

Media release as of April 26, 2019

Interim report of BB Biotech AG as at March 31, 2019

Long-term focus on innovation leads to a strong first quarter of 2019

BB Biotech's stock and Net Asset Value advance 24.2% and 31.1%, respectively

Buoyed by an impressive rebound on stock markets, the healthcare sector closed the first quarter with a positive performance. Biotechnology stocks performed even better, which underlines their strength and breadth. BB Biotech shares outperformed against this positive backdrop. The company's profit for the period rose to CHF 890 mn compared to CHF 28 mn in 1Q 2018. Further progress was made in realigning the portfolio, shifting assets from large-cap stocks into fast-growing smaller and mid-sized companies. The portfolio weightings of drug developers specializing in genetic engineering techniques were increased and two new positions in such companies were added to the portfolio. Bristol-Myers Squibb's takeover of Celgene for USD 74 bn is set to generate a significant cash inflow for BB Biotech when the transaction closes sometime in the third quarter. BB Biotech's Management Team is optimistic about the remainder of the year. Further milestones are likely to be reached on the R&D front and there are increasing indications that M&A activity is picking up.

Equity markets got off to a strong start in 2019. In January, most indices recovered from their fourth-quarter losses. US and European equity indices closed the first quarter with positive double-digit total returns. The S&P (+13.7% in USD), the Dow Jones (+11.8%) and the Nasdaq Composite Index (+16.8%) each performed strongly. European markets as measured by the EuroStoxx 50 (+12.3% in EUR), the DAX (+9.2% in EUR) and the SMI (+13.8% in CHF) also ended the first quarter in positive territory.

Healthcare markets were also up but not as much as broader markets. The MSCI World Healthcare Index rose by 8.3%. Pharmaceuticals and biotechnology outperformed broader healthcare indices with the Nasdaq Biotech Index up 15.5% (all values in USD). The strength and breadth of the biotechnology sector proved itself even in the wake of a high profile Alzheimer's disease drug candidate failure for Biogen in late clinical development.

BB Biotech's performance for the first quarter

BB Biotech's shares gained 24.2% in CHF and 25.4% in EUR in the first guarter 2019. The portfolio gained 31.1% in CHF, 32.3% in EUR and 29.4% in USD. Net profit was CHF 890 mn compared to a net profit of CHF 28 mn for the same period in 2018. The currency impact added 1.9% to portfolio performance as the US dollar gained modestly against the Swiss Franc. Return calculations for BB Biotech take into account the dividend distribution approved by the shareholders at the AGM on March 21, 2019.

Continued capital distribution

BB Biotech paid out the proposed dividend of CHF 3.05 per share. The Board confirmed continuation of the dividend policy and anticipates payout of the regular dividend of 5% of the prior December's average share price.

The eleventh share repurchase program, started in April 2016 and ending in April 2019, allowed BB Biotech to acquire up to 10% of the company's outstanding shares over a period of up to three years. BB Biotech did not trade on the second trading line in the first quarter of 2019, meaning it has not been used since April 2016. The board has approved a twelfth share repurchase program starting in April 2019 for up to 10% of the company's outstanding shares over a period of up to three years.

Increased investment level in the first three months of 2019

Management increased short-term credits – raising investment levels from 106.2% to 109.8% during the quarter. In total, the dividend payout of CHF 169 mn plus investments in new and existing portfolio holdings exceeded



cash received from exiting our positions in Regeneron and profit taking in existing, successful longer-term holdings.

First-quarter portfolio activity

As outlined in the third-quarter 2018 update, the management team continued in the first quarter 2019 to reduce the allocation in larger capitalized companies and to increase the weightings of both existing smaller and midcap companies and novel genetic medicine companies.

Funds raised from the sale of the remaining shares in Regeneron and from continued profit taking in Gilead, Celgene, Incyte, Vertex and Ionis positions have been reinvested into Agios, Nektar, Kezar, Intercept and Esperion. They also financed increased investment in the genetic medicine companies Audentes and Sangamo. BB Biotech supported Myokardia's capital increase - backing development of Mavacamten for patients with obstructive and non-obstructive hypertrophic cardiomyopathy and further pipeline diversification.

Two new genetic medicines investments were added to the portfolio in the first quarter. Crispr Therapeutics is a pioneer in the Cas9 gene-editing field. With its partner Vertex, Crispr has started dosing of with CTX001 in patients with hemoglobinopathies such as beta-thalassemia and sickle cell disease. Crispr is also in early development stages with next-generation cell therapies such as allogenic CD19, BCMA, and CD70 targeting cell therapies, mostly for cancer indications.

Homology Medicines is developing both gene therapy and gene editing candidates. In gene therapy, Homology's lead asset is HMI-102 for adults with phenylketonuria (PKU). In gene editing, Homology is developing HMI-103 for children with PKU. Driven by mutations in the PAH gene, PKU patients lack function of the enzyme phenylalanine hydroxylase, which is responsible for breaking down phenylalanine, an amino acid obtained exclusively from the diet. In the gene therapy approach, Homology delivers functional copies of the PAH gene to adults via proprietary adeno-associated viruses. In gene editing, the company works with "homology arms" - sequences that allow specific alignment to the desired target zone on the dysfunctional gene. The naturally occurring process of homologous recombination then corrects the dysfunctional gene by replacement with a functional copy.

While progress is accelerating, these gene therapy and editing companies are in early development stages. BB Biotech is entering the arena decisively but with circumspect – investing about 4% of its portfolio in this important new technology sub-sector as of March 31, 2019.

Medicines based on oligonucleotides are moving ahead rapidly and creating an entire new space in healthcare. Antisense and RNA-interference-based products have already delivered substantial returns for shareholders of BB Biotech and management believes there is more to come. Ionis, driven by an impressive product launch for Spinraza and the progress in the company's pipeline and platform technology, has now grown to become BB Biotech's largest holding. The portfolio managers continue to increase exposure to RNA-focused companies, which now represent about 25% of portfolio holdings.

Solid progress of portfolio holdings

The year started with a major transaction for one of BB Biotech's major positions – as Bristol-Myers Squibb (BMS) announced its intention to buy Celgene for USD 74 bn. The deal terms per Celgene share are USD 50 plus one share of BMS plus a contingency value right (CVR) of up to USD 9 subject to the approval of three key Celgene development candidates. The deal should close in the third quarter of 2019 and deliver a significant cash inflow for BB Biotech.

Several of the portfolio companies reported major milestones during the first quarter of 2019. Three confirmatory Phase III (so-called "pivotal") trial readouts occurred:

Sage Therapeutics announced that SAGE-217 met the primary and secondary endpoints in a Phase III clinical trial in postpartum depression. Two weeks of outpatient treatment with SAGE-217 achieved a significant improvement in the Hamilton Rating Scale for depression. Around half of the SAGE-217-treated women achieved remission.

Vertex reported that its triple combination of VX-445, with the tezacaftor/ivacaftor combination (Symdeko) met the primary endpoint of improvement in lung function (ppFEV1) for patients with cystic fibrosis. Homozygous F508del



patients experienced significant improvement of their lung function - with a mean absolute ppFEV1 improvement of 10 percentage points compared to Symdeko. Patients with one F508del mutation and one minimal function mutation also experienced improvement of their lung function – reporting a mean absolute ppFEV1 improvement of 13.8 percentage points. Vertex is expected to file a US NDA and an EU MAA in the second half of 2019.

Macrogenics also announced positive results from the SOPHIA study of margetuximab in breast cancer reporting prolongation of progression-free survival (PFS) in patients treated with the combination of margetuximab plus chemotherapy compared to trastuzumab (Herceptin) plus chemotherapy. The company expects to submit a biologics license application to the US FDA in the second half of 2019. Macrogenics is also developing margetuximab in combination with anti-PD-1 therapies for gastroesophageal cancer.

Sage also gained FDA approval for Zulresso (brexanolone) injection. This is the first and only treatment indicated specifically for postpartum depression. Sage expects to launch Zulresso by mid-2019.

Several of the portfolio companies took advantage of rising market valuations to bolster their cash reserves. Macrogenics, Myokardia and Sangamo issued shares in secondary public offerings, while companies such as Esperion (with Daiichi Sankyo) and Voyager (with Neurocrine and Abbvie) increased cash through out-licensing deals.

Outlook for 2019

BB Biotech expects its portfolio companies to achieve further major milestones in 2019 and that this will sustain the positive momentum of the first quarter. Overall, large cap biotechnology companies trade well below fundamental value at present, so pipeline successes and takeovers may well drive valuations higher. In addition, there are increasing positive signs in the M&A area.

The US healthcare system - largely influenced by Alex Azar (HHS) and Scott Gottlieb (FDA) - will continue to track towards greater price transparency even as the discord between payers, PBMs, providers, and the drug industry continue. BB Biotech expects incoming FDA commissioner Ned Sharpless - from the National Cancer Institute – to extend Gottlieb's initiatives while also focusing on decreasing timeline, capital and access hurdles for innovative new medicines.

BB Biotech's longstanding and successful commitment to invest in leading technologies that address unmet medical needs, with sustainable economic value, continues to underpin its strong and optimistic outlook. The management team will continue to reshape the portfolio based on the strategy announced in the second half of 2018 - selling remaining large cap holdings and adding promising, smaller and mid cap positions while actively managing the portfolio to optimize returns for shareholders.

The complete interim report as at March 31, 2019 is available on www.bbbiotech.com.

For further information:

Investor Relations

Bellevue Asset Management AG, Seestrasse 16, 8700 Küsnacht, Switzerland, tel. +41 44 267 67 00 Dr. Silvia Siegfried-Schanz, ssc@bellevue.ch Maria-Grazia Iten-Alderuccio, mga@bellevue.ch Claude Mikkelsen, cmi@bellevue.ch

Media Relations

Bellevue Asset Management AG, Seestrasse 16, 8700 Küsnacht, Switzerland, tel. +41 44 267 67 00 Tanja Chicherio, tch@bellevue.ch

TE Communications AG, Bleichestrasse 11, 9000 St. Gallen, Switzerland, tel. +41 79 423 22 28 Thomas Egger, teg@te-communications.ch

www.bbbiotech.com



BB Biotech invests in companies in the fast growing market of biotechnology and is one of the world's largest investors in this sector. BB Biotech is listed in Switzerland, Germany and Italy. Its investments are focused on listed companies that are developing and commercializing novel medical treatments and cures. BB Biotech's investment selection process is guided by the fundamental research and analysis of physicians and molecular biologists. Its Board of Directors has many years of experience in industry and science.

Disclaimer

This release contains forward-looking statements and expectations as well as assessments, beliefs and assumptions. Such statements are based on the current expectations of BB Biotech, its directors and officers, and are, therefore, subject to risks and uncertainties that may change over time. As actual developments may significantly differ, BB Biotech and its directors and officers accept no responsibility in that regard. All forwardlooking statements included in this release are made only as of the date of this release and BB Biotech and its directors and officers assume no obligation to update any forward-looking statements as a result of new information, future events or other factors.



Composition of BB Biotech's portfolio as at March 31, 2019 (in % of securities, rounded values)

Ionis Pharmaceuticals	15.8%
Incyte	7.8%
Neurocrine Biosciences	7.5%
Vertex Pharmaceuticals	6.0%
Sage Therapeutics	5.5%
Celgene	5.2%
Agios Pharmaceuticals	5.0%
, igios i mai massansans	0.070
Alexion Pharmaceuticals	4.5%
Alnylam Pharmaceuticals	3.8%
Esperion Therapeutics	3.6%
Radius Health	3.4%
Halozyme Therapeutics	3.4%
Argenx SE	2.8%
Moderna Therapeutics	2.4%
Myovant Sciences	2.2%
Intercept Pharmaceuticals	2.0%
Gilead	1.9%
Nektar Therapeutics	1.7%
Exelixis	1.7%
Akcea Therapeutics	1.7%
Myokardia	1.7%
Macrogenics	1.5%
Wave Life Sciences	1.4%
Voyager Therapeutics	1.4%
Audentes Therapeutics	1.3%
Alder Biopharmaceuticals	0.9%
Crispr Therapeutics	0.7%
Scholar Rock Holding	0.7%
Intra-Cellular Therapies	0.7%
Sangamo Therapeutics	0.6%
Kezar Life Sciences	0.5%
G1 Therapeutics	0.3%
Cidara Therapeutics	0.2%
Novavax	0.1%
Homology Medicines	0.1%
Total securities	CHF 3 958.8 mn
Other accets	CHF 28.7 mn
Other assets Other payables	CHF (382.1) mn
Other payables	OIII (302.1) IIIII
Net Asset Value	CHF 3 605.3 mn