

#### IMPORTANT INFORMATION

#### Information to investors

The Prospectus has been prepared by the board of directors of Karolinska Development by reasons of the Directed share issue and admission to trading of shares of series B in Karolinska Development on Nasdaq Stockholm. The Swedish language version of the Prospectus has been approved and registered with the Swedish Financial Supervisory Authority in accordance with the provisions of Chapter 2, Sections 25 and 26 of the Swedish Financial Instruments Trading Act (1991:980). The approval and registration of the Swedish language version of this Prospectus does not imply that the Swedish Financial Supervisory Authority guarantees that the factual information provided in the Prospectus is accurate or complete.

The Offer to subscribe for new shares in accordance with this Prospectus is not made to persons domiciled in the United States, Australia, Canada, Hong Kong, Japan, New Zealand, Singapore, Switzerland, South Africa or any other jurisdiction where participation requires additional prospectus, registrations or other measures than required by Swedish law. The Prospectus, the application form and any other documents relating to the Offer may not be distributed in or into any country where such distribution or the Offer requires such additional measures or where such distribution would be in conflict with applicable law or regulation in that country. The new shares which may be issued in connection with the Offer have not been registered and will not be registered in accordance with the US Securities Act of 1933, as amended (the "Securities Act"), or under the applicable securities laws in any country other than Sweden. Any subscription of shares in violation of the above may be deemed invalid.

This Prospectus and the Offer are governed by Swedish law. The courts of Sweden have exclusive jurisdiction to settle any conflict or dispute arising out of or in connection with this Prospectus and the Offer. The Prospectus has been prepared in both a Swedish language version and an English language version. In case of any inconsistency between the Swedish language version and the English language version, the Swedish language version shall prevail.

#### Forward-looking information

This Prospectus may include forward-looking information. Such information is not a guarantee of future conditions and is subject to unavoidable risks and uncertainties. Forward-looking information may be distinguished by the fact that it does not exclusively refer to historic or current factual circumstances or that it contains such words as "may", "should", "expected", "believed", "estimated", "planned", "being prepared", "is estimated", "plans to", "forecast", "attempts" or "could" or negations of such terms and other variations thereof or comparative terms. Such forward-looking information reflects the current expectations of the board of directors and executive management of Karolinska Development based on the information available to them at this time and is based on a number of assumptions that are subject to elements of risks and uncertainty that may be beyond the control of the board of directors and the executive management. Actual results may deviate considerably from what is expressed or implied in the forward-looking information. All forward-looking information is based exclusively on the conditions prevailing when it was provided and Karolinska Development and its board of directors have no obligation (and explicitly refute any such obligation) to update or change such forward-looking information, either as a result of new information, new conditions or other factors, other than as required by applicable laws and regulations. Karolinska Development and/or persons who act on its behalf are subject to the reservations in, or referred to in, this section.

#### Third party information

The Prospectus contains third party information in the form of industry and market information and statistics and calculations derived from studies, industry reports, market researches, publicly available information and commercial publications. Such statements are identified by reference to the source. The Company confirm that the third party information has been accurately reproduced and, as far as the Company is aware and can assure by comparison with other information published by such third party, no facts have been omitted which could mean that the rendered information is incorrect or misleading. However, the Company has not independently verified the accuracy or completeness of any third party information, and the Company can therefore not guarantee its accurancy or completeness.

#### Presentation of financial information

The figures presented in the Prospectus have in certain cases been rounded off, as a consequence of which the tables will not always tally correctly. Unless otherwise stated, all financial figures are stated in Swedish kronor ("SEK"). Financial information in the Prospectus has not been audited and/or reviewed by the auditor unless explicitly stated.

#### Certain definitions

"Karolinska Development" or the "Company" refers to Karolinska Development AB, company registration no. 556707-5048, or the group of companies for which Karolinska Development AB is parent company.

"Euroclear" refers to Euroclear Sweden AB, company registration no. 556112-8074.

"Nasdaq Stockholm" refers to the Swedish regulated market operated by Nasdaq Stockholm AB, company registration no. 556420-8394.

The "Directed share issue" or the "Offer" refers to the offer to the Company's convertible holders (convertible 2015/2019) to subscribe for shares of series B in Karolinska Development in accordance with the terms set out in this Prospectus.

The " $\mbox{\bf Prospectus}$  refers to this prospectus.

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#### THE OFFER IN BRIEF

#### The Offer

Holders of the Company's convertible 2015/2019, is offered to subscribe for new shares of series B in Karolinska Development. The board of directors intends to resolve on set-off, which imply that the Company's convertible holders will be able to pay by setting-off their convertible claims. The nominal value for each convertible amount to SEK 4.71, and accrued interest for each convertible as of 30 June 2019 amounts to approximately SEK 1.95. By set-off the convertible holder receives shares with a corresponding value to the convertible claim, including accrued interest.

#### Subscription price

SEK 3.74 per new share of series B

#### Indicative timetable

8 July – 19 July 2019 Subscription period

24 July 2019 Outcome of the Offer is announced
30 July 2019 First day of trading the shares on Nasdaq

Stockholm

#### Financial calendar

21 August 2019 Interim report January – June 2019
7 November 2019 Interim report January – September 2019

#### Trading symbol on Nasdaq Stockholm

Shares of series B KDEV
Convertibles KDEV KV1

#### ISIN

Shares of series B SE0002190926 Convertibles SE0006510103

# Summary

Secti	Section A – Introduction and warnings			
A.1	Introduction and warnings	This summary should be read as an introduction to the Prospectus. Any decision to invest in the Securities should be based on an assessment of the entire Prospectus by the investor. Where a claim relating to the information contained in the Prospectus is brought before a court of law, the plaintiff investor may, under the national legislation of each member state, have to bear the costs of translating the Prospectus before the legal proceedings are initiated. Civil liability attaches only to those persons who have tabled the summary including any translations thereof, but only if the summary is misleading, inaccurate or inconsistent when read together with the other parts of the Prospectus or it does not provide, when read together with the other parts of the Prospectus, key information in order to aid investors when considering whether to invest in securities.		
A.2	Financial intermediaries	Not applicable. Financial intermediaries do not have the right to use the Prospectus for following resale or final placement of the securities.		

	on B – Information r	
B.1	Company name and trading name	The Company's legal name is Karolinska Development AB and its corporate registration number is 556707-5048.
B.2	Domicile and legal form of the issuer	Karolinska Development's registered office is located in the municipality of Solna, Stockholm county, Sweden. The Company was founded in Sweden and is a Swedish public limited liability company operating its business in accordance with the Swedish Companies Act (2005:551) (Sw. aktiebolagslagen).
B.3	Main business operations	Karolinska Development is an investment company which offers an opportunity to share in the growth in value of a number of Nordic life sciences companies with high commercial potential. Life science is a broad concept that, among other, includes products and methods aimed at maintaining good health or treating diseases. The company focuses on identifying breakthrough medical innovations and invests in the creation and growth of companies that advance these assets into differentiated commercial products that are designed to make a difference to patients' lives while providing an attractive return on investment to shareholders.
		Karolinska Development has established relations with leading universities and research institutes in the Nordic region, including Karolinska Institutet, enabling access to world-class medical innovations. The Company aims to build companies around scientists who are leaders in their fields, supported by experienced management teams and advisers, through investments together with specialist international investors to provide the greatest chance of success. In order to create the best possibilities to succeed, the companies are built through experienced management teams and advisers, and they are co-financed by professional life science investors.
		Karolinska Development's portfolio consists of nine companies targeting opportunities in innovative treatments for life-threatening or serious debilitating diseases and other medical conditions. Eight of the portfolio companies have candidate drugs in ongoing clinical studies or approved products in early commercial phase.
B.4a	Trends	Karolinska Development is an investment company which business operation is to invest in portfolio company shares. General trends do not affect the Company to the same extent as manufacturing companies as for sales and operations costs. However, changes taking place as a result of the global market, may affect Karolinska Development.
		Global sales of prescription drugs are forecasted to rise significantly over the coming years. Growth is, among other things, expected to be driven by new, innovative drugs and increased access to medical care. A considerable part of the expected growth is likely to be generated in China, India and Indonesia.

B.4a	Trends, cont.	The pharmaceutical industry is facing result, the companies must identify ceutical companies, which previous dependent on external innovations a opment from other companies. The rt obe continuously intense. The key capital, a normalization of the capital execute their growth strategies. In the driven by the companies' need to The global market for medical tech growing areas are neurology, diabeted drivers are increased life expectancy,	new profitate ly relied on and are active market for but a factors that I market for e medical ted differentiate mology is exercised.	ole patent-pro in-house resi rely seeking to usiness agreer at are expecte life science of chnology man e their product spected to gr and plastic surg	otected innoveraction and do be license or a ments in the ed to drive to the companies, and ket, a high both portfolios are own over the gery, and der	vative producevelopment cquire produite science schese activited the need usiness voluand secure geneat five year all care. The	acts. The pharma- , are increasingly ucts under devel- sector is expected cies are access to for companies to me is expected to growth.
		increased spending on health care. expected to have high growth over the and lifestyle changes.	The marke	t for medical	technology	in the Asia	a-Pacific region is
		China is the second largest and fastes per capita is though still considerably aging population, rising incomes an growth in the country's health care s	lower than dincreasing	in the world's	s other major	r health care	e markets. China's
B.5	Group structure	Karolinska Development currently ha subsidiaries. Further, Karolinska Devel Out of the nine portfolio companies, r is instead considered as associated co	opment has no company i	additionally fi s deemed to b	ve directly or oe a subsidiar	indirectly ov y for accoun	wned subsidiaries.
		shares or votes. The table below sho shareholders and convertible holder of the Offer.  Ownership structure		-	March 2019		_
		Shareholder	Shares of	Shares of	Conital 9/	Votes 9/	
		Karolinska Institutet Holding AB	series A	series B	Capital %	Votes %	A ma a m + (C E I/ \3)
							Amount (SEK) <sup>3)</sup>
			1,503,098 0	2,126,902 6.371.600	5.64 % 9.89 %	22.01 % 8.17 %	0
		Tredje AP-Fonden	0	6,371,600	9.89 %	8.17 %	0
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup>		6,371,600 4,853,141	9.89 % 7.53 %	8.17 % 6.23 %	0 0 272,858,294.11 <sup>2)</sup>
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup> Östersjöstiftelsen	0	6,371,600 4,853,141 3,889,166	9.89 % 7.53 % 6.04 %	8.17 % 6.23 % 4.99 %	0 0 272,858,294.11 <sup>2)</sup> 0
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup> Östersjöstiftelsen Costal Investment Management LLC	0 0 0	6,371,600 4,853,141 3,889,166 3,470,466	9.89 % 7.53 % 6.04 % 5.39 %	8.17 % 6.23 % 4.99 % 4.45 %	0 0 272,858,294.11 <sup>2)</sup> 0 0
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup> Östersjöstiftelsen Costal Investment Management LLC OTK Holding A/S	0 0 0 0	6,371,600 4,853,141 3,889,166 3,470,466 2,300,000	9.89 % 7.53 % 6.04 % 5.39 % 3.57 %	8.17 % 6.23 % 4.99 % 4.45 % 2.95 %	0 0 272,858,294.11 <sup>2)</sup> 0 0
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup> Östersjöstiftelsen Costal Investment Management LLC OTK Holding A/S Ribbskottet AB	0 0 0	6,371,600 4,853,141 3,889,166 3,470,466 2,300,000 1,700,000	9.89 % 7.53 % 6.04 % 5.39 % 3.57 % 2.64 %	8.17 % 6.23 % 4.99 % 4.45 % 2.95 % 2.18 %	0 0 272,858,294.11 <sup>2)</sup> 0 0 0
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup> Östersjöstiftelsen Costal Investment Management LLC OTK Holding A/S Ribbskottet AB Stift För Främjande&Utveckling	0 0 0 0 0	6,371,600 4,853,141 3,889,166 3,470,466 2,300,000 1,700,000 1,397,354	9.89 % 7.53 % 6.04 % 5.39 % 3.57 % 2.64 % 2.17 %	8.17 % 6.23 % 4.99 % 4.45 % 2.95 % 2.18 % 1.79 %	0 0 272,858,294.11 <sup>2)</sup> 0 0
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup> Östersjöstiftelsen Costal Investment Management LLC OTK Holding A/S Ribbskottet AB Stift För Främjande&Utveckling Försäkringsaktiebolaget Avanza Pension	0 0 0 0 0	6,371,600 4,853,141 3,889,166 3,470,466 2,300,000 1,700,000	9.89 % 7.53 % 6.04 % 5.39 % 3.57 % 2.64 % 2.17 % 1.86 %	8.17 % 6.23 % 4.99 % 4.45 % 2.95 % 2.18 % 1.79 %	0 0 272,858,294.11 <sup>2)</sup> 0 0 0 0 0 3,290,768.67
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup> Östersjöstiftelsen Costal Investment Management LLC OTK Holding A/S Ribbskottet AB Stift För Främjande&Utveckling Försäkringsaktiebolaget Avanza Pension Friheden Invest A/S	0 0 0 0 0 0 0 0	6,371,600 4,853,141 3,889,166 3,470,466 2,300,000 1,700,000 1,397,354 1,196,955 1,000,000	9.89 % 7.53 % 6.04 % 5.39 % 3.57 % 2.64 % 2.17 % 1.86 % 1.55 %	8.17 % 6.23 % 4.99 % 4.45 % 2.95 % 2.18 % 1.79 % 1.54 % 1.28 %	0 0 272,858,294.11 <sup>2)</sup> 0 0 0 0 3,290,768.67 0
		Tredje AP-Fonden Sino Biopharmaceutical Limited¹¹ Östersjöstiftelsen Costal Investment Management LLC OTK Holding A/S Ribbskottet AB Stift För Främjande&Utveckling Försäkringsaktiebolaget Avanza Pension Friheden Invest A/S Total ten largest shareholders	0 0 0 0 0 0 0	6,371,600 4,853,141 3,889,166 3,470,466 2,300,000 1,700,000 1,397,354 1,196,955 1,000,000 28,305,584	9.89 % 7.53 % 6.04 % 5.39 % 3.57 % 2.64 % 2.17 % 1.86 % 1.55 %	8.17 % 6.23 % 4.99 % 4.45 % 2.95 % 2.18 % 1.79 % 1.54 % 1.28 % 55.60 %	0 0 272,858,294.11 <sup>2)</sup> 0 0 0 0 3,290,768.67 0 0 276,149,062.78
		Tredje AP-Fonden Sino Biopharmaceutical Limited <sup>1)</sup> Östersjöstiftelsen Costal Investment Management LLC OTK Holding A/S Ribbskottet AB Stift För Främjande&Utveckling Försäkringsaktiebolaget Avanza Pension Friheden Invest A/S	0 0 0 0 0 0 0 0 0 0	6,371,600 4,853,141 3,889,166 3,470,466 2,300,000 1,700,000 1,397,354 1,196,955 1,000,000 28,305,584 34,365,770	9.89 % 7.53 % 6.04 % 5.39 % 3.57 % 2.64 % 2.17 % 1.86 % 1.55 % 46.27 % 53.35 %	8.17 % 6.23 % 4.99 % 4.45 % 2.95 % 2.18 % 1.79 % 1.54 % 1.28 % 55.60 %	0 0 272,858,294.11 <sup>2)</sup> 0 0 0 0 3,290,768.67 0
		Tredje AP-Fonden Sino Biopharmaceutical Limited¹¹ Östersjöstiftelsen Costal Investment Management LLC OTK Holding A/S Ribbskottet AB Stift För Främjande&Utveckling Försäkringsaktiebolaget Avanza Pension Friheden Invest A/S Total ten largest shareholders Other shareholders	0 0 0 0 0 0 0 0 0 0 1,503,098	6,371,600 4,853,141 3,889,166 3,470,466 2,300,000 1,700,000 1,397,354 1,196,955 1,000,000 28,305,584	9.89 % 7.53 % 6.04 % 5.39 % 3.57 % 2.64 % 2.17 % 1.86 % 1.55 %	8.17 % 6.23 % 4.99 % 4.45 % 2.95 % 2.18 % 1.79 % 1.54 % 1.28 % 55.60 %	0 0 272,858,294.11 <sup>2)</sup> 0 0 0 0 3,290,768.67 0 0 276,149,062.78 Unknown

# **B.7** Selected historical financial information

Below is selected historical information in summary for the financial years 2016–2018 as well as for the periods January – March 2018 and 2019. The information relating to the financial years 2018, 2017 and 2016 has been obtained from the audited financial statements for Karolinska Development. The information relating to the interim periods has been obtained from the unaudited interim report for January – March 2019 (with comparable figures for January – March 2018). Karolinska Development's financial statements for the investment entity have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by International Accounting Standards Board ("IASB"), and interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC") as adopted by the EU for application in the EU. Furthermore, the Swedish Financial Reporting Board's recommendation RFR 1, "Supplementary Accounting Rules for Groups" and statement UFR 7 and 9 by the Financial Reporting Council have also been applied.

The Company is an investment entity according to IFRS 10 "Consolidated Financial Statements".

#### Summary income statement for the Investment Entity

	2019	2018			
	Jan-Mar	Jan-Mar	2018	2017	2016
SEK 000	(unaudited)	(unaudited)	(audited)	(audited)	(audited)
Revenue	904	734	3,073	2,464	5,360
Change in fair value of shares					
in portfolio companies	-11	-4,809	58,499	252,072	-146,544
Change in fair value of					
other financial assets	4,214	4,195	41,481	2,483	-
Other expenses	-3,014	-4,079	-14,017	-12,996	-15,415
Personnel costs	-5,944	-5,442	-14,993	-23,513	-17,344
Depreciation of right-of-use					
assets	-176	_	_	_	-
Depreciation of tangible					
non-current assets	_	_	_	_	-106
Operating profit/loss	-4,027	-9,401	74,043	220,510	-174,049
Interest income	200	2,002	7,318	4,549	1,954
Interest expenses	-14,872	-12,235	-49,464	-43,495	-45,237
Other financial gains and losses	73	-91	-1,387	-1,969	500
Financial net	-14,600	-10,324	-43,533	-40,915	-42,783
Profit/loss before tax	-18,627	-19,725	30,510	179,595	-216,832
Tax		_	_	_	
Net profit/loss for the period	-18,627	-19,725	30,510	179,595	-216,832

#### Earnings per share

SEK 000	2019 Jan–Mar (unaudited)	2018 Jan–Mar (unaudited)	2018 (audited)	2017 (audited)	2016 (audited)
Earnings per share, weighted average, before dilution	-0.29	-0.31	0.48	2.93	-4.08
Number of shares, weighted average before dilution	64,174,452	64,116,921	64,136,941	61,243,234	53,210,223
Earnings per share, weighted average after dilution	-0.29	-0.31	0.48	2.93	-4.08
Number of shares, weighted average after dilution	64,174,452	64,116,921	64,136,941	61,300,516	53,210,223

B.7	Selected historical	Balance sheet for the Inve	stment Entity	,			
	financial information,		31 Mar 2019	31 Mar 2018	31 Mar 2018	31 Mar 2017	31 Mar 2016
	cont.	SEK 000	(unaudited)	(unaudited)	(audited)	(audited)	(audited)
		ASSETS					
		Non-current assets					
		Right of use assets	1,231	-	-	-	-
		Financial assets					
		Shares in portfolio companies at					
		fair value through profit or loss	636,008	456,423	618,927	447,783	149,408
		Loans receivable from portfolio					
		companies	5,113	3,480	5,098	3,436	957
		Other financial assets	27,290	44,791	26,970	40,596	38,113
		Total non-current assets	669,642	504,694	650,995	491,815	188,478
		Current assets					
		Receivables from portfolio					
		companies	684	744	473	611	229
		Other financial assets	56,955	-	53,060	-	-
		Other current receivables	817	645	3,432	531	660
		Prepaid expenses and accrued					
		income	1,218	852	632	666	806
		Short-term investments, at fair					
		value through profit or loss	50,025	140,242	69,949	150,329	237,545
		Cash and cash equivalents	11,742	5,475	15,843	19,305	10,602
		Total current assets	121,441	147,958	143,389	171,442	249,842
		TOTAL ASSETS	791,083	652,652	794,384	663,257	438,320
		EQUITY AND LIABILITIES					
		Equity					
		Share capital	644	644	644	644	26,732
		Share premium	1,970,752	1,970,752	1,970,752	1,970,752	1,874,236
		Accumulated losses including	_,	_,	_,	_,	_,,
		net profit/loss for the year	-1,694,012	-1,724,000	-1,675,389	-1,704,275	-1,871,153
		Total equity	277,384	247,396	296,007	267,121	29,815
		Long-term liabilities					
		Convertible loan	_	391,463	_	379,184	394,438
		Other financial liabilities	11,423	4,807	11,423	4,807	4,798
		Total long-term liabilities	11,423	396,270	11,423	383,991	399,236
		Current liabilities					
		Convertible loan	442,173	_	428,303	_	_
		Current interest-bearing	2,273		.20,505		
		liabilities	50,000	_	50,000	_	_
		Accounts payable	1,519	1,256	1,373	1,155	1,460
		Liabilities to portfolio companies	1,239				±,,-roo
		Other current liabilities	1,714	1 2//	021	1 627	060
			1,/14	1,344	831	1,627	960
		Accrued expenses and prepaid income	5,631	6,386	6,447	9,363	6,849
		Total current liabilities	502,276	8,986	486,954	12,145	9,269
		Total liabilities	513,699	405,256	498,377	396,136	408,505
		TOTAL EQUITY AND LIABILITIES	791,083	652,652	794,384	663,257	438,320

7	Selected historical	Statement of cash flows for	the Investm	ent Entity					
	financial information,		2019	2018					
	cont.		Jan-Mar	Jan-Mar	2018	2017	201		
		SEK 000	(unaudited	(unaudited	(audited)	(audited)	(audited		
		Operating activities							
		Operating profit/loss	-4,027	-9,401	74,043	220,510	-174,04		
		Adjustments for items not affecting cash							
		Depreciation	176	_	_	_	10		
		Result of fair value change	-4,203	614	-99,980	-254,555	146,54		
		Other items	-179	-	-2,134	18	-1,3		
		Proceeds from short-term							
		investments	-252	-16	-570	-405	-19		
		Interest received/paid	-498		-343	2			
		Cash flow from operating activities before changes in working capital and operating investments	-8,983	-8,803	-28,984	-34,430	-28,96		
		and operating investments	-8,983	-8,803	-20,364	-34,430	-20,30		
		Cash flow from changes in working capital							
		Increase (–)/Decrease (+) in operating receivables	1,792	-407	-4,368	348	7,85		
		Increase (+)/Decrease (-) in operating liabilities	213	-3,159	46,506	2,876	-2,66		
		Cash flow from changes in working capital	-6,978	-12,369	13,154	-31,206	-23,7		
		Investment activities							
		Payment from earn-out agreement	_	_	8,663	_			
		Sale of shares in portfolio							
		companies	-	-	11,911	45,565	,4		
		Acquisitions of shares in portfolio companies	-16,892	-11,448	-117,237	-89,775	-26,9		
		Proceeds from sale of short-term							
		investments <sup>1)</sup>	19,769	9,987	80,047	86,747	41,3		
		Cash flow from operating activities	2,877	-1,461	-16,616	42,537	14,7		
		Financing activities							
		Share issue	_	_	-	-			
		Convertible debenture issue	_	_	-	-2,628			
		Cash flow from financing activities	0	0	0	-2,628			
		Cash flow for the period/ year	-4,101	-13,830	-3,462	8,703	-8,98		
		Cash and cash equivalents at the							
		beginning of the period/ year	15,843	19,305	19,305	10,602	19,5		
		CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD/YEAR	11,742	5,475	15,843	19,305	10,6		
		Supplemental disclosure <sup>1)</sup>							
		CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD/ YEAR	11,742	5,475	15,843	19,305	10,6		
		Short-term investments, market		5,115			,-		
		value at closing date	50,025	140,242	69,949	150,329	237,5		
		CASH AND CASH EQUIVALENTS AND SHORT-TERM INVEST- MENTS AT THE END OF THE							
		PERIOD/ YEAR	61,767	145,717	85,792	169,634	248,1		
		1) Surplus liquidity in the Investment Entity is invested in fixed income funds and is recognized as short-term investments with a maturity exceeding three months. These investments consequently are not reported as cash and cash equivalents and therefore are included in cash flow from operating activities. The supplemental disclosure is presented to provide a comprehensive overview of the Investment Entity's available funds, including cash, cash equivalents and short-term investments.							

B.7	Selected historical	Key figures for the Investm	ent Entity				
	financial information,		2019	2018			
	cont.		Jan-Mar	Jan-Mar	2018	2017	2016
		SEK 000	(unaudited)	(unaudited)	(audited)	(audited)	(audited)
		Income statement					
		Result of change in Fair Value of					
		shares in portfolio companies	-11	-4,809	58,499	252,072	-146,544
		Profit/loss after tax	-18,627	-19,725	30,510	179,595	-216,832
		Balance sheet					
		Cash, cash equivalents and					
		short-term investments	61,767	145,717	85,792	169,634	248,147
		Share information Earnings per share before and					
		after dilution (SEK)	-0.3	-0.3	0.5	2.9	-4.1
		Net asset value per share (SEK)	3.5	4.0	3.8	4.3	0.7
		Equity per share (SEK) Share price per share, last	4.3	3.9	4.6	4.2	0.6
		trading day in report period (SEK)	5.9	5.0	6.2	5.8	6.0,
		Portfolio information Investments in portfolio					
		companies Of which investments not	17,093	13,449	124,557	91,869	28,917
		affecting cash flow Valuation of total portfolio	200	2,002	7,321	4,561	1,892
		holdings	636,008	456,423	618,927	447,783	149,408

#### **Definition of Key Terms**

#### Equity per share

Equity divided by the number of shares outstanding at year-end.

#### Net Portfolio Fair Value (after potential distribution to Rosetta Capital)

The net aggregated proceeds that Karolinska Development will receive after KDev Investments' distribution of proceeds to Rosetta Capital.

#### Result of change in Fair Value of shares in portfolio companies

Result of change in Fair Value of shares in portfolio companies includes both unrealized gains and losses (Fair Value) and realized gains and losses (e.g. divestments).

#### **Definition of Alternative Performance Measures**

The Company presents certain financial measures that are not defined under IFRS. The Company believes that these measures provide useful supplemental information to investors and the Company's management as they allow for the evaluation of the Company's performance. Because not all companies calculate the financial measures in the same way, these are not always comparable to measures used by other companies. Therefore, these financial measures should not be considered as substitutes for measures as defined under IFRS.

#### Total Portfolio Fair Value

The aggregated proceeds that would be received by Karolinska Development and KDev Investments if the shares in their portfolio companies were sold in an orderly transaction between market participants at the measurement date.

#### Equity to total assets ratio

Equity divided by total assets.

#### Net asset value per share

Net Portfolio Fair Value of the total portfolio, loans receivable from portfolio companies, short-term investments, cash and cash equivalents, and net of financial assets and liabilities minus interest-bearing liabilities, in relation to the number of shares outstanding on the closing date.

B.7

Selected historical financial information, cont.

#### Significant events during the financial period 2016–2018 and January – March 2019.

During 2016 and in the beginning of 2017, Karolinska Development completed the strategy shift that was implemented in 2014 with the ambition of becoming a leading Nordic life-science investor. Karolinska Development has during the specified period been focusing on changing the financing of its portfolio companies from short term financing mainly provided by Karolinska Development to financing its portfolio companies to next significant value inflection point in syndicate with other professional life science investors. Karolinska Development has also been focusing on strengthen the board of management and the board of directors in its portfolio companies. These objectives have been achieved for the majority of the portfolio.

With the strategy shift, Karolinska Development has in general changed its business model from managing its portfolio as pharmaceutical development projects with a large degree of detailed involvement to managing the portfolio as an investment company with involvement mainly on board level.

Karolinska Development's business model includes a focus of the financial resources on the portfolio companies with the most potential of delivering the highest possible return on Karolinska Development's investments. As a result of this, Karolinska Development has consequently divested companies which lack this potential and has thereby reduced the size of its portfolio to the current nine portfolio companies.

Karolinska Development has also with the strategy shift adjusted its valuation principles to be aligned with other investment companies and it has in general focused its communication toward a more open and transparent communication.

During the period January 2016 to March 2019, the Net Portfolio Fair value increased from SEK 149 million in December 2016 to SEK 636 million in March 2019, an increase of SEK 487 million. The main reason was an increase in fair values and investments in the portfolio companies. Decreases of fair values have also occurred during the period. The result of Changes of fair value in the portfolio companies have improved since 2016. In 2018 it was SEK 58 million, in 2017 SEK 252 million and in 2016 SEK –147 million. For the first quarter of 2019, the result of changes in fair value in the portfolio companies was close to SEK zero.

The Company's operational costs for 2018 decreased to SEK 29 million from SEK 37 million in 2017 and SEK 33 million in 2016. During the first quarter of 2019, the Company's operational costs were SEK 9 million.

The Company's convertible loan entails increased interest expenses, even though a part of the debt was converted in 2017. The interest costs were SEK 45 million in December 2016, decreased in 2017 to SEK 43 million, and increased in 2018 to SEK 49 million. The interest is cumulative. During the latter part of 2018, interest for the credit facility totaling SEK 50 million has been added. The interest is paid monthly in arrears

#### Significant events after the 2019 interim report for January - March was published

Since the Company's interim report for January - March 2019 was published, the board of directors have proposed measures to settle the Company's convertible loan. The board of directors resolved on a directed issue of shares of series B to the holders of the Company's convertible 2015/2019, subject to the approval by the annual general meeting, which was approved on June 28, 2019. The Company has received subscription undertakings from Sino Biopharmaceutical Limited ("Sino Biopharma") and other holders, together holding 84 per cent of the convertible loan including accrued interest. Sino Biopharma's undertaking is conditional to its holdings not exceeding 49 per cent of the total number of votes in the Company after the Directed share issue. Sino Biopharma's commitment is further conditional of that convertible loan holders representing at least 95 per cent of the convertible loan have committed to set-off their holding of convertible loans in the Directed share issue. Since a business model based on biological risks in pharmaceutical development and medical technology products is vulnerable, Karolinska Development intends, provided that a substantial portion of the convertible debt is set-off in the Directed Rights Issue, and that agreements are signed with Sino Biopharma, to supplement its business model with cash-generating operations in Asia in cooperation with Sino Biopharma. The Company will, hence, initiate a strategic initiative together with Sino Biopharma to open the Asian market for Nordic innovations in connection with the Directed share issue.

B.7	Selected historical financial information, cont.	On 14 May 2019, the Company received an earn out payment in the form of 270,000 shares in Lipidor AB. The fair value of the shares amounts to approximately SEK 1.2 million.  Karolinska Development announced in June 2019, that the Company has sold its entire ownership in the portfolio company Pharmanest AB. KCIF Co-investment Fund KB – a holding company jointly owned by the European Investment Fund and Karolinska Development – also sells its ownership interests. In total,
		the divestment brings in approximately SEK 23 million to Karolinska Development.
B.8	Selected pro forma financials	Not applicable. The Company has not presented any pro forma accounting.
B.9	Profit forecast	Not applicable. The Company has not presented any profit/loss forecast.
B.10	Remarks from the company's auditor	As a result of the Company's liquidity situation, the auditor for the financial year 2018 made a note under section "Considerable uncertainty relating to the going concern assumption". The auditor's report is not modified in this regard.
B.11	Working capital	Karolinska Development's assessment is that the Company does not have sufficient working capital to cover the current needs over the next twelve months from the date of this Prospectus. The current needs refer to the need for working capital that is deemed to exist within a period of twelve months from the date of the Prospectus. The Company's need for additional working capital appears partly on 29 November 2019 for payment of the final balance of the credit facility of maximum SEK 50 million, and on 31 December 2019 for repayment of the convertible loan of SEK 484 million. The total shortage of working capital, including costs for operating the business and commitments regarding follow-on investments in the portfolio companies, amounts to approximately SEK 524 million. The Company is dependent on the fact that as large part of the convertible loan as possible is set off in the Offer and as of the date of the Prospectus there are conditional subscription commitments of SEK 357.5 million.
		The Company's working capital requirement for the next 12 months in addition to repayment of the convertible loan but including repayment of a credit facility of SEK 50 million amounts to about SEK 40 million. The Company is currently considering possibilities for a subsequent rights issue or directed issue to secure the additional working capital required. The Company is also looking at possibilities for extending existing short-term loans or for new loans from third parties. The Company believes that the possibilities to obtain financing to secure the additional working capital requirements are good. In the event that the Offer is not sufficiently subscribed, one or more parties that have entered into subscription commitments might not fulfil their obligations or if subsequent capital raising initiatives do not secure working capital, the Company may need to evaluate alternative additional sources of funding, which will probably be done at significantly higher costs and at worse conditions, which can have negative effects for both the Company and its shareholders. In the event that all alternative financing possibilities fail and in the event that additional working capital cannot be raised, this could lead to the Company being forced to company reconstruction or bankruptcy or other forms of winding up the Company.

Section	on C – Securities	
C.1	Securities offered	Shares of series B. ISIN Code SE0002190926.
C.2	Denomination	The Company's shares of series B are denominated in SEK.
C.3	Number of shares in the company and nominal value	As of the date of the Prospectus, Karolinska Development's share capital amounts to SEK 644,187,37, divided into 1,503,098 shares of series A and 62,915,639 shares of series B. The quota value of the shares is SEK 0.01. Full payment has been made for all the shares.

C.4	Rights associated with the securities	Shares of series A carry ten (10) votes and shares of series B carry one (1) vote at general meeting. Shares of each series may be issued up to an amount equal to the entire share capital. All shares have equal rights to the Company's assets upon liquidation and equal rights to dividend. If the Company resolves to issue new shares of two classes, class A and class B, through a cash issue or an issue with payment by set-off, owners of shares of class A and class B shall enjoy preferential rights to subscribe for new shares of the same class pro rata to the number of shares previously held by them (primary preferential right). Shares which are not subscribed for pursuant to the primary preferential rights shall be offered to all shareholders for subscription (subsidiary preferential right). If the Company resolves only to issue shares of one class through a cash issue or an issue with payment by set-off, all shareholders shall, irrespective of share class, have preferential rights to subscribe for new shares pro rata to the number of shares previously held by them.
C.5	Restrictions on transferability	Not applicable. The Company's shares of series B are not subject to any restrictions on the transferability.
C.6	Admission for trading	The Company's shares of series B are listed on Nasdaq Stockholm. Following the registration of the new shares of series B issued in the Offer at the Swedish Companies Registration Office, the shares will be traded on Nasdaq Stockholm.
C.7	Dividend policy	To date, Karolinska Development has not paid any dividends to shareholders. When Karolinska Development's cash flow from operations exceeds the Company's future capital requirements, the board of directors may propose that the annual general meetings resolves on a dividend.

Section		

#### **D.1** Main risks related to the issuer or the industry

An investment in securities is associated with considerable risk. Prior to any potential investment decision, it is important to carefully analyse the risk factors deemed relevant to the Company's and the share's future development. These risks include, among others, the following industry and market-related risk factors.

- Future capital needs If the Offer cannot be carried out successfully or if subsequent raising of funds cannot be carried out to a sufficient extent, or not at all, there is a risk that the Company will be forced into company reconstruction or bankruptcy or other settlement of the Company.
- Risk of losing invested capital Karolinska Development invests, for instance, in companies with projects at early stages, which means that it is uncertain whether a product can be commercialized. Additionally, Karolinska Development invests primarily in unlisted companies, which means that Karolinska Development may not be able to find suitable exit alternatives. If above mentioned risks are realized, the Company's business, results, financial condition and growth could be adversely affected.
- Future financing requirements In order to secure financing for investments in current and new portfolio companies, Karolinska Development may seek additional financing in the future. If Karolinska Development is unable to obtain funding on time, the Company may be required to significantly curtail its investments, implying that the Company's business, results, financial condition and growth could be adversely
- Key employees at Karolinska Development and its portfolio companies It is vital that Karolinska Development succeeds in retaining its key employees and is able to recruit new employees when needed. If Karolinska Development or the portfolio companies would be unsuccessful in its efforts to retain and recruit relevant personnel, the Company's business, results, financial condition and growth could be adversely affected.
- The development work of the portfolio companies The majority of the portfolio companies' therapeutic projects are in phase II stages of development and further research and development work is required before the innovations and technologies of the companies can be commercialized. If none of the portfolio companies are able to achieve such commercial success, it would adversely affect the portfolio companies' and the Company's business, results, financial condition, and growth.

# D.1 Main risks related to the issuer or the industry, cont.

- Valuation risks Companies active in pharmaceutical development and medical technology at an
  early phase are, by their very nature, difficult to value. Due to the uncertainty in these assessments
  and the subjectivity in the inputs, the estimated value of the portfolio may deviate substantially
  from future generated value. If the value of the Company's portfolio companies is written down or
  written off, it would adversely affect the Company's results and financial condition.
- The challenge of innovation The markets for pharmaceutical, biotechnology, diagnostics and
  medical devices are characterized, inter alia, by long periods of research and development, rapid
  technological development, regulatory challenges, and a large number of competing product
  launches. If the portfolio companies cannot successfully, and within set time frames, break into
  these markets and establish their products and technologies, the portfolio companies' and the
  Company's business, results, financial condition and growth could be adversely affected.
- Long time before marketing of products The time it takes before a product candidate can be commercialized could lead to delay in milestone payments and royalty income, or that they lapse entirely, which could adversely affect the portfolio companies' and the Company's business, results, financial condition and growth.
- Market and technology development The portfolio companies frequently operate in markets characterized by rapid development and problems in the development work may lead to delays in set timetables and that products and techniques, once they are fully-developed, will not satisfy the market requirements and demands and/or will not achieve broad market acceptance, which could adversely affect the portfolio companies' and the Company's business, results, financial condition and growth.
- Need for strategic partners Most of the portfolio companies have a great need to enter into partnerships or ally themselves with major international companies to market their products. The portfolio companies may not be successful in attracting third parties to enter into such partnerships, and, if such partnerships are entered into, they may not develop as planned, which could adversely affect the portfolio companies' and the Company's business, results, financial condition and growth.
- Intellectual property rights of the portfolio companies The success of the portfolio companies is to a large extent dependent on the portfolio companies' ability to protect methods and technologies that they develop under patent protection. There is a risk that such patent protection could be considerably less extensive than the portfolio companies expects, or afterwards be declared invalid. Further, a portfolio company may need to resort to litigation to enforce a patent granted and there is a risk that any party should claim that a portfolio company's creation or use of methods or technologies infringes upon such party's intellectual property rights, and the portfolio company may be forced to pay damages and eventually cease the infringing activity. If any of the risks related to the intellectual property of the portfolio companies were to materialize, it could adversely affect the portfolio companies' and the Company's business, results, financial condition and growth.
- Data Protection Legislation There is a risk that the Company and the portfolio companies at present or in the future will not meet the requirements that data protection legislation entails. If the Company or the portfolio companies process personal data in violation of GDPR, the Company or the portfolio companies may become subject to, among other things, administrative fines up to EUR 20 million or four per cent of each group's annual global turnover, and damages. In addition to the mentioned consequences, if the Company or the portfolio companies breaches applicable data protection legislation, the Company or the portfolio companies may become subject to litigation, both of a civil and criminal nature, suffer from negative publicity and be forced to change or refrain from certain processing of personal data. If any of the above risks are materialized it could have a material adverse effect on the portfolio companies' and the Company's results and financial condition.

D.1	Main risks related to the issuer or the industry, cont.	<ul> <li>Future financing requirements of the portfolio companies – Research and development activities and marketing efforts in the life science industry are capital-intensive. The portfolio companies may not be able to obtain further capital on advantageous terms. Any inability of Karolinska Development to participate in future investment rounds in a portfolio company could lead to the portfolio company having to curtail its business and/or to Karolinska Development's holding in the company being diluted by other investors. The risk is particularly high in Karolinska Development's subsidiaries, which are dependent on capital from Karolinska Development. If any of these risks were to materialize, it could adversely affect the portfolio companies' and the Company's business, results, financial condition and growth.</li> <li>Tax risks – Karolinska Development's business is conducted in accordance with Karolinska Development's interpretation of the applicable tax regulations. The Company's interpretation of the regulations may be incorrect or legislation may be amended, potentially with retroactive effect, which could have a negative effect on the Company's financial condition.</li> <li>Dependency on obtaining regulatory approvals – The portfolio companies and their collaborating partners may fail in obtaining approvals from regulatory authorities to commence or complete clinical trials. If approval is obtained, such clinical trials may prove that the products are not safe or effective to the extent necessary to obtain marketing authorizations from regulatory authorities. If the portfolio companies and their collaborating partners do not receive required approvals or authorizations for their product candidates, the portfolio companies' and the Company's business, results, financial condition and growth could be adversely affected.</li> <li>Environmental regulations – Due to the chemical ingredients in pharmaceutical products and the nature of their manufacturing process, the pharmaceutical industr</li></ul>
D.3	Main risk related to the securities	<ul> <li>companies may not be able to obtain the operating licenses necessary to conduct their business.</li> <li>The principal risks related to the securities and the Offer includes, among other, the following risks.</li> <li>Unsecured subscription undertakings – The Company has received conditional subscription undertakings for subscription up to 76.79 per cent of the Directed share issue. These subscription undertakings are not secured by pledge, escrow or similar arrangements. Consequently, there is a risk that one or more convertible holders will not fulfil their respective committments. If the above-mentioned undertakings are not fulfilled, it may adversely affect the Company's ability to successfully complete the Directed share issue.</li> <li>Major shareholders and change of control – Major existing or future shareholders may use its influence in a way that is not in all aspects beneficial to all shareholders. If major shareholders increase or decrease their holdings in the Company, it may adversely affect the price of Karolinska Development's shares negatively.</li> <li>Risks associated with absent dividends – Karolinska Development has not paid any dividends to date and it is possible that Karolinska Development will not pay any dividend in the foreseeable future, or at all.</li> </ul>

Secti	Section E – Offer					
E.1	Issue amount and issue expenses	The Company's debt, including interest, related to the convertible holders will be lowered with an amount approximated to SEK 466 million if the Offer is fully subscribed. Since the payment of the shares of series B is made by set-off the Company will not receive any issue amount. Issuing expenses estimates to approximately SEK 8.3 million.				
E.2a	Reasons and use of the issue proceeds	Karolinska Development is an investment company that offers an opportunity to participate in the value creation of a number of Nordic life science companies that are pioneering potentially ground-breaking medical innovations with substantial commercial opportunities. Investments are made through co-investments together with other leading national and international specialist investors. This facilitates access to a broader capital base, additional expertise within pharmaceutical and medical technology development and commercialisation, and expanded international networks between potential licensing and business partners. Eight of the portfolio companies have drug candidates in ongoing clinical studies or approved products in the early launch phase and all companies have well-defined exit strategies.				
		On January 2, 2015, the Company issued a convertible loan with a nominal amount of SEK 387 million, together with accrued interest until June 30, 2019 the total amounted is SEK 466 million. As mentioned in the Company's interim report for the first quarter of 2019, the board works actively to resolve the Company's long-term capital requirements and a conversion of the outstanding convertible loan is necessary to ensure the Company's survival. A conversion would also increase the degree of strategic and operational headroom for the future.				
		Sino Biopharma, one of the leading pharmaceutical groups in China, has undertaken to participate in the issue, with the provision that Sino Biopharma's share of the votes in the Company shall not exceed 49 per cent after the Directed share issue, and that a certain degree of acceptance will be achieved in the Offer. Provided that a significant proportion of the convertible debt is offset in the Directed share issue, the Company will initiate a strategic initiative together with Sino Biopharma, to open the Asian market for Nordic innovations. The focus will be on companies that are close to market launch, with the ambition to generate a positive cash flow to Karolinska Development, which can be reinvested in new innovative companies.				
		It is the board's assessment that the Company's existing working capital is not sufficient to cover the amount of capital required for the next 12 months. The Directed share issue to the holders of the convertible loan will not result in any liquid funds being transferred to the Company, but the issue amount will be offset against parts or the entire convertible loan including accrued interest. Furthermore, the board of directors considers that the Directed share issue will not be sufficient to cover the Company's working capital requirement even if the entire convertible loan should be offset. The Company's working capital requirement for the next 12 months in addition to repayment of the convertible loan but including repayment of a credit facility of SEK 50 million amounts to approximately SEK 40 million. The Company intends to investigate a number of different opportunities in the autumn of 2019 to finance the outstanding working capital requirement after the Directed share issue has been completed.				
		The Board of Directors is of the belief that the Directed share issue constitutes an attractive way of achieving the required restructuring of the Company's capital structure to the prevailing conditions.				

E.3	Terms and conditions of the Offer	<b>General</b> : On 29 May 2019 the board of directors' resolved, subject to the general meeting's subsequent approval, on a directed share issue of shares of series B to the holders of the Company's convertible 2015/2019. The annual general meeting on 28 June 2019 resolved to approve the board of directors' resolution on the Directed share issue. The board of directors intends to resolve on set-off.	
		Subscription price: SEK 3.74 for each new share of series B. The nominal value for each convertible amount to SEK 4.71, and accrued interest for each convertible amount to SEK 1.95 on 30 June 2019. By set-off the convertible holders receive shares with a value corresponding to the convertible claim, including accrued interest. The convertible receivable, including accrued interest, is not necessarily dividable in equals with the subscription price. If the claim, including accrued interest, which the convertible holder wishes to set-off does not correspond to an even number of shares of series B, the surplus amount will be forfeited. Convertible holders accepting the Offer will receive accrued interest up to and including 30 June 2019. Convertible holders setting off their convertibles in accordance with the Offer, forfeits their rights to any accrued interest after 30 June 2019. Over-subscription is not possible.	
		<b>Subscription period</b> : The period commencing on 8 July 2019 up and until 19 July 2019. The board of directors may prolong the subscription period.	
		The convertibles total nominal amount, including any accrued interest up to and including 30 June 2019, amounts to approximately SEK 466 million. The maximum number of new shares of series B that may be issued in the Directed share issue amounts to 124,471,935 representing a share capital increase of SEK 1,244,719.35.	
E.4	Interests and potential conflicts of interest	There are no conflicts of interest between the members of the board of directors or executive management and Karolinska Development. The board members Tse Ping and Theresa Tse represent Sino Biopharma, one of the major shareholders of the Company, which together with its subsidiary also holds approximately 83 per cent of the Company's convertibles 2015/2019. Sino Biopharma's representatives on the board of directors of Karolinska Development have not taken part in the planning and decisions related to the Directed share issue. No other conflicts of interests exist.	
		DNB Markets is financial adviser and Cirio Advokatbyrå AB is legal adviser to the Company in connection with the Directed share issue. DNB Markets receives a remuneration based on a pre-settled agreement for services rendered in connection with the Directed share issue. Cirio Advokatbyrå AB receives continuous compensation for services rendered. In addition to the above parties' interests in the Directed share issue being successful, DNB Markets and Cirio Advokatbyrå AB have no other economic or other interests in the Directed share issue. No conflict of interest is deemed to exist between the parties.	
E.5	Selling shareholders and lock-up agreements	Not applicable. The Offer only comprises newly issued shares of series B.	
E.6	Dilution effect	Provided that the Offer is fully subscribed for, the number of shares in the Company will increase from 124,471,935 to 187,387,574 shares, whereof 1,503,098 are shares of series A. The dilutive effect corresponds to approximately 65.9 per cent of the Company's outstanding shares and 61.5 per cent of the votes in the Company, provided that the Offer is fully subscribed for.	
E.7	Expenses borne by the investor	Not applicable. The Company does not charge investors any costs.	

## Risk factors

The risks associated with investments in companies, such as Karolinska Development, that invest in life science companies with research operations in early development phases, are generally more extensive than the risks normally associated with investments in limited liability companies, since in the early development phases it is still very uncertain whether a product will be successful during the different phases of clinical development and after market entry. Prospective investors should carefully consider all the information set forth in the Prospectus and in particular, evaluate the specific risk factors set forth below, which describe certain risks related to an investment in the securities subject to the Prospectus. The risks set out below could have a negative impact on Karolinska Development's business, results, financial condition and growth. However, other risks and uncertainties not known to Karolinska Development at this time may also become important factors that could affect Karolinska Development. If any of these risks were to materialise, Karolinska Development's business, results, financial condition and growth could be adversely affected.

#### Risks associated with the market and Karolinska **Development's operations**

Future capital needs

The Company carries out the Offer to reduce the Company's outstanding convertible loans. The convertible loan carries an annual nominal interest rate of 8 per cent and has a nominal value of SEK 329 million as of 31 March 2019. The convertible loan matures on 31 December 2019 with a repayment amount of approximately SEK 484 million. As of the date of the Prospectus, the Company has received conditional subscription undertakings of SEK 357.5 million relating to the convertible loan. The Company also has an outstanding credit facility of SEK 50 million, which matures in November 2019. As of the date of this Prospectus, the Company does not have funds to repay the convertible loan and the credit facility. The Company will also need additional funds after the completion of the Offer to settle any remaining parts of the convertible loan and the credit facility. If the Offer cannot be carried out successfully or if subsequent raising of funds cannot be carried out to a sufficient extent, or not at all, there is a risk that the Company will be forced into company reconstruction or bankruptcy or other settlement of the Company.

#### Risk of losing invested capital

Karolinska Development invests, for instance, in companies with projects at early stages, before beneficial effects have been proven, in animal testing or human testing, so-called proof of principle and proof of concept, respectively. Accordingly, the business is associated with a great amount of risk. Karolinska Development invests primarily in unlisted companies, which means that Karolinska Development may not be able to find suitable exit alternatives for its investments within the time frame expected by Karolinska Development, or at all. If Karolinska Development is unsuccessful in finding suitable exit opportunities for its investments, the Company's business, results, financial condition, and growth could be adversely affected.

#### Future financing requirements

In order to secure financing for investments in current and new portfolio companies, Karolinska Development may seek additional financing in the future. Such additional financing may not be available to Karolinska Development on acceptable terms, or at all. If Karolinska Development is unable to obtain funding on time, the Company may be required to significantly curtail its investments, implying that the Company's business, results, financial condition and growth could be adversely affected.

Loan financing, if available, may be expensive and may involve restrictive covenants or may otherwise constrain the Company's financial flexibility, which could adversely affect the Company's business, results, financial condition and growth.

#### Key employees at Karolinska Development and its portfolio companies

It is vital that Karolinska Development succeeds in retaining its key employees and is able to recruit new employees when needed. Therefore, high demands will be placed on the Company's professional leadership, that Karolinska Development's distinctive profile is preserved, and that the forecasted development is met. Karolinska Development faces competition for personnel from other companies, investment funds, universities, public and private research centers as well as government entities and other organisations. If Karolinska Development would be unsuccessful in its efforts to retain and recruit relevant personnel, the Company's business, results, financial condition, and growth could be adversely affected.

Furthermore, a key factor for the portfolio companies is to succeed in retaining and recruiting individuals with experience in fundraising, company development and exits, and/or expertise in research and technology on which these companies are built. Equally important is a skillful leadership and that the staff considers the workplace stimulating. To achieve this, high demands will

be placed on the portfolio companies' leadership. In addition to an interesting work environment, attractive employment conditions are important. The portfolio companies may fail in their efforts to retain and recruit staff with the appropriate skills, which may adversely affect the portfolio companies and the Company's business, results, financial position, and growth.

#### Cooperation with the portfolio companies and co-investors

Karolinska Development usually has a representative on the board of directors of its material portfolio companies. The aim is to be able to assist these portfolio companies on a strategic level in matters concerning their development. The boards of directors of the portfolio companies are also composed of representatives of other investors as well as independent directors. Cooperation on these boards is dependent on effective communication and good relationships between the directors and with the management of the portfolio companies. Karolinska Development's board representatives are in a minority position on the boards of the portfolio companies and their influence on board meetings may be limited. Moreover, it is necessary for Karolinska Development and its executive management to succeed in reaching agreements with other investors which could contribute to the portfolio companies' further development. Karolinska Development also often holds a minority position in the portfolio companies. Karolinska Development and its board representatives may not be able to meet these requirements, which could adversely affect the portfolio companies' further development and the Company's business, results, financial condition, and growth.

#### Access to new investment opportunities

Karolinska Development has a non-exclusive agreement with Karolinska Institutet Holding AB ("KIHAB"), wholly owned by Karolinska Institutet, and Karolinska Institutet Innovations AB ("KIAB"), regulating the establishment of a new incubator fund focused on identifying potentially valuable new medical innovations at KI and other Swedish universities at an early preseed stage. Karolinska Development may not be able to secure access to the deal flow coming from such an incubator fund or the fund may not be established.

Apart from the agreement with KIHAB and KIAB above, Karolinska Development is also dependent on its relationships with universities, tech transfer offices, entrepreneurs, and investors to get access to additional deal flow. Karolinska Development may not be able to identify suitable deals to invest in.

License agreement regarding the use of "Karolinska" Pursuant to the license agreement the Company has entered into with Karolinska Institutet, Karolinska Development has a non-exclusive and non-transferrable right to use "Karolinska" in its legal name. The license may be terminated with immediate effect if there is a change of control of Karolinska Development resulting in a person or entity other than Karolinska Institutet (or any other entity within the Karolinska Intitutet sphere) directly or indirectly controls shares representing more than 50 per cent of the votes in Karolinska Development. An increase in major shareholders' holdings may trigger conditions in the agreement that result in the agreement being terminated or must be renegotiated. This could adversely affect the Company's operations, results, financial condition and growth.

Ownership structures in the portfolio companies Karolinska Development's holdings in the portfolio companies are in some cases direct, in other cases indirect via, for example, KDev Investments AB and/or KCIF Co-Investment Fund KB ("KCIF"), and sometimes the Company has a combination of direct and indirect holdings. The Company makes investments in the portfolio companies on a regular basis, normally through new issues of shares in the portfolio companies, but also through loans or other financing instruments. This imply that the ownership structures of the portfolio companies are changing regularly. Furthermore, from time to time transfers of ownership are made in connection with exits, partial exits or due to restructurings. There is a risk that necessary waivers from pre-emption or preferential rights according to portfolio companies' articles of association or according to shareholders' agreements regarding the portfolio companies are not obtained, or not documented in the correct order. If anyone were to dispute the Company's holdings in the portfolio companies and succeed with such a claim in a legal proceeding, it could result in an unexpected decrease in the value of the Company's holdings in the portfolio companies, which could adversely affect the Company's business, results, financial position, and growth.

# The development work of the portfolio companies The majority of the portfolio companies' therapeutic projects

are in phase II stages of development and further research and development work is required before the innovations and technologies of the companies can be commercialised. Examples of such work are testing of drugs on patients to assess the candidate drugs' effect and safety. Problems or delays may occur and the development work may not be able to be conducted successfully, or at all. Future product development of the portfolio companies is subject to the risk of failure, inherent in the development of pharmaceutical, other biotechnological products or techniques, and medical devices. This includes, among others, the possibility that any or all of the portfolio companies' product candidates will show a lack of effect, be toxic or otherwise fail to either meet applicable regulatory standards, fail to receive necessary regulatory approvals or clearances, or turn out to be difficult to develop into commercially viable products.

Cash flow from exits or licensing of projects is subject to the success of the portfolio companies' projects. Each outcome has a direct impact on the potential value of a portfolio company.

Other factors that may have an impact on the cash flow from the portfolio companies are competitors' successes and demand from potential buyers at a given point in time.

Most of the portfolio companies' projects may not be commercialised to the extent necessary in order for Karolinska Development's investment in the project to be profitable, or even for Karolinska Development to recover the capital invested from the portfolio company in question. Karolinska Development has after the strategic reorganisation a relatively narrow portfolio, limiting the potential that one or more projects can be commercialised successfully enough to result in significant dividends or exit proceeds to Karolinska Development. If none of the portfolio companies are able to achieve such commercial success, it would adversely affect the portfolio companies' and the Company's business, results, financial condition, and growth.

# Risks related to investments and the possible establishment in Asia

Future investments in companies or businesses can entail both business and company-specific risks, such as miscalculations with respect to value and future prospects and unexpected costs due to unknown events. Also risks identified and taken into account prior to each investment can, however, be misjudged and have an adverse impact as regards to the value and prospects and cause unexpected costs or omissions in fulfilment of contractual obligations. Any major future investments may also reduce the Company's liquidity and result in dilutive effects for the Company's shareholders through the issuance of shares or related instruments as well as lead to raising of new loans.

Provided that a significant proportion of the convertible debt is offset in the Directed share issue, the Company will initiate a strategic initiative together with Sino Biopharma to open the Asian market for Nordic innovations. The focus will be on companies that are close to market launch, with the ambition to generate a positive cash flow to Karolinska Development, which can be reinvested in new innovative companies. There is a risk that this cooperation cannot be implemented successfully or not at all.

#### Valuation risks

Companies active in pharmaceutical development and medical technology at an early phase are, by their very nature, difficult to value, as lead times are very long and development risks are high. Due to the uncertainty in these assessments and the subjectivity in the inputs, the estimated value of the portfolio may deviate substantially from future generated value. This is largely due to the sensitivity of the valuation methods, that milestones are moved or to trial costs, and similar assumptions, which are not necessarily accounted for when the contract value is determined by negotiation. Financing strategy decisions can also influence valuations.

The results from the portfolio company Modus Therapeutics' Phase 2 study of sevuparin did not show a meaningful clinical benefit in the management of acute vaso-occlusive crisis in patients with sickle cell disease. Modus is now considering its options for further development of sevuparin and the outcome of this assessment may affect Modus Therapeutic's book value. If the value of the Company's portfolio companies is written down or written off, it would adversely affect the Company's results and financial condition.

#### The challenge of innovation

The markets for pharmaceuticals, diagnostics, biotechnology, and medical devices are characterised, inter alia, by long periods of research and development, rapid technological development, regulatory challenges, and a large number of competing product launches. The existing and potential customers of the portfolio companies often work within established reference models and standard practices. The portfolio companies conduct business with highly advanced research and pioneering technologies. If the portfolio companies cannot successfully, and within set time frames, break into these markets and establish their products and technologies, the portfolio companies' and the Company's business, results, financial condition, and growth could be adversely affected.

#### Long time before marketing of products

The time it takes before a product candidate has completed the entire research and development process, established a strong patent protection, satisfied all regulatory requirements, and found strong marketing and distribution partners, is often underestimated. Moreover, the market introduction of new products and technologies often starts slowly. Introducing new products and technologies, which are not previously known and accepted, or have predetermined reimbursement models, takes time. This could lead to delays in milestone payments and royalty income, or that they lapse entirely, which could adversely affect the portfolio companies' and the Company's business, results, financial condition, and growth.

#### Competition for the portfolio companies

The markets for the product candidates and new technologies of the portfolio companies are exposed to fierce competition. The portfolio companies' direct and indirect competitors are in many cases major international companies. Such actors are already established in the markets of the portfolio companies and may hold competitive advantages. Furthermore, they can normally react rapidly to new research and development or new market requirements. They may also, compared to the portfolio companies, have greater financial resources and expertise in research and development, clinical trials, better opportunities in obtaining regulatory approvals, and superior marketing.

Competitors may develop more effective, more affordable and more suitable products, or may achieve patent protection earlier or be able to commercialise their products earlier than Karolinska Development's portfolio companies. These competing products may render the portfolio companies' product candidates obsolete or otherwise limit the ability of the portfolio companies to generate revenues from their product candidates, which could adversely affect the portfolio companies' and the Company's business, results, financial condition, and growth.

#### Market and technology development

The portfolio companies frequently operate in markets characterised by rapid development. New and competing products and technologies may pose a threat to the products developed by the portfolio companies. Moreover, new products and actors result in increased competition, which may negatively impact both price and market penetration. The future prospects of the portfolio companies will to a large extent depend on their ability to develop their business and to produce high-quality products and technologies. The portfolio companies' development work may not proceed without problems. Problems in the development work may lead to delays in set timetables and that products and techniques, once they are fully developed, will not satisfy the market requirements and demands and/or will not achieve broad market acceptance. Changes in pricing principles may impair the value of the products, technologies, and services developed by the portfolio companies, which in turn could adversely affect the portfolio companies' and the Company's business, results, financial condition, and growth.

#### Product liability for the portfolio companies

The portfolio companies in commercial phase may in many cases be exposed to the risk of product liability claims that may be inherent due to flaws in manufacturing, studies, or marketing of certain pharmaceuticals or diagnostics, biotechnology, and medical devices. The portfolio companies may not be able to obtain or maintain insurance protection for such claims on acceptable terms, or at all. Moreover, insurance that the portfolio companies do obtain may not provide adequate protection against a potential claim. This could adversely affect the portfolio companies' and the Company's business, results, financial condition, and growth.

#### Need for strategic partners

Most of the portfolio companies have a great need to enter into partnerships or ally themselves with major international companies to market their products. The portfolio companies may not be successful in attracting third parties to enter into such partnerships, and, if such partnerships are entered into, they may not develop as planned.

If a strategic partner does not fulfill its contractual obligations or commitments or fails to keep to expected time limits, or if a partner has to be replaced or if the clinical information that the partner receives for some reason appears to be of poor quality or incorrect, planned clinical trials may be extended, delayed, or terminated, which could have a negative impact on the business of the portfolio companies and their ability to license or commercialise its products, which in turn could adversely affect the portfolio companies' and the Company's business, results, financial condition, and growth.

Intellectual property rights of the portfolio companies The success of the portfolio companies is to a large extent dependent on the portfolio companies' ability to protect methods and technologies that they develop with patent protection and other intellectual property rights in order to prevent competitors from using their innovations and other protected information. Since patent applications in general are confidential for 18 months from the date of the application, third parties may have filed patent applications for methods and technologies covered by a portfolio company's pending patent applications without the portfolio company being aware of such applications. Consequently, the portfolio company's patent application may not have priority, which in turn could result in the patent protection being considerably less extensive than applied for. The fact that a patent has been granted does not provide absolute protection during the term of the patent. Patents may later be declared invalid by court or an authority, which leads to insufficient patent protection vis-à-vis other innovations. In addition, granted patents must be properly transferred from the inventor/inventors to the portfolio company in question. Moreover, the extent of the patent protection is dependent on patent category and the wording of the patent application. The different patent categories and the wording of the patent application are of importance to the strength of a patent and may vary from case to case.

Because of the formulation of the patent legislation, the application of an innovation in accordance with a portfolio company's patent may be governed by the technology in another patent on which the portfolio company's patent is dependent. In such a situation, the portfolio company may not be able to ensure the right to use such technology at reasonable conditions to the portfolio company, or at all.

A third party may sue a portfolio company for infringing its patent rights. Likewise, a portfolio company may need to resort to litigation against a third party to enforce a patent granted to the portfolio company or to determine the scope and invalidity of third-party proprietary rights. Patent litigations often take several years and the issue may, depending on the rules of the country in question, be tried in several courts. The cost of pursuing intellectual property litigation, even if resolved in the portfolio company's favor, could be substantial. Litigation could also

divert the portfolio company's focus from the portfolio company's ordinary business. Uncertainty resulting from pursuing litigation could limit a portfolio company's ability to continue its operations. If any party should claim that a portfolio company's creation or use of methods or technologies infringes upon such party's intellectual property rights, the portfolio company may be forced to pay damages and cease the infringing activity.

In many countries, prohibitory injunctions may be announced at an early stage of legal proceedings. As prohibitory injunctions often require that security is provided, the portfolio companies may not have sufficient financial resources to pursue prohibitory injunctions.

It is not certain that the patents of the portfolio companies entail sufficient legal or commercial protection against financially strong competitors that, despite the patent, may use the portfolio company's methods and technologies. Furthermore, the patents of the portfolio companies may not entail sufficient legal or commercial protection against similar products which the market assesses to be replaceable with the portfolio company's product. Only a few of the portfolio companies may have registered trademarks. Without accurate registration, it might be difficult, or at least time and resource consuming, to prevent a third party from using the respective portfolio company's trade name or brands. If any of the risks related to the intellectual property of the portfolio companies were to materialise, it could adversely affect the portfolio companies' and the Company's business, results, financial condition, and growth.

#### Trade secrets of the portfolio companies

Each portfolio company may be dependent on trade secrets, which are not protected by patents or other intellectual property, being safeguarded. Such trade secrets could include, but are not limited to, information in relation to inventions for which patent protection has not been sought yet or to information in relation to manufacturing processes or methods for which patent protection cannot be sought. Employees and collaboration partners of the respective portfolio company do generally have an obligation of confidentiality towards the portfolio company. However, it can happen that someone, having access to information of great value to the portfolio company in question, discloses or uses the information in a manner that impairs the portfolio company's position on the market, which could adversely affect the relevant portfolio company's and the Company's business, results, financial condition, and growth.

#### Data Protection Legislation

The Company and its portfolio companies process personal data in its operations and are obliged to comply with applicable data protection legislation, including the General Data Protection Regulation ("GDPR"), which entered into force on 25 May 2018. Processing of patient data and personal data regarding individ-

ual health status is among the riskier processes that the portfolio companies conduct from a data protection perspective. Such data are particularly sensitive data that are subject to specific requirements under applicable data protection legislation.

The data protection legislation is extensive and requires, among other things, that the Company and the portfolio companies process personal data in a secure manner and understand, control and document how they process personal data. There is a risk that the Company and the portfolio companies at present or in the future will not meet the requirements that data protection legislation entails. If the Company or the portfolio companies process personal data in violation of GDPR, the Company or the portfolio companies may become subject to, among other things, administrative fines up to EUR 20 million or four per cent of each group's annual global turnover, and damages. In addition to the mentioned consequences, if the Company or the portfolio companies breaches applicable data protection legislation, the Company or the portfolio companies may become subject to litigation, both of a civil and criminal nature, suffer from negative publicity and be forced to change or refrain from certain processing of personal data. If any of the above risks are materialised it could have an adverse effect on the Company's results and financial condition.

# Future financing requirements of the portfolio companies

Research and development activities and marketing efforts in the life science industry are capital-intensive. The portfolio companies may not be able to obtain further capital on advantageous terms, and the capital which may be obtained may not be sufficient to finance the activities in accordance with the portfolio companies' respective business plans. Any inability of Karolinska Development to participate in future investment rounds in a portfolio company could lead to the portfolio company having to curtail its business and/or to Karolinska Development's holding in the company being diluted by other investors. The risk is particularly high in Karolinska Development's subsidiaries, which are dependent on capital from Karolinska Development. Even in situations where Karolinska Development would be able and willing to participate, co-investors may not be willing to participate on the same terms and conditions. If any of these risks were to materialise, it could adversely affect the portfolio companies' and the Company's business, results, financial condition and growth.

#### Tax risks

Karolinska Development's operations is conducted in accordance with Karolinska Development's interpretation of the applicable tax regulations. The Company's interpretation of the regulations may be incorrect or legislation may be amended, potentially with retroactive effect, which could have a negative effect on the Company's financial condition.

Karolinska Development's assessment is that the Company has a partial right to deduct input value added tax (VAT). The rules concerning input VAT are complicated and Karolinska Development's partial right to deduct input VAT could be challenged, entailing further limitations in respect of the Company's right to deduct input VAT, which in turn would give rise to increased costs for the Company. There is also a risk that Swedish tax authorities reassesses previous year's tax returns, denying the Company the right to deduct input VAT, which would result in increased costs for the Company. The Company's right to deduct input VAT may also be limited by future legislative changes. Limitations in Karolinska Development's partial right to deduct input VAT could adversely affect the Company's business, results, financial condition and growth.

#### Tax losses carried forward

Karolinska Development and certain portfolio companies have significant tax losses carried forward. The Company's ability to use tax losses carried forward in the future may be restricted, partly or wholly, upon ownership changes that entail a change of control of the Company. There is also risk that Swedish tax authorities reassesses previous years' tax returns with the result that the deficit is reduced. The possibility to use tax losses carried forward may also be affected by changes in legislation or case law.

#### New tax rules

As of 1 January 2019, a general limitation on the right to deduct negative net interest income in the corporate sector and a reduction in corporate tax from 22 per cent to 21.4 per cent has been introduced.

The general deduction limitation imply that companies can only deduct a negative net interest income corresponding to a maximum of 30 per cent of a company's EBITDA. Alternatively, a simplification rule may be used implying that a negative net interest income may be deducted up to SEK 5 million within a group. It is possible to equalise the interest deduction within a group when the group has the right to make group contributions. Furthermore, interest that could not be deducted from a certain year may be saved and deducted in a subsequent year. This applies for a maximum of six years and is lost upon ownership changes.

According to the annual report 2018, the Company's interest income amounted to SEK 7.3 million and interest expenses to SEK -49.5 million, which implies that the Company has a negative net interest income. The new interest deduction limitation rules, if they had been in force in 2018, would reduce the deficit by approximately SEK 19.9 million. The new interest deduction restrictions may, depending on future interest expenses, decrease the Company's deficit, which may ultimately have a negative impact on the Company's operations, financial position and results.

#### Dependency on obtaining regulatory approvals

In order to obtain regulatory approvals for commercial sale of the portfolio companies' products, the portfolio companies and their collaborating partners will be required to complete clinical trials to demonstrate the safety and efficacy of the products. The portfolio companies and their collaborating partners may fail in obtaining approvals from regulatory authorities to commence or complete such clinical trials. If approval is obtained, such clinical trials may prove that the products are not safe or effective to the extent necessary to obtain marketing authorisations from regulatory authorities. Positive results demonstrated in development studies and clinical trials that the portfolio companies and their collaborating partners finalise may not be confirmed in results obtained in future clinical trials.

The portfolio companies and their collaborating partners will not be able to market any of their products without first obtaining the requisite authorisations from the appropriate regulatory authorities. The regulatory process to obtain marketing authorisation for a new pharmaceutical product may take many years and usually requires significant financial and other resources.

If the portfolio companies and their collaborating partners do not obtain the requisite authorisations to market their product candidates, it could adversely affect the portfolio companies' and the Company's business, results, financial condition and growth.

#### Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will vary depending on changes in market interest rates. Interest rate risk can consist of change in fair value, price risk and changes in cash flow. Surplus liquidity in the investment entity is invested in fixed-income funds and interest-bearing instruments. At 31 March 2019, interest-bearing assets amounted to SEK 50 million. At the same date, interest-bearing debt in the form of the credit facility, amounted to SEK 50 million. A, for the Company, negative development of the market interest could adversely affect the Company's business, results and financial condition.

#### Currency risk

Currency risk is the risk that exchange rate changes will have a negative impact on the investment entity. The investment entity's exchange rate exposure consists of transaction exposure through exposure in a foreign currency linked to the contractual cash flow and statement of financial position items where changes in the exchange rates affect the results and cash flows. This could adversely affect the Company's business, results and financial condition.

#### Credit risk

Credit risk is the risk that the counterparty to a transaction fails to fulfil its obligations under the contract and that any assets pledged do not cover the investment entity's claim. The maximum credit risk exposure is equivalent to the book value of financial assets. Should the Company's counterparties fail to fulfil its obligations it could adversely affect the Company's business, results and financial condition.

#### Changed accounting rules

The company's operations are affected by applicable accounting rules, such as IFRS and other international accounting rules. This imply that the Company's accounting, financial reporting and internal control in the future may be affected by and need to be adapted to changed accounting rules or changed application of such accounting rules. This may lead to uncertainties regarding the Company's accounting, financial reporting and internal control and could affect the Company's reported earnings, balance sheet and equity, which could have a negative impact on the Company's operations, financial results or financial position.

#### Environmental regulations

Due to the chemical ingredients in pharmaceutical products and the nature of their manufacturing process, the pharmaceutical industry is subject to extensive environmental regulation. The portfolio companies are thus subject to the risk of incurring liability for damages or costs of remediation, renovation or control of environmental problems. The portfolio companies may not be able to obtain the operating licenses necessary to conduct their business. In addition, if the portfolio companies fail to comply with environmental regulations relating to the proper use or disposal of hasardous materials or otherwise fail to comply with conditions attached to operating licenses, such licenses could be revoked. The portfolio companies can also be subject to legal sanctions and substantial liability and costs, or could be required to suspend or modify their operations, which could adversely affect the portfolio companies' and the Company's business, results, financial condition and growth.

#### Risks associated with shares and the Offer

Volatility on the securities market

The securities market is very volatile. As equity and equity related investments may both rise and fall in value, it is not certain that an investor will get back the invested capital. An investment in the Company's shares should therefore be preceded by a careful analysis of Karolinska Development, its competitors and market, general information about the industry and other relevant information.

The value of the Company's securities may fluctuate in the future, even as a result of events that are not directly linked to Karolinska Development or to the operations of the Company, such as, inter alia, fluctuations in the market and general economic conditions. The liquidity and the trading price of the

Company's shares may be affected by, for example, fluctuations in actual or projected operating results, changes in projected earnings or failure to meet securities analysts' earnings expectations, changes in trading volumes in Karolinska Development's shares, changes in macroeconomic conditions, the activities of competitors and suppliers, changes in market valuations of comparable companies, changes in investors' and analysts' perception of Karolinska Development or the industry, changes in the legal framework in which the Company operates and other factors referred to in this section.

Therefore, the future development of the price of the Company's shares is uncertain. The share price can be negatively affected as a result of market volatility, the possibility of a large number of shares being sold on the market, or as a result of an expectation that such disposal will occur.

#### Unsecured subscription undertakings

The Company has received conditional subscription undertakings for subscription up to 76.79 per cent of the Directed share issue. These subscription undertakings are not secured by pledge, escrow or similar arrangements. Consequently, there is a risk that one or more convertible holders will not fulfill their respective commitments. If the above-mentioned undertakings are not fulfilled, it may adversely affect the Company's ability to successfully complete the Directed share issue.

#### Major shareholders and change of control

As of 31 March 2019, KIHAB owned shares in Karolinska Development representing approximately 22.01 per cent of the capital and approximately 5.64 per cent of the votes in the Company, the Third AP Fund owned approximately 9.89 per cent of the capital and approximately 8.17 per cent of the votes in the Company and Sino Biopharmaceutical Limited owned approximately 7.53 per cent of the capital and about 6.23 per cent of the votes in the Company.

In addition, Sino Biopharma together with its subsidiary holds a convertible loan (convertible 2015/2019) in the Company, which amounts to a total of SEK 385,783,864 including accrued interest up to 30 June 2019, which corresponds to 83 per cent of the Company's outstanding convertible loan. If all convertible holders accept the Offer, Sino Biopharma would hold approximately 52.5 per cent of the capital and 49 per cent of the votes in the Company.

Sino Biopharmal, KIHAB and the Third AP Fund thus have a significant influence over Karolinska Development and most decisions that require approval by the shareholders of the Company. Current and future major shareholders may use their respective influence in a way that is not in all aspects beneficial to all shareholders. If major shareholders increase or decrease their holdings in the Company, it may adversely affect the price of Karolinska Development's shares.

#### Risk factors

#### Dilution

Karolinska Development may in the future raise additional capital through issue of shares or other equity-related securities. Such issues may reduce the proportionate ownership, voting rights and earnings per share for the holder of shares in the Company. Furthermore, any new issues may have a negative effect on the market price of the shares.

#### Risks associated with absent dividends

In time, the Company is expected to receive income from the sale of portfolio companies or dividends from portfolio companies. Such revenues are expected to finance investments in current holdings up until an exit thereof as well as investments in new innovations, after which any surplus will be distributed to the shareholders. However, Karolinska Development has not paid any dividends so far and there is a risk that Karolinska Development will not pay any dividend in the foreseeable future, or at all.

# Invitation to subscribe for shares in Karolinska Development

On 29 May 2019 the board of directors in Karolinska Development resolved, subject to the general meeting's subsequent approval, on a directed share issue of shares of series B to the holders of the Company's convertible 2015/2019, in order to facilitate conversion of the outstanding convertible loan amounting nominally to SEK 329 million together with accrued interest up to and including 30 June 2019 (the "Directed share issue" or the "Offer"). The annual general meeting on 28 June 2019 resolved to approve the board of directors' resolution on the Directed share issue and resolved on the board of directors' proposal on required changes in the articles of association. The board of directors intends to resolve on set-off.

For each new share of series B under the Offer the subscription price is SEK 3.74. The nominal value for each convertible amount to SEK 4.71, and accrued interest for each convertible amount to SEK 1.95 on 30 June 2019. By set-off the convertible holders receive shares with a value corresponding to the convertible claim, including accrued interest. The convertible receivable, including accrued interest, is not necessarily dividable in equals with the subscription price. If the claim, including accrued interest, which the convertible holder wishes to set-off does not correspond to an even number of shares of series B, the surplus amount will be forfeited. Convertible holders' accepting the Offer will receive accrued interest up to and including 30 June 2019. Convertible holders setting off its convertibles in accordance with the Offer, forfeits its rights to any accrued interest after 30 June 2019. Subscription and payment by set-off shall be made during the period commencing on 8 July 2019 up and until 19 July 2019. The board of directors may prolong the subscription period. Over-subscription is not possible.

The subscription price corresponds to the volume-weighted average share price (VWAP) of the Company's shares of series B for fifteen (15) trading days ending 26 June 2019, with a market discount of three (3) per cent on such VWAP.

The convertibles total nominal amount, including any accrued interest up to and including 30 June 2019, amounts to approximately SEK 466 million. The maximum number of new shares of series B that may be issued in the Directed share issue amounts to 124,471,935 representing a share capital increase of SEK 1,244,719.35. If the Offer is fully subscribed, the dilutive effect, before the Directed share issue, sums to 65.9 per cent of the Company's outstanding shares and 61.5 per cent of the votes in the Company. Costs related to the Directed share issue is estimated to SEK 8.3 million.

The Company has received written conditional subscription undertakings from the Company's convertible bond holders amounting to approximately SEK 357.5 million corresponding to approximately 76.79 per cent of the Directed share issue. No compensation is paid for the subscription undertakings. For further information see Section "Subscription undertakings".

The Swedish Securities Council (Sw: Aktiemarknadsnämnden) has granted an exemption for Sino Biopharma from the mandatory bid obligation that otherwise could arise in connection with Sino Biopharma's participation in the Directed share issue. For further information see Section "Legal issues and supplementary information – Exemption from the mandatory bid obligation".

#### Illustration of the Offer

Each holder of the convertibles 2015/2019, may subscribe for a total number of new shares of series B in the Company corresponding to the total nominal value of held convertibles, including the accrued interest, divided with the subscription price. Holders of the convertibles do not pay any additional amount in cash to participate in the Offer, instead the convertible holders receive shares corresponding to the nominal value including accrued interest. The convertible receivable, including accrued interest, is not necessarily dividable in equals with the subscription price. If the claim, including accrued interest, which the convertible holder wishes to set-off does not correspond to an even number of shares of series B, the surplus amount will be forfeited.

# CONVERTIBLE - Convertible receivable: SEK 329 million - Accrued interest as of 30 June 2019: SEK 136 million - In total: SEK 466 million Payment by way of setting off the convertible receivable. Convertible holders receive 124,471,935 shares of series B. Annulment of SEK 466 million.

The holders of Karolinska Development's convertible 2015/2019 are hereby invited to subscribe for new shares of series B in accordance with the terms and conditions in this Prospectus.

Solna 5 July 2019 **Karolinska Development AB (publ)** *The board of directors* 

# Background and reasons

Karolinska Development is an investment company that offers an opportunity to participate in the value creation of a number of Nordic life science companies that are pioneering potentially ground-breaking medical innovations with substantial commercial opportunities. Investments are made through co-investments together with other leading national and international specialist investors. This facilitates access to a broader capital base, additional expertise within pharmaceutical and medical technology development and commercialisation, and expanded international networks between potential licensing and business partners. Eight of the portfolio companies have drug candidates in ongoing clinical studies or approved products in the early launch phase and all companies have well-defined exit strategies.

On January 2, 2015, the Company issued a convertible loan with a nominal amount of SEK 387 million, together with accrued interest until June 30, 2019 the total amounted is SEK 466 million. As mentioned in the Company's interim report for the first quarter of 2019, the board works actively to resolve the Company's long-term capital requirements and a conversion of the outstanding convertible loan is necessary to ensure the Company's survival. A conversion would also increase the degree of strategic and operational headroom for the future.

Sino Biopharma, one of the leading pharmaceutical groups in China, has undertaken to participate in the issue, with the provision that Sino Biopharma's share of the votes in the Company shall not exceed 49 per cent after the Directed share issue, and that a certain degree of acceptance level will be achieved in the Offer.<sup>1)</sup> Provided that a significant proportion of the convertible debt is offset in the Directed share issue, the Company will initiate a strategic initiative together with Sino Biopharma, to open the Asian market for Nordic innovations. The focus will be on companies that are close to market launch, with the ambition to generate a positive cash flow to Karolinska Development, which can be reinvested in new innovative companies.

#### Use of the issue proceeds

It is the board's assessment that the Company's existing working capital is not sufficient to cover the amount of capital required for the next 12 months. The Directed share issue to the holders of the convertible loan will not result in any liquid funds being transferred to the Company, but the issue amount will be offset against parts or the entire convertible loan including accrued interest. Furthermore, the board of directors considers that the Directed share issue will not be sufficient to cover the Company's working capital requirement even if the entire convertible loan should be offset. The Company's working capital requirement for the next 12 months in addition to repayment of the convertible loan but including repayment of a credit facility of SEK 50 million amounts to approximately SEK 40 million. The Company intends to investigate a number of different opportunities in the autumn of 2019 to finance the outstanding working capital requirement after the Directed share issue has been completed.

The Board of Directors is of the belief that the Directed share issue constitutes an attractive way of achieving the required restructuring of the Company's capital structure to the prevailing conditions.

The Board of Directors of Karolinska Development is responsible for the content of the Prospectus. The Board of Directors hereby assures that all reasonable cautionary measures have been observed to ensure that the information provided in this Prospectus, insofar as the Board of Directors is aware, agrees with the actual circumstances and no omissions have been made regarding anything that could alter its meaning.

> Solna 5 July 2019 Karolinska Development AB (publ) The board of directors

1) Sino Biopharmaceutical Limited has, under the above condition, undertaken to sell its remaining part of its convertibles to a third party to be utilised by subscribing for shares of series B during the application period in the Directed share issue but no later than 30 September 2019, through payment by set-off of

## Terms, conditions and instructions

#### The Offer

Karolinska Development offers holders of the Company's convertible 2015/2019 an opportunity to set-off the convertible holder's claim under the convertibles, including accrued interest as of 30 June 2019, against the subscription price of SEK 3.74 per share of series B. The convertibles nominal values are SEK 4.71 per convertible and accrued interest as of 30 June 2019 is SEK 1.95 per convertible. Convertible holders who set-off their claims receive shares with a value corresponding to the claims under the convertibles, including accrued interest. If the claim, including accrued interest, which the convertible holder wishes to set-off does not correspond to an even number of shares of series B, the surplus amount will be forfeited. The convertible receivable, including accrued interest, is not necessarily dividable in equals with the subscription price. According to terms and conditions of the convertibles 2015/2019, interest will be paid in full as accrued after the end of the financial quarter ending immediately prior to conversion being called for, whereby interest accrued prior to 30 June 2019 will be paid to convertible holders' accepting the Offer. Convertible holders handing over their convertibles in accordance with the Offer, annul its rights to any interest accrued on and after 30 June 2019.

#### **Subscription period for the Offer**

The subscription period for the Offer commences on 8 July 2019. The Offer can be accepted up and until 17.00 on 19 July 2019. The board of directors of Karolinska Development reserves the right to extend the subscription period. An extension will be disclosed by the Company by way of a press release no later than 19 July 2019. Subscriptions are binding.

#### **Brokerage**

No brokerage fee will be paid in connection with the Offer.

#### **Subscription**

Holders of convertibles in Karolinska Development whose convertibles are owner registered with Euroclear Sweden AB ("Euroclear") and who wishes to accept the Offer shall under the period commencing on 8 July 2019 up and until 19 July 2019 sign and submit a correctly completed application form as designated herein to:

DNB Bank ASA, filial Sverige Securities Services & Custody 105 88 STOCKHOLM

The application form shall be submitted in the enclosed return envelope in good time before the last day of the subscription period in order to reach DNB Markets ("DNB Markets") prior to 17.00 on 19 July 2019.

The VP-account (Sw. VP-konto) and current holding in Karolinska Development is shown on the pre-printed application form sent out in connection with the information letter to the convertible holders in Karolinska Development whose convertibles were direct registered with Euroclear on 3 July 2019.

Owners should check that the pre-printed information on the application forms is correct.

Additional application forms for subscription and payment can be obtained by phone (+46 8 473 48 50), alternatively downloaded from the Company's and DNB Markets' web pages (www.karolinskadevelopment.com and www.dnb.se/emission). Please note that nominee convertible holders shall submit the application for subscription and payment by set-off through their nominee, in accordance with the nominee's instructions.

Incomplete or incorrectly completed application forms may be disregarded. Application forms which are sent by post should be sent in good time before the last day of the subscription period.

#### Confirmation

After a correctly completed application form has been received and registered, the convertibles will be transferred to a new and blocked VP-account (account in kind) in the owners' name. In connection with the transfer, the convertible holder will receive a notice (VP notice) from Euroclear.

#### Disclosure of the result of the Offer

The result of the Offer is estimated to be disclosed by way of a press release on 24 July 2019.

#### **Delivery of shares**

The shares will be delivered when the Directed share issue has been registered with the Swedish Companies Registration Office, which is estimated to occur on 29 July 2019.

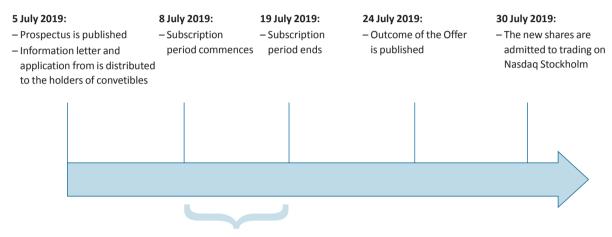
#### **Questions regarding the Offer**

Questions relating to the Offer can be directed to DNB Markets on telephone (+46 8 473 48 50). Information is also available on the Company's and DNB Markets' web pages (www.karolinskadevelopment.com and www.dnb.se/emission).

#### Miscellaneous

The Company's shares of series B are traded on Nasdaq Stockholm. The new shares of series B will be traded on Nasdaq Stockholm as well after the Directed share issue has been registered by the Swedish Companies Registration Office. The first day of trading is expected to commence on 30 July 2019. The new shares qualify for dividend on the first record day for dividend after the new shares have been registered by the Swedish Companies Registration Office and have been recorded in the share registry kept by Euroclear.

#### Overall time schedule for the Offer



### Market overview

The Prospectus contains third party information in the form of industry and market information and statistics and calculations derived from studies, industry reports, market researches, publicly available information and commercial publications. Such statements are identified by reference to the source. The Company confirm that the third party information has been accurately reproduced and, as far as the Company is aware and can assure by comparison with other information published by such third party, no facts have been omitted which could mean that the rendered information is incorrect or misleading. However, the Company has not independently verified the accuracy or completeness of any third party information, and the Company can therefore not guarantee its accurancy or completeness.

Karolinska Development is a Nordic life sciences investment company. The company focuses on identifying medical innovations in the Nordic region that are developed by entrepreneurs and invests in the creation and growth of companies that advance these assets into differentiated commercial products that are designed to make a difference to patients' lives while providing an attractive return on investment to shareholders.

#### The Market

Life science is a broad concept that, among other, includes products and methods aimed at maintaining good health or treating diseases. Karolinska Development's investments are focused on potentially ground-breaking pharmaceutical treatments or medtech products.

Life Sciences industry growth is linked to global health care expenditures, which are expected to rise at an annual rate of 5.4 per cent between 2018–2022, a significant rise from 2.9 per cent in 2013–2017. This increase is due to advancements in treatments and health technologies, the expansion of health care coverage in developing markets, increased life expectancy, and rising health care labor costs.<sup>1)</sup>

#### **The Market for Therapeutics**

The pharmaceutical industry is facing repercussions of patent expiries related to blockbuster pharmaceuticals. As a consequence, companies have to identify new profitable patent protected innovative products to replace these. Pharmaceutical companies that previously relied on in-house research and development, are increasingly dependent on external innovations and are actively seeking to license or acquire products under development from other companies.

Developing a new pharmaceutical product takes a long time and demands substantial investments. It takes an average of 12 years to translate a new scientific theory into a registered pharmaceutical.<sup>2)</sup> The risk of an individual project failing to make it to market is high — only around 10 per cent of the projects that start phase I trials make it to market.<sup>3)</sup> The enormous potential for growth in value in those companies that achieve success is, of course, the reason why there is, nonetheless, considerable interest in investing in smaller life science companies.

In order to cut down the time to market and balance the biological risk, many pharmaceutical companies focus on identifying and acquiring or licensing promising projects in a later clinical phase and thereafter continues the development and commercialisation of the projects.

Global pharmaceutical spending is projected to outpace overall health care spending. Worldwide prescription drug sales are predicted to increase from USD 900 billion in 2019 to USD 1.2 trillion by 2024. The increase corresponds to a compound annual growth rate ("CAGR") of 6.4 per cent over 2018–2024, six times the 1.2 per cent over 2011–2017. The primary drivers of growth are predicted to be novel therapies addressing unmet needs and increased access to medicines. US will continue to be the single largest market. The projected growth will also be generated from increased spending in particularly China, India and Indonesia.<sup>4)</sup>

Oncology is the fastest growing therapy area in the global pharmaceutical market, followed by autoimmune diseases, and various orphan diseases.<sup>5)</sup>

<sup>1)</sup> Deloitte. 2019 global healthcare outlook. Shaping the Future.

 $<sup>2) \</sup> https://www.fass.se/LIF/menydokument?userType=2\&menyrubrikId=3204.$ 

<sup>3)</sup> https://www.bio.org/sites/default/files/Clinical%20Development%20Success%20Rates%202006-2015%20-%20BIO,%20Biomedtracker,%20Amplion%202016.pdf.

<sup>4)</sup> Deloitte, 2019 Global Life Science Outlook. Focus and Transform I Accelerating change in Life Science.

<sup>5)</sup> Deloitte. 2019 Global Life Science Outlook. Focus and Transform I Accelerating change in Life Science.

Preclinical research Preclinical development

Phase I

Phase II

Phase III

Registration process

Market launch

Research and development activities carried out in a laboratory setting, Potential target structures for new pharmaceuticals are identified. Chemical or biological compounds with the ability to influence these target structures are characterised. produced on a small scale, and tested in a range of experimental models. The objective is to designate one or more candidate drugs with the desired properties for further development.

Officially regulated preclinical trials to ensure that a candidate drug has the properties required for it to be suitable for progression to clinical trials on humans. Ensuring that the compound has a good safety profile is an important component of this

Conducted on healthy test subjects to determine whether the candidate drug behaves in the same way in the body as that indicated in preclinical trials Documentation of the safety profile of the compound is, once again, the focus of this phase.

Conducted on a limited number of patients with the disease that the candidate drug is intended to alleviate or cure. The focus is on studying efficacy and safety, and on establishing data for determining the doses to be used in the phase III studies.

Studies involving a substantially larger number of patients. sometimes numbering in the thousands. The results of the phase III studies form an important element of the source data required to obtain market approval from the pharmaceutical regulatory authorities.

An application, which can comprise 100.000s of pages of documentation, is submitted to one or more pharmaceutical regulatory authorities. Processing an application normally takes around one year.

If the pharmaceutical regulatory authority has approved the application, the product launch can begin. Price negotiations with the organisations that will pay for the drug must, however, be conducted first in the majority of countries.

The market for specialty and orphan drugs

The therapeutic companies in Karolinska Development's portfolio focus on potentially ground-breaking specialty and orphan drugs.

Specialty pharmaceuticals are pharmaceuticals prescribed by specialist doctors. Usually, specialty pharmaceuticals are characterised by a high sales price, low level of competition, high level of product differentiation and relatively low sales volumes.

Orphan drugs, which are part of the market for specialty pharmaceuticals, are defined as pharmaceuticals used to diagnose, prevent or treat rare diseases that are chronic, debilitating and often life- threatening. Rare diseases affect a very limited part of the population. In the US, a rare disease, i.e. a disease which is treated with orphan drugs, is defined as a disease that affects less than 200,000 people, while the EU defines a rare disease as a disease that affects less than one in 2,000 people (0.05 per cent of the population).1)

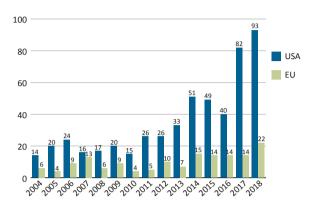
The term "orphan drug" derives from and reflects the previous insignificant interest within the pharmaceutical industry to carry out research and to develop pharmaceuticals for rare diseases. The small target population combined with high research and development costs has previously limited the development of orphan drugs under standard pharmaceutical conditions since few pharmaceutical companies were willing to take candidates through the expensive process of research, development and procedures for regulatory approval.

To encourage the development of new treatments for these rare and often severe diseases, the US enacted a new legislation in 1983.2) The Orphan Act provides regulatory and financial incentives in order to motivate pharmaceutical companies to develop pharmaceuticals for rare diseases. The Orphan Act resulted in the adoption of similar legislations in Japan (1993), Australia (1998) and within the EU (2000). The purpose of these legislations is to create market exclusivity for a number of years and simultaneously enable shorter procedures for regulatory approval, thereby creating protection against competition from generic pharmaceuticals and reducing development costs for pharmaceutical companies. The regulatory authorities can grant pharmaceutical candidates status as orphan drug candidates if certain formulated criteria are considered to be met.

<sup>1)</sup> Evaluate pharma, Orphan drug report, 2015.

<sup>2)</sup> Act to amend the Federal Food, Drug, and Cosmetic Act to facilitate the development of pharmaceuticals for rare diseases and conditions, and for other purposes, 1983,

#### Number of orphan drug approvals in 2004-2018.1)



The market for orphan drugs is considered to be underdeveloped because the majority of identified rare diseases still lack treatment alternatives. In the past few years, due to, among other factors, patent expiries and growing competition in the market for generic pharmaceuticals, many pharmaceutical companies have shifted focus to orphan drugs. Due to the market exclusivity provided by law combined with the possibility to price products at a higher level than other pharmaceuticals as a result of the low degree of competition and the large medical need, the pharmaceutical companies find the market for orphan drugs attractive. The global orphan drugs market is predicted to almost double and account for 20 per cent of worldwide prescription sales by 2024. By 2025, the global orphan market is projected to reach USD 323,4 billion, growing at a CAGR of 11,5 per cent between 2018–2025. Predominantly innovative advances in gene and cell therapy are predicted to drive the growth.2),3)

In summary, there is a momentum in the development of treatments for rare life-threatening and severe debilitating diseases. Other factors spurring this development include:

The medical need for pharmaceuticals treating rare types of cancer are substantial and there is also an increasingly refined understanding of the biology behind these diseases. The technical advances made in recent years enable development of individualised pharmaceuticals which in combination with for instance diagnostic tests, i.e. companion diagnostics, artificial intelligence, and advances in health care analytics could result in a more efficient treatment of these diseases.

- In light of the lack of satisfactory treatment alternatives for
  patients affected by rare diseases, the regulatory authorities are increasingly willing to engage in proactive dialogues
  with pharmaceutical companies to facilitate development
  of new pharmaceuticals. This is done through, for instance,
  more rapid development paths by means of a simplified
  approval procedure and shorter approval cycles.
- The growth of influential and well-organised patient organisations within rare diseases.
- Advantageous remuneration levels for differentiated products that meet the medical need of patients with rare diseases and which result in clinically relevant increased length of life expectancy and quality of life.

These factors confirm that rare diseases is an attractive area in the biopharmaceutical industry and are expected to result in the discovery of promising new technologies and new molecules.

#### The Market for Medical Technology

Karolinska Development has two portfolio companies in the medical technology (medtech) sector.

A medical device or technology is any instrument, apparatus, software, material, or other article intended for: diagnosis, prevention, monitoring, treatment or alleviation of disease or compensation for an injury or handicap; and modification of the structure or any function of the body. Typically, the purpose of a medical device is not achieved by pharmacological, immunological or metabolic means. Examples range from surgical instruments to implants, prostheses, MRI machines, CT and PET scans.

The growth of the global medtech market was stagnant from 2011–2015, with a value ranging from USD 350–375 billion. This was mainly due to lasting impact of the 2009 financial recession. In 2019, worldwide medtech sales are predicted to reach USD 475 billion, and the market is projected to grow at a CAGR of 5.6 per cent between 2017–2024 to reach USD 595 billion by the end of 2024. The fastest growing device areas are Neurology, Diabetic care, General and Plastic Surgery and Dental.<sup>4)</sup> Key drivers of growth are, as aforementioned, increased life expectancy, chronic diseases, advances in technology and treatment, and rising health care expenditure.

<sup>1)</sup> Food and Drug Administration (FDA), 2019 and European Medicine Agency (EMA), 2019.

<sup>2)</sup> Deloitte. 2019 Global Life Science Outlook. Focus and Transform I Accelerating change in Life Science.

Global Orphan Drugs Market 2019 Industry Key Players, Trends, Sales, Supply, Demand, Analysis & Forecast To 2025.

<sup>4)</sup> Deloitte. 2019 Global Life Science Outlook. Focus and Transform I Accelerating change in Life Science.

In vitro diagnostics (IVD), i.e. tests that can detect diseases, conditions or infections, is one of the fastest growing segments, driven by the prevalence of chronic diseases. Furthermore, Software-as-a-Medical-Device (SaMD) is a rapidly growing area generating new innovations that regulatory authorities throughout the world are working to properly regulate and make more agile.

The US is the largest medtech market in the world with a market size of USD 156 billion, representing 40 per cent of the global medtech market.<sup>1)</sup> Asia Pacific is expected to gain momentum over the next years because of increasing investments in healthcare infrastructures and changing lifestyle.

Medtech products comprise everything from sticking plasters to radiotherapy equipment, and the commercialisation processes naturally differ in line with the type of product. One

of the key differences between the development of medtech and pharmaceutical products is that medtech products do not usually undergo the formal clinical development phases (phase I-III studies) described in the section above. Another difference lies in the fact that the development risk is generally lower while the commercialisation risk is higher. Fewer projects fall by the wayside, but the market launch process is often more drawn out than for pharmaceuticals.

The official approval requirements for medtech products depend on the control level required to determine the product's safety and efficacy, or its similarity to previously approved products. Typically, a prototype is developed based on a concept or an idea for a new device. From there on, proof of concept is established and the prototype is iterated and tested to generate the evidence and documentation required for market approval.

#### Approval process in the USA

In the USA, the products are divided into three categories. Class I products require no formal approval, class II products are only required to show that they are equivalent to a previously approved product, while class III products must obtain Pre-Market Approval (PMA) before launch. In the latter case, clinical studies supervised by the US regulatory authority, the FDA, are required.

#### Approval process in the EU

In the EU, the majority of products must be CE-labelled before sales may commence. The CE-labelling (Conformité Européenne) system requires the manufacturer to confirm that the product meets regulatory requirements. A product that achieves CE-labelling in one country has access to the entire EEA market. In many cases, the manufacturer can carry out all of the tests and investigations required to demonstrate the product's regulatory compliance. If the products are associated with specific risks, the manufacturer is required to engage an independent certification organisation, known as a "notified body".

#### **Subsidies**

Once it has been approved, the product can be marketed and used, but a strong sales performance will usually require the health care provider to receive subsidies from government bodies or private insurance companies. The process of obtaining the go-ahead from the pavers can be both complicated and drawn out.

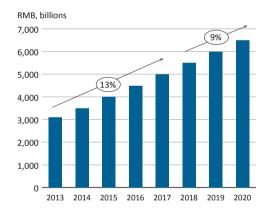
Health economic evaluations have become an increasingly important factor in obtaining payment for medtech products.

<sup>1)</sup> https://www.selectusa.gov/medical-technology-industry-united-states.

#### **Healthcare market in China**

China is the fastest growing healthcare market in the world with an average annual growth rate of 13 per cent over the past five years, compared to 4 per cent in the US and 2 per cent in Japan.<sup>1)</sup> China is also the second largest healthcare market globally, with total healthcare costs amounting to USD 594 billion in 2015, and is projected to reach USD 1,100 billion by 2022.<sup>2)</sup> There is also continued good growth potential in China's healthcare market; per capita health spending in China amounts to USD 426 on average, compared to over USD 5,200 for the world's eighth largest healthcare markets.<sup>3)</sup> In addition, China's aging population, rising incomes and increasing urbanisation are expected to contribute to continued growth in China's healthcare sector.

Healthcare market in China - growth



Source: Deloitte China, 2017 China Life Sciences and Health Care Investment Promotion Report.

Top 10 Total Pharmaceutical Markets in the World

2001	2013	2017
1. USA	1. USA	1. USA
2. Japan	2. Japan	2. China
3. France	3. China	3. Japan
4. Germany	4. Germany	4. Brazil
5. Italy	5. France	5. Germany
6. UK	6. Brazil	6. France
7. Spain	7. Italy	7. Italy
8. Canada	8. Spain	8. India
9. China	9. Canada	9. Russia
10. Brazil	10. UK	10. Canada

Source: IMS Institute, The Global Use of Medicines: Outlook Through 2016.

<sup>1)</sup> WTO Data Portal per 12/31/2015.

International Trade Association, 2016 Top Markets Report Pharmaceuticals, 2016.

<sup>3)</sup> WTO Data Portal per 12/31/2015.

#### Market drivers<sup>1)</sup>

The main growth drivers in the Chinese healthcare market are the following:

#### I. Comprehensive health insurance system

National health insurance is covering 95 per cent of China's population, with annual increases in coverage rate and payouts.

#### II. Growing middle class

There are approximately 150 million people in China who earn between USD10 and USD100 per day, and this group is expected to increase to 1,000 million people by 2030.

#### III. Large aging population

The proportion of older people (65+ years) is expected to continue to increase; Research shows that by 2020, older people will account for > 17 per cent of the population.

#### IV. Higher prevalence of chronic diseases

Chronic diseases remain a burden, and today accounts for 79.4 per cent of the total number of deaths.

#### The Market for Acquisitions and Licensing Deals

Despite increased internal research and development costs, the large life science companies, particularly pharmaceutical companies, have failed to develop more new approved products at a higher level than previously. To compensate, the companies have to an increasing extent turned to licensing, mergers and acquisitions as a way to fill in-house capability gaps, gain scale and to add new markets, new drugs and new technologies. Such deals play a significant role in life science companies' strategies to refuel their pipelines and drive future growth.

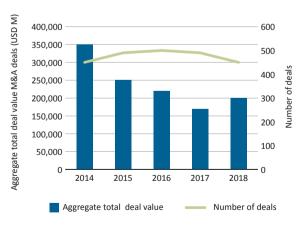
The transaction structures of license agreements are generally divided into three components: (1) up-front payments, (2) additional payments based on achievement of certain development and commercial milestones, and (3) royalties on future product sales. Up-front payment is the payment that the licensor receives at the time of conclusion of the license agreement. Additional payments based on achievement of certain milestones are potential payments contingent on positive results at certain milestones which are negotiated between the license parties. Milestones typically include phases of pharmaceutical development, regulatory approval and sales levels. Royalty

payments are normally based on future sales of the approved product. Amounts to be paid up-front and paid in relation to milestones as well as per centage of royalties are negotiated between the licensor and licensee. The balance between the three components vary on a case by case basis but generally, the licensing deals of clinical projects include up-front payments and milestones often include tens of millions of dollars and levels of royalties exceeds 10 per cent.2)

Deal activity (including licensing deals, acquisitions and mergers) in 2018 is at its lowest level for 5 years. This is primarily due to variety of financing options available to smaller life science companies that has driven up company valuations and thereby lowered pharmaceutical companies' appetite for certain types of dealmaking.<sup>3),4)</sup> For instance, US VC investments in biotech companies has increased almost 50 per cent from USD 10 billion in 2017 to USD 14.9 billion in 2018.5 Moreover, the initial public offering ("IPO") activity for biotech companies remained strong in 2018 as the number of IPOs continued to increase from 2017. The strong funding climate permits smaller life science companies to hold on to their pipeline assets for longer, thus exerting a downward pressure on deal activity.<sup>6)</sup>

The volume of mergers and acquisition (M&A) deals announced in 2018 in the pharmaceutical sector fell 10 per cent from 2017 to 2018. However, the total deal value of all these deals in 2018 was 15 per cent higher than the equivalent figure for 2017.7)

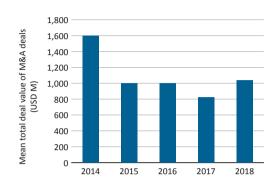
#### Pharmaceutical sector: number of M&A deals and total value of all these deals 2014-2018.



Source: IQVIA Pharma Deals, Review of 2018

- 1) The World Bank, "Toward a Healthy and Harmonious Life in China; Stemming the Rising Tide of Non-Communicable Diseases", 07/31/2011,
- 2) Medtrack 2017, Partnering in the Pharma World: BIO-Europe® and Industry Trends 2017 Update.
- 3) IOVIA Pharma Deals, Review of 2018.
- 4) Vantage Pharma, Biotech and Medtech 2018 in review, February 2019.
- PwC/CB Insights Healthcare MoneyTree™ Reports O1-O4 2017 and 2018.
- 6) IOVIA Pharma Deals, Review of 2018.
- 7) IQVIA Pharma Deals, Review of 2018.

# Pharmaceutical sector: Mean total deal value of M&A deals 2014–2018



Source: IQVIA Pharma Deals, Review of 2018

The volume of licensing deals in the pharmaceutical sector fell with 2 per cent from 2017 to 2018, a considerably less decline than that for mergers and acquisitions. In 2018, the mean total deal value, excluding royalties, for licensing deals increased 1 per cent from USD 339 million in 2017 to USD 341 million in 2018. 1)

The total value of all merger and acquisition deals in the medtech sector fell from USD 100 billion in 2017 to nearly 28 USD billion in 2018. The decline is believed to be due to higher company valuations which reduces larger medtech companies' appetite for dealmaking. Furthermore, larger medtech companies are increasingly focusing on portfolio synergies when choosing companies to buy.<sup>2)</sup>

# Medtech sector: number of M&A deals and total value of all these deals 2014–2018.



Source: Vantage Pharma, Biotech and Medtech 2018 in review, February 2019.

Deal activity in the life science industry is predicted to be intense during 2019. Key contributing factors to drive these activities are expected to be access to capital; capital markets normalising for life science companies after a year of robust valuations; and a need for companies to execute their growth strategies. Dealmaking acitivity in the medtech sector is expected to be driven by the companies' need to differentiate their product portfolio and grow. <sup>3)</sup>

#### **Comparable companies**

Examples of other European listed investment companies operating within the same field as Karolinska Development are HBM Healthcare, Puretech, IP Group, Netscientific, Allied Minds, Malin, Syncona, MedCap and Mercia Technologies. Moreover, it may be noted that some pharmaceutical companies in recent years have established their own venture capital funds in accordance with models that in many respects resemble Karolinska Development's business model to invest in and develop medical innovations.

<sup>1)</sup> IQVIA Pharma Deals, Review of 2018.

<sup>2)</sup> Vantage Pharma, Biotech and Medtech 2018 in review, February 2019.

<sup>3)</sup> PwC: Global Pharma & Life Science Deals Insights: Year-end 2018.



# **Business description**

#### Overview

Karolinska Development is an investment company which offers an opportunity to share in the growth in value of a number of Nordic life sciences companies with substantial commercial opportunities. The company focuses on identifying medical innovations and invests in the creation and growth of companies that advance these assets into differentiated commercial products that are designed to make a difference to patients' lives while providing an attractive return on investment to shareholders.

Karolinska Development has established relations with leading universities and research institutes in the Nordic region, including Karolinska Institutet, enabling access to world-class medical innovations. The Company aims to build companies around scientists who are leaders in their fields, supported by experienced management teams and advisers, through investments together with specialist international investors to provide the greatest chance of success. In order to create the best possibilities to succeed, the companies are built through experienced management teams and advisers, and they are co-financed by professional life science investors.

Karolinska Development's portfolio consists of nine companies targeting opportunities in innovative treatment for lifethreatening or serious debilitating diseases and other medical conditions. Eight of the portfolio companies have candidate drugs in ongoing clinical studies or approved products in early commercial phase. Several of the portfolio companies are expected to present clinical phase II project results during 2019 and 2020, offering the potential for substantially increased opportunities for attractive divestments or licensing deals. Comparable candidate drugs for the Company's active holdings in the portfolio have, in recent years, been out-licensed or sold for contract values of billions for the individual projects. The portfolio companies have been strengthened in the past year through the recruitment of executive management with a documented ability to close international business deals in the life sciences sector.

# **Investment Strategy**

Karolinska Development believes that some of the most innovative biomedical research and ideas in Europe originate at institutions in the Nordic region, and there is a substantial pool of hidden value potential.

The Company's strategy is focused on identifying new investment opportunities across the Nordic region with substantial commercial opportunities, to expand and diversify its portfolio into broader areas of life science with near-term value-inflection points. The Company will also seek to make investments in under-valued companies on the public markets in the region and in more mature investments, where returns may be realised more quickly than from early stage companies. Karolinska Development will seek to syndicate deals with professional life science investors.

Karolinska Development intends to realise value from its portfolio through dividends, trade sales, asset sales or IPOs.

The key elements of Karolinska Development's strategy are expanded below.

# A clear focus within the portfolio

Karolinska Development has a diversified portfolio consisting of companies that the company considers to have the best chances of developing innovative medicines or medtech products that meet a clear medical need, and with the potential of delivering attractive returns to shareholders. The portfolio comprised nine companies at the date of this Prospectus, compared with 21 companies at the end of 2014.

Focused portfolio

- Significant unmet medical needs
- Well defined patient populations
- Specialty care products/orphan drugs
- Scientifically- and commercially attractive projects

Strong leadership at portfolio companies

- Strengthen governance of portfolio at board level with representation by professional independent directors
- Enforce management to increased and combined focus significant value inflection points, syndicated financing, and return on investment

Differentiated investment approach

Maximize value creation focusing on:

- Significant value inflection points
- Capital requiremen to reach value infection points
- Flexibel exit

Proactive syndication strategy

Access to knowledge and capital through:

- Experienced professional independent directors
- Developing external investor relations
- Continuously seeking syndication with professional life science investors

# Investments in potentially ground-breaking medical innovations

Innovation level is an important parameter in evaluating the commercial potential of life science projects. Some are designed to make marginal improvements to existing treatments, whilst others are based on radically new types of compounds or technologies with the potential to dramatically improve patients' quality of life and maybe even increase the chances of a cure and survival. Karolinska Development only invests in the latter project category.

## **Focusing on commercialisation**

Evaluating the companies' ability to commercialise the projects is equally important. Karolinska Development focuses on optimising the portfolio companies' potential for commercialising their projects, and the past year has seen the portfolio companies strengthened through the recruitment of people with a documented ability to close international business deals in the life sciences sector.

# Reduced risk development strategies

Karolinska Development has long-established processes for minimising the risk that the results of clinical trials fail to live up to justifiable expectations. The portfolio companies receive professional support throughout the process of optimising the design of their clinical studies, and the potential for spreading the risk by expanding therapeutic indications is subject to continuous assessment. The development strategies for the individual projects are structured in close cooperation with world-leading scientific and clinical experts.

# Financing and exit model

Karolinska Development invests in portfolio companies via syndication with other professional life science investors. Karolinska Development continuously evaluates exit options.

In accordance with industry standards, the investments in pharmaceutical projects continue until proof-of-concept is demonstrated in phase II studies, at which point the potential for entering into cash-flow generating licensing deals, trade sales, or IPOs will be examined. The reason is that positive phase II data markedly increases the potential for attractive business deals. It is only when this data has been generated that it is possible to demonstrate that a candidate drug has the anticipated biological effect, thereby substantially reducing the ongoing development risk and significantly increasing the value of the project.

Holdings in portfolio companies within medtech are usually divested at the point when the companies have launched their first product and have become cash flow-positive.

# Asian strategy as complement to current business model

Nordic life science companies and healthcare providers face extensive challenges entering the Asian market, not at least due to cultural differences. This is particularly challenging for small and medium sized companies. Provided that a substantial part of the convertible loan is settled in the Directed share issue and a definitive agreement is entered into with Sino Biopharma for the establishment of a joint venture, Karolinska Development plans to set up a branch office in China with the task to bridge this gap by opening the Asian market for Nordic innovations, with an initial focus on the Chinese market. Together with Sino Biopharma, Karolinska Development will be able to offer Nordic small and mid-size life science companies access to the extensive distribution network offered by Sino Biopharma. The focus will be on companies close to market entries, with the ambition to generate positive cash flow to Karolinska Development in the relative near-term. The objective is that the cash flow will contribute significantly to the financing of Karolinska Development's follow-on investments in portfolio companies and new investments in Nordic life science companies.

# People's republic of China ("PRC") share of global population (2017A) China 18% Rest of World 82% PRC share of global therapeutics market (2017A) China 10% Rest of World 89% PRC share of global medtech market (2020E) China 12%

 $Source: Statista, United \, Nations, \, Department \, of \, Economic \, and \, Social \, Affairs, \, Population \, Division \, (2019).$ 

Statista, Share of pharmaceutical revenue worldwide in 2017, by country. Statista, Medical Technology Industry in China report, 2019.

Sino Biopharma is one of the leading Asian life science investors and an innovative and research and development driven pharmaceutical conglomerate with a product sales network throughout China and first-class production facilities certified by the CFDA (China Food and Drug Administration). In 2018, Sino Biopharma recorded revenues of RMB 20.9 billion (approximately SEK 29.0 billion) and profits after tax of RMB 10.7 billion (approximately SEK 14.8 billion). Sino Biopharma together with its subsidiaries has close to 22,000 employees. Sino Biopharma is listed on the Hong Kong Stock Exchange's main board and has been selected as a constituent stock of the Hang Seng Index.

# Distribution via Sino Biopharma



- Sino Biopharma has the largest sales network in China with over 12,000 professionals
- The network mainly covers hospitals and has, for example, a market share on hepatitis therapeutics of ~25%
- 33 products are supplied with sales in excess of RMB 100 million

Source: Information from Sino Biopharma.

Sino Biopharma is a member of the Charoen Pokphand Group ("CP Group"). Founded in 1921, CP Group is a transnational conglomerate that consists of three core businesses that operate in the agribusiness and food, retail and distribution, and the telecommunications industries with investment in more than 100 countries, including Ping An Insurance, CITIC Group, China Mobile, ITOCHU Corporation, Marko Group. The CP Group currently employs over 350,000 people with offices and factories located worldwide. Annual revenue for the CP Group for the year 2017 was USD 55 billion.

# **Background and history**

The origin of Karolinska Development dates back to 2003 and was founded with the aim to finance and commercialise innovations from researchers at Karolinska Institutet in Stockholm, Sweden's largest academic institution for medical education and research and one of Europe's largest medical universities.

Several of its current portfolio companies have their origin in the close cooperation with KIAB, the technology transfer arm of KI. The Company has subsequently broadened its networks to capture innovations from other prominent research institutions in the Nordic region.

Since 2003, the portfolio of Karolinska Development has evolved from mainly including therapeutics companies with projects in pre-clinical phase to including companies with projects at various stages of clinical development, of which several are expected to deliver Phase 2 clinical proof-of-concept results within the next two years. The portfolio also includes two medical technology companies that are now commercialising their products and building global sales and distribution networks through the execution of their commercial strategies.

Karolinska Development, in its current form as a Nordic life science investment firm, was established in 2008 when the investment funds Karolinska Development I AB (founded in 2003) and Karolinska Development II AB (founded in 2005) were merged with the Company. In 2011, the Company was listed on Nasdaq Stockholm (ticker: KDEV).

In December 2012, Karolinska Development and Rosetta Capital IV LP ("Rosetta Capital") entered into an agreement under which Rosetta Capital acquired a minority stake in the, at the time, recently formed joint venture KDev Investments through an investment of SEK 220 million. Karolinska Development has, after the transaction, a direct ownership of approximately 87 per cent in KDev Investments, which in turn has holdings in four of Karolinska Developments portfolio companies. The Company's ownership in these four portfolio companies is consequently indirect. The control over KDev Investments is divided between Karolinska Development and Rosetta Capital, and KDev Investments is considered as a joint venture for accounting purposes. Further information regarding the agreement with Rosetta Capital is set out in the section "Legal issues and supplementary information - Material agreements -Agreement regarding KDev Investments".

In 2014, Karolinska Development implemented a comprehensive strategy shift. The portfolio at this point comprised 21 companies whose projects displayed a wide variation in terms of their level of innovation. The strategy shift entailed Karolinska Development retaining its holdings in portfolio companies conducting "first in class" projects and selling a number of companies whose level of innovation and commercial potential were lower. Earn-out agreements secured Karolinska Development's rights to share in the future growth in value of the divested companies. A single-minded process of strengthening the commercial competence of the remaining portfolio companies was launched at the same time. Measures were, in addition, implemented in order to broaden the number of therapeutic indication areas in the prioritised projects, in order to boost their commercial potential and spread the risks. The strategy shift was essentially completed in the beginning of 2017.

# Karolinska Development's portfolio

# A Focused Portfolio with substantial commercial opportunities

Karolinska Development's investments in therapeutic companies are conducted in syndicates with other professional life science investors until proof-of-concept is demonstrated in Phase II trials, at which point different exit options are evaluated. For medtech companies, the business model is to finance the companies beyond break-even before realising the investments.

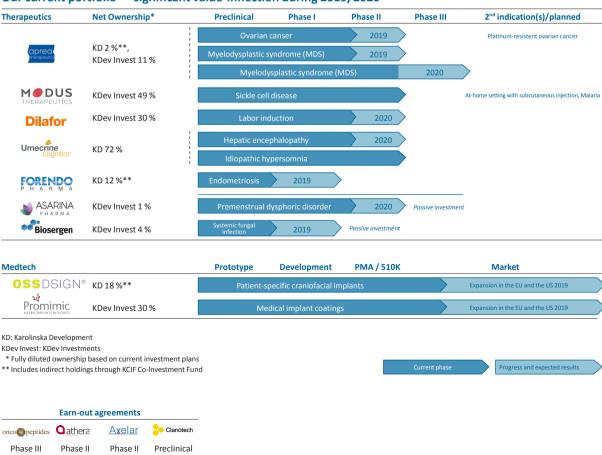
Karolinska Development has a focused portfolio of therapeutic and medtech companies with significant value-generating potential. The portfolio companies are developing highly differentiated and commercially attractive products that have the potential to deliver compelling clinical and health economic benefits, as well as attractive returns on investment.

During the past years, Karolinska Development has optimised the clinical programs of the portfolio companies to reach clinically meaningful value-inflection points in 2019 and 2020. Experienced leadership has been recruited to the management and boards of the portfolio companies. Furthermore, Karolinska Development has supported the financing of the portfolio companies through syndication with experienced international and domestic professional life science investors. As a result, several of Karolinska Development's portfolio companies now are financed and well positioned to deliver key value-generating clinical or commercial milestones within the next two years.

The therapeutics companies' next key value-generating milestones are expected within the next two years, when several of the companies are supposed to present Phase II proof-of-concept data. The medtech companies OssDsign and Promimic are revenue generating and have significant milestones mapped out in 2019 and 2020 regarding execution of their commercial strategies.

In addition to its active value creation in seven portfolio companies, Karolinska Development has passive investments in two portfolio companies and retained economic interests in the form of earn out-agreements in additionally four life science companies.

# Our current portfolio — significant value-inflection during 2019/2020





# Aprea Therapeutics AB

Project (First-in class)

APR-246

**Primary indication** 

MDS

**Development Phase** 

Phase III

Holding in company\*

Karolinska Development 2 %\*\*
KDev Investments 11 %

Other investors

Redmile Group, Rock Springs Capital Versant Ventures, 5AM Ventures, HealthCap, Sectoral Asset Management, KCIF Co-Investment Fund KB

Origin

Karolinska Institutet

More information

aprea.com

- \* Fully-diluted ownership based on current investment plans.
- \*\* Includes indirect holdings through KCIF Co-Investment Fund



# A new approach to treating broad range of cancers

Aprea Therapeutics (Stockholm, Sweden and Boston, US) is a biotech company developing novel anticancer compounds targeting the tumor suppressor protein p53. Mutations of the p53 gene occur in around 50 per cent of all human tumors. These mutations are often associated with resistance to anticancer drugs and poor overall survival, representing a major unmet medical need in the treatment of cancer. Aprea's lead drug candidate APR-246 is a first-in-class compound that reactivates mutant p53 protein, inducing programmed cell death in human cancer cells.

APR-246 is currently in a Phase Ib/II clinical study in myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML), investigating the drug candidate's safety and efficacy in combination with standard chemotherapy (azacitidine) for the treatment of TP53 mutated MDS and AML. Aprea presented positive interim data at key congresses during 2018. The overall response rate (ORR) in 20 evaluable patients was 95 per cent, with 70 per cent patients achieving a complete remission (CR) at data cutoff. In comparison, the ORR in corresponding patient group receiving standard of care is 30–50 per cent and CR is 20–30 per cent. No safety or tolerability issues have so far been recorded. Final results from the study are expected in 2019.

Following the promising development in MDS, Aprea has initiated a pivotal Phase III study in patients with TP53 mutated MDS from which results are anticipated in 2020. The company also aims to start a Phase Ib/II trial in 2019 evaluating APR-246 in MDS patients in the post-transplantation maintenance setting.

Among solid tumors, APR-246 is evaluated in a Phase II study in platinum-sensitive high-grade serous ovarian cancer (HGSOC) and in a Phase Ib study in platinum-resistant HGSOC. Results are expected in 2019, although the company has yet to decide whether to continue development in solid tumors.

# Deal values for similar projects

- USD 469 million MEI Pharma (licensor) & Helsinn Group (licensee) 2016
- USD 483 million Calithera Biosciences (licensor) & Incyte (licensee) 2017

# The market

APR-246 has the potential to be used in many cancers as mutations in p53 are found in around 50 per cent of all diagnosed cancers. The lead target indications thus far include blood tumors as MDS and AML. MDS is an orphan disease and represents a spectrum of hematopoietic stem cell malignancies. Approximately 30–40 per cent of MDS patients progress to AML and mutations in p53 are found in up to 20 per cent of MDS and AML patients, which is associated with poor overall prognosis.

# Recent progress

- First patient included in pivotal Phase III study (January 2019).
- Janus Henderson Investors joined the financing round announced in Dec 2018 and invested EUR 5 million (February 2019).
- FDA granted APR-246 Fast Track designation and Orphan Drug designation for treatment of patients with TP53 mutated MDS (April 2019).

# **Expected milestones**

- Results from Phase II study in platinum-sensitive HGSOC expected in 2019.
- Final results from Phase Ib/IIa study in MDS expected in 2019.



# Modus Therapeutics AB

Project (First-in-class)

Sevuparin

**Primary indication**Sickle cell disease (SCD)

**Development Phase** 

Phase II

Holding in company\*
KDev Investments 49 %

Other investors

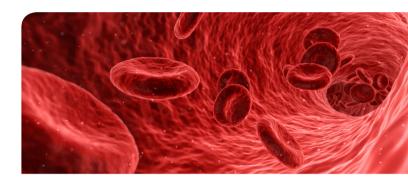
HealthCap, The Foundation for Baltic and East European Studies, Praktikerinyest Origin

Karolinska Institutet, Uppsala University

More information

Modustx.se

\* Fully-diluted ownership based on current investment plans



# Focuses on restoring healthy blood flow in debilitating diseases

Modus Therapeutics (Stockholm, Sweden) is developing sevuparin, an innovative drug which has the potential to restore blood flow and prevent further microvascular obstructions in a number of diseases.

Modus has completed a global Phase II study of sevuparin in hospitalised sickle cell disease (SCD) patients. The randomized, double blinded study included 144 SCD-patients at clinical sites across Europe, the Middle East and the Caribbean. The study compared intravenously (IV) administered sevuparin with placebo in patients admitted to the hospital with an acute vaso-

occlusive crisis (VOC) associated with SCD. The study also assessed several pain-related secondary endpoints. Data from the study did not show a meaningful clinical effect of sevuparin in the management of acute VOC in the total study population, however, the data suggests that sevuparin, at the administered doses, is safe and well tolerated. Modus is now considering its options for further development of sevuparin.

A Phase I study of subcutaneously administered sevuparin is ongoing and results are expected in 2019.

# The market

SCD, an orphan disease, leads to progressive organ damage that limits the life expectancy of patients. Lifetime medical care costs can exceed USD 1 million per patient with an estimated USD 1 billion spent annually on the disease in the US alone, where sickle cell disease is believed to affect approximately 100,000 individuals. The population grows significantly outside of the US and EU with over 1 million patients in the Middle East and over 5 million patients in Africa.

# **Recent progress**

- Patient enrollment completed in Phase II study in SCD (January 2019).
- First cohort dosed in Phase I study with subcutaneously administered sevuparin (February 2019).
- Results from Phase II trial in SCD presented and no significant efficacy was observed (May 2019).

## **Expected milestones**

• Results from Phase I study with subcutaneously administered sevuparin anticipated in 2019.

# **Dilafor**

Dilafor AB

Project (First-in-class)

Tafoxiparin

Primary indication Labor induction

**Development Phase** Phase IIb

Holding in company\*

KDev Investments 30 %
Other investors

The Foundation for Baltic and East European Studies, Opocrin, Praktikerinvest, Rosetta Capital, Lee's Pharmaceutical

Origin

Karolinska Institutet

More information Dilafor.com

investment plans.

\* Fully-diluted ownership based on current



# Reducing complications with childbirth

Dilafor (Solna, Sweden) is developing tafoxiparin for obstetric indications. The company's primary goal with tafoxiparin is to minimise the risk for protracted labor and associated complications.

About a quarter of all pregnant women are subject to labor induction. More than half of these inductions fail, which leads to protracted labor that entail an increased risk of complications for both mother and child as well as substantial health care costs. Between 25 and 40 per cent ends up requiring emergency caesarean sections.

In a previous phase IIa study, subcutaneous administration of Dilafor's drug candidate tafoxiparin has shown a significant positive effect with a shortened time to delivery and an enhanced ripening of the cervix in patients induced into labor. A soft and ripe cervix is a prerequisite for successful labor induction. Dilafor is now proceeding with a phase IIb study to investigate in a larger group whether treatment with subcutaneously administered tafoxiparin can soften the cervix and improve the outcome of labor induction, thereby shortening the time to delivery.

## Deal values for similar projects

- USD 397 million Velo Bio (seller) & AMAG Pharmaceuticals (buyer) 2018
- USD 465 million Palatin Technologies (licensor) & AMAG Pharmaceuticals (licensee) 2017

# The market

It has been estimated that about a quarter of all pregnant women are in need of labor induction, i.e. they do not have a spontaneous onset of labor. The procedure using standard of care such as prostaglandins and oxytocin often — in more than 50 per cent of cases associated with failed induction — lead to protracted labor and emergency cesarean sections or other maternal and fetal complications.

# **Recent progress**

• SEK 23,3 million raised from current investors, with the existing shareholder Opocrin S.p.A as the main investor, to fund a phase IIb study of tafoxiparin in labor induction (April 2019).

# **Expected milestones**

• Start of Phase IIb study in labor induction during 2019



# **Umecrine Cognition AB**

Project (First-in-class)

GR3027

**Primary indications** Hepatic encephalopathy Idiopathic hypersomnia

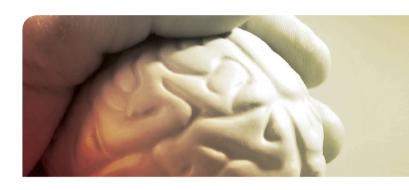
**Development Phase** Phase IIa

Holding in company\* Karolinska Development 72 %

Other investors Norrlandsfonden. Fort Knox Förvaring AB, PartnerInvest

Origin **Umeå University** More information umecrinecognition.com

\* Fully-diluted ownership based on current investment plans



# New treatment approach for CNS-related disorders

Umecrine Cognition (Solna, Sweden) is developing a therapy that represents a new target class for several major CNS-related disorders. The lead compound GR3027 is presently in clinical development for hepatic encephalopathy (HE), a serious neuropsychiatric and neurocognitive complication in acute and chronic liver disease (including cirrhosis). The drug candidate is also being clinically evaluated as a new treatment of idiopathic hypersomnia (IH), which is a severe orphan disease characterised by chronic excessive daytime sleepiness despite normal sleep.

An increase in the inhibitory GABA system in the CNS is believed to be a main driver for the clinical signs and symptoms in a wide range of cognitive and sleep disorders, including HE and IH. This makes GABA-receptor modulating steroid antagonists that act on the neurosteroid enhancement of GABA receptor activation, as developed by Umecrine Cognition, a credible therapeutic class to explore.

GR3027 has been shown to restore different types of neurological impairments in experimental models. The drug candidate enters the CNS and reverses the inhibitory effects of the neurosteroid allopregnanolone on brain function in humans. Positive Phase Ib data from the ongoing combined Phase Ib/IIa study in HE shows that GR3027 is well tolerated, does not cause any dose-limiting side effects and has a favorable pharmacokinetic profile. GR3027 has now advanced into the phase IIa part of the study, from which results are expected in early 2020.

A Phase IIa study in 10 patients with IH has been completed. The primary study objectives were met in regard to safety and pharmacokinetics. The study also showed preliminary evidence of clinical efficacy in a subset of patients. Umecrine Cognition will analyse the data further before a decision to potentially move forward with the development of GR3027 in idiopathic hypersomnia or other sleep disorders.

# Deal values for similar projects

- USD 397 million Aerial Biopharma (licensor) & Jazz Pharmaceuticals (licensee) 2014
- USD 201 million Vernalis (licensor) & Corvus Pharmaceuticals (licensee) 2015

# The market

HE is a severe disorder with a large unmet need. In total, liver cirrhosis affects up to 1 per cent of US and EU populations. Between 180,000 and 290,000 patients with cirrhosis in the US are hospitalised due to complications of HE. Once HE develops, mortality reaches 22-35 per cent after five years. HE is also associated with large societal and individual costs.

There are no approved treatments for IH but several wake-promoting agents are used off-label. However, they are inadequate to alleviate symptoms in most patients, and refractory or intolerance symptoms occur in one-quarter of patients.

### Recent progress

• Results from Phase IIa study in IH presented (January 2019).

# **Expected milestones**

• Results from the Phase IIa part of the combined Phase Ib/IIa study in HE expected in early 2020.

# FORENDO P H A R M A

# Forendo Pharma Ltd

Project (First-in-class)

FOR-6219

**Primary indication** Endometriosis

**Development Phase** 

Phase la

Holding in company\*

Karolinska Development 12 %\*\*

Other investors

Novo Seeds, Novartis Venture Fund, Merck Ventures, Vesalius Biocapital, Innovestor Origin

University of Turku, Finland

More information forendo.com

- \* Fully-diluted ownership based on current investment plans
- \*\* Includes indirect holdings through KCIF
  Co-Investment Fund



## Novel therapies for women's health

Forendo (Turku and Oulu, Finland) is developing a new treatment for eliminating endometriosis while at the same time maintaining normal hormonal cycles.

Endometriosis is an estrogen dependent disease that affects women in reproductive age and is caused by cells normally lining uterus being present outside of the uterine cavity, which induces chronic inflammation. The disease is manifested in many diverse ways and it often causes particularly painful menstruations or chronic pelvic pain. The existing drug therapies ameliorate the symptoms by suppressing estrogen synthesis, but due to systemic estrogen disturbances these therapies are also associated with harmful side effects that limit the use of them. The risk of osteoporosis is for example well known in association with estrogen elimination therapies.

Forendo's drug candidate FOR-6219 is an inhibitor of the HSD17B1 enzyme, a novel drug target for tissue specific regulation of hormone activity. Initial proof for this novel mechanism has been demonstrated in preclinical models in which the compound has been shown to locally block formation of estrogen in endometrial tissue, cause regression of endometriosis and relief of the associated inflammatory pain without impacting systemic estrogen levels. A Phase la trial found FOR-6219 to be safe and well tolerated, with good pharmacokinetic profile. These results support the initiation of a Phase Ib study in healthy postmenopausal women with the aim to demonstrate Proof of Mechanism. Study start is expected in mid-2019.

Forendo has also a second program, a dual HSD inhibitor for the treatment of broader gynecological conditions in preclinical discovery phase.

# Deal values for similar projects

- USD 853 million Astellas (buyer)
   & Ogeda (seller) 2017
- USD 595 million Neurocrine Biosciences (licensor) & AbbVie (licensee) 2010

# The market

It is estimated that 10 per cent of all fertile women are affected by endometriosis. This corresponds to a total of 176 million women in the world. Endometriosis has a detrimental effect on the well-being of the women affected and the socio-economic burden of the disease from e.g. sick leaves is profound due to the lack of safe and effective treatment. Forendo's approach to treat endometriosis therefore has a high potential to substantially impact future treatment regimens.

## **Recent progress**

- EUR 4 million raised from new investor Vesalius Biocapital III Partners (September 2018).
- Positive Phase Ia results presented (March 2019)

# **Expected milestones**

• Phase Ib study start in 2019.

# **OSS**DSIGN®

# OssDsign AB

#### **Project**

OSSDSIGN® Cranial and OSSD-SIGN® Facial

**Primary indication** Cranial implants

**Development Phase** 

Marketed

Holding in company\*
Karolinska Development 18 %\*\*

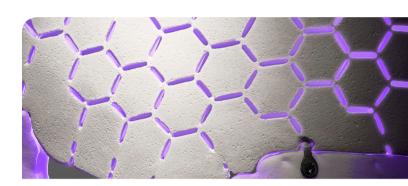
**Other investors**SEB Venture Capital,
Fouriertransform

## Origin

Karolinska University Hospital, Uppsala University

More information ossdsign.com

- Fully-diluted ownership based on current investment plans
- \*\* Includes indirect holdings through KCIF
  Co-Investment Fund



## Commercialising innovative craniofacial implants

OssDsign (Uppsala, Sweden) is an innovator, designer and manufacturer of implants and material technology for bone regeneration. Its lead products – OSSDSIGN® Cranial and OSSDSIGN® Facial – are already being sold on several European markets including Germany, the UK and the Nordic region, as well as selected non-European markets including Singapore and Israel. The company is commercialising its cranial implant in the US and is also undertaking regulatory and commercial activities in Japan.

The commercial strategy is focused on building sales of the innovative products through a combination of an internal sales organisation and distribution partnerships. A US subsidiary has been established to strengthen the market presence.

OssDsign's personalised bone regeneration technology provides improved healing properties that are clinically proven to enhance patient outcomes. <sup>1)</sup> By combining a regenerative ceramic material reinforced with titanium, with tailored patient-specific designs enabled by state-of-the-art computer-aided design, 3D printing and moulding techniques, the technology platform aims to contribute to the permanent healing of a range of bone defects. Enhanced healing means a better implant solution for patients and cost savings for hospitals.

OssDsign is listed on Nasdaq First North.

# Deal values for similar projects

- USD 330 million Baxter International (buyer) & ApaTech (seller) 2010
- USD 360 million Royal DSM (buyer) & Kensey Nash (seller) 2012

## The market

OssDsign is focusing on the market for craniomaxillofacial (CMF) implants. The total market size was estimated to USD 1,8 billon in 2016 and is expected to grow at an CAGR of 5–9 per cent worldwide over the next five years. The market for OssDsign's lead product in cranioplasty alone is estimated to approximately USD 200 million. OssDsign pursues a focused business strategy on a well-defined patient population. The advantages are that the targeted procedures are carried out in a limited number of easily identifiable hospitals around the world. The indications are relatively price insensitive and easy to access on many markets from a regulatory perspective.

# **Recent progress**

- SEK 64 million raised from Swedish private investors and the French investment management company Alto Invest (February 2019).
- OssDsign announced application for listing on Nasdaq First North and published a prospectus
  in connection with a share issue of SEK 151,3 million. The share issue was oversubscribed, and
  the company listed on Nasdaq First North (May 2019).
- Received initial positive notice regarding reimbursement for OSSDSIGN Cranial in France (May 2019)

# **Expected milestones**

 Launch of OssDsign's products on new EU markets and selected markets outside of Europe during 2019.

Kihlström Burenstam Linder L et al. 2018, https://www.ossdsign.com/clinicalresults



Project

HAnano Surface

Primary indication
Implant surface coatings

**Development Phase** Marketed

Holding in company\*

KDev Investments 30 %

Other investors
ALMI Invest
K-Svets Venture

Chalmers Ventures

# \* Fully-diluted ownership based on current investment plans

# **Promimic AB**



# Coatings to enhance the properties of medical implants

Origin

Technology

Chalmers University of

More information Promimic.com

Promimic (Gothenburg, Sweden) is a biomaterials company that develops and markets a coating for medical implants called HA<sup>nano</sup> Surface, which increases their integration into bone and anchoring strength.

The HAnano Surface is nanometer thin, which helps preserve the micro-structure of the implant and reduces the risk of cracks in the coating. Unlike other types of coatings, it can be applied to any implant geometry and material, including porous materials and 3D structures. Furthermore, the HAnano coating technology offers a fast way to market since the technology that the coating is based on has been approved by FDA, whereby a new implant coated with HAnano Surface can receive marketing approval through the 510(k) route. The coating process is easy to implement in the industrial scale production of implants.

Promimic has established a sales operation in the US and a series of development and commercial partnerships, including with Sistema de Implante Nacional (S.I.N), a leading provider of dental implants in Brazil. S.I.N. is commercialising dental implants coated with HA<sup>nano</sup> Surface in USA, amongst other countries. A manufacturing facility for HA<sup>nano</sup> coated implants to supply the US and Chinese markets has also been established by the Promimic's partner, Danco Anodizing. In 2019, Promimic strengthened its position in the orthopedic space through the partnership with the US company Onkos Surgical. The partners will develop and commercialise the HA<sup>nano</sup> Surface technology in combination with Onkos Sugical's products for limb salvage surgery.

## Deal values for similar projects

- USD 95 million Nobel Biocare (buyer) & AlphaBioTec (seller) 2008
- USD 120 million MAKO surgical (buyer) & Pipeline Biomedical (seller) 2013

# The market

Promimic is focusing on the markets for dental and orthopedic implants, which collectively represents a worldwide market opportunity of USD 600 – 800 million. The implant industry is a large, high-growth market which delivers high profit margins. The competition amongst implant manufacturers is fierce and each market segment is dominated by four-to-eight global companies. The strategies of many of these companies rely on in-licensing new technologies in order to differentiate their products and strengthen their market position. Promimic has a business model designed to meet these needs. It is centered on out-licensing its HA<sup>nano</sup> Surface technology to leading implant manufacturers so that they can incorporate it into their products.

## **Recent progress**

• Entered into partnership with the US company Onkos Surgical (March 2019).

# **Expected milestones**

• Further product launches and license agreements with major manufacturers during 2019.



# Asarina Pharma AB

Project (First-in-class)

Sepranolone

Primary indication

Premenstrual dysphoric disorder asarinapharma.com

**Development Phase** 

Phase IIb

Holding in company\*
KDev Investments 1 %

**Major owners** 

Kurma Biofund, The Foundation for Baltic and East European Studies, Rosetta Capital, Idinvest Patrimonie, Sectoral Asset Management Umeå University

More information

Origin

\* Fully-diluted ownership based on current investment plans.

Asarina Pharma (Solna, Sweden and Copenhagen, Denmark) is developing innovative and targeted products to treat women with severe symptoms associated with the menstrual cycle such as premenstrual dysphoric disorder (PMDD).

The company's most advanced drug candidate, sepranolone, is the first therapy specifically being developed for PMDD. Sepranolone is a non-hormonally active compound that inhibits the disease provoking effect of the progesterone metabolite, allopregnanolone, in women suffering from PMDD. A clinical phase IIb study in PMDD is ongoing. A Phase IIa trial of sepranolone for the treatment of menstrual migraine will begin mid-2019.

Asarina Pharma is listed on Nasdaq First North.



Project BSG005

**Primary indication**Systemic fungal infections

**Development Phase**Preclinical

Holding in company\*
KDev Investments 4 %

Other major owners

The Foundation for Baltic and East European Studies, Sintef Venture II AS, Rosetta Capital

# Origin

SINTEF and Norweigan University of Science and Technology

More information

biosergen.se

\* Fully-diluted ownership based on current investment plans.

# Biosergen AS

Based on the expertise in biosynthetic engineering Biosergen (Trondheim, Norway) is currently running a development program for systemic fungal infections where a candidate drug has been selected, BSG005. The candidate drug BSG005 is in preclinical development and has demonstrated a broad spectrum of antifungal activity.

Patients most susceptible to systemic fungal infections are those whose immune systems are compromised by diseases such as cancer and those who are receiving immunosuppressive therapy. While effective treatments are available, their use is usually limited by serious side-effects or an increasing incidence of drug resistance.

Biosergen's BSG005 has in preclinical models and experiments demonstrated a wide antifungal efficacy spectrum. BSG005 has so far shown superior properties compared to conventional treatment in terms of efficacy, toxicity and pharmacokinetics. Clinical development is expected to begin in 2019.

# Financial information in summary

Below is selected historical information in summary for the financial years 2016-2018 as well as for the periods January -March 2018 and 2019. The information relating to the financial years 2018, 2017 and 2016 has been obtained from the audited financial statements for Karolinska Development. The information relating to the interim periods has been obtained from the unaudited interim report for January - March 2019 (with comparable figures for January - March 2018). Karolinska Development's financial statements for the investment entity have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by International Accounting Standards Board ("IASB"), and interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC") as adopted by the EU for application in the EU. Furthermore, the Swedish Financial Reporting Board's recommendation RFR 1, "Supplementary Accounting Rules for Groups" and statement UFR 7 and 9 by the Financial Reporting Council have also been applied. The Company is an investment entity according to IFRS 10 "Consolidated Financial Statements". Except as explicitly stated, there is no information in the Prospectus audited and / or reviewed by the Company's auditor.

The information in this section shall be read in conjunction with the sections "Comments to the financial development" and "Equity, liabilities and other financial information" as well as Karolinska Development's audited accounts for 2016–2018 and the unaudited interim report for the period January – March 2019. Figures presented in this section have in certain cases been rounded off, as a consequence of which the tables will not always tally correctly.

# **Summary income statement for the Investment Entity**

	2019	2018			
	Jan-Mar	Jan-Mar	2018	2017	2016
SEK 000	(unaudited)	(unaudited)	(audited)	(audited)	(audited)
Revenue	904	734	3,073	2,464	5,360
Change in fair value of shares					
in portfolio companies	-11	-4,809	58,499	252,072	-146,544
Change in fair value of other financial assets	4,214	4,195	41,481	2,483	_
Other expenses	-3,014	-4,079	-14,017	-12,996	-15,415
Personnel costs	-5,944	-5,442	-14,993	-23,513	-17,344
Depreciation of right-of-use assets	-176	-	-	-	-
Depreciation of tangible non-current assets	-	-	-	-	-106
Operating profit/loss	-4,027	-9,401	74,043	220,510	-174,049
Interest income	200	2,002	7,318	4,549	1,954
Interest expenses	-14,872	-12,235	-49,464	-43,495	-45,237
Other financial gains and losses	73	-91	-1,387	-1,969	500
Financial net	-14,600	-10,324	-43,533	-40,915	-42,783
Profit/loss before tax	-18,627	-19,725	30,510	179,595	-216,832
Тах				<u>-</u>	
Net profit/loss for the period	-18,627	-19,725	30,510	179,595	-216,832

# Earnings per share

SEK 000	2019 Jan–Mar (unaudited)	2018 Jan-Mar (unaudited)	2018 (audited)	2017 (audited)	2016 (audited)
Earnings per share, weighted average, before dilution	-0.29	-0.31	0.48	2.93	-4.08
Number of shares, weighted average before dilution	64,174,452	64,116,921	64,136,941	61,243,234	53,210,223
Earnings per share, weighted average after dilution	-0.29	-0.31	0.48	2.93	-4.08
Number of shares, weighted average after dilution	64,174,452	64,116,921	64,136,941	61,300,516	53,210,223

# **Balance sheet for the Investment Entity**

SEK 000	31 Mar 2019 (unaudited)	31 Mar 2018 (unaudited)	31 Dec 2018 (audited)	31 Dec 2017 (audited)	31 Dec 2016 (audited)
ASSETS					
Non-current assets					
Right of use assets	1,231	_	-	-	-
Financial assets					
Shares in portfolio companies at fair value					
through profit or loss	636,008	456,423	618,927	447,783	149,408
Loans receivable from portfolio companies	5,113	3,480	5,098	3,436	957
Other financial assets	27,290	44,791	26,970	40,596	38,113
Total non-current assets	669,642	504,694	650,995	491,815	188,478
Current assets					
Receivables from portfolio companies	684	744	473	611	229
Other financial assets	56,955	_	53,060	_	-
Other current receivables	817	645	3,432	531	660
Prepaid expenses and accrued income	1,218	852	632	666	806
Short-term investments, at fair value					
through profit or loss	50,025	140,242	69,949	150,329	237,545
Cash and cash equivalents	11,742	5,475	15,843	19,305	10,602
Total current assets	121,441	147,958	143,389	171,442	249,842
TOTAL ASSETS	791,083	652,652	794,384	663,257	438,320
EQUITY AND LIABILITIES					
Equity					
Share capital	644	644	644	644	26,732
Share premium	1,970,752	1,970,752	1,970,752	1,970,752	1,874,236
Accumulated losses including					
net profit/loss for the year	-1,694,012	-1,724,000	-1,675,389	-1,704,275	-1,871,153
Total equity	277,384	247,396	296,007	267,121	29,815
Long-term liabilities					
Convertible loan	-	391,463	-	379,184	394,438
Other financial liabilities	11,423	4,807	11,423	4,807	4,798
Total long-term liabilities	11,423	396,270	11,423	383,991	399,236
Current liabilities					
Convertible loan	442,173	_	428,303	_	_
Current interest-bearing liabilities	50,000	_	50,000	_	_
Accounts payable	1,519	1,256	1,373	1,155	1,460
Liabilities to portfolio companies	1,239	_	_	_	_
Other current liabilities	1,714	1,344	831	1,627	960
Accrued expenses and prepaid income	5,631	6,386	6,447	9,363	6,849
Total current liabilities	502,276	8,986	486,954	12,145	9,269
Total liabilities	513,699	405,256	498,377	396,136	408,505
TOTAL EQUITY AND LIABILITIES	791,083	652,652	794,384	663,257	438,320

# Statement of cash flows for the Investment Entity

SEK 000	2019 Jan–Mar (unaudited)	2018 Jan–Mar (unaudited)	2018 (audited)	2017 (audited)	2016 (audited)
Operating activities	(unadanca)	(unuuunteu)	(addited)	(ddditted)	(ddditcd)
Operating profit/loss	-4,027	-9,401	74,043	220,510	-174,049
	,-	-, -	,	-,-	,
Adjustments for items not affecting cash	476				100
Depreciation	176	-	-	-	106
Result of fair value change	-4,203	614	-99,980	-254,555	146,544
Other items	-179	_	-2,134	18	-1,371
Proceeds from short-term investments	-252	-16	-570	-405	-193
Interest received/paid	-498		-343	2	0
Cash flow from operating activities					
before changes in working capital and operating investments	-8,983	-8,803	-28,984	-34,430	-28,963
mvestments	0,303	0,003	20,504	34,430	20,303
Cash flow from changes in working capital					
Increase (-)/Decrease (+) in operating receivables	1,792	-407	-4,368	348	7,851
Increase (+)/Decrease (-) in operating liabilities	213	-3,159	46,506	2,876	-2,665
Cash flow from changes in working capital	-6,978	-12,369	13,154	-31,206	-23,777
Investment activities					
Payment from earn-out agreement	_	_	8,663	_	_
Sale of shares in portfolio companies	_	_	11,911	45,565	444
Acquisitions of shares in portfolio companies	-16,892	-11,448	-117,237	-89,775	-26,987
Proceeds from sale of short-term investments <sup>1)</sup>	19,769	9,987	80,047	86,747	41,326
Cash flow from operating activities	2,877	-1,461	-16,616	42,537	14,783
Financing activities					
Share issue	_	_	_	_	7
Convertible debenture issue	_	_	_	-2,628	_
Cash flow from financing activities	0	0	0	-2,628	7
Cook flow for the maried / war	4 404	42.020	2.462	0.703	0.007
Cash flow for the period/ year	-4,101	-13,830	-3,462	8,703	-8,987
Cash and cash equivalents at the beginning of the period/year	15,843	19,305	19,305	10,602	19,589
CASH AND CASH EQUIVALENTS	15,045	15,505	15,505	10,002	15,565
AT THE END OF THE PERIOD/ YEAR	11,742	5,475	15,843	19,305	10,602
	,		.,	.,	
Supplemental disclosure <sup>1)</sup>					
CASH AND CASH EQUIVALENTS					
AT THE END OF THE PERIOD/ YEAR	11,742	5,475	15,843	19,305	10,602
Short-term investments,					
market value at closing date	50,025	140,242	69,949	150,329	237,545
CASH AND CASH EQUIVALENTS AND SHORT-TERM					
INVESTMENTS AT THE END OF THE PERIOD/ YEAR	61,767	145,717	85,792	169,634	248,147

<sup>1)</sup> Surplus liquidity in the Investment Entity is invested in fixed income funds and is recognised as short-term investments with a maturity exceeding three months. These investments consequently are not reported as cash and cash equivalents and therefore are included in cash flow from operating activities. The supplemental disclosure is presented to provide a comprehensive overview of the Investment Entity's available funds, including cash, cash equivalents and short-term investments.

# Key figures for the Investment Entity

SEK 000	2019 Jan–Mar (unaudited)	2018 Jan-Mar (unaudited)	2018 (audited)	2017 (audited)	2016 (audited)
Income statement	(unauditeu)	(unaudited)	(auditeu)	(auditeu)	(auditeu)
Result of change in Fair Value of shares					
in portfolio companies	-11	-4,809	58,499	252,072	-146,544
Profit/loss after tax	-18,627	-19,725	30,510	179,595	-216,832
Balance sheet					
Cash, cash equivalents and short-term investments	61,767	145,717	85,792	169,634	248,147
Share information					
Earnings per share before and after dilution (SEK)	-0.3	-0.3	0.5	2.9	-4.1
Net asset value per share (SEK)	3.5	4.0	3.8	4.3	0.7
Equity per share (SEK)	4.3	3.9	4.6	4.2	0.6
Share price per share, last trading day					
in report period (SEK)	5.9	5.0	6.2	5.8	6.0
Portfolio information					
Investments in portfolio companies	17,093	13,449	124,557	91,869	28,917
Of which investments not affecting cash flow	200	2,002	7,321	4,561	1,892
Valuation of total portfolio holdings	636,008	456,423	618,927	447,783	149,408

# **Definitions**

Definition of Key Terms

Key Terms	Description	Motivation for use
Equity per share	Equity divided by the number of shares outstanding at year-end.	Shows each share's share of the equity.
Net Portfolio Fair Value (after potential distribution to Rosetta Capital)	The net aggregated proceeds that Karolinska Development will receive after KDev Investments' distribution of proceeds to Rosetta Capital.	Shows the portfolios Net Fair Value after the distribution.
Result of change in Fair Value of shares in portfolio companies	Result of change in Fair Value of shares in portfolio companies includes both unrealised gains and losses (Fair Value) and realised gains and losses (e.g. divestments).	Shows the result of changes in shares in portfolio companies

# Definition of Alternative Performance Measures

The Company presents certain financial measures that are not defined under IFRS. The Company believes that these measures provide useful supplemental information to investors and the Company's management as they allow for the evaluation of the Company's performance. Because not all companies calculate the financial measures in the same way, these are not always comparable to measures used by other companies. Therefore, these financial measures should not be considered as substitutes for measures as defined under IFRS.

Alternative Performance Measures	Description	Motivation for use
Total Portfolio Fair Value	The aggregated proceeds that would be received by Karolinska Development and KDev Investments if the shares in their portfolio companies were sold in an orderly transaction between market participants at the measurement date.	Shows the whole portfolios Fair Value at the measurement date.
Equity to total assets ratio	Equity divided by total assets.	Shows how much of the assets that are financed with own capital.
Net asset value per share	Net Portfolio Fair Value of the total portfolio (SEK 636.0 million), loans receivable from portfolio companies (SEK 5.1 million), short-term investments (SEK 50.0 million), cash and cash equivalents (SEK 11.7 million), and net of financial assets and liabilities minus interest-bearing liabilities (SEK 72.8 million minus SEK 492.2 million). Net asset value per share: the net asset value in relation to the number of shares outstanding, excluded repurchased shares (64,174,452) on the closing date (31 December 2018).	Shows each shares part of the company's net asset value.

# Comments to the financial development

This section, "Comments to the financial development", is intended to facilitate the understanding and evaluation of trends and fluctuations in Karolinska Development's operating results and financial position. Historical performance is not necessarily an accurate indicator of future performance. The information in this section should be read in conjunction with the information in "Summary financial information", "Equity, liabilities and other financial information" and Karolinska Development's financial statements, including related notes, which is incorporated in this Prospectus by reference.

This section contains certain forward-looking statements. Such forward-looking statements are by nature dependent on assumptions, data or methods that may be incorrect or imprecise and may not materialise. All forward-looking statements involve risks and uncertainties, including, but not limited to, those described in the section "Risk factors". As a consequence, Karolinska Development's actual results may depart significantly from those indicated in these forward-looking statements. For more information regarding forward-looking statements, see the section "Important information – Forward-looking statements".

# Jan - Mar 2019 compared with Jan - Mar 2018

Financial development

Karolinska Development's revenues drive from services rendered to portfolio companies. The revenue during January – March 2019 amounted to SEK 0.9 million compared to SEK 0.7 million during January – March 2018.

During January – March 2019, the net result was impacted by a net loss of SEK 0.01 million due to a decrease in fair value of shares in portfolio companies. During January – March 2018 the net result was impacted by a net loss of SEK 4.8 million due to a decrease in fair value of shares in portfolio companies. Change of fair value of other financial assets amounted to SEK 4.2 million during January – March 2019, same as in January – March 2018. The change is mainly a consequence of the change in valuation of an earn-out deal.

During January – March 2019 other expenses amounted to SEK 3.0 million compared to SEK 4.1 million during January – March 2018. Personnel costs amounted to SEK 5.9 million during January – March 2019 compared to SEK 5.4 million during January – March 2018.

As of 31 March 2019, the number of employees was seven, same as per 31 March 2018.

During January – March 2019, the financing of the portfolio companies via loans decreased, which is why interest income decreased by SEK 1.8 million to SEK 0.2 million, compared to

SEK 2.0 million in January — March 2018. Interest expenses increased during January — March 2019 by SEK 2.7 million to SEK 14.9 million, compared to SEK 12.2 million during January — March 2018. The reason for the increase is the interest on the convertible bond (the interest is cumulative) and the interest on the credit facility.

The investment entity reported Profit/Loss before Tax of SEK –18.6 million in January – March 2019, compared to SEK –19.7 million in January – March 2018.

Fair Value, Investments and Result of Change in Portfolio Fair Value

The Portfolio Fair Value of Karolinska Development, is divided into *Total Portfolio Fair Value* and *Net Portfolio Fair Value*.

**Total Portfolio Fair Value** is the aggregated proceeds to be received by Karolinska Development and KDev Investments if the shares in their portfolio companies are sold in an orderly transaction between market participants at the measurement date.

**The Net Portfolio Fair Value** (after potential distribution to Rosetta Capital) is the net aggregated proceeds to be distributed to Karolinska Development following KDev Investments' distribution of proceeds to Rosetta Capital.

			31 Mar 2019 vs
SEK million	31 Mar 2019	31 Mar 2018	31 Mar 2018
Karolinska Development			
Portfolio Fair Value			
(unlisted companies)	510.0	416.6	93.4
Karolinska Development			
Portfolio Fair Value			
(listed companies)	0.0	11.6	-11.6
KDev Investments			
Portfolio Fair Value	460.0	300.5	159.6
Total Portfolio Fair Value	970.0	728.6	241.4
Potential distribution			
to Rosetta Capital of fair			
value of KDev Invest-			
ments*	334.0	272.2	61.8
Net Portfolio Fair Value			
(after potential distribu-			
tion to Rosetta Capital)	636.0	456.4	179.6

Net Portfolio Fair Value is designated in Karolinska Development's balance sheet as Shares in portfolio companies at fair value through profit or loss.

Potential distribution to Rosetta capital of fair value in KDev *Investments* represents the portion of the dividend received by KDev Investments that is to be distributed to Rosetta Capital.

The change in Karolinska Development's Portfolio Fair Value is in general a result of new financing rounds in the portfolio companies at an increased valuation and where independent third parties invest or alternatively as a result of valuations by independent valuation institutes when significant milestones have been met. Changes can also be a result from a decrease in Fair Value generated by financing rounds at lower valuation, divestment at no or limited up-front payment or project failure.

On 31 March 2019 the Portfolio Net Fair Value amounted to SEK 636.0 million. Compared to Portfolio Net Fair Value of SEK 456.4 million 31 March 2018, a total increase of SEK 179.6 million. Fair Value of the portfolio companies owned directly by Karolinska Development increased by SEK 81.8 million compared to 31 March 2018.

The Fair Value of the portfolio companies held indirectly via KDev Investments amounted to SEK 460.0 million 31 March 2019, compared to SEK 300.5 million 31 March 2018 an increase by SEK 159.6 million.

Total Fair Value of portfolio companies held directly by Karolinska Development and indirectly via KDev Investments increased by SEK 241.4 million from 31 March 2018 compared to 31 March 2019.

As a consequence of the increase in Fair Value of the portfolio held indirectly via KDev Investments, the potential distribution to Rosetta Capital increased by SEK 61.8 million, resulting in Net Portfolio Fair Value increase of SEK 179.6 million from 31 March 2018 to 31 March 2019.

During January – March 2019 Karolinska Development invested in SEK 17.1 million, whereof SEK 16.9 million was cash investments and SEK 0.2 million was non-cash investments (accrued interest on loans).

Karolinska Development made investments in portfolio companies Umecrine Cognition with SEK 10.5 million and Forendo Pharma with SEK 6.6 million.

## Cash flow

During January - March 2019 the cash flow from operating activities before changes in working capital and operating investments amounted to SEK -9.0 million, a decrease of Cashflow by SEK 0.2 million compared to January - March 2018.

During January - March 2019 Karolinska Development invested SEK 16.9 million in cash in its portfolio companies and together with changes in working capital, cash from operating activities amounted to SEK -4.1 million, an increase by SEK 9.7 million compared to January - March 2018.

### Financial position

As of 31 March 2019, cash and cash equivalents and short-term investments amounted to SEK 61.8 million, a decrease of SEK 83.9 million compared to 145.7 million 31 March 2018.

The equity amounted to SEK 277.4 million on 31 March 2019, an increase by SEK 30.0 million compared to SEK 247.4 million on 31 March 2018. The increase is a consequence of the Net profit/Loss of during the period.

The equity ratio 31 March 2019 was 35 per cent compared to 38 per cent 31 March 2018.

## Full year 2018 compared with full year 2017

Financial development

Karolinska Development's revenues derive from services rendered to portfolio companies. The revenue during 2018 increased to SEK 3.1 million, compared to 2.5 million 2017.

During 2018, the net result was impacted by a net profit of SEK 58.5 million due to an increase in fair value of shares in portfolio companies. The main reason for the increase was the increase of fair value of Aprea Therapeutics and OssDsign in connection with investments, but fair value also decreased due to the valuation of Dilafor. During 2017, the net result was impacted by a net profit of SEK 252.1 million due to an increase in fair value. Change of fair value of other financial assets amounted to SEK 41.5 million during 2018, an increase of SEK 39.0 million compared to 2017. The change is mainly a consequence of the change in valuation of an earn-out deal.

During the 2018 other expenses amounted to SEK 14.0 million compared to SEK 13.0 million during 2017. Personnel costs amounted to SEK 15.0 million during 2018 compared to SEK 23.5 million during 2017, the main reasons for the decrease in personnel costs during 2018 of SEK 8.5 million are fewer employees and a decreased outcome of bonus schemes.

As of 31 December 2018, the number of employees was seven, same as per 31 December 2017.

During 2018, the financing of the portfolio companies via loans increased, which is why interest income increased by SEK 2.7 million to SEK 7.3 million, compared to 4.6 SEK million in 2017. Interest expenses increased during 2018 by SEK 6.0 million to SEK 49.5 million, compared with SEK 43.5 million during 2017. The reason for the increase is the interest on the convertible bond (the interest is cumulative) and the interest on the credit facility.

The investment entity reported Profit/Loss before Tax of SEK 30.5 million in 2018, compared to SEK 179.6 million in 2017. The main reason for the decrease was the lower positive result of change in fair value of shares in portfolio companies during 2018 compared to 2017.

Fair Value, Investments and Result of Change in Portfolio Fair Value

See section above (January – March 2019) regarding the description of *Total Portfolio Fair Value and Net Portfolio Fair Value*.

The Portfolio Fair Value 31 December 2018 compared to 31 December 2017:

SEK million	2018-12-31	2017-12-31	2018 vs 2017
Karolinska Development			
Portfolio Fair Value			
(unlisted companies)	492.6	413.8	78.8
Karolinska Development			
Portfolio Fair Value			
(listed companies)	0	14.1	-14.1
KDev Investments			
Portfolio Fair Value	459.7	286.1	173.6
Total Portfolio Fair Value	952.3	714.0	238.3
Potential distribution to			
Rosetta Capital of fair			
value of KDev Invest-			
ments	333.4	266.2	67.2
Net Portfolio Fair Value			
(after potential distribu-			
tion to Rosetta Capital)	618.9	447.8	171.1

On 31 December 2018 the Portfolio Net Fair Value amounted to SEK 618.9 million. Compared to Portfolio Net Fair Value of SEK 447.8 million 31 December 2017, a total increase of SEK 171.1 million. During 2018 the Fair Value of the portfolio companies owned directly by Karolinska Development increased by SEK 64.7 million.

The Fair Value of the portfolio companies held indirectly via KDev Investments amounted to SEK 459.7 million 31 December 2018, compared to SEK 286.1 million 31 December 2017 an increase by SEK 173.6 million.

Total Fair Value of portfolio companies held directly by Karolinska Development and indirectly via KDev Investments increased by SEK 238.3 million during 2018.

As a consequence of the increase in Fair Value of the portfolio held indirectly via KDev Investments, the potential distribution to Rosetta Capital increased by SEK 67.2 million, resulting in a Net Portfolio Fair Value increase of SEK 171.1 million during 2018

During 2018 invested Karolinska Development SEK 124.6 million in portfolio companies, whereof SEK 117.3 million was cash investments and SEK 7.3 million was non-cash investments (accrued interest on loans).

Karolinska Development made investments in seven portfolio companies: Aprea Therapeutics (SEK 42.0 million), Modus Therapeutics (SEK 33.7 million), Umecrine Cognition (SEK 16.5 million), Dilafor (SEK 13.1 million), OssDsign (SEK 9.9 million), Forendo Pharma (SEK 6.5 million) and Promimic (SEK 2.9 million).

#### Cash flow

During 2018 the cash flow from operating activities before changes in working capital and operating investments amounted to SEK -29.0 million, an increase of Cash-flow by SEK 5.4 million compared to 2017.

During 2018 Karolinska Development invested SEK 117.2 million in cash in its portfolio companies and together with changes in working capital, cash from operating activities amounted to SEK -3.4 million, a decrease by SEK 14.8 million compared to 2017. Net cash decreased by SEK 3.4 million during 2018, a decrease with SEK 12.2 million compared to 2017.

# Financial position

As of 31 December 2018, cash and cash equivalents and shortterm investments amounted to SEK 85.8 million, a decrease of SEK 83.8 million compared to 169.6 million 31 December 2017.

The equity amounted to SEK 296.0 million on 31 December 2018, an increase by SEK 28.9 million compared to SEK 267.1 million on 31 December 2017. The increase is a consequence of the Net profit/Loss of SEK during the period.

The equity ratio 31 December 2018 was 37 per cent compared to 40 per cent 31 December 2017.

## Full year 2017 compared with full year 2016

# Financial development

Karolinska Development's revenues derive from services rendered to portfolio companies, and during 2016 also a dividend. The revenue from services to portfolio companies increased slightly during 2017, amounting SEK 2.5 million, compared to SEK 2.0 million during 2016. Received dividend during 2016 amounted SEK 3.3 million.

During 2017, the net result was impacted by a net profit of SEK 252.1 million due to an increase in fair value of shares in portfolio companies. The main reason for the increase was the divestment of shares in BioArctic and Xspray but also increase of fair value of Umecrine Cognition in connection with Phase 1b data. Change of fair value of other financial assets amounted to SEK 2.5 million during 2017, an increase of SEK 2.5 million compared to 2016. The change is mainly a consequence of the change in valuation of an earn-out deal.

During 2017 the other expenses amounted to SEK 13.0 million compared to SEK 15.4 million during 2016. Personnel costs amounted to SEK 23.5 million during 2017 compared to SEK 17.3 million during 2016. The main reasons for the increase in personnel costs during 2017 of SEK 6.2 million are accrued severance costs for the previous CFO and outcome of bonus schemes.

As of 31 December 2017, the number of employees was seven, compared to eight as per 31 December 2016.

During 2017, the financing of the portfolio companies via loans increased, which is why interest income increased by SEK 2.5 million to SEK 4.5 million, compared to 2.0 SEK million in 2016. Interest expenses decreased during 2017 by SEK 1.7 million to SEK 43.5 million, compared with SEK 45.2 million during 2016. The reason for the decrease is that part of the convertible bond was offset in the targeted issue during the first quarter of 2017, because of which the interest expense on the convertible bond decreased.

The investment entity reported Profit/Loss before Tax of SEK 179.6 million in 2017, compared to SEK –216.8 million in 2016. The main reason for the increase was the positive result of change in fair value of shares in portfolio companies during 2017 compared to 2016.

Fair Value, Investments and Result of Change in Portfolio Fair Value

See section above (January – March 2019) regarding the description of *Total Portfolio Fair Value and Net Portfolio Fair Value*.

The Portfolio Fair Value 31 December 2017 compared to 31 December 2016:

SEK million	2017-12-31	2016-12-31	2017 vs 2016
Karolinska Development			
Portfolio Fair Value			
(unlisted companies)	413.8	143.7	270.2
Karolinska Development			
Portfolio Fair Value			
(listed companies)	14.1	0.0	14.1
KDev Investments			
Portfolio Fair Value	286.1	261.6	24.5
Total Portfolio Fair Value	714.0	405.2	308.8
Potential distribution			
to Rosetta Capital of fair			
value of KDev Invest-			
ments	266.2	255.8	10.4
Net Portfolio Fair Value			
(after potential distribu-			
tion to Rosetta Capital)	447.8	149.4	298.4

On 31 December 2017 the Portfolio Net Fair Value amounted to SEK 447.8 million. Compared to Portfolio Net Fair Value of SEK 149.4 million 31 December 2016, a total increase of SEK 298.4 million. During 2017 the Fair Value of the portfolio companies owned directly by Karolinska Development increased by SEK 284.3 million. The main reason for the increase was Umecrine Cognition's increased fair value and the investments in the company, the investments in OssDsign, but also the increased fair values of the holding in Pharmanest and the remaining holding in BioArctic.

The Fair Value of the portfolio companies held indirectly via KDev Investments amounted to SEK 286.1 million 31 December 2017, compared to SEK 261.6 million 31 December 2016 an increase by SEK 24.5 million. The main reason for the increase was the investments in Modus Therapeutics.

Total Fair Value of portfolio companies held directly by Karolinska Development and indirectly via KDev Investments increased by SEK 308.8 million during 2017.

As a consequence of the increase in Fair Value of the portfolio held indirectly via KDev Investments, the potential distribution to Rosetta Capital increased by SEK 10.4 million, resulting in a Net Portfolio Fair Value increase of SEK 298.4 million during 2017.

During 2017 Karolinska Development invested SEK 91.9 million in portfolio companies, whereof SEK 87.3 million was cash investments and SEK 4.6 million was non-cash investments (accrued interest on loans).

Karolinska Development's investments in portfolio companies during 2017 were made in: Umecrine Cognition (SEK 44.8 million), OssDsign (SEK 24.5 million) Modus Therapeutics (SEK 22.9 million), Pharmanest (SEK 0.1 million). A reimbursement was made by KCIF (SEK –0.5 million).

During 2016 the Portfolio Net Fair Value decreased to SEK 149.4 million. Compared to Portfolio Net Fair Value of SEK 267.7 million 31 December 2015, a total decrease of SEK 118.2 million. Fair Value of the portfolio companies owned directly by Karolinska Development increased by SEK 9.6 million during 2016. The main reason for the increase was investments in Umecrine Cognition.

The Fair Value of the portfolio companies held indirectly via KDev Investments decreased with SEK 195.9 million during 2016. The investments in Aprea Therapeutics and Modus Therapeutics had a positive impact on the fair value, while the development of the fair value of Akinion, Clanotech and Inhalation Sciences had a negative impact on the fair value.

During 2016 invested Karolinska Development SEK 28.8 million in portfolio companies, whereof SEK 27.0 million was cash investments and SEK 1.8 million was non-cash investments (accrued interest on loans).

Karolinska Development investments in portfolio companies during 2016 were made in: Modus Therapeutics (SEK 9.1 million), Umecrine Cognition (SEK 8.9 million), Aprea Therapeutics (SEK 6.3 million), Promimic (SEK 3.6 million) and Clanotech (SEK 0.8 million).

## Cash flow

During 2017 the cash flow from operating activities before changes in working capital and operating investments amounted to SEK -34.4 million, an increase of the cash-flow deficit by SEK 5.4 million compared to 2016.

During 2017 invested Karolinska Development SEK 89.8 million in cash in its portfolio companies and together with changes in working capital, cash from operating activities amounted to SEK 11.3 million, an increase by SEK 20.3 million compared to 2016. Net cash increased by SEK 8.7 million during 2017, an increase with SEK 17.7 million compared to 2016.

# Financial position

As of 31 December 2017, cash and cash equivalents and shortterm investments amounted to SEK 169.6 million, a decrease of SEK 78.5 million compared to SEK 248.1 million on 31 December 2016.

The equity amounted to SEK 267.1 million on 31 December 2017, an increase by SEK 237.3 million compared to SEK 29.8 million on 31 December 2016. The increase is a consequence of the Net profit/Loss for the year 2017 and the increase in equity due to the set-off issue carried out in the first quarter.

The equity ratio 31 December 2017 was 40 per cent compared to 7 per cent 31 December 2016.

# Equity, liabilities and other financial information

The tables in this section shall be read together with the section "Comments to the financial development" and Karolinska Development's annual reports, including corresponding notes, which are included in this Prospectus by reference. Some amounts in this section have been rounded off and therefore table values may not sum up exactly the same.

# **Equity and liabilities**

The table below shows Karolinska Development's capitalisation as at 30 April 2019.

Capital structure	
SEK '000	2019-04-30
Total current liabilities	
Guaranteed	_
Secured <sup>1)</sup>	50,000
Unguaranteed/unsecured	446,796
Total current liabilities	496,796
Non-current liabilities	
Guaranteed	-
Secured	_
Unguaranteed/unsecured	
Total non-current liabilities	-
Equity	
Share capital	644
Other capital contributions	1,970,752
Retained earnings	<b>-1</b> ,694,012 <sup>2)</sup>

The right to additional consideration regarding divested shares in Oncopeptides,
 Athera and Lipidor.

Equity

#### **Net financial indebtness**

The table below shows Karolinska Developments net liabilities as at 30 April 2019.

Net	liabilities
SEK	'000

SE	K '000	2019-04-30
Α	Cash	_
В	Cash equivalents (bank accounts)	7,861
С	Trading securities	50,089
D	Liquidity A+B+C	57,950
E	Current financial receivables <sup>1)</sup>	32,403
F	Short-term interest-bearing liabilities	50,000
G	Current convertible loan	446,796
Н	Other current financial debt	-
Π	Current financial indebt F+G+H	496,796
J	Net current financial debtness I-E-D	406,443
K	Non-current bank loans	_
L	Convertible loan	-
Μ	Other non-current loans	_
N	Non current financial indebtness K+L+M	_
0	Net financial indebtness J+N <sup>2)</sup>	406,443
_		

<sup>1)</sup> Current financial receivables consist of short-term loans to portfolio companies and other financial receivables

277.384

# Indirect indebtedness/pledge assets and contingent liabilities

Karolinska Developments' indirect indebtedness/pledge assets amounts to SEK 57 million and consist of right to earn-out payments for transferred shares in Oncopeptides, Athera and Lipidor. Karolinska Development has contingent assets amounting to SEK 2.5 million which refers to investment commitment in portfolio companies.

# **Convertible loan**

In January 2015 Karolinska Development issued convertible bonds at a nominal value of SEK 387 million. Due to accounting principles SEK 309 million was accounted for as a liability and SEK 78 million was amortised as cost over the period January 2015 to December 2019. The nominal amount decreased to SEK 329 million and the amortised costs until the due date 31 December 2019 decreased to SEK 66 million after a set off issue in March 2017. On 30 June 2019 the total liability for the convertible loan amounted to SEK 456 million and the cost still not amortised amounted to SEK 10 million. As such, the

<sup>2)</sup> Result as of 31 March 2019.

<sup>2)</sup> Negative figure equals asset

outstanding convertible loan, including accumulated interest, amounted to SEK 466 million as of 30 June 2019. The proposed share issue against setting-off convertible loan amounts to SEK 466 million.

Net financial indebtness amounted to SEK 406 million on 30 April 2019. With the outstanding convertible loan, including accumulated interest, amounting to SEK 466 million as of 30 June 2019, the Net financial indebtness would amount to SFK 425 million.

If the convertible loan would not at all be set-off against shares the outstanding amount that must be repaid on 31 December 2019 amounts to SEK 484 million, including accumulated interests.

## **Credit facilities**

On 29 November 2018, Karolinska Development signed an agreement with DNB Bank ASA, branch Sweden on a one-year credit facility totaling SEK 50 million. The interest rate is 4 per cent and is paid monthly on the last day of each month. The full amount of the credit facility has been utilised.

#### Investments

Karolinska Development has a portfolio of nine companies, eight of which have projects in clinical development or early launch phase. Clinical phase II results are expected for presentation during the remainder of 2019 by two of the portfolio company Aprea Therapeutics' projects, offering the potential for substantially increased opportunities for attractive divestments or licensing deals.

Karolinska Development's investments during the period January - March 2019 and the years 2016-2018 are stated above in the section "Comments to the financial development". Investments during the period from April 2019 to the day of the Prospectus are SEK 5.9 million and were made in OssDsign with SEK 5.5 million and in Dilafor with SEK 0.4 million.

During the past years Karolinska Development has succeeded in securing additional financing in syndication with other professional life science investors to ensure the portfolio companies are financed to their next significant value inflection point. With the current financial plans for the portfolio companies the current ownership and the expected ownership fully diluted is as described below:

Net Ownership*					
Ownership 31 March 2019	Ownership – After full dilution				

# **Karolinska Development**

i	
	Aprea Therapeutics (KD)
	Forendo
	OssDsign
	Pharmanest
	Umecrine Cognition
ı	

2 %	2 %
12 %	12 %
26 %	18 %
10 %	10 %
74 %	72 %

# **KDev Investments**

Α	prea Therapeutics
Α	sarina Pharma
В	iosergen
D	ilafor
N	1odus Therapeutics
Р	romimic

11 % 1 %	11 % 1 %
4 %	4 %
39 %	30 %
63 %	49 %
39 %	30 %

If the financial plans for the portfolio companies change it will have an impact on Karolinska Development's final fully diluted ownership, which may increase and decrease.

Karolinska Development has previously divested nine companies by earn-out agreements including rights to additional payments. As part of the earn-out agreements the funds to further develop these companies have been secured from the acquirers of the portfolio companies. The right to earn-outs remain wholly or partly for four of the nine companies.

<sup>\*</sup> Includes ownership via KCIE

The valuation of the company's portfolio is based on the International Private Equity and Venture Capital Valuation Guidelines (IPEV) and IFRS 13 Fair Value Measurement. Based on the valuation criteria provided by these rules, an assessment is made of each company to determine a valuation method. This takes into account whether the companies have recently been financed or involved with a transaction that includes an independent third party.

If there is no valuation available based on a similar transaction, discounted cash flow models (DCF) may be used. DCFs of the Underlying Business considers all of the cash flows of a portfolio company that are then discounted with an appropriate rate and also risk adjusted to take the developments risks in pharmaceutical development into consideration. The revenue streams are approximated from epidemiological data on the intended therapeutic indication, and a number of assumptions such as for example pricing per patient and year, market share and market exclusivity (from IPR and regulatory market protection). As described in the IPEV Valuation Guidelines the inputs into the DCF models are constructed with a high level of subjectivity. Hence, this method is only suitable for late stage assets, i.e. either pharmaceutical companies with lead projects in late stage (Phase III) development or technology projects with an established market presence where the revenues can be projected with a higher degree of confidence than in products in earlier stages of development.

As of 31 March 2019, there are currently no portfolio companies valued by DCF.

On 31 March 2019 the total Fair Value of the portfolio amounted to SEK 970 million. Adjusted for potential distribution of SEK 334 million to Rosetta Capital, the Net Fair Value of the portfolio amounted to SEK 636 million.

Karolinska Development does not own and does not intend to own any significant non-current assets, besides investment in portfolio companies including shares in small listed companies.

# Karolinska Development's future investments and capital requirements

Karolinska Development has a portfolio of companies that are financed to deliver the next significant value inflection point. Investments are made in syndication with other professional life science investors.

## Working capital statement

Karolinska Development's assessment is that the Company does not have sufficient working capital to cover the current needs over the next twelve months from the date of this Prospectus. The current needs refer to the need for working capital that is deemed to exist within a period of twelve months from the date of the Prospectus. The Company's need for additional working capital appears partly on 29 November 2019 for payment of the final balance of the credit facility of maximum SEK 50 million, and on 31 December 2019 for repayment of the convertible loan of SEK 484 million. The total shortage of working capital, including costs for operating the business and commitments regarding follow-on investments in the portfolio companies, amounts to approximately SEK 524 million. The Company is dependent on the fact that as large part of the convertible loan as possible is set off in the Offer and as of the date of the Prospectus there are conditional subscription commitments of SEK 357.5 million.

The Company's working capital requirement for the next 12 months in addition to repayment of the convertible loan but including repayment of a credit facility of SEK 50 million amounts to about SEK 40 million. The Company is currently considering possibilities for a subsequent rights issue or directed issue to secure the additional working capital required. The Company is also looking at possibilities for extending existing short-term loans or for new loans from third parties. The Company believes that the possibilities to obtain financing to secure the additional working capital requirements are good. In the event that the Offer is not sufficiently subscribed, one or more parties that have entered into subscription commitments might not fulfil their obligations or if subsequent capital raising initiatives do not secure working capital, the Company may need to evaluate alternative additional sources of funding, which will probably be done at significantly higher costs and at worse conditions, which can have negative effects for both the Company and its shareholders. In the event that all alternative financing possibilities fail and in the event that additional working capital cannot be raised, this could lead to the Company being forced to company reconstruction or bankruptcy or other forms of winding up the Company. Further information is found in the section "Risk factors".

## Future financing needs

Development of the portfolio companies' research projects will require capital contributions by their investors in order to capitalise on the value potential. The portfolio companies have no guarantees that required capital will be obtained to finance their projects on favourable terms, or that such capital may be obtained at all

Karolinska Development maintains a strategy to invest in the portfolio companies in syndicate with professional life science investors. If the portfolio companies are not successful in attracting other investors, Karolinska Development may choose to invest alone. If Karolinska Development chooses not to invest in the portfolio companies, investments may be made solely by other investors, which may have a negative impact on the valuations of the portfolio companies and as such Karolinska Developments ownership may be heavily diluted.

The portfolio companies may fail to achieve milestones or meet development milestones according to plan. In such cases, investors may decide to discontinue investing in a project. If so, the portfolio companies may have to limit their operations. Karolinska Development's shareholdings may also be diluted by other investors, and other investors may refrain from co-investing on equal terms.

Investments in existing portfolio companies are expected to be limited in 2019 as a consequence of several companies being financed until next value inflection point and due to Karolinska Development's strategy of investing in syndication with other investors. Some companies may enter license agreements with partners or receive non-dilutive grants such as EU contributions. Furthermore, third party investments are expected to increase.

Karolinska Development is continuously exploring the opportunity to invest in new portfolio companies.

# Financial targets

Karolinska Development is planning to continue to secure financing in its current portfolio companies and to cover its operating expenses with the current funds until it has obtained further funds from exiting current portfolio companies. The Company is currently considering possibilities for a subsequent rights issue to secure further funds. It is Karolinska Development's plan to subsequently continue investing in new portfolio companies and in the Asia strategy with these funds. The Asia strategy aims to secure cash flows to Karolinska Development in the medium term in order to fully or partly cover the financing needs of new portfolio companies in the Nordic market.

# Dividend policy

To date, Karolinska Development has not paid any dividends to shareholders. When Karolinska Development's cash flow from operations exceeds the Company's future capital requirements, the board of directors may propose that the annual general meetings resolves on a dividend.

# Tax situation

Against the background of the group's accumulated loss carry forward, Karolinska Development assesses that the Company's profits will not be subject to corporate tax in the next few years. For risks related to accumulated loss carried forward, see the section "Risk factors".

Capital gains on the sale of privately owned companies are normally tax free in accordance with Swedish law.

## Financial risk management

The Company is exposed to the financial risks. For further information, please see the sections "Risk factors", the Company's interim report for the first quarter 2019 and the Company's annual report 2018, 2017 and 2016.

## Tendencies and considerable revisions

Karolinska Development is an investment company which business operation is to invest in portfolio company shares. General trends do not affect the Company to the same extent as manufacturing companies as for sales and operations costs. However, changes taking place as a result of the global market, may affect Karolinska Development. This is described in more detail in section "Market Overview".

Global sales of prescription drugs are forecasted to rise significantly over the coming years. Growth is expected to be driven by new, innovative drugs and increased access to medical care. A considerable part of the expected growth is likely to be generated in China, India and Indonesia.

The pharmaceutical industry is facing the consequences of patents expiring on its top-selling drugs. As a result, the companies must identify new profitable patent-protected innovative products. The pharmaceutical companies, which previously relied on in-house research and development, are increasingly dependent on external innovations and are actively seeking to license or acquire products under development from other companies. The market for business agreements in the life science sector is expected to be continuously intense. The key factors that are expected to drive these activities are access to capital, a normalization of the capital market for life science companies, and the need for companies to execute their growth strategies. In the medical technology market, a high business volume is expected to be driven by the companies' need to differentiate their product portfolios and secure growth.

The global market for medical technology is expected to grow over the next five years. The fastest growing areas are neurology, diabetes, general and plastic surgery, and dental care. The most important drivers are increased life expectancy, chronic diseases, advances in technology and treatment, as well as increased spending on health care. The market for medical technology in the Asia-Pacific region is expected to have high growth over the next few years as a result of increased investments in healthcare and lifestyle changes.

China is the second largest and fastest growing healthcare market in the world. Healthcare expenditure per capita is though still considerably lower than in the world's other major healthcare markets. China's aging population, rising incomes and increasing urbanization are expected to contribute to continued growth in the country's healthcare sector.

With the comprehensive strategy shift that began in 2014 and in all essence ended in 2017, Karolinska Development has been focusing on changing the financing of its portfolio companies from short term financing mainly provided by Karolinska Development to financing its portfolio companies to next significant value inflection point in syndicate with other professional life science investors. Karolinska Development has also been focusing on strengthen the board of management and the board of directors in its portfolio companies. These objectives have been achieved for the majority of the portfolio.

With the strategy shift, Karolinska Development has in general changed its business model from managing its portfolio as pharmaceutical development projects with a large degree of detailed involvement to managing the portfolio as an investment company with involvement mainly on board level.

Karolinska Development's business model includes a focus of the financial resources on the portfolio companies with the most potential of delivering the highest possible return on Karolinska Development's investments. As a result of this, Karolinska Development has consequently divested companies which lack this potential and has thereby reduced the size of its portfolio to the current nine portfolio companies.

Karolinska Development has also with the strategy shift adjusted its valuation principles to be aligned with other investment companies and it has in general focused its communication toward a more open and transparent communication.

## IFRS 16

IFRS 16 Leases entered into force on 1 January 2019. The standard changes the reporting of leases and requires all leases to be recognised in the balance sheet. The Company only has operating leases for office premises, which has minor impact on the financial position and key ratios at transition. The Company has chosen to apply the transition rules for this standard in accordance with the simplified approach, which recognises the accumulated effect of an initial application of the standard on the first day of application, 1 January 2019. Comparative information will not be restated, and it will continue to be reported in accordance with IAS 17 Leases and IFRIC 4 Determining Whether an Arrangement Contains a Lease. The Company has opted to exclude leases in which the value of the underlying asset is low. Leasing expenses for earlier operating leases will be replaced as of 1 January 2019, with write-downs on right-ofuse assets and financial interest expenses for lease liabilities. Right-of-use assets will be measured at an amount corresponding to the lease liabilities on the date of transition. On 1 January 2019, the change in the reporting of leases impacted the balance sheet total by SEK 1,2 million (corresponding to less than 1 per cent) without having an impact on equity.

# Significant events after the 2019 interim report for January – March was published

Since the Company's interim report for January - March 2019 was published, the board of directors have proposed measures to settle the Company's convertible loan. The board of directors resolved on a directed issue of shares of series B to the holders of the Company's convertible 2015/2019, subject to the approval by the annual general meeting, which was approved on June 28, 2019. The Company has received subscription undertakings from Sino Biopharma and other shareholders, together holding 84 per cent of the convertible loan including accrued interest. Sino Biopharma's undertaking is conditional to their holdings not exceeding 49 per cent of the total number of votes in the Company after the Directed share issue. Sino Biopharma's commitment is conditional of that convertible loan holders representing at least 95 per cent of the convertible loan have committed to set-off their holding of convertible loans in the Directed share issue. Sino Biopharmaceutical Limited has, under the above condition, undertaken to sell its remaining part of its convertibles to a third party to be utilised by subscribing for shares of series B during the application period in the Directed share issue but no later than 30 September 2019, through payment by set-off of the convertibles. Since a business model based on biological risks in pharmaceutical development and medical technology products is vulnerable, Karolinska Development intends, provided that a substantial portion of the convertible debt is set-off in the Directed share issue, and that agreements are signed with Sino Biopharma, to supplement its business model with cash-generating operations in Asia in cooperation with Sino Biopharma. The Company will, hence, initiate a strategic initiative together with Sino Biopharma to open the Asian market for Nordic innovations in connection with the completion of Directed share issue.

On 14 May 2019, the Company received an earn out payment in the form of 270,000 shares in Lipidor AB. The fair value of the shares amounts to approximately SEK 1.2 million.

Karolinska Development announced in June, that the Company has sold its entire ownership in the portfolio company Pharmanest AB. KCIF — a holding company jointly owned by the European Investment Fund and Karolinska Development — also sells its ownership interests. In total, the divestment brings in approximately SEK 23 million to Karolinska Development.

The Company is not aware of any public, economic, fiscal, monetary or other political measures that may, directly or indirectly, significantly have an impact on the Company's financials except for what is stated in the section "Risk factors".

# Board of directors, executive management and auditor

#### **Board of directors**

According to Karolinska Development's articles of association, the board of directors shall consist of not less than three and not more than nine members. Currently, Karolinska Development's board of directors consists of six members, including the chairman, with no deputy members. The current board of directors is appointed for the period until the end of the annual general meeting 2020. The table below lists the name, position, year of birth, year of election, independence in relation to the Company and its executive management and major shareholders and title of each member of the board.

				Independent in relation to:			
Name	Position	Year of birth	Year of election	The Company and its executive management	Major shareholders	Title	
Hans Wigzell	Chairman	1938	2006	Yes	Yes	D.Sc.	
Tse Ping	Member	1952	2015	Yes	Yes	Fil. Dr. h.c.	
Vlad Artamonov	Member	1978	2012	Yes	Yes	MBA, B.Sc	
Magnus Persson	Member	1960	2017	Yes	Yes	D.Sc., Reader, M.D	
Theresa Tse	Member	1992	2017	Yes	Yes	B.A	
Viktor Drvota	Member	1965	2019	No	Yes	D.Sc., Reader, M.D	

The Company fulfils the requirements under the Swedish Corporate Governance Code (Sw. Svensk kod för bolagsstyrning) (the "Code") that a majority of the members of the board of directors are to be independent of the company and its executive management, and at least two members of the board of directors are independent in relation to the company's major shareholders.



HANS WIGZELL Appointed 2006. Born 1938.

Hans Wigzell is chairman of the board of directors of Karolinska Development since 2018 and member of the board of directors since 2006. Hans Wigzell is also chairman of Rhenman & Partners Asset Managment AB and member of the board of directors of RaySearch Laboratories AB (publ), Aktiebolaget Wigzellproduktion and Sarepta Therapeutics, Inc.

Hans Wigzell has previously, during the past five years, served as chairman of Cadila Pharmaceuticals Sweden Aktiebolag and member of the board of directors of Swedish Orphan Biovitrum AB (publ), NeoDynamics AB, CPL BCX Pharma AB, PRFA Management AB and Valneva SA.

Holdings in Karolinska Development: 36,491 shares of series B.



TSE PING Appointed 2015. Born 1952.

Tse Ping is a member of the board of directors and deputy chairman of Karolinska Development. Tse Ping is also founder and member of the board of directors of Sino Biopharmaceutical Limited (listed in Hong Kong) and deputy chairman of Charoen Pokphand Group.

Holdings in Karolinska Development:

4,853,141 shares of series B and convertible loan amounting to SEK 272,858,294 (via related legal entity).



VLAD ARTAMONOV Appointed 2012. Born 1978.

Vlad Artamonov is a member of the board of directors of Karolinska Development. Vlad Artamonov is also a member of the boards of directors and partner of Coastal Capital International Ltd and member of the board of directors of Spicers Limited (Australia).

Vlad Artamanov has previously, during the past five years, served as member of the board of directors of Redbank (Australia).

Holdings in Karolinska Development: 3,470,541 shares of series B (via related legal entity).



MAGNUS PERSSON Appointed 2017. Born 1960.

Magnus Persson is a member of the board of directors of Karolinska Development. Magnus Persson is also chairman of SLS Invest AB, Cantargia AB, Initiator Pharma AS, Galecto BioTech AB, Addi Medical AB, Perma Ventures AB and Attgeno AB, member of the board of directors of Immunicum Aktiebolag, Medical Prognosis Institute AS, Cerecor Inc, NeuroVive Pharmaceutical AB and

Själbådan AB and deputy board member of Mordin AB, Merigen AB and Duomedix AB.

Magnus Persson has previously, during the past five years, served as Chief Executive Officer of KIHAB and chairman of the board of directors of Bio-Works Technologies AB.

 $\label{thm:continuous} \mbox{Holdings in Karolinska Development: No holdings.}$ 



THERESA TSE Appointed 2017. Born 1992.

Theresa Tse is a member of the board of directors of Karolinska Development.
Theresa Tse is also chairman of Sino Biopharmaceutical Limited.

Holdings in Karolinska Development: 4,853,141 shares of series B and convertible loan amounting to SEK 272,858,294 (via related legal entity).



VIKTOR DRVOTA

Chief Executive Officer and member of the board.

Appointed 2017 and 2019. Born 1965.

Viktor Drvota is Chief Executive Officer and a member of the board of directors of Karolinska Development. Viktor Drvota is also a member of the board of directors of OssDsign AB and Dilafor AB and deputy board member of Promimic AB.

Viktor Drvota has previously during the past five years served as member of the board of directors of SciBase Holding AB (publ), Aprea Therapeutics AB, Neoventa Holding Aktiebolag, InDex Pharmaceuticals AB, ClanoTeck AB, Akinion Pharmaceuticals AB, Kanalfläkt Design Alliuq AB, Airsonett Holding AB, Avidicare Holding AB, Oveun AB, Nuevolution AB (publ) and Sjöängens Brygga Ekonomisk förening.

Holdings in Karolinska Development: 24,000 shares of series B and 1,608,418 warrants (shares of series B).

## **Executive management**

			year of	
Name	Position	Year of birth	employment	Title
Viktor Drvota	Chief Executive Officer	1965	2017	Reader in Cardiology
Fredrik Järrsten	Chief Financial Officer	1967	2017	MBA
Ulf Richenberg	General Counsel	1955	2008	LLM



VIKTOR DRVOTA Chief Executive Officer since 2017. See section "Board of directors" above.



**ULF RICHENBERG** Appointed 2008. Born 1955.

Ulf Richenberg is General Counsel of Karolinska Development. Ulf Richenberg is also chairman of KCIF Fund Management AB, KD Incentive AB and KDev Invest Consulting AB.

Ulf Richenberg has previously, during the past five years, served as chairman of Modus Therapeutics Holding AB (publ), Biosergen AS, NovaSAID AB,

NeoDynamics AB, KDev Oncology AB, member of the board of directors of AVARIS AB, Axelar AB and Aprea Personal AB, and deputy board member of Pergamum AB and as partner of Avance Hund & Fritid Handelsbolag.

Holdings in Karolinska Development: 39,872 shares of series B and 402,105 warrants (shares of series B).



FREDRIK JÄRRSTEN Appointed 2017. Born 1967.

Fredrik Järrsten is Chief Financial Officer and deputy Cheif Executive Officer of Karolinska Development. Fredrik Järrsten is also Chief Executive Officer and a member of the board of Fredrik Järrsten Konsult AB, chairman of the board of Terroir Suisse AB, member of the board of directors of Promimic AB, KCIF Fund Management AB and KDev Investments AB, and deputy board

member of FLEXIJECT Co-injection AB.

Fredrik Järrsten has previously, during the past five years, served as member of the board of directors of Bactiguard AB, Frösunda Holdco AB and VFS Invest AB.

Holdings in Karolinska Development: 40,000 shares of series B and 402,105 warrants (shares of series B).

#### **Auditor**

The auditor of the Company is, since 2015, Ernst & Young Aktiebolag, and was re-elected at the annual general meeting on 28 June 2019. The authorised auditor Björn Ohlsson, a member of FAR, is the auditor in charge. Ernst & Young has been the Company's auditor during the whole period covering the financial information of this Prospectus. The address of the auditor is Box 7850, 103 99 Stockholm.

# Other information regarding the members of the board of directors and executive management

Two members of the board of directors have a family relationship, Tse Ping and Theresa Tse (father and daughter). No other members of the board of directors or executive management has any family relationship with any other member of the board of directors or executive management. There are no conflicts of interest between the members of the board of directors or executive management and Karolinska Development. The board members Tse Ping and Theresa Tse represent Sino Biopharma, one of the major shareholders of the Company, which together with its subsidiary also holds approximately 83 per cent of the Company's convertibles 2015/2019. Sino Biopharma's representatives on the board of directors of Karolinska Development have not taken part in the planning and decisions related to the Directed share issue. No other conflicts of interests exist.

Ulf Richenberg served as chairman of the board of directors of Neodynamics AB when it declared bankruptcy in May 2016. No other members of the board of directors or executive management have during the past five years been involved in any bankruptcies, bankruptcy adminstration or liquidations in a capacity as member of the board of directors, deputy member of the board of directors or executive management. None of the above mentioned members of the board of directors or executive management has been convicted of fraudulent conduct or been subject to any public incrimination or sanctions by statutory or regulatory authorities and none of the members of the board of directors or executive management has been disqualified by a court from acting as a member of administrative, management or supervisory bodies of a company or to hold leading or overarching functions in a company during the last five years.

The board members are not entitled to any benefits after retirement from the board. For information on the executive management member's rights to pension benefits and severance pay if their positions with the Company are terminated, see the section "Corporate governance — Remuneration to the members of the board of directors and executive management".

The office address of the members of the board and the executive management is c/o Karolinska Development AB, Tomtebodavägen 23 A, Solna, Sweden.

# Corporate governance

# **Corporate governance**

Karolinska Development is a Swedish public limited liability company. The corporate governance of the Company is mainly based on Swedish legislation, such as the Swedish Companies Act (Sw. Aktiebolagslagen) and the Swedish Annual Accounts Act (Sw. Arsredovisningslagen), the Code, Nasdaq Stockholm's Rule Book for Issuers, the Company's articles of association and internal rules and instructions.

## The Swedish Corporate Governance Code

Karolinska Development is a Swedish public limited liability company listed on Nasdaq Stockholm's main list. All companies listed on a regulated market shall apply the Code. Karolinska Development has complied with the Code since 2008. The Company is not obliged to comply with every rule in the Code at all times, but is allowed the freedom to choose alternative solutions which the Company deems better suited to the Company's particular circumstances. This assumes that the Company reports every such non-compliance, describes the alternative solution and states the reasons for such deviation in its annual corporate governance report in accordance with the "comply or explain" mechanism. Karolinska Development complies with the Code without deviations and has not reported any deviations under 2018.

## **General meeting**

### General

Under the Swedish Companies Act, the general meeting is the Company's highest decision-making body. At the annual general meeting, which shall be held within six months from the end of the financial year, shareholders exercise their voting rights on issues such as the adoption of income statements and balance sheets, appropriation of the Company's profits or losses, resolutions to release the members of the board of directors and the CEO from liability for the preceding financial year, the appointment of members of the board of directors and auditor and remuneration for the board of directors and the auditor.

Besides the annual general meeting, extraordinary general meetings may be convened. In accordance with the articles of association, all general meetings shall be convened through announcements in the Swedish Official Gazette (Sw. Post- och Inrikes Tidningar) and by posting the notice to the meeting on the Company's website. An announcement shall simultaneously be placed in Svenska Dagbladet with information that the meeting has been convened. Minutes from the general meetings are published on Karolinska Development's webpage.

# Right to attend general meetings

All shareholders who are directly registered in the share register kept by Euroclear five weekdays prior to the general meeting and who notify the Company of their intention to attend the general meeting at the latest by the date specified in the notice convening the meeting, shall be entitled to attend the general meeting and vote according to the number of shares they hold. Shareholders may attend general meetings in person or through a proxy and may also be accompanied by up to two assistants.

# Nomination committee

The nomination committee shall carry out its duties in accordance with the Code. The nomination committee's main duties are to propose candidates for the positions as chairman of the board of directors and other members of the board of directors, as well as propose fees and other remuneration to each members of the board of directors. The nomination committee is also to make proposals on the election of and remuneration to the auditor.

Karolinska Development's annual general meeting 2019, resolved that the nomination committee shall consist of five members. The five largest owners (voting power, as set forth in the share register kept by Euroclear as of 31 August 2019) shall appoint one member each. The chairman of the board of directors shall convene the first meeting. If a shareholder does not exercise its right to appoint a member, the shareholder next in order of voting power, who has not already appointed a member or has a right to appoint a member, shall have the right to appoint a member to the nominating committee. The members shall among themselves appoint the chairman of the committee. If a member resigns or is prevented from pursuing his/her assignment, the shareholder that has appointed such member shall appoint a new member. If the shareholding in the Company is materially changed, before the nomination committee has completed its assignment, the nomination committee may decide to change the composition of the nomination committee, as determined by the nomination committee (considering the principles applicable for the appointment of the nomination committee). Any change in the composition of the nomination committee shall be announced as soon as possible. No fees shall be paid to the members of the nomination committee. Out of pocket expenses shall be reimbursed by the Company.

The members of the annual general meeting 2019 Nomination Committee are Peter Lundkvist (chairman), appointed by Tredje AP-fonden (Third Swedish National Pension Fund), Yan Cheng,

appointed by Sino Biopharma, Hans Möller, appointed by KIHAB, Todd Plutsky, appointed by Coastal Investment Management LLC and; Anders Bladh, appointed by Ribbskottet AB. The mandate of the committee shall be until the members of the succeeding committee have been announced. The members of the Nomination Committee shall be made public as soon as the members have been appointed, and in no case later than six months prior to annual general meeting 2020.

## The board of directors

#### General

The board of directors is the second highest decision-making body after the general meeting. The board of directors' responsibility is regulated by the Swedish Companies Act, the Swedish Annual Accounts Act, the Company's articles of association, directions given by the general meeting and the procedure for the board of directors of the Company. In addition, the board of directors shall comply with the Code and Nasdaq Stockholm's Rule Book for Issuers, as well as other Swedish and foreign laws and regulations, as applicable.

Pursuant to the Swedish Companies Act, the board of directors is responsible for the Company's organisation and the administration of the Company's affairs. Furthermore, the board of directors shall continuously assess the Company's and the group's financial situation, as well as see to that the Company's organisation is formed in a way that the accounting, management of funds and the Company's financial conditions are controlled in a secure manner.

The assignments of the board of directors include, inter alia, to set objectives and strategies, see to that there are effective systems for follow-up and control of the Company's operations, and see to that there is a satisfactory control of the Company's compliance with laws and other regulations applicable to the Company's operations. The assignments of the board of directors also include to see to that required ethical guidelines are set for the Company's behavior and to see to that the Company's disclosure of information is characterised by transparency and is correct, relevant and reliable. In addition, the assignments of the board of directors include appointing, evaluating and if necessary, removing the CEO.

Members of the board of directors (except for employee representatives) are appointed annually by the annual general meeting for the period until the end of the next annual general meeting. According to the Company's articles of association, the annual general meeting shall appoint not less than three and

not more than nine directors. At present, the Company's board of directors consists of six ordinary members. For further information on the board members see section "Board of directors, executive management and auditor".

The board of directors of Karolinska Development follows a written procedure, which is reviewed annually and adopted at the board's statutory meeting each year. Among other things, the procedure for the board of directors regulates the board of directors' role and responsibility, the board of directors' way of working and the division of labour, both within the board of directors and between the board of directors and the CEO. In connection with the statutory Board meeting, the Board also adopts an instruction for the CEO and an instruction for financial reporting.

## Audit committee

The board of directors has internally established an audit committee. At least one of the members of the audit committee must have accounting or auditing proficiency. The current audit committee consists of three members: Hans Wigzell (chairman), Magnus Persson and Vlad Artamonov. All members of the audit committee are considered independent of the Company, its executive management and its major shareholders.

The audit committee shall, without any other impact on the tasks and responsibilities of the board of directors:

- (a) monitor the Company's financial reporting and provide recommendations and proposals to ensure the reliability of the reporting;
- (b) in respect of the financial reporting, monitor the effectiveness of the company's internal control, internal audits, and risk management;
- (c) remain informed regarding the audit of the annual report and the group report as well as regarding the conclusions of the Swedish Inspectorate of Auditors' quality controls;
- (d) inform the board of directors of the result of the audit and the way in which the audit contributed to the reliability of the financial reporting, as well as the function filled by the committee:
- (e) review and monitor the impartiality and independence of the auditor and, in conjunction therewith, pay special attention to whether the auditor provides the company with services other than auditing services; and
- (f) assist in conjunction with preparation of proposals to the general meeting's resolution regarding election of an auditor.

#### Remuneration committee

The board of directors has internally established a remuneration committee. According to the Code, the chair of the board may chair the remuneration committee and the other members of the committee are to be independent of the Company and its executive management. The current remuneration committee consists of three members: Hans Wigzell (chairman), Magnus Persson and Vlad Artamonov, each being considered independent of the Company and its executive management.

The remunerations committee's main tasks are to:

- (a) prepare the board of directors' decisions on issues concerning principles for remuneration, remuneration and other terms of employment for the management;
- (b) monitor and evaluate programs for variable remuneration for the management, both ongoing and those terminated during the year; and
- (c) monitor and evaluate the application of the guidelines for remuneration to the management that the annual general meeting is legally obliged to decide on, as well as the current remuneration structures and levels in the Company.

### Investment committee

The board of directors has internally established an Investment Committee. Investment Committee consists of three members: Hans Wigzell (chairman), Magnus Persson and Viktor Drvota.

The main tasks of the Investment Committee are to prepare and analyse investment proposals and submit recommendations to the board of directors.

# The chief executive officer and other executive managers

The CEO reports to the board of directors. The CEO's responsibility is governed by the Swedish Companies Act, the Swedish Annual Accounts Act, the Company's articles of association, guidelines from the annual general meeting, the instruction for the CEO and other internal directions and guiding principles adopted by the board of directors. In addition thereto, the CEO shall comply with the Code and Nasdag Stockholm's Rule Book for Issuers, as well as other Swedish and foreign laws and regulations, as applicable.

According to the Swedish Companies Act, the CEO shall handle the day-to-day management pursuant to the board of directors' guidelines and instructions. In addition, the CEO shall take any measures necessary in order for the Company's accounts to be maintained pursuant to law and that the management of funds is conducted in an appropriate manner. The division of labor between the board of directors and the CEO is described in the instruction for the CEO.

The CEO shall administrate the operative management and execute the resolutions passed by the board of directors. The CEO shall control and supervise that the matters to be dealt with by the board of directors according to applicable legislation, the articles of association and internal instructions are presented to the board of directors, and shall continuously keep the chairman of the board of directors informed about the performance of the Company's operations, its earnings and financial position, as well as any other event, circumstances or condition that cannot be assumed to be irrelevant to the board of directors or the shareholders.

The CEO and other executive management are presented in greater detail in the section "Board of directors, executive management and auditor".

### **Auditing**

The Company's auditor is appointed by the annual general meeting. The auditor's assignment includes to audit the Company's annual report and accounts, the consolidated accounts and the consolidated companies' interrelations, as well as the management by the board of directors and the CEO. Following each financial year, the auditor shall submit an audit report to the annual general meeting.

Pursuant to the Company's articles of association, the Company shall have not less than one and not more than two auditors, with or without deputy auditor (not more than two). Karolinska Development's auditor is Ernst & Young Aktiebolag, with Björn Ohlsson as auditor in charge. The Company's auditor is presented in greater detail in the section "Board of directors, executive management and auditor - Auditor".

Under 2018 the total remuneration for the Company's auditor amounted to SEK 1,874,000, which included audit services, audit related services and tax consulting.

# **Insider and information policy**

The Company has adopted policy documents for the purpose of informing employees and others concerned within Karolinska Development regarding the laws and regulations applicable to the dissemination of information by the Company and the special requirements imposed on persons who are active in a listed company with regard, for example, to insider information. The Company has also established routines for appropriate handling dissemination of information that is not public (a so-called insider register). Karolinska Development's portfolio companies have, through agreements with the Company, undertaken to coordinate with Karolinska Development when disseminating information that can be expected to be inside information.

# Remuneration to the members of the board of directors and executive management

Remuneration to the members of the board of directors

Fees and other remuneration for members of the board of directors, including the chairman of the board, are resolved upon by the annual general meeting. In accordance with a resolution of the annual shareholders' meeting 2019, fees will be paid with a fixed fee of SEK 400,000 to the chairman of the board and a fixed fee of SEK 200,000 to other directors not employed by the Company. Board fees shall be paid in proportion to participation in board meetings. The members of the board are not entitled to any benefits after the board assignment has ended.

The table below shows the fees received by the board members elected by the annual general meeting for the financial year of 2018.

Name	Position	Fees (KSEK)
Hans Wigzell	Chairman of the board	383
Tse Ping	Boardmember	200
Magnus Persson	Boardmember	200
Vlad Artamonov	Boardmember	200
Theresa Tse	Boardmember	200
Anders Härfstrand	Former boardmember	200
Niclas Adler	Former boardmember	17
Total		1,400

### Remuneration to executive management Guidelines for Remuneration to Executive Management

The board of directors proposes guidelines for remuneration to the Company's executive management. The guidelines are subsequently adopted by the annual general meeting. The current guidelines for remuneration to executive management was adopted by the annual general meeting on 28 June 2019. The guidelines apply to salary and other forms of remuneration to the CEO and other executive management agreed upon after the 2019 annual general meeting. The guidelines apply to all categories of remunerations and benefits, whether paid in cash, or paid now or in the future, or if certain or uncertain. Compensation and issues of securities covered by Chapter 16 of the Swedish Companies Act are not covered by these guidelines.

#### General

Remuneration to executive management comprises fixed salary, variable remuneration, pension and customary other benefits.

Karolinska Development shall maintain compensation levels and terms required to recruit and keep an executive management with the competence and experience necessary to meet the Company's operational goals. The total remuneration to executive management shall be competitive, reasonable and appropriate.

Market term consultancy fee may be paid to board directors that perform services to the Company outside the scope of the directorship.

#### Fixed salary

Fixed salaries shall be based on each individual's experience and field of responsibility. Fixed salary shall be revised annually for each calendar year.

### Variable remuneration

Variable remunerations shall be formed to promote Karolinska Development's long term value creation; be based upon criteria that are predetermined, clear, measurable and that can be influenced; if in form of variable salary, have a fixed cap; not be included when calculating pension insurance premiums.

CEO and other executive management are entitled to bonus based on exits in the portfolio. The total maximum payment for the exit related bonus, shall be limited to SEK 50 million per exit and financial year.

Annual short-term incentive programs ("STI") based on set objectives are proposed by the remuneration committee and resolved by the board of directors for each calendar year. The payment to an employee under a STI program shall be limited to an amount corresponding to six months' salaries. The cost for the Company at maximum outcome of STI 2019 amounts to SEK 3.7 million.

The Company has four annual long-term incentive programs ("LTI") for the year 2008–2010 and 2017, each resolved by the respective annual general meeting.

#### Pension

The Company's costs for pension for an employee shall be paid during the period when the employee is active in the Company. Pension insurance premiums shall not be paid when an employee has retired. In addition to what is required under Swedish law, premiums shall be paid in accordance with an adopted pension premium plan.

### Customary other benefits

Executive management are entitled to such customary other benefits that are applied for all employees at Karolinska Development, such as sick pay, health care and wellness program. The number of paid holidays is thirty.

Executive management are not allowed to receive fees for serving as directors of board of directors, when related to the employment at Karolinska Development. The Company does not provide company cars.

The termination period at termination by the Company shall not exceed twelve months for the CEO and six months for other executive management. Severance pay may be paid only to the CEO. Fixed salary during a period of notice and severance pay aggregated are not to exceed an amount equivalent to the individual's fixed salary for two years.

### Preparations and decisions

The Company's remuneration committee is to prepare decisions related to salaries and other employment terms to executive management. The board of directors is to decide regarding salary to the CEO and principles for remuneration to other executive management.

### Exceptions

The board of directors may case by case decide on exceptions if there are special reasons. Circumstances known to the board of directors when the guidelines where decided are normally not reason enough for an exception. Exceptions (if any) shall be commented on at the following annual general meeting.

### Remuneration during the 2018 financial year

The table below shows the fees paid to the CEO and other executive management for the financial year 2018.

(KSEK)	Base salary	Variable remuneration	Other benefits and remuneration <sup>1)</sup>	Pension costs <sup>2)</sup>	Total
Chief Executive Officer	2,563	1,568	1	668	4,800
Former Chief Executive Officer	_	335	450	_	785
Other executive management <sup>3)</sup>	2,877	1,779	2	792	5,450
Other executive management <sup>4)</sup>	381	295	34	67	777
Total	5,821	3,977	487	1,527	11,812

- 1) Refers mainly to travel and housing benefits, and outcomes of PSP programs.
- 2) Pensions to the CEO and other executive management consist of insurance premiums.
- 3) 2 persons in 2018.
- 4) Relates to former CFO

### Bonus for executive management

The CEO is entitled to a bonus based on exits in the portfolio. The remuneration amounts to 1/3 of four per cent of the net proceeds paid to the Company upon the exit. The remuneration includes all the Company's expenses in relation to the payment.

Other executive management are entitled to bonuses based on exits in the portfolio. The total remuneration to other executive management is 2/3 of four per cent of the net proceeds paid to the Company upon the exit. The remuneration includes all the Company's expenses in relation to the payment.

The maximum payment to the CEO and other executive management is limited to SEK 50 million. If exit-bonus and a STI program cover the same event that triggers payment, no double payment shall be made.

Incentive program for executive management and other employees

Below follows information about Karolinska development's annual long-term incentive programs for the years 2008-2010, Warrant Program 2017/2020 and the Company's short term incentive program for 2019.

### Incentive programs 2008–2010

The program was designed as a combined warrant and profitsharing program consisting of three annual stages for the years 2008–2010. The warrants have expired. No current employees of the Company are covered by the programs.

Each profit-sharing plan is related to appreciation in the value of the portfolio companies and extends 15 years. The 2008 profit-sharing program is related to the Company's investment

portfolio as of 31 December 2007, while the 2009 and 2010 programs refer to investments made by the Company under 2008 and 2009, respectively.

Each sub-plan provides entitlement to a cash payment equivalent to a total of 5 per cent of the portion of the return on the investments encompassed by the sub-plan, in excess of a threshold rate. The threshold rate consists of the initial value of the investments encompassed by a specific sub-plan, to the extent they have been exited, adjusted by an annual rate of 6 per cent for the years 2008–2012 and 8 per cent thereafter. On the "plus side" are the proceeds received from exits.

To the extent that returns exceed an annual return of 35 per cent, the portion that exceeds the returns is halved to 2.5 per cent. To the extent that returns exceed 50 per cent, the amount in excess of 50 per cent will be further halved to 1.25 per cent. Excess returns above 60 per cent are not eligible for profit-sharing.

In addition to the portion of excess returns as stated above, the sub-plan 2010 also provides entitlement to a total of 37.5 per cent of KDAB Carried Interest, according to the agreement the Company has entered into with the European Investment Fund ("EIF") related to KCIF. KDAB Carried Interest can be summarised as 20 per cent of any return exceeding an annual threshold rate of 6 per cent of – and after repayment of - the amounts that the Company and EIF have committed to KCIF. According to the agreement with EIF, Karolinska Development is entitled to the current portion of the KDAB Carried Interest only if it is included in the Company's profit-sharing plan. As a result, this portion of the profit-sharing plan essentially imply that the Company, despite accounting costs that arise, is not foregoing any amount it otherwise would have had available, with the exception of the additional social security costs that this profit-sharing entails for the Company.

No payments have been made as part of the program. No current employees of the Company are covered by the program.

### Warrant Program 2017/2020

The annual general meeting on 24 May 2017 resolved on a LTI program (Warrant Program 2017/2020) for all of the Company employees, according to the following terms. A maximum of 3,216,836 warrants will be issued. Each warrant entitles the holder to subscribe for one (1) share of series B in the Company.

Subscription of shares by virtue of the warrants may be effected during the period 30 June 2020 – 31 August 2020. The subscription price per share will correspond to 250 per cent of the volume weighted mean value according to Nasdaq Stockholm's official price list for shares of series B in the Company during the ten (10) trading days immediately following the annual general meeting 2017.

The warrants were allocated as follows: to the CEO, 1,608,418; to other executive management, 402,105 each; and to other employees, 107,228 each. 3,136,416 warrants were subscribed in total and 80,420 warrants were reserved for new recruitments but were never subscribed.

### Incentive Program STI 2019

The board of directors decided on a STI Program (STI 2019) for executive management based on a number of specific corporate goals established by the board for 2019. The goals are designed to promote Karolinska Development's long-term value appreciation. The remuneration is dependent on whether one or more goals are met and has a fixed cap corresponding to six months' base salary for each participant.

### Notice period and severance pay

The CEO's employment contract includes a period of notice of twelve months for the Company and six months for the CEO. Other executive management have employment contracts with a notice period of six months for the employee and six months or the time that follows from the applicable legislation for the Company.

### Pension

Karolinska Development has defined contribution pension plans. Payment to these plans are made on an ongoing basis according to the rules of each plan. In defined contribution pension plans, the Company pays fixed fees to a separate legal entity. When the fee is paid, the Company has no further obligations.

The Company holds two endowment insurance policies for two former CEOs of Karolinska Development. The total amount allocated in endowment insurance amounted to SEK 2.5 million as of March 31, 2019. Otherwise, at the time of this Prospectus, the Company does not have any appropriations for pension or similar benefits for payment after termination of employment.

## Share capital and ownership structure

### Share capital and ownership structure

As of the date of the Prospectus, Karolinska Development's share capital amounts to SEK 644,187.37, divided into 1,503,098 shares of series A and 62,915,639 shares of series B. The quota value is SEK 0.01. Full payment has been made for all the shares. According to the articles of association<sup>1)</sup>, the share capital shall be not less than SEK 625,000 and not more than SEK 2,500,000. The number of shares in the Company shall be not less than 62,500,000 and not more than 250,000,000. Shares of series A carry ten (10) votes and shares of series B carry one (1) vote at general meetings. Shares of each series may be issued up to an amount equal to the entire share capital. All shares have equal rights to the Company's assets upon liquidation and equal rights to dividends.

Provided that the Offer is fully subscribed for, Karolinska Development's share capital will amount to SEK 1,888,906.72. This imply that the convertibles, including accrued interest as of 30 June 2019, may at most be set-off into 124,471,935 shares of series B, which would correspond to an increase of the share capital of SEK 1,244,719.35. This would entail an ownership dilution of approximately 65.9 per cent. The voting dilution would approximately be 61.5 per cent.

Karolinska Development's shares of series A have ISIN-code SE0002190850 and the shares of series B have ISIN-code SE0002190926. The shares are denominated in SEK. The Company's shares have been issued in accordance with Swedish law and the rights of the shareholders may only be amended in accordance with the Swedish Companies Act (Sw. aktiebolagslagen).

The Company's shares are registered with Euroclear, a central securities depository and clearing organisation in accordance with the Central Securities Depositories and Financial Instruments Accounts Act (1998:1479). The address of Euroclear is Box 191. 101 23 Stockholm.

The Company's shares are not subject to any restrictions on transferability, nor are they subject to any offer made pursuant to a mandatory takeover bid, squeeze out or sell out rules. No public takeover offer have been made in respect of the Company since the Company was formed.

### Share capital development

The changes in Karolinska Development's share capital and number of shares during the last five years are stated in the chart below. At the beginning of the financial year 2014, the Company had a share capital of SEK 24,265,708.50 divided into a total of 48,531,417 shares, of which 1,503,098 were shares of series A and 47,028,319 were shares of series B. On 30 June 2019, Karolinska Development had a share capital of 644,187.37 divided into a total of 64,418,737 shares, of which 1,503,098 were shares of series A and 62,915,639 were shares of series B.

1) The articles of association is expected to be registered with the Swedish Companies Registration Office on 29 July 2019

### Changes in share capital

		Change in		Change in				
		number of	Total number	number of	Total number			
		shares of	of shares of	shares of	of shares	Change in	Total	Quota
Year	Change	series A	series A	series B	of series B	share capital	share capital	value
2014	Issue of new shares	_	1,503,098	4,853,141	51,881,460	2,426,570.50	26,692,279.00	0.50
2015	Issue of warrants	_	1,503,098	65,082	51,946,542	32,541.00	26,724,820.00	0.50
2016	Issue of warrants1)	_	1,503,098	15,358	51,961,900	7,679.00	26,732,499.00	0.50
2017	Set-off issue <sup>2)</sup>	_	1,503,098	10,871,698	62,833,598	5,435,849.00	32,168,348.00	0.50
2017	Reduction <sup>3)</sup>	_	1,503,098	_	62,833,598	-31,524,981.04	643,366.96	0.01
2017	Conversion <sup>4)</sup>	_	1,503,098	564	62,834,162	5.64	643,372.60	0.01
2017	Issue of warrants <sup>5)</sup>	_	1,503,098	23,840	62,858,002	238.40	643,611.00	0.01
2017	Conversion <sup>6)</sup>	_	1,503,098	106	62,858,108	1.06	643,612.06	0.01
2018	Issue of warrants7)	-	1,503,098	57,531	62,915,639	575.31	644,187.37	0.01
2019	Directed share issue <sup>8)</sup>	_	1,503,098	124,471,935	187,387,574	1,244,719.35	1,888,906.72	0.01

- 1) Subscription of shares by exercise of warrants issued in incentive program (PSP 2013) resolved on the annual general meeting 2013. The subscription price was SEK 0.50 per share.
- 2) Set-off issue directed to the Company's convertible holders. The subscription price was SEK 6.17 per share.
- 3) Reduction without cancellation of shares to transfer to non-restricted equity.
- 4) Conversion of part of convertible loan. The subscription price was SEK 6.17 per share.
- 5) Subscription of shares by exercise of warrants issued in incentive program (PSP 2014) resolved on the annual general meeting 2014. The subscription price was SEK 0.01 per share.
- 6) Conversion of part of convertible loan. The subscription price was SEK 6.17 per share.
- 7) Subscription of shares by exercise of warrants issued in incentive program (PSP 2015) resolved on the annual general meeting 2015. The subscription price was SEK 0.01 per share.
- 8) Requires full subscription in the Directed share issue.

### **Convertibles**

On 2 January 2015, the Company issued convertibles with a nominal value of SEK 386,859,000 with a nominal interest of 8 per cent. The nominal value was reduced by SEK 57,601,145.19 to SEK 329,257,854.81 after a set-off issue in March 2017. The convertible mature on 31 December 2019 and the nominal value, including accrued interest, will amount to SEK 483,787,811 (given the accrued interest is interest-bearing). The convertibles could until 30 June 2019 be converted into shares upon request of the convertible holder to a price of SEK 22 per share of series B.

## Ownership dilution effects of outstanding incentive programs

Karolinska Development has incentive programs for the Company's executive management and other employees, see section "Corporate governance – Incentive programs for executive management and other employees". If all warrants issued in this incentive program are utilised, the number of shares of series B in the Company will increase from 64,418,737 shares to 67,555,153 shares. The dilution effect at full utilisation of the warrants amounts to approximately 4.64 per cent of the Company's outstanding shares and approximately 3.87 per cent of the votes in the Company.<sup>1)</sup>

### **Authorisation**

The annual general meeting on 28 June 2019 resolved on authorising the board of directors, for the period until the next annual general meeting to resolve, on one or more occasions, with or without deviation from the shareholders' preferential rights, and

for payment in cash, by set-off or in kind, to issue new shares of series B up to a number that, at the time of the first resolution under this authorisation, corresponds to twenty (20) per cent of the total share capital; provided however that any such issue must not result in the Company's share capital exceeding the Company's maximum allowed share capital as set out in the articles of association. Sino Biopharma made a request that the annual general meeting 2019 should request that the board of directors strive to limit the size of the authorization so that, in case where they intend to issue shares corresponding to more than 10 per cent of the total share capital, such issue should only be made to settle any remaining convertible debt. The board of directors noted the request.

### The Company's holding of own shares

As of the date of the Prospectus, the Company holds 244,285 of its own shares of series B, with a total nominal value of SEK 2,442.85 and a book value of SEK 4,726,904 (booked against equity).

## Ownership structure prior to and following the Directed share issue

As of the 31 March 2019, Karolinska Development has approximately 3,800 shareholders. The largest shareholder was Karolinska Institutet Holding AB with approximately 5.6 per cent of the shares and approximately 22.0 per cent of the votes in the Company. The table below shows the Company's ownership structure, i.e. holdings of the largest shareholders and convertible holders in the Company as of 31 March 2019 and directly after execution of the Offer.

<sup>1)</sup> Calculated as per the date of the Prospectus.

### **Ownership structure**

		Shares			Convertible loan
Shareholder	Shares of series A	Shares of series B	Capital %	Votes %	Amount (SEK) <sup>3)</sup>
Karolinska Institutet Holding AB	1,503,098	2,126,902	5.64 %	22.01 %	0
Tredje AP-Fonden	0	6,371,600	9.89 %	8.17 %	0
Sino Biopharmaceutical Limited <sup>1)</sup>	0	4,853,141	7.53 %	6.23 %	272,858,294.112)
Östersjöstiftelsen	0	3,889,166	6.04 %	4.99 %	0
Costal Investment Management LLC	0	3,470,466	5.39 %	4.45 %	0
OTK Holding A/S	0	2,300,000	3.57 %	2.95 %	0
Ribbskottet AB	0	1,700,000	2.64 %	2.18 %	0
Stift För Främjande&Utveckling	0	1,397,354	2.17 %	1.79 %	3,290,768.67
Försäkringsaktiebolaget Avanza Pension	0	1,196,955	1.86 %	1.54 %	0
Friheden Invest A/S	0	1,000,000	1.55 %	1.28 %	0
Total ten largest shareholders	1,503,098	28,305,584	46.27 %	55.60 %	276,149,062.78
Other shareholders	0	34,365,770	53.35 %	44.09 %	Unknown
The Company's holding of own shares	0	244,285	0.38 %	0.31 %	0
Total	1,503,098	62,915,639	100.00 %	100.00 %	Unknown

<sup>1)</sup> Includes convertibles held by Sino Biopharmaceutical Limited's subsidiary Chia Tai Resources.

<sup>2)</sup> Sino Biopharmaceutical Limited can set-off a maximum number of convertibles up to a voting share of 49.00 per cent and a capital share of 52.5 per cent in the Company, which corresponds to an amount of SEK 249,530,430.80 excluding interest. Sino Biopharmaceutical Limited has, under certain conditions, undertaken to sell its remaining part of its convertibles to a third party to be utilised by subscribing for shares of series B during the application period in the Directed share issue but no later than 30 September 2019, through payment by set-off of the convertibles.

<sup>3)</sup> Refers to the nominal value excluding interest.

### Shareholder agreements, etc

As far as the board of directors of Karolinska Development is aware, there are no shareholder agreements or similar agreements between the shareholders of Karolinska Development intended to establish joint influence over the Company, or which may result in change of control of the Company.

### Restrictions on the sale of the holdings of the Company's shares of series A

The shares in Karolinska Development are freely transferable. However, according to an undertaking dated 4 December 2007, KIHAB has undertaken in relation to all shareholders in Karolinska Development not to sell any shares of series A in Karolinska Development, with the exception of sales within the Karolinska Institutet sphere. To the extent such permitted transfer takes place, KIHAB has undertaken to ensure that the acquirer makes a commitment corresponding to KIHAB's commitment.

The restrictions regarding sale do not apply to shares of series B (this includes shares of series B that derive from conversion of shares of series A). In addition to this, a sale of shares of series A in connection with an offer for all shares in Karolinska Development is free from restrictions provided that the offeror becomes the owner of more than 90 per cent of the Company's share.

### Articles of association

### Karolinska Development AB (publ) (CIN 556707-5048)

Adopted at the general meeting on 28 June 2019.1)

### 1. Name

The company's name is Karolinska Development AB. The company is a public company.

### 2. Registered office

The company's registered office shall be situated in the municipality of Solna, County of Stockholm, Sweden.

### 3. Object of the company's business

The objects of the Company's business are to provide administration services within finance and accounting, legal, management and human recourses; to provide advice within medical development, clinical trial, regulatory and patents; to own and manage shares and other securities within the area of medicine, biotechnology and pharmaceuticals; as well as other activities compatible therewith.

### 4. Share capital and shares

The company's share capital shall be not less than SEK 625,000 and not more than SEK 2,500,000. The company shall have not less than 62,500,000 shares and not more than 250,000,000 shares.

Two classes of shares may be issued, class A and class B. Each share of class A shall carry ten (10) votes. Each share of class B shall carry one (1) vote. Shares of either class may be issued up to an amount corresponding to the entire share capital.

If the company resolves to issue new shares of two classes, class A and class B, through a cash issue or an issue with payment by set-off, owners of shares of class A and class B shall enjoy preferential rights to subscribe for new shares of the same class pro rata to the number of shares previously held by them (primary preferential right). Shares which are not subscribed for pursuant to the primary preferential rights shall be offered to all shareholders for subscription (subsidiary preferential right). If the shares thus offered are not sufficient for the subscription pursuant to the subsidiary preferential rights, the shares shall be allocated between the subscribers pro rata to the number of shares previously held and, to the extent such allocation cannot be effected, by the drawing of lots.

If the company resolves only to issue shares of one class through a cash issue or an issue with payment by set-off, all shareholders shall, irrespective of share class, have preferential rights to subscribe for new shares pro rata to the number of shares previously held by them.

If the company resolves to issue warrants or convertibles through a cash issue or an issue with payment by set-off, the shareholders shall have preferential rights to subscribe for warrants as if the issue applied to the shares that may be subscribed for pursuant to the right of option and preferential rights to subscribe for convertibles as if the issue applied to the shares that the convertibles may be converted to, respectively.

The above shall not limit the right to resolve upon a cash issue or an issue with payment by set-off with deviation from the shareholders' preferential rights.

In the event of a bonus issue, new shares of each class shall be issued pro rata to the number of shares of the same class previously issued. In this connection, the owners of existing shares of a certain class shall have preferential rights to new shares of the same class. This shall not restrict the possibility of issuing new shares of a new class by means of a bonus issue, following the required amendment to the articles of association.

### 5. Conversion clause

One share of class A may upon request of the owner of such share be converted into one share of class B. The request for conversion shall be made in writing to the company, whereby the number of shares to which the request refers shall be stated. The conversion shall thereafter without delay be reported to the Swedish Companies Registration Office for registration and will be deemed to have been effected as soon as the registration is completed and it has been noted in the central securities depository register.

### 6. Euroclear company

The company's shares shall be registered in a securities register in accordance with the Securities Depositories and Financial Instruments Accounts Act (1998:1479).

<sup>1)</sup> The articles of association is expected to be registered with the Swedish Companies Registration Office on 29 July 2019.

### 7. Financial year

The company's financial year shall be the calendar year.

### 8. Board of directors

The board of directors elected by the shareholders' meeting shall consist of not less than three (3) and not more than nine (9) directors.

### 9. Auditor

The company shall have not less than one (1) and not more than two (2) auditors and not more than two (2) deputy auditors. As auditor and, when applicable, deputy auditor, shall an authorised public accountant or a registered public accounting firm be elected.

The board of directors may appoint one or several special auditors to review merger plans or division plans, statements by the board in connection with a reduction of the share capital, or in connection with transfers of own shares or issues of shares, warrants or convertibles with provisions regarding payment in kind, with a right to set-off or otherwise on conditions. Such special auditor shall be an authorized public accountant or a registered accounting firm.

### 10. Notice of shareholders' meeting

Notices of shareholders' meetings shall be published in Postoch Inrikes Tidningar (the Swedish Official Gazette) and at the company's website. At the time of the notice, information that the notice has taken place shall be published in the daily newspaper Svenska Dagbladet.

# 11. Shareholders' right to participate in shareholders' meetings

Shareholders who want to participate in shareholders' meetings, shall be listed in print-outs or other representation of the entire shareholders' register concerning the circumstances five (5) business days prior to the meeting, as well as notify the company the day which is specified in the notice to the meeting. The last-mentioned day may not be a Sunday, other public holiday, Saturday, Midsummer Eve, Christmas Eve or New Year's Eve and not fall earlier than the fifth business days prior to the meeting.

Shareholders or representatives may bring up to two counsels at shareholders' meetings only if the shareholder is giving notice of the number of counsels to the company in accordance with the previous paragraph.

# 12. The attendance of third parties at the shareholders' meeting

The board of directors may decide that persons, who are not shareholders in the company, shall, on the terms and conditions determined by the board, have the right to attend or in another way observe the negotiations at the shareholders' meeting.

### 13. Collection of proxies

The board of directors may collect proxies on the expense of the company in accordance with the procedure described in Chapter 7, Section 4, second paragraph of the Swedish Companies Act.

### 14. Place for shareholders' meeting

Shareholders' meeting may be held in Stockholm or Solna, Sweden.

### 15. Items at the annual shareholders' meetings

The following business shall be addressed at annual share-holders' meetings:

- 1. election of a chairman of the meeting;
- 2. preparation and approval of the voting list;
- 3. approval of the agenda;
- 4. election of one or two persons who shall approve the minutes of the meeting;
- 5. determination of whether the meeting was duly convened;
- submission of the annual report and the auditors' report and, where applicable, the consolidated financial statements and the auditors' report for the group;
- resolutions regarding the adoption of the income statement and the balance sheet and, when applicable, the consolidated income statement and the consolidated balance sheet;
- 8. resolutions regarding allocation of the company's profits or losses in accordance with the adopted balance sheet;
- resolutions regarding discharge of the directors and the managing director from liability;
- 10. determination of the number of directors and, where applicable, the number of auditors and deputy auditors;
- 11. determination of fees for the directors and the auditors;
- 12. election of directors and, where applicable, auditors and deputy auditors;
- 13. nomination of members of the nomination committee;
- 14. other matters, which are set out in the Swedish Companies Act or the company's articles of association.

## Legal issues and supplementary information

### **Information about Karolinska Development**

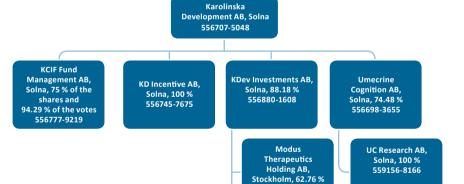
The legal name of the Company is Karolinska Development AB. The Company is a Swedish public limited liability company. Karolinska Development was established in Sweden on 23 March 2006 and was registered in the companies register on 7 July 2006, with the corporate registration number 556707-5048. The registered office of Karolinska Development is the municipality of Solna, Stockholm County. The object of Karolinska Development's business is set out in section 3 of the articles of association. The Company is a Swedish public limited liability company that operates its business in accordance with the laws of Sweden.

### Accounting and legal group structure

Karolinska Development currently has nine directly or indirectly owned portfolio companies, whereof two are subsidiaries. Further, Karolinska Development has additionally five directly or indirectly owned subsidiaries. Out of the nine portfolio companies, no company is deemed to be a subsidiary for accounting purposes and is instead considered as associated companies, joint ventures or other companies.

Karolinska Development is an investment entity<sup>1)</sup> according to IFRS 10 "Consolidated Financial Statements". Pursuant to the rules for investment entities, Karolinska Development does not consolidate its subsidiaries. Separate financial reports are prepared for Karolinska Development and its subsidiaries (the investment entity) where subsidiaries, joint ventures, associated companies and other financial investments are measured at fair value in the balance sheet with changes in value in profit or loss in accordance with IFRS 9 "Financial Instruments".

Portfolio companies in which Karolinska Development has a controlling interest are considered as subsidiaries of the investment entity. Portfolio companies in which Karolinska Development either (i) holds more than a 50 per cent interest, but where the influence is limited due to applicable shareholders' agreements, or (ii) holds less than 50 per cent but more than 20 per cent, are normally considered as associated companies or joint ventures.



556851-9523

Modus Therapeutics AB, Stockholm, 100 %

Legal group structure2)

<sup>1)</sup> It should be noted that Karolinska Development does not constitute an investment entity in accordance with the definition in the Act on Income Tax (Sw: Inkomstskattelag 1991:1229), Chapter 39 Section 15. Karolinska Development is thus not treated as an investment entity for tax purposes.

<sup>2)</sup> The illustration is simplified and the ownership figures in the illustration represent Karolinska Development's total ownership in the relevant company, as of the date of the Prospectus, whether direct or indirect, and include any ownership due to the Company's interest in KDev investments and/or any other Company.

### **Material agreements**

License agreement regarding the use of "Karolinska" Pursuant to the license agreement the Company has entered into with Karolinska Institutet, Karolinska Development has a non-exclusive and non-transferrable right to use "Karolinska" in its legal name. The license is valid until further notice with five years' notice. The license may however be terminated with immediate effect upon material breach by Karolinska Development of any of the conditions set forth in the license agreement, provided such breach has not been amended by Karolinska Development within thirty days from receiving notice thereof from Karolinska Institutet. The license may also be terminated with immediate effect if Karolinska Development becomes insolvent, suspends its payment, offers its creditors a composition agreement, files an application for company reorganisation or becomes subject to bankruptcy or receivership proceedings. The license may also be terminated with immediate effect if there is a change of control of Karolinska Development resulting in a person or entity other than Karolinska Institutet (or any other entity within the Karolinska Intitutet sphere) directly or indirectly controls shares representing more than 50 per cent of the votes in Karolinska Development.

### Agreements regarding KDev Investments

On 21 December 2012, Karolinska Development entered into an agreement with Rosetta Capital regarding the sale of a minority share of Karolinska Development's holdings in 13 of the Company's portfolio companies (the "Rosetta Transaction"). The Rosetta Transaction was completed during the first quarter of 2013 at which time Karolinska Development transferred the holdings in the 13 concerned portfolio companies to a new investment company; KDev Investments. Karolinska Development is the majority owner and holds 88.18 per cent of the shares and Rosetta Capital is the minority owner of KDev Investments. The shareholders have entered into a shareholder's agreement regarding the management of KDev Investments AB, and exercises joint control over the Company. The KDev Investments AB group is considered a joint venture for accounting purposes.

The KDev Investments portfolio today comprises six companies. Four of the companies develop pharmaceuticals and have projects in clinical trials:, Aprea Therapeutics AB, active in oncology; Asarina Pharma AB, developing innovative and targeted products to treat women with serious symptoms associated with the menstrual cycle; Dilafor AB, developing treatments in the area of women's health; Modus Therapeutics Holding AB, which owns all the shares in Modus Therapeutics AB, and develops sevuparin. Biosergen AS, conducts preclinical development of a development program for systemic fungal infections. Promimic AB, conducts development and sale of technical products within nano coating of implant.

Repayment of shareholder loans and invested funds, and on dividend distribution, from KDEV Investments AB shall be done as follows. Initially, both parties shall receive repayment of shareholder loans related to operational expenses. Further, Rosetta Capital shall receive an amount corresponding to SEK 43 million covering investments made in the portfolio companies. Thereafter, distribution of dividend shall be allocated to Rosetta Capital as holder of preference shares in KDEV Investments, in accordance with the preferential dividend distribution rights under i–iii below. The first SEK 29 million of the dividend distribution to Rosetta Capital shall be used to pay Karolinska Development for deferred purchase price related to the purchase of shares in KDev Investments AB.

- (i) 100 per cent of total future returns up to SEK 220 million;
- (ii) 30 per cent of total future returns between SEK 220 million and SEK 880 million; and
- (iii) 18.33 per cent of total future returns between SEK 880 million and SEK 1,320 million;

### Deal flow agreement with KIAB and KIHAB

Several universities and colleges have established organisations focusing on screening, developing and financing of the innovations provided by researchers, in order to support the researchers' work. KIAB is a company with such an organisation, wholly owned by Karolinska Institutet through KIHAB. In December 2015, Karolinska Development, KIHAB and KIAB signed a new non-exclusive agreement to ensure Karolinska Development's access to research projects through KIAB's flow of innovations from cutting-edge research at Karolinska Institutet and other academic institutions across the Nordic region including, amongst other, plans to establish a new incubator fund focused on identifying potentially valuable new medical innovations at Karolinska Institutet at an early (pre-seed) stage. This agreement has replaced the previous deal flow agreement from 2008.

## Co-operation with the European Investment Fund (EIF)

In November 2009 Karolinska Development and EIF established a co-operation that EIF invests alongside Karolinska Development in some portfolio companies with the proportions of 27:73, provided that certain specified investment criteria are met.

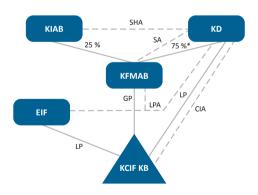
EIF normally invests in traditional fund structures for risk capital investments. Such funds typically have a limited term, are usually required to immediately distribute any proceeds to the fund investors rather than to reinvest in other portfolio companies and are, typically, controlled by the investment managers of such funds. In order to structurally correspond, as closely as possible, to the traditional fund structures and thereby fulfill

the conditions provided by EIF in order to initiate the cooperation, the co-investments are carried out through KCIF. The ownership and operations of KCIF are governed by a limited partnership agreement.

Investors and limited partners in KCIF are EIF, having committed to contribute EUR 12.9 million, and Karolinska Development, having committed to contribute EUR 4.5 million. The commitments are drawn down continuously by KCIF on an as-needed basis, to cover investments as well as KCIF's payment of an annual management fee to KCIF Fund Management AB ("KFMAB"), which is the general partner and manager of KCIF.

According to the agreement KFMAB is owned to 37.5 per cent by Karolinska Development, 25 per cent by KIAB and to 37.5 per cent by key executives employed by Karolinska Development. The key executives hold shares with increased voting power and jointly control a majority of the votes in KFMAB. For the time being all of these shares are held by Karolinska Development due to decrease of the number of key executives. Karolinska Development, KIAB and the key executives have entered into a shareholders' agreement relating to KFMAB. The shareholders' agreement includes, inter alia, a number of provisions aiming to protect the voting minority, i.e. Karolinska Development and KIAB.

Set forth below is a chart illustrating the ownership in the KCIF structure and the agreements relating to the co-operation with EIF.



\* Ownership according to agreement, currently KIAB holds 25 % of the shares and 5.71 % of the votes and Karolinska Development holds 75 % of the shares and 94.29 % of the votes.

KD = Karolinska Development SHA = Shareholders' agreement SA = Service agreement

GP = General partner

LPA = Limited partnership agreement CIA = Co-investment agreement LP = Limited partner

KFMAB is entitled to an annual management fee of 1 per cent of the total amount committed to KCIF. KFMAB manages the operations of KCIF through the purchase of services from Karolinska Development under a service agreement. The service agreement entitles Karolinska Development to an annual service fee corresponding to the amount remaining of the management fee after deduction of KFMAB's other costs and a buffer for future costs in KFMAB.

Any dividend from KCIF will, somewhat simplified, be distributed as follows. First, EIF and Karolinska Development will receive an amount equal to their respective actual drawn down to KCIF plus an annual interest rate of six per cent. Thereafter that Karolinska Development shall receive an amount corresponding to 20 per cent of remaining profit. The remaining funds will be allocated with 80 per cent to EIF and Karolinska Development in proportion to their respective part of the total commitment to KCIF. The remaining 20 per cent will be distributed to Karolinska Development on the condition that 25 per cent of such amount shall be redistributed to KIAB and at least 37.5 per cent of such amount shall be redistributed to former key executives through Karolinska Development's profit-sharing program.

KCIF has a lifespan of twelve years beginning in November 2009, but since 2013, only follow-on investments can be made by KCIF.

Subject to certain conditions, EIF is entitled to terminate the cooperation and call for liquidation of KCIF in the event of a change of control in Karolinska Development or KFMAB, or if key managers leave Karolinska Development and are not replaced by persons acceptable to EIF.

Investment and shareholders agreements regarding portfolio companies

Karolinska Development enters into investment and shareholder agreements with other shareholders in Karolinska Development's portfolio companies. These agreements usually regulate governance, investments and issues related to divestment of the portfolio company and its business. The exact regulation varies depending on Karolinska Development's ownership and the ownership structure in general.

### **Intellectual property rights**

Karolinska Development does not itself conduct any research or development operations and does not own any intellectual property rights related to such activities. The brand "Karolinska" is licensed from Karolinska Institutet, as set out in the section "Legal issues and supplementary information - Material Agreements – License agreement to use "Karolinska" above. It should however be noted that Karolinska Development's portfolio companies conduct extensive research and development operations and control a large number of intellectual property rights. For additional information, please see the section, "Karolinska Development's Portfolio".

#### Insurance

Karolinska Development holds a business insurance with IF, a business travel insurance with Europeiska ERV and a directors and officers liability insurance with AIG and Bridge Underwriting. Karolinska Development is of the opinion that, the insurances are adequate for the business' operations and are entered into on market terms.

### **Environmental**

Karolinska Development's operations does not entail any specific environmental risks and is not subject to any specific environmental approvals or decisions from governmental authorities. The board of directors of Karolinska Development considers that Karolinska Development is, in all material respects, in compliance with applicable health and safety laws and regulations and provides a safe and environmentally sound workplace for its employees.

The portfolio companies' operations may be subject to environmental regulation due to the chemical ingredients of medicinal products and the production process. For more information, see section "Risk Factors".

### **Legal proceedings**

Karolinska Development is currently not involved in any legal or arbitrational proceedings (including any such proceedings which are pending or the issuer is aware of may arise) that could have a significant effect on Karolinska Development's financial position or profitability. Nor has Karolinska Development been involved in any such proceedings during the last 12 months.

### **Regulatory matters**

Karolinska Development's operations is not subject to any approvals or decisions from governmental or regulatory authorities. The portfolio companies are, however, obliged to obtain certain regulatory approvals in order to conduct clinical trials as well as to market and sell their products. For more information, see section "Risk factors".

### **Transactions with related parties**

Affiliates

The Investment Entity has a related party relationship with its subsidiaries, joint ventures, associated companies and the companies in the Karolinska Institutet Holding AB Group.

Karolinska Development has a non-exclusive deal flow agreement with KIHAB and KIAB, a wholly owned subsidiary of

KIHAB, including inter alia, a new incubator fund with a focus on identifying potentially valuable new medical innovations at Karolinska Institutet at an early stage.

Furthermore, Karolinska Development has rendered services to the portfolio companies in the areas of management, communication, finance and administration, including legal and analytical operations. Fees for services rendered have been market hased

In November 2009 Karolinska Development and the EIF entered into an agreement whereby EIF invests in parallel with Karolinska Development in portfolio companies. The investments are made through KCIF. KCIF invests in parallel with Karolinska Development at a ratio of 27:73 (KCIF: Karolinska Development) on the condition that certain stated investment criterias are fulfilled. The investors and limited partners in KCIF are EIF, which has committed EUR 12.9 million, and Karolinska Development, which has committed EUR 4.5 million. The amounts are paid to KCIF as needed to make investments, to cover KCIF's expenses, and to pay an annual management fee to KFMAB, a limited partner responsible for the operation of KCIF. The management fee for the period January 2019 until the date of this Prospectus amounted to SEK 305 thousand.

KFMAB is currently 75 per cent owned by Karolinska Development and 25 per cent by KIAB. The parties have entered into a shareholder agreement regarding KFMAB.

### Compensation and profit distribution

KFMAB is entitled to an annual management fee corresponding to 2.5 per cent of the capital committed to KCIF during the investment period and 1 per cent of invested capital thereafter. In practice, KFMAB fulfills its obligations to manage the operations of KCIF by purchasing services from Karolinska Development according to a service agreement. The service agreement entitles Karolinska Development to annual compensation equivalent to what remains of the management fee after deducting KFMAB's other expenses and a certain buffer for future expenses in KFMAB. Any dividends from KCIF will essentially be distributed as follows. First, EIF and Karolinska Development will receive an amount corresponding to the portion of the committed capital paid to KCIF at the time of the dividend payment and annual interest of 6 per cent on this amount. Secondly, 80 per cent of the remaining funds will be distributed to EIF and Karolinska Development in proportion to their capital investment. The remaining 20 per cent will be distributed to Karolinska Development on the condition that 25 per cent of the amount is redistributed to KIAB and at least 37.5 per cent is redistributed to the investment managers through Karolinska Development's profit-sharing program (which comprises only former employees).

Through its ownership and managerial role, Karolinska Development has concluded that it controls KFMAB and therefore considers KFMAB to be a subsidiary. The indirect ownership in the portfolio companies through KCIF holding has been included in Karolinska Development's share of the portfolio companies, Note 33 for annual report 2018 and Note 34 for annual report 2017 and 2016.

Transactions during the period from 1 January until the date of this prospectus is shown below.

For information regarding the Company's transactions with closely related parties during the past three year, please see note 19 and note 45 in the annual report for 2016, note 19 and note 44 in the annual report for 2017 and note 19 and note 45 in the annual report for 2018. Karolinska Development make the assessment that the Company's related party transactions is made on market terms and in accordance with Swedish law.

Investment Entity 1 Jan 2019 – 5 Ju			ul 2019	
SEK	Sale of services	Interest income	Purchase of services	
Associate relationship				
Owner: Karolinska Institutet				
Holding koncernen	-	-	474	
(of wich rental cost)	_	_	(357)	
Portfolio companies	1,832	574	0	
Total	1,832	574	474	

	5 Jul 2019		
KSEK	Liability to associates	Receivable from associate	
Associate relationship			
Karolinska Institutet Holding Group	0	-	
Portfolio companies	0	1,344	
Total	0	1,344	

### **Subscription undertakings**

The Company has received written conditional subscription undertakings from the Company's convertible holders to a total amount of approximately SEK 357.5 million corresponding to approximately 76.79 per cent of the Directed share issue. According to the subscription undertakings, the subscribed shares shall be paid by set-off of the undersigned's convertibles. No compensation is paid for these subscription undertakings.

Sino Biopharma's undertaking is conditional upon (i) approval by the board of directors of Sino Biopharma prior to the annual general meeting in Karolinska Development, which was fulfilled in June 2019, (ii) that convertible holders representing at least 95 per cent of the convertible loan, including Sino Biopharma's

holdings, have committed to set-off their convertibles in the Directed share issue, (iii) that the Swedish Securities Council (Sw: Aktiemarknadsnämnden) grants an exemption from the mandatory bid obligation as governed by the Swedish Takeover Rules, which was granted on June 3, 2019. Further, Sino Biopharma's undertaking is limited to the company's holdings not exceeding 49 per cent of the total number of votes in the Company after the Directed share issue. If the remaining amount of the convertible loan held by Sino Biopharma is not fully repaid by set-off in the Directed share issue, Sino Biopharma will sell the remaining part of the convertible loan to a third party unrelated to Sino Biopharma, in duly time in order for the party acquiring the remaining part of the loan to be able to utilise the convertible note by subscribing for shares of series B during the application period in the Directed share issue, but in any event no later than 30 September 2019, through payment by set-off of the remaining convertibles. In the event of the subscription price in the share issue resolved by the board of directors is higher than the market price of the shares of series B on Nasdaq Stockholm, the remaining part of the convertible loan shall be set-off through a directed issue on a subscription price calculated as the VWAP, fifteen (15) trading days ending two (2) days prior to when the set-off takes place, with three (3) per cent discount on such calculated VWAP.

The subscription undertakings are not secured by pledge, escrow or other similar arrangements. Hence there is a risk that one or several parties will not, fully or partly, fulfill their commitment. All subscription undertakings were made in connection to the board of director's resolution of the Directed share issue during May - June 2019.

Name	Subscrip- tion under- taking (SEK)	% of the Directed share issue	Address
Sino Biopharma- ceutical Limited <sup>1)</sup>	352,801,493	75.8	Flat/Room 4109, Office Tower, Convention Plaza, 1 Harbour Road, Wanchai, Hong Kong.
Stift För Främjande & Utveckling <sup>1)</sup>	4,652,692	1.0	Humlegårdsgatan 11, 114 46 Stockholm

<sup>1)</sup> The subscription undertaking is conditional upon that convertible holders representing at least 95 per cent of the convertible loan have committed to set-off their convertibles in the Directed share issue.

### **Exemption from the mandatory bid obligation**

The Swedish Securities Council (Sw: Aktiemarknadsnämnden) has granted an exemption (AMN 2019:24) for Sino Biopharma from the mandatory bid obligation that otherwise could arise in connection with Sino Biopharma's participation in the Directed share issue.

### **Advisers' interests**

DNB Markets is financial adviser and Cirio Advokatbyrå AB is legal adviser to the Company in connection with the Directed share issue. DNB Markets receives a remuneration based on a pre-settled agreement for services rendered in connection with the Directed share issue. Cirio Advokatbyrå AB receives continuous compensation for services rendered. In addition to the above parties' interests in the Directed share issue being successful, DNB Markets and Cirio Advokatbyrå AB have no other economic or other interests in the Directed share issue. No conflict of interest is deemed to exist between the parties.

### Note from auditor

The auditor's report in the annual report for 2018 deviates from the standard wording. The auditor has made the following note under Section "Considerable uncertainty relating to the going concern assumption".

We want to draw attention to the board's information in the directors' report on page 30 and 34 and note 1 in the financial statement, which states that the cash equivalents as per December 31, 2018 is not sufficient to repay the outstanding credit facility and convertible loan which matures in November 2019 and December 2019. In the directors' report it is presented that the Company is in need of additional financing in the next 12 months in order to finance the repayment of the convertible loan and the outstanding credit facility. Should sufficient financing not be obtained, there is a risk that the requirement for adopting going concern is not met. The board of directors has taken steps to ensure the business's need for financing and is in negotiations with the Company's major convertible holder, including a proposal from the Company for a conversion of the convertible loan.

These conditions indicate that there is significant uncertainty that can lead to considerable doubt regarding the company's ability to continue its operations. We have not modified our opinion because of this.

### **Documents incorporated by reference**

Karolinska Development's interim report for the period January – March 2019, and Karolinska Development's annual reports for 2018, 2017 and 2016 represents part of this Prospectus and shall be read as part hereof. References are made as follows:

The interim report for the period January – March 2019;
 Financial development (pages 14–19), income statement (page 20), balance sheet and statement of changes in equity (page 21), statement of cash flow (page 22), and notes (pages 25–29),

- Annual report 2018; director's report (pages 26–36), income statement (page 37), balance sheet (page 38), statement of changes in equity (page 39), statement of cash flow (page 40) and notes (pages 45–73), and further auditor's report (pages 74–76),
- Annual report 2017; director's report (pages 26–38), income statement (page 40), balance sheet (page 41), statement of changes in equity (page 42), statement of cash flow (page 43) and notes (pages 48–85), and further auditor's report (pages 86–89).
- Annual report 2016; director's report (pages 26–36), income statement (page 38), balance sheet (page 39), statement of changes in equity (page 40), statement of cash flow (page 41) and notes (pages 46–79), and further auditor's report (pages 80–82).

The parts of each annual report or interim report which are not referred to contains information that exists in other parts of the Prospectus or information that is not considered to be deemed relevant for investors. The annual reports for 2018, 2017 and 2016 have been audited by the Company's auditor, and each auditor's report represents part of the annual reports. The interim report for the period January — March 2019 has not been subject to audit by the Company's auditor.

The documents are available on the Company's web page https://www.karolinskadevelopment.com/sv/rapporter-och-presentationer.

### **Documents available for inspection**

The following documents are available for review at Karolinska Development's head quarter, Tomtebodavägen 23 A, 171 65 Solna, telephone (+46) 8 524 860 70 (office hours).

- This Prospectus,
- Karolinska Development's articles of association,
- Karolinska Development's annual reports including auditor's report, and annual reports for all subsidiaries for the financial years 2018, 2017 and 2016 (including auditor's report), and further,
- Karolinska Development's interim report for the period January – March 2019.

The documents are also available on the Company's web page http://www.karolinskadevelopment.com.

### Tax issues in Sweden

### General information

The following is a summary of the Swedish tax consequences that may arise from the Offer. The Summary is based on existing legislation and is only designated as general information. The Summary covers certain Swedish tax considerations that may arise for private individuals and limited liability companies (Sw: aktiebolag) that are subject to unlimited tax liability in Sweden, unless otherwise specifically stated. The Summary does not purport to be a comprehensive description of all tax consequences that may be relevant in relation to the Offer. For instance, the Summary does not address the specific rules for (i) securities held by partnerships or held as current assets in business operations, (ii) tax-exempt capital gains and dividends (including non-deductibility for capital losses) in the corporate sector that may be applicable when shares are considered to be held for business purposes (Sw: näringsbetingade andelar) by the shareholder, (iii) the specific rules that could be applicable to holdings in companies that are, or have previously been, closely held companies or shares acquired on the basis of such holdings, (iv) shares held in an endowment insurance, or (v) shares or other equity-related securities that are held in an investment savings account (Sw: investeringssparkonto) and that are subject to special rules on standardised taxation.

Specific tax rules not described in the summary may apply for certain categories of shareholders, i.e. investment companies. The tax treatment of each holder of securities is partially dependent on the specific situation of each holder. Each holder should consult a local tax advisor regarding the tax effects arising for the holder due to the Offer, including the applicability and effect of foreign rules and tax treaties. The Company is not responsible for withholding tax.

### **Private individuals and estates**

Taxation of capital gains

For private individuals' tax resident in Sweden, sales of shares are taxed as capital income with a flat tax rate of 30 per cent.

Capital gains and losses are calculated as the difference between the sales price, less sales costs, and the acquisition cost (Sw: omkostnadsbeloppet). The acquisition cost consists of the acquisition price together with brokerage. The acquisition cost for all shares of the same class and type is added and calculated together using the average method (Sw: genomsnittsmetoden), thus the acquisition price for one share is the average acquisition price for all shares of the same class and type, based on actual acquisition prices and taking into account any changes in the holding. Paid subscribed shares (Sw. BTA) are not regarded as being of the same class and type as the existing shares in the Company until the resolution on the share issue

has been registered with the Swedish Companies Registration Office. For listed shares the Standard Method can also be used. According to this method the acquisition cost is calculated as 20 per cent of the sales price, less sales costs.

If the acquisition cost is higher than the sales price, a capital loss arises. Capital losses on listed shares and other securities taxed as shares (except shares in mutual funds or special funds containing only Swedish receivables (Sw: räntefonder) are fully deductible against taxable capital gains during the same year on shares and against taxable capital gains during the same year on listed shares and securities taxed as shares. A deduction for capital losses, not set off through the described method, is given in the capital income category with 70 per cent of the loss. If a deficit arises in the capital income category, a tax reduction is granted on income from employment, income from business as well as property tax and municipal property charges (Sw: kommunal fastighetsavgift). The tax reduction is granted with 30 per cent of the deficit up to SEK 100,000 and with 21 per cent of the residuary deficits. Any remaining loss cannot be carried forward to future income years.

### Dividends

Dividends on listed shares are taxed by 30 per cent. For individuals, a preliminary tax of 30 per cent is withheld on dividends. The preliminary tax is normally withheld by Euroclear or, in respect of nominee-registered shares, by the nominee.

### Swedish limited liability companies (Sw. aktiebolag)

Taxation of capital gains and dividends

Swedish limited liability companies are normally taxed for all income, including capital income, as business income with a tax rate of 21,4 per cent. Capital gain and/or loss is calculated as described above, section "Private individuals and estates". Capital losses on shares and other securities can only be set off against capital gains on shares and other securities taxed as shares. If the loss cannot be fully set off, the Company can, during the same income year, deduct the loss against capital gains from shares and other securities taxed as shares sold by another group company, provided that group relief is possible between the two companies. Capital losses can be carried forward to future income years and be set off against capital gains on sale of shares and other securities during future income years, without limitation in time.

### Set-off of convertible loan

For holders of convertibles in the Company changing its convertible debt into shares in a set-off issue and where the change is not made under the existing convertible terms, a taxable event is deemed to exist.

The sales price for the convertible offset by the Directed share issue equals the value of the shares received from the exchange. The acquisition cost of the shares received is equivalent to the value of the convertible bond at the exchange, i.e. no taxable capital gain will arise.

Accrued interest on the convertible bonds is taxed. For the holders who are individuals the interest income is taxed in the capital income category by 30 per cent.

### Shareholders with limited tax liability in Sweden

Subscription of shares is not taxable in Sweden.

Shareholders who have limited tax liability in Sweden and whose holdings are not attributable to a permanent establishment in Sweden, are normally not taxed in Sweden for capital gains upon sale of shares. Shareholders may however be taxed in their country of residence.

A private individual resident outside of Sweden may be subject to taxation in Sweden for capital gains on sales of participation rights (for example shares, subscription rights, convertible redemption rights and sales rights pertaining to shares and allotment in investment fund) if the individual during the year of disposal or at some point during the previous ten calendar years has been resident or lived permanently in Sweden. The rule also applies to estates of Swedes resident abroad. However, the taxation right may be limited through tax treaties between Sweden and other countries.

Swedish withholding tax is normally levied on dividends paid by a Swedish company to shareholders not resident in Sweden for tax purposes. The tax rate is 30 per cent. This tax rate is, however, generally reduced through tax treaties for the avoidance of double taxation. Deductions for withholding tax are normally made by Euroclear or, for nominee-registered shares, by the nominee. If a 30 per cent withholding is made on a payment to a shareholder entitled to a reduced rate or if too much withholding tax has otherwise been withheld, an application for a refund can be filed with the Swedish Tax Agency (Sw: *Skatteverket*) before the end of the fifth calendar year after the dividend.

### **Definitions**

**CP Group** Charoen Pokphand Group.

CAGR Measure of growth that provides the average annual growth rate over a certain time period.

**Deal flow agreement** Agreement between Karolinska Development, KIHAB and KIAB giving Karolinska Development

access to research projects through KIAB's flow of innovations from cutting-edge research at

Karolinska Institutet and other academic institutions across the Nordic region.

**DNB Markets** DNB Markets, a part of DNB Bank ASA, branch in Sweden.

The Company or Karolinska

Development

Karolinska Development AB, Corp. Reg. No. 556707-5048.

EIF European Investment Fund.

The Offer or the Directed

share issue

The offer to the Company's convertible holders (convertible 2015/2019) to subscribe for shares

of series B in Karolinska Development in accordance with the terms in this Prospectus.

**Euroclear** Euroclear Sweden AB.

**IFRS** International Financial Reporting Standards.

IPO Initial public offering.

Karolinska Institutet Karolinska Institutet, Corp. Reg. No. 202100-2973.

Karolinska Institutet is one of the world's leading medical universities and awards the Nobel Prize

in Physiology or Medicine.

**KDev Investments** KDev Investments AB, Corp. Reg. No. 556880-1608.

KIAB Karolinska Institutet Innovations AB, Corp. Reg. No. 556528-3909.

KIAB, which is owned (indirectly though KIHAB) by Karolinska Institutet, identifies projects with high commercial potential at an early stage by actively seeking new ideas from Karolinska Institutet and other Nordic universities. KIAB leads and also finances the project development in early phases, where the objective is to establish a licensing agreement or a start-up company.

KIHAB Karolinska Institutet Holding AB, Corp. Reg. No. 556525-6053.

KIHAB is owned by Karolinska Institutet. KIHAB is the parent company of a group of five wholly owned subsidiaries, including Karolinska Institutet Innovations AB (KIAB) and Karolinska Institutet

Science Park AB.

KCIF Co-Investment Fund KB.

KFMAB KCIF Fund Management AB.

**The Code** Swedish Code of Corporate Governance.

Nasdaq Stockholm The regulated market managed by Nasdaq Stockholm AB.

Portfolio companies Companies operating in life science and are wholly or partially owned by Karolinska

Development.

Net Portfolio Fair Value (after potential distribution to Rosetta Capital) The net aggregated dividend that Karolinska Development will receive after KDev Investments'

distribution of dividend to Rosetta Capital.

Total Portfolio Fair Value

The aggregated proceeds that would be received by Karolinska Development and KDev Investments if the shares in their portfolio companies were sold in an orderly transaction between market participants at the measurement date.

The Prospectus

This Prospectus.

**Rosetta Capital** 

Rosetta Capital IV LP.

SEK

Swedish krona.

Sino Biopharma

Sino Biopharmaceutical Limited, listed on Hong Kong Stock Exchange, is one of the leading pharmaceutical groups in China and a significant current shareholder in Karolinska Development. In 2018 Sino Biopharma's earnings amounted to RMB 20.9 billion (approximately SEK 28.9 billion) and the earnings after tax to RMB 10.7 billion (approximately SEK 14.8 billion). Sino Biopharma together with its subsidiaries have almost 22,000 employees.

Fair value

The NASDAQ Stockholm regulations for issuers require companies listed on NASDAQ Stockholm to apply the International Financial Reporting Standards, IFRS, in their consolidated financial statements. The application of the standards allows groups of an investment company nature to apply so-called fair value in the calculation of the carrying amount of certain assets. These calculations are made on the basis of established principles and are not included in the opening accounts of the Group's legal entity, nor do they affect cash flows.

Karolinska Development applies the accounting principles of fair value according to the International Private Equity and Venture Capital Valuation Guidelines and adheres to the guidance of IFRS 13 Fair Value Measurement. Based on the valuation criteria provided by these rules, an assessment is made of each company to determine a valuation method. This takes into account whether the companies have recently been financed or involved with a transaction that includes an independent third party. If there is no valuation available based on a similar transaction, risk adjusted net present value (rNPV) calculations are made of the portfolio companies whose projects are suitable for this type of calculation. In other cases, Karolinska Development's total investment is used as the best estimation of fair value. In one other case, the valuation at the time of the last capital contribution is used.

The part of the Fair Value that is related to the value of Karolinska Development's portfolio companies is named Portfolio Fair Value or Fair Value of the portfolio. The calculation of the Portfolio Fair Value is based on IFRS 13 standards of deciding and reporting fair value and the International Private Equity and Venture Capital Valuation Guidelines (IPEV Valuation Guidelines) decided by the IPEV board that represent the current best practice, on the valuation of private equity investments.

The Portfolio Fair Value is divided into Total Portfolio Fair Value and Net Portfolio Fair Value (after potential distribution to Rosetta Capital).

**VWAP** 

Volume Weighted Average Price.

## Glossary

Amino acids Amino acids are the chemical building blocks that can be combined in chains, or sequences, to form

proteins and peptides.

CNS Central Nervous System (CNS), including the brain and spinal cord.

Double-blind (study) A double-blind study is one in which both the subject and investigator are unaware of the assigned

treatment

Chemotherapy See Cytotoxics.

Cohort (in medical research) A group of individuals with defined characteristics who are followed for a period of time to examine

the effect of one or several exposures.

**Companion diagnostics** Diagnostic test used in combination with a therapeutic drug to determine its applicability to a

specific patient.

Complete remission (CR) Disappearance of all clinical evidence of disease in response to treatment.

Cytotoxics Pharmaceuticals that target fast growing cells, for example cancer cells. These compounds usually

work by halting the cell division process. The treatment with cytotoxics is referred to as chemo-

therapy

**Endometrios** Endometriosis is a disorder in which tissue that normally lines the inside of the uterus grows outside

the uterus, inducing chronic inflammation.

First in class Drugs that use a new, unique mechanism of action for treating a medical condition.

**GABA** system The brain's main inhibitory system. GABA, abbreviation of gamma-aminobutyric acid, is the major

inhibitory neurotransmitter in the central nervous system. GABA binds to various GABA-receptors.

Off-label Relates to prescription of a drug for a condition that the drug is not officially approved to treat.

The proportion of patients who respond to treatment. Overall Response Rate (ORR)

Orphan disease A rare disease that affects a small percentage of the population.

Programmed cell death A suicide mechanism a cell may go through if it is somehow damaged.

**Proof of Mechanism** Relates to early clinical development and typically refers to the demonstration of a drug candidate's

mechanism by, for instance, showing that the drug reaches the target organ, interacts with the

intended molecules, and affects cell biochemistry and biology in the desired direction.

Large molecules built from sequences of amino acids. Proteins are used in many different ways in an Protein

organism; they provide structure for cells and tissues, they catalyse chemical reactions in the form

of enzymes and they are involved in the signalling in and between cells.

Randomized (study) A study in which the trial participants are randomly allocated into two or more treatment groups

that are prescribed a specific treatment or placebo.

Receptor A large molecule, usually a protein, which is attached to cell membranes and binds to a target

molecule. The target molecule can be a hormone that has a certain effect on the cell to which it

Steroids Type of organic molecules that among other things include natural hormones.

Subcutaneous Under the skin.

## Addresses

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