clinical-stage biopharmaceutical company engaged in the discovery and development of a novel class of therapeutics using its proprietary small molecule nucleic acid hybrid (SMNH) chemistry platform.

Investment Highlights

1) Spring Bank reported financial results for their second quarter as well as progress on their clinical programs. Key highlight for the Company for the June quarter was the release in May of top-line results for the initial 20-patient 25mg dosage cohort in the Phase 2a segment of the ACHIEVE trial, for its SB 9200 in patients with chronic hepatitis B virus, or HBV. The initial cohort group performed well in regards to both primary and secondary endpoints of the trial, including antiviral activity with a mean reduction of 0.6 log₁₀ in HBV DNA at week 12 for the SB 9200 treatment group and with no serious adverse events observed. The Company has already completed enrollment in the second 20-patient cohort in the Phase 2a trial, with a stronger 50mg dose, and Spring Bank hopes to report top-line results for this group in Q4/17. Still remaining to be dosed in the Phase 2a trial are cohorts in the 100mg and 200mg dosage strengths; Spring Bank hopes to complete the entire Phase 2a segment of the ACHIEVE trial early next year and release full results.

2) The Company also reported further progress within its HBV pipeline, specifically a new collaboration with Gilead Sciences (GILD, Not Rated) for a Phase 2 study exploring a combination treatment of Spring Bank's SB 9200 and Gilead's Vemlidy in chronic HBV patients. The Phase 2 trial will be funded and led by Gilead. At the same time, Spring Bank plans to evaluate one or two dosage cohorts of the Phase 2a ACHIEVE trial both as monotherapy and in combination with Gilead's Viread in a potential Phase 2b trial in about 200 patients with chronic HBV. The Phase 2b segment of ACHIEVE could start as early as H2/2018, depending on results for the Phase 2a segment of the trial.

3) Lastly, Spring Bank is making progress on its non-HBV clinical pipeline, including its next generation STING platform. In that regard, the Company published an abstract at the recent 2017 ASCO Annual Meeting in early June which included results from efficacy

Current Price \$13.04
Price Target \$27.50

Estimates	F2015A	F2016A	F2017E
Revenues(\$000s)	\$946	\$352	\$0
1Q March	250	280	0 A
2Q June	331	72	0 A
3Q September	260	0	0 E
4Q December	105	0	0 E

EPS (diluted)	F2015A	F2016A	F2017E
1Q March	(0.37)	(1.11)	(0.69) A
2Q June	(0.39)	(0.62)	(0.93) A
3Q September	(0.59)	(0.53)	(0.44) E
4Q December	(0.68)	(0.28)	(0.45) E

EBITDA/Share	(\$1.82)	(\$2.06)	(\$1.60)
EVEBITDA (x)	N/A	N/A	N/A

Stock Data	
52-Week Range	\$6.31-\$16.97
Shares Outstanding (mil.)	12.8
Market Capitalization (mil.)	\$166.9
Enterprise Value (mil.)	\$115.5
Debt to Capital (6/17)	0.0%
Book Value/Share (6/17)	\$3.30
Price/Book	4.0 x
Average Trading Volume (3-Month)	51,100
Insider Ownership	8.2%
Institutional Ownership	17.6%
Short interest	40,000
Dividend / Yield	\$0.00/0.0%


 Price target and ratings changes over the past 3 yrs:
 Updated - August 7, 2017 - Buy - Price Target \$27.50

studies of its agonist compound SB 11285 in mouse models of A20 lymphoma and CT26 colon cancer. Spring Bank's near-term goal with its STING platform is to submit an Investigational New Drug (IND) application and/or a Clinical Trial Application (CTA) for the first human clinical trials of SB 11285 in certain types of cancers in 2018.

4) Spring Bank has also recently bolstered its balance sheet, including completing a recent \$40 million (net proceeds) public offering of 3.3 million shares. The Company now has over \$51.4 million in cash and equivalents on hand (at June 30), enough to get the Company through the end of 2019, or approximately through the completion of the Phase 2 ACHIEVE clinical trial. In Spring Bank's most recent Q2/17 quarter, the Company announced a loss from operations of \$5.3 million, as compared to an operating loss of \$4.3 million in Q2/16. Increases in both R&D and general and administrative expenses of between 15%-25% this year as the Company ramped-up clinical programs contributed to the higher losses in Q2/17. Operating cash burn for Spring Bank has been roughly \$4.5-\$5 million per quarter this year, a burn rate that we expect will continue for the Company over the next several years barring the signing of any major new joint ventures or partnerships.

Conclusion/Stock Valuation

We are maintaining our BUY rating on Spring Bank Pharmaceuticals based on recent positive clinical progress, but initiating a \$27.50 Price Target on these shares to provide more guidance to investors. Based on a 13-member comparable group of similar-stage HBV and infectious disease stocks, which include Arbutus Biopharma (ABUS, Not Rated), Arrowhead Pharma (ARWR, Not Rated), Assembly Biosciences (ASMB, Not Rated), Aduro Biotech (ADRO, Not Rated), Aviragen Therapeutics (AVIR, Not Rated), ContraVir Pharma (CTRV, Not Rated), DynaVax (DVAX, Not Rated), Eiger BioPharma (EIGR, Not Rated), Inovio (INO, Not Rated), Novavax (NVAX, Not Rated), ProQR (PRQR, Not Rated), PCT Therapeutics (PTCT, Not Rated), and TransGene (TRGNF, Not Rated), SBPH shares currently trade at a considerable discount to others in this group. Using an average market capitalization of slightly more than \$350 million for our comparable group, we estimate a stock valuation of \$27.50 for SBPH shares, and therefore we are re-iterating our BUY rating on SBPH shares and initiating a 12-18 month price target of \$27.50 per share.

Risk Factors

In addition to normal economic and market risk factors that impact most equities and the common risks shared by Spring Bank with other companies in the industry, we believe an investment in SBPH involves the following risks:

- **Reliance on key management** – At present, SBPH relies on several key members of its management team who either founded the Company or have been in key executive positions for an extended period of time. Should one or more of these key executives leave the Company, SBPH could find it difficult to replace their long-standing knowledge of operations and industry expertise.
- **Reliance on partnerships** – To date, SBPH has signed a number of marketing and development partnerships for its pharmaceutical technologies and products. Thus, in the future certain factors related to product marketing and sales and new product development may be determined by third parties and out of the control of Company management.
- **Limited stock liquidity** – Trading volume in SBPH stock is comparatively light and these shares have a relatively limited history of trading on US stock exchanges compared with other healthcare stocks. As such, news regarding SBPH, its target market, partners and/or competitors could lead to significant volatility in the stock price.

- **Competitive Markets** – The Company and its partners compete in its target pharmaceutical product markets with a number of companies, many of which are considerably larger than the Company. There can be no assurance that the Company and its partners will be able to successfully compete and launch new products into these competitive markets in the future.
- **FDA and regulatory risks** – SBPH and its marketing partners are subject to regulatory review for its ongoing research and development activities, principally the US Food and Drug Administration’s application processes. In addition, the quality assurance and manufacture of the Company’s pharmaceutical products are subject to ongoing oversight and regulation, and any negative correspondence from the FDA or other regulatory agencies could have an adverse effect on the ongoing operations of the Company.
- **Lack of historic profitability** - SBPH has not achieved operating profitability on a quarterly basis for several years, and according to our forecasts may not be expected to do so in the near future. Although the Company maintains adequate cash reserves at the present time, there can be no assurance the Company will not need to raise additional working capital in the future should operating losses continue.
- **Need to defend patents and other intellectual property** – SBPH currently holds approximately US and International patents on its platform technologies and processes, some of which expire in the near future. The Company may be required to defend its patents in the US and overseas in the future, and there can be no assurance these defenses will be successful.

Spring Bank Pharmaceuticals, Inc.
Consolidated Statements of Income
 (In 000s, except per share data)

FYE December	2015	1Q16	2Q16	3Q16	4Q16	2016	1Q17	2Q17	3Q17E	4Q17E	2017E	2018E
		March	June	September	December		March	June	September	December		
Grant revenue	\$946	\$280	\$72	\$0	\$0	\$352	\$0	\$0	\$0	\$0	\$0	\$500
Operating Expenses												
Research and development	7,539	5,589	2,936	2,723	2,770	14,018	2,527	3,404	3,500	3,600	13,031	14,000
General and administrative	5,003	1,226	1,458	1,452	1,603	5,739	1,987	1,856	2,000	2,100	7,943	8,500
Other operating expenses	0	0	0	0	0	0	0	0	0	0	0	0
Total operating expenses	12,542	6,815	4,394	4,175	4,373	19,757	4,514	5,260	5,500	5,700	20,974	22,500
Income (loss) from operations	(\$11,596)	(\$6,535)	(\$4,322)	(\$4,175)	(\$4,373)	(\$19,405)	(\$4,514)	(\$5,260)	(\$5,500)	(\$5,700)	(\$20,974)	(\$22,000)
Other income (loss)	14	16	25	24	1,966	2,031	(1,983)	(3,629)	(100)	(100)	(5,812)	(500)
Net income (loss) before taxes	(\$11,582)	(\$6,519)	(\$4,297)	(\$4,151)	(\$2,407)	(\$17,374)	(\$6,497)	(\$8,889)	(\$5,600)	(\$5,800)	(\$26,786)	(\$22,500)
Income taxes	0	0	0	0	0	0	0	0	0	0	0	0
Net income (loss)	(\$11,582)	(\$6,519)	(\$4,297)	(\$4,151)	(\$2,407)	(\$17,374)	(\$6,497)	(\$8,889)	(\$5,600)	(\$5,800)	(\$26,786)	(\$22,500)
Basic income per share	(\$2.04)	(\$1.11)	(\$0.62)	(\$0.53)	(\$0.28)	(\$2.39)	(\$0.69)	(\$0.93)	(\$0.44)	(\$0.45)	(\$2.40)	(\$1.67)
Diluted income per share	(\$2.04)	(\$1.11)	(\$0.62)	(\$0.53)	(\$0.28)	(\$2.39)	(\$0.69)	(\$0.93)	(\$0.44)	(\$0.45)	(\$2.40)	(\$1.67)
Basic shares outstanding	5,683	5,877	6,924	7,760	8,447	7,257	9,416	9,517	12,800	13,000	11,183	13,500
Diluted shares outstanding	5,683	5,877	6,924	7,760	8,447	7,257	9,416	9,517	12,800	13,000	11,183	13,500
Key ratios:												
Revenue growth	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
G & A/revenue	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
R&D/revenue	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Deprec, amort & non-cash comp.	1,213	380	3,500	100	(1,600)	2,390	2,560	4,230	1,000	1,100	8,890	2,000
Cash Flow/share	(\$1.82)	(\$1.04)	(\$0.12)	(\$0.52)	(\$0.47)	(\$2.06)	(\$0.42)	(\$0.49)	(\$0.36)	(\$0.36)	(\$1.60)	(\$1.52)
EBITDA/share	(\$1.82)	(\$1.04)	(\$0.12)	(\$0.52)	(\$0.47)	(\$2.06)	(\$0.42)	(\$0.49)	(\$0.36)	(\$0.36)	(\$1.60)	(\$1.52)

Balance Sheets

(\$000s)

Assets:	12/31/16	6/30/17
Current Assets		
Cash and equivalents	\$10,684	\$51,443
marketable securities	14,046	4,936
Prepaid expenses and other current assets	840	884
Total current	25,570	57,263
Marketable securities, long-term	752	
Property and equipment, net	522	550
Intangibles and other long-term assets	35	35
Total Assets	\$26,879	\$57,848
Liabilities:		
Current liabilities		
Accounts payable	\$1,519	\$1,802
Accrued expenses and other current	1,982	1,742
Total current	3,501	3,544
Warrant liabilities	6,333	12,027
Other long-term	27	33
Total liabilities	9,861	15,604
Stockholders' equity	17,018	42,244
TOTAL LIAB & EQ	\$26,879	\$57,848

Quarterly Earnings Comparisons

	March	June	September	December	Total
Revenues (in \$Mill)					
2015	250	331	260	105	946
2016	280	72	0	0	352
2017E	0	0	0	0	0
Earnings per Share (diluted)					
2015	(\$0.37)	(\$0.39)	(\$0.59)	(\$0.68)	(\$2.04)
2016	(\$1.11)	(\$0.62)	(\$0.53)	(\$0.28)	(\$2.39)
2017E	(\$0.69)	(\$0.93)	(\$0.44)	(\$0.45)	(\$2.40)

Source: Dawson James Securities, Inc. estimates; Company documents

Important Disclosures:

Price Chart:



Price target and ratings changes over the past 3 years:
 Updated – Buy – August 7, 2017 – Price Target \$27.50

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

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	Company Coverage		Investment Banking	
Ratings Distribution	# of Companies	% of Total	# of Companies	% of Totals
Market Outperform (Buy)	9	69%	2	22%
Market Perform (Neutral)	0	0%	0	0%
Market Underperform (Sell)	0	0%	0	0%
Ratings Suspension*	4	31%	4	100%
Total	13	100%	6	46%

*Suspensions are ratings under review for possible change due to unusual market-moving news, and/or analyst departure/change

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