



Market data

| | |
|--------------|--------|
| EPIC/TKR | VAL |
| Price (p) | 3.00 |
| 12m High (p) | 7.30 |
| 12m Low (p) | 0.96 |
| Shares (m) | 133.36 |
| Mkt Cap (£m) | 12.22 |
| EV (£m) | 11.80 |
| Free Float* | 99% |
| Market | AIM |

*As defined by AIM Rule 26

Description

ValiRx is a clinical-stage biopharmaceutical company focused on novel treatments for cancer and associated biomarkers. It currently has two products in Phase I/II and Phase II clinical trials. Its business model focuses on out-licensing or partnering drug candidates after clinical trials.

Company information

| | |
|----------|--|
| CEO | Dr Satu Vainikka |
| CFO | Gerry Desler |
| Chairman | Oliver de Giorgio-Miller |
| | +44 20 3008 4416 |
| | www.valirx.com |

Key shareholders

| | |
|-----------|------|
| Directors | 0.5% |
|-----------|------|

Diary

| | |
|--------|----------|
| 8 May | AGM |
| Sep'18 | Interims |

Analysts

| | | |
|---------------|---------------|--|
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ValiRx

2017: a pivotal year

ValiRx (VAL) is a clinical-stage biopharmaceutical company focused on the development of therapeutics for the treatment of cancer. The company's two leading assets are in clinical trials: VAL201 (Phase I/II) – a peptide for advanced prostate cancer and potential to treat other hormone-induced indications; and VAL401 (Phase II) – a novel reformulation of risperidone, in trials for lung cancer. Both drugs are targeted at multi-billion dollar markets that are inadequately served by current drugs. The aim is to progress the clinical data and exit via a collaboration or commercial out-licensing to a larger partner.

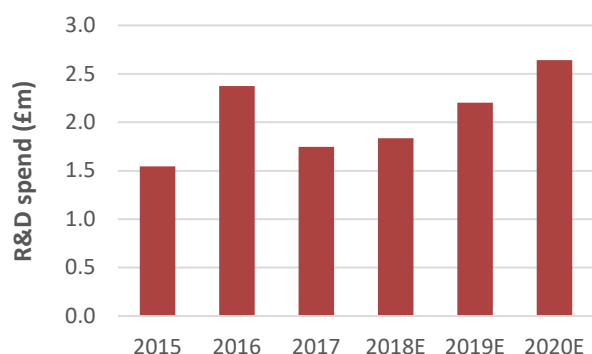
- **Strategy:** VAL operates as a virtual business, out-sourcing most of its activities. The core strategy is to develop its therapeutic assets through the clinical pathway and seek a partner/licensing deal to complete the development programme and regulatory submissions to commercialise the products.
- **2017 results:** Lower than expected R&D spend and corporate overhead meant that full-year results were better than expectations, with the net loss reducing 34% to -£3.02m (-£4.75m). This fed through to the net cash position, which was also better than forecast at £0.31m (-£0.73m).
- **Trial progress:** VAL has made substantial progress with all of its clinical candidates during 2017, with further trial results due for release during 2018. Most progress has been made with VAL401 in non-small cell lung cancer, with a view to out-licensing it for further development this year.
- **Risks:** New and/or first-in-class drugs carry the risk that they might fail in clinical trials. However, the substantial safety history of the active ingredient in VAL401 and the consistent safety record to date in the VAL201 trial mitigate these risks. More capital is needed to further its proprietary assets along the value chain.
- **Investment summary:** VAL is undervalued relative to its peers at a similar stage of development. The reason for this is certainly its need for more capital to advance its clinical programmes, thereby building value. Given the clinical progress seen to date, the company should be attracting potential commercial partners and/or institutional investors in order to achieve the real value of its assets.

Financial summary and valuation

| Year-end Dec (£000) | 2015 | 2016 | 2017 | 2018E | 2019E | 2020E |
|---------------------|--------|--------|--------|--------|--------|--------|
| Sales | 83 | 0 | 0 | 0 | 0 | 0 |
| SG&A | -1,645 | -1,666 | -1,467 | -1,511 | -1,587 | -1,587 |
| R&D | -1,543 | -2,375 | -1,747 | -1,834 | -2,201 | -2,641 |
| EBITDA | -2,877 | -3,939 | -2,938 | -3,158 | -3,600 | -4,040 |
| Underlying EBIT | -2,888 | -3,949 | -2,948 | -3,168 | -3,611 | -4,051 |
| Reported EBIT | -3,029 | -3,987 | -3,125 | -3,345 | -3,788 | -4,228 |
| Underlying PBT | -2,889 | -4,288 | -3,398 | -3,200 | -3,656 | -4,114 |
| Statutory PBT | -2,567 | -5,569 | -3,554 | -3,377 | -3,834 | -4,291 |
| Underlying EPS (p) | -7.7 | -6.0 | -1.9 | -0.7 | -0.8 | -0.9 |
| Statutory EPS (p) | -6.7 | -8.2 | -2.0 | -0.7 | -0.8 | -0.9 |
| Net (debt)/cash | 232 | -734 | 311 | -2,514 | -5,903 | -9,662 |
| Capital increases | 2,681 | 2,615 | 3,602 | 120 | 0 | 0 |

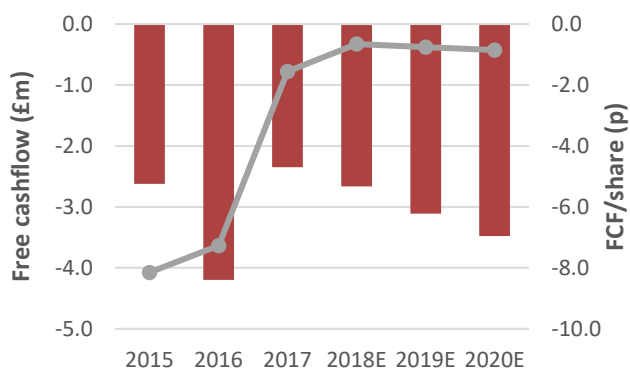
Source: Hardman & Co Life Sciences Research

R&D Investment



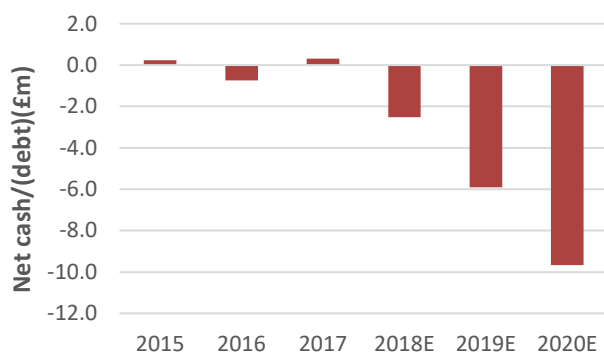
- ▶ ValiRx outsources all its research
- ▶ The cost of the current clinical trial for VAL201 and VAL401 where borne during 2016
- ▶ R&D expenditure is expected to increase with the new clinical programmes

Free cashflow



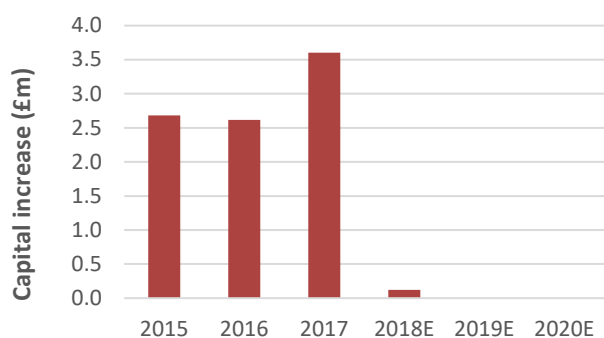
- ▶ Cashflow is driven by the corporate overhead (SG&A) and R&D investment, offset by tax credit on R&D investment
- ▶ The monthly average cash burn is ca.£0.25m
- ▶ Manufacturing costs of clinical trial material was borne in fiscal 2016, which impacted cash flows
- ▶ The R&D tax credit in the balance sheet is £0.42m which will be received in fiscal 2018, and is expected to rise as greater investment is made in clinical programmes

Net cash



- ▶ Net cash at 31st December 2017 was £0.31m, comprising cash of £0.70m and convertible loans of -£0.39m, which, in all likelihood, will be converted into equity
- ▶ Our cash projections suggest that VAL will need cash injection during 2018 in the absence of a licensing deal

Capital increase



- ▶ During 2017, VAL raised £3.07m gross (£2.78m net) new capital by way of four Placings
- ▶ In 2017, £0.56m of bonds were converted into equity and a further £0.35m were re-paid. At the period end £0.39m bonds were outstanding which are expected to convert into equity.
- ▶ Further resources will be needed in the near future

Source: Company data; Hardman & Co Life Sciences Research

Full-year 2017 results

Development highlights

- ▶ **VAL201:** Safety and tolerability have been confirmed in the ongoing Phase I/II trial in patients with advanced or metastatic prostate cancer. In addition, the MHRA decision to increase the dosing level, shows confidence in VAL201 and raises the probability of efficacy. Data read-out is expected during 2018.
- ▶ **VAL401:** Completion of the Phase II trial in lung cancer, with data suggesting some palliative effect added to an improvement in symptoms and the survival prospect in the small cohort of patients treated.
- ▶ **VAL101:** A second generation of VAL101 derived from its proprietary GeneICE platform has been generated, with an improved manufacturing process – production and purification – that will speed-up the progression of VAL101 towards the clinic.
- ▶ **VAL301:** The reformulated version of VAL201 has undergone late pre-clinical studies for the treatment of endometriosis. Evidence shows no effect on bone density or fertility, side effects usually seen in current treatments. The product is undergoing additional late pre-clinical toxicology work with the aim of entering the clinic during 2018.

Financial highlights

- ▶ **R&D spend:** Investment in R&D decreased by 27% to -£1.74m (-£2.37m), largely because of the absence of manufacturing costs for clinical trial materials which were incurred in 2016.
- ▶ **Administration:** SG&A costs reduced by 12% to £1.47m (-£1.67m).
- ▶ **Net cash:** VAL raised a total of £3.07m during the financial year and most of the outstanding bonds were either converted or repaid. At the period end, it had net cash was £0.31m, made up of £0.70m cash offset by £0.39m of convertible bonds, which in all likelihood are expected to be converted into equity.

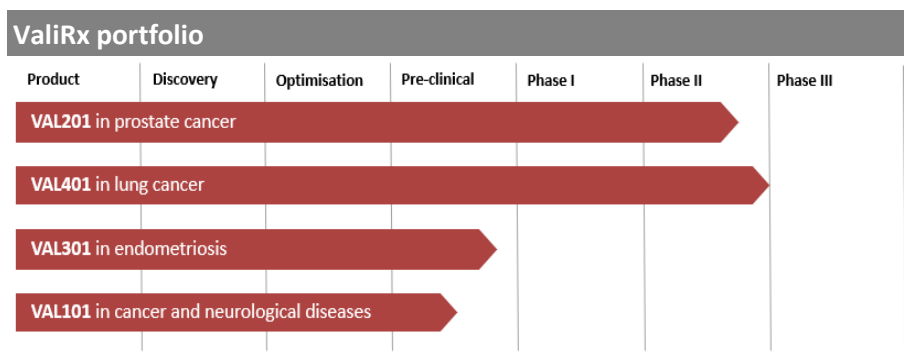
| ValiRx full-year results – actual vs expectations | | | | | |
|---|----------------|----------------|-------------|------------------|--------------|
| Year-end December (£m) | 2016 actual | 2017 actual | change % | 2017 forecast | Delta Δ |
| R&D spend | -2.37 | -1.74 | -27% | -2.85 | +1.11 |
| Administration | -1.67 | -1.47 | -12% | -1.75 | +0.28 |
| Underlying EBIT loss | -3.95 | -2.95 | -25% | -4.51 | +1.56 |
| Tax credit | +0.62 | +0.42 | -32% | +0.74 | -0.32 |
| Underlying net loss | -3.47 | -2.86 | -18% | -3.84 | +0.98 |
| Net cash/(debt) | -0.73 | +0.31 | | +0.56 | -0.25 |

*Figures may not add up exactly due to rounding
Source: Hardman & Co Life Sciences Research*

Corporate highlights

- ▶ **Strengthened IP:** The company has been granted additional patent protection for both VAL201 and VAL401, with a US patent for VAL201 being issued post the period-end, in 1Q'18.
- ▶ **Advisory Board:** VAL has created an advisory board to support the main Board and provide additional expertise. It is comprised currently of two members: Ajay Agrawal (CSO), Andrew King (ex-CFO NeuTec).

Pipeline progress



Source: ValiRx; Hardman & Co Life Sciences Research

Clinical trial update

VAL201

High safety and tolerability, plus some early evidence of efficacy, has been observed in the Phase I/II trial in advanced/metastatic prostate cancer for the peptide inhibitor that possesses a distinctive mode of action on the androgen receptor. Consequently, the research ethic committee, in consultation with the MHRA, decided to escalate both the dose and frequency of administration, thereby raising the potential for VAL201 to show anti-cancer efficacy. Headline data are expected during 2018.

VAL401

The reformulated oral version of risperidone allows specific targeting of cancer cells has completed a pilot Phase II trial in late-stage lung cancer patients. Results were very favourable, with VAL401 achieving an overall response rate of 60% and improved the quality of life in patients with late-stage disease. In addition, there was some evidence to show that VAL401 improves disease symptoms (pain and fatigue), suggesting that it has a palliative effect, and making it a good candidate for a combination study. A proposed Phase III trial in ca.200 late-stage NSCLC patients with and without standard-of-care will be run either with or by a partner. Management indicated that discussions are underway with several potential partners for the further development of VAL401.

Pre-clinical developments

VAL301

The reformulated version of VAL201, targeting the gynaecological disorder endometriosis, which is hypothesised to have a lower side effect potential compared to current standard-of-care. VAL301 is currently undergoing late-stage pre-clinical studies with the aim of having a complete pre-clinical package with the optimal formulation during 2018. VAL is expected to submit an IND to start clinical trials in 2018.

VAL101

Through a consortium of partners, led by ValiRx, the manufacturing process for the GeneICE platform has been optimised. This has paved the way for accelerated pre-clinical development of a new version of VAL101 that targets the gene expressing Bcl2. Having shown that VAL101 produced programmed cell death (apoptosis) in cancer cell models, the product is now being prepared for testing in clinical trials.

Financial forecasts

Profit & Loss

- ▶ ValiRx is a virtual company with most of its activity being outsourced.
- ▶ In the medium term, the P&L account is driven by two numbers, the corporate overhead/administration costs and the investment in R&D/clinical trials.
- ▶ **SG&A:** Overall administrative costs in 2017 decreased to -£1.47m (-£1.67m), with tight control of corporate overhead.
- ▶ **R&D:** Despite the progress made in clinical trials, R&D costs decreased unexpectedly. This was largely the consequence of the cost of manufacturing the batches of drugs for use in clinical trials being borne in fiscal 2016. With more trials being planned, R&D costs are expected to rise over the forecast period.

| Profit & Loss account | | | | | | |
|----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Year-end Dec (£000) | 2015 | 2016 | 2017 | 2018E | 2019E | 2020E |
| Sales | 83 | 0 | 0 | 0 | 0 | 0 |
| COGS | -78 | 0 | 0 | 0 | 0 | 0 |
| SG&A | -1,645 | -1,666 | -1,467 | -1,511 | -1,587 | -1,587 |
| R&D | -1,543 | -2,375 | -1,747 | -1,834 | -2,201 | -2,641 |
| Other income | 203 | 0 | 89 | 0 | 0 | 0 |
| EBITDA | -2,877 | -3,939 | -2,938 | -3,158 | -3,600 | -4,040 |
| Depreciation | -11 | -11 | -11 | -11 | -11 | -11 |
| Amortisation | -92 | -92 | -177 | -177 | -177 | -177 |
| Underlying EBIT | -2,980 | -4,042 | -3,125 | -3,345 | -3,788 | -4,228 |
| Share-based costs | -49 | -128 | 0 | 0 | 0 | 0 |
| Exceptional items | 0 | 183 | 0 | 0 | 0 | 0 |
| Statutory EBIT | -3,029 | -3,987 | -3,125 | -3,345 | -3,788 | -4,228 |
| Net financials | 462 | -1,582 | -429 | -32 | -47 | -64 |
| Underlying pre-tax profit | -2,981 | -4,380 | -3,575 | -3,377 | -3,834 | -4,292 |
| Reported pre-tax | -2,567 | -5,569 | -3,554 | -3,377 | -3,834 | -4,292 |
| Tax liability/credit | 391 | 620 | 416 | 437 | 525 | 630 |
| Tax rate | -15% | -11% | -12% | -13% | -14% | -15% |
| Underlying net income | -2,532 | -3,559 | -3,040 | -2,940 | -3,310 | -3,663 |
| Statutory net income | -2,118 | -4,748 | -3,020 | -2,940 | -3,310 | -3,663 |
| Ordinary 0.1p shares: | | | | | | |
| Period-end (m) | 38.34 | 83.25 | 399.06 | 407.46 | 407.46 | 407.46 |
| Weighted average (m) | 31.79 | 57.74 | 151.07 | 406.54 | 407.46 | 407.46 |
| Fully-diluted (m) | 35.58 | 98.51 | 259.52 | 520.84 | 521.76 | 521.76 |
| Underlying basic EPS (p) | -8.0 | -6.2 | -2.0 | -0.7 | -0.8 | -0.9 |
| Statutory basic EPS (p) | -6.7 | -8.2 | -2.0 | -0.7 | -0.8 | -0.9 |
| U/I fully-diluted EPS (p) | -7.1 | -3.6 | -1.2 | -0.6 | -0.6 | -0.7 |
| Stat. fully-diluted EPS (p) | -6.0 | -4.8 | -1.2 | -0.6 | -0.6 | -0.7 |
| DPS (p) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Source: Hardman & Co Life Sciences Research

Balance sheet

- ▶ **Net cash/(debt)** – at 31st December 2017, VAL had net cash of £311k on its balance sheet, comprising cash of £701k and outstanding convertible loan notes of £390k, which are treated as debt, although in all likelihood these will be converted into shares. Therefore, the company effectively has £700k of working capital.
- ▶ To continue funding R&D investment at current levels, further capital will be required during 2018. This could come either from licensing agreements, collaborative deals with equity components and/or an equity placing by the company

| Balance sheet | | | | | | |
|-------------------------|--------------|--------------|--------------|---------------|---------------|---------------|
| at 31st Dec (£000) | 2015 | 2016 | 2017 | 2018E | 2019E | 2020E |
| Shareholders' funds | 4,533 | 2,369 | 3,153 | 213 | -3,096 | -6,757 |
| Cumulated goodwill | 0 | 0 | 0 | 0 | 0 | 0 |
| Total equity | 4,533 | 2,369 | 3,153 | 213 | -3,096 | -6,757 |
| Share capital | 8,121 | 8,166 | 8,433 | 8,433 | 8,433 | 8,433 |
| Reserves | -3,667 | -5,816 | -5,255 | -8,195 | -11,504 | -15,165 |
| Minorities | 79 | 20 | -25 | -25 | -25 | -25 |
| Provisions/liabilities | 0 | 0 | 0 | 0 | 0 | 0 |
| Deferred tax | 0 | 0 | 0 | 0 | 0 | 0 |
| Long-term debt | 0 | 0 | 0 | 0 | 0 | 0 |
| Short-term loans | 0 | 1,294 | 390 | 390 | 390 | 390 |
| less: Cash | 232 | 561 | 701 | -2,124 | -5,513 | -9,272 |
| less: Deposits | 0 | 0 | 0 | 0 | 0 | 0 |
| less: Non-core invests. | 1,463 | 97 | 117 | 117 | 0 | 0 |
| Invested capital | 2,837 | 3,006 | 2,724 | 2,610 | 2,807 | 2,905 |
| Fixed assets | 22 | 11 | 0 | -11 | -21 | -32 |
| Intangible assets | 2,673 | 2,825 | 2,928 | 3,074 | 3,074 | 3,074 |
| Inventories | 44 | 0 | 0 | 0 | 0 | 0 |
| Trade debtors | 33 | 0 | 0 | 0 | 0 | 0 |
| Other debtors | 253 | 781 | 766 | 613 | 583 | 553 |
| Tax credit/liability | 400 | 644 | 424 | 437 | 525 | 630 |
| Trade creditors | -448 | -1,127 | -1,200 | -1,100 | -1,000 | -900 |
| Other creditors | -141 | -127 | -194 | -404 | -353 | -421 |
| Debtors less creditors | 98 | 171 | -204 | -454 | -246 | -138 |
| Invested capital | 2,837 | 3,006 | 2,724 | 2,610 | 2,807 | 2,905 |
| Net cash/(debt) | 232 | -734 | 311 | -2,514 | -5,903 | -9,662 |

Source: Hardman & Co Life Sciences Research

Cashflow

- ▶ **Capital increases:** During the year, VAL raised a total of £3.67m gross new capital by the way of four small Placings.
- ▶ **Convertible Loan Notes:** Most of the convertible loans notes were converted, or repaid, in 2017. In December 2017, VAL decided to close down the loan facility. In addition, Yorkville exercised 106m of warrants into ordinary shares, generating £1.5m.
- ▶ **Warrants:** In January 2018, 8.4m warrants were exercised, raising £0.12m of new capital for the company. There are a further 92.1m warrants outstanding at exercise prices between 4p and 9p.
- ▶ **Cash requirement:** To fund the business over the next two years, we forecast a minimum cash requirement of ca.£7m. This could come in the form of up-front payments as part of licensing deal(s), equity participation in a collaborative deal, an equity fund raise or a combination of these options.

| Cashflow | | | | | | |
|--------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Year-end Dec (£000) | 2015 | 2016 | 2017 | 2018E | 2019E | 2020E |
| Underlying EBIT | -2,980 | -4,042 | -3,125 | -3,345 | -3,788 | -4,228 |
| Depreciation | 11 | 11 | 11 | 11 | 11 | 11 |
| <i>Inventories</i> | -33 | 12 | 0 | 0 | 0 | 0 |
| <i>Receivables</i> | 95 | -1,072 | 14 | 0 | 0 | 0 |
| <i>Payables</i> | -167 | 788 | 54 | 100 | 100 | 100 |
| Change in working capital | -105 | -272 | 69 | 100 | 100 | 100 |
| Exceptionals/provisions | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 5 | -22 | -83 | 0 | 0 | 0 |
| Company op cashflow | -2,977 | -4,233 | -2,952 | -3,058 | -3,500 | -3,940 |
| Net interest | -1 | -338 | -35 | -32 | -46 | -63 |
| Tax paid/received | 388 | 376 | 637 | 424 | 437 | 525 |
| Operational cashflow | -2,590 | -4,196 | -2,351 | -2,665 | -3,109 | -3,478 |
| Capital expenditure | -32 | 0 | 0 | 0 | 0 | 0 |
| Sale of fixed assets | 0 | 0 | 0 | 0 | 0 | 0 |
| Free cashflow | -2,622 | -4,196 | -2,351 | -2,665 | -3,109 | -3,478 |
| Dividends | 0 | 0 | 0 | 0 | 0 | 0 |
| Acquisitions | -390 | -387 | -280 | -280 | -280 | -280 |
| Disposals | 0 | 861 | 0 | 0 | 0 | 0 |
| Other investments | 110 | 141 | 74 | 0 | 0 | 0 |
| Cashflow after invests. | -2,901 | -3,581 | -2,558 | -2,946 | -3,389 | -3,759 |
| Share repurchases | 0 | 0 | 0 | 0 | 0 | 0 |
| Capital increases | 2,681 | 2,615 | 3,602 | 120 | 0 | 0 |
| Currency effect | 0 | 0 | 0 | 0 | 0 | 0 |
| Cash/(debt) acquired | 0 | 0 | 0 | 0 | 0 | 0 |
| Change in net debt | -220 | -966 | 1,045 | -2,826 | -3,389 | -3,759 |
| Hardman FCF/share (p) | -8.1 | -7.3 | -1.6 | -0.7 | -0.8 | -0.9 |
| Opening net cash | 453 | 232 | -734 | 311 | -2,514 | -5,903 |
| Closing net cash | 232 | -734 | 311 | -2,514 | -5,903 | -9,662 |

Source: Hardman & Co Life Sciences Research

Company matters

Registration

Incorporated in the UK with company registration number: 3916791

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Board of Directors

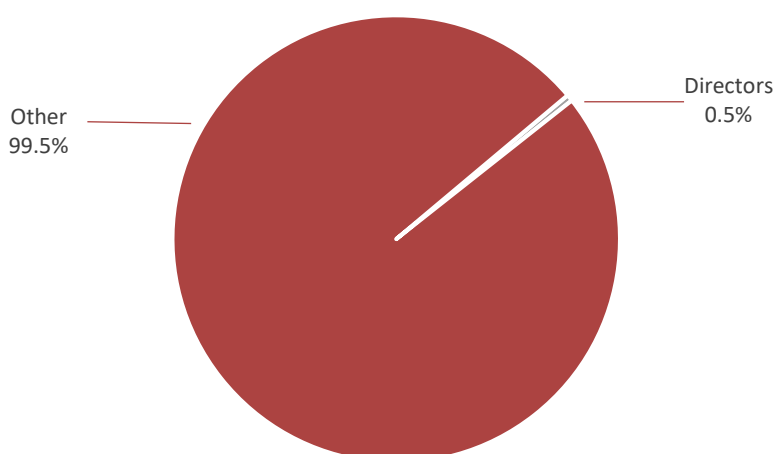
| Board of Directors | | | |
|--------------------------|--------------------------|--------------|-------|
| Position | Name | Remuneration | Audit |
| Chairman | Oliver de Giorgio-Miller | M | |
| Chief Executive Officer | Dr Satu Vainikka | | |
| Chief Financial Officer | Gerry Desler | | M |
| Chief Operations Officer | Dr George Morris | | M |
| Non-executive director | Kevin Alexander | M | |

*M = member; C = chair
Source: Company reports*

Share capital

At the time of going to press, there were 407,426,717 Ordinary shares of 0.1p in issue and 20,712,960 outstanding share options (all out of the money). In addition, there are currently 93.59m warrants outstanding with an exercise price between 4p and 9p, which could generate up to £7.4m of additional capital for the company in the future, although it should be noted that ca.68% of these are exercisable at 9.0p.

ValiRx shareholders



Source: Company reports/announcements

Notes

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- ii. certified high net worth individuals within the meaning of Article 48 of the Order;
- iii. certified sophisticated investors and self-certified sophisticated investors within the meaning of Article 50 and Article 50A of the Order;
- iv. associations of high net worth investors or sophisticated investors within the meaning of Articles 51 of the Order; and
- v. any other person whom it may lawfully be communicated.

(together, the relevant persons).

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Status of Hardman & Co's research under MiFID II

Some professional investors, who are subject to the new MiFID II rules from 3rd January, may be unclear about the status of Hardman research and, specifically, whether it can be accepted without a commercial arrangement. Hardman's company research is paid for by the companies about which we write and, as such, falls within the scope of 'minor non-monetary benefits', as defined in the Markets in Financial Instruments Directive II.

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The fact that we are commissioned to write the research is disclosed in the disclaimer, and the research is widely available.

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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