UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

FOR THE MONTH OF AUGUST 2021

COMMISSION FILE NUMBER 001-39081

BioNTech SE

(Translation of registrant's name into English)

An der Goldgrube 12
D-55131 Mainz
Germany
+49 6131-9084-0
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F: Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): ☐

DOCUMENTS INCLUDED AS PART OF THIS FORM 6-K

On August 09, 2021, BioNTech SE (the "Company") provided a development update and reported its financial results for the three and six months ended June 30, 2021. The interim condensed consolidated financial statements as well as the operating and financial review and prospects of the Company, for the three and six months ended June 30, 2021, are attached hereto as Exhibit 99.1 and shall be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and incorporated by reference herein.

SIGNATURE

Pursuant to the requirements of s the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BioNTech SE

By: /s/ Sierk Poetting
Name: Sierk Poetting
Title: Chief Operating Officer

Date: August 09, 2021

EXHIBIT INDEX

Exhibit	Description of Exhibit
99.1	Quarterly Report for the Three and Six Months Ended June 30, 2021.

BioNTech SE

Quarterly Report for the Three and Six Months Ended June 30, 2021

BioNTech SE

Quarterly Report for the Three and Six Months Ended June 30, 2021

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Interim Condensed Consolidated Financial Statements

Interim Condensed Consolidated Statements of Profit or Loss

		Three months ended June 30,		Six months ended June 30,	
		2021	**2020**	**2021**	**2020**
(in millions, except per share data)	**Note**	*(unaudited)*	*(unaudited)*	*(unaudited)*	*(unaudited)*
Revenues					
Research & development revenues	3	€28.0	€32.5	€48.9	€53.7
Commercial revenues	3	5,280.5	9.2	7,308.0	15.7
Total revenues		**5,308.5**	**41.7**	**7,356.9**	**69.4**
Cost of sales	4	(883.8)	(5.6)	(1,116.9)	(11.5)
Research and development expenses	5	(201.1)	(95.2)	(417.3)	(160.3)
Sales and marketing expenses		(13.3)	(3.0)	(22.0)	(3.5)
General and administrative expenses	6	(47.8)	(18.8)	(86.7)	(34.6)
Other operating expenses		(0.3)	(0.8)	(0.9)	(0.9)
Other operating income	7	36.2	0.8	147.5	1.2
Operating income / (loss)		**€4,198.4**	**€(80.9)**	**€5,860.6**	**€(140.2)**
Finance income	8	0.3	0.2	24.8	0.6
Finance expenses	8	(175.4)	(9.3)	(219.1)	(3.4)
Interest expenses related to lease liabilities		(0.5)	(0.5)	(1.2)	(0.9)
Profit / (loss) before tax		**€4,022.8**	**€(90.5)**	**€5,665.1**	**€(143.9)**
Income taxes	9	(1,235.6)	2.2	(1,749.8)	2.2
Profit / (Loss) for the period		**€2,787.2**	**€(88.3)**	**€3,915.3**	**€(141.7)**
Earnings per share					
Basic profit / (loss) for the period per share		€11.42	€(0.38)	€16.07	€(0.62)
Diluted profit / (loss) for the period per share		€10.77	€(0.38)	€15.14	€(0.62)

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

Interim Condensed Consolidated Statements of Comprehensive Income / (Loss)

		Three months ended June 30,		Six months ended June 30,	
(in millions)	**Note**	**2021** *(unaudited)*	**2020** *(unaudited)*	**2021** *(unaudited)*	**2020** *(unaudited)*
Profit / (Loss) for the period		**€2,787.2**	**€(88.3)**	**€3,915.3**	**€(141.7)**
Other comprehensive income / (loss)					
Other comprehensive income / (loss) that may be reclassified to profit or loss in subsequent periods, net of tax					
Exchange differences on translation of foreign operations		€(1.1)	€(3.4)	3.4	(3.5)
Net other comprehensive income / (loss) that may be reclassified to profit or loss in subsequent periods		**€(1.1)**	**€(3.4)**	**3.4**	**(3.5)**
Other comprehensive income / (loss) for the period, net of tax		**€(1.1)**	**€(3.4)**	**3.4**	**(3.5)**
Comprehensive income / (loss) for the period, net of tax		**€2,786.1**	**€(91.7)**	**€3,918.7**	**€(145.2)**

The accompanying notes form an integral part of these interim condensed consolidated financial statements.

Interim Condensed Consolidated Statements of Financial Position

(in millions)		**June 30, 2021**	**December 31, 2020**
Assets	**Note**	*(unaudited)*	
Non-current assets			
Intangible assets		€164.1	€163.5
Property, plant and equipment		261.6	227.0
Right-of-use assets		119.5	99.0
Other assets		0.9	1.0
Deferred tax assets	9	163.2	161.2
Total non-current assets		**€709.3**	**€651.7**
Current assets			
Inventories	11	305.4	64.1
Trade and other receivables	10	7,051.7	165.5
Other financial assets	10	0.8	137.2
Other assets		113.1	61.0
Income tax assets		0.9	0.9
Deferred expenses		53.5	28.0
Cash and cash equivalents		914.1	1,210.2
Total current assets		**€8,439.5**	**€1,666.9**
Total assets		**€9,148.8**	**€2,318.6**
Equity and liabilities			
Equity			
Share capital		246.3	246.3
Capital reserve		1,674.4	1,514.5
Treasury shares		(3.8)	(4.8)
Retained earnings / (Accumulated losses)		3,505.7	(409.6)
Other reserves	13	60.2	25.4
Total equity		**€5,482.8**	**€1,371.8**
Non-current liabilities			
Interest-bearing loans and borrowings	10	242.9	231.0
Other financial liabilities	10	243.4	31.5
Provisions		5.6	5.5
Contract liabilities		6.1	71.9
Other liabilities		4.7	0.6
Deferred tax liabilities		-	0.3
Total non-current liabilities		**€502.7**	**€340.8**
Current liabilities			
Interest-bearing loans and borrowings	10	13.9	9.1
Trade payables	10	262.7	102.3
Other financial liabilities	10	698.9	74.1
Government grants	7	3.1	92.0
Tax provisions	9	1,750.6	-
Other provisions	14	98.0	0.9
Contract liabilities		241.0	299.6
Other liabilities		95.1	28.0
Total current liabilities		**€3,163.3**	**€606.0**
Total liabilities		**€3,666.0**	**€946.8**
Total equity and liabilities		**€9,148.8**	**€2,318.6**

The accompanying notes form an integral part of these interim condensed consolidated financial statements.

Interim Condensed Consolidated Statements of Changes in Stockholders' Equity

(in millions)	Note	Share capital	Capital reserve	Treasury shares	Retained earnings / (Accumulated losses)	Other reserves	Total equity
As of January 1, 2020		**€232.3**	**€686.7**	**€(5.5)**	**€(424.8)**	**€4.8**	**€493.5**
Loss for the period		-	-	-	(141.7)	-	**(141.7)**
Other comprehensive loss		-	-	-	-	(3.5)	**(3.5)**
Total comprehensive income		-	-	-	**€(141.7)**	**€(3.5)**	**€(145.2)**
Share-based payments	13	-	-	-	-	16.3	**16.3**
As of June 30, 2020		**€238.2**	**€918.2**	**€(5.5)**	**€(566.5)**	**€17.6**	**€602.0**
As of January 1, 2021		**€246.3**	**€1,514.5**	**€(4.8)**	**€(409.6)**	**€25.4**	**€1,371.8**
Profit for the period		-	-	-	3,915.3	-	**3,915.3**
Other comprehensive income		-	-	-	-	3.4	**3.4**
Total comprehensive income		-	-	-	**€3,915.3**	**€3.4**	**€3,918.7**
Issuance of share capital	12	-	162.6	1.0	-	-	**163.6**
Transaction costs	12	-	(2.7)	-	-	-	**(2.7)**
Share-based payments	13	-	-	-	-	31.4	**31.4**
As of June 30, 2021		**€246.3**	**€1,674.4**	**€(3.8)**	**€3,505.7**	**€60.2**	**€5,482.8**

The accompanying notes form an integral part of these interim condensed consolidated financial statements.

Interim Condensed Consolidated Statements of Cash Flows

(in millions)	Three months ended June 30, 2021 *(unaudited)*	Three months ended June 30, 2020 *(unaudited)*	Six months ended June 30, 2021 *(unaudited)*	Six months ended June 30, 2020 *(unaudited)*
Operating activities				
Profit / (Loss) for the period	€2,787.2	€(88.3)	€3,915.3	€(141.7)
Income taxes	€1,235.6	€(2.2)	€1,749.8	€(2.2)
Profit / (loss) before tax	**€4,022.8**	**€(90.5)**	**€5,665.1**	**€(143.9)**
Adjustments to reconcile profit / (loss) before tax to net cash flows:				
Depreciation and amortization of property, plant, equipment and intangible assets	16.4	8.8	29.4	17.4
Share-based payment expense	22.0	8.3	39.3	16.7
Net foreign exchange differences	(70.1)	0.2	(101.3)	(0.1)
Gain on disposal of property, plant and equipment	0.2	-	0.4	0.1
Finance income	(0.3)	(0.2)	(0.6)	(0.6)
Interest on lease liability	0.5	0.5	1.2	0.9
Finance expense	175.1	0.1	219.1	0.2
Movements in government grants	(20.9)	-	(88.8)	-
Other non-cash income	-	(0.2)	-	(0.2)
Working capital adjustments:				
Increase in trade and other receivables, contract assets and other assets	(4,651.0)	(7.7)	(6,751.5)	(9.8)
Decrease / (Increase) in inventories	(158.5)	1.0	(241.3)	3.2
Increase in trade payables, other financial liabilities, other liabilities, contract liabilities and provisions	565.5	64.6	821.0	46.7
Interest received	0.3	0.3	0.6	0.6
Interest paid	(2.1)	(0.5)	(3.9)	(1.0)
Income tax paid	(0.2)	(0.2)	(0.3)	(0.4)
Net cash flows used in operating activities	**€(100.3)**	**€(15.5)**	**€(411.6)**	**€(70.2)**
Investing activities				
Purchase of property, plant and equipment	(25.9)	(15.1)	(47.6)	(21.4)
Proceeds from sale of property, plant and equipment	0.3	-	1.2	-
Purchase of intangibles assets and right-of-use assets	(4.2)	(2.1)	(11.7)	(4.2)
Acquisition of subsidiaries and businesses, net of cash acquired	-	7.4	-	0.9
Net cash flows used in investing activities	**€(29.8)**	**€(9.8)**	**€(58.1)**	**€(24.7)**
Financing activities				
Proceeds from issuance of share capital, net of costs	160.9	147.8	160.9	147.8
Proceeds from loans and borrowings	-	-	-	2.9
Repayment of loans and borrowings	(0.7)	(0.3)	(1.4)	(0.3)
Payments related to lease liabilities	(7.3)	(1.3)	(11.1)	(2.2)
Net cash flows from financing activities	**€152.9**	**€146.2**	**€148.4**	**€148.2**
Net increase/(decrease) in cash and cash equivalents	22.8	120.9	(321.3)	53.3
Change in cash and cash equivalents resulting from exchange rate differences	(0.2)	0.5	25.2	0.6
Cash and cash equivalents at the beginning of the period	891.5	451.6	1,210.2	519.1
Cash and cash equivalents at June 30	**€914.1**	**€573.0**	**€914.1**	**€573.0**

The accompanying notes form an integral part of these interim condensed consolidated financial statements.

Selected Explanatory Notes to the Interim Condensed Consolidated Financial Statements

1 Corporate Information

BioNTech SE is a limited company incorporated and domiciled in Germany. The registered office is located in Mainz, Germany (An der Goldgrube 12, 55131 Mainz). The accompanying unaudited interim condensed consolidated financial statements present the financial position and the results of operation of BioNTech SE and its subsidiaries and have been prepared on a going concern basis in accordance with the International Financial Reporting Standards, or IFRS as issued by the International Accounting Standards Board, or IASB. References to the “Company”, “BioNTech”, “Group”, “we”, “us” and “our” refer to BioNTech SE and its consolidated subsidiaries.

We combine decades of groundbreaking research in immunology, a wide array of computational discovery and therapeutic drug platforms for the rapid development of novel biopharmaceuticals. We leverage powerful new therapeutic mechanisms and exploit a diverse array of biological targets to harness the power of each patient’s immune system to address the unique molecular signature of each patient’s underlying disease. Our broad portfolio of oncology product candidates includes individualized and off-the-shelf mRNA-based therapies, innovative chimeric antigen receptor T cells, bi-specific checkpoint immuno-modulators, targeted cancer antibodies and small molecules. The breadth of our immunotherapy technologies and expertise enables us to develop potential therapies and vaccines to address infectious diseases and a broad range of indications beyond. We rapidly mobilized these to address the COVID-19 pandemic with our COVID-19 vaccine, referred to as COMIRNATY® in the European Union and certain other locations where we have received marketing approval.

In March 2021 a new entity BioNTech Turkey Tıbbi Ürünler Ve Klinik Araştirma Ticaret Anonim Şirketi, which translates into English as BioNTech Turkey Pharmaceutical Products and Clinical Trials Trading JSC, Istanbul, Turkey, was founded in Turkey and is a wholly owned consolidated subsidiary of BioNTech SE.

Our unaudited interim condensed consolidated financial statements as of and for the three and six months ended June 30, 2021 were authorized for issuance in accordance with a resolution of the audit committee on August 9, 2021.

2 Basis of Preparation, Significant Accounting Policies and further Accounting Topics

Basis of Preparation and Principles of Consolidation

The accompanying unaudited interim condensed consolidated financial statements as of and for the three and six months ended June 30, 2021 have been prepared in accordance with IAS 34 Interim Financial Reporting.

The unaudited interim condensed consolidated financial statements do not include all the information and disclosures required in the consolidated financial statements, and should be read in conjunction with our audited consolidated financial statements and accompanying notes included in our Annual Report on Form 20-F as of and for the year ended December 31, 2020.

We prepare and present our unaudited interim condensed consolidated financial statements in Euros. If not stated differently, amounts are rounded and presented in millions of Euros. Accordingly, numerical figures shown as totals in some tables may not be exact arithmetic aggregations of the figures that preceded them and figures presented in the explanatory notes may not add up to the rounded arithmetic aggregations.

The unaudited interim condensed consolidated financial statements as of and for the three and six months ended June 30, 2021 include BioNTech SE and its subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Significant Accounting Judgments, Estimates and Assumptions

The preparation of the unaudited interim condensed consolidated financial statements requires our management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities and the accompanying disclosures. This includes but is not limited to the judgment described as “Pfizer Agreement Characteristics” in the notes to our audited consolidated financial statements as of and for the year ended December 31, 2020. In order to determine our share of the collaboration partner’s gross profits, we used certain information from the collaboration partner, including revenues from the sale of products, some of which is based on preliminary data shared between the partners. These estimated figures may change in future periods as we receive final data from our collaboration partner. Those changes in our share of the collaboration partner’s gross profit are recognized prospectively as a change in estimates. Our management continually evaluates judgments and estimates, including such related to the fair value measurement of derivatives, revenues and expenses. Management bases its judgments and estimates on parameters available when the unaudited interim condensed consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond our control. Such changes are reflected in the assumptions when they occur.

Significant Accounting Policies

The accounting policies adopted in the preparation of the unaudited interim condensed consolidated financial statements are consistent with those followed in the preparation of our audited consolidated financial statements as of and for the year ended December 31, 2020. Certain policies have been further described further below due to the activities related to and the transactions occurred during the three and six months ended June 30, 2021.

Foreign Currency Translation

Foreign currency translation effects related to operating activities include foreign exchange differences arising on operating items such as trade receivables and trade payables and are either shown as other operating income or expenses on a cumulative basis and might switch between those two positions during the year-to-date reporting periods. Foreign currency translation effects presented within finance income and expenses include foreign exchange differences arising on financing items such as loans and borrowings as well as foreign exchange differences arising on cash and cash equivalents and are either shown as finance income or expenses on a cumulative basis and might switch between those two positions during the year-to-date reporting periods.

The IFRS standards applied for the first time as of January 1, 2021, as disclosed in the notes to the audited consolidated financial statements as of and for the year ended December 31, 2020, had no impact on our unaudited interim condensed consolidated financial statements as of and for the three and six months ended June 30, 2021.

Operational Impacts of COVID-19

As we advance our clinical programs, we are in close contact with our principal investigators and clinical sites, and are assessing the impact on the clinical trials, expected timelines and costs on an ongoing basis. We have modified the business practices in response to the spread of COVID-19, including restricting employee travel, developing social distancing plans for employees and cancelling physical participation in meetings, events and conferences. In addition, for certain programs, including BNT111, BNT113, BNT122, BNT141 and BNT142 (RiboMabs), BNT151 and BNT152/153 (RiboCytokines), BNT161 (Influenza) and BNT171 (Rare Disease), delays in the commencement of trials were experienced, due to slowed patient enrollment and other delays as a result of the COVID-19

pandemic. After several months of delay to focus efforts on our COVID-19 vaccine in 2020, we started two Phase 2 clinical trials for our FixVac product candidates BNT111 and BNT113 as well as Phase 1 clinical trials for BNT211 (CARVac), BNT221 (NEO-PTC-01, a neoantigen-based T-cell therapy), BNT151 and BNT152+153 (RiboCytokines) as well as BNT411 (TLR-agonist). These delays, even though they were temporary, may negatively impact our operations and overall business by delaying further progress of these clinical trials and preclinical studies. Our operations, including research and manufacturing, could also be negatively impacted due to the potential impact of staff absences as a result of self-isolation procedures or extended illness. Such factors were evaluated and considered when preparing these unaudited interim condensed consolidated financial statements as of and for the three and six months ended June 30, 2021. We will continue to evaluate observed and potential effects of the COVID-19 pandemic.

3 Revenues from Contracts with Customers

Disaggregated information on revenues

Set out below is the disaggregation of our revenues from contracts with customers:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Research & development revenues from collaborations	**€28.0**	**€32.5**	**€48.9**	**€53.7**
Genentech Inc.	*13.3*	*11.3*	*25.9*	*26.9*
Pfizer Inc.	*14.3*	*20.6*	*14.3*	*24.2*
Shanghai Fosun Pharmaceutical (Group) Co., Ltd	*-*	*0.4*	*7.4*	*0.9*
Other	*0.4*	*0.2*	*1.3*	*1.7*
Commercial revenues	**5,280.5**	**9.2**	**7,308.0**	**15.7**
COVID-19 vaccine revenues	5,266.0	-	7,281.6	-
*Sales to collaboration partners**	*138.1*	-	*202.0*	-
Direct product sales to customers	*1,035.6*	-	*1,235.4*	-
Share of collaboration partner's gross profit and sales milestones	*4,092.3*	-	*5,844.2*	-
Other sales	14.5	9.2	26.4	15.7
Total	**€5,308.5**	**€41.7**	**€7,356.9**	**€69.4**

*Represents sales to our collaboration partners of products manufactured by us.

Research & Development Revenues from Collaborations

During the three and six months ended June 30, 2021, our collaborations with Genentech Inc., or Genentech, Pfizer Inc., or Pfizer, Shanghai Fosun Pharmaceutical (Group) Co., Ltd, or Fosun Pharma, and other collaboration partners were progressed and respective research and development revenues were derived from deferred upfront payments as well as upon achieving development and regulatory milestones.

During the three and six months ended June 30, 2021, our Influenza collaboration with Pfizer was progressed and €14.3 million research and development revenues were derived from deferred upfront payments based on progress incurred. In comparison, during the three and six months ended June 30, 2020, research and development revenues from our collaboration with Pfizer were mainly related to ourCOVID-19 vaccine collaboration.

As part of our BNT162 vaccine program against COVID-19, we are additionally collaborating with Fosun Pharma to develop a COVID-19 vaccine in China. Upon receiving the authorization for emergency use and launching our COVID-19 vaccine in Hong Kong, development and regulatory milestones of €7.4 million have been achieved and recognized as research and development revenues

during the three months ended March 31, 2021. No further research and development revenues were recognized during the three months ended June 30, 2021. In comparison, during the three and six months ended June 30, 2020, research and development revenues were derived from a non-refundable upfront cash payment received under the collaboration.

Commercial Revenues

During the three and six months ended June 30, 2021 commercial revenues increased due to rapid increases in the supply and sales of our COVID-19 vaccine worldwide. We are the marketing authorization holder in the European Union, and holder of emergency use authorizations or similar authorizations in the United States (together with Pfizer), the United Kingdom, Canada, Turkey and other countries in advance of a planned application for full marketing authorizations in these countries. Pfizer has marketing and distribution rights worldwide with the exception of China, Germany and Turkey. Fosun Pharma has marketing and distribution rights in China. The allocation of marketing and distribution rights defines territories in which the collaboration partners act as a principal.

Whenever responsibilities in the manufacturing and supply process of the COVID-19 vaccine shift and the COVID-19 vaccine is transferred, the vaccine is sold from one partner to the other. During the three months ended June 30, 2021, we recognized €138.1 million of revenues from selling drug product batches manufactured by us to our partners. During the six months ended June 30, 2021, €202.0 million of revenues were recognized from selling drug product batches manufactured by us to our partners.

By supplying our territories during the three and six months ended June 30, 2021, we recognized €1,035.6 million and €1,235.4 million of revenues, respectively, from direct COVID-19 vaccine sales in Germany and Turkey. The share of gross profit that we owe our collaboration partner Pfizer based on our sales is recognized as cost of sales.

Based on COVID-19 vaccine sales in the collaboration partners' territories, we are eligible to receive a share of their gross profit which represents a net figure and is recognized as collaboration revenues during the commercial phase together with sales milestones that are recorded once the underlying thresholds are met. During the three months ended June 30, 2021, €3,923.7 million gross profit share and €168.6 million of sales milestones have been recognized as revenues. During the six months ended June 30, 2021, €5,428.4 million gross profit share and €415.8 million of sales milestones have been recognized as revenues. In order to determine our share of our collaboration partner's gross profits, we used certain information from the collaboration partners, including revenues from the sale of products, some of which is based on preliminary data shared between the partners and might vary once final data is available. Based on updated information received from the collaboration partner, we identified a revenue catch-up of €39.9 million which had been recognized prospectively in the commercial revenues during the three months ended June 30, 2021.

The revenues from contracts with customers were recognized as follows:

	Three months ended June 30,		**Six months ended June 30,**	
(in millions)	**2021**	**2020**	**2021**	**2020**
Timing of revenue recognition				
Goods and services transferred at a point in time	€1,187.1	€7.9	€1,460.9	€12.9
Goods and services transferred over time	4,121.4	33.8	5,896.0	56.5
Total	**€5,308.5**	**€41.7**	**€7,356.9**	**€69.4**

4 Cost of Sales

The cost of sales recognized during the three and six months ended June 30, 2021 and 2020 are shown in the following table:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Cost of sales related to COVID-19 vaccine revenues	€872.1	-	€1,095.3	-
Cost related to other sales	11.7	5.6	21.6	11.5
Total	**€883.8**	**€5.6**	**€1,116.9**	**€11.5**

5 Research and Development Expenses

The research and development expenses recognized during the three and six months ended June 30, 2021 and 2020 are shown in the following table:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Purchased services	€99.9	€39.6	€241.8	€58.0
Wages, benefits and social security expense	68.2	32.4	115.7	59.5
Laboratory supplies	16.5	13.0	27.9	21.2
Depreciation and amortization	7.1	6.8	14.6	13.9
Other	9.4	3.4	17.3	7.7
Total	**€201.1**	**€95.2**	**€417.3**	**€160.3**

6 General and Administrative Expenses

The general and administrative expenses recognized during the three and six months ended June 30, 2021 and 2020 are shown in the following table:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Wages, benefits and social security expense	€17.1	€7.7	€31.4	€14.2
Purchased services	11.5	4.1	23.5	8.3
Insurance premiums	4.4	0.8	8.7	1.6
IT and office equipment	5.4	1.4	8.0	2.7
Depreciation and amortization	1.3	1.6	2.6	2.7
Other	8.1	3.2	12.5	5.1
Total	**€47.8**	**€18.8**	**€86.7**	**€34.6**

7 Other Operating Income

The other operating income recognized during the three and six months ended June 30, 2021 and 2020 is shown in the following table:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Government grants	€0.1	-	€68.0	-
Foreign exchange differences, net	34.4	-	75.1	-
Other	1.7	0.8	4.4	1.2
Total	**€36.2**	**€0.8**	**€147.5**	**€1.2**

During the three and six months ended June 30, 2021, €67.1 million other operating income was derived from a government grant for which we became eligible during the year ended December 31, 2020 as part of an initiative by the German Federal Ministry of Education (*Bundesministerium für Bildung und Forschung*, or the BMBF) to support our COVID-19 vaccine program, BNT162.

The foreign exchange differences included in operating income arose from valuing our trade receivables and trade payables that are denominated in U.S. dollar and specifically incur under our COVID-19 collaboration with Pfizer.

8 Finance Income and Expenses

The finance income recognized during the three and six months ended June 30, 2021 and 2020 is shown in the following table:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Foreign exchange differences, net	-	-	€24.2	-
Interest income	0.3	0.2	0.6	0.6
Total	**€0.3**	**€0.2**	**€24.8**	**€0.6**

The finance expenses recognized during the three and six months ended June 30, 2021 and June 30, 2020 are shown in the following table:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Fair value adjustments of financial instruments measured at fair value	€170.4	-	€211.9	-
Amortization of financial instruments	4.7	0.1	7.2	0.2
Foreign exchange differences, net	0.3	9.2	-	3.2
Total	**€175.4**	**€9.3**	**€219.1**	**€3.4**

During the three and six months ended June 30, 2021,€170.4 million and €211.9 million, finance expenses were recognized, respectively, from remeasuring the derivative embedded in our convertible note (see Note 10).

The foreign exchange differences included in finance income and expenses arose from valuing our U.S. dollar bank accounts.

9 Income Tax

For the six months ended June 30, 2021, income taxes are calculated based on the best estimate of the weighted average annual income tax rates expected for the full financial year (estimated annual effective income tax rate) on ordinary income before tax plus the tax effect of any discrete items. Our effective income tax rate was approximately 31% for the six months ended June 30, 2021. Current income taxes were recognized with respect to the German tax group. For the German entities, the estimated annual effective income tax rate anticipates the full use of the tax loss carry forwards resulting in an expense of the deferred tax assets over the fiscal year 2021. Consequently, during the three and six months ended June 30, 2021, a proportionate amount of the deferred tax assets related to the tax loss carryforward was utilized. The change in deferred tax assets was partly compensated by deferred tax effects of identified discrete items. As of June 30, 2021, we continue to maintain a valuation allowance against deferred tax assets of our U.S. tax group as there is not sufficient probability in terms of IAS 12 that there will be future taxable profits available against which the unused tax losses and temporary differences can be utilized.

The income taxes recognized during the three and six months ended June 30, 2021 and 2020 are shown in the following table:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Current income taxes	€1,257.0	€0.1	€1,752.1	€0.1
Deferred taxes	€(21.4)	€(2.3)	(2.3)	(2.3)
Income taxes	**€1,235.6**	**€(2.2)**	**€1,749.8**	**€(2.2)**

10 Financial Assets and Financial Liabilities

Set out below, is an overview of financial assets, other than cash and cash equivalents, held as of June 30, 2021 and December 31, 2020:

Financial assets at amortized cost

(in millions)	**June 30, 2021**	**December 31, 2020**
Trade and other receivables	€7,051.7	€165.5
Other financial assets	0.8	137.2
Total	**€7,052.5**	**€302.7**
Total current	7,052.5	302.7
Total non-current	-	-

Trade and other receivables significantly increased mainly due to the trade receivables from our own sales and our COVID-19 collaboration with Pfizer. The contractual settlement of the gross profit share has a temporal offset of more than one calendar quarter. As Pfizer's fiscal quarter for subsidiaries outside the United States differs from ours, it creates an additional time lag between the recognition of revenues and the payment receipt. Consequently, as of June 30, 2021, our trade receivables included in addition to the profit share for the second quarter of 2021, trade receivables which related to the gross profit share for the first quarter of 2021. The payment settling our gross profit share for the first quarter of 2021 (as defined by the contract) was received from our collaboration partner subsequent to the end of the reporting period in July 2021. Other financial assets decreased as the advance-payment which had been received by our collaboration partner on future deliveries was paid to us during the six months ended June 30, 2021.

Set forth below is an overview of financial liabilities, other financial liabilities and trade payables held as of June 30, 2021 and December 31, 2020:

Interest-bearing loans and borrowings

(in millions)	**Maturity**	**June 30, 2021**	**December 31, 2020**
Lease liabilities		€97.7	€84.2
Convertible note - host contract	08/28/2024	91.2	87.5
3.50% € 50,000,000 secured bank loan	12/21/2026	47.9	47.2
2.15% € 10,000,000 secured bank loan	12/30/2027	8.4	9.0
2.08% € 9,450,000 secured bank loan	09/30/2028	8.2	8.7
1.90% € 3,528,892.48 secured bank loan	05/30/2039	3.4	3.5
Total		**€256.8**	**€240.1**
Total current		13.9	9.1
Total non-current		242.9	231.0

Trade payables and other financial liabilities

(in millions)	**June 30, 2021**	**December 31, 2020**
Derivatives not designated as hedging instrument		
Convertible note - embedded derivative	€242.8	€30.9
Financial liabilities at fair value through profit or loss		
Contingent consideration	0.6	0.6
Total financial liabilities at fair value	**€243.4**	**€31.5**
Trade payables and other financial liabilities at amortized cost, other than interest-bearing loans and borrowings		
Trade payables	262.7	102.3
Other financial liabilities	698.9	74.1
Total trade payables and other financial liabilities at amortized cost, other than interest-bearing loans and borrowings	**€961.6**	**€176.4**
Total trade payables and other financial liabilities	**€1,205.0**	**€207.9**
Total current	961.6	176.4
Total non-current	243.4	31.5

Total financial liabilities

(in millions)	**June 30, 2021**	**December 31, 2020**
Interest-bearing loans and borrowings	€256.8	€240.1
Trade payables and other financial liabilities	1,205.0	207.9
Total	**€1,461.8**	**€448.0**
Total current	975.5	185.5
Total non-current	486.3	262.5

Other financial liabilities increased mainly due to obligations incurred from our license agreements.

Risk management activities

No changes have occurred regarding our risk management activities as disclosed in the notes to the audited consolidated financial statements as of and for the year ended December 31, 2020.

Fair values

Fair values of cash and cash equivalents, trade receivables, trade payables, and other current financial assets and liabilities approximate their carrying amounts largely due to the short-term maturities of these instruments.

The financial liabilities measured at amortized cost include four fixed-interest rate loans as well as our issued convertible note. As of June 30, 2021 and December 31, 2020, the carrying value approximates their fair values as there have been no significant changes in relevant interest rates since the inception of the respective loans and note.

The fair values of financial instruments measured at fair value are reassessed on a quarterly basis. Unchanged to December 31, 2020, we used the Cox-Rubinstein binomial tree model to determine the fair value of the embedded derivative as of June 30, 2021. The valuation technique is based on significant observable inputs (Level 2) and described in further detail in Note 12 our audited consolidated financial statements included in our Annual Report on Form 20-F as of and for the year ended December 31, 2020. The fair value adjustment derived from remeasuring the embedded derivative was mainly driven by the increase in our share price, amounted to €170.4 million for the three months ended June 30, 2021 and €211.9 million for the six months ended June 30, 2021, respectively, and was recognized as finance expenses in profit or loss (see Note 8). The initial fair value of the contingent consideration determined at acquisition remains valid since no changes of the underlying performance criteria have occurred.

11 Inventories

Set out below, is an overview of inventories held as of June 30, 2021 and December 31, 2020:

(in millions)	**June 30, 2021**	**December 31, 2020**
Raw materials and supplies	€169.3	€44.3
Unfinished goods	55.8	19.4
Finished goods	80.3	0.4
Total	**€305.4**	**€64.1**

The inventories increased mainly due to our production ramp-up.

12 Issued Capital and Reserves

At-The-Market Offering Program

In November 2020, we entered into a sales agreement, or the Sales Agreement, with Jefferies LLC and SVB Leerink LLC, as sales agents, to establish an at-the-market offering program, pursuant to which we may sell, from time to time, ADSs representing ordinary shares for aggregate gross proceeds of up to $500.0 million. During the three months ended June 30, 2021, we sold 995,890 ADSs, each representing one of our ordinary shares that had previously been held in treasury, under the Sales Agreement for aggregate gross proceeds of $200.0 million (€163.6 million). Reissuing 995,890 ordinary shares was registered as decrease of €1.0 million in treasury shares. As a result of the transaction the capital reserve increased by €162.6 million offset by €2.7 million transaction costs, net of tax.

13 Share-Based Payments

Expense arising from share-based payment arrangements

During the three and six months ended June 30, 2021 and 2020, the following share-based payment arrangements led to the expenses recognized for services received during the respective periods as shown in the following table:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Expense arising from equity-settled share-based payment arrangements	€17.3	€8.1	€32.5	€16.3
Employee Stock Ownership Plan	*7.1*	*4.3*	*11.6*	*8.6*
Chief Executive Officer Grant	*1.6*	*3.2*	*3.3*	*6.4*
*Management Board Grant**	*0.4*	*0.6*	*0.9*	*1.3*
BioNTech 2020 Employee Equity Plan for employees based in Europe	*8.2*	-	*16.7*	-
Expense arising from cash-settled share-based payment arrangements	9.8	0.2	11.9	0.4
*Management Board Grant**	*1.2*	*0.2*	*1.3*	*0.4*
BioNTech 2020 Restricted Stock Unit Plan for North America Employees	*8.6*	-	*10.6*	-
Total	**€27.1**	**€8.3**	**€44.4**	**€16.7**

Cost of sales	€1.9	€0.2	€3.6	€0.4
Research and development expenses	18.8	6.4	30.9	13.0
General and administrative expenses	6.1	1.7	9.6	3.3
Total	**€27.1**	**€8.3**	**€44.4**	**€16.7**

* In May 2021, phantom options were granted under the Management Board Grant for the 2021 year which led to a modification from equity-settled to cash-settled share-based payment arrangement and a reclassification of €1.1 million between equity and non-current other liabilities, respectively. Expenses incurred before and after the modification date have been disclosed as equity-settled or cash-settled share-based payment arrangement, respectively.

Changes in share-based payment arrangements

New share-based payment arrangements and material changes to arrangements that occurred during the three and six months ended June 30, 2021 are shown below. A detailed description of our share-based payment arrangements is included in Note 17 to our audited consolidated financial statements included in our Annual Report on Form 20-F as of and for the year ended December 31, 2020.

BioNTech 2020 Employee Equity Plan for employees based in Europe (Equity-Settled)

In December 2020, we adopted the BioNTech 2020 Employee Equity Plan for employees based in Europe, or the European Plan. Under the European Plan Restricted Cash Units, or RSUs, are offered to our employees. As of the grant date in February 2021, with implementing the European Plan for the calendar year 2020, award agreements were entered into with all of our employees who are eligible under the European Plan, or the LTI 2020 program. In addition, further award agreements were entered into with employees who did not participate in the Employee Stock Ownership Plan, or ESOP, or the LTI-plus program. The LTI 2020 program vests annually in equal installments after four years and the LTI-plus program vests annually in equal installments after two years, with both programs commencing in December 2020. Moreover, the LTI-plus program contains a non-vesting condition concerning 50% of the granted RSUs; these units will be awarded to the participants after the U.S. Food and Drug Administration, or the FDA, fully approves BNT162b2, our COVID-19 vaccine. As we have the ability to determine the method of settlement, both programs were classified as equity-settled. The cost of the awards will be recognized over the relevant service period, applying the graded vesting method.

Set out below is an overview of the RSU's granted and subsequent changes to RSU's outstanding during the six months ended June 30, 2021.

	Restricted Stock Units	Weighted average fair value (€)
Granted	627,486	89.41
Forfeited	(789)	88.70
As of June 30, 2021	**626,697**	**89.41**

The fair value of the awards is based upon the price of our ADSs representing ordinary shares at grant date. A retention assumption is applied when estimating the number of equity instruments for which service conditions are expected to be satisfied and will be revised in case material differences arise. Ultimately, a true-up to the number satisfied until settlement date will be recorded.

BioNTech 2020 Restricted Stock Unit Plan for North America Employees (Cash-Settled)

In December 2020, we adopted the BioNTech 2020 Restricted Stock Unit Plan for North America Employees, or the North American Plan. Under the North American Plan, RSUs are offered to our employees. These RSUs generally vest over four years, with 25% vesting one year after the service commencement date and the remainder vesting in equal quarterly installments thereafter. The first awards under the North American Plan were granted in February 2021. The service date for these awards is the date as of which the employee became employed by BioNTech US. As these RSUs are intended to be cash-settled upon vesting, the awards were defined as a cash-settled share-based payment arrangement. The liability related to these awards is measured, initially and at the end of each reporting period until settled, at the fair value of the award considering the price of the ADSs representing our ordinary shares. The cost of the awards will be recognized over the relevant service period, applying the graded vesting method.

Management Board Grant (partly Equity-Settled, partly Cash-Settled)

Effective from the beginning of 2020, the first year following the completion of our IPO, until the end of the term each of the Management Board members' employment agreements, such employment agreements provide for a long-term incentive compensation in the form of yearly grants of options to purchase our ordinary shares.

In May 2021, the grant date, phantom options equivalent to the number of options the Management Board members would have been entitled to receive for the 2021 year were granted under the Management Board Grant which led to a modification from equity-settled to cash-settled share-based payment arrangement and a reclassification of €1.1 million between equity and non-current other liabilities. The rights to receive options in 2022 remain determined as equity-settled share-based payment arrangements.

The phantom options allocated to BioNTech's Management Board as of May 2021 allocation date are presented in the tables below.

Phantom options outstanding	**Allocation date May 2021**
Prof. Ugur Sahin, M.D.	17,780
Sean Marett	7,112
Dr. Sierk Poetting	7,112
Dr. Özlem Türeci, M.D.	7,112
Ryan Richardson	6,163

Measurement of Fair Values

Under this cash-settled share-based payment arrangement, the fair values of the liabilities will be remeasured until the settlement date continuously using a Monte-Carlo simulation model which incorporates the impact of the performance criteria regarding share price and index development as described in Note 17 to our audited consolidated financial statements included in our Annual Report on Form 20-F as of and for the year ended December 31, 2020. Continuously, the fair values are recognized over the award's vesting period beginning as of the service commencement date (January 1, 2020) until four years commencing on the first anniversary of the allocation date have lapsed.

14 Provisions

From time to time, we may be involved in legal proceedings arising out of the normal course and conduct of our business. As of June 30, 2021, certain proceedings were pending or threatened against us or our subsidiaries, mainly related to purported obligations arising out of use or alleged use of third party intellectual property. As it is not possible to predict the outcome of such proceedings, particularly given the early stage of such proceedings, our best estimate of potential outflow of economic resources amounts to €96.8 million, which is included in current other provisions in our unaudited interim condensed consolidated statements of financial position as of June 30, 2021. We do not currently believe that any of these matters will have a material effect on our financial position or results of operations. However, this assessment is based on assumptions deemed reasonable by management including those about future events and uncertainties. The outcome of these matters is ultimately uncertain, such that unanticipated events and circumstances might occur that might cause us to change those assumptions and give rise to a material adverse effect on our financial position in the future.

15 Related Party Disclosures

ATHOS KG, Holzkirchen, Germany is the sole shareholder of AT Impf GmbH, Munich, Germany and beneficial owner of our ordinary shares. Entities controlled by ATHOS KG mainly provide rental and property management activities and sell property, plant and equipment to us. The total amount of transactions with ATHOS KG or entities controlled by them was as follows for the periods indicated:

	Three months ended June 30,		**Six months ended June 30,**	
(in millions)	**2021**	**2020**	**2021**	**2020**
Purchases of various goods and services from entities controlled by ATHOS KG	€0.2	€1.0	€0.4	€1.5
Purchases of property and other assets from entities controlled by ATHOS KG	-	2.3	-	2.3
Total	**€0.2**	**€3.3**	**€0.4**	**€3.8**

The outstanding balances of transactions with ATHOS KG or entities controlled by them were as follows as of the dates indicated:

(in millions)	**June 30, 2021**	**December 31, 2020**
ATHOS KG	€0.6	€0.5
Total	**€0.6**	**€0.5**

None of the balances are secured and no bad debt expense has been recognized in respect of amounts owed by related parties.

16 Events after the Reporting Period

With effect as of July 1, 2021, the Supervisory Board appointed Jens Holstein to the Management Board as Chief Financial Officer (CFO). Jens Holstein takes over the CFO role from Dr. Sierk Poetting who will fully focus on his tasks as Chief Operating Officer (COO).

On July 9, 2021, BioNTech Pharmaceuticals Co. Ltd., Shanghai, China, was founded and is a wholly-owned subsidiary of BioNTech Pharmaceuticals Asia Pacific Pte. Ltd., a wholly-owned subsidiary of BioNTech SE.

Forward-Looking Statements

This quarterly report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, but not limited to, statements concerning: our expected revenues and net profit related to sales of our COVID-19 vaccine, referred to as COMIRNATY® in the European Union as authorized for use under conditional marketing approval, in territories controlled by our collaboration partners, particularly for those figures that are derived from preliminary estimates provided by our partners; our pricing and coverage negotiations with governmental authorities, private health insurers and other third-party payors after our initial sales to national governments; the extent to which a COVID-19 vaccine continues to be necessary in the future; competition from other COVID-19 vaccines or related to our other product candidates, including those with different mechanisms of action and different manufacturing and distribution constraints, on the basis of, among other things, efficacy, cost, convenience of storage and distribution, breadth of approved use, side-effect profile and durability of immune response; the rate and degree of market acceptance of our COVID-19 vaccine and our investigational medicines, if approved; the initiation, timing, progress, results, and cost of our research and development programs and our current and future preclinical studies and clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available and our research and development programs; the timing of and our ability to obtain and maintain regulatory approval for our product candidates; the collaboration between BioNTech and Pfizer to develop a COVID-19 vaccine (including a potential booster dose of BNT162b2 and/or a potential booster dose of a variation of BNT162b2 having a modified mRNA sequence); the ability of BNT162b2 to prevent COVID-19 caused by emerging virus variants; our ability to identify research opportunities and discover and develop investigational medicines; the ability and willingness of our third-party collaborators to continue research and development activities relating to our development candidates and investigational medicines; the impact of the COVID-19 pandemic on our development programs, supply chain, collaborators and financial performance; unforeseen safety issues and claims for personal injury or death arising from the use of our COVID-19 vaccine and other products and product candidates developed or manufactured by us; our Malaria, Tuberculosis and HIV programs, and timing for selecting clinical candidates for these programs and the commencement of a clinical trial, as well as any data readouts; the nature of the collaboration with the African Union and the Africa CDC; the nature and duration of support from WHO, the European Commission and other organizations with establishing infrastructure; the development of sustainable vaccine production and supply solutions on the African continent and the nature and feasibility of these solutions; our estimates of our expenses, ongoing losses, future revenue and capital requirements and our needs for or ability to obtain additional financing; our ability to identify, recruit and retain key personnel; our and our collaborators' ability to protect and enforce our intellectual property protection for our proprietary and collaborative product candidates, and the scope of such protection; the development of and projections relating to our competitors or our industry; our ability and that of our collaborators to commercialize and market our product candidates, if approved, including our COVID-19 vaccine; the amount of and our ability to use net operating losses and research and development credits to offset future taxable income; our ability to manage our development and expansion; regulatory developments in the United States and foreign countries; our ability to effectively scale our production capabilities and manufacture our products, including our target COVID-19 vaccine production levels, and our product candidates; our ability to implement, maintain and improve effective internal controls; our plans for expansion in southeast Asia and China, including our planned regional headquarters and manufacturing facility in Singapore as well as the joint venture JV with Fosun Pharma; and other factors not known to us at this time. In some cases, forward-looking statements can be identified by terminology such as "will," "may," "should," "expects," "intends," "plans," "aims," "anticipates," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. The forward-looking statements in this quarterly report are neither promises nor guarantees, and you should not place undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties, and other factors, many of which are beyond BioNTech's control and which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. You should review the risks and

uncertainties described under the heading “Risk Factors” in this quarterly report and in subsequent filings made by BioNTech with the SEC, which are available on the SEC’s website at https://www.sec.gov/. Except as required by law, BioNTech disclaims any intention or responsibility for updating or revising any for-ward-looking statements contained in this quarterly report in the event of new information, future developments or otherwise. These forward-looking statements are based on BioNTech’s current expectations and speak only as of the date hereof.

Operating and Financial Review and Prospects

In this report, unless stated or the context otherwise requires, references to the "Company", "BioNTech", "Group", "we", "us" and "our" refer to BioNTech SE and its consolidated subsidiaries. The following "Operating and Financial Review and Prospects" should be read together with the unaudited interim condensed consolidated financial statements and related notes as presented above. The following discussion is based on our financial information prepared in accordance with the International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB, which may differ in material respects from generally accepted accounting principles in other jurisdictions, including U.S. GAAP. The following discussion includes forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including but not limited to those described in the "Risk Factors" section further below. Please also see "Forward-Looking Statements" included at the end of this quarterly report for the three and six months ended June 30, 2021.

Operating Results

Overview

BioNTech was founded in 2008 with the goal to develop treatments for patients that address diseases with high unmet medical need. As a next generation immunotherapy company it is our vision to harness the power of the immune system to develop novel therapies against cancer and infectious diseases. To realize this vision, we combine decades of groundbreaking research in immunology, a wide array of computational discovery and therapeutic drug platforms for the rapid development of novel biopharmaceuticals. We leverage powerful new therapeutic mechanisms and exploit a diverse array of biological targets to harness the power of each patient's immune system to address the unique molecular signature of each patient's underlying disease. Our broad portfolio of oncology product candidates includes individualized and off-the-shelf mRNA-based therapies, innovative chimeric antigen receptor T cells, bi-specific checkpoint immuno-modulators, targeted cancer antibodies and small molecules. The breadth of our immunotherapy technologies and expertise enables us to develop potential therapies and vaccines to address infectious diseases and a broad range of indications beyond. We rapidly mobilized these to address the COVID-19 pandemic with our COVID-19 vaccine, referred to as COMIRNATY® in the European Union and other locations where we have received marketing approval.

We believe our successful development of a first-in-class COVID-19 mRNA vaccine in less than one year validates our execution capabilities and the power of our technologies to change lives.

We intend to invest the proceeds we generate from sales of our COVID-19 vaccine to accelerate the maturation of our oncology and infectious disease pipeline and the expansion into additional therapeutic areas, such as autoimmunity, allergy, regenerative medicine and inflammatory diseases.

We believe we are well-positioned to develop and commercialize the next generation of immunotherapies with the potential to transform treatment paradigms for many severe diseases and significantly improve clinical outcomes for patients.

We have assembled an exceptional team of over 2,500 employees and have established relationships with eight pharmaceutical collaborators, including Bayer AG, or Bayer, Genentech, Inc., or Genentech, Genevant Sciences GmbH, or Genevant, Genmab A/S, or Genmab, Pfizer Inc., or Pfizer, Regeneron Pharmaceuticals, Inc., or Regeneron, Sanofi S.A., or Sanofi and Shanghai Fosun Pharmaceutical (Group) Co., Ltd., or Fosun Pharma.

Corporate Development

- On May 9, 2021, we agreed on the terms with Fosun Pharma to establish a 50/50 Joint Venture, or JV, to manufacture the COVID-19 vaccine in Mainland China. The establishment of a JV will be conditional on us receiving approval for our COVID-19 vaccine in Mainland China and agreement with Fosun Pharma on a definitive JV agreement, in addition to other conditions. As part of our global supply strategy, we believe that establishing local manufacturing capacity for the COVID-19 vaccine could substantially increase our ability to supply vaccines to China upon approval.
- On May 10, 2021, we announced plans to expand our global footprint to Asia with the establishment of the first regional headquarters for southeast Asia in Singapore. In addition to selecting Singapore as the future regional headquarters, we plan to establish a fully integrated mRNA manufacturing facility in Singapore with support from the Singaporean Economic Development Board, or the EDB. The new facility will leverage cutting-edge manufacturing and digital infrastructure and will be equipped to produce a range of novel mRNA vaccines and therapeutics. The envisioned site will bring highly automated and end-to-end mRNA production capabilities. The facility, with an estimated annual capacity of several hundred million doses, shall provide regional and global supply capacity, as well as a rapid response capability for southeast Asia to address potential pandemic threats. We plan to open our Singapore office and initiate construction of the manufacturing facility in 2021, subject to planning approval, and anticipate the site could be operational as early as 2023.
- With effect as of July 1, 2021, the Supervisory Board appointed Jens Holstein to the Management Board as Chief Financial Officer (CFO). Jens Holstein joined the Management Board to help strengthen our growth trajectory as a global, fully integrated immunotherapy company with an approved or authorized product. He previously served as CFO for MorphoSys AG and in various CFO and general management roles within the Fresenius SE Group. Jens Holstein takes over the CFO role from Dr. Sierk Poetting who will fully focus on his tasks as Chief Operating Officer (COO) going forward.
- With effect as of August 4, 2021, we entered into a purchase agreement with Kite Pharma Inc., Santa Monica, California, United States to acquire their clinical manufacturing facility in Gaithersburg, Maryland, United States and their T Cell Receptor (TCR) R&D platform. The acquired Gaithersburg facility and employees will provide production capacity to support clinical trials in the United States and will complement our existing cell therapy manufacturing facility in Idar-Oberstein, Germany. The facility will support the development of our expanding pipeline of novel cell therapies, including cancer product candidates based on our CAR-T Cell amplifying mRNA vaccine (CARVac) and NEOSTIM platforms as well as the newly acquired individualized neoantigen TCR program. Under the terms of the agreement, Kite received a one-time upfront payment from us. The asset acquisition is an important step in our goal to build a global biotechnology company for individualized cancer medicine by further strengthening our footprint in the United States.

Key Pipeline Updates

Below is a summary of our authorized product and clinical product candidates, organized by platform and indication.

Infectious Disease

COVID-19 Vaccine Program – BNT162b2

BNT162b2 Clinical Development Updates

- Multiple clinical trials are ongoing to expand access to and authorization of BNT162b2 to additional regions and population groups such as the studies in children from 6 months to 11 years of age, and in healthy pregnant women.

On April 1, 2021, we and Pfizer announced updated topline results from the global Phase 3 trial of BNT162b2 which showed high efficacy and no serious safety concerns through up to six months following the second dose. The data were published on the medRxiv preprint server on July 29, 2021. Topline efficacy was based on an analysis of 971 confirmed symptomatic cases of COVID-19 observed in the pivotal Phase 3 trial through March 13, 2021. BNT162b2 was 91.2% effective against COVID-19, measured seven days through up to six months after the second dose. The vaccine was also 95.7% effective against severe COVID-19 as defined by the Food and Drug Administration (FDA) as measured seven days after the second dose. Safety data collected demonstrated a favorable safety and tolerability profile. An additional exploratory analysis of 800 trial participants enrolled in South Africa confirmed 100% efficacy against SARS-CoV-2 lineage B.1.351 (Beta variant). These data support previous results from immunogenicity studies published on April 15, 2021 demonstrating that BNT162b2 induced a robust neutralizing antibody response to the B.1.351 lineage. The updated results have been submitted to the regulatory authorities and are currently under review.

- On April 1, 2021, we and Pfizer started a randomized Phase 3 trial to evaluate the safety, tolerability and immunogenicity of a lyophilized and ready-to-use formulation of BNT162b2, administered on a two-dose (separated by 21 days) schedule in adults aged 18 to 55.
- A clinical trial within the global Phase 1/2/3 trial is ongoing which includes: (1) an assessment of the impact of a third dose of BNT162b2 in prolonging immunity against COVID-19 and in protecting against COVID-19 caused by potential newly emerging SARS-CoV-2 variants, and (2) an assessment of a modified, variant-specific version of BNT162b2 that targets the full spike protein of the Beta variant. The aim of these studies is to explore the development, manufacturing and regulatory pathway that we and Pfizer would pursue if SARS-CoV-2 were to change enough to require an updated vaccine.
- In July 2021, we and Pfizer provided an update on our comprehensive booster dose strategy. In initial data from the ongoing Phase 1/2/3 booster trial of a third dose of our current BNT162b2 vaccine we have observed that a booster dose given six months after the second dose has a consistent tolerability profile while eliciting high neutralization titers in both younger and older adults compared to those observed after two primary doses. The immune sera elicited neutralizing titers against the original SARS-CoV-2 wild-type strain that are more than 5 to 8-fold, and more than 15 to 21-fold against the B.1.351 lineage (Beta-variant) than after two primary doses. In addition, a third dose of BNT162b2 elicited neutralizing titers against the Delta variant that are more than 5 to 11-fold than after two doses. We expect to publish more definitive data about the analysis and plan to submit the data to the FDA, European Medicines Agency, or the EMA, and other regulatory authorities in the coming weeks.

  While we believe a third dose of BNT162b2 has the potential to preserve the highest levels of protective efficacy against all currently tested variants, including Delta. We and Pfizer are remaining vigilant, and we are developing and will clinically test an updated version of the COVID-19 vaccine that targets the full spike protein of the Delta variant. This trial, aimed at studying the Delta variant, is part of ours and Pfizer´s comprehensive strategy to address variants should the need arise in the future. We anticipate the clinical study to begin in August 2021, subject to regulatory approvals.
- As discussed above, in July 2021, we and Pfizer began a Phase 3 clinical trial to evaluate the safety, tolerability and efficacy of a 30µg booster dose of BNT162b2 versus placebo in approximately 10,000 participants aged 16 years and older who have previously received two doses of BNT162b2 at least six months prior to randomization. Participants will be followed for up to twelve months. The trial is being conducted in the United States, Brazil and South Africa.

Regulatory Updates

- In May 2021, we and Pfizer announced the expansion of emergency use authorizations, conditional marketing authorizations or equivalents for adolescents 12 years of age and older

in the United States, European Union and Canada. Authorizations for adolescents 12 years of age and older have been also granted in additional countries.

- On May 17, 2021, we announced that the FDA and the EMA approved the transportation and storage of thawed, undiluted vials of BNT162b2 at fridge temperatures of 2°C to 8°C for up to one month (31 days).
- On July 16, 2021, the FDA granted Priority Review designation for the Biologics License Application (BLA) for BNT162b2 to prevent COVID-19 in individuals 16 years of age and older. This follows the completion of the rolling submission of the BLA in May 2021, which includes data from the pivotal Phase 3 clinical trial of the vaccine. The Prescription Drug User Fee Act (PDUFA) goal date for a decision by the FDA is in January 2022. Additional submissions to pursue regulatory approvals in those countries where emergency use authorizations or equivalents were initially granted are ongoing or planned.

Commercial Updates

We and Pfizer have shipped over one billion doses of BNT162b2 vaccine to more than 100 countries or territories around the world as of July 21, 2021.

The companies have signed orders of approximately 2.2 billion doses for delivery in 2021 and more than one billion doses for 2022 and beyond as of July 21, 2021. Further discussions for additional dose commitments are ongoing for 2021 and beyond.

- On May 6, 2021, we and Pfizer announced that we signed a Memorandum of Understanding with the International Olympic Committee to donate doses of COVID-19 vaccine to vaccinate athletes, and their delegations, participating in the Tokyo Olympic and Paralympic Games 2020.
- On May 20, 2021, we and Pfizer announced an agreement with the European Commission, or the EC, to supply 900 million doses to the European Union with an option for the EC to request up to an additional 900 million doses of our COVID-19 vaccine. This brings the total number of potential doses delivered to the EC, inclusive of all agreements, to up to 2.4 billion. The EC also has the option to purchase an updated version of the vaccine that includes new formulations or addresses potential viral variants, if available and approved. All doses for the EC are planned to be manufactured in the European Union.
- On June 10, 2021, we and Pfizer announced an agreement to provide the U.S. government with 500 million doses at a not-for-profit price, of which 200 million doses will be provided in 2021 and 300 million doses in the first half of 2022. The U.S. government will donate vaccine doses to low- and lower middle-income countries and organizations that support them. These doses are part of our and Pfizer’s previously announced pledge to provide two billion doses of the COVID-19 vaccine to low- and middle-income countries over the next 18 months.
- On July 23, 2021, we and Pfizer announced that the U.S. government purchased an additional 200 million doses, bringing the total number of doses under the existing supply agreement to 500 million. The companies expect to deliver 110 million of the additional doses by December 31, 2021, and the remaining 90 million doses no later than April 20, 2022. The U.S. government also has the option to acquire an updated version of the vaccine to address potential variants and also new formulations, if available and authorized.

Manufacturing Updates

- We and Pfizer expect BNT162b2 annual manufacturing capacity to reach three billion doses by the end of 2021 and expect to have capacity to manufacture up to four billion doses in 2022.
- In the second quarter of 2021, the EMA approved the manufacturing of our COVID-19 vaccine drug product at our facility in Marburg, Germany. This manufacturing facility is one of the largest mRNA vaccine manufacturing sites worldwide with an annual production capacity of

up to one billion doses of COVID-19 vaccine, once fully operational. The first batches of vaccines manufactured at the Marburg facility were delivered in mid-April 2021.

- On May 10, 2021, we announced plans to establish a fully integrated mRNA manufacturing facility in Singapore with support from the EDB, as well as plans to establish our first regional headquarters for southeast Asia. The new facility will leverage cutting-edge manufacturing and digital infrastructure and will be equipped to produce a range of novel mRNA vaccines and therapeutics. The envisioned site will bring highly automated and end-to-end mRNA production capabilities. The facility, with an estimated annual capacity of several hundred million doses, will provide regional and global supply capacity, as well as a rapid response capability for southeast Asia to address potential pandemic threats. We anticipate the site could be operational as early as 2023.
- On July 21, 2021, we and Pfizer announced the signing of a letter of intent with the Biovac Institute (Pty) Ltd., or Biovac, a Cape Town-based, South African biopharmaceutical company, for the manufacture of vaccine for distribution within the African Union. Biovac will perform fill and finish manufacturing and distribution activities within our and Pfizer's global COVID-19 vaccine supply chain and manufacturing network. Biovac's Cape Town facility is expected to be incorporated into the vaccine supply chain by the end of 2021. At full operational capacity, the annual production will exceed 100 million finished doses annually. All doses will exclusively be distributed within the 55-member states that make up the African Union.

Influenza Vaccine Program – BNT161

We are also collaborating with Pfizer to develop an influenza vaccine based on our suite of mRNA platforms. A Phase 1 clinical trial is expected to start in the third quarter of 2021. The clinical trial will evaluate modified RNA influenza vaccine candidates based on the proven BNT162b2 COVID-19 vaccine platform. The product candidate, BNT161, is designed to encode influenza virus antigens selected by the WHO in advance of a given flu season.

Other Infectious Diseases

Currently, we and our partners are developing vaccines against nine different infectious diseases.

- On July 26, 2021, we announced plans to develop sustainable solutions to address infectious diseases on the African continent. As part of the plans, we aim to develop a well-tolerated and highly effective Malaria vaccine, beginning with the initiation of a clinical trial by end of 2022. We will assess multiple vaccine candidates featuring known targets such as circumsporozoite protein (CSP) as well as new antigens discovered in the pre-clinical research phase. The second objective is dedicated to the development of sustainable vaccine production and supply solutions on the African continent. To this end, we are exploring possibilities to set up state-of-the-art mRNA manufacturing facilities, either with partners or on our own. This strategy aims to expand the capacity of low- and middle-income countries to manufacture contemporary vaccines end-to-end and scale up production to increase global access. Our efforts are supported by the World Health Organization and the Africa Centers for Disease Control and Prevention. Besides the WHO, the European Commission and other organizations have been involved in the early planning phase of our Malaria project and have offered their support to identify and set up the necessary infrastructure.
- Our Malaria project is part of the 'eradicateMalaria' initiative, led by the kENUP Foundation, to accelerate the eradication of Malaria.
- On July 26, 2021, we announced that clinical trials for our first tuberculosis vaccine candidate are planned to begin in 2022, just two years after the program was initiated. We have collaborated with the Bill and Melinda Gates Foundation since 2019 to provide affordable access to vaccines to low- and middle-income countries. The antigen discovery programs for both Malaria and Tuberculosis are being conducted by specialized teams at our headquarters in Mainz, Germany.

- We have a research collaboration with the University of Pennsylvania under which we have the exclusive option to develop and commercialize prophylactic mRNA immunotherapies for the treatment of up to 10 infectious disease indications.
- There are an additional five undisclosed programs.

Oncology

We are advancing the development of a broad oncology pipeline which has now progressed 15 product candidates in 18 ongoing trials. Six clinical trials, including two randomized Phase 2 clinical trials for FixVac programs, BNT111 and BNT113, have started in 2021. In the second quarter of 2021, we started first-in-human Phase 1 trials for the neoantigen specific T cell therapy, BNT221 and for a second RiboCytokine program BNT152+153. We expect to further advance our oncology pipeline in the second half of 2021 with BNT122 expected to move into a randomized Phase 2 trial and two further preclinical programs to move into Phase 1 trials.

During the remainder of 2021, we expect at least four data updates from our ongoing clinical trials in oncology.

FixVac

Our FixVac product candidates contain selected combinations of pharmacologically optimized uridine mRNA encoding known cancer-specific shared antigens. FixVac product candidates also feature our proprietary immunogenic mRNA backbone and proprietary RNA-LPX delivery formulation, which are designed to enhance stability and translation as well as trigger both innate and adaptive immune responses.

- **BNT111** in advanced melanoma.
  - BNT111 is in an ongoing Phase 1 trial for the treatment of advanced melanoma
  - In collaboration with Regeneron we are conducting a randomized Phase 2 trial for the treatment of patients with advanced melanoma.

    On June 18, 2021, we announced that the first patient was dosed in a randomized global, three-arm Phase 2 trial evaluating BNT111 in combination with cemiplimab, versus both agents as monotherapy, in patients with anti-PD1-refractory/relapsed unresectable Stage III or IV melanoma.

    The open-label randomized trial is expected to enroll a total of 120 patients. The primary endpoint is overall response rate of BNT111 in combination with cemiplimab. Secondary endpoints include overall response rate in the single agent arms, duration of response, and safety.

  Melanoma remains one of the deadliest types of skin cancer with a 5-year survival for Stage IV metastatic disease of only 22.5%. In the refractory or relapsed setting, survival can be as short as six months depending on risk factors. Up to 50% of patients progress after treatment with checkpoint inhibitors.
- **BNT112** is in an ongoing Phase 1/2 trial for the treatment of prostate cancer**.**
- **BNT113** in advanced HPV16+ head and neck cancer.
  - BNT113 is in an ongoing Phase 1/2 basket trial for the treatment of HPV16+ head and neck cancer.
  - On August 9, 2021, we announced that the first patient was dosed in July in a potentially registrational randomized Phase 2 trial evaluating BNT113 in combination with pembrolizumab versus pembrolizumab monotherapy as a first-line treatment in patients with unresectable recurrent or metastatic HPV16+ head and neck squamous cell carcinoma (HNSCC) expressing PD-L1.

BNT113 has not been combined with anti-PD1 therapy before and the Phase 2 trial will start with a run in portion (Part A) designed to demonstrate the safety of the combination of BNT113 and pembrolizumab. After approximately 12 to 18 patients have completed one cycle, safety and recommended Phase 2 dosage will be confirmed, and assuming clinical success, the trial will be advanced to Part B.

Part B is planned to enroll a total of 267 patients. Primary endpoints include safety, overall survival and objective response rate. Secondary endpoints include progression free survival, durable complete responses, duration of response, patient reported outcomes, and quality of life measures.

HPV-associated cancers are increasing with HPV16+ HNSCC typically occurring in younger people. Most patients with HPV16+ HNSCC are diagnosed at more advanced clinical stages. We see a significant opportunity to improve the treatment landscape with BNT113 given that it has the potential to augment clinical responses in patients being treated with checkpoint inhibitors.

- **BNT114** in triple negative breast cancer (TNBC).
    - The main study phase of BNT114 Phase 1 (TNBC-MERIT) was completed and recently summarized in a clinical trial report. A long-term follow-up period is ongoing until 2023 for patients receiving the individualized neoantigen specific vaccine only. Treatment with an on-demand manufactured BNT114-vaccine was feasible in terms of timelines, logistics, and patient burden in a standard clinical healthcare setting. Main study data demonstrated that treatment with BNT114 had an acceptable safety and tolerability profile, which was in line with the known mode of action and was accompanied by transient increases in cytokine levels.
- **BNT115** is in an ongoing investigator-initiated Phase 1 trial for the treatment of ovarian cancer.
- **BNT116** is in preclinical development for the treatment of non-small cell lung cancer.

Individualized Neoantigen Specific Immunotherapy (iNeST)

iNeST is an individualized cancer immunotherapy that targets specific neoantigens that are present on a patient's tumor. Our iNeST immunotherapies contain pharmacologically optimized uridine mRNA encoding up to 20 patient-specific neoantigens, delivered in our proprietary RNA-LPX formulation. We are developing our iNeST cancer immunotherapy in collaboration with Genentech.

- An open-label Phase 1a/1b trial evaluating the safety, tolerability, immune response and pharmacokinetics of **autogene cevumeran (BNT122)** as a single agent and in combination with atezolizumab in patients with locally advanced or metastatic solid tumors (basket trial) is ongoing. At the 2020 AACR conference, we presented data from the monotherapy dose-finding cohorts in which autogene cevumeran was observed to have a manageable safety profile and induced strong neoantigen-specific immune responses in patients with low and intermediate mutational load tumor types.
- A Phase 2 open-label trial evaluating the efficacy and safety of autogene cevumeran (BNT122) in combination with pembrolizumab versus pembrolizumab alone in patients with previously untreated advanced melanoma is ongoing.
- A randomized Phase 2 trial in the adjuvant treatment of circulating tumor DNA positive, surgically resected Stage II (high risk)/Stage III colorectal cancer is planned to start in the second half of 2021. The trial is currently recruiting patients.

mRNA Intratumoral Immunotherapy

We, in collaboration with Sanofi, are developing intratumoral immunotherapies utilizing our proprietary mRNA technology. These immunotherapies are designed to be administered directly into

the tumor in order to alter the tumor microenvironment and enhance the immune system's ability to recognize and fight cancer within the tumor (proximal) as well as in other untreated locations (distal).

- **SAR441000 (BNT131)** consists of modified mRNA encoding immunomodulatory cytokines for direct intratumoral injection. SAR441000 (BNT131) is being studied in a Sanofi-sponsored Phase 1 clinical trial as monotherapy and in combination with an anti-PD-1/PD-L1 checkpoint inhibitor in patients with advanced solid tumors.

RiboCytokines

BNT151 and BNT152+153 are nucleoside-modified mRNAs encoding human cytokines fused to human serum albumin. BNT151 encodes an IL-2 variant, BNT152 encodes IL-7 and BNT153 encodes IL-2.

- **BNT151** – A first-in-human, open-label, multicenter Phase 1/2a trial is ongoing. The trial evaluates dose escalation, safety, pharmacokinetics and pharmacodynamics of BNT151 with expansion cohorts in multiple solid tumor indications, including head and neck squamous cell carcinoma (HNSCC), hepatocellular carcinoma (HCC), renal cell cancer (RCC), non-small cell lung cancer (NSCLC), and triple-negative breast cancer (TNBC). The monotherapy dose escalation will enroll patients with tumors that are metastatic or unresectable with no available standard therapy likely to confer clinical benefit. In the combined treatment dose escalation, patients with different solid tumors will be enrolled and treated with BNT151 and the respective standard of care.
- **BNT152+153** – In June 2021 the first patient was dosed in a first-in-human Phase 1 trial evaluating a combination of BNT152 (encoding IL-7) and BNT153 (encoding IL-2). The trial will enroll approximately 72 patients with various solid tumors. In parallel, BNT152 and BNT153 monotherapy dose escalation in Part 1 will determine the Part 2 dose of each compound. Part 2 will be the dose escalation of BNT152 and BNT153 in combination.

RiboMabs

Our RiboMab product candidates, BNT141 and BNT142, are designed to encode secreted antibodies, consisting of our proprietary nucleoside-modified mRNA that is designed to minimize the immunomodulatory activity of the mRNA. RiboMab product candidates are formulated using liver-targeting LNPs for intravenous delivery.

- **BNT141** is our RiboMab product candidate for the treatment of solid tumors. BNT141 encodes an IgG antibody which upon injection is secreted into the bloodstream. We plan to start a Phase 1 clinical trial for BNT141 in the second half of 2021.
- **BNT142** is our RiboMab product candidate for the treatment of solid tumors. BNT142 is designed to encode a secreted bispecific antibody that targets CD3 and CLDN6. We plan to start a Phase 1 clinical trial for BNT142 in the second half of 2021.

CAR-T Cell Immunotherapy

BNT211 is our CAR-T cell therapy for the treatment of CLDN6+ solid tumors. BNT211 targets CLDN6 and will initially be evaluated in combination with a CARVac that encodes CLDN6.

- A first-in-human Phase 1/2a open-label dose escalation and dose expansion trial evaluating BNT211 in patients with Claudin-6-positive solid tumors is ongoing. The trial evaluates Claudin-6 CAR-T cells dosed as monotherapy and in combination with Claudin-6 CARVac. A data update for this trial is planned in the second half of 2021.

Neoantigen-Targeting T Cell Therapy

BNT221 (NEO-PTC-01) is our individualized neoantigen-targeting T cell therapy for the treatment of cancer. BNT221 (NEO-PTC-01) targets selected sets of individualized neoantigens.

- In April 2021, the first patient was dosed in a first-in-human Phase 1 dose escalation trial evaluating BNT221 in patients with checkpoint inhibitor unresponsive or refractory metastatic melanoma. Part 1 of the trial consists of a monotherapy dose escalation of BNT221. In Part 2, BNT221 will be dosed in combination with anti-PD1 therapy after first-line treatment.

Next-Generation Checkpoint Immunomodulators

We are developing, in collaboration with Genmab, bispecific antibodies that function as tumor-targeted and dual immunomodulators, applying Genmab's proprietary DuoBody® technology in combination with our joint target identification and product concept expertise. These next-generation checkpoint immunomodulators are thought to induce beneficial co-stimulation, promoting specific T cell activation, survival, proliferation and T cell effector functions. BNT311 and BNT312 are partnered with Genmab as part of a 50/50 collaboration in which development costs and future profit are shared.

- **BNT311 (GEN1046)**, our jointly owned PD-L1x4-1BB product candidate, is a potential first-in-class bispecific antibody combining PD-L1 checkpoint inhibition with 4-1BB checkpoint activation. A Phase 1/2a dose escalation trial with multiple expansion cohorts in patients with solid tumors is ongoing. A data update for the trial is planned in the second half of 2021.
- **BNT312 (GEN1042)**, our jointly owned CD40x4-1BB antibody product candidate, is a potential first-in-class bispecific antibody designed to induce conditional immune activation by crosslinking CD40 and 4-1BB positive cells. A Phase 1/2a dose escalation trial with expansion cohorts in patients with solid tumors is ongoing. The first data disclosure for the trial is planned in the second half of 2021.

Targeted Cancer Antibodies

BNT321 (MVT-5873) is a fully human IgG1 monoclonal antibody targeting sialyl Lewis A (sLea), an epitope on CA19-9 that is expressed in pancreatic and other solid tumors that plays a role in tumor adhesion and metastasis formation, and is a marker of an aggressive cancer phenotype.

- BNT321 is currently in Phase 1 clinical development in pancreatic cancer.

Small Molecule Immunomodulators

BNT411 is our novel small molecule TLR7 agonist product candidate. BNT411 is designed to activate both the adaptive and innate immune system through the TLR7 pathway.

A Phase 1/2a dose-escalation trial of BNT411 as a monotherapy in patients with solid tumors and in combination with atezolizumab, carboplatin and etoposide in patients with chemotherapy-naïve extensive-stage small cell lung cancer (ES-SCLC) is ongoing. A data update from this trial is planned in the second half of 2021.

Rare Disease Protein Replacement Therapies

We are collaborating with Genevant in order to combine our mRNA technology with Genevant's LNP delivery technology, to create up to five mRNA protein replacement therapies for the treatment of rare diseases with high unmet medical needs. The first product candidate under the Genevant collaboration, BNT171, is being developed for Ornithine Transcarbamylase (OTC) Deficiency. Our mRNA replacement product candidate is associated with a favorable tolerability profile and good protein expression (in mice) and demonstrated phenotype rescue in a mouse disease model. Currently, we have placed the programs on hold in order to focus on other disease areas.

Financial Operations Overview

The following table shows our interim condensed consolidated statements of profit or loss for each period presented:

	Three months ended June 30,		Six months ended June 30,	
	2021	**2020**	**2021**	**2020**
(in millions)	*(unaudited)*	*(unaudited)*	*(unaudited)*	*(unaudited)*
Revenues				
Research & development revenues	€28.0	€32.5	€48.9	€53.7
Commercial revenues	5,280.5	9.2	7,308.0	15.7
Total revenues	**5,308.5**	**41.7**	**7,356.9**	**69.4**
Cost of sales	(883.8)	(5.6)	(1,116.9)	(11.5)
Research and development expenses	(201.1)	(95.2)	(417.3)	(160.3)
Sales and marketing expenses	(13.3)	(3.0)	(22.0)	(3.5)
General and administrative expenses	(47.8)	(18.8)	(86.7)	(34.6)
Other operating expenses	(0.3)	(0.8)	(0.9)	(0.9)
Other operating income	36.2	0.8	147.5	1.2
Operating income / (loss)	**€4,198.4**	**€(80.9)**	**€5,860.6**	**€(140.2)**
Finance income	0.3	0.2	24.8	0.6
Finance expenses	(175.4)	(9.3)	(219.1)	(3.4)
Interest expenses related to lease liabilities	(0.5)	(0.5)	(1.2)	(0.9)
Profit / (loss) before tax	**€4,022.8**	**€(90.5)**	**€5,665.1**	**€(143.9)**
Income taxes	(1,235.6)	2.2	(1,749.8)	2.2
Profit / (Loss) for the period	**€2,787.2**	**€(88.3)**	**€3,915.3**	**€(141.7)**

Important financial and operating terms and concepts are described in Item 5 of our Annual Report on Form 20-F as of and for the year ended December 31, 2020.

Operational Impacts of COVID-19

The impact of COVID-19 during the three and six months ended June 30, 2021 and 2020 is explained in Note 2 to the unaudited interim condensed consolidated financial statements.

COVID-19 Collaborations

In response to the COVID-19 pandemic, we initiated our COVID-19 vaccine development program, BNT162, in late January 2020, leveraging our proprietary mRNA platform, and assembled a global consortium of partners including Pfizer (worldwide collaboration outside of China) and Fosun Pharma (China).

Details about our COVID-19 collaborations are described further in our Key Pipeline Updates above, Items 4 and 5 of our Annual Report on Form 20-F as of and for the year ended December 31, 2020 as well as the notes to our audited consolidated financial statements included in that Annual Report.

Comparison of the three and six months ended June 30, 2021 and 2020

Revenues

The following is a summary of revenues recognized for the periods indicated:

	Three months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Revenues				
Research & development revenues from collaborations	**€28.0**	**€32.5**	**€(4.5)**	**(14)**
Genentech Inc.	*13.3*	*11.3*	*2.0*	*18*
Pfizer Inc.	*14.3*	*20.6*	*(6.3)*	*(31)*
Shanghai Fosun Pharmaceutical (Group) Co., Ltd	*-*	*0.4*	*(0.4)*	*(100)*
Other	*0.4*	*0.2*	*0.2*	*100*
Commercial revenues	**5,280.5**	**9.2**	**5,271.3**	**n.m.****
COVID-19 vaccine revenues	5,266.0	-	5,266.0	-
*Sales to collaboration partners**	*138.1*	*-*	*138.1*	*-*
Direct product sales to customers	*1,035.6*	*-*	*1,035.6*	*-*
Share of collaboration partner's gross profit and sales milestones	*4,092.3*	*-*	*4,092.3*	*-*
Other sales	14.5	9.2	5.3	58
Total revenues	**€5,308.5**	**€41.7**	**€5,266.8**	**n.m.**

*Represents sales to our collaboration partners of products manufactured by us.
** n.m. – not meaningful

	Six months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Revenues				
Research & development revenues from collaborations	**€48.9**	**€53.7**	**€(4.8)**	**(9)**
Genentech Inc.	*25.9*	*26.9*	*(1.0)*	*(4)*
Pfizer Inc.	*14.3*	*24.2*	*(9.9)*	*(41)*
Shanghai Fosun Pharmaceutical (Group) Co., Ltd	*7.4*	*0.9*	*6.5*	*722*
Other	*1.3*	*1.7*	*(0.4)*	*(24)*
Commercial revenues	**7,308.0**	**15.7**	**7,292.3**	**n.m.**
COVID-19 vaccine revenues	7,281.6	-	7,281.6	-
*Sales to collaboration partners**	*202.0*	*-*	*202.0*	*-*
Direct product sales to customers	*1,235.4*	*-*	*1,235.4*	*-*
Share of collaboration partner's gross profit and sales milestones	*5,844.2*	*-*	*5,844.2*	*-*
Other sales	26.4	15.7	10.7	68
Total revenues	**€7,356.9**	**€69.4**	**€7,287.5**	**n.m.**

*Represents sales to our collaboration partners of products manufactured by us.

For the three months ended June 30, 2021 compared to the three months ended June 30, 2020, our total revenues from contracts with customers increased by €5,266.8 million from €41.7 million to €5,308.5 million as well as by €7,287.5 million from €69.4 million during the six months ended June 30, 2020 to €7,356.9 million during the six months ended June 30, 2021. Since December 2020, our COVID-19 vaccine has been authorized or approved for emergency or temporary use or granted conditional marketing authorization in over 70 countries worldwide, which resulted in a recognition of revenues from the sale of pharmaceutical products for the first time.

Research & Development Revenues from Collaborations

For the three months ended June 30, 2021 compared to the three months ended June 30, 2020, research and development revenues from collaborations decreased by €4.5 million or 14% from €32.5 million to €28.0 million as well as by €4.8 million or 9% from €53.7 million in the six months ended June 30,

2020 to €48.9 million in the six months ended June 30, 2021. This was mainly due to a decrease in revenues from our COVID-19 vaccine collaboration with Pfizer which led to significant revenues during the three and six months ended June 30, 2020 but progressed into the commercial phase leading to less research and development revenues during the three and six months ended June 30, 2021. The decrease was partially offset by recognizing €14.3 million research and development revenues during the three months ended June 30, 2021 from deferred upfront payments based on progress incurred from our Influenza collaboration with Pfizer and additionally recognizing €7.4 million development and regulatory milestones as research and development revenues during the three months ended March 31, 2021 from our collaboration with Fosun Pharma upon receiving authorization for emergency use and launching our COVID-19 vaccine in Hong Kong. No further research and development revenues were recognized from this collaboration during the three months ended June 30, 2021.

Commercial Revenues

For the three months ended June 30, 2021 compared to the three months ended June 30, 2020, commercial revenues increased by €5,271.3 million from €9.2 million to €5,280.5 million as well as by €7,292.3 million from €15.7 million in the six months ended June 30, 2020 to €7,308.0 million in the six months ended June 30, 2021, mainly due to rapid increases in the supply and sales of our COVID-19 vaccine worldwide. We are the marketing authorization holder in the European Union, and holder of emergency use authorizations or similar authorizations in the United States (together with Pfizer), the United Kingdom, Canada, Turkey and other countries in advance of a planned application for full marketing authorizations in these countries. Pfizer has marketing and distribution rights worldwide with the exception of China, Germany, and Turkey. Fosun Pharma has marketing and distribution rights in China. The allocation of marketing and distribution rights defines territories in which the collaboration partners act as principal.

Whenever responsibilities in the manufacturing and supply process of the COVID-19 vaccine shift and the COVID-19 vaccine is transferred, the vaccine is sold from one partner to the other. During the three months ended June 30, 2021, we recognized €138.1 million of revenues from selling drug product batches manufactured by us to our partners. During the six months ended June 30, 2021, €202.0 million of revenues were recognized from selling drug product batches manufactured by us to our partners.

By supplying our territories during the three and six months ended June 30, 2021, we recognized €1,035.6 million and €1,235.4 million of revenues, respectively, from direct COVID-19 vaccine sales in Germany and Turkey. The share of gross profit that we owe our collaboration partner Pfizer based on our sales is recognized as cost of sales.

Based on COVID-19 vaccine sales in the collaboration partners' territories, we are eligible to receive a share of their respective gross profit, which represents a net figure and is recognized as collaboration revenues during the commercial phase together with sales milestones that are recorded once the underlying thresholds are met. During the three months ended June 30, 2021, €3,923.7 million gross profit share and €168.6 million of sales milestones have been recognized as revenues. During the six months ended June 30, 2021, €5,428.4 million gross profit share and €415.8 million of sales milestones have been recognized as revenues. In order to determine our share of collaboration partner's gross profits, we used certain information from the collaboration partners, including revenues from the sale of products, some of which is based on preliminary data shared between the partners and might vary once final data is available. Based on updated information received from the collaboration partner, we identified a revenue catch-up of €39.9 million which had been recognized prospectively in the commercial revenues during the three months ended June 30, 2021.

Cost of Sales

The following table summarizes our cost of sales for the periods indicated:

	Three months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Cost of sales				-
Cost of sales related to COVID-19 vaccine revenues	€872.1	-	€872.1	-
Cost related to other sales	11.7	5.6	6.1	109
Total cost of sales	**€883.8**	**€5.6**	**€878.2**	**n.m.**

	Six months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Cost of sales				
Cost of sales related to COVID-19 vaccine revenues	€1,095.3	-	€1,095.3	-
Cost related to other sales	21.6	11.5	10.1	88
Total cost of sales	**€1,116.9**	**€11.5**	**€1,105.4**	**n.m.**

For the three months ended June 30, 2021 to the three months ended June 30, 2020, our cost of sales increased by €878.2 million from €5.6 million to €883.8 million as well as by €1,105.4 million from €11.5 million for the six months ended June 30, 2020 compared to €1,116.9 million during the six months ended June 30, 2021, mainly due to recognizing cost of sales from our COVID-19 vaccine sales which included the share of gross profit that we owe our collaboration partner Pfizer based on our sales.

Research and Development Expenses

The following table summarizes our research and development expenses for the periods indicated:

	Three months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Research and development expenses				
Purchased services	€99.9	€39.6	€60.3	152
Wages, benefits and social security expense	68.2	32.4	35.8	110
Laboratory supplies	16.5	13.0	3.5	27
Depreciation and amortization	7.1	6.8	0.3	4
Other	9.4	3.4	6.0	176
Total research and development expenses	**€201.1**	**€95.2**	**€105.9**	**111**

	Six months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Research and development expenses				
Purchased services	€241.8	€58.0	€183.8	317
Wages, benefits and social security expense	115.7	59.5	56.2	94
Laboratory supplies	27.9	21.2	6.7	32
Depreciation and amortization	14.6	13.9	0.7	5
Other	17.3	7.7	9.6	125
Total research and development expenses	**€417.3**	**€160.3**	**€257.0**	**160**

For the three months ended June 30, 2021 compared to the three months ended June 30, 2020, our research and development expenses increased by €105.9 million or 111% from €95.2 million to €201.1 million as well as by €257.0 million or 160% from €160.3 million during the six months ended June 30, 2020 compared to €417.3 million during the six months ended June 30, 2021, mainly due to

an increase in research and development expenses from our BNT162 program, recorded as purchased services with respect to those expenses, which are initially incurred by Pfizer and subsequently charged to us under our collaboration agreement with Pfizer. The increase was further driven by an increase in wages, benefits and social security expenses due to increases in headcounts, recognizing inventor compensation expenses as well as expenses incurred under the new share-based-payment arrangements.

General and Administrative Expenses

The following table summarizes our general and administrative expenses for the periods indicated:

	Three months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
General and administrative expenses				
Wages, benefits and social security expense	€17.1	€7.7	€9.4	122
Purchased services	11.5	4.1	7.4	180
Insurance premiums	4.4	0.8	3.6	450
IT and office equipment	5.4	1.4	4.0	286
Depreciation and amortization	1.3	1.6	(0.3)	(19)
Other	8.1	3.2	4.9	153
Total general and administrative expenses	**€47.8**	**€18.8**	**€29.0**	**154**

	Six months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
General and administrative expenses				
Wages, benefits and social security expense	€31.4	€14.2	€17.2	121
Purchased services	23.5	8.3	15.2	183
Insurance premiums	8.7	1.6	7.1	444
IT and office equipment	8.0	2.7	5.3	196
Depreciation and amortization	2.6	2.7	(0.1)	(4)
Other	12.5	5.1	7.4	145
Total general and administrative expenses	**€86.7**	**€34.6**	**€52.1**	**151**

For the three months ended June 30, 2021 compared to the three months ended June 30, 2020, our general and administrative expenses increased by €29.0 million or 154% from €18.8 million to €47.8 million as well as by €52.1 million or 151% from €34.6 million during the six months ended June 30, 2020 compared to €86.7 million during the six months ended June 30, 2021, mainly due to an increase in wages, benefits and social security expenses from increasing headcounts and recognizing expenses incurred under the new share-based-payment arrangements, higher expenses for purchased management consulting and legal services, as well as higher insurance premiums.

Other Operating Income and Expenses

The following table summarizes our other result, including other operating income and expenses, for the periods indicated:

	Three months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Other result				
Other operating income	**€36.2**	**€0.8**	**35.4**	**n.m.**
Government grants	0.1	-	0.1	-
Foreign exchange differences, net	34.4	-	34.4	-
Other	1.7	0.8	0.9	113
Other operating expenses	**(0.3)**	**(0.8)**	**0.5**	**(63)**
Other	(0.3)	(0.8)	0.5	(63)
Total other result	**€35.9**	-	**€35.9**	-

	Six months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Other result				
Other operating income	**€147.5**	**€1.2**	**€146.3**	**n.m.**
Government grants	68.0	-	68.0	-
Foreign exchange differences, net	75.1	-	75.1	-
Other	4.4	1.2	3.2	267
Other operating expenses	**(0.9)**	**(0.9)**	-	-
Other	(0.9)	(0.9)	-	-
Total other result	**€146.6**	**€0.3**	**€146.3**	**n.m.**

For the three months ended June 30, 2021 compared to the three months ended June 30, 2020, our total other result increased by €35.9 million from Nil to €35.9 million as well as by €146.3 million from €0.3 million during the six months ended June 30, 2020 to €146.6 million during the six months ended June 30, 2021, mainly due recording other operating income from government grants for which we became eligible as part of an initiative by the German Federal Ministry of Education (*Bundesministerium für Bildung und Forschung*, or the BMBF) to support our COVID-19 vaccine program. In addition, during the three and six months ended June 30, 2021, €34.4 million and €75.1 million foreign exchange differences arising on operating items were recognized on a cumulative basis as other operating income, respectively. The increase reflects the change in foreign exchange rate and relates to our trade receivables and trade payables that are denominated in U.S. dollar and specifically increased under our COVID-19 collaboration with Pfizer.

Finance Income / Expenses

The following table summarizes our finance result for the periods indicated:

	Three months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Finance result				
Finance income	**€0.3**	**€0.2**	**€0.1**	**50**
Interest income	0.3	0.2	0.1	50
Finance expenses	**(175.4)**	**(9.3)**	**(166.1)**	**n.m.**
Fair value adjustments of financial instruments measured at fair value	(170.4)	-	(170.4)	-
Amortization of financial instruments	(4.7)	(0.1)	(4.6)	n.m.
Foreign exchange differences, net	(0.3)	(9.2)	8.9	(97)
Interest expenses related to lease liabilities	**(0.5)**	**(0.5)**	**-**	**-**
Total finance result	**€(175.6)**	**€(9.6)**	**€(166.0)**	**n.m.**

	Six months ended June 30,		Change	
(in millions)	**2021**	**2020**	**€**	**%**
Finance result				
Finance income	**€24.8**	**€0.6**	**€24.2**	**n.m.**
Foreign exchange differences, net	24.2	-	24.2	-
Interest income	0.6	0.6	-	-
Finance expenses	**(219.1)**	**(3.4)**	**(215.7)**	**n.m.**
Fair value adjustments of financial instruments measured at fair value	(211.9)	-	(211.9)	-
Amortization of financial instruments	(7.2)	(0.2)	(7.0)	n.m.
Foreign exchange differences, net	-	(3.2)	3.2	(100)
Interest expenses related to lease liabilities	**(1.2)**	**(0.9)**	**(0.3)**	**33**
Total finance result	**€(195.5)**	**€(3.7)**	**€(191.8)**	**n.m.**

For the three months ended June 30, 2021 compared to the three months ended June 30, 2020, our total financial result decreased by €166.0 million from a negative financial result of €9.6 million to a negative financial result of €175.6 million as well as by €191.8 million from a negative financial result of €3.7 million during the six months ended June 30, 2020 compared to a negative financial result of €195.5 million during the six months ended June 30, 2021, mainly due increased expenses arising from fair value measurement adjustments of the derivative embedded within the convertible note. The change in fair value was mainly driven by the increase in our share price and amounted to €170.4 million for the three months ended June 30, 2021 and €211.9 million for the six months ended June 30, 2021, respectively, and was recognized as finance expenses in profit or loss. The foreign exchange differences included in finance income and expenses arose from valuing our U.S. dollar bank accounts.

Income Taxes

For the six months ended June 30, 2021, income taxes are calculated based on the best estimate of the weighted average annual income tax rates expected for the full financial year (estimated annual effective income tax rate) on ordinary income before tax plus the tax effect of any discrete items. Our effective income tax rate was approximately 31% for the three months ended June 30, 2021. Current income taxes were recognized with respect to the German tax group. For the German entities, the estimated annual effective income tax rate anticipates the full use of the tax loss carry forwards resulting in an expense of the deferred tax assets over the fiscal year 2021. Consequently, during the three and six months ended June 30, 2021, a proportionate amount of the deferred tax assets related to the tax loss carryforward was utilized. The change in deferred tax assets was partly compensated by deferred tax effects of identified discrete items. As of June 30, 2021, we continue to maintain a valuation allowance

against deferred tax assets of our U.S. tax group as there is not sufficient probability in terms of IAS 12 that there will be future taxable profits available against which the unused tax losses and temporary differences can be utilized.

During the three and six months ended June 30, 2020, we had accumulated tax losses with respect to corporate tax and trade tax. Deferred tax assets on tax losses had not been capitalized as there was not sufficient probability in terms of IAS 12 that there would be future taxable profits available against which the unused tax losses could be utilized. The accumulated tax losses related to Germany and the United States. There was no expiration date for any of the accumulated tax losses under German or U.S. tax law.

Related Party Transactions

Related party transactions that occurred during the three and six months ended June 30, 2021 and 2020 are explained in Note 15 to the unaudited interim condensed consolidated financial statements.

Critical Accounting Policies and Use of Estimates

Our unaudited interim condensed consolidated financial statements for the three and six months ended June 30, 2021 have been prepared in accordance with IFRS, as issued by the IASB.

The preparation of the unaudited interim condensed consolidated financial statements in accordance with IFRS requires the use of estimates and assumptions by the management that affect the value of assets and liabilities as reported on the balance sheet date, and revenues and expenses arising during the respective reporting period. As described in Item 5 of our Annual Report on Form 20-F as of and for the year ended December 31, 2020 as well as the Note 3 to our audited consolidated financial statements included in that Annual Report, the area where our management needed to apply judgment the most relates to the recognition of revenues. This includes but is not limited to determining commercial revenues under our collaboration agreement with Pfizer which is recognized based on the collaboration partners' gross profit from COVID-19 vaccine sales where we used certain information from the collaboration partner, including revenues from the sale of products, some of which is based on preliminary data shared between the partners. These estimated figures may change in future periods as we receive final data from our collaboration partner. Those changes in our share of the collaboration partner's gross profit are recognized prospectively as change in estimates.

Further areas in which assumptions, estimates and the exercising of a degree of discretion are appropriate relate to the determination of the useful lives of non-current assets, establishing the fair value of intangibles and derivatives, the formation of provisions, as well as income taxes. We base our assumptions and estimates on parameters available when the unaudited interim condensed consolidated financial statements are prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond our control. Hence, our estimates may vary from the actual values.

Our critical accounting policies are discussed further in Item 5 of our Annual Report on Form 20-F as of and for the year ended December 31, 2020 as well as Note 2.3 to our audited consolidated financial statements included in that Annual Report include those related to revenue recognition, research and development expenses, share-based compensation, fair value measurement of share-based awards as well as taxes. Actual results in the areas related to critical accounting estimates could differ from management's estimates.

Legal Proceedings

From time to time, we may be involved in legal proceedings arising out of the normal course and conduct of our business. As of June 30, 2021, certain proceedings were pending or threatened against us or our subsidiaries, mainly related to purported obligations arising out of use or alleged use of third party intellectual property. As it is not possible to predict the outcome of such proceedings, particularly given the early stage of such proceedings, our best estimate of potential outflow of economic resources

amounts to €96.8 million, which is included in current other provisions in our unaudited interim condensed consolidated statements of financial position as of June 30, 2021. We do not currently believe that any of these matters will have a material effect on our financial position or results of operations. However, this assessment is based on assumptions deemed reasonable by management including those about future events and uncertainties. The outcome of these matters is ultimately uncertain, such that unanticipated events and circumstances might occur that might cause us to change those assumptions and give rise to a material adverse effect on our financial position in the future.

Liquidity and Capital Resources

Overview

Historically we have funded our operations primarily from private placements of our ordinary shares, issuance of ordinary shares in connection with our initial public offering in 2019 and our global offering in 2020, generation of proceeds under our collaboration agreements, secured bank loans and issuance of a convertible note. Since December 2020, our COVID-19 vaccine has been authorized or approved for emergency or temporary use or granted conditional marketing authorization in over 70 countries worldwide. Consequently, we have progressed from recognizing revenues primarily from research and development activities to recognizing revenues and profits from sales of our first commercial product. These will now be used to finance our operations including research and development activities and further expansions. We intend to invest the proceeds we generate from sales of our COVID-19 vaccine to accelerate the maturation of our technologies as well as of our oncology and infectious disease pipeline including the expansion into additional therapeutic areas, such as autoimmunity, allergy, regenerative medicine and inflammatory diseases. As of June 30, 2021, we had cash and cash equivalents of €914.1 million. In addition, trade receivables remained outstanding mainly due to the contractual settlement of the gross profit share under our COVID-19 collaboration with Pfizer as described in Note 10 to the unaudited interim condensed consolidated financial statements. Those trade receivables include the gross profit share for the first quarter of 2021 (as defined by the contract) for which the settlement payment was received from our collaboration partner subsequent to the end of the reporting period in July 2021 and further improved our cash position.

Cash and cash equivalents are invested in accordance with our investment policy, primarily with a focus on liquidity and capital preservation, and consist primarily of cash in banks and on hand and short-term deposits with an original maturity of three months or less, which are stated at fair value.

We maintain two secured loans with Deutsche Bank AG, or Deutsche Bank, to finance the buildouts of our JPT Peptide Technologies GmbH facility and Innovative Manufacturing Services GmbH facility. Our €10.0 million secured credit facility, entered into with Deutsche Bank by our subsidiary BioNTech Innovative Manufacturing Services GmbH, bears interest at a rate of 2.15% and matures on December 30, 2027. The loan is repayable in equal quarterly installments of €0.3 million commencing on June 30, 2020. As of June 30, 2021, the full amount under this facility is drawn down and is already subject to repayments. Our €9.5 million secured credit facility, entered into with Deutsche Bank by our subsidiary JPT Peptide Technologies GmbH, bears interest at a rate of 2.08% and matures on September 30, 2028. The loan is repayable by quarterly installments of €0.3 million commencing on September 30, 2020. As of June 30, 2021, the full amount under this facility is drawn down and as well already subject to repayments. Each of these facilities is secured by liens over our property.

In December 2019, we signed a financing arrangement with the European Investment Bank, or the EIB, to partially support the implementation of certain technical aspects of our investment in the development of patient-tailored therapeutic vaccines for cancer in Germany, or the Investment. Under this arrangement, the EIB has agreed to provide us with a credit in an amount of up to €50.0 million to partially finance the Investment, provided that the amount of credit does not exceed 50% of the cost of the Investment. The credit consists of (i) a term loan in the amount of €25.0 million that may be drawn in a single tranche upon the achievement of certain milestone events, not all of which have been achieved (Credit A), and (ii) a term loan in the amount of €25.0 million that may be drawn in a

maximum of four tranches each of which must be for a minimum of €5.0 million or the balance of the remaining facility (Credit B). Tranches under Credit B may only be drawn after Credit A has been drawn down and upon the achievement of certain milestone events. Each tranche under Credit A and Credit B must be repaid within six years from the date on which the tranche is disbursed to us. The financing arrangement is to be secured by way of liens over certain of our property. As of June 30, 2021, there has been no draw down.

In June 2020, we entered into an agreement with the EIB for a €100.0 million credit facility to partially support the development of BNT162 and fund expansion of our manufacturing capacity to provide worldwide supply of BNT162 in response to the COVID-19 pandemic. Under this arrangement, the EIB agreed to provide us with a credit in an amount up to €100.0 million to partially finance such development and expansion. The credit consists of (i) a term loan in the amount of €50.0 million that may be drawn in a single tranche upon the achievement of certain milestone events (Credit A), and (ii) a term loan in the amount of €50.0 million that may be drawn in a single tranche (Credit B). Credit B may only be drawn after Credit A has been drawn down and upon the achievement of certain milestone events. The financing arrangement is to be secured by way of liens over certain of our property. As of June 30, 2021, €50.0 million from Credit A have been drawn down. Interest is payable on the outstanding balance of Credit A at the cash interest fixed rate of 1% per annum quarterly in arrears, plus deferred interest at fixed rate of 2.5% per annum. The nominal amount must be repaid on December 21, 2026.

On July 27, 2020, we offered 5,500,000 ADSs each representing one of our ordinary shares, in a public, underwritten offering on the Nasdaq Global Select Market at a public offering price of $93.00 per ADS, or the Underwritten Offering. On August 27, 2020, following the Underwritten Offering, we issued 16,124 ADSs each representing one of our ordinary shares, in a rights offering at the same public offering price of $93.00 per ADS, or the Rights Offering. The Underwritten Offering and the Rights Offering are part of a single, global offering which we refer to as the Global Offering. The gross proceeds of the Global Offering were $513.0 million (€436.3 million).

A fund associated with Temasek Capital Management Pte. Ltd., or Temasek, and another accredited investor participated in a private investment which we refer to as the June 2020 Private Placement. The private placement includes an investment in a four-year mandatory convertible note and an investment in ordinary shares. The €100.0 million four-year mandatory convertible note has a coupon of 4.5% per annum and a conversion premium of 20% above the reference price.

In September 2020, we became eligible to receive up to €375.0 million in funding from an initiative by the German Federal Ministry of Education (*Bundesministerium für Bildung und Forschung*, or the BMBF) to support our COVID-19 vaccine program, BNT162. The BMBF funding was granted to accelerate our vaccine development and to upscale manufacturing capabilities in Germany. The funding will also compensate further costs that incur since the COVID-19 vaccine continues to be tested in clinical trials and because study participants will continue to be followed for two years to continue evaluating safety and efficacy.

In November 2020, we entered into a sales agreement, or the Sales Agreement, with Jefferies LLC and SVB Leerink LLC, as sales agents, to establish an at-the-market offering program, pursuant to which we may sell, from time to time, ADSs representing ordinary shares for aggregate gross proceeds of up to $500.0 million. During the year ended December 31, 2020, we sold 735,490 ADSs, each representing one of our ordinary shares and previously held in treasury, under the Sales Agreement for aggregate gross proceeds of $92.9 million (€76.5 million). In addition, during the three months ended June 30, 2021, we sold 995,890 ADSs, each representing one of our ordinary shares that had previously been held in treasury, under the Sales Agreement for aggregate gross proceeds of $200.0 million (€163.6 million). As of June 30, 2021, the remaining capacity under the Sales Agreement is $207.1 million.

Cash Flow

The following table summarizes the primary sources and uses of cash for each period presented:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2021**	**2020**	**2021**	**2020**
Net cash flows from (used in):				
Operating activities	€(100.3)	€(15.5)	€(411.6)	€(70.2)
Investing activities	(29.8)	(9.8)	(58.1)	(24.7)
Financing activities	152.9	146.2	148.4	148.2
Total cash inflow (outflow)	**€22.8**	**€120.9**	**€(321.3)**	**€53.3**

Operating Activities

We derive cash flows from operations primarily from collaborations, the sale of products and services rendered. Our cash flows from operating activities are significantly influenced by our use of cash for operating expenses and working capital to support the business. Historically we have experienced negative cash flows from operating activities as we have invested in the development of our technologies and manufacturing capabilities, as well as in our clinical and preclinical development of our product candidates. During the three and six months ended June 30, 2021, our cash flows from operating activities remained negative as trade receivables remained outstanding due to the contractual settlement of the gross profit share under our COVID-19 collaboration with Pfizer as described in Note 10 to the unaudited interim condensed consolidated financial statements. As of June 30, 2021, trade receivables included the gross profit share for the first quarter of 2021 (as defined by the contract) for which the settlement payment was received from our collaboration partner subsequent to the end of the reporting period in July 2021 and improved our cash position.

Net cash used in operating activities for the three months ended June 30, 2021 was €100.3 million, comprising a profit before tax of €4,022.8 million, positive non-cash adjustments of €122.9 million, and a net negative change in assets and liabilities of €4,244.0 million. Non-cash items primarily included finance expenses related to our convertible bond fair value update. The net negative change in assets and liabilities was primarily due to an increase in trade receivables related to our COVID-19 collaboration with Pfizer, as previously discussed in this Quarterly Report.

Net cash used in operating activities for the three months ended June 30, 2020 was €15.5 million, comprising a loss before tax of €90.5 million, positive non-cash adjustments of €17.5 million, and a net positive change in assets and liabilities of €57.9 million. Non-cash items primarily included depreciation and amortization as well as share-based compensation expenses. The net positive change in assets and liabilities was primarily based on the upfront payment received from our COVID-19 collaboration with Pfizer, which was recorded as contract liability and subsequently started to be recognized as revenue.

Net cash used in operating activities for the six months ended June 30, 2021 was €411.6 million, comprising a profit before tax of €5,665.1 million, positive non-cash adjustments of €98.7 million, and a net negative change in assets and liabilities of €6,171.8 million. Non-cash items primarily included finance expenses related to our convertible bond fair value update which were offset by net foreign exchange differences and movements in government grants. The net negative change in assets and liabilities was primarily due to an increase in trade receivables related to our COVID-19 collaboration with Pfizer, as previously discussed in this Quarterly Report.

Net cash used in operating activities for the six months ended June 30, 2020 was €70.2 million, comprising a loss before tax of €143.9 million, positive non-cash adjustments of €34.4 million, and a net positive change in assets and liabilities of €40.1 million. Non-cash items primarily included depreciation and amortization as well as share-based compensation expenses. Also on a year-to-date

basis, the net positive change in assets and liabilities was primarily based on the increase in contract liabilities and trade payables.

Investing Activities

Net cash used in investing activities for the three months ended June 30, 2021 was €29.8 million, of which €25.9 million was attributable to the purchase of property, plant and equipment with respect to our production as well as research and development facilities.

Net cash used in investing activities for the three months ended June 30, 2020 was €9.8 million, of which €15.1 million were attributable to the acquisition of assets and partially offset by the positive effect attributable to the acquisition of Neon of €7.4 million.

Net cash used in investing activities for the six months ended June 30, 2021 was €58.1 million, of which €47.6 million was attributable to the purchase of property, plant and equipment.

Net cash used in investing activities for the six months ended June 30, 2020 was €24.7 million, of which €21.4 million was attributable to the purchase of property, plant and equipment, mainly including the amounts spent with respect to the new buildings at our BioNTech IMFS facility in Idar-Oberstein, Germany.

Financing Activities

Our primary financing activities consist of issuances of share capital, proceeds from bank loans and payments of lease liabilities.

During the three and six months ended June 30, 2021, we generated cash from financing activities of €152.9 million and €148.4 million, respectively, primarily from the sale of treasury shares under the at-the-market offering program net of transaction cost, as previously discussed in this Quarterly Report.

During the three and six months ended June 30, 2020, we generated cash from financing activities of €146.2 million and €148.2 million, respectively, primarily from proceeds from the issuance of shares in the amount of €147.8 million received from Fosun Pharma via Fosun Industrial Co., Limited, Hong Kong and Pfizer, net of transaction costs related to all financing transactions that occurred during the three and six months ended June 30, 2020.

Operation and Funding Requirements

Historically, we have incurred significant losses and negative cash flows from operations due to our significant research and development expenses and our investment in our manufacturing capabilities. As of December 31, 2020, our accumulated losses amounted to €409.6 million. Those have been compensated by the profit generated during the three and six months ended June 30, 2021.

We expect to continue to incur significant and increasing operating expenses for the foreseeable future. We anticipate that our expenses will increase substantially if and as we and our collaborators:

- continue or expand our research or development of our programs in preclinical development;
- continue or expand the scope of our clinical trials for our product candidates;
- initiate additional preclinical, clinical, or other trials for our product candidates, including under our collaboration agreements;
- continue to invest in our immunotherapy platforms to conduct research to identify novel technologies;
- change or increase our manufacturing capacity or capability;
- change or add additional suppliers;

- add additional infrastructure to our quality control, quality assurance, legal, compliance and other groups to support our operations as a public company and our product development and commercialization efforts, including expansion of sites in Germany and new sites in the United States, and potentially others globally;
- attract and retain skilled personnel;
- seek marketing approvals and reimbursement for our product candidates;
- develop our sales, marketing, and distribution infrastructure for our COVID-19 vaccine and any other products for which we may obtain marketing approval or emergency use authorization;
- seek to identify and validate additional product candidates;
- acquire or in-license other product candidates and technologies;
- make milestone or other payments under any in-license agreements;
- maintain, protect, defend, enforce and expand our intellectual property portfolio; and
- experience any delays or encounter issues with any of the above.

We are a party to license and research and development agreements with universities and other third parties, as well as patent assignment agreements, under which we have obtained rights to patents, patent applications and know-how. We enter into contracts in the normal course of business with CROs for clinical trials, clinical and commercial supply manufacturing, with vendors for preclinical research studies and for other services and products for operating purposes. We work together with CMOs, who manufacture our product candidates and products and enter into lease agreements to lease laboratory, GMP manufacturing, storage and office spaces. Purchase obligations under our agreements to the extent that they are quantifiable and not cancelable have been considered when defining our guidance for future cash commitments. Most of the committed cash outflow within the remaining months in 2021 is related to CMO purchase obligations amounting to €346.8 million and lease payments amounting to €6.9 million. Further, we have purchase obligations with an amount of €145.8 million for the year 2022 and lease payment obligations of €113.5 million for the years 2022 and beyond.

We are subject to all of the risks related to the development and commercialization of pharmaceutical products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business.

Our future funding requirements, both near and long term, will depend on many factors, including, but not limited to:

- the initiation, progress, timing, costs, and results of preclinical or nonclinical studies and clinical trials for our product candidates;
- the amount and timing of revenues and associated costs from sales of our COVID-19 vaccine;
- the results of research and our other platform activities;
- the clinical development plans we establish for our product candidates;
- the terms of any agreements with our current or future collaborators, and the achievement of any milestone payments under such agreements to be paid to us or our collaborators;
- the number and characteristics of product candidates that we develop or may in-license;
- the outcome, timing and cost of meeting regulatory requirements established by the FDA, the EMA and other comparable regulatory authorities;
- the cost of filing, prosecuting, obtaining, maintaining, protecting, defending and enforcing our patent claims and other intellectual property rights, including actions for patent and other intellectual property infringement, misappropriation and other violations brought by third

parties against us regarding our product candidates or actions by us challenging the patent or intellectual property rights of others;

- the effect of competing technological and market developments, including other products that may compete with one or more of our product candidates;
- the cost and timing of completion and further expansion of clinical and commercial scale manufacturing activities sufficient to support all of our current and future programs; and
- the cost of establishing sales, marketing, and distribution capabilities for any product candidates for which we may receive marketing approval and reimbursement in regions where we choose to commercialize our products on our own.

Risk Factors

Our business is subject to various risks. You should carefully consider the risks and uncertainties described under the heading “Risk Factors” in our Annual Report on Form 20-F filed with the U.S. Securities and Exchange Commission (SEC) on March 30, 2021. If any of those risks in our Annual Report are realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. Additionally, risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, results of operations and/or prospects.