

LUDWIG INSTITUTE FOR
CANCER RESEARCH LTD

2022 FINANCIAL REPORT

LUDWIG
CANCER
RESEARCH

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CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED BALANCE SHEET AS AT DECEMBER 31, 2022

	Notes	USD	
		2022	2021
Assets			
Cash and cash equivalents	2, 3	20,387,357	16,643,275
Financial assets	2, 4, 9	1,222,610,027	1,475,884,689
Trade receivables		95,197	59,874
External funding receivables	2	912,964	1,448,901
Other short-term receivables	5, 13	1,010,165	6,533,654
Prepaid expenses and accrued income		1,436,212	2,669,515
Total current assets		1,246,451,922	1,503,239,908
Financial assets	2, 6	512,376,094	677,486,054
Investments	2, 7	300,427	444,772
Net deferred tax assets	2, 19	1,917,536	2,805,000
Leasehold improvements, equipment and other assets	2, 8	960,712	347,892
Total non-current assets		515,554,769	681,083,718
Total assets		1,762,006,691	2,184,323,626
Liabilities			
Short-term accounts payable	11	10,192,885	3,564,111
Other short-term liabilities	3, 9, 12	1,109,004	925,685
Short-term provisions	13	0	3,361,854
Accrued short-term expenses		4,492,958	5,245,889
Deferred income	2, 14	2,144,290	6,634,902
Total short-term liabilities		17,939,137	19,732,441
Other long-term liabilities	15	1,765,522	2,014,758
Long-term provisions	16	6,895,469	10,768,086
Total long-term liabilities		8,660,991	12,782,844
Total liabilities		26,600,128	32,515,285
Shareholders' equity			
Share capital	1	49,618	49,618
Donated capital	1	572,000,000	572,000,000
General legal retained surplus	1	9,924	9,924
Voluntary retained surplus	1	1,163,347,021	1,579,748,799
Total shareholders' equity		1,735,406,563	2,151,808,341
Total liabilities and shareholders' equity		1,762,006,691	2,184,323,626

CONSOLIDATED INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2022

	Notes	USD	
		2022	2021
Operating income			
Contributions and dividends	2	47,191	45,802
External funding	2, 14	10,198,868	11,281,717
License fees and royalties		2,647,436	2,480,060
Other operating income	8, 18	9,139,225	3,084,406
Total operating income		22,032,720	16,891,985
Operating expenses			
Salaries and social benefits	10, 17	26,630,376	28,094,635
Laboratory supplies		4,071,680	3,540,405
Equipment and leasehold improvements	2, 8	1,618,299	2,010,322
Clinical trial studies		2,539,001	2,322,911
Core collaborative research programs	2	35,194,708	34,518,907
Other collaborative research programs	2	2,675,742	4,298,730
Occupancy		4,005,986	4,177,910
Travel, conferences and seminars		462,450	88,193
Professional fees and services		15,240,622	13,009,613
Patent and inventors' costs		1,733,983	957,107
Depreciation	2, 8	188,128	31,995
Other operating expenses	18	16,791,222	1,359,716
Total operating expenses		111,152,197	94,410,444
Other items			
Share of operational loss and capital items in associated entity	7	(310,703)	(853,333)
Gain on foreign exchange		830,522	342,909
Loss on foreign exchange		(1,059,658)	(681,861)
Interest and other financial cost		(688)	0
Interest and other financial income		2,846,174	2,562,225
Gain on financial assets and investments	2, 4, 9	104,539,268	398,415,510
Loss on financial assets and investments	2, 4, 9	(441,187,717)	(157,174,566)
Extraordinary income / (expense)	13	3,943,862	0
Total other items		(330,398,940)	242,610,884
Surplus for the year before taxes		(419,518,417)	165,092,425
Taxes			
Current income tax income / (expense)	2, 19	(486,165)	(67,263)
Deferred income tax income / (expense)	2, 19	(887,808)	(1,328,115)
Total taxes		(1,373,973)	(1,395,378)
Retained surplus			
(Deficit) / Surplus for the year after taxes		(420,892,390)	163,697,047
Voluntary retained surplus at the beginning of the year		1,579,748,799	1,411,385,061
Net change in restricted funds	2, 14	4,490,612	4,666,691
Voluntary retained surplus at the end of the year		1,163,347,021	1,579,748,799

CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2022

	Notes	USD	
		2022	2021
Operating activities			
(Deficit) / Surplus for the year after taxes		(420,892,390)	163,697,047
Net change in restricted funds	14	4,490,612	4,666,691
Adjustments for non-cash items			
Share of operational loss capital items in associated entity	7	310,703	272,895
Net loss / (gains) on financial assets		257,659,958	(231,295,942)
Deferred tax changes	2, 19	887,464	1,156,371
Forex (loss) / gain on cash and cash equivalents		78,288	46,149
Depreciation / Impairment	2	188,228	32,014
Other movements in operating assets and liabilities			
Increase / (Decrease) in provisions		(7,234,471)	(2,884,213)
(Increase) / Decrease in current and non-current financial assets and investments		79,169,117	(9,956,721)
Decrease / (Increase) in receivables		6,024,103	(2,150,332)
Decrease in prepayments and accrued income		1,233,303	(431,546)
(Decrease) / Increase in current liabilities		6,812,093	(23,816,956)
(Decrease) in accrued liabilities and deferred income		(5,243,543)	(4,252,338)
Increase in long-term liabilities and long-term accrued expenses		(249,236)	182,761
Cash flow from operating activities		(76,765,771)	(104,734,120)
Investing activities			
Investment in tangible fixed assets	2	(660,948)	(181,359)
Investment in financial assets		(540,950,575)	(553,629,107)
Sale of financial assets and repayment of loans		622,199,664	657,712,470
Cash flow from investing activities		80,588,141	103,902,004
Net cash (outflow) / inflow		3,822,370	(832,116)
Cash and cash equivalents at January 1		16,643,275	17,521,540
Forex effect on cash and cash equivalents		(78,288)	(46,149)
Net cash (outflow) / inflow		3,822,370	(832,116)
Cash and cash equivalents at December 31		20,387,357	16,643,275

CONSOLIDATED STATEMENT OF CAPITAL CHANGES FOR THE YEAR ENDED DECEMBER 31, 2022

Shareholders' equity

The share capital consists of 50 fully paid shares of nominal value CHF 1,000 each. The shareholders do not have any interest in the assets or income of the Ludwig Institute for Cancer Research Ltd. Their sole power is to exercise their voting rights in accordance with the exclusively charitable and scientific purposes of the Institute.

USD	Share Capital	General legal retained surplus	Donated capital	Voluntary retained surplus	Shareholders' equity
Balance at December 31, 2020	49,618	9,924	572,000,000	1,411,385,061	1,983,444,603
(Deficit) / Surplus for the year	0	0	0	163,697,047	163,697,047
Net change in restricted funds	0	0	0	4,666,691	4,666,691
Balance at December 31, 2021	49,618	9,924	572,000,000	1,579,748,799	2,151,808,341
(Deficit) / Surplus for the year	0	0	0	(420,892,390)	(420,892,390)
Net change in restricted funds	0	0	0	4,490,612	4,490,612
Balance at December 31, 2022	49,618	9,924	572,000,000	1,163,347,021	1,735,406,563

Donated capital

Universe Tankships, Inc. made the following donations to LICR Fund, Inc.:

	Year	USD Amount
Initial donation	1990	500,000,000
Second donation	1991	24,000,000
Third donation	1992	48,000,000
Total		572,000,000

Voluntary retained surplus

The Statutes of the Ludwig Institute for Cancer Research Ltd stipulate that the surplus for the year is not to be distributed to shareholders and accordingly the available voluntary retained surplus is carried forward.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT DECEMBER 31, 2022

1. Accounting principles and scope of consolidation

Basis of presentation

The accompanying consolidated financial statements of the Ludwig Institute for Cancer Research Ltd (the Institute) are presented in accordance with generally accepted accounting principles in Switzerland (Financial Reporting Standards - Swiss GAAP FER).

Scope of consolidation

The consolidated financial statements include the financial results of the Institute, a not-for-profit organization incorporated in Zurich, Switzerland, the LICR Fund, Inc. (the Fund), a not-for-profit membership corporation incorporated in Delaware, U.S.A, which was established to receive, hold and invest funds on behalf of the Institute and which is effectively controlled by the Institute, and Universe Tankships, Inc. (UTI), a Marshall Islands corporation, which is a wholly-owned subsidiary of the Institute.

All inter-company transactions and balances have been eliminated. No minority interests exist for either the Fund or UTI.

Ludwig Technologies, Inc., a Delaware, USA corporation wholly owned subsidiary of the Institute, has been accounted for at acquisition cost. Similarly, investments of insignificant value or negative equity, in which the Institute holds at least 20% but not more than 50%, have been accounted for at acquisition cost and, if applicable, adjusted for impairment losses.

Vaccitech Oncology Limited (VOLT), Oxford, UK, is a company founded in 2019 to collaborate with Vaccitech Limited. The Institute's share is 24% of the capital and is accounted for at acquisition cost and, if applicable, adjusted for impairment losses.

Nature of operations

The Institute carries out its scientific and clinical activities at various Branches in conjunction with hospitals in university medical centers. During 2022 the Institute's research Branches were situated in Lausanne, Oxford, Princeton and San Diego and research laboratories in Brussels, at the Memorial Sloan Kettering Cancer Center in New York and at the Wistar Institute in Philadelphia. The latter two were replaced during 2022 by the Weill Cornell Medical College in New York and the Johns Hopkins University in Baltimore. In addition, administrative offices were maintained in New York and Zurich. The Institute has a broadly based research program that addresses the challenge of cancer using the disciplines of cell biology, genetics, immunology, molecular biology and virology.

2. Accounting policies and valuation standards

Cash and cash equivalents

Cash and cash equivalents include cash on hand and at banks, funds on call and cash deposits.

Core and other collaborative research programs

Collaborative research programs are divided into core and other collaborative research programs. The Lausanne Branch, the Oxford Branch, the Princeton Branch, Memorial Sloan Kettering Cancer Center (MSKCC), New York, the Wistar Institute, Philadelphia, the Weill Cornell Medical College, New

York, and the Johns Hopkins University, Baltimore, are considered as core, whereas all other research activities are considered as other.

Current assets - Financial assets

Investments with readily determinable fair values in debt and equity securities are reported at fair value based upon the last quoted market price or published net asset value for certain investment funds with characteristics similar to a mutual fund. Publicly traded investments are valued at the last reported sales price on the date of valuation, as quoted on major securities exchanges. Securities that are not traded on major securities exchanges are valued based on quotations received from leading vendors. Forward foreign currency contracts are valued based on the average of closing bid and asked quotations from banks and brokers. Pooled investments are funds that are not held at the Fund's custodian bank. These funds are part of multiple investors' commingled funds, which are invested in one or more asset classes by a fund manager. These investments are valued at their closing published net asset value per share on the valuation date, which is their redeemable value.

The Fund invests in limited partnerships formed for the purpose of earning returns from alternative investment strategies. Investments in limited partnerships held by the Fund are reported at net asset value as a practical expedient for fair value, which generally represents the Fund's proportionate share of the net assets of the investee partnerships as reported by them and reviewed by management for reasonableness. The underlying partnerships in which the Fund invests may hold nonmarketable securities, the fair value of which has been determined by the general partners of the respective partnerships. The Fund's proportionate share of net asset values may differ significantly from the fair values that would have been used had a ready market existed. The Fund's proportionate share of the change in values of the investee partnerships is recorded as an increase or a decrease in the net investment return in its statements of activities. Investments in mutual funds are valued at their closing published net asset value per share on the valuation date, which is their redeemable value.

Securities transactions are recorded on the trade date. Realized gains and losses on security transactions are calculated on the average cost basis.

The Fund invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and could materially affect the amounts reported in the Balance Sheet.

Non-current assets – Financial assets and investments

Financial assets held by the Fund which are subject to a redemption or lockup period of more than one year are presented as non-current assets.

Financial assets held by other consolidated entities are presented as non-current assets based on the intention to keep them for the longer term.

If fair values are readily determinable, these financial assets are reported at fair value based upon the last quoted market price.

Investments in companies where the holding is greater than 20% of the share capital are valued using the equity method, unless they are of insignificant value or hold negative equity.

Other financial assets and investments are accounted for at acquisition cost and adjusted for impairment losses, if applicable.

External funding

External funding received from any outside source, whether of a cash or a non-cash nature, is recorded in the books of the Institute upon receipt as Deferred income. External funding received is converted to income when the corresponding expenditure is incurred. Any unspent external funding is deferred to future accounting periods until the corresponding expenditure is incurred or excess funding is returned to the external funding partner once the project has been concluded. External funding pledged but not received in respect of an expenditure that has been incurred is recorded as income and is accounted for on the balance sheet as External funding receivables.

Tangible and intangible assets

The Institute's expenditure on research equipment, leasehold improvements and other assets is expensed in the year it is incurred in accordance with accepted practice for cancer research organizations. The resale value of research equipment is minimal and no significant income is generated therefrom. With respect to UTI as a taxable entity, purchases of equipment and leasehold improvements are capitalized and depreciated.

All operating expenditure, including the cost of patenting and licensing intellectual property, is expensed in the year it is incurred.

Taxes

The Institute and the Fund are tax-exempt organizations and accordingly are not subject to income and capital taxes. UTI is subject to income and capital taxes. Deferred tax assets and liabilities are recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Withholding taxes on foreign dividends and interest have been provided for in accordance with the applicable countries' tax rates.

3. Pledged assets

The Institute has pledged assets held by a financial institution to that institution totaling to USD 0.2 million in 2022 and USD 0.2 million in 2021. These amounts are included under Cash and cash equivalents and are used as collateral for various letters of credit totaling to a total of USD 0.2 million. The letters of credit have been issued to the lessors of various office premises occupied by the Institute.

The Fund obtained an advised line of credit through its financial institution on April 10, 2019. The total credit available under this agreement was USD 35.0 million as of December 31, 2022 and 2021. There were no amounts outstanding as of December 31, 2022 and 2021. The expiration date is

August 28, 2023 and the agreement may be terminated by either party with written notice. The line of credit is collateralized by qualifying assets with a fair value of approximately USD 73.9 million and USD 104.5 million at December 31, 2022 and 2021, respectively.

4. Current assets - Financial assets

Financial assets held as current assets as at December 31, 2022 and 2021 were as follows:

Description	USD	
	2022	2021
Invested cash and cash equivalents		
- US Dollars	34,016,329	13,993,305
- Other currencies	1,141,238	2,286,867
Equity investments	46,175,990	44,770,099
Fixed income investments		
- Government	25,448,773	38,725,074
- Corporate	6,566,918	5,607,883
Investments at net asset value	1,108,909,639	1,362,396,400
Due from brokers	(67,454)	8,214,547
Net unrealized gain / (loss) on forward contracts	418,594	(109,486)
Total current financial assets	1,222,610,027	1,475,884,689

5. Other short-term receivables

Other short-term receivables of USD 1,010,165 as at December 31, 2022 and USD 6,533,654 as at December 31, 2021 mainly contained short term deposits and receivables in connection with collaboration partners. As at December 31, 2021, additionally, a receivable from the Swiss VAT authorities (see 13. Other short-term provision) and receivables in connection with the leasehold improvement of the New York offices was included.

6. Non-current assets - Financial assets

Description	USD	
	2022	2021
Arima Genomics		
Net investment	210	210
Share in capital and voting rights	3.34%	3.34%
Epigenome Technologies, Inc.		
Net investment	5	5
Share in capital and voting rights	1.00%	1.00%
iOx Therapeutics Limited		
Net investment	0	33
Share in capital and voting rights	0.00%	9.90%
Portage Biotech, Inc.		
Net investment	1,307,831	0
Share in capital and voting rights	1.48%	0.00%
Life Sciences Pharmaceuticals, Inc.		
Net investment	1,457	1,457
Share in capital and voting rights	13.65%	13.65%
Other		
Fixed income securities	4,171,620	4,723,860
Investments at net asset value	504,572,032	670,116,760
Loans to staff	520,000	541,553
Long-term deposits	37,418	87,418
US 457(b) Pension plan (see Note 14)	1,765,521	2,014,758
Total financial assets	512,376,094	677,486,054

The Institute is committed to disseminating its know-how to the global research community. The holdings in the start-up organizations shown under Financial assets in the Balance Sheet are the result of licensing arrangements, with start-up organizations or their successors, transferring Institute research knowledge to these companies. Participation in these entities does not form part of the Institute's long-term strategy and the respective Financial assets, if not quoted on a stock exchange, are valued at acquisition cost and if applicable, adjusted for impairment losses.

In 2022 a share exchange was performed in which the Institute surrendered the iOx Therapeutics Limited shares and received in exchange shares of Portage Biotech, Inc, incorporated in British Virgin Islands. As of December 31, 2022 the shares of Portage Biotech, Inc. were quoted at a stock market value of USD 1,307,831.

The Institute has granted various housing loans to staff. The outstanding long-term receivables totaled to USD 520,000 as at December 31, 2022 and USD 541,553 as at December 31, 2021. Short-term receivables for these loans are recorded under Other short-term receivables and amounted to USD 3,554 in 2022 and USD 6,400 in 2021.

7. Non-current assets - Investments

Description	USD	
	2022	2021
Investment in Vaccitech Oncology Limited (VOLT)		
Share capital	1,389	1,557
Share premium	6,558,685	7,350,510
Cumulated results	(5,295,274)	(5,418,221)
percentage owned and voting rights	24.00%	24.00%
Net investment at January 1	444,245	444,245
Share of capital and premium change	0	296,886
Share of net loss	(310,703)	(272,895)
Translation adjustment	166,458	(23,991)
Net investment at December 31, VOLT	300,000	444,245
Miscellaneous investments	427	527
Total investments at December 31	300,427	444,772

On January 16, 2019, the Institute entered into an investment agreement with Vaccitech Limited, Oxford, United Kingdom (Vaccitech) and Vaccitech Oncology Limited, Oxford, United Kingdom (VOLT). Vaccitech is an Oxford-based biopharmaceutical company that holds certain intellectual property rights relating to a platform technology, which it is developing for several therapeutic and prophylactic indications in humans and animals. Vaccitech has licensed intellectual property rights associated with viral vectors for use within the field of oncology to VOLT. The objective of this collaboration is to translate the evaluation of the cancer vaccine checkpoint combination into clinical trials with cancer patients whose tumors expressing MAGE-A3 and/or NY-ESO-1 antigens, to determine the safety and efficacy of the immunotherapy combination. The original investment was USD 2,999,641 and impairments have been performed to reach the current value.

With respect to miscellaneous investments in which the Institute holds at least 20%, the following information is provided:

- i. The nominal share capital of Recepta Biopharma S.A., Sao Paulo, Brazil, is BRL 1,000. The company conducts medical research and develops, produces and commercializes humanized antibodies for the diagnosis of human cancer. The Institute holds 26.1% of the shares and of the voting rights.
- ii. In order to administer intellectual property assets in areas other than cancer, in 2010 the Institute founded Ludwig Technologies, Inc., Delaware, USA. The nominal share capital is USD 100. Ludwig Technologies, Inc. holds 14.05% of the shares and of the voting rights in the company Extended Delivery Pharmaceuticals, LLC, Connecticut, USA. This biotechnology company is developing a long-acting type of insulin.
- iii. In 2010, the Institute entered into a joint venture with The Cancer Research Institute, New York, USA, and formed the company Cancer Vaccine Acceleration Company, LLC, Delaware, USA. The purpose of the company was to identify novel opportunities for the development of cancer vaccine and immunotherapy and to obtain, hold and develop intellectual property. Cancer Vaccine Acceleration Company, LLC, was dissolved during 2022.

8. Tangible fixed assets

During the years ended December 31, 2022 and December 31, 2021, the purchase of equipment and other assets and expenditure on leasehold improvements, totaling to USD 1,618,299 and USD 2,010,322 respectively, was expensed in the year of acquisition. In 2022 and 2021, significant expenditures were made in connection with the move of the New York office. Expenditures in 2022 additionally included expenditure regarding the refurbishment of the office in Zurich, whereas 2021, significant expenditures were made for scientific equipment.

Receipts arising from the disposal of equipment and other assets totaling to USD 3,902 and USD 2,864, respectively, were credited in full to Other operating income.

9. Forward currency contracts

The Fund enters into forward foreign currency contracts in order to hedge its exposure to changes in foreign currency exchange rates on its assets and liabilities denominated in foreign currency. In 2022 and 2021, unrealized gains of USD 722,825 and USD 308,489 and unrealized losses of USD 304,231 and USD 417,975, respectively, arose from contracts open at year end and are included in gain and loss on financial assets and investments in the Income Statement and in the Current assets - Financial assets in the Balance Sheet. They represent the changes in fair value of the contracts from the time of the Fund's conclusion of the contracts.

The notional values of the forward foreign currency contracts held by the Fund translated at the relevant year-end exchange rates were as follows:

Description	USD	
	2022	2021
Forward currency purchases	31,450,594	34,981,981
Forward currency sales	31,869,188	34,872,495

10. Pension Schemes

Pension schemes have been established at all Institute locations.

The consolidated annual cost of the employer's contributions in 2022 and 2021 for all plans amounted to USD 1,623,079 and USD 1,793,814 respectively, and is accounted for as Salaries and social benefits.

The following table shows all the pension schemes for which information is required under Swiss GAAP FER 16. All amounts are in thousands:

USD	Deficit 31.12.2022	Share of	Share of	Net	Contri- butions 2022	Total	Total
		Commit- ment*	Commit- ment*	Change in Commit- ment		Income / (Expense) 2022	Income / (Expense) 2021
LGI Qualified plan (USA)	(385)	(385)	(2,242)	1,857	0	1,857	2,949
LGI Supplemental plan (USA)	(6,510)	(6,510)	(8,526)	2,016	(136)	1,880	(390)
AXA Foundation for Occupational Benefits (CH)	N/A	0	0	0	(334)	(334)	(348)

* Economic commitment

In **Switzerland**, the Institute operates a scheme with the AXA Foundation for Occupational Benefits (AXA) for staff employed in Switzerland.

In **Belgium**, a scheme was in place during 2022 and 2021 providing target benefits upon retirement to staff at the Brussels Branch. The plan is administered by and funds are invested with the AG Insurance Company, Brussels. The insurance company recalculates the contributions to be paid to finance the target pension benefits on an annual basis. A new plan was introduced per January 1, 2018, for personnel joining the Institute thereafter. This plan is based on defined contribution and administrated with the AG Insurance company as well.

In the **United Kingdom**, the Institute is a registered employer with the Universities Superannuation Scheme Ltd (the USS scheme) which, under the defined benefits section, sets the level of contributions based on the advice of the scheme's actuary. The main employer is Universities UK. In view of the size of the scheme and the Institute's limited participation in the management of the scheme, this scheme is treated as a defined contribution scheme. The last actuarial valuation took place on March 31, 2017, and this showed, under the Technical Provisions basis as required by the UK Pensions Regulator, a funding level of 89%. Taking account of the underfunding of the scheme, various changes to the benefit structure are under discussion between the main employer and representatives of the members, the University and College Union. As the Institute has less than 20 active staff members in the scheme, it is not party to the consultation process.

Following legislation introduced in the United Kingdom in September 2005, special provisions apply in the event of either an employer winding up a pension scheme or causing a cessation event to occur as a registered employer of a multi-employer pension scheme. In these cases, the employer is required to make additional funding available to buyout all liabilities with an insurance company (defined either as "buyout-debt" or "Section 75 debt") or, for multi-employer schemes with continuing indirect participation, to enter into an approved withdrawal agreement (AWA). Subject to agreement with the trustee of the pension scheme and the pension regulator, under an AWA, a guarantee is to be provided by the employer to the trustee of the pension scheme and the additional funding requirement is deferred until the trustee requires it to be paid or the scheme commences wind-up.

The Institute's Board of Directors has reviewed the position considering the various on-going employment situations in the United Kingdom. As the USS scheme continues to have active members, and it is intended to retain the scheme for active members, the Board has concluded that there is no need to make provision for buyout-debt as at December 2022 and 2021.

Buy-out liability for the Institute for the the USS scheme in the United Kingdom based on information provided by the scheme representative using the last valuation as of March 31, 2017 and latest available estimation as per March 31, 2022, is estimated to be GBP 7.2 million (USD 8.7 million) as at December 31, 2022 and GBP 9.1 million (USD 12.4 million) as at December 31, 2021.

In the **United States of America**, the Institute operated The Ludwig Institute for Cancer Research Retirement Savings Plan (the LICRRS Plan). The LICRRS Plan is organized under Section 403(b) of the Internal Revenue Code and is a defined contribution scheme.

The total of short-term liabilities related to pension schemes is set out in Note 11.

In the **United States of America**, The Ludwig Group Inc. (LGI), a wholly owned subsidiary of UTI, maintained both a qualified and a supplemental retirement plan. LGI did not make any contributions to the qualified plan in 2022 or 2021, nor does it expect to make any contributions in 2023. In the supplemental plan, contributions of USD 136,327 were paid in 2022 and USD 202,447 in 2021. Benefits of USD 1,814,558 in 2022 and USD 2,105,933 in 2021 were paid out in respect of both plans. The qualified plan is funded and the supplemental plan is unfunded. The long-term provisions in respect of the two LGI plans are set out in Note 15.

11. Short-term accounts payable

This item mainly includes invoices from cooperation partners relating to their last quarter costs, which we did not settle until the new year.

12. Other short-term liabilities

Description	USD	
	2022	2021
Other short-term liabilities to third parties (see also note 3)	1,069,468	878,300
Other short-term liabilities to pension funds	39,536	47,385
Total other short-term liabilities	1,109,004	925,685

13. Short-term provisions

USD	Tax related	Total
Provisions as per December 31, 2020	3,484,508	3,484,508
Additions	0	0
Utilizations	0	0
Release of provisions	0	0
Currency adjustments	(122,654)	(122,654)
Provisions as per December 31, 2021	3,361,854	3,361,854
Additions	0	0
Utilizations	0	0
Release of provisions	(3,361,854)	(3,361,854)
Currency adjustments	0	0
Provisions as per December 31, 2022	0	0

VAT tax claim

The Institute is registered for Value Added Tax (VAT) in Switzerland.

During 2017, the Institute was invoiced for an amount of CHF 3,762,506 (USD 4,075,063) by the Swiss Federal Tax Administration with respect to the amounts claimed by the tax authorities for the years 2007 to 2009.

Of this amount, CHF 2,769,717 (USD 2,999,802) was in respect of VAT claimed by the Swiss Federal Tax Administration for the years 2007 to 2009 and CHF 992,789 (USD 1,075,261) was in respect of

interest charged on the tax claimed. The Institute settled the amounts invoiced under reservation, noting that the Institute continues to dispute the claims. The total payment is recorded in the books under Other short-term receivables.

Following a reassessment by Institute Management in 2017 regarding the claims made by the Swiss Federal Tax Administration, it was decided to retain a provision in the amount of CHF 3,104,000 (USD 3,361,854).

During 2022, the Swiss Federal Tax Administration fully refunded the amounts paid in 2017 plus interest due to a reassessment of their position. The release of the provision and the interest received are recorded as Extraordinary income in the Income Statement with a total amount of USD 3,943,862.

14. Deferred income

Description	USD	
	2022	2021
Deferred income at January 1	6,634,902	11,301,593
Usage of deferred income	(9,497,176)	(9,502,620)
Additional deferred income	5,006,564	4,835,929
Deferred income at December 31	2,144,290	6,634,902
Net change in restricted funds	(4,490,612)	(4,666,691)

In accordance with the provisions of Swiss GAAP FER 21, all changes in deferred income (restricted funds) are shown gross in the captions External funding and Net change in restricted funds in the Consolidated Statement of Income and Expenditure (see Note 2, Accounting policies and valuation standards - External funding).

15. Other long-term liabilities

Description	USD	
	2022	2021
US 457(b) Pension plan	1,765,522	2,014,758
Total other long-term liabilities	1,765,522	2,014,758

The US 457(b) Pension plan, a non-qualified, tax advantaged deferred compensation retirement plan, is available to some Institute employees in the United States. The Institute provides the plan and the employees defer compensation to it on a pre-tax basis. The total liability includes the return on investment credited to the employee accounts and is offset by a respective financial asset (see Note 6 Non-current assets – Financial assets).

16. Long-term provisions

Long-term provisions relate to the two Ludwig Group, Inc. (LGI) pension plans as described in Note 10.

USD	Total	Supplemental plan	Qualified plan
Provisions as at December 31, 2020	13,529,645	8,338,357	5,191,288
Additions	(655,626)	390,286	(1,045,912)
Utilizations	(2,105,933)	(202,447)	(1,903,486)
Provisions as at December 31, 2021	10,768,086	8,526,196	2,241,890
Additions	(2,058,059)	(1,879,600)	(178,459)
Utilizations	(1,814,558)	(136,327)	(1,678,231)
Provisions as at December 31, 2022	6,895,469	6,510,269	385,200

17. Directors' emoluments

Emoluments consist of (i) Directors' fees, (ii) Salaries and social benefits, and (iii) Other remuneration. Directors' fees were paid by the Institute and the Fund; Salaries and social benefits were paid by the Institute and LGI and other remuneration was paid by the Institute.

Description	USD	
	2022	2021
Directors' fees	331,102	348,415
Salaries and social benefits	2,068,102	1,985,567
Total emoluments	2,399,204	2,333,982

In 2022 and 2021, the President of the Institute and the Institute's Scientific Director received salaries and social benefits but did not receive director's fees. The Chairperson and the remaining members of the two Boards received director's fees but did not receive salaries nor social benefits. No members of the Board of Directors received other remuneration.

The remuneration of the two Boards of Directors, the Chairperson of the two Boards, the Presidents of the Institute and the Fund and the Institute's Scientific Director are subject to review by the Institute's and the Fund's Compensation Committees, respectively.

Salaries are benchmarked against objective, third party comparable levels of compensation for fairness and reasonableness. The individual levels of Directors' fees have remained unchanged since 1998.

As at December 31, 2022, the Boards of the Institute and the Fund each had eight members plus an emeritus board member. As at December 31, 2021, the Boards of the Institute and the Fund each had nine members plus an emeritus board member.

18. Other operating expenses / Other operating income

Other operating expenses include a settlement payment of USD 15,000,000 for closing a legal case against the Institute. The related reimbursement from the insurance of USD 3,750,000 is included in Other operating income.

19. Taxes

As a foreign entity, UTI is not subject to U.S. income taxes. The income tax provision relates to taxes for LGI, which conducts its operations in the United States. LGI's pre-tax income was approximately USD 1,533,000 in 2022 and USD 209,000 in 2021.

20. Other related party transactions

The Institute is a party to a Research Collaboration and License Agreement with Vaccitech Oncology Limited. In 2022 and 2021 income from cost recovery and licensing amounted to USD 16,947 and USD 77,280, respectively.

21. Lease commitments, collaborative research and member contracts

All such commitments not recorded in the Balance Sheet, with a notice period of three months or more, are set out by year below:

Description	USD	
	2022	2021
2022	0	42,913,423
2023	72,943,506	42,611,373
2024	46,090,887	18,318,017
2025	14,832,365	16,147,036
2026	3,743,165	5,737,549
2027	5,182,236	748,353
2028-2033	2,806,324	2,806,322
Commitments not recorded in the Balance Sheet	145,598,483	129,282,073

22. Approval of the consolidated financial statements

The consolidated financial statements of the Ludwig Institute for Cancer Research Ltd as at December 31, 2022, together with the Report of the Auditors, dated May 17, 2023, are hereby submitted to the General Meeting of Shareholders.

23. Subsequent events

There are no subsequent events to report, which might have a material impact on the consolidated financial statements.



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Report of the Statutory Auditor to the General Meeting of Ludwig Institute for Cancer Research Ltd, Zurich

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Ludwig Institute for Cancer Research Ltd and its subsidiaries (the Group) on pages 4-21, which comprise the consolidated balance sheet as at December 31, 2022 and the consolidated statement of income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at December 31, 2022, and its consolidated results of operations and its consolidated cash flows for the year then ended in accordance with Swiss GAAP FER and comply with Swiss law.

Basis for Opinion

We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements" section of our report. We are independent of the Group in accordance with the provisions of Swiss law, together with the requirements of the Swiss audit profession, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

The Board of Directors is responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements of the company and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

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

Board of Directors' Responsibilities for the Consolidated Financial Statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with Swiss GAAP FER and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

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

As part of an audit in accordance with Swiss law and SA-CH, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

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

Report on Other Legal and Regulatory Requirements

In accordance with article 728a para. 1 item 3 CO and PS-CH 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

KPMG AG



Martin Schaad
Licensed Audit Expert
Auditor in Charge



Noemi Maibach
Licensed Audit Expert

Zurich, May 17, 2023

Enclosure:

- Consolidated financial statements (consolidated balance sheet, consolidated statement of income, consolidated statement of cash flows, consolidated statement of capital changes and notes to the consolidated financial statements)

PERFORMANCE REPORT

PURPOSES OF THE ORGANIZATION

The Ludwig Institute for Cancer Research Ltd (the Institute) is an international not-for-profit organization with a 51-year legacy of pioneering discoveries relating to cancer. The Institute provides its scientists around the world with the resources and the flexibility to realize the life-changing potential of their work and advance their discoveries for the benefit of cancer patients. This philosophy, combined with robust translational programs, maximizes the potential of breakthrough discoveries.

The Institute conducts its own basic cancer research as well as clinical trials, bridging investigations on the fundamental questions of life and applied science of cancer care. Since its inception, the Institute has invested USD 2.3 billion of its own resources and USD 0.7 billion from external funding in cancer research. Internal support for its research comes from an investment pool valued at around USD 1.7 billion. This investment portfolio is held and managed by LICR Fund, Inc. (the Fund).

The Institute now has 473 full-time equivalent scientists, clinicians, postdoctoral fellows, students and support staff located in four countries, four Branches and three supported labs who are focused on multiple aspects of cancer research. The Institute is part of the larger Ludwig Cancer Research (Ludwig) community, which also includes the Ludwig Centers at six U.S. institutions, all pursuing research to advance the scientific understanding of cancer and improve its prevention, diagnosis and treatment.

The Institute's research activities are principally organized through Branches. Each Branch occupies a defined space and functions in close association with a local university, research institute and / or not-for-profit hospital. A number of individual investigators and laboratories complement the Institute's Branches through a wide range of collaborative research programs, thereby extending the international reach and research footprint of the Institute.

EXTERNAL FUNDING

The Institute continued to attract significant external funding in 2022 to support its core research programs.

In 2022, the Institute recorded income of USD 6.9 million from industrial and philanthropic resources and USD 3.3 million from government sources. The total income of USD 10.2 million, which included refunds of unused funds of USD 0.8 million, was 9.5%, or USD 1.1 million, lower than the 2021 amount received of USD 11.3 million, which included refunds of unused funds of USD 3.1 million.

Although there were substantial increases, namely from Tigen Pharma S.A., Lausanne, Switzerland, of USD 1.0 million, there were several funding sources that had decreased due to the anticipated end of collaborations, namely from the National Institutes of Health (NIH), Bethesda MD, USA, of USD 1.4 million. The general decrease was mainly due to the ongoing wind-down activities in San Diego and for the clinical trials program.

The five highest providers of external funding to the Institute were as follows:

Tigen Pharma S.A., Lausanne, Switzerland (USD 3.1 million), the US National Institutes of Health (USD 3.0 million), the Université Catholique de Louvain, Brussels, Belgium, (USD 1.0 million), the University of California, San Diego, USD (USD 0.8 million) and Société des Produits Nestlé S.A., Vevey, Switzerland (USD 0.8 million).

SEGMENT REPORTING

The total operating expenses of USD 115.5 million in 2022 and USD 94.4 million in 2021 consist of the following segments:

Description	million USD		Variance	% of total 2021
	2022	2021		
Branch and laboratory expenditure				
Lausanne	11.6	14.1	-2.5	10%
Oxford	10.3	10.8	-0.5	9%
Princeton	7.9	5.2	2.6	7%
San Diego (including SMD*)	17.4	18.0	-0.6	15%
Brussels	4.5	6.1	-1.6	4%
Johns Hopkins Institute	0.3	0.0	0.3	0%
Memorial Sloan Kettering Cancer Center	0.5	1.2	-0.7	0%
Weill Cornell	0.2	0.0	0.2	0%
Wistar Institute	0.4	1.6	-1.2	0%
Total Branch and laboratory expenditure	53.0	56.9	-3.9	46%
Non-Branch expenditure				
Clinical Trials	7.1	7.8	-0.7	6%
Fund management	7.8	6.9	0.9	7%
Intellectual property	3.9	2.4	1.5	3%
Programs	6.5	5.4	1.1	6%
Administration	37.2	15.0	22.2	32%
Total Non-Branch Expenditure	62.5	37.5	25.0	54%
Total Institute	115.5	94.4	21.1	100%
*Small Molecule Discovery Group				

NOT-FOR-PROFIT REPORTING

The Institute and the Fund prepare, by entity, various statistical and information returns which require analysis of expenditure between i) program service, ii) management and general and iii) grant writing costs.

Using this analysis, on a consolidated basis, for the year 2021 (the latest year where analysis data is currently available), total expenditure of USD 97.2 million are broken down into program service expenditure - USD 71.0 million (73%); management and general expenditure - USD 23.9 million (25%); and grant writing expenditure - USD 2.3 million (2%).

For 2020, total expenditure of USD 81.4 million is analyzed as program service expenditure - USD 61.3 million (75%); management and general expenditure - USD 18.4 million (23%) and grant writing expenditure - USD 1.7 million (2%).

INTERNAL CONTROL SYSTEM AND ANNUAL RISK ASSESSMENT

The Institute's and the Fund's management are responsible for the design, operation and maintenance of internal control systems (ICS). The Institute's and the Fund's Boards of Directors are ultimately responsible for the identification and assessment of risks, definition of the ICS framework and monitoring of management actions to ensure the adequacy and effectiveness of the control environment. The Institute's and the Fund's system of internal control over financial reporting is based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and is designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with generally accepted accounting principles in Switzerland / Financial Reporting Standards – Swiss GAAP FER.

The Institute and the Fund have adopted a risk-based approach to internal control and accept that it is not possible to build a control environment that is risk free. Accordingly, the system of internal control in place is designed to manage rather than to eliminate risk. The system of internal control is an on-going process designed to identify the principal financial reporting risks, to evaluate the nature and extent of those risks and to manage them efficiently.

In 2022, the Institute's and the Fund's managements conducted risk assessments of the key processes already documented in the form of process flowcharts. Risks within those key processes were identified and evaluated as to their likelihood and impact based on predefined scales, incorporating quantitative and qualitative criteria. For each of the identified risks, the risk level was calculated as a multiple of the likelihood and impact. Top risks for each process were identified based on their respective risk level and classified further as financial reporting or operational risks. Key controls were defined and implemented to mitigate those top financial reporting risks. Non-financial reporting risks are considered to be outside of the ICS and are addressed through other policies and procedures.

The Institute's and Fund's managements assessed the effectiveness of the ICS over financial reporting during the year under review and reported thereon to the Institute's and Fund's Audit Committees.

The respective Audit Committees have the delegated responsibility to oversee the development and operation of the ICS, to receive reports from the Risk and Compliance Officer and External Auditors, to review the internal control system documentation and to agree to any actions necessary to implement recommended improvements. The Audit Committees received reports from the Institute's Risk and Compliance Officer regarding the ICS at all of their respective meetings during the year.

The Boards of Directors of the Institute and the Fund assessed the effectiveness of the ICS for financial reporting throughout the year and believe that the ICS for financial reporting was properly in effect as of December 31, 2022.

As part of the system of internal control, the internal audit function continued to operate and verify the adequacy and effectiveness of internal controls, carry out work to test the controls and provide reports to the two Audit Committees. The operations of the Ludwig Laboratories in Brussels at the

De Duve Institute and of the LICR Fund, Inc. were reviewed by internal audit during 2022 and a report thereof was submitted to the Institute's Audit Committee.

Risk assessments are carried out on an annual basis by the Risk and Compliance Officer reporting to the Audit Committees. They are based on annual self-reassessment of risks and controls by the ICS process owners, information obtained through interviews of the Institute's and the Fund's management and key personnel and further evaluation and testing of controls when carrying out internal audits.

Cyber security risks have been assessed in 2022 and it was noted that cyber security landscape in which businesses operate has changed significantly in the past few years. Attackers continue to refine their techniques to evade security. To mitigate those threats in 2022 the Institute's IT function continued to leverage the tools available under Microsoft Office 365 subscription and deployed Cloud App Security, Windows Defender Advanced Threat Protection, Azure AD Identity Protection and Compliance Manager. In 2022 the Institute IT underwent penetration testing and vulnerability assessment by an independent third party. During 2022 the end users participated in an on-line Cyber Security Awareness Training and were required to pass a test at the end of each training module.

MANAGING BODIES AND SENIOR STAFF

The Statutes and By-laws of the Institute determine the responsibilities and the authority of the following organs of the company:

- The Board of Directors
- Management (comprising the Executive Officers and Branch Directors)

The Board is elected at the General Meeting of Shareholders, held each year in June, for a one-year term of office. The members of the Institute's Board of Directors are automatically members of the Board of Directors of the Fund.

The individuals who served as members of the Board of Directors of both the Institute and the Fund during 2022 were as follows:

John L. Notter (Chairperson)
 Chi Van Dang, MD, PhD
 Nancy Ellen Davidson, MD
 Olivier Dunant (retired December 31, 2022)
 John D. Gordan III
 Alexandra C. Johnson
 Judge Barbara S. Jones
 Edward A. McDermott Jr.
 Philip A. Pizzo, MD (retired September 1, 2022)
 Alexander Borissov was the Secretary to the Board.

The Executive Officers of the Institute constitute its management and consisted of the President, the Scientific Director, the Deputy Scientific Director, the Executive Vice-President for Technology Development and the Chief Financial Officer.

These posts were held as of December 31, 2022, by the following individuals:

President	Edward A. McDermott Jr.
Scientific Director	Chi Van Dang, MD, PhD
Deputy Scientific Director (appointed July 1, 2022)	Pat J. Morin, PhD
Executive Vice-President for Technology Development	Jonathan C.A. Skipper, PhD
Chief Financial Officer	Thomas Bänninger

The Executive Officers were supported by:

Senior Vice-President for Human Resources	Kimberly McKinley-Thomas
Senior Vice-President for Intellectual Property	Pär Olsson, PhD
Senior Vice-President for Communications	Rachel Reinhardt
Vice-President for Clinical Trials Management and Chief Medical Officer (retired December 31, 2022)	Ralph Venhaus, MD

The Institute has a Scientific Advisory Committee that provides advice to the Scientific Director on scientific matters and reviews the performance and plans of scientific staff. As of December 31, 2022, the Scientific Advisory Committee was composed of:

Philip D. Greenberg, MD
Juanita L. Merchant MD, PhD
Robert Schreiber, PhD
Victor Velculescu, MD, PhD
Karen H. Vousden, PhD
W.K. Alfred Yung, MD

Each Branch of the Institute is managed by a Director who is responsible for its scientific program and administration.

The leadership of the Institute's Branches as of December 31, 2022 was as follows:

Lausanne	George Coukos, MD, PhD
Oxford	Xin Lu, PhD
Princeton	Joshua Rabinowitz, MD, PhD
San Diego	Jonathan C.A. Skipper, PhD

Some Executive Officers, Branch Directors and other senior staff members hold academic positions within the host institutions with which the Institute is associated.

RESULTS OF WORK ON INSTITUTE RESEARCH PROGRAMS IN 2022

Scientific Publications

Laboratory and clinical research to further the prevention, early detection, understanding and control of cancer is conducted at the Institute's Branches and through collaborations with other institutions, including the six Ludwig Centers located at universities across the United States. In 2022, progress was made in the study of tumor biology, cancer genomics, cancer prevention, the tumor microenvironment, cancer metabolism, and tumor immunology.

The Institute is committed to prompt and active dissemination of its research results. In the year 2022, the publication record by location was as follows:

	Primary Research Articles	Reviews/ Book Chapters/ Commentaries	Total
Oxford / Brussels	95	25	120
Lausanne	78	33	111
New York / MSKCC	14	2	16
Princeton	18	2	20
San Diego	17	2	19
Scientific Director Laboratory	6	12	18
Total	228	76	304

Ludwig Institute Clinical Research

Over the past few years, the Institute has moved away from centrally managed Ludwig-sponsored clinical trials overseen by a dedicated clinical trials management team in New York, in favor of having its clinical research implemented through locally sponsored, investigator initiated clinical trials managed through its Branch collaborating institutions or through non-profit clinical trial networks.

Ongoing clinical trials based upon Ludwig research during 2022:

Study Title	Principal Investigator	Sponsor/Site	Ludwig Branch
Phase I Study to Assess Feasibility and Safety of Adoptive Transfer of Autologous Tumor-Infiltrating Lymphocytes in Combination With Interleukin-2 Followed by Nivolumab Rescue for Advanced Metastatic Melanoma	George Coukos	Centre Hospitalier Universitaire Vaudois	George Coukos, Lausanne
Pilot Study to Assess the Feasibility, Safety and Efficacy of Adoptive Transfer of Autologous Tumor-Infiltrating Lymphocytes Enriched for Tumor Antigen Specificity (NeoTIL) in Advanced Solid Tumors	Blanca Navarro-Rodrigo	Centre Hospitalier Universitaire Vaudois	George Coukos, Lausanne
Phase Ib Study to Test the Feasibility and Safety of a Personalized Vaccine in Combination With Low-dose Cyclophosphamide in Patients With Advanced or Metastatic Non Small Cell Lung Cancer (NSCLC)	Hasna Bouchaab	Centre Hospitalier Universitaire Vaudois	Lana Kandalaft, Lausanne
Phase Ib Study of the Combination of Personalized Autologous Dendritic Cell Vaccine and Standard Of Care Adjuvant Chemotherapy Followed by Nivolumab for Resected Pancreatic Adenocarcinoma	Antonia Digkila	Centre Hospitalier Universitaire Vaudois	Lana Kandalaft, Lausanne
Phase I/IIa Trial of ChAdOx1 and MVA Vaccines Against MAGE-A3 and NY-ESO-1 With Standard of Care Treatment	Fiona Blackhall	Cancer Research UK	Benoit Van Den Eynde, Oxford
Pilot Study to Investigate Targetable Metabolic Pathways Sustaining Pancreatic Cancer and Associated Genomic Alterations	Howard Hochster	Rutgers University	Josh Rabinowitz, Princeton
Low-Carbohydrate diet and SGLT2-Inhibitor to Achieve Moderate Ketosis in Healthy Volunteers	Melissa Erickson	Advent Health Orlando	Josh Rabinowitz, Princeton

Ludwig Institute Sponsored Clinical Trials

Four Ludwig-sponsored clinical trials were completed during 2022 and all corresponding Institute regulatory dossiers were inactivated or withdrawn, and no Ludwig-sponsored clinical trials or trial sites remain active. During the year, the Institute initiated no new Ludwig-sponsored clinical trials, made no new Institute regulatory submissions and no additional Ludwig managed clinical sites were opened.

TECHNOLOGY DEVELOPMENT

One of the main objectives of the Institute is to bring its scientific discoveries to public benefit as quickly and effectively as possible. Given that the significant costs involved in drug development are far beyond the resources available to it, the Institute enters into research, development and licensing agreements with commercial drug development organizations that have the financial, management and technological resources necessary to develop Institute discoveries for diagnostic and therapeutic purposes.

To facilitate this work, the Institute has established a comprehensive patent protection and licensing capability. In 2022, 13 new U.S. patents and six new European patents were issued. Seven new U.S. applications and a further seven new international patent applications were also filed. In addition, the Institute was party to 203 license, sublicense and option agreements with commercial organizations at the start of 2022. During the year, an additional nine agreements were implemented while four agreements either expired or were terminated. At the end of 2022, the Institute's portfolio comprised a total of 208 agreements. Most of these license agreements allow companies to commercialize Institute reagents or products derived from such technologies for laboratory research purposes, as companion diagnostic candidates or for a company's own in-house commercial research. A subset of these agreements grant rights to commercial companies using Institute discoveries for the development of therapeutic and diagnostic products. These programs remain at various stages of product development, from pre-clinical testing to phase 1, 2 and 3 clinical trials. Sargramostim (or Leukine), a recombinant granulocyte macrophage colony-stimulating factor (GM-CSF) used for myeloid reconstitution after bone marrow transplantation or neutropenia induced by chemotherapy, is a marketed product derived directly from the Institute's research.

Cancer immunotherapy continues to be a focus of the Institute's translational and clinical research, as reflected in the patents issued and filed by the Institute and its partners. Over the past year, the Institute has filed several new patent applications claiming novel constructs and immune cell expansion methodologies applicable to the design and development of innovative cellular therapies. In addition, the discovery and patenting of new genomic and epigenetic insights and related technologies reflects the Institute's established expertise in the field and an emerging focus in seeking useful applications for its technologies and know-how.

Monoclonal antibodies targeting antigens on the surface of tumor cells may be exploited therapeutically as antibody drug conjugates (ADCs) to deliver cytotoxic agents directly to the tumor cell. The humanized MX35 antibody, originally discovered by the Institute and developed in collaboration with Recepta Biopharma S.A., is being developed by the biotechnology company Mersana as upifitamab risodotin (UpRi), a first in class NaPi2b-targeting ADC. In 2022, Mersana completed patient enrollment in the UPLIFT registrational trial in patients with platinum-resistant ovarian cancer and has initiated patient enrollment in the phase 3 UPNEXT trial of UpRi as monotherapy maintenance therapy in platinum sensitive ovarian cancer. In addition, the dose escalation phase of the phase 1/2 UPGRADE study of UpRi in combination with carboplatin in patients with platinum-sensitive ovarian cancer was nearing completion.

Another ADC called ABBV-637 based upon the Institutes anti-EGFR antibody MAb806, is being developed by AbbVie. Results from a clinical trial of ABBV-637 monotherapy or in combination with docetaxel or osimertinib in participants with non-small cell lung cancer (NSCLC) were presented at the 2022 ESMO Annual Congress.

Checkpoint antibody immunotherapies targeting PD-1/L1 and CTLA-4 have become standard therapies for a broad range of cancer indications. Botensilimab (AGEN1181) is a second-generation, Fc-enhanced, anti-CTLA-4 antibody derived from zalifrelimab (AGEN1884) originally discovered by the Institute and licensed to Agenus. The Fc region of the antibody was engineered to enhance potency, improve safety, and benefit a broader patient population compared to existing registered anti CTLA-4 antibodies. In 2022 Agenus initiated three phase 2 studies of botensilimab in metastatic colorectal cancer, metastatic melanoma and pancreatic cancer.

Portage Biotech is developing invariant natural killer T-cell (iNKT) agonist IMM60, originally licensed from the Ludwig Institute, that induces a broad reprogramming of the innate and adaptive immune system. This enables the body to recognize and attack tumors and could help more patients respond to treatment. Portage reported the initial results from the ongoing phase 1/2 clinical trial with PORT-2, a liposome formulation of IMM60, either alone or in combination with anti-PD1 standard of care. Portage has entered into a collaboration agreement with Merck to evaluate PORT-2 in combination with pembrolizumab (anti-PD1) in NSCLC.

A novel cancer immunotherapeutic VTP-600 is being developed together with Vaccitech Oncology Limited (VOLT). A phase 1/2 clinical trial which is being conducted on behalf of Ludwig and VOLT by Cancer Research UK, began enrolling subjects. Newly diagnosed NSCLC patients receive VTP-600 in combination with chemotherapy plus anti-PD1 standard of care.

Ludwig has established a research and development collaboration with Swiss cell therapy company Tigen Pharma. In 2022 Tigen exercised an option to further develop and commercialize the Neo-Antigen T Cell (NeoTIL) Product developed at the Ludwig Lausanne Branch. The NeoTIL Product is currently in a phase I clinical trial for the treatment of solid tumors under the sponsorship of the Centre hospitalier universitaire Vaudois, in Lausanne.

At the end of 2022, the Institute had holdings in nine start-up companies with products at various stages of development and maturity originating from licenses to Institute technology:

Extended Delivery Pharmaceuticals, LLC, USA
Life Sciences Pharmaceuticals, Inc., USA
Portage Biotech Inc., USA
Recepta Biopharma S.A., Brazil
Vaccitech Oncology Limited, United Kingdom
Arima Genomics Inc., USA
Epigenome Technologies, Inc., USA

In 2022 the gross income to the Institute from the commercialization of the Institute's technologies was USD 3.7 million from various therapeutic licenses and from royalty income from the sales of numerous research reagents and kits, for example Melan-A (A103), CDNA Synthesis Technology, Anti-CD25 mabPC61 and 17A2mab anti murine CD3. The net income to the Institute after sharing with co-owners and inventors was USD 1.9 million.

HUMAN RESOURCES

An important aspect of the programs developed by the Institute and its Branches is the training of outstanding young scientists who will in time join a new generation of cancer researchers. On December 31, 2022, the Institute and its branches were acting as sponsor to 107 postdoctoral fellows and 110 PhD students.

AWARDS AND DISTINCTIONS

The quality of the Institute's investigators continued to be internationally recognized. The following awards and distinctions were received in 2022:

Lausanne

George Coukos, MD, PhD	Web of Science highly cited researcher 2022 (4th year)
Michal Bassani-Sternberg, PhD	Swiss Bridge Award 2022
Johanna Joyce, PhD	I.J. "Josh" Fidler Innovation in Metastasis Research Award, Metastasis Research Society Mark Foundation ASPIRE Award Swiss National Science Foundation Advanced Grant
Denarda Dangaj, PhD	DOD (US) Early career investigator award imFLAME award (Genentech/Roche Network)
Tatiana Petrova, PhD	1st poster Prize, Gordon Research Conference on Lymphatics 2022 (to Jaeryung Kim)
Ping Chih-Ho, PhD	Anna Fuller Foundation Prize (USA)
Santiago Carmona, PhD	Nature Communications 2021 Top 25 papers

New York / Weill Cornell

Jedd D. Wolchok, MD, PhD	Appointed Director, Sandra and Edward Meyer Cancer Center, Weill Cornell Medicine
Taha Merghoub, PhD	Appointed Deputy Director, Sandra and Edward Meyer Cancer Center, Weill Cornell Medicine

Oxford / Brussels

Sir Peter J. Ratcliffe, MD, FRS	Named Doctor of Science honoris causa, The Institute of Cancer Research, University of London Elected as Honorary Member of The Physiological Society
Yang Shi, PhD	Elected to National Academy of Medicine Elected to European Molecular Biology Organization Elected as Fellow of the Academy of American Association for Cancer Research Society of Chinese Bioscientists in America Presidential Award

Tammie Bishop, PhD	Associate Professorship, University of Oxford R Jean Banister Prize (The Physiology Society)
Xin Lu, FRS FMedSci	Elected to Academia Europaea
Benjamin Schuster-Böckler, PhD	Associate Professorship, University of Oxford
Chunxiao Song, PhD	Associate Professorship, University of Oxford
Stefan Constantinescu, MD, PhD	President of the Federation of European Academies of Medicine (FEAM) President, Royal Academy of Medicine of Belgium, Brussels
Benoit Van den Eynde, MD PhD	Director of the de Duve Institute, 3-year term reappointment JITC Best Paper Award 2022: Best Basic Tumor Immunology Paper published in the Journal for ImmunoTherapy of Cancer

Princeton

Eileen White, PhD	Board of Governors, Rutgers University
Josh Rabinowitz, MD PhD	Harvard Medical School, Marianne Wessling-Resnick Distinguished Lecture Ludwig Distinguished Seminar, Lausanne, Switzerland

San Diego

Don Cleveland, PhD	E.B. Wilson medal from the American Society of Cell Biology for contributions to cell biology over the course of a career Lalji Family ALS Award, with three colleagues, from the Sean M. Healey & AMG Center for ALS at Massachusetts General Hospital 2022 listing of Most Highly Cited Researchers in the World
Arshad Desai, PhD	Elected to American Academy of Arts and Sciences
Karen Oegema, PhD	Elected to American Academy of Arts and Sciences

Scientific Director Laboratory

Chi Dang, MD PhD	Clarivate Analytics Web of Science Highly Cited Researchers 2022
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Appointed Bloomberg Distinguished Professor of Cancer
Medicine at Johns Hopkins
HERO Symposium Keynote Speech (virtual), International
Conference on Advanced Biomedical Sciences, Taiwan
FAPESP Brentani keynote lecture - Sao Paolo, Brazil

STATUTORY FINANCIAL STATEMENTS

BALANCE SHEET AS AT DECEMBER 31, 2022

	Notes	USD		CHF	
		2022	2021	2022	2021
Assets					
Cash and cash equivalents	1, 2	11,163,181	9,223,104	10,409,666	8,515,692
Trade receivables		69,797	20,818	65,086	19,221
External funding receivables	1, 12	912,965	1,448,901	851,340	1,337,770
Other short-term receivables	8	925,481	4,694,078	863,011	4,334,042
Prepaid expenses and accrued income		784,060	2,231,092	731,136	2,059,967
Total current assets		13,855,484	17,617,993	12,920,239	16,266,692
Financial assets	1, 3	2,324,644	2,645,434	2,167,731	2,442,529
Investments	1, 4	5,403,612	5,547,957	5,038,868	5,122,429
Total non-current assets		7,728,256	8,193,391	7,206,599	7,564,958
Total assets		21,583,740	25,811,384	20,126,838	23,831,650
Liabilities					
Short-term accounts payable - 3rd party	5	10,191,963	3,564,110	9,504,005	3,290,743
Short-term accounts payable - intercomp.	6	1,141,780	1,318,685	1,064,710	1,217,542
Other short-term liabilities	7	422,124	506,123	393,631	467,303
Short-term provisions	8	0	3,361,854	0	3,104,000
Accrued short-term expenses	1	3,888,031	4,512,191	3,877,943	4,325,591
Deferred income	1, 12	2,144,290	6,634,901	1,999,550	6,126,004
Total short-term liabilities		17,788,188	19,897,864	16,839,839	18,531,183
Other long-term liabilities	9	1,765,522	2,014,758	1,646,349	1,860,226
Total long-term liabilities		1,765,522	2,014,758	1,646,349	1,860,226
Total liabilities		19,553,710	21,912,622	18,486,188	20,391,409
Shareholders' equity					
Share capital	1	49,618	49,618	50,000	50,000
General legal retained surplus	1	9,924	9,924	10,000	10,000
Voluntary retained surplus		1,970,488	3,839,220	1,580,650	3,380,241
Total shareholders' equity		2,030,030	3,898,762	1,640,650	3,440,241
Total liabilities and shareholders' equity		21,583,740	25,811,384	20,126,838	23,831,650

INCOME STATEMENT FOR THE YEAR ENDED DECEMBER 31, 2022

	Notes	USD		CHF	
		2022	2021	2022	2021
Operating income					
Contributions	1, 11	76,000,000	45,000,000	73,188,000	41,422,500
External funding	1, 12	14,689,479	15,948,408	14,145,968	14,680,510
License fees and royalties	13	2,647,436	2,480,060	2,549,481	2,282,895
Other operating income	14	9,089,835	3,060,482	8,753,511	2,817,174
Total operating income		102,426,750	66,488,950	98,636,960	61,203,079
Operating expenses					
Salaries and social benefits		24,298,964	25,102,163	23,399,902	23,106,541
Laboratory supplies		4,071,680	3,540,405	3,921,028	3,258,943
Equipment and leasehold improvements	1	1,609,606	2,000,421	1,550,051	1,841,388
Clinical trial studies		2,539,001	2,322,911	2,445,058	2,138,240
Core collaborative research programs	1	35,194,708	34,518,907	33,892,504	31,774,654
Other collaborative research programs	1	2,675,742	4,298,730	2,576,740	3,956,981
Occupancy		3,593,526	3,732,036	3,460,566	3,435,339
Travel, conferences and seminars		351,379	73,352	338,378	67,521
Professional fees and services		15,786,640	12,553,358	15,202,534	11,555,366
Patent and inventors' costs		1,733,983	957,107	1,669,826	881,017
Other operating expenses	14	16,013,780	929,855	15,421,270	855,932
Total operating expenses		107,869,009	90,029,245	103,877,857	82,871,922
Surplus / (Deficit) for the year before Other items		(5,442,259)	(23,540,295)	(5,240,897)	(21,668,843)
Other items					
Gain on foreign exchange	1	830,521	342,909	799,792	315,648
Loss on foreign exchange	1	(1,059,658)	(681,861)	(1,020,451)	(627,653)
Interest and other financial income	1	3,836	277,032	3,694	255,008
Interest and other financial cost	1	(688)	0	(663)	0
Gain on financial assets and investments	1, 3,4	0	22,498,726	0	20,710,077
Loss on financial assets and investments	1, 3,4	(144,346)	(19)	(139,005)	(17)
Extraordinary income / (expense)	8	3,943,862	0	3,797,939	0
Total Other items		3,573,527	22,436,787	3,441,306	20,653,063
Surplus / (Deficit) for the year		(1,868,732)	(1,103,508)	(1,799,591)	(1,015,780)
Voluntary retained surplus on January 1		3,839,220	4,942,728	3,380,241	4,396,021
Voluntary retained surplus on December 31		1,970,488	3,839,220	1,580,650	3,380,241

NOTES TO THE STATUTORY FINANCIAL STATEMENTS

1. Accounting policies

Basis of preparation

These financial statements have been prepared in accordance with the provisions of the Swiss Code of Obligations.

Cash and cash equivalents

Cash on hand and at banks, funds on call and cash deposits are classified as Cash and cash equivalents.

Operating income

Contributions are accounted for on a cash basis.

External funding received from any outside source, whether of a cash or a non-cash nature, is recorded in the books of the Ludwig Institute for Cancer Research Ltd (the Institute) upon receipt as Deferred income. External funding received is recorded as income when corresponding expenditure has incurred. Any unspent external funding is deferred to future accounting periods until the corresponding expenditure is incurred or excess funding is returned to the external funding partner once the project has been concluded. External funding pledged but not received where expenditure has been incurred, is recorded as income, and is accounted for as External funding receivables.

Core and other collaborative research programs

Collaborative research programs are divided into Core and Other collaborative research programs. The Lausanne Branch, the Oxford Branch, the Princeton Branch, the Memorial Sloan Kettering Cancer Center (MSKCC), New York, Weill Cornell Medical College, New York, the Johns Hopkins University, Baltimore and the Wistar Institute, Philadelphia are considered as core, whereas all other research activities are considered as other.

Translation of foreign exchange transactions

For preparing the Statutory Financial Statements in Swiss Francs, US Dollar values are converted using the modified closing rate method as follows:

1. Income and expenditure – at the yearly average of the monthly rates as published by the Swiss Federal Tax Administration
2. Assets and Liabilities – at the year-end closing rates as published by the Swiss Federal Tax Administration
3. Equity - at historical rates
4. Translation differences are included either in a) Loss on foreign exchange and therefore as result of the current year also in Voluntary retained surplus in case of a loss; or b) in Accrued short-term expenses in case of a gain

Tangible fixed assets

Acquisition costs for research equipment, costs for leasehold improvements and costs for other assets are fully expensed in the year of acquisition.

Financial assets and investments

Financial assets, which are traded on a stock exchange, are valued, unless described in the respective section differently, at the stock market price prevailing at the end of the year. All other Financial assets and Investments are valued at acquisition cost and, if applicable, adjusted for impairment losses.

Accruals

Accruals are recognized for goods and services rendered in the respective accounting period if no invoices have been received. The same principle applies to amounts due to intellectual property co-owners and inventors.

2. Pledged assets

The Institute has pledged assets held by a financial institution to that financial institution totaling to USD 0.2 million (CHF 0.2 million) in 2022 and USD 0.2 million (CHF 0.2 million) in 2021. These amounts are included under Cash and cash equivalents and are used as collateral for various letters of credit totaling to USD 0.2 million (CHF 0.2 million). The letters of credit have been issued to the lessors of various office premises occupied by the Institute.

3. Financial assets

Description	USD		CHF	
	2022	2021	2022	2021
Arima Genomics				
Net investment	210	210	196	194
Share in capital and voting rights	3.34%	3.34%	3.34%	3.34%
Epigenome Technologies, Inc.				
Net investment	5	5	5	5
Share in capital and voting rights	1.00%	1.00%	1.00%	1.00%
iOx Therapeutics Limited				
Net investment	0	33	0	30
Share in capital and voting rights	0.00%	9.90%	0.00%	9.90%
Portage Biotech, Inc.				
Net investment	33	0	31	0
Share in capital and voting rights	1.48%	0.00%	1.48%	0.00%
Life Sciences Pharmaceuticals, Inc.				
Net investment	1,457	1,457	1,359	1,345
Share in capital and voting rights	13.65%	13.65%	13.65%	13.65%
Loans to staff	520,000	541,553	484,900	500,016
Deposits	37,418	87,418	34,892	80,713
US 457(b) Pension plan	1,765,521	2,014,758	1,646,348	1,860,226
Total financial assets	2,324,644	2,645,434	2,167,731	2,442,529

The Institute is committed to disseminating its know-how to the global research community. The holdings in the start-up organizations shown under Financial assets in the Balance Sheet are the result of licensing arrangements, with start-up organizations or their successors transferring

Institute research knowledge to these companies. Participation in these entities does not form part of the Institute's long-term strategy and the respective Financial assets, if not quoted on a stock exchange, are valued at acquisition cost and, if applicable, adjusted for impairment losses.

IOx Therapeutics Limited was founded in 2015 and is a joint spin-off of the Institute and the Oxford University.

In 2022 a share exchange was performed in which the Institute surrendered the iOx Therapeutics Limited shares and received in exchange shares of Portage Biotech, Inc, incorporated in British Virgin Islands. As of December 31, 2022 the shares of Portage Biotech, Inc. were quoted at a stock market value of USD 1,307,831 (CHF 1,219,552). A valuation reserve in the amount of USD 1,307,798 (CHF 1,219,521) was created which resulted in no change of the value compared to the value of of iOx Therapeutics Limited in the previous year.

The Institute has granted various housing loans to staff. The outstanding long-term receivables as of December 31, 2022 totaled to USD 520,000 (CHF 484,900) and as at December 31, 2021 to USD 541,553 (CHF 500,016). Short-term receivables for these loans are recorded under Other short-term receivables and totaled to USD 3,554 (CHF 3,314) in 2021 and USD 6,400 (CHF 5,909) in 2021.

The US 457(b) Pension plan, a non-qualified, tax advantaged deferred compensation retirement plan, is available to various Institute employees in the United States. The Institute provides the plan, and the employees defer compensation to it on a pre-tax basis. The total assets represent the value invested in favor of the employees and is offset by the liability to the employees (see note 9.)

4. Investments

Description	USD		CHF	
	2022	2021	2022	2021
Universe Tankships, Inc.				
Book value	5,103,185	5,103,185	4,758,720	4,711,771
Share in capital and voting rights	100.00%	100.00%	100.00%	100.00%
Vaccitech Oncology Limited				
Book value	300,000	444,245	279,750	410,171
Share in capital and voting rights	24.00%	24.00%	24.00%	24.00%
Recepta Biopharma S.A.				
Book value	327	327	305	302
Share in capital and voting rights	26.21%	26.21%	26.21%	26.21%
Ludwig Technologies, Inc.				
Book value	100	100	93	92
Share in capital and voting rights	100.00%	100.00%	100.00%	100.00%
Cancer Vaccine Acceleration Company, LLC				
Book value	0	100	0	92
Share in capital and voting rights	0.00%	50.00%	0.00%	50.00%
Total investments	5,403,612	5,547,957	5,038,868	5,122,429

The investment in Universe Tankships, Inc., (Marshall Islands), has been accounted for at acquisition cost in USD. Universe Tankships, Inc. holds 100% of capital and voting rights in The Ludwig Group, Inc., Delaware (USA). The Ludwig Group, Inc. provides administrative services to the Institute and other Institute related parties (see Note 6).

With respect to other investments, in which the Institute holds at least 20% of the capital, the following information is provided:

1. The nominal share capital of Recepta Biopharma S.A., Sao Paulo, (Brazil), is BRL 1,000. The company conducts medical research, develops, produces, and commercializes humanized antibodies for the diagnosis of human cancer.
2. To administer intellectual property assets in areas other than cancer, in 2010 the Institute founded Ludwig Technologies, Inc., Delaware, (USA). The nominal share capital is USD 100. Ludwig Technologies, Inc. holds 14.05% of capital and voting rights in the company Extended Delivery Pharmaceuticals, LLC, Connecticut, (USA). This biotechnology company is developing a long-acting form of insulin.
3. In 2010, the Institute entered a joint venture with the Cancer Research Institute and formed the company Cancer Vaccine Acceleration Company, LLC, Delaware, (USA). The purpose of the company was to identify novel opportunities for the development of cancer vaccines and immunotherapies and to obtain, hold and develop intellectual property. The nominal share capital was USD 200. Cancer Vaccine Acceleration Company, LLC, was dissolved during 2022.
4. On January 16, 2019, the Institute entered an investment agreement with Vaccitech Limited, Oxford, United Kingdom (Vaccitech) and Vaccitech Oncology Limited, Oxford, United Kingdom (VOLT). Vaccitech is an Oxford-based biopharmaceutical company that holds certain intellectual property rights relating to a platform technology which is developing for several therapeutic and prophylactic indications in humans and animals. Vaccitech has licensed intellectual property rights associated with viral vectors for use within the field of oncology to VOLT. The objective of this collaboration is to translate the evaluation of the cancer vaccine checkpoint combination into clinical trials with cancer patients whose tumors expressing MAGE-A3 and/or NY-ESO-1 antigens, to determine the safety and efficacy of the immunotherapy combination. The original investment was USD 2,999,641 (CHF 2,984,717) and impairments have been performed to reach the current value.

5. Short-term accounts payable - 3rd party

This item mainly includes invoices from cooperation partners relating to their last quarter costs, which we did not settle until the new year.

6. Short-term accounts payable - intercompany

The current administrative service agreement with The Ludwig Group, Inc., a wholly owned subsidiary of Universe Tankships, Inc., (Marshall Islands) has been in place since January 1, 2006 and was renewed the last time as of January 1, 2022.

Payables in favor of The Ludwig Group, Inc. as of December 31, 2022 and December 31, 2021 amounted to USD 1,141,780 (CHF 1,064,710) and USD 1,318,685 (CHF 1,217,542) respectively.

7. Other short-term liabilities

Description	USD		CHF	
	2022	2021	2022	2021
Other short-term liabilities to third parties	382,588	458,738	356,763	423,553
Other short-term liabilities to pension fund	39,536	47,385	36,867	43,751
Total other short-term liabilities	422,124	506,123	393,631	467,303

Of the total, an amount of USD 0.3 million relates to a contractual obligation arising from an employment contract.

8. Short-term provisions

USD	Tax related	Total
Provisions as per December 31, 2020	3,484,508	3,484,508
Additions	0	0
Utilizations	0	0
Release of provisions	0	0
Currency adjustments	(122,654)	(122,654)
Provisions as per December 31, 2021	3,361,854	3,361,854
Additions	0	0
Utilizations	0	0
Release of provisions	(3,361,854)	(3,361,854)
Currency adjustments	0	0
Provisions as per December 31, 2022	0	0

CHF	Tax related	Total
Provisions as per December 31, 2020	3,104,000	3,104,000
Additions	0	0
Utilizations	0	0
Release of provisions	0	0
Currency adjustments	0	0
Provisions as per December 31, 2021	3,104,000	3,104,000
Additions	0	0
Utilizations	0	0
Release of provisions	(3,237,465)	(3,237,465)
Currency adjustments	133,465	133,465
Provisions as per December 31, 2022	0	0

Vat tax claim

The Institute is registered for Value Added Tax (VAT) in Switzerland.

During 2017, the Institute was invoiced for an amount of CHF 3,762,506 (USD 4,075,063) by the Swiss Federal Tax Administration with respect to the amounts claimed by the tax authorities for the years 2007 to 2009.

Of this amount, CHF 2,769,717 (USD 2,999,802) was in respect of VAT claimed by the Swiss Federal Tax Administration for the years 2007 to 2009 and CHF 992,789 (USD 1,075,261) was in respect of interest charged on the tax claimed. The Institute settled the amounts invoiced under reservation, noting that the Institute continues to dispute the claims. The total payment is recorded in the books under Other short-term receivables.

Following a reassessment by Institute Management in 2017 regarding the claims made by the Swiss Federal Tax Administration, it was decided to retain a provision in the amount of CHF 3,104,000 (USD 3,361,854).

During 2022, the Swiss Federal Tax Administration fully refunded the amounts paid in 2017 plus interest due to a reassessment of their position. The release of the provision and the interest received are recorded as Extraordinary income in the Income Statement with a total amount of USD 3,943,862 (CHF 3,797,939).

9. Other long-term liabilities

Description	USD		CHF	
	2022	2021	2022	2021
US 457(b) Pension Plan	1,765,522	2,014,758	1,646,349	1,860,226
Total other long-term liabilities	1,765,522	2,014,758	1,646,349	1,860,226

The US 457(b) Pension plan, a non-qualified, tax advantaged deferred compensation retirement plan, is available to various Institute employees in the United States. The Institute provides the plan, and the employees defer compensation to it on a pre-tax basis. The total liability includes the return on investment credited to the employee accounts and is offset by a respective financial asset (see Note 3).

10. Lease commitments, collaborative research and member contracts

All such commitments not recorded in the balance sheet, with a notice period of three months or more, are set out below:

Description	USD		CHF	
	2022	2021	2022	2021
Lease and administrative commitments	8,139,989	12,099,445	7,590,540	11,171,418
Core and other collaborative research commitments	105,794,107	102,547,265	98,653,005	94,681,890
Ludwig Members long term obligations	31,664,387	14,635,363	29,527,041	13,512,831
Commitments not recorded in the balance sheet	145,598,483	129,282,073	135,770,585	119,366,138

11. Contributions

The LICR Fund, Inc. (the Fund), a non-profit membership corporation incorporated in Delaware, USA, was established to receive, hold, and invest funds on behalf of the Institute. During 2022 and 2021, the Fund was a material source of funding and made contributions to the Institute of USD 76,000,000 (CHF 73,188,000) and USD 45,000,000 (CHF 41,422,500) respectively.

12. External funding receivables / External funding

The Institute receives external funding from third parties, including government agencies, in return for which the Institute may be obliged to comply with specific conditions. In certain cases, the right and / or obligation exists to confirm compliance by means of audit.

13. License fees and royalties

License fees and royalties' income is shown in the Income Statement net of co-owners' share of income.

Description	USD		CHF	
	2022	2021	2022	2021
Gross license fees and royalties income	3,728,932	2,833,872	3,590,962	2,608,579
Co-owners' share distributed	1,081,496	353,812	1,041,481	325,684
Net license fees and royalties	2,647,436	2,480,060	2,549,481	2,282,895

14. Other operating expenses / Other operating income

Other operating expenses include a settlement payment of USD 15,000,000 (CHF 14,445,625) for closing a legal case against the Institute. The related reimbursement from the insurance of USD 3,750,000 (CHF 3,611,406) is included in Other operating income.

15. Full-time equivalents

The average number of full-time equivalent employees was 121 in 2022 and 150 in 2021.

16. Internal control system and annual risk assessment

The Institute's management is responsible for the design, operation and maintenance of the system of internal control (ICS). The Institute's Board of Directors is ultimately responsible for the identification and assessment of risks, definition of the ICS framework and monitoring of management actions to ensure the adequacy and effectiveness of the control environment. The Institute's system of internal control over financial reporting is based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

The Institute has adopted a risk-based approach to internal control and accepts that it is neither possible nor cost effective to build a control environment that is risk free. Accordingly, the system of internal control in place is designed to manage rather than to eliminate risk. The system of internal control is an on-going process designed to identify the principal financial reporting risks, to evaluate the nature and extent of those risks and to manage them efficiently.

In 2022, the Institute's management conducted risk assessments of the key processes already documented in the form of process flowcharts. Risks within those key processes were identified and evaluated as to their likelihood and impact based on predefined scales, incorporating quantitative and qualitative criteria. For each of the identified risks, the risk level was calculated as a multiple of the likelihood and impact. Top risks for each process were identified based on their respective risk level and classified further as financial reporting or operational risks. Key controls were defined and implemented to mitigate those top financial reporting risks. Non-financial reporting risks are considered outside of the ICS through other LICR policies and procedures.

The Institute's management assessed the effectiveness of the ICS over financial reporting during the year under review and reported thereon to the Institute's Audit Committee.

The Audit Committee has the delegated responsibility to oversee the development and operation of the internal control system, to receive reports from the Risk and Compliance Officer and External Auditors, to review the internal control system documentation and to agree any actions necessary to implement recommended improvements. The Audit Committee received reports from the Institute's Risk and Compliance Officer regarding the ICS at all of its meetings during the year.

The Board of Directors of the Institute assessed the effectiveness of the ICS for financial reporting throughout the year and believes that the ICS for financial reporting was properly in effect as of December 31, 2022.

As part of the system of internal control, the internal audit function continued to operate and verify the adequacy and effectiveness of internal controls, carry out work to test the controls and provide reports to the Audit Committee. The operations of the Ludwig Laboratories in Brussels at the De Duve Institute were reviewed by internal audit during 2022 and a report thereof was submitted to the Institute's Audit Committee.

Risk assessments are carried out on an annual basis by the Risk and Compliance Officer reporting to the Audit Committee. They are based on an annual self-reassessment of risks and controls by the ICS process owners, information obtained by interviews of the Institute's management and key personnel and further evaluation and testing of controls when carrying out internal audits.

17. Subsequent events

There are no subsequent events to report, which might have a material impact on the financial statements.

PROPOSED APPROPRIATION OF AVAILABLE SURPLUS

The Statutory Financial Statements of the Ludwig Institute for Cancer Research Ltd as of December 31, 2022, together with the Report of the Statutory Auditors, dated May 17, 2023, are hereby submitted to the General Meeting of Shareholders.

The Balance Sheet of the Statutory Financial Statements shows total assets of CHF 20,126,838 and the Statement of Income and Expenditure shows a deficit for the fiscal year of CHF 1,799,591

Description	CHF 2022
Voluntary retained surplus on January 1	3,380,241
(Deficit) for the year	(1,799,591)
Voluntary retained surplus on December 31	1,580,650

In accordance with Article 8 of the Statutes, the Board of Directors proposes that the Shareholders of the Institute authorize the carrying forward of the Voluntary retained surplus at the end of the year 2022 in the amount of CHF 1,580,650. In this regard, it is noted that according to Article 8 of the Statutes of the Institute, no distribution may be made to the Shareholders.



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Report of the Statutory Auditor to the General Meeting of Ludwig Institute for Cancer Research Ltd, Zurich

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Ludwig Institute for Cancer Research Ltd, (the Company) on pages 43-53, which comprise the balance sheet as at December 31, 2022, and the income statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements comply with Swiss law and the Company's articles of incorporation.

Basis for Opinion

We conducted our audit in accordance with Swiss law and Swiss Standards on Auditing (SA-CH). Our responsibilities under those provisions and standards are further described in the "Auditor's Responsibilities for the Audit of the Financial Statements" section of our report. We are independent of the Company in accordance with the provisions of Swiss law, together with the requirements of the Swiss audit profession, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Board of Directors' Responsibilities for the Financial Statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the Company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and SA-CH will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Swiss law and SA-CH, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

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

Report on Other Legal and Regulatory Requirements

In accordance with article 728a para. 1 item 3 CO and PS-CH 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the Company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG AG



Martin Schaad
Licensed Audit Expert
Auditor in Charge



Noemi Maibach
Licensed Audit Expert

Zurich, May 17, 2023

Enclosures:

- Financial statements (balance sheet, income statement and Notes)
- Proposed appropriation of available earnings