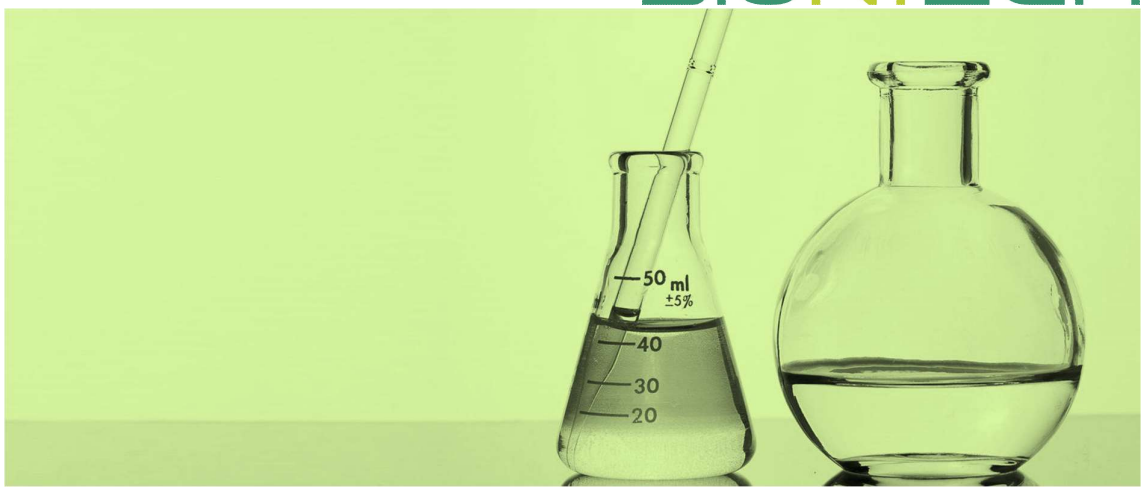


BioNTech SE, Mainz

Consolidated Financial Statements for the year ended December 31, 2019

Convenience Translation

Index to the Consolidated Financial Statements

Consolidated Statements of Operations

(in thousands, except per share data)	Note	Years ended December 31, 2019	2018	2017
Revenues from contracts with customers	4	€108,589	€127,575	€61,598
Cost of sales	7.1	(17,361)	(13,690)	(9,318)
Gross profit		**€91,228**	**€113,885**	**€52,280**
Research and development expenses	7.2	(226,466)	(143,040)	(85,496)
Sales and marketing expenses	7.3	(2,718)	(3,041)	(6,603)
General and administrative expenses	7.4	(45,547)	(26,334)	(23,520)
Other operating income	7.5	2,724	5,396	2,349
Other operating expenses		(739)	(720)	(288)
Operating loss		**€(181,518)**	**€(53,854)**	**€(61,277)**
Finance income	7.6	4,122	8,046	2,133
Finance expenses	7.7	(326)	(48)	(26,007)
Interest expense related to lease liability	19	(1,718)	(1,721)	(676)
Share of loss of equity method investees		-	(84)	(78)
Loss before tax		**€(179,440)**	**€(47,662)**	**€(85,905)**
Income taxes	8	268	(600)	(45)
Loss for the period		**€(179,172)**	**€(48,262)**	**€(85,950)**
Attributable to:				
Equity holders of the parent		(179,056)	(48,019)	(85,653)
Non-controlling interests		(116)	(243)	(297)
		€(179,172)	**€(48,262)**	**€(85,950)**
Earnings per share				
in EUR				
Basic & diluted, loss per share for the year attributable to ordinary equity holders of the parent	9	€(0.85)	€(0.25)	€(0.51)

Consolidated Statements of Comprehensive Loss

		Years ended December 31,		
		2019	**2018**	**2017**
(in thousands)	**Note**			
Loss for the period		**€(179,172)**	**€(48,262)**	**€(85,950)**
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		77	10	(23)
Net other comprehensive income that may be reclassified to profit or loss in subsequent periods		**77**	**10**	**(23)**
Other comprehensive income for the period, net of tax		**77**	**10**	**(23)**
Comprehensive loss for the period, net of tax		**€(179,095)**	**€(48,252)**	**€(85,973)**
Attributable to:				
Equity holders of the parent		(178,979)	(48,009)	(85,677)
Non- controlling interests		(116)	(243)	(297)
Comprehensive loss for the period, net of tax		**€(179,095)**	**€(48,252)**	**€(85,973)**

Consolidated Statements of Financial Position

(in thousands)		As of December, 31 2019	As of December, 31 2018
Assets	***Note***		
Non-current assets			
Intangible assets	11	€89,434	€88,042
Property, plant and equipment	10	93,044	66,200
Right-of-use assets	19	55,018	49,766
Other financial assets	12	-	18
Total non-current assets		**€237,496**	**€204,025**
Current assets			
Inventories	13	11,722	5,789
Trade receivables	14	11,913	18,938
Other financial assets	12	1,680	336
Other assets	15	9,069	9,164
Income tax assets		756	891
Deferred expense		5,862	2,348
Cash and cash equivalents	12	519,149	411,495
Total current assets		**€560,151**	**€448,961**
Total assets		**€797,647**	**€652,986**
Equity and liabilities			
Equity			
Share capital*	16	232,304	193,296
Capital reserve*	16	686,714	344,115
Treasury shares*	16	(5,525)	-
Accumulated losses		(424,827)	(245,771)
Other reserves	17	4,826	(25,487)
Equity attributable to equity holders of the parent		**€493,492**	**€266,153**
Non-controlling interest		-	847
Total equity		**€493,492**	**€267,000**
Non-current liabilities			
Financial liabilities	12	68,904	54,218
Contract liabilities	4	97,109	205,647
Total non-current liabilities		**€166,013**	**€259,865**
Current liabilities			
Tax provisions		150	297
Provisions		762	710
Financial liabilities		1,823	-
Trade payables	12	20,498	41,721
Contract liabilities	4	93,583	66,027
Other financial liabilities	12	13,836	8,266
Other liabilities	18	7,490	9,100
Total current liabilities		**€138,142**	**€126,121**
Total liabilities		**€304,155**	**€385,986**
Total equity and liabilities		**€797,647**	**€652,986**

*Numbers have been adjusted to reflect capital increase due to 1:18 share split which occurred on September 18, 2019,

Consolidated Statements of Changes in Stockholders' Equity

		Year ended December 31, 2019								
		Equity attributable to equity holders of the parent								
(in thousands)	Note	Share capital*	Capital reserve*	Treasury shares*	Accumulated losses	Other reserves	Foreign Currency translation reserve	Total	Non-controlling interest	Total equity
As of January 1, 2019		**€193,296**	**344,115**	**-**	**(245,771)**	**(25,474)**	**(13)**	**266,153**	**847**	**267,000**
Loss for the period		-	-	-	(179,056)	-	-	**(179,056)**	(116)	**(179,172)**
Other comprehensive income		-	-	-	-	-	77	**77**	-	**77**
Total comprehensive income		**-**	**-**	**-**	**(179,056)**	**-**	**77**	**(178,979)**	**(116)**	**(179,095)**
Issuance of share capital	16	8,126	41,748	-	-	-	-	**49,874**	-	**49,874**
Capital increase Series B	16	17,990	186,390	(5,525)	-	-	-	**198,855**	-	**198,855**
Capital increase initial public offering (referred to as IPO)	16	10,517	132,743	-	-	-	-	**143,260**	-	**143,260**
Acquisition of non-controlling interest	16	2,375	(1,644)	-	-	-	-	**731**	(731)	**-**
Transaction costs	16	-	(16,638)	-	-	-	-	**(16,638)**	-	**(16,638)**
Share-based payments	17	-	-	-	-	30,236	-	**30,236**	-	**30,236**
As of December 31, 2019		**€232,304**	**686,714**	**(5,525)**	**(424,827)**	**4,762**	**64**	**493,492**	**-**	**493,492**

* Numbers have been adjusted to reflect capital increase due to 1:18 share split which occurred on September 18, 2019,

		Year ended December 31, 2018								
		Equity attributable to equity holders of the parent								
(in thousands)	Note	Share capital*	Capital reserve*	Treasury shares*	Accumulated losses	Other reserves	Foreign currency translation reserve	Total	Non-controlling interest	Total equity
As of January 1, 2018		**€166,764**	**8,922**	**-**	**(197,753)**	**(27,206)**	**(23)**	**(49,296)**	**1,090**	**(48,206)**
Loss for the period		-	-	-	(48,019)	-	-	**(48,019)**	(243)	**(48,262)**
Other comprehensive income		-	-	-	-	-	10	**10**	-	**10**
Total comprehensive income		**-**	**-**	**-**	**(48,019)**	**-**	**10**	**(48,009)**	**(243)**	**(48,252)**
Issuance of share capital	16	25,949	329,867	-	-	-	-	**355,816**	-	**355,816**
Share based payments	17	-	-	-	-	7,641	-	**7,641**	-	**7,641**
Settlement of share-based payment plan		583	5,326	-	-	(5,909)	-	**-**	-	**-**
As of December 31, 2018		**€193,296**	**344,115**	**-**	**(245,771)**	**(25,474)**	**(13)**	**266,153**	**847**	**267,000**

* Numbers have been adjusted to reflect capital increase due to 1:18 share split which occurred on September 18, 2019,

		Year ended December 31, 2017								
		Equity attributable to equity holders of the parent								
(in thousands)	Note	Share capital*	Capital reserve*	Treasury shares*	Accumulated losses	Other reserves	Foreign currency translation reserve	Total	Non-controlling interest	Total equity
As of January 1, 2017		**€3,270**	**172,416**	**-**	**(112,100)**	**(33,115)**	**-**	**30,471**	**1,387**	**31,858**
Loss for the period		-	-	-	(85,653)	-	-	**(85,653)**	(297)	**(85,950)**
Other comprehensive income		-	-	-	-	-	(23)	**(23)**	-	**(23)**
Total comprehensive income		**-**	**-**	**-**	**(85,653)**	**-**	**(23)**	**(85,676)**	**(297)**	**(85,973)**
Issuance of share capital	16	163,494	(163,494)	-	-	-	-	**-**	-	**-**
Share based payments	17	-	-	-	-	5,909	-	**5,909**	-	**5,909**
As of December 31, 2017		**€166,764**	**8,922**	**-**	**(197,753)**	**(27,206)**	**(23)**	**(49,296)**	**1,090**	**(48,206)**

Numbers have been adjusted to reflect capital increase due to 1:18 share split which occurred on September 18, 2019

Consolidated Statement of Cash Flows

	Years ended December 31		
(in thousands)	**2019**	**2018**	**2017**
Operating activities			
Loss for the period	€(179,172)	€(48,262)	€(85,950)
Income taxes	(268)	600	45
Loss before tax	**€(179,440)**	**€(47,662)**	**€(85,905)**
Adjustments to reconcile loss before tax to net cash flows:			
Depreciation and amortization of property, plant, equipment and intangible assets	33,896	21,984	10,529
Share-based payment expense	30,235	7,641	5,909
Net foreign exchange differences	70	459	24,820
(Gain)/Loss on disposal of property, plant and equipment	542	(14)	15
Finance income	(1,782)	(1,996)	(2,133)
Interest on lease liability	1,718	1,721	676
Finance expense	326	48	53
Share of loss of an associate and a joint venture	-	84	78
Working capital adjustments:			
Decrease/(Increase) in trade receivable and contract assets	2,939	(18,732)	(2,816)
Decrease/(Increase) in inventories	(5,798)	(1,253)	(574)
(Decrease)/Increase in trade and other payables, contract liabilities and provisions	(80,577)	(21,080)	(4,574)
Interest received	1,256	1,996	2,133
Interest paid	(2,044)	(1,769)	(729)
Income tax received (paid), net	122	(304)	(45)
Net cash flows used in operating activities	**€(198,537)**	**€(58,877)**	**€(52,562)**
Investing activities			
Purchase of property, plant and equipment	(38,592)	(29,901)	(24,320)
Proceeds from sale of property, plant and equipment	21	705	5,193
Purchase of intangibles assets	(32,488)	(37,256)	(33,422)
Acquisition of subsidiaries and businesses, net of cash acquired	(6,056)	-	-
Net cash flows used in investing activities	**€(77,115)**	**€(66,452)**	**€(52,549)**
Financing activities			
Proceeds from issuance of share capital, net of costs	375,351	361,725	-
Proceeds from loans and borrowings	11,000	5,600	-
Payment of finance lease liabilities	(3,061)	(2,148)	(1,643)
Net cash flows from/(used in) financing activities	**€383,290**	**€365,177**	**€(1,643)**
Net increase/(decrease) in cash and cash equivalents	107,638	239,848	(106,753)
Change in cash resulting from exchange rate differences	16	(459)	(24,820)
Cash and cash equivalents at January 1	411,495	172,106	303,680
Cash and cash equivalents at December 31	**€519,149**	**€411,495**	**€172,106**

Notes to the Consolidated Financial Statements

1 Corporate Information

BioNTech SE is a limited company incorporated and domiciled in Germany. American Depository Shares (ADS) representing BioNTech's shares are publicly traded on Nasdaq Global Select Market since October 10, 2019. The registered office is located in Mainz, An der Goldgrube 12, 55131 Germany. The accompanying International Financial Reporting Standards (IFRS) consolidated financial statements present the financial position and the results of operation of BioNTech SE and its subsidiaries, hereinafter also referred to as "BioNTech" or the "Group".

Effective March 8, 2019, BioNTech AG changed its name and legal form to BioNTech SE. The Group is principally engaged in developing innovative immunotherapies for the individualized treatment of cancer and other infectious diseases.

During the year ended December 31, 2019 the following changes to the Group structure occurred:

- Two entities were founded in the United States: BioNTech USA Holding, LLC and BioNTech Research & Development, Inc. Both are wholly-owned subsidiaries of BioNTech SE.
- reBOOST Management GmbH, was acquired through a share purchase which represents a related party transaction.

All entities listed above are included in the Group's consolidated financial statements.

Information on the Group's structure is provided in Note 5.

2 Significant Accounting Policies

2.1 Basis of Preparation

The consolidated financial statements have been prepared on a going concern basis and in accordance with the International Financial Reporting Standards (IFRS), as adopted by the European Union, and the additional requirements of German commercial law pursuant to Section 315e HGB.

BioNTech prepares and publishes its consolidated financial statements in Euros. Unless otherwise stated, the numbers are rounded to thousands of Euros. Accordingly, numerical figures shown as totals in some tables may not be exact arithmetic aggregations of the figures that preceded them.

2.2 Basis of Consolidation

The consolidated financial statements comprise the financial statements of the Company 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.

The Group re-assesses whether it controls an investee 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 the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary.

The statement of operations and each component of other comprehensive income 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 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 the Group loses control over a subsidiary, it derecognizes the related assets (including goodwill), liabilities, non-controlling interests and other components of equity, while any resultant gain or loss is recognized in the statement of operations. Any investment retained is recognized at fair value.

2.3 Summary of Significant Accounting Policies

2.3.1 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.

After initial recognition, goodwill is tested at least annually or when there is an indication for impairment. See Note 2.3.13.

2.3.2 Current versus Non-Current Classifications

The Group presents assets and liabilities in the consolidated statements of financial position based on current or non-current classification. An asset is current when it is either: (i) expected to be realized within 12 months after the reporting period or (ii) cash or cash equivalents, unless it is restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current. A liability is current when it is due to be settled within 12 months after the reporting period. 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 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, the Group determines 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, the Group has determined classes of assets and liabilities 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.

2.3.4 Revenue from Contracts with Customers

Revenue Recognition

Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which BioNTech expects to be entitled in exchange for those goods or services. If a contract with a customer contains more than one performance obligation, the transaction price is allocated to each performance obligation on a relative-stand-alone selling price basis. BioNTech has generally concluded that it acts as the principal in its revenue arrangements because it typically controls the goods or services before transferring them to the customer. The following is a description of these activities.

Revenue from Collaboration and License Agreements

BioNTech generates revenues from collaboration and license agreements under which BioNTech grants licenses to use, research, develop, manufacture and commercialize product candidates and products. If the grant of a license is bundled together with 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. For each promise to grant a license that is a separate performance obligation, it is considered whether control is transferred to a licensee either at a point in time or over time. Under the terms of its licensing arrangements, BioNTech provides the licensee with a right to access BioNTech's intellectual property as it exists throughout the license period (as BioNTech's intellectual property is still subject to further research). Therefore, the promise to grant a license is accounted for as a performance obligation satisfied over time, as the licensee simultaneously receives and consumes the benefits of BioNTech's performance.

If the consideration in an agreement includes a variable amount, BioNTech estimates the amount of consideration to which BioNTech 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 revenue reversal in the amount of cumulative revenue recognized will not occur when the associated uncertainty with respect the variable consideration is subsequently resolved. The estimated deferred revenue is updated at each reporting date to reflect the current facts and circumstances.

Rendering of Services

BioNTech provides development and manufacturing services to customers and recognizes revenue over time using an input-based method to measure progress toward complete satisfaction of the services because the customer simultaneously receives and consumes the benefits provided by BioNTech. If BioNTech has a right to consideration from a customer in the amount that corresponds directly with the value to the customer of BioNTech's performance completed to date (for example, service contracts in

which BioNTech bills a fixed amount for each hour or day of service provided), BioNTech recognizes revenue in the amount for which BioNTech has a right to invoice the customer.

Sale of Products

Revenue from the sale of medical products (*e.g.*, peptides and retroviral vectors for clinical supply) is recognized when BioNTech transfers control of the product to the customer. Control of the product normally transfers when the customer gains physical possession and BioNTech has not retained any significant risks of ownership or future obligations with respect to the product. A receivable is recognized, as the consideration is unconditional and only the passage of time is required before payment is due. The transaction price is quoted in the relevant price lists in force at the date of customer placing the respective order for such products. Payments from customers are due within 20 days (Europe) or 30 days (non-Europe) after invoice.

Contract Balances

Contract Assets

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

Trade Receivables

A receivable represents BioNTech's 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 BioNTech has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before BioNTech transfers 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 BioNTech performs under the contract.

2.3.5 Government Grants

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which the grant is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as deduction in calculating the carrying amount of the asset and thus in the statement of operations over the life of the depreciable asset as a reduced depreciation expense.

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.

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, associates and interests in joint arrangements, 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, associates and interests in joint arrangements, 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.

Recognition of Taxes

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

The Group offsets current tax assets and current tax liabilities if, and only if, it has a legally enforceable right to set off the recognized amounts and intends 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 the Group has 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 statement of financial position.

2.3.7 Foreign Currencies

The Group's consolidated financial statements are presented in Euros, which is also the parent company's functional currency. For each entity, the Group determines the functional currency, and items included in the financial statements of such entity are measured using that functional currency. The Group uses the direct method of consolidation and on disposal of a foreign operation, the gain or loss that is reclassified to the statement of operations 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

On consolidation, the assets and liabilities of foreign operations are translated into Euros at the rate of exchange prevailing at the reporting date and their statements of operations 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.

2.3.8 Property, Plant and Equipment

Construction in progress is stated at cost, net of accumulated impairment losses, if any. 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	7-33
Equipment, tools and installations	3-15

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 statement of operations 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.

2.3.9 Leases

The Group early adopted IFRS 16 Leases for annual periods beginning on January 1, 2017.

At the inception of a contract, the Group assesses 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. To assess whether a contract conveys the right to control the use of an identified asset, the Group assesses whether:

- the contract involves the use of an identified asset—this may be specified explicitly or implicitly and should be physically distinct or represent substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, then the asset is not identified;
- the Group has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and
- the Group has the right to direct the use of the asset. The Group has this right when it has the decision-making rights that are most relevant to changing how and for what purpose the asset is used. In rare cases where the decision about how and for what purpose the asset is used is pre-determined, the Group has the right to direct the use of the asset if either:
- the Group has the right to operate the asset; or
- the Group designed the asset in a way that predetermines how and for what purpose it will be used.

At inception or on reassessment of a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices. However, for the leases of land and buildings in which it is a lessee, the Group has elected not to separate non-lease components, and instead accounts for the lease and non-lease components as a single lease component.

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of the costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received by the Group.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset and the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

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 Group uses its incremental borrowing rate as the discount rate.

Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, including in-substance fixed payments;

- variable lease payments that depend on an index or a rate, initially measured using the index or rate as of the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early.

The lease liability is subsequently measured at amortized cost using the effective interest 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 Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it 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 statement of operations if the carrying amount of the right-of-use asset has been reduced to zero.

The Group presents right-of-use assets separately and lease liabilities in 'financial liabilities' in the statement of financial position.

Depreciation 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 (Years)
Buildings	2-25
Equipment, tools and installations	2-5
Automobiles	3-4

Short-Term Leases and Leases of Low-Value Assets

The Group has 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. The Group recognizes the lease payments associated with these leases as an expense in the statement of operations on a straight-line basis over the lease term.

2.3.10 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 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 economic 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 at least reviewed at the end of each reporting period. The amortization expense on intangible assets with finite lives is recognized in the statement of operations 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	10-20
Licenses	3-20

Owing to the high risks up to the time that pharmaceutical products are approved, these criteria are not met in the Biotech business sector until regulatory approval has been provided. Therefore, the Group has not yet capitalized any development expenditures. The related expenditure is reflected in the statement of operations in the period in which the expenditure is incurred.

2.3.11 Financial Instruments – Initial Recognition and Subsequent Measurement

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, after the initial measurement the financial assets are subsequently classified as either measured at amortized cost, fair value through other comprehensive income, or fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15. Refer to the accounting policies in Note 2.3.4.

In order for a financial asset to be classified and measured at amortized cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

Financial Assets at Amortized Cost (Debt Instruments)

The Group measures financial assets at amortized cost if both of the following conditions are met:

- the financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortized cost are subsequently measured using the effective interest rate (EIR) method, and are subject to impairment. Gains and losses are recognized in the statement of operations when the asset is derecognized, modified or impaired.

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 Group's consolidated statement 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 recognized for all debt instruments not held at fair value through profit or loss. 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.

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

ii) Financial Liabilities

Initial Recognition and Measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings or as payables.

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.

The Group's financial liabilities include trade payables and other financial liabilities.

Subsequent Measurement

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

Financial Liabilities at Fair Value through Profit or Loss

The Group has no financial liabilities measured at fair value through profit or loss.

Loans, Borrowings, Trade Payables and Other Financial Liabilities

After initial recognition, interest-bearing loans and borrowings, trade payables and other financial liabilities are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in the statement of operations 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 statement of operations.

This category generally applies to interest-bearing loans and borrowings.

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 statement of operations.

2.3.12 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 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.

2.3.13 Impairment of Non-Financial Assets

The Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash generating unit's (CGU) 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. When the carrying amount of an asset or cash generating unit exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows 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 asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's cash generating units to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses of continuing operations are recognized in the statement of operations in expense categories consistent with the function of the impaired asset.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or cash generating unit's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the statement of operations unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

2.3.14 Cash and Cash Equivalents

Cash and cash equivalents comprise cash in banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value.

2.3.15 Provisions

Provisions are recognized when the Group has 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 the Group expects 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. The expense relating to a provision is presented in the statement of operations net of any reimbursement.

2.3.16 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).

Equity-Settled Transactions

The cost of equity-settled transactions is determined by the fair value at the date when the grant is made using an appropriate valuation model, further details of which are given in Note 17.

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), over the period in which the service is provided (the vesting period). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest.

2.4 Standards applied for the First Time (IFRS)

In 2019 several new and amended standards and interpretations became effective. These were applied for the first time, but did not have an impact on the consolidated financial statements of the Group.

Standards/Interpretations	Date of application
IFRIC 23 Uncertainty over income tax treatment	January 1, 2019
Amendments to IFRS 9 Prepayment Features with Negative Compensation	January 1, 2019
Amendments to IAS 19 Plan Amendment, Curtailment or Settlement	January 1, 2019
Amendments to IAS 28 Long-term interests in associates and joint ventures	January 1, 2019
Annual improvement cycle to IFRS 2015-2017	January 1, 2019

2.5 Standard issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements and that might have an impact on the Group's financial statements are disclosed below. The Group has not early adopted any standards and intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Standards/Interpretations	Date of application
Amendments to IFRS 3 Business Combinations	January 1, 2020
Amendments to IFRS 9, IAS 39 and IFRS 7 Interest Rate Benchmark Reform	January 1, 2020
Amendments to IAS 1 and IAS 8 Definition of Material	January 1, 2020
Amendments to References to the Conceptual Framework in IFRS Standards	January 1, 2020
Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current	January 1, 2022

The Group does not expect a significant impact of the application of any of these amendments.

3 Significant Accounting Judgements, Estimates and Assumptions

The preparation of the Group's consolidated financial statements requires management to make judgements, 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.

Judgments

In the process of applying the Group's accounting policies, management has made the following judgments, which have the most significant effect on the amounts recognized in the consolidated financial statements:

Revenue from Contracts with Customers

BioNTech applied the following judgements that significantly affect the determination of the amount and timing of revenue from contracts with customers:

Identification and Determination of the Nature of Performance Obligations in Collaboration and License Agreements

BioNTech generates revenues from collaboration and license agreements under which BioNTech grants licenses to use, research, develop, manufacture and commercialize candidates and products. As these agreements comprise several promises, it must be assessed whether these promises are capable of being distinct within the context of the contract. If these promises are not distinct, they have to be combined until the bundle of promised goods and services is distinct. For some agreements, this results in BioNTech accounting for all 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, it must be assessed which of these promises is the predominant promise to determine the nature of the performance obligation. BioNTech determined that the grant of the license is the predominant promise within the (combined) performance obligation to grant a license to the customers. It was assessed that BioNTech grants their customers a right to access or a right to use BioNTech's intellectual property due to the collaboration and license agreements.

Consequently, the promise to grant a license is accounted for as a performance obligation satisfied over time as BioNTech's customer simultaneously receive and consumes the benefits from BioNTech's performance.

Estimation of Variable Consideration and Assessment of the Constraint when Determining the Deferred Revenue

BioNTech's collaboration and license agreements comprise variable considerations which are contingent on the occurrence or non-occurrence of a future event *(i.e.*, reaching a certain milestone). When determining the deferred revenue of a collaboration and license agreement, BioNTech is required to estimate the amount of consideration to which it will be entitled in exchange for transferring the promised goods or services to the customer.

As there are usually only two possible outcomes (*i.e.*, milestone is reached or not), BioNTech has assessed that the method of the most likely amount is the best method to predict the amount of consideration to which BioNTech will be entitled.

The most likely amount of these milestone payments *(i.e.*, the full milestone payment) is only included in the transaction price if the occurrence of reaching future milestone is highly probable. BioNTech has 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.

BioNTech has concluded that future milestone payments are fully constrained at the end of the current fiscal year.

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

For the carrying amounts of the revenue recognition-related contract balances, see Note 4.

Estimates and Assumptions

The 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. The Group based its 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.

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.

This estimate also requires the determination of the most appropriate inputs to the valuation model when calculating the fair value of the share option.

The Group has used an external appraisal for the measurement of the cash- and equity-settled transactions' fair value at the grant date considering certain assumption relating to, *e.g.*, the volatility of 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 post the initial public offering, the grant date's share prices on the Nasdaq Global Select Market were included in the valuation.

For further disclosures relating to share-based payments, see Note 17.

Leases

Right-of-use assets are measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease.

Significant accounting judgments are required for the determination of the appropriate incremental borrowing rate, which is to be used in the calculation of the asset and liability that are recognized in the financial statements regarding the lease contracts.

For the carrying amounts of right-of-use assets and the related lease liability, see Note 19.

Taxes

Deferred tax assets are recognized for unused tax losses only to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgement is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits, together with future tax planning strategies.

The Group has tax losses carried forward and these losses relate to subsidiaries that have a history of losses. The subsidiaries neither have any taxable temporary difference nor any tax planning opportunities available that could partly support the recognition of these losses as deferred tax assets.

On this basis, the Group has determined that it cannot recognize deferred tax assets on the tax losses carried forward.

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

4 Revenue from Contracts with Customers

4.1 Disaggregated Revenue Information

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

	Years ended December 31,		
(in thousands)	**2019**	**2018**	**2017**
Revenues resulting from collaboration and license agreements	€84,428	€101,837	€42,333
Genentech Inc.	*64,026*	*49,536*	*27,829*
Pfizer Inc.	*14,348*	*7,174*	*-*
Sanofi S.A.	*4,233*	*41,712*	*5,665*
Genmab A/S	*-*	*2,740*	*6,765*
Eli Lilly and Company	*1,821*	*676*	*2,074*
Revenues from other sales transactions	24,161	25,738	19,265
Total	**€108,589**	**€127,575**	**€61,598**

Through December 31, 2019, BioNTech received k€279,542 in upfront fees from Genentech under the Genentech Collaboration Agreement. Such amounts are initially deferred and subsequently recognized as revenue as the Company performs under the agreement and measured based on the costs incurred under the respective research programs. Of these upfront fees, k€64,026 was recognized as revenue in the year ended December 31, 2019 (k€49,536 in 2018; k€27,829 in 2017). As of December 31, 2019, k€131,556 upfront fees is recognized as deferred revenue within contract liabilities in the statement of financial position (as of December 31, 2018: k€195,582).

Through December 31, 2019, BioNTech received k€59,560 in upfront and near-term milestone payments from Sanofi under the Sanofi Agreement. Such amounts are initially deferred and subsequently recognized as revenue as the Company performs under the agreement and measured based on the costs incurred under the respective research programs. Of these upfront fees, k€4,233 was recognized as revenue in the year ended December 31, 2019 (k€8,535 in 2018; k€5,665 in 2017). As of December 31, 2019, k€34,483 upfront fees is recognized as deferred revenue within contract liabilities in the statement of financial position (as of December 31, 2018: k€38,716). During the year ended December 31, 2018, BioNTech recognized k€33,177 of revenue from Sanofi for reimbursement of 50% of Cellscript sublicense costs pursuant to a separate sub-sublicense agreement dated December 22, 2018.

Through December 31, 2019, BioNTech received k€43,044 in upfront fees from Pfizer under the Pfizer Collaboration Agreement. Such amounts are initially deferred and subsequently recognized as revenue as BioNTech performs under the agreement and measured based on the time elapsed under the respective research programs. Of these upfront fees, k€14,348 was recognized as revenue in the year ended December 31, 2019 (k€7,174 in 2018). As of December 31, 2019, k€21,522 upfront fees is recognized as deferred revenue within contract liabilities in the statement of financial position (as of December 31, 2018: k€35,870).

The transactions resulting from product sales that are included within the revenue from other sales transactions are as follows:

	Years ended December 31,		
(in thousands)	**2019**	**2018**	**2017**
Product sales of JPT Peptide Technologies GmbH	€12,111	€10,748	€10,652

During the year ended December 31, 2019, BioNTech recognized revenue of k€1,059 under a bill-and-hold transaction for which the customer already had obtained control. The bill-and-hold arrangement is substantive since the request to retain the product in BioNTech's facilities until January 2020 was initiated by the customer.

4.2 Contract Balances

(in thousands)	**December 31, 2019**	**December 31, 2018**
Trade receivables	€11,913	€18,938
Contract liabilities	190,692	271,674

Trade receivables are non-interest bearing and are generally settled within 20 to 30 days.

Contract assets are recognized for revenue earned from sales and services based on individual customer contracts of BioNTech Innovative Manufacturing Services GmbH. However, the customers' advance payments exceeded BioNTech's transferred goods and services for which a conditional right to consideration exists. Therefore, only contract liabilities net of contract assets are presented as per December 31, 2019 and December 31, 2018, respectively.

Contract liabilities include mainly upfront fees received from BioNTech's major collaboration and license agreements. The outstanding balances of these accounts decreased during the year ended December 31, 2019 as revenues resulting from these agreements exceeded further payments received from the collaborators due to the achievement of milestones. During the year ended December 31, 2019, BioNTech did not receive upfront fees or an unconditional right of consideration from the collaboration and license agreements (year ended December 31, 2018: k€41,120) and recognized revenues resulting from collaboration and license agreements of k€82,607 (during the year ended December 31, 2018: k€65,068), which reduced the contract liabilities. In addition, during the year ended December 31, 2019, a milestone payment of k€1,821 was received from the Eli Lilly and Company collaboration agreement and recorded as revenue.

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

(in thousands)	**December 31, 2019**	**December 31, 2018**
Amounts included in contract liabilities at the beginning of the year	€82,607	€65,068

4.3 Performance Obligations

Information about BioNTech's performance obligations is summarized below:

Collaboration and License Agreements

BioNTech accounts for its promises to grant licenses as performance obligations satisfied over time as the customers simultaneously receive and consume the benefit of BioNTech's performance of providing access to its intellectual property as the performance occurs. BioNTech recognizes revenue over time by measuring the progress toward complete satisfaction of that performance obligation according to the method that demonstrates BioNTech's performance towards complete satisfaction. In contracts in which the costs vary based on the stage of research, an input-based measure considering cost incurred depicts most reliably the progress of the related research activities. In other contracts, revenue recognition on a straight-line basis most reliably depicts BioNTech's performance toward complete satisfaction. In case the contractual activities progress, the achievement of development milestones will be used to measure the progress toward complete satisfaction.

The deferred revenue allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at year-end are as follows:

(in thousands)	December 31, 2019	December 31, 2018
Within one year	€90,453	€64,522
More than one year	97,109	205,647
Total	**€187,562**	**€270,169**

The deferred revenue allocated to the remaining performance obligations does not contain deferred revenues of performance obligations which are part of contracts that have an original expected duration of one year or less or of performance obligations for which the consideration from the customer corresponds directly to the value to the customer of BioNTech's performance to date at an amount of k€3,130 (December 31, 2018: k€1,505).

5 Group Information

Information about Subsidiaries

The consolidated financial statements of the Group include the following subsidiaries:

				% equity interest	
Name	**Country of incorporation**	**Registered office**		**December 31, 2019**	**December 31, 2018**
BioNTech RNA Pharmaceuticals GmbH	Germany	Mainz	*	100%	100%
BioNTech Delivery Technologies GmbH (previously BioNTech Protein Therapeutics GmbH)	Germany	Halle (previously Mainz)	*	100%	100%
BioNTech Diagnostics GmbH	Germany	Mainz	*	100%	100%
BioNTech Small Molecules GmbH	Germany	Mainz	*	100%	100%
BioNTech IVAC GmbH (previously BioNTech Business Services GmbH)	Germany	Mainz	*	100%	100%
BioNTech Austria Beteiligungen GmbH	Austria	Vienna		100%	100%
BioNTech Innovative Manufacturing Services GmbH	Germany	Idar-Oberstein	*	100%	100%
reBOOST Management GmbH	Germany	Mainz	*	100%	-
JPT Peptide Technologies GmbH	Germany	Berlin	*	100%	100%
JPT Inc. (previously TheraCode JPT Inc.)	United States	Acton		100%	100%
BioNTech USA Holding LLC	United States	New York		100%	-
BioNTech Research and Development Inc.	United States	New York		100%	-
BioNTech Cell & Gene Therapies GmbH	Germany	Mainz	*	100%	94.50%
BioNTech Real Estate Holding GmbH (previously AptaIT GmbH)	Germany	Holzkirchen (previously Munich)	*	100%	100%
BioNTech Real Estate Verwaltungs GmbH	Germany	Holzkirchen	*	100%	100%
BioNTech Real Estate GmbH & Co. KG	Germany	Holzkirchen	*	100%	100%

* Subsidiary makes use of the exemption provisions of Sections 264 (3) and 264b HGB for the 2019 financial year

During the year ended December 31, 2019, two entities were founded in the United States: BioNTech USA Holding, LLC and BioNTech Research & Development, Inc. Both are wholly-owned subsidiaries of BioNTech SE. Additionally, reBOOST Management GmbH, was acquired through a share purchase which represents a related party transaction.

During the year ended December 31, 2018, BioNTech Real Estate Verwaltungs GmbH and BioNTech Real Estate GmbH & Co. KG were established.

BioNTech SE prepares the consolidated financial statements for the smallest group of companies.

Parent Company

ATHOS KG, Holzkirchen, Germany owns 100% of shares in AT Impf GmbH, Munich, Germany and is the beneficiary owner of BioNTech. ATHOS KG prepares the consolidated financial statements for the largest group of companies. AT Impf GmbH, Munich, Germany is the parent company of the Group and owned the following percentage of ordinary shares in BioNTech at the following dates as indicated:

Name	Country of incorporation	Registered office	Ownership of ordinary shares in BioNTech (in %)	
			December 31, 2019	December 31, 2018
AT Impf GmbH	Deutschland	Munich	50.33%	54.16%

Entity with significant Influence over the Group

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

Name	Country of incorporation	Registered office	Ownership of Ordinary Shares in BioNTech (in %)	
			December 31, 2019	December 31, 2018
Medine GmbH	Deutschland	Mainz	18.38%	21.57%

6 Business Combinations

MAB Discovery GmbH

In January 2019, BioNTech entered into an agreement to acquire MAB Discovery GmbH's operational antibody generation unit based near Munich, Germany (hereinafter also referred to as "MAB Discovery"), for a total consideration of k€6,050. The employees of MAB Discovery were transferred automatically to BioNTech with effect as of the closing date. The acquisition closed on April 1, 2019.

The Group has acquired MAB Discovery because it intends to adopt and pursue the unit's current business into its own.

The fair values of the identifiable net assets of MAB Discovery as at the date of acquisition were:

(in thousands)	Fair Value recognized on acquisition MAB Discovery GmbH
Assets	
Goodwill	€2,205
Other intangible assets	2,711
Property, Plant and equipment	999
Inventory	135
Total identifiable net assets at fair value	**€6,050**

(in thousands)	Cash Flow on acquisition MAB Discovery GmbH
Net cash acquired	-
Cash paid	€6,050
Net cash flow on acquisition	**€(6,050)**

The consolidated financial statements include the results of MAB Discovery since the acquisition date. From the date of acquisition, MAB Discovery contributed k€4,299 to loss before tax in the Technology Platform business segment from continuing operations of the Group. If the transaction would have occurred at the beginning of the reporting period, an estimated amount of k€5,232 would have contributed to loss before tax in the Technology Platform business segment. From the date of acquisition, MAB Discovery did not generate any revenue and no revenue would have been generated if the transaction would have occurred at the beginning of the reporting period.

Goodwill recognized is primarily attributed to the expected synergies and other benefits from combining the assets and activities of MAB Discovery with those of the Group.

Transaction costs of k€91 relating to the acquisition have been expensed and are included in the general and administrative expenses within the condensed consolidated statement of operations and are part of operating cash flows in the statement of cash flows.

reBOOST Management GmbH

On August 29, 2019, BioNTech entered into an agreement to purchase all of the outstanding shares of reBOOST Management GmbH (hereinafter also referred to as "reBOOST") from Medine GmbH, which is wholly owned by BioNTech's Chief Executive Officer, Ugur Sahin. The k€279 purchase price consists of k€31 cash consideration and assumption of liabilities of up to k€248. The related party acquisition closed on September 2, 2019.

The consolidated financial statements include the results of reBOOST since the acquisition date. From the date of acquisition, reBOOST contributed k€213 to loss before tax in the Technology Platform business segment from continuing operations of the Group. If the transaction would have occurred at the beginning of the reporting period, an estimated amount of k€237 would have contributed to loss before tax in the Technology Platform business segment. From the date of acquisition, reBOOST did not generate any revenue and no revenue would have been generated if the transaction would have occurred at the beginning of the reporting period.

The Group acquired reBOOST because it expects to lift synergies and other benefits arising from the ongoing collaborations of reBOOST with different co-operations.

7 Income and Expenses

7.1 Cost of Sales

	Years ended December 31,		
(in thousand)	**2019**	**2018**	**2017**
Wages, benefits and social security expense	€7,206	€6,726	€6,105
Laboratory supplies	3,845	1,368	2,849
Purchased services	1,986	2,514	-
Depreciation and amortization	1,467	1,367	-
Other	2,857	1,715	364
Total	**€17,361**	**€13,690**	**€9,318**

7.2 Research and Development Expenses

	Years ended December 31		
(in thousands)	**2019**	**2018**	**2017**
Wages, benefits and social security expense	€83,213	€45,668	€31,970
Purchased services	65,552	42,079	22,686
Laboratory supplies	37,218	22,921	15,762
Depreciation and amortization	27,533	18,312	9,859
Lease and lease related cost	3,800	1,572	366
IT costs	2,527	2,404	3,475
Travel costs	1,546	1,281	776
Transport costs	1,081	668	396
Job advertisement expenses	1,040	352	-
Other	2,956	7,783	206
Total	**€226,466**	**€143,040**	**€85,496**

7.3 Sales and Marketing Expenses

	Years ended December 31		
(in thousand)	**2019**	**2018**	**2017**
Wages, benefits and social security expense	€1,938	€1,728	€1,631
Purchased services	247	794	2,771
Travel costs	88	267	260
Other	445	252	1,940
Total	**€2,718**	**€3,041**	**€6,603**

7.4 General and Administrative Expenses

	Years ended December 31,		
(in thousands)	**2019**	**2018**	**2017**
Wages, benefits and social security expense	€19,122	€8,582	€9,861
Purchased services	6,419	5,177	3,544
IT and office equipment	4,855	2,284	630
Depreciation and amortization	4,573	3,774	2,706
Lease and lease related cost	1,715	1,012	1,611
Travel costs	1,391	1,043	247
Insurance premiums	1,061	145	99
Laboratory supplies	785	456	63
Job advertisement expenses	548	861	719
Other	5,078	3,000	4,039
Total	**€45,547**	**€26,334**	**€23,520**

7.5 Other Operating Income

	Years ended December 31,		
(in thousands)	**2019**	**2018**	**2017**
Government grants	€1,547	€4,228	€2,266
Other	1,177	1,168	83
Total	**€2,724**	**€5,396**	**€2,349**

7.6 Finance Income

	Years ended December 31		
(in thousands)	**2019**	**2018**	**2017**
Interest income	€1,781	€1,996	€2,133
Foreign exchange gains (net)	2,341	6,050	-
Total	**€4,122**	**€8,046**	**€2,133**

Finance income results from BioNTech's interests on short-term deposits. In the years ended December 31, 2019 and December 31, 2018 results from BioNTech's unhedged USD cash accounts were recorded as foreign exchange gains.

7.7 Finance Expense

	Years ended December 31,		
(thousands)	**2019**	**2018**	**2017**
Financial instruments measured at amortized cost	€326	€48	€53
Foreign exchange loss (net)	-	-	25,955
Total	**€326**	**€48**	**€26,007**

In the year ended December 31, 2017, foreign exchange losses as a result from BioNTech's unhedged USD cash accounts were recorded as finance expenses.

8 Income Tax

Tax expense for the years ended December 31, 2019, December 31, 2018 and December 31, 2017 are comprised of current income taxes and other taxes.

The following table illustrates the reconciliation of tax expense to the estimated tax rate for the periods indicated. The reconciliation for the year ended December 31, 2019 excludes an amount of k€28 for property tax expenses.

(in thousands)	Years ended December 31, 2019	2018	2017
Loss before tax	**€(179,440)**	**€(47,662)**	**€(85,905)**
Expected tax benefit (based on BioNTech`s statutory tax rate of 30.78%, 2018: 30.99%, 2017: 30.86%)	55,240	14,776	26,517
Effects			
Government grants exempted from taxes	48	28	17
Non-deductible expenses	(58)	(18)	(22)
Add-back for trade tax purposes	(110)	(96)	(70)
Non-recognition of tax-effect on share-based payment expenses	(9,308)	-	-
Tax-effective equity transaction costs	5,121	-	-
Utilization of tax losses	-	1,165	-
Non-recognition of deferred taxes on tax losses and temporary differences	(51,197)	(13,634)	(26,015)
Deviation valuation allowance prior year due to change tax rate	192	-	-
Effect from lower foreign income tax rate	(102)	-	-
Adjustment prior year tax	316	-	-
Other effects	154	(2,821)	(472)
Income tax expense	**€296**	**€(600)**	**€(45)**

Deferred Taxes

Deferred taxes for the periods indicated relate to the following:

Year ended December 31, 2019

(in thousands)	January 1, 2019	Recognized in P&L	December 31, 2019
Fixed assets	€(90)	€(565)	€(655)
Inventories	-	596	596
Leases	306	206	512
Contract liabilities (prior year revenues)	28,441	(4,898)	23,543
Provisions	134	53	187
Other (incl. deferred expenses)	161	1,926	2,087
Deferred Tax Assets Net (before valuation)	**€28,951**	**€(2,681)**	**€26,270**
Valuation Adjustment	**(28,951)**	**2,681**	**(26,270)**
Deferred Tax Assets Net (after valuation)	**-**	**-**	**-**

Year ended December 31, 2018

(in thousands)	January 1, 2018	Recognized in P&L	December 31, 2018
Fixed assets	€(877)	€787	€(90)
Inventories	83	(83)	-
Leases	83	223	306
Contract liabilities (prior year revenues)	16,631	11,810	28,441
Provisions	73	61	134
Other	684	(523)	161
Deferred Tax Assets Net (before valuation)	**€16,676**	**€12,275**	**€28,951**
Valuation Adjustment	**(16,676)**	**(12,275)**	**(28,951)**
Deferred Tax Assets Net (after valuation)	**-**	**-**	**-**

Accumulated tax losses of the Group for the periods indicated amount to the following:

	Years ended December 31,		
(in thousands)	**2019**	**2018**	**2017**
Corporate Tax	€356,044	€179,264	€178,491
Trade Tax	352,341	176,425	176,024

Deferred tax assets on tax losses have not been capitalized as there is not sufficient probability in terms of IAS 12 that there will be future taxable profits available against which the unused tax losses can be utilized. The accumulated tax losses as at December 31, 2019 relate to Germany and the United States (as at December 31, 2018: Germany). There is no expiration date for any of the accumulated tax losses under German or US tax law.

9 Earnings per Share

Basic earnings per share (EPS) is calculated by dividing the loss 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.

On September 18, 2019, BioNTech effected a 1:18 share split by issuing 206,595,492 shares by way of a capital increase from its own funds; thus, no outside proceeds were received. This capital increase came into effect upon registration with the commercial register (*Handelsregister*). The accompanying financial statements and notes to the financial statements including the EPS information below give retroactive effect to the share split for all periods presented.

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

	Years ended December 31		
(in thousands)	**2019**	**2018**	**2017**
Loss attributable to ordinary equity holders of the parent for basic earnings	**€(179,056)**	**€(48,019)**	**€(85,653)**
Weighted average number of ordinary shares for basic EPS	**211,499**	**190,710**	**166,764**
Effects of dilution from share options	-	-	-
Weighted average number of ordinary shares adjusted for the effect of dilution	**211,499**	**190,710**	**166,764**

There have been no other transactions involving ordinary shares or potential ordinary shares between the reporting date and the date of authorization of these financial statements. Stock options were not included in the calculation of diluted EPS because they are antidilutive for the periods presented.

10 Property, Plant and Equipment

(in thousands) **Acquisition and production costs**	**Land and buildings**	**Equipment, tools and installations**	**Construction in progress and advance payments**	**Total**
As of January 1, 2018	**€13,077**	**€58,080**	**€6,153**	**€77,310**
Additions	8,925	11,322	6,154	26,401
Disposals	-	(858)	-	(858)
Reclassifications	145	5,069	(5,216)	-
As of December 31, 2018	**€22,147**	**€73,613**	**€7,091**	**€102,853**
As of January 1, 2019	**€22,147**	**€73,613**	**€7,091**	**€102,853**
Additions	7,269	8,700	22,623	38,592
Disposals	-	(105)	(10)	(115)
Reclassifications	53	-	(53)	-
Currency differences	-	(1)	1	-
Acquisition of subsidiaries and businesses, net of cash acquired	-	999	-	999
As of December 31, 2019	**€29,469**	**€83,206**	**€29,652**	**€142,329**

(in thousands) **Cumulative depreciation and impairment charges**	**Land and buildings**	**Equipment, tools and installations**	**Construction in progress and advance payments**	**Total**
As of January 1, 2018	**€5,690**	**€22,013**	**-**	**€27,703**
Depreciation	782	8,349	-	**9,131**
Disposals	-	(182)	-	**(182)**
As of December 31, 2018	**€6,472**	**€30,180**	**-**	**€36,652**
As of January 1, 2019	**€6,472**	**€30,180**	**-**	**€36,652**
Depreciation	1,854	10,861	-	12,715
Disposals	-	(79)	-	(79)
Currency differences	-	(3)	-	(3)
As of December 31, 2019	**€8,326**	**€40,959**	**-**	**€49,285**

(in thousands) **Carrying Amount**	**Land and buildings**	**Equipment, tools and installations**	**Construction in progress and advance payments**	**Total**
As of January 1, 2018	**€7,387**	**€36,067**	**€6,153**	**€49,606**
As of December 31, 2018	**€15,675**	**€43,433**	**€7,091**	**€66,200**
As of December 31, 2019	**€21,143**	**€42,247**	**€29,652**	**€93,044**

11 Intangible Assets

(in thousands) **Acquisition costs**	**Goodwill**	**Concessions, licenses and similar rights**	**Advance payments**	**Total**
As of January 1, 2018	**€534**	**€85,271**	**€3,565**	**€89,370**
Additions	-	12,150	3,128	15,278
Disposals	-	-	(765)	(765)
Reclassifications	-	4,431	(4,431)	-
As of December 31, 2018	**€534**	**€101,853**	**€1,497**	**€103,883**
As of January 1, 2019	**€534**	**€101,853**	**€1,497**	**€103,883**
Additions	-	11,744	1,529	13,273
Disposals	-	(133)	(477)	(610)
Reclassifications	-	146	(146)	-
Currency differences	-	(23)	-	(23)
Acquisition of subsidiaries and businesses, net of cash acquired	2,444	2,726	-	5,170
As of December 31, 2019	**€2,978**	**€116,313**	**€2,403**	**€121,693**

(in thousands) **Cumulative depreciation and impairment charges**	**Goodwill**	**Concessions, licenses and similar rights**	**Advance payments**	**Total**
As of January 1, 2018	-	**€5,833**	-	**€5,833**
Depreciation	-	10,009	-	10,009
As of December 31, 2018	-	**€15,842**	-	**€15,842**
As of January 1, 2019	-	**€15,842**	-	**€15,842**
Depreciation	-	16,502	-	16,502
Disposals	-	(81)	-	(81)
Currency differences	-	(3)	-	(3)
As of December 31, 2019	-	**€32,260**	-	**€32,260**

(in thousands) **Carrying amount**	**Goodwill**	**Concessions, licenses and similar rights**	**Advance payments**	**Total**
As of January 1, 2018	**€534**	**€79,438**	**€3,565**	**€83,537**
As of December 31, 2018	**€534**	**€86,011**	**€1,497**	**€88,042**
As of December 31, 2019	**€2,978**	**€84,053**	**€2,403**	**€89,434**

Contractual Commitments

Contractual commitments for the acquisition of intangible assets amounts to Nil as of December 31, 2019 (as of December 31, 2018: k€19,482).

Goodwill

For impairment testing, goodwill acquired through business combinations and intangible assets not yet in use have been allocated to the respective cash-generating units (CGU).

The goodwill acquired in the respective business combinations for the dates indicated is presented in the following table:

	MAB Discovery		JPT Peptide Technologies		reBOOST		Total	
(in thousands)	As of December 31, 2019	As of December 31, 2018	As of December 31, 2019	As of December 31, 2018	As of December 31, 2019	As of December 31, 2018	**As of December 31, 2019**	**As of December 31, 2018**
Goodwill	€2,205	-	€534	€534	€239	-	**€2,978**	**€534**

The Group performs its annual goodwill impairment test for the respective year as per October 1.

The recoverable amount was determined on a value in use calculation using cash flow projections from budgets approved by senior management covering at least a five-year period.

Management concluded that no reasonable possible change of key assumptions on which the calculation of the recoverable amount is based would cause the carrying amount of the CGU to exceed its recoverable amount.

The pre-tax discount rate applied to cash flow projections for the year ended December 31, 2019 is 9.0% (for the year ended December 31, 2018: 12.2%) and cash flows beyond the five-year period are extrapolated using a 1.8% growth rate (for the year ended December 31, 2018: 1.0%).

As the recoverable amount exceeded the carrying amount of the CGU for every balance sheet date, no impairment charge was required.

Intangible Assets not yet Available for Use

Intangible assets not yet available for use did not exist in the years ended December 31, 2019 and December 31, 2018.

12 Financial Assets and Financial Liabilities

12.1 Capital Risk Management

The objective of the capital management of BioNTech is primarily designed to finance the Group's growth strategy.

The Group's controlling committee reviews the total amount of cash of the Group on a weekly basis. As part of this review, the committee considers the total cash and cash equivalents, the cash outflow, currency translation differences and refinancing activities. The Group monitors 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 thousands)	**December 31, 2019**	**December 31, 2018**
Cash and cash equivalents at banks and on hand	€519,149	€411,495
Total	**€519,149**	**€411,495**

In meeting its financing objectives, the Group negotiates and enters into research cooperation agreements. In general, the aim is to maximize the financial resources available for further research and development projects.

BioNTech is not subject to externally imposed capital requirements. The objectives of BioNTech's capital management were achieved in the reporting year.

No changes were made in the objectives, policies or processes for managing cash during the years ended December 31, 2019 and December 31, 2018.

12.2 Categories of Financial Instruments

Financial Assets at Amortized Cost

(in thousands)	**December 31, 2019**	**December 31, 2018**
Trade receivables	€11,913	€18,938
Other financial assets and receivables	1,680	354
Total	**€13,593**	**€19,292**
Total current	13,593	19,273
Total non-current	-	18

Financial Liabilities: Financial Liabilities at Amortized Cost (including interest-bearing Loans and Borrowings)

(in thousands)	**Maturity**	**December 31, 2019**	**December 31, 2018**
Trade payables		€19,909	€41,721
Lease liabilities		56,683	50,752
2.15% € 10,000,000 secured bank loan	12/30/2027	9,000	4,000
2.08% € 9,450,000 secured bank loan	09/30/2028	7,600	1,600
Other financial liabilities		11,551	6,132
Total		**€104,743**	**€104,205**
Total current		35,699	49,987
Total non-current		69,044	54,218

2.15% Secured Loan

The loan is secured by a lien over land and buildings with a carrying value of k€10,000 as at December 31, 2019 (December 31, 2018: k€10,000). Additionally, the loan is secured by a permanent guarantee (*Höchstbetragsbürgschaft*) of the Company to the bank to the amount of k€10,000. The loan is repayable in equal quarterly instalments of k€312.5 commencing on March 31, 2020. As at December 31, 2019, the undrawn available amount is k€1,000.

2,08% Bank Loan

The loan is secured by a lien over land and buildings to the amount of k€9,450. Additionally, the loan is secured by a permanent guarantee (*Höchstbetragsbürgschaft*) of the Company to the bank to the amount of k€9,450 as at December 31, 2019 (December 31, 2018: k€9,450). The loan is repayable by quarterly instalments of k€286.4 commencing on September 30, 2020. As at December 31, 2019, the available undrawn amount of k€1,850 will be drawn on a predetermined date.

12.3 Fair Values

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

The liabilities include two fixed-interest rate loans. The fair value of the two fixed-interest rate loans is calculated based on significant observable inputs (Level 2). As of December 31, 2019 and December 31, 2018, the carrying value approximates their fair values as there have been no significant changes in relevant interest rates since inception of the respective loans.

12.4 Financial Instruments Risk Management Objectives and Policies

The Group's financial liabilities comprise of bank loans, lease liabilities, trade and other payables. The main purpose of these financial liabilities is to enable the Group's operations. The Group's principal financial assets include mainly cash and trade receivables that derive directly from its operations.

The Group is exposed to market risk, credit risk and liquidity risk. The Group's senior management oversees the management of these risks.

The controlling committee provides assurance to the Group's senior management that the Group's financial risk activities are governed by appropriate policies and procedures and that financial risks are identified, measured and managed in accordance with the Group's policies and risk objectives. The Board of Directors reviews and agrees policies for managing each of these risks, which are summarized below.

12.5 Market Risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices. Market risk comprises of three types of risk: interest risk, foreign currency risk and other price risk. Financial instruments affected by market risk include cash and cash equivalents. Interest risk as well as other price risk are not considered as risks for the Group.

The sensitivity analysis in the following sections relate to the position as at December 31, 2019 and December 31, 2018.

There were no material changes in the Group's market risk exposures or changes in the way risk was managed and valued during the periods.

Foreign Currency Risk

Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. The Group's exposure to the risk of changes in foreign currency rates relates primarily to the Group's operating activities (when revenue or expense is denominated in a foreign currency).

In order to reduce exchange rate risk, BioNTech makes every effort to generate expenses and income in the same functional currency. The Group does not hedge exchange rate risks.

The carrying amount of the monetary assets (the Group's cash and cash equivalents) of BioNTech denominated in foreign currencies at the dates indicated are as follows:

(in thousands)	**December 31, 2019**	**December 31, 2018**
USD Bank accounts	€213,913	€176,376
Total	**€213,913**	**€176,376**

The following tables demonstrate the sensitivity to a reasonably possible change in USD exchange rates, with all other variables held constant. The impact on the Group's profit before tax is due to changes in the fair value of monetary assets. The Group's exposure to foreign currency changes for all other currencies is not material.

		1 € =	Closing Rate		Average Rate	
Currency	**Country**		**2019**	**2018**	**2019**	**2018**
USD	United States		1.1234	1.1450	1.1195	1.1810

(in thousands)	Change in USD rate	Effect on loss before tax	Effect on pre-tax equity
2019	+5 %	€(10,186)	€(10,186)
2019	-5%	€11,259	€11,259
2018	+5 %	€(8,399)	€(8,399)
2018	-5%	€9,283	€9,283

12.6 Credit Risk Management

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities, including deposits with banks and financial institutions, foreign exchange transactions and trade accounts receivable.

Trade Receivables and Contract Assets

The Group's exposure to credit risk of trade receivables and contract assets is primarily on transactions with corporate customers in the biopharma/biotech industry that operate in Germany or in the United States. An analysis of the aging of receivables and the creditworthiness of customers is used to evaluate this risk at each reporting date. The Group follows risk control procedures to assess the credit quality of the customers taking into account their financial position, past experience and other factors. The compliance with credit limits by corporate customers is regularly monitored by management.

The credit risk on trade receivables and contract assets is very low as the customer portfolio of BioNTech mainly consists of medical universities, other public institutions and peers in the biopharma industry, which all have a very high credit rating and the group has not incurred bad debt expense. BioNTech does not expect that its customer portfolio will change.

Generally, trade receivables are written off if past due for more than one year and are not subject to enforcement activity. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in Note 12.2. The Group does not hold collateral as security.

Cash Deposits

Credit risk from balances with banks and financial institutions is managed by the Group's controlling department in accordance with the Group's policy. Investments of surplus funds are made only with banks.

Credit risk stemming from cash and deposits is very low.

The Group's maximum exposure to credit risk for the components of the statements of financial position at December 31, 2019 and December 31, 2018 are the carrying amounts as illustrated in Note 12.1.

12.7 Liquidity Risk

Generally, BioNTech has relied on the financing from shareholders and collaborators in order to ensure sufficient liquidity. Lack of external financial support could pose a risk of going concern. The liquidity management of BioNTech ensures the availability of cash and cash equivalents for operational activities and further investments through appropriate budget planning. In addition, a sufficient level of

cash and cash equivalents, which is managed centrally, is always maintained to finance the operational activities.

The Group monitors liquidity risks using a liquidity planning tool.

Ultimately, the responsibility for liquidity risk management lies with the management, which has established an appropriate approach to managing short-, medium- and long-term financing and liquidity requirements. BioNTech manages liquidity risks by holding appropriate reserves, as well as by monitoring forecasted and actual cash flows and reconciling the maturity profiles of financial assets and liabilities.

Risk Concentration

Concentrations arise when a number of counterparties are engaged in similar business activities, or activities in the same geographical region, or have economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic, political or other conditions. Concentrations indicate the relative sensitivity of the Group's performance to developments affecting a particular industry.

In order to avoid concentrations of risk, the Group's policies and procedures include specific guidelines to focus on the maintenance of an effective diversification in the sources of funding and distribution of cash deposits. Identified concentrations of credit risks are controlled and managed accordingly.

The maturity profile of the Group's financial liabilities based on contractual undiscounted payments is summarized as follows:

Year ended December 31, 2019

(in thousands)	Less than 1 year	1 to 5 years	More than 5 years	Total
Interest bearing loans and borrowings	€2,220	€10,693	€8,355	**€21,268**
Trade and other payables	20,498	-	-	**€20,498**
Lease liabilities	5,176	17,882	55,852	**€78,910**
Other financial liabilities	10,351	-	-	**€10,351**
Total	**€38,245**	**€28,575**	**€64,207**	**€131,027**

Year ended December 31, 2018

(in thousands)	Less than 1 year	1 to 5 years	More than 5 years	Total
Interest bearing loans and borrowings	-	€5,600	-	**€5,600**
Trade and other payables	41,721	-	-	**41,721**
Lease liabilities	3,822	13,346	56,524	**73,692**
Other financial liabilities	6,132	-	-	**6,132**
Total	**€51,675**	**€18,946**	**€56,524**	**€127,145**

12.8 Changes in Liabilities arising from Financing Activities

Year ended December 31, 2019

(in thousands)	**January 1, 2019**	**Cash flows**	**New leases and disposals**	**Reclassification**	**December 31, 2019**
Current obligations under lease contracts	€2,134	€(3,061)	€1,484	€2,928	**€3,485**
Non-current obligations under lease contracts	48,618	-	8,437	(2,928)	**54,127**
Interest-bearing loans and borrowings	5,600	11,000	-	-	**16,600**
Total	**€56,352**	**€7,939**	**€9,921**	**-**	**€74,212**

Year ended December 31, 2018

(in thousands)	**January 1, 2018**	**Cash flows**	**New leases and disposals**	**Reclassification**	**December 31, 2018**
Current obligations under lease contracts	€1,832	€(2,126)	€296	€2,132	**€2,134**
Non-current obligations under lease contracts	50,349	-	401	(2,132)	**48,618**
Interest-bearing loans and borrowings	-	5,600	-	-	**5,600**
Total	**€52,182**	**€3,474**	**€697**	**-**	**€56,352**

13 Inventories

(in thousands)	**December 31, 2019**	**December 31, 2018**
Raw materials and supplies	€8,201	€4,475
Unfinished goods	2,888	80
Finished goods	633	1,234
Total	**€11,722**	**€5,789**

During the year ended December 31, 2019, inventories of k€2,182 (during the year ended December 31, 2018: k€1,789) were recognized as an expense and recognized in cost of sales.

BioNTech has not pledged any inventories as securities for liabilities.

14 Trade Receivables

(in thousands)	December 31, 2019	December 31, 2018
Trade receivables	€11,913	€18,938
Total	**€11,913**	**€18,938**

Trade receivables are non-interest bearing and are generally due on terms of 20 to 30 days. As described in Note 12.6, expected credit loss for trade receivables is immaterial

15 Other Assets

(in thousands)	December 31, 2019	December 31, 2018
Sales tax receivable	€7,536	€8,611
Prepayments on inventories	351	155
Other	1,182	398
Total	**€9,069**	**€9,164**

As at December 31, 2019, other assets mainly comprised interest income of k€529 and receivables from withholding taxes of k€310 (as at December 31, 2018, other assets were mainly comprised of interest income of k€270).

16 Issued Capital and Reserves

Year ended December 31, 2019

On September 18, 2019, BioNTech effected a 1:18 share split by issuing 206,595,492 shares by way of a capital increase from its own funds; thus, no outside proceeds were received. This capital increase came into effect upon registration with the commercial register (*Handelsregister*). The accompanying financial statements and notes to the financial statements give retroactive effect to the share split for all periods presented.

The financing transactions that occurred during the year ended December 31, 2019 were as follows:

Issuance of Share Capital

In January 2019, BioNTech issued 5,088,204 shares and increased its share capital by k€5,088. The cash investment of k€80,006 was received in 2018 (k€79,997).

On August 30, 2019, BioNTech entered into agreements with the Bill & Melinda Gates Foundation (BMGF). BMGF agreed to purchase 3,038,674 ordinary shares with nominal amount of k€ 3,039 of BioNTech for a total of k€49,864 (k$55,000). These agreements require BioNTech to perform certain research and development activities to advance the development of products for the prevention and treatment of HIV and tuberculosis. In the event of a breach of the underlying conditions, including such research and development activities, BMGF has the right to sell its shares back to BioNTech at the initial

share price or fair market value, whichever is higher, subject to certain conditions. BioNTech's ability to pay dividends is also limited under the terms of these agreements.

Capital Increase Series B

In June and August 2019, BioNTech issued an aggregate of 12,465,288 of ordinary shares (excluding 5,524,506 ordinary shares which were issued to a Hong Kong-based investor and subsequently transferred to BioNTech for no consideration; these shares are held as treasury shares) to certain new and existing shareholders at a price of $ 18.10 per share for aggregate proceeds of k€198,548 (k$225,622). These share issuances led to an increase of share capital of k€ 17,990 and capital reserve of k€ 186,390 and recognition of a treasury share balance of k€ 5,525.

Initial Public Offering (IPO)

On October 10, 2019, BioNTech increased its share capital by k€10,000 in conjunction with the Initial Public Offering. American Depositary Shares which represent ordinary shares were offered on the Nasdaq Global Select Market at a price of $15.00. On November 6, 2019, BioNTech increased its share capital by k€517 upon the execution of the underwriter´s option. American Depositary Shares which represent ordinary shares were issued at a price of $15.00 (under both issuances). The gross proceeds were k€143,260 (k$157,761) including k€10,517 increase in share capital and k€132,743 increase in capital reserve.

Acquisition of Non-Controlling Interest

As of March 14, 2019, BioNTech acquired the remaining 5.5% of non-controlling interests in BioNTech Cell & Gene Therapies GmbH held by Eli Lilly Nederland B.V. in exchange of issuing 2,374,794 new ordinary shares with an imputed share in the share capital of €1.00 each. This acquisition was recognized within equity and resulted in the derecognition of the non-controlling interest of k€731 as well as an increase to the share capital of k€2,375. The net effect of the transaction of k€1,644 was recognized as a decrease in the capital reserve.

Year ended December 31, 2018

During the year ended December 31, 2018, the issued capital increased by k€26,532. The increase was mainly related to k€22,588 issued during the Series A financing round, k€3,361 issued as share capital and k€583 issued in the course of settling the share-based payment plan. As a result of the financing transactions the capital reserve increased during the year ended December 31, 2018, by k€335,193.

17 Share-Based Payments

On September 18, 2019, BioNTech effected a 1:18 share split by issuing 206,595,492 shares by way of a capital increase from its own funds; thus, no outside proceeds were received. This capital increase came into effect upon registration with the commercial register (*Handelsregister*). The accompanying financial statements and notes to the financial statements including share-based payment information below give retroactive effect to the share split for all periods presented.

During the years ended December 31, 2019, December 31, 2018 and December 31, 2017, the Group had the following share-based arrangements.

17.1 Chief Executive Officer Grant (Equity-Settled)

Description of Share-Based Payments

In September 2019, BioNTech agreed to grant Prof. Ugur Sahin, M.D. an option to purchase 4,374,963 ordinary shares, subject to Prof. Sahin's continuous employment with BioNTech. The options' per share exercise price is the Euro translation of the public offering price from BioNTech's initial public offering, €13.60 ($15.00). The option will vest annually in equal installments after four years commencing on the first anniversary of the initial public offering and will be exercisable four years after the initial public offering. The option will be subject to the terms, conditions, definitions and provisions of the Employee Stock Ownership Plan (ESOP) and the applicable option agreement thereunder. The vested option rights can only be exercised if and to the extent that 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 shares outstanding immediately following the initial public offering (other than 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.

Measurement of Fair Values

A Monte-Carlo simulation model has been used to measure the fair value at grant date of the Chief Executive Officer Grant. This model incorporates the impact of the performance criteria regarding share price and index development described above in the calculation of the award's fair value at grant date. The inputs used in the measurement of the fair value at grant date of the Chief Executive Officer Grant were as follows:

	Grant date October 10, 2019
Weighted average fair value	€5.63
Weighted average share price	€13.60
Exercise price	€13.60
Expected volatility (in %)	41.4%
Expected life (in years)	5.37
Risk-free interest rate (in %)	1.52%

The options' per share exercise price is the Euro translation of the public offering price from BioNTech's initial public offering on October 10, 2019. Expected volatility was based on an evaluation of the historical volatilities of comparable companies over the historical period commensurate with the expected term. The expected term was based on general optionholder behavior for employee options.

Reconciliation of Outstanding Share-Options

The number and weighted-average exercise price of share options under the Chief Executive Officer Grant during the year ended December 31, 2019 were as follows:

	Share options outstanding	Number of Ordinary Shares underlying options	Weighted average exercise price (€)
As of January 1, 2019	-	-	-
Granted	4,374,963	4,374,963	13.60
As of December 31, 2019	**4,374,963**	**4,374,963**	**13.60**

The options outstanding at December 31, 2019 have a weighted-average expected life of 5.12 years.

Expense recognized in the Statement of Operations

The expense recognized for employee services received during the year ended December 31, 2019 is shown in the following table:

	Year ended December 31,
(in thousands)	**2019**
Research and development expenses	€3,208
Total	**€3,208**

There were no cancellations or modifications to the awards in the year ended December 31, 2019.

17.2 Employee Stock Ownership Plan (Equity Settled)

Description of Share-Based Payments

On November 15, 2018, the Group established a share option program that grants selected employees options to receive shares in the company. The program is designed as an Employee Stock Ownership Plan (ESOP). The Group has offered the participants a certain number of rights (Option Rights) by explicit acceptance of the participants. The exercise of the Option Rights in accordance with the terms of the ESOP, gives the participants the right to obtain shares against payment of the exercise price. The Option Rights vest over four years, can only be exercised if the company has executed a public offering in the United States (IPO) and when meeting the Threshold Amount. Threshold Amount means the exercise price provided that such price increases by eight percentage points on the first and then each subsequent anniversary of the Allocation Date (September 26, 2018). The Option Rights can be exercised at the latest eight years after the Allocation Date. If they have not been exercised by that date, they will forfeit without compensation.

Measurement of Fair Values

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 arrangement. Moreover, the option rights can only be exercised if the IPO has occurred. Both conditions have been incorporated into the fair value at grant date.

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

	Grant date November 15, 2018	Grant dates between February 21, – April 3, 2019	Grant dates between April 29, - May 31, 2019	Grant date December 1, 2019
Weighted average fair value	€7.41	€6.93	€7.04	€9.49
Weighted average share price	€14.40	€15.72	€16.03	€19.84
Exercise price	€10.14	€15.03	€15.39	€15.82
Expected volatility (in %)	46.0%	46.0%	46.0%	46.0%
Expected life (in years)	5.84	6.00	6.00	5.50
Risk-free interest rate (in %)	0.05%	0.05%	0.05%	0.05%

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

Reconciliation of Outstanding Share-Options

The number and weighted-average exercise prices of share options under the ESOP during the years ended December 31, 2019 and December 31, 2018 were as follows:

	Share options outstanding	Number of Ordinary Shares Under-lying Options	Weighted average exercise price (€)
As of January 1, 2018	-	-	-
Granted	658,109	11,845,962	10.14
As of December 31, 2018	**658,109**	**11,845,962**	**10.14**
As of January 1, 2019	658,109	11,845,962	10.14
Granted	14,511	261,198	15.17
Forfeited	(17,237)	(310,266)	10.85
As of December 31, 2019	**655,383**	**11,796,894**	**10.23**

The options outstanding at December 31, 2019 have a weighted-average expected life of 4.73 years.

Expense recognized in the Statement of Operations

The expense recognized for employee services received during the years ended December 31, 2019 and December 31, 2018 is shown in the following table:

	Years ended December 31,	
(in thousands)	**2019**	**2018**
Cost of sales	€896	€114
Research and development expenses	20,016	6,786
Sales and marketing expenses	108	13
General and administrative expenses	6,008	728
Total	**€27,028**	**€7,641**

There were no cancellations or modifications to the awards in the years ended December 31, 2019 and December 31, 2018.

17.3 Share Appreciation Rights (Equity-Settled)

Description of Share-Based Payments

On December 1, 2017, the Group granted 582,714 shares to selected employees under the share appreciation rights (SAR) program. The shares vested immediately at the grant date (December 2017) as there were no vesting conditions.

There were no other SARs granted during the years ended December 31, 2019 and December 31, 2018.

Measurement of Fair Values

The fair value of the SARs has been determined using a discounted cash flow (DCF) model as of December 2017.

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

	Grant date December 1, 2017
Fair value	10.13€
Exercise price	10.13€
WACC	8.2%
Tax rate	31.2%
Debt free net working capital (in % of sales)	5.5%
Risk-free interest rate (in %)	1.2%
Long-term growth rate (in %)	1.8%

Growth rate estimates are based on epidemiology data for different indications in focus geographies. The average market growth rates per indication and stage have been extrapolated with data derived from published industry research.

The expected life of the SARs is based on historical data and current expectations and is not necessarily indicative of exercise patterns that may occur.

Expected dividends were not incorporated into the measurement of fair value.

Expense recognized it the Statement of Operations

The expense recognized for employee services received during the year ended December 31, 2017 is shown in the following table:

(in thousands)	**Year ended December 31, 2017**
Cost of sales	-
Research and development expenses	3,620
Sales and marketing expenses	14
General and administrative expenses	2,275
Total	**€5,909**

17.4 Net Settlement Feature for Withholding Tax Obligation

Under the agreement, BioNTech must withhold an amount for an employee's tax obligation associated with the share-based payment and transfer that amount in cash to the tax authority on the employee's behalf. BioNTech does not withhold shares in order to settle the employee's tax obligations. The Group withheld an amount of k€7,761 that was paid to the taxation authority in relation to the SARs in the year ended December 31, 2018.

18 Other Liabilities

(in thousands)	**December 31, 2019**	**December 31, 2018**
Liabilities employees	€6,710	€5,236
Other	780	3,864
Total	**€7,490**	**€9,100**

Other liabilities comprise accruals for outstanding invoices in the amount of k€715 as at December 31, 2019 (as at December 31, 2018: k€3,739) and several other non-material positions.

19 Leases

19.1 Amounts Recognized in the Statement of Financial Positions

Right-of-Use Assets

The following amounts are presented as right-of-use assets within the statement of financial positions as of the dates indicated:

	December 31, 2019	**December 31, 2018**
Buildings	€54,956	€49,718
Equipment, tools and installations	7	21
Automobiles	55	27
Total	**€55,018**	**€49,766**

Additions to the right-of-use assets during the year ended December 31, 2019 were k€10,040 (during the year ended December 31, 2018: k€723).

Lease Liability

The following amounts are included in other financial liabilities as of the dates indicated:

(*in thousands)*	**December 31, 2019**	**December 31, 2018**
Current	€3,485	€2,134
Non-current	54,127	48,618
Total	**€57,612**	**€50,752**

19.2 Amounts Recognized in the Statement of Operations

Depreciation Charge Right-of-Use Assets

	Years ended December 31,		
(in thousands)	**2019**	**2018**	**2017**
Buildings	€4,614	€2,751	€1,759
Equipment, tools and installations	25	60	111
Automobiles	40	35	39
Total depreciation charge	**€4,679**	**€2,846**	**€1,909**
Interest on lease liabilities	€1,718	€1,721	€676
Expense related to short-term leases (included in other expenses)	442	431	442
Expense relating to leases of low-value assets that are not short-term leases (included in other expenses)	90	90	95
Total amounts recognized in profit or loss	**€6,929**	**€5,088**	**€3,122**

19.3 Amounts recognized in the Statement of Cash Flows

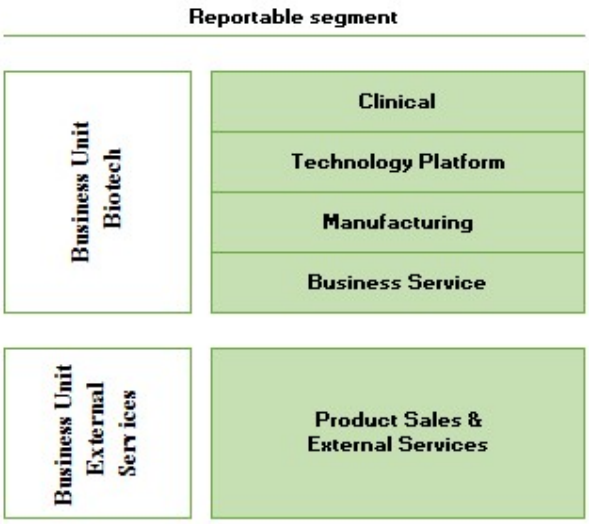
During the year ended December 31, 2019, the total cash outflow for leases amounted to k€4,779 (during the year ended December 31, 2018: k€3,847; during the year ended December 31, 2017: k€2,319).

20 Segment Information

BioNTech develops individualized treatments for cancer patients and improved therapeutics to treat infectious and rare diseases. This activity, together with research and development activities, forms the core of the company. External services provide the interface where medical products are sold to third parties.

BioNTech's business is managed in two business units, the biotech business unit and the external services business unit. The biotech business unit is comprised of three operation segments, which are individually monitored by the Chief Operating Decision Maker (CODM). Four operating segments have been identified in accordance with IFRS 8. No aggregation of operating segments was performed.

Resource allocation and performance assessment is performed at the level of the Management Board. The Management Board members are jointly responsible for the management and strategic decision making. Consequently, the Management Board has been identified as the CODM. BioNTech's business consist of the following reportable segments:



Research and Development activities form the Biotech Business Unit and are divided in the segments Clinical, Technology Platform and Manufacturing.

The **Clinical** segment subsumes all development activities relating to clinical programs. Clinical studies include testing the product candidates on humans. Clinical trials are an essential part of the development and licensing of the medicinal products and are performed before the respective product can be placed on the market. BioNTech is actively engaged in many collaborations and licensing deals with reputable pharmaceutical companies and academic partners.

Technology Platform contains all development activities relating to preclinical programs. Preclinical development is the stage of research that begins before clinical trials. It is performed to determine the desired pharmacological effects and to identify any unwanted effects that may cause adverse reactions during human exposure.

Manufacturing is an essential part of the research and development process as it comprises the manufacturing unit of mRNA and engineered cell therapies. All the medical substances and tools that form the basis for the research studies performed at BioNTech are manufactured in this segment, *(i.e.*, the Manufacturing segment contains only internally produced substances and tools).

Product Sales & External Services comprises the legal entities JPT Peptide Technology GmbH and Innovative Manufacturing Services GmbH (IMFS), which form the interface to third parties. External services and medicinal products (*e.g.*, peptides and retroviral vectors) that are in the areas of molecular immunotherapies and biomarker-based diagnostic approaches for individualized treatment of cancer and other infectious diseases are sold to customers worldwide.

Business Service contains the Group's central administrative functions (*e.g.*, Finance, Procurement, Human Resources, Legal and Intellectual Property) and overarching projects. Business Service does not fulfil the requirements for an operating segment according to IFRS 8, as it will never generate more than incidental revenues. However, financial information about Business Service is disclosed, as it contributes to the understanding of the company.

The table below reconciles segment figures to Group figures for the periods indicated:

	Business Unit BioNTech				External Services Business Unit			
(in thousands)	**Clinical**	**Technology Platform**	**Manufacturing**	**Business Service**	**Product Sales & External Services**	**Total**	**Adjustments**	**Group**
Year ended December 31, 2019								
Revenues								
Collaboration Revenues	€33,493	€2,147	€48,788	-	-	€84,428		€84,428
Revenues from other sales transactions	-	692	2	-	23,467	24,161		24,161
Cost of sales	-	-	-	-	(16,923)	(16,923)	(438)	(17,361)
Gross profit	**€33,493**	**€2,839**	**€48,790**	**-**	**€6,544**	**€91,666**	**€(438)**	**€91,228**
Income / Expenses								
Research and development expenses	(91,516)	(79,119)	(50,478)	(5,192)	(600)	(226,905)	439	(226,466)
Sales and marketing expenses	-	-	-	(1,302)	(1,415)	(2,717)	(1)	(2,718)
General and administrative expenses	-	-	(3,821)	(38,756)	(2,970)	(45,547)	-	(45,547)
Other result	1,125	307	59	23	468	1,982	3	1,985
Segment operating income / (loss)	**€(56,898)**	**€(75,973)**	**€(5,450)**	**€(45,227)**	**€2,027**	**€(181,521)**	**€3**	**€(181,518)**

	Business Unit BioNTech				External Services Business Unit			
(in thousands)	**Clinical**	**Technology Platform**	**Manufacturing**	**Business Service**	**Product Sales & External Services**	**Total**	**Adjustments**	**Group**
Year ended December 31, 2018								
Revenues								
Collaboration Revenues	€36,750	€39,452	€25,635	-	-	€101,837		€101,837
Revenues from other sales transactions	-	6,783	-	42	18,914	25,738		25,738
Cost of sales	-	-	-	(40)	(13,358)	(13,398)	(292)	(13,690)
Gross profit	**€36,750**	**€46,235**	**€25,635**	**€2**	**€5,556**	**€114,177**	**€(292)**	**€113,885**
Income / Expenses								
Research and development expenses	(48,641)	(60,320)	(31,508)	(1,979)	(884)	(143,332)	292	(143,040)
Sales and marketing expenses	-	-	-	(2,106)	(935)	(3,041)	-	(3,041)
General and administrative expenses	-	-	(2,558)	(21,233)	(2,542)	(26,334)	-	(26,334)
Other result	3,772	178	30	85	559	4,624	52	4,676
Segment operating income / (loss)	**€(8,119)**	**€(13,908)**	**€(8,401)**	**€(25,231)**	**€1,753**	**€(53,906)**	**€52**	**€(53,854)**

	Business Unit BioNTech				External Services Business Unit			
(in thousands)	**Clinical**	**Technology Platform**	**Manufacturing**	**Business Service**	**Product Sales & External Services**	**Total**	**Adjustments**	**Group**
Year ended December 31, 2017								
Revenues								
Collaboration Revenues	€25,721	€14,504	€2,108	-	-	€42,333	-	€42,333
Revenues from other sales transactions	-	324	-	-	18,941	19,265	-	19,265
Cost of sales	-	-	-	-	(9,318)	(9,318)	-	(9,318)
Gross profit	**€25,721**	**€14,828**	**€2,108**	**-**	**€9,623**	**€52,280**	**-**	**€52,280**
Income / Expenses								
Research and development expenses	(25,099)	(37,019)	(14,764)	(6,701)	(1,912)	(85,496)	-	(85,496)
Sales and marketing expenses	-	-	-	(4,904)	(1,698)	(6,603)	-	(6,603)
General and administrative expenses	-	-	(785)	(20,309)	(2,427)	(23,520)	-	(23,520)
Other result	-	777	-	820	463	2,061	-	2,061
Segment operating income / (loss)	**€623**	**€(21,414)**	**€(13,441)**	**€(31,094)**	**€4,049**	**€(61,277)**	**-**	**€(61,277)**

The segments are managed based on external sales and operating profit/loss, which represents the operating profit earned by each segment. Segment figures are reported consolidated, which reflects the way management steers the business.

BioNTech's internal reporting is generally in accordance with IFRS and in line with the Group's accounting policies, except for minor deviations in classification between cost of sales and research and development cost. Whenever revenues are attributable to different segments, these revenues are split based on the incurred cost. Internal overhead costs are allocated to segments based on revenues when they are directly attributable to a service rendered. Sales and marketing expenses, general and administrative expenses and the other result that are not directly attributable to one of the segments are allocated to Business Service.

To reconcile the segment figures to the Group's financial statements for the year ended December 31, 2019, the presentation of k€439 of research and development cost was adjusted (for the year ended December 31, 2018: k€292).

Revenue at BioNTech can be differentiated between revenues resulting from collaboration and license agreements and revenues from other sales. The Company collaborates with reputable pharmaceutical and healthcare companies and several global academic collaborators. During the year ended December 31, 2019, the revenue generated from the Genentech and Pfizer collaboration agreements represent each more than 10% of BioNTech's overall revenue resulting from collaboration and license agreements. The revenues were partly recorded in the Clinical as well as Manufacturing segment. During the year ended December 31, 2018, the revenue generated from the Genentech and Sanofi collaboration agreements represent each more than 10% of BioNTech's overall revenue resulting from collaboration and license agreements. The revenues were partly recorded in the Clinical, Technology Platform as well as Manufacturing segment. During the year ended December 31, 2017, the revenue generated from the Genentech, Genmab and Sanofi collaboration agreements represent each more than 10% of BioNTech's overall revenue resulting from collaboration and license agreements. The revenues were partly recorded in the Clinical, Technology Platform as well as Manufacturing segment. The total amounts of revenues generated with these customers in the periods presented are disclosed in Note 4.

Revenues from other sales result from the sale of medical products (*e.g.*, peptides and retroviral vectors) for clinical supply. Research and development activities are managed on a worldwide basis but the operative manufacturing facilities and sales offices are located and managed in Germany. External sales are originated in Germany.

21 Related Party Disclosures

21.1 Parent and Ultimate Controlling Party

ATHOS KG, Holzkirchen, Germany owns 100% of shares in AT Impf GmbH, Munich, Germany and is the beneficiary owner of BioNTech. AT Impf GmbH, Munich, Germany is the parent company of the Group.

21.2 Transactions with Key Management Personnel

Key Management Personnel Compensation

Key management personnel at BioNTech has been defined as the members of the Management Board and of the Supervisory Board. Key management personnel compensation is comprised of the following:

Compensation of key management personnel of the Group

(in thousands)	**December 31, 2019**	**December 31, 2018**	**December 31, 2017**
Short-term employee benefits	€1,847	€1,161	€880
Share-based payment transactions	18,151	6,163	1,855
Total compensation paid to key management personnel	**€19,998**	**€7,324**	**€2,735**

In September 2019, BioNTech agreed to grant Prof. Ugur Sahin, M.D., BioNTech's co-founder and Chief Executive Officer, an option to purchase 4,374,963 ordinary shares (see Note 17).

Executive officers also participate in the Group's ESOP and SAR program (see Note 17).

Key Management Personnel Transactions

A number of key management personnel, or their related parties, hold positions in other companies that results in them having control or significant influence over these companies. A number of these companies have had transactions with the Group during the year.

The Group purchases various goods and services from research institutes where Prof. Ugur Sahin, M.D., our co-founder and Chief Executive Officer, co-founded TRON and served as Managing Director at TRON until 2019 and currently serves as a Professor of Medicine at the University of Mainz. Prof. Sahin resigned from this position with TRON, effective September 10, 2019. Additionally, Prof. Christoph Huber, M.D., a member of our Supervisory Board, served on TRON's supervisory board until his resignation in April 2019. Prof. Ugur Sahin, M.D., our co-founder and Chief Executive Officer, owns a significant amount of shares in TRON.

The aggregate value of transactions related to key management personnel were as follows for the periods indicated:

(in thousands)	**December 31, 2019**	**December 31, 2018**	**December 31, 2017**
Consulting services / patent assignment	€56	€25	€25
Purchases of various goods and services from TRON	9,968	11,160	6,553
Total	**€10,024**	**€11,185**	**€6,578**

The outstanding balances of transactions related to key management personnel were as follows as at the periods indicated:

(in thousands)	**December 31, 2019**	**December 31, 2018**
TRON	€1,843	€2,160
Total	**€1,843**	**€2,160**

21.3 Other Related Party Transactions

The total amount of transactions with ATHOS KG or entities controlled by them was as follows for the periods indicated:

(in thousands)	**December 31, 2019**	**December 31, 2018**	**December 31, 2017**
Purchases of various goods and services from entities controlled by ATHOS KG	€2,071	€2,431	€1,240
Purchases of property and other assets from entities controlled by ATHOS KG	-	4,748	-
Total	**€2,071**	**€7,179**	**€1,240**

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

(in thousands)	**December 31, 2019**	**December 31, 2018**
ATHOS KG	€51	€587
Total	**€51**	**€587**

None of the balances are secured and no expenses have been recorded for uncollectible receivables relating to amounts owed by related parties.

22 Declaration on the Corporate Governance Code pursuant to Section 161 of the German Stock Corporation Act (AktG)

On May 4, 2020 the Management Board and Supervisory Board issued the declaration of conformity pursuant to Section 161(1) of the German Stock Corporation Act (*AktG*), which was made in connection with the declaration on corporate governance pursuant to section 315d in conjunction with section 289f of the Commercial Code (*HGB*) included in the Group management report.

23 Number of Employees

The average number of employees was as follows for the periods indicated:

	December 31,		
	2019	**2018**	**2017**
Quarterly average number of employees by function			
Research and Development	877	601	453
Production	161	137	106
Administration	131	76	58
Sales and Marketing	26	30	12
Total	**1,195**	**844**	**629**

The number of employees were as follows as at the periods indicated:

	December 31,		
	2019	**2018**	**2017**
Number of employees by function on the reporting date			
Research and Development	973	729	511
Production	178	168	120
Administration	144	93	65
Sales and Marketing	28	36	14
Total	**1,323**	**1,026**	**710**

Personnel expenses for the years 2019, 2018 and 2017 composed the following:

(in thousands)	**December 31, 2019**	**December 31, 2018**	**December 31, 2017**
Wages and salaries	€98,568	€54,149	€43,336
Social security expenses	12,911	8,555	6,231
Total	**€111,479**	**€62,704**	**€49,567**

The item wages and salaries includes, among other things, expenses from share-based payments.

24 Audit Fees

The following fees were recorded for the services rendered by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft for the years ended December 31, 2019 and December 31, 2018:

	December 31,	
	2019	**2018**
(in thousands)		
Audit fees	€578	€550
Audit-related fees	721	-
Tax fees	132	41
All other fees	49	32
Total	**€1,480**	**€623**

25 Events after the Reporting Period

In December 2019, BioNTech Delivery Technologies GmbH (previously BioNTech Protein Therapeutics GmbH; also referred to as "BioNTech Delivery Technologies"), a wholly owned subsidiary of BioNTech SE, entered into an agreement to acquire all assets, employees and proprietary know-how of Lipocalyx GmbH and its related parties (also referred to as "Lipocalyx") in exchange for a total consideration of cash at an amount of k€6,516 and additional contingent consideration provisionally estimated at an amount of k€572. Current assets and non-current assets before purchase price allocation accounted for in accordance with German GAAP at an amount of k€139 and k€77 (unaudited amounts) were acquired. No liabilities were assumed as part of this asset deal. The operational drug delivery business of Lipocalyx is based in Halle (Saale), Germany. The employees of Lipocalyx were transferred automatically to BioNTech Delivery Technologies with effect as of the closing date. The acquisition closed on January 6, 2020.

On January 12, 2020, BioNTech's Supervisory Board appointed Ryan Richardson to the Management Board as Chief Strategy Officer (CSO) and Managing Director. In his new role he will support and contribute to the creation and implementation of the Company's long-term growth strategy in collaboration with the management team. Ryan has previously served as Senior Vice President, Corporate Development & Strategy after joining the Company in 2018.

In the beginning of March 2020, BioNTech announced details of its efforts to develop a potential vaccine to induce immunity for and prevent COVID-19 infection. BioNTech's product candidate, BNT162, is a potential first-in-class mRNA vaccine in the worldwide effort against COVID-19. As part of the program, BioNTech announced two strategic collaborations with large pharmaceutical companies to globally develop BioNTech's vaccine candidates and supply an approved vaccine globally.

BioNTech and Pfizer Inc. ("Pfizer"; NYSE: PFE) are jointly developing a vaccine against COVID-19, initially in the United States and Europe. The collaboration builds on the existing research and development partnership between Pfizer and BioNTech, signed in 2018, under which the companies have been working together to develop mRNA-based vaccines for the prevention of influenza. The companies expect to utilize multiple research and development sites from both companies to jointly conduct clinical trials for the COVID-19 vaccine candidates initially in the United States and Europe across multiple sites. In late April, both companies announced that the German regulatory authority, the Paul-Ehrlich-Institut, approved the Phase 1/2 clinical trial and the first cohort of BioNTech's Phase 1/2 clinical trial were dosed shortly thereafter. In early May, Pfizer and BioNTech initiated a clinical trial for BNT162 in the United States and the first participants were dosed shortly thereafter. During the clinical development stage, BioNTech and its partners will provide clinical supply of the vaccine from its GMP-certified mRNA manufacturing facilities in Europe. BioNTech and Pfizer will work together to scale-up manufacturing capacity at risk to provide worldwide supply in response to the pandemic. If the vaccine candidate is approved, BioNTech and Pfizer would also work jointly to commercialize the vaccine worldwide (excluding China which is already covered by BioNTech's collaboration with Fosun Pharma). Under the terms of the agreement, Pfizer agreed to pay BioNTech $185 million in upfront payments, including an equity investment of $113 million which was received in late April 2020 and a cash payment of $72 million. The issuance of 2,377,446 ordinary shares with the nominal amount of k€ 2,377 was registered within the commercial register (*Handelsregister*) as of May 5, 2020. BioNTech is eligible to receive future milestone payments of up to $563 million for a potential total consideration of $748 million. Pfizer and BioNTech will share development costs equally. Initially, Pfizer will fund 100% of the development costs, and BioNTech will repay Pfizer its 50% share of these costs during the commercialization of the vaccine.

BioNTech also announced a strategic alliance with Shanghai Fosun Pharmaceutical (Group) Co., Ltd ("Fosun Pharma"; Stock Symbol: 600196.SH, 02196.HK) to develop its COVID-19 vaccine candidates in China. Under the terms of the agreement, the two companies will work together on the development of BNT162 in China, conducting clinical trials in China and leveraging Fosun Pharma's extensive clinical development, regulatory, and commercial capabilities in the country. If approved, Fosun

Pharma will commercialize the vaccine in China. Under the terms of the agreement, Fosun Pharma agreed to make an equity investment of $50 million (€46 million) for 1,580,777 ordinary shares in BioNTech, which was received in mid-April 2020. The issuance of ordinary shares with the nominal amount of k€ 1,581 was registered within the commercial register (*Handelsregister*) as of April 23, 2020.

In addition to its development efforts, as the global COVID-19 pandemic continues to evolve, BioNTech has continuously monitored the situation in regards to its operations and has put significant measures in place to protect supply chain, operations, employees and the execution of clinical trials. BioNTech has not seen any impact on its mRNA manufacturing, nor on its CAR-T manufacturing operations. BioNTech has implemented a plan to manage the evolving disruptions on the clinical programs, and is prioritizing execution of ongoing clinical trials, whereas certain first-in-human (FIH) clinical trial timelines have been affected. BioNTech intends to initiate Phase 2 trials as planned, manage ongoing Phase 1 trials to support timely completion and optimize ability to initiate and conduct FIH studies. The extent to which the COVID-19 pandemic impacts BioNTech's operations will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information which may emerge concerning the severity of COVID-19 and the actions to contain COVID-19 or treat its impact, among others. BioNTech will continue to evaluate potential effects and will provide updates as appropriate.

On May 6, 2020, BioNTech announced the closing of the Neon Therapeutics, Inc. ("Neon"; Nasdaq: NTGN) acquisition through an all-stock transaction. The merger agreement was first announced on January 16, 2020. Neon is a biotechnology company developing novel neoantigen-based T cell therapies. The transaction combines two organizations with a common culture of pioneering translational science and a shared vision for the future of cancer immunotherapy. Based on a 10 day VWAP for BioNTech's ADSs calculated for the period ending at the close of trading on May 4, 2020, the day before the last trading day before the closing of the acquisition, the implied aggregate value of the Merger Consideration was approximately $96.7 million (€89.5 million) financed by issuing new ordinary shares as an all-stock transaction. The new subsidiary based in Cambridge, Massachusetts, will operate under the name of BioNTech US Inc., a wholly owned subsidiary of BioNTech SE, and will serve as BioNTech's U.S. headquarter. As of May 7, 2020, Neon's common stock will no longer be available for trading.

As of the date of this filing, BioNTech has not performed the detailed valuation studies necessary to derive the required estimates of the fair value of the Neon's assets to be acquired and liabilities to be assumed and the related allocations of the purchase price. Neon prepared its financial statements in accordance with U.S. general accepted accounting principles, or U.S. GAAP, and applied U.S. dollars as its reporting currency. As of March 31, 2020 Neon's total assets amounted to $31.4 million comprising $15.0 million cash and cash equivalents, $7.2 million right-of-use assets and $6.7 million property and equipment. Total liabilities amounted to $17.0 million mainly comprising $6.4 million accrued expenses and $6.2 million non-current as well as $1.3 million current lease liabilities. Neon had 28,963,858 shares at $0.001 par value issued and outstanding as of March 31, 2020. Neon's accumulated deficit amounted to $270.1 million as of March 31, 2020. Neon's operating expenses for the three months ended March 31, 2020 mainly comprised of research and development expenses ($9.4 million) as well as general and administrative expenses ($7.2 million). The operating expenses for the year ended December 31, 2019 mainly comprised of research and development expenses ($59.7 million) as well as general and administrative expenses ($21.4 million).

Mainz, May 14, 2020

BioNTech SE

Prof. Ugur Sahin, M.D.
Chairman of the Management Board and
Chief Executive Officer

Sean Marett
Chief Business Officer and
Chief Commercial Officer

Dr. Sierk Poetting
Chief Financial Officer and
Chief Operating Officer

Dr. Özlem Türeci
Chief Medical Officer

Ryan Richardson
Chief Strategy Officer