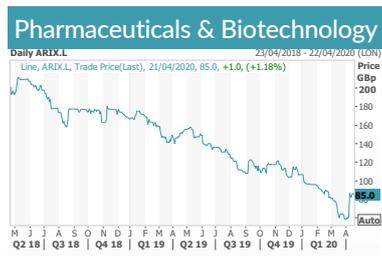




23 April 2020



Source: Refinitiv

## Market data

EPIC/TKR	ARIX
Price (p)	86
12m High (p)	159
12m Low (p)	60
Shares (m)	135.6
Mkt Cap (£m)	116.6
NAV/share (p)	137
Premium/discount to NAV	-37%
Free Float	69%
Market	Main

## Description

ARIX is a publicly listed biotechnology venture capital (VC) company. It provides an opportunity for all investors to participate in a balanced portfolio of diverse biotech innovation via a single stock. With a global portfolio of 16 companies and five IPOs achieved since launch in 2016, ARIX is a dynamic and modern approach to life sciences VC investing.

## Company information

Executive Chairman	Naseem Amin
MD	Jonathan Tobin
COO	Robert Lyne
Finance Director	Marcus Karia
	+44 20 7290 1050
	<a href="http://www.arixbioscience.com">www.arixbioscience.com</a>

## Key shareholders

Directors	0.1%
Link Fund Solutions	19.8%
Fosun	8.2%
Ruffer	6.1%
Takeda Ventures	5.5%

## Diary

3 Jun	AGM
Aug'20	Interim results

## Analyst

Martin Hall	020 7194 7632
	<a href="mailto:mh@hardmanandco.com">mh@hardmanandco.com</a>

## ARIX BIOSCIENCE

## Resetting the stage

Arix Bioscience (ARIX) is a listed global venture capital (VC) company that presents an opportunity for institutional and retail investors to participate in the high risk-return profile of early-stage biotech investing. ARIX minimises risk through a combination of an expert investment team and portfolio diversification, sourced via its extensive network and partners. The company has announced a restructuring of its Board and executive team recently, which has resulted in a significant and sustainable reduction in its operating overhead, and greatly extended its cash runway.

- **Strategy:** ARIX sources investments from an established network and a strong scientific reputation. The portfolio is diversified by therapeutic area, treatment modality, stage of discovery/development and geography to balance the risk-reward profile. Value is realised when ARIX successfully exits its investments.
- **Change at the top:** ARIX has made two separate announcements recently that have greatly reduced the size of its Board, refocused the investment team, and resulted in a significant reduction in operating costs. This has greatly increased its cash runway, which is important in the current global economic environment.
- **Reducing annual overhead:** In fiscal 2019, ARIX reduced its administrative overhead by 17% to £9.7m. Recent changes to the management team and Board of Directors are expected to see this fall further, to ca.£7.0m (-28%) in fiscal 2020 and a normalised and sustainable £5.5m (-21%) in fiscal 2021.
- **Autolus update:** On a separate note, investee company Autolus (AUTL.OQ) announced that the US Food & Drug Administration (FDA) had accepted its investigational new drug (IND) application for AUTO1, its lead CAR-T product candidate for the treatment of adults with acute lymphoblastic leukaemia (ALL). This will allow Autolus to initiate a pivotal trial with AUTO1-AL1.
- **Investment summary:** ARIX shares are currently impacted by the global macroeconomics affected by COVID-19 and some negative sentiment towards biotech. This has resulted in some volatility in the share prices of some of its listed portfolio companies, which is likely to remain the case until there is greater clarity regarding the easing of the global lockdown. Meanwhile, the market responded very favourably to ARIX's reduction in operating costs, with its share price rising ca.40%.

## Financial summary and valuation

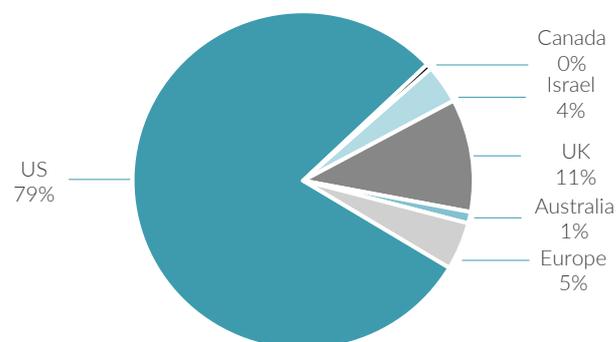
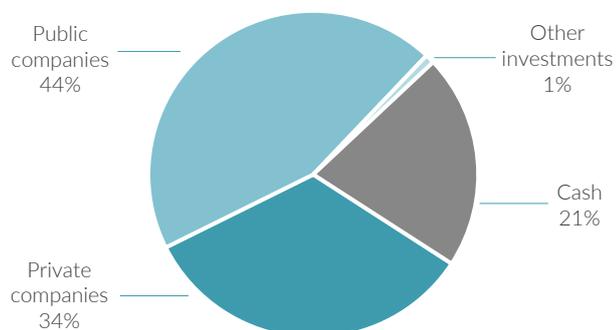
Year-end Dec (£m)	2017	2018	2019	2020E	2021E	2022E
Change in FV of investments	5.5	51.2	-58.6	*-9.2	*0.0	*0.0
Other income	1.9	1.3	0.5	0.2	0.2	0.0
Administrative expenses	-11.0	-11.7	-9.7	-7.0	-5.5	-5.6
Operating profit/(loss)	-7.2	37.5	-70.6	-17.9	-7.2	-7.6
Profit/(loss) before tax	-7.7	38.2	-69.9	-17.5	-6.9	-7.3
Underlying EPS (p)	-9.5	27.2	-49.9	-11.8	-4.7	-5.0
Net cash/(debt)	74.9	91.2	53.7	37.4	25.8	14.0
Capital increase	105.1	83.5	0.0	0.0	0.0	0.0
NAV/share (p)	152	200	149	137	-	-

\*Based on share prices and forex at close of business on 20 April 2020

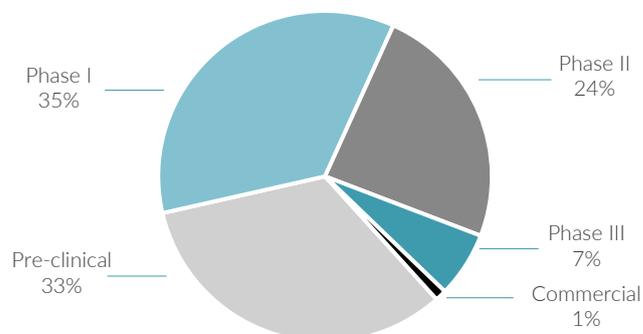
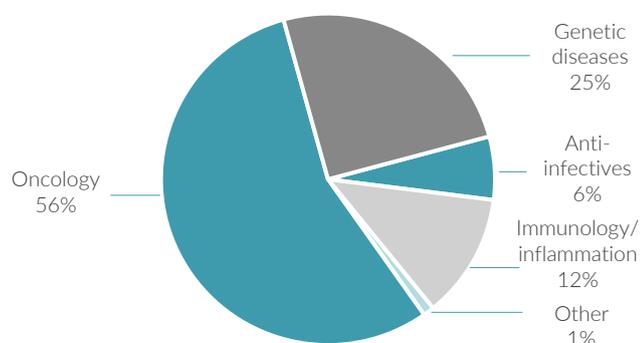
Source: Hardman &amp; Co Life Sciences Research

## Arx Bioscience

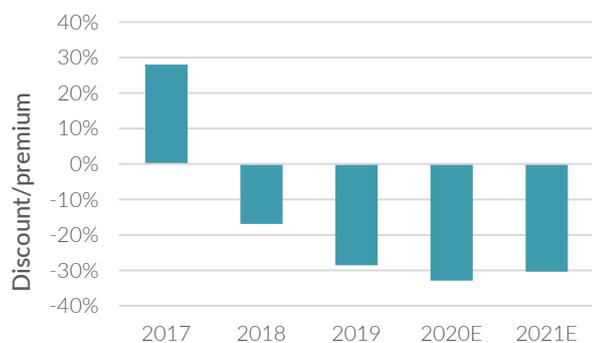
### Composition of NAV by asset and geography, 2019



### Portfolio diversification by therapeutic area and stage, 2019

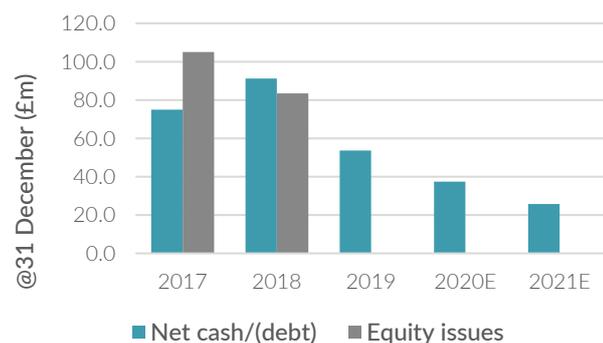


### Trading premium/discount to NAV



- ▶ ARIX floated on 17 February 2017
- ▶ General market sentiment towards global biotech stocks has caused ARIX to trade at a discount to NAV since 2018
- ▶ ARIX's reported NAV/share was 149p at full-year 2019

### Net cash/(debt)



- ▶ ARIX recycles cash to its balance sheet on divestment of holdings in its portfolio companies
- ▶ Reduced operating costs have significantly extended the cash runway

Source: Company data, Hardman & Co Life Sciences Research

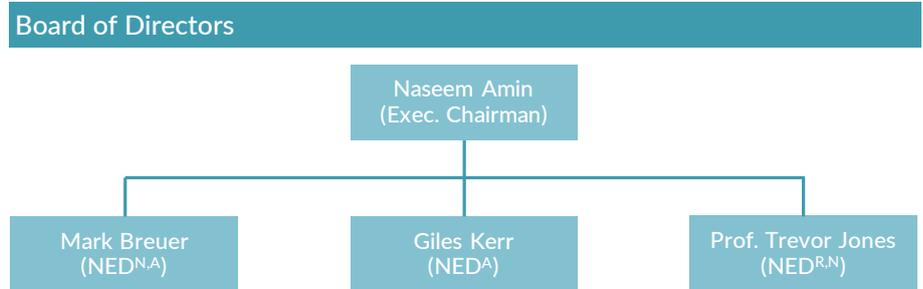
## Lean and focused structure

In early April, ARIX announced major changes to its Board of Directors and operating/investment team; these have resulted in a lean, focused structure, and significantly lowered the running costs of the business.

### Major changes

#### Board of Directors

- ▶ **Chairman:** Naseem Amin, a qualified medical practitioner and experienced VC entrepreneur, who joined the Board in December 2019 as a non-executive director (NED), has stepped up to Executive Chairman, replacing co-founder Jonathan Peacock, who will leave after the AGM in June 2020.
- ▶ **NEDs:** Changes and retirements will see the number of NEDs reduced to three, thereby creating a small, focused group of directors, at greatly reduced cost.

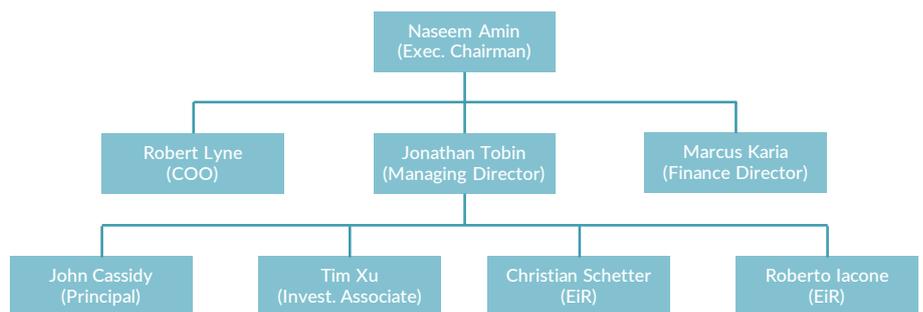


A=Audit Committee, N=Nominations Committee, R=Remuneration Committee  
Source: Company reports

#### Operations

- ▶ **CEO:** Co-founder and CEO, Joe Anderson, together with two members of the investment team, have left the company with immediate effect. Costs will again be reduced, but the full potential will not be realised until fiscal 2021, due to severance packages.
- ▶ **Managing Director (MD):** Experienced investment director, Jonathan Tobin, a specialist in biotechnology investments, has been promoted to MD.
- ▶ **Entrepreneur-in-Residence (EiR):** The core investment team will be supported by two EiRs, who are responsible for helping to source and evaluate academic opportunities from various universities and research institutes based in Europe.

#### New operating structure



EiR = Entrepreneur-in-Residence  
Source: Hardman & Co Life Sciences Research

Normalised operating costs have been reduced to ca. \$5.5m p.a.

## Cost analysis

Over the last two years, ARIX has been reducing costs, as evidenced by the 17% reduction in overall costs to £9.7m in 2019, which included £0.45m of non-cash depreciation and amortisation. However, only a modest further reduction (-7%), to £9.0m, had been anticipated for 2020 and 2021. By resetting the scene with a smaller Board of Directors and a leaner investment team, the reduction in costs has been accelerated and is now expected to stabilise at around £5.5m on a normal annualised basis in 2021, as shown in the following table. Severance packages will not see the full benefit in 2020. Excluding the Board, ARIX is now expecting to operate with a team of about 10-12 people (some are part-time), including the EIRs.

Cost analysis				
Year-end Dec (£000)	2018	2019	2020E	2021E
Salary and bonus	5,651	4,808	3,728	3,099
Social security	580	532	424	317
Pension/benefits	306	297	204	151
<b>Total employee costs</b>	<b>6,537</b>	<b>5,637</b>	<b>4,357</b>	<b>3,567</b>
Consultancy fees	512	320	0	0
Recruitment costs	563	147	0	0
Other expenses	4,086	3,605	2,650	1,950
<b>Total admin. expenses</b>	<b>11,698</b>	<b>9,709</b>	<b>7,007</b>	<b>5,517</b>
Change	+6%	-17.0%	-27.8%	-21.3%
<b>Board and consultants</b>	<b>3,004</b>	<b>2,367</b>	<b>930</b>	<b>310</b>
% total employment costs	42.6%	39.7%	21.3%	8.7%
% total operating costs	25.7%	24.4%	13.3%	5.6%

Source: Company reports, Hardman & Co Life Sciences Research

Board and consultant costs have been running at ca.25%...

...but are now expected to be only 5%-6% from 2021

## Board of Directors and consultants

The positive impact of the changes can be seen in the significant fall in the costs of the Board, and the use of consultants. In 2018, these totalled £3.0m and represented 42.6% and 25.7% of employment and operating costs, respectively. Although the salary of the Executive Chairman has not been disclosed, Hardman & Co estimates that the equivalent figures will be 8.7% and 5.6%, respectively, in the first normalised fiscal year (2021).

## Cash runway

At the end of 2019, ARIX had a net cash position of £53.7m. As a consequence of the recent changes, the forecast net cash position at the end of fiscal 2022 has more than doubled, significantly extending the company's cash runway.

Net cash* position				
Year-end Dec (£m)	2019	2020E	2021E	2022E
Previous forecast	53.7	35.4	20.9	6.6
New forecast	-	37.4	25.8	14.0
Change	-	+2.0	+4.9	+7.4

\*includes financial lease liabilities

Source: Hardman & Co Life Sciences Research

## Portfolio news

### Autolus (AUTL.OQ)

AUTO1 granted IND status by FDA in April...

...allowing first pivotal trial

On 16 April, Autolus announced that the FDA had accepted the company's application for IND status for AUTO1, its lead CAR-T drug candidate aimed at adults with acute lymphoblastic leukaemia (ALL). This acceptance allows Autolus to commence recruitment of US sites for its first pivotal study, AUTO1-AL1.

In the same statement, Autolus provided the market with an update on the impact of COVID-19. While there had been some effect on the ability to recruit and operate clinical trials in some centres, the overall impact had been minimal. In addition, the company has been able to continue manufacturing, without interruption, from its operations at the Cell and Gene Therapy Catapult laboratory, located in Stevenage, UK, for the supply of material into the US for its AUTO3-ALEXANDER trial on patients for the treatment of diffuse large B-cell lymphoma (DLBCL).

As we previously reported, Autolus raised ca.\$80m in January 2020 to fund its ongoing working capital requirements. Arix did not participate in this funding round, maintaining its stake at 3.37m shares (6.5%), which is currently valued at \$37.2m/£29.8m.

### Imara (IMRA.OQ)

Imara is trading around its IPO price

In March, Imara Inc announced the pricing of its initial public offering (IPO) on NASDAQ of 4.7m shares of common stock at a public offering price of \$16.0 per share, raising \$75.2m. The IPO resulted in a £4.3m rise in the value of ARIX's existing holding in Imara, which was valued at £10.7m on 31 December 2019. In addition, ARIX agreed to invest a further \$3.0m in the company at IPO. The stock has been trading around the IPO price since the company listed.

Imara is a clinical-stage pharmaceutical company working on small molecule phosphodiesterase inhibitors, which are orally active, for the treatment of sickle cell disease. A Phase I trial indicated that lead compound, IMR-687, was well tolerated and safe in healthy volunteers. It is currently being evaluated in a multinational Phase IIa study in adult patients with sickle cell disease. IMR-687 has been granted both Orphan Drug Designation and Rare Paediatric Designation by the FDA.

## Financial summary

The largest component of the income statement for each reporting period is the revaluation of ARIX's investments under IFRS9. Its investments are considered to be long-term financial assets, and ARIX classifies them using a fair-value hierarchy that reflects the significance of the inputs used in generating the related fair value. ARIX adopts the most conservative approach, ascribing the lowest-level input with the fair-value hierarchy framework to each of its investments.

- **Key driver:** The financial performance is dictated largely by the quoted investments in the portfolio of 16 companies, which are marked-to-market.

Forecast summary						
Year-end Dec (£m)	2017	2018	2019	2020E	2021E	2022E
<b>Profit &amp; Loss</b>						
Other income	1.9	1.3	0.5	0.2	0.2	0.0
Change in FV of investments	5.5	51.2	-58.6	*-9.2	-	-
Operating income	7.4	52.5	-58.1	-9.0	0.2	0.0
Administrative expenses	-11.0	-11.7	-9.7	-7.0	-5.5	-5.6
Share-based payments	-3.7	-3.3	-2.8	-2.0	-2.0	-2.0
<b>Operating profit/(loss)</b>	<b>-7.2</b>	<b>37.5</b>	<b>-70.6</b>	<b>-17.9</b>	<b>-7.2</b>	<b>-7.6</b>
Net interest	0.0	0.7	0.8	0.5	0.3	0.2
Profit before tax	-7.7	38.2	-69.9	-17.5	-6.9	-7.3
Tax payable/credit	0.2	-5.9	5.9	1.5	0.6	0.6
Net income	-7.5	32.3	-64.0	-16.0	-6.3	-6.7
Weighted av. shares (m)	78.7	118.8	128.1	135.6	135.6	135.6
<b>Underlying EPS (p)</b>	<b>-9.5</b>	<b>27.2</b>	<b>-49.9</b>	<b>-11.8</b>	<b>-4.7</b>	<b>-5.0</b>
Fully diluted EPS (p)	-9.5	25.1	-46.4	-11.0	-4.3	-4.6
<b>Balance sheet (@31 Dec)</b>						
Investments at fair value	71.3	184.0	151.9	156.0	160.4	170.0
Intangible assets	2.1	1.8	0.7	0.4	0.1	0.0
Non-current assets	73.9	186.1	153.4	157.1	161.2	170.8
Cash & deposits	74.9	91.2	54.6	38.4	26.7	14.9
Receivables	1.3	2.2	1.1	1.1	1.1	1.1
<b>Current assets</b>	<b>76.2</b>	<b>93.4</b>	<b>55.8</b>	<b>39.5</b>	<b>27.9</b>	<b>16.1</b>
Total liabilities	-3.7	-9.3	-7.1	-10.5	-9.4	-13.8
Net assets	146.4	270.2	202.1	186.1	179.8	173.1
<b>NAV/share (p)</b>	<b>152</b>	<b>200</b>	<b>149</b>	<b>137</b>	<b>-</b>	<b>-</b>
<b>Cashflow</b>						
Underlying EBIT	-7.2	37.5	-70.6	-17.9	-7.2	-7.6
Change in FV of investments	-5.5	-51.2	58.6	9.2	0.0	0.0
Other non-cash items	4.2	3.8	3.2	2.3	2.2	2.2
Tax & interest	-50.2	-55.2	-26.1	-9.1	-6.1	-6.1
<b>Operational cashflow</b>	<b>-8.8</b>	<b>-11.1</b>	<b>-9.4</b>	<b>-7.1</b>	<b>-5.5</b>	<b>-5.7</b>
Equity investments	-50.2	-55.2	-34.9	-16.0	-6.1	-6.1
Disposals	0.0	0.0	8.8	6.9	0.0	0.0
<b>Cashflow after investments</b>	<b>-59.0</b>	<b>-66.3</b>	<b>-35.5</b>	<b>-16.3</b>	<b>-11.6</b>	<b>-11.8</b>
Equity issues	105.1	83.5	0.0	0.0	0.0	0.0
Change in net cash/(debt)	46.0	16.3	-37.5	-16.3	-11.6	-11.8
Opening net cash/(debt)	28.9	74.9	91.2	53.7	37.4	25.8
<b>Closing net cash/(debt)</b>	<b>74.9</b>	<b>91.2</b>	<b>53.7</b>	<b>37.4</b>	<b>25.8</b>	<b>14.0</b>

\*Note: Based on share prices and forex at close of business on 20 April 2020  
Source: Hardman & Co Life Sciences Research

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The full detail is on page 26 of the full directive, which can be accessed here: <http://ec.europa.eu/finance/docs/level-2-measures/mifid-delegated-regulation-2016-2031.pdf>

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