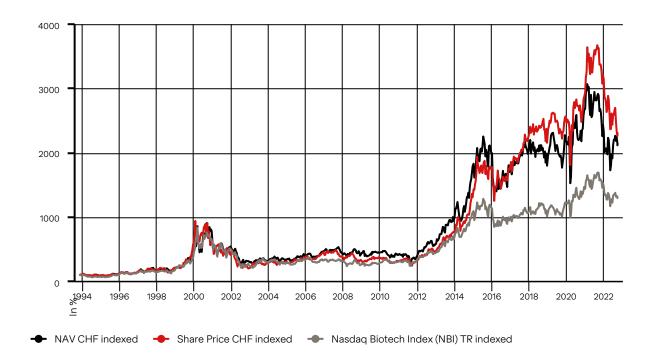
# Performance/Multi-year comparison

## Indexed performance since launch

#### **BB Biotech AG (SIX)-CHF**



### Rolling performance

	SHARE	NAV	NBI TR
30.09.2021 - 30.09.2022	(33.7%)	(22.7%)	(21.3%)
30.09.2020 - 30.09.2021	31.1%	24.5%	21.9%
30.09.2019 - 30.09.2020	15.9%	21.0%	26.4%
28.09.2018 - 30.09.2019	(10.6%)	(14.1%)	(16.2%)
29.09.2017 - 28.09.2018	15.7%	0.2%	11.1%

## Cumulated performance 30.09.2022

	SHARE	NAV	NBI TR
YTD	(27.7%)	(9.9%)	(13.4%)
1 year	(33.7%)	(22.7%)	(21.3%)
3 years	0.7%	16.4%	21.3%
5 years	4.1%	0.2%	13.0%
10 years	350%	242%	179%
since inception <sup>1)</sup>	2 209%	2 042%	1 196%

### Annual performance

	SHARE	NAV	NBI TR
2021	8.3%	(11.5%)	3.0%
2020	19.3%	24.3%	15.8%
2019	18.5%	23.4%	23.0%
2018	(5.2%)	(14.5%)	(8.0%)
2017	22.9%	23.4%	16.4%

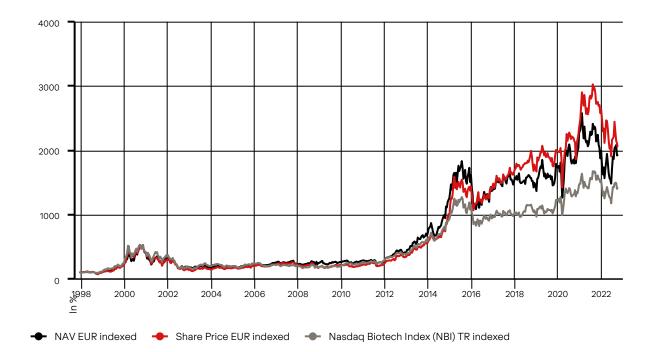
## Annualized performance 30.09.2022

	SHARE	NAV	NBI TR
1 year	(33.7%)	(22.7%)	(21.3%)
3 years	0.2%	5.2%	6.6%
5 years	0.8%	0.0%	2.5%
10 years	16.2%	13.1%	10.8%
since inception <sup>1)</sup>	11.5%	11.2%	9.3%

1 09.11.1993

1 09.11.1993

#### **BB BIOTECH AG (XETRA)-EUR**



### Rolling performance

	SHARE	NAV	NBI TR
30.09.2021 - 30.09.2022	(26.1%)	(13.9%)	(11.7%)
30.09.2020 - 30.09.2021	29.6%	24.5%	21.8%
30.09.2019 - 30.09.2020	17.5%	22.0%	27.3%
28.09.2018 - 30.09.2019	(5.8%)	(10.0%)	(12.6%)
29.09.2017 - 28.09.2018	15.5%	0.6%	12.1%

## Cumulated performance 30.09.2022

	SHARE	NAV	NBI TR
YTD	(22.4%)	(3.3%)	(6.7%)
1 year	(26.1%)	(13.9%)	(11.7%)
3 years	12.6%	30.9%	37.0%
5 years	22.4%	18.6%	34.2%
10 years	457%	328%	250%
since inception <sup>1)</sup>	1 960%	1 823%	1369%

### 1 10.12.1997

### Annual performance

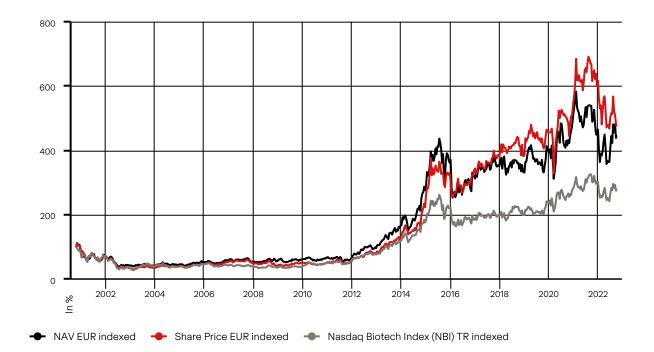
	SHARE	NAV	NBI TR
2021	13.3%	(7.8%)	7.4%
2020	18.1%	24.8%	16.1%
2019	23.4%	28.1%	27.6%
2018	(2.2%)	(11.1%)	(4.3%)
2017	12.9%	12.5%	6.7%

## Annualized performance 30.09.2022

	SHARE	NAV	NBI TR
1 year	(26.1%)	(13.9%)	(11.7%)
3 years	4.0%	9.4%	11.1%
5 years	4.1%	3.5%	6.1%
10 years	18.7%	15.6%	13.3%
since inception <sup>1)</sup>	13.0%	12.6%	11.5%

1 10.12.1997

### **BB BIOTECH AG (MILAN)-EUR**



### Rolling performance

	SHARE	NAV	NBI TR
30.09.2021 - 30.09.2022	(26.3%)	(13.9%)	(11.7%)
30.09.2020 - 30.09.2021	30.6%	24.5%	21.8%
30.09.2019 - 30.09.2020	17.2%	22.0%	27.3%
28.09.2018 - 30.09.2019	(6.3%)	(10.0%)	(12.6%)
29.09.2017 - 28.09.2018	15.9%	0.6%	12.1%

## Cumulated performance 30.09.2022

	SHARE	NAV	NBI TR
YTD	(22.8%)	(3.3%)	(6.7%)
1 year	(26.3%)	(13.9%)	(11.7%)
3 years	12.8%	30.9%	37.0%
5 years	22.6%	18.6%	34.2%
10 years	459%	328%	250%
since inception <sup>1)</sup>	376%	344%	177%

1 19.10.2000

### Annual performance

	SHARE	NAV	NBI TR
2021	13.0%	(7.8%)	7.4%
2020	19.7%	24.8%	16.1%
2019	22.6%	28.1%	27.6%
2018	(1.3%)	(11.1%)	(4.3%)
2017	12.2%	12.5%	6.7%

## Annualized performance 30.09.2022

	SHARE	NAV	NBI TR
1 year	(26.3%)	(13.9%)	(11.7%)
3 years	4.1%	9.4%	11.1%
5 years	4.1%	3.5%	6.1%
10 years	18.8%	15.6%	13.3%
since inception <sup>1)</sup>	7.4%	7.0%	4.8%

1 19.10.2000

## Multi-year comparison

	30.09.2022	2021	2020	2019	2018
Market capitalization at the end of the period (in CHF mn)	2 919.6	4 274.1	4 107.9	3 670.3	3 235.4
Net Asset Value at the end of the period (in CHF mn)	2 721.3	3 283.5	3 887.5	3 393.0	2 884.5
Number of shares (in mn)	55.4	55.4	55.4	55.4	55.4
Trading volume (in CHF mn)	1 296.7	2 101.0	2 315.6	2 004.2	2 610.7
Profit/(loss) (in CHF mn)	(322.6)	(404.8)	691.2	677.4	(471.3)
Closing price at the end of the period in CHF	52.70	77.15	74.15	66.25	58.40
Closing price (G) at the end of the period in EUR	54.30	74.05	68.00	61.40	52.00
Closing price (I) at the end of the period in EUR	54.30	74.40	68.50	61.00	52.00
Stock performance (incl. distributions) <sup>1)</sup>	(27.7%)	8.3%	19.3%	18.5%	(5.2%)
High/low share price in CHF	78.15/51.00	92.20/73.40	74.70/45.44	73.20/59.35	74.10/56.10
High/low share price in EUR	75.40/49.60	86.20/67.80	69.00/43.04	64.70/52.10	64.80/48.60
Premium/(discount) (annual average)	24.2%	19.5%	9.2%	11.8%	9.7%
Dividend in CHF	N.A.	3.85	3.60	3.40	3.05
Degree of investment (quarterly figures)	112.5%	108.6%	106.8%	109.1%	108.4%
Total Expense Ratio (TER) p.a. <sup>2)</sup>	1.27%	1.22%	1.25%	1.26%	1.25%

All figures in CHF %, total return-methodology
Based on market capitalization

## Shareholder letter

#### Dear Shareholders

During the third quarter of 2022 investors grappled with continued high inflation and the decisive reactions by central banks in form of interest rate hikes – led by the US Federal Reserve. These increases and guidance regarding further actions resulted in higher implied bond yields, additional pressure on global equities and significant fluctuations in currency exchange rates.

During the third quarter, most stock market indices traded down: The S&P 500 was down 4.9%, the Dow Jones retreated 6.2% and the Nasdaq Composite Index was down 3.9% (all values in USD). European market indices closed lower. The Euro Stoxx 50 (-3.7% in EUR), the German Dax (-5.2 in EUR) and the Swiss SPI (-4.8% in CHF) followed suit.

Against these general developments, healthcare markets held up in July and August, but sold off in September, ending the third quarter with losses more or less in line with broader markets. The MSCI World Healthcare Index declined 6.7% (in USD), while the Nasdaq Biotech Index (NBI) ended with a small gain of 0.7% (in USD) consequent to acquisitions and positive clinical trial data from Alnylam for TTR and the surprising data from Eisai/Biogen's newest Alzheimer program. Within the NBI smaller and mid cap biotechnology companies (XBI S&P Biotechnology ETF +6.8%, in USD) outperformed larger cap names during the quarter.

The US Inflation Reduction Act (IRA) was signed into law by President Biden in mid-August resulting in a pause of the pharmaceutical and biotechnology sectors as investors digested the implications. Conclusions have been mixed, ranging from significant concerns about price negotiations and controls to diffidence. Some commentators have cautioned that future changes in the law may take those conclusions into more or less pessimistic spaces. In other words, "the jury is out". Our view is that the legislation, if it is maintained, will spur innovation so that winners emerge in a more competitive and price-sensitive environment. While biopharma complained a good deal about the legislation, and some firms might experience challenges, we believe the industry can adapt to the increased challenge on prices. It should drive entrepreneurs, biotech and pharmaceutical companies to doubledown on creation of the very best drugs possible. We will continue to seek out and invest in those opportunities.

Optimism that the SARS-CoV-2 pandemic has been controlled was associated with declines in the value of vaccine, diagnostics, and therapeutics, development and commercialization companies during the third quarter 2022. We are thrilled with the positive impact of vaccines (including from Moderna – in which we invested early in a private financing round) and other technologies. But we are far from complacent about the rapid drift and shift of variants of concern and the continued burden of COVID-19 and its post-acute sequelae (PASC). While there are fewer opportunistic companies working on COVID-19, we continue to watch the leading players carefully for opportunities to pursue further growth.

#### BB Biotech third quarter and first nine months 2022 performance

BB Biotech's third quarter 2022 share price performance was -6.9% in CHF and -4.7% in EUR. In contrast, the Net Asset Value (NAV) gained 8.3% in CHF, 12.1% in EUR and 4.8% in USD. The net gain was CHF 210 mn compared to a net loss of CHF 208 mn for the same period in 2021. The solid third quarter numbers brought total share price return for the first nine months of 2022 – including the dividend – to -27.7% in CHF and -22.4% in EUR; in line with European markets but well behind the evolution of the NAV's deprecation of 9.9% in CHF, 3.3% in EUR and 16.7% in USD. The performance difference is an erosion of the share price premium over NAV, accentuated by exclusion from the SMIM Index on September 16, 2022 which precipitated a sell off by ETFs. Year-to-date, the net loss was CHF 323 mn compared to a net gain of CHF 141 mn at the same time in 2021. USD/CHF exchange-rate fluctuations contributed 6.8% to performance for the first nine months and 13.4% for the USD/EUR.

#### Third quarter 2022 portfolio activity

The investment team continued to reshape the portfolio. Radius was taken private for USD 10 per share and one contingency value right of USD 1 per share depending on future sales targets. While at a disappointingly low price, the cash inflow of USD 87 mn increased our flexibility to act on interesting investment opportunities. First, the capital released from Radius was invested privately into Rivus Pharmaceuticals' Series B financing. The funds will support clinical advancement of HU6, a first-in-class controlled metabolic accelerator designed to treat cardio-metabolic diseases with a focus on obesity. Second, we increased our holdings in Celldex. Third we increased our holdings in Revolution Medicines as the company progressed two clinical studies for their promising KRAS G12C and RAS-Multi inhibitors.

We hold 31 positions in the portfolio, and the investment level decreased slightly from 113.2% by the end of the second quarter to 111.2% by the end of the third quarter 2022. This means that we have dry powder to invest in more new opportunities within the established guidelines.

The capital released from Radius was invested privately into Rivus Pharmaceuticals' Series B financing.

#### Third quarter 2022 developments in the portfolio

Positive trial read outs drove our third quarter results. The RNA companies Alnylam (siRNA) and Ionis (antisense RNA) both presented positive results in TTRA amyloidosis patients.

Alnylam reported the Apollo-B Phase III study of patisiran. Statistically significant improvements were reported among TTRA patients with cardiomyopathies, in the 6 minute walk test at 12 months. This was the first siRNA late stage trial with a clear-cut benefit for patients cardiac manifestations of TTRA. Apollo-B results raise prospects for success in the ongoing large trial HELIOS-B for vutrisiran, the next generation siRNA for TTRA patients. Ionis and global partner AstraZeneca presented positive Phase III data for eplontersen which reduced serum transthyretin concentrations by 80%, with a favorable safety profile. The data showed advantages for the next generation oligonucleotide chemistry.

Relay presented promising results for RLY-4008, a selective FGFR2 inhibitor for treating cholangiocarcinoma patients with FGFR2-driven disease.

Several products from portfolio companies were approved during the third quarter. Incyte won US approval for topical agent Opzelura for forms of vitiligo. Myovant and Pfizer won US approval of Myfembree for pain associated with endometriosis.

Crispr Therapeutics and Vertex announced plans to apply for regulatory approval for their gene editing program CTX001 for sickle cell and beta thalassemia patients. They expect to file in Europe and Japan (Q4 2022) and to complete a rolling submission in the US (Q1 2023).

Effective commercialization of new products by midsized biotechnology companies remained a focus. Within our portfolio, Argenx again reported strong uptake of Vyvgart by myasthenia gravis. Myovant continued steady growth with Orgovyx for prostate cancer and Intra-Cellular reported accelerating revenues for Caplyta. Neurocrine continued to expand uses of Ingrezza and expect more with label expansion to cover chorea in Huntington's Disease patients in 2023.

## There were few takeovers in the third quarter, though many smaller cap companies continue to strive for partnership deals.

There were few takeovers in the third quarter, though many smaller cap companies continue to strive for partnership deals. Mersana announced an option agreement with GSK for the codevelopment and commercialization of XMT-2056, their immunosynthen antibody drug conjugate candidate targeting HER2.

### The Inflation Reduction Act (IRA)

On August 16, 2022, the Inflation Reduction Act (IRA) was signed into law by President Biden. Key provisions include:

#### Medicare's right to negotiate

Certain high-cost, older drugs that lack competition will be subject to repricing 9 years post launch for small molecules and 13 years post launch for biological drugs. The first cohort of Part D drugs will be eligible for negotiation in 2026, followed by a larger number of candidates each year. Part B drug repricing negotiations will start in 2028. Orphan drugs for a single rare disease and drugs from small biotechnology companies that represent >80% of total revenues will be excluded.

#### Rebates for price increases that exceed inflation

Drug price growth will be tied to inflation. Rebates, or penalty taxes, will be applied for price increases that exceed inflation.

#### **Redesign of Medicare Part D**

As soon as 2025, Medicare Part D (which covers mostly oral outpatient products) will be redesigned to limit annual out of pocket spending to USD 2000. A so-called «coverage gap» will be eliminated and out of pocket contribution in catastrophic situations will be shifted entirely to insurance plans and manufacturers, while annual insurance premium growth will be limited to 6% until 2030.

Overall, we foresee these changes will affect companies differentially, with a handful of winners and losers. Nevertheless, the US will remain the largest and most attractive market for innovative prescription drugs. And we will continue to seek the most innovative firms with the most attractive, valuable technology and product offerings.

#### Outlook for the final quarter of 2022

US midterm elections will be on November 8. Healthcare investors will watch for results which suggest strict implementation, or possible revisions of the IRA.

After 18 months of pressure on biotechnology equity markets, we see attractive valuations and the opportunity to invest with optimism. Some of our small and midcap portfolio companies will need capital. We will continue to look out for investment opportunities into novel, fairly valued companies, such as our recent additions Celldex and Rivus Pharmaceuticals.

Although the pandemic phase has transitioned to an endemic model, the spread of SARS-CoV-2 variants of concern will be carefully monitored this fall and winter in the Northern hemisphere. The biotechnology sector will continue to solve problems associated with COVID-19 and continue to bring forward other valuable products for severe and chronic diseases. We anticipate continued momentum in the sector as differentiated medicines are delivered to patients with medical needs at prices considered affordable and sustainable by payers. We also believe that the biotechnology industry will rise to the challenge of potential U.S. price controls, just as it has before in other regions of the world.

We thank you for the trust you have placed in the Company. The Board of Directors of BB Biotech AG

Dr. Erich Hunziker Chairman Laura Hamill Member Prof. Dr. Mads Krogsgaard Thomsen Member Dr. Clive Meanwell Vice Chairman Dr. Pearl Huang Member Dr. Thomas von Planta Member

# Portfolio at a glance

### Securities as at September 30, 2022

Company	Number of securities	Change since 31.12.2021	Local currency	Share price	Market value in CHF mn	In % of securities	In % of shareholders' equity	In % of company
Ionis Pharmaceuticals	9 230 000	(1 002 973)	USD	44.23	402.9	13.3%	14.8%	6.5%
Argenx SE	892 503	(78 035)	USD	353.05	311.0	10.3%	11.4%	1.6%
Neurocrine Biosciences	2 798 437	(216 963)	USD	106.21	293.4	9.7%	10.8%	2.9%
Vertex Pharmaceuticals	950 523	(79 477)	USD	289.54	271.6	9.0%	10.0%	0.4%
Alnylam Pharmaceuticals	920 000	(190 000)	USD	200.16	181.8	6.0%	6.7%	0.8%
Incyte	2 691 077	(205 923)	USD	66.64	177.0	5.9%	6.5%	1.2%
Moderna	1 501 951	(161 398)	USD	118.25	175.3	5.8%	6.4%	0.4%
Intra-Cellular Therapies	3 291 479	(246 940)	USD	46.53	151.2	5.0%	5.6%	3.5%
Sage Therapeutics	2 950 278	(219 826)	USD	39.16	114.0	3.8%	4.2%	5.0%
Agios Pharmaceuticals	4 030 792	(281 500)	USD	28.28	112.5	3.7%	4.1%	7.4%
Myovant Sciences	5 872 639	(249 400)	USD	17.96	104.1	3.4%	3.8%	6.1%
Arvinas	2 136 412	(40 491)	USD	44.49	93.8	3.1%	3.4%	4.0%
Relay Therapeutics	4 120 720	34 758	USD	22.37	91.0	3.0%	3.3%	3.4%
Revolution Medicines	4 602 562	1 181 100	USD	19.72	89.6	3.0%	3.3%	5.2%
Fate Therapeutics	3 658 536	(42 800)	USD	22.41	80.9	2.7%	3.0%	3.8%
Crispr Therapeutics	888 605	(60 979)	USD	65.35	57.3	1.9%	2.1%	1.1%
Celldex Therapeutics	1 800 000	1 800 000	USD	28.11	49.9	1.6%	1.8%	3.8%
Exelixis	2 654 500	(180 500)	USD	15.68	41.1	1.4%	1.5%	0.8%
Esperion Therapeutics	4 194 064	(283 900)	USD	6.70	27.7	0.9%	1.0%	6.3%
Beam Therapeutics	568 121	(38 700)	USD	47.64	26.7	0.9%	1.0%	0.8%
Mersana Therapeutics	3 866 200	(268 800)	USD	6.76	25.8	0.9%	0.9%	4.0%
Kezar Life Sciences	3 000 000	(1 918 148)	USD	8.61	25.5	0.8%	0.9%	4.4%
Macrogenics	7 275 564	-	USD	3.46	24.8	0.8%	0.9%	11.8%
Generation Bio Co.	3 608 280	(244 900)	USD	5.31	18.9	0.6%	0.7%	6.1%
Rivus Pharmaceuticals <sup>1)</sup>			USD		17.3	0.6%	0.6%	
Wave Life Sciences	4 494 458	(108 400)	USD	3.61	16.0	0.5%	0.6%	5.2%
Scholar Rock Holding	2 132 725	(142 400)	USD	6.93	14.6	0.5%	0.5%	4.1%
Essa Pharma	5 879 583	863 769	USD	1.82	10.6	0.4%	0.4%	13.3%
Molecular Templates	11 192 003	400 000	USD	0.75	8.3	0.3%	0.3%	19.9%
Black Diamond Therapeutics	4 694 113	1 254 113	USD	1.69	7.8	0.3%	0.3%	12.9%
Homology Medicines	1 622 522	(114 600)	USD	1.61	2.6	0.1%	0.1%	2.8%
Radius Health – Contingent Value Right	8 733 538	8 733 538	USD	0.00	0.0	0.0%	0.0%	
Total securities					3 025.0	100.0%	111.2%	
Other assets					3.1		0.1%	
Other payables					(306.9)		(11.3%)	
Net asset value					2 721.3		100.0%	

1) Unlisted company

Exchange rate as at 30.09.2022: USD/CHF: 0.9870