BIONTECH

BioNTech SE

Annual Financial Statements of BioNTech SE, Mainz, December 31, 2024

ACTING TOGETHER — CREATING SYNERGIES

TABLE OF CONTENT

BioNTech SE, Mainz

Statements of Financial Position as of December 31, 2024

Assets		December 31, 2024 in millions €	December 31, 2023 in millions €
A.	**Fixed assets**		
I.	**Intangible assets**		
1.	Purchased franchises, industrial and similar rights and assets, and licenses in such rights and assets	521.0	650.8
2.	Goodwill	2.1	2.3
3.	Advanced payments	20.5	21.5
		543.6	**674.6**
II.	**Property, plant and equipment**		
1.	Land, land rights and buildings, including buildings on third-party land	45.2	42.0
2.	Other equipment, furniture and fixtures	63.2	52.4
3.	Advanced payments and construction in progress	61.4	42.1
		169.8	**136.5**
III.	**Financial assets**		
1.	Shares in affiliated companies	1,149.0	1,156.5
2.	Loans to affiliated companies	—	8.5
3.	Equity investments	96.8	47.0
4.	Securities classified as fixed assets	2,443.2	1,326.4
5.	Other loans	39.7	2.6
		3,728.7	**2,541.0**
		4,442.1	**3,352.1**
B.	**Current assets**		
I.	**Inventories**		
1.	Raw materials and supplies	1.0	1.1
2.	Advanced payments	0.1	0.1
		1.1	**1.2**
II.	**Receivables and other assets**		
1.	Trade receivables	1,105.2	1,163.6
2.	Receivables from affiliated companies	1,767.9	1,370.5
3.	Other assets	656.1	279.8
		3,529.2	**2,813.9**
III.	**Other securities**	**5,104.6**	**4,662.6**
IV.	**Cash on hand and at banks**	**9,338.9**	**11,409.5**
		17,973.8	**18,887.2**
C.	**Prepaid expenses**	**163.7**	**216.3**
D.	**Net Defined Benefit Asset**	**2.2**	**1.8**
		18,139.7	**19,105.3**
		22,581.8	**22,457.4**

Equity and liabilities			December 31, 2024	December 31, 2023
		in millions €	*in millions €*	*in millions €*
A.	**Equity**			
I.	Share capital		248.6	248.6
	Treasury shares		(8.6)	(10.8)
	Issued (share) capital		**240.0**	**237.8**
	Conditional capital: €37.3 million (previous year: €85.8 million)			
II.	**Capital reserve**		**778.7**	**695.6**
III.	**Retained earnings**		**9,845.1**	**9,845.1**
IV.	**Accumulated profit**		**8,232.5**	**9,361.0**
			19,096.3	**20,139.5**
B.	**Provisions**			
1.	Tax provisions	1.2		525.1
2.	Other provisions	431.5		571.7
			432.7	**1,096.8**
C.	**Liabilities**			
1.	Trade payables	343.0		254.2
2.	Liabilities to affiliated companies	1,256.3		485.8
3.	Other liabilities	1,193.5		93.4
	thereof for taxes: €28.6 million (previous year: €18.1 million)			
	thereof for social security: €0.2 million (previous year: €1.6 million)			
			2,792.8	**833.4**
D.	**Deferred income**		**260.0**	**387.7**
			22,581.8	**22,457.4**

BioNTech SE, Mainz

Statements of Profit or Loss for the Period from January 1, 2024, to December 31, 2024

			Years ended December 31,	
			2024	**2023**
		in millions €	*in millions €*	*in millions €*
1.	Revenues	2,224.4		3,270.1
2.	Cost of sales	(218.2)		(250.0)
3.	**Gross profit**		**2,006.2**	**3,020.1**
4.	Research and development expenses	(2,396.8)		(1,743.6)
5.	Sales expenses	(62.0)		(29.4)
6.	General and administrative expenses	(746.8)		(535.1)
7.	Other operating income	796.4		299.5
	thereof income from currency translation: €155.9 million (previous year: nil)			
8.	Other operating expenses	(1,416.9)		(315.6)
	thereof expenses from currency translation: €65.8 million (previous year: €284.6 million)			
			(3,826.1)	**(2,324.2)**
9.	Income from profit transfer	309.5		184.6
	thereof from affiliated companies: expenses of €309.5 million (previous year: €184.6 million)			
10.	Other interest and similar income	641.4		366.7
	thereof from affiliated companies: €60.6 million (previous year: €40.0 million)			
11.	Income from other securities and loans classified as fixed financial assets	53.8		29.7
12.	Impairments of financial assets and securities classified as current assets	(190.9)		—
13.	Expenses from loss transfer	(111.5)		(166.2)
14.	Interest and similar expenses	(17.6)		(78.0)
	thereof to affiliated companies: €14.9 million (previous year: €74.4 million)			
			684.7	**336.8**
15.	Income taxes		6.7	(233.2)
16.	**Profit / (Loss) after tax**		**(1,128.5)**	**799.5**
17.	**Net income / (loss)**		**(1,128.5)**	**799.5**
18.	Profit carryforward from the previous year		9,361.0	8,961.2
19.	Allocations to retained earnings		—	(399.7)
20.	**Accumulated profit**		**8,232.5**	**9,361.0**

Notes to the Separate Financial Statements

1 General Notes on the Annual Financial Statements

The annual financial statements of BioNTech SE, hereinafter also referred to as the “Company,” “BioNTech,” “we” or “us,” for the period from January 1 to December 31, 2024, have been prepared in accordance with the provisions of the German Commercial Code (HGB) and the German Stock Corporation Act (AktG).

BioNTech SE is a European limited liability company incorporated and domiciled in Germany and is registered in the commercial register B of the Mainz Local Court under the number HRB 48720. American Depositary Shares (ADSs) representing BioNTech SE’s ordinary shares have been publicly traded on the Nasdaq Global Select Market since October 10, 2019. The registered office is located in Mainz, Germany (An der Goldgrube 12, 55131 Mainz).

The Mainz-based Company is a large corporation as defined by Section 267 para. 3 HGB. Thus the Company is subject to the requirements for large corporations.

The accompanying annual financial statements have been prepared on a going concern basis and in accordance with Section 242 et seq. and Section 264 et seq. HGB as well as in accordance with the relevant provisions of the AktG.

The separate financial statements are published in euros. Unless otherwise stated, the numbers are rounded to millions or thousands 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. Rounding applied may differ from rounding published in different units in the previous years.

The statements of profit or loss have been prepared using the cost of sales method in accordance with Section 275 para. 3 HGB.

2 Notes on Accounting Policies

The following accounting policies were used to prepare the annual financial statements.

Purchased intangible assets with finite useful lives are recognized at cost and amortized on a straight-line basis over their estimated useful lives. If impairment is expected to be permanent, an impairment loss is recognized to reduce the value to the lower net realizable value.

Purchased goodwill is amortized over its estimated useful life of 15 years, reflecting the period over which purchased goodwill will create a benefit.

Depreciable items of property, plant and equipment are valued at acquisition cost less accumulated depreciation. Depreciation is charged on a straight-line basis over the expected useful life. Advanced payments and construction in progress are valued at acquisition or production cost. Borrowing costs are not included in production cost. If impairment is expected to be permanent, an impairment loss is recognized to reduce the value to the lower net realizable value.

Low-value assets of up to €800 are fully expensed in the year of acquisition.

With regard to financial assets, shares in affiliated companies, equity investments and securities classified as fixed assets are recognized at acquisition cost, while loans are recognized at nominal value or – if permanent impairment is expected – at the lower net realizable value. Contingent consideration is only recognized as an increase in the carrying amount of the investment upon satisfaction of the respective condition.

Raw materials and supplies are recognized at the lower of acquisition cost or net realizable value.

Receivables and other assets are stated at nominal value. Securities classified as current assets are recognized at acquisition cost. Appropriate specific and general bad debt allowances provide for all foreseeable valuation risks.

Cash and cash equivalents are stated at nominal value. Money market funds reported under cash on hand are valued at the lower of nominal value or quoted or market value on the reporting date and may only have a term of less than three months at the acquisition date.

Expenses recorded before the reporting date which relate to a certain period after this date are posted under prepaid expenses.

When accounting for share-based payment awards, we distinguish between cash-settled and equity-settled transactions. For both instruments, the fair value is measured at grant date and then spread evenly as remuneration expense over the period in which the employees earn an unconditional entitlement to the instruments. Cash-settled awards are remeasured at fair value at each reporting date until the award is settled. For equity-settled transactions, the recognition of expenses leads to an increase in the capital reserve, whereas expenses recognized for cash-settled transactions give rise to a liability. If the Company can choose whether to settle the awards either in cash or by providing equity instruments, we account for them as equity-settled transactions, unless there is a present obligation to settle in cash or the transaction is settled in cash. Whenever we decide to settle in cash or there is a present obligation to settle in cash, any difference between the amount (to be) paid in cash and the fair value at grant date is recognized as an additional expense. In accordance with international accounting rules for share-based payment transactions between group companies, we do not only account for share-based payments to employees of BioNTech SE but also for commitments to employees of subsidiaries that are fulfilled by BioNTech SE. When these beneficiaries are not employees of BioNTech SE, the expenses are recognized in other operating expenses.

Treasury shares are deducted from share capital on the face of the statements of financial position at their nominal value. The difference between the nominal value and the acquisition cost of the acquired shares is offset against the capital reserve. Expenses from the acquisition of treasury shares are recognized in expenses in the current financial year.

Tax provisions and other provisions account for all identifiable risks, uncertain liabilities and onerous contracts. They are valued at the settlement value deemed necessary according to prudent business judgment. Future price and cost increases are factored in. Other provisions with residual terms of more than one year were discounted at the average interest rates of the last seven years for their respective residual term.

The assets which serve exclusively to fulfill the long-term obligations to employees from long-term accounts and which are protected against claims asserted by all other creditors (covering assets as defined by Section 246 para. 2 sentence 2 HGB) are measured at their fair value and offset against the related liabilities. The related expenses and income from discounting and from the assets to be offset are also offset.

Foreign exchange forward contracts are not recognized as hedges pursuant to Section 254 HGB. The foreign exchange forward contracts are valued using valuation techniques which employ the use of foreign exchange spot and forward rates. Contracts with a negative value as of the reporting date are accounted for under other provisions in the statements of financial position.

Liabilities are recognized at the settlement value.

Advanced payments received in connection with research and development collaborations are recognized as deferred income and released to profit or loss over the term of the contract.

If there are differences between the carrying amounts of assets, liabilities, prepaid expenses and deferred income in the statutory accounts and their tax base which are expected to reverse in future financial years, any resulting net tax charge is recognized as a deferred tax liability in the statements of financial position. Any resulting net tax benefit may be recognized as a deferred tax asset. Tax loss carryforwards are taken into account in the calculation of deferred tax assets to the extent that they are expected to be offset within the next five years. The resulting tax charge and benefit amounts are determined using the company-specific tax rates at the time the differences reverse and are not discounted. Deferred tax assets are offset against deferred tax liabilities and the option to recognize net deferred tax assets in excess of deferred tax liabilities was not exercised. Differences between the carrying amounts of assets, liabilities and prepaid expenses and deferred income in the statutory accounts and the tax bases of tax group subsidiaries are included to the extent that BioNTech SE expects future tax charges and benefits from the reversal of temporary or quasi-permanent differences.

Assets and liabilities denominated in foreign currencies are translated using the mean spot rate of exchange on the reporting date. If they have residual terms of more than one year, the realization principle (Section 252 para. 1 no. 4 clause 2 HGB) and the historical cost principle (Section 253 para. 1 sentence 1 HGB) are applied.

The “thereof” items presented in the statements of profit or loss include both realized and unrealized currency translation differences.

Revenues from the sale of goods are recognized when the significant opportunities and risks of ownership have been transferred to the buyer and the amount of revenues to be recognized can be measured reliably. Revenues from services are recognized when the service is rendered. No revenue is recognized when there are significant risks involving the receipt of the consideration or the possible return of goods. All other revenues are recognized net of sales deductions such as bonuses, discounts or rebates.

For our COVID-19 collaborations, revenues are recognized on the basis of our collaboration partners’ gross profit from COVID-19 vaccine sales generated in territories allocated to these partners based on marketing and distribution rights. Our territory comprises Germany and Turkey. In determining the revenues pursuant to these collaboration agreements, we are reliant on our collaboration partners for details and, to a certain extent, on estimates. As a result, the revenues pursuant to these collaboration agreements are subject to the risk that the amounts reported might differ from the actual amounts until our collaboration partners’ final results are available.

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs for which the grant is intended to compensate are expensed. Any prepayments are recognized as deferred income. As the costs in the case of grants for research and development projects are not usually incurred over time, prepayments from grants related to an expense item are recognized as other liabilities in the statements of financial position. When the grant relates to an asset, it is recognized as deferred income within the statements of financial position. Other operating income is subsequently recognized in profit or loss over the useful life of the underlying asset subject to funding.

Research and development expenses are expensed as incurred.

Based on the Organisation for Economic Co-operation and Development (OECD) Base Erosion and Profit Shifting (BEPS) project to tackle tax avoidance, the OECD/G20 Inclusive Framework (an association of about 140 countries) decided to introduce a global minimum taxation for large companies and multinational groups (known as Pillar 2). The Global Anti-Base Erosion Rules are intended to ensure that large multinational groups pay a minimum level of tax on the income arising in each jurisdiction where they operate. In December 2021, the OECD published its OECD Model Rules, which serve as a draft bill for implementation into national domestic law, followed by guidelines and commentaries published in March 2022. In December 2022, the EU adopted a corresponding directive (EU 2022/2523) that obliges EU member states to transpose the rules into national domestic law. If the effective tax rate in any jurisdiction is below the minimum rate (15%), the Group may be subject to the top-up tax or a qualified domestic minimum top-up tax.

Several jurisdictions in which the Group operates have transposed the global minimum taxation rules into national domestic law. In addition, the Group is closely following the progress of the legislative process in each country in which the Group operates. As of the reporting date, the BEPS Pillar 2 regulations (MinBestRL UmsG) had already been transposed into German law (MinStG). In accordance with the regulations that have entered into force in Germany, the Group is obliged to file top-up tax information returns for affected entities, beginning in the 2024 financial year. The Group falls within the scope of these regulations. The Group carried out an analysis as of the reporting date to determine the fundamental impact and the jurisdictions in which the Group is exposed to possible effects in connection with a minimum tax.

Based on this analysis, no countries were identified in which the Group is materially affected by a minimum tax. Consequently, the average effective tax rate did not change materially as a result of the minimum tax rate coming into force from December 30, 2023. BioNTech applies the exception in Section 274 para. 3 HGB, according to which no deferred tax assets and liabilities in connection with the income taxes of the second pillar of the OECD are recognized and no disclosures are made.

3 Notes to the Statements of Financial Position and the Statements of Profit or Loss

3.1 Intangible Assets and Property, Plant and Equipment

The development of the individual fixed asset items, including amortization, depreciation and impairment for the financial year, is shown in the statements of changes in fixed assets. The statements of changes in fixed assets are attached to these notes.

In the 2024 financial year, there were additions of €137.0 million (previous year: €651.8 million) to purchased franchises, industrial and similar rights and assets, and licenses in such rights and assets. They mainly include additions from the acquisition of licenses under license and collaboration agreements in the amount of €97.0 million (previous year: €443.5 million).

The additions to intangible assets under license and collaboration agreements resulted from payments made for the acquisition of licenses (of which €41.4 million from Duality Biologics (Suzhou) Co. Ltd, Shanghai, China, €28.1 million from OncoC4 Inc., Rockville, USA, and €27.5 million from Biotheus Inc., Zhuhai, China). The additions in the previous year also resulted from payments made for the acquisition of licenses (including €203.7 million from Duality Biologics (Suzhou) Co. Ltd, Shanghai, China, €125.2 million from OncoC4 Inc, Rockville, USA, €64.1 million from MediLink Therapeutics (Suzhou) Co. Ltd, Suzhou, China, and €50.6 million from Biotheus Inc, Zhuhai, China).

With regard to intangible assets, impairment losses of €160.0 million were recognized during the year ended December 31, 2024, as the impairment is expected to be permanent (previous year: nil).

Fixed assets are amortized/depreciated on a straight-line basis over the following terms:

Amortization/depreciation period by type of	Useful life (years)
Intangible assets	
Patents, industrial rights	8 - 20
Licenses	3 - 10
Goodwill	15
Software	3 - 8
Property, plant and equipment	
Buildings	10 - 33
IT systems	3 - 5
IT hardware	1
Machines/production equipment	8 - 10
Laboratory equipment	3 - 5
Office fixtures and fittings	5 - 10

3.2 Financial Assets

in millions €	As of January 1, 2024	Additions	Disposals	Impairments/ Write-ups	As of December 31, 2024
1. Shares in affiliated companies	1,156.5	41.1	—	48.6	1149
2. Loans to affiliated companies	8.5	—	8.5	—	—
3. Equity investments	47.0	188.9	—	139.1	96.8
4. Securities classified as fixed assets	1,326.4	1,341.6	224.4	0.4	2,443.2
5. Other loans	2.6	38.0	0.9	—	39.7
Total	**2,541.0**	**1,609.6**	**233.8**	**188.1**	**3,728.7**

During the year ended December 31, 2024, there were additions to shares in affiliated companies in the amount of €41.1 million (previous year: €543.1 million), which was attributable to capital increases. Impairments relating to shares in affiliated companies amounted to €48.6 million (previous year: nil). An impairment loss of the fair value was not recognized for one equity investment (carrying amount €23.3 million, fair value €17.3 million), as we came to the conclusion that the impairment is not to be classified as permanent, taking into account the development of the stock market price in the period preceding the balance sheet date. The shares in InstaDeep Ltd. (€493.3million, previous year €490.1 million) and BioNTech USA Holding LLC., Cambridge, USA, (€399.7 million, same as previous year) accounted for the bulk of the total shares in affiliated companies of €1,149.0 million.

During the year ended December 31, 2024, a loan with a subsidiary was rolled over and newly concluded with a term of less than one year. The disposal of loans to affiliated companies amounted to €8.5 million (previous year: €588.9 million). New contracts with a term of less than one year are reported as short-term receivables from affiliated companies.

During the year ended December 31, 2024, there were additions to equity investments in the amount of €188.9 million (previous year: nil) and impairment losses of €139.1 million (previous year: €19.7 million), mainly due to the development of the share price in the previous period.

During the year ended December 31, 2024, we continued to make long-term investments in various securities. Additions exceeded repayments, which explains why the final value amounted to €2,443.2 million.

As of the balance sheet date, other loans amounted to €39.7 million and mainly resulted from a claim to future license payments.

Information is provided on the following companies in accordance with Section 285 no. 11 HGB:

Name / registered office		Share-holding	Net income/net loss for the year (in millions €)[1]	Equity (in millions €)[1]
BioNTech BioNTainer Holding GmbH, Mainz	[2]	100%	2.9	83.7
BioNTech Cell & Gene Therapies GmbH, Mainz	[2]	100%	0.4	8.7
BioNTech Collaborations GmbH, Mainz	[2], [3]	100%	—	—
BioNTech Delivery Technologies GmbH, Halle	[2]	100%	—	0.6
BioNTech Diagnostics GmbH, Mainz	[2]	100%	—	5.5
BioNTech Europe GmbH, Mainz	[2]	100%	7.4	14.2
BioNTech Idar-Oberstein Services GmbH, Idar-Oberstein	[2]	100%	—	0.2
BioNTech Individualized mRNA Manufacturing GmbH, Mainz	[2]	100%	—	—
BioNTech Innovation and Services Marburg GmbH, Marburg	[2]	100%	(0.4)	—
BioNTech Innovation GmbH, Mainz	[2]	100%	0.4	0.4
BioNTech Innovative Manufacturing Services GmbH, Idar-Oberstein	[2]	100%	(24.1)	(23.7)
BioNTech Manufacturing GmbH, Mainz	[2]	100%	175.7	203.4
BioNTech Manufacturing Marburg GmbH, Marburg	[2]	100%	30.3	(12.9)
BioNTech Real Estate Holding GmbH, Holzkirchen	[2]	100%	0.2	0.1
InstaDeep DE GmbH, Berlin		100%	0.1	0.2
JPT Peptide Technologies GmbH, Berlin	[2]	100%	0.1	13.4
NT Security and Services GmbH, Mainz	[2]	100%	—	—
reSano GmbH, Mainz	[2]	100%	—	(1.3)
BioNTech Australia Pty Ltd, Melbourne, Australien		100%	(1.9)	(2.9)
BioNTech R&D (Austria) GmbH, Wien, Österreich		100%	2.7	24.1
BioNTech (Shanghai) Pharmaceuticals Co. Ltd., Shanghai, China		100%	(2.3)	5.6
InstaDeep France SAS, Paris, France		100%	1.5	3.5
Biopharma BioNTech Israel Ltd., Israel		100%	(0.6)	(0.8)
New Technologies Re, Luxemburg, Luxemburg		100%	2.4	18.1
InstaDeep Nigeria Ltd., Lagos, Nigeria		100%	—	—
BioNTech Rwanda Ltd., Kigali, Ruanda		100%	(6.2)	61.6
BioNTech Pharmaceuticals Asia Pacific Pte. Ltd., Singapur		100%	(66.6)	(46.4)
BioNTech Pharmaceuticals Spain S.L, Barcelona, Spanien		100%	0.1	0.5
BioNTech Switzerland GmbH, Basel, Schweiz		100%	0.2	1.1
BioNTech Taiwan Co. Ltd., Taipeh, Taiwan		100%	(0.2)	—
InstadDeep Tunisia SARL, Tunis, Tunesia		100%	0.3	1.1
BioNTech Turkey Tıbbi Ürünler Ve Klinik Araştirma Ticaret Anonim Şirketi, Istanbul, Türkei		100%	0.6	1.1
BioNTech UK Ltd., London, Großbritannien		100%	4.4	3.4
InstaDeep Ltd., London, Großbritannien		100%	—	71.1
BioNTech Research and Development, Inc., Cambridge, USA		100%	5.1	106.1
BioNTech USA Holding LLC., Cambridge, USA		100%	(0.2)	428.2
BioNTech US Inc., Cambridge, USA		100%	24.2	235.7
BioNTech Delivery Technologies (US) LLC, Cambridge, USA		100%	—	—
InstaDeep LLC., Dover, USA		100%	0.4	0.6
JPT Peptide Technologies Inc., Cambridge, USA		100%	—	1.5
Simba Merger Sub, George Town, Cayman Islands	[3]	100%	—	—
Crescendo Biologics Ltd., Cambridge, Großbritannien	[4]	13.04%	(23.4)	24.3
Ryvu Therapeutics S.A., Krakau, Polen	[4]	8.29%	(20.3)	59.8
Autolus Therapeutics plc. London, Großbritannien	[4]	12.5%	(192.7)	100.9
Sortera Bio Ltd, Cambridge, Großbritannien	[3]	16.6%	—	—

[1] These figures are based on the local IFRS financial statements before consolidation and therefore do not show the company's contribution to the consolidated financial statements. Net income and equity amounts denominated in

foreign currencies are translated using the exchange rates published by the German Central Bank (*Deutsche* Bundesbank).

(2) Companies with which domination and profit and loss transfer agreements are in place.

(3) Newly founded in the 2024 financial year.

(4) Net income for the 2023 financial year and equity as of December 31, 2023.

3.3 Receivables, Other Assets and Securities

(in millions €)	December 31, 2024	December 31, 2023
Trade receivables	1,105.2	1,163.6
Receivables from affiliated companies	1,767.9	1,370.5
Other assets	656.1	279.8
Total	**3,529.2**	**2,813.9**

Trade receivables decreased by €58.4 million from €1,163.6 million to €1,105.2 million as of December 31, 2024, and mainly related to the collaboration agreement with Pfizer Inc., New York, United States, as well as our revenues from direct COVID-19 vaccine sales to customers in our territories. The contractual settlement with Pfizer has a temporal offset of more than one calendar quarter. As Pfizer's financial 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. As of December 31, 2024, our trade receivables included, in addition to the profit share for the fourth quarter of 2024, trade receivables which related to the gross profit share for the third quarter of 2024. As in the previous year, trade receivables and other assets are due in up to one year.

Receivables from affiliated companies consisted of trade receivables (including cash pool) in the amount of €47.4 million (previous year: €660.9 million) and other receivables in the amount of €1,720.5 million (previous year: €709.6 million), of which €1,340.2 million (previous year: €525 million) comprised short-term loans to affiliated companies and €309.5 million (previous year: €184.6 million) was from profit transfers. Total receivables increased by €397.4 million from €1,370.5 million to €1,767.9 million as at December 31, 2024. This was mainly due to the granting of new loans to the subsidiaries, which resulted in a corresponding level of receivables of €1,340.2 million (previous year: €677.2 million). Receivables from affiliated companies with a remaining term of more than one year amounted to €33.9 million (previous year: €22.9 million) and resulted from the share-based payment commitments for 2021, 2022, and 2023.

Miscellaneous other assets mainly related to advance payments and reimbursement claims against Pfizer in connection with the National Institutes of Health (NIH) and the University of Pennsylvania (UPenn) totaling €514.5 million (previous year: nil).

During the year ended December 31, 2024, we invested in short-term securities. The balance of other securities was €5,104.6 million as of the reporting date (previous year: €4,662.6 million).

3.4 Cash on Hand and at Banks

As of the reporting date, cash and cash equivalents came to €9,338.9 million (previous year: €11,409.5 million) and comprised money market funds, reverse repos, fixed-term deposits and deposits. The decrease compared to the previous year is mainly due to investments in securities, which are reported in the items securities classified as fixed assets and other securities.

3.5 Prepaid Expenses

Prepaid expenses decreased by €52.6 million from €216.3 million in the previous year to €163.7 million. As of the reporting date, the item mainly comprised compensation payments of €83.1 million (previous year: €151.1 million) to our collaboration partner under the amended COVID-19 vaccine purchase agreement with the European Commission for the German market. Prepaid expenses for our collaborations amounted to €26.9 million (previous year: €47.9 million).

3.6 Net Defined Benefit Asset

In the financial year, the covering assets available to offset the long-term obligations to employees from long-term accounts consisted of fixed-term deposits whose acquisition cost amounted to €7.4 million as of December 31, 2024 (previous year: €6.1 million), which corresponds to the fair value (market value on the reporting date). The assets were offset by a settlement value of the related liabilities of €5.3 million (previous year: €4.3 million). The net defined benefit asset was recognized in the year ended December 31, 2023, under other loans and was disclosed separately in the balance sheet as of December 31, 2024, for both the 2023 and 2024 financial years. There was a positive effect of €1.0 million (previous year: €0.1 million) on the finance result.

3.7 Equity

As of December 31, 2024, our share capital comprised 248,552,200 (previous year: 248,552,200) voting bearer shares, of which 8,581,396 (previous year: 10,826,465) were held as treasury shares. The par value of our shares is €1.00 and each confers one voting right at the Annual General Meeting.

Treasury shares

Treasury shares developed as follows in the 2024 financial year:

(in units)	
As of January 1, 2024	**(10,826,465)**
Settlement of share-based payment transactions	(2,245,069)
As of December 31, 2024	**(8,581,396)**

Capital reserve

The capital reserve developed as follows in the 2024 financial year:

(in millions €)	
As of January 1, 2024	**695.6**
Change due to share-based payment transactions	83.1
As of December 31, 2024	**778.7**

Retained earnings

Retained earnings remained unchanged during the year ended December 31, 2024, and amounted to €9,845.1 million as of December 31, 2024.

Accumulated profit

Accumulated profit includes a profit carryforward of €9,361.0 million.

3.8 Proposal for the Appropriation of Profit or Loss 2024

BioNTech SE's net loss for the year ended December 31, 2024, amounted to €1,128.5 million. The accumulated profits from the past financial year amounting to €8,232.5 million are to be carried forward in full to new account.

3.9 Tax Provisions

As of the reporting date, tax provisions amounted to €1.2 million (previous year: €525.1 million). This mainly includes provisions for trade tax in the amount of €1.0 million (previous year: €239.0 million) for the financial years 2021 to 2023. Compared to the previous year, provisions of €516.9 million were utilized with the 2021 and 2022 assessments for corporate tax, solidarity surcharge, and trade tax. For the year ended December 31, 2024, there is a receivable in the amount of €48.9 million, which mainly includes creditable capital gains tax.

All tax prepayments made for the year ended December 31, 2024, in the amount of €80.6 million have already been refunded.

Overall, there is no actual current tax expense for the year ended December 31, 2024 (previous year: €233.2 million). The reported current tax income of €6.7 million relates to previous years.

3.10 Other Provisions

(in millions €)	December 31, 2024	December 31, 2023
Provisions for outstanding invoices	279.4	418.3
Provisions for contractual disputes	76.8	118.2
Other provisions	75.3	35.2
Total	**431.5**	**571.7**

Provisions for outstanding invoices relate to purchased services that were uncertain as of the reporting date, as was their amount. They mainly included obligations derived from license agreements which are being incurred with respect to our COVID-19 vaccine sales in our and the collaboration partners' territories where we and our partners are using third-party intellectual property.

The provisions for contractual disputes cover such disputes in connection with potential obligations.

Other provisions mainly include personnel provisions for outstanding vacation, overtime, and bonuses in the amount of €38.3 million (previous year: €33.1 million), provisions for impending losses from forward exchange transactions in the amount of €16.3 million (previous year: nil), and impending losses from other pending transactions in the amount of €5.9 million (previous year: nil).

3.11 Liabilities

(in millions €)	December 31, 2024	December 31, 2023
Trade payables	**343.0**	**254.2**
Liabilities to affiliated companies	**1,256.3**	**485.8**
Other liabilities	**1,193.5**	**93.4**
Liabilities from contractual disputes	1,148.0	50.6
Liabilities from wage taxes and social security expenses	28.8	18.1
Other miscellaneous liabilities	16.7	24.7
Total	**2,792.8**	**833.4**

Liabilities to affiliated companies consisted of trade payables in the amount of €208.0 million (previous year: €375.7 million) and current liabilities in the amount of €1,048.3 million (previous year: €110.1 million), mainly for cash pool obligations to subsidiaries and from the transfer of losses as part of profit and loss transfer agreements. Liabilities with a remaining term of more than one year amounted to €3.1 million (previous year: €5.5 million) and resulted from share-based payments for employees.

As of December 31, 2024, other liabilities mainly included payment obligations from contractual disputes with NIH in the amount of €761.9 million and UPenn in the amount of €385.0 million. In addition, payment charges from withholding tax in the amount of €15.6 million and liabilities from wage taxes and social security expenses in connection with obligations that became due with the settlement of our share-based payment programs for the respective employees and Management Board members, as well as grants related to an expense item of €12.8 million.

3.12 Deferred Income

Deferred income mainly includes the compensation payments in connection with the amended COVID-19 vaccine purchase agreement with the European Commission and the deferred upfront fees from collaborations.

3.13 Deferred Tax

Differences between the carrying amounts of assets, liabilities, prepaid expenses and deferred income, deferred tax assets in connection with our Employee Stock Ownership Plans in the statutory accounts, and deferred taxes from income tax loss carryforwards resulted in net deferred tax assets of €410.0 million (previous year: €162.8 million), which were not recognized. This includes deferred tax assets from tax group companies in the amount of €11.5 million (previous year: €1.8 million).

Deferred taxes were calculated using an overall tax rate of 30.8% for corporate income tax, trade tax and the solidarity surcharge.

3.14 Off-Statement of Financial Position Transactions and Other Financial Obligations

Contingent liabilities relate to potential future events whose occurrence would give rise to an obligation. As of the reporting date, contingent liabilities from guarantees amounted to €676.7 million (previous year: €642.8 million), all of which are entirely in respect of affiliated companies. The risk of claims is considered to be low due to the central management of the subsidiaries, taking into account the Group's good financial position.

Other financial obligations include the following rental and lease obligations:

(in millions €)	Less than 1 year	1 to 5 years	More than 5 years	Total
Rental agreements	18.8	53.3	18.1	**90.2**

Rental and lease agreements offer the benefit of optimizing liquidity. There are no identifiable significant risks.

There are also other financial obligations in connection with the purchase of property, plant and equipment and intangible assets:

(in millions €)	Less than 1 year	1 to 5 years	More than 5 years	Total
Commitments under purchase agreements for property, plant and equipment	13.1	—	—	**13.1**
Contractual obligation to acquire intangible assets	168.9	1,047.3	583.3	**1,799.5**
Total	**182.0**	**1,047.3**	**583.3**	**1,812.6**

The financial obligations in connection with the purchase of intangible assets arise from the license and collaboration agreements concluded and the resulting obligations to make milestone payments to the collaboration partner as well as the contractual obligation under purchase agreements for property, plant and equipment. Provided that all of the contractually agreed milestones are achieved, the Company would be obligated to pay up to €1,812.6 million as of December 31, 2024 (as of December 31, 2023: €1,875.5 million).

3.15 Revenues

	Years ended December 31,	
(in millions €)	2024	2023
Revenues from external customers	2,026.9	3,129.2
Revenues from affiliated companies	197.5	140.9
Total	**2,224.4**	**3,270.1**

The external revenues mainly include commercial revenues comprising our gross profit share from our collaboration partners.

From the year ended December 31, 2023, to the year ended December 31, 2024, commercial revenues decreased by €1,102.3 million from €3,129.2 million to €2,026.9 million and included our share of gross profit from sales by our collaboration partners in territories allocated to them based on marketing and distribution rights. The decrease in commercial revenues was due to lower demand for our COVID-19 vaccine.

Revenues from affiliated companies primarily relate to income from the provision of administrative services for the subsidiaries.

In the year ended December 31, 2024, based on the geographical region in which our customers, affiliated companies, and collaboration partners are based, we generated revenue primarily in the United States (€2,212.7 million) in addition to other countries (€11.7 million). In the previous year, the most important geographical region was the United States (€2,993.8 million) alongside other countries (€276.3 million).

3.16 Cost of Sales

From the year ended December 31, 2023, to the year ended December 31, 2024, cost of sales decreased by €31.8 million from €250.0 million to €218.2 million. Cost of sales primarily includes 50% of the gross profit from COVID-19 vaccine sales in territories where we have marketing and distribution rights (e.g. Germany), which our collaboration partner Pfizer receives as a pro rata share. In addition, sales-related licensing costs for third-party intellectual property contribute to the cost of sales.

3.17 Research and Development Expenses

From the year ended December 31, 2023, to the year ended December 31, 2024, research and development expenses increased by €653.2 million from €1,743.6 million to €2,396.8 million, mainly due to progressing clinical studies for our pipeline candidates as well as our newly acquired product candidates and the development of variant-adapted COVID-19 vaccines. The increase was further driven by an increase in wages, benefits and social security expenses resulting from a significant increase in headcount.

3.18 Sales Expenses

From the year ended December 31, 2023, to the year ended December 31, 2024, sales expenses increased by €32.6 million from €29.4 million to €62.0 million, mainly due to increased expenses for setup and enhancement of the commercial IT platform and an increase in wages, benefits and social security expenses resulting from an increase in headcount.

3.19 General and Administrative Expenses

From the year ended December 31, 2023, to the year ended December 31, 2024, our general and administrative expenses increased by €211.7 million from €535.1 million to €746.8 million. The increase resulted mainly from higher expenses for legal and consulting costs, as well as increased wages, benefits and social security expenses resulting from an increase in headcount.

3.20 Other Operating Income

	Years ended December 31,	
(in millions €)	**2024**	**2023**
Reimbursement asset	514.5	—
Foreign exchange differences	155.9	—
Grants	26.6	1.0
Income from foreign exchange forward contracts	14.3	259.2
Other	85.1	39.3
Total	**796.4**	**299.5**

During the year ended December 31, 2024, other operating income increased by €496.9 million compared to the previous year, from €299.5 million to €796.4 million. In the year ended December 31, 2024, other operating income primarily included income from reimbursement claims against Pfizer in connection with the National Institutes of Health (NIH) and the University of Pennsylvania (UPenn) totaling €514.5 million and from foreign currency differences of €155.9 million. Out-of-period income amounted to €26.2 million and primarily included reversals of provisions.

3.21 Other Operating Expenses

	Years ended December 31,	
(in millions €)	**2024**	**2023**
Expenses from contractual disputes / settlements	1,171.9	—
Foreign exchange differences	65.8	284.6
Expenses from employee programs of subsidiaries	60.2	7.1
Expenses from impairments of receivables	56.7	0.0
Other	62.3	23.9
Total	**1,416.9**	**315.6**

During the year ended December 31, 2024, other operating expenses increased by €1,101.3 million compared to the previous year, from €315.6 million to €1,416.9 million. Other operating expenses during the year ended December 31, 2024, mainly include expenses from settlements of contractual disputes in the amount of €1,171.9 million and foreign exchange losses of €65.8 million. Further effects resulted from increased expenses from employee programs of subsidiaries in the amount of €60.2 million and from impairments of receivables from subsidiaries in the amount of €56.7 million. Out-of-period expenses amounted to €0.5 million and primarily included insurance premiums of the previous year and adjustments to personnel provisions.

3.22 Finance Result

The finance result, comprising the effects of profit transfer and interest income and expenses, developed as follows in the 2024 financial year:

	Years ended December 31,	
(in millions €)	**2024**	**2023**
Investment result	**198.0**	**18.4**
Income from profit transfer	309.5	184.6
Expenses from loss transfer	(111.5)	(166.2)
Interest result	**486.7**	**318.4**
Other interest and similar income	641.4	366.7
thereof from affiliated companies	*60.6*	*40.0*
Other interest and similar expenses	(17.6)	(78.0)
thereof to affiliated companies	*(14.9)*	*(74.4)*
Impairments of financial assets and securities classified as current assets	(190.9)	—
Income from securities	53.8	29.7
Total	**684.7**	**336.8**

3.23 Other Notes to the Statements of Profit or Loss

3.23.1 Cost of Materials

	Years ended December 31,	
(in millions €)	**2024**	**2023**
Cost of purchased services	0.6	—
Cost of raw materials and supplies and of purchased merchandise	0.1	1.1
Total	**0.7**	**1.1**

During the year ended December 31, 2024, the cost of materials decreased by €0.4 million year-on-year from €1.1 million to €0.7 million. Expenses that are not directly attributable to the company's sales are not part of the cost of materials. In our view, this leads to a clearer presentation of the company's business model and to a corresponding change in the previous year's figures.

3.23.2 Personnel Expenses

	Years ended December 31,	
(in millions €)	**2024**	**2023**
Wages and salaries	446.0	288.3
Wage taxes, social security, pension and other benefit costs	55.0	40.0
thereof for old-age pensions	*0.6*	*0.4*
Total	**501.0**	**328.3**

Personnel expenses increased by €172.7 million from €328.3 million during the 2023 financial year to €501.0 million during the 2024 financial year. The increase was primarily driven by the exercise of the ESOP 2019 program, the increase in headcount, as well as wage taxes and social security expenses in relation with our share-based payments.

3.24 Other Notes / Corporate Bodies

3.24.1 Supervisory Board

During the 2024 financial year, the following persons were members of the Supervisory Board:

Name (function)	Age	Expiry of appointment	Main occupation (other relevant appointments)
Helmut Jeggle (Chair of the Supervisory Board)	54	2026	Managing Partner of Salvia GmbH and entrepreneurial venture capital investor (Supervisory Board member of 4SC AG, AiCuris AG and Tonies SE, Board Director of Bambusa Therapeutics Inc.)
Ulrich Wandschneider, Ph.D. (Deputy Chair of the Supervisory Board)	63	2027	Managing Director of beebusy capital GmbH and independent consultant for companies in the life science and healthcare sector (Supervisory Board member of Marienhaus GmbH)
Baroness Nicola Blackwood	45	2027	Managing Director and Chair of Oxford University Innovations Limited (Equity Partner, ReCode Health Ventures LLC, Trustee and Director of the Alan Turing Institute, Chair of the Advisory Board of Genomics England Limited, Independent and Non-Executive Director of RTW Biotech Opportunities Ltd)
Prof. Anja Morawietz, Ph.D.	47	2026	Auditor and management consultant, Professor of External Accounting and General Business Administration at Nuremberg Georg Simon Ohm University of Applied Sciences
Michael Motschmann	67	2027	Member of the Management Board and Head of the Equity Investments division of MIG Capital AG (Supervisory Board member of AFFiRiS AG, APK AG, HMW-Emissionshaus AG and HMW-Innovations AG)
Prof. Rudolf Staudigl, Ph.D.	70	2026	Independent consultant (Supervisory Board member of TÜV Süd Aktiengesellschaft until July 3, 2024, Supervisory Board member of Groz-Beckert KG (Deputy Chair))

3.24.2 Management Board

During the 2024 financial year, the following persons were members of the Management Board:

Name	Age	Expiry of appointment	Position (main responsibilities)
Prof. Ugur Sahin, M.D.	59	2026	Chair of the Management Board (Chief Executive Officer) (Research and Development, Scientific Collaborations, Patent Applications, Quality Assurance, and Project Management)
Annemarie Hanekamp[(1)]	44	2028	Chief Commercial Officer (Marketing and Sales)
Jens Holstein[(3)]	61	2025	Chief Financial Officer (Finance, Human Resources, Risk Management, and Purchasing)
Sean Marett[(2)]	60	2024	Chief Business Officer and Chief Commercial Officer (Marketing and Sales)
Sierk Poetting, Ph.D.	52	2026	Chief Operating Officer (Production, IT, Laboratories and Infrastructure, Sustainability, and Internal Communication)
Ryan Richardson	45	2026	Chief Strategy Officer (Corporate Strategy, capital market responsibility, and Investor Relations)
James Ryan, Ph.D.	49	2027	Chief Legal Officer and Chief Business Officer (Legal, Business Development, Alliance Management, and Intellectual Property)
Prof. Özlem Türeci, M.D.	57	2025	Chief Medical Officer (Clinical Development, Regulatory, and Medical Affairs)

(1) Annemarie Hanekamp was appointed to the Management Board as Chief Commercial Officer with effect from July 1, 2024.

(2) Sean Marett was a member of the Management Board until June 30, 2024.

(3) Jens Holstein, our Chief Financial Officer, plans to retire at the end of his term. A successor will be announced in due course

3.24.3 Total Supervisory Board and Management Board Compensation

In the 2024 financial year, the compensation to the members of the Supervisory Board of BioNTech SE amounted to €0.9 million (previous year: €0.6 million). The compensation to the members of the Management Board of BioNTech SE amounted to €13.0 million in the 2024 financial year (previous year: €8.3 million).

	Years ended December 31,	
(in millions €)	**2024**	**2023**
Management Board[1]	**13.0**	**8.3**
Fixed compensation	4.0	3.9
Fringe benefits	0.2	0.0
Short-term incentive – first installment	0.8	0.7
Short-term incentive – second installment[2]	0.6	1.0
Other performance-related variable compensation[3]	1.3	0.8
Share-based payments (incl. long-term incentive)[4]	6.1	1.9
Supervisory Board	**0.9**	**0.6**
Total compensation paid to key management personnel	**13.9**	**8.9**

(1) During the year ended December 31, 2024, Sean Marett retired from the Management Board with effect as of July 1, 2024. Therefore, his compensation until his departure date is presented on a pro-rata basis in this table. The following compensation pursuant to his separation agreement subsequent to his departure date and thus as former Management Board member are not included in this table: a severance payment of €275,000, an additional payment of €39,000 in respect of the 2024 STI, a grant of 5,760 phantom options in respect of the 2024 LTI and a payment of €477,030 in relation to his 12-months consultancy agreement.

(2) The fair value of the second installment of the short-term incentive compensation which has been classified as a cash-settled share-based payment arrangement was determined pursuant to the regulations of IFRS 2 “Share-based Payments”. This table shows the pro-rata share of personnel expenses for the respective financial year, which are recognized over the award’s vesting period beginning as of the service commencement date (date when entering or renewing service agreements) until each separate determination date and are remeasured until settlement date.

(3) Represents for the financial year 2024 the cash payment related to the one-time signing bonus granted to Annemarie Hanekamp as part of her appointment to the Management Board, designed to compensate her for lower bonus payments that she would receive as part of her compensation package with BioNTech and to recognize and appreciate her move to BioNTech. For 2023, the amount represents the one-time signing cash payment related to James Ryan’s appointment to the Management Board to provided compensation in lieu of participation in the LTI 2023 program and the one-time special cash payment related to Jens Holstein to honor his contribution to BioNTech’s extraordinary financial performance. For 2022, the amount includes a one-time signing and retention cash payment agreed when renewing the service agreement agreed with Sean Marett in 2022.

(4) The fair value of the share-based payments was determined pursuant to the regulations of IFRS 2 “Stock-based Payments”. This table shows the pro-rata share of personnel expenses resulting from stock-based compensation for the respective financial year. During the years ended December 31, 2024, 2023 and 2022, the amounts included expenses derived from a one-time signing bonus granted to Jens Holstein as of his appointment to the Management Board in the form of 4,246 phantom shares as well as expenses derived from the one-time signing bonus granted to Annemarie Hanekamp as of her appointment to the Management Board in the form of shares in the amount of €500,000.

The amounts disclosed in the table are the amounts recognized as an expense during the period.

Management Board members participated in our ESOP program (see Note 3.23.4). Out of the 5,152,410 option rights granted to our Management Board under the ESOP 2018 program, 4,921,630 options were exercised during the year ended December 31, 2022. The remaining 230,780 option rights were exercised by Sean Marett in May 2023. During the year ended December 31, 2024, our CEO Prof. Ugur Sahin, M.D., exercised all 4,374,963 options granted under the CEO Grant 2019 and Members of the Management Board, who participated in the LTI 2020 Board Program, exercised 209,128 options in August 2024 while 38,968

options are outstanding as of December 31, 2024 (see Note 3.23.4). For further information regarding outstanding options for each Management Board member from LTI 2021-2024 Board Programs, see Note 3.23.4.

3.24.4 Share-Based Payments

As of December 31, 2024, there were the following share-based payment arrangements for Management Board members and our own employees as well as for employees of subsidiaries. Accordingly, we not only account for share-based payments to employees of BioNTech SE but also for commitments to employees of subsidiaries that are fulfilled by BioNTech SE. When these beneficiaries are not employees of BioNTech SE, the expenses are recognized in other operating expenses.

Overall, expenses resulting from share-based payment transactions in the 2023 financial year amounted to €233.6 million (previous year: €43.2 million).

BioNTech 2020 Employee Equity Plan for Employees Based Outside North America (Equity-Settled)

In December 2020, we approved the BioNTech 2020 Employee Equity Plan for employees based outside North America, or the European Plan. Under the European Plan, Restricted Stock Units, or RSUs, are offered to our employees.

Award agreements were entered as of the respective grant dates in February 2021 (LTI 2020), January 2022 (LTI 2021 program), December 2022 (LTI 2022 program) and January 2024 (LTI 2023). RSUs issued under the LTI 2020, LTI 2021, LTI 2022 and LTI 2023 programs vest annually in equal installments over respective waiting periods of four years, commencing in December 2020, December 2021, December 2022 and December 2023, respectively. All programs were classified as equity-settled as we have the ability to determine the method of settlement.

The fair values of the awards issued under the European Plan were based upon the price of our ADSs representing ordinary shares at the grant date.

	LTI 2020 program	LTI 2021 program	LTI 2022 program	LTI 2023 program
Weighted average fair value	€92.21	€203.22	€165.03	€97.99
Waiting period (in years)	4.0	4.0	4.0	4.0

The RSUs outstanding as of the respective dates are presented in the table below.

	LTI 2020 program	LTI 2021 program	LTI 2022 program	LTI 2023 program
As of January 1, 2023	235,305	104,608	396,110	—
Forfeited / Modified	(4,400)	(3,497)	(16,141)	—
As of December 31, 2023	**230,905**	**101,111**	**379,969**	**—**
As of January 1, 2024	230,905	101,111	379,969	—
Granted / Allocated	—	—	—	834,211
Settled	(225,201)[1]	—	—	—
Forfeited / Modified	(4,541)	(2,332)	(12,507)	(62,902)
As of December 31, 2024	**1,163**	**98,779**	**367,462**	**771,309**
thereof vested	*1,163*	*75,920*	*187,812*	*194,636*
thereof unvested	—	*22,859*	*179,650*	*576,673*

[1] The closing price of an American Depositary Share of BioNTech on Nasdaq on December 13, 2024, the last trading day before the settlement date, converted from USD to Euro using the exchange rate published by the German Central Bank (Deutsche Bundesbank) on the same day was €114.45.

BioNTech 2024 North America Employee Participation Plan (Equity-Settled)

During the year ended December 31, 2024, a new long-term incentive program for employees resident in North America was established. Within this plan, BioNTech SE has granted RSUs and Performance-RSUs (for individuals at the Job Level Vice President or above) with an equity-based LTI program to all of their employees. The number of RSUs granted to each participant is determined by multiplying the eligible earnings by a percentage within the applicable range for such individual's BioNTech Job Level and dividing such amount by the Share Price at Grant, rounding the result down to the nearest whole number. The number of PRSUs is subject to adjustments based on the performance of BioNTech ADSs against the Nasdaq Biotechnology Index (Index). In May 2024, 356,757 RSUs and 34,481 PRSUs were granted to the participants. In December 2024, 47,115 further RSUs were granted to New-Joiners. The weighted average fair value at grant dates was €93.00. Between the grant date in May and December 31, 2024, 24,284 RSUs and 2,915 PRSUs were forfeited. As of December 31, 2024, 379,588 RSUs and 31,566 PRSUs are outstanding.

All RSUs, except the PRSUs, shall vest with annually in equal tranches of 25% over a period of 4 years, starting from the date of the grant. In contrast to the German LTI employee programs 2020-2023, there is no 4-year waiting period.

InstaDeep RSU Program Employees (Partly Equity-Settled, Partly Cash-Settled)

As part of the acquisition of InstaDeep in 2023, it was agreed to issue a long-term RSU award with a total target incentive value of £15.0 million. The start of the vesting period was July 2023. The 160,997 RSUs granted under this award vest annually in equal tranches of 25% over a period of 4 years. There is no waiting period and each tranche will be settled with vesting. The weighted average fair value at grant date was €92.08.

The first tranche of 40,249 RSUs vested in July 2024 and was settled in the three months ended December 31, 2024, in cash. As of December 31, 2024, 120,748 RSUs were outstanding. The gross payout amount of the settlement of the first tranche was €2.1 million. The program is accounted for as equity-settled and it is at the discretion of the company whether the following three tranches will be settled in equity or in cash in the years 2025-2027.

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

In December 2020, we approved 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 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. During the years ended December 31, 2024, 2023 and 2022, the settlement of RSUs resulted in a cash outflow of €13.9 million, €10.0 million and €9.4 million, respectively.

As of December 31, 2024, the liability related to these awards amounted to €11.2 million (€14.4 million as of December 31, 2023).

Management Board Grant – Short-Term Incentive (Cash-Settled)

Management Board's service agreements also include an STI compensation component, which is an annual performance-related bonus for the years of their respective service periods.

50% of each annual award is paid out at the end of the calendar month following the date on which the Supervisory Board has approved the consolidated financial statements of the Company for the financial / bonus year that is relevant for the determination of the STI (first installment). The remaining 50% of each annual award is paid out one year after the achievement of the performance targets for the respective bonus year has been determined, subject to an adjustment relative to the performance of the price of the American Depositary Shares representing our ordinary shares during that year (second installment). The second installments represent cash-settled share-based payment arrangements. The fair values of the liabilities are recognized over the awards' vesting periods beginning when entering or renewing service agreements, i.e., the service commencement date, until each separate determination date and are remeasured until the

settlement date. As of December 31, 2024, the liability related to these awards amounted to €2.8 million (€2.1 million as of December 31, 2023).

Management Board Grant – Long-Term Incentive (Partly Equity-Settled, Partly Cash-Settled)

Our Management Board's service agreements provide for long-term, four-year incentive compensation (Management Board Grant - LTI) through an annual grant of options to acquire BioNTech shares at the end of the respective waiting periods of such agreements. The options are subject to the terms and conditions of the respective authorizations of the AGM creating our Employee Stock Ownership Plan, or ESOP, and the applicable option agreements.

The options vest annually in equal installments over four years commencing on the first anniversary of the allocation date and are exercisable four years after the allocation date. Vested options can only be exercised if each of the following performance criteria has been achieved: (i) at the time of exercise, the current price is equal to or greater than the threshold amount (that is, the exercise price, provided that such amount increases by seven percentage points on each anniversary of the allocation date); (ii) at the time of exercise, the current price is at least equal to the target price (that is, (a) for the twelve-month period starting on the fourth anniversary of the allocation date, $8.5 billion divided by the total number of the ordinary shares outstanding immediately following the initial public offering (other than ordinary shares owned by BioNTech), and (b) for each twelve-month period starting on the fifth or subsequent anniversary of the allocation date, 107% of the target share price applicable for the prior twelve-month period); and (iii) the closing price for the fifth trading day prior to the start of the relevant exercise window is higher than the exercise price by at least the same percentage by which the Nasdaq Biotechnology Index (or a comparable successor index) is higher than it was on the last trading day before the allocation date. Following the expiry of the waiting period, option rights may be exercised during the exercise windows set out in the ESOP agreement. Option rights can be exercised up to ten years after the allocation date, after which they will be forfeited without compensation.

The right to receive options generally represents an equity-settled share-based payment arrangement. The allocation of options in 2020 occurred in February 2020. In May 2021 and May 2022, Management Board members received phantom options equivalent to the number of options they would have been entitled to receive for 2021 and 2022, which led to a modification from equity-settled to cash-settled share-based payment arrangement and a reclassification of €1.1 million and €3.3 million between equity and non-current other liabilities as of the respective allocation dates. During 2023 and 2024, options were granted in May 2023 and August 2024, respectively.

A Monte-Carlo simulation model has been used to measure the fair values at the (estimated) allocation dates of the Management Board Grant. This model incorporates the impact of the performance criteria regarding share price and index development described above. The parameters used for measuring the fair values as of the respective (estimated) allocation dates were as follows:

	Allocation date February 2020	Allocation date May 12, 2021[1]	Allocation date May 17, 2021[1]	Allocation date May 2022[1]	Allocation date May 2023	Allocation date August 2024
Weighted average fair value	€10.83	€36.13	€31.61	€42.24	€45.73	€37.88
Weighted average share price	€28.20	€179.16	€190.87	€157.24	€98.93	€84.23
Exercise price[2]	€28.32	€178.29	€179.83	€146.40	€104.86	€75.91
Expected volatility	36.6%	56.2%	52.3%	53.5%	47.2%	48.9%
Expected life (years)	4.8	4.6	4.6	5.8	5.8	5.8
Risk-free interest rate	1.6%	4.5%	4.2%	4.5%	3.7%	3.8%

(1) Classified as cash-settled share-based payment arrangement; all other share-based payment arrangements are classified as equity-settled.

(2) The share options allocated as of February 2020 and May 2023 as well as the phantom share options allocated as of May 2021 and 2022 are subject to an effective exercise price cap.

For the awards with estimated allocation dates, the exercise prices of options expected to be allocated have been derived from the Monte-Carlo simulation model. Those will be adjusted until the actual allocation has occurred and the exercise price has ultimately been determined.

	Estimated allocation date 2025	Estimated allocation date 2026	Estimated allocation date 2027	Estimated allocation date 2028
Weighted average fair value[(1)]	€49.89	€45.98	€43.98	34.74
Weighted average share price[(1)]	€109.68	€109.68	€109.68	€109.68
Exercise price[(1)]	€112.63	€119.48	€123.00	€130.37
Expected volatility	49.2%	47.8%	47.8%	43.7 %
Expected life (years)[(1)]	5.8	5.8	5.8	5.8
Risk-free interest rate	4.6%	4.7%	4.7%	4.8%

(1) Valuation parameter for estimated allocation dates derived from the Monte-Carlo simulation model.

All options are subject to an effective exercise price cap, which means that the exercise price shall be adjusted to ensure that the current price of an ADS as of the exercise date does not exceed 800% of the exercise price. For the LTI 2020, the maximum economic benefit receivable is capped at $246.24, and the effective exercise price is capped at a Euro amount equivalent to $30.78. For the phantom share options issued under the LTI 2021 and 2022 programs and the options issued under the LTI 2023 and 2024 programs, the maximum compensation that each member is entitled to receive, together with other compensation components received in the respective grant year, shall not exceed €20.0 million for Ugur Sahin and €10.0 million for all others.

Expected volatility was based on an evaluation of the historical volatilities of comparable companies over the historical period commensurate with the expected option term. The expected term was based on general option holder behavior for employee options.

The share options (including phantom share options) allocated to our Management Board as of the dates indicated are presented in the table below.

	Allocation date February 2020	Allocation date May 12, 2021[1]	Allocation date May 17, 2021[1]	Allocation date May 2022[1]	Allocation date May 2023	Allocation date August 2024
(Phantom) share options outstanding as of January 1, 2023	**248,096**	**45,279**	**6,463**	**86,118**	**—**	**—**
Granted / Allocated	—	—	—	—	130,586	—
(Phantom) share options outstanding as of December 31, 2023	**248,096**	**45,279**	**6,463**	**86,118**	**130,586**	**—**
(Phantom) share options outstanding as of January 1, 2024	**248,096**	**45,279**	**6,463**	**86,118**	**130,586**	**—**
Granted / Allocated	—	—	—	—	—	193,257
Exercised[2]	(209,128)	—	—	—	—	—
Forfeited / Modified	—	(1,778)	—	(7,332)	(13,812)	(12,729)
(Phantom) share options outstanding as of December 31, 2024	**38,968**	**43,501**	**6,463**	**78,786**	**116,774**	**180,528**
thereof allocated and vested but subject to performance and/or waiting requirements	38,968	30,878	4,848	43,060	32,646	—
thereof allocated and unvested	—	12,623	1,615	35,726	84,128	180,528

(1) Classified as cash-settled share-based payment arrangement; all other share-based payment arrangements are classified as equity-settled.

(2) The average closing price of an American Depositary Share of BioNTech on Nasdaq weighted over the various dates immediately preceding the settlement dates, converted from USD to Euro using the exchange rate published by the German Central Bank (Deutsche Bundesbank) on the same days was €75.00 for all options exercised in 2024.

For the awards with estimated allocation dates, the numbers of options expected to be allocated have been derived from a Monte-Carlo simulation model. Those will be adjusted until the actual allocation has occurred and the number of options granted has ultimately been determined.

The share options expected to be allocated to our Management Board as of the dates indicated are presented in the table below.

	Estimated allocation date 2025[1]	Estimated allocation date 2026[1]	Estimated allocation date 2027[1]	Estimated allocation date 2028[1]
Share options estimated to be allocated	122,211	98,760	26,616	7,533

(1) Valuation parameter derived from the Monte-Carlo simulation model.

As of December 31, 2024, the share options allocated and expected to be allocated under our equity-settled share-based payment arrangements had a remaining weighted average expected life of 5.0 years (as of December 31, 2023: 4.1 years).

As of December 31, 2024, the liability related to the phantom option awards amounted to €5.1 million (€3.6 million as of December 31, 2023).

Chief Executive Officer Grant (Equity-Settled)

In September 2019, we granted Prof. Ugur Sahin, M.D., an option to purchase 4,374,963 of our shares under the ESOP 2017/2019 program. All of these option rights vested and became exercisable in 2023, and were exercised on August 9, 2024, with an exercise price for each option of €13.74 ($15.00) calculated using the foreign exchange rate published by the German Central Bank (Deutsche Bundesbank) on the day before the exercise date and by applying the effective exercise cap and the maximum cap mechanism as disclosed above. The closing price of one ADS on Nasdaq on the settlement date converted from U.S. Dollars to Euro using the exchange rate published by the German Central Bank (Deutsche Bundesbank) on the same day was €73.68 and led to an intrinsic value of the exercised options of €259.5 million.

In August 2024, the Supervisory Board determined that the award would be settled by the delivery of treasury shares (in the form of ADSs) equal to the net value of the exercised option rights after deduction of (i) the exercise price and (ii) the applicable wage taxes (including solidarity surcharge and church tax, if applicable) and social security contributions resulting from the exercise. The applicable taxes and social security contributions resulting from and withheld upon the exercise amounted to €123.2 million and were paid by us in September 2024 in cash directly to the respective authorities. The settlement mechanism decision changed neither the rights nor the classification of the grant as equity-settled. As a result of the settlement, no additional share-based payments under IFRS 2 were recorded during the year ended December 31, 2024.

Employee Stock Ownership Plan (Partly Equity-Settled, Partly Cash-Settled)

Employee Stock Ownership Plan (Equity-Settled)

Based on an authorization of the general meeting on August 18, 2017, we established a share option program under which we granted selected employees options to receive our shares. The program is designed as an Employee Stock Ownership Plan, or ESOP. We offered participants a certain number of option rights by their explicit acceptance of an option rights agreement. The exercise of option rights in accordance with the agreement gives the participants the right to obtain shares against payment of the exercise price. With respect to the Management Board members serving at the time of allocation, the options are subject to the effective exercise price cap and maximum cap mechanisms. Under the exercise price cap, the exercise price shall be adjusted to ensure that the current price of an ADS as of the exercise date does not exceed 800% of the exercise price. Under the maximum cap mechanism, the maximum economic benefit receivable in respect of any exercised option, was capped at $240.00, with the effective exercise price being capped at a Euro amount equivalent to $30.00. Under the ESOP, the option rights (other than Özlem Türeci's, and Ryan Richardson's options) fully vest after four years and can be exercised if: (i) the waiting period of four years has elapsed; and (ii) at the time of exercise, the average closing price of the shares of the Company or the average closing price of the right or certificate to be converted into an amount per share on the previous ten trading days preceding the exercise of the option right exceeds the strike price by a minimum of 32%, with this percentage increasing by eight percentage points as of the fifth anniversary of the respective issue date and as of each subsequent anniversary date. Following the expiry of the waiting period, option rights may be exercised within a period of four weeks from the date of the Annual General Meeting or the publication of the annual financial statements, the semi-annual report or our most recent quarterly report or interim report (exercise windows). The option rights can be exercised up to eight years after the allocation date. If they have not been exercised by that date, they will be forfeited without compensation.

By way of a shareholders' resolution of the general meeting on August 19, 2019, the authorization to issue such option rights was amended such that, in order for the options to be exercisable, the average closing price of the Company's shares or the average closing price of the right or certificate to be converted into an amount per share on the ten trading days immediately preceding the exercise must exceed the strike price by a minimum of 28%, with this percentage increasing by seven percentage points as of the fifth anniversary of the issue date and as of each subsequent anniversary date. Furthermore, in addition to the aforementioned requirements, the exercise is only possible if the share price (calculated by reference to the price of the ordinary share underlying the ADS) has performed similar to or better than the Nasdaq Biotechnology Index. The changes made do not affect option rights already issued.

The fair value of the ESOP has been measured using a binomial model. Service conditions attached to the arrangement were not taken into account in measuring the fair value.

The share options can only be exercised by the grantee if the price of the share is equal or greater to the threshold amount as defined in the ESOP agreement. Moreover, the option rights can only be exercised if the IPO has occurred. Both conditions have been incorporated into the fair value at the grant date.

The inputs used in the measurement of the fair values at the grant date of the ESOP were as follows:

	Grant date November 15, 2018	Grant dates between February 21 and April 3, 2019
Weighted average fair value	€7.41	€6.93
Weighted average share price	€14.40	€15.72
Exercise price[1]	€10.14	€15.03
Expected volatility	46.0%	46.0%
Expected life (years)	5.8	6.0
Risk-free interest rate	0.1%	0.1%

(1) With respect to the Management Board members appointed as such at the time the options were granted, the options are subject to the effective exercise price cap as well as the maximum cap mechanism.

Expected volatility has been based on an evaluation of the historical and the implied volatilities of comparable companies over the historical period commensurate with the expected term. The expected term has been based on general option holder behavior for employee options.

Set out below is an overview of changes to share options outstanding and number of ordinary shares underlying these options that occurred during the periods indicated:

	Share options outstanding	Number of ordinary shares underlying options	Weighted average exercise price (€)[1]
As of January 1, 2023	57,584	1,036,514	11.10
Exercised[2]	(39,785)	(716,121)	11.04
As of December 31, 2023	**17,799**	**320,393**	**11.24**
As of January 1, 2024	17,799	320,393	11.24
Exercised[2]	(7,725)	(139,053)	10.14
As of December 31, 2024	**10,074**	**181,340**	**12.08**
thereof vested	*10,074*	*181,340*	*12.08*
thereof unvested	—	—	—

(1) With respect to the Management Board members appointed as such at the time the options were granted, the options are subject to the effective exercise price cap as well as the maximum cap mechanism.

(2) The average closing price of an American Depositary Share of BioNTech on Nasdaq weighted over the various dates immediately preceding the settlement dates, converted from USD to Euro using the exchange rate published by the German Central Bank (Deutsche Bundesbank) on the same days was €83.45 and €96.49 for all settlements during the years ended December 31, 2024 and 2023, respectively.

In September 2022, the Supervisory Board determined the ESOP settlement by the delivery of treasury shares (in the form of ADSs) equal to the net value of the exercised option rights after deduction of (i) the exercise price and (ii) the applicable wage taxes (including solidarity surcharge thereon and church tax, if applicable) and social security contributions resulting from such exercise. The settlement was applied during the exercise windows in 2024 and 2023.

As of December 31, 2024, the share options outstanding under our equity-settled share-based payment arrangements had a remaining weighted average expected life of 0.1 years (as of December 31, 2023: 0.8 years).

InstaDeep Employee Stock Ownership Awards (Equity-Settled)

As part of the acquisition of InstaDeep in 2023, we agreed to issue long-term ESOP awards with a total target incentive value of £15.0 million. With this award, 398,013 options were granted to the InstaDeep employees. The awards are subject to a 4-year cliff vesting and will vest and become exercisable in July 2027. The exercise price is $94.47 for all InstaDeep employees located in France and Rest of World and $100.34 for two employees located in the US. As of December 31, 2024, 398,013 options are outstanding.

The fair value of the ESOP awards has been measured using a Monte Carlo simulation. For the ESOPs granted under the InstaDeep Employee Stock Ownership awards, the same performance requirements that allow the ESOPs to be exercised apply as for the BioNTech Employee Stock Ownership Plan.

Employee Stock Ownership Plan (Cash-Settled)

Phantom options which were granted under the ESOP mainly during the year ended December 31, 2022, each give the participants the right to receive a cash payment equal to the difference between an exercise closing price (average closing price of an American Depositary Share of BioNTech on Nasdaq over the last ten trading days preceding the exercise date) and the exercise price. The phantom options can only be exercised by the grantee if the price of the share is equal or greater to the threshold amount as defined in the ESOP agreement. The majority of options have an exercise price of €10.14. During the years ended December 31, 2024 and 2023, 50,748 and 52,100 cash-settled phantom option rights were exercised and resulted in a cash outflow of €3.8 million and €4.5 million, respectively. The average 10-day closing prices of an American Depositary Share of BioNTech on Nasdaq weighted over the various settlement dates converted from USD to Euro using the exchange rate published by the German Central Bank (Deutsche Bundesbank) on the same days was €92.70 and €96.25. As of December 31, 2024, 58,903 cash-settled option rights remained outstanding. As of December 31, 2024, the liability related to cash-settled share-based payment option rights amounted to €5.0 million (€8.5 million as of December 31, 2023). The liability is based on the fair value of the respective rights. The fair value is measured using a binomial model consistent with the grant date fair value measurement of the equity-based option rights described above, which is updated on every reporting date.

3.24.5 Auditor's Fees

The Company does not disclose the auditor's fees (Section 285 no. 17 HGB) as this information is stated in the consolidated financial statements prepared by BioNTech SE in which the Company is included.

3.24.6 Average Headcount in Accordance with Section 267 Para. 5 HGB

	Years ended December 31,	
	2024	2023
Scientific research and development	1,374	1,310
Support functions	1,083	921
Clinical research and development	426	436
Operations	129	220
Quality	200	193
Commercial and business development	97	86
Total	**3,309**	**3,166**

3.24.7 Related Parties

ATHOS KG, Holzkirchen, Germany is the sole shareholder of AT Impf GmbH, Munich, Germany, and beneficial owner of ordinary shares in BioNTech. ATHOS KG via AT Impf GmbH has de facto control over us based on its substantial shareholding, which practically enabled it to exercise the majority of voting rights to pass resolutions at our Annual General Meeting, or AGM. BioNTech SE prepares the consolidated financial statements for the smallest group of companies.

A number of key management personnel can control or exercise significant influence over BioNTech SE. There were no transactions with key management personnel during the 2024 financial year.

However, there were business relationships with related parties controlled by ATHOS KG in the 2024 financial year. These business relationships mainly include rental and real estate management activities. The total amount of transactions with ATHOS KG or entities controlled by it was as follows for the periods indicated:

	Years ended December 31,	
(in millions €)	**2024**	**2023**
ATHOS KG, Holzkirchen	0.2	0.3
Total	**0.2**	**0.3**

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

(in millions €)	**December 31, 2024**	**December 31, 2023**
ATHOS KG, Holzkirchen	—	0.4
Total	**—**	**0.4**

3.24.8 Disclosure of Authorized Capital Pursuant to Section 160 Para. 1 No. 4 AktG

By resolution adopted by the Annual General Meeting on June 22, 2021, the Management Board is authorized to increase share capital by a total of up to €122,657,313 by issuing up to 122,657,313 registered shares with no par value in return for cash or contributions in kind (Authorized Capital).

3.24.9 Notification Pursuant to Section 20 AktG

ATHOS KG, Holzkirchen, Germany is the sole shareholder of AT Impf GmbH, Munich, Germany, and beneficial owner of ordinary shares in BioNTech. ATHOS KG via AT Impf GmbH has de facto control over us based on its substantial shareholding, which practically enabled it to exercise the majority of voting rights to pass resolutions at our Annual General Meeting, or AGM. As of December 31, 2024, and December 31, 2023, AT Impf GmbH held 42.4% and 43.8%, respectively, of the shares in BioNTech SE.

3.24.10 Corporate Governance

The Declaration of Conformity pursuant to Section 161 para. 1 AktG, which, in accordance with the Code, is issued in connection with the Corporate Governance Declaration pursuant to Section 315d in conjunction with Section 289f HGB, was issued and included in the combined management report of BioNTech SE.

3.24.11 Events After the Reporting Period

Acquisition of Biotheus

The acquisition of Biotheus by BioNTech Collaborations GmbH was completed in January 2025. In this context, BioNTech Collaborations GmbH carried out a capital increase of €812.2 million by BioNTech SE to settle the purchase price payment.

Jens Holstein – retirement

Jens Holstein, our Chief Financial Officer, plans to retire at the end of his term. A successor will be announced in due course.

Mainz, March 7, 2025

BioNTech SE

Prof. Ugur Sahin, M.D.
Chief Executive Officer

Jens Holstein
Chief Financial Officer

Annemarie Hanekamp
Chief Commercial Officer

Sierk Poetting, Ph.D.
Chief Operating Officer

Ryan Richardson
Chief Strategy Officer

James Ryan, Ph.D.
Chief Legal Officer und
Chief Business Officer

Prof. Özlem Türeci, M.D.
Chief Medical Officer

		Acquisition costs				
		January 1, 2024	Additions	Disposals	Reclassifications	December 31, 2024
		in millions €	*in millions €*	*in millions €*	*in millions €*	*in millions €*
I.	**Intangible assets**					
1	Purchased franchises, industrial and similar rights and assets, and licenses in such rights and assets	739.4	137.0	0.3	11.3	887.4
2	Goodwill	3.0	—	—	—	3.0
3	Advanced payments	21.5	10.3	—	(11.3)	20.5
		763.9	**147.3**	**0.3**	**—**	**910.9**
II.	**Property, plant and equipment**					
1	Land, land rights and buildings, including buildings on third-party land	52.8	3.5	—	6.0	62.3
2	Other equipment, furniture and fixtures	91.3	15.7	0.6	11.5	117.9
3	Advanced payments and construction in progress	42.1	37.3	0.5	(17.5)	61.4
		186.2	**56.5**	**1.1**	**—**	**241.6**
III.	**Financial assets**					
1	Shares in affiliated companies	1,156.5	41.1	—	—	1,197.6
2	Loans to affiliated companies	8.5	—	8.5	—	—
3	Equity investments	47.0	188.9	—	—	235.9
4	Securities classified as fixed assets	1,326.4	1,341.6	224.4	—	2,443.6
5	Other loans	2.6	38.0	0.9	—	39.7
		2,541.0	**1,609.6**	**233.8**	**—**	**3,916.8**
		3,491.1	**1,813.4**	**235.2**	**—**	**5,069.3**

		Accumulated amortization, depreciation and impairment				Carrying amounts	
		January 1, 2024	Additions	Disposals	December 31, 2024	December 31, 2024	December 31, 2023
		in millions €	*in millions €*	*in millions €*	*in millions €*	*in millions €*	*in millions €*
I.	**Intangible assets**						
1	Purchased franchises, industrial and similar rights and assets, and licenses in such rights and assets	88.6	278.1	0.3	366.4	521.0	650.8
2	Goodwill	0.7	0.2	—	0.9	2.1	2.3
3	Advanced payments	—	—	—	—	20.5	21.5
		89.3	**278.3**	**0.3**	**367.3**	**543.6**	**674.6**
II.	**Property, plant and equipment**						
1	Land, land rights and buildings, including buildings on third-party land	10.8	6.3	—	17.1	45.2	42.0
2	Other equipment, furniture and fixtures	38.9	16.2	0.4	54.7	63.2	52.4
3	Advanced payments and construction in progress	—	—	—	—	61.4	42.1
		49.7	**22.5**	**0.4**	**71.8**	**169.8**	**136.5**
III.	**Financial assets**						
1	Shares in affiliated companies	—	48.6	—	48.6	1,149.0	1,156.5
2	Loans to affiliated companies	—	—	—	—	—	8.5
3	Equity investments	—	139.1	—	139.1	96.8	47.0
4	Securities classified as fixed assets	—	0.4	—	0.4	2,443.2	1,326.4
5	Other loans	—	—	—	—	39.7	2.6
		—	**188.1**	**—**	**188.1**	**3,728.7**	**2,541.0**
		139.0	**488.9**	**0.7**	**627.2**	**4,442.1**	**3,352.1**

TABLE OF CONTENT

1 General Information on the BioNTech Group

Pursuant to Section 315 para. 5 of the German Commercial Code (HGB) in conjunction with Section 298 para. 2 HGB, this combined management report comprises both the group management report of BioNTech SE and its group companies (together "BioNTech" or the "Group") and the management report of BioNTech SE (also "the Company"), hereinafter also referred to as "BioNTech," the "Group," "we" or "us." The combined management report has been prepared in accordance with the Regulation on the Statute for a European Company (SE) in conjunction with the German Stock Corporation Act (AktG). The comments on the Group have been prepared in accordance with the IFRS Accounting Standards as adopted by the European Union; the comments on BioNTech SE have been prepared in accordance with the German Commercial Code. Unless otherwise stated, the statements in the combined management report relate to both the Group and BioNTech SE. In addition to the reporting on the Group, the development of BioNTech SE is explained in Section 3.

We prepare and publish our combined management report in euros and round figures to the nearest thousand or million euros. Accordingly, the figures presented as totals or as percentages in some tables may deviate slightly and the figures presented in the notes may not add up exactly to the totals presented.

1.1 Business Model

We are a global immunotherapy company and carry out pioneering work in the development of innovative medicines for cancer, infectious diseases and other serious illnesses. Our vision and mission have remained unchanged since our foundation in 2008: We want to improve the health of people worldwide. To this end, we utilize the full potential of the immune system to develop drugs for diseases with high or unmet medical needs.

Our fully integrated business model combines decades of research in immunology, translational drug discovery and development, cross-technology innovation, GMP production, artificial intelligence ("AI") and machine learning, and commercial capabilities to develop and market therapies and vaccines.

We have a broadly diversified portfolio of product candidates based on a cross-platform approach to technology. They form the basis for our strategy of developing innovative combination therapies.

In oncology, our aim is to use our technologies to treat a broad spectrum of cancers at various stages. The main causes of cancer treatment failure are tumor heterogeneity and inter-individual variability. As a result of randomly occurring mutations, each patient's cancer is different. In addition, every cell within a patient's tumor is different. Overcoming these two challenges is at the heart of our strategy. In order to enhance anti-tumor activity and counteract resistance mechanisms, we try to combine active substances with synergistic active mechanisms.

In the area of infectious diseases, our product strategy is anchored in our global social responsibility and our aspiration to contribute to equitable access to medical treatments.

1.2 The BioNTech Approach

We are working on the development of innovative immunotherapies and vaccines by pursuing a strategy based on a technology-independent approach. Our main objectives are to further develop an innovative oncology pipeline with several product approvals in the coming years and to maintain a sustainable business with vaccines against infectious respiratory diseases based on the BioNTech-Pfizer-Comirnaty franchise. Our vision is to establish a company with several approved products based on our technologies and science. We have been a multi-technology company since our foundation. We believe that by combining complementary treatment methods, we can harness the potential of each individual technology to offer patients precise and personalized treatments. Our approach is based on the following principles:

- Utilization of the full potential of the immune system Our oncology pipeline comprises (1) immunomodulators, including bi- and monospecific antibodies, (2) mRNA-based cancer immunotherapies, and (3) targeted therapies such as antibody-drug conjugates ("ADCs") and cell therapies, including T-cell receptor and CAR-T cell therapies. Our cross-technology innovation engine is driven by potential synergies between these technologies and aims to help enable individualized treatment for cancer patients.

- Expansion of the patient population that could benefit from cancer immunotherapy Our aim is to address cancer at early, adjuvant and metastatic stages and to extend the benefits of immunotherapy to patient groups that are currently not eligible for immunotherapy or cannot benefit from current immunotherapies.

- Improvement in the success rate through new combinations We develop drug candidates that are precisely aligned with the respective target structure. By combining compounds with non-overlapping and/or synergistic mechanisms of action, e.g. through the combination of our next-generation immuno-oncology (IO) candidate BNT327 with ADC BNT325/DB-1305 (partnered with MediLink), we aim to increase the immune response and counteract resistance mechanisms.

- Individualized approaches The challenge in the treatment of cancer is its inter-individual variability and heterogeneity, which increases the risk of relapse or lack of treatment success. Taking this biological reality into account is one of our fundamental principles in the development of product candidates. For example, each of our mRNA cancer vaccine candidates addresses multiple target structures to account for this variability.

- Integration of AI into our pipeline and processes Since our foundation, we have integrated computer-aided methods, data science, AI, and machine learning into our work. With the acquisition of InstaDeep in 2023, we were able to further expand our capacities in AI-driven drug research and the development of immunotherapies and vaccines in 2024. By combining our expertise in immunology, deep genomics, and AI, we are working on solutions that could make a difference for millions of patients.

- Programs for combatting global health threats Our product strategy for infectious diseases is rooted in our global social responsibility for addressing diseases with high or unmet medical needs. We want to play a part in promoting equal access to innovative medicines.

Innovative and diversified pipeline

We have developed our innovative pipeline in the areas of oncology and infectious diseases. As our portfolio moves into late-stage clinical development, we have built key capabilities to deliver the medicines of tomorrow that could make a difference for millions of patients.

Today, our pipeline consists of 18 clinical programs in oncology and seven clinical programs in infectious diseases. In 2024, we and our partners reported data from our entire portfolio at several medical conferences and published manuscripts in specialist journals.

Oncology

From this diverse clinical portfolio, we have defined two priority programs that we believe have the potential to be effective in different indications and in different phases of a tumor disease: firstly, our mRNA-based cancer immunotherapy programs FixVac and iNeST, which we believe are particularly suitable for early-stage cancer and low tumor burden; secondly, our clinical product candidate BNT327, formerly known as PM8002, a bispecific antibody for which we obtained full global rights with the acquisition of Biotheus Inc, Zhuhai, China, ("Biotheus") in January 2025. We believe that BNT327 has the potential to become a next-generation immuno-oncology candidate suitable for a broad range of cancers. Our strategy based on combinations means that we can also create sustainable value with these two focus programs as a combination partner for other therapies.

In line with our focus on oncology, we have advanced several drug candidates into mid- and late-stage development, i.e. Phase 2 and 3 clinical trials, for a number of technologies, in particular bispecific antibodies, mRNA immunotherapies, and ADCs. Today, more than 20 Phase 2 and 3 clinical trials are underway in oncology.

We plan to bring further product candidates into the late development phase over the course of the next year. We will continue to advance our pipeline with a view to the first market launch in oncology planned for 2026.

In February 2024, the strategic collaboration with Autolus Therapeutics plc, London, United Kingdom (“Autolus”) began to advance the development of both companies’ autologous CAR-T programs. Under this collaboration, we have the ability to access Autolus’ commercial and clinical site network, UK manufacturing capabilities and commercial supply infrastructure in a cost-effective way to accelerate the development of our product candidate BNT211.

In November 2024, we announced the acquisition of Biotheus to accelerate the implementation of our oncology strategy, a process which we completed in January 2025. The acquisition follows an exclusive global license and collaboration agreement with Biotheus from 2023 to develop, manufacture, and market BNT327 worldwide outside of China.

Infectious diseases

Together with our partner Pfizer, we have maintained our position as the global market leader in the COVID-19 vaccine franchise in 2024. With Pfizer, we have supplied more than 40 countries and regions worldwide with a vaccine adapted to the JN.1 and KP.2 variants. In addition, we expanded our range of prefilled syringes in a number of markets in 2024.

Three Phase 1 clinical trials with our proprietary mRNA vaccine technology were also launched in the area of infectious diseases, including the evaluation of candidates against shingles, tuberculosis, and Mpox.

Healthcare and social responsibility

In February 2024, we announced that our short-term, science-based emissions reduction targets had been approved by the Science Based Targets Initiative ("SBTi"). The SBTi is an organization that develops methods and criteria for effective climate protection measures for companies and validates corporate goals. This validation underlines that BioNTech's Scope 1 and 2 climate targets are ambitious and in line with the United Nations Paris Agreement to limit global warming to 1.5 degrees Celsius above pre-industrial levels. The SBTi has validated BioNTech's short-term emission reduction targets in the following form:

- BioNTech is committed to reducing absolute Scope 1 and Scope 2 greenhouse gas emissions by 42% by 2030, starting from a 2021 baseline.

- BioNTech is committed to setting science-based emissions targets for 72% of its suppliers for purchased goods and services, capital goods, and upstream transportation and distribution activities by 2027.

We work with non-governmental organizations, institutions, and governments to contribute to more equitable access to new medicines, especially in low- and middle-income countries and regions. We made progress towards this goal last year: in 2024, more than 30% of COVID-19 vaccine doses were delivered to low- and middle-income countries in line with demand.

We are developing mRNA vaccine candidates for infectious diseases with high medical need, including vaccine candidates against tuberculosis, malaria, and HIV as well as infectious diseases with pandemic potential such as Mpox. In May 2024, we announced the expansion of our strategic partnership with the Coalition for Epidemic Preparedness Innovations ("CEPI") to support the development of research and development capacity for mRNA vaccines and production capacity at our facility in Kigali, Rwanda. These capacities will help to develop and produce potential mRNA vaccines for Africa in Africa to better respond to potential epidemic and pandemic threats in Africa. To this end, CEPI will provide funds of up to $145 million, which are linked to the achievement of certain milestones or the provision of production capacities.

1.3 Legal and Organizational Structure

Legal structure

BioNTech SE was founded in 2008 as a spin-off from Johannes Gutenberg University Mainz. The underlying broad technology and patent portfolio has been built up over a period of more than 20 years.

BioNTech SE is the parent company of the BioNTech Group and is responsible for the management and development of the Group. BioNTech SE has its registered office in Mainz, Germany (An der Goldgrube 12, 55131 Mainz). In addition, the BioNTech Group comprised 41 companies at the end of the year ended December 31, 2024.

The shares of BioNTech SE are publicly traded as American Depositary Shares (ADS), each representing one ordinary share, on the Nasdaq Global Select Market.

Organizational structure

BioNTech SE, the parent company of the BioNTech Group, has a dual management system: As of December 31, 2024, the Management Board as the managing body had seven members and is appointed and monitored by the Supervisory Board. In January, our Supervisory Board expanded our Management Board and appointed Annemarie Hanekamp as Chief Commercial Officer (CCO) with effect from July 1, 2024. As CCO, Annemarie Hanekamp is responsible for the development and implementation of the global commercialization strategy to realize BioNTech's full potential as a vertically integrated biopharmaceutical company. Her current appointment to our Management Board ends on June 30, 2028. Our Supervisory Board consisted of six members as of December 31, 2024. As of December 31, 2024, the Group had 6,946 employees, of which 3,389 were employed by BioNTech SE (December 31, 2023: 6,292, of which 3,166 at BioNTech SE). The average number of employees in 2024 was 6,715, of which 3,309 were employed by BioNTech SE (previous year: 5,640, of which 2,882 at BioNTech SE).

1.4 Update on Commercialization

We develop and scale biotech innovations with the aim of building a patient-centered multi-product company. In view of the market launch of BioNTech’s first oncology product planned for 2026, our Supervisory Board appointed Annemarie Hanekamp to the Management Board as Chief Commercial Officer with effect from July 1, 2024. Annemarie Hanekamp is a respected executive with deep expertise in developing patient-centric commercialization strategies for innovative oncology products in the areas of sales, marketing, and market access. In her role, she is responsible for the global commercialization strategy to realize BioNTech’s full potential as an integrated biopharmaceutical company.

Furthermore, in 2024 we continued our global leadership in COVID-19 vaccines together in collaboration with Pfizer with our monovalent COVID-19 vaccine adapted to JN.1 and KP.2. We believe that, with our partner Pfizer, we are well positioned to maintain our leading position in the development and marketing of COVID-19 vaccines.

1.5 Research and Development

Pipeline of Clinical Product Candidates

Our diversified portfolio consists of product candidates from different drug classes that focus on the treatment of cancer and infectious diseases. In 2024, we advanced several product candidates into mid- and late-stage development, i.e. Phase 2 and 3 clinical trials, including mRNA vaccines and next-generation immunomodulators. A particular focus in immunomodulators is on BNT327, our bispecific anti-PD-L1/VEGF-A antibody, which together with our mRNA cancer immunotherapies is a key priority in our pipeline.

We published clinical data and updates for many programs, including:

- BNT113, our FixVac program for patients with unresectable, recurrent or metastatic HPV16+ head and neck squamous cell carcinoma (HNSCC) in combination with pembrolizumab (Merck & Co., Inc.'s KEYTRUDA®) was generally well tolerated. An exploratory analysis of 15 patients showed that BNT113 triggers de novo T cell responses against the HPV16 oncoproteins E6 and E7 (September 2024, ESMO).

- BNT116, our FixVac program for patients with non-small cell lung cancer (NSCLC): Preliminary data on BNT116 in combination with chemotherapy (docetaxel) showed promising antitumor activity, consistent induction of immune responses, a clear safety profile and no evidence of additive toxicity (April 2024, AACR). In addition, preliminary data on BNT116 in combination with Cemiplimab (Regeneron's Libtayo®) showed a clear safety profile and a median progression-free survival (PFS) of 5.5 months in patients who had previously received PD-1 inhibition therapy (November 2024, SITC).

- Autogene Cevumeran/BNT122, our individualized cancer vaccine program in collaboration with Genentech in patients with pancreatic ductal adenocarcinoma (PDAC) as adjuvant therapy: Results from an investigator-initiated Phase 1 study showed that autogene cevumeran in combination with atezolizumab and mFOLFIRINOX induced significant T-cell activity in patients with surgically resected PDAC, which correlated with delayed recurrence. Additional data with longer follow-up showed that autogene cevumeran continued to induce polyspecific T cell responses up to three years after vaccination and that the vaccine response correlated with delayed tumor recurrence (April 2024, AACR).

- BNT211, our most advanced cell therapy program, which is being studied alone and in combination with a CLDN6-encoding, CAR-T Cell Amplifying RNA Vaccine ("CARVac") in patients with germ cell tumors and other solid tumors: The Phase 1/2 study is investigating the safety and efficacy of BNT211 in patients with CLDN6-positive relapsed or refractory advanced solid tumors. The data showed encouraging signs of clinical activity and increased durability of the cancer-specific CAR-T cells in combination with CARVac. Additional data showed encouraging signs of antitumor activity in multiple indications and suggests that the safety profile of CLDN6 CAR-T cells with and without CARVac is consistent with previously published effects of CAR-T therapies and that repeated administration of CARVac does not substantially increase toxicity (September 2024, ESMO).

- BNT323/DB-1303, a HER2-targeted ADC candidate developed in collaboration with DualityBio and being studied in patients with metastatic breast cancer and endometrial cancer:

  - BNT323/DB-1303 is being investigated in a Phase 1/2 study (NCT05150691) in patients with advanced, unresectable, recurrent, or metastatic HER2-expressing tumors. A cohort required for approval with HER2-expressing endometrial cancer has reached the planned number of patients; data is expected in 2025.

  - A confirmatory Phase 3 trial (NCT06340568) for advanced endometrial cancer is being planned.

  - The ongoing Phase 3 study DYNASTY-Breast02 (NCT06018337) is investigating patients with HR+ and HER2-low breast cancer whose disease progressed during hormone or CDK4/6 inhibitor therapy. A trial-in-progress poster was presented at the ESMO Congress in September 2024.

- BNT325/DB-1305, a TROP-2-targeted ADC candidate being developed in collaboration with DualityBio, received Fast Track designation from the U.S. Food and Drug Administration in January 2024 for the treatment of patients with platinum-resistant epithelial ovarian cancer, fallopian tube cancer or primary peritoneal cancer who have previously received between one and three systemic treatment regimens.

- BNT327/PM8002 is a bispecific antibody candidate being developed in collaboration with Biotheus. It combines PD-L1 checkpoint inhibition with neutralization of the signaling molecule VEGF-A. BNT327 and is currently being investigated in several global Phase 2 and Phase 3 trials conducted exclusively in China to evaluate the efficacy and safety of the candidate as monotherapy or in combination with chemotherapy in various indications. In addition, BNT327 is being evaluated in combination with BNT325/DB-1305, a next-generation ADC candidate, in a Phase 1/2 study. We also plan to investigate BNT327 in combination with our other clinical ADCs – BNT323/DB-1303, BNT324/DB-1311 and BNT326/YL202. We presented clinical data updates from multiple Phase 1b/2a studies of BNT327 as monotherapy in various indications, including advanced cervical cancer, platinum-resistant recurrent ovarian cancer, and advanced non-small cell lung cancer, at the American Society of Clinical Oncology ("ASCO") Annual Meeting, the European Society for Molecular Oncology ("ESMO") Congress, and the San Antonio Breast Cancer Symposium ("SABCS").

In the field of infectious diseases, several Phase 1 and Phase 1/2 clinical trials are underway for prophylactic vaccine candidates based on our mRNA technology platform. These include candidates against malaria (the Company's own program), tuberculosis (in collaboration with the Bill & Melinda Gates Foundation), Mpox (in partnership with CEPI), and shingles (in partnership with Pfizer).

Collaborations

In addition to the strategic collaborations entered into with Pfizer and Fosun Pharma as part of the COVID-19 vaccine development program in the 2020 financial year and the ongoing academic collaboration with Mainz University Hospital and Translational Oncology at the University Medical Center of Johannes Gutenberg University Mainz gemeinnützige GmbH ("TRON"), we have initiated or further developed additional collaborations with pharmaceutical and technology companies.

Our existing cooperation partners include:

- Genentech: Development of individualized neoepitope-specific mRNA immunotherapies for the treatment of various types of cancer.

- Pfizer: Development of our COVID-19, influenza, and combined COVID-19/influenza vaccine programs using the technology of our mRNA-based infectious disease platform

- Genmab: Development of innovative mono- and bispecific checkpoint immunomodulators.

- OncoC4: Research and development of a monoclonal anti-CTLA4 antibody.

- DualityBio: Research and development of certain antibody-drug conjugates.

- MediLink Therapeutics (Suzhou) Co: Development of a next-generation ADC.

In 2024, we entered into several supplementary agreements and cooperations, including:

- The announcement of the acquisition of our strategic cooperation partner Biotheus. The acquisition gives us full global rights to BNT327, a bispecific antibody against PD-L1 and VEGF-A, which is in late-stage clinical development and was formerly known as PM8002.
- An existing strategic partnership with CEPI to promote mRNA-based vaccine candidates for the prevention of Mpox (BNT166) was expanded with the aim of creating research and development capacities for corresponding mRNA vaccines as well as clinical and commercial-scale production capacities at our site in Kigali, Rwanda.
- We have entered into a strategic collaboration with Autolus to advance both companies' autologous CAR-T programs to market, subject to regulatory approval. The companies have also concluded a license and option agreement and a securities purchase agreement.

2 Economic Report

2.1 Macroeconomic and Sector-Specific Conditions

The German economic output declined in 2024. Price-adjusted gross domestic product fell by 0.2%[1] compared to the previous year. Increasing competition for the German export industry on important sales markets and high energy prices led to uncertainty and weighed on the economy.

According to IMF experts, however, the global economy grew by 3.2%[2] in 2024.

The German pharmaceutical industry expects production and investment to grow in 2024. The increase in employment in the sector is also continuing, which underlines its role as a growth driver and key industry in the transition.[3]

With the development and advancement of the COVID-19 vaccine against diverse COVID-19 variants, as well as an early warning system designed to detect SARS-CoV2 risk variants more quickly, we are working with other companies, research institutes and governments to continue to contribute to the worldwide effort to protect against COVID-19. Our goal remains to make the vaccine available to a broad population worldwide after the transition of the pandemic to an endemic phase.

Therapeutics in immunotherapy

The global market for cancer immunotherapies was estimated at $12.2 billion[4] in 2024 and is forecast by The Business Research Company to grow at a compound annual growth rate of 15%[4] to around $31.3 billion[4] by 2023. The growth during this period can be attributed to the increasing prevalence of cancer, the increasing acceptance of immunotherapy over traditional therapy, the growing research and development activities to develop targeted therapies for specific diseases, the increasing efficacy and accuracy of newer therapies, and the increasing recognition of the limitations of traditional cancer therapies.[5]

Marketing authorization, pricing, and reimbursement are highly regulated in healthcare. On the one hand, the strategy pursued by governments is to provide patients with highly effective and safe medicines in a timely manner. On the other hand, cost pressure on global healthcare systems has been increasing for years. Therefore, drug manufacturers not only need to demonstrate the efficacy and safety of their products to gain approval, but also need to demonstrate the cost-effectiveness of their new drug against the respective standard of care to gain reimbursability. The rapid development of the COVID-19 vaccine, based on BioNTech's proprietary mRNA technology, has demonstrated the potential of mRNA-based immunotherapies. The rapid, efficient and safe development was driven by BioNTech's decades of expertise in the research and development of mRNA-based vaccines.

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(1) *Source: https://www.destatis.de/DE/Presse/Pressekonferenzen/2025/bip2024/pm-bip.pdf?__blob=publicationFile*

(2) *Source: https://www.imf.org/en/Publications/WEO/Issues/2024/01/30/world-economic-outlook-update-january-2024*

(3) *Source:https://www.vfa.de/de/presse/pressemitteilungen/pm-031-2024-pharma-industrie-ist-lichtblick-in-der-wirtschaftsflaute.html*

(4) *Source: https://www.grandviewresearch.com/horizon/outlook/mrna-therapeutics-market-size/global*

(5) *Source: https://www.grandviewresearch.com/horizon/outlook/mrna-therapeutics-market-size/global*

2.2 Business Development Compared to the Forecast

The following table shows a comparison between the forecast and the BioNTech Group's results for the year ended December 31, 2024:

	Forecast for the year ended December 31, 2024 *(published as part of the Q4 2023 earnings presentation)*	**Updated forecast for the year ended December 31, 2024** *(published as part of the Q3 2024 earnings presentation)*	**Results for the year ended December 31, 2024**
Group Revenues	€2.5 billion to €3.1 billion	€2.5 billion to €3.1 billion (lower end)	€2,751.1 million
Research and development costs	€2.4 billion to €2.6 billion	€2.4 billion to €2.6 billion	€2,254.2 million
Sales and general administration costs	€700 million to €800 million	€600 million to €700 million	€599.0 million
Investments in property, plant, and equipment and intangible assets	€400 million to €500 million	€300 million to €400 million	€307.1 million

During the year ended December 31, 2024, a total of €2.8 billion in revenues was generated within the Group. This value is in the middle of the range of the initial forecast. Vaccination rates are stabilizing at an endemic level with the usual seasonal distribution. During the year ended December 31, 2024, vaccination rates stabilized at a lower level in the commercialized markets outside the EU. Our expectations in the middle of the range have been fulfilled.

At €2.3 billion, the expenses from research and development expenses expected for the year ended December 31, 2024 were around €200.0 million below the average of the initial forecast range. This is due to our ongoing portfolio management measures. The postponement of some expenses for approval studies from 2024 to 2025 also contributed to the result in this year. Investments were made in our focus areas, particularly in our mRNA cancer immunotherapies and our BNT327 product candidates.

We initially expected sales and general administration expenses of €700.0 million to €800.0 million for the year ended December 31, 2024. At €599.0 million, the actual expenses for the internal administrative and coordinating functions associated with the expansion of research and development, such as finance, human resources, and business development, were €151.0 million below the average of the forecast expenses. Overall, it can be said that we were able to successfully reduce our sales and administration expenses through active management. We ensure that we use our resources effectively and efficiently and focus on the most important areas. By systematically de-prioritizing and postponing projects, we were able to focus on our core initiatives and thus drive forward our achievements. We have also carefully controlled our expenditure and reduced external services and consulting, among other things, in order to ensure our financial stability.

Operating investments in property, plant, and equipment and intangible assets amounted to €307.1 million in the past financial year. Expenditure on the expansion and improvement of our research and development and production facilities and investments in IT infrastructure was therefore around €150.0 million below the average of the originally forecast range. This is mainly due to the postponement of planned investments due to short-term changes in priorities.

2.3 Net Assets, Financial Position, and Operating Results of the Group

2.3.1 Operating Results

Revenues

Our sales revenue mainly comprises commercial COVID-19 vaccine revenues in addition to revenue from a contract with the German government for pandemic preparedness. Revenue from contracts with customers fell by €1,067.9 million compared to the previous year, from €3,819.0 million to €2,751.1 million in the year ended December 31, 2024, as demand for our COVID-19 vaccine declined compared to the previous year. In addition, the shareable inventory write-downs of our collaboration partner Pfizer reduced our share of gross profit and thus negatively impacted our sales for the year ended December 31, 2024.

Cost of sales

The cost of sales fell by €58.5 million compared to the previous year, from €599.8 million to €541.3 million in the year ended December 31, 2024. The decrease mainly resulted from the recognition of lower costs in connection with reduced COVID-19 vaccine sales and includes Pfizer's share of our gross profit from our sales as well as inventory write-downs and write-offs recognized in connection with the introduction of a variant-adjusted COVID-19 vaccine and changes in demand.

Research and Development Expenses

	Years ended December 31,		Change	
(in millions €)	**2024**	**2023**	**€**	**%**
COVID-19 vaccine	236	313	(77.0)	(25)
Non-COVID-19 vaccine	2,018.2	1,470.1	548.1	37
Research and development costs[1]	**2,254.2**	**1,783.1**	**471.1**	**26**

[1] Breakdown according to the internal cost allocation logic.

Research and development expenses increased by €471.1 million compared to the previous year, from €1,783.1 million to €2,254.2 million in the year ended December 31, 2024. The increase is mainly due to the progressing clinical studies for pipeline candidates, such as antibody drug conjugates or our antibody and individualized cancer immunotherapy product candidates. Another reason for the increase was higher personnel expenses due to an increase in the number of employees.

Sales and Marketing Expenses

Sales and marketing expenses increased by €5.2 million compared to the previous year, from €62.7 million to €67.9 million in the year ended December 31, 2024. The increase is mainly due to higher expenses for setting up and improving the commercial IT platform and higher personnel costs due to an increase in the number of employees.

General and Administrative Expenses

General administrative expenses increased by €36.1 million compared to the previous year, from €495.0 million to €531.1 million in the year ended December 31, 2024.

The increase resulted in particular from higher expenses for purchased services in the IT area and higher personnel expenses due to an increase in the number of employees.

Other Operating Result

The other operating result fell by €482.9 million compared to the previous year, from a net negative amount of €188.0 million to a net negative amount of €670.9 million in the year ended December 31, 2024. During the year ended December 31, 2024, there was a negative effect in other operating income primarily from the settlement of contractual disputes and the associated expenses for such disputes, which exceeded the positive effects from currency translation.

Finance Result

The finance result increased by €140.9 million compared to the previous year, from €495.7 million to €636.6 million in the year ended December 31, 2024. Due to higher interest income from investments in securities, bank deposits, and bank balances, as well as from fair value adjustments from money market funds in the year ended December 31, 2024, the change is mainly due to increased finance income of €664.0 million (previous year: €519.6 million).

Income Taxes

Our tax expenses changed by €268.2 million from €255.8 million in the previous year to tax income of €12.4 million in the year ended December 31, 2024. Income taxes comprise actual tax income in the amount of €2.3 million (previous year: tax expense of €243.1 million) and deferred tax income of €10.1 million (previous year: deferred tax expense of €12.7 million).

In 2024, deferred tax assets are only recognized if the recognition criteria of IAS 12 are met as of December 31, 2024. Unrecognized deferred tax assets are remeasured at each reporting date and recognized to the extent that the recognition criteria of IAS 12 are met. The amount of deductible temporary differences, unused tax losses, and unused tax credits for which no deferred tax assets have been recognized on the balance sheet is €332.4 million as of December 31, 2024. As of December 31, 2024, we partially recognize deferred tax assets on the losses of our US tax group and partially of other companies.

Annual Result

During the year ended December 31, 2024, an annual loss of €665.3 million (previous year: annual profit of €930.3 million) was generated.

2.3.2 Financial Position

The objective of financial management is to ensure that capital is maintained and to provide liquidity for the growth of the companies and for research and development projects. Proceeds from commercial sales of our COVID-19 vaccine are our most important source of liquidity. Scenario and cash flow planning is used to determine liquidity requirements.

Capital Structure

As of December 31, 2024, our share capital comprised 248,552,200 voting bearer shares, of which 8,581,396 were held as treasury shares. The nominal value of our shares is €1.00 and each share carries one voting right at the Annual General Meeting. The financing of ongoing clinical studies and

the development and expansion of production capacities and commercialization of new formulations were primarily financed from our own funds.

Investments

During the year ended December 31, 2024, investments were made in securities in particular in order to invest the financial reserves profitably. In addition, investments in property, plant, and equipment totaling €287.9 million (previous year: €249.4 million) were made. The investments were mainly made in connection with new buildings in Germany and investments in the development of our international locations in Singapore, Rwanda, and Australia. Investments in intangible assets amounted to €115.2 million in the year ended December 31, 2024 (previous year: €505.0 million) primarily in connection with the acquisition of licenses as part of licensing and cooperation agreements. There were no company acquisitions in the year ended December 31, 2024. In the previous year, by contrast, €187.4 million was invested in intangible assets in connection with the acquisition of the subsidiary InstaDeep Ltd.

Depreciation on property, plant, and equipment amounted to €54.9 million in the year ended December 31, 2024 (previous year: €97.7 million) and impairment losses amounted to €58.1 million (previous year: nil), which is primarily due to an adjustment as part of the strategic production allocation structure. Regular amortization of intangible assets amounted to €54.8 million (previous year: €40.5 million) and impairment losses amounted to €83.3 million (previous year: nil), which is primarily due to an adjustment in the prioritization of product candidates in the overall portfolio.

In total, we spent €2,081.2 million on investing activities in the year ended December 31, 2024 (previous year: €6,954.5 million). These consist primarily of net investments in securities, reverse repurchase agreements, and bank deposits.

Liquidity

As of December 31, 2024, our cash and cash equivalents amounted to €9,761.9 million (previous year: €11,663.7 million), investments in current securities to €6,536.2 million (previous year: €4,885.1 million) and non-current securities to €1,061.1 million (previous year: €1,104.6 million), i.e. a total of €17,359.2 million (previous year: €17,653.4 million). The change in the year ended December 31, 2024 is mainly due to our investments in our research and development pipeline, the decline in payments received from commercial sales of our COVID-19 vaccine, and our share of the gross profit from commercial sales of our partner Pfizer's COVID-19 vaccine. The contractual settlement of the gross profit share is delayed by more than one calendar quarter. In addition, Pfizer's subsidiaries outside the United States have a different financial quarter. We receive a large proportion of these payments in U.S. dollars via our partner Pfizer, which means that we are exposed to concentration and currency risks – which we counter through hedging transactions. Operating activities, which mainly comprise the share of gross profit received and payments for research and development activities, generated a cash flow from operating activities of €207.7 million (previous year: cash flow of €5,371.4 million).

Net cash used in financing activities amounted to €45.9 million in the year ended December 31, 2024 (previous year: €778.6 million). The main component was cash outflows in connection with lease payments.

2.3.3 Net Assets

As of December 31, 2024, total equity and liabilities amounted to €22,529.7 million compared to €23,006.3 million as of December 31, 2023. The decrease was mainly due to lower receivables from Pfizer as a result of reduced COVID-19 vaccine sales and the developments explained below.

Current and Non-Current Assets

Compared to December 31, 2023, non-current assets increased by €247.2 million from €3,479.0 million to €3,726.2 million as of December 31, 2024. The increase resulted primarily from investments in property, plant, and equipment.

The decrease in current assets by €723.8 million from €19,527.3 million as of December 31, 2023 to €18,803.5 million as of December 31, 2024 is mainly due to the fact that receivables from our COVID-19 collaboration with Pfizer and receivables from our customers that we supply directly in our territory declined as a result of lower demand at the end of the year ended December 31, 2024 and to the fact that we invested more funds.

Equity

Compared to December 31, 2023, equity decreased by €834.8 million from €20,245.9 million to €19,411.1 million as of December 31, 2024. The decrease is mainly due to the loss for the year ended December 31, 2024. The equity ratio fell by 1.8 percentage points to 86.2% (previous year: 88.0%).

Current and Non-Current Liabilities

Compared to December 31, 2023, liabilities increased by €358.2 million from €2,760.4 million to €3,118.6 million as of December 31, 2024. The increase resulted primarily from obligations arising from the settlement of contractual disputes and the associated expenses for such disputes.

Off-Balance Sheet Commitments

The off-balance sheet commitments include the following:

(in millions €)	December 31, 2024	December 31, 2023
Commitments under purchase agreements for property, plant, and equipment	186.7	154.4
Contractual commitments in connection with the acquisition of intangible assets	1,193.1	1,721.1
Total	**1,379.8**	**1,875.5**

Contractual commitments in connection with the acquisition of intangible assets exist in relation to licensing and research and development cooperations. We have entered into commitments to make milestone payments as soon as certain targets are reached. Assuming that all milestone events are achieved, we would be obliged to pay up to €1,193.1 million as of December 31, 2024 (€1,721.1 million as of December 31, 2023) in connection with the acquisition of intangible assets. The amounts specified represent the maximum payments to be made and it is unlikely that they will all fall due. We have excluded milestone payments that are subject to licensing agreements with Biotheus, as these payments will be treated as intercompany transactions following the acquisition of Biotheus, which was completed in January 2025. The obligations arising from the acquisition of Biotheus are listed in Note 5 “Business combinations” of our Group. The amounts and the dates of the actual payments may

both vary considerably from those stated in the table, since the achievement of the conditions for payment is possible but uncertain. Other financial obligations from possible future sales-based milestone and license payments were not included in the table above.

The expected maturities of payment obligations from purchase agreements for property, plant, and equipment and contractual obligations in connection with the acquisition of intangible assets are as follows:

(in millions €)	Less than 1 year	1 to 5 years	More than 5 years	Total
Commitments under purchase agreements for property, plant, and equipment	109.0	77.7	—	186.7
Contractual commitments in connection with the acquisition of intangible assets	118.9	677.6	396.6	1,193.1
Total	**227.9**	**755.3**	**396.6**	**1,379.8**

2.4 Key Performance Indicators of the Group and BioNTech SE

2.4.1 Non-Financial Key Performance Indicators of the Group and BioNTech SE

Innovation continued to be classified as a key non-financial performance indicator in the year ended December 31, 2024 and was used for internal management purposes. Progress in research achievements, such as the initiation of approval-oriented studies and preparation of the first application for market approval, are a key performance indicator for our Company. We are working on proving the benefits of further treatment approaches clinically, further developing product candidates in studies with approval potential, and continuously expanding collaborations and production options in order to be able to offer innovative treatments to patients around the world.

BioNTech also supports the United Nations Sustainable Development Goals (SDGs). Through our business model, we are making a relevant contribution to supporting the third Sustainable Development Goal of the United Nations (SDG 3): ensuring healthy lives for all at all ages and promoting well-being.

2.4.2 Financial Key Performance Indicators of the Group and BioNTech SE

The following financial key performance indicators are in the focus of our operational business development management. We use the measures based on current exchange rates (not currency adjusted) and take effects from potential M&A activities or collaborations into account where these have been published.

Revenues

Total revenues mainly comprise expected commercial revenue, particularly in connection with our COVID-19 business as well as other revenue sources. Revenues are heavily influenced by the volumes available under the collaboration and the agreed upon purchase quantities. As our revenues represent our share of the gross profits of our collaboration partners, they are particularly influenced by the costs incurred in that context. Our revenues serve as a performance indicator of our commercial earning power.

Research and Development Expenses

Research and Development expenses are an indicator of our future earnings potential, as this depends heavily on the development of the clinical pipeline and responsible use of the financial resources generated. This performance indicator mainly includes expenses for the development of our clinical product candidates, for early, exploratory research, and structural expenses in the research and development area. In 2024, we increasingly focused our portfolio on product candidates in late clinical development phases (Phase 2 and Phase 3). This is also reflected in a focus of our capital resources on the corresponding product candidates in the areas of oncology and infectious diseases. At the same time, this focus reflects our goal of continuously increasing the value of our portfolio by promoting promising therapies. Late-stage studies require significant financial investment, which we provide as part of active portfolio management, combined with consistent cost control.

Sales, General and Administrative Expenses

These costs include sales and marketing costs as well as general and administrative costs. We use this measure to manage the costs associated with the expansion of the sales and marketing organization to ensure the necessary infrastructure and digital capacity for future market-ready products, as well as to manage the internal administrative and coordinating functions associated with the expansion of research and development, such as finance, human resources, or business development, with regard to the associated cost development.

Operating investments in Property, Plant, and Equipment and Intangible Assets

Operating investments in property, plant, and equipment and intangible assets include expenditure for the acquisition of property, plant, and equipment and for the acquisition of intangible assets and rights of use, unless they are made as part of a merger & acquisition (M&A). These mainly include expenditure on the expansion and improvement of our research and development and production facilities and investments in state-of-the-art IT infrastructure to support the Company in all digitalization projects.

2.5 Overall Statement on the Business Development and Position of the Group and BioNTech SE

We are a global immunotherapy company pioneering the development of novel medicines against cancer, infectious diseases and other serious diseases. These activities still require high investments at this stage. In addition to financial metrics, we continue to measure our business success primarily by our research performance, and in particular by the achievement of the targets we have set. Together with collaboration partners, we have generated a robust and diversified oncology and infectious disease pipeline. We continued to develop our pipeline in the year ended December 31, 2024 and made progress in line with expectations and plans. We are well equipped to continue BioNTech's successful development in 2025 in a market environment that remains challenging.

3 Management Report of BioNTech SE

3.1 Supplementary Notes According to the German Commercial Code (HGB)

BioNTech SE is the parent company of the BioNTech Group and has its headquarters in Mainz, Germany. In addition, the BioNTech Group comprised 41 companies at the end of the year ended December 31, 2024. Key management functions for the Group such as corporate strategy, risk management, investment management tasks, executive and financial management, and communication with important stakeholders of the Group are the responsibility of the Management Board of BioNTech SE. BioNTech SE generated the majority of Group sales with its operating activities, particularly in connection with Pfizer, which were concluded by BioNTech SE as part of the COVID-19 vaccine program.

BioNTech SE is not managed separately using its own performance indicators, as the Company is integrated into the Group management. The notes provided for the Group apply. The economic conditions of BioNTech SE essentially correspond to those of the BioNTech Group and are described in detail in section 2.

3.2 Net Assets, Financial Position and Operating Results of BioNTech SE

3.2.1 Operating Results

	Years ended December 31,	
(in millions €)	**2024**	**2023**
Revenues	2,224.4	3,270.1
Cost of Sales	(218.2)	(250.0)
Gross profit on revenues	**2,006.2**	**3,020.1**
Research and development expenses	(2,396.8)	(1,743.6)
Sales and marketing expenses	(62.0)	(29.4)
General and administrative expenses	(746.8)	(535.1)
Other operating income	796.4	299.5
Other operating expenses	(1,416.9)	(315.6)
Operating profit / (loss)	**(1,819.9)**	**695.9**
Income from profit transfer	309.5	184.6
Income from other securities and loans classified as financial assets	53.8	29.7
Other interests and similar income	641.4	366.7
Interest and similar expenses	(17.6)	(78.0)
Expenses from loss transfer	(111.5)	(166.2)
Write-downs on financial assets and current securities	(190.9)	—
Profit / (Loss) before tax	**(1,135.2)**	**1,032.7**
Income taxes	6.7	(233.2)
Net profit / (loss)	**(1,128.5)**	**799.5**

Revenues

Revenue fell by €1,045.7 million compared to the previous year, from €3,270.1 million to €2,224.4 million in the year ended December 31, 2024. Commercial sales decreased due to lower demand for our COVID-19 vaccine and are largely attributable to the recognition of sales under the collaboration agreement with Pfizer, with which BioNTech SE is a contractual partner.

Cost of Sales

Cost of sales fell by €31.8 million year-on-year from €250.0 million to €218.2 million in the year ended December 31, 2024 as a result of the decline in COVID-19 vaccine sales. Cost of sales essentially include the share of our gross profit that Pfizer receives as a collaboration partner on the basis of our sales. In addition, sales-related licensing costs for third-party intellectual property contribute to the cost of sales.

Research and Development Expenses

From the year ended December 31, 2023 to the year ended December 31, 2024, research and development expenses increased by €653.2 million from €1,743.6 million to €2,396.8 million. The increase is mainly due to the progressing clinical studies for pipeline candidates, such as antibody drug conjugates or our antibody and individualized cancer immunotherapy product candidates. Another reason for the increase was higher personnel expenses due to an increase in the number of employees.

General and Administrative Expenses

From the year ended December 31, 2023 to the year ended December 31, 2024, general administrative expenses increased by €211.7 million from €535.1 million to €746.8 million. The increase is mainly due to higher expenses for legal and consulting expenses and for setting up and improving the commercial IT platform, as well as an increase in wages and salaries, social benefits, and social security expenses as a result of the increase in the number of employees.

Other Operating Result

The other operating result fell by €604.4 million compared to the previous year, from a negative net result of €16.1 million to a negative net result of €620.5 million in the year ended December 31, 2024. During the year ended December 31, 2024, there was a negative effect in other operating income primarily from the settlement of contractual disputes and the associated expenses for such disputes, which exceeded the positive effects from currency translation.

Finance Result

The finance result, consisting of the effects from the profit transfer and interest income and expenses, increased by €347.9 million compared to the previous year, from a positive net result of €336.8 million to a positive net result of €684.7 million in the year ended December 31, 2024. The increase resulted in particular from net interest income, which improved by €359.2 million year-on-year from €318.4 million to €677.6 million, mainly due to interest income from securities in the year ended December 31, 2024. The profit transfer from affiliated companies included in the finance result (net profit transfer of €198.0 million; previous year: net profit transfer €18.4 million) had an additional impact on the finance result.

Income Taxes

Income taxes realized during the year ended December 31, 2024 amounted to €6.7 million (previous year: tax expense of €233.2 million). Income taxes consist of actual tax income in the amount of €6.7 million (previous year: tax expense of €233.2 million) and no deferred tax expense or deferred tax income (previous year: nil).

Net Profit / (Loss)

During the year ended December 31, 2024, a net loss for the year of €1,128.5 million (previous year: net profit for the year of €799.5 million) was generated.

3.2.2 Financial Position

The objective of BioNTech SE's financial management is essentially identical to that of the Group and involves providing liquidity for the growth of the Group companies.

Capital Structure

As of December 31, 2024, our subscribed capital comprised 248,552,200 bearer shares with voting rights, of which 8,581,396 were held as treasury shares.

Investments

During the year ended December 31, 2024, total investments of €1,813.4 million (previous year: €2,598.1 million) were made. This amount was made up of investments in property, plant, and equipment totaling €56.5 million (previous year: €59.2 million), investments in intangible assets in the amount of €147.3 million (previous year: €667.2 million), and in particular investments in securities held as fixed assets and shares in affiliated companies and other loans in the amount of €1,609.6 million (previous year: €1,871.7 million).

Depreciation on buildings, other equipment, operating and office equipment amounted to €22.5 million in 2024 (previous year: €21.4 million). Amortization of intangible assets amounted to €278.3 million (previous year: €63.9 million), while impairments amounted to €160.0 million, which is primarily due to an adjustment in the prioritization of product candidates in the overall portfolio.

Liquidity

As of December 31, 2024, our cash and cash equivalents amounted to €9,338.9 million (previous year: €11,409.5 million), securities held as fixed assets to €2,443.2 million (previous year: €1,326.4 million) and other securities to €5,104.6 million (previous year: €4,662.6 million), i.e. a total of €16,886.7 million (previous year: €17,398.5 million). The change in the year ended December 31, 2024 is mainly due to our investments in our research and development pipeline, the decline in payments received from commercial sales of our COVID-19 vaccine, and our share of the gross profit from commercial sales of our partner Pfizer's COVID-19 vaccine. The contractual settlement of the gross profit share has a temporal offset of more than one calendar quarter. In addition, Pfizer's subsidiaries outside the United States have a different financial quarter. We receive a large portion of these payments in U.S. dollars via our partner Pfizer, which means that we are exposed to concentration and currency risks – which we counter through hedging transactions. Operating activities, which mainly comprise the share of gross profit received and payments for research and development activities, generated a cash flow

from operating activities of minus €1,269.9 million (previous year: positive cash flow of €4,514.8 million).

Net cash generated from financing activities amounted to €1,274.9 million in the year ended December 31, 2024 (previous year: minus €813.4 million). The main component was cash flows in connection with cash pool obligations to subsidiaries.

3.2.3 Net Assets

(in millions €)	December 31,	December 31,
Assets	**2024**	**2023**
Fixed assets		
Intangible assets	543.6	674.6
Property, plant and equipment	169.8	136.5
Financial assets	3,728.7	2,541.0
Total fixed assets	**4,442.1**	**3,352.1**
Current assets		
Inventories	1.1	1.2
Receivables and other assets	3,529.2	2,813.9
Other securities	5,104.6	4,662.6
Cash on hand and at banks	9,338.9	11,409.5
Total current assets	**17,973.8**	**18,887.2**
Deferred expenses	**163.7**	**216.3**
Assets arising from overfunding of pension provisions	**2.2**	**1.8**
Total assets	**22,581.8**	**22,457.4**
Equity and liabilities		
Equity		
Share capital	248.6	248.6
Capital reserve	778.7	695.6
Treasury shares	(8.6)	(10.8)
Retained earnings	9,845.1	9,845.1
Accumulated profit	8,232.5	9,361.0
Total equity	**19,096.3**	**20,139.5**
Provisions		
Tax provisions	1.2	525.1
Other provisions	431.5	571.7
Total provisions	**432.7**	**1,096.8**
Liabilities		
Trade payables	343.0	254.2
Liabilities to affiliated companies	1,256.3	485.8
Other liabilities	1,193.5	93.4
Total liabilities	**2,792.8**	**833.4**
Deferred income	**260.0**	**387.7**
Total equity and liabilities	**22,581.8**	**22,457.4**

As of December 31, 2024, total equity and liabilities amounted to €22,581.8 million compared to €22,457.4 million as of December 31, 2023. Cash on hand and bank balances from our COVID-19 collaboration with Pfizer and the payments received from the COVID-19 vaccine sales of our subsidiaries via the profit and loss transfer agreements make up a significant part of the balance sheet. The changes in our total equity and liabilities are mainly due to the following developments:

Fixed Assets and Current assets

Compared to December 31, 2023, fixed assets increased by €1,090.0 million from €3,352.1 million to €4,442.1 million as of December 31, 2024. In addition to accruals in the area of advance payments, the increase in financial assets is attributable to investments in securities.

Compared to December 31, 2023, current assets decreased by €913.4 million from €18,887.2 million as of December 31, 2023 to €17,973.8 million as of December 31, 2024. The decrease was mainly due to a reduction in cash and cash equivalents.

Equity

Compared to December 31, 2023, equity decreased by €1,043.2 million from €20,139.5 million to €19,096.3 million as of December 31, 2024. The decrease was primarily due to the net loss generated in the year ended December 31, 2024. The equity ratio fell by 5.1 percentage points to 84.6% (2023: 89.7%).

Provisions and Liabilities

Compared to December 31, 2023, provisions and liabilities increased by €1,295.3 million from €1,930.2 million to €3,225.5 million as of December 31, 2024. The increase is mainly due to the settlement of contractual disputes in the amount of €1,148.0 million and a decrease in provisions for outstanding invoices of €138.9 million.

Off-Balance Sheet Commitments

Contingent liabilities relate to potential future events, the occurrence of which would lead to an obligation. As of the reporting date, contingent liabilities from guarantees amounted to €676.7 million (previous year: 642.8 million), all of which are entirely in respect of affiliated companies. The risk of utilization is considered to be low due to the central management of the subsidiaries, taking into account the Group's good financial position.

Other financial obligations include the following rental and leasing obligations:

(in millions €)	**Less than 1 year**	**1 to 5 years**	**More than 5 years**	**Total**
Rental agreements	18.8	53.3	18.1	**90.2**

The advantages of rental and leasing contracts lie in the optimization of liquidity. No significant risks are discernible.

There are also other financial obligations in connection with the purchase of property, plant, and equipment and intangible assets:

(in millions €)	Less than 1 year	1 to 5 years	More than 5 years	Total
Commitments under purchase agreements for property, plant, and equipment	13.1	—	—	**13.1**
Contractual obligation to acquire intangible assets	168.9	1,047.3	583.3	**1,799.5**
Total	**182.0**	**1,047.3**	**583.3**	**1,812.6**

The financial obligations in connection with the purchase of intangible assets result from the license and collaboration agreements concluded and the resulting obligations to make milestone-based payments to the collaboration partner, together with the contractual obligation from purchase agreements for property, plant, and equipment. Provided that all contractually agreed milestones are reached, the Company has undertaken to pay up to €1,812.6 million as of December 31, 2024.

3.3 Forecast, Opportunity and Risk Report

The business development of BioNTech SE is essentially subject to the same risks and opportunities as the BioNTech Group, as BioNTech SE participates in the risks of the Group companies through its shareholdings. As a result of the BioNTech Group's centralized financial management, all financing transactions are primarily processed via BioNTech SE. As the parent company of the BioNTech Group, BioNTech SE is integrated into our Group-wide risk management system.

3.4 Relationships with Affiliated Companies

Final declaration of the Management Board of BioNTech SE on the report on relationships with affiliated companies for the year ended December 31, 2024 (dependent company report pursuant to Section 312(3) sentence 3 AktG):

"According to the circumstances known to us at the time when the legal transactions were carried out or the actions were taken, BioNTech SE received appropriate consideration for each legal transaction and was not disadvantaged. In the financial year, no actions were taken or omitted at the instigation or in the interest of ATHOS KG or its affiliated companies in the period from January 1 to December 31, 2024."

4 Forecast, Opportunity and Risk Report

4.1 Forecast Report

As a company, we are part of the pharmaceutical and biotechnology industry, which is characterized nationally and internationally by its strength in innovation. The growth prospects for the sector are seen as good, driven by its independence from economic cycles, global demographic change, and medical and technological progress. Based on our proprietary mRNA technology, we were the first company in the world to develop a highly effective and safe vaccine against COVID-19 in compliance with scientific standards within a year and then to successfully market it globally together with our collaboration partners. This illustrates our ability to develop and market medicines and therapies based on innovative technologies that can provide added value for patients and society.

For the 2025 financial year, we expect Group sales of between €1.7 billion and €2.2 billion.

The sales forecast mainly includes commercial sales from our COVID-19 vaccine business and is underpinned by various assumptions.

These include expected deliveries under existing or agreed supply contracts and expected sales in the context of conventional commercial orders. Sales revenues are heavily influenced by purchase volumes and price trends. The regulatory recommendations to adapt COVID-19 vaccines to address recently circulating variants or sublines of SARS-CoV-2 also continue to have an impact. We expect our sales to be determined by the approval of our COVID-19 vaccine in the second half of the year. As our sales revenues represent our share of the gross profits of our collaboration partners, they are particularly influenced by the costs incurred in that context. For the 2025 financial year, we have reflected expected devaluations and other charges from our cooperation partner Pfizer amounting to 15% of our gross profit share. In the long term, we aim to generate sustainable sales from the COVID-19 vaccine program and maintain our leading position in the development and marketing of COVID-19 vaccines. In the future, we will continue to work with Pfizer to create the conditions to flexibly adapt the vaccine to other potential future mutations as necessary, to continuously optimize the formulations, and to make the product available to other patient groups by expanding the indications.

In addition to COVID-19 vaccine-related revenue, we plan to generate further sources of income, including from the framework agreement signed with the Federal Republic of Germany on pandemic preparedness, the production and supply of mRNA-based vaccines, and revenue from external sales by our subsidiaries InstaDeep Ltd, JPT Peptide Technologies GmbH, and BioNTech Individualized mRNA Manufacturing GmbH.

Potential changes in laws or government policies, at the state or national level, as well as changing public opinion on vaccines and mRNA technology in the United States and globally, could adversely affect BioNTech's COVID-19 vaccine revenues and operating results.

With the successful production and marketing of our COVID-19 vaccine, we have built up a great deal of expertise and a global network to develop, produce, and market products worldwide. Our future earnings potential depends heavily on the development of the clinical pipeline and responsible use of the financial resources generated. We have a broadly diversified portfolio of product candidates based on a cross-platform approach to technology. They form the basis for our strategy of developing innovative combination therapies. We intend to reinvest the proceeds from the sale of our COVID-19 vaccine in our advanced clinical candidates. In the 2025 financial year, we expect to make significant progress in several clinical studies in the oncology pipeline, such as our key clinical product candidate BNT327. We will use the potential of our pipeline to strengthen BNT327, in particular through combinations with our ADC candidates. We are also continuing to develop our COVID-19 vaccine, including in combination with flu protection. In line with our cost-conscious portfolio optimization strategy, we expect to reduce our expenditure on research and development outside our focus area. Overall, we expect our research and development expenditures for the 2025 financial year to amount to between €2.6 billion and €2.8 billion.

Expenses for sales and general administrative expenses in the 2025 financial year are expected to be between €650.0 million and €750.0 million. The costs for internal administrative and coordinated functions such as finance, human resources, and business development are expected to remain constant. Distribution costs will increase as part of the preparations for the market launch of new products.

For the 2025 financial year, we expect operating investments in property, plant, and equipment and intangible assets of between €250.0 million and €350.0 million. This includes expenditure for the expansion and improvement of our research and development and the manufacturing facilities described above, as well as further investments in IT infrastructure that will support the Company in its bio-digital transformation and our focus as a data-driven company.

Our forecasts and statements about the future include the effects of license agreements, cooperations, and potential M&A transactions, insofar as these are in the public domain. The forecast does not take into account any potential effects that may arise from the results of current or future legal disputes or related judgments or settlements as well as certain potential one-time effects and charges related to portfolio optimization. Yet unknown and/or unquantifiable external risks and related activities are not included. Based on the expected sales margin and taking into account the cost of sales, research and development costs, and all other costs, we do not expect to be profitable in 2025.

During the year ended December 31, 2024, we strengthened our technology platforms, our digital capabilities, and our infrastructure through corresponding investments, selected strategic partnerships, licensing, and acquisitions in order to create long-term added value for patients, shareholders, and society. In 2025, we aim to further advance our oncology pipeline with the aim of launching our first oncology product on the market in 2026 and establishing ourselves as an innovative oncology company with several approved products in various indications by 2030.

4.2 Risk Report

4.2.1 Risk Governance Framework

Risk Management System

As a next-generation immunotherapy company, we are exposed to numerous uncertainties and changes resulting from new research approaches, for example. These uncertainties can have a significant impact on the planned business success. At BioNTech, we are aware that it is necessary to take risks in order to take advantage of opportunities that arise. We have therefore established a risk management system (RMS) that takes a systematic approach to identifying, assessing, managing, mitigating, communicating, and tracking risks.

Our RMS is a central element of our value-oriented corporate management and applies to all divisions, subsidiaries, and locations throughout the Group. Risk management is overseen by our Enterprise Risk Management team, which is based in the Business Planning & Analysis department and reports directly to the CFO.

Risk Management Process

Our Management Board and Supervisory Board jointly determine the risk strategy and risk appetite. Our company-wide risk management process covers strategic, operational, financial, legal, compliance, sustainability, and reputational risks. We continuously review and optimize our systems to ensure that we also systematically cover environmental, climate, and human rights aspects in order to comply with the EU Corporate Sustainability Reporting Directive (CSRD). In the future, BioNTech may be required to report on the impact of its activities on people and the environment and on the impact of sustainability aspects on our Company in accordance with the CSRD.

Our risk cycle is run through every six months. Our risk owners identify and assess the risks and decide which measures are to be taken. We also assess the progress of existing measures as part of the risk cycle. Enterprise Risk Management reports regularly to the Management Board on the overall risk situation. Ad hoc risks are continuously recorded, evaluated, and reported to the Management Board immediately if a threshold value is exceeded.

Risk Identification

The risk identification process at BioNTech is systematic and includes the recording and analysis of new risks and regular review and adjustment of known risks.

Individual risks are managed and quantitatively assessed by risk owners by determining the probability of occurrence and expected financial loss. Risks are also assessed qualitatively in terms of reputational damage and legal relevance.

A risk management tool supports risk identification and management. The risks are cataloged along the Risk Universe and aggregated using a Monte Carlo simulation in order to estimate the entire range of possible developments. Risks are managed by comparing our risk-bearing capacity, whereby key figures such as our equity, EBIT, and cash and cash equivalents in the short, medium, and long term are compared with the value-at-risk as an aggregated overall risk. The risks are assessed financially and categorized according to probability of occurrence and potential damage. Depending on the combination of these two characteristics, the risks are categorized as high, medium, or low. A risk is

classified as high if a significant loss of resources and time is imminent and will have a correspondingly significant impact on the net assets, financial position, and operating results. These risks tend to have a higher probability of occurrence and impact. It is important to take measures to reduce or avoid the risk. Medium risks generally do not have serious consequences for the net assets, financial position, and operating results and can also be mitigated by means of appropriate measures. Low risks are comparatively easy to manage. Nevertheless, it is important to monitor both medium and low risks and, if necessary, take measures to reduce them or keep them at a low level. The order of risks within the categories reflects the current assessment of the relative extent of the risk.

BioNTech continuously monitors identified risks and makes individual decisions on how to handle them. This involves deciding whether or not to accept the risk, whether it can be covered by insurance or mitigated by other measures, for example.

Risk Reporting

The aim is to identify, monitor, and manage our risks at an early stage. Risks and their impact on the Company are presented transparently in order to facilitate effective management of those risks and thus data-related decision-making.

Enterprise Risk Management prepares an overall risk report for the Management Board twice a year. The Management Board then informs the Audit Committee. If unexpectedly high risks arise – over and above the regular reporting of significant risks – these are reported directly to the Management Board. The Management Board is informed about human rights risk management and potential human rights risks once a year in the fourth quarter by the Human Rights Officer in accordance with the German Supply Chain Due Diligence Act (LkSG). The Audit Committee of our Supervisory Board reviews the effectiveness and appropriateness of the risk management system and also uses the Internal Audit department for this purpose.

Risk Culture

BioNTech promotes an open risk culture and encourages all employees to report new risks directly to their supervisors, Enterprise Risk Management, or anonymously via a reporting portal. Six-monthly training courses and specific training on human rights issues are offered to all risk owners and their teams of experts, and training materials are available to all employees via the intranet. The information collected can be forwarded directly to the relevant risk owner. The risk awareness culture is supported by communication and events.

Three Lines Model

BioNTech uses the “Three Lines Model” for systematic management of risks. The aim is to anticipate possible developments at an early stage and to record, assess, manage, and publicize the resulting risks systematically. The governance structure consists of three lines. The first line is concerned with ensuring operational compliance with the requirements defined in the second line and carrying out checks as part of day-to-day activities. In addition to risk management, the second line also includes the internal control system (see section 4.2.3), the compliance & ethics program (see section 5.4 Integrity and ethics), and the Human Rights Officer with the statutory task of monitoring risk management in accordance with the LkSG. This line provides systems and expertise to detect risks systematically, defines the control framework, and specifies guidelines. Internal Audit acts as the third line. This line checks the effectiveness of the first two lines and ensures that risk management meets the requirements (see section 4.2.3).

4.2.2 Risks

The risks with the greatest financial impact are listed below. The list is presented in descending order according to the assessment of financial risk, with the exception of legal and IP-related risks, which are subject to the assessment uncertainties described in section 18 of our notes.

Legal and IP-related Risks

Legal risks include product liability claims, infringement of intellectual property, possible breaches of contract, and securities lawsuits. Materialization of these risks could damage our reputation and have a negative impact on our Company's success. The associated contingent liabilities and disputes relating to intellectual property, contract interpretation, and product-related lawsuits are presented in more detail in section 18 of our notes. We currently do not believe that any of these matters will have a material adverse effect on our financial position and continue to monitor the status of claims. However, if unfavorable court decisions are made or out-of-court settlements are reached, this could have a significant impact on our net assets, financial position, and operating results.

Product Development and Launch Risks

BioNTech's future success depends largely on the successful development and commercialization of our development candidates and the marketing of our next products. Naturally, research and development and the supervision of clinical trials are associated with major risks. For scientific, procedural, or regulatory reasons, product candidates may not be developed to market maturity, or only with a delay. Similarly, despite optimal preparation, unforeseeable complications or side effects can occur during clinical trials, which in the worst case can lead to legal disputes and compensation payments. We constantly monitor the development of our industry and the market in order to address uncertain factors during the research and development of our product candidates accordingly. We are also continuously expanding our commercial specialist area, extending our functional expertise, and further developing processes in order to consolidate our position as a major market player. Scaling of the IT landscape and the commercial model and the interaction between Medical and Public Affairs are time-critical components. We are strengthening our sales force and expanding the necessary capacities in order to develop a scalable commercial model that can also be used in various countries and regions. The financial risk is considered to be high and primarily has medium and long-term effects.

Risks from the Portfolio Optimization Strategy

BioNTech is in a constant process of strategic adjustments, in particular through investment in specific key areas, while consolidating and optimizing capacities in other areas. Despite possible job cuts at various locations, the total number of employees is expected to remain stable over the next three years in view of measures to expand capacity elsewhere. If we are unable to implement our plans as envisaged, we are exposed to certain risks. Measures could be of less benefit than originally estimated, for example, they could take effect later than assumed, or they could fail to have any effect at all. Growth in strategically important areas also increases the complexity of our processes and interfaces. Each of these factors – alone or in combination – could have a negative impact on our business, net assets, financial position, and operating results. To mitigate these risks, we have established a dedicated project team to monitor and sustainably implement the strategic initiative. The financial risk is considered to be high and will have medium and long-term effects.

Risks in relation to our activities in China

BioNTech's global expansion means that regulatory requirements are increasing, particularly as a result of working with collaboration partners in various countries, including China. Additional requirements and laws must be taken into account, such as data protection, animal welfare, and the protection of human rights. The financial risk is assessed as medium and primarily has medium and long-term effects.

Risks to Commercial Products/the Comirnaty market

Our COVID-19 vaccine is our first commercial product and has played an important role in combating the pandemic. However, forecast sales may be subject to fluctuations, for example due to changes in market demand or adjustments to changing distribution channels. We continuously monitor market and industry developments and are in contact with government representatives and cost bearers. The contracts with collaboration partners are based on certain expectations, but the actual results may differ. The financial risk is assessed as medium and primarily has medium and long-term effects.

Risks from M&As and their Integration

At BioNTech, we focus on continuous growth and therefore carry out various transactions and mergers in order to position ourselves strategically. The integration of new companies into the BioNTech family is an important part of this process and delays can have an impact both financially and on the timing of our product pipeline. Improved processes and a larger specialist department counteract this risk. The financial risk is assessed as medium.

Risks from IT Security and Data Protection

We take various measures to ensure IT security and data protection at BioNTech. This includes protection against unauthorized access to our supply chain and infrastructure and against extortion, denial of service attacks, fraud, phishing, or a global IT blackout. We continuously improve our security policies and guidelines, carry out IT risk and application security assessments, use a vulnerability scanner, train our employees, and have set up an incident management system. The protection of intellectual property and personal data is also important to us. We use various measures such as policies and guidelines, role concepts, training, and data management. The remaining financial risk is classified as medium.

Risks in Connection with extreme Events

Our risk management also takes into account very rare events with a potentially major impact on BioNTech (so-called tail events). Although these events are very unlikely, we cannot completely rule them out. They include sabotage, political or internal unrest in the vicinity of our branches, or a sudden loss of reputation from outside. We use various measures such as our operational continuity management to counteract these risks. The financial risk is assessed as medium.

Compliance Risks

In the area of compliance and business ethics, our focus is on combating corruption, bribery, and money laundering, cooperation with healthcare professionals, and the avoidance of conflicts of interest and discrimination. We have established processes and various training courses and guidelines to deal with these issues. In particular, BioNTech's global expansion, the various subsidiaries, especially in the USA and China, and the increased volume of goods increase the risk in

the area of import and export compliance. The supply of clinical study material in particular requires stable and smooth processes. The continuous expansion of our global export control function counteracts this risk of regulatory violations and reputational damage. The remaining financial risk is classified as medium.

In addition to the above risks with the greatest potential financial impact, the following sustainability risks also exist:

Sustainability Risks

Through cooperation between the Risk Performance and Corporate Social Responsibility (CSR) departments, material sustainability risks have been identified and increasingly integrated into the company-wide risk management system since the year ended December 31, 2023. In 2024, the focus was again on climate risks in accordance with the Task Force on Climate Related Financial Disclosures (TCFD) and human rights risks in accordance with the Supply Chain Due Diligence Act (LkSG). The financial impact on BioNTech is estimated to be low.

4.2.3 Internal Control System and Internal Audit

Internal Control System

Our internal control system (ICS) aims to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external reporting purposes in accordance with International Financial Reporting Standards (IFRS) or the German Commercial Code (HGB). By listing our shares on the Nasdaq Global Select Market, we have developed our internal control system based on SOX regulations (Sarbanes-Oxley Act Section 404).

The ICS control process is mapped onto an ICS lifecycle. This consists of the six consecutive or parallel sub-steps shown below:

- Scoping phase
- Effectiveness test
- Reconciliation of audit results
- Activity monitoring
- Quality assurance of self-assessments
- ICS reporting

The audit results are regularly communicated to the Management Board and Supervisory Board and released as part of the annual financial statements. The scope of the ICS is defined across all processes. The audit results include not only topics relating to financial reporting, but also more extensive processes and topics from general areas such as treasury, taxes, IT, compliance, and operational topics.

Based on the COSO model (Committee of Sponsoring Organizations of the Treadway Commission), our internal control system for financial reporting is divided into five components: control environment, risk assessment, control activities, information and communication, and monitoring of the internal control system.

The effectiveness of the internal control system for financial reporting is regularly reviewed and assessed using the COSO components in accordance with Section 404 SOX. As of December 31, 2024, the control system for financial reporting was assessed as effective by our Management Board.

System-related limitations may arise in the design of the internal control system for financial reporting and in connection with the diligence of implementation of the controls, with the result that there is no absolute certainty that the objectives of financial reporting will be achieved and that misstatements will always be prevented or detected.

Internal Audit

Internal Audit reports to the CEO and the Audit Committee. As an independent auditing and advisory body without operational responsibility, Internal Audit reviews organizational units, processes, corporate functions, applications, and projects on behalf of the Management Board and the Audit Committee according to a risk-based selection process. Various audits were carried out in the year ended December 31, 2024. Audit findings result in agreed measures that are monitored by Internal Audit until they are fully implemented. Regular reporting on the implementation status of the agreed measures to the Audit Committee and the Management Board has been established.

4.2.4 Assessment of the Internal Control System and Risk Management System by the Management Board

The company-wide risk situation is evaluated every six months at Management Board meetings. The results of the internal control process are presented to the Audit Committee on a quarterly basis and an overall statement is made about the appropriateness and effectiveness of the ICS and RMS. Based on this, the Management Board has no evidence that our ICS and RMS were not appropriate or effective in their entirety as of December 31, 2024.

We are certain that we can continue to master challenges and exploit opportunities in the future without taking unacceptably high risks. In doing so, we strive for a balanced relationship between opportunities and risks. Our aim is to increase added value for our stakeholders by analyzing and seizing new opportunities.

4.2.5 Assessment of the Overall Risk Situation by the Management Board

The assessment of the overall risk situation is the result of a consolidated view of all significant risk categories and individual risks.

At the time of preparation, there are no risks to the continued existence of BioNTech SE and its affiliated subsidiaries from the risks mentioned above.

4.3 Opportunities Report

In pursuit of our vision, we are focused on transforming the treatment of cancer and infectious diseases and creating long-term value for patients, society, and our shareholders through innovative and personalized medicines and therapies that harness the full potential of the human immune system. Based on the key building blocks listed below, we believe we are well positioned to provide people around the world with access to our therapies and medicines and to ensure that they benefit from them.

Portfolio strategy

The basis for the delivery of our vision is our expertise and many years of experience in the field of immunology. We are a multi-technology company with particular expertise in the development of mRNA-based therapeutics, immunomodulators such as mono- and bispecific antibodies, and targeted therapies such as ADCs and CAR-T cell therapies. We believe that by combining complementary treatment methods, we can fully exploit the potential of each individual technology. By combining these technologies, we aim to develop precise and personalized treatments that increase the likelihood of therapeutic success, reduce the risk of therapy resistance, and address a larger patient population. We are using AI and machine learning to further expand our pipeline, identify and optimize molecules, and accelerate workflows to achieve seamless AI integration within our Company.

Our diversified portfolio consists of product candidates from different drug classes that focus on the treatment of cancer and infectious diseases. Today, our pipeline consists of 18 clinical programs in oncology and seven clinical programs in infectious diseases. In 2024, we advanced several product candidates into mid- and late-stage development, i.e. Phase 2 and 3 clinical trials, including mRNA vaccines and next-generation immunomodulators. A particular focus in immunomodulators is on BNT327, our bispecific anti-PD-L1/VEGF-A antibody, which together with our mRNA cancer immunotherapies is a key priority in our pipeline. In addition, we and our partners have reported on data from our entire portfolio at several medical conferences and published manuscripts in specialist journals. We believe we are well positioned to develop the next generation of immunotherapies that have the potential to change the treatment paradigms for cancer, infectious diseases, and other serious illnesses and significantly improve clinical outcomes for patients.

Our long-term vision in oncology is to expand the available treatment options for cancer patients. In order to best meet the needs of cancer patients, we have set ourselves the goal of covering the entire spectrum of cancer diseases: We want to develop and market new therapies for patients, ranging from adjuvant therapy to the treatment of metastatic cancer. We aim to achieve this by building a diverse clinical portfolio with modalities that have synergistic mechanisms of action. With our combination strategy, we aim to address cancer in a polyspecific way and potentially cure it. Our strategy has enabled us to build a unique pipeline comprising technologies and candidates with disruptive potential, focusing on therapeutic approaches with pan-tumor potential such as personalized mRNA cancer immunotherapies and the bispecific antibody candidate BNT327. We see these two focus programs as key value drivers for our Company in terms of our ambition to become an integrated biopharmaceutical company with multiple products and revenue streams. We therefore plan to invest significantly in the clinical development and commercialization of these therapies.

We continue to pursue cost-efficient value creation by clearly prioritizing our pipeline. We plan to invest in specific key areas while consolidating and continuously optimizing our capacities in other areas, including the establishment of specialized centers of excellence for mRNA production and consolidation and adjustment of capacities in administrative functions and preclinical research in Europe and North America. This may lead to job cuts at various locations. Overall, the total number of employees is expected to remain fairly stable over the next three years due to investments in growth areas. Planned investments in the expansion of research, development, production, and marketing capacities therefore represent an opportunity. This includes the establishment of a production facility for individualized mRNA immunotherapies in Mainz, the acquisition of Biotheus, and the strategic expansion of the workforce in certain areas worldwide.

The aim is to build on the successes of 2024, to continue to put progress at the heart of our strategy, and to focus on our candidates with the highest potential.

Research and Development Employees

As of December 31, 2024, the BioNTech Group employed 6,946 people, 41.0% of whom worked in research and development. As of December 31, 2023, 42.5% of the Group's 6,292 employees worked in research and development. BioNTech SE had 3,389 employees as of December 31, 2024, (December 31, 2023: 3,166) employees, 54.4% of whom work in research and development (December 31, 2023: 55.1%). The high number of employees in the R&D division gives us the opportunity to continue and accelerate basic scientific research and, above all, clinical research, particularly with regard to our approval-related studies.

Production

We continuously ensure that we have a production network that meets our production requirements. We are setting up focused centers of excellence for early-stage mRNA production in Idar-Oberstein and cell & gene production in Gaithersburg, while our center of excellence for late-stage mRNA production in Marburg is being extended. In Mainz, the expansion of our clinical production as part of the iNeST (individualized neoantigen-specific immunotherapy) program led to faster production of individualized mRNA cancer vaccines, process improvement potential, and faster turnaround times. The focus remains on building a new production facility in order to have capacities for commercial production in addition to clinical capacities for the first time in 2026. This means that we have sufficient capacity in our production network to be able to produce future clinical requirements for drug candidates ourselves.

With our "BioNTainer" approach, we have turnkey mRNA production facilities based on a container solution that enable scalable vaccine production. The production facility under construction in Kigali, Rwanda, will be at the heart of a decentralized and robust end-to-end production network in Africa and comprises a modular R&D production building and an additional mRNA production facility consisting of several BioNTainers for the production of clinical and commercial mRNA. The aim is to support equal access to innovative medicines worldwide and to counteract the unmet medical needs in Africa. In addition, we signed a multi-year strategic partnership with the Australian state of Victoria in December 2023. The mRNA production facility currently under construction in Melbourne is also based on our modular high-tech production units and is intended to support research and development and the production of mRNA-based investigational medicinal products on a clinical scale.

Thanks to the acquisition of Biotheus, which was completed on January 31, 2025, we are now also able to produce monocular antibodies ourselves. Biotheus has several production lines with which we plan to produce the clinical requirements for our antibody candidate BNT327/PM8002 ourselves. The development of the supply chains for our remaining monocular antibodies and for our antibody-drug conjugation portfolio was also driven forward in 2024 and the first technology transfers to external partners were initiated. Our global production capacities and our global COVID-19 vaccine supply chain and production network give us the opportunity to provide people around the world with quick and easy access to state-of-the-art medicines and therapies. In addition, the increasing digitalization and automation of Company processes, supported by effective process management, gives us the opportunity to achieve additional added value and efficiency gains.

Commercialization

Last year, we continued our transformation into a globally active, profitable, and fully integrated biotechnology company. Following the transformation of the global COVID-19 market from a pandemic to an endemic situation, Comirnaty revenues have stabilized at a low single-digit billion figure. The financial resources generated in 2021, 2022, and 2023 have created a good starting position for us to accelerate the expansion of our portfolio in the field of oncology and to open up further therapeutic areas and sales markets. We are still on course to play a leading role in the rapidly growing market for immunotherapies in the coming years.

With effect from July 1, 2024, the Supervisory Board appointed Annemarie Hanekamp as a new member of the Management Board. In her role as Chief Commercial Officer, she brings broad experience in sales, marketing, market access, and the development of patient-centric commercialization strategies for innovative oncology products. She will drive the development of commercial capacities and structures as preparation for product launches in readiness for the first market introduction of cancer drugs. In addition to global commercialization functions, the establishment of an oncology-specific function in the USA is being driven forward at full speed in order to position ourselves in the essential sales and access channels in the American oncology sector.

Team and corporate culture

Our employees are behind our great achievements of recent years. In addition, we have a management team of renowned scientists, experienced entrepreneurs, and biotechnology investors who support us.

Our corporate culture is rooted in three core values: Cohesion, passion, and innovation. These values shape our actions and define us as a company. We believe that our values and culture have been key to our success over the last decade and continue to drive our innovation and achievements in developing new medicines for people. Our start-up culture, epitomized by “Project Lightspeed”, has contributed to the rapid and successful development of the Pfizer-BioNTech COVID-19 vaccine. Our Management Board and Supervisory Board recognize the importance of preserving this culture as a guiding compass and providing mechanisms to realize, shape, and develop it in line with our business strategy.

BioNTech's workforce grew by around 700 employees in 2024. We believe that our corporate culture is a unifying force among our 6,946 employees from around the world, who come from a variety of professional, cultural, and personal backgrounds.

We are dependent on highly qualified employees to continue our successful development. BioNTech is recognized as one of the most desirable employers, especially in Germany, and regularly achieves top positions in independent and highly respected employer rankings; examples from 2024: #1 employer in Pharma & MedTech in Germany according to a survey of over 33,000 German employees conducted by Stern magazine and the market research company Statista; #12 employer among the top global companies for women according to Forbes magazine; #1 employer among science students in Germany according to a survey by the renowned Human Resource Research Institute Trendence in 2024.

In 2020, we established our "Culture Campus" to emphasize the importance of corporate culture at BioNTech. To underline this priority, the head of our Culture Campus department reports directly to our CEO Prof. Ugur Sahin, M.D. and CMO Prof. Özlem Türeci, M.D., who are also our co-founders. All our "pioneers" are encouraged to actively support our corporate culture through initiatives such as workshops run by our Culture Campus department. In 2024, the Culture Campus department focused on promoting connection and cohesion within the organization. Our "Connect with Colleagues" platform, which was launched in 2023, has grown to 50 groups uniting around 180 BioNTech colleagues with shared interests and passions. Another focus of our cultural work in 2024 was to support teams in reflecting on and improving their collaboration. At BioNTech, we believe that corporate culture is the most important cornerstone of our daily work. This inspired us to expand the content of our "Collaboration Corner" platform, which was set up in 2023. Based on the feedback we received from our Culture Ambassadors, this support proved to be effective in helping teams discuss common issues such as organizing hybrid work and interfacing with other teams. To offer our teams even more support and facilitate interaction on important cultural topics, our Culture Campus has launched "FACULTY", a community of internal cultural mediators. Through FACULTY, our colleagues can actively support our culturally relevant initiatives with facilitation skills, expertise in fostering collaboration, and deep knowledge of BioNTech's culture. Our fifty FACULTY members are located in Germany, the USA, China, Rwanda, and the United Kingdom. They include pioneers from various departments such as HR, Engineering, Quality, R&D, Site Operation, and IT.

5 Corporate governance declaration in accordance with Section 315d in conjunction with Section 289f HGB

5.1 Declaration on the Corporate Governance Code in accordance with Section 161 AktG

The German Stock Corporation Act (AktG) requires the Management Board and Supervisory Board of German companies that are listed on a stock exchange regulated and supervised by a state-recognized body to issue an annual declaration either (i) stating that the recommendations of the German Corporate Governance Code ("Code") have been observed, or (ii) listing the recommendations with which the Company has not complied and explaining the reasons for the deviation from the Code's recommendations (declaration of compliance). There is no obligation to follow the recommendations or suggestions of the Code. A listed company in this sense is also obliged to state in this annual declaration whether it intends to comply with the recommendations or to list the recommendations that it does not intend to comply with in the future. The declaration must be made publicly available online.

If the Company changes its policy in relation to certain recommendations between these annual declarations, it must disclose this fact and explain the reasons for the deviation from the recommendations. Non-compliance with the other suggestions included in the Code alongside the recommendations does not have to be disclosed.

The Management Board and Supervisory Board have engaged extensively with the recommendations of the Code and on February 27, 2025 adopted the following declaration of compliance in accordance with Section 161(1) AktG, which is issued in accordance with the Code in connection with the declaration on corporate governance pursuant to Section 315d in conjunction with Section 289f HGB:

BioNTech SE has complied with all recommendations of the Code in the version dated April 28, 2022, with the exception of the points listed below, and will continue to comply with them in the future.

- According to Section B.3 of the Code, the initial appointment of members of the Management Board should be for a maximum period of three years. In deviation from this, Management Board member Annemarie Hanekamp was appointed for a period of four years with effect from July 1, 2024. In view of Ms. Hanekamp's many years of experience and individual qualifications, the Company considers an initial appointment of four years to be necessary and appropriate. In addition, the Supervisory Board considered the initial appointment for a period of four years to be in the best interests of the Company in implementing long-term strategic corporate goals and decisions, particularly in the commercial area.

- In accordance with point C.7 of the Code, it is recommended that more than half of the members of the Supervisory Board should be independent of the Company and the Management Board. In this sense, a Supervisory Board member is independent of the Company and its Management Board if he or she has no personal or business relationship with the Company or its Management Board that could give rise to a material and not merely temporary conflict of interest. When assessing independence, the length of membership of the Supervisory Board is also taken into account. Despite the fact that two of the six members of the Supervisory Board have been on the Supervisory Board for longer than the twelve years recommended by the Code, all members of the Supervisory Board are considered independent. The Supervisory Board considers it beneficial and essential for the Company to retain the knowledge and experience currently available on the Supervisory Board. This includes many years of knowledge of the Company and its industry as well as extensive expertise in the areas of finance, economics, science, and capital markets, which is particularly important in view of the Company's current steady global growth and transformation. The length of membership of the two Supervisory Board members Mr. Helmut Jeggle and Mr. Michael Motschmann does not conflict with their respective independence due to their long-standing ties to the Company, their economic independence from the Company, and the absence of other matters that could give rise to potential conflicts of interest (see Section C.8 of the Code).

5.2 Composition and working methods of the Management Board, Supervisory Board, and committees

We are a European company with limited liability (Societas Europaea or SE), which has its registered office in Germany. We have opted for a two-tier structure for the SE. Our corporate bodies are therefore the Management Board, the Supervisory Board, and the Annual General Meeting. The Management Board and Supervisory Board are completely separate and no member of the Management Board can be a member of the Supervisory Board at the same time.

Our Management Board manages the day-to-day business of the Company on its own responsibility in accordance with applicable legislation, the Articles of Association, and the rules of procedure adopted by the Supervisory Board and represents us in transactions with third parties.

The main task of the Supervisory Board is to monitor the Management Board. The Supervisory Board is also responsible for appointing and dismissing members of the Management Board, representing us in transactions with a current or former member of the Management Board, and granting approval for important matters.

Our Management Board and Supervisory Board manage their own areas of responsibility (separation of powers) and are solely responsible for them; neither body may therefore make decisions that fall within the remit of the other body under applicable legislation, the Articles of Association, or the rules of procedure. The members of both bodies are obliged to demonstrate loyalty and due diligence. In performing their duties, they are obliged to observe the duty of care of a prudent and conscientious businessman. If they fail to comply with the relevant duties of care, they may be held liable to us.

In fulfilling their duties, the members of both boards must take into account a broad range of considerations in their decisions, including the interests of shareholders, employees, creditors, and – to a limited extent – the public, while safeguarding the rights of our shareholders to equal treatment. In addition, the Management Board is responsible for implementing an appropriate and effective internal control system and risk management system.

Our Supervisory Board has extensive monitoring duties. To ensure that the Supervisory Board can perform these functions properly, our Management Board must regularly report to our Supervisory Board on current business activities and future business planning (including financial, investment, and personnel planning), among other things. In addition, our Supervisory Board or one of its members is entitled to request special reports from the Management Board at any time on all matters relating to the Company, our legal and business relationships with affiliated companies, and all business transactions and matters at these affiliated companies that could have a significant impact on our position.

Under German law, our shareholders generally have no direct right of recourse against the members of our Management Board or the members of our Supervisory Board if they have breached their duty of loyalty and diligence towards us. Apart from cases in which we are unable to fulfill our obligations to third parties, unlawful conduct towards board members, or other special circumstances, only we have the right to assert claims for damages against the members of our two boards.

We can only waive or settle these claims for damages if at least three years have passed since a claim arose in connection with a breach of obligation and if our shareholders approve the waiver or settlement at a shareholders' meeting by a simple majority of the votes cast, provided that no shareholders holding a total of one tenth or more of our share capital object to the waiver or settlement and have their objection formally entered in the minutes of the meeting.

5.2.1 Supervisory Board

Under German law, the Supervisory Board must consist of at least three members, although a company's articles of association may stipulate a higher number. The Supervisory Board consists of six members as of December 31, 2024. As BioNTech is not subject to co-determination, the members of the Supervisory Board are elected by the Annual General Meeting in accordance with the provisions of the SE Regulation and the German Stock Corporation Act.

The following table contains the names and functions of the current members of the Supervisory Board, their age as of December 31, 2024, their term of office (which expires on the day of the Annual General Meeting of the relevant year), their main occupation, and other relevant Supervisory Board appointments outside BioNTech:

Name (function)	Age	Term expires	Principal occupation (other relevant mandates)
Helmut Jeggle (Chair of the Supervisory Board)	54	2026	Managing partner and entrepreneurial venture capital investor of Salvia GmbH (Supervisory Board member of 4SC AG, AiCuris AG and Tonies SE, Board Director at Bambusa Therapeutics Inc.)
Ulrich Wandschneider, Ph.D. (Deputy Chair of the Supervisory Board)	63	2027	Managing director of beebusy capital GmbH and independent consultant to companies in the lifescience and healthcare sector (Supervisory Board Member at Marienhaus GmbH)
Baroness Nicola Blackwood	45	2027	Managing Director and Chair of Oxford University Innovations Limited (Equity Partner, ReCode Health Ventures LLC, Trustee and Director of the Alan Turing Institute, Chair of the Advisory Board of Genomics England Limited, Independent NED on the RTW Biotech Opportunities Ltd.)
Prof. Anja Morawietz, Ph.D.	47	2026	Certified Public Accountant and Management Consultant, Professor of External Accounting and General Business Administration at the Nuremberg University of Applied Sciences Georg Simon Ohm
Michael Motschmann	67	2027	Member of the Management Board and head of equity investments of MIG Capital AG (Supervisory Board member AFFiRiS AG, APK AG, HMW-Emissionshaus AG and HMW-Innovations AG)
Prof. Rudolf Staudigl, Ph.D.	70	2026	Independent consultant (member of the Supervisory Board of TÜV Süd Aktiengesellschaft until 3 July 2024, member of the Supervisory Board of Groz-Beckert KG (Deputy Chair))

The business address of the members of the Supervisory Board is the same as the business address of BioNTech: An der Goldgrube 12, D-55131 Mainz, Germany.

The skills profile of the Supervisory Board members as of December 31, 2024, is as follows:

Qualification/name (function)	Helmut Jeggle (Chair of the Supervisory Board)	Ulrich Wandschneider, Ph.D. (Deputy Chair of the Supervisory Board)	Baroness Nicola Blackwood	Prof. Anja Morawietz, Ph.D.	Michael Motschmann	Prof. Rudolf Staudigl, Ph.D.
(Biotech) industry experience	x	x	x		x	x
(Biotech) industry sales and marketing	x	x	x			
Management	x	x			x	x
Innovation, research and development		x	x			x
Accounting, auditing and controlling (including sustainability reporting)	x	x		x	x	x
Compliance, internal controls and risk management		x		x	x	x
Human resources		x			x	x
Digitalization		x	x	x	x	
International experience / relevant markets	x	x	x	x	x	x
CSR / sustainability		x	x	x		
Elected to the Supervisory Board of the Company for the first time	2008	2018	2023	2022	2008	2022
End of term	2026	2027	2027	2026	2027	2026
Independence	x	x	x	x	x	x
Year of birth	1970	1961	1979	1977	1957	1954
Gender	m	m	f	f	m	m

German law does not require the majority of Supervisory Board members to be independent, and neither the Articles of Association nor the rules of procedure of the Supervisory Board stipulate otherwise. In the opinion of the Supervisory Board, an appropriate number of shareholder representatives on the Supervisory Board (i.e. the entire Supervisory Board) are independent if the Supervisory Board has two independent members. In addition to Ulrich Wandschneider, Nicola Blackwood, Anja Morawietz, and Rudolf Staudigl, the Supervisory Board considers Helmut Jeggle and Michael Motschmann to be independent, notwithstanding the fact that they have been members of the Supervisory Board for a period of more than 15 years. As stated in the Declaration of Conformity pursuant to Section 161 (1) AktG published by the Company on February 27, 2025, which is issued in accordance with the Code in connection with the declaration on corporate governance pursuant to Section 315d in conjunction with Section 289f HGB, the length of service of the two appointed Supervisory Board members does not prevent their independence. The rules of procedure of our Supervisory Board stipulate that the Supervisory Board should include an independent member with expertise in the areas of accounting, internal control processes, and auditing. Ulrich Wandschneider, Anja Morawietz, Michael Motschmann, and Rudolf Staudigl fulfill this role.

Under European law, a member of the Supervisory Board of an SE may be elected for a maximum term specified in the Articles of Association, which must not exceed six years. Re-election, including repeated re-election, is permissible. The Annual General Meeting may set a shorter term of office than normal for individual members or all members of the Supervisory Board and, subject to legal restrictions, set different start and end dates for the term of office of the members of the Supervisory Board. Our Articles of Association provide for a term of office of around five years, depending on the date of the Annual General Meeting of Shareholders in the year in which the term of office of the member in question expires.

The Annual General Meeting may elect one or more substitute members at the same time as electing the members of the Supervisory Board. The substitute members replace members who leave the Supervisory Board and take their place for the remainder of the respective term of office. At present, no substitute members have been elected or proposed for election.

Members of our Supervisory Board may be dismissed at any time during their term of office by a resolution of the Annual General Meeting passed with at least a simple majority of the votes cast. In addition, any member of our Supervisory Board may resign from office at any time with one month's notice to the Management Board – or with immediate effect if there is good cause to do so.

Our Supervisory Board elects a Chair and a Deputy Chair from among its members. The Deputy Chair exercises the rights and duties of the Chair if the Chair is unable to do so. The members of the Supervisory Board elected Helmut Jeggle as Chair and Ulrich Wandschneider as Deputy Chair, each for the duration of their membership of the Supervisory Board.

The Supervisory Board meets at least twice per calendar half-year. Our Articles of Association stipulate that the Supervisory Board is quorate if at least three of its members take part in a vote. Members of the Supervisory Board are deemed to be present if they participate in the meeting by telephone or other (electronic) means of communication (including video conferencing) or if their written vote is cast by another member. In addition, the Articles of Association allow resolutions to be passed by telephone or other (electronic) means of communication (including video conferencing).

The resolutions of our Supervisory Board are passed by a simple majority of the votes cast, unless otherwise stipulated by law, the Articles of Association, or the rules of procedure of our Supervisory Board. In the event of a tie, the Chair of the Supervisory Board has the casting vote. Our Supervisory Board may not make management decisions, but has determined in accordance with European and German law and in addition to its statutory responsibilities that certain matters require its prior approval, including:

- entering into certain large transactions;
- establishment or holding of equity investments in companies (with the exception of wholly owned subsidiaries) or the sale of shares in companies (with the exception of the sale of JPT Peptide Technologies GmbH);
- issue of shares from authorized capital, unless the shares are issued as part of a redemption of stock appreciation rights;
- acquisition of treasury shares for a consideration.

The remuneration of the members of the Supervisory Board is described in the compensation report, which is prepared for the year ended December 31, 2024, in accordance with the provisions of Section 162 AktG and published on the website.

Each member of the Supervisory Board must disclose conflicts of interest to the Supervisory Board, in particular those that may arise as a result of a consultancy or board function with customers, suppliers, lenders, or other third parties. Significant, not merely temporary conflicts of interest in the person of a member of the Supervisory Board should result in that member resigning from office. Our Supervisory Board also takes appropriate measures to limit, prevent or resolve conflicts of interest in accordance with the applicable legal provisions and the Company's Conflicts of Interest Policy.

For the year ended December 31, 2024, our Supervisory Board conducted a self-assessment by completing a written questionnaire. It covered all key aspects of the Supervisory Board's work, including its committees, its composition, its competence profile, its main areas, and its relationship with the Management Board. The results of the self-assessment were evaluated and will be presented to the Supervisory Board as the basis for a discussion of current challenges and suggestions for improvement. According to the evaluation of the self-assessment to date, the Supervisory Board, its committees, and the Management Board continue to work professionally and cooperatively. No fundamental need for change was identified.

Working methods of the Supervisory Board

Decisions are generally made by our entire Supervisory Board, but decisions on certain matters may be delegated to committees of our Supervisory Board to the extent permitted by law. The Chair, or if he is unable to attend, the Deputy Chair, chairs the meetings of the Supervisory Board and determines the order in which the items on the agenda are dealt with, the type and order of voting, and any postponement of the discussion and passing of resolutions on individual items on the agenda after appropriate consideration of the circumstances. Our Supervisory Board may designate other types of measures as requiring approval.

In addition, each member of the Supervisory Board is obliged to fulfill their duties and responsibilities personally, and these duties and responsibilities cannot be delegated to third parties generally and permanently. However, the Supervisory Board and its committees have the right to appoint independent experts to review and analyze certain matters as part of its control and monitoring duties under applicable European and German law. We would cover the costs of such independent experts commissioned by the Supervisory Board or one of its committees.

In accordance with Section 107(3) AktG, the Supervisory Board can form committees from among its members and entrust them with certain tasks. The tasks, powers, and procedures of the committees are determined by the Supervisory Board. To the extent permitted by law, important powers of the Supervisory Board may also be transferred to committees.

The Supervisory Board has established by resolution an Audit Committee, a Compensation, Nominating, and Corporate Governance Committee, a Capital Markets Committee, and a Product Committee. The table below lists the committee members appointed for the year ended December 31, 2024.

Name of the committee	Members
Audit Committee	Prof. Anja Morawietz, Ph.D. (Chair), Prof. Rudolf Staudigl, Ph.D., and Ulrich Wandschneider, Ph.D.
Compensation, Nominating, and Corporate Governance Committee	Prof. Rudolf Staudigl, Ph.D. (Chair), Baroness Nicola Blackwood, and Michael Motschmann
Capital Markets Committee	Helmut Jeggle (Chair), Prof. Anja Morawietz, Ph.D., and Michael Motschmann
Product Committee	Ulrich Wandschneider, Ph.D. (Chair), Baroness Nicola Blackwood and Helmut Jeggle

Audit Committee

During the year ended December 31, 2024, our Audit Committee consisted of Anja Morawietz (Chair), Rudolf Staudigl, and Ulrich Wandschneider. The Audit Committee supports the Supervisory Board in monitoring the accuracy and integrity of the financial statements, the accounting and financial reporting processes and audits, the effective functioning of the internal control system, the risk management system, compliance with legal and regulatory requirements, the qualification and independence of the independent auditor, the performance of the independent auditor, and the effective functioning of the Internal Audit department and, subject to certain restrictions, makes and implements corresponding decisions on behalf of the Supervisory Board. The duties and responsibilities of the Audit Committee in fulfilling its purpose include, but are not limited to

- Monitoring of the Company's accounting, sustainability reporting, financial reporting processes, sustainability reporting processes, and the audit of the annual financial statements, consolidated financial statements, the (Group) management reports, and the sustainability report and of the effectiveness of the internal control system;
- Monitoring of the effectiveness of the risk management system and the internal audit system;
- Monitoring of the independent audit of the financial statements, in particular the selection and independence of the auditor, the quality of the audit, and the additional services provided by the auditor;
- Submission of a recommendation by the Audit Committee to the Supervisory Board regarding the proposal for the appointment of the auditor;
- Assignment of the audit mandate, remuneration, retention, and supervision of the independent auditor;
- Assessment of the qualification, independence, and quality of the independent auditor's performance;
- Review and pre-approval of the audit and non-audit services to be provided by the independent auditor;
- Review and discussion with the independent auditor and the Management Board of the annual audit plan and overall audit strategy, the responsibilities of the independent auditor, and the responsibilities of management in the audit process, and review of applicable critical accounting policies and practices;

- Review of alternative treatments of financial information discussed by the independent auditor and the Management Board, the impact of using such alternative disclosures and treatments, and the treatment preferred by the independent auditor;

- Review and discussion of the adequacy and effectiveness of internal accounting controls and critical accounting policies with the independent auditor and management;

- Review and discussion of the results of the annual audit with the independent auditor and management;

- Discussion and review of the sustainability report;

- Monitoring of the effectiveness of the compliance management system;

- Review, approval, and ongoing monitoring of all related party transactions as defined by SEC regulations or German law and ongoing review and monitoring of potential conflicts of interest in relation to compliance with policies and procedures;

- Monitoring of the procedures for the receipt, retention, and handling of complaints received in relation to accounting, internal accounting controls, auditing, or other compliance matters.

Within the limits of applicable European and German law, the Audit Committee has the resources and authority appropriate to fulfill its duties and responsibilities, including the authority to select, retain, terminate, and approve fees and other engagement terms for special or independent consultants, auditors, or other experts and advisors as it deems necessary or appropriate to fulfill its duties and responsibilities, without seeking approval from the Management Board or Supervisory Board.

In addition, all members have the specialist knowledge and experience in the field of accounting required by the German Corporate Governance Code and expertise in the field of auditing. This includes, in particular, knowledge and experience of the application of accounting principles and internal control and risk management systems, and specialist knowledge and experience of auditing. Ulrich Wandschneider and Anja Morawietz also have knowledge of sustainability reporting and its auditing.

Compensation, Nominating, and Corporate Governance Committee

During the year ended December 31, 2024, our Compensation, Nominating, and Corporate Governance Committee consisted of Rudolf Staudigl (Chair), Nicola Blackwood, and Michael Motschmann. The Compensation, Nominating, and Corporate Governance Committee has the following tasks and responsibilities, among others, in fulfilling its mandate:

- Preparation and discussion of guidelines in connection with the remuneration of the members of the Management Board;

- Review and monitoring of the Company's targets and objectives for the remuneration of the members of the Management Board, including assessing the performance of the members of the Management Board with regard to these targets, and submission of proposals to the Supervisory Board on remuneration based on these assessments;

- Review of all share-based remuneration plans and agreements and submission of recommendations to the Supervisory Board regarding such plans;

- Support in identifying and recruiting candidates to fill positions on the Management Board and Supervisory Board;

- Consideration of all corporate governance issues and development of suitable recommendations for the Supervisory Board;

- Monitoring of the evaluation of the Supervisory Board and reporting on its performance and effectiveness.

Capital Markets Committee

During the year ended December 31, 2024, our Capital Markets Committee consisted of Helmut Jeggle (Chair), Anja Morawietz, and Michael Motschmann. The Capital Markets Committee advises the Supervisory Board and makes recommendations on issues relating to capital measures and takeover, merger, and acquisition activities. Responsibilities include the following tasks:

- Monitoring of the Company's activities in relation to capital structure and capital procurement, including the preparation and implementation of IPOs and share issues;

- Monitoring of the Company's activities in connection with takeovers, mergers, and acquisitions.

Product Committee

During the year ended December 31, 2024, our Product Committee consisted of Ulrich Wandschneider (Chair), Nicola Blackwood, and Helmut Jeggle. The Product Committee advises the Supervisory Board on our strategy and investments in research and development programs and on the preparation of product launches and makes corresponding recommendations. Responsibilities include the following tasks:

- Advice on strategy, execution, and communication in relation to relevant market launch efforts;

- Overseeing of activities related to a) product development, b) market launch plans, and c) their implementation;

- Advice on the market potential of products in clinical development.

5.2.2 Management Board

Our Management Board consists of at least two members. Our Supervisory Board determines the exact number of members of the Management Board. In accordance with the Articles of Association, the Supervisory Board may also appoint a Chair or a Spokesman of the Management Board.
Ugur Sahin was appointed Chair of the Management Board.

Name	Age	Term expires	Position (main responsibilities)
Prof. Ugur Sahin, M.D.	59	2026	Chair of the Management Board (Chief Executive Officer) (Research and Development, Scientific Collaborations, Patent Applications, Quality Assurance, and Project Management)
Annemarie Hanekamp[(1)]	44	2028	Chief Commercial Officer (Marketing and Sales)
Jens Holstein[(3)]	61	2025	Chief Financial Officer (Finance, Human Resources, Risk Management, and Purchasing)
Sean Marett[(2)]	60	2024	Chief Business Officer and Chief Commercial Officer (Marketing and Sales)
Sierk Poetting, Ph.D.	52	2026	Chief Operating Officer (Production, IT, Laboratories and Infrastructure, Sustainability, and Internal Communication)
Ryan Richardson	45	2026	Chief Strategy Officer (Corporate Strategy, Capital Market Responsibility, and Investor Relations)
James Ryan, Ph.D.	49	2027	Chief Legal Officer and Chief Business Officer (Legal, Business Development, Alliance Management, and Intellectual Property)
Prof. Özlem Türeci, M.D.	57	2025	Chief Medical Officer (Clinical Development, Regulatory, and Medical Affairs)

[(1)] Annemarie Hanekamp was appointed to the Management Board as Chief Commercial Officer with effect from July 1, 2024.

[(2)] Sean Marett was a member of the Management Board until June 30, 2024.

[(3)] Jens Holstein, our Chief Financial Officer, plans to retire at the end of his term. A successor will be announced in due course.

The members of our Management Board are appointed by the Supervisory Board for a term of office of up to five years. At the end of their term of office, they have the right to reappointment or extension, including repeated reappointment and extension, in each case for up to a further five years. Under certain circumstances, such as a serious breach of duty or a vote of no confidence by shareholders at an Annual General Meeting, a member of the Management Board may be dismissed by our Supervisory Board before the end of their term of office.

The members of our Management Board manage the day-to-day business in accordance with applicable legislation, the Articles of Association, and the rules of procedure for the Management Board adopted by the Supervisory Board. They are generally responsible for the management of the Company and for handling day-to-day business relationships with third parties, the internal organization of the business, and communication with shareholders.

A member of the Management Board of an SE governed by German law may not deal with or vote on matters relating to proposals, agreements, or contractual arrangements between themselves and the Company, and a member of our Management Board may be liable to us if they have a material interest in a contractual arrangement between us and a third party that is not disclosed to and approved by our Supervisory Board.

The rules of procedure for our Management Board stipulate that certain matters require a resolution by the full Management Board, in addition to those transactions for which a resolution by the full Management Board is required by law or the Articles of Association. In particular, the full Management Board decides on:

- the budget for the following year, which must be submitted to the Supervisory Board by the Management Board by December 20 of each year;
- reporting to the Supervisory Board;
- all measures and transactions that require the approval of the Supervisory Board;
- all measures and transactions relating to a business area that is of extraordinary importance or involves an extraordinary economic risk;
- the inclusion of new or the discontinuation of existing business areas;
- the acquisition or sale of equity investments or portfolios;
- certain large transactions.

The remuneration of the members of the Management Board is described in the compensation report, which is prepared for the year ended December 31, 2024, in accordance with the requirements of Section 162 AktG and published on the website.

5.3 Objectives for the composition of the Management Board in accordance with Section 76(4) AktG and the Supervisory Board in accordance with Section 111(5) AktG, and diversity concept

Our social aspirations in our core business are complemented by good corporate governance. In this context, the composition of the Management Board and Supervisory Board and long-term succession planning must be appropriately adapted to the needs of the Company. In addition to the professional and personal qualifications of the members of the Management Board and Supervisory Board, we take diversity and the appropriate participation of women into account in the composition of both bodies. We also consider the balance of the age structure in order to ensure long-term succession planning and have set the maximum age for members of the Management Board at 70 and for members of the Supervisory Board at 80. The Management Board and Supervisory Board are of the opinion that the current composition takes full account of the objectives defined for the composition of these bodies.

On March 8, 2023, the Supervisory Board set the target for the proportion of women on the Management Board at 25% and on the Supervisory Board at 25% in accordance with Section 111(5) AktG. The deadline for achieving this target was set at December 31, 2025. The Supervisory Board has also drawn up a profile of skills and expertise for the entire Board. The competence profile takes into account the following areas, among others: general (biotech) industry experience, experience in sales and marketing, management, innovation, research and development, accounting, auditing and controlling (including sustainability reporting), compliance, internal controls and risk management, human resources, digitalization, international experience/relevant markets, and CSR/sustainability. When appointing members to the Supervisory Board as a whole, the Supervisory Board always endeavors to complete this competence profile.

Özlem Türeci holds the position of Chief Medical Officer on our Management Board, which was expanded to include Annemarie Hanekamp as Chief Commercial Officer on July 1, 2024 and currently consists of seven members. This increases the current proportion of women on the Management Board to 28%, meaning that the target of 25% was achieved for the first time in the year ended December 31, 2024.

Nicola Blackwood and Anja Morawietz are members of our Supervisory Board, which currently consists of six members. The current proportion of women on the Supervisory Board is therefore 33%, meaning that the target of 25% was achieved in both the year ended December 31, 2024, and the year ended December 31, 2023.

In accordance with Section 76(4) AktG, the Management Board also agreed the target number of women in management positions on March 8, 2023. The proportion of women in the top management level below the Management Board and the second management level below the Management Board should be at least 30% in each case. The deadline by which this target is to be achieved at both management levels has been set at December 31, 2025.

As of December 31, 2024, a total of 34% (previous year: 37%) of the members of the top management level below the BioNTech Management Board are women. At the second management level below the Management Board, 47% (previous year: 46%) of positions at BioNTech are held by women as of December 31, 2024. The targets were therefore achieved in both the year ended December 31, 2024 and 2023.

5.4 Integrity and Ethics

Compliance & Business Ethics

BioNTech has implemented a comprehensive compliance management system consisting of the three common compliance program elements: Prevent - Detect - Respond.

Prevent

Guidelines and processes: All employees are actively informed about relevant policies and guidelines. Clearly defined processes prevent business decisions that are not in line with regulations or the Company's values.

Training and communication: BioNTech's guidelines and directives are made clear through regular, target group-oriented training and practical supplementary material. The training concept includes both face-to-face and online training sessions and interactive e-learning.

Detect

Early detection of compliance risks: In view of BioNTech's rapid growth, the compliance program provides for various measures to ensure that potential new compliance risks are identified promptly.

Integrated controls: BioNTech's compliance program includes controls that are integrated into the relevant business processes.

Speak-Up program: The contact point for protection of ethics allows for anonymous reporting of potential misconduct of any kind. Reports can be made online or in person.

Respond

Internal investigations: As soon as a report of possible misconduct is received, it is systematically reviewed to determine whether further investigation is necessary. All investigations are subject to a process that ensures a professional, objective, and confidential approach.

Disciplinary and optimization measures: Based on the results of investigations, audits, and risk assessments, the Compliance & Business Ethics department makes recommendations for disciplinary and optimization measures. Disciplinary measures relate to individual responsibilities, while optimization measures are aimed at improving structural and procedural aspects.

Continuous feedback: The Compliance & Business Ethics department systematically collects feedback from the Company in order to adapt the compliance program to the Company's requirements.

Digital platform for regulatory compliance

The measures listed above are supported by a digital platform known as the BioNTech Best Practices Hub (BxP Hub). The BxP Hub offers a wide range of functions that support the introduction of policies and guidelines, training, and monitoring activities. Using various modules, the BxP Hub records interactions relating to various compliance topics, such as transfer of value with HCPs, invitations to business dinners, business gifts, potential conflicts of interest, and any violations or concerns reported through BioNTech's reporting channels.

Progress in 2024

In 2024, the compliance management system was further optimized and significant progress was made in areas such as governance structure, team size, specialization, and content.

General progress

The Compliance and Business Ethics department now reports directly to the CEO. The department structure was adapted to the needs of the evolving organization and the expertise within the department was further expanded. The department is now divided into five different specialist areas, each led by experienced compliance experts. In 2024 alone, the department was expanded by six additional full-time employees. In order to better support the various business functions, each department has been assigned a compliance business partner who acts as the first point of contact for the respective department. This approach helps to facilitate smooth integration of compliance practices at the various locations and in our business activities.

Policy Governance

BioNTech's Global Policy Governance Framework sets out the centralized process for the development, approval, and implementation of our global and local corporate policies and guidelines. In 2024, we introduced a total of 19 new or revised policies and guidelines. By the end of the year, our compliance program comprised a total of 13 policies and guidelines.

Code of Ethics & Business Integrity

In 2024, the Code of Conduct was revised to take account of BioNTech's development and expansion in various countries. The Code of Conduct illustrates our commitment to ethical and responsible business practices and emphasizes the importance of transparency, integrity, and compliance with legal and regulatory requirements. It also underlines our commitment to promoting diversity, inclusion, and sustainability in all aspects of our business. The Code serves as a guiding principle for all our employees, including the Management Board, Supervisory Board, and managing directors, and ensures that BioNTech's values and mission are upheld in all our business activities. If an employee violates the Code of Conduct, this can result in a range of disciplinary consequences, up to and including termination of employment.

6 Compensation Report

The compensation report for the year ended December 31, 2024, is prepared in accordance with the requirements of Section 162 AktG and published on the website at www.biontech.de.

7 Non-Financial Report

Since our foundation, we have focused on our vision and mission on improving the health of people worldwide. To this end, we utilize the full potential of the immune system to develop drugs for diseases with high or unmet medical needs.

We support the United Nations Sustainable Development Goals (SDGs). Our research and development work makes an important contribution to the United Nations' third Sustainable Development Goal (SDG 3): ensuring healthy lives and promoting well-being at all ages. Sub-goals 3.3 (Infectious diseases) and 3.b (Medicine and vaccines) are of particular importance to us. This is in line with our central commitment to global social responsibility. At the heart of our business practices is the goal of ensuring that people around the world benefit from our research and innovations. As part of these efforts, we continue to focus on urgent medical needs and on fair and equitable access to new medicines.

Climate Strategy

We see climate protection as a core component of our sustainability commitment. If humanity does not succeed in limiting global warming to 1.5°C compared to pre-industrial levels, serious consequences for people and nature around the world are to be expected. We therefore support the global agreement on climate change ("Paris Climate Agreement"), which was adopted at the 21st UN Climate Change Conference ("COP 21") at the end of 2015 and the UN's 13th Sustainable Development Goal (SDG 13) of taking immediate action to combat the climate crisis and its effects.

BioNTech is addressing the climate crisis by working to minimize the impact of our operations and reduce greenhouse gas (GHG) emissions in operations and throughout the value chain. Based on the requirements of the Science Based Targets Initiative (SBTi), BioNTech set binding emission reduction targets in 2022. An absolute reduction of 42% by 2030 (target value: 1.9 kt CO_2e) compared to the base year of 2021 (3.2 kt CO_2e) was set for BioNTech's Scope 1 & 2 greenhouse gas emissions. A "Supplier Engagement Target" was adopted for Scope 3 greenhouse gas emissions and further specified in the course of 2023 in accordance with the requirements of the SBTi: BioNTech is committed to ensuring that 72% of its suppliers by emissions, which includes purchased goods and services, capital goods and upstream transportation and distribution, will have set science-based SBTi targets by 2027. The Company's near-term and science-based emissions reduction targets for Scope 1, 2 and 3 were validated by the Science-Based Targets Initiative in 2024. This validation underlines that BioNTech's Scope 1 and 2 climate targets are ambitious and in line with the United

Nations Paris Agreement, which aims to limit global warming to 1.5 degrees Celsius above pre-industrial levels.

To achieve these climate targets, BioNTech 2023 has started to integrate greenhouse gas emission reduction targets into growth and investment planning, supply chain management, and ongoing operations. In September 2022, the "Energy & Sustainability Projects (ESP)" department was created under the umbrella of the BioNTech Site Service Unit BSS and is responsible, among other things, for the operational implementation of the decarbonization targets in Scope 1 and 2. In 2024, we increased the internal responsibilities of our environmental departments in order to promote cooperation and improve internal processes such as monitoring and reporting of our sites' energy data. These are now even more closely linked to the responsibilities of our Energy Management Team within the Safety, Health, & Environment (SHE) department. As part of these efforts, the ESP team was renamed the "Decarbonization Strategy & Implementation (DSI)" team.

In 2023, the BioNTech Management Board also approved a multi-year framework budget to provide the DSI department with additional financial scope for decarbonization measures. The budget is used for targeted modernization measures as part of the decarbonization roadmap. As an agile instrument, it supplements the decarbonization measures planned and budgeted for in projects for property conversions. For new buildings, the topic of CO_2 emissions has been included in the budget process in order to achieve sustainability targets and comply with sustainability requirements; since 2024, for example, the expected CO_2 change must be specified in applications for construction costs. At the same time, we have continued our efforts to reduce Scope 3 emissions in our supply chain in order to achieve our Supplier Engagement Target. To this end, dialog with our most important suppliers was initiated in 2023 and continued in 2024. This is used to agree memoranda of understanding, which set out the intention of these suppliers to establish science-based emission reduction targets in accordance with the SBTi. Since 2023, our Code of Conduct for Suppliers has also included climate protection requirements.

Human Rights Obligations

Driven by the Guiding Principles on Business and Human Rights (UN Guiding Principles) adopted by the United Nations in 2011, many national action plans (NAPs) for corporate human rights due diligence have been developed around the world. The German Federal Government adopted the German NAP in 2016. This was followed by the German Act on Corporate Due Diligence to Prevent Human Rights Violations in Supply Chains (Lieferkettensorgfaltspflichtengesetz, LkSG), which came into force on January 1, 2023. BioNTech monitors the dynamic regulatory developments in human rights issues in all countries in which the Company and its strategic suppliers operate.

Based on the Universal Declaration of Human Rights and the fundamental principles of the International Labor Organization (ILO), BioNTech committed itself to basic human rights values for the first time in 2016 and has also been a signatory to the UN Global Compact and its ten principles since 2020. Furthermore, commitments to uphold human rights as outlined in the Universal Declaration of Human Rights, the fundamental principles of the ILO, the United Nations Guiding Principles on Business and Human Rights (UNGP), and the ten principles of the UN Global Compact are included in corporate guidelines such as the Code of Business Ethics & Integrity and the BioNTech Declaration of Human Rights. Since 2023, we have carried out a comprehensive human rights risk analysis every year, covering our own operations and those of direct suppliers. The analysis

is the basis for defining the relevant human rights issues. As part of this process, BioNTech takes appropriate preventive measures to counter the risks identified.

On January 1, 2023, our Management Board appointed a Human Rights Officer in accordance with the LkSG. Responsibility for human rights management was transferred to the Human Rights Officer. This function is responsible for all subsidiaries of the BioNTech Group and reports directly to the Chief Operating Officer (COO), who is the member of the Management Board responsible for human rights issues. The appointment of the Human Rights Officer does not exempt the Management Board from its supervisory and monitoring responsibility for compliance with human rights. Details on BioNTech's human rights risk management in accordance with the LkSG can be found in the Risk Report (section 4.2) and in the BioNTech Declaration of Principles on Respect for Human Rights 2024.

ESG Ratings

In 2024, BioNTech once again maintained its "Prime" status from the rating agency Institutional Shareholder Services, ISS ESG (Environmental, Social, Governance) and remained in the benchmark "Top 10%" of all rated companies in the pharmaceutical and biotechnology sector. In addition, BioNTech improved its overall rating from B- to B in the Corporate Rating 2024 on a scale from D- (lowest rating) to A+ (highest rating). ISS expanded its Quality Score in 2024 to include the two categories "Social" and "Environment", in which BioNTech is currently rated 1 and 2 respectively. These values indicate the transparency of a company with a focus on social and environmental issues on a scale of 1 (high transparency) to 10 (low transparency). In addition, BioNTech achieved a 4 in the "Governance" category of the ISS Quality Score on a risk scale of 1 (low risk) to 10 (high risk).[6]

In the S&P Corporate Sustainability Assessment (S&P CSA), BioNTech received 52 out of a possible 100 points in the 2024 assessment. BioNTech has been actively involved in the comprehensive S&P CSA rating process since 2022 and is listed as a participating company. The Company was able to improve its result significantly for the third time in a row (2023: 45/100 points; 2022: 32/100 points).

In October 2024, BioNTech was given an ESG risk rating of 25.9 (2023: 24.1) and was assessed by Sustainalytics as having a medium risk of experiencing material financial impacts from ESG factors. This corresponds to a risk on the third of five risk levels (negligible, low, medium, high, and severe). The rating measures the extent to which the economic value of a company is at risk due to ESG factors. Sustainalytics uses absolute risk categories and quantitative scores from 0 to 40+ to enable a comparable assessment for all companies and sectors evaluated.

[6] As of: December 9, 2024.

8 Events After The Reporting Period

A detailed description of the supplementary report can be found in the notes to the consolidated financial statements and the annual financial statements of BioNTech SE.

Mainz, March 7, 2025

BioNTech SE

Prof. Dr. med. Ugur Sahin
Chief Executive Officer

Jens Holstein
Chief Financial Officer

Annemarie Hanekamp
Chief Commercial Officer

Dr. Sierk Poetting
Chief Operating Officer

Ryan Richardson
Chief Strategy Officer

Dr. James Ryan
Chief Legal Officer und
Chief Business Officer

Prof. Dr. med. Özlem Türeci
Chief Medical Officer

Translation of the German independent auditor's report concerning the audit of the annual financial statements and management report prepared in German

Independent auditor's report

To BioNTech SE

Opinions

We have audited the annual financial statements of BioNTech SE, Mainz, which comprise the balance sheet as at December 31, 2024, and the income statement for the financial year from January 1 to December 31, 2024, and notes to the financial statements, including the recognition and measurement policies presented therein. In addition, we have audited the management report of BioNTech SE, which is combined with the group management report, for the financial year from January 1 to December 31, 2024. In accordance with the German legal requirements, we have not audited the content of the corporate governance declaration pursuant to Sec. 289f HGB ["Handelsgesetzbuch": German Commercial Code] included in section 5 of the management report. In addition, we have not audited the content of the disclosures contained in sections 4.2.3 and 4.2.4 based on recommendation A.5 of the German Corporate Governance Code (GCGC 2022) or the non-financial report contained in section 7 of the management report, which relate to disclosures extraneous to management reports. Disclosures extraneous to management reports are such disclosures that are not required pursuant to Secs. 289, 289a or Secs. 289b to 289d HGB or German Accounting Standard (GAS) 20.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying annual financial statements comply, in all material respects, with the requirements of German commercial law applicable to business corporations and give a true and fair view of the assets, liabilities and financial position of the Company as at December 31, 2024 and of its financial performance for the financial year from January 1 to December 31, 2024 in compliance with German legally required accounting principles, and

- the accompanying management report as a whole provides an appropriate view of the Company's position. In all material respects, this management report is consistent with the annual financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. We do not express an opinion on the corporate governance declaration referred to above or on sections 4.2.3, 4.2.4 and 7 of the management report referred to above.

Pursuant to Sec. 322 (3) Sentence 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the annual financial statements and of the management report.

Basis for the opinions

We conducted our audit of the annual financial statements and of the management report in accordance with Sec. 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's responsibilities for the audit of the annual financial statements and of the management report" section of our auditor's report. We are independent of the Company in accordance with the requirements of German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions on the annual financial statements and on the management report.

Other information

The Supervisory Board is responsible for the Report of the Supervisory Board. The executive directors and the Supervisory Board are responsible for the declaration pursuant to Sec. 161 AktG ["Aktiengesetz": German Stock Corporation Act] on the German Corporate Governance Code, which is part of the corporate governance declaration pursuant to Sec. 289f HGB, and for the compensation report pursuant to Sec. 162 AktG. In all other respects, the executive directors are responsible for the other information. The other information comprises the aforementioned corporate governance declaration and the aforementioned disclosures extraneous to management reports contained in sections 4.2.3, 4.2.4 and 7 of the management report. The other information also comprises additional parts to be included in the annual report, of which we obtained a copy prior to issuing the auditor's report, in particular:

- The Sustainability Report
- The Report of the Supervisory Board pursuant to Sec. 171 (2) AktG
- The Compensation Report

but not the annual financial statements, not the management report disclosures whose content is audited and not our auditor's report thereon.

In addition, the other information comprises additional parts intended for the annual report, which we expect to be provided with after the auditor's report has been issued, in particular:

- The Letter from the Management Board to the shareholders
- The multi-year overview of business development

Our opinions on the annual financial statements and on the management report do not cover the other information, and consequently we do not express an opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the annual financial statements, with the management report or our knowledge obtained in the audit, or

- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the executive directors and the Supervisory Board for the annual financial statements and the management report

The executive directors are responsible for the preparation of the annual financial statements that comply, in all material respects, with the requirements of German commercial law applicable to business corporations, and that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German legally required accounting principles. In addition, the executive directors are responsible for such internal control as they, in accordance with German legally required accounting principles, have determined necessary to enable the preparation of annual financial statements that are free from material misstatement, whether due to fraud (i.e., fraudulent financial reporting and misappropriation of assets) or error.

In preparing the annual financial statements, the executive directors are responsible for assessing the Company's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting, provided no actual or legal circumstances conflict therewith.

Furthermore, the executive directors are responsible for the preparation of the management report that, as a whole, provides an appropriate view of the Company's position and is, in all material respects, consistent with the annual financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the management report.

The Supervisory Board is responsible for overseeing the Company's financial reporting process for the preparation of the annual financial statements and of the management report.

Auditor's responsibilities for the audit of the annual financial statements and of the management report

Our objectives are to obtain reasonable assurance about whether the annual financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the management report as a whole provides an appropriate view of the Company's position and, in all material respects, is consistent with the annual financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our opinions on the annual financial statements and on the management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Sec. 317 HGB and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual financial statements and this management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual financial statements and of the management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and

appropriate to provide a basis for our opinions. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting a material misstatement resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the annual financial statements and of arrangements and measures relevant to the audit of the management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control and of such arrangements and measures.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the annual financial statements and in the management report or, if such disclosures are inadequate, to modify our respective opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the annual financial statements, including the disclosures, and whether the annual financial statements present the underlying transactions and events in a manner that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German legally required accounting principles.

- Evaluate the consistency of the management report with the annual financial statements, its conformity with [German] law, and the view of the Company's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate opinion

on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Cologne, March 10, 2025

EY GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft

Schlebusch	Weigel
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]