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COMPANY UPDATE

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Spring Bank Pharmaceuticals, Inc.
(SBPH/NASDAQ/$10.80/Buy)

Sherry Grisewood, CFA
Managing Partner, Life Science Research
561-208-2943

Year-End Update

Spring Bank Pharmaceuticals continues to execute on both the Company's clinical plan and its strategic plan. Enrollment in the **ACHIEVE** trial is progressing well. Management expects that, barring any surprises, the second **ACHIEVE** trial cohort will begin enrolling during the second quarter of 2017, followed shortly thereafter with top-line data from the 25mg (first) **ACHIEVE** cohort. Further, management has executed on its stated plan to add corporate collaborations in order to broaden the potential clinical settings for the Company's Small Molecule Nucleic Acid Hybrid (SMNH) platform with two late 2016 collaboration announcements. Management has indicated other discussions are taking place so it is possible one or more additional collaborations may be announced during 2017. Finally, Spring Bank secured the funding necessary to support its clinical and operations plans well into 2018.

Current Price $10.80
(SPRINGBANK LISTED ON NASDAQ MAY 2016)

FY Ended Dec 31 unless otherwise specified

Estimates (MM's)*	FY2015A	FY2016E	FY2017E
YR Revenues	$0.94 A	$0.35 A	$0.00 E
1Q	$0.00	$0.28 A	E
2Q	$0.00	$0.07 A	E
3Q	$0.00	$0.00 A	E
4Q	$0.00	$0.00 A	E
2018 Preliminary Revenue Estimate			$0.0 E
YR EPS (loss)	($2.03) A	($2.39) A	($2.52) E
1Q		($1.11) A	NA
2Q		($0.62) A	NA
3Q		($0.53) A	NA
4Q		($0.28) A	NA
P/E (x)	NA	NA	NA
2018 Preliminary EPS (loss)			($3.27)
REV/Share	NA	NA	NA
EV/EBITDA (x)			
Stock Data			
52-Week Range			$6.31-$13.25
Shares Outstanding (mil.)			9.42
Market Capitalization			$104.5 MM
Enterprise Value			$79.79 MM
Current Ratio (12/16)			7.30X
Book Value/Share (12/16)			$1.81
Price/Book			6.14.X
Average Trading Volume (3-Month)			18,500
Insider Ownership			46.1%
Institutional Ownership			11.0%
Short interest (Million shares)			NIL
Dividend / Yield			$0.00/0.0%

*Some numbers may not add due to rounding

Status of SB9200 ACHIEVE Trial--Right on the Timeline

Since the **ACHIEVE** trial's initiation in June 2016, Spring Bank has expanded enrollment locations for the first (25mg dose) cohort to three countries: Canada, Hong Kong and Korea. The 20th patient and last patient to be randomized is now on treatment thus setting up the "last patient/last dose" timing for early May with a Data and Safety Monitoring Board (DSMB) review expected later in the month of May. Upon a "go-ahead" from the DSMB, Spring Bank will immediately begin enrollment for the 50mg dose cohort, and will add sites in Taiwan to those already open. To refresh, following the 12-week SB9200 once daily oral treatment period, patients are treated for an additional 12 weeks with 300mg (SOC) of Gilead Sciences's **Viread®.** In addition to assessing the primary trial endpoints of safely and antiviral effect at 12 weeks, patients are tested for serum HBV DNA, HBsAg (surface antigen) and HBeAg (envelope antigen) at baseline for changes at 6, 12, 14, 16 and 24 weeks. Management has guided investors to look for top-line results of this first **ACHIEVE** cohort in the second quarter of this year.

Please find Important Disclosures beginning on Page 6.

The second **ACHIEVE** cohort doubles to 50 mg the first cohort's dose and will also be randomizing patients on a 4:1 drug/placebo ratio, with the two remaining cohorts each doubling the prior cohort's dose (100mg and 200mg, respectively). The first 25mg cohort dose is very low, so investors should keep in mind that this is a dose escalation trial with an efficacy signal more appropriately expected in higher dose cohorts. Conversely, if Spring Bank sees a strong efficacy signal in the 50mg or 100mg cohorts, the Company has the option of not running the highest dose cohort in favor of moving directly into the Phase IIb study. At this juncture, the target threshold for an efficacy signal is at least a ½ log reduction in HBsAg, which is an accepted predictor of the probability of treatment reaching "functional cure" status. Management intends to release top-line results as each treatment cohort is completed. Therefore, assuming no DSMB issues arise as the trial moves to higher dose cohorts, results for all patients on SB9200 monotherapy should be available in a little over a year (1H 2018).

SB9200 Phase IIb study

Upon successful results from the Phase IIa **ACHIEVE** trial, and go-ahead from the FDA, Spring Bank anticipates initiating a Phase IIb trial in 2018 that will double patient enrollment to 200 patients and compare the treatment combination of SB9200 with a nucleos(t)ide analog to that of SB9200 as a monotherapy. **Viread** is slated for the drug combination. The two most efficacious dosages from the **ACHIEVE** dose escalation analysis will be utilized in a five arm, 40 patient per arm, study. Since this study will focus on comparative efficacy, treatment arms can run in parallel and the study's duration should be shorter than the present **ACHIEVE** trial. Assuming no surprises, the Phase IIb studies could also be completed in about a year, despite the higher patient enrollment requirement, thus putting Spring Bank in the position to announce Phase IIb trial results in 2019.

Arbutus Biopharma Corp. Collaboration

The collaboration that Spring Bank signed with Arbutus last December focuses on preclinical studies in HBV involving the co-administration of SB9200 and Arbutus's AB-423 capsid assembly inhibitor. Arbutus's technology addresses the HBV viral replication process upstream of the action of nucleos(t)ides. The HBV capsid (core) protein uses the liver cell to convert encapsulated viral rcDNA to cccDNA. By inhibiting assembly of the viral capsid, the ability of hepatitis B virus to replicate is impaired, resulting in reduced cccDNA. AB-423 is an orally-available small molecule with a potential dual mode of inhibition that targets inhibition of pgRNA encapsidation during ongoing infection and inhibition of cccDNA synthesis by interfering with capsid uncoating prior to translation. This is a different mechanistic target than the HBV siRNA treatment being developed by Arrowhead Pharmaceuticals. Arbutus intends to begin Phase I clinical studies with AB-423 early 2017.

In addition to its capsid assembly inhibitor program, Arbutus is also developing its own siRNA candidates for the treatment of HBV. The Company's lead siRNA candidate, ARB-1467, is currently in a multi-dosing Phase II clinical trial in chronic HBV patients who are also receiving stable nucleos(t)ide analog treatment. Now that Arrowhead has cancelled its most advanced siRNA HBV program, Arbutus has an opportunity to gain first mover advantage in the use of siRNA for HBV. As such, and considering the attractiveness of adding an independent immunomodulatory agent to any HBV treatment, we believe it may be likely to see an expansion of the Spring Bank and Arbutus collaboration to include Arbutus's siRNA clinical program.

Update on SB11285

As noted in prior comments, Spring Bank's second SMNH candidate, SB11285, continues to move through the pre-clinical phase of development. After its "debut" last fall with the release of *in vitro* data, Spring Bank is moving up the compound's visibility with a number of posters and abstracts slated for presentation at several academic symposia during this year. This month, the Company will be presenting two posters at the **2017**

Keystone Symposia: Cancer Immunology and Immunotherapy: Taking a Place in Mainstream Oncology, to be held at the Fairmont Chateau Whistler in Whistler, British Columbia (Canada) on March 19-23, 2017. The Keystone Symposia on Molecular and Cellular Biology organization holds a number of specialty symposia during the year focused on specific issues related molecular biology. This Keystone Symposia meeting is organized to highlight recent insights into the complex roles of immune components and pathways in controlling or alternatively promoting cancer and to showcase recent uses of cancer vaccines, checkpoint blocking strategies, adoptive cell therapies and cellular engineering approaches, either as mono or combinatorial therapies, that have resulted in durable, effective and safe therapeutic responses. Part of the meeting will also focus on new, developing technologies that may be capable of refining the knowledge base around cancer immune-therapy.

Spring Bank will be presenting the following posters:

Title: A Novel Class of STING Agonists for Immuno-oncology
Date and Time: Monday March 20, 2017
Poster Number: 1036
Session info: Poster Session 1

Title: Characterization of SB 11285 as a novel STING Agonist for Immuno-oncology
Date and Time: Thursday March 23, 2017
Poster Number: 4074
Session info: Poster Session 4

In addition to the Keystone Symposia, Spring Bank has submitted an abstract related to SB11285 to the American Society of Clinical Oncology (ASCO) for presentation at ASCO's annual meeting in June and the Company intends to submit SB11285 preclinical *in vivo* data to the American Association for Cancer Research (AACR) Immuno-oncology meeting in the fall.

Potential New Indication-Hepatitis Delta (HDV)

During recent New York investor presentations, management made mention of the possibility of expanding the indication for SB9200 beyond HBV to HDV. HDV is only just now being recognized as a potential market for anti-viral treatment, as practitioners have not routinely included testing for HDV when diagnosing HBV. However, the symbiotic relationship between HDV and HBV coupled with the fact that the two viruses affect liver cells differently, has led some to conclude that there may be a patient population who will need to have HDV treatment in addition to HBV treatment in order to reach a functional cure of the HBV. Though data concerning the true incidence rate of HDV is still sketchy, an HDV treatment market lends itself to companies such as Spring Bank since it has largely escaped interest from larger biopharmaceutical companies such as Gilead. Spring Bank will assess the HDV market opportunity based upon the efficacy signal seen in the **ACHIEVE** trial. We view Eiger Biopharmaceuticals not only as the current leader in the HDV market, but perhaps also a potential future collaborator for Spring Bank.

Financial Results

Spring Bank's financial results for 2016 were in line with expectation. The Company reported residual grant revenue of $352,000 and operating expenses of $19,756,000 for the year. Operating expenses consisted of $14,017,000 in Research & Development expenses and $5,739,000 in General & Administrative expenses. R&D expense for the fourth quarter was slightly under our estimate ($2,770,000 actual vs $3,217,000 estimate). After giving effect for a $1,942,000 benefit in the change in fair value of warrant liabilities, the Company's

comprehensive **loss** for 2016 was $17,366,000 or $2.39 per share. The variance to our estimated loss of $19,758,000 or $2.75 per share was accounted for by the positive benefit of the change in fair value warrant liability.

Significantly, Spring Bank strengthened its cash position with financings in both October and November 2016. As a reminder, Spring Bank's November private placement added approximately $14 million in net proceeds to the balance sheet. MPM Capital's Oncology Impact Fund was the lead investor. Shares were priced at $9.12 and the 5-year warrants have a strike price of $10.79. The warrants are exercisable starting on May 24, 2017. This financing together with the $15.6 million added in October 2016 puts Spring Bank on solid financial footing to support current operations and clinical development programs. Spring Bank reported $25.5 million in cash as of December 31, 2017.

Consolidated Statement of Operations and Loss

USD$ in Thousands (except for shares outstanding)									
	2014	2015	Year End 12/2016				2016A	2017E	2018E
			Q1 2016A	Q2 2016A	Q3 2016A	Q42016A			
Revenue									
Product Sales									
Contract Revenue/Milestone Payments							$0	$100	$500
Grant revenue	$738	$946	$ 280	$ 72	$0	$0	$352		
Total Revenue	$738	$946	$ 280	$ 72	**$0**	**$0**	**$352**	**$100**	**$500**
Operating expenses:									
Research and development	6,132	7,539	5,589	2,935	2,723	2,770	14,017	18,082	24,049
General and administrative	2,412	5,003	1,226	1,458	1,452	1,603	5,739	6,542	7,458
Total operating expenses	8,544	12,542	6,815	4,393	**4,175**	**4,373**	**19,756**	**24,624**	**31,507**
Loss from operations	($7,806)	(11,596)	(6,535)	(4,321)	(4,175)	(4,373)	(19,404)	(24,524)	(31,007)
Other income (expense)									
Interest income (expense)	(1,906)	32	17	21	27	31	96	35	15
Change in fair value of warrant liabilities						1,942	1,942		
Pre-tax income (loss)	**(9,712)**	**(11,564)**	**(6,518)**	**(4,300)**	**(4,148)**	**(2,400)**	**(17,366)**	**(24,489)**	**(30,992)**
Income tax expense (income)									
Net loss	(9,712)	(11,564)	(6,518)	(4,300)	(4,148)	(2,400)	(17,366)	(24,489)	(30,992)
Unrealized gain (loss) on marketable securities			(1)	4	(3)	(7)	11		
Comprehensive loss			**$ (6,519)**	**$ (4,296)**	**$ (4,151)**	**$ (2,407)**	**(17,355)**	**(24,489)**	**(30,992)**
Net loss per common share - basic and diluted	**(0.78)**	**(2.03)**	**$ (1.11)**	**$ (0.62)**	**$ (0.53)**	**$ (0.28)**	**(2.39)**	**(2.52)**	**(3.27)**
Weighted-average number of shares outstanding - basic and diluted	3,118,344	5,932,799	5,877,135	6,923,941	7,759,630	8,447,367	7,256,671	9,723,684	9,478,664

Source: SEC filings, DJ estimates

2017 Anticipated Milestones

1. Q1 2017: Presentation of pre-clinical SB11285 data at theKeystone Symposium
2. Q2 2017: 1st cohort DSMB review
2. 1H 2017: Top line results from 1st Phase IIa ACHIEVE trial cohort
3. 1H 2017: Initiation of 2nd ACHIEVE cohort enrollment
4. 2H 2017: Presentation of SB11285 pre-clinical in vivo model data
5. Late 2017: Top line results from 50mg ACHIEVE trial cohort

Spring Bank continues to track right on plan. We are encouraged by management's view that, once this first **ACHIEVE** cohort is cleared by the DSMB, trial enrollment may be able to proceed at a faster rate for subsequent cohorts, thus positioning the Company to advance to Phase IIb in 2018. We are also excited to see market response to SB11285, which we believe holds real potential as a unique immunomodulatory agent. It should be noted that STING, SB11285's molecular target, is now being mentioned by pharma companies such as Novartis as a primary player in immuno-stimulation.

Furthermore, it appears that the "weak" holders have been washed out of the Spring Bank's shares and as recent action has demonstrated, just a modest amount of buying has enabled the stock to break out of a three month range-bound trading pattern and to break lock-step trading with Gilead. We are looking for the stock to consolidate recent gains before making a move to retest the 12 area as we get closer to **ACHIEVE** milestones.

We are maintaining our BUY rating on Spring Bank shares. *SG*

Companies Mentioned in this report:
Gilead Sciences Inc. -- NASDAQ/GILD/$70.28/Not rated
Arbutus Biopharma Corporation--NASDAQ/ABUS/$2.65/Not rated
Arrowhead Pharmaceuticals –NASDAQ/ARWR/$2.17/Not rated
Eiger Biopharmaceuticals -- NASDAQ/ EIGR/$11.80/Not rated
Novartis AG –NYSE/NVS/$75.48/Not rated

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Market Perform (Neutral)	0	0%	0	0%
Market Underperform (Sell	0	0%	0	0%
Rating Suspensions*	4	67%	4	100%
Total	6	100%	5	83%

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