Audited Consolidated Financial Statements of BioNTech SE prepared in accordance with IFRS Accounting Standards as issued by the IASB and adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e para. 3 in connection with para. 1 HGB as of and for the Year Ended December 31, 2024

Consolidated Statements of Profit or Loss

(in millions €, except per share data)	Note	Years ended December 31, 2024	2023	2022
Revenues	6	2,751.1	3,819.0	17,310.6
Cost of sales	7.1	(541.3)	(599.8)	(2,995.0)
Research and development expenses	7.1	(2,254.2)	(1,783.1)	(1,537.0)
Sales and marketing expenses	7.1	(67.9)	(62.7)	(59.5)
General and administrative expenses [1]	7.1	(531.1)	(495.0)	(481.7)
Other operating expenses [1]	7.2	(811.5)	(293.0)	(410.0)
Other operating income	7.2	140.6	105.0	815.3
Operating profit / (loss)		**(1,314.3)**	**690.4**	**12,642.7**
Finance income	7.3	664.0	519.6	330.3
Finance expenses	7.3	(27.4)	(23.9)	(18.9)
Profit / (Loss) before tax		**(677.7)**	**1,186.1**	**12,954.1**
Income taxes	8	12.4	(255.8)	(3,519.7)
Net profit / (loss)		**(665.3)**	**930.3**	**9,434.4**
Earnings / (Loss) per share				
Basic earnings / (loss) per share	9	(2.77)	3.87	38.78
Diluted earnings / (loss) per share	9	(2.77)	3.83	37.77

[1] Adjustments to the year 2022 figures due to change in functional allocation of general and administrative expenses and other operating expenses (see Note 7.2).

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

Consolidated Statements of Comprehensive Income

(in millions €)	Note	Years ended December 31, 2024	2023	2022
Net profit / (loss)		**(665.3)**	**930.3**	**9,434.4**
Other comprehensive income				
Other comprehensive income that may be reclassified to profit or loss in subsequent periods, net of tax				
Exchange differences on translation of foreign operations		43.5	(19.8)	11.2
Net other comprehensive income / (loss) that may be reclassified to profit or loss in subsequent periods		**43.5**	**(19.8)**	**11.2**
Other comprehensive loss that will not be reclassified to profit or loss in subsequent periods, net of tax				
Net gain / (loss) on equity instruments designated at fair value through other comprehensive income	12	(146.6)	3.7	10.5
Remeasurement gain / (loss) on defined benefit plans		—	0.3	0.6
Net other comprehensive income / (loss) that will not be reclassified to profit or loss in subsequent periods		**(146.6)**	**4.0**	**11.1**
Other comprehensive income / (loss), net of tax		**(103.1)**	**(15.8)**	**22.3**
Comprehensive income / (loss), net of tax		**(768.4)**	**914.5**	**9,456.7**

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

Consolidated Statements of Financial Position

(in millions €) **Assets**	**Note**	**December 31, 2024**	**December 31, 2023**
Non-current assets			
Goodwill	10	380.6	362.5
Other intangible assets	10	790.4	804.1
Property, plant and equipment	11	935.3	757.2
Right-of-use assets	20	248.1	214.4
Contract assets	6	9.8	—
Other financial assets	12	1,254.0	1,176.1
Other non-financial assets	14	26.3	83.4
Deferred tax assets	8	81.7	81.3
Total non-current assets		**3,726.2**	**3,479.0**
Current assets			
Inventories	13	283.3	357.7
Trade and other receivables	12	1,463.9	2,155.7
Contract assets	6	10.0	4.9
Other financial assets	12	7,021.7	4,885.3
Other non-financial assets	14	212.7	280.9
Income tax assets	8	50.0	179.1
Cash and cash equivalents	12	9,761.9	11,663.7
Total current assets		**18,803.5**	**19,527.3**
Total assets		**22,529.7**	**23,006.3**
Equity and liabilities			
Equity			
Share capital	15	248.6	248.6
Capital reserve		1,398.6	1,229.4
Treasury shares	15	(8.6)	(10.8)
Retained earnings		19,098.0	19,763.3
Other reserves	16	(1,325.5)	(984.6)
Total equity		**19,411.1**	**20,245.9**
Non-current liabilities			
Lease liabilities, loans and borrowings	12	214.7	191.0
Other financial liabilities	12	46.9	38.8
Provisions	17	20.9	8.8
Contract liabilities	6	183.0	398.5
Other non-financial liabilities	19	87.5	13.1
Deferred tax liabilities	8	42.4	39.7
Total non-current liabilities		**595.4**	**689.9**
Current liabilities			
Lease liabilities, loans and borrowings	12	39.5	28.1
Trade payables and other payables	12	426.7	354.0
Other financial liabilities	12	1,443.4	415.2
Income tax liabilities	8	4.5	525.5
Provisions	17	144.8	269.3
Contract liabilities	6	294.9	353.3
Other non-financial liabilities	19	169.4	125.1
Total current liabilities		**2,523.2**	**2,070.5**
Total liabilities		**3,118.6**	**2,760.4**
Total equity and liabilities		**22,529.7**	**23,006.3**

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

Consolidated Statements of Changes in Stockholders' Equity

		Equity attributable to equity holders of the parent					
(in millions €)	Note	Share capital	Capital reserve	Treasury shares	Retained earnings	Other reserves	Total equity
As of January 1, 2022		**246.3**	**1,674.4**	**(3.8)**	**9,882.9**	**93.9**	**11,893.7**
Net profit		—	—	—	9,434.4	—	9,434.4
Other comprehensive income		—	—	—	—	22.3	22.3
Total comprehensive income		**—**	**—**	**—**	**9,434.4**	**22.3**	**9,456.7**
Issuance of share capital	15	0.5	67.1	—	—	—	67.6
Redemption of convertible note		1.8	233.2	—	—	—	235.0
Share repurchase program	16	—	(979.5)	(6.9)	—	—	(986.4)
Transaction costs	16	—	(0.1)	—	—	—	(0.1)
Dividends	16	—	—	—	(484.3)	—	(484.3)
Share-based payments	16	—	833.1	5.4	—	(1,519.8)	(681.3)
Deferred tax assets	16	—	—	—	—	554.7	554.7
As of December 31, 2022		**248.6**	**1,828.2**	**(5.3)**	**18,833.0**	**(848.9)**	**20,055.6**
Net profit		—	—	—	930.3	—	930.3
Other comprehensive loss		—	—	—	—	(15.8)	(15.8)
Total comprehensive income / (loss)		**—**	**—**	**—**	**930.3**	**(15.8)**	**914.5**
Issuance of share capital		—	—	—	—	—	—
Treasury shares used for acquisition of business combination		—	102.6	1.1	—	—	103.7
Share repurchase program		—	(731.6)	(6.9)	—	—	(738.5)
Share-based payments	16	—	30.2	0.3	—	(15.1)	15.4
Current and deferred taxes		—	—	—	—	(104.8)	(104.8)
As of December 31, 2023		**248.6**	**1,229.4**	**(10.8)**	**19,763.3**	**(984.6)**	**20,245.9**
Net loss		—	—	—	(665.3)	—	(665.3)
Other comprehensive loss		—	—	—	—	(103.1)	(103.1)
Total comprehensive loss		**—**	**—**	**—**	**(665.3)**	**(103.1)**	**(768.4)**
Share-based payments	16	—	169.2	2.2	—	(237.8)	(66.4)
As of December 31, 2024		**248.6**	**1,398.6**	**(8.6)**	**19,098.0**	**(1,325.5)**	**19,411.1**

Consolidated Statements of Cash Flows

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Operating activities			
Net profit / (loss)	(665.3)	930.3	9,434.4
Income taxes	(12.4)	255.8	3,519.7
Profit / (Loss) before tax	**(677.7)**	**1,186.1**	**12,954.1**
Adjustments to reconcile profit before tax to net cash flows:			
Depreciation and amortization of property, plant, equipment, intangible assets and right-of-use assets	298.0	183.4	123.3
Share-based payment expenses	100.9	51.4	108.6
Net foreign exchange differences	(109.5)	(298.0)	625.5
(Gain) / Loss on disposal of property, plant and equipment	(0.3)	3.8	0.6
Finance income excluding foreign exchange differences	(648.5)	(519.6)	(265.3)
Finance expense excluding foreign exchange differences	27.4	7.9	18.9
Government grants	(31.5)	2.4	0.3
Other non-cash (income) / loss	—	—	—
Unrealized (gain) / loss on derivative instruments at fair value through profit or loss	4.6	175.5	(241.0)
Working capital adjustments:			
Decrease in trade and other receivables, contract assets and other assets	387.7	5,374.0	4,369.9
Decrease in inventories	74.5	81.9	62.9
Increase in trade payables, other financial liabilities, other liabilities, contract liabilities, refund liabilities and provisions	758.4	118.9	85.7
Interest received and realized gains from cash and cash equivalents	474.9	258.2	29.3
Interest paid and realized losses from cash and cash equivalents	(13.5)	(5.4)	(21.5)
Income tax paid	(389.2)	(482.9)	(4,222.1)
Share-based payments	(154.5)	(766.2)	(51.8)
Government grants received	106.0	—	—
Net cash flows from operating activities	**207.7**	**5,371.4**	**13,577.4**
Investing activities			
Purchase of property, plant and equipment	(286.5)	(249.4)	(329.2)
Proceeds from sale of property, plant and equipment	1.2	(0.7)	0.6
Purchase of intangible assets and right-of-use assets	(165.8)	(455.4)	(34.1)
Acquisition of subsidiaries and businesses, net of cash acquired	—	(336.9)	—
Investment in other financial assets	(12,370.3)	(7,128.4)	(47.8)
Proceeds from maturity of other financial assets	10,740.2	1,216.3	375.2
Net cash flows used in investing activities	**(2,081.2)**	**(6,954.5)**	**(35.3)**
Financing activities			
Proceeds from issuance of share capital and treasury shares, net of costs	—	—	110.5
Proceeds from loans and borrowings	—	0.3	0.8
Repayment of loans and borrowings	(2.3)	(0.1)	(18.8)
Payments related to lease liabilities	(43.6)	(40.3)	(41.1)
Share repurchase program	—	(738.5)	(986.4)
Dividends	—	—	(484.3)
Net cash flows used in financing activities	**(45.9)**	**(778.6)**	**(1,419.3)**
Net increase / (decrease) in cash and cash equivalents	(1,919.4)	(2,361.7)	12,122.8
Change in cash and cash equivalents resulting from exchange rate differences	14.8	(14.5)	60.1
Change in cash and cash equivalents resulting from other valuation effects	2.8	164.8	(0.5)
Cash and cash equivalents at the beginning of the period	11,663.7	13,875.1	1,692.7
Cash and cash equivalents as of December 31	**9,761.9**	**11,663.7**	**13,875.1**

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

Notes to the Consolidated Financial Statements

1 Corporate Information

BioNTech SE is a limited company incorporated and domiciled in Germany. American Depositary Shares (ADS) 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). BioNTech SE is registered in the commercial register B of the Mainz Local Court under the number HRB 48720. These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU), and give a true and fair view of the financial position and results of operations of the Group in accordance with International Financial Reporting Standards (IFRS) and the results of operation of BioNTech SE and its subsidiaries, hereinafter also referred to as "BioNTech," the "Group," "we" or "us".

Our consolidated financial statements for the year ended December 31, 2024, were prepared by the Management Board on March 7, 2025.

2 Significant Accounting Policies

2.1 Basis of Preparation

General

The consolidated financial statements have been prepared in accordance with the IFRS Accounting Standards as issued by the International Accounting Standards Board (IASB).

We prepare and publish our consolidated financial statements in Euros and round numbers to thousands or millions of Euros, respectively. 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.

Segment Information

Decisions with respect to business operations and resource allocations are made by our Management Board, as the chief operating decision maker based on BioNTech as a whole. Accordingly, we operate and make decisions as a single operating segment, which is also our reporting segment.

2.2 Basis of Consolidation

The consolidated financial statements comprise the financial statements of BioNTech SE and its controlled investees (subsidiaries).

The Group controls an investee if, and only if, the Group has

- power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee);
- exposure, or rights, to variable returns from its involvement with the investee; and
- the ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights results in control.

Whether an investee is controlled is re-assessed if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when control is obtained over the subsidiary and ceases when control over the subsidiary is lost.

The profit / (loss) and each component of other comprehensive income / (loss) for the period are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the consolidated financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If control over a subsidiary is lost, the related assets (including goodwill), liabilities, non-controlling interests and other components of equity are derecognized, while any resultant gain or loss is recognized in the consolidated statements of profit or loss. Any investment retained is recognized at fair value.

2.3 Summary of Material Accounting Policies

2.3.1 Foreign Currencies

Our consolidated financial statements are presented in Euros, which is also our functional currency. For each entity, the Group determines the functional currency, and items included in the consolidated financial statements of such entities are measured using that functional currency. We use the direct method of consolidation and, on disposal of a foreign operation, the gain or loss that is reclassified to the consolidated statements of profit or loss reflects the amount that arises from using this method.

Transactions and Balances

Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions.

In determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which the Group initially recognizes the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of advance consideration.

Foreign Currency Translation

Foreign currency translation effects from the translation of operating activities include foreign exchange differences arising on operating items such as trade receivables and trade payables and are either shown as other operating income or expenses on a cumulative basis. Foreign currency translation effects presented within finance income and expenses include foreign exchange differences arising on financing items such as loans and borrowings as well as foreign exchange differences arising on cash and cash equivalents and are either shown as finance income or expenses on a cumulative basis.

Foreign Currency Translation on Consolidation

Upon consolidation, the assets and liabilities of foreign operations are translated into Euros at the rate of exchange prevailing at the reporting date and the transactions recorded in their consolidated statements of profit or loss are translated at exchange rates prevailing at the dates of the transactions.

The exchange differences arising on translation for consolidation are recognized in other comprehensive income. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is reclassified to profit or loss.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising upon the acquisition are treated as assets and liabilities of the foreign operation and translated at the spot rate of exchange at the reporting date.

2.3.2 Current versus Non-Current Classifications

Assets and liabilities in the consolidated statements of financial position are presented based on current or non-current classification.

An asset is current when it is either: (i) expected to be realized or intended to be sold or consumed in the normal operating cycle, (ii) held primarily for the purpose of trading, (iii) expected to be realized within twelve months after the reporting period, or (iv) cash or cash equivalents, unless it is restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period. All other assets are classified as non-current.

A liability is current when it is either: (i) expected to be settled in the normal operating cycle, (ii) held primarily for the purpose of trading, (iii) due to be settled within twelve months after the reporting period, or (iv) there is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period. The terms of the liability that could, at the option of the counterparty, result in its settlement by the issue of equity instruments do not affect its classification. The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities, respectively.

2.3.3 Revenue from Contracts with Customers

Revenue

Identification of the Contract

We generate revenues from collaboration and license agreements, which contain multiple elements, including licenses to use, research, develop, manufacture and commercialize candidates and products, research and development services as well as obligations to develop and manufacture preclinical and clinical material and products. We determined that those collaboration and license agreements qualify as contracts with customers. A contract is an agreement between two or more parties that establishes enforceable rights and obligations.

Identification of Performance Obligations

Our customer contracts often include bundles of licenses, goods and services. If the granting of a license is bundled together with delivering of goods and or the rendering of services, it is assessed whether these agreements are comprised of more than one performance obligation. A performance obligation is only accounted for as the grant of a license if the grant of a license is the sole or the predominant promise of the performance obligation.

Determining Transaction Prices

We apply judgment when determining the consideration that is expected to be received. If the consideration in an agreement includes a variable amount, we estimate the amount of consideration to which we will be entitled in exchange for transferring the goods to the customer. At contract inception, the variable consideration is estimated based on the most

likely amount of consideration expected from the transaction and constrained until it is highly probable that a significant revenues reversal in the amount of cumulative revenues recognized will not occur when the associated uncertainty with respect to the variable consideration is subsequently resolved. The estimated revenues are updated at each reporting date to reflect the current facts and circumstances.

Allocation of Transaction Prices

If a contract with a customer contains more than one performance obligation, the transaction price is allocated to each performance obligation based on relative standalone selling prices. We have established the following hierarchy to determine the standalone selling prices.

- Where standalone selling prices for offered licenses, goods or services are observable and reasonably consistent across customers, our standalone selling price estimates are derived from our respective pricing history. However, due to the limited number of customers and the limited company history, this approach can rarely be used.

- Where sales prices for an offering are not directly observable or highly variable across customers, we follow a cost-plus-margin approach.

- For offerings that have highly variable pricing and lack substantial direct costs to estimate based on a cost-plus-margin approach, we allocate the transaction price by applying a residual approach.

Judgment is required when estimating standalone selling prices.

Recognition of Revenues

For each separate performance obligation, it is evaluated whether control is transferred either at a point in time or over time. For performance obligations that are satisfied over time, revenues are recognized based on a measure of progress, which depicts the performance in transferring control to the customer. Under the terms of our licensing arrangements, when we provide the licensee with a research and development license, which represents a right to access our intellectual property as it exists throughout the license period (as our intellectual property is still subject to further research), the promise to grant a license is accounted for as a performance obligation satisfied over time as our customers simultaneously receive and consume the benefits from our performance.

Revenues based on the collaboration partners' gross profit, which is shared under the respective collaboration agreements, are recognized based on the sales-based or usage-based royalty exemption; i.e., when the underlying sales occur, which is when the performance obligation has been satisfied. As described further in Note 3, judgment is applied to certain aspects when accounting for the collaboration agreements.

Revenue arrangements that involve two or more partners who contribute to the provision of a specific good or service to a customer are assessed in terms of principal-agent considerations in order to determine the appropriate treatment for the transactions between us and the collaborator and the transactions between us and other third parties. The classification of transactions under such arrangements is determined based on the

nature and contractual terms of the arrangement along with the nature of the operations of the participants. Any consideration related to activities in which we are considered the principal, which includes being in control of the good or service before such good or service is transferred to the customer, is accounted for as gross revenues. Any consideration related to activities in which we are considered the agent is accounted for as net revenues.

Revenues from the sale of pharmaceutical and medical products (e.g., COVID-19 vaccine sales and other sales of peptides and retroviral vectors for clinical supply) are recognized when we transfer control of the product to the customer. Control of the product normally transfers when the customer gains physical possession and we have not retained any significant risks of ownership or future obligations with respect to the product. In general, payments from customers are due within 30 days after invoice. However, with respect to our collaboration with Pfizer Inc., or Pfizer, there is a significant time lag between when revenues are recognized and the payments are received. The contractual settlement of the gross profit share 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.

For certain contracts, the finished product may temporarily be stored at our location under a bill-and-hold arrangement. Revenues from bill-and-hold arrangements are recognized at the point in time when the customer obtains control of the product and all of the following criteria have been met: (i) the arrangement is substantive; (ii) the product is identified separately as belonging to the customer; (iii) the product is ready for physical transfer to the customer; and (iv) we do not have the ability to use the product or direct it to another customer. In determining when the customer obtains control of the product, we consider certain indicators, including whether title and significant risks and rewards of ownership have transferred to the customer and whether customer acceptance has been received.

Contract Balances

Contract Assets

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If we transfer goods or services to a customer before the customer pays the respective consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional.

Trade Receivables

A receivable represents our right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due).

Contract Liabilities

A contract liability is the obligation to transfer goods or services to a customer for which we have received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before we transfer goods or services to the customer, a contract liability is recognized when the payment is made or when the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when we fulfill our performance obligations under the contract.

2.3.4 Research and Development Expenses

Research and development costs are expensed in the period in which they are incurred. Regarding internal projects, we consider that regulatory approval and other uncertainties inherent in the development of new products preclude the capitalization of internal development expenses as an intangible asset until marketing approval from a regulatory authority is obtained. Payments made to third parties, such as contract research and development organizations as compensation for subcontracted research and development, that are deemed not to transfer intellectual property are expensed as internal research and development expenses in the period in which they are incurred. Such payments are only capitalized if they meet the criteria for recognition of an internally generated intangible asset, usually when marketing approval has been received from a regulatory authority. We have entered into agreements under which third parties grant licenses to us, which are known as in-license agreements. If in-licensing results in consideration for the acquisition of intellectual property that meets the definition of an identifiable asset, this is capitalized as an intangible asset unless the respective intellectual property is mainly used as part of our general ongoing research and development activities without any intent to market the respective product as such. If the transaction also includes research and development services to be provided by the licensor, the share of consideration attributable to these services is recognized in research and development expenses in line with the performance of the services. Sales-based milestone or royalty payments incurred under license agreements after the approval date of the respective pharmaceutical product are recognized as expenses in cost of sales as incurred.

Subsequent internal research and development costs in relation to intellectual property rights are expensed because the technical feasibility of the internal research and development activity can only be demonstrated by the receipt of marketing approval for a related product from a regulatory authority in a major market.

Prior to the second quarter of 2023, we had assessed that inventory produced prior to successful regulatory approval did not meet the criteria for capitalization as an asset, and accordingly expensed the costs of pre-launch inventory as research and development costs. Based on the experience of the past years and the developments since our COVID-19 vaccine was first authorized or approved for emergency or temporary use, our assessment regarding the potential to produce economic benefits changed. Beginning with the second quarter of 2023, pre-launch products from the Comirnaty product family with their potential for economic benefit fulfill the recognition criteria for an asset under the IFRS Conceptual Framework. At each reporting date, the respective inventory is measured at the lower of cost and net realizable value. However, because it is not probable until regulatory approval is obtained, we consider the net realizable value to be zero, as this is the probable amount expected to be realized from its sale until approval is obtained. The write-down is recognized in the statements of profit or loss as research and development expenses. If regulatory approval for a product candidate is obtained, the relevant write-down would be reversed to a maximum of the original cost. Subsequently, inventory is recognized as cost of sales.

2.3.5 Government Grants

Government grants and similar grants which are accounted for in accordance with IAS 20 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 other income on a systematic basis over the periods that the related costs for which the grant is intended to compensate are expensed. When the grant relates to an asset, it is recognized as deferred income within the consolidated statements of financial position. Other income is subsequently recognized in our consolidated statements of profit or loss over the useful life of the underlying asset subject to funding.

2.3.6 Taxes

Current Income Tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where the Group operates and generates taxable income.

In addition, current income taxes presented for the period include adjustments for uncertain tax payments or tax refunds for periods not yet finally assessed by tax authorities, excluding interest expenses and penalties on the underpayment of taxes. In the event that amounts included in the tax return are considered unlikely to be accepted by the tax authorities (uncertain tax positions), a provision for income taxes is recognized.

Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred Tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- when the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; or

- in respect of taxable temporary differences associated with investments in subsidiaries, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, the carry forward of unused tax credits and unused tax losses can be utilized, except:

- when the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss; or

- in respect of deductible temporary differences associated with investments in subsidiaries, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year in which the asset is realized, or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Recognition of Taxes

Current and deferred tax items are recognized similarly to the underlying transaction either in profit or loss, other comprehensive income or directly in equity.

Current tax assets and current tax liabilities are offset if, and only if, we have a legally enforceable right to set off the recognized amounts and intend either to settle on a net basis, or to realize the asset and settle the liability simultaneously. Deferred tax assets and deferred tax liabilities are only offset when we have a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either (i) the same taxable entity or (ii) different taxable entities, which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

Sales Tax

Expenses and assets are recognized net of sales tax, except when the sales tax incurred on a purchase of assets or services is not recoverable from the taxation authority.

The net amount of sales tax recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the consolidated statements of financial position.

Global Minimum Taxation

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 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 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 so-called top-up tax or a so-called qualified domestic minimum top-up tax.

Several jurisdictions in which the Group operates have transposed the OECD Model Rules into national domestic law and brought them into force. In addition, the Group is closely following the progress of the legislative process in each country in which the Group operates. As of the balance sheet date, the BEPS Pillar 2 regulations (MinBestRL UmsG) had already been transposed into German law (MinStG). The date of application of the law in Germany is for financial years beginning after December 30, 2023. Subsequently, as the OECD Model Rules have entered into force in Germany, the Group is obliged to file top-up tax information returns for all entities which are part of the Group, beginning in financial year 2024. 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 Pillar 2 top-up tax.

2.3.7 Business Combinations and Goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree.

Goodwill is initially measured at cost as the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests and any previous interest held over the net identifiable assets acquired and liabilities assumed.

Costs related to executing business combinations are recognized when they are incurred and are classified as general and administrative expenses.

After initial recognition, goodwill is tested at least annually or when there is an indication for impairment. See Note 2.3.10. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

2.3.8 Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses.

The portion of the consideration paid by us in in-licensing agreements to acquire rights to intellectual property is recognized as an intangible asset, referred to as In-process R&D. If an in-licensing agreement includes research and development services, the share of consideration attributable to these services is deferred and recognized in research and development expenses as goods or services are received. Payments depending on the achievement of specific milestones as part of the purchase of intangible assets, except for intangible assets acquired in a business combination, are recognized as subsequent acquisition cost of the intangible asset and as a financial liability once the milestone is reached.

The useful lives of intangible assets are assessed as either finite or indefinite.

Intangible assets with finite lives are amortized generally on a straight-line basis over the useful life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at the end of each reporting period at the least. The amortization expense on intangible assets with finite lives is recognized in the consolidated statements of profit or loss in the expense category that is consistent with the function of the intangible assets.

A summary of the useful lives applied to the Group's intangible assets is as follows:

Intangible assets	Useful life (years)
Intellectual property rights	8-20
Licenses	3-20
Software	3-8

Intangible assets with indefinite useful lives are tested for impairment at least annually, or when there is an indication for impairment, either individually or at the level of a cash-generating unit (see Note 2.3.10 for further details). In the case of intangible assets not yet available for use, the point in time from which a capitalized asset can be expected to generate economic benefit for the Group cannot be determined. Such assets are not amortized, and therefore classified as having an indefinite useful life. The intangible assets not yet available for use are tested for impairment annually, or when there is an indication for impairment on an individual basis. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

We have classified advanced payments on intangible assets as intangible assets that are not yet ready for use. Advanced payments on intangible assets are tested for impairment on an annual basis.

An intangible asset is derecognized upon disposal (i.e., at the date the recipient obtains control) or when no future economic benefits are expected from its use or disposal. Any gain or loss arising upon derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statements of profit or loss.

See Note 2.3.4 for further details in connection with our accounting of internally generated intangible assets.

2.3.9 Property, Plant and Equipment

Construction in progress is stated at cost. Property, plant and equipment are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the property, plant and equipment if the recognition criteria are met. All other repair and maintenance costs are expensed as incurred.

Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, as follows:

Property, plant and equipment	Useful life (years)
Buildings	10-33
Equipment, tools and installations	7-18

Operating and business equipment has a useful life of 1-10 years and is reported under equipment, tools and installations due to immateriality. Leasehold improvements disclosed in

buildings have a useful life of the shorter period of the underlying lease term or the economic useful live (see Note 2.3.16).

An item of property, plant and equipment initially recognized is derecognized upon disposal (i.e., at the date the recipient obtains control) or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statements of profit or loss when the asset is derecognized.

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year-end and adjusted prospectively, if appropriate.

2.3.10 Impairment of Non-Financial Assets

At each reporting date, we assess whether there is an indication that a non-financial asset may be impaired. Goodwill is tested for impairment at least annually. Impairment is determined for goodwill by assessing the recoverable amount of each cash-generating unit (or group of CGUs) to which the goodwill relates. If any indication exists, or when annual impairment testing is performed, we estimate the asset's or CGU's recoverable amount. The recoverable amount is the higher of an asset's or CGU's fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. If the asset does not generate independent cash inflows, the impairment test is performed for the smallest group of assets that generate largely independent cash inflows from other assets (CGU). When the carrying amount of an asset or cash-generating unit exceeds its recoverable amount, the asset or the non-current assets of the CGU are considered impaired and written down to their recoverable amount.

Impairment losses are recognized in the consolidated statements of profit or loss in expense categories consistent with the function of the impaired asset.

Intangible assets with an indefinite useful life are tested for impairment annually at the CGU level, as appropriate, and when circumstances indicate that the carrying value may be impaired.

Intangible assets not yet available for use are not amortized, but rather tested for impairment when a triggering event arises or at least once a year. The identification of triggering events takes place on a quarterly or on an ad hoc basis with the involvement of the responsible departments, taking internal and external information sources into consideration. The impairment test is performed annually or if there are indications of impairment by determining the asset's value in use. In assessing value in use, the estimated discounted future cash flows are based on long-term forecast calculations reflecting the asset's estimated product life cycles. The assumptions are based on internal estimates along with external market studies. The result of the valuation depends to a large extent on the estimates by the management of the future cash flows of the assets and the discount rate applied, and is therefore subject to uncertainty. Any expense resulting from an impairment of intangible assets with finite lives is recognized in the consolidated statements of profit or

loss in the expense category that is consistent with the function of the respective intangible assets.

2.3.11 Financial Instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

i) Financial Assets

Initial Recognition and Measurement

Financial assets are initially measured at fair value as of the trade date and – depending on their classification – subsequently measured at amortized cost, fair value through other comprehensive income (OCI) or fair value through profit or loss.

Subsequent Measurement

The measurement of financial assets depends on their classification, as described below.

Financial Assets Measured at Amortized Cost

Financial assets measured at amortized cost include trade receivables and other financial assets that are generally measured using the effective interest rate (EIR) method. With respect to trade receivables, we applied the practical expedient, which means that they are measured at the transaction price determined in accordance with IFRS 15. Refer to the accounting policies in Note 2.3.3. Other financial assets measured at amortized cost are held to collect contractual cash flows, which are solely payments of principal and interest. Gains and losses are recognized in our consolidated statements of profit or loss when the financial asset is derecognized, modified or impaired.

Financial Assets Designated at Fair Value through OCI (Equity Instruments)

Upon initial recognition, we can irrevocably elect to classify equity investments as equity instruments designated at fair value through OCI if they meet the definition of equity under IAS 32 and are not held for trading. The classification is determined on an instrument-by-instrument basis. Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other income in the consolidated statements of profit or loss when the right of payment has been established. If dividends clearly represent a recovery of part of the cost of the investment they are recognized in the OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment. We elected to irrevocably classify our non-listed and listed equity investments under this category. They are recognized using trade date accounting.

Financial Assets at Fair Value through Profit or Loss

When we acquire contractual rights to cash flows from the sale of patent-protected biopharmaceutical products by unrelated biopharmaceutical companies as royalty assets and do not own the intellectual property or have the right to commercialize the underlying products, royalty assets are recognized as financial assets measured at fair value through profit and loss. We recognize day one gains and losses only when the fair value is evidenced by a quoted price in an active market for the same instrument or is based on a valuation technique that only uses data from observable markets. In all other cases, we defer the difference between the fair value at initial recognition and the transaction price. After initial

recognition, we recognize that deferred difference as a gain or loss only to the extent that it arises from a change in a factor that market participants would take into account when pricing the asset or liability.

Derivatives not designated as hedging instruments are measured at fair value through profit or loss.
A financial asset exists if the derivative has a positive fair value.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e., removed from the consolidated statements of financial position) when the rights to receive cash flows from the asset have expired or have been transferred in terms of fulfilling the derecognition criteria.

Impairment of Financial Assets

An allowance for expected credit losses (ECLs) is considered for all non-derivative financial debt investments, including cash, time deposits and debt securities of the Group. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all of the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

Since our financial debt investments are considered to be investments with low risk, the expected credit loss in the upcoming twelve months is used to determine the impairment loss. Wherever a considerable increase in the default risk is assumed, the lifetime expected credit loss of the financial asset is considered.

For trade receivables and contract assets the Group applies a simplified approach in calculating ECLs. This means that the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. We have established an ECL model that is based on the probability of default (PD), considers the respective country default probabilities and takes the maturities into account. In order to determine the PD of companies, we use the maturities of the trade receivables and the score of the companies.

If there is objective evidence that certain trade receivables or contract assets are fully or partially impaired, additional loss allowances are recognized to account for expected credit losses. A debtor's creditworthiness is assumed to be impaired if there are objective indications that the debtor is in financial difficulties, such as the disappearance of an active market for its products or impending insolvency.

ii) Financial Liabilities

Financial liabilities are generally measured at amortized cost using the effective interest rate (EIR) method. Derivatives with negative fair values not designated as hedging instruments and liabilities for contingent consideration in business combinations are measured at fair value.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

Financial liabilities measured at amortized cost include loans and borrowings, trade payables and other financial liabilities. They are measured at amortized cost using the EIR method. Gains and losses are recognized in the consolidated statements of profit or loss when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the consolidated statements of profit or loss.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the consolidated statements of profit or loss.

iii) Expenses and Income from Exchange Forward Contracts

Effects from foreign exchange forward contracts, which are measured at fair value through profit or loss, are shown as either other operating income or other operating expenses on a cumulative basis and might switch between those two items during the year-to-date reporting periods.

2.3.12 Fair Value Measurement

Fair value is a market-based measurement. For some assets and liabilities, observable market transactions or market information is available. For other assets and liabilities, observable market transactions or market information might not be available. When a price for an identical asset or liability is not observable, another valuation technique is used. To increase consistency and comparability in fair value measurements, there are three levels of the fair value hierarchy:

- Level 1 contains the use of quoted prices in active markets for identical assets or liabilities.

- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly.

- Level 3 inputs are unobservable.

Within this hierarchy, estimated values are made by management based on reasonable assumptions, including other fair value methods.

For assets and liabilities that are recognized in the financial statements at fair value on a recurring basis, we determine whether transfers have occurred between levels in the fair value hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, classes of assets and liabilities have been determined on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above.

2.3.13 Inventories

Inventories are valued at the lower of cost and net realizable value.

Costs incurred in bringing each product to its present location and condition are accounted for as follows:

- raw materials and supplies: purchase cost on a first-in / first-out basis; or

- unfinished goods and finished goods: cost of direct materials and labor, including both internal manufacturing and third-party contract manufacturing organizations, or CMOs, and a proportion of manufacturing overheads based on the normal operating capacity, but excluding borrowing costs.

Net realizable value is the estimated selling price in the ordinary course of business less estimated costs of completion and the estimated costs necessary to make the sale. Write-offs are recorded if inventories are expected to be unsaleable, do not fulfill the specification defined by our quality standards or if their shelf-life has expired. For our inventories subject to the collaboration partners' gross profit share mechanism, we consider the contractual compensation payments in the estimate of the net realizable value.

Beginning with the second quarter of 2023, pre-launch products from the Comirnaty product family with their potential for economic benefit fulfill the recognition criteria for an asset under the IFRS Conceptual Framework. At each reporting date, the respective inventory is measured at the lower of cost and net realizable value. However, because is not probable until regulatory approval is obtained, we consider the net realizable value to be zero, as this is the probable amount expected to be realized from its sale until approval is obtained.

2.3.14 Cash and Cash Equivalents

Cash and cash equivalents comprise cash at banks and on hand and short-term investments that we consider to be highly liquid (including deposits, money market funds and reverse repos) with an original maturity of three months or less that are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value. Deposits with an original maturity of more than three months are recognized as other financial assets.

2.3.15 Treasury Shares

We apply the par value method to our repurchases of outstanding American Depositary Shares, or ADSs. Accordingly, the nominal value of acquired treasury shares is deducted from equity and shown in the separate item “Treasury shares”. Any premium paid in excess of the nominal value of a repurchased ADS is deducted from the capital reserve. On the trade date, we recognize a liability, and on the settlement date, we settle in cash. We recognize the foreign exchange differences that may occur between the trade and settlement date as profit or loss.

2.3.16 Leases

At the inception of a contract, we assess whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

At inception or on reassessment of a contract that contains a lease component, the consideration in the contract is allocated to each lease component on the basis of their relative standalone prices. However, for leases of land and buildings in which we are a lessee, we have elected not to separate non-lease components, and instead account for the lease and non-lease components as a single lease component.

We recognize a right-of-use asset and a lease liability at the lease commencement date.

The right-of-use asset is initially measured at cost.

The depreciation of the right-of-use asset is calculated on a straight-line basis over the estimated useful lives of the assets or shorter lease term, as follows:

Right-of-use assets	Useful life or shorter lease term (years)
Buildings	2-25
Equipment, tools and installations	2-5
Production facilities	2-3
Automobiles	3-4

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the incremental borrowing interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate. Generally, the incremental borrowing rate is used as the discount rate.

The lease liability is subsequently measured at amortized cost using the EIR method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the estimate of the amount expected to be payable under a residual value guarantee, or if we change our assessment of whether we will exercise a purchase, extension or termination option. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in the consolidated statements of profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Right-of-use assets are presented separately and lease liabilities are presented under "Financial liabilities" in the consolidated statements of financial position.

Short-Term Leases and Leases of Low-Value Assets

We have elected not to recognize right-of-use assets and lease liabilities for short-term leases of machinery that have a lease term of 12 months or less or leases of low-value assets. We recognize the lease payments associated with these leases as an expense in the consolidated statements of profit or loss on a straight-line basis over the lease term.

2.3.17 Provisions

Provisions are recognized when there is a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When we expect some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain.

A provision is also recognized for certain contracts with suppliers for which the unavoidable costs of meeting the obligations exceed the economic benefits expected to be received. The economic benefits considered in the assessment comprise the future benefits we are directly entitled to under the contract as well as the anticipated future benefits that are the economic consequence of the contract if these benefits can be reliably determined.

The expense relating to a provision is presented in the consolidated statements of profit or loss net of any reimbursement if reimbursement is considered to be virtually certain.

2.3.18 Share-Based Payments

Employees (and others providing similar services) receive remuneration in the form of share-based payments, which are settled in equity instruments (equity-settled transactions) or in cash (cash-settled transactions).

In accordance with IFRS 2, share-based payments are generally divided into cash-settled and equity-settled. Both types of payment transactions are measured initially at their fair value as of the grant date. The fair value is determined using an appropriate valuation model, further details of which are given in Note 16. Rights granted under cash-settled transactions are remeasured at fair value at the end of each reporting period until the settlement date. The cost of share-based payment awards is recognized over the relevant service period, applying either the straight-line method or the graded vesting method, where applicable.

These costs are recognized in cost of sales, research and development expenses, sales and marketing expenses or general and administrative expenses, together with a corresponding increase in equity (other reserves) or other liabilities, over the period in which the service is provided (the vesting period). The cumulative expense recognized for cash- and equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired, and also reflects the best estimate of the number of equity instruments expected to ultimately vest.

Service and non-market performance conditions are not taken into account when determining the grant date fair value of awards, but the likelihood of the conditions being met is assessed as part of our best estimate of the number of equity instruments that will ultimately vest. Market performance conditions are reflected within the grant date fair value. Any other conditions attached to an award, but without an associated service requirement, are considered to be non-vesting conditions. Non-vesting conditions are reflected in the fair value of an award and lead to an immediate expensing of an award unless there are also service and/or performance conditions.

If we have a choice of settling either in cash or by providing equity instruments, the rights granted are accounted for as an equity-settled transaction, unless there is a present obligation to settle in cash.

If, due to local tax regulations, an amount is withheld for the employee's tax obligations and paid directly to the tax authorities in cash on the employee's behalf, the entire share-based payment program remains an equity-settled plan based on the IFRS 2 classification. Accordingly, the amount withheld for the employee's tax obligations expected to be paid directly to the tax authorities is reclassified from "Other reserves" to "Other non-financial liabilities".

2.3.19 Cash Dividend

We recognize a liability to pay a dividend when the distribution is authorized. As per the corporate laws of Germany, a distribution is authorized when it is approved by the general shareholder meeting. A corresponding amount is recognized directly in equity.

2.4 Standards Applied for the First Time

In 2024, the following potentially relevant new and amended standards and interpretations became effective, but did not have a material impact on our consolidated financial statements:

Standards / Interpretations	Date of application
Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback	January 1, 2024
Amendments to IAS 7 Statement of Cash Flows and IFRS 7 Financial Instruments: Disclosures: Supplier Finance Arrangements	January 1, 2024
Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current	January 1, 2024
Amendments to IAS 1 Presentation of Financial Statements: Non-current Liabilities with Covenants	January 1, 2024

2.5 Standards Issued but Not Yet Effective

The new and amended standards and interpretations that are issued but not yet effective by the date of issuance of the financial statements and that might have an impact on our financial statements are disclosed below. We have not adopted any standards early and intend to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Standards / Interpretations		Date of application
Amendments to IAS 21 The Effects of Changes in Foreign Exchange Rates: Lack of Exchangeability		January 1, 2025
Amendments to the Classification and Measurement of Financial Instruments: – Amendments to IFRS 9 and IFRS 7	(1)	January 1, 2026
Annual Improvements Volume 11	(1)	January 1, 2026
Contracts Referencing Nature-dependent Electricity – Amendments to IFRS 9 and IFRS 7	(1)	January 1, 2026
IFRS 18 Presentation and Disclosure in Financial Statements	(1)	January 1, 2027
IFRS 19 Subsidiaries without Public Accountability: Disclosures	(1)	January 1, 2027

(1) Standards had not yet been endorsed in the European Union at the time of publication.

An analysis of the effects of IFRS 18 on us with regard to the presentation and disclosures in the financial statements has been started and is ongoing. IFRS 18 requires additional defined subtotals (operating, investing, financing) in the statement of profit and loss and disclosures about management performance measures, and adds new principles for aggregating and disaggregating information. With regard to the first-time application of the other standards and interpretations listed in the table and other standards amended in the annual improvements, it is currently estimated that there will be no material impact on our consolidated financial statements.

3 Significant Accounting Judgements, Estimates and Assumptions

The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, the accompanying disclosures and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Significant accounting judgments, as well as key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. We based our assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

Revenues from Contracts with Customers

We applied the following judgments, estimates and assumptions that significantly affect the determination of the amount and timing of revenues from contracts with customers:

Identification and Determination of Performance Obligations

We generate revenues from collaboration and license agreements, which contain multiple elements, including licenses to use, research, develop, manufacture and commercialize candidates and products, research and development services as well as obligations to develop and manufacture preclinical and clinical material and products. We determined that those collaboration and license agreements qualify as contracts with customers. A contract is an agreement between two or more parties that establishes enforceable rights and obligations. At inception of each agreement, we apply judgment when determining which promises represent distinct performance obligations. If promises are not distinct, they are combined until the bundle of promised goods and services is distinct. For some agreements, this results in accounting for goods and services promised in a collaboration and license agreement as a single performance obligation with a single measure of progress. For these combined performance obligations, we assess which of these promises is the predominant promise to determine the nature of the performance obligation. When licenses are granted, we determined that the grant of the license is the predominant promise within the combined performance obligations. In our view, we grant our customers a right to access or a right to use our intellectual property due to the collaboration and license agreements.

Measurement of the Transaction Price

Our collaboration and license agreements often include variable consideration, which is contingent on the occurrence or non-occurrence of a future event (i.e., reaching a certain milestone). When determining deferred revenues from a collaboration and license agreement, we need to estimate the amount of consideration to which we will be entitled in exchange for transferring the promised goods or services to our customers.

As there are usually only two possible outcomes (i.e., milestone is reached or not), we have assessed that the method of the most likely amount is the best method to predict the amount of consideration to which we will be entitled. At contract inception, the most likely amount for milestone payments is estimated to be zero. We have assessed that the likelihood of achieving the respective milestone decreases depending on how far the expected date of achieving the milestone lies in the future. At each reporting date, we use judgment to determine when to include variable consideration in the transaction price in such a way that it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognized will not occur when the associated uncertainty with respect to the variable consideration is subsequently resolved. We have concluded that future milestone payments are fully constrained at the end of the current financial year.

Future milestone payments would become unconstrained upon the satisfaction of the milestone event, specifically a development event, regulatory approval or achievement of a sales milestone.

Allocation of the Transaction Price to Performance Obligations and Revenue Recognition as Performance Obligations are Satisfied

We allocate the transaction price to performance obligations based on their relative standalone selling prices, which are generally based on our best estimates and interpretations of facts and circumstances of each contractual agreement and may require significant judgment to determine appropriate allocation.

Upfront payments and reimbursement for expenses are initially deferred on our consolidated statements of financial position. We assessed that no significant financing component exists within our collaboration agreements since the overall business purpose of advanced payments is to support the payment structure rather than to provide a significant benefit of financing. For performance obligations in which the costs vary based on progress, an input-based measure that takes into account cost incurred is the most reliable indicator of the progress of the related research activities. In other cases, revenue recognition on a straight-line basis may be the most reliable indicator of our performance toward complete satisfaction. If the contractual activities progress, the achievement of development milestones will be used to measure the progress toward complete satisfaction. We evaluate the measure of progress in each reporting period and, if necessary, adjust the measure of performance and related revenue recognition. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and net profit or loss in the period of adjustment.

Upon successfully commercializing a pharmaceutical product, the collaboration and license agreements also provide for additional profit-sharing or tiered royalties earned when customers recognize net sales of licensed products as well as sales milestone payments. Revenue is recognized based on the sales-based or usage-based royalty exemption; i.e., when, or as, the underlying sales occur, which is when the performance obligation has been satisfied.

Principal-Agent Considerations

Collaboration agreements that involve two or more partners who contribute to the provision of a specific good or service to a customer are assessed in terms of principal-agent considerations. Under our current collaboration agreements, the allocation of marketing and distribution rights defines territories in which the collaboration partner acts as a principal in each case. We recognize revenue net based on the collaboration partners' gross profit in territories where the partner is responsible for supply, and on a gross basis when directly supplying our customers in our territories when control has been transferred. Amounts paid to collaboration partners for their share of our profits earned where we are the principal in the transaction are recorded as cost of sales.

Pfizer Agreement Characteristics

With respect to our collaboration with Pfizer, commercial revenues are recognized based on our collaboration partner's gross profit from COVID-19 vaccine sales, which is shared under the respective collaboration agreement. In determining commercial revenues pursuant to this collaboration agreement, we are reliant on our collaboration partner for details regarding its gross profit for the period at hand. Some of the information which our collaboration partner provides us with to identify the gross profit is, by necessity, preliminary and subject to change.

Pfizer's gross profit share is calculated based on sales and takes into account transfer prices. The latter include manufacturing and shipping costs, which represent standard prices and include mark-ups on manufacturing costs as specified by the terms of the agreement. Manufacturing and shipping cost variances were considered as far as those have been identified. Nevertheless, those input parameters may be adjusted once actual costs are determined. The sales as reported by Pfizer have been used to estimate license obligations in terms of royalties and sales milestones. Sales milestones and royalties are recognized as they are earned by the partners. Sales milestones are shared equally, while royalty payments are borne by the partners on the basis of revenues in the territories for which the partners are responsible and subsequently deducted as cost under the gross profit shared. The estimated royalty fees applied to net sales reflect the license obligations to the extent currently identified from third-party contractual arrangements. Changes in estimates are accounted for prospectively, when determined.

Manufacturing cost variances include among others expenses from unused contract manufacturing capacities and overstock inventories finally scrapped. As only materialized costs – which for example means manufacturing capacities finally lapsed or inventories finally scrapped – are shared with the partner in a cash-effective manner, the gross profit share impact is anticipated once assessed as being highly probable to occur. Any changes to this assessment will be recognized prospectively.

Pfizer's determination of manufacturing and shipping costs also affects the transfer prices that have been charged to COVID-19 vaccine supplies that it manufactures and supplies to us and may be subject to adjustment whenever manufacturing and shipping cost variances are identified. Likewise, our own cost of sales and the respective gross profit share owed to our partner may be adjusted prospectively, when changes are determined.

For contract balances related to the Pfizer agreement, see Note 6. Judgment is required in determining whether a right to consideration is unconditional and thus qualifies as a receivable.

Intangible Assets

Significant assumptions and estimates are required for the identification of a potential need to recognize an impairment loss. These estimates include management's assumptions regarding future cash flow projections and economic risks that require significant judgment and assumptions about future developments. They can be affected by a variety of factors, including, but not limited to, changes in business strategy, assumptions regarding funding ability of expected R&D expenses, assumptions regarding the size of addressable markets and number of addressable indications as well as the time and probability to reach market.

Changes to the assumptions underlying our assessment of the impairment of goodwill and intangible assets could require material adjustments to the carrying amount of our recognized goodwill and intangible assets, as well as to the amounts of impairment charges recognized in profit or loss.

Significant assumptions and estimates are also required to determine the appropriate amount of amortization of intangible assets. They relate in particular to the determination of the underlying useful life. The useful life of an intangible asset is based on our estimates regarding the period over which the intangible asset is expected to generate economic benefits for us.

Contingent Liabilities

Disclosures in respect of third-party claims and litigation for which no provisions have been recognized disclosures are made in the form of contingent liabilities, unless a potential outflow of resources is considered remote. It is not practicable to estimate the financial impact of our contingent liabilities due to the uncertainties around lawsuits and claims as outlined above.

For further disclosures relating to contingent liabilities see Note 18.

Research and Development Expenses

The nature of our business and primary focus of our activities, including development of our platforms and manufacturing technologies, generate a significant amount of research and development expenses. Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset if, and only if, the capitalization criteria are met. Based on our assessment, we have concluded that, due to the inherent risk of failure in pharmaceutical development and the uncertainty of approval, these criteria are usually not met before regulatory approval is achieved. The related expenditure is reflected in the consolidated statements of profit or loss in the period in which the expenditure is incurred. We have entered into agreements under which third parties grant licenses to us, which are known as in-license agreements. If in-licensing results in consideration for the acquisition of intellectual property that meets the definition of an identifiable asset, this is capitalized as an intangible asset. If the transaction also

includes research and development services to be provided by the licensor, the share of consideration attributable to these services is recognized in research and development expenses in line with the performance of the services. The allocation of consideration attributable to the acquisition of intellectual property and consideration attributable to the research and development services provided by the licensor requires management to make judgements and assumptions. These judgments and assumptions need to be applied on a case-by-case basis and can materially affect our research and development expenses.

Business Combinations

In our accounting for business combinations, judgment is required in determining whether an intangible asset is identifiable and whether it should be recorded separately from goodwill. Additionally, estimating the acquisition-date fair values in conjunction with purchase price allocation involves estimation uncertainty and discretionary decisions. The necessary measurements are based on information available on the acquisition date and on expectations and assumptions that have been deemed reasonable by management. These judgments, estimates and assumptions can materially affect our financial position and profit.

Share-Based Payments

Determining the fair value of share-based payment transactions requires the most appropriate valuation for the specific program, which depends on the underlying terms and conditions. We used valuation models such as a binomial or Monte Carlo simulation model for the measurement of the cash- and equity-settled transactions' fair value, taking into account certain assumptions relating to a number of factors, including the volatility of the stock price, the determination of an appropriate risk-free interest rate, expected dividends and the probability of reaching a minimum hurdle to exercise the relevant options. For awards which were granted prior to the initial public offering, at a time where no quoted market prices existed, the valuation model assumptions included the option's underlying share price. For awards which were granted after the initial public offering, the grant date's share prices on the Nasdaq Global Select Market were included in the valuation.

A fluctuation assumption is applied when estimating the number of equity instruments for which service conditions are expected to be satisfied and will be revised if material differences arise. Ultimately, a true-up to the number satisfied by the settlement date will be recorded.

For further disclosures relating to share-based payments, see Note 16.

Income Taxes

We are subject to income taxes in more than one tax jurisdiction. Due to the increasing complexity of tax laws and the corresponding uncertainty regarding the legal interpretation by the fiscal authorities, tax calculations are generally subject to an elevated amount of uncertainty. To the extent necessary, possible tax risks are taken into account in the form of provisions.

We do not recognize or we would impair deferred tax assets if it is unlikely that a corresponding amount of future taxable profit will be available against which the deductible temporary differences, tax loss carry forwards and tax credits can be utilized. The assessment whether a deferred tax asset can be recognized or is impaired requires significant judgment, as we need to estimate future taxable profits to determine whether the utilization of the deferred tax asset is probable. In evaluating our ability to utilize our deferred tax assets, we consider all available positive and negative evidence, including the level of historical taxable income and projections for future taxable income over the periods in which the deferred tax assets are recoverable. Based on the requirements in IAS 12, to not place reliance on future events that are uncertain as they for example cannot be controlled, managements assessment takes particular into account the fact that there is an inherent risk of failure in pharmaceutical development and an uncertainty of approval which is dependent on external regulatory agencies' opinions. This also includes management's assessment on the character and amounts of taxable future profits, the periods in which those profits are expected to occur, and the availability of tax planning opportunities.

Our management continued to take the view that deferred tax assets on tax losses carried forward that relate to subsidiaries which have a loss-making history cannot be recognized. This includes the assessment that those subsidiaries have neither any taxable temporary differences nor any tax planning opportunities available that could support the recognition of deferred tax assets.

For further disclosures relating to deferred taxes, see Note 8.

4 Group Information

Information about Subsidiaries

The consolidated financial statements include the following subsidiaries:

			% equity interest	
Name	Country of incorporation	Registered office	December 31, 2024	December 31, 2023
BioNTech BioNTainer Holding GmbH	Germany	Mainz [2]	100%	100%
BioNTech Cell & Gene Therapies GmbH	Germany	Mainz [2]	100%	100%
BioNTech Collaborations GmbH	Germany	Mainz [2]	100%	n/a[1]
BioNTech Delivery Technologies GmbH	Germany	Halle [2]	100%	100%
BioNTech Diagnostics GmbH	Germany	Mainz [2]	100%	100%
BioNTech Europe GmbH	Germany	Mainz [2]	100%	100%
BioNTech Idar-Oberstein Services GmbH	Germany	Idar-Oberstein [2]	100%	100%
BioNTech Individualized mRNA Manufacturing GmbH	Germany	Mainz [2]	100%	100%
BioNTech Innovation and Services Marburg GmbH	Germany	Marburg [2]	100%	100%
BioNTech Innovation GmbH	Germany	Mainz [2]	100%	100%
BioNTech Innovative Manufacturing Services GmbH	Germany	Idar-Oberstein [2]	100%	100%
BioNTech Manufacturing GmbH	Germany	Mainz [2]	100%	100%
BioNTech Manufacturing Marburg GmbH	Germany	Marburg [2]	100%	100%
BioNTech Real Estate Holding GmbH	Germany	Holzkirchen [2]	100%	100%
InstaDeep DE GmbH	Germany	Berlin	100%	100%
JPT Peptide Technologies GmbH	Germany	Mainz [2]	100%	100%
NT Security and Services GmbH	Germany	Mainz [2]	100%	100%
reSano GmbH	Germany	Mainz [2]	100%	100%
BioNTech Australia Pty Ltd.	Australia	Melbourne	100%	100%
BioNTech R&D (Austria) GmbH	Austria	Vienna	100%	100%
Simba Merger Sub	Cayman Islands	George Town	100%	n/a[1]
BioNTech (Shanghai) Pharmaceuticals Co. Ltd.	China	Shanghai	100%	100%
InstaDeep France SAS	France	Paris	100%	100%
Biopharma BioNTech Israel Ltd.	Israel	Tel Aviv	100%	100%
New Technologies Re	Luxembourg	Luxembourg	100%	100%
InstaDeep Nigeria Limited	Nigeria	Lagos	100%	100%
BioNTech Rwanda Ltd.	Rwanda	Kigali	100%	100%
BioNTech Pharmaceuticals Asia Pacific Pte. Ltd.	Singapore	Singapore	100%	100%
BioNTech Pharmaceuticals Spain S.L	Spain	Barcelona	100%	100%
BioNTech Switzerland GmbH	Switzerland	Basel	100%	100%
BioNTech Taiwan Co. Ltd.	Taiwan	Taipei	100%	100%
InstaDeep Tunisia SARL	Tunisia	Tunis	100%	100%
BioNTech Turkey Tıbbi Ürünler Ve Klinik Araştirma Ticaret Anonim Şirketi	Turkey	Istanbul	100%	100%
BioNTech UK Ltd.	United Kingdom	London	100%	100%
InstaDeep Ltd.	United Kingdom	London	100%	100%
BioNTech Research and Development, Inc.	United States	Cambridge	100%	100%
BioNTech USA Holding, LLC	United States	Cambridge	100%	100%
BioNTech US Inc.	United States	Cambridge	100%	100%
BioNTech Delivery Technologies (US), LLC	United States	Cambridge	100%	100%
InstaDeep LLC	United States	Dover	100%	100%
JPT Peptide Technologies Inc.	United States	Cambridge	100%	100%

[1] Included during the year ended December 31, 2024.

[2] Subsidiary makes use of the exemption of Sections 264 para. 3 and 264b HGB for the 2024 financial year.

All entities listed above are included in our consolidated financial statements.

Parent Company

ATHOS KG, Holzkirchen, Germany, is the sole shareholder of AT Impf GmbH, Munich, Germany, and beneficial owner of the following percentage of ordinary shares in BioNTech at the dates as indicated. ATHOS KG via AT Impf GmbH has de facto control over BioNTech based on its substantial shareholding, which practically enables it to exercise the majority of voting rights to pass resolutions at our Annual General Meeting, or AGM.

			Ownership of ordinary shares in BioNTech (in %)	
Name	Country of incorporation	Registered office	December 31, 2024	December 31, 2023
AT Impf GmbH	Germany	Munich	42.44 %	43.77 %

Entity with Significant Influence over the Group

Medine GmbH, Mainz, Germany, owned the following percentage of ordinary shares in BioNTech at the following dates as indicated:

			Ownership of ordinary shares in BioNTech (in %)	
Name	Country of incorporation	Registered office	December 31, 2024	December 31, 2023
Medine GmbH	Germany	Mainz	16.85 %	17.01 %

5 Business Combinations

Acquisition of Biotheus

On November 13, 2024, our subsidiary, BioNTech Collaborations GmbH, entered into an agreement and plan of merger, or the Merger Agreement, with Biotheus, a clinical-stage biotechnology company dedicated to the discovery and development of novel antibodies to address unmet medical needs of patients with oncological or inflammatory diseases. The acquisition supports the global execution of our oncology strategy and provides full global rights to BNT327/PM8002, an investigational PD-L1 x VEGF-A bispecific antibody, with potential to replace current checkpoint inhibitor standard of care treatments for solid tumors.

Following the satisfaction of several customary closing conditions and regulatory approvals as defined in the Merger Agreement, the acquisition closed on January 31, 2025.

Upon closing and under the terms of the agreement, we paid Biotheus shareholders upfront of approximately $850.0 million, predominantly in cash, with a small portion in ADSs, to acquire 100% of the issued share capital of Biotheus, subject to customary purchase price adjustments, and agreed to pay additional performance-based contingent payments of up to $150.0 million if certain milestones are met.

By closing the acquisition, we gained full rights to Biotheus's pipeline candidates and its in-house bispecific antibody drug conjugate capability. The acquisition has expanded our footprint in China, adding a local research and development hub to conduct clinical trials. In addition, we have gained a biologics manufacturing facility to contribute to our future global manufacturing

and supply, and more than 300 Biotheus employees in R&D, manufacturing and enabling functions have joined the BioNTech workforce.

We are in the process of performing a preliminary allocation of the total consideration and the underlying assets acquired and liabilities assumed based on their estimated fair value as of the acquisition date in accordance with IFRS 3.

Based on our initial assessment, the purchase price will be mainly allocated to amounts related to the settlement of the pre-existing relationship in connection with the License and Collaboration Agreement with Biotheus as of November 2023, which comprised the development, manufacturing and commercialization of BNT327 ex-Greater China.

The amount related to the settlement of the pre-existing relationship is identified based on the fair value of the settled rights of Biotheus in connection with contingent payments in relation to the License and Collaboration Agreement and will be separated from the remaining consideration to be transferred for the acquired business of Biotheus. The consideration for the acquired business of Biotheus will be allocated to net assets acquired, which include identified intangible assets in connection with Biotheus' BNT327 Greater China rights and other clinical pipeline candidates, property, plant and equipment, cash, financial liabilities, deferred tax liabilities and if applicable goodwill as residual.

The assessment is preliminary as the accounting for the settlement of the pre-existing relationship and business combination is still in progress.

6 Revenues from Contracts with Customers

6.1 Disaggregated Revenue Information

Set out below is the disaggregation of the Group's revenues from contracts with customers:

	Years ended December 31,					
(in millions €)	**2024**		**2023**		**2022**	
COVID-19 vaccine revenues	2,432.1	88%	3,776.2	99%	17,145.2	99%
Other revenues	319.0	12%	42.8	1%	165.4	1%
Total	**2,751.1**	**100%**	**3,819.0**	**100%**	**17,310.6**	**100%**

(in millions €)	Years ended December 31,					
Revenues by customers	**2024**		**2023**		**2022**	
Pfizer	2,011.7	73%	3,293.0	86%	13,795.8	80%
German Federal Ministry of Health	701.0	25%	473.6	12%	3,020.5	17%
Other customers	38.4	2%	52.4	2%	494.3	3%
Total	**2,751.1**	**100%**	**3,819.0**	**100%**	**17,310.6**	**100%**

(in millions €)	Years ended December 31,					
Revenues by countries	**2024**		**2023**		**2022**	
United States	1,847.8	67%	3,010.9	79%	12,709.7	73%
Germany	706.9	26%	482.7	13%	3,031.0	18%
Rest of the World	196.4	7%	325.4	8%	1,569.9	9%
Total	**2,751.1**	**100%**	**3,819.0**	**100%**	**17,310.6**	**100%**

COVID-19 vaccine revenues

During the year ended December 31, 2024, COVID-19 vaccines revenues were recognized from the supply and sales of our COVID-19 vaccine worldwide, mainly comprising our share of the collaboration partner's gross profit derived from sales in the collaboration partner's territory. During the year ended December 31, 2024, our commercial revenues decreased as compared to the year ended December 31, 2023, in line with a lower COVID-19 vaccine market demand. In addition, write-downs by our collaboration partner Pfizer, significantly reduced our gross profit share and hence negatively influenced our revenues for the year ended December 31, 2024. Our COVID-19 vaccine revenues are subject to seasonal effects in the fall / winter of the northern hemisphere.

Other revenues

During the year ended December 31, 2024, our other revenues were mainly derived from a pandemic preparedness contract with the German government effectively supplemented in the three months ended March 31, 2024.

The revenues from contracts with customers disclosed above were recognized as follows:

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Timing of revenue recognition			
Goods and services transferred at a point in time	611.4	776.3	4,447.2
Goods and services transferred over time	298.5	15.4	127.2
Revenue recognition applying the sales-based or usage-based royalty recognition constraint model[(1)]	1,841.2	3,027.3	12,736.2
Total	**2,751.1**	**3,819.0**	**17,310.6**

[(1)] Represents sales based on the share of the collaboration partners' gross profit and sales milestones.

6.2 Contract Assets

The contract assets developed as follows:

(in millions €)	2024 Current	2024 Non-current	2024 Total	2023 Current	2023 Non-current	2023 Total
As of January 1	**4.9**	**—**	**4.9**	**—**	**—**	**—**
Additions	—	28.4	28.4	4.2	—	4.2
thereof: attributable to performance obligations satisfied in prior periods	—	23.6	23.6	—	—	—
Reclassification to trade accounts receivables	(13.5)	—	(13.5)	—	—	—
Reclassification from non-current to current	18.6	(18.6)	—	—	—	—
Changes in scope of consolidation	—	—	—	0.7	—	0.7
As of December 31	**10.0**	**9.8**	**19.8**	**4.9**	**—**	**4.9**

During the year ended December 31, 2024, the contract assets were significantly influenced by the rendering of services under the pandemic preparedness contract with the German government.

6.3 Contract Liabilities

The development of the contract liabilities is as follows:

(in millions €)	2024 Current	2024 Non-current	2024 Total	2023 Current	2023 Non-current	2023 Total
As of January 1	**353.3**	**398.5**	**751.8**	**77.1**	**48.4**	**125.5**
Additions	—	—	—	387.2	444.0	831.2
Recognition as revenues	(272.7)	—	(272.7)	(202.2)	—	(202.2)
Reclassification from non-current to current	215.5	(215.5)	—	93.9	(93.9)	—
Currency effects	(1.2)	—	(1.2)	(2.7)	—	(2.7)
As of December 31	**294.9**	**183.0**	**477.9**	**353.3**	**398.5**	**751.8**

Contract liabilities significantly decreased compared to the previous year as advance payments in connection with the amendment of the COVID-19 vaccine purchase agreement with the European Commission, or EC, were consumed. As of December 31, 2024, the contract liabilities included €416.2 million of such payments and €61.1 million of remaining upfront fees from our collaboration agreement with Pfizer (Zoster) (as of December 31, 2023: €688.7 million payments under our COVID-19 vaccine purchase agreement with the European Commission and €62.3 million of remaining upfront fees from our collaboration agreement with Pfizer (Zoster)).

Set out below is the amount of revenue recognized for the periods indicated:

	Years ended December 31,		
(in millions €)	2024	2023	2022
Amounts included in contract liabilities at the beginning of the year	272.7	3.5	63.1

7 Income and Expenses

7.1 General Expenses

Cost of Sales

From the year ended December 31, 2023, to the year ended December 31, 2024, cost of sales decreased by €58.5 million, or 10%, from €599.8 million to €541.3 million, mainly due to recognizing lower cost of sales from our decreased COVID-19 vaccine sales, which included the share of gross profit that we owe our collaboration partner Pfizer based on our sales. The same reasoning applies to the change while comparing the years ended December 31, 2023 and 2022, which decreased by €2,395.2 million, or 1%, from €2,995.0 million to €599.8 million. In addition, cost of sales was impacted by expenses arising from inventory write-downs and scrapings in the context of the launch of our variant adapted COVID-19 vaccine in the amount of €125.8 million during the year ended December 31, 2024 (€94.5 million for year ended December 31, 2023, and nil for year ended December 31, 2022).

Research and Development Expenses

From the year ended December 31, 2023 to the year ended December 31, 2024, our research and development expenses increased by €471.1 million, or 26%, from €1,783.1 million to €2,254.2 million, mainly influenced by advancing key pipeline candidates, such as our ADC antibody and individualized cancer-immunotherapy product candidates. Further contributions to the increase came from higher personnel expenses resulting from an increase in headcount. The same reasoning applies to the change in our research and development expenses while comparing the years ended December 31, 2023 and 2022, which increased by €246.1 million, or 16%, from €1,537.0 million to €1,783.1 million.

Sales and Marketing Expenses

From the year ended December 31, 2023, to the year ended December 31, 2024, our sales and marketing expenses increased by €5.2 million, or 8%, from €62.7 million to €67.9 million, mainly due to increased expenses for setup and enhancement of commercial IT platforms and an increase in personnel expenses resulting from an increase in headcount. The same reasoning applies to the change in sales and marketing expenses while comparing the years ended December 31, 2023 and 2022, which increased by €3.2 million, or 5%, from €59.5 million to €62.7 million.

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 €36.1 million, or 7%, from €495.0 million to €531.1 million, mainly influenced by increased expenses for IT services as well as by an

increase in personnel expenses resulting from an increase in headcount. The same reasoning applies to the change in general and administrative expenses while comparing the years ended December 31, 2023 and 2022, which increased by €13.3 million, or 3%, from €481.7 million to €495.0 million.

7.2 Other Operating Result

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Other operating result			
Other operating income	**140.6**	**105.0**	**815.3**
Gain on derivative instruments at fair value through profit or loss	—	67.6	—
Grants	31.5	2.2	1.4
Foreign exchange differences, net	84.9	—	727.4
Other	24.2	35.2	86.5
Other operating expenses	**(811.5)**	**(293.0)**	**(410.0)**
Contractual disputes / settlements	(657.4)	—	—
Litigation costs[(1)]	(113.7)	(29.4)	(3.0)
Loss on derivative instruments at fair value through profit or loss	(32.4)	—	(385.5)
Foreign exchange differences, net	—	(252.0)	—
Other	(8.0)	(11.6)	(21.5)
Total other operating result	**(670.9)**	**(188.0)**	**405.3**

(1) Adjustments to the year 2022 figures relate to reclassifying legal costs in connection with certain litigation as other operating expenses, rather than general and administrative expenses, to reflect changes in reporting.

During the year ended December 31, 2024, the other operating income increased compared to the year ended December 31, 2023, as foreign exchange differences arising on operating items changed from a negative effect to a positive effect. Comparing the year ended December 31, 2023, to the year ended December 31, 2022, we had a negative effect from exchange differences.

During the year ended December 31, 2024, the other expenses increased compared to the year ended December 31, 2023, which was mainly due to the settlement of contractual disputes and related expenses to such disputes and other litigations. The amounts shown for contractual disputes are net of the related reimbursements to be received. For further information see Note 12.2. During the year ended December 31, 2023, the other operating expenses decreased compared to the year ended December 31, 2022, as the fair value measurement effect of our derivatives changing from a negative to a positive effect.

7.3 Finance Result

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Finance result			
Finance income	**664.0**	**519.6**	**330.3**
Gains from financial instruments measured at amortized cost	437.6	357.6	48.5
Gains from financial instruments measured at fair value	210.9	162.0	216.8
Foreign exchange differences, net	15.5	—	65.0
Finance expenses	**(27.4)**	**(23.9)**	**(18.9)**
Loss from financial instruments measured at fair value	(6.0)	—	—
Loss from financial instruments measured at amortized cost without expected credit losses	(4.6)	—	—
Loss from financial instruments measured at amortized cost, expected credit losses	(4.2)	—	—
Foreign exchange differences, net	—	(16.0)	—
Other	(12.6)	(7.9)	(18.9)
Total finance result	**636.6**	**495.7**	**311.4**

During the year ended December 31, 2024, the finance income increased compared to the year ended December 31, 2023, mainly due to interest income earned on security investments as bonds, commercial paper, reverse repos and deposits as well as fair value adjustments in relation to our money market funds. The same effect applies for the year ended December 31, 2023, compared to the year ended December 31, 2022.

During the year ended December 31, 2024, the finance expenses increased compared to the year ended December 31, 2023, mainly due to interest expenses for financial liabilities that have been discounted at inception date, interests on leases and tax liabilities and impairments for expected credit losses of financial assets. This was partially compensated by positive exchange rate effects . During the year ended December 31, 2023, the other finance income increased compared to the year ended December 31, 2022.

7.4 Employee Benefits Expense

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Wages and salaries	814.0	617.8	544.8
Social security costs	113.7	76.7	58.6
Pension costs	3.5	4.1	2.1
Total	**931.2**	**698.6**	**605.5**

Wages and salaries include, among other things, expenses for share-based payments. The increase is mainly due to an increase in headcount between the years ended December 31, 2024 and 2023.

8 Income Tax

Income tax for the years ended December 31, 2024, December 31, 2023, and December 31, 2022, comprised current income taxes, other taxes and deferred taxes. We are subject to corporate taxes, the solidarity surcharge and trade taxes. Our corporate tax rate in the reporting year remained unchanged (15.0%) as did the solidarity surcharge (5.5%) whereas the average trade tax rate changed resulting in a combined income tax rate of 27.6% in the year ended December 31, 2024 (during the years ended December 31, 2023 and 2022: 27.1% and 27.2%, respectively). Deferred taxes are calculated at a rate of 30.8%. BioNTech USA Holding, LLC is subject to Federal Corporate Income Tax (21.0%) as well as State Income Tax in various state jurisdictions (effective rate of 3.4%). The deferred tax rates calculations basis remained unchanged compared to the previous period.

The following table illustrates the current and deferred taxes for the periods indicated:

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Current income taxes	(2.3)	243.1	3,629.6
Deferred taxes	(10.1)	12.7	(109.9)
Income taxes expenses / (income)	**(12.4)**	**255.8**	**3,519.7**

The following table reconciles the expected income taxes to the income tax expenses. The expected income taxes were calculated using the combined income tax rate of BioNTech SE applicable to the Group and mentioned above which was applied to profit before taxes to calculate the expected income taxes.

	Years ended December 31,		
(in millions €)	**2024**		
Profit / (Loss) before tax	**(677.7)**	**1,186.1**	**12,954.1**
Expected tax credit	(186.8)	321.8	3,529.7
Effects			
Deviation due to local tax basis	12.6	6.6	8.9
Deviation due to deviating income tax rate (Germany and foreign countries)	6.6	(0.1)	7.3
Change in valuation allowance	(16.4)	(14.3)	30.6
Effects from tax losses and tax credits	241.1	(66.5)	23.2
Change in deferred taxes due to tax rate change	9.1	(2.4)	(2.3)
Non-deductible expenses	(49.1)	3.1	2.5
Non tax-effective income	(2.1)	(0.6)	(87.9)
Non tax-effective share-based payment expenses	(37.2)	7.7	8.7
Tax-effective equity transaction costs	—	—	—
Adjustment prior year taxes	—	5.5	(31.5)
Non-tax effective bargain purchase	—	—	—
Other effects	9.8	(5.0)	30.5
Income taxes	**(12.4)**	**255.8**	**3,519.7**
Effective tax rate	**1.8%**	**21.6%**	**27.2%**

Taxes

Deferred taxes for the periods indicated relate to the following:

Year ended December 31, 2024

(in millions €)	January 1, 2024	Recognized in P&L	Recognized in OCI	Recognized directly in equity	December 31, 2024
Fixed assets	(8.4)	11.5	—	—	3.1
Right-of-use assets	(56.6)	(8.3)	—	—	(64.9)
Inventories	113.6	(31.7)	—	—	81.9
Trade and other receivables	(90.0)	(412.1)	—	—	(502.1)
Lease liabilities	57.2	13.3	—	—	70.5
Contract liabilities	(43.0)	(47.3)	—	—	(90.3)
Loans and borrowings	4.8	20.4	—	—	25.2
Net employee defined benefit liabilities	0.6	0.1	—	—	0.7
Share-based payments	142.1	20.3	—	(85.0)	77.4
Other provisions	9.8	4.4	—	—	14.2
Other (incl. deferred expenses)	(44.9)	413.1	—	—	368.2
Tax losses / tax credits	94.4	230.2	63.2	—	387.8
Deferred tax assets net (before valuation adjustment)	179.6	213.9	63.2	(85.0)	371.7
Valuation adjustment	(138.0)	(133.9)	(60.5)	—	(332.4)
Deferred tax assets / (liabilities), net (after valuation adjustment)	41.6	80.0	2.7	(85.0)	39.3
Thereof deferred tax assets	81.3	82.7	2.7	(85.0)	81.7
Thereof deferred tax liability	(39.7)	(2.7)	—	—	(42.4)

Year ended December 31, 2023

(in millions €)	January 1, 2023	Recognized in P&L	Recognized in OCI	Recognized directly in equity	December 31, 2023
Fixed assets	15.8	20.2	—	(44.4)	(8.4)
Right-of-use assets	(55.8)	(0.8)	—	—	(56.6)
Inventories	148.9	(35.3)	—	—	113.6
Trade and other receivables	(162.7)	72.7	—	—	(90.0)
Lease liabilities	55.2	2.0	—	—	57.2
Loans and borrowings	7.6	(2.8)	—	—	4.8
Contract liabilities	(10.0)	(33.0)	—	—	(43.0)
Net employee defined benefit liabilities	0.7	(0.1)	—	—	0.6
Other provisions	11.0	(1.2)	—	—	9.8
Share-based payments	188.4	12.0	—	(58.3)	142.1
Other (incl. deferred expenses)	61.5	(106.4)	—	—	(44.9)
Tax losses / tax credits	99.5	(5.1)	—	—	94.4
Deferred tax assets net (before valuation adjustment)	**360.1**	**(77.8)**	**—**	**(102.7)**	**179.6**
Valuation adjustment	(136.7)	65.1	—	(66.4)	(138.0)
Deferred tax assets / (liabilities), net (after valuation adjustment)	**223.4**	**(12.7)**	**—**	**(169.1)**	**41.6**
Thereof deferred tax assets	**229.6**	**20.8**	**—**	**(169.1)**	**81.3**
Thereof deferred tax liability	**(6.2)**	**(33.5)**	**—**	**—**	**(39.7)**

As of December 31, 2024, our accumulated tax losses comprised tax losses of German entities that were incurred prior to the establishment of a tax group with BioNTech SE or by entities that are not within the tax group or U.S. tax group. Up until the year ended December 31, 2024, our accumulated tax losses also comprised those of the German tax group. Our accumulated tax losses for the periods indicated amounted to the following:

	Years ended December 31,		
(in millions €)	2024	2023	2022
Corporate tax	1,236.7	260.7	352.3
Trade tax	989.6	140.1	204.1

	Years ended December 31,		
(in millions €)	2024	2023	2022
Federal tax credits	25.4	21.3	4.0
State tax credits	7.1	8.7	1.6

Up until the year ended December 31, 2024, deferred tax assets on tax losses were only partially recognized, as there was not sufficient probability in terms of IAS 12 that future taxable profits would have been available against which all the unused tax losses could have been utilized.

The amount of deductible temporary differences, unused tax losses, and unused tax credits for which no deferred tax asset is recognized in the statement of financial position as of

December 31, 2024, is €2,028.8 million. Therefore, as of December 31, 2024, we have not recognized deferred tax assets for unused tax losses and temporary differences in an amount of €332.4 million (December 31, 2023: €138.0 million, December 31, 2022: €136.7 million).

As of December 31, 2024, we maintain the partial non-recognition of deferred tax assets for unused U.S. federal and state tax losses and tax credits at an amount of €30.5 million and €4.0 million, respectively, as there is not sufficient probability in terms of IAS 12 that future taxable income will be available against which these unused tax losses and tax credits can be utilized. The material unrecognized U.S. federal and state tax losses and tax credits will begin to expire in 2036.

We do not recognize deferred tax liabilities for taxable temporary differences associated with investments in subsidiaries, in cases where we are able to control the timing of the reversal of the temporary difference and it is probable that the temporary differences will not reverse in the foreseeable future. The aggregate amount of temporary differences associated with investments in subsidiaries, for which deferred tax liabilities have not been recognized, is €14.5 million.

The global minimum taxation for large multinational groups (known as The Pillar Two regulations) based on Base Erosion and Profit Shifting (BEPS) project by the Organization for Economic Co-operation and Development (OECD) were transposed into German law at the end of 2023 (MinStG) and came into force on January 1st, 2024. We do fall within the scope of these regulations. As of December 31, 2024 we carried out an analysis to determine the impact and jurisdictions from which we are exposed to potential effects in connection with a Pillar Two top-up tax. It was checked whether the CbCR Safe Harbor Regulations were fulfilled. In Jurisdictions where the CbCR Regulations do not apply, the effective tax rate was calculated on a simplified basis. Since our relevant effective tax rate calculated for Pillar Two purposes is mainly above 15% in all jurisdictions in which it operates, it has been determined that we are not materially subject to Pillar Two top-up taxes. We apply the exception in IAS 12, according to which no deferred tax assets and liabilities are recognized in connection with the second pillar (Pillar Two) income taxes of the OECD and no disclosures are made in this regard. We closely monitor the progress of the legislative process in each country in which we operate.

9 Earnings per Share

Basic earnings per share (EPS) is calculated by dividing the profit for the year attributable to ordinary equity holders of the parent by the weighted average number of ordinary shares outstanding during the year.

Diluted EPS is calculated by dividing the profit attributable to ordinary equity holders of the parent by the weighted average number of ordinary shares outstanding during the year, plus the weighted average number of ordinary shares that would be issued on conversion of all the dilutive potential ordinary shares into ordinary shares.

The following table reflects the income and share data used in the basic and diluted EPS calculations:

	Years ended December 31,		
(in millions €, except per share data)	**2024**	**2023**	**2022**
Profit attributable to ordinary equity holders of the parent for basic earnings	**(665.3)**	**930.3**	**9,434.4**
Weighted average number of ordinary shares outstanding for basic EPS	**240.4**	**240.6**	**243.3**
Effects of dilution from share options	—	2.1	6.5
Weighted average number of ordinary shares outstanding adjusted for the effect of dilution	**240.4**	**242.7**	**249.8**
Earnings / (Loss) per share			
Basic earnings / (loss) per share	—	—	—
Diluted earnings / (loss) per share	—	—	—

10 Other Intangible Assets and Goodwill

Goodwill

(in millions €)	**Goodwill**
Acquisition costs	
As of January 1, 2023	61.2
Currency differences	(5.6)
Acquisition of subsidiaries and businesses	306.9
As of December 31, 2023	**362.5**
Acquisition of subsidiaries and businesses	—
Currency differences	18.1
As of December 31, 2024	**380.6**

Intangible Assets with Indefinite Useful Lives

	CGU Immunotherapies		CGU External Product Sales of JPT		CGU External Business of InstaDeep		Total	
(in millions €)	As of December 31, 2024	As of December 31, 2023	As of December 31, 2024	As of December 31, 2023	As of December 31, 2024	As of December 31, 2023	As of December 31, 2024	As of December 31, 2023
Goodwill	369.8	352.2	0.5	0.5	10.3	9.8	380.6	362.5
Intangible assets with indefinite useful life	486.5	444.5	—	—	—	—	486.5	444.5
Total	**856.3**	**796.7**	**0.5**	**0.5**	**10.3**	**9.8**	**867.1**	**807.0**

For the year ended December 31, 2024, our goodwill relates almost completely to the CGU Immunotherapies. The CGU Immunotherapies focuses on the development of therapies in the field of oncology and infectious diseases and comprises our broad pipeline that includes mRNA-based immune activators, antigen-targeting T cells and antibodies and defined immunomodulators of various immune cell mechanisms.

We performed our annual Goodwill impairment test in October 2024.

The recoverable amount of the CGU Immunotherapies has been determined based on a fair value less cost of disposal (FVLCD), which we derived based on our market capitalization as an observable input parameter.

The recoverable amounts of the CGU External Product Sales of JPT and the CGU External Business of InstaDeep have been determined based on their value in use. In assessing value in use, the estimated future cash flows, which are derived based on a bottom-up business plan provided by the management of the respective entities, are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the assets. A long-term growth rate of 1.5% is applied to project future cash flows after the last year of the detailed planning period.

As a result of the analysis in October 2024, we did not identify an impairment for these CGUs. Even if our market capitalization had been approximately 10% lower, FVLCD would have still been above the respective carrying amount of the CGU Immunotherapies.

Intangible assets with indefinite useful lives mainly comprised acquired intangible assets not yet available for use, or In-process R&D, of €485.5 million (as of December 31, 2023: €443.5 million). Such assets are not amortized and therefore reviewed for impairment annually. The annual impairment test was performed on an individual basis of the assets during the three months ended December 31, 2024. The recoverable amounts were determined based on the value in use. The results gave rise to impairment losses in total of €55.1 million that were related to the CGU Immunotherapies. The impairment losses were recorded under R&D expenses in the consolidated statements of profit or loss. The impairments resulted from revised prioritization of product candidates in the overall portfolio.

We examine the existence of indications of impairment using various factors, particularly deviations from sales forecasts and the analysis of changes in medium-term planning. The identification of indications of impairment takes place with the involvement of the responsible departments, taking external and internal information sources into consideration.

During the three months ended June 30, 2024, we identified a triggering event in connection with the asset related to the product candidate BNT326/YL202 due to the partial clinical hold placed on the Phase 1 trial of our partner, MediLink Therapeutics (Suzhou) Co., Ltd, or MediLink by the U.S. Food and Drug Administration, or FDA. The impairment test performed did not reveal any impairment loss. Further triggering events were identified in connection with the asset related to the product candidate BNT316/ONC-392. During the three months ended September 30, 2024, a triggering event was identified based on the operational hold of the trial. During the three months ended December 31, 2024, the trial was then placed on partial clinical hold. The FDA subsequently lifted the partial clinical holds related to both product candidates. During the three months ended December 31, 2024, we identified a triggering event based on our analysis of changes in medium-term planning. We have

performed impairment tests in connection with the identified triggering events which did not give rise to any impairment loss.

A sensitivity analysis of the key assumptions, future cash flows and weighted average cost of capital, was performed as part of the scheduled impairment testing of the intangible assets not yet available for use. For those assets that have not been impaired, the sensitivity analysis did not give rise to any impairment loss, either for a reduction of 10% in future cash flows or for a 10% increase in the weighted average cost of capital.

Other Intangible Assets

(in millions €)	In-process R&D	Concessions, licenses and similar rights	Advance payments	Total
Acquisition costs				
As of January 1, 2023	—	222.3	13.1	235.4
Additions	443.5	45.7	15.8	505.0
Disposals	—	(1.6)	(1.6)	(3.2)
Reclassifications	—	4.9	(4.9)	—
Currency differences	—	(3.6)	—	(3.6)
Acquisition of subsidiaries and businesses	—	187.4	—	187.4
As of December 31, 2023	**443.5**	**455.1**	**22.4**	**921.0**
Additions	97.1	6.2	11.9	115.2
Disposals	—	(2.9)	—	(2.9)
Reclassifications	—	11.6	(11.6)	—
Currency differences	—	11.1	—	11.1
As of December 31, 2024	**540.6**	**481.1**	**22.7**	**1,044.4**

(in millions €)	In-process R&D	Concessions, licenses and similar rights	Advance payments	Total
Cumulative amortization and impairment charges				
As of January 1, 2023	—	76.9	—	76.9
Amortization	—	40.5	—	40.5
Disposals	—	(0.3)	—	(0.3)
Currency differences	—	(0.2)	—	(0.2)
As of December 31, 2023	**—**	**116.9**	**—**	**116.9**
Amortization	—	54.8	—	54.8
Impairment	55.1	28.2	—	83.3
Disposals	—	(2.8)	—	(2.8)
Currency differences	—	1.8	—	1.8
As of December 31, 2024	**55.1**	**198.9**	**—**	**254.0**

(in millions €)	In-process R&D	Concessions, licenses and similar rights	Advance payments	Total
Carrying amount				
As of December 31, 2023	**443.5**	**338.2**	**22.4**	**804.1**
As of December 31, 2024	**485.5**	**282.2**	**22.7**	**790.4**

The intangible assets resulting from licensing and collaboration agreements are combined into one class of assets, In-process R&D, due to their similar nature and use in our operations and are attributed to the CGU Immunotherapies.

The amortization of the concessions, licenses and similar rights during the year ended December 31, 2024, has been mainly recorded under R&D expenses in the consolidated statements of profit or loss.

During the year ended December 31, 2024, triggering events with respect to two intangible assets with definite useful life occurred. We performed impairment tests based on decisions to stop the development of the compounds that were acquired as part of business combinations in the past. The recoverable amounts were determined based on the value in use. The impairment tests gave rise to the full impairment of the compounds in the amount of €26.4 million. The remaining insignificant impairments relate to intangibles which are not significant for the group. The majority of these impairment losses were recorded under R&D expenses in the consolidated statements of profit or loss.

The decrease in other intangible assets by €13.7 million from December 31, 2023, to December 31, 2024, was mainly related to impairment losses of €83.3 million in total (as of December 31, 2023: nil). This was partially offset by the payments made in connection with the purchase of intangible assets. We entered into license and collaboration agreements in which we work together with partners to develop pharmaceutical products and, provided regulatory approval is granted, commercialize them. Thereof €9.4 million (as of December 31, 2023: €443.5 million) was related to upfront payments and €87.7 million (as of December 31, 2023: nil) was related to milestone payments as part of the purchase of intangible assets that were recognized as subsequent acquisition cost of the intangible assets acquired. The payments in connection with the license and collaboration agreements resulted in the recognition of intangible assets not yet available for use.

11 Property, Plant and Equipment

(in millions €)	Land and buildings	Equipment, tools and installations	Construction in progress and advance payments	Total
Acquisition and production costs				
As of January 1, 2023	217.0	273.0	235.5	725.5
Additions	9.7	50.3	189.4	249.4
Disposals	—	(2.4)	(0.2)	(2.6)
Reclassifications	9.3	22.3	(31.6)	—
Currency differences	(0.6)	(1.2)	(3.6)	(5.4)
Acquisition of subsidiaries and businesses	—	2.1	—	2.1
As of December 31, 2023	**235.4**	**344.1**	**389.5**	**969.0**
Additions	46.2	49.3	192.4	287.9
Disposals	(0.3)	(4.7)	—	(5.0)
Reclassifications	86.6	36.3	(122.9)	—
Currency differences	1.5	2.7	1.6	5.8
As of December 31, 2024	**369.4**	**427.7**	**460.6**	**1,257.7**

(in millions €)	Land and buildings	Equipment, tools and installations	Construction in progress and advance payments	Total
Cumulative depreciation and impairment charges				
As of January 1, 2023	22.0	94.3	—	116.3
Depreciation	14.4	83.3	—	97.7
Disposals	—	(1.7)	—	(1.7)
Currency differences	(0.2)	(0.3)	—	(0.5)
As of December 31, 2023	**36.2**	**175.6**	**—**	**211.8**
Depreciation	12.3	38.3	4.3	54.9
Impairment	26.0	32.1	—	58.1
Disposals	(0.1)	(4.0)	—	(4.1)
Currency differences	0.4	1.0	0.3	1.7
As of December 31, 2024	**74.8**	**243.0**	**4.6**	**322.4**

(in millions €)	Land and buildings	Equipment, tools and installations	Construction in progress and advance payments	Total
Carrying amount				
As of December 31, 2023	**199.2**	**168.5**	**389.5**	**757.2**
As of December 31, 2024	**294.6**	**184.7**	**456.0**	**935.3**

Non-Current Assets by Region

As of December 31, 2024, non-current assets comprised €177.6 million in other intangible assets, goodwill, property, plant and equipment, right-of-use assets and other assets of our subsidiaries incorporated in the United States (as of December 31, 2023: €158.2 million) as well as €529.6 million in the United Kingdom (as of December 31, 2023: €511.7 million), respectively. The remaining non-current assets of €1,683.3 million (as of December 31, 2023: €1,469.0 million) mainly relate to entities incorporated in Germany.

12 Financial Assets and Financial Liabilities

12.1 Capital Risk Management

Our capital management objectives are designed primarily to finance our growth strategy.

Our treasury committee reviews the total amount of cash and cash equivalents on a regular basis. As part of this review, the committee considers total cash and cash equivalents, cash outflow, currency translation differences and refinancing activities. We monitor cash using a burn rate. The cash burn rate is defined as the average monthly net cash flow from operating and investing activities during a financial year.

(in millions €)	December 31, 2024	December 31, 2023
Cash at banks and on hand	**450.0**	**453.1**
Security investments disclosed as cash and cash equivalents	**9,311.9**	**11,210.6**
Bank deposits	1,849.4	2,589.5
Money market funds	6,947.5	7,446.1
Reverse Repo	515.0	1,175.0
Total	**9,761.9**	**11,663.7**

In general, the aim is to protect and maximize the financial resources available for further research and development projects.

Since December 2021, we have had an investment and asset management policy in place that contains policies and processes for managing cash and cash equivalents. Under this policy, our investment portfolio is to be maintained in a manner that minimizes risks to the invested capital. These risks include mainly credit risk and concentration risk. The portfolio must provide liquidity in a timely manner to accommodate operational and capital needs. The portfolio is managed by the Treasury department.

We are not subject to externally imposed capital requirements. Our capital management objectives were achieved in the years ended December 31, 2024 and 2023.

12.2 Categories of Financial Instruments

Financial Assets and Liabilities at Amortized Cost and at Fair Value through OCI and Profit or Loss

Set out below is an overview of financial assets and liabilities at amortized cost and at fair value through OCI and profit or loss, as of the dates indicated:

December 31, 2024

(in millions €)	Carrying amount			Fair value			
	Current	Non-current	Total	Level 1 (Fair value)	Level 2 (Fair value)	Level 3 (Fair value)	Total
Financial assets subsequently measured at fair value through profit or loss							
Foreign exchange forward contracts	11.9	—	11.9	—	11.9	—	11.9
Security investments disclosed as cash and cash equivalents	6,947.5	—	6,947.5	6,947.5	—	—	6,947.5
Other financial assets	—	39.6	39.6	—	—	39.6	39.6
Financial assets subsequently measured at fair value through OCI							
Non-listed equity investments	—	1.5	1.5	—	—	1.5	1.5
Listed equity investments	—	92.7	92.7	92.7	—	—	92.7
Financial assets subsequently measured at amortized costs[1]							
Security investments disclosed as other financial assets	6,536.2	1,061.1	7,597.3	—	—	—	7,597.3
Security investments disclosed as cash and cash equivalents	2,364.4	—	2,364.4	—	—	—	2,364.4
Cash at banks and on hand	450.0	—	450.0	—	—	—	450.0
Trade and other receivables	1,463.9	—	1,463.9	—	—	—	1,463.9
Reimbursement asset	473.6	40.9	514.5	—	—	—	514.5
Other financial assets	—	18.2	18.2	—	—	—	18.2
Financial liabilities subsequently measured at fair value							
Foreign exchange forward contracts	16.3	—	16.3	—	16.3	—	16.3
Contingent consideration	0.9	46.9	47.8	—	—	47.8	47.8
Financial liabilities subsequently measured at amortized costs[1]							
Loans and borrowings	—	—	—	—	—	—	—
Trade payables and other payables	426.7	—	426.7	—	—	—	426.7
Other financial liabilities	1,426.2	—	1,426.2	—	—	—	1,426.2
Financial liabilities subsequently not measured according to IFRS 9							
Lease liabilities	39.5	214.7	254.2	—	—	—	254.2

[1] Fair values for financial assets and liabilities at amortized costs are not disclosed as the book values represent a reasonable approximation.

December 31, 2023

(in millions €)	Carrying amount			Fair value			
	Current	Non-current	Total	Level 1 (Fair value)	Level 2 (Fair value)	Level 3 (Fair value)	Total
Financial assets subsequently measured at fair value through profit or loss							
Security investments disclosed as cash and cash equivalents	7,446.1	—	7,446.1	7,446.1	—	—	7,446.1
Financial assets subsequently measured at fair value through OCI							
Non-listed equity investments	—	27.1	27.1	—	—	27.1	27.1
Listed equity investments	—	26.0	26.0	26.0	—	—	26.0
Financial assets subsequently measured at amortized costs[1]							
Security investments disclosed as other financial assets	4,885.1	1,104.6	5,989.7	—	—	—	5,989.7
Security investments disclosed as cash and cash equivalents	3,764.5	—	3,764.5	—	—	—	3,764.5
Cash at banks and on hand	453.1	—	453.1	—	—	—	453.1
Trade and other receivables	2,155.7	—	2,155.7	—	—	—	2,155.7
Other financial assets	0.2	18.4	18.6	—	—	—	18.6
Financial liabilities subsequently measured at fair value							
Foreign exchange forward contracts	0.4	—	0.4	—	0.4	—	0.4
Contingent consideration	—	38.8	38.8	—	—	38.8	38.8
Financial liabilities subsequently measured at amortized costs[1]							
Loans and borrowings	—	2.3	2.3	—	—	—	2.3
Trade payables and other payables	354.0	—	354.0	—	—	—	354.0
Other financial liabilities	414.9	—	414.9	—	—	—	414.9
Financial liabilities subsequently not measured according to IFRS 9							
Lease liabilities	28.1	188.6	216.7	—	—	—	216.7

[1] Fair values for financial assets and liabilities at amortized costs are not disclosed as the book values represent a reasonable approximation.

Trade and other receivables

Trade and other receivables significantly decreased compared to the previous year and predominantly comprise trade receivables from our COVID-19 collaboration with Pfizer as well as our direct product sales to customers in our territory. The contractual settlement of the gross profit share 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. Consequently, 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.

Reimbursement asset

For the year ended December 31, 2024, we recognized a reimbursement asset in the amount of €514.5 million, derived from the settlement as described below under other financial liabilities.

In connection with the Settlement Agreement with the National Institutes of Health, or the NIH, Pfizer has agreed to reimburse us for $364.5 million (as of December 31, 2024,

amounted to €350.9 million) of the claimed royalties paid to the NIH for 2020-2023 sales under the Settlement Agreement.

In connection with the Term Sheet and the proposed Settlement Agreement with the University of Pennsylvania, or UPenn, Pfizer has agreed to reimburse us for up to $170.0 million (as of December 31, 2024, amounts to €163.6 million) of the claimed royalties payable to UPenn for 2020-2023 sales in connection with the proposed Settlement Agreement.

Other financial liabilities

During the year ended December 31, 2024, the other financial liabilities increased compared to the year ended December 31, 2023, which is essentially related to the settlement of the contractual disputes with the NIH and UPenn in the amount of €1,146.9 million.

On December 20, 2024, we entered into a Settlement Agreement with the NIH. Under the terms of the Settlement Agreement, we will, among other things, pay $791.5 million (as of December 31, 2024, amounts to €761.9 million) to the NIH.

On December 23, 2024, we entered into a binding Term Sheet with UPenn to provide terms on which we retain license rights under certain UPenn patent rights in order to allow it to continue to pursue development and commercialization of Licensed Products. Under the terms of the Term Sheet, we and UPenn intend to enter into a Settlement Agreement, pursuant to which we would, among other things, pay $400.0 million (as of December 31, 2024, amounts to €385.0 million) as royalties for calendar years 2020-2023 to UPenn as well as $52.0 million as a contribution to a research and development investment fund to be jointly managed by us and UPenn.

Equity investments designated at Fair Value through OCI

Financial investments in equity securities measured at fair value through other comprehensive income comprise the following effects:

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Net gain / (loss) on equity instruments designated at fair value through other comprehensive income	(146.6)	3.7	10.5
Total	**(146.6)**	**3.7**	**10.5**

During the year ended December 31, 2024, the non-listed and listed equity investments increased by €41.1 million compared to year-end 2023 mainly due to our investment in Autolus Therapeutics plc in February 2024 and offsetting subsequent fair value changes amounting to €146.6 million during the year ended December 31, 2024.

Measurement of fair values

The following table shows the valuation techniques used in measuring fair values for financial instruments in our consolidated statements of financial position, as well as the significant unobservable inputs used.

Type	Valuation technique	Significant unobservable inputs
Forward exchange contracts	Discounted cash flow using par method. Expected future cash flows based on foreign exchange forwards discounted over the respective remaining term of the contracts using the respective deposit interest rates and spot rates.	n/a
Non-listed equity investments	Quantitative and qualitative factors such as actual and forecasted results, cash position and financing round valuations.	– Actual and forecasted results – Net Asset Value – Cash position – Nature and pricing indication of latest financing round
Listed equity investments	Stock prices of the listed companies and applicable exchange rates, if the listing is in a foreign currency.	n/a
Money market funds	Quoted prices on an active market.	n/a
Contingent consideration	Present value of expected future payments and reflecting changes in expected achievement of underlying performance parameters and compounding effects.	– Expected future payments – Applied cost of capital
Royalty assets	Present value of expected future cash flows.	– Expected future cash flows – Applied cost of capital

12.3 Recurring Fair Values (Level 3)

The following table shows the recurring fair value measurement of the royalty assets included in other financial assets as well as contingent considerations and the effect of the measurements on our consolidated statements of profit or loss for the current period.

	Financial assets	Financial liabilities
(in millions €)	Other financial assets	Contingent
As of January 1, 2023	**—**	**(6.1)**
Additions	—	(31.8)
Net effect on profit or loss - Finance income / (expense)		
Net change in fair value	—	(0.9)
As of December 31, 2023	**—**	**(38.8)**
As of January 1, 2024	**—**	**(38.8)**
Additions	43.4	—
Disposals	—	—
Net effect on profit or loss - Finance income / (expense)		
Net change in fair value	(3.8)	(9.0)
As of December 31, 2024	**39.6**	**(47.8)**

The sensitivity of the fair values of contingent considerations in fair value level 3 to the significant, unobservable, variable input factors, with all other factors remaining constant, is shown in the following table:

Contingent consideration

Input factor	Change in assumptions	Change in fair value with increasing input factor (in millions €)	Change in fair value with decreasing input factor (in millions €)
Cash flow projections	10%	4.4	(4.4)
Discount rate	1%	(0.6)	0.6

The sensitivity of the fair values of royalty assets included in other financial assets to the significant, unobservable, variable input factors, with all other factors remaining constant, is shown in the following table:

Royalty assets

Input factor	Change in assumptions	Change in fair value with increasing input factor (in millions €)	Change in fair value with decreasing input factor (in millions €)
Cash flow projections	10%	4.1	(4.1)
Discount rate	1%	(3.1)	3.5

The estimated fair value of non-listed equity investments would, for example, increase (decrease) if the price of the latest financing round of the respective investment were to increase (decrease) and the overall company value were higher (lower).

12.4 Financial Instruments Risk Management Objectives and Policies

Our financial liabilities mainly comprise obligations derived from other financial liabilities such as obligation from transactions with licensors, trade and other payables, lease liabilities, contingent consideration, liabilities from exchanges forward contracts. The main purpose of these financial liabilities is to enable our operations. Our principal financial assets include mainly cash, security investments, trade receivables and reimbursement assets that derive directly from our operations.

We are exposed to market risk, credit risk and liquidity risk. Our Management Board oversees the management of these risks.

The treasury committee provides assurance to our Management Board that our financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with our policies and risk objectives. The Management Board reviews and agrees policies for managing each of these risks, which are summarized below.

12.5 Market Risks

Market risks address the risks that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices. Market risks comprise three types of risk: interest risks, foreign currency risks and other price risks. Financial instruments affected by market risks include financial assets such as security investments, trade and other receivables, cash and cash equivalents as well as financial liabilities such as trade payables and other financial liabilities. We do not consider interest risks as well as other price risks as material risks to us.

There were no material changes in the way the risks were managed and valued during the years ended December 31, 2024 and 2023.

Foreign Currency Risks

Foreign currency risks address the risks that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. We are subject to currency risks, as our income and expenditures are denominated in Euro and the U.S. dollar. As such, we are exposed to exchange rate fluctuations between these currencies. Cash inflows denominated in U.S. dollar mainly result from generating proceeds under our collaboration agreements. Our commercial revenues are primarily collaboration revenues from earnings based on our partners' gross profit, which is shared under the respective collaboration agreements and represents payments we receive in U.S. dollar. Cash outflows dominated in U.S. dollar mainly result from amounts spent on research and development activities and license obligations as well as expanding our global footprint further. With the aim of preserving capital, surplus liquidity is mainly invested in domestic currency investments as exchange rate fluctuations can reduce the value of our financial positions. We limit the effects of the identified risks by means of a coordinated and consistently implemented risk strategy. Besides applying natural hedging relationships where possible, foreign exchange forward contracts are concluded, as a matter of principle, as instruments to mitigate foreign currency exchange risk associated with foreign currency-denominated payments. However, the foreign exchange forward contracts which we entered into were not designated as hedging instruments under IFRS.

The carrying amount of the monetary assets and liabilities denominated in U.S. dollar at the dates indicated are as follows:

(in millions €)	December 31, 2024	December 31, 2023
Cash and cash equivalents in U.S. dollar	617.6	122.6
Monetary assets in U.S. dollar	1,484.7	1,191.9
Monetary liabilities and provisions in U.S. dollar	1,858.1	567.3
Total	**244.2**	**747.2**

The following tables demonstrate the sensitivity to a reasonable, possible change in U.S. dollar exchange rates or U.S. dollar forward rates, with all other variables held constant. The impact on our profit before tax is due to changes in the fair value of monetary assets and liabilities. The exposure to foreign currency changes for all other currencies is not material.

		1 € =	Closing rate		Average rate	
Currency	**Country**		**2024**	**2023**	**2024**	**2023**
U.S. dollar	United States		1.0389	1.105	1.0824	1.0813

(in millions €)	Change in U.S. dollar rate	Effect on profit / (loss) before tax	Effect on pre-tax equity
2024	+5 %	(11.6)	(11.6)
	-5 %	12.9	12.9
2023	+5 %	(35.5)	(35.5)
	-5 %	39.2	39.3

12.6 Credit Risk Management

Credit risks address the risks that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. We are exposed to credit risks from our operating activities, including security investments, bank deposits, reverse repos, foreign exchange transactions, trade and other receivables and cash at banks. The maximum exposure to credit risk for the components of the consolidated statements of financial position as of December 31, 2024, and December 31, 2023, are the carrying amounts as illustrated in Note 12.1 and Note 12.2.

Security Investments, Bank Deposits, Reverse Repos and Cash at banks

Our financial management is dedicated predominantly to the goal of capital preservation. Thus, all our financial activities are focused towards avoiding risks and, where they cannot be avoided, actively managing and minimizing them. Credit risks from balances with security investments, bank deposits, reverse repos and cash at banks are managed by our Treasury department in accordance with our investment and asset management policy.

Our security investments are solely invested in the highest-quality liquid assets (e.g. core European sovereign, supranational and agency bonds) and bank deposits with a maturity of more than 3 months (held at selected banks, exclusively rated as investment grade). They do not bear any currency risks or material credit risks. The bank deposits are held at selected banks, exclusively rated as investment grade. We limit our investment engagements individually and track each credit risk continuously. For reverse repos, only investment-grade counterparties qualify as our business partners and secured investments are solely collateralized by high-quality liquid assets.

Accordingly, credit risks from these financial assets are limited. Before entering into new business relationships and during ongoing business relationships, we evaluate our business partners with regard to their individual default risk. Therefore, we do not presume an increased credit risk as of the balance sheet date and determine the impairment loss based on the upcoming twelve months.

The calculated expected credit losses were not material as of December 31, 2024, and December 31, 2023.

Trade and Other Receivables

Our exposure to credit risks of trade and other receivables is primarily related to transactions with corporate customers in the biopharma / biotech industry that operate in the United States or Germany, as well as governments which are customers, in connection with fulfilling our commercial obligations in our territories as defined in our contracts with customers. An analysis of the aging of receivables and the creditworthiness of customers is used to evaluate this risk at each reporting date. We follow risk control procedures to assess the credit quality of our customers taking into account their financial position, past experience and other factors.

As of December 31, 2024, outstanding trade and other receivables were mainly due from our collaboration partner Pfizer. Besides well-established pharmaceutical companies and governmental institutions, our other customers – to a smaller extent – are medical universities, other public institutions and peers in the biopharma industry. The balances with those customers are not material. Due to this customer portfolio, the credit risk on trade and other receivables is generally very low. We have not incurred material bad debt expense and do not expect that this will change with respect to the trade and other receivables outstanding as of December 31, 2024.

The expected credit risk on trade and other receivables and contract assets derived from applying the simplified approach in calculating expected credit losses was not material as of December 31, 2024, and December 31, 2023.

12.7 Liquidity Risk

We plan to invest heavily in R&D as we make a strong drive to build out our global development organization and diversify our therapeutic area footprint. Additionally, we plan to enhance capabilities through complementary acquisitions, technologies, infrastructure and manufacturing. Our liquidity management ensures the availability of cash and cash equivalents, short term financial instruments for operational activities and further investments through appropriate budget planning. In addition, a sufficient level of cash and cash equivalents, which are managed centrally, is always maintained to finance the operational activities.

We monitor liquidity risks using a liquidity planning tool.

Ultimately, the responsibility for liquidity risk management lies with our Management Board, which has established an appropriate approach to managing short-, medium- and long-term financing and liquidity requirements. We manage liquidity risks by holding appropriate reserves based on our COVID-19 sales, as well as by monitoring forecasted and actual cash flows and reconciling the maturity profiles of financial assets and liabilities. Significant reserves currently exist and were generated during the Covid-19 pandemic.

Risk Concentration

Concentrations arise when the number of counterparties is small or when a larger number of counterparties is engaged in similar business activities, or activities in the same geographical region, or has economic features that would cause their ability to meet

contractual obligations to be affected similarly by changes in economic, political or other conditions. Concentrations indicate the relative sensitivity of our performance to developments affecting a particular industry. We only have a limited number of customers mainly comprising pharmaceutical companies and governmental institutions.

The maturity profile of our financial liabilities based on contractual undiscounted payments is summarized as follows:

Year ended December 31, 2024

(in millions €)	Less than 1 year	1 to 5 years	More than 5 years	Total
Trade and other payables	426.7	—	—	**426.7**
Lease liabilities	48.1	152.7	90.3	**291.1**
Contingent consideration	—	62.5	0.1	**62.6**
Foreign exchange forward contracts	16.3	—	—	**16.3**
Other financial liabilities	1,426.2	—	—	**1,426.2**
Total	**1,917.3**	**215.2**	**90.4**	**2,222.9**

Year ended December 31, 2023

(in millions €)	Less than 1 year	1 to 5 years	More than 5 years	Total
Loans and borrowings	—	2.3	—	**2.3**
Trade and other payables	354.0	—	—	**354.0**
Lease liabilities	34.1	136.6	73.7	**244.4**
Contingent consideration	—	57.5	0.3	**57.8**
Foreign exchange forward contracts	0.4	—	—	**0.4**
Other financial liabilities	414.9	—	—	**414.9**
Total	**803.4**	**196.4**	**74.0**	**1,073.8**

12.8 Changes in Liabilities Arising from Financing Activities

Year ended December 31, 2024

(in millions €)	January 1, 2024	Cash flows	New leases and disposals	Reclassifi-cation	Other	December 31, 2024
Current obligations under lease contracts	28.1	(43.6)	19.4	35.6	—	39.5
Non-current obligations under lease contracts	188.6	—	56.0	(35.6)	5.7	214.7
Loans and borrowings	2.3	(2.3)	—	—	—	—
Total	**219.0**	**(45.9)**	**75.4**	**—**	**5.7**	**254.2**

Year ended December 31, 2023

(in millions €)	January 1, 2023	Cash flows	New leases and disposals	Reclassifi-cation	Other	December 31, 2023
Current obligations under lease contracts	36.0	(40.3)	(0.6)	34.1	(1.1)	28.1
Non-current obligations under lease contracts	174.1	—	51.1	(34.1)	(2.5)	188.6
Loans and borrowings	2.1	0.2	—	—	0.0	2.3
Total	**212.2**	**(40.1)**	**50.5**	**—**	**(3.6)**	**219.0**

13 Inventories

(in millions €)	December 31, 2024	December 31, 2023
Raw materials and supplies	268.1	347.5
Unfinished goods	7.3	4.0
Finished goods	7.9	6.2
Total	**283.3**	**357.7**

During the year ended December 31, 2024, expenses from inventory write-downs to net realizable value and scrapings due to inventories expected to be unsellable, not fulfilling the specification defined by our quality standards and shelf-life expiry resulted in €125.8 million, compared to €94.5 million in the previous period. The inventories valued at net realizable value in our consolidated statements of financial position as of December 31, 2024, take contractual compensation payments into consideration. We have not pledged any inventories as securities for liabilities. During the years ended December 31, 2024 and 2023, inventories in the amount of €129.5 million and €354.4 million, respectively, were recognized as cost of sales.

14 Other Non-Financial Assets

(in millions €)	December 31, 2024	December 31, 2023
Deferred expenses	166.8	284.9
Prepayments related to service contracts	27.7	28.3
Other	44.5	51.1
Total	**239.0**	**364.3**
Total current	212.7	280.9
Total non-current	26.3	83.4

Deferred expenses mainly comprise prepayments for future expenses of €83.1 million (€151.1 million as of December 31, 2023) for the settlement fee of the European Commission to our collaboration partner and prepayments for our collaborations with Ryvu Therapeutics S.A., Krakow, Poland, €8.5 million (€15.7 million as of December 31, 2023) and MediLink Therapeutics Co., Ltd, Suzhou, China, €17.7 million (nil as of December 31, 2023). The remaining deferred expenses mainly comprise insurance obligations of €18.2 million and service contracts.

15 Issued Capital and Reserves

As of December 31, 2024, the number of shares outstanding was 239,970,804. This amount excludes 8,581,396 shares held in treasury. As of December 31, 2023, the number of shares outstanding was 237,725,735, excluding 10,826,465 shares held in treasury.

16 Share-Based Payments

During the years ended December 31, 2024, 2023, and 2022, our share-based payment arrangements led to the following expenses:

		Years ended December 31,		
(in millions €)	**Note**	**2024**	**2023**	**2022**
Expense arising from equity-settled share-based payment arrangements		**85.0**	**44.1**	**46.5**
Employee Stock Ownership Plan	16.5	—	—	13.8
Chief Executive Officer Grant	16.4	—	1.2	3.1
Management Board Grant[1]	16.3	5.2	3.2	4.3
BioNTech 2020 Employee Equity Plan for Employees Based Outside North America	16.1	58.3	36.3	25.3
InstaDeep Employee Incentive Plan[2]	16.1, 16.5	11.4	3.4	—
2024 North America Employee Participation Plan	16.1	10.1	—	
Expense / (Income) arising from cash-settled share-based payment arrangements		**15.9**	**7.3**	**61.5**
Employee Stock Ownership Plan	16.5	0.1	(0.9)	53.4
Management Board Grant[1]	16.2, 16.3	2.6	(2.4)	—
BioNTech 2020 Restricted Stock Unit Plan for North America Employees	16.1	13.2	10.6	8.1
Total		**100.9**	**51.4**	**108.0**
Cost of sales		9.0	6.5	3.0
Research and development expenses		63.5	33.4	84.6
Sales and marketing expenses		2.5	1.0	0.8
General and administrative expenses		25.9	10.5	19.6
Total		**100.9**	**51.4**	**108.0**

[1] In May 2022, phantom options were granted under the Management Board Grant for the year 2022 which led to a modification from an equity-settled to cash-settled share-based payment arrangement and a reclassification of €3.3 million between equity and non-current other liabilities, respectively. Expenses incurred before and after the modification dates have been disclosed as equity-settled or cash-settled share-based payment arrangement, respectively. The amount includes expenses incurred with respect to a one-time signing bonus granted to Jens Holstein and Annemarie Hanekamp as of their appointment to the Management Board (see Note 21.2).

[2] The first tranche of 40,249 RSUs vested in July 2024 and was settled in the three months ended December 31, 2024, in cash.

During the years ended December 31, 2024, 2023 and 2022, our share-based payment arrangements led to a cash outflow of €154.5 million, €766.2 million and €51.8 million, respectively. We expect to settle the equity-settled share-based payment arrangements remaining from our 2020 Management Board Grant (see Note 16.3) and the Employee Stock Ownership Plan (see Note 16.5) on a net basis by delivering to the participant a number 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. This

reduces the dilutive impact of the respective rights compared to an all-equity settlement. If all of the equity-settled rights outstanding as of December 31, 2024, were to be exercised accordingly, the cash outflow to the tax authority in 2025 would amount to approximately €9.9 million (based on the share price as of December 31, 2024).

16.1 BioNTech Employee Equity Plan

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).

16.2 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).

16.3 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	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	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	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).

16.4 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.

16.5 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.

17 Provisions

(in millions €)	December 31, 2024	December 31, 2023
Contractual disputes / settlements	85.7	118.2
Obligations from onerous CMO contracts	50.7	80.2
Other	29.3	79.7
Total	**165.7**	**278.1**
Total current	144.8	269.3
Total non-current	20.9	8.8

As of December 31, 2024, our current provisions included €85.7 million in contractual disputes mainly related to collaborators regarding, among other things, the interpretation of each party's obligations or the amounts payable under the respective agreements (€118.2 million as of December 31, 2023). Acknowledging a decrease in obligations identified as contractual disputes, the change of €32.5 million compared to the previous period related entirely to consumption.

As of December 31, 2024, our current provisions included €50.7 million (€80.2 million as of December 31, 2023) of obligations for production capacities derived from contracts with Contract Manufacturing Organizations, or CMOs, that became redundant. The change of €29.5 million compared to December 31, 2023, related entirely to release of provision.

As of December 31, 2024, our current provisions included €29.3 million in other obligations mainly comprising employee related obligations (€79.7 million as of December 31, 2023, mainly comprising inventor remunerations as well as customs and duties). The change of €50.4 million compared to the previous period related mainly to consumption.

18 Contingent Liabilities and Other Financial Commitments

Contingent Liabilities

Our contingent liabilities include, but are not limited to, intellectual property disputes and contractual disputes regarding, among other things, the interpretation of each party's obligations or the amounts payable under the respective agreements, product-related disputes and actions by or on behalf of our shareholders.

From time to time, in the normal course and conduct of our business, we may be involved in proceedings with third parties about considering, for example, the use and/or remuneration for use of such third party's intellectual property. As of December 31, 2024, none of the intellectual property-related considerations outlined below, of which we have either been notified, or for which potential claims could be brought against us or our subsidiaries in the future, fulfill the criteria for recording a provision.

We are subject to an increasing number of product-related disputes. Our product liability claims often involve highly complex issues related to medical causation, correctness and completeness of product information (Summary of Product Characteristics/package leaflet) as well as label warnings and reliance thereon, scientific evidence and findings, actual and provable defectiveness and injury, and other matters. These complexities vary from matter to matter. As of December 31, 2024, none of these claims fulfill the criteria for recording a provision.

We are currently subject to certain claims by or on behalf of our shareholders. As of December 31, 2024, these claims do not fulfill the criteria for recording a provision.

Substantially all of our contingent liabilities are subject to significant uncertainties and, therefore, determining the likelihood of a loss and/or the measurement of any loss can be complex. Consequently, we are unable to estimate the range of reasonably possible loss. Our assessments, which result from a complex series of judgments about future events and uncertainties, are based on estimates and assumptions that have been deemed reasonable by management, but that may prove to be incomplete or inaccurate, and unanticipated events and circumstances may occur that might cause us to change those estimates and assumptions. We currently do not believe that any of these matters will have a material adverse effect on our financial position, and will continue to monitor the status of these and other claims that may arise. However, we could incur judgments, enter into settlements or revise our expectations regarding the outcome of matters, which could have a material adverse effect on our results of operations and/or our cash flows in the period in which the amounts are accrued or paid. We will continue to evaluate whether, if circumstances were to change in the future, the recording of a provision may be needed and whether potential indemnification entitlements exist against any such claim.

Certain pending matters to which we are a party are discussed below.

Alnylam Proceedings

In March 2022, Alnylam Pharmaceuticals, Inc., or Alnylam, filed a lawsuit against Pfizer and Pharmacia & Upjohn Co. LLC in the U.S. District Court for the District of Delaware alleging that an existing patent owned by Alnylam, U.S. Patent No. 11,246,933, or the '933 Patent, is infringed by the cationic lipid used in Comirnaty, and seeking monetary relief, which is not specified in their filings. We filed a counterclaim to become party to the Alnylam proceeding, and in June 2022, Alnylam added to its claims allegations that we induced infringement of the '933 Patent. Additionally, in July 2022, Alnylam filed a lawsuit against us, our wholly owned subsidiary, BioNTech Manufacturing GmbH, Pfizer and Pharmacia & Upjohn Co. LLC in the U.S. District Court for the District of Delaware alleging that we also induced infringement of a newly issued patent, U.S. Patent No. 11,382,979, or the '979 Patent, which is a continuation of the '933 Patent. The two lawsuits were consolidated on July 28, 2022. In May 2023, Alnylam filed a third lawsuit against Pfizer Inc. and Pharmacia & Upjohn Co. LLC in the U.S. District Court for the District of Delaware alleging infringement of U.S. Patent Nos. 11,633,479; 11,633,480; 11,612,657; and 11,590,229, all of which are continuations of the '933 Patent. We filed a counterclaim to become party to the new proceeding, and in July 2023, Alnylam added to its claims allegations that we induced infringement of the four new patents. All of the lawsuits have been consolidated into a single proceeding, which is currently expected to go to trial in July 2025.

We believe we have strong defenses against the allegations claimed relative to each of the patents and intend to vigorously defend ourselves in the proceedings mentioned above. However, our analysis of Alnylam's claims is ongoing and complex, and we believe the outcome of the suit remains substantially uncertain. Taking into account discussions with our external lawyers, we do not consider the probability of an outflow of resources to be sufficient to recognize a provision at the balance sheet date. In our opinion, these matters constitute contingent liabilities as of the balance sheet date. However, it is currently impractical for us to estimate with sufficient reliability the respective contingent liabilities.

CureVac Proceedings

Infringement Proceedings – EP'122, DE'961, DE'974, DE'575, and EP'668

In July 2022, CureVac AG (CureVac) filed a lawsuit against us and our wholly owned subsidiaries, BioNTech Manufacturing GmbH and BioNTech Manufacturing Marburg GmbH, in the Düsseldorf Regional Court, alleging Comirnaty's infringement of one European patent, EP1857122B1, or EP'122, and three Utility Models DE202015009961U1, DE202015009974U1, and DE202021003575U1. In August 2022, CureVac AG added European Patent EP3708668B1, or EP'668, to its German lawsuit.

On August 15, 2023, the Düsseldorf Regional Court held a hearing on infringement with respect to all five IP rights. At the hearing, the Court suspended its infringement ruling with respect to EP'122 until December 28, 2023. On September 28, 2023, the Court issued orders suspending its infringement rulings with respect to the remaining four IP rights (DE'961, DE'974, DE'575, and EP'668) pending validity decisions in the DE'961, DE'974, and DE'575 cancellation proceedings before the German Patent and Trademark Office and in the EP'668 opposition proceedings before the Opposition Division of the European Patent Office, or EPO. In the September 28th orders, the Court explained that it was suspending its

infringement rulings until validity decisions are reached, while contemporaneously noting concerns regarding the validity of DE'961, DE'974, DE'575, and EP'668. On December 28, 2023, the Düsseldorf Regional Court stayed the infringement proceedings as to EP'122 until a final appellate decision is rendered as to the validity of EP'122 by the Federal Court of Justice. On June 7, 2024, CureVac AG waived DE'575 and withdrew this utility model from the infringement proceedings. On July 2, 2024, the EPO Opposition Division issued a preliminary opinion noting that it believes EP'668 is likely invalid, and set an oral hearing for March 2025.

Infringement Proceedings – EP'755, DE'123, and DE'130

In July 2023, CureVac filed a second lawsuit against us and our wholly owned subsidiaries, BioNTech Manufacturing GmbH and BioNTech Manufacturing Marburg GmbH, in the Düsseldorf Regional Court, alleging Comirnaty's infringement of one European patent, EP4023755B1, or EP'755, and two Utility Models DE202021004123U1, and DE202021004130U1. On June 7, 2024, CureVac waived DE'123 and withdrew this utility model from the infringement proceedings. A hearing on infringement with respect to EP'755 and DE'130 that was scheduled to occur in the Düsseldorf Regional Court on September 10, 2024 was rescheduled for July 2025 and the Court suspended its infringement ruling with respect to DE'130 until a validity decision was reached in the co-pending cancellation proceeding before the German Patent and Trademark Office. On July 24, 2024, the EPO Opposition Division issued a preliminary opinion noting that it believes EP'755 is likely invalid, and set an oral hearing for May 2025.

Nullity Proceedings – EP'122

In September 2022, we filed a nullity action in the Federal Patent Court of Germany seeking a declaration that EP'122 is invalid. In April 2023, the Federal Patent Court of Germany issued a preliminary opinion in the EP'122 nullity action in support of the validity of EP'122. The preliminary opinion did not address any infringement of EP'122. The preliminary opinion is a preliminary assessment by the court of the merits of a claim, and is non-binding. On December 19, 2023, the Federal Patent Court held an oral hearing, after which it nullified EP'122. On April 30, 2024, the Federal Patent Court issued a judgment containing its written reasons for nullifying EP'122. On May 7, 2024, CureVac appealed the judgment, which is currently pending.

Cancellation Proceedings – DE'961, DE'974, and DE'575

In November 2022, we filed cancellation actions seeking the cancellation of the three German Utility Models in the German Patent and Trademark Office. On December 27, 2023, the German Patent and Trademark Office issued a preliminary opinion that DE'974 is likely to be cancelled. On January 23, 2024, the German Patent and Trademark Office issued a preliminary opinion that DE'961 is likely to be cancelled based on invalidity pursuant to para. 1 (2) no. 5 Utility Model Act. On March 7, 2024, the German Patent and Trademark Office issued a preliminary opinion that DE'575 is likely to be cancelled. On June 6, 2024, CureVac submitted a written statement to the German Patent and Trademark Office waiving DE'575. On June 12, 2024, we withdrew our request for cancellation of DE'575. On June 25 and 26, 2024, the German Patent and Trademark Office heard oral arguments regarding DE'961 and DE'974, and at the conclusion of the hearing on June 26, 2024, confirmed that

both DE'961 and DE'974 were cancelled. In November 2024, the German Patent and Trademark Office issued its written decisions cancelling DE'961 and DE'974. CureVac has filed an appeal in both cancellation proceedings, which are currently pending.

Cancellation Proceedings– DE'123 and DE'130

In November 2023, we filed cancellation actions seeking the cancellation of German Utility Models DE'123 and DE'130 in the German Patent and Trademark Office. On June 6, 2024, CureVac submitted a written statement to the German Patent and Trademark Office waiving DE'123. On June 12, 2024, we withdrew our request for cancellation of DE'123. On December 5, 2024, the German Patent and Trademark Office issued a preliminary opinion that DE'130 is likely to be cancelled.

United States

In July 2022, we and Pfizer filed a complaint for a declaratory judgment in the U.S. District Court for the District of Massachusetts, seeking a judgment of non-infringement by Comirnaty of U.S. Patent Nos. 11,135,312; 11,149,278; and 11,241,493. In May 2023, the action in the U.S. District Court for the District of Massachusetts was transferred to the U.S. District Court for the Eastern District of Virginia, where CureVac filed counterclaims asserting infringement of six additional U.S. patents, U.S. Patent Nos. 10,760,070; 11,286,492; 11,345,920; 11,471,525; 11,576,966; and 11,596,686. In July 2023, CureVac filed amended counterclaims to assert an additional U.S. patent, U.S. Patent No. 11,667,910. In June 2024, CureVac voluntarily dismissed with prejudice its claims of infringement with respect to the '493, '525, and '966 patents. Currently, a three-week jury trial is scheduled to begin on March 3, 2025, and an one-week bench trial regarding the prosecution laches defense is scheduled to begin on April 15, 2025.

United Kingdom

In September 2022, we and Pfizer filed a declaration of non-infringement and revocation action against EP'122 and EP'668 in the Business and Property Courts of England and Wales, in the UK High Court of Justice, or the UK High Court. In October 2022, CureVac responded by filing a counterclaim alleging infringement of the EP'122 and EP'668 patents in the Business and Property Courts of England and Wales, in the UK High Court. On December 18, 2023, we and Pfizer amended our pleadings to add a claim for revocation and declarations of invalidity and non-infringement with respect to EP'755. The UK High Court held a trial on EP'668 and EP'755 between July 10, 2024 and July 24, 2024. On October 8, 2024, the UK High Court released a judgment finding both EP'668 and EP'755 invalid. The UK High Court held a hearing on November 15, 2024, during which it denied CureVac permission to appeal the judgment. On December 5, 2024, CureVac sought permission from the UK Appeals Court to appeal the judgment. With respect to EP'122, on October 25, 2024, CureVac agreed to a final and unappealable revocation of the UK designation of EP'122 and to discontinue its counterclaim for infringement.

We believe we have strong defenses against the allegations claimed relative to each of the patents and utility models and intend to vigorously defend ourselves in the proceedings mentioned above. However, our analysis of CureVac's claims is ongoing and complex, and we believe the ultimate outcomes remain substantially uncertain. Taking into account discussions with our external lawyers, we do not consider the probability of an outflow of

resources to be sufficient to recognize a provision at the balance sheet date. In our opinion, these matters constitute contingent liabilities as of the balance sheet date. However, it is currently impractical for us to estimate with sufficient reliability the respective contingent liabilities.

Moderna Proceedings

Germany

Infringement Proceedings – EP'949 and EP'565

In August 2022, Moderna filed a lawsuit against us and our wholly owned subsidiaries, BioNTech Manufacturing GmbH, BioNTech Europe GmbH and BioNTech Manufacturing Marburg GmbH, as well as Pfizer, Pfizer Manufacturing Belgium NV and Pfizer Ireland Pharmaceuticals in the Düsseldorf Regional Court alleging Comirnaty's infringement of two European patents, 3590949B1, or EP'949, and 3718565B1, or EP'565. On November 7, 2023, the Opposition Division of the EPO revoked EP'565 after a one-day oral hearing, and on December 7, 2023, it issued its written decision revoking EP'565. On December 8, 2023, the Opposition Division issued a preliminary opinion noting that it believes EP'949 is likely invalid. As a result of those developments in the EPO proceedings, the Düsseldorf Regional Court postponed its hearing on infringement with respect to EP'949, originally scheduled for December 12, 2023, to January 21, 2025. On February 7, 2024, Moderna appealed the Opposition Division's revocation decision on EP'565, and the appeal is currently pending. On May 16, 2024, the Opposition Division decided that EP'949 is valid, in amended form, and issued its written decision regarding the same on July 8, 2024. BioNTech appealed this decision, and the appeal is currently pending.

United Kingdom

In August 2022, Moderna filed a lawsuit asserting Comirnaty's infringement of EP'949 and EP'565 against us and our wholly owned subsidiaries, BioNTech Manufacturing GmbH, BioNTech Europe GmbH and BioNTech Manufacturing Marburg GmbH, and Pfizer Limited, Pfizer Manufacturing Belgium NV and Pfizer Inc. in the Business and Property Courts of England and Wales, in the UK High Court. In September 2022, we and Pfizer filed a revocation action in the Business and Property Courts of England and Wales requesting revocation of EP'949 and EP'565.

The UK High Court held a trial between April 22, 2024, and May 21, 2024. On July 2, 2024, the UK High Court released two judgments. The first judgment concerns the validity of EP'949 and EP'565. In this first judgment, the UK High Court found that EP'565 is invalid and therefore not infringed, while EP'949 is valid and infringed. The second judgment concerns whether Moderna's October 2020 commitment not to "enforce [its] COVID-19 related patents against those making vaccines intended to combat the pandemic," or the Patent Pledge, amounted to a consent under UK law to carry out any acts that would otherwise amount to patent infringement. With respect to this judgment, the UK High Court found that Moderna's Patent Pledge amounted to consent to carry out activities that might otherwise infringe its patents prior to March 2022, but not after March 2022.

The UK High Court held a hearing on September 25, 2024, during which it granted Pfizer and BioNTech permission to appeal its judgment regarding the validity of EP'949, and denied

Moderna permission to appeal its judgment regarding validity of EP'565. On October 16, 2024, Moderna sought permission from the UK Appeals Court to appeal the EP'565 judgment. On November 11, 2024, the UK Appeals Court denied Moderna's application to appeal; accordingly, the UK designation of EP'565 is finally revoked with no further opportunity to appeal in the UK. No party sought permission to appeal the UK High Court's judgment on the patent pledge.

United States

U.S. District Court Litigation

In August 2022, Moderna filed a lawsuit in the U.S. District Court for the District of Massachusetts against us and our wholly owned subsidiaries BioNTech Manufacturing GmbH and BioNTech US Inc. and Pfizer Inc. alleging Comirnaty's infringement of U.S. Patent Nos. 10,898,574; 10,702,600 and 10,933,127 and seeking monetary relief. On April 12, 2024, the U.S. District Court for the District of Massachusetts stayed the litigation pending resolution of the inter partes review of U.S. Patent Nos. 10,702,600 and 10,933,127.

Inter Partes Review

In August 2023, Pfizer and we filed petitions seeking inter partes review of U.S. Patent Nos. 10,702,600 and 10,933,127 before the United States Patent Trial and Appeal Board, or the PTAB. On March 6, 2024, the PTAB issued decisions instituting inter partes review proceedings on all challenged claims of U.S. Patent Nos. 10,702,600 and 10,933,127. An oral hearing on the merits occurred on December 10, 2024, and a first-instance decision by the PTAB is expected by March 2025.

Netherlands

In September 2022, Moderna filed a lawsuit against us and our wholly owned subsidiary BioNTech Manufacturing GmbH and Pfizer B.V., Pfizer Export B.V., C.P. Pharmaceuticals International C.V. and Pfizer Inc. in the District Court of The Hague alleging Comirnaty's infringement of EP'949 and EP'565. The District Court of the Hague held a hearing on October 6, 2023, on infringement and validity with respect to EP'949. On December 6, 2023, the Court found EP'949 to be invalid. On March 5, 2024, Moderna appealed this decision, and the appeal is pending. The EP'565 case has been stayed pending the outcome of Moderna's appeal of the Opposition Division's revocation of EP'565.

Ireland

In May 2023, Moderna filed a lawsuit against us and our wholly owned subsidiary BioNTech Manufacturing GmbH, Pfizer Inc., Pfizer Healthcare Ireland, Pfizer Ireland Pharmaceuticals, and C.P. Pharmaceuticals International C.V. alleging Comirnaty's infringement of EP'949 and EP'565 in the High Court of Ireland. On February 26, 2024, the High Court of Ireland stayed the lawsuit pending the final determination of the EPO opposition proceedings for EP'949 and EP'565 (in each case including any appeals).

Belgium

In May 2023, Moderna filed a lawsuit against us, our wholly owned subsidiary BioNTech Manufacturing GmbH, Pfizer Inc. and Pfizer Manufacturing Belgium alleging Comirnaty's infringement of EP'949 and EP'565 in the Brussels Dutch-speaking Enterprise Court. On May

29, 2024, the parties filed a joint request to stay the proceedings, which was entered by the Enterprise Court.

All of the above proceedings are currently pending.

We believe we have strong defenses against the allegations claimed relative to each of the patents and intend to vigorously defend ourselves in the proceedings mentioned above. However, our analysis of Moderna's claims is ongoing and complex, and we believe the outcome of the suit remains substantially uncertain. Taking into account discussions with our external lawyers, we do not consider the probability of an outflow of resources to be sufficient to recognize a provision at the balance sheet date. In our opinion, these matters constitute contingent liabilities as of the balance sheet date. However, it is currently impractical for us to estimate with sufficient reliability the respective contingent liabilities.

Arbutus and Genevant Proceedings

In April 2023, Arbutus and Genevant filed a lawsuit against Pfizer and us in the U.S. District Court for the District of New Jersey alleging that Pfizer and we have infringed the following patents owned by Arbutus: U.S. Patent Nos. 9,504,651; 8,492,359; 11,141,378; 11,298,320; and 11,318,098, through the use of Genevant's lipid nanoparticle technology and methods for producing such lipids in Comirnaty, and seeking monetary relief. This proceeding is currently pending.

We believe we have strong defenses against the allegations claimed relative to each of the patents and intend to vigorously defend ourselves in the lawsuit mentioned above. However, our analysis of Arbutus and Genevant's claims is ongoing and complex, and we believe the outcome of the suit remains substantially uncertain. Taking into account discussions with our external lawyers, we do not consider the probability of an outflow of resources to be sufficient to recognize a provision at the balance sheet date. In our opinion, these matters constitute contingent liabilities as of the balance sheet date. However, it is currently impractical for us to estimate with sufficient reliability the respective contingent liabilities.

GlaxoSmithKline Proceedings

In April 2024, GSK filed a lawsuit against Pfizer, Pharmacia & Upjohn Co. LLC, BioNTech SE, BioNTech Manufacturing GmbH, and BioNTech US Inc. in the United States District Court for the District of Delaware alleging that the cationic lipid used in COMIRNATY® infringes U.S. Patent Nos. 11,638,693; 11,638,694; 11,666,534; 11,766,401; and 11,786,467; and seeking monetary relief. On August 14, 2024, GSK filed an amended complaint to assert infringement of three additional patents, U.S. Patent Nos. 11,759,422; 11,655,475; and 11,851,660. This proceeding is currently pending.

We believe we have strong defenses against the allegations claimed relative to each of the patents and intend to vigorously defend ourselves in the lawsuit mentioned above. However, our analysis of GSK's claims is ongoing and complex, and we believe the outcome of the suit remains substantially uncertain. Taking into account discussions with our external lawyers, we do not consider the probability of an outflow of resources to be sufficient to recognize a provision at the balance sheet date. In our opinion, these matters constitute contingent

liabilities as of the balance sheet date. However, it is currently impractical for us to estimate with sufficient reliability the respective contingent liabilities.

Ladewig Proceedings

In January 2024, we and certain of our officers and directors were named as defendants in a securities class action complaint captioned Ladewig v. BioNTech SE filed in the U.S. District Court for the Central District of California brought on behalf of a putative class of investors who purchased our securities from March 30, 2022 through October 13, 2023. Plaintiffs allege that we violated Sections 10(b) and 20(a) of the Exchange Act by stating that we were "well positioned" to remain a "market leader" in vaccines for the prevention of COVID-19 and by purportedly overstating demand for Comirnaty. Plaintiffs further allege that we failed to adapt our inventory to reflect the emergence of new COVID variants. On July 15, 2024, the case was transferred to the U.S. District Court for the Southern District of New York.

We believe we have strong defenses against the allegations claimed and intend to vigorously defend ourselves in the lawsuit mentioned above. We cannot reasonably estimate the maximum potential exposure or the range of possible loss for this matter. Taking into account discussions with our external lawyers, we do not consider the probability of an outflow of resources to be sufficient to recognize a provision at the balance sheet date. In our opinion, these matters constitute contingent liabilities as of the balance sheet date. However, it is currently impractical for us to estimate with sufficient reliability the respective contingent liabilities.

Other Financial Commitments

The other financial commitments were as follows:

(in millions €)	December 31, 2024	December 31, 2023
Commitments under purchase agreements for property, plant and equipment	186.7	154.4
Contractual obligation to acquire intangible assets	1,193.1	1,721.1
Total	**1,379.8**	**1,875.5**

Contractual obligations to acquire intangible assets exist in connection with in-licensing and research and development collaborations. We have entered into obligations to make milestone payments once specific targets have been reached. Provided that all of the milestone events are achieved, we would be obligated 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 shown represent the maximum payments to be made, and it is unlikely that they will all fall due. We have excluded any milestone payments subject to in-licensing agreements with Biotheus as such payments are treated as intra-group transactions following the acquisition of Biotheus, which closed in January 2025. Commitments from the acquisition of Biotheus are disclosed under Note 5 Business Combinations. 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 under purchase agreements for property, plant and equipment and contractual obligations to acquire intangible assets are as follows:

Year ended December 31, 2024

(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 obligation to acquire intangible assets	118.9	677.6	396.6	1,193.1
Total	**227.9**	**755.3**	**396.6**	**1,379.8**

Other financial obligations were recognized at nominal value.

19 Other Non-Financial Liabilities

(in millions €)	December 31, 2024	December 31, 2023
Liabilities to employees	99.8	73.3
Liabilities from share-based payment arrangements	26.6	29.0
Liabilities from wage taxes and social securities expenses	22.7	15.1
Grants	85.2	0.8
Other	22.6	20.0
Total	**256.9**	**138.2**
Total current	169.4	125.1
Total non-current	87.5	13.1

Other Non-Financial Liabilities related to funds received based on government grants and similar grants with a total nominal amount of €326.8 million. The received funds for which no related expense has been recognized during the year ended December 31, 2024, were deferred and recognized in the Other Non-Financial Liabilities. The government grants and similar grants are mainly related to assets such as buildings and equipment. The funding will be recognized in profit or loss within other operating income over the respective useful life of the underlying assets, see Note 2.3.9. The grants are related to conditions such as construction milestones.

20 Leases

20.1 Amounts Recognized in the Consolidated Statements of Financial Position

Right-of-Use Assets

The following amounts are presented as right-of-use assets within the consolidated statements of financial position as of the dates indicated:

(in millions €)	December 31, 2024	December 31, 2023
Buildings	238.2	209.8
Production facilities	—	—
Other operating equipment	9.9	4.6
Total	**248.1**	**214.4**

Additions to the right-of-use assets during the year ended December 31, 2024, were €74.4 million (during the year ended December 31, 2023: €66.4 million).

Lease Liability

The following amounts are included in lease liabilities, loans and borrowings as of the dates indicated:

(in millions €)	December 31, 2024	December 31, 2023
Current	39.5	28.1
Non-current	214.7	188.6
Total	**254.2**	**216.7**

20.2 Amounts Recognized in the Consolidated Statements of Profit or Loss

Depreciation Charge of Right-of-Use Assets

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Buildings	42.2	40.7	35.2
Production facilities	—	3.0	23.1
Other operating equipment	3.4	1.5	0.5
Total depreciation charge	**45.6**	**45.2**	**58.8**
Interest on lease liabilities	8.6	5.7	5.1
Expense related to short-term leases and leases of low-value assets	43.3	58.9	27.1
Total amounts recognized in profit or loss	**97.5**	**109.8**	**91.0**

20.3 Amounts Recognized in the Consolidated Statements of Cash Flows

During the year ended December 31, 2024, the total cash outflow for leases amounted to €43.6 million (during the year ended December 31, 2023: €46.0 million; during the year ended December 31, 2022: €46.2 million).

20.4 Extension Options

We have several lease contracts that include extension options. These options are negotiated by management to provide flexibility in managing the leased asset portfolio and align with the need of the business. Management exercises judgment in determining whether these extension options are reasonably certain to be exercised. The undiscounted potential future lease payments, which relate to periods after the exercise date of renewal options and are not included in lease liabilities, amount to up to €152.1 million as of December 31, 2024,

considering terms up until 2049 (as of December 31, 2023: €157.2 million considering terms up until 2049).

21 Related Party Disclosures

21.1 Parent and Ultimate Controlling Party

ATHOS KG, Holzkirchen, Germany is the sole shareholder of AT Impf GmbH, Munich, Germany and beneficial owner of our ordinary shares. ATHOS KG via AT Impf GmbH has de facto control over BioNTech based on its substantial shareholding, which practically enables it to exercise the majority of voting rights to pass resolutions at our Annual General Meeting, or AGM.

21.2 Transactions with Key Management Personnel

Our key management personnel have been defined as the members of the Management Board and the Supervisory Board. Key management personnel compensation is comprised of the following:

	Years ended December 31,		
(in millions €)	**2024**	**2023**	**2022**
Management Board[1]	**13.0**	**8.3**	**15.0**
Fixed compensation	4.0	3.9	2.9
Fringe benefits	0.2	—	—
Short-term incentive – first installment	0.8	0.7	0.6
Short-term incentive – second installment[2]	0.6	1.0	0.7
Other variable compensation[3]	1.3	0.8	0.1
Share-based payments (incl. long-term incentive)[4]	6.1	1.9	10.7
Supervisory Board	**0.9**	**0.6**	**0.5**
Total compensation of key management personnel	**13.9**	**8.9**	**15.5**

[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 16). 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 16). For further information regarding outstanding options for each Management Board member from LTI 2021-2024 Board Programs, see Note 16.

21.3 Related Party Transactions

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**	**2022**
Purchases of various goods and services from entities controlled by ATHOS KG	0.2	0.3	0.3
Purchases of property and other assets from entities controlled by ATHOS KG	—	—	62.5
Total	**0.2**	**0.3**	**62.8**

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

On December 22, 2022, we entered into a purchase agreement with Santo Service GmbH, pursuant to which we acquired the real estate property An der Goldgrube 12 and the existing laboratory and office building including any movable assets for a total consideration of €62.5 million. The purchase price was paid during the year ended December 31, 2022. Santo Service GmbH is wholly owned by AT Impf GmbH, that is controlled by ATHOS KG.

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	—	0.4
Total	**—**	**0.4**

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

A number of individuals in key positions can control or exercise significant influence over BioNTech SE. There were no business relationships with individuals in key positions during the year ended December 31, 2024.

22 Numbers of Employees

The average number of employees is:

	Years ended December 31,		
Quarterly average number of employees by function	**2024**	**2023**	**2022**
Clinical Research & Development	680	434	243
Scientific Research & Development	2,079	1,871	1,302
Operations	1,491	1,469	1,240
Quality	463	470	383
Support Functions	1,802	1,217	828
Commercial & Business Development	200	179	108
Total	**6,715**	**5,640**	**4,104**

The number of employees as of the reporting date is:

	Years ended December 31,		
Number of employees by function as of the reporting date	**2024**	**2023**	**2022**
Clinical Research & Development	752	592	274
Scientific Research & Development	2,093	2,080	1,512
Operations	1,268	1,562	1,365
Quality	468	474	413
Support Functions	2,156	1,390	983
Commercial & Business Development	209	194	145
Total	**6,946**	**6,292**	**4,692**

23 Fees for Auditors

The following fees were recognized for the services provided by EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft for the years ended December 31, 2024 and 2023:

	Years ended December 31,	
(in millions €)	**2024**	**2023**
Audit fees	2.8	3.2
Audit-related fees	—	0.3
Tax fees	0.6	0.1
Total fees for professional audit services and other services	**3.4**	**3.6**

24 Corporate Governance

The declaration of conformity pursuant to Sec. 161 para. 1 of the German Stock Corporation Act (Aktiengesetz) is issued in accordance with the Corporate Governance Code in connection with the corporate governance declaration pursuant to Sec. 315d in conjunction with Sec. 289f HGB and can be found in the combined management report of BioNTech SE.

25 Events After the Reporting Period

Business Combinations

Acquisition of Biotheus

Our subsidiary, BioNTech Collaborations GmbH, entered into an agreement and plan of merger, or the merger agreement, with Biotheus on November 13, 2024. Following the satisfaction of several customary closing conditions and regulatory approvals as provided in the merger agreement, the acquisition of Biotheus closed on January 31, 2025. For further information, please refer to the description of this acquisition in Note 5.

Contingent Liabilities and Other Financial Commitments

Promosome

In January 2025, Promosome LLC filed a lawsuit against us and Pfizer in the Unified Patent Court, or the UPC, Munich Division, alleging that Comirnaty infringes EP 2 401 365 and seeking monetary relief. This proceeding is currently pending.

CureVac Proceedings – United Kingdom

On January 27, 2025, the UK Appeals Court denied CureVac's application to appeal; accordingly, the UK designations of EP'668 and EP'755 are finally revoked with no further opportunity to appeal in the UK.

Moderna Proceedings – Germany

On January 21, 2025, the Düsseldorf Regional Court held a hearing on infringement with respect to EP'949. On March 5, 2025, the Court issued a first-instance decision declining to stay the infringement proceedings and finding infringement of EP'949 by BioNTech and Pfizer. BioNTech and Pfizer intend to appeal the Düsseldorf Regional Court's infringement decision. The court has not ruled on the invalidity of EP'949 which will be decided in a next step by the EPO in the opposition appeal proceedings. The Opposition Division of the EPO found EP'949 to be valid in 2024; BioNTech appealed this decision, and the appeal is currently pending. Should Moderna nevertheless decide to enforce the Düsseldorf Regional Court's first instance-decision on a preliminary basis, BioNTech and Pfizer will need to provide information and render accounts on relevant acts in Germany. A determination of compensation and damages will then follow in separate proceedings. The EPO's decision as to the invalidity of EP'949 is expected before any determination of compensation and damages will take place.

Moderna Proceedings – US

With respect to Pfizer and our inter partes proceedings against Moderna, on March 5, 2025, the United States Patent Trial and Appeal Board found all challenged claims of Moderna's US Patent Nos. 10,933,127 and 10,702,600 to be unpatentable and thus invalid. Moderna may appeal this decision.

Our assessment stated in Note 18 remains unchanged: None of these claims fulfill the criteria for recording a provision but represent contingent liabilities. These contingent

liabilities are subject to significant uncertainties and, therefore, determining the likelihood of a loss and/or the measurement of any loss can be complex. Consequently, we are unable to estimate the range of reasonably possible loss. Our assessments, which result from a complex series of judgments about future events and uncertainties, are based on estimates and assumptions that have been deemed reasonable by management, but that may prove to be incomplete or inaccurate, and unanticipated events and circumstances may occur that might cause us to change those estimates and assumptions. We currently do not believe that any of these matters will have a material adverse effect on our financial position, and will continue to monitor the status of these and other claims that may arise. However, we could incur judgments, enter into settlements or revise our expectations regarding the outcome of matters, which could have a material adverse effect on our results of operations and/or our cash flows in the period in which the amounts are accrued or paid. We will continue to evaluate whether, if circumstances were to change in the future, the recording of a provision may be needed and whether potential indemnification entitlements exist against any such claim.

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. 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

The following English language translation of the German language independent auditor's report (Bestätigungsvermerk des unabhängigen Abschlussprüfers) refers to the consolidated financial statements, prepared in accordance with IFRS Accounting Standards as issued by the International Accounting Standards Board (IASB) (IFRS Accounting Standards) and adopted by the European Union and the additional requirements of German commercial law pursuant to Sec. 315e (3) in conjunction with (1) HGB ("Handelsgesetzbuch": German Commercial Code), as well as the group management report, which is combined with the management report of the Company (combined management report), prepared on the basis of German commercial law (HGB), of BioNTech SE, Mainz, as of and for the year ended December 31, 2024 as a whole and not solely to the consolidated financial statements presented in this Prospectus on the preceding pages. The group management report is not part of this Prospectus.

Independent Auditor's Report

To BioNTech SE

Opinions

We have audited the consolidated financial statements of BioNTech SE, Mainz, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2024, and the consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of cash flows and consolidated statement of changes in stockholders' equity for the financial year from January 1 to December 31, 2024, and notes to the consolidated financial statements, including material accounting policy information. In addition, we have audited the group management report of BioNTech SE, which is combined with the management report of the Company, 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. 315d HGB ["Handelsgesetzbuch": German Commercial Code] included in section 5 of the group 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 group management report, which relate to disclosures extraneous to management reports. Disclosures extraneous to group management reports are such disclosures that are not required pursuant to Secs. 315, 315a HGB or Secs. 315b to 315d HGB or German Accounting Standard (GAS) 20.

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

- the accompanying consolidated financial statements comply, in all material respects, with the IFRS Accounting Standards as issued by the International Accounting Standards Board (IASB) (IFRS Accounting Standards) and adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315e (3) in conjunction with (1) HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities and financial position of the Group as at December 31, 2024 and of its financial performance for the financial year from January 1 to December 31, 2024, and

- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated 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 group 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 consolidated financial statements and of the group management report.

Basis for the opinions

We conducted our audit of the consolidated financial statements and of the group 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 consolidated financial statements and of the group management report" section of our auditor's report. We are independent of the group entities 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 consolidated financial statements and on the group 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. 315d 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 group 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 consolidated financial statements, not the group 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 consolidated financial statements and on the group 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 consolidated financial statements, with the group 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 consolidated financial statements and the group management report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with the IFRS Accounting Standards as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (3) in conjunction with (1) HGB, and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position and financial performance of the Group. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated 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 consolidated financial statements, the executive directors are responsible for assessing the Group'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 unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated 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 group 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 group management report.

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

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated 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 consolidated financial statements and on the group 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 consolidated financial statements and this group 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 consolidated financial statements and of the group 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 consolidated financial statements and of arrangements and measures relevant to the audit of the group

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 Group'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 Group'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 consolidated financial statements and in the group 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 Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with the IFRS Accounting Standards as adopted by the EU and the additional requirements of German commercial law pursuant to Sec. 315e (3) in conjunction with (1) HGB.

- Plan and perform the audit of the consolidated financial statements to obtain sufficient appropriate audit evidence regarding the financial information of the entities or business units within the Group as a basis for forming opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and review of the work performed for the group audit. We remain solely responsible for our audit opinions.

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

- Perform audit procedures on the prospective information presented by the executive directors in the group 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]