Vaccines That Make a Difference

2023
CONSOLIDATED
FINANCIAL STATEMENTS

valneva

Consolidated financial statements as at December 31, 2023

I. Consolidated Statement of Profit or Loss and other Comprehensive Income

Consolidated Statement of Profit or Loss

		Year ended December 31,	
in € thousand	Note	2023	2022
Product sales	*5*	144,624	114,797
Other revenues	*5*	9,088	246,506
REVENUES		**153,713**	**361,303**
Cost of goods and services	*6*	(100,875)	(324,441)
Research and development expenses	*6*	(59,894)	(104,922)
Marketing and distribution expenses	*6*	(48,752)	(23,509)
General and administrative expenses	*6*	(47,799)	(34,073)
Other income and expenses, net	*8*	21,520	12,199
OPERATING PROFIT/(LOSS)		**(82,087)**	**(113,443)**
Finance income	*9*	1,210	260
Finance expenses	*9*	(23,325)	(19,054)
Foreign exchange gain/(loss), net	*9*	5,574	(12,587)
Result from investments in associates		—	9
PROFIT/(LOSS) BEFORE INCOME TAX		**(98,629)**	**(144,815)**
Income tax benefit/(expense)	*10*	(2,800)	1,536
PROFIT/(LOSS) FOR THE PERIOD		**(101,429)**	**(143,279)**
EARNINGS/(LOSSES) PER SHARE			
for profit/(loss) for the period attributable to the equity holders of the Company (expressed in € per share)			
Basic	*11*	(0.73)	(1.24)
Diluted	*11*	(0.73)	(1.24)

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

Consolidated Statement of Comprehensive Income

		Year ended December 31,	
	Note	2023	2022
PROFIT/(LOSS) FOR THE PERIOD		**(101,429)**	**(143,279)**
OTHER COMPREHENSIVE INCOME/(LOSS)			
Items that may be reclassified to profit or loss			
Currency translation differences	*22.2*	3,300	(73)
Items that will not be reclassified to profit or loss			
Defined benefit plan actuarial gains/(losses)	*30.1*	(130)	178
OTHER COMPREHENSIVE INCOME/(LOSS) FOR THE YEAR, NET OF TAX		**3,170**	**105**
TOTAL COMPREHENSIVE INCOME/(LOSS) FOR THE PERIOD		**(98,258)**	**(143,174)**

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

II. Consolidated Statement of Financial Position

in € thousand	Note	Year ended December 31 2023	2022
ASSETS			
Non-current assets		**197,238**	**196,685**
Intangible assets	*12*	25,567	28,711
Right of use assets	*13*	20,392	41,603
Property, plant and equipment	*14*	136,198	112,435
Deferred tax assets	*10.2*	6,592	5,637
Other non-current assets	*19*	8,490	8,299
Current assets		**262,824**	**424,660**
Inventories	*17*	44,466	35,104
Trade receivables	*18*	41,645	23,912
Other current assets	*19*	50,633	74,079
Cash and cash equivalents	*20*	126,080	289,430
Assets classified as held for sale	*21*	—	2,134
TOTAL ASSETS		**460,062**	**621,344**
EQUITY			
Share capital	*22*	20,837	20,755
Share premium	*22*	594,003	594,043
Other reserves	*22.2*	65,088	55,252
Retained earnings/(Accumulated deficit)	*22*	(450,253)	(306,974)
Loss for the period		(101,429)	(143,279)
TOTAL EQUITY		**128,247**	**219,797**
LIABILITIES			
Non-current liabilities		**172,952**	**124,156**
Borrowings	*24*	132,768	87,227
Lease liabilities	*27*	29,090	28,163
Refund liabilities	*29*	6,303	6,635
Provisions	*30*	1,074	1,320
Deferred tax liabilities	*10.2*	3,638	694
Other liabilities	*31*	79	116
Current liabilities		**158,863**	**277,392**
Borrowings	*24*	44,079	11,580
Trade payables and accruals	*25*	44,303	41,491
Income tax liability		632	532
Tax and Employee-related liabilities	*26*	16,209	15,738
Lease liabilities	*27*	2,879	25,411
Contract liabilities	*28*	5,697	9,411
Refund liabilities	*29*	33,637	136,450
Provisions	*30*	10,835	31,257
Other liabilities	*31*	592	5,523
TOTAL LIABILITIES		**331,815**	**401,547**
TOTAL EQUITY AND LIABILITIES		**460,062**	**621,344**

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

III. Consolidated Statement of Cash Flows

in € thousand	Note	Year ended December 31, 2023	2022
CASH FLOWS FROM OPERATING ACTIVITIES			
Loss for the year		(101,429)	(143,279)
Adjustments for non-cash transactions	*5.32.1*	44,984	44,070
Changes in non-current operating assets and liabilities	*5.32.1*	514	(147,713)
Changes in working capital	*5.32.1*	(145,578)	1,732
Cash used in operations	*5.32.1*	**(201,509)**	**(245,189)**
Income tax paid		(1,236)	(154)
NET CASH GENERATED FROM/(USED IN) OPERATING ACTIVITIES		**(202,744)**	**(245,343)**
CASH FLOWS FROM INVESTING ACTIVITIES			
Acquisition of subsidiaries, net of cash acquired	*5.1.2*	(10,951)	—
Purchases of property, plant and equipment		(14,231)	(29,246)
Proceeds from sale of property, plant and equipment		111	8
Purchases of intangible assets		(81)	(76)
Proceeds from assets classified as held for sale		3,358	—
Interest received		1,210	260
NET CASH GENERATED FROM/(USED IN) INVESTING ACTIVITIES		**(20,585)**	**(29,054)**
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds/(payments) from issuance of common stock, net of costs of equity transactions	*5.22*	(240)	189,837
Proceeds from borrowings, net of transaction costs	*5.24*	81,111	39,331
Repayment of borrowings	*5.24*	(2,097)	(1,793)
Payment of lease liabilities	*5.27*	(3,127)	(3,048)
Interest paid		(12,567)	(9,211)
NET CASH GENERATED FROM/(USED IN) FINANCING ACTIVITIES		**63,081**	**215,116**
NET CHANGE IN CASH AND CASH EQUIVALENTS		**(160,248)**	**(59,282)**
Cash and cash equivalents at beginning of the year [(1)]	*5.20*	286,532	346,642
Exchange gains/(losses) on cash		(204)	(828)
CASH AND CASH EQUIVALENTS AT END OF THE PERIOD [(1)]		**126,080**	**286,532**

(1) Cash and cash equivalents as at December 31, 2022 amounted to €289.4 million as it included restricted cash of €2.9 million.

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

IV. Consolidated Statement of Changes in Equity

in € thousand	Note	Share capital	Share premium	Other reserves	Retained earnings/ (Accumulated deficit)	Profit/ (loss) for the period	Total equity
BALANCE AS AT JANUARY 1, 2023		**20,755**	**594,043**	**55,252**	**(306,974)**	**(143,279)**	**219,797**
Total comprehensive income/(loss)		—	—	3,170	—	(101,429)	(98,258)
Income appropriation		—	—	—	(143,279)	143,279	—
Share-based compensation expense:							
Value of services	*23*	—	—	6,666	—	—	6,666
Exercises	*23*	82	(39)	—	—	—	42
BALANCE AS AT DECEMBER 31, 2023		**20,837**	**594,003**	**65,088**	**(450,253)**	**(101,429)**	**128,247**

in € thousand	Note	Share capital	Share premium	Other reserves	Retained earnings/ (Accumulated deficit)	Profit/ (loss) for the period	Total equity
BALANCE AS AT JANUARY 1, 2022		**15,786**	**409,258**	**52,512**	**(233,549)**	**(73,425)**	**170,581**
Total comprehensive income/(loss)		—	—	105	—	(143,279)	(143,174)
Income appropriation		—	—	—	(73,425)	73,425	—
Share-based compensation expense:							
Value of services	*23*	—	—	2,636	—	—	2,636
Exercises	*23*	387	3,371	—	—	—	3,758
Capital Increase	*22*	4,582	181,413	—	—	—	185,996
BALANCE AS AT DECEMBER 31, 2022		**20,755**	**594,043**	**55,252**	**(306,974)**	**(143,279)**	**219,797**

Capital Increase includes the cost of transactions, net of tax.

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

V. Notes to the Consolidated Financial Statements

Note 1 General information

1.1 Corporate Information

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, applying deep expertise across multiple vaccine modalities, focused on providing either first-, best- or only-in-class vaccine solutions. The Group has a strong track record, having advanced multiple vaccines from early R&D to approvals, and currently markets three proprietary travel vaccines as well as certain third-party vaccines leveraging the Group's established commercial infrastructure. Revenues from the growing commercial business help fuel the continued advancement of the vaccine pipeline. This includes the only Lyme disease vaccine candidate in advanced clinical development, which is partnered with Pfizer, the world's first vaccine against the chikungunya virus, as well as vaccine candidates against the Zika virus and other global public health threats.

VLA2001, the only inactivated whole-virus COVID-19 vaccine approved in Europe, was first commercialized in late 2021. Valneva suspended manufacturing of the vaccine in August 2022 and inventories were fully written down as of December 31, 2022. In order to save additional costs linked to the vaccine including license fees, Valneva requested the withdrawal of VLA2001's marketing authorization in Europe. The withdrawal was accepted by EMA and became effective on December 1, 2023.

As at December 31, 2023, the Group's portfolio includes three commercial vaccines:

- IXIARO (also marketed as JESPECT), indicated for the prevention of Japanese encephalitis;
- DUKORAL, indicated for the prevention of cholera, and, in some countries, prevention of diarrhea caused by enterotoxigenic Escherichia coli; and
- IXCHIQ, Valneva's single-shot chikungunya vaccine.

The Company is registered at 6 rue Alain Bombard, 44800 Saint-Herblain, France. Valneva has operations in Austria, Sweden, the United Kingdom, France, Canada and the United States and over 700 employees in total.

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

Significant events of the period and significant agreements

Divestment of CTM Unit in Solna, Sweden

Valneva decided to divest its Clinical Trial Manufacturing (CTM) unit in Solna. The Company completed a business transfer agreement with NorthX Biologics, an established contract development and manufacturing organization (CDMO), with over 30 years of Good Manufacturing Practices (GMP) production experience. Their ownership of the unit took effect on July 1, 2023. Valneva maintains the manufacturing site in Sweden where the Dukoral vaccine is manufactured and filled. The deal comprised Valneva's CTM production equipment and approximately 30 staff members in Sweden, including the existing Valneva Sweden Site Head. The CTM business continues to utilize the existing premises in Solna. Valneva Sweden is sub-leasing the premises to NorthX Biologics and provides services in Facility Management, Engineering and Warehousing. Valneva is considering this sub-lease as an operational lease. A loss of €1.4 million from the divestment of the CTM Unit in Solna is included in the "Miscellaneous income/(expenses), net" (see Note 8).

Extension of existing loan agreement by $100 million (€90 million)

On August 16, 2023, Valneva entered into an agreement to increase the principal amount of its existing $100 million (€90 million) senior secured loan agreement with funds managed by leading U.S. healthcare investment firms Deerfield Management Company and OrbiMed ("the D&O Loan Agreement"). The add-on loan facility has a three-year interest-only period and will mature in the third quarter of 2028. The loan interest rate remains unchanged. The increased funding will be used to further invest in research and development (R&D), as well as continued market access preparation and commercialization of Valneva's chikungunya vaccine (see Note 24).

Sale of BliNK equity interest

On September 8, 2023, the Company sold its 48.9% equity interest in BliNK Biomedical SAS, Marseille, which had been classified as an asset held for sale since June 30, 2022 (see Note 21).

Purchase of the office building in Vienna (VBC3)

On October 31, 2023, the Company acquired VBC 3 Errichtungs GmbH, Vienna, the legal entity that owns the Vienna building occupied by Valneva, which was previously leased. The acquisition price net of the entity's cash is €11.0 million. For more information please refer to Note 1.2.

U.S. FDA Approval of World's First Chikungunya Vaccine, IXCHIQ

On November 10, 2023, Valneva's single-shot chikungunya vaccine candidate VLA1553 received approval from the U.S. Food and Drug Administration (FDA) under the brand name IXCHIQ. In the U.S., the vaccine is indicated for the prevention of disease caused by the chikungunya virus (CHIKV) in individuals 18 years of age and older who are at increased risk of exposure to CHIKV.

EMA accepts Chikungunya vaccine Marketing Authorization Application for accelerated assessment

The European Medicines Agency (EMA) performed a technical validation of the Marketing Authorization Application (MAA) for Valneva's single-shot chikungunya vaccine candidate VLA1553 and determined that all essential regulatory elements required for scientific assessment were included in the application. The MAA was granted accelerated assessment in November 2023 by EMA's Committee for Medicinal Products for Human Use (CHMP) based on the vaccine candidate's "major interest for public health and therapeutic innovation".

Change in the Company's governance structure

On December 20, 2023, the Company's shareholders approved a transition from the Company's two-tier governance model with a Supervisory Board and Management Board to a one-tier governance model led by a Board of Directors. This transition was effective on December 20, 2023. For convenience, references in these Notes to the "Board" should be interpreted to refer to the Supervisory Board or Board of Directors, as applicable.

The Executive Committee comprises the Company's former Management Board and in addition, since January 1, 2024, the Company's Chief Operating Officer and Chief People Officer. The Company's Board of Directors also changed the name of the Board's Audit and Risk Committee to the Audit, Compliance and Risk Committee in connection with the governance change, and for convenience these Notes refer to this committee as the Audit Committee.

1.2 Group information

The following list shows all subsidiaries held by the Company directly or indirectly:

Name	Country of incorporation	Consolidation Method	Interest held as at	
			December 31, 2023	December 31, 2022
Vaccines Holdings Sweden AB	SE	Full Consolidation	100 %	100 %
Valneva Austria GmbH	AT	Full Consolidation	100 %	100 %
Valneva Canada Inc.	CA	Full Consolidation	100 %	100 %
Valneva France SAS	FR	Full Consolidation	100 %	100 %
Valneva Scotland Ltd.	UK	Full Consolidation	100 %	100 %
Valneva Sweden AB	SE	Full Consolidation	100 %	100 %
Valneva UK Ltd.	UK	Full Consolidation	100 %	100 %
Valneva USA, Inc.	US	Full Consolidation	100 %	100 %
VBC 3 Errichtungs GmbH	AT	Full Consolidation	100 %	— %

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

The Company's site in Saint-Herblain includes general and administrative functions as well as research and development facilities. Valneva SE has a site in Lyon which operates commercial activities.

Vaccines Holdings Sweden AB, located in Solna, Sweden, is the holding company of Valneva Sweden AB, also located in Solna, which manufactures DUKORAL and commercializes DUKORAL, IXIARO and third-party products such as Moskito Guard and other vaccines in the Nordic countries.

Valneva Austria GmbH, located in 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, VLA2001 and third-party products such as FLUCELVAX TETRA, FLUAD, Moskito Guard, Rabipur/RabAvert and Encepur.

Valneva Canada Inc., located in Kirkland, Canada, commercializes IXIARO, DUKORAL and third-party products such as KAMRAB and Rabipur.

Valneva France SAS, located in Lyon, France, commercializes IXIARO, DUKORAL and third-party products such as PreHevbri, Rabipur and Encepur.

Valneva Scotland Ltd., located in Livingston, Scotland (United Kingdom) is primarily involved in the production of IXIARO and Valneva's new chikungunya vaccine IXCHIQ. Valneva Scotland Ltd. was also executing the production of VLA2001 prior to suspension of its manufacturing.

Valneva UK Ltd., located in Fleet, England (United Kingdom), commercializes DUKORAL, IXIARO and third-party products such as PreHevbri or Rabipur in the United Kingdom.

Valneva USA, Inc., located in Bethesda, Maryland (USA), focuses on the commercialization of IXIARO to the U.S. military and the U.S. private market.

Acquisition of VBC 3 Errichtungs GmbH (VBC3)

On October 31, 2023, the Group acquired 100% of the equity of VBC 3 Errichtungs GmbH, located in Vienna, Austria, whereby Valneva SE purchased 6% and Valneva Austria GmbH 94% of the equity. VBC3 owns the building in which Valneva Austria GmbH carries out central administrative and R&D activities. Formerly the building was under a finance lease. The purchase was treated as an acquisition of a group of assets, and the cost of the group was allocated to the individual identifiable assets and liabilities on the basis of their relative fair values at the date of purchase.

The following table summarizes the recognised amounts of identifiable net assets based on their relative fair values at the acquisition date which was determined as October 1, 2023 as per contract details:

in € thousand	October 1, 2023
Cash	1,003
Property, Plant & Equipment	22,373
Loans and borrowings	(11,296)
Other liabilities	(126)
TOTAL IDENTIFIABLE NET ASSETS	**11,955**

The fair value of the consideration transferred, excluding the entity's cash of €1.0 million, was €11.0 million and was settled in cash. Acquisition-related costs were of minor relevance and are not included as part of consideration transferred. They have been recognised as an expense in the consolidated statement of profit or loss, as part of other expenses.

Note 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

2.1 Basis of preparation

These 2023 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 issued by the International Accounting Standards Board (IASB) and endorsed by the European Union (EU).

The preparation of financial statements in conformity with IFRS as issued by the IASB and endorsed by the EU 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 3.

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 and authorized for issuance by the Board of Directors on March 18, 2024.

2.2 Impact of new, revised or amended Standards and Interpretations

Standards, amendments to existing standards and interpretations issued by IASB and endorsed by the European Union whose application has been mandatory since January 1, 2023

New standards and interpretations adopted by the Group		Effective date in accordance with IASB	Date of EU Endorsement	Effective date in accordance with EU Endorsement	Effects
IFRS 17	Insurance Contracts including Amendments to IFRS 17	January 1, 2023	November 19, 2021	January 1, 2023	none
AMENDMENTS ADOPTED BY THE GROUP					
IAS 1	Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting policies	January 1, 2023	March 2, 2022	January 1, 2023	none
IAS 8	Amendments to IAS 8 Accounting policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates	January 1, 2023	March 2, 2022	January 1, 2023	none
IAS 12	Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction	January 1, 2023	August 11, 2022	January 1, 2023	none
IAS 12	Amendments to IAS 12 Income taxes: International Tax Reform – Pillar Two Model Rules	January 1, 2023	November 8, 2023	January 1, 2023	none
IFRS 9 & IFRS 17	Amendments to IFRS 17 Insurance contracts: Initial Application of IFRS 17 and IFRS 9 – Comparative Information	January 1, 2023	September 8, 2022	January 1, 2023	none

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. The amendments to IAS 1 Presentation of Financial Statements have had an impact on the Group's disclosures of accounting policies, but not on the measurement, recognition or presentation of any items in the Group's financial statements.

Standards, amendments to existing standards and interpretations whose application is not yet mandatory

The Group did not elect for early application of the following new standards, amendments and interpretations which were issued but not mandatory as at January 1, 2023.

New standards, Interpretations and Amendments		Effective date in accordance with IASB	Date of EU Endorsement	Effective date in accordance with EU endorsement	Effects
IAS 1	Amendments to IAS 1 Presentation of Financial Statements	January 1, 2024	December 19, 2023	January 1, 2024	none
IFRS 16	Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback	January 1, 2024	November 20, 2023	January 1, 2024	none
IAS 7 & IFRS 7	Amendments to IAS 7 Statement of Cash Flows and IFRS 7 Financial Instruments: Disclosures: Supplier Finance Arrangements	January 1, 2024	not yet endorsed	not yet endorsed	none
IAS 21	Amendments to IAS 21 The Effects of Changes in Foreign Exchange Rates: Lack of Exchangeability	January 1, 2025	not yet endorsed	not yet endorsed	none

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

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.

2.4 Foreign currency translation

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.

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.

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;
- 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); 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.

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. The Group's risk management systems identify, evaluate and manage financial risks. The Audit Committee of the Group's Board of Directors receives regular reports on the Group's risk management systems, including the management of financial risks.

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 (USD). The foreign exchange risks from the exposure to other currencies 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.

Interest rate risk

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 2023, as well as 2022, both the Group's investments as well as the borrowings at variable rates were denominated in EUR, SEK, USD, 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, 2023 and December 31, 2022, 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.

Credit risk

The Group is exposed to credit risk. It is the risk of financial loss if customers or counterparties to a financial instrument fail to meet their contractual obligations.

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. The credit quality of financial assets is described in Note 16.4.

Liquidity risk

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, 2023 will be sufficient to fund its operations for at least 12 months from the date of authorization for issuance of these consolidated financial statements. This is further supported by the gross proceeds of $103 million for the sale of the Priority Review Voucher (PRV) which Valneva received in February 2024. For the existing D&O 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 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.

Balance as at December 31, 2023

in € thousand	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	Over 5 years	Total
Borrowings	44,079	62,378	70,390	—	176,847
Lease liabilities	2,879	5,313	5,414	18,362	31,969
Refund liabilities	33,637	6,303	—	—	39,941
Trade payables and accruals	44,303	—	—	—	44,303
Tax and employee-related liabilities (1)	10,815	—	—	—	10,815
Other liabilities	34	—	—	—	34
TOTAL	**135,747**	**73,995**	**75,804**	**18,362**	**303,908**

(1) 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.

Balance as at December 31, 2022

in € thousand	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	Over 5 years	Total
Borrowings	11,629	74,815	44,859	939	132,242
Lease liabilities	26,674	5,915	5,706	21,268	59,563
Refund liabilities	140,098	—	7,000	—	147,098
Trade payables and accruals	41,491	—	—	—	41,491
Tax and employee-related liabilities (1)	10,778	—	—	—	10,778
Other liabilities	87	—	—	—	87
TOTAL	**230,756**	**80,731**	**57,565**	**22,207**	**391,260**

(1) 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.

The fair values as well as the book values of the Group's borrowings are disclosed in Note 24. To manage liquidity risk, the Group holds a combination of cash, cash equivalents and short-term deposit balances.

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-sustained 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

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.

Note 3 Critical accounting judgements and key sources of estimation uncertainty

In applying the Group's accounting policies, which are described in Note 2: Summary of significant accounting policies, 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.

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 management has 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 Other revenues and Note 29 Refund liabilities: Revenue recognition of other revenues/refund liabilities: management's judgement is required to determine the identification 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 regarding whether revenue from collaborations, licensing and service agreements is recognized over time or at a point in time. Revenue is only recognized when it is highly likely that it will not reverse in future, and this is a judgement required from management. In particular, Note 2 underlines the judgements made in applying accounting policies, whereby the Research Collaboration and License Agreement with Pfizer and several amendments thereto are most relevant.

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 Revenues: Revenue recognition of product sales: estimate of expected returns and replacements, and supply of products free of charge;
- Note 5.2 Other revenues: Likelihoods for refund liabilities and for revenue recognition in accordance with the actual costs compared to the budget;
- Note 8 Other income/(expenses), net and 5.31 Other liabilities: Estimates of income recognized and repayments from grants, measured according to cost incurred compared to the budget;
- Note 10 Income tax benefit/(expense): 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 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 when Valneva can benefit from this intangible asset. 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 14 Property, plant and equipment: Depreciation period - assessment of useful life;
- Note 15 Impairment testing: Impairment test of intangible, tangible assets and right of use assets: 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 Executive Committee. 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 vaccine candidates and receive regulatory approval, or if Valneva fails to successfully manufacture or commercialize vaccine candidates if approved, an impairment may be required. For the main estimates and sensitivities related to the impairment test regarding the CGU, see Note 15;
- Note 17 Inventories: 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 used. For the assessment of write-downs of work in progress, finished goods and purchased goods, the forecasted sales plans for 2024 and a minimum shelf life at the time of the most current sales expectation have been taken into account. In addition, those inventories have been assessed on the likelihood of the release of those products.
- Note 23 Share-based compensation: 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 29 Refund liabilities: Recognition and classification of the refund obligation related to the Pfizer Collaboration and License Agreement;
- Note 30 Provisions and Note 33 Commitments and contingencies: 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, management made assumptions regarding the likelihood of termination costs for certain agreements.
- Note 18 Trade receivables and 16.5 Impairment of financial assets: A simplified approach based on historical loss rates is used to determine the loss allowances in order to recognize expected credit losses (ECL) for short-term financial assets such as trade receivables.

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 16: Financial instruments and
- Note 23: Share-based compensation.

Note 4 Segment information

The Company's Management Board, and since December 20, 2023, its Executive Committee, as the Company's chief operating decision maker ("CDM"), considers Valneva's operating business in its entirety to allocate resources and assess performance. The committee evaluates all vaccine candidates and vaccine products together as a single operating segment, "development and commercialization of prophylactic vaccines". Therefore, the split used to allocate resources and assess performance is based on a functional view, thus correlating to the income statement format.

As a consequence, the Group has changed its internal reporting process as at January 1, 2023 to present a single operating segment instead of the previously disclosed product-based segments.

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

Note 5 Revenues

Revenues include both revenues from contracts with customers and other revenues (mainly subleases) which are out of scope from IFRS 15:

	Year ended December 31,	
in € thousand	2023	2022
Product sales	144,624	114,797
Other revenues from contracts with customers	8,075	245,709
Other non-IFRS 15 revenue	1,014	797
REVENUES	**153,713**	**361,303**

Product sales increased in the year ended December 31, 2023 by €29.8 million compared to the prior period. This is a result of higher demand for IXIARO following globally increased travel activities. Further, DUKORAL sales went up substantially in 2023 after supply shortages in 2022, COVID-19 VLA2001 product sales strongly decreased following the Company's decision to suspend the program.

Other revenues from contracts with customers decreased in the year ended December 31, 2023 by €237.6 million. In 2022, €169.2 million and in 2021 €253.3 million of revenues for COVID-19 VLA2001 were recognized as other revenues from the re-assessment of the likelihood of the royalty obligation and the de-recognition of the previously included capex obligation towards the UK Authority following the settlement agreement in connection to the UK Supply Agreement (discussed in Note 5.2). Furthermore, a release of non-refundable advance payments from EU member states related to the COVID-19 VLA2001 Advance Purchase Agreement (APA) with the European Commission amounting to €110.8 million was included as other revenues in 2022. This was offset by €45.9 million net negative revenue from the updated terms of the Collaboration and License Agreement with Pfizer. The other changes compared to 2022 are made up of individually insignificant transactions.

5.1 Product sales

The Group mostly generates product sales revenues from the sale of its commercialized travel vaccines and from the sale of third-party products.

The Group's product sales contracts generally include one nature of performance obligation. Revenue is recognized at the point in time when the identified performance obligation is transferred to the customer, so either when the customer obtains control over the goods at the time of shipment or when the product is received by the customer, depending on the terms of the agreement, which generally happens within a few days. Sales contracts with retailers and with the U.S. Department of Defense (DOD) are shown as "direct product sales", whereas sales to distributors are reported as "indirect sales - sales through distributors".

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 constraint on variable consideration (expected rebates, discounts and considerations for product returns) are taken into account and recognized on an accrual basis and reported as refund liabilities or as contract liabilities (for replacement doses) in the consolidated balance sheet.

In most cases, Valneva sells the products through retailers. When more than one party is involved in providing or 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 for fulfilling 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 of Valneva's other 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. Distribution costs and other amounts payable to customers are deducted from revenue for principals, and 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.

5.2 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 received 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, and therefore the revenue is recognized at the point in time at which the licensee is able to direct the use of 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 consideration constraint is removed.

Revenue for research and development services within the Group's contracts currently in place is recognized over time. The progress is measured on an input basis (costs incurred related to total costs expected). This input method is considered 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 a change in estimate of variable consideration occurs. Revenues from license royalties are recognized when the underlying product sales occur.

Vaccine Supply Agreement with the UK Authority (UK Supply Agreement)

In September 2020, Valneva entered into the UK Supply Agreement with the Secretary of State for Business, Energy and Industrial Strategy of the United Kingdom (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, including an obligation for Valneva to upgrade its manufacturing facilities in Scotland. In September 2021, Valneva received notice of the UK Authority's decision to terminate the UK Supply Agreement, and the termination became effective in October 2021.

The impact of the termination of the UK Supply Agreement was assessed as at December 31, 2021. 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 was more than remote, a refund liability of €166.9 million was recognized for the royalty on sales and certain other obligations which survive the termination of the UK Supply Agreement.

In June 2022, Valneva and the UK Authority signed a settlement agreement (the UK Settlement Agreement). The UK Settlement Agreement resolves certain matters relating to the obligations of the Company and UK Authority following the termination of the UK Supply Agreement and in relation to the separate agreement relating to clinical trials of VLA2001 in the UK, which remains in place. The Company continues to have certain other obligations pursuant to provisions of the UK Supply Agreement that survive its termination. Due to the termination of the agreements other revenue in the amount of €169.2 million (of which €80.0 million related to the capex obligation and €89.2 million related to the royalty obligation) were recognized in the year ended December 31, 2022.

There was no impact on the financial position of the Group for the year ended December 31, 2023.

Advance Purchase Agreement with the European Commission (EC APA)

In November 2021, Valneva entered into the EC APA in order to supply its VLA2001 COVID-19 vaccine to participating EC member states. The EC APA was amended in July 2022 to reduce the amount of doses of VLA2001 ordered. At the time of the amendment, Valneva had received advance payments for the original order volume. Per the terms of the EC APA, Valneva is not obligated to repay any amount of such advance payments that had already been spent or committed.

As of December 31, 2022, Valneva had fulfilled its remaining performance obligations under the contract and assessed that the risk of reimbursement of the advance payments was remote. Accordingly, the contract liability was released in full to revenue for the year ended December 31, 2022, including €6.0 million attributed to product sales (as partial advance payment for delivery of 1.25 million doses of VLA2001) and €110.8 million attributed to other revenue from contracts with customers. Therefore, product sales present the part directly related to vaccines sale with the original dose price according to the agreement.

There was no impact on the financial position of the Group for the year ended December 31, 2023.

Lyme - Pfizer Collaboration and License Agreement

In April 2020, Valneva signed the Collaboration and License Agreement with Pfizer to co-develop and commercialize the Group's Lyme disease vaccine candidate (VLA15). This is classified as an agreement with a customer as defined by IFRS 15 guidance on revenue contracts with customers, and accordingly, amounts received or payable by Valneva under the Collaboration and License Agreement are accounted for in the Group's revenues.

In 2021 and 2022 several amendments to the transaction price were made via amendments to the Collaboration and License Agreement and resulted in a reduction to the constrained (i.e. highly probable) transaction price, reflecting an increase in expected payments to customer related to Valneva's contribution to Pfizer's future development costs.

In addition, Valneva considered the constraint to determine if it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur. Valneva considered that it is no longer highly probable that it will be entitled to the consideration as payments to customers might further increase in the future. Therefore, for the year ended December 31, 2022, the cumulated revenue of €45.9 million was reversed as other revenues from contracts with customers. In the year ended December 31, 2023, no revenues were recognised.

While license and equipment purchase orders were fulfilled in prior periods, the R&D activities and additional services are ongoing through 2024 and will satisfy the performance obligation over time. During this period Valneva will fund 40% of the remaining shared development costs. Items not included in the transaction price as of December 31, 2023 are (i) $143 million of early commercialization milestones, (ii) royalties, ranging from 14% to 22%, and (iii) $100 million of sales milestones which will be recognized when they occur.

As at December 31, 2023, the discounted refund liability amounted to €33.1 million (December 31, 2022: €135.5 million). The decrease was due to payments made in the period in connection with the terms of this agreement. The amounts not recognized in revenue are disclosed as refund liabilities as well as trade receivables which amounted to €10.7 million for the year ended December 31, 2023 (December 31, 2022: €4.6 million).

5.3 Disaggregated revenue information

The Group's revenues are disaggregated as follows:

Type of goods or service

	Year ended December 31,	
in € thousand	**2023**	**2022**
IXIARO	73,483	41,349
DUKORAL	29,775	17,334
Third party products	35,675	26,545
COVID VLA2001	5,691	29,568
PRODUCT SALES	**144,624**	**114,797**
IXCHIQ (1)	2,733	5,565
COVID VLA2001 (1)	1,973	280,010
Lyme VLA15	—	(45,869)
Services related to clinical trial material	275	3,205
Others	3,093	2,798
OTHER REVENUES FROM CONTRACTS WITH CUSTOMERS	**8,075**	**245,709**
Other non-IFRS 15 revenue	1,014	797
REVENUES	**153,713**	**361,303**

(1) Revenues from these products were derived from contractual arrangements and do not represent product sales.

In the year ended December 31, 2023 product sales revenues for all active products increased significantly by €29.8 million compared to the same period in 2022.

IXIARO/JESPECT sales showed a 78% increase in sales which was primarily the result of the continued travel market recovery, as well as price increases. The increase in IXIARO product sales included an adverse €1.5 million foreign currency impact. DUKORAL sales in 2023 were 72% higher compared to 2022. This increase is also a result of the significant recovery in the private travel markets and price increases. Foreign currency fluctuations reduced DUKORAL sales by €0.9 million. Third Party product sales recorded a 34% increase which was mainly driven by sales of Rabipur/RabAvert and Encepur under the distribution agreement with Bavarian Nordic. On the other hand, sales revenues for the COVID-19 VLA2001 product decreased by 81% as the program was suspended given the strongly decreased demand.

In the year ended December 31, 2022, other revenues from contracts with customers were strongly influenced by one-off effects. An income of €169.2 million was related to the termination of the UK Supply Agreement and further €110.8 million to the termination of the EC APA. For more detail see above within this Note. This was partially offset by €45.9 million of negative revenue resulting from an increase in the refund liability linked to the amendment to the Collaboration and License Agreement with Pfizer.

Sales channels for product sales

Products are sold via the following sales channels:

	Year ended December 31,	
in € thousand	**2023**	**2022**
Direct product sales	119,305	75,968
Indirect product sales (Sales through distributors)	25,320	38,828
TOTAL PRODUCT SALES	**144,624**	**114,797**

Geographical markets

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

	Year ended December 31,	
in € thousand	2023	2022
United States	32,964	(23,803)
Canada	28,193	18,904
United Kingdom	20,266	181,129
Austria	14,583	21,793
Germany	13,503	68,529
Nordics	12,695	12,043
France	5,866	46,608
Other Europe	9,335	18,740
Rest of World	16,308	17,360
REVENUE TOTAL	**153,713**	**361,303**

Nordics includes Finland, Denmark, Norway and Sweden.

In the year ended December 31, 2023, revenues from product sales increased considerably, driven by the continued recovery of travel vaccine sales. Revenues from Canada and the United States especially contributed to this increase.

Revenues in the year ended December 31, 2022 were strongly influenced by non-recurring effects. Revenues from the United States included a €45.9 million net negative revenue from the updated terms of the Collaboration and License Agreement with Pfizer. Further 2022 revenues from the United Kingdom included non-product revenues of €169.2 million from the UK Authority following the UK Settlement Agreement. 2022 also contained a release of non-refundable advance payments from several EU member states, affecting specifically revenues from Germany, France, Austria, Nordics and Other Europe.

Information about major customers

The concentration risk on the customer portfolio of the Group is limited. In 2023, there was one single customer (share of 12%) with a contribution exceeding 10% of the annual revenue.

Product sales to the largest customer amounted to €17.7 million in 2023 (2022: €16.0 million). Other revenues from the largest customer amounted to €5.0 million in 2023 (2022: €169.2 million). In 2022, the UK Authority was the largest customer due to the UK Supply Agreement explained above in Note 5.2.

5.4 Assets and liabilities related to contracts with customers

See Note 18 for details on trade receivables, Note 19 for details on costs to obtain a contract, Note 28 for details of contract liabilities and Note 29 for details of refund liabilities.

Note 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	*Note*	Year ended December 31, 2023	2022
Consulting and other purchased services		80,988	141,631
Cost of services and change in inventory		11,417	190,086
Employee benefit expense other than share-based compensation	*7*	72,997	56,393
Share-based compensation expense	*7*	6,276	(5,215)
Raw materials and consumables used		14,113	12,723
Depreciation and amortization and impairment	*12/13/14*	16,853	44,285
Building and energy costs		13,088	14,696
Supply, office and IT costs		11,663	11,739
License fees and royalties		5,492	6,830
Advertising costs		13,361	7,343
Warehousing and distribution costs		3,939	1,898
Travel and transportation costs		2,700	2,208
Other expenses		4,432	2,329
OPERATING EXPENSES		**257,320**	**486,945**

The €229.6 million decrease in operating expenses from €486.9 million in the year ended December 31, 2022 to €257.3 million in the year ended December 31, 2023 primarily resulted from non-recurring expenses recorded in 2022 which were related to the suspended COVID-19 program. These non-recurring expenses included the write-down of COVID-19 vaccine inventory of €159.4 million (presented under "cost of services and change in inventory") as well as impairment charges of fixed assets.

Expenses for "consulting and other purchased services" reduced substantially in the year ended December 31, 2023, as the comparison period of 2022 included considerable expenses for VLA2001 related to research and development and external manufacturing costs.

Expenses for "cost of services and change in inventory" strongly decreased as in the year ended December 31, 2022 effects from the significant changes to the ordered volumes and the expected future demand for VLA2001, in particular a write-down of inventory of €159.4 million, were recorded.

The expense position "depreciation and amortization and impairment" contains a reversal of a fixed asset impairment in the amount of €1.9 million related to production equipment in the year ended December 31, 2023, whereas 2022 included non-recurring charges of €14.8 million for the impairment of VLA2001 related fixed assets including idle manufacturing equipment, leasehold improvements and Right of Use assets.

"Employee benefit expenses other than share-based compensation" increased in the year ended December 31, 2023 compared to December 31, 2022 because of a €23.2 million release of the employer contribution provision and therefore an income to the social security contributions in 2022. In the same year "Share-based compensation expense" showed an income due to share-based payment program valuations resulting from the reduction in the share price.

Fees charged by the Group Auditors

	Year ended December 31							
	PricewaterhouseCoopers				Deloitte & Associés			
in € thousand	2023	%	2022	%	2023	%	2022	%
Statutory audit of separate and consolidated financial statements	**1,710**	**81%**	**1,612**	**84%**	**1,519**	**79%**	**1,412**	**83%**
provided by the statutory auditor	1,177	56%	1,107	58%	1,240	65%	1,110	66%
provided by the statutory auditor's network	534	25%	505	26%	280	15%	302	18%
Services other than certification of accounts	**405**	**19%**	**304**	**16%**	**401**	**21%**	**280**	**17%**
provided by the statutory auditor	362	17%	280	15%	382	20%	280	17%
provided by the statutory auditor's network	43	2%	25	1%	19	1%	—	—%
TOTAL	**2,116**	**100%**	**1,916**	**100%**	**1,921**	**100%**	**1,692**	**100%**

Services other than certification of accounts provided by the statutory auditors includes services that PricewaterhouseCoopers and Deloitte & Associés provides, such as consents and review of documents filed with the SEC and with AMF, services for certification or reports on capital transactions and also services related to the verification of the consolidated declaration of non-financial performance.

Note 7 Employee benefit expense

Employee benefit expenses include the following:

in € thousand	Year ended December 31, 2023	2022
Salaries	55,793	57,272
Social security contributions	14,359	(3,035)
Share-based compensation expense	6,276	(5,215)
Training and education	1,292	840
Other employee benefits	1,553	1,317
TOTAL EMPLOYEE BENEFIT EXPENSE	**79,273**	**51,178**

In the year ended December 31, 2022, the social security contributions included an income of €23.2 million resulting from the release of the provision of employer contribution charges on share-based payment programs due to the reduction in the share price.

During 2023, the Group had an average of 684 employees (2022: 778 employees).

Note 8 Other income/(expenses), net

Other income and expenses, net include the following:

in € thousand	Year ended December 31, 2023	2022
Research and development tax credit	6,797	15,348
Grant income	11,350	191
Profit/(loss) on disposal of fixed assets and intangible assets, net	(21)	(38)
Profit/(loss) from revaluation of lease agreements	45	(32)
Taxes, duties, fees, charges, other than income tax	(475)	(217)
Miscellaneous income/(expenses), net	3,824	(3,054)
OTHER INCOME AND EXPENSES, NET	**21,520**	**12,199**

Other operating income and expenses increased by €9.3 million, or 76%, to €21.5 million for the year ended December 31, 2023 from €12.2 million for the year ended December 31, 2022 due to higher grant income and net miscellaneous income.

In the year ended December 31, 2023, "grant income" increased due to the recognition of an €11.1 million grant income received from Scottish Enterprise, Scotland's national economic development agency, for developing non-COVID-19 vaccines (the chikungunya vaccine and IXIARO).

On the other hand the "research and development tax credit" was positively affected in the year 2022 by an amount of €13.9 million related to the research and development programs executed in Austria, mainly for the COVID-19 and chikungunya vaccine candidates.

In the "miscellaneous income/(expenses), net", an income of €4.7 million from a settlement with a supplier in connection with COVID-19 activities was recognised in the year ended December 31, 2023. Further non-recurrent transaction results were recorded, namely a loss of €1.4 million from the divestment of the CTM Unit in Solna as well as a €0.3 million gain from the sale of BliNK. In the year ended December 31, 2022, this position was negatively impacted by a litigation provision in the amount of €3.1 million.

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.

Grants 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 24.1).

Government grants 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 February 2022 the Group received two grants worth up to £20.0 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 the COVID-19 vaccine and other vaccine candidates. Following the termination of the COVID-19 vaccine program, in May 2023 the grant relating to this program was amended, reducing the available funding by £0.7 million and adjusting how the funds will be used. The funds under these grants will be received over three years, beginning in March 2022. If Valneva fails to comply with the terms of the grants, Scottish Enterprise may stop payments under the grants and require repayment of the funds provided to date. In the year ended December 31, 2023, €11.1 million (£9.6 million) of grant funds from Scottish Enterprise were recognized.

In 2019 the Group signed a funding agreement with CEPI. Valneva will receive up to $24.6 million for vaccine manufacturing and late-stage clinical development of a single-dose, live attenuated vaccine against chikungunya (VLA1553). In line with CEPI's commitment to equitable access, the funding will underwrite a partnership effort to accelerate regulatory approval of Valneva's chikungunya vaccine for use in regions where outbreaks occur and support World Health Organization 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 a loan and measured in accordance with IFRS 9 (see Note 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 from the CEPI grant which benefits Instituto Butantan is recognized as revenue (see Note 5). In the year ended December 31, 2023, €0.2 million of grant income (2022: €0.2 million) and €5.0 million of other revenues (2022: €3.9 million) related to CEPI were recognized.

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 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.

In both periods the position included tax credits primarily from Austria and to a lesser extent from France.

Note 9 Finance income/(expenses), net

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

	Year ended December 31,	
in € thousand	**2023**	**2022**
FINANCE INCOME		
Interest income from other parties	1,210	260
TOTAL FINANCE INCOME	**1,210**	**260**
FINANCE EXPENSES		
Interest expense on loans	(13,681)	(8,238)
Interest expense on refund liabilities	(8,419)	(9,597)
Interest expenses on lease liabilities	(1,183)	(955)
Other interest expense	(42)	(264)
TOTAL FINANCE EXPENSES	**(23,325)**	**(19,054)**
FOREIGN EXCHANGE GAIN/(LOSSES), NET	**5,574**	**(12,587)**
FINANCE INCOME/(EXPENSES), NET	**(16,541)**	**(31,381)**

The foreign exchange gain/(losses), net are primarily driven by non-cash revaluation results of non-Euro denominated balance sheet positions, especially caused by USD denominated liabilities (devaluation of the USD against the EUR of 4% in 2023).

The increase in interest expense on loans is due to the 45% increase in Valneva's average loan volume in 2023 and due to the increase of the average interest rate by 1.48 percentage-points. In the year ended December 31, 2023 further tranches of the D&O Loan Agreement were drawn, for further details see Note 24.

The interest expense on refund liabilities for the year ended December 31, 2023 of €8.4 million was mainly caused by payment deferrals related to the Pfizer agreement. Please refer to Note 29 for more information on the refund liability balances.

Note 10 Income tax benefit/(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 substantively 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.

10.1 Current income tax

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

	Year ended December 31,	
in € thousand	2023	2022
CURRENT TAX		
Current income tax charge	(931)	(1,029)
Adjustments in respect of current income tax of previous year	(175)	97
DEFERRED TAX		
Relating to origination and reversal of temporary differences	(1,695)	2,468
INCOME TAX BENEFIT/(EXPENSE)	**(2,800)**	**1,536**

The individual entities' reconciliations, which are 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:

	Year ended December 31,	
in € thousand	2023	2022
LOSS BEFORE TAX	**(98,629)**	**(144,815)**
Tax calculated at domestic tax rates applicable to profits in the respective countries	23,400	37,203
Income not subject to tax (mainly R&D tax credit)	190	7,435
Expenses not deductible for tax purposes	(1,902)	(26)
Deferred tax asset not recognized	(23,360)	(45,955)
Utilization of previously unrecognized tax losses	(1,593)	2,628
Income tax credit/withholding tax/other adjustments	553	101
Effect of change in applicable tax rate	(160)	586
Exchange differences	(25)	(526)
Income tax of prior years	98	90
Minimum income tax	(2)	(2)
INCOME TAX BENEFIT/(EXPENSE)	**(2,800)**	**1,536**
Effective income tax rate	—	—

Although the Group operates at a loss overall, there are profitable entities with revenues from the sale of commercialized travel vaccines and from the sale of third-party products.

10.2 Deferred tax

As at December 31, 2023, the deferred tax assets of €204.5 million (December 31, 2022: €199.5 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, 2023, the Group had tax losses carried forward of €879.1 million (December 31, 2022: €821.6 million), of which €290.0 million related to Valneva SE (December 31, 2022: €272.1 million), €564.2 million related to Valneva Austria GmbH (December 31, 2022: €521.7 million), €10.4 million related to Valneva Scotland, Ltd. (December 31, 2022: €19.6 million), €13.7 million related to Valneva Sweden AB (December 31, 2022: €8.2 million) and €0.9 million related to Vaccines Holdings Sweden AB (December 31, 2022: €0.0 million).

Tax losses carried forward in France, Austria, United Kingdom and Sweden have no expiry date.

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

	Year ended December 31,	
in € thousand	2023	2022
BEGINNING OF THE YEAR	**4,943**	**2,292**
Exchange differences	(294)	171
Income statement charge / (credit)	(1,695)	2,480
END OF THE YEAR	**2,954**	**4,943**

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

	Year ended December 31,	
in € thousand	2023	2022
DEFERRED TAX ASSET FROM		
Tax losses carried forward	207,858	203,852
Fixed assets	1,765	3,541
Inventory	4,388	3,306
Borrowings and accrued interest	4,722	1,526
Provision	1,501	1,659
Other items	217	2,502
Non-recognition of deferred tax assets	(204,529)	(199,493)
TOTAL DEFERRED TAX ASSETS	**15,921**	**16,893**
DEFERRED TAX LIABILITY FROM		
Fixed assets	(6,364)	(4,789)
Intangible assets	(5,157)	(6,229)
Other items	(1,446)	(932)
TOTAL DEFERRED TAX LIABILITY	**(12,967)**	**(11,950)**
DEFERRED TAX, NET	**2,954**	**4,943**

The corporate income tax rate in Austria was 25% in 2022 and was reduced to 24% in 2023. The corporate income tax rate will be reduced to 23% from 2024 onward.

The corporate income tax rate in the United Kingdom was 19% until March 2023 and was increased to 25% from April 2023 onward.

The corporate income tax rate in France was reduced to 25% from 2022 onward.

The deferred tax assets and liabilities presented above as at December 31, 2023 and December 31, 2022 have been adjusted for these changes in tax rates.

Note 11 Earnings (Losses) per share

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 Note 22 and Note 23).

	Year ended December 31,	
	2023	2022
Net profit (loss) from continuing operations attributable to equity holders of the Company *(in € thousand)*	(101,429)	(143,279)
Weighted average number of outstanding shares	138,624,381	115,473,914
BASIC EARNINGS (LOSSES) FROM CONTINUING OPERATIONS PER SHARE *(€ PER SHARE)*	**(0.73)**	**(1.24)**

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,	
	2023	2022
Profit used to determine diluted earnings per share *(in € thousand)*	(101,429)	(143,279)
Weighted average number of outstanding shares for diluted earnings (losses) per share (1)	138,624,381	115,473,914
DILUTED EARNINGS/(LOSSES) FROM CONTINUING OPERATIONS PER SHARE *(€ PER SHARE)*	**(0.73)**	**(1.24)**

(1) Potentially dilutive securities (2023: 2,861,904 share options; 2022: 1,504,892 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.

Note 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 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 2023 and 2022, no development costs were 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 - 24 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 (with a remaining useful life period of 9 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, 2023					
Opening net book value	585	26,731	1,394	—	28,711
Additions	85	—	—	—	85
Amortization charge	(420)	(2,683)	(160)	—	(3,262)
Exchange rate differences	4	24	4	—	33
CLOSING NET BOOK VALUE	**255**	**24,073**	**1,239**	**—**	**25,567**
AS AT DECEMBER 31, 2023					
Cost	6,368	80,562	7,314	—	94,244
Accumulated amortization and impairment	(6,113)	(56,489)	(6,075)	—	(68,677)
CLOSING NET BOOK VALUE	**255**	**24,073**	**1,239**	**—**	**25,567**

in € thousand	Software	Acquired R&D technology and projects	Development costs	Intangible assets in the course of construction	Total
YEAR ENDED DECEMBER 31, 2022					
Opening net book value	1,217	29,768	1,581	134	32,700
Additions	201	1	—	—	201
Amortization charge	(792)	(2,957)	(171)	—	(3,920)
Disposals	—	—	(2)	(125)	(127)
Exchange rate differences	(41)	(80)	(14)	(9)	(144)
CLOSING NET BOOK VALUE	**585**	**26,731**	**1,394**	**—**	**28,711**
AS AT DECEMBER 31, 2022					
Cost	6,240	80,514	7,304	—	94,058
Accumulated amortization and impairment	(5,655)	(53,783)	(5,910)	—	(65,347)
CLOSING NET BOOK VALUE	**585**	**26,731**	**1,394**	**—**	**28,711**

As at December 31, 2023 and December 31, 2022, there were no acquired research and development technology project 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 development costs) with definite useful life are comprised primarily of the already commercialized vaccine against Japanese encephalitis (IXIARO) with acquisition costs amounting to €78.8 million (December 31, 2022: €78.7 million) and a net book value amounting to €25.0 million (December 31, 2022: €27.7 million).

For impairment test, see Note 15.

Note 13 Leases (right of use assets)

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 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 Sweden include options to terminate the agreements earlier. The notice periods in these contracts are 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. 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 0.183% and 7.000%, 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 following significant increases in right of use assets in Sweden.

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 Sweden, which 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.

Right-of-use 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 €10,000) 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 for which there is no option for the lessee to prolong the contract to more than 12 months or there is no reasonable certainty that such an option will be exercised. 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.

13.1 Development of right-of-use assets

in € thousand	Land, buildings and leasehold improvements	Manufacturing and laboratory equipment	Furniture, fittings and other	Total assets
YEAR ENDED DECEMBER 31, 2023				
Opening net book value	41,365	—	238	41,603
Additions	3,593	—	189	3,781
Amortization	(2,428)	—	(141)	(2,569)
Termination of contracts	(22,516)	—	(32)	(22,548)
Exchange rate differences	127	—	(2)	125
CLOSING NET BOOK VALUE	**20,141**	**—**	**251**	**20,392**

in € thousand	Land, buildings and leasehold improvements	Manufacturing and laboratory equipment	Furniture, fittings and other	Total assets
YEAR ENDED DECEMBER 31, 2022				
Opening net book value	47,993	15	278	48,285
Additions	1,482	—	147	1,629
Amortization	(2,944)	(15)	(145)	(3,103)
Impairment charge	(4,178)	—	—	(4,178)
Revaluation due to variable payments	859	—	—	859
Termination of contracts	—	—	(32)	(32)
Exchange rate differences	(1,847)	—	(10)	(1,857)
CLOSING NET BOOK VALUE	**41,365**	**—**	**238**	**41,603**

In the year ended December 31, 2023, right of use assets decreased from €41.6 million to €20.4 million, mainly due to termination of contracts and amortizations. This was partly offset by modifications of lease contacts for buildings in Sweden and a new lease contract for office space in the United States.

The largest lease agreements for the premises in Austria was terminated in September 2023 with a termination value of €22.5 million. The largest remaining active lease contract was for the building in Solna, Sweden with a book value of €15.5 million as at December 31, 2023 (December 31, 2022: €14.7 million).

For details on lease liabilities, see Note 27. For details on the impairment charge, see Note 15.

13.2 Other amounts recognized in the consolidated income statement

Expense relating to short-term leases and leases of low-value assets as well as expenses relating to termination of lease contracts have not been material in 2023 and 2022. There have been no substantive revaluations in 2023 and 2022.

Note 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, 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 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, 2023						
Opening net book value	74,493	34,544	1,140	675	1,583	112,435
Change in consolidation scope	22,373	—	—	—	—	22,373
Additions	9,088	2,884	414	33	1,985	14,404
Depreciation charge	(6,008)	(4,372)	(442)	(155)	—	(10,976)
Impairment charge/reversal	—	1,869	—	—	—	1,869
Disposals	(1,837)	(3,547)	(61)	(2)	—	(5,448)
Exchange rate differences	991	383	3	9	155	1,541
CLOSING NET BOOK VALUE	**99,100**	**31,761**	**1,053**	**560**	**3,724**	**136,198**
AS AT DECEMBER 31, 2023						
Cost	125,580	73,686	3,438	1,895	3,724	208,323
Accumulated depreciation and impairment	(26,479)	(41,926)	(2,384)	(1,335)	—	(72,125)
CLOSING NET BOOK VALUE	**99,100**	**31,761**	**1,053**	**560**	**3,724**	**136,198**

The change in consolidation scope came from the acquisition of VBC3, see Note 1.2. The additions were primarily from the finalization of the Almeida facility in Livingston. The reversal of impairment is due to a reversal of a fixed asset impairment in the amount of €1.9 million related to production equipment.

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, 2022						
Opening net book value	10,284	21,066	1,335	202	92,659	125,545
Reclassification	45,082	16,576	—	—	(61,658)	—
Additions	30,902	24,484	281	552	(29,043)	27,176
Depreciation charge	(3,091)	(10,424)	(432)	(64)	—	(14,012)
Impairment charge	(4,453)	(14,618)	—	—	—	(19,071)
Disposals	—	(43)	(2)	—	—	(45)
Exchange rate differences	(4,230)	(2,497)	(42)	(14)	(375)	(7,158)
CLOSING NET BOOK VALUE	**74,493**	**34,544**	**1,140**	**675**	**1,583**	**112,435**
AS AT DECEMBER 31, 2022						
Cost	96,528	76,315	3,245	1,912	1,583	179,583
Accumulated depreciation and impairment	(22,035)	(41,770)	(2,105)	(1,238)	—	(67,148)
CLOSING NET BOOK VALUE	**74,493**	**34,544**	**1,140**	**675**	**1,583**	**112,435**

Additions in 2022 mainly referred to investments in Scotland and Sweden and related to the production of VLA2001. Reclassification in 2022 mainly related to assets in Scotland for which final construction took place in 2022.

With regards to impairment charges recognized in 2022, see Note 15.

From the total of €16.9 million (2022: €44.3 million) of depreciation, amortization and impairment expenses, €12.5 million (2022: €39.5 million) were charged to cost of goods and services, €3.0 million (2022: €3.5 million) were charged to research and development expenses, €0.8 million (2022: €0.7 million) were charged to marketing and distribution expenses and €0.5 million (2022: €0.6 million) were charged to general and administrative expenses. The decrease in depreciation and amortization charged to costs of goods and services was caused by impairments in VLA2001 and DUKORAL in 2022.

Non-current operating assets by region

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 to sites where production and research and development activities take place. Sales activities by distribution sites do not require major non-current operating assets. Revenues by region (see Note 5) are structured according to the location of the final customer. In some countries there are customers, but no assets.

	Year ended December 31,	
in € thousand	2023	2022
United Kingdom	87,646	84,843
Austria	49,460	52,199
Nordics	39,111	40,250
Other Europe	4,839	5,211
United States	934	64
Canada	166	183
NON-CURRENT ASSETS	**182,156**	**182,749**

Note 15 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 or CGUs). 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.

De-recognition of VLA2001

As at December 31, 2022, impairment tests were adapted to the changes resulting in de-recognition of the COVID vaccine VLA2001 as a CGU as no material future cash flows are expected to be generated by this CGU following the Company's decision to wind down the COVID-19 program, and utilization of dedicated and shared assets was reviewed. In addition, future cash flows generated by the IXCHIQ vaccine were taken into account as fixed assets originally expected to be utilized by COVID are now expected to be used across the IXIARO, DUKORAL and IXCHIQ CGUs. A triggering event was identified in December 2022 for the CGUs impacted by suspending manufacturing of VLA 2001 and impairment tests were performed as at December 31, 2022. As a consequence, impairment charges for VLA2001 of €14.8 million were recorded for the year ended December 31, 2022. This impairment was composed of €1.0 million for right of use assets, €1.9 million for leasehold improvements and €11.9 million for manufacturing equipment. In the year ended December 31, 2023, the impairment for manufacturing equipment could be reduced by €1.9 million, as certain assets were usable for other vaccine productions, especially IXCHIQ (see also Note 13 and Note 14).

IXIARO

The impairment test for the CGU of IXIARO did not result in any impairment for the years ended December 31, 2023 and 2022. Further, no triggering event was identified.

DUKORAL

As at December 31, 2022, impairment charges for DUKORAL CGU were recorded in the amount of €8.3 million, including €3.2 million of right of use assets, €2.5 million of leasehold improvements and €2.7 million of manufacturing equipment. As at December 31, 2023, no triggering event was identified and also the impairment testing did not result in further impairment needs. The results of the impairment testing on DUKORAL were not materially different from the position as at December 31, 2022. An increase in the WACC or reduction in revenue may result in further impairment charges (see table below).

IXCHIQ

The impairment test for the CGU of the new vaccine IXCHIQ as at December 31, 2023 did not result in any impairment requirement as the value in use for the CGU was considerably higher than the book value of its assets. Additionally, no triggering events were identified for IXCHIQ. Further details can be seen in the below sensitivity analysis.

Sensitivity to changes in assumptions

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

- discount rate
- reduction of expected revenues

The following table shows the these parameters and their sensitivity to the overall result in case of described changes:

in € thousand except ratios	IXIARO	DUKORAL	IXCHIQ	CTM*
WEIGHTED AVERAGE COST OF CAPITAL (WACC)				
2023	9.08%	8.94 %	9.04%	—%
2022	8.34%	8.30%	8.25%	9.50%
BREAK-EVEN WACC				
2023	81.06%	8.04%	113.62%	—%
2022	56.27%	7.59%	113.60%	15.00%
IMPAIRMENT IF WACC INCREASES BY 1% *(in € thousand)*				
2023	NO	3,330	NO	—
2022	NO	5,095	NO	NO
IMPAIRMENT IF SALES REDUCE BY 10% *(in € thousand)*				
2023	NO	6,508	NO	—
2022	NO	4,023	NO	1

* *CTM CGU was sold in July 2023, see Note 1.1.*

Note 16 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.

16.1 Financial instruments by category

The Group has materially only short-term assets and all of the financial instruments are categorized as assets at amortized costs. Financial instruments can be found in the following positions within the assets:

	Year ended December 31	
in € thousand	**2023**	**2022**
FINANCIAL INSTRUMENTS IN ASSETS		
Trade receivables	41,645	23,912
Other assets (1)	1,109	11,988
Cash and cash equivalents	126,080	289,430
TOTAL ASSETS	**168,834**	**325,330**

(1) *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.*

The Group has only financial instruments which are categorized as liabilities at amortized costs. Financial instruments can be found in the following positions within the liabilities:

	Year ended December 31	
in € thousand	2023	2022
FINANCIAL INSTRUMENTS IN LIABILITIES		
Borrowings	176,847	98,806
Trade payables and accruals	44,303	41,491
Tax and employee-related liabilities (1)	10,815	10,778
Lease liabilities	31,969	53,574
Refund liabilities	39,941	143,085
Other liabilities (2)	34	32
TOTAL LIABILITIES	**303,908**	**347,767**

(1) 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.
(2) Deferred income is excluded from the other liabilities balance, as this analysis is required only for financial instruments.

16.2 Fair value measurements

As at December 31, 2023 and December 31, 2022, the Group did not have assets and liabilities measured though profit and loss.

In both periods, the Group also did not have open foreign currency options nor foreign currency forwards. Due to the short-term nature of its financial instruments fair valuation has no effect on the financial position.

16.3 Foreign currency sensitivity analysis

The following table details the Group's sensitivity of financial instruments 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:

	Year ended December 31	
in € thousand	2023	2022
$/EUR +10%	(24,079)	(21,245)
$/EUR -10%	29,430	25,966
GBP/EUR +10%	4,760	3,941
GBP/EUR -10%	(5,817)	(4,817)
SEK/EUR +10%	(8,846)	(9,318)
SEK/EUR -10%	10,812	11,388
CAD/EUR +10%	2,368	2,011
CAD/EUR -10%	(2,894)	(2,457)

The effect in the USD/EUR relationship is mostly due to borrowings denominated in USD while the cash and working capital is predominantly on a EUR basis. Due to higher borrowings in the year ended December 31, 2023, the Group's sensitivity has slightly increased. The Group has not used any hedging instruments to reduce the impact of foreign exchange rate changes.

16.4 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:

	Year ended December 31	
in € thousand	2023	2022
TRADE RECEIVABLES		
Receivables from governmental institutions (AAA-country)	205	757
Receivables from governmental institutions (AA-country)	11,535	3,620
Receivables from governmental institutions (A-country)	—	—
AA	—	—
A	—	4,861
Counterparties without external credit rating or rating below A	29,905	14,674
TRADE RECEIVABLES	**41,645**	**23,912**
OTHER ASSETS		
A	—	11,296
Assets from governmental institutions (AA-country)	—	151
Counterparties without external credit rating or rating below A	1,109	541
OTHER ASSETS	**1,109**	**11,988**
CASH AND CASH EQUIVALENTS		
AA	17,581	11,557
A	108,253	272,719
Counterparties without external credit rating or rating below A	245	5,154
CASH AND CASH EQUIVALENTS	**126,080**	**289,430**

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.

16.5 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, 2023 and December 31, 2022 that losses incurred were immaterial, taking further into account the limited number of customers as well as credit checks mentioned in Note 2.5. Therefore, loss allowance was considered immaterial as at December 31, 2023 and December 31, 2022.

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, 2023 and December 31, 2022, the expected credit loss was calculated using the cumulative expected default rate based on the counterparties' ratings and was immaterial.

Note 17 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.

	Year ended December 31	
in € thousand	**2023**	**2022**
Raw materials	35,379	86,452
Work in progress	38,094	114,218
Finished goods	12,968	11,783
Purchased goods (third party products)	3,626	3,518
GROSS AMOUNT OF INVENTORIES BEFORE WRITE-DOWN	**90,067**	**215,970**
Less: write-down provision	(45,601)	(180,866)
INVENTORIES	**44,466**	**35,104**

The decrease in gross amounts of inventories before write-down is primarily related to decrease in the inventory of raw materials and work in progress as of December 31, 2023.

The total write-down provision on inventory amounts to €45.6 million as of December 31, 2023 (December 31, 2022: €180.9 million). The decrease in the write-down provision compared to prior year is mainly attributable to the suspension of manufacturing of VLA2001 in 2022. As a result, raw material acquired to produce VLA2001 which could not be repurposed and used for other products was written down. Work in progress related to VLA2001 was written down due to reduced sales expectations following the termination of supply agreements. In total an amount of €176.9 million related to VLA2001 inventory was included in 2022.

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

	Year ended December 31	
in € thousand	**2023**	**2022**
Raw materials	28,158	79,939
Work in progress	15,177	99,089
Finished goods	1,524	1,417
Purchased goods (third party products)	743	421
TOTAL WRITE-DOWN PROVISION	**45,601**	**180,866**

As at December 31, 2023, €31.2 million of the inventory reserve related to VLA2001 (December 31, 2022: €176.9 million), of which €26.6 million was attributable to the raw materials (December 31, 2022: €78.8 million) and €4.6 million to work in progress (December 31, 2022: €98.1 million). As at December 31, 2023, the remaining write-down provision of €12.2 million in raw materials and work in progress relate to Valneva's commercialized vaccines IXIARO, DUKORAL and IXCHIQ (December 31, 2022: €2.2 million).

As at December 31, 2023, the write down provision for finished goods for Valneva's commercialized vaccines IXIARO and DUKORAL based on sales expectations and limited shelf life of the products amount to €1.5 million (December 31, 2022: €1.4 million). Also a slight increase in the provision for third party products was necessary as at December 31, 2023 (December 31, 2022: €0.4 million).

Note 18 Trade receivables

Trade receivables 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.

Trade receivables include the following:

	Year ended December 31	
in € thousand	**2023**	**2022**
Trade receivables	41,714	23,997
Less: loss allowance of receivables	(69)	(84)
TRADE RECEIVABLES, NET	**41,645**	**23,912**

In 2023 and 2022, no material impairment losses were recognized. As at December 31, 2023, the amount of trade receivables past due (which is defined as being more than 30 days late) reached €4.5 million (December 31, 2022: €4.4 million) of which €3.4 million come from a governmental authority with a credit rating of B+/B2.

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, 2023, trade receivables included €41.6 million (December 31, 2022: €23.9 million) of receivables from contracts with customers.

Note 19 Other assets

Other assets include the following:

	Year ended December 31	
in € thousand	**2023**	**2022**
R&D tax credit receivables	43,762	49,174
Advance payments	759	1,672
Tax receivables	3,921	9,066
Prepaid expenses	4,468	4,939
Contract costs	3,710	3,710
Consumables and supplies on stock	872	1,380
Miscellaneous current assets	522	451
OTHER NON-FINANCIAL ASSETS	**58,014**	**70,391**
Deposits	194	11,822
Miscellaneous financial assets	916	165
OTHER FINANCIAL ASSETS	**1,109**	**11,988**
OTHER ASSETS	**59,123**	**82,378**
Less non-current portion	8,490	8,299
CURRENT PORTION	**50,633**	**74,079**

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 “R&D tax credit receivables” is mainly related to the received research and development tax credit primarily in connection with the COVID-19, chikungunya and Lyme vaccine candidates.

The reduction in “tax receivables” goes back to receipt of VAT claims. The reduction in “deposits” is related to the termination of the lease agreement and the subsequent purchase of VBC3. In 2022, VBC3 was still under a lease agreement for which a deposit was given. For more information about the VBC3 acquisition, see Note 13.

Note 20 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 with a maximum maturity of three months 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.

	Year ended December 31	
in € thousand	**2023**	**2022**
Cash in hand	9	3
Cash at bank	126,071	286,530
Clearing accounts	(1)	(1)
Restricted cash	—	2,898
CASH AND CASH EQUIVALENTS	**126,080**	**289,430**

As at December 31, 2023, there was no restricted cash. As at December 31, 2022 the restricted cash mainly consisted of a locked bank account for a bank guarantee provided to a supplier as security for a payment relating to a settlement agreement announced in September 2022. As a result of a payment made in February 2023, this restriction has been removed.

In 2023, the minimum liquidity requirement for the Group according to the D&O Loan Agreement. (see Note 24.1) was €35 million.

Note 21 Assets classified as held for sale

BliNK Biomedical SAS

Valneva previously held a 48.9% equity interest in BliNK Biomedical SAS, Marseille (BliNK), a private company not listed on a stock exchange. As a result of the management's intent to sell the equity interest, it was classified as an asset held for sale as of June 30, 2022.

On September 8, 2023, the Company sold its equity interest in BliNK. The proceeds of the sale amounted to €2.4 million. For the year ended December 31, 2023, the final sale resulted in a profit of €0.2 million. The transaction stipulates an earn-out component which entitles the Company to receive 0.006491% for each equity interest share of BliNK's net revenue over a period of seven years. The Company has assessed the fair value of the earn-out component as at December 31, 2023 to be immaterial.

Divestment of CTM Unit in Solna, Sweden

Valneva decided to divest its CTM unit in Solna as explained in Note 1.1 and Note 8. The transfer of ownership of the unit took effect on July 1, 2023. With the payment of the proceeds no remaining assets or liabilities held for sale were shown for the CTM unit as of December 31, 2023.

Note 22 Equity

22.1 Share capital and share premium

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

	Year ended December 31	
number of shares	**2023**	**2022**
Ordinary shares issued (€0.15 par value per share)	138,912,142	138,346,968
Convertible preferred shares registered	—	20,514
TOTAL SHARES ISSUED	**138,912,142**	**138,367,482**
Less Treasury shares	(124,322)	(124,322)
OUTSTANDING SHARES	**138,787,820**	**138,243,160**

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.

The following table shows the development of the number of outstanding shares:

	Year ended December 31	
number of shares	2023	2022
OUTSTANDING AS AT JANUARY 1	**138,243,160**	**105,114,763**
Share-based compensation exercises	544,660	2,578,636
Capital Increase	—	30,549,761
OUTSTANDING AT YEAR END	**138,787,820**	**138,243,160**

The Company has issued stock options to employees under various employee stock option plans (ESOPs) established in the last 10 years. For details, please refer to Note 23. In June 2022, Pfizer invested €90.6 million (€95.0 million) million net representing 9,549,761 shares at a price of €9.49 per share through a reserved capital increase. In October 2022, the Company closed the Global Offering for a total of 21,000,000 new ordinary shares. Aggregate gross proceeds of the Global Offering, before deducting underwriting commissions and expenses payable by the Company, were €102.9 million ($99.9 million).The costs of both equity transactions which were directly attributable to the issue of new shares are shown in equity as a deduction, net of tax, from the proceeds.

Conditional and authorized capital

As at December 31, 2023, the Company had 9,919,432 (December 31, 2022: 7,267,281) shares of conditional capital in connection with (see Note 23):

- the possible exercise of existing stock options; and
- the possible final grant of existing Free Ordinary Shares.

Pursuant to resolution No. 21 of the Combined General Meeting held on December 20, 2023, 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 €5.2 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.

22.2 Other reserves

in € thousand	Other regulated reserves	Other comprehensive income	Treasury shares	Capital from Share-based compensation	Other revenue reserves	Total
BALANCE AS AT JANUARY 1, 2023	**52,820**	**(5,041)**	**(645)**	**17,636**	**(9,517)**	**55,252**
Currency translation differences	—	3,300	—	—	—	3,300
Defined benefit plan actuarial losses	—	(130)	—	—	—	(130)
Share-based compensation expense	—	—	—	6,666	—	6,666
Purchase/sale of treasury shares	—	—	—	—	—	—
BALANCE AS AT DECEMBER 31, 2023	**52,820**	**(1,871)**	**(645)**	**24,301**	**(9,517)**	**65,088**

in € thousand	Other regulated reserves	Other comprehensive income	Treasury shares	Capital from Share-based compensation	Other revenue reserves	Total
BALANCE AS AT JANUARY 1, 2022	**52,820**	**(5,146)**	**(645)**	**15,000**	**(9,517)**	**52,512**
Currency translation differences	—	(73)	—	—	—	(73)
Defined benefit plan actuarial gains	—	178	—	—	—	178
Share-based compensation expense	—	—	—	2,636	—	2,636
Purchase/sale of treasury shares	—	—	—	—	—	—
BALANCE AS AT DECEMBER 31, 2022	**52,820**	**(5,041)**	**(645)**	**17,636**	**(9,517)**	**55,252**

Other regulated reserves contain a non-distributable mandatory legal reserve from the merger with Intercell AG.

The Company did not obtain a dividend from its subsidiaries or pay a dividend to its shareholders in 2023 and 2022.

Note 23 Share-based compensation

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

	Year ended December 31	
in € thousand	**2023**	**2022**
Stock option plans	5,152	1,916
Free ordinary shares program	1,514	719
Phantom shares	(390)	(11,291)
SHARE-BASED COMPENSATION EXPENSE /(INCOME)	**6,276**	**(8,656)**

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.

Beginning in 2013, the Company granted stock options to employees and management pursuant to seven successive plans.

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:

	2023			2022		
	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	**5,774,339**	**5,776,114**	**4.90**	**3,933,385**	**3,996,588**	**3.11**
Granted	3,441,269	3,441,269	5.25	3,152,751	3,152,751	6.47
Expired	(3,648)	(4,015)	2.92	—	—	—
Forfeited	(647,024)	(647,024)	5.25	(196,834)	(196,834)	3.05
Exercised	(14,134)	(15,542)	2.92	(1,114,963)	(1,176,391)	3.32
OUTSTANDING AT YEAR END	**8,550,802**	**8,550,802**	**5.02**	**5,774,339**	**5,776,114**	**4.90**
Exercisable at year end	3,296,856	3,296,856	3.98	2,621,588	2,623,363	3.02

14,134 employee stock options (of which 14,134 were granted from ESOP 2013, 0 from ESOP 2015 and 0 from ESOP 2016) were exercised in 2023, whereas 1,114,963 employee stock options (of which 615,918 were granted from ESOP 2013, 478,845 from ESOP 2015 and 20,200 from ESOP 2016) were exercised in 2022.

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

expiry date	Exercise price *(in € per share)*	Number of options as at December 31, (presentation as number of convertible shares) 2023	2022
2023	2.92	—	19,557
2025	3.92	43,655	43,655
2026	2.71	14,500	14,500
2027	2.85	551,475	551,475
2029	3.05	1,770,676	1,994,176
2032	6.47	2,750,477	3,152,751
2033	5.25	3,420,019	—
OUTSTANDING AT YEAR END		**8,550,802**	**5,776,114**

In 2023, 3,441,269 stock options were granted (2022: 3,152,751). The weighted average grant date fair value of options granted during 2023 was €3.22 (2022: €3.77). The fair value of the granted options was determined using the Black Scholes valuation model.

The significant inputs into the models were:

	As at Dec 15, 2023
Expected volatility *(%)*, based on historical volatility	72.95
Expected vesting period *(term in years)*	5.50 – 6.50
Risk-free interest rate *(%)*	2.12 – 3.15

23.2 Free ordinary shares

In 2023, the Company's Management Board granted 445,320 free ordinary shares for the benefit of Management Board and members of the Company's senior management (2022: 401,911). The purpose of this free share plan 2023-2026 is to provide a long-term incentive program for the Company's senior management.

The number of free ordinary shares granted was as follows:

number of free ordinary shares granted	Year ended December 31 2023	2022
Executive Committee (formerly Management Board)	263,842	196,855
Senior Leadership Group	181,478	205,056
FREE ORDINARY SHARES GRANTED	**445,320**	**401,911**

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

number of free shares	Year ended December 31 2023	2022
OUTSTANDING AS AT JANUARY 1	**1,487,667**	**1,842,404**
Granted	445,320	401,911
Forfeited	(14,725)	(120,000)
Exercised	(549,632)	(636,648)
OUTSTANDING AT YEAR END	**1,368,630**	**1,487,667**

Subject to vesting conditions (service 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 and the second tranche for the free shares granted in 2023 will vest on December 15, 2025, and the third tranche will vest on December 15, 2026.

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

The expenses arising from the free ordinary share plan is the number of shares granted expected to vest multiplied with the share price at the grant date.

The 2023 and 2022 plans further provide 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 two years after the grant date. For the 2022 plan that is October 10, 2024, and for the 2023 plan it is December 15, 2025. As management considered the chance of a Change of Control remote at the grant date, 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. Finally, the terms and conditions applicable to the free share plans state that if a Change of Control takes place before the specified date 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, 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 during its meetings held on June 22, 2022 and March 9, 2023 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.

23.3 Phantom shares

In 2017, 2019 and 2020, phantom share plans were issued for employees who are US citizens, with the same conditions as the stock option programs (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.

No new phantom shares were granted in 2023. In 2022, no new phantom shares were granted, but a change from one phantom share program to another for one employee was agreed.

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

	Year ended December 31	
number of phantom shares	**2023**	**2022**
OUTSTANDING AS AT JANUARY 1	**670,500**	**841,450**
Granted	—	117,000
Forfeited	(50,000)	(67,001)
Exercised	(210,000)	(220,949)
OUTSTANDING AT YEAR END	**410,500**	**670,500**

The carrying amount of the liability relating to the phantom shares as at December 31, 2023 was €1.4 million (December 31, 2022: €3.0 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:

		Number of phantom shares as at December 31,	
expiry date	**Exercise price** *(in € per share)*	**2023**	**2022**
2027	2.85	6,250	6,250
2029	3.05	194,250	244,250
2030	—	210,000	420,000
OUTSTANDING AT YEAR END		**410,500**	**670,500**

The significant inputs into the models were:

	Year ended December 31	
	2023	**2022**
Expected volatility *(in %)*	51.26	51.07-86.95
Expected vesting period *(term in years)*	—	0.25-0.93
Risk-free interest rate *(in %)*	2.10	1.32-2.37

Note 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 period-end include the following:

in € thousand	Year ended December 31 2023	2022
NON-CURRENT		
Debentures and other loans	132,768	87,227
CURRENT		
Debentures and other loans	44,079	11,580
TOTAL BORROWINGS	**176,847**	**98,806**

The maturity of the borrowings is as follows:

in € thousand	Year ended December 31 2023	2022
Between 1 and 3 years	62,378	57,838
Between 3 and 5 years	70,390	28,765
Over 5 years	—	624
NON-CURRENT BORROWINGS	**132,768**	**87,227**
Current borrowings	44,079	11,580
TOTAL BORROWINGS	**176,847**	**98,806**

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

in € thousand	Year ended December 31 2023	2022
Borrowings denominated in EUR	3,581	4,433
Borrowings denominated in USD	173,266	94,373
TOTAL BORROWINGS	**176,847**	**98,806**

24.1 Other loans

In August 2023, Valneva signed the 7th amendment of the D&O Loan Agreement originally signed in February 2020. The amendment provided the Company with immediate access to $100.0 million (€90.0 million), out of which $50.0 million (€45.0 million) was drawn at the execution date of the amendment on August 16, 2023 and the remaining $50.0 million (€45.0 million) was drawn on December 28, 2023. The interest rate on the new debt remains unchanged at 9.95%, translating into an effective interest rate for the first draw of 14.17% and for the second draw of 13.47% as of December 31, 2023. The new tranches have a three-year interest-only period and will mature on August 16, 2028. Transaction costs amounting to €11.2 million have been deducted from the loan proceeds received. As at December 31, 2023, a total of $200.0 million have been drawn under the loan agreement. The book value of the loan amounts to $186.2 million (€167.5 million).

In April 2022, Valneva signed an amendment to increase the principal amount of the $60.0 million (€54.0 million) D&O Loan Agreement. The April 2022 amendment provided Valneva immediate access to $20.0 million (€18.0 million), with an additional $20.0 million (€18.0 million) available upon potential approval of VLA2001 by the European Medicines Agency. This additional $20.0 million (€18.0 million) was drawn in September 2022. The loan interest rate on this additional debt remains unchanged at 9.95% (equivalent to 10.09% on an annual basis). The interest-only period was extended from the second quarter of 2023 to the third quarter of 2024, and the loan will now mature in the first quarter of 2027 instead of the first quarter of 2026. As at December 31, 2022, $100.0 million (€90.0 million) was drawn down and the carrying amount was $95.0 million (€89.2 million). As at December 31, 2021, $60.0 million (€54.0 million) was drawn down and the carrying amount was $56.3 million (€49.7 million). The loan is secured by substantially all of Valneva's assets, including its intellectual property, and is guaranteed by Valneva SE and certain of its subsidiaries. Please refer to Note 35 for information about changes to the D&O Loan Agreement after December 31, 2023.

Noting the COVID-19 pandemic's 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 €115.0 million minimum revenue requirement with quarterly minimum revenue requirements representing an annual total of €64.0 million in 2021 and €103.8 million in 2022. In 2023, the twelve-month rolling €115.0 million minimum revenue requirement is effective again. The parties also agreed to modify the minimum cash requirement to €50.0 million for 2021 and 2022. Following an amendment to the D&O Loan Agreement in April 2022, the minimum liquidity requirement is €35.0 million for 2023.

The Group does not expect these limitations to affect its ability to meet its cash obligations. As at December 31, 2023, the Group's consolidated liquidity or net revenues did not fall below the covenant minimum values.

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 D&O 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. The Group does not expect these limitations to affect its ability to meet its cash obligations.

The D&O Loan Agreement is included in the balance sheet item "Borrowings" and developed as follows:

in € thousand	2023	2022
BALANCE AS AT JANUARY 1	**89,182**	**49,671**
Proceeds of issue	91,111	38,502
Transaction costs	(11,198)	(255)
Accrued interest	12,942	7,521
Payment of interest	(11,022)	(7,685)
Exchange rate difference	(3,494)	1,429
BALANCE AS AT DECEMBER 31	**167,520**	**89,182**
Less: non-current portion	(127,119)	(79,709)
CURRENT PORTION	**40,401**	**9,473**

As at December 31, 2023, other loans also included borrowings related to financing of research and development expenses and CIR (R&D tax credit in France) of €3.6 million (December 31, 2022: €4.4 million) as well as an amount related to CEPI of €5.7 million December 31, 2022: €5.2 million), representing payments received which are expected to be paid back in the future. For detailed information see Note 8.1.

24.2 Borrowings and other loans secured

As at December 31, 2023, €171.1 million (December 31, 2022: €93.6 million) of the outstanding borrowings and other loans were guaranteed, secured or pledged. These borrowings and other loans 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).

24.3 Fair value of borrowings and other loans

The fair value of the borrowings and other loans are calculated by discounting the contractual cash flows with interest rates derived from relevant bond yields and swap rates and adjusted for any further potential risk and liquidity risks related to the nature of each loan. The relevant bond yields were determined by an internal analysis based on Moody's RiskCalc corporate rating methodology. In the year ended December 31, 2023, the resulting calculations revealed no material difference between the carrying amount and the fair value.

As at December 31, 2022, differences were identified only for guaranteed other loans, with a fair value of €3.9 million (carrying amount was €4.4 million).

Note 25 Trade payables and accruals

Trade payables and accruals include the following:

	Year ended December 31	
in € thousand	2023	2022
Trade payables	17,564	14,505
Accrued expenses	26,739	26,986
TOTAL	**44,303**	**41,491**
Less non-current portion	—	—
CURRENT PORTION	**44,303**	**41,491**

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

Note 26 Tax and employee-related liabilities

Liabilities for tax and employee-related liabilities are generally measured at amortized costs. Liabilities related to employees comprise mainly accruals for bonuses and unconsumed vacations. The line social security and other taxes consists of amounts owed to tax authorities and social security institutions.

	Year ended December 31	
in € thousand	**2023**	**2022**
Employee-related liabilities	10,815	10,778
Social security and other taxes	5,394	4,960
BALANCE AS AT DECEMBER 31	**16,209**	**15,738**
Less non-current portion	—	—
CURRENT PORTION	**16,209**	**15,738**

Note 27 Lease liabilities

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

	Year ended December 31	
in € thousand	**2023**	**2022**
OPENING NET BOOK VALUE	**53,574**	**56,822**
Additions	3,759	1,629
Revaluation due to variable payments	(2)	859
Termination of contracts	(22,539)	—
Lease payments	(4,286)	(3,900)
Interest expenses	1,183	833
Exchange rate differences	280	(2,669)
CLOSING NET BOOK VALUE	**31,969**	**53,574**

In the year ended December 31, 2023, lease liabilities decreased by €21.6 million, mainly due to the termination of the lease agreement for the premises in Austria in September 2023 with a termination value of €22.5 million.

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

	Year ended December 31	
in € thousand	**2023**	**2022**
Between 1-3 years	5,313	4,573
Between 3-5 years	5,414	4,608
Over 5 years	18,362	18,982
NON-CURRENT LEASE LIABILITIES	**29,090**	**28,163**
Current lease liabilities	2,879	25,411
TOTAL LEASE LIABILITIES	**31,969**	**53,574**

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

	Year ended December 31	
in € thousand	**2023**	**2022**
EUR	1,479	24,694
SEK	28,308	27,314
Other	2,182	1,566
TOTAL LEASE LIABILITIES	**31,969**	**53,574**

Note 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:

	Year ended December 31	
in € thousand	**2023**	**2022**
BALANCE AS AT JANUARY 1	**9,411**	**128,758**
Revenue recognition	(4,394)	(130,678)
Addition	1,870	10,833
Other releases	(1,032)	—
Exchange rate differences	(159)	498
BALANCE AS AT CLOSING DATE	**5,697**	**9,411**
Less non-current portion	—	—
CURRENT PORTION	**5,697**	**9,411**

In the year ended December 31, 2023, revenue recognition in the amount of €3.8 million came from the Advanced Purchase Agreement (APA) for VLA2001 with the Kingdom of Bahrain. The other releases of €1.0 million are from the divestment of Valneva’s CTM Unit in Solna as of July 1, 2023.

In 2022, revenue recognized in the amount of €116.8 million related to the APA with the European Commission, €2.3 million related to the APA with the Kingdom of Bahrain, €2.0 million related to the agreement with Instituto Butantan and €5.9 million related to the Collaboration and License Agreement with Pfizer. Additions (amounts received for future performance obligations) in 2022 amounting to €4.2 million related to the Collaboration and License Agreement with Pfizer, €2.0 million related to Instituto Butantan, and €3.8 million related to the APA with the Kingdom of Bahrain.

Note 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 during the period is presented below:

	Year ended December 31	
in € thousand	**2023**	**2022**
BALANCE AS AT JANUARY 1	**143,085**	**254,582**
Additions	465	52,012
Payments	(352)	(2,626)
Other releases	(108,542)	(879)
Revenue recognition	(40)	(169,242)
Interest expense capitalized	8,419	9,597
Exchange rate difference	(3,095)	(357)
BALANCE AS AT CLOSING DATE	**39,941**	**143,085**
Less non-current portion	(6,303)	(6,635)
CURRENT PORTION	**33,637**	**136,450**

As at December 31, 2023, from the total of €39.9 million, an amount of €33.1 million is connected to the Collaboration and License Agreement with Pfizer. Beside the future payment obligations to Pfizer these refund liabilities also contain considerations which should be recognized in future as revenue and amount to €10.7 million for the year ended December 31, 2023 (December 31, 2022: €4.6 million). Refund liabilities of €6.5 million relate to the expected payment to GlaxoSmithKline (GSK) due to the termination of the strategic alliance agreements (SAA) in 2019. The other releases in the year ended December 31, 2023 relate largely to payments made in the period in connection with the terms of the Pfizer Collaboration and License Agreement.

As at December 31, 2022, €135.5 million stems from the collaboration with Pfizer and €6.6 million (of which €6.6 million was non-current) related to the expected payment to GSK from the termination of the SAA in 2019. Revenue recognized in 2022 related primarily to the de-recognition of the previously included royalty obligation towards the UK Authority in the amount of €89.2 million and the de-recognition of the previously included capex obligation towards the UK Authority in the amount of €80.0 million. Additions included the milestone of €25 million (€24.5 million) received related to the Collaboration and License Agreement with Pfizer as well as other payments received where Valneva has a repayment obligation.

Note 30 Provisions

30.1 Provisions for employee commitments

in € thousand	Year ended December 31 2023	2022
Employer contribution costs on share-based compensation plans	1,684	3,330
Phantom shares	1,421	2,976
Retirement termination benefits	459	330
Leaving indemnities	670	267
BALANCE AS AT CLOSING DATE	**4,234**	**6,903**
Less non-current portion	490	1,320
CURRENT PORTION	**3,744**	**5,583**

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, 2023: €4.72 (December 31, 2022: €6.22).

Retirement termination benefits

Some Group companies provide retirement termination benefits to their retirees.

For defined benefit plans, retirement costs are determined once a year:

- up to December 31, 2020, using the projected unit credit method where each period of service gave rise to an additional unit of benefit entitlement and where each unit was measured separately to determine the final obligation;
- from December 31, 2021 onward, under the new calculation method proposed by the IFRS IC and according to the updated recommendation of the ANC n 2013-02 as at December 31, 2021: under this method, when the plan provides for the payment of an indemnity to the employee, if he or she is present at the date of retirement, the amount of which depends on seniority and is capped at a certain years of service, the commitment must be calculated solely on the basis of the years of service prior to the retirement date.

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

	Year ended December 31 2023	2022
Discount rate	3.20%	3.60%
Salary increase rate	2.50%	2.50%
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	20

Changes in defined benefit obligation

Present value of obligation development:

in € thousand	Year ended December 31 2023	2022
BALANCE AS AT JANUARY 1	**330**	**422**
Current service cost	(1)	86
Actuarial losses/(gains)	130	(178)
BALANCE AS AT CLOSING DATE	**459**	**330**

30.2 Other provisions

in € thousand	Year ended December 31 2023	2022
Non-current	584	960
Current	7,091	24,714
PROVISIONS	**7,675**	**25,674**

The position mostly comprises €5.2 million from a provision for expected legal and settlement costs under a court proceeding related to the Intercell AG/Vivalis SA merger (December 31, 2022: €5.2 million). As at December 31, 2022 an amount of €18.8 million related to onerous purchase agreements in connection with the wind-down of COVID-19 activities which mostly were used during the year ended December 31, 2023.

Note 31 Other liabilities

in € thousand	Year ended December 31 2023	2022
Deferred income	513	5,519
Other financial liabilities	34	32
Miscellaneous liabilities	125	88
OTHER LIABILITIES	**671**	**5,639**
Less non-current portion	(79)	(116)
CURRENT PORTION	**592**	**5,523**

As at December 31, 2022 deferred income mainly included conditional advances from government enterprise grants in Scotland.

Note 32 Cash flow information

32.1 Cash generated from operations

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

	Year ended December 31,	
in € thousand	2023	2022
LOSS FOR THE YEAR	**(101,429)**	**(143,279)**
ADJUSTMENTS FOR		
Depreciation and amortization	17,584	21,036
Write-off / impairment fixed assets/intangibles	(731)	23,249
Share-based compensation expense	5,111	(8,656)
Income tax expense/(income)	2,800	(1,536)
(Profit)/loss from disposal of property, plant, equipment and intangible assets	(12)	38
Share of (profit)/loss from associates	—	(9)
(Profit)/loss from disposal held for sale	580	—
Provision for employer contribution costs on share-based compensation plans[1]	(1,659)	(22,933)
Other non-cash (income)/expense	(804)	14,088
Interest income	(1,210)	(260)
Interest expense	23,325	19,054
	44,984	**44,070**
CHANGES IN NON-CURRENT OPERATING ASSETS AND LIABILITIES (EXCLUDING THE EFFECTS OF ACQUISITION AND CONSOLIDATION)		
Other non-current assets	(192)	10,981
Long term contract liabilities	—	(5,241)
Long term refund liabilities [2]	1,136	(154,833)
Other non-current liabilities and provisions	(430)	1,379
	514	**(147,713)**
CHANGES IN WORKING CAPITAL (EXCLUDING THE EFFECTS OF ACQUISITION AND EXCHANGE RATE DIFFERENCES ON CONSOLIDATION)		
Inventory	(9,165)	84,224
Trade and other receivables	(2,855)	12,401
Contract liabilities	(3,471)	(114,603)
Refund liabilities	(112,689)	33,764
Trade and other payables and provisions	(17,398)	(14,053)
	(145,578)	**1,732**
CASH USED IN OPERATIONS	**(201,509)**	**(245,189)**

(1) *In the year ended December 31, 2022, the position "employee benefit other than share-based compensation" includes an income of €23.2 million, which resulted from release of the employer contribution provision, which was accounted for as of December 31, 2021 for the payable at the exercise of the IFRS 2 programs.*

(2) *As at December 31, 2022, the terms of the royalty and the CAPEX obligation towards the UK Authority were redefined under the 2022 settlement agreement. Management assessed the likelihood for this future obligation as remote. This resulted in a reduction of refund liabilities and recognition of other revenues recognized of €169.2 million.*

32.2 Reconciliation of liabilities arising from financing activities

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 borrowings and lease liabilities see Note 24 and Note 27.

	Year ended December 31	
in € thousand	**2023**	**2022**
BALANCE AS AT JANUARY 1	**98,806**	**57,834**
Proceeds of issue	92,309	39,587
Transaction costs	(11,198)	(255)
Repayments	(2,097)	(1,793)
Revaluations	393	1,115
Accrued interest	13,365	7,932
Payment of interest	(11,025)	(7,685)
Exchange rate difference	(3,706)	2,073
BALANCE AS AT DECEMBER 31	**176,847**	**98,806**

Note 33 Commitments and contingencies

As at December 31, 2023, there were €3.7 million of capital expenditure contracted, mainly related to manufacturing sites (December 31, 2022: €9.9 million). The respective contracts are all related to the finalization of the Almeida building in Scotland, the new manufacturing facility and production site for IXIARO and IXCHIQ.

33.1 Other commitments, pledges and guarantees

The other commitments relate to minimum payments and consist of:

	Year ended December 31	
in € thousand	**2023**	**2022**
Loans and grants	6	49
Royalties	6,798	8,262
OTHER COMMITMENTS	**6,804**	**8,311**

The pledges consist of:

	Year ended December 31	
in € thousand	**2023**	**2022**
Pledges on bank accounts	121,085	284,889
GUARANTEES AND PLEDGES	**121,085**	**284,889**

The stated pledges on cash at banks originate from the requirements of the D&O Loan Agreement which in addition is secured by substantially all of Valneva's assets, including its intellectual property, and is guaranteed by the Company and certain of its subsidiaries. For more information about this loan, please refer to Note 24.

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. In April 2022, this expert presented the result of its work on the exchange ratio, and in April 2023 the court's expert committee provided their view. However, the final outcome will depend on the court's position on specific legal points. The Company therefore assessed the probability of several scenarios and decided to hold a provision of €5.2 million to cover the reassessed risk and potential legal costs (December 31, 2022: €5.2 million).

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 was rendered on September 6, 2023. The court has rejected the plaintiff's claims. No appeal was filed within the statutory timeline; therefore the judgment has become final.

Note 34 Related-party transactions

In the year ended December 31, 2023, there have been no changes to related parties. Due to their significant influence through material transactions and provision of essential technical information Groupe Grimaud La Corbière SAS, Sevremoine (France) and its affiliate Vital Meat SAS are considered as related parties. Bpifrance, Maisons-Alfort (France) is considered as related party with significant influence through a membership in the Company's Board of Directors.

34.1 Rendering of services

Transactions with related parties are carried out similar to market:

in € thousand	Year ended December 31 2023	2022
PROVISION OF SERVICES		
Operating activities	260	1,200
Financing activities	76	8
PROVISION OF SERVICES	**335**	**1,208**

Services provided by Valneva to Groupe Grimaud La Corbière SAS, a significant 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 and sale of patents and cells.

Operating activities include Valneva's agreement with Vital Meat SAS, an affiliate of Group Grimaud La Corbière SAS, to which Valneva transferred certain assets (patent and cell lines) for a consideration of €1.0 million in the year ended December 31, 2022.

From June 2022 onward, Bpifrance qualified as a related party, as a shareholder of Valneva with significant influence through membership on the Company's Board. Valneva has borrowed amounts amounting to 80% of French Tax Authorities receivables relating to Research Tax Credits for 2020, 2021 and 2022 from Bpifrance. The total amount borrowed from Bpifrance is €3.5 million. A commitment fee of 0.5% as well as interest at the EURIBOR one-month average rate of the previous month (the rate mentioned is a variable rate deducted at nil percent if it were to be negative) plus 1.7% p.a. is applicable to these borrowed amounts (see table above).

The borrowings related to the Research Tax Credits outstanding:

in € thousand	Amount	Grant date
BPI payable relating to Research tax credit 2020	859	November 2021
BPI payable relating to Research tax credit 2021	1,419	November 2022
BPI payable relating to Research tax credit 2022	1,198	December 2023

34.2 Key management compensation

The aggregate compensation of the key management (including Executive Committee and Board of Directors) was as follows:

	Year ended December 31	
in € thousand	2023	2022
Salaries and other short-term employee benefits	3,439	3,172
Other long-term benefits	52	45
Share-based payments (expense of the year)	2,145	722
KEY MANAGEMENT COMPENSATION	**5,636**	**3,939**

In the year ended December 31, 2023, the aggregate compensation of the members of the Company's Executive Committee (former Management Board) amounted to €5.2 million (2022: €3.6 million) and represents primarily salaries and share-based payments.

The presented key management compensation includes that of the former Supervisory Board in the amount of €0.5 million for the year ended December 31, 2023 (2022: €0.4 million).

Note 35 Events after the reporting period

Sale of Priority Review Voucher for $103 million

The Company sold the Priority Review Voucher (PRV) it received from the U.S. Food and Drug Administration (FDA) for $103 million (€95 million) on February 2, 2024. The Company was awarded a tropical disease PRV in November 2023 following U.S. FDA approval of IXCHIQ, Valneva's single-dose, live-attenuated vaccine indicated for the prevention of disease caused by chikungunya virus (CHIKV) in individuals 18 years of age and older who are at increased risk of exposure to CHIKV. With this approval, IXCHIQ became the world's first licensed chikungunya vaccine available to address this unmet medical need.

Valneva will invest proceeds from the sale of the PRV into its R&D projects, including the co-development of its Phase 3 vaccine candidate against Lyme disease, additional clinical trials for its chikungunya vaccine IXCHIQ and the expansion of the Company's clinical pipeline.

Amendment of the D&O Loan Agreement

On March 18, 2024 Valneva has signed an amendment with US Healthcare funds Deerfield and OrbiMed, deferring the commencement of the re-payment of the initial $100 million loan from July 1, 2024 to January 1, 2026. The maturity date of the loan will remain unchanged and the interest only period has been extended by 18 months.