valneva

Standing strong

2021
CONSOLIDATED
FINANCIAL STATEMENTS

CONSOLIDATED FINANCIAL STATEMENTS 2021

VALNEVA

A European Company (*Societas Europaea*) with a Management and a Supervisory Board
Registered offices:
6 rue Alain Bombard, 44800 SAINT-HERBLAIN - France
Nantes Companies Register (RCS) No. 422 497 560

Consolidated financial statements

as at December 31, 2021

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1. CONSOLIDATED STATEMENTS OF INCOME (LOSS) AND COMPREHENSIVE INCOME (LOSS)

1.1 Consolidated Statements of Income (Loss)

€ in thousand (except per share amounts)	**Note**	**Year ended December 31,**		
		2021	**2020**	**2019**
Product sales	5.4/5.5	62,984	65,938	129,511
Other revenues	5.4/5.5	285,101	44,383	(3,315)
Revenues		**348,086**	**110,321**	**126,196**
Cost of goods and services	5.4/5.6	(187,920)	(54,302)	(52,781)
Research and development expenses	5.4	(173,283)	(84,454)	(38,022)
Marketing and distribution expenses	5.4	(23,643)	(18,264)	(24,145)
General and administrative expenses	5.4	(47,606)	(27,539)	(18,398)
Other income and expenses, net	5.8	22,976	19,117	6,338
OPERATING LOSS		**(61,390)**	**(55,120)**	**(811)**
Finance income	5.9	8,379	689	1,449
Finance expenses	5.9	(16,964)	(10,738)	(3,082)
Result from investments in associates	5.15	(5)	(133)	1,574
LOSS BEFORE INCOME TAX		**(69,979)**	**(65,302)**	**(870)**
Income tax income/(expense)	5.10	(3,446)	909	(874)
LOSS FOR THE PERIOD		**(73,425)**	**(64,393)**	**(1,744)**
Losses per share for loss for the period attributable to the equity holders of the Company, expressed in € per share	5.11			
- **basic**		**(0.75)**	**(0.71)**	**(0.02)**
- **diluted**		**(0.75)**	**(0.71)**	**(0.02)**

The accompanying notes form an integral part of these financial statements

1.2 Comprehensive Income (Loss)

€ in thousand	Note	Year ended December 31,		
		2021	2020	2019
Loss for the period		**(73,425)**	**(64,393)**	**(1,744)**
Other comprehensive income/(loss)				
Items that may be reclassified to profit or loss				
Currency translation differences	5.22.1	(2,877)	2,438	656
Items that will not be reclassified to profit or loss				
Defined benefit plan actuarial gains/(losses)	5.30.1	205	(78)	(13)
Other comprehensive income/(loss) for the year, net of tax		**(2,672)**	**2,360**	**644**
TOTAL COMPREHENSIVE LOSS FOR THE YEAR ATTRIBUTABLE TO THE OWNERS OF THE COMPANY		**(76,097)**	**(62,033)**	**(1,100)**

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

2 CONSOLIDATED BALANCE SHEETS

€ in thousand	Note	As at December 31,	
		2021	2020
ASSETS			
Non-current assets		**231,520**	**140,737**
Intangible assets	5.12	32,700	35,409
Right of use assets	5.13	48,285	43,374
Property, plant and equipment	5.14	125,545	34,779
Investments in associates	5.15	2,124	2,130
Deferred tax assets	5.10.2	3,582	5,570
Other non-current assets	5.20	19,282	19,476
Current assets		**585,832**	**308,427**
Inventories	5.18	124,098	26,933
Trade receivables	5.19	44,013	19,232
Other current assets	5.20	71,036	57,828
Cash and cash equivalents	5.21	346,686	204,435
TOTAL ASSETS		**817,352**	**449,164**
EQUITY			
Capital and reserves attributable to the Company's equity holders		**170,581**	**77,422**
Share capital	5.22	15,786	13,646
Share premium	5.22	409,258	244,984
Other reserves	5.22	52,512	52,342
Retained earnings/(Accumulated deficit)	5.22	(233,549)	(169,156)
Loss for the period		(73,425)	(64,393)
LIABILITIES			
Non-current liabilities		**277,791**	**195,872**
Borrowings	5.24	50,726	46,375
Lease liabilities	5.13/5.27	53,687	49,392
Contract liabilities	5.28	4,741	58
Refund liabilities	5.29	158,970	97,205
Provisions	5.30	8,308	2,358
Deferred tax liabilities	5.10.2	1,290	412
Other liabilities	5.31	69	72
Current liabilities		**368,979**	**175,870**
Borrowings	5.24	7,107	6,988
Trade payables and accruals	5.25	68,119	36,212
Income tax liability	5.10	83	-
Tax and Employee-related liabilities	5.26	17,249	13,165
Lease liabilities	5.13/5.27	3,135	2,696
Contract liabilities	5.28	124,017	89,578
Refund liabilities	5.29	95,611	14,222
Provisions	5.30	48,708	10,169
Other liabilities	5.31	4,950	2,841
TOTAL LIABILITIES		**646,771**	**371,742**
TOTAL EQUITY AND LIABILITIES		**817,352**	**449,164**

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

3 CONSOLIDATED STATEMENTS OF CASH FLOWS

€ in thousand	Note	Year ended December 31,		
		2021	2020	2019
Cash flows from operating activities				
Loss for the year		(73,425)	(64,393)	(1,744)
Adjustments for non-cash transactions	5.32	56,476	37,941	12,704
Changes in non-current operating assets and liabilities	5.32	59,353	88,472	3,597
Changes in working capital	5.32	36,127	77,740	(6,682)
Cash generated from operations	5.32	**78,532**	**139,759**	**7,875**
Income tax paid		(1,631)	(2,021)	(2,346)
Net cash generated from operating activities		**76,901**	**137,738**	**5,529**
Cash flows from investing activities				
Purchases of property, plant and equipment	5.14	(92,229)	(18,936)	(10,502)
Purchases of intangible assets	5.12	(942)	(535)	(382)
Proceeds from sale of intangible assets		-	24	-
Interest received		54	107	199
Net cash used in investing activities		**(93,116)**	**(19,340)**	**(10,685)**
Cash flows from financing activities				
Proceeds from issuance of common stock, net of costs of equity transactions	5.23	166,614	75	(2,484)
Disposal of treasury shares	5.23	209	215	21
Proceeds from borrowings, net of transaction costs	5.24/5.32.2	859	50,266	11,781
Repayment of borrowings	5.24/5.32.2	(1,956)	(21,995)	(11,684)
Payment of lease liabilities	5.13/5.27	(2,805)	(2,111)	(2,709)
Interest paid		(8,417)	(4,711)	(2,621)
Net cash generated from/(used in) financing activities		**154,504**	**21,740**	**(7,696)**
Net change in cash and cash equivalents		**138,288**	**140,138**	**(12,852)**
Cash and cash equivalents at beginning of the year		204,394	64,439	77,084
Exchange gains/(losses) on cash		3,960	(183)	207
Restricted cash	5.21	44	41	-
Cash and cash equivalents at end of the year		**346,686**	**204,435**	**64,439**

The accompanying notes form an integral part of these financial statements

4 CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY

€ in thousand *(except number of shares)*	**Note**	***Number of shares issued***	**Share capital**	**Share premium**	**Other reserves**	**Retained earnings/ (Accumulated deficit)**	**Profit/ (loss) for the period**	**Total equity**
Balance as at January 1, 2019 before IFRS 16 adoption		***90,917,837***	**13,638**	**244,900**	**52,060**	**(170,676)**	**3,264**	**143,186**
Changes in Accounting Policy –Initial Application of IFRS 16		-	-	-	(9,474)	-	-	(9,474)
Balance as at January 1, 2019		***90,917,837***	**13,638**	**244,900**	**42,587**	**(170,676)**	**3,264**	**133,712**
Total comprehensive loss		-	-	-	644	-	(1,744)	(1,100)
Income appropriation		-	-	-	-	3,264	(3,264)	-
Share-based compensation expense:								
- value of services		-	-	-	2,504	-	-	2,504
- exercises		*25,975*	4	12	-	-	-	16
Treasury shares		-	-	-	21	-	-	21
Balance as at December 31, 2019		***90,943,812***	**13,642**	**244,912**	**45,756**	**(167,412)**	**(1,744)**	**135,153**
Balance as at January 1, 2020		***90,943,812***	**13,642**	**244,912**	**45,756**	**(167,412)**	**(1,744)**	**135,153**
Total comprehensive loss		-	-	-	2,360	-	(64,393)	(62,033)
Income appropriation		-	-	-	-	(1,744)	1,744	-
Share-based compensation expense:	5.22							
- value of services		-	-	-	4,012	-	-	4,012
- exercises		*26,750*	4	71	-	-	-	75
Treasury shares	5.22	-	-	-	215	-	-	215
Balance as at December 31, 2020		***90,970,562***	**13,646**	**244,984**	**52,342**	**(169,156)**	**(64,393)**	**77,422**

€ in thousand *(except number of shares)*	**Note**	***Number of shares issued***	**Share capital**	**Share premium**	**Other reserves**	**Retained earnings/ (Accumulated deficit)**	**Profit/ (loss) for the period**	**Total equity**
Balance as at January 1, 2021		***90,970,562***	**13,646**	**244,984**	**52,342**	**(169,156)**	**(64,393)**	**77,422**
Total comprehensive loss		-	-	-	(2,672)	-	(73,425)	(76,097)
Income appropriation		-	-	-	-	(64,393)	64,393	-
Share-based compensation expense:	5.22							
- value of services		-	-	-	2,632	-	-	2,632
- exercises		*952,372*	143	2,114	-	-	-	2,257
Treasury shares	5.22	*(4,025)*	(1)	-	209	-	-	209
Issuance of ordinary shares, May 2021	5.22	*8,145,176*	1,222	88,375	-	-	-	89,597
Issuance of ordinary shares, November 2021	5.22	*5,175,000*	776	87,199	-	-	-	87,975
Cost of equity transactions, net of tax	5.22	-	-	(13,414)	-	-	-	(13,414)
Balance as at December 31, 2021		***105,239,085***	**15,786**	**409,258**	**52,512**	**(233,549)**	**(73,425)**	**170,581**

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

5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

5.1 General information and significant events of the period

Valneva SE ("the Company") together with its subsidiaries (the "Group" or "Valneva") is a company focused on the development and commercialization of prophylactic vaccines for infectious diseases with significant unmet medical needs. The Company takes a highly specialized and targeted approach to vaccine development and then applies its deep understanding of vaccine science to develop prophylactic vaccines addressing these diseases. Valneva has leveraged its expertise and capabilities both to successfully commercialize two vaccines and to rapidly advance a broad range of vaccine candidates into and through the clinic, including candidates against Lyme disease, the chikungunya virus and COVID-19.

The Group's portfolio includes two commercial vaccines for travelers: IXIARO (also marketed as JESPECT) indicated for the prevention of Japanese encephalitis and DUKORAL indicated for the prevention of cholera, and, in some countries, prevention of diarrhea caused by enterotoxigenic Escherichia coli. Valneva has operations in Austria, Sweden, the United Kingdom, France, Canada and the United States and over 750 employees.

Valneva SE is a public company listed on the Euronext Paris (symbol: VLA) and on the Nasdaq Global Select Market (symbol: VALN) since May 2021.

List of direct or indirect interests held by the Company:

Name	Country of incorporation	Consolidation method	Interest held as at December 31,	
			2021	2020
BliNK Biomedical SAS[1]	FR	Equity method	48.9%	48.9%
Vaccines Holdings Sweden AB	SE	Consolidation	100%	100%
Valneva Austria GmbH	AT	Consolidation	100%	100%
Valneva Canada Inc.	CA	Consolidation	100%	100%
Valneva France SAS	FR	Consolidation	100%	100%
Valneva Scotland Ltd.	UK	Consolidation	100%	100%
Valneva Sweden AB	SE	Consolidation	100%	100%
Valneva UK Ltd.	UK	Consolidation	100%	100%
Valneva USA, Inc.	US	Consolidation	100%	100%

The closing date for the consolidated financial statements is December 31st of each year.

The Company is registered at 6 rue Alain Bombard, 44800 Saint-Herblain, France.

The Company's site in Saint-Herblain (Nantes, France) includes general and administrative functions and research and development (R&D) facilities. The Valneva SE site in Lyon operates commercial activities.

Vaccines Holdings Sweden AB is the holding company of Valneva Sweden AB.

Valneva Austria GmbH (Vienna, Austria) focuses on pre-clinical and clinical development activities of vaccines. The facilities accommodate departments for pre-clinical R&D, (technical/clinical) product development, quality and regulatory affairs, general and administrative as well as commercial functions. Valneva Austria GmbH commercializes IXIARO, DUKORAL and third-party products such as FLUCELVAX TETRA, FLUAD, Moskito Guard, RABIPUR and ENCEPUR.

[1] See Note 5.15

Valneva Canada Inc. (Montreal, Quebec) commercializes IXIARO, DUKORAL and third-party products as KamRAB in 2020 and Vivotif in 2019.

Valneva France SAS (Lyon, France) was founded in February 2019 and commercializes IXIARO and DUKORAL since 2020.

Valneva Scotland Ltd. (Livingston, United Kingdom) is primarily involved in the production of Valneva's Japanese encephalitis vaccine, IXIARO, as well as in the production of chikungunya and COVID-19 vaccines, which are currently in the development phase.

Valneva Sweden AB (Solna, Sweden) manufactures the DUKORAL vaccine and commercializes DUKORAL, IXIARO and third-party products such as Moskito Guard and Vivotif in the Nordic countries. In addition, Valneva Sweden AB provides R&D services and filling services for our VLA2001 SARS-CoV-2 vaccine candidate.

Valneva UK Ltd. (based nearby London, United Kingdom) commercializes DUKORAL, IXIARO and third-party products such as Moskito Guard in the United Kingdom.

Valneva USA, Inc. focuses on the commercialization of IXIARO to the US military and the US private market.

SIGNIFICANT EVENTS OF THE PERIOD

COVID-19

The Group has been and could continue to be materially adversely affected by the current COVID-19 pandemic in regions where Valneva has significant manufacturing facilities, concentrations of clinical trial sites, or other business operations. COVID-19 has adversely impacted sales of travel vaccines, with travel to endemic areas significantly reduced compared to 2019 (pre-pandemic). DUKORAL and IXIARO are aimed at diseases that primarily threaten travelers to particular regions (e.g. Asia). As a result, sales of these vaccines have decreased significantly, adversely impacting the Group's financial results. The Group has been and expects to continue to be impacted by the significant reduction in international travel following the onset of the global COVID-19 pandemic. In its November 2021 report, the United Nations World Tourism Organization, or UNWTO, noted that despite the improvement in the third quarter of the year, the pace of recovery remains slow and uneven across world regions due to varying degrees of mobility restrictions, vaccination rates and traveler confidence. Rising concerns over the Delta and Omicron variants of the virus have led several countries to re-impose restrictive measures. In addition, the volatility and lack of clear information on entry requirements could continue to affect the resumption of international travel during the Northern Hemisphere's summer season. However, vaccination programs worldwide, together with fewer restrictions for vaccinated travelers and the use of digital tools such as the EU Digital COVID Certificate, have contributed to the gradual normalization of travel. The recovery of international travel is forecast by leading international travel organizations, such as the International Air Transport Association and the UNWTO, to recover to 2019 demand levels between mid-2023 to end of 2024. If international travel does not resume as quickly or as much as expected, the Group's product sales will continue to be severely affected, and Valneva may not be able to complete the development of its vaccine candidates without additional financing. Valneva continues to closely monitor how the pandemic and related response measures are affecting the Company's business. Valneva reported cash and cash equivalents of €346.7 million as at December 31, 2021. Although it is difficult to predict future liquidity requirements, the Group's management considered that the existing cash and cash equivalents as at December 31, 2021 will be sufficient to fund its operations for at least the next 12 months from the authorization of publication of these consolidated financial statements. For details on liquidity risk, see Note 5.2.5.

Impact from COVID-19 is described in the following notes as at December 31, 2021 and for the year ended December 31, 2021:

Impact from COVID-19	Note	
COVID segment	5.1/5.28/5.29	The Company has developed a COVID-19 vaccine candidate VLA2001 and reported positive topline results from its pivotal Phase 3 trial in 2021. Regulatory submissions are ongoing and Valneva expects potential regulatory approvals in the first quarter of 2022. Valneva signed an Advance Purchase Agreement with the European Commission to supply up to 60 million doses of VLA2001, for a period of over two years. Valneva and the Kingdom of Bahrain signed an Advance Purchase Agreement to supply 1 million doses of VLA2001. The agreement with the UK Authority to provide up to 190 million doses of VLA2001 was terminated in September, 2021 and became effective in October, 2021. For further information on the termination, see Note 5.2.2. In order to prepare for the commercialization of the COVID-19 vaccine, capital expenditure and inventory have been built up in 2021.
Revenues from contracts with customers	5.5	In 2021, commercialized products revenues from DUKORAL and IXIARO continued to be adversely impacted by the worldwide reduction in travelling due to the COVID-19 pandemic, with DUKORAL experiencing the greatest impact. In 2021, IXIARO product sales were €45.1 million (a decrease of €3.4 million compared to €48.5 million in 2020), and DUKORAL product sales were €2.4 million (a decrease of €10.9 million, compared to €13.3 million in 2020).
Impairment testing	5.16	Impairment tests for commercialized products IXIARO and DUKORAL were performed and resulted in no impairment charges for 2021.
Inventories	5.18	The income statement included a €5.7 million of write-down due to lower sales expectations and limited shelf life of the finished goods
Trade receivables	5.19	An assessment of expected credit loss resulted in only minor impact on the Group's figures

Effects of climate change on the consolidated financial statements

In preparing the consolidated financial statements, Valneva's management has considered the impact of climate change. These considerations did not have a material impact on the financial reporting judgements and estimates in 2021.

Public offering in May 2021

In May 2021, Valneva announced the closing of a global offering to specified categories of investors of an aggregate of 8,145,176 new ordinary shares, after full exercise of the overallotment option granted to the underwriters (see Note 5.22). The net proceeds from the global offering amounted to €82.8 million.

Public offering in November 2021

In November 2021, Valneva announced the closing of a global offering to specified categories of investors of an aggregate of 5,175,000 new ordinary shares, after full exercise of the overallotment option granted to the underwriters (see Note 5.22). The net proceeds from the global offering amounted to €81.3 million.

Significant agreements signed in the periods presented

In January 2019, Valneva and the U.S. Government Department of Defense (DoD) signed a new contract for the supply of its Japanese encephalitis vaccine IXIARO through 2019 and the beginning of 2020 with a value of $59 million guaranteed and potentially worth up to $70 million.

In June 2019, Valneva and GSK (Glaxo Smith Kline) announced a mutual agreement to terminate the Strategic Alliance Agreement (SAA), originally agreed between Novartis and Intercell (predecessor companies of GSK and Valneva, respectively). Valneva paid €9.0 million to GSK immediately and would pay up to a further €7.0 million when milestones of marketing approvals of its Lyme vaccine are fulfilled. As a result, Valneva regained control of its main research and development assets, including its Lyme vaccine candidate (VLA15). In 2019, the effect was €10.7 million negative other revenues reflecting both the current and future payment obligations (see Note 5.5).

In July 2019, Valneva and Coalition for Epidemic Preparedness Innovations (CEPI) announced a new partnering agreement. CEPI will provide Valneva up to $23.4 million for vaccine manufacturing and late-stage clinical development of a single-dose, live-attenuated vaccine (VLA1553) against chikungunya (see Note 5.8).

In February 2020, Valneva Austria GmbH signed a loan agreement with US healthcare funds Deerfield and OrbiMed. The loan agreement initially had a borrowing capacity of up to $85 million (of which $60 million have been drawn down). Repayments of principal will start in 2023, while the loan will mature in 2026. For more details, see Note 5.24.1.

In April 2020, Valneva and Dynavax announced a collaboration to advance vaccine development for COVID-19. Dynavax is providing CpG 1018, a component of the US FDA- and EMA-approved HEPLISAV-B vaccine, to support the development of Valneva's COVID-19 vaccine candidate VLA2001, while Valneva is leveraging its technical and platform capabilities to develop an inactivated, whole virus vaccine candidate against COVID-19. In September 2020, Valneva and Dynavax announced a commercial partnership for the supply of Dynavax's CpG 1018 adjuvant for use in VLA2001. This commercial agreement includes a purchase order commitment amount of up to $136.8 million. No deliveries for commercial use took place between Dynavax and Valneva in 2020. As at December 31, 2020, Valneva recorded €31.1 million in advance payments from this agreement (see Note 5.20). During 2021, deliveries took place between Dynavax and Valneva. As at December 31, 2021, Valneva paid €47.9 million of advance payments, of which €40.7 million have been written off as Valneva does not need those deliveries in the future and those payments were non-refundable. As at December 31, 2021, Valneva recorded €7.2 million of advance payments in other current assets and €41.9 million in inventories from this agreement. In the consolidated statement of cash flows for the year ended December 31, 2021, the cash outflows of advance payments and payments for deliveries are reflected in the loss for the year and changes in working capital relating to inventories and trade and other receivables.

In April 2020, a new collaboration to co-develop and commercialize the Group's Lyme disease vaccine candidate (VLA15) was signed with Pfizer Inc. (NYSE: PFE). This agreement was entered into with a customer as defined by IFRS 15 guidance on revenue contracts with customers, it included a $ 130 million (€116.9 million) upfront payment, which was received in June 2020. Valneva will refund 30% of development costs incurred by Pfizer up to an agreed amount, through completion of the development program, which is planned for 2025. In addition, Pfizer will be obligated to pay Valneva low double-digit tiered royalties starting at 19% on net sales of licensed products, subject to specified offsets and reductions. Therefore, as at December 31, 2020, €81.9 million was recognized as discounted refund liabilities. The transaction price was determined taking into account the refund obligation of Valneva. The agreement includes R&D and service performance obligations for which revenue is recognized over time as well as a license performance obligation for which revenue is recognized at a point in time when Pfizer can benefit and use the license without the further involvement of Valneva. The transaction has been allocated to the various performance obligations in proportion to their standalone selling price. In 2020, €31.6 million were recognized as other revenues. €2.8 million of costs to obtain a contract were included in other assets as at December 31, 2020. In 2021, €14.3 million was recognized as other

revenues. €3.0 million costs to obtain a contract were included in other non-current assets as at December 31, 2021, and €79.6 million has been recognized as discounted refund liabilities. For more details, see Notes 5.5 and 5.29.

In June 2020, Valneva and Bavarian Nordic A/S (OMX: BAVA) announced a marketing and distribution partnership for their commercial products. Pursuant to the agreement, Valneva commercializes Bavarian Nordic's marketed vaccines, leveraging its commercial infrastructure in Canada, the UK, France and Austria. Valneva also markets and distributes these products in Belgium and the Netherlands. The partnership includes vaccines that protect against rabies, Japanese encephalitis, tick-borne encephalitis and cholera. This agreement had no material financial impact on the Group's consolidated financial statements as at and for the year ended December 31, 2020. Revenues are recognized at a point in time when products are delivered to the customer. In 2021, those product sales (mainly Rabipur, Encepur) amounted to €8.2 million.

In September 2020, the U.S. Department of Defense (DoD) awarded Valneva a new contract for the supply of IXIARO. The terms of the agreement, as subsequently amended in September 2021, contemplate an initial base year followed by two option years, each with a range of minimum and maximum potential dose orders. The base year had a minimum value of approximately $53 million for 370,000 doses, and the first option year, which the DoD has exercised in September 2021, has a minimum value of approximately $28.8 million for 200,000 doses. The second option year, if exercised, has a minimum value of approximately $36 million for 250,000 doses. These changes bring the total minimum value of the contract to approximately $118 million, assuming the exercise of the second-year option which remains unchanged, compared to a minimum value of $135 million in the initial contract. In order to support its customer through this pandemic period, Valneva also agreed to provide additional inventory to the DoD after September 2023 to mitigate the potential impact of unused stock that may expire. This replacement inventory will be provided free of charge and resulted in in a contract liability amounted to $5.4 million recognized as at December 31, 2021 (December 31, 2020: nil).

In September 2020, Valneva announced an agreement with the UK Authority for the supply Valneva's inactivated COVID-19 vaccine, VLA2001 (the UK Supply Agreement). Under the agreement, Valneva was to provide the UK Authority with 60 million doses of VLA2001 in the second half of 2021. The UK Authority had options over 40 million additional doses in 2022 and a further 90 million doses, in aggregate, from 2023 to 2025. The UK Authority also invested up-front in the scale up and development of the vaccine. In January 2021, the UK Authority exercised its option to order 40 million doses. In September 2021, the UK Authority gave notice of termination of this Supply Agreement. The termination of this UK Supply Agreement became effective in October 2021. For further information about the termination of the UK Supply Agreement, see Note 5.5.2.

In January 2021, Valneva and Instituto Butantan, a producer of immunobiologic products, announced the signing of definitive agreements for the development, manufacturing and marketing of Valneva's single-shot chikungunya vaccine candidate, VLA1553, in Low- and Middle-Income Countries (LMICs). This finalization follows the signing of a binding term sheet in May 2020. The collaboration falls within the framework of the $23.4 million funding agreement Valneva signed with CEPI in July 2019 (see Note 5.8.1). Under the collaboration, Valneva will transfer its chikungunya vaccine technology to Instituto Butantan, who will develop, manufacture and commercialize the vaccine in LMICs. In addition, Instituto Butantan will provide certain clinical and Phase 4 observational studies that Valneva will use to meet regulatory requirements. The agreement includes small upfront and technology transfer milestones. As at December 31, 2021, €2.1 million was recognized as other revenues and €0.8 million was included in contract liabilities (December 31, 2020: €1.0 million).

In November 2021, Valneva signed an Advance Purchase Agreement (APA) with the European Commission (EC) to supply up to 60 million doses of VLA2001, over two years. Under the terms of the APA, Valneva shall deliver 24.3 million doses in 2022 (starting in April 2022), subject to approval of VLA2001 by the European Medicines Agency (EMA). The EC has an option to purchase a further 35.7 million doses for delivery in 2023. During 2021, no revenue was recognized, as the deliveries will start in the second quarter of 2022. Advanced payments of €116.9 million were included in contract liabilities as at December 31, 2021.

In November 2021, Valneva and the Kingdom of Bahrain, signed an APA for the supply of one million doses of VLA2001. As at December 31, 2021, accounts receivable and contract liabilities related to this agreement comprised €3.8 million.

In November 2021, Valneva and IDT Biologika announced their collaboration for the production of VLA2001. Under the collaboration, IDT Biologika will produce VLA2001's drug substance at its Biosafety Level 3 facilities in Dessau-Roßlau, Germany, in addition to production taking place at Valneva's manufacturing site in Livingston, Scotland. As at December 31, 2021, advance payments related to the agreement with IDT Biologika to produce the COVID-19 vaccine in amount of €16.4 million.

5.2 Summary of significant accounting policies

The principal accounting policies applied in preparing these consolidated financial statements are outlined below. These policies have been consistently applied to all years presented.

5.2.1 Basis of preparation

These 2021 Consolidated Financial Statements have been prepared in accordance with the International financial reporting standards, which comprise IFRS (International Financial Reporting Standards), IAS (International Accounting Standard) and their interpretations, SIC (Standards Interpretations Committee) and IFRIC (International Financial Reporting Interpretations Committee), as adopted by the European Union.

The preparation of financial statements in conformity with IFRS as adopted by the European Union requires the use of certain critical accounting estimates. It also requires the Group's management to exercise its judgement in applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 5.3.

In the year 2020, the line "amortization and impairment of fixed assets/intangibles" in the consolidated income statement was reclassified to the line "Cost of goods and services" and "Research and development expenses". This split was made to improve the P&L disclosure per function. The comparable period was adjusted accordingly to maintain the comparability. In 2019, the amount of €3.0 million of amortization and impairment of fixed assets/intangible was reclassified to "Cost of goods and services" amounting to €2.8 million and to "Research and development expenses" amounting to €0.1 million.

For ease of presentation, numbers have been rounded and, where indicated, are presented in thousands of Euros. Calculations, however, are based on exact figures. Therefore, the sum of the numbers in a column of a table may not conform to the total figure displayed in the column.

These consolidated financial statements were approved by the Management Board on March 23, 2022 and authorized for issuance by the Supervisory Board on March 23, 2022.

5.2.2 Impact of new, revised or amended Standards and Interpretations

(a) ***New and amended standards adopted by the Group***

Standard - Interpretation – Amendment		Effective Date	Effects
Amendments to IFRS 4	Insurance Contracts – deferral of IFRS 9	January 1, 2021	None
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16	Interest Rate Benchmark Reform – Phase 2	January 1, 2021	None
Amendments to IFRS 16	(I) COVID-19-Related Rent Concessions (II) COVID-19-Related Rent Concessions beyond June 30, 2021	January 1, 2021	None

The amendments listed above did not have any impact on the amounts recognized in prior periods and are not expected to significantly affect the current or future periods.

Interpretations Committees agenda decisions		Effective Date	Effects
IAS 38	Configuration or Customisation Costs in a Cloud Computing Arrangement (IAS 38 Intangible Assets)	January 1, 2021	None
IAS 19	Attributing Benefit to Periods of Service (IAS 19 Employee Benefits)	January 1, 2021	No material effects

The interpretations listed above did not have any material impact on the amounts recognized in prior periods and are not expected to significantly affect the current or future periods.

(b) ***New standards, amendments and interpretations issued but not effective for the financial year beginning January 1, 2021, and not early adopted.***

The Group did not elect for early application of the following new standards and amendments which were issued by the IASB and which are endorsed by the EU but not mandatory as at January 1, 2021:

- IFRS 17 – Insurance Contracts
- Amendments to IFRS 3 – Reference to the Conceptual Framework
- Amendments to IAS 16 – Proceeds before Intended Use
- Amendments to IAS 37 – Onerous contracts - Cost to Fulfilling a contract
- Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41 – Annual Improvements to IFRSs 2018-2020 Cycle

The following new amendments were issued by the IASB and are not yet endorsed by the EU:

- Amendments to IAS 1 – Classification of Liabilities as Current or Non-current
- Amendments to IAS 1 and IFRS PS 2 – Disclosure of Accounting policies
- Amendments to IFRS 3 – Reference to the Conceptual Framework
- Amendments to IAS 8 – Definition of Accounting Estimates
- Amendments to IAS 12 – Deferred Tax related to Assets and Liabilities arising from a Single Transaction

These standards are not expected to have a material impact on the entity in the current reporting periods and on foreseeable future transactions.

5.2.3 Consolidation

Subsidiaries

Subsidiaries are entities over which the Company has control. The Company controls an entity when the Company is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Company. They are deconsolidated from the date that control ceases.

The Group uses the acquisition method of accounting to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of assets transferred, the liabilities incurred, and the equity interests issued by the Company. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs, other than those associated with the issue of debt or equity securities, are expensed as incurred. Identifiable assets acquired, liabilities, and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The excess of

the consideration transferred over the fair value of the Company's share of the identifiable net assets acquired is recorded as goodwill. If the fair value of the net assets of the acquired subsidiary exceeds the consideration, the difference is recognized directly in the income statement as a bargain purchase gain. Intercompany transactions, balances and unrealized gains on transactions between Group companies are eliminated.

Associates

Associates are entities over which the Company has significant influence.

5.2.4 Foreign currency translation

(a) ***Functional and presentation currency***

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in Euros which is Valneva SE's functional and presentation currency.

(b) ***Transactions and balances***

Foreign currency transactions are converted into the functional currency using exchange rates applicable on the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are recognized in the income statement.

(c) ***Subsidiaries***

The results and financial position of all subsidiaries (none of which having the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are converted into the presentation currency as follows:

+ assets and liabilities presented for each balance sheet are converted according to the exchange rate valid on the balance sheet date;
+ from 2021 onward, income and expenses for each income statement are converted at monthly average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are converted on the dates of the transactions). In 2020 and 2019, income and expenses for each income statement were converted using exchange rates applicable on the dates of the transactions); and
+ all resulting exchange differences are recognized as other comprehensive income and are shown as other reserves.

When a foreign operation is partially disposed of or sold, exchange differences that had been recorded in equity are recognized in the income statement as part of the gain or loss on sale.

5.2.5 Financial risk management

The Group's activities expose it to a variety of financial risks: market risk (including currency risk and interest rate risk), credit risk, and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance.

Financial risk management is carried out under the CFO's responsibility and is closely supervised by the Management Board. The Group's risk management systems identify, evaluate and manage financial risks. The Management Board submits regular reports on its risk management systems, including the management of financial risks, to the Audit Committee of the Supervisory Board.

(a) ***Market risk***

Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risks arising from various currencies, primarily with respect to the British Pound (GBP), the Canadian Dollar (CAD), the Swedish Krona (SEK) and the US Dollar ($). The foreign exchange risks from the exposure to other currencies, including the Danish Krone, the Swiss Franc and the Norwegian Krone, are relatively limited. Foreign exchange risks arise from future commercial transactions, recognized assets and liabilities, and net investments in foreign operations.

The objective of the Group is to limit the potential negative impact of the foreign exchange rate changes, for example by currency conversion of cash and cash equivalents denominated in foreign currency and by using foreign currency options.

The Group has certain investments in foreign operations, the net assets of which are exposed to foreign currency translation risk.

The following table details the Group's sensitivity to a 10% increase and decrease in currency units against the relevant foreign currencies. 10% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the year-end for a 10% change in foreign currency rates. The sensitivity analysis includes external loans as well as loans to foreign operations within the Group where the denomination of the loan is in a currency other than the currency of the lender or the borrower. A positive number below indicates an increase in pre-tax profit or a reduction in pre-tax loss. With all other variables held constant, the impact from changes in exchange rates on the pre-tax result would be as follows:

€ in thousand	**Year ended December 31,**	
	2021	**2020**
EUR/$ +10%	6,818	3,229
EUR/$ -10%	(8,334)	(3,947)
EUR/GBP +10%	(11,986)	(10,022)
EUR/GBP -10%	14,650	12,249
EUR/SEK +10%	(2,884)	(400)
EUR/SEK -10%	3,525	489
EUR/CAD +10%	(557)	(228)
EUR/CAD -10%	681	279

As at December 31, 2021, the changes in impact from an increase or a decrease in $ were mainly caused by a decrease in cash and cash equivalents and in intercompany (IC) receivables denominated in $ in Valneva Austria GmbH.

As at December 31, 2021, the increase in the Foreign Currency Exchange Risk in GBP was caused by higher refund liabilities denominated in GBP in Valneva Austria GmbH and by increased IC liabilities denominated in Euro in Valneva Scotland Ltd, both relating to the COVID-19 vaccine program (see Note 5.1).

As at December 31, 2021, the increase in the Foreign Currency Exchange Risk in SEK was caused by increased IC receivables within the group denominated in SEK.

While the Group utilized a hedging strategy to lower its exposure to non-Euro currencies, there is a business need to keep a certain level of non-Euro funds available in its accounts at any time in order to cover payment obligations denominated in GBP or $. In addition, revaluation of certain non-Euro cash balances is offset by revaluation of non-Euro denominated refund liabilities on the Group's balance sheet (see Note 5.29).

Interest rate risks

The Group is exposed to market risks in connection with hedging both its liquid assets and its medium and long-term indebtedness and borrowings subject to variable interest rates.

Borrowings issued at variable rates expose the Group to cash flow interest rate risks, which are offset by cash and financial assets held at variable rates. During 2021, as well as 2020, the Group's investments at variable rates, as well as the borrowings at variable rates, were denominated in €, SEK, $, CAD and GBP.

The Group analyzes its interest rate exposure on a dynamic basis. Based on this analysis, the Group calculates the impact on profit and loss of a defined interest rate change. The same interest rate change is used for all currencies. The calculation only includes investments in financial instruments and cash in banks that represent major interest-bearing positions. As at December 31, 2021 and December 31, 2020, no material interest risk was identified. In case of increasing interest rates the positive effect from cash in banks will be higher than the negative effect from variable interest-bearing liabilities, in case of decreasing interest rates there will be no material negative impact.

(b) ***Credit risks***

The Group is exposed to credit risk. Valneva holds bank accounts, cash balances, and securities at sound financial institutions with high credit ratings. To monitor the credit quality of its counterparts, the Group relies on credit ratings as published by specialized rating agencies such as Standard & Poor's, Moody's, and Fitch. The Group has policies that limit the amount of credit exposure to any single financial institution. The Group is also exposed to credit risks from its trade debtors, as its income from product sales, collaborations, licensing and services arises from a small number of transactions. The Group has policies in place to enter into such transactions only with highly reputable, financially sound counterparts. If customers are independently rated, these ratings are used. Otherwise, when there is no independent rating, a risk assessment of the credit quality of the customer is performed, taking into account its financial position, past payment experience and other relevant factors. Individual credit limits are set based on internal or external ratings in accordance with signature authority limits as set by the Management Board. Most of the trade receivables are receivables from governmental institutions with high credit rating (AAA-country or AA-country). The credit quality of financial assets is described in Note 5.17.3.

(c) ***Liquidity risks***

The Group is exposed to liquidity risk due to the maturity of its financial liabilities and the fluctuations of its operating cash-flow, and the potential implementation of early repayment clauses in loan or grant agreements. Furthermore, fluctuations in the Group's operating cash flow during accounting periods also generate liquidity risks. Prudent liquidity risk management therefore implies maintaining sufficient cash resources, cash equivalents and short-term deposits in order to satisfy ongoing operating requirements and the ability to close out market positions. Extraordinary conditions on the financial markets may, however, temporarily restrict the possibility to liquidate certain financial assets.

Although it is difficult to predict future liquidity requirements, the Group considers that the existing cash and cash equivalents as at December 31, 2021 will be sufficient to fund the operations for at least the 12 months from the date of authorization for issuance of these consolidated financial statements. For the existing loan agreement with covenants, amendments were agreed to reduce the minimum liquidity covenant and the minimum revenue covenant to prevent a breach of the covenants (see Note 5.24.1).

The table below analyzes the Group's financial liabilities into relevant maturity groupings based on the remaining period from the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

As at December 31, 2020 € in thousand	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	Between 5 and 10 years	Between 10 and 15 years	Over 15 years	Total
Borrowings	7,004	25,569	37,900	5,148	-	-	75,621
Lease liabilities	3,442	28,078	3,677	9,446	9,963	3,850	58,456
Refund liabilities	20,025	82,670	48,566	-	-	-	151,260
Trade payables and accruals	36,212	-	-	-	-	-	36,212
Tax and employee-related liabilities[2]	8,300	-	-	-	-	-	8,300
Other liabilities	27	25	-	-	-	-	52
	75,010	**136,342**	**90,142**	**14,594**	**9,963**	**3,850**	**329,901**

As at December 31, 2021 € in thousand	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	Between 5 and 10 years	Between 10 and 15 years	Over 15 years	Total
Borrowings	7,121	48,560	20,534	1,765	-	-	77,980
Lease liabilities	4,060	29,011	5,761	12,798	9,928	1,905	63,464
Refund liabilities	101,070	132,355	55,000	12,720	-	-	301,145
Trade payables and accruals	68,119	-	-	-	-	-	68,119
Tax and employee-related liabilities[2]	10,101	-	-	-	-	-	10,101
Other liabilities	27	25	-	-	-	-	52
	190,499	**209,952**	**81,295**	**27,282**	**9,928**	**1,905**	**520,861**

The fair values as well as the book values of the Group's borrowings are disclosed in Note 5.24. To manage liquidity risk, the Group holds sufficient cash, cash equivalents and short-term deposit balances.

5.2.6 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide benefits for shareholders and for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. The Group actively manages its funds to primarily ensure liquidity and principal preservation while seeking to maximize returns. The Group's cash and short-term deposits are located at several different banks. In order to maintain or adjust the capital structure, the Group may issue new shares or sell assets to reduce debt.

In order to pursue its business strategy to grow into a major, self-sustainable vaccine company through organic growth and opportunistic mergers & acquisitions, the Group may rely on additional equity and debt financing. Capital consists of "Equity" as shown in the consolidated balance sheet.

5.2.7 Fair value estimation

The carrying value less impairment provision of trade receivables and payables are assumed to approximate their fair values due to the relatively short maturity of the respective instruments.

[2] Social security and other tax payables are excluded from the tax and employee-related liabilities balance, as this analysis is required for financial instruments only.

5.3 Critical accounting judgements and key sources of estimation uncertainty

In applying the Group's accounting policies, which are described in Note 5.2 *Summary of significant accounting policies*, the management is required to make judgements (other than those involving estimations) that have a significant impact on the amounts recognised and to make estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

5.3.1 Critical judgements in applying the Group's accounting policies

The following are the critical judgements, apart from those involving estimations (which are presented separately below), that the directors have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in financial statements:

- Note 5.2.2 and note 5.29: Revenue recognition of other revenues: Management's judgement is required to determine the identification and separation of performance obligations (especially when determining whether the license is distinct, which is the case when the customer can benefit from the license without further involvement), the determination of the transaction price (including the judgement of payables to customers), and allocation of the transaction price to the performance obligations on relative standalone selling price. The standalone selling price is sometimes not available or is based on hard-to-value intangible assets, so various valuation techniques are used. In addition, Management's judgement is required whether revenue from collaborations, licensing and service agreements is recognized over time or at a point in time. In particular, Note 5.5.2**.** underlines the judgements made in applying accounting policies in the context of the terminations, particularly regarding probability of repayment obligations in the context of revenue recognition, of
  - Valneva's COVID-19 vaccine UK Supply Agreement in 2021
  - Valneva's strategic alliance agreements (SAA) with GlaxoSmithKline (GSK) in 2019
- Notes 5.8 and 5.31: Other income: The Group receives funding from CEPI, which include performance obligations and refund obligations. Management's judgement is required to determine whether such components of an agreement are revenues from customers or fall within the standard of accounting for government grants. CEPI has global partnership between public, private, philanthropic, and civil society organizations. Because CEPI is an NGO and is acting in a way a government organization would, it was accounted for under IAS 20. In addition, the valuation of the various components required Management's judgement.
- Note 5.13: Lease term: When determining lease terms, the Group makes judgements whether it is reasonably certain to exercise renewal or early termination options.

5.3.2 Key sources of estimation uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty in the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below:

- Note 5.5: Revenue recognition of product sales: estimate of expected returns and replacements, and supply of products free of charge;
- Note 5.5: Other revenues: likelihoods for refund liabilities; for revenues recognition in accordance to the actual costs compared to the budget;
- Notes 5.8 and 5.31: Other income: estimates of income recognized and repayments from grants, measured according to cost incurred compared to the budget;

- Note 5.10: Recognition of deferred tax assets: availability of future taxable profit against which deductible temporary differences and tax losses carried forward can be utilized and whether sufficient evidence is provided for entities
- Note 5.12: Intangible assets: Amortization period of development expenditures and acquired technologies; The most significant criteria considered for the determination of the useful life include the patent life as well as the estimated period where Valneva can benefit from this intangible. These assumptions are considered to be a key source of estimation uncertainty as relatively small changes in the assumptions used may have a significant effect on the Group's financial statements within the next year.
- Note 5.16 Impairment test of intangible, tangible assets, and investments in associates: key assumptions underlying recoverable amounts; Budgets comprise forecasts of revenue, staff costs and overheads based on current and anticipated market conditions that have been considered and approved by the Management board. The revenue projections are inherently uncertain due to the short-term nature of the business and unstable market conditions. If the Group does not successfully develop VLA2001 and receive regulatory approval, or if Valneva fails to successfully manufacture or commercialize VLA2001 if approved, an impairment may be required. For the main estimates and sensitivities related to the impairment test regarding the CGU, see Note 5.16.
- Note 5.18: Write down analysis for inventories: For the assessment of write-down of raw material the current production plans have been taken into account. Raw material which will not be used before expiry date was written down. For this assessment the status of the expiry dates as of the balance sheet date was taken. For the assessment of write-downs of work in progress, finished goods and purchased goods, the forecasted sales plans for 2022 and a minimum shelf life at the time of selling has been taken into account. In addition, those inventory have been assessed on the likelihood of the release of those products.
- Note 5.23: Share-based payments and related expected employer contribution costs: assumption for fair value determination as well as the determination of accelerated vesting in the event of a change of control (as considered remotely);
- Note 5.29: Refund liability related to the UK Supply agreement: As at December 31, 2021 the royalty obligation was assessed at the maximum amount (maximum royalty payment of €100 million), as all COVID sales are expected to occur outside the UK. As of December 31, 2020 the royalty obligation was assessed at a lower level, as the main production capacity was planned for sales within the UK. As at December 2021, a sensitive estimate were the revenue forecast and the timing of the expected cash payments. The major part of the royalty obligation is expected to be non-current, and therefore thoese amounts have been discounted. The related estimated cash-outs are expected to happen from 2022 to 2026.
- Notes 5.30 and 5.33: Recognition and measurement of provisions and contingencies: key assumptions about the likelihood and magnitude of an outflow of resources. In estimating the provision for onerous contracts, the management made assumption regarding the likelihood of termination costs for certain agreements.

5.3.3 Measurements of fair values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When measuring the fair value of an asset or a liability, the Group uses observable market data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following Notes:

- Note 5.16: financial instruments; and
- Note 5.23: share-based payment arrangements.

5.4 Segment information

The Company's Management Board, as its chief operating decision maker, considers the operational business from a product rather than geographic perspective and has identified four reportable segments. Key performance indicators include revenue and operating profitability.

As at January 1, 2021, the following changes were implemented into the Group's segment reporting structure.

- Given the materiality of the Group's COVID-19 business, a separate segment was introduced covering all activities related to the development, manufacturing, and distribution of the SARS-CoV-2 vaccine candidate.

The individual segments consist of the following:

- "Commercialized products" (marketed vaccines, currently the Group's vaccines IXIARO and DUKORAL as well as third-party products)
- "COVID" (development, manufacturing, and distribution related to Valneva's SARS-CoV-2 vaccine candidate)
- "Vaccine candidates" (proprietary research and development programs aiming to generate new approvable products in order to generate future cash flows from product sales or from commercialization through partnering with pharmaceutical companies, excluding COVID-19 vaccine candidates, which is presented separately). With the transfer of the license of Valneva's VLA15 Lyme vaccine candidate to Pfizer in December 2020, all related revenues and costs were moved from the "Vaccine candidates" segment to the "Technologies and services" segment.
- "Technologies and services" (services and inventions at the commercialization stage, i.e. revenue generating through collaborations, service, and licensing agreements). With the transfer of the license of Valneva's VLA15 Lyme vaccine candidate to Pfizer in December 2020, all related revenues and costs were moved from the "Vaccine candidates" segment to the "Technologies and services" segment.

As at January 1, 2021, the Group changed its internal reporting process and amended the following allocation rule: general and administrative (G&A) costs were allocated to the four operational segments based on three key criteria (each equally weighted): 1) Revenues, 2) R&D spend and 3) full-time equivalent personnel (FTEs). The allocation of local G&A spend is based on the above criteria measured on local level, whereas the allocation of global functional G&A spend is based on global key criteria. The Group also monitors G&A spend dedicated to corporate projects and any project which is 1) material in spend, 2) one-time in nature, and 3) supports the entire business remains reported under "Corporate Overhead". In 2021 the major items included in "Corporate Overhead" were costs related to the placement of new shares on Nasdaq in May and November 2021.

Segment reporting information for earlier periods has been restated to conform to these changes.

5.4.1 Income statement by segment

Income statement by segment for the year ended December 31, 2019

€ in thousand	Commer-cialized products	COVID	Vaccine candi-dates	Techno-logies and services	Corporate Overhead	Total
Product sales	129,511	-	-	-	-	129,511
Other revenues	163	-	(10,516)	7,038	-	(3,315)
Revenues	**129,674**	**-**	**(10,516)**	**7,038**	**-**	**126,196**
Cost of goods and services	(47,789)	-	(1)	(4,991)	-	(52,781)
Research and development expenses	(3,928)	-	(32,864)	(1,229)	-	(38,022)
Marketing and distribution expenses	(22,930)	-	(895)	(261)	-	(24,145)
General and administrative expenses	(10,161)	-	(7,124)	(795)	(318)	(18,398)
Other income and expenses, net	7	-	7,709	484	(1,861)	6,338
Operating profit/(loss)	**44,873**	**-**	**(43,691)**	**(245)**	**(2,238)**	**(811)**

Income statement by segment for the year ended December 31, 2020

€ in thousand	Commer-cialized products	COVID	Vaccine candi-dates	Techno-logies and services	Corporate Overhead	Total
Product sales	65,938	-	-	-	-	65,938
Other revenues	1	-	31,604	12,779	-	44,383
Revenues	**65,939**	**-**	**31,604**	**12,779**	**-**	**110,321**
Cost of goods and services	(41,830)	-	(3,305)	(9,167)	-	(54,302)
Research and development expenses	(2,711)	(18,962)	(62,140)	(640)	-	(84,454)
Marketing and distribution expenses	(17,554)	-	(638)	(72)	-	(18,264)
General and administrative expenses	(13,412)	(2,374)	(7,781)	(2,274)	(1,697)	(27,539)
Other income and expenses, net	1,101	1,578	14,073	117	2,248	19,117
Operating profit/(loss)	**(8,466)**	**(19,759)**	**(28,189)**	**743**	**551**	**(55,120)**

Income statement by segment for the year ended December 31, 2021

€ in thousand	Commer-cialized products	COVID	Vaccine candi-dates	Techno-logies and services	Corporate Overhead	Total
Product sales	62,984	-	-	-	-	62,984
Other revenues	18	253,314	3,257	28,512	-	285,101
Revenues	**63,002**	**253,314**	**3,257**	**28,512**	**-**	**348,086**
Cost of goods and services	(40,017)	(122,843)	-	(25,061)	-	(187,920)
Research and development expenses	(2,094)	(113,907)	(53,181)	(4,101)	-	(173,283)
Marketing and distribution expenses	(18,455)	(1,182)	(3,811)	(194)	-	(23,642)
General and administrative expenses	(6,102)	(23,003)	(8,323)	(5,495)	(4,684)	(47,606)
Other income and expenses, net	2,196	11,546	7,033	2,458	(257)	22,976
Operating profit/(loss)	**(1,469)**	**3,927**	**(55,025)**	**(3,881)**	**(4,941)**	**(61,390)**

5.4.2 Geographical segments

In presenting information on the basis of geographical segments, segment revenue is based on the final location where Valneva's distribution partner sells the product or where the customer/partner is located. Segment assets are based on the geographical location of the assets.

Product sales per geographical segment

€ in thousand	Year ended December 31,		
	2021	**2020**	2019
United States	40,339	36,414	63,700
Canada	4,226	8,965	24,396
Austria	9,341	3,333	2,668
United Kingdom	2,707	1,847	8,594
Nordics	2,436	2,866	11,027
Germany	726	7,060	10,345
Other Europe	3,075	2,068	4,961
Rest of World	134	3,384	3,819
Product sales	**62,984**	**65,938**	**129,511**

Non-current operating assets per geographical segment

€ in thousand	As at December 31,	
	2021	**2020**
United States	66	93
Canada	239	98
Austria	61,237	58,896
Nordics	53,020	27,540
United Kingdom	87,387	21,977
Other Europe	4,582	4,958
Non-current assets	**206,531**	**113,562**

Non-current operating assets for this purpose consist of intangible assets, right of use assets and property, plant and equipment. The main non-current operating assets are allocated on sites where production and research and development activities are performed. Sales activities by distribution sites do not require major non-current operating assets. Revenues are structured where the final customer is. In some countries there are customers, but no assets.

5.4.3 Information about major customers

Product sales to the largest customer amounted to €41.8 million (2020: €33.8 million, 2019: €46.7 million). Other revenues from the largest customer amounted to €253.3 million (2020: two largest customers with revenues €31.6 million and €7.5 million, 2019: two largest customers with revenues €4.1 million and €0.8 million). There were no further customers with a contribution exceeding 10% of the annual revenue.

5.5 Revenues from contracts with customers

Within the Group the following revenue streams were identified:

a. Product Sales
b. Other revenues

5.5.1 Product sales

The Group's product sales contracts, normally concluded with retailers and, in the United States, with the DoD ("direct product sales") as well as with distributors ("indirect sales – sales through distributors"), generally include one performance obligation. Revenue is recognized at the point in time when the identified performance obligation is transferred to the customer, so when the customer obtains control over the goods.

Some of the Group's product sales agreements include retrospective rebates, charge-back clauses, discounts and under certain conditions return rights which give rise to variable consideration under IFRS 15. The expected rebates, discounts and considerations for product returns are recognized on an accrual basis and reported as refund liabilities in the consolidated balance sheet.

In most cases, Valneva sells the products through retailers. When more than one party is involved in providing/distributing goods or services, the standard requires an entity to determine whether itself and its retailers are principals or agents in these transactions by evaluating the nature of its promises to the customer. An entity is a principal if it controls a promised good or service before transferring that good or service to the customer. An entity is an agent if its role is to arrange for another entity to provide the goods or services. Indicators that control has been transferred are that a) the retailer is primarily responsible to fulfill the promise to its customers, b) the retailer has inventory risk and c) the retailer has discretion in establishing the price for the sale to its customers. One of Valneva's retailers has extensive rights to return and consequently no inventory risk and does not have the power to establish the price for the sales to its customers. Therefore, this retailer acts as agent rather than as principal. All other of Valneva's retailers act as principal. While revenues to principals are recognized when the control is transferred to the principals, revenue from product sales to agents are recognized when the control is transferred to the final customer, when the goods are delivered to the final customer. Payables to customers are deducted from revenue for principals, costs paid to agents are recognized as "Marketing and distribution expenses".

Valneva also sells products acquired from third parties. Valneva considers that it is acting as principal given that it controls products before transferring them to the final customer. More specifically, Valneva has an inventory risk before the goods have been transferred to customers and has discretion in establishing the prices. Revenue is recognized when the product is delivered to the customers. Products purchased from third parties are recognized as "inventory" in the balance sheets and when sold as "cost of goods" in the statements of income.

5.5.2 Other revenues

The Group generates other revenues for its product candidates and proprietary technologies. The contracts in place often include several different promised goods or services such as research licenses, commercial licenses and further R&D services. The terms of such agreements include license fees payable as initial fees, annual license maintenance fees and fees to be paid upon achievement of milestones, as well as license option fees and fees for the performance of research services. In addition, the Group's licensing arrangements generally provide for royalties payable on the licensee's future sales of products developed within the scope of the license agreement. Revenue recognized due to the termination of agreements is recognized in other revenues.

The Group's license contracts in place provide distinct right to use licenses, therefore the revenue is recognized at the point in time at which the licensee is able to direct the use and benefit from the license. The consideration for licensing contracts may consist of fixed and variable parts. In case of right-to-use licenses, the fixed part of the consideration is recognized at the point in time when the licensee is able to direct the use and benefit from the license. For any variable consideration, revenue is recognized at the point in time when the variable constraint is removed.

Revenue for research and development services within the Group's contracts currently in place is recognized over time. For those contracts including constraints, once the constraint is removed the transaction price is updated and revenue is recognized in line with the revenue recognition of the corresponding performance obligation. The progress is measured on an input basis (costs incurred related to total costs expected). It is considered that this input method is an appropriate measure of the progress towards complete satisfaction of these performance obligations under IFRS 15.

Variable considerations are included in revenues only to the extent that it is highly probable that a significant reversal in the amount of the cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. At the end of each reporting period, the Group updates the estimated transaction price and its assessment of whether an estimate of variable consideration is constrained. Amounts allocated to a satisfied performance obligation are recognized as revenue, or as a reduction of revenue, in the period in which the transaction price changes.

Vaccine Supply Agreement with the UK Authority

In September 2020, Valneva entered into a supply agreement, or the UK Supply Agreement, with the Secretary of State for Business, Energy and Industrial Strategy of the United Kingdom, or the UK Authority, pursuant to which Valneva was obligated to develop, manufacture and supply SARS-CoV-2 vaccines, to the UK Authority in the United Kingdom of Great Britain, and Northern Ireland, or the UK, including an obligation for Valneva to upgrade its manufacturing facilities in Scotland. Valneva received notice in September 2021 of the UK Authority's decision to terminate the UK Supply Agreement, and the termination became effective in October 2021, as described below. The UK Supply Agreement required the UK Authority to pay non-refundable advance payments to fund certain manufacturing-related expenses over the life of the project, and as at December 31, 2021 Valneva had received an aggregate of GBP359.2 million (€408.3 million) under the UK Supply Agreement.

Under the UK Supply Agreement, Valneva was obligated to use commercially reasonable efforts to develop the vaccine candidate, to secure marketing authorization (and to proceed with the application for minimum viable marketing authorization) in the UK, to conduct assigned activities in accordance with the facility and manufacturing plans and to perform other activities, including working with third parties to maintain sufficient manufacturing capacity. Pursuant to the terms of the UK Supply Agreement, the UK Authority placed an initial order for 60 million doses to be delivered in 2021 and was granted an option for a further 40 million doses to be delivered in 2022 and a further 90 million doses, in aggregate, from 2023 to 2025. In January 2021, the UK Authority exercised its option to order 40 million doses for delivery in 2022. With respect to sales to non-UK customers of product manufactured using any facilities used under the UK Supply Agreement, Valneva is obligated to pay the UK Authority a low single-digit royalty on such net sales, subject to a maximum royalty payment.

In September 2021, Valneva received notice of the UK Authority's decision to terminate the UK Supply Agreement. Valneva had not received any indication from the UK Authority, prior to this time, of the UK Authority's intention to serve the notice. In the termination notice, the UK Authority purported to terminate the contract on one of two different bases detailed thereafter, each with different potential or actual consequences.

First, the UK Authority purported to terminate the UK Supply Agreement on the common law (non-contractual) ground that Valneva would allegedly, at some time in the future, breach its obligations regarding the delivery schedule under the UK Supply Agreement. Valneva strongly disputes the UK Authority's purported termination based on an alleged anticipated breach of the UK Supply Agreement and did not consider such termination to be valid. However, if the UK Authority were to successfully bring proceedings for damages against Valneva in respect of the alleged anticipatory breach, it could be argued that the applicable contractual cap on the liability under the UK Supply Agreement could be as high as an amount equivalent to the sums paid by the UK Authority prior to termination. However, Management believed that it was very unlikely that any such claim by the UK Authority would be successful. In any event, the UK Authority did not notify Valneva of any specific claim for damages in connection with the purported termination for alleged anticipatory breach nor did it indicate the amount of any possible claim as of the date these financial statements are authorized for issue. Second, the UK Authority purported to terminate the UK Supply Agreement on 30 days' notice based on its discretionary right under the UK Supply Agreement to terminate for convenience. Valneva acknowledged the UK Authority's termination of the UK Supply Agreement on the basis of this discretionary right, and, as such, the termination became effective in October 2021. The UK Supply Agreement provided that, in the case of termination for convenience by the UK Authority, Valneva shall not be obliged to refund or repay any amount paid by the UK Authority. The above-mentioned royalty on sales and other certain obligations survived termination of the UK Supply Agreement.. The other obligations are related to investments in manufacturing, such as the Alemida manufacturing facility, which were acquired with funds advanced by the UK, Valneva may have certain obligation to the UK Authority, such as a partial return of funding received, in respect of those assets if they are sold, disposed or repurposed.

The impact of the termination of the UK Supply Agreement was assessed. Payments received, where the likelihood of repayment is remote, totaled €253.3 million and were recognized as revenue in 2021. For amounts with uncertainties and a repayment likelihood, which is more than remote, a refund liability of €166.9 million was recognized for the royalty on sales and other certain obligations which survive the termination of the UK Supply Agreement. Moreover, provisions for the present obligation under the onerous purchase agreements and write-downs for materials of COVID-19 vaccine were recognized. For more detailed information see Notes 5.30.2 and 5.18.

Valneva will update this estimate of the refund liability in accordance with IFRS 15.55 in 2022 when these uncertainties are resolved and would recognize revenue in the future, to the extent that it becomes highly probable that no future significant reversal in the amount of cumulative revenue recognized will occur.

5.5.3 Disaggregated revenue information

Revenues as presented in the Consolidated Income Statement and in the Segment Reporting (see Note 5.4) include both revenues from contracts with customers and other revenues (mainly subleases), which are out of scope from IFRS 15:

Year ended December 31, 2019 € in thousand	Commercialized products	COVID	Vaccine candidates	Technologies and services	Total
Revenues from contracts with customers	129,674	-	(10,516)	5,768	124,926
Other revenues	-	-	-	1,270	1,270
Revenues	**129,674**	**-**	**(10,516)**	**7,038**	**126,196**

Year ended December 31, 2020 € in thousand	Commercialized products	COVID	Vaccine candidates	Technologies and services	Total
Revenues from contracts with customers	65,939	-	31,604	11,814	109,357
Other revenues	-	-	-	965	965
Revenues	**65,939**	**-**	**31,604**	**12,779**	**110,321**

Year ended December 31, 2021 € in thousand	Commercialized products	COVID	Vaccine candidates	Technologies and services	Total
Revenues from contracts with customers	63,002	253,314	3,257	27,613	347,186
Other revenues	-	-	-	899	899
Revenues	**63,002**	**253,314**	**3,257**	**28,512**	**348,086**

Valneva's total revenues for 2019 include a negative revenue of €10.7 million related to the June 2019 mutual agreement to terminate its SAA, with its customer GlaxoSmithKline Biologicals SA, or GSK (see Note 5.3.1), which included recognition of negative revenues related to both current and future payment obligation, which consist of:

€ in thousand	2019
Settlement fee (fixed)	(9,000)
Settlement fee (variable; excluding financing component)	(5,987)
Release of SAA related contract liabilities	4,274
Net effect of SAA termination	**(10,714)**

The Group's revenues from contracts with customers are disaggregated as follows:

Type of goods or service

Year ended December 31, 2019 € in thousand	Commer-cialized products	COVID	Vaccine candidates	Techno-logies and services	Total
IXIARO	94,307	-	-	-	94,307
DUKORAL	31,471	-	-	-	31,471
Third party products	3,896	-	-	-	3,896
Others	-	-	(10,516)	5,768	(4,748)
Revenues from contracts with customers	**129,674**	**-**	**(10,516)**	**5,768**	**124,926**

Year ended December 31, 2020 € in thousand	Commer-cialized products	COVID	Vaccine candidates	Techno-logies and services	Total
IXIARO	48,480	-	-	-	48,480
DUKORAL	13,300	-	-	-	13,300
Third party products	4,158	-	-	-	4,158
Lyme VLA15	-	-	31,604	-	31,604
Services related to clinical trial material	-	-	-	7,997	7,997
Others	-	-	-	3,817	3,817
Revenues from contracts with customers	**65,939**	**-**	**31,604**	**11,814**	**109,357**

Year ended December 31, 2021 € in thousand	Commer-cialized products	COVID	Vaccine candidates	Techno-logies and services	Total
IXIARO	45,118	-	-	-	45,118
DUKORAL	2,444	-	-	-	2,444
Third party products	15,440	-	-	-	15,440
COVID VLA2001	-	253,314	-	-	253,314
Chikungunya VLA1553	-	-	3,257	-	3,257
Lyme VLA15	-	-	-	14,265	14,265
Services related to clinical trial material	-	-	-	10,001	10,001
Others	-	-	-	3,346	3,346
Revenues from contracts with customers	**63,002**	**253,314**	**3,257**	**27,613**	**347,186**

In 2020, commercialized products revenues from DUKORAL and IXIARO were adversely impacted by the worldwide reduction in travel due to the COVID-19 pandemic:

- in 2020, IXIARO product sales were €48.5 million - a decrease of €45.8 million compared to €94.3 million in 2019
- in 2020, DUKORAL product sales were €13.3 million - a decrease of €18.2 million compared to €31.5 million in 2019.

- In 2020 commercialized products revenues from third party products were €4.2 million - an increase of €0.3 million compared to €3.9 million in 2019.

In 2021, commercialized products revenues from DUKORAL and IXIARO continued to be adversely impacted by the worldwide reduction in travel due to the COVID-19 pandemic:

- in 2021, IXIARO product sales were €45.1 million - a decrease of €3.4 million compared to €48.5 million in 2020;
- in 2021, DUKORAL product sales were €2.4 million - a decrease of €10.9 million compared to €13.3 million in 2020;
- in 2021 commercialized products revenues from third party products were €15.4 million, - an increase of €11.3 million compared to €4.2 million in 2020, primarily due to the marketing and distribution partnership with Bavarian Nordics where first sales of Rabipur and Encepur started in 2021. In addition, the influenza vaccine product sales increased as well. In 2021, revenues within the COVID segment totaled €253.3 million resulting from the termination of the UK Supply Agreement as described above.

The revenues within the vaccine candidates segment in 2020 related to the Lyme vaccine candidate and amounted to €31.6 million, whereas in 2021 the revenues amounted to €3.3 million related to the newly signed chikungunya vaccine collaboration with Instituto Butantan. As the Lyme vaccine candidate was outlicensed by the end of 2020, revenue from this vaccine candidate is included in the Technologies and Services segment from 2021 onward.

In 2021 revenues from technologies and services amounted to €27.6 million, compared to €11.8 million in 2020 and €5.8 million in 2019. In 2021 this revenue included €14.3 million from the collaboration with Pfizer related to the Lyme vaccine candidate.

Geographical markets

Year ended December 31, 2019 € in thousand	Commer-cialized products	COVID	Vaccine candidates	Techno-logies and services	Total
United States	63,700	-	162	130	63,992
Canada	24,396	-	-	-	24,396
Austria	2,668	-	-	4,136	6,803
United Kingdom	8,596	-	-	15	8,610
Nordics	11,027	-	-	5	11,032
Germany	10,345	-	-	150	10,495
Other Europe	4,961	-	(10,678)	440	(5,277)
Other markets	3,980	-	-	893	4,873
Revenues from contracts with customers	**129,674**	**-**	**(10,516)**	**5,768**	**124,926**

Year ended December 31, 2020 € in thousand	Commer-cialized products	COVID	Vaccine candidates	Techno-logies and services	Total
United States	36,414	-	31,604	341	68,359
Canada	8,965	-	-	-	8,965
Austria	3,333	-	-	6,928	10,261
United Kingdom	1,848	-	-	1,038	2,886
Nordics	2,866	-	-	5	2,871
Germany	7,060	-	-	200	7,260
Other Europe	2,068	-	-	2,373	4,441
Other markets	3,384	-	-	930	4,314
Revenues from contracts with customers	**65,939**	**-**	**31,604**	**11,814**	**109,357**

Year ended December 31, 2021 € in thousand	Commer-cialized products	COVID	Vaccine candidates	Techno-logies and services	Total
United States	40,339	-	-	14,452	54,791
Canada	4,226	-	-	-	4,226
Austria	9,341	-	-	8,376	17,718
United Kingdom	2,721	253,314	-	40	256,075
Nordics	2,440	-	-	-	2,440
Germany	726	-	-	240	966
Other Europe	3,075	-	-	3,210	6,286
Other markets	134	-	3,257	1,294	4,684
Revenues from contracts with customers	**63,002**	**253,314**	**3,257**	**27,613**	**347,186**

Sales channels

Commercialized products are sold via the following sales channels:

€ in thousand	Year ended December 31,		
	2021	2020	2019
Direct product sales	60,325	54,160	110,386
Indirect product sales (Sales through distributors)	2,678	11,778	19,125
Total product sales	**63,002**	**65,939**	**129,511**

5.5.4 Assets and liabilities related to contracts with customers

See Note 5.19 for details on trade receivables, Note 5.20 for details on costs to obtain a contract, Note 5.28 for details of contract liabilities and Note 5.29 for details of refund liabilities.

5.6 Expenses by nature

The consolidated income statement line items cost of goods and services, research and development expenses, marketing and distribution expenses and general and administrative expenses include the following items by nature of cost:

€ in thousand	Notes	Year ended December 31,		
		2021	2020	2019
Consulting and other purchased services		169,158	65,212	29,840
Cost of services and change in inventory		105,648	10,778	5,320
Employee benefit expense other than share-based compensation	5.7	85,334	58,264	46,219
Share-based compensation expense	5.7	14,678	6,328	2,552
Raw materials and consumables used		14,676	12,434	9,844
Depreciation and amortization and impairment	5.12/5.13/ 5.14	14,281	9,939	8,607
Building and energy costs		10,960	8,140	6,995
Supply, office and IT costs		7,409	3,333	3,281
License fees and royalties		4,865	4,384	7,553
Advertising costs		2,176	2,496	6,801
Warehousing and distribution costs		1,419	1,898	3,013
Travel and transportation costs		538	529	1,921
Other expenses		1,309	822	1,399
Operating expenses		**432,452**	**184,558**	**133,345**

The increase in operating expenses of €244.0 million in 2021, compared to 2020, primarily resulted from the increased research and development expenses due to the Company's advanced clinical trial programs, the inventory write-down - due to the COVID-19 pandemic for commercialized product as well as write-down on COVID-19 vaccine related inventory related to the termination of the UK Supply Agreement (see Note 5.5.2).

Fees charged by the Group Auditors:

€ in thousand	Year ended December 31,											
	PricewaterhouseCoopers						Deloitte & Associés					
	2021	%	2020	%	2019	%	2021	%	2020	%	2019	%
Statutory audit of separate and consolidated financial statements	**630**	**51%**	**316**	**41%**	**222**	**93%**	**621**	**52%**	**346**	**45%**	**231**	**100%**
provided by the statutory auditor	*445*		*226*	-	*103*	-	*447*		*231*	-	*100*	-
provided by the statutory auditor's network	*185*		*90*	-	*119*	-	*174*		*115*	-	*131*	-
Services other than certification of accounts	**608**	**49%**	**461**	**59%**	**16**	**7%**	**578**	**48%**	**416**	**55%**	**-**	**-**
Other services	608	49%	461	59%	16	7%	578	48%	416	55%	-	-
provided by the statutory auditor	*578*		*416*	-	-	-	-		*416*	-	-	-
provided by the statutory auditor's network	*30*		*45*	-	*16*	-	-		-	-	-	-
TOTAL	**1,238**	**100 %**	**777**	**100%**	**238**	**100%**	**1,199**	**100%**	**762**	**100%**	**231**	**100%**

In 2021, other services included mainly the audit fees for the audit of the financial statements under PCAOB standards for years ended December 31, 2020 and 2019, compliance fees, as well as fees related to the audit of the Austrian research and development tax credit.

5.7 Employee benefit expense

Employee benefit expenses include the following:

€ in thousand	Year ended December 31,		
	2021	2020	2019
Salaries	47,717	38,515	34,128
Social security contributions	35,923	18,555	10,621
Share-based compensation expense	14,678	6,328	2,552
Training and education	603	351	672
Other employee benefits	1,091	842	798
Total Employee benefit expense	**100,012**	**64,592**	**48,771**

The social security contributions included a provision of €26.5 million (2020: €7.4 million, 2019: nil) of employer contribution charges on share-based payment programs which are due at exercise of the programs.

During 2021, the Group had an average of 722 employees (2020: 532 employees, 2019: 508 employees).

5.8 Other income/(expenses), net

5.8.1 Grants

Grants from governmental agencies and non-governmental organizations are recognized where there is reasonable assurance that the grant will be received, and the Group will comply with all conditions.

Grant monies received as reimbursement of approved research and development expenses are recognized as other income when the respective expenses have been incurred and there is reasonable assurance that funds will be received. Advance payments received under such grants are deferred and recognized when these conditions have been met. Advanced payments received which need to be repaid are recognized as borrowings (see Note 5.24.1).

Government grant monies received to support the purchase of property, plant and equipment are included in non-current liabilities as deferred government grants and are credited to the income statement on a straight-line basis over the expected lives of the related assets.

In 2019 the Group signed a funding agreement with CEPI. Valneva will receive up to $23.4 million for vaccine manufacturing and late-stage clinical development of a single-dose, live attenuated vaccine (VLA1553) against chikungunya. In line with CEPI's commitment to equitable access, the funding will underwrite a partnership effort to accelerate regulatory approval of Valneva's single-dose chikungunya vaccine for use in regions where outbreaks occur and support WHO prequalification to facilitate broader access in lower- and middle-income countries. Valneva has to pay back part of the consideration, upon achievement of certain milestones. The refundable consideration is accounted for as loan and measured in accordance with IFRS 9 (see Note 5.24.1). The difference between the proceeds from CEPI and the carrying amount of the loan is treated under IAS 20 and presented as "Borrowings". The amount which Instituto Butantan benefits from the CEPI grant, is recognized as revenue (see Note 5.1). In 2021, due to a change in estimate of the likelihood of repayment milestones, minus €0.9 million of grant income related to CEPI (2020: €5.8 million).

5.8.2 Research and development tax credits

Research and development tax credits granted by tax authorities are accounted for as grants under IAS 20. As a consequence, the portion of the research tax credit covering operating expenses is recognized in the income statement under "Grants" in "Other income and expenses, net" and the portion covering capitalized development expenditures under "Intangible assets" is recorded as deduction from the assets relating to fixed assets.

Other income and expenses, net include the following:

€ in thousand	Year ended December 31,		
	2021	2020	2019
Research and development tax credit	21,949	9,937	6,314
Grant income	1,684	7,680	1,886
Profit/(loss) on disposal of fixed assets and intangible assets, net	(42)	(10)	(92)
Profit/(loss) from revaluation of lease agreements	-	1,584	-
Taxes, duties, fees, charges, other than income tax	(212)	(168)	(146)
Miscellaneous income/(expenses), net	(403)	95	(1,623)
Other income and expenses, net	**22,976**	**19,117**	**6,338**

5.9 Finance income/(expenses), net

Interest income is recognized on a time-proportion basis using the effective interest method.

€ in thousand	Year ended December 31,		
	2021	2020	2019
Finance income			
Interest income from other parties	249	119	199
Fair value gains on derivative financial instruments	-	397	-
Foreign exchange gains, net	8,130	173	1,250
Total finance income	**8,379**	**689**	**1,449**
Finance expenses			
Interest expense on loans	(7,273)	(6,162)	(1,588)
Interest expense on refund liabilities	(8,478)	(3,640)	(89)
Interest expenses on lease liabilities	(903)	(907)	(926)
Other interest expense	(309)	(30)	(30)
Fair value losses on derivative financial instruments	-	-	(449)
Total finance expenses	**(16,964)**	**(10,738)**	**(3,082)**
Finance income/(expenses), net	**(8,584)**	**(10,049)**	**(1,633)**

In 2021, the net finance result amounted to minus €8.6 million compared to minus €10.0 million in 2020 and compared to minus €1.6 million in 2019. In 2021 the decrease in net finance expense was mainly due to positive net foreign exchange gains which were partially offset by increased interest expenses on non-current refund liabilities. In 2020 the increase in net finance expenses was mainly due to higher borrowings and the increase in non-current refund liabilities.

5.10 Income tax income/(expense)

The tax expense for the period comprises current and deferred tax. Tax is recognized in the income statement, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively. The current Income tax income/(expense) is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Group's subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions, where appropriate, based on amounts expected to be paid to the tax authorities.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred income tax is determined using tax rates (and laws) that have been enacted or

substantially enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realized, or the deferred income tax liability is settled.

Deferred income tax assets are recognized to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not be reversed within the foreseeable future.

5.10.1 Current income tax

Income tax income/(expense) is comprised of current and deferred tax.

€ in thousand	Year ended December 31,		
	2021	2020	2019
Current tax			
Current income tax charge	(32)	(69)	(2,849)
Adjustments in respect of current income tax of previous year	(19)	109	(258)
Deferred tax			
Relating to origination and reversal of temporary differences	(3,395)	869	2,233
Income tax income/(expense)	**(3,446)**	**909**	**(874)**

The individual entities' reconciliations – prepared on the basis of the tax rates applicable in each country while taking consolidation procedures into account – have been summarized in the reconciliation below. The estimated tax charge is reconciled to the effective tax charge disclosed.

The tax on the Group's loss before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated companies as follows:

€ in thousand	Year ended December 31,		
	2021	2020	2019
Loss before tax	(69,979)	(65,302)	(870)
Tax calculated at domestic tax rates applicable to profits in the respective countries	18,824	16,675	1,431
Income not subject to tax (mainly R&D tax credit)	10,739	2,612	1,727
Expenses not deductible for tax purposes	(2,509)	(1,789)	(169)
Deferred tax asset not recognized	(26,902)	(15,852)	(7,405)
Utilization of previously unrecognized tax losses	-	-	5,480
Income tax credit	(459)	109	105
Effect of change in applicable tax rate	(3,291)	(771)	(1,708)
Exchange differences	296	(105)	62
Income tax of prior years	(64)	170	(256)
Minimum income tax	(80)	(141)	(142)
Income tax income/(expense)	**(3,446)**	**909**	**(874)**
Effective income tax rate	-	-	-

Although the Group operates at a loss overall, there are profitable jurisdictions.

5.10.2 Deferred tax

As at December 31, 2021, the deferred tax assets of €153.8 million (December 31, 2020: €126.3 million) were not recognized as there was not sufficient evidence that adequate taxable profit will be available against which the unused tax losses can be utilized in the foreseeable future. Deferred tax assets were only recognized for entities where sufficient evidence has been provided that adequate taxable profit will be available against which the unused tax losses can be utilized in the foreseeable future.

As at December 31, 2021, the Group had tax losses carried forward of €628.3 million (December 31, 2020: €529.5 million), of which €234.9 million were related to Valneva SE (December 31, 2020: €192.0 million), €380.0 million were related to Valneva Austria GmbH (December 31, 2020: €321.1 million), €0 million were related to Valneva USA, Inc. (December 31, 2020: €0.4 million),

€0.8 million were related to Valneva Scotland, Ltd. (December 31, 2020: €3.1 million) and €12.6 million were related to Valneva Sweden AB (December 31, 2020: €12.9 million).

Tax losses carried forward in France, Austria, United Kingdom and Sweden have no expiry date, whereas the tax loss from US entities will begin to expire in the year 2033 if unused.

The gross movement on the deferred income tax account was as follows:

€ in thousand	**2021**	**2020**	**2019**
Beginning of year	5,158	4,988	2,689
Exchange differences	(529)	(699)	66
Income statement charge / (credit)	(3,395)	869	2,233
End of year	**2,292**	**5,158**	**4,988**

The deferred tax assets and liabilities are allocable to the various balance sheet items as follows:

€ in thousand	**As at December 31,**	
	2021	**2020**
Deferred tax asset from		
Tax losses carried forward	156,470	131,633
Fixed assets	2,007	2,033
Inventory	1,837	4,108
Borrowings and accrued interest	1,284	1,161
Provision	1,611	1,564
Other items	2,891	2,019
Non-recognition of deferred tax assets	(153,836)	(126,283)
Total deferred tax assets	**12,264**	**16,235**
Deferred tax liability from		
Fixed assets	(2,359)	(1,187)
Intangible assets	(6,855)	(7,480)
Other items	(758)	(2,410)
Total deferred tax liability	**(9,972)**	**(11,077)**
Deferred tax, net	**2,292**	**5,158**

The corporate income tax rate in the United Kingdom was 19% and will be increased to 25% in 2023.

The corporate income tax rate in France will be gradually reduced over the next years to 25%. The rate was 26.5% in 2021 and will be reduced to 25% from 2022 onward on the full amount of taxable profits.

The deferred tax assets and liabilities presented above as at December 31, 2021 and December 31, 2020 have been adjusted for these changes in tax rates.

5.11 Earnings (Losses) per share

(a) Basic

Basic earnings (losses) per share are calculated by dividing the profit attributable to equity holders of the Company by the weighted average number of outstanding shares during the year, excluding shares purchased by the Company and held as treasury shares (see Notes 5.22 and 5.23).

	Year ended December 31,		
	2021	**2020**	**2019**
Net profit (loss) from continuing operations attributable to equity holders of the Company (€ in thousand)	(73,425)	(64,393)	(1,744)
Weighted average number of outstanding shares	97,619,320	90,757,173	91,744,268
Basic earnings (losses) from continuing operations per share (€ per share)	**(0.75)**	**(0.71)**	**(0.02)**

(b) Diluted

Diluted earnings per share are calculated by adjusting the weighted average number of ordinary outstanding shares to assume conversion of all dilutive potential ordinary shares. The Company has share options as dilutive potential ordinary shares. For the share options, a calculation is done to determine the number of shares that could have been acquired at fair value (determined as the average annual market share price of the Company's shares) based on the monetary value of the subscription rights attached to outstanding share options. The number of shares calculated as above is compared with the number of shares that would have been issued assuming the exercise of the share options.

	Year ended December 31,		
	2021	**2020**	**2019**
Profit used to determine diluted earnings per share (€ in thousand)	(73,425)	(64,393)	(1,744)
Weighted average number of outstanding shares for diluted earnings (losses) per share[3]	97,619,320	90,757,173	91,744,268
Diluted earnings/(losses) from continuing operations per share (€ per share)	**(0.75)**	**(0.71)**	**(0.02)**

5.12 Intangible assets

Computer software

Acquired computer software licenses are capitalized on the basis of the costs incurred to acquire and implement the specific software. These costs are amortized on a straight-line basis over their estimated useful lives, generally three to six years.

Costs associated with developing or maintaining computer software programs are recognized as expenses when they were incurred.

The costs of computer software subject to a software as a service agreement (SaaS) are recognized as expenses when they are incurred.

Acquired research and development technology and projects

Acquired research and development technology projects are capitalized. Amortization of the intangible asset over its useful life starts when the product has been fully developed and is ready for use. These

[3] Potentially dilutive securities (2021: 5,846,267 share options; 2020: 5,481,763 share options) have been excluded from the computation of diluted weighted-average shares outstanding, because such securities had an antidilutive impact due to the losses reported.

costs are amortized on a straight-line basis over their useful lives. This useful life is determined on a case-by-case basis according to the nature and characteristics of the items included under this heading. The main current acquired research and development technology project is amortized over periods of 24 years, which is based on the patent life and technological replacement of a newer vaccine generation.

Development costs

Research expenses are recognized as expenses when incurred. Development expenses incurred on clinical projects (related to the design and testing of new or significantly improved products) are recognized as intangible assets when the following criteria have been fulfilled:

- it is technically feasible to complete the intangible asset so that it will be available for use or sale;
- management intends to complete the intangible asset and to utilize or sell it;
- there is an ability to utilize or sell the intangible asset;
- it can be demonstrated how the intangible asset will generate probable future economic benefits;
- adequate technical, financial, and/or other resources to complete the development and to utilize or sell the intangible asset are available; and
- the expenditure attributable to the intangible asset during its development can be reliably measured.

Other development expenditures that do not meet these criteria are recognized as expenses when they are incurred. Development costs previously recognized as an expense are not recognized as an asset in a subsequent period. Capitalized development costs are recorded as intangible assets and amortized from the point at which the asset is ready for use on a straight-line basis over its useful life, generally 10-15 years. In 2021 and 2020, no development costs have been capitalized.

Amortization

Amortization of intangible assets is calculated using the straight-line method to allocate their cost amounts to their residual values over their estimated useful lives, as follows:

- Software 3 – 6 years
- Acquired R&D technology and projects 1 - 15 years
- Development costs 1 - 15 years

The useful life is determined on a case-by-case basis according to the nature and characteristics of the items included under this heading. The main current acquired research and development technology project is amortized over periods of 24 years, which is based on estimated period where Valneva benefits from the patent.

€ in thousand	Software	Acquired R&D technology and projects	Development costs	Intangible assets in the course of construction	Total
Year ended December 31, 2020					
Opening net book value	1,629	38,183	1,953	48	41,813
Additions	48	401	-	86	535
Amortization charge	(569)	(2,723)	(194)	-	(3,486)
Disposals	-	(3,329)	(5)	-	(3,333)
Exchange rate differences	3	(108)	(16)	3	(119)
Closing net book value	**1,112**	**32,423**	**1,737**	**137**	**35,409**
As at December 31, 2020					
Cost	5,589	80,183	9,851	137	95,759
Accumulated amortization and impairment	(4,477)	(47,759)	(8,113)	-	(60,350)
Closing net book value	**1,112**	**32,423**	**1,737**	**137**	**35,409**

€ in thousand	Software	Acquired R&D technology and projects	Development costs	Intangible assets in the course of construction	Total
Year ended December 31, 2021					
Opening net book value	1,112	32,423	1,737	137	35,409
Additions	802	140	-	-	942
Amortization charge	(719)	(2,919)	(178)	-	(3,816)
Disposals	-	-	-	-	-
Exchange rate differences	22	123	21	(2)	165
Closing net book value	**1,217**	**29,768**	**1,581**	**134**	**32,700**
As at December 31, 2021					
Cost	6,254	80,724	9,895	134	97,007
Accumulated amortization and impairment	(5,037)	(50,956)	(8,314)	-	(64,307)
Closing net book value	**1,217**	**29,768**	**1,581**	**134**	**32,700**

The disposal of acquired R&D technology and projects in 2020 included €3.3 million from de-recognition of the Lyme disease vaccine candidate (VLA15) (see Note 5.1). In April 2020, a Research Collaboration and License agreement for Lyme VLA15 was signed between Pfizer and Valneva. Under the agreement, Valneva continues performing R&D services for the VLA15-221 study and grants Pfizer an exclusive license enabling Pfizer to develop the vaccine candidate to licensure. Upon completion of the transfer of the license in December 2020, the intangible asset with a value amounting to €3.3 million was de-recognized and expensed as cost of services sold (COSS) on the Income Statement.

As at December 31, 2021 and December 31, 2020, there were no acquired research and development technology projects assets with a definite useful life which are not yet amortized.

Significant intangible assets (included in acquired R&D technology and projects as well as in the development costs) with definite useful life are comprised primarily of the already commercialized vaccine against Japanese encephalitis (IXIARO) with acquisition costs amounting to €79.0 million and a net book value amounting to €30.6 million (December 31, 2020: €33.2 million).

For impairment test, see Note 5.16.

5.13 Leases (right of use assets and lease liabilities)

The Group leases various premises, equipment, and vehicles. Rental contracts are typically made for fixed periods ranging from a few months to five years. The rental contracts for the premises in Sweden

(10 and 20 years) and Austria (15 years) include a significantly longer fixed period. Generally, the rental contracts do not include an option for early termination or prolongation of the rental period. The rental contracts for the premises in Solna, Sweden include options to terminate the agreements earlier. The notice period is between one and six years. At the commencement date, it was not reasonably certain that these early termination options were to be exercised, so they were not included in the valuation of the lease liabilities and right of use assets. The Group changed the manner in which it accounts for leases effective January 1, 2019, due to the adoption of IFRS 16 – Leases.

Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, which is generally the case for leases in the Group, the Group uses its incremental borrowing rate. The incremental borrowing rate depends on the term, currency and start date of the lease and is determined based on a series of inputs including: the risk-free rate based on government bond rates; a country-specific risk adjustment; a credit risk adjustment based on bond yields; and an entity-specific adjustment when the risk profile of the entity that enters into the lease is different than that of the Group and the lease does not benefit from a guarantee from the Group. Valneva uses incremental borrowing rates between 0.013% and 3.186%, depending on the currency and the remaining term until maturity. For the rental contracts for the premises in Sweden interest rates of 2.493% and 3.401% were determined.

The Group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset. This includes also the major contracts for the premises in Austria and Sweden, contain variable payments based on inflation rates or on published interest rates.

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

RoU assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset’s useful life.

Payments associated with short-term leases of equipment and vehicles and all leases of low-value assets (below €5,000) are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less and without an option for the lessee to prolong the contract to more than 12 months or it is not reasonably certain to exercise such an option. Low-value assets comprise mainly IT equipment and small items of office furniture.

The Group does not have residual value guarantees in the rental contracts.

5.13.1 Development of right-of-use assets and lease liabilities

€ in thousand	Right-of-use assets				Lease liabilities
	Land, buildings and leasehold improvements	Manufacturing and laboratory equipment	Furniture, fittings and other	Total assets	Total Lease liabilities
Year ended December 31, 2020					
Opening net book value	49,039	58	236	49,334	58,901
Additions	117	-	151	267	267
Amortization	(2,309)	(22)	(141)	(2,471)	-
Revaluation due to variable payments	(4,507)	-	2	(4,505)	(6,096)
Termination of contracts	-	-	(33)	(33)	(26)
Lease payments	-	-	-	-	(2,910)
Interest expenses	-	-	-	-	800
Exchange rate differences	782	-	1	782	1,152
Closing net book value	**43,121**	**37**	**216**	**43,374**	**52,088**

€ in thousand	Right-of-use assets				Lease liabilities
	Land, buildings and leasehold improvements	Manufacturing and laboratory equipment	Furniture, fittings and other	Total assets	Total Lease liabilities
Year ended December 31, 2021					
Opening net book value	43,121	37	216	43,374	52,088
Additions	7,642	-	231	7,874	7,873
Amortization	(2,628)	(22)	(135)	(2,784)	-
Revaluation	199	-	3	202	202
Termination of contracts	-	-	(41)	(41)	(44)
Lease payments	-	-	-	-	(3,601)
Interest expenses	-	-	-	-	802
Exchange rate differences	(341)	-	3	(339)	(496)
Closing net book value	**47,993**	**15**	**278**	**48,285**	**56,822**

Revaluation of right of use (RoU) assets for land, buildings and leasehold improvements and lease liabilities in 2020 mainly refers to the partial early termination of the rental contract in Sweden.

For impairment test, see Note 5.16.

As at December 31, 2021, RoU assets increased to €48.3 million from €43.4 million as at December 31, 2020, mainly due to a new lease contract for land and building in Sweden (addition of €6.4 million, partly offset by amortization expenses of €0.5 million), as well as a new lease contract for land and building in Scotland (December 31, 2021: €1.2 million). Major lease agreements were for the premises in Austria (December 31, 2021: €24.0 million, December 31, 2020: €24.8 million) and Sweden (December 31, 2021: €22.1 million, December 31, 2020: €17.6 million).

For more details on lease liabilities, see Note 5.27.

5.13.2 Other amounts recognized in the consolidated income statement

€ in thousand	Year ended December 31,		
	2021	2020	2019
Expense relating to short-term leases (included in other income and expenses)	340	96	146
Expense relating to leases of low-value assets that are not shown above as short-term leases (included in other income and expenses)	21	-	3
Income relating to revaluation of lease liabilities (included in other income and expenses)	42	1,591	-
Expenses relating to termination of lease contracts (included in other income and expenses)	(38)	(7)	-

Income relating to revaluation of lease liabilities in 2020 referred to the partial early termination of the rental contract in Sweden.

5.14 Property, plant and equipment

Property, plant and equipment mainly comprise a manufacturing facility and leasehold improvements in rented office and laboratory space. All Property, plant and equipment are stated at historical cost less depreciation and less impairment losses when necessary. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount or are recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and that the cost of the item can be measured reliably. All other repairs and maintenance are charged to the income statement during the financial period in which they incur.

Property, plant and equipment include machinery, for which validation is required to bring the asset to its working condition. The costs of such validation activities are capitalized together with the cost of the asset. Validation costs beyond the normal validation costs, which are usually required to bring an asset to its working condition, are expensed immediately. The usual validation costs are capitalized on the asset and depreciated over the remaining life of the asset or the shorter period until the next validation is usually required.

Depreciation of assets is calculated using the straight-line method to allocate their cost amounts to their residual values over their estimated useful lives, as follows:

- Buildings, leasehold improvements 5 - 40 years
- Machinery, laboratory equipment 1 - 15 years
- Furniture, fittings and office equipment 4 - 10 years
- Hardware 3 - 5 years

Leasehold improvements are depreciated over the shorter of their useful life or the lease term, unless the entity expects to use the assets beyond the lease term.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

An asset's carrying amount is immediately written-down to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the income statement "other income and expenses, net" (see Note 5.8).

€ in thousand	Land, buildings and leasehold improvements	Manufacturing and laboratory equipment	Computer hardware	Furniture, fittings and other	Assets in the course of construction	Total
Year ended December 31, 2020						
Opening net book value	9,248	5,944	707	313	3,791	20,003
Additions	2,578	8,553	241	30	7,535	18,936
Depreciation charge	(1,087)	(2,471)	(211)	(73)	-	(3,842)
Impairment charge	-	-	-	-	(140)	(140)
Disposals	-	(2)	(1)	(3)	-	(6)
Exchange rate differences	(87)	16	(10)	(9)	(82)	(172)
Closing net book value	**10,651**	**12,041**	**726**	**257**	**11,105**	**34,779**
December 31, 2020						
Cost	24,062	28,743	2,573	1,453	11,105	67,935
Accumulated depreciation and impairment	(13,411)	(16,702)	(1,847)	(1,196)	-	(33,156)
Closing net book value	**10,651**	**12,041**	**726**	**257**	**11,105**	**34,779**

€ in thousand	Land, buildings and leasehold improvements	Manufacturing and laboratory equipment	Computer hardware	Furniture, fittings and other	Assets in the course of construction	Total
Year ended December 31, 2021						
Opening net book value	10,651	12,041	726	257	11,105	34,779
Additions	664	14,360	912	16	79,897	95,848
Depreciation charge	(1,160)	(6,129)	(333)	(59)	-	(7,681)
Impairment charge	-	-	-	-	-	-
Disposals	-	(19)	(2)	(21)	(4)	(46)
Exchange rate differences	129	813	32	9	1,662	2,645
Closing net book value	**10,284**	**21,066**	**1,335**	**202**	**92,659**	**125,545**
December 31, 2021						
Cost	25,554	44,127	3,204	1,454	92,659	166,999
Accumulated depreciation and impairment	(15,269)	(23,062)	(1,870)	(1,252)	-	(41,453)
Closing net book value	**10,284**	**21,066**	**1,335**	**202**	**92,659**	**125,545**

Additions in 2020 and 2021 mainly referred to investments in Scotland and Sweden and related to the production of the COVID-19 vaccine VLA2001.

From the total of €14.3 million depreciation and amortization expenses (2020: €9.9 million), €8.9 million (2020: €5.0 million) were charged to cost of goods and services, €4.7 million were charged to research

and development expenses (2020: €4.1 million), €0.4 million were charged to marketing and distribution expenses (2020: €0.5 million) and €0.3 million were charged to general and administrative expenses (2020: €0.3 million). The increase in depreciation and amortization charged to costs of goods and services was caused by investments in Scotland and Sweden in 2020 and 2021.

5.15 Investments in associates

An associate is an entity over which the Company has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment, or a portion thereof, is classified as held for sale, in which case it is accounted for in accordance with IFRS 5. Under the equity method, an investment in an associate is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Company's share of the profit or loss and other comprehensive income of the associate. When the Company's share of losses of an associate exceeds the Company's interest in that associate (which includes any long-term interests that, in substance, form part of the Company's net investment in the associate), the Company discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the associate.

The requirements of IAS 28 are applied to determine whether there is any objective evidence that its net investment in the associate is impaired after the initial recognition of the net investment (a 'loss event'). When and only when, there is a loss event existing and the impact on the estimated future cash flows from the net investment can be reliably estimated, the entire carrying amount of the investment is tested for impairment in accordance with IAS 36 as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

Details of the Group's material associate are as follows:

Name of associate	Place of business	Measurement method	% of ownership interest as at December 31,	
			2021	2020
BliNK Biomedical SAS	FR	Equity method	48.9%	48.9%

In January 2015, the Company and the UK Company BliNK Therapeutics Ltd founded BliNK Biomedical SAS ("BliNK"), a private company specialized in the discovery of innovative monoclonal antibodies. The Company contributed assets and liabilities in conjunction with the VIVA│Screen® technology. From 2018 onward BliNK reduced its research activities and has licensed out its technology.

BliNK is a private company and its shares are not listed on a stock exchange.

While the Company retains a substantial ownership interest in the entity, BliNK is run as an independent business by its own management team. The Company does not have control over BliNK in the regards of IFRS 10, but rather holds a significant influence in BliNK in accordance with IAS 28.3, and therefore the investment in associates is accounted for by using the equity method in accordance with IAS 28.

In 2021, the Company recorded a loss of €0.0 million related to its share of equity in BliNK (2020: loss of €0.3 million). The total equity of BliNK amounted to €4.3 million as at December 31, 2021 (December 31, 2020: €4.4 million), see Note 5.16 impairment testing.

5.15.1 Summarized financial information

The summarized financial information below represents amounts shown in the associate's financial statements prepared in accordance with IFRS (adjusted by the Group for equity accounting purposes).

€ in thousand	As at December 31,	
	2021	2020
BliNK Biomedical SAS		
Non-current assets	2	3
Current assets	4,782	4,759
Non-current liabilities	209	209
Current liabilities	93	38
Revenue	810	836
Loss from continuing operations	(16)	(272)
Total comprehensive income	(16)	(272)

5.15.2 Reconciliation to the carrying amount

€ in thousand	As at December 31,	
	2021	2020
Net assets of associate	4,344	4,355
Proportion of the Company's ownership interest in BliNK Biomedical SAS	48.9%	48.9%
Balance	**2,121**	**2,130**

5.16 Impairment testing

At the end of each reporting period Valneva assesses whether there is any indication that an asset may be impaired. Indicators for the necessity of an impairment test are, among others, actual or expected declines in sales or margins and significant changes in the economic environment with an adverse effect on Valneva's business. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less selling costs and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). The cash-generating units correspond with the specific vaccine products and vaccine candidates. Non-financial assets, other than goodwill, that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

As at December 31, 2021, impairment tests were performed on the IXIARO, the DUKORAL and the COVID cash-generating units (CGUs).

IXIARO annual product sales in 2021 declined moderately due to the COVID-19 crisis and travel restrictions. No triggering event was identified in 2021. However, an impairment test has been performed for the IXIARO CGU as at December 31, 2021 on a voluntary basis.

For the DUKORAL CGU a more significant year-over-year reduction in product sales was experienced and a triggering event was identified during H1 2021. In addition to the impairment test performed in June 2021 another voluntary impairment test was performed in December 2021.

	Year ended December 31,		
€ in thousand	2021	2020	% 2021 vs 2020
Product Sales			
IXIARO	45,118	48,480	(6.9%)
DUKORAL	2,440	13,300	(81.7%)

For the first time an impairment test has been performed for the COVID CGU, where the termination of the UK Supply Agreement represented a triggering event ('loss of a major customer').

As a basis, the long-range business model including product specific financial plans covering a period of five years was used consistently across all CGUs tested. The Group's long range business model includes assumptions on market size / market share, product sales and resulting profitability. The value in use calculations are based on the plans for the next five years and a terminal value applied for the periods beyond 2026. A terminal value has been applied on the IXIARO and DUKORAL CGUs while no terminal value has been applied on the COVID CGU.

Business plan assumptions have been revised to reflect reductions in expected sales and assuming a recovery of IXIARO sales to pre-COVID levels by 2025 to 2026. The calculation used post tax risk-adjusted cash flow projections and a discount rate of 7.49%. The discount rate of 7.49% was based on a negative risk-free rate of 0.20%, 6.68% market risk premium, a negative country risk premium of 0.37%, 1.03% currency risk, a levered beta of 1.12, and a peer group related equity-capital ratio. The net carrying value of IXIARO related assets amounted to €48.2 million as at December 31, 2021 (December 31, 2020: €46.7 million).

During 2021, due to the impact of the COVID-19 pandemic situation affecting future profitability and cash generation of the DUKORAL CGU, the Group tested the related product line for impairment. While there were no material intangible assets held for DUKORAL the carrying amount of property, plant and equipment and RoU assets as well as working capital were tested. For DUKORAL sales recovery to pre-COVID levels is not expected, driven by the expected entry of a competing product in some European markets within the coming years. The calculations used post tax risk-adjusted cash flow projections based on the Group's long-range business plan and a discount rate of 7.23% per annum. The discount rate of 7.23% per annum was based on negative risk-free rate of 0.20%, 6.68% market risk premium, negative country risk premium of 0.36%, 0.74% currency risk, a levered beta of 1.13 and a peer group related equity-capital ratio. The net carrying value of DUKORAL related assets amounted to €13.7 million as at December 31, 2021 (December 31, 2020: €15.1 million).

During 2021, the Group invested significant funds into building up COVID manufacturing capacities across both the Livingston and Solna production sites. In addition to property, plant and equipment, RoU assets as well as intangible assets the Group holds significant working capital (mainly inventories) related to the COVID CGU. Business plan assumptions have been revised after termination of the UK Supply Agreement and after signing of supply agreements with the European Commission and Bahrain and foresee a continuation of COVID-19 vaccine sales during the planning horizon of 5 years. The calculations used post tax risk-adjusted cash flow projections based on the Group's long-range business plan and a discount rate of 7.77% per annum. The discount rate of 7.77% per annum was based on negative risk-free rate of 0.20%, 6.68% market risk premium, country risk premium of 0.49%, 0.46% currency risk, a levered beta of 1.12 and a peer group related equity-capital ratio. The net carrying value of COVID related assets amounted to €214.5 million as at December 31, 2021.

The impairment tests resulted in no impairment charges.

No triggering event was identified for the CGUs.

Sensitivity to changes in assumptions

The net present value calculations are most sensitive to the following assumptions:

+ discount rate
+ reduction of expected revenues

The net present value calculation uses a discount rate of 7.23% for DUKORAL, 7.49% for IXIARO (2020: 7.30% for DUKORAL, 7.55% for IXIARO) and 7.77% for COVID. The recoverable amounts of these CGUs would equal its carrying amount if the key assumptions were to change as follows: increase in the discount rate from 7.49% to 53.11% would trigger an impairment loss for IXIARO (2020: 4,689 basis points from 7.55% to 54.44%), increase from 7.23% to 13.10% would trigger an impairment loss for

Dukoral (2020: increase of 328 basis points from 7.30% to 10.58%) and an increase in the discount rate from 7.77% to 75.34% would trigger an impairment loss for COVID.

Sensitivity analysis	**2021**			**2020**	
	IXIARO	**DUKORAL**	**COVID**	**IXARO**	**DUKORAL**
WACC	7.49%	7.23%	7.77%	7.55%	7.30%
Break-even WACC	53.11%	13.10%	75.34%	54.44%	10.58%
Impairment if WACC increases by 1%	NO	NO	NO	NO	NO
Impairment if sales reduce by 10%	NO	NO	NO	NO	NO

The net present value calculations are based upon assumptions regarding market size, expected sales volumes resulting in sales value expectations, expected royalty income or expected milestone payments. A reduction in IXIARO and DUKORAL revenues of 10% (which reflects the sensitivity to slower than currently expected recovery of the travel vaccine market assumption taken) would result in no impairment loss in 2021 and 2020. A potential reduction in COVID revenues of 10% (as a result of e.g. later than expected licensure or manufacturing capacity constraints) would result in no impairment loss in 2021.

As at December 31, 2021 an impairment test was performed on the investment held in BliNK Biomedical SAS. A triggering event was identified given the net income of BliNK showed a loss giving situation for the year ended December 31, 2021. As a basis the BliNK business plan for the next 5 years has been used. No terminal value has been applied for the period beyond the planning horizon of 5 years. The calculation used post tax risk-adjusted cash flow projections and a discount rate of 6.84%. The discount rate of 6.84% was based on a negative risk-free rate of 0.20%, 6.49% market risk premium, a levered beta of 1.12, and a peer group related equity-capital ratio. The impairment test resulted in no impairment charges.

As at December 31, 2020, impairment charges amounted to €0.1 million and related to assets in the course of construction (see Note 5.14).

As at December 31, 2019, impairment charges amounting to €0.1 million were recognized following the decision of Emergent BioSolutions Inc. to not make use of their opt-in right post successful finalization of a Phase 1 clinical study. The impairment charge of €0.1 million was recognized for acquired R&D technology and projects.

5.17 Financial instruments

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value at each balance sheet date.

The valuation techniques utilized for measuring the fair values of assets and liabilities are based on observable and unobservable inputs. Observable inputs reflect readily obtainable data from independent sources, while unobservable inputs reflect management's market assumptions.

The fair value of instruments that are quoted in active markets are determined using the quoted prices where they represent those at which regularly and recently occurring transactions take place. Furthermore, the Group uses valuation techniques to establish the fair value of instruments where prices, quoted in active markets, are not available.

5.17.1 Financial instruments by category

As at December 31, 2020 € in thousand	Assets at fair value through profit and loss	Assets at amortized cost	Total
Assets as per balance sheet			
Trade receivables	-	19,232	19,232
Other assets[4]	-	11,918	11,918
Cash and cash equivalents	-	204,435	204,435
Assets	**-**	**235,584**	**235,584**

	Liabilities at fair value through profit and loss	Liabilities at amortized cost	Total
Liabilities as per balance sheet			
Borrowings	-	53,363	53,363
Trade payables and accruals	-	36,212	36,212
Tax and employee-related liabilities[5]	-	8,300	8,300
Lease liabilities	-	52,088	52,088
Refund liabilities	-	111,426	111,426
Other liabilities[6]	-	51	51
Liabilities	**-**	**261,439**	**261,439**

[4] Prepayments and tax receivables and other non-financial assets are excluded from the other assets balance, as this analysis is required only for financial instruments.

[5] Social security and other tax payables are excluded from the tax and employee-related liabilities balance, as this analysis is required only for financial instruments.

[6] Deferred income is excluded from the other liabilities balance, as this analysis is required only for financial instruments.

As at December 31, 2021 € in thousand	Assets at fair value through profit and loss	Assets at amortized cost	Total
Assets as per balance sheet			
Trade receivables	-	44,013	44,013
Other assets[4]	-	11,522	11,522
Cash and cash equivalents	-	346,686	346,686
Assets	**-**	**402,221**	**402,221**

	Liabilities at fair value through profit and loss	Liabilities at amortized cost	Total
Liabilities as per balance sheet			
Borrowings	-	57,834	57,834
Trade payables and accruals	-	68,119	68,119
Tax and employee-related liabilities[5]	-	10,101	10,101
Lease liabilities	-	56,822	56,822
Refund liabilities	-	254,582	254,582
Other liabilities[6]	-	44	44
Liabilities	**-**	**447,502**	**447,502**

5.17.2 Fair value measurements

As at December 31, 2021 and December 31, 2020, the Company did not have assets and liabilities measured though profit and loss.

In 2020, the Group entered into various foreign currency option and forward contracts to limit the risk of foreign currency losses on expected future cash flows. The underlying currency amount and the duration of the options depend on the amount and timing of the expected future cash flows.

As at December 31, 2021 and December 31, 2020, the Company did not have open foreign currency options nor foreign currency forwards.

5.17.3 Credit quality of financial assets

The credit quality of financial assets that are not impaired can be assessed by reference to external credit ratings (if available) or to historical information about counterparty default rates as follows:

€ in thousand	As at December 31,	
	2021	2020
Trade receivables		
Receivables from governmental institutions (AAA-country)	289	36
Receivables from governmental institutions (AA-country)	23,086	15,595
Receivables from governmental institutions (A-country)	606	-
AA	2	188
A	3,442	787
Counterparties without external credit rating or rating below A	16,589	2,631
Trade receivables	**44,013**	**19,237**
Other assets		
A	11,296	11,644
Assets from governmental institutions (AA-country)	199	-
Counterparties without external credit rating or rating below A	27	336
Other assets	**11,522**	**11,979**
Cash and cash equivalents		
AA	3,457	3,984
A	332,361	149,477
Counterparties without external credit rating or rating below A	10,868	50,973
Cash and cash equivalents	**346,686**	**204,435**

The rating information refers to long-term credit ratings as published by Standard & Poor's or another rating organization (equivalent to the Standard & Poor's rating).

The maximum exposure to credit risk at the reporting date is the fair value of the financial assets.

5.17.4 Impairment of financial assets

Trade receivables

According to IFRS 9.5.5.15, the simplified approach (measure the loss allowance at an amount equal to lifetime expected credit losses) has to be used for trade receivables, which do not contain a significant financing component. This is the case for the Group, as all trade receivables are short term with a maturity lasting less than 12 months.

Loss allowances have to be established for each trade receivable based on the expected credit losses. Accordingly, at the end of each reporting period, trade receivables were adjusted through a loss allowance in accordance with the revised expected outcome.

According to IFRS 9.5.5.17 default probabilities are to be determined on the basis of historical data, but must be adjusted on the balance sheet date on the basis of up-to-date information and forward looking information. The analysis of the historical data showed as at December 31, 2021 and December 31, 2020 that losses incurred were immaterial, taking further into account the limited number of customers as well as credit checks mentioned in Note 5.2.5. Therefore, loss allowance was considered immaterial as at December 31, 2021 and December 31, 2020.

Other assets and cash and cash equivalents

Historically, no losses have been incurred on other assets measured at amortized costs and on cash and cash equivalents. As at December 31, 2021 and December 31, 2020, the expected credit loss was calculated using the cumulative expected default rate based on the counterparties' ratings and was immaterial.

5.18 Inventories

Inventories are stated at the lower of cost and net realizable value. The cost of finished goods and work in progress comprises raw materials, direct labor, other direct costs and related production overheads (based on normal operating capacity) at standard costs. The variances between the actual costs and the standard costs are calculated monthly and allocated to the inventory, so there is no difference between actual and standard costs. Inventories exclude borrowing costs. Provisions for batches which fail to meet quality requirements and may not be sold (failed batches) are deducted from the value of inventories.

€ in thousand	**As at December 31,**	
	2021	**2020**
Raw materials	102,082	4,790
Work in progress	55,681	14,914
Finished goods	8,135	13,625
Purchased goods (third party products)	7,362	1,303
Gross amount of inventories before write-down	**173,260**	**34,631**
Less: write-down provision	(49,162)	(7,698)
Inventories	**124,098**	**26,933**

The increase in raw materials and work in progress is primarily related to the production of the COVID-19 vaccine.

In 2021, the cost of inventories, which is recognized as an expense and is included in the position “Cost of goods and services”, amounted to €145.3 million (2020: €27.0 million), of which €127.1 million (2020: €9.6 million) related to raw materials which cannot be used and failed batches, which were written down. In 2021, €121.4 million (2020: nil) of these expenses related to the COVID-19 vaccine and stem from write-downs for materials which cannot be used, failed batches and batches at risk of failure (see termination of UK supply agreement in Note 5.5.2). €5.7 million (2020: €9.6 million) of these expenses related to commercialized products and stem from write-downs due to lower sales expectations and limited shelf life of the products.

Write-down provisions related to the inventory categories as follows:

€ in thousand	**As at December 31,**	
	2021	**2020**
Raw materials	29,751	470
Work in progress	15,096	2,730
Finished goods	3,974	4,435
Purchased goods (third party products)	342	63
Total Write-down provision	**49,162**	**7,698**

Given the expected reductions in product sales related to Valneva's commercialized vaccines IXIARO and DUKORAL due to the current COVID-19 pandemic, the Company has performed a review of both commercial and raw material inventories and has included write-downs in the COGS as at December 31, 2021 and December 31, 2020. Commercial inventories not carrying a minimum residual shelf-life at the expected time of sale on the basis of the most current sales expectations have been written down. These write-downs totaled €7.6 million as at December 31, 2021 (December 31, 2020: €7.4 million), €4.0 million (December 31, 2020: €4.4 million) thereof related to finished goods, €3.3 million (December 31, 2020: €2.4 million) related to work in progress and €0.3 million related to purchased goods (December 31, 2020: €0.5 million related to raw materials and €0.1 million related to purchased goods). As at December 31, 2021, the remaining write-down provisions concerning raw materials amounting to €29.8 million and work in progress amounting to €11.8 million mainly related to the COVID-19 vaccine. As at December 31, 2020, write-down provisions concerning work in progress amounting to €0.3 million related to failed batches.

5.19 Trade receivables

Trade receivables and other assets are initially recognized at fair value.

The carrying amount of trade receivables is reduced through an allowance for doubtful account. When a trade receivable is considered uncollectible, it is written off against this allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in the profit or loss.

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise when the Group provides money, goods, or services directly to a debtor with no intention of trading the receivable.

They are included in current assets, except those with maturities beyond 12 months after the balance sheet date. These are classified as non-current assets. Loans and receivables are classified as "trade receivables and other assets" in the balance sheet.

Trade receivables include the following:

€ in thousand	**As at December 31,**	
	2021	**2020**
Trade receivables	44,030	19,237
Less: loss allowance of receivables	(17)	(6)
Trade receivables, net	**44,013**	**19,232**

In 2021 and 2020, no material impairment losses were recognized. As at December 31, 2021, the amount of trade receivables past due amounted to €21.2 million (2020: €0.4 million) and mainly related to accounts receivable due from highly rated governmental authorities. In the months of January 2022 and February 2022 this amount of trade receivables past due of €21.2 million was lowered by €18.7 million due to payments received in the months of January 2022 and February 2022.

Due to the short-term nature of the current receivables, their carrying amount is considered to be the same as their fair value.

As at December 31, 2021, trade receivables included €40.9 million (December 31, 2020: €18.7 million) receivables from contracts with customers.

5.20 Other assets

Other assets include the following:

€ in thousand	As at December 31,	
	2021	**2020**
R&D tax credit receivables	35,390	19,637
Advance payments	27,375	33,671
Tax receivables	6,145	5,468
Prepaid expenses	5,131	2,544
Contract costs	3,010	2,846
Consumables and supplies on stock	1,722	1,061
Miscellaneous current assets	23	158
Other non-financial assets	78,796	65,385
Deposits	11,339	11,358
Miscellaneous financial assets	183	560
Other financial assets	11,522	11,918
Other assets	**90,318**	**77,303**
Less non-current portion	(19,282)	(19,476)
Current portion	**71,036**	**57,828**

Due to the short-term nature of the financial instruments included in other assets, their carrying amount is considered to be the same as their fair value.

The increase in R&D tax credit receivables is mainly related to increased research and development expenditures primarily in connection to the COVID-19 and chikungunya vaccine candidates.

As at December 31, 2021 and December 31, 2020, the deposits mainly related to a deposit associated with a lease agreement.

As at December 31, 2021, advance payments amounting to €16.4 million related to the agreement with IDT Biologika to produce the COVID-19 vaccine. Advance payments amounting to €7.2 million related to the collaboration agreement with Dynavax (see Note 5.1).

As at December 31, 2020, advance payments amounting to €31.1 million related to the collaboration agreement with Dynavax.

Contract costs mainly relate to the collaboration with Pfizer (see Note 5.1) and refer to costs to obtain a contract. It will be amortized in line with the pattern of revenue recognition.

5.21 Cash and cash equivalents

Cash includes cash-at-bank, cash in hand, and deposits held at call with banks. Cash equivalents include short-term bank deposits and medium-term notes that can be assigned or sold on very short notice and are subject to insignificant risk of changes in value in response to fluctuations in interest rates with a maximum maturity of 3 months.

€ in thousand	As at December 31,	
	2021	2020
Cash in hand	3	2
Cash at bank	346,639	173,107
Short-term bank deposits (maximum maturity of 3 months)	-	31,285
Restricted cash	44	41
Cash and cash equivalents	**346,686**	**204,435**

As at December 31, 2021 and December 31, 2020, the restricted cash was a Certificate of Deposit with restricted limited access to secure the credit limit for the Company's commercial card. As at December 31, 2020, the minimum liquidity requirement for the Group according to the debt financing agreement with US healthcare funds Deerfield and OrbiMed (see Note 5.24.1) was €75.0 million, which was amended in January 2021 to be €50.0 million in 2021 and 2022 and €35.0 million from 2023 onward.

5.22 Equity

The ordinary shares and convertible preferred shares are classified as equity.

Number of shares	As at December 31,	
	2021	2020
Ordinary shares issued (€0.15 par value per share)	105,190,223	90,950,048
Convertible preferred shares registered	48,862	20,514
Total shares issued	**105,239,085**	**90,970,562**
Less Treasury shares	(124,322)	(146,322)
Outstanding shares	**105,114,763**	**90,824,240**

Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, if any, from the proceeds.

When the Company purchases its own equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs (net of income taxes, if any) is deducted from equity attributable to the Company's equity holders until the shares are cancelled, reissued or otherwise disposed of. In cases where such shares are subsequently sold or reissued, any consideration received, net of any directly attributable incremental transaction costs and related income tax effects is included in equity attributable to the Company's equity holders.

The profit or loss for the year is fully included in net result, while other comprehensive income solely affects retained earnings and other reserves.

In January 2021, 790,075 stock options (of which 363,050 were granted from ESOP 2016 and 427,025 from ESOP 2017) were exercised, which resulted in an increase in ordinary shares.

In May 2021, the Company announced the closing of its global offering to specified categories of investors of an aggregate of 8,145,176 new ordinary shares, after full exercise of the overallotment option granted to the underwriters (the "Option"), consisting of a public offering of 2,850,088 American Depositary Shares ("ADSs"), each representing two ordinary shares, in the United States at an offering price of $26.41 per ADS (the "U.S. Offering"), and a concurrent private placement of 2,445,000 ordinary shares in Europe (including in France) and other countries outside of the United States at the corresponding offering price of €11.00 per ordinary share (the "European Private Placement", and, together with the U.S. Offering, the "Global Offering"). Aggregate gross proceeds of the Global Offering, after full exercise of the Option, before deducting underwriting commissions and estimated expenses payable by the Company, were approximately $107.6 million (€89.6 million). The cost of equity transactions in the amount of €6.8 million, which were directly attributable to the issue of new shares, are shown in equity as a deduction, net of tax, if any, from the proceeds.

In November 2021, the Company announced the closing of its global offering to specified categories of investors of an aggregate of 5,175,000 new ordinary shares, after full exercise of the overallotment option granted to the underwriters (the "Option"), consisting of a public offering of 354,060 American Depositary Shares ("ADSs"), each representing two ordinary shares, in the United States at an offering price of $39.42 per ADS (the "U.S. Offering"), and a concurrent private placement of 4,466,880 ordinary shares in Europe (including France) and other countries outside of the United States at the corresponding offering price of €17.00 per ordinary share (the "European Private Placement", and, together with the U.S. Offering, the "Global Offering"). Aggregate gross proceeds of the Global Offering, after full exercise of the Option and before deducting underwriting commissions and estimated expenses payable by the Company, were approximately $102.0 million (€88.0 million). The cost of equity transactions in the amount of €6.7 million, which were directly attributable to the issue of new shares, are shown in equity as a deduction, net of tax, if any, from the proceeds.

Conditional and authorized capital

As at December 31, 2021, the Company had 6,572,937 shares of conditional capital in connection with (see Note 5.23):

+ the possible exercise of existing stock options;
+ the possible exercise of existing equity warrants (BSAs);
+ the possible final grant of existing Free Ordinary Shares;
+ the possible final grant and conversion of existing Free Convertible Preferred Shares;

Pursuant to resolution No. 21 of the Combined General Meeting held on June 23, 2021, the maximum aggregate amount of capital increases that may be carried out, with immediate effect or in the future, under resolutions 13 to 20 of said Meeting, may not exceed €5,175 million, it being specified that to this maximum aggregate amount will be added the additional nominal amount of shares or securities to be issued in accordance with applicable legal or regulatory provisions and, if applicable, with contractual provisions providing for other forms of adjustment, in order to preserve the rights of the holders of securities or other rights giving immediate and/or future access to the capital of the Company.

5.22.1 Other reserves

€ in thousand	Other regulated reserves	Other comprehen sive income	Treasury shares	Capital from Share-based compensation	Other revenue reserves	Total
Balance as at January 1, 2020	**52,820**	**(4,836)**	**(1,112)**	**8,357**	**(9,474)**	**45,756**
Currency translation differences	-	2,438	-	-	-	2,438
Defined benefit plan actuarial losses	-	(78)	-	-	-	(78)
Share-based compensation expense:						
- value of services	-	-	-	4,012	-	4,012
Purchase/sale of treasury shares	-	-	215	-	-	215
Balance as at December 31, 2020	**52,820**	**(2,474)**	**(898)**	**12,368**	**(9,474)**	**52,342**

€ in thousand	Other regulated reserves	Other comprehen sive income	Treasury shares	Capital from Share-based compensation	Other revenue reserves	Total
Balance as at January 1, 2021	**52,820**	**(2,474)**	**(898)**	**12,368**	**(9,474)**	**52,342**
Currency translation differences	-	(2,877)	-	-	-	(2,877)
Defined benefit plan actuarial gains	-	205	-	-	-	205
Share-based compensation expense:						
- value of services	-	-	-	2,632	-	2,632
Purchase/sale of treasury shares	-	-	253		(43)	209
Balance as at December 31, 2021	**52,820**	**(5,146)**	**(645)**	**15,000**	**(9,517)**	**52,512**

Regulated non-distributable reserve relates to a mandatory legal reserve from the merger with Intercell AG.

The Company did not obtain a dividend from its subsidiaries or associates nor paid a dividend to its shareholders in 2021 and 2020.

5.23 Share-based compensation

The Company operates various share-based compensation plans, both equity-settled and cash-settled plans. The profit and loss statement includes the following expenses arising from share-based payments:

€ in thousand	Year ended December 31,		
	2021	**2020**	**2019**
Stock option plans	646	1,182	1,177
Free convertible preferred share plans	652	1,266	1,198
Free ordinary shares program	1,334	1,563	130
Equity warrants	-	-	-
Phantom shares	11,877	2,317	74
Share-based compensation expense	**14,509**	**6,328**	**2,578**

5.23.1 Stock option plans

The fair value of such share-based compensation is recognized as an expense for employee services received in exchange for the grant of the options. The total amount to be expensed over the vesting period is determined by reference to the fair value of the options granted, excluding the impact of any non-market vesting conditions. Non-market vesting conditions are included in assumptions about the number of options that are expected to become exercisable. Annually, the Group revises its estimates of the number of options that are expected to become exercisable. It recognizes the impact of the revision of original estimates, if any, in the income statement and makes a corresponding adjustment to equity.

The proceeds received net of any directly attributable transaction costs are credited to nominal capital (nominal value) and share premium (amount exceeding nominal value) when the options are exercised.

Since 2013, the Company granted stock options to employees and management pursuant to five successive plans.

Since 2015, the employee stock option plans have primarily been for the benefit of non-executive employees, while members of the Management Board and the Management Committee, as well as the Manufacturing site Heads (since 2017), would have the opportunity to participate in four-year free share programs (convertible preferred shares or ordinary).

Stock options granted from 2013 to 2017 are exercisable in two equal portions after being held for two and for four years (the vesting periods), while stock options granted from 2019 onwards are exercisable in three equal portions after being held for one year, two years and three years. Stock Options granted in 2019 are subject to performance conditions.

All options expire no later than ten years after being granted. Stock options are not transferable or negotiable and unvested options lapse without compensation upon termination of employment with the Group (forfeiture). Stock options granted from 2013 onwards vest with the effectiveness of the takeover of more than 50% of the outstanding voting rights of the Group. As this change of control event was considered remote, it has not been considered in the determination of the vesting period.

Changes in the number of stock options outstanding and their related weighted average exercise prices are as follows:

	2021			2020		
	Number of options	**Number of shares available**	**Average exercise price in € per share**	**Number of options**	**Number of shares available**	**Average exercise price in € per share**
Outstanding as at January 1	4,911,410	4,975,831	3.06	5,247,110	5,313,098	3.06
Granted	-	-	-	-	-	-
Forfeited	(187,950)	(189,168)	3.07	(335,700)	(337,267)	3.06
Exercised	(790,075)	(790,075)	2.79	-	-	-
Outstanding at year end	**3,933,385**	**3,996,588**	**3.11**	**4,911,410**	**4,975,831**	**3.06**
Exercisable at year end	3,203,817	3,267,020		2,855,570	2,919,991	

790,075 employee stock options (of which 363,050 were granted from ESOP 2016 and 427,025 from ESOP 2017) were exercised in January 2021. No stock options were exercised in 2020.

Stock options outstanding at the end of the period have the following expiry dates and exercise prices:

	Exercise price	**Number of options as at December 31,**	
Expiry date	**in € per share**	**2021**	**2020**
2023	2.919	696,903	645,900
2025	3.92	522,500	533,000
2026	2.71	36,200	399,250
2027	2.85	552,725	998,000
2029	3.05	2,188,260	2,335,260
Outstanding at year end		**3,996,588**	**4,911,410**

In 2021 and 2020, no stock options were granted. The fair value of the granted options was determined using the Black Scholes valuation model.

5.23.2 Free ordinary shares

In 2019, Company's Management Board granted free ordinary shares for the benefit of Management Board and Management Committee members. The purpose of this free share plan 2019-2023 is to provide a long-term incentive program for the Company's senior management. No further free ordinary shares were granted in 2021 and 2020.

In 2019, the number of free ordinary shares granted was as follows:

	Number of free ordinary shares granted
Management Board	1,381,947
Other Management Committee members	810,000
Free ordinary shares granted	**2,191,947**

In accordance with the foregoing, changes in the outstanding free ordinary shares are as follows:

	Number of free shares	
	2021	**2020**
Outstanding as at January 1	1,842,404	2,191,947
Forfeited	-	349,543
Outstanding at year end	**-**	**1,842,404**

Subject to vesting conditions (including performance and presence conditions), the free share granted to a participant will vest in and be delivered to that participant ("*seront définitivement attribuées*") in three tranches. Each tranche will amount to one third of the total individual allocation. If one third is not a whole number, the number of free shares will be rounded down for the first two tranches and rounded up for the third tranche.

The first tranche vested on December 19, 2021, the second tranche will vest on December 19, 2022, and the third tranche will vest on December 19, 2023. Vesting is subject to performance conditions.

Following the vesting of the free shares, no compulsory holding period will apply to the vested shares.

The plan further provides for accelerated vesting of the free shares in the event of a Change of Control (as defined in the applicable terms & conditions) occurring no earlier than December 19, 2023. As this was considered remote at the grant date (judgement by Management), this was not included in the determination of the vesting period. In addition, the plan provides for the possibility to remain entitled to a prorated number of shares, for any unvested tranche, in case of retirement of a beneficiary before complete vesting. However, this is subject to meeting the performance conditions defined for the plan. Finally, the terms and conditions applicable to the free share plan state that if a Change of Control takes place before December 19, 2021, and section III of Article L. 225-197-1 of the French Commercial Code does not apply, the plan will be canceled and the Company will indemnify the participants for the loss of unvested free shares, subject again to meeting the performance conditions and, for the Management Board members, to getting all required shareholder approvals. The gross amount of this indemnity will be calculated as though such free shares had been vested upon the Change of Control. The conditions and limitations set forth in the applicable terms and conditions of the plan will apply to this calculation, *mutatis mutandis*.

In accordance with section II (4th paragraph) of Article L. 225-197-1 of the French Commercial Code, the Supervisory Board decided on November 21, 2019, that the Management Board members should keep no less than 20% of the vested free shares of each tranche until termination of their office as Management Board member or corporate officer.

5.23.3 Free convertible preferred share plan

In 2017, the FCPS Program 2017-2021, a long-term incentive plan for the Group's Executive Managers was implemented. As a prerequisite to the possibility of participating in the program, each potential beneficiary was required to make a cash investment in the Company, by purchasing the Company's ordinary shares.

The FCPS will be convertible into the Company's ordinary shares four years after their initial granting if the conversion conditions set out below are met.

Upon expiration in December 2021 (the **Conversion Date**), the Management Board determined the conversion ratio, on the basis of (a) the Final Share Price (as hereinafter defined) and (b) the conversion table below.

The "**Final Share Price**" (volume-weighted average stock market price of the Company's ordinary shares over a period of six months immediately preceding the Conversion Date, as rounded to the second decimal place) was €18.21.

As the Final Share Price was higher than €8.00, the conversion ratio was determined that the beneficiaries' gross gain will not exceed the gross gain they would have realized if the Final Share Price was €8.00.

Following the full payment of the amount of personal investment required, the Management Board conditionally granted the program beneficiaries a number of FCPS:

	Number of FCPS 2017 granted to the beneficiaries
Management Board	24,200
Other Executive Managers	9,817
Free convertible preferred shares granted	**34,017**

Changes in the FCPS are as follows:

	Number of shares	Number of FCPS	
	2021	2021	2020
Outstanding as at January 1		32,463	34,017
Granted		-	-
Expired		-	(1,554)
Outstanding at year end		**32,463**	**32,463**
Exercisable at year end (number of shares)	**884,144**		

The fair value of FCPS 2017 was determined using the Monte Carlo valuation model.

5.23.4 Phantom shares

In 2017 and 2019, phantom share plans were issued for employees who are US citizens, with the same conditions as the stock options program (see above) but which will not be settled in equity, but in cash. Therefore, it is considered as a cash settled plan. The liability for the phantom shares is measured (initially and at the end of each reporting period until settled) at the fair value of the share options rights, by applying an option pricing model taking into account the terms and conditions on which the phantom rights were granted and the extent to which the employees have rendered services to date.

In 2020, 690,000 phantom shares were granted. In 2021, no new phantom shares were granted.

The carrying amount of the liability relating to the phantom shares as at December 31, 2021 was €14.3 million (December 31, 2020: €2.3 million). The fair values of the granted options were determined on the balance sheet dates using the Black Scholes valuation model.

Phantom shares outstanding at the end of the period have the following expiry dates and exercise prices:

	Exercise price	Number of phantom shares as at December 31,	
Expiry date	**in € per share**	**2021**	**2020**
2023	2.919	4,950	10,450
2025	3.92	6,000	14,000
2026	2.71	-	9,000
2027	2.85	6,250	32,000
2029	3.05	134,250	176,750
2030	-	690,000	690,000
Outstanding at year end		**841,450**	**932,200**

The significant inputs into the models were:

	As at December 31,	
	2021	**2020**
Expected volatility (%)	72.97	43.81
Expected vesting period (term in years)	0.25 – 4.39	0.25 – 5.40
Risk-free interest rate (%)	(0.78) – (0.64)	(0.82) – (0.71)

5.23.5 Equity warrants

In 2017, the Company granted equity warrants to members of the Supervisory Board. The warrants granted in 2017 (BSA 27) are exercisable in four equal portions after 12, 24, 36 and 48 months. The subscription price for one new ordinary share under the 2017 plan (BSA 27) amounts to €2.574.

Changes in the equity warrants outstanding are as follows:

	Number of equity warrants	
	2021	**2020**
Outstanding as at January 1	43,750	103,875
Granted	-	-
Exercised	(21,875)	(26,750)
Forfeited	-	(33,375)
Outstanding at year end	**21,875**	**43,750**

5.24 Borrowings

Borrowings are initially recognized at fair value if determinable, net of transaction costs incurred. Borrowings are subsequently stated at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption value is recognized in the income statement over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the balance sheet date.

Borrowings of the Group at year-end include the following:

€ in thousand	As at December 31,	
	2021	2020
Non-current		
Other loans	50,726	46,375
Non-current borrowings	**50,726**	**46,375**
Current		
Other loans	7,107	6,988
Current borrowings	**7,107**	**6,988**
Total borrowings	**57,834**	**53,363**

The maturity of non-current borrowings is as follows:

€ in thousand	As at December 31,	
	2021	2020
Between 1 and 2 years	21,102	5,925
Between 2 and 3 years	15,502	14,270
Between 3 and 4 years	12,306	12,559
Between 4 and 5 years	674	10,524
Over 5 years	1,143	3,097
Non-current borrowings	**50,726**	**46,375**
Current borrowings	7,107	6,988
Total borrowings	**57,834**	**53,363**

The carrying amounts of the Group's borrowings are denominated in the following currencies:

€ in thousand	As at December 31,	
	2021	2020
Borrowings denominated in EUR	4,708	5,855
Borrowings denominated in USD	53,126	47,508
Total borrowings	**57,834**	**53,363**

5.24.1 Other loans

In February 2020, Valneva Austria GmbH signed a loan agreement (the Loan Agreement) with US healthcare funds Deerfield Management Company and OrbiMed (the Lenders), or an initial borrowing capacity of up to $85 million.

Principal payments will start in 2023, while the loan will mature in 2026. The intended use of proceeds was to repay existing borrowings from the European Investment Bank and allow the Group to continue

to advance its leading Lyme and chikungunya development programs in the short term. As at December 31, 2021, $60.0 million (€54.1 million) was drawn down in two tranches under the Loan Agreement. As at December 31, 2021 the carrying amount was €49.7 million. The interest rate is 9.95% (equivalent to 10.09% on an annual basis). The loan is secured by all of Valneva's assets, including the intellectual property, and is guaranteed by Valneva SE and certain of its subsidiaries.

Noting the COVID-19 pandemic impact on the travel industry and following a temporary waiver of the revenue covenant for the second half of 2020, Valneva, Deerfield and OrbiMed agreed to modify this covenant for 2021 and 2022, replacing the twelve-month rolling €115 million with quarterly minimum revenues representing an annual total of €64 million in 2021 and an annual total of €103.75 million in 2022. The parties also agreed to modify the minimum cash requirement to €50 million for 2021 and 2022 and to €35 million for the following years.

If the Group's consolidated liquidity or net revenues were to fall below the covenant minimum values, Valneva would not be able to comply with the financial covenants in the Loan Agreement, which could result in additional costs (up to additional 10%-points of interest over the duration of the default) and an early repayment obligation (payment of the principal increased by 8% and of an indemnity representing the interests expected until March 2023). The Group does not expect these limitations to affect its ability to meet its cash obligations.

The loan was included in the balance sheet item "Borrowings".

€ in thousand	2021	2020
Balance as at January 1	**46,190**	-
Proceeds of issue	-	52,935
Transaction costs	-	(4,162)
Accrued interest	6,167	4,538
Payment of interest	(6,459)	(2,698)
Exchange rate difference	3,774	(4,423)
Balance as at December 31	**49,671**	**46,190**
Less: non-current portion	(44,360)	(41,261)
Current portion	**5,311**	**4,929**

As at December 31, 2021, Other loans also included borrowings related to financing of Research and Development expenses and CIR (R&D tax credit in France) of €4.7 million (December 31, 2020: €5.9 million) as well as the amount related to CEPI of €3.5 million (December 31, 2020: €1.3 million), representing payments received which are expected to be paid back in the future. For detailed information see Note 5.8.1.

5.24.2 Borrowings and other loans secured

As at December 31, 2021, €54.4 million (December 31, 2020: €52.0 million) of the outstanding borrowings and other loans were guaranteed, secured or pledged. These borrowings and other loans are related to financing of research and development expenses, fixed assets and CIR (R&D tax credit in France) and have various conditions (interest rates) and terms (maturities).

5.24.3 Fair value of borrowings and other loans

For the majority of the borrowings and other loans, the fair values are not materially different from their carrying amounts, since the interest payable on those borrowings is either close to current market rates or the borrowings are of a short-term nature.

As at December 31, 2021, material differences were identified only for guaranteed other loans. Based on an estimated arms' length interest rate of 9.55%, the fair value is €4.2 million (carrying amounts is €4.7 million).

5.25 Trade payables and accruals

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payable are classified as current liabilities if payment is due within one year or less. Trade payables are recognized initially at fair value. Short-term trade payables are subsequently measured at the repayment amount.

Trade payables and accruals include the following:

€ in thousand	**As at December 31,**	
	2021	**2020**
Trade payables	16,035	24,898
Accrued expenses	52,084	11,314
Balance as at December 31	**68,119**	**36,212**
Less non-current portion	-	-
Current portion	**68,119**	**36,212**

The carrying amounts of trade and other payables are considered to be the same as their fair values, due to their short-term nature.

5.26 Tax and employee-related liabilities

The Group recognizes a liability and an expense for bonuses. The Group recognizes a liability when it has assumed a contractual obligation or when there is a past practice that has created a constructive obligation.

€ in thousand	**As at December 31,**	
	2021	**2020**
Employee-related liabilities	10,101	8,300
Social security and other taxes	7,148	4,866
Balance as at December 31	**17,249**	**13,165**
Less non-current portion	-	-
Current portion	**17,249**	**13,165**

5.27 Lease liabilities

Lease liabilities are effectively secured as the rights to the leased assets revert to the lessor in the event of default.

The development of lease liabilities is described in Note 5.13.

The maturity of non-current lease liabilities is as follows:

€ in thousand	As at December 31,	
	2021	2020
Between 1 and 2 years	25,301	2,296
Between 2 and 3 years	2,150	24,434
Between 3 and 4 years	2,214	1,280
Between 4 and 5 years	2,289	1,331
Between 5 and 10 years	10,733	7,384
Between 10 and 15 years	9,114	8,907
Over 15 years	1,886	3,759
Non-current lease liabilities	**53,687**	**49,392**
Current lease liabilities	3,135	2,696
Total Lease liabilities	**56,822**	**52,088**

The carrying amounts of the Group's lease liabilities are denominated in the following currencies:

€ in thousand	As at December 31,	
	2021	2020
EUR	24,650	25,633
SEK	30,657	26,166
Other	1,515	289
Total lease liabilities	**56,822**	**52,088**

5.28 Contract liabilities

A contract liability has to be recognized, when the customer already provided the consideration or part of the consideration, before an entity has fulfilled its performance obligation (agreed goods or services which should be delivered or provided), resulting from the "contract".

Development of contract liabilities is presented in the table below:

€ in thousand	2021	2020
Balance as at January 1	89,636	1,426
Revenue recognition	(89,364)	(594)
Exchange rate differences	7	101
Addition	128,479	88,703
Balance as at December 31	**128,758**	**89,636**
Less non-current portion	(4,741)	(58)
Current portion	**124,017**	**89,578**

With regards to additions in 2021, €116.9 million were related to the APA with the European Commission to supply up to 60 million doses of VLA2001, €3.8 million were related to the APA with the Kingdom of Bahrain, and €4.7 million were related to a payment received from the DoD for IXIARO. With regards to changes to the position because of revenue recognized in 2021, €87.0 million related to the UK Supply Agreement (see Note 5.1).

As at December 31, 2020, €87.0 million related to the UK Supply Agreement (see Note 5.1), €1.6 million related to CTM services provided to different customers and €1.0 million related to the agreement for the development, manufacturing and marketing of Valneva's single-shot chikungunya vaccine, VLA1553, in LMICs with Instituto Butantan.

5.29 Refund liabilities

A refund liability has to be recognized when the customer already provided a consideration which is expected to be refunded partially or totally. It is measured at the amount the Company has an obligation to repay or amounts which did not meet the criteria for revenue recognition in the past, but there are no remaining goods and services to be provided in future.

Development of refund liabilities:

€ in thousand	2021	2020
Balance as at January 1	111,426	6,553
Additions	159,179	109,296
Payments	(18,022)	(477)
Other releases	(15,198)	-
Interest expense capitalized	8,478	3,640
Exchange rate difference	8,718	(7,586)
Balance as at December 31	**254,581**	**111,426**
Less non-current portion	(158,970)	(97,205)
Current portion	**95,611**	**14,222**

As at December 31, 2021, €79.6 million (thereof €75.2 million non-current) related to the collaboration with Pfizer Inc. (see Note 5.1), €166.9 million (thereof €77.3 million non-current) related to the UK Supply Agreement (see Note 5.5.2), €6.4 million (thereof €6.3 million non-current) related to the expected payment to GSK related to the termination of the SAA in 2019 (see Note 5.1). Other releases related to reductions in refund liabilities in the wake of revaluations that increased contract liabilities.

As at December 31, 2020, €81.9 million (thereof €70.0 million non-current) related to the collaboration with Pfizer Inc. (see Note 5.1), €20.9 million (all non-current) related to the UK Supply Agreement (see Note 5.5.2), €6.3 million (all non-current) related to the expected payment to GSK related to the termination of the SAA in 2019 (see Note 5.1) and €2.3 million related to refund liabilities to customers related to rebate programs and right to return products.

Expected cash outflows for refund liabilities are disclosed under Note 5.2.5.

5.30 Provisions

5.30.1 Provisions for employee commitments

€ in thousand	As at December 31,	
	2021	2020
Employer contribution costs on share-based compensation plans	26,520	7,351
Phantom shares	14,267	2,390
Retirement termination benefits	422	550
Leaving indemnities	-	112
Balance as at December 31	**41,210**	**10,403**
Less non-current portion	8,308	2,358
Current portion	**32,901**	**8,045**

(a) Share-based provisions

Employer contribution costs on share-based compensation plans and Phantom shares are calculated at the balance sheet date using the share price of Valneva as at December 31, 2021: €24.5 (December 31, 2020: €7.75).

(b) Retirement termination benefits

Some Group companies provide retirement termination benefits to their retirees.

For defined benefit plans, retirement costs are determined once a year using the projected unit credit method. This method sees each period of service as giving rise to an additional unit of benefit entitlement and measures each unit separately to determine the final obligation. The final obligation is then discounted. These calculations mainly use the following assumptions:

+ a discount rate;
+ a salary increase rate;
+ an employee turnover rate.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

For basic schemes and defined contribution plans, the Group recognizes the contributions as expenses when payable, as it has no obligations over and above the amount of contributions paid.

Assumptions used

	As at December 31,	
	2021	**2020**
Discount rate	1.00%	0.50%
Salary increase rate	2.00%	2.00%
Turnover rate	0%-21.35%	0%-21.35%
Social security rate	43.00%-47.00%	43.00%-47.00%
Average remaining lifespan of employees (in years)	22	22

Changes in defined benefit obligation

Present value of obligation development:

€ in thousand	**2021**	**2020**
Balance as at January 1	**550**	**404**
Current service cost	77	68
Actuarial losses/(gains)	(205)	78
Balance as at December 31	**422**	**550**

5.30.2 Other provisions

€ in thousand	As at December 31,	
	2021	**2020**
Non-current	-	-
Current	15,806	2,124
Provisions	**15,806**	**2,124**

As at December 31, 2021, the significantly increased provision related mainly to onerous purchase agreements related to the termination of the UK Supply Agreement (€13.5 million). Secondly, the position comprised €2.1 million from a provision for expected legal and settlement costs under a court proceeding related to the Intercell AG/Vivalis SA merger (December 31, 2020: €1.9 million).

5.31 Other liabilities

€ in thousand	As at December 31,	
	2021	**2020**
Deferred income	4,966	2,861
Other financial liabilities	44	51
Miscellaneous liabilities	8	2
Other liabilities	**5,019**	**2,913**
Less non-current portion	(69)	(72)
Current portion	**4,950**	**2,841**

Deferred income mainly includes conditional advances from a grant from CEPI (see Note 5.8).

5.32 Cash flow information

5.32.1 Cash generated from operations

The following table shows the adjustments to reconcile net loss to net cash generated from operations:

€ in thousand	Note	Year ended December 31,		
		2021	2020	2019
Loss for the year		(73,425)	(64,393)	(1,744)
Adjustments for				
• Depreciation and amortization	5.12/5.13/5.14	14,281	9,799	8,532
• Write-off / impairment fixed assets/intangibles	5.12/5.13/5.14	-	140	75
• Share-based compensation expense	5.23	14,509	6,328	2,552
• Income tax expense/(income)	5.10	3,446	(909)	874
• Dividends received from associated companies	5.15	-	-	433
• (Profit)/loss from disposal of property, plant, equipment and intangible assets	5.8	46	10	92
• Share of (profit)/loss from associates	5.15	5	133	(1,574)
• Fair value losses on derivative financial instruments		-	-	178
• Provision for employer contribution costs on share-based compensation plans	5.30.1	19,079	7,351	-
• Other non-cash (income)/expense		(11,604)	4,470	(892)
• Interest income	5.9	(249)	(119)	(199)
• Interest expense	5.9	16,964	10,738	2,633
Changes in non-current operating assets and liabilities (excluding the effects of acquisition and exchange rate differences on consolidation):				
• Other non-current assets		194	(2,303)	79
• Long term contract liabilities	5.28	4,662	(674)	(2,321)
• Long term refund liabilities	5.29	54,501	90,653	6,016
• Other non-current liabilities and provisions		(3)	795	(178)
Changes in working capital (excluding the effects of acquisition and exchange rate differences on consolidation):				
• Inventory		(92,373)	(4,196)	(2,415)
• Trade and other receivables		(21,349)	(24,023)	(17,278)
• Contract liabilities	5.28	34,453	88,801	(989)
• Refund liabilities	5.29	80,160	10,614	448
• Trade and other payables and provisions		35,236	6,544	13,552
Cash generated from operations		**78,532**	**139,759**	**7,875**

In 2021, other non-cash (income)/expense mainly related to net foreign exchange gains.

In 2020, other non-cash (income)/expense included €3.3 million expenses from disposal of Lyme VLA15 (see Notes 5.1 and 5.12), €1.6 million income from a revaluation of lease liabilities and right of use assets and €2.6 million net foreign exchange losses.

The following table shows the adjustments to reconcile profit/loss from the disposal of property, plant, equipment and intangible assets to proceeds from the disposal of fixed assets:

€ in thousand	**Year ended December 31,**		
	2021	**2020**	**2019**
Net book value	46	34	92
Loss on disposal of fixed assets	(46)	(10)	(92)
Proceeds from disposal of property, plant, equipment and intangible assets	**-**	**24**	**-**

5.32.2 Reconciliation of liabilities arising from financing activities

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were (or future cash flows will be) classified in the Group's consolidated statement of cash flows as cash flows from financing activities. For development of lease liabilities, see Note 5.13.

€ in thousand	**Bank borrowings**	**Other loans**	**Total**
Balance as at January 1, 2020	**19,759**	**6,557**	**26,316**
Repayments	(20,000)	(1,995)	(21,995)
Additions, net of transaction costs	-	50,266	50,266
Foreign exchange movements	-	(4,556)	(4,556)
Other changes[7]	241	3,090	3,331
Balance as at December 31, 2020	**-**	**53,363**	**53,363**
Balance as at January 1, 2021	**-**	**53,363**	**53,363**
Repayments	-	(1,956)	(1,956)
Additions, net of transaction costs	-	859	859
Foreign exchange movements	-	3,998	3,998
Other changes[8]	-	1,570	1,570
Balance as at December 31, 2021	**-**	**57,834**	**57,834**

[7] Other changes include interest accruals and payments.

5.33 Commitments and contingencies

As at December 31, 2021, there were €23.6 million of capital expenditure contracted, mainly related to manufacturing sites for the COVID-19 vaccine candidate (December 31, 2020: €48.0 million).

5.33.1 Other commitments, pledges and guarantees

The other commitments relate to minimum payments consist of:

€ in thousand	As at December 31,	
	2021	2020
Loans and grants	143	1,454
Royalties	8,941	9,393
Other commitments	**9,084**	**10,846**

The pledges consist of:

€ in thousand	As at December 31,	
	2021	2020
Pledges on consolidated investments	19,901	19,474
Pledges on bank accounts	292,257	150,642
Pledges on receivable	344,519	160,511
Guarantees and pledges	**656,677**	**330,626**

5.33.2 Contingencies and litigations

Following the merger between the companies Vivalis SA and Intercell AG in 2013, certain former Intercell shareholders initiated legal proceedings before the Commercial Court of Vienna to request a revision of either the cash compensation paid to departing shareholders or the exchange ratio between Intercell and Valneva shares used in the merger. In October 2021, a court-appointed expert recommended an increase in the cash compensation as well as further valuation work on the exchange ratio. The Company therefore held a provision of €2.1 million to cover this increase and potential settlement costs (December 31, 2020: €1.9 million). €0.3 million of additional expenses related to this litigation was included in “other expenses” in the year ended December 31, 2021.

In July 2016, a claim for additional payment was raised and litigation was filed in December 2016, in connection with the 2009 acquisition of Humalys SAS, from which the Company had acquired a technology, which was later combined with other antibody discovery technologies and spun off to BliNK Biomedical SAS in early 2015. Former shareholders of Humalys claimed additional consideration as a result of the spin-off transaction. A first instance decision in the Humalys case is expected in the first half of 2022. After consultation with its external advisors the Company believes that this claim is unsubstantiated, and the filed litigation is not likely to succeed in court. Detailed information on the potential specific financial consequences, which might result from a successful claim could adversely affect the Company’s ability to defend its interests in this case and therefore is not provided, in accordance with IAS 37.92.

5.34 Related-party transactions

5.34.1 Rendering of services

Services provided by Valneva to Groupe Grimaud La Corbière SAS, being shareholder of Valneva are considered related party transactions and consist of services within a Collaboration and Research License agreement and of the provision of premises and equipment.

€ in thousand	Year ended December 31,		
	2021	2020	2019
Provision of services:			
Operating activities	231	187	236
Provision of services	**231**	**187**	**236**

5.34.2 Key management compensation

The aggregate compensation of the members of the Company's Management Board included the following:

€ in thousand	Year ended December 31,		
	2021	2020	2019
Salaries and other short-term employee benefits[8]	1,930	2,950	2,449
Other long-term benefits	24	18	15
Share-based payments (expense of the year)	856	1,786	1,174
Key management compensation	**2,809**	**4,755**	**3,638**

5.34.3 Supervisory Board compensation

In 2021, the aggregate compensation of the members of the Company's Supervisory Board amounted to €0.3 million (2020: €0.2 million, 2019: €0.3 million). In the year 2017, the Company granted equity warrants to members of the Supervisory Board. For more information, see Note 5.23.

5.35 Events after the reporting period

Valneva Scotland was awarded two grants worth up to £20 million (approximately €23.9 million) from Scottish Enterprise, Scotland's national economic development agency, to support research and development relating to the manufacturing processes of Valneva's COVID-19 vaccine candidate and Valneva's other vaccine candidates. The funds under these grants will be received over three years, beginning in March 2022.

At year end, the company assessed the inventory valuation taking into consideration the residual shelf life and production plan for 2022. This analysis resulted in a write-down of raw material for an amount of €23 million as at December 31, 2021. In 2022, one of the suppliers performed additional analysis and concluded in March 2022 on an extension of the shelf life. As a consequence, Valneva expects to use some of the material in the manufacturing process and will reverse a portion of the write-down. Since the extension of the shelf life was determined in 2022, the company considers the developments after the reporting date as a non-adjusting subsequent event.

[8] In 2020 leaving indemnities of €0.9 million have been included.

6 STATUTORY AUDITOR'S REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

VALNEVA

STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

PricewaterhouseCoopers Audit
63 rue de Villiers
92 200 Neuilly-sur-Seine
S.A.S. au capital de € 2.510.460
672 006 483 R.C.S. Nanterre

Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles et du Centre

Deloitte & Associés
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S.A.S. au capital de 2 188 160 €
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Commissaire aux Comptes
Membre de la compagnie
régionale de Versailles et du Centre

This is a translation into English of the statutory auditors' report on the consolidated financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users. This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the information concerning the Group presented in the management report and other documents provided to shareholders.
This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2021

To the general assembly
VALNEVA
Société Européenne
6 rue Alain Bombard
44800 Saint Herblain

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of VALNEVA ("the Group") for the year ended 31 December 2021.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at 31 December 2021 and of the results of its operations

for the year then ended in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit and Governance Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with independence requirements of the French Commercial Code ("*Code de commerce*") and the French Code of Ethics ("*code de déontologie*") for statutory auditors, for the period from 1 January 2021 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014.

Justification of Assessments - Key Audit Matters

Due to the global crisis related to the Covid-19 pandemic, the financial statements of this period have been prepared and audited under specific conditions. Indeed, this crisis and the exceptional measures taken in the context of the state of sanitary emergency have had numerous consequences for companies, particularly on their operations and their financing, and have led to greater uncertainties on their future prospects. Those measures, such as travel restrictions and remote working, have also had an impact on the companies' internal organization and the performance of the audits.

It is in this complex and evolving context that, in accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code ("*Code de commerce*") relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

Risk description	Risk response
Consequences of the termination of the SARS-CoV-2 Vaccine Supply Agreement with the UK Secretary of State for Business, Energy and Industrial Strategy (the UK Authority) – Revenue recognition, provision for onerous purchase contracts and valuation of inventories built up for the commercialization of this vaccine *(Paragraph "Significant agreements signed in the periods presented" included in the Note 5.1 « General information and significant events of the period », Note 5.3.1« Critical judgements in applying the Group's accounting policies », Note 5.3.2 « Key sources of estimation uncertainty », paragraph « Vaccine Supply Agreement with the UK Authority » included in the Note 5.5.2 « Other revenues, Note 5.18 « Inventories», Note 5.29 « Refund liabilities » and Note 5.30.2 « Other Provisions » to the consolidated financial statements)*	
In September 2020, Valneva entered into a supply agreement (the UK Supply Agreement) with the UK Secretary of State for Business, Energy, and Industrial Strategy (the UK Authority), under which Valneva was to manufacture and supply the UK Authority with its SARS-CoV-2 vaccine, after increasing its manufacturing capacity in Scotland. This contract falls under the scope of IFRS 15 "Revenue from Contracts with Customers". This Agreement required the UK Authority to make non-refundable pre-payments and as of December 31, 2021, Valneva thus received a total of 408.3 million euros. Valneva was notified in September 2021 of the UK Authority's decision to terminate this Vaccine Supply Agreement. In the notice of termination, the UK Authority wished to terminate the UK Supply Agreement on two different bases. The first being that Valneva will fail to meet its obligations regarding the delivery schedule provided for in the UK Supply Agreement (termination for anticipated violation of the delivery schedule provided for in the Supply Agreement) and the second being that the UK Authority wished to terminate the UK Supply Agreement with a thirty days' notice in using its discretionary right to terminate for convenience. The Company, after consultation with its external advisors, considers that the first basis for termination is unfounded and has thus taken note of the termination, by the UK Authority, of the Supply Agreement on the basis only of the exercise of this discretionary right. The Company's management has thus assessed the impacts of the termination of the UK Supply Agreement on the financial statements as of December 31, 2021: - Payments received from the UK Authority for which the likelihood of	We have read the Supply Agreement entered into between Valneva and the UK Authority and the termination letter, in order to assess in particular the compliance of the accounting treatment adopted by management for this contract We have examined the procedures implemented by Management to identify and list all the risks associated with the termination of the SARS-CoV-2 vaccine supply contract with the UK Authority. We have assessed the reasonableness of Management's estimate of the legal basis for terminating this Agreement: - by reviewing the risk analysis carried out by the General and Legal Department of Valneva; - by obtaining and analyzing written correspondence between Valneva and the UK Authority; - by obtaining and analyzing lawyers' notes. We also reviewed the process implemented by management, and assessed the design of the controls related to the recognition of revenue related to this contract to supply vaccines to the UK Authority.. We have assessed the reasonableness of the main assumptions made by management concerning the probabilities of future reimbursements, forecasts of sales of the SARS-CoV-2 vaccine to customers other than the UK Authority, the probabilities of success in obtaining the marketing authorization, in coherence with external data and evidences obtained, moreover, during the audit, such as internal Company communications and presentations.

reimbursement was considered remote amount to 253.3 million euros as of December 31, 2021 and were recognized in other revenues ("COVID - 19" segment). For amounts considered carrying uncertainties and a reimbursement likelihood which could not be assessed as highly unlikely, a refund liability of 166.9 million euros was recorded as of December 31, 2021. - Onerous purchase contracts related to the supply of this vaccine have been identified and a provision of 13.5 million euros has been recorded as of December 31, 2021. - The Group's management also carried out a review of the valuation of inventories linked to this vaccine and thus recorded an inventory depreciation. As of December 31, 2021, the remaining write-down provisions concerning raw materials amounting to €29.8 million and work in progress amounting to €11.8 million mainly related to the COVID-19 vaccine. The revenue recognition for this contract requires judgment to define the contractual framework in which the termination of this contract takes place and its impact on the risk of reimbursement of non-refundable pre-payments already received. Adding to this, is the estimation of the part of pre-payments carrying uncertainties regarding their probability of reimbursement and recorded as refund liabilities at the closing date. The valuation of onerous purchase contracts and the assessment of the net realizable value of inventories related to this vaccine also require multiple assumptions and judgments. We therefore considered the accounting treatment of the consequences of the termination of this UK Supply Agreement as a key audit matter.	We also reviewed the process implemented by management and assessed the design of controls related to the recognition of provisions for onerous contracts. We reviewed the analysis of the contracts related to this vaccine by obtaining and analyzing in particular the agreements signed with the suppliers. We have assessed the reasonableness of forecasts for production plans, sales and the ability to sell products based in particular on their residual shelf life. Our assessment was based in particular on our understanding of the expected commercial opportunities for the vaccine, our inquiries with Management and on consistency with the forecasts resulting from the strategic plans presented to the Supervisory Board. We have also assessed that note disclosures to the consolidated financial statements provided appropriate information.
Contingencies and other provisions *(Notes 5.30.2 « Other provisions » and 5.33.2 « Contingencies and litigations » to the consolidated financial statements)*	
Valneva is involved in two litigations. a) In July 2016, the Company received an additional request for payment, accompanied by a threat of legal action, related to the acquisition of Humalys in 2009, through which Vivalis (today Valneva) had acquired the technology that was subsequently combined with another antibody discovery technology	We gained an understanding of processes implemented by Management identify risks linked to a legal proceeding or a commercial /regulatory litigation. We assessed the reasonableness of the estimate of the costs related to these risks by :

and contributed to BliNK Biomedical in early 2015. Humalys' former shareholders claim for an additional payment pursuant to this disposal. The Company's management, after consultation with its external advisors, believes that this claim has no substance and the filed litigation is very unlikely to succeed in court. The Company's management considered this litigation as a contingent liability considering the probability of an outflow of resources is low. b) Former shareholders of Intercell, an entity that merged with Valneva, have initiated legal proceedings before the Commercial Court of Vienna to request a revision of the exchange ratio between Intercell and Valneva shares used in the merger in 2013. A provision was recorded in the amount of 2.1 million euros as at December 31, 2021. Given the uncertainties surrounding the outcomes of these litigations, we have considered the accounting treatment in the financial statements to be a key audit matter.	- reviewing the risk assessments performed by the Company's Management and in-house legal counsel ; - obtaining and analyzing the memorandums and responses from the Company's external legal advisors to our legal letters. Finally, we have assessed that note disclosures to the consolidated financial statements provided appropriate information.

Specific verifications

We have also performed, in accordance with professional standards applicable in France, the specific verification required by laws and regulations of the Group's information given in the management report of the Management Board.

We have no matters to report as to their fair presentation and their consistency with the consolidated financial statements.

We attest that the consolidated non-financial statement required by Article L.225-102-1 of the French Commercial Code (*Code de commerce*) is included in the Group's information given in the management report, it being specified that, in accordance with Article L.823-10 of this Code, we have verified neither the fair presentation nor the consistency with the consolidated financial statements of the information contained therein. This information should be reported on by an independent third party.

Report on Other Legal and Regulatory Requirements

Format of presentation of the consolidated financial statements included in the annual financial report

We have also verified, in accordance with the professional standard applicable in France relating to the procedures performed by the statutory auditor relating to the annual and consolidated financial statements presented in the European single electronic format, that the presentation of the consolidated financial statements included in the annual financial report mentioned in Article L. 451-1-2, I of the French Monetary and Financial Code (*Code monétaire et financier*), prepared under the responsibility of the Management Board, complies with the single electronic format defined in the European Delegated Regulation No 2019/815 of 17 December 2018. As it relates to consolidated financial statements, our work includes verifying that the tagging of these consolidated financial statements complies with the format defined in the above delegated regulation.

Based on the work we have performed, we conclude that the presentation of the consolidated financial statements included in the annual financial report complies, in all material respects, with the European single electronic format.

Appointment of the Statutory Auditors

We were appointed as statutory auditors of Valneva by the annual general meeting held on 29 June 2012 for PricewaterhouseCoopers Audit and on 22 February 2007 for Deloitte & Associés

As at 31 December 2021, PricewaterhouseCoopers Audit was in the 10th year of total uninterrupted engagement and Deloitte & Associés was in the 15th year, in the which are the 9th year for both firms since securities of the Company were admitted to trading on a regulated market.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit and Governance Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Management Board.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L.823-10-1 of the French Commercial Code (*Cde de commerce*), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.

- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements.

- Assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein.

- Evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit and Governance Committee

We submit a report to the Audit and Governance Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit and Governance Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit & Governance Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (*Code de commerce*) and in the French Code of Ethics *(code de déontologie)* for statutory auditors. Where appropriate, we discuss with Audit and Governance Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Neuilly-sur-Seine and Bordeaux, 23 March 2022

The Statutory Auditors

PricewaterhouseCoopers Audit	Deloitte & Associés
French original signed by Cédric Mazille	French original signed by Stéphane Lemanissier

A European Company *(Societas Europaea)*
with a Management Board and a Supervisory Board
Registered Office: 6 rue Alain Bombard, 44800 Saint-Herblain (France)
Nantes Trade and Companies Registry (R.C.S.) No. 422 497 560