SCIENTIFIC PROGRAM REVIEW 19TH MAY 2020

Current Corporate Strategy and Notes

"ValiRx is a biotechnology oncology focused company specialising in developing novel treatments for cancer.

The Company's business model focuses on identifying and in-licensing early stage projects, adding value through scientific development and then out-licensing therapeutic candidates early in the development process. By aiming for early-stage value creation, the company reduces risk while increasing the potential for realising value."

The corporate statement above has been applied to acquire the projects as shown in the table below:

Project	Current Stage	Next Stage	Notes
VAL201	Phase 1/2 clinical trial nearing completion	Results to be collected, analysed and reported	Acquired in 2008 at preclinical stage
VAL301	Preclinical	Preclinical studies to be completed prior to clinical program launch	Developed from VAL201 within Valirx
VAL401	Pilot Phase 2 trial complete	Funding being sought for next clinical trial	Acquired into the Joint Venture, ValiSeek Limited in 2014 at preclinical stage
VAL101/ GeneICE	Discovery	Partner sought	Acquired in the 2008 acquisition of Cronos Therapeutics
TRAC	Inactive, commercial	Partner sought	Re-acquired in 2018
FitBio	Inactive, clinical	Partner sought	Acquired in 2019

Each live project requires resources to maintain, even when not being actively progressed, including patent activities and patent renewals; meanwhile the value of a static project declines over time due to a decrease in available patent life. ***Therefore, our continuous evaluations will ensure static projects are either sold, licensed, passed on or terminated.***

This evaluation also considers both **current and alternative uses** of the drug in question, based on the scientific mechanism of action of the drug in the body. Using the VAL201 drug product for both oncology indications and endometriosis is just one example which we have already exploited. Where an alternative use is not within the remit of Valirx, for example if a third party owns the intellectual property rights, then a **consortium or collaborative** arrangement may be appropriate to enable Valirx to both input and benefit from a third party project.

Where there is no immediate buyer available, ensuring that the science is passed on to another party – even for a zero or low return – allows the liability of that project to be removed from the cash flow, and resources re-directed to active projects. Terminating projects is a last resort, only if the science has failed, or the commercial opportunity has moved on; however this option retains the benefit of liability reduction.

Further additions to the board of directors are expected, with incoming experts expected to provide input and feedback into forward looking strategies for both scientific and commercial developments.

VAL201

VAL201 HEADLINE RESULTS ANTICIPATED Q3 2020

VAL201 has been subject to an open label Phase 1/2 clinical trial in patients with prostate cancer entitled: **"A Phase I/II, Dose Escalation Study to Assess the Safety and Tolerability of VAL201 in Patients with Locally Advanced or Metastatic Prostate Cancer and Other Advanced Solid Tumours".**

Brief details of this trial are displayed below. Details can also be found on the Clinical Trials register at www.clinicaltrials.gov, using trial identifier number: NCT02280317; when results are available, these will also be available within this database.

Recruitment open	December 2014 – January 2020
End of Trial Documentation submitted	27th January 2020
Patients dosed	12
Single Site	UCLH (University College London Hospital, UK)

Patients were scheduled for treatment of a **once weekly injection of VAL201** in 3 week cycles for a maximum of 6 cycles. 4 patients completed all 6 cycles, the remaining 8 patients were withdrawn prior to completion, with valuable data being collected from all 12.

Eligible Patients:

Adult men (over the age of 18), with **incurable locally advanced or metastatic prostate cancer** who have relapsed following radiotherapy treatment, are in 'watchful waiting' or where a policy of intermittent hormone therapy had been decided. Patients were expected to have no or only mild symptoms relating to their prostate cancer.

Primary endpoint:

"To estimate the Maximum Tolerated Dose (MTD) or Maximum Administered Dose (MAD) of VAL201"

This states the principal aim of the clinical trial as assessing how high a dose can or should be given to the patient in order to attempt to elicit a disease relevant response. As a dose escalation trial, as is typical for first in human studies, the dose level was started at a fraction of the dose tested in preclinical studies (in this case 0.5 mg/kg – so a typical 80 kg adult man received 40 mg per dose), and gradually increased to 8 mg/kg.

As well as assessing the tolerability of the dose (MTD) the trial considers the MAD, hence which doses are practical to give, based primarily on pharmacokinetics (a measure of how the body processes the drug) – considering how long the drug stays in the body, at what level, and whether that level continues to increase with increasing dose in a predictable manner.

Secondary endpoints:

"To assess the safety and tolerability of VAL201"

This endpoint requires a listing of adverse events that occur for each patient, regardless of whether or not the event is related to either the drug or the disease. These events are categorised by whether they are "serious", that is they require significant medical intervention to resolve; the severity of the event; whether it is likely to be related to administration of the drug; whether it results in the patient stopping or reducing intake of the drug; and how many patients the event occurs in.

As previously reported, the most common event during VAL201 administration was the occurrence of an injection site reaction, reported varyingly as bruising, rash or pain.

No drug-related events were reported that resulted in the patient being removed prematurely from the clinical trial.

"To evaluate the pharmacokinetics of VAL201"

Full pharmacokinetic profiles were successfully collected and analysed in two patients, on different doses, at multiple time points during their dosing schedule. When the data has been verified and entered into the database, this will be fully analysed to aid understanding of how the drug behaves in the body.

"To assess anti-tumour activity of VAL201"

Although primarily a safety and tolerability focussed trial, the patients involved undergo continuous monitoring of their disease throughout (as they would have regardless of trial participation). This includes **measurement of disease markers** (such as PSA), regular CT or MRI scans and symptom assessments to assess disease progression.

When the datasets have been formally verified and locked against further alteration, analysis and success against each endpoint can be assessed. ***Until the analyses are complete it would be premature to remark with confidence on the achievement or the content of any of the endpoints.***

Headline data will be released on completion of the initial analysis; after which the clinical study report will be compiled and submitted to the relevant regulatory authorities; the clinicialtrial.gov database will be updated according to regulatory requirements; and finally details of the results will be assembled into research papers – authored by Valirx and the clinical trial team for publishing in peer-reviewed journals.

Data verification requires access to the clinic by staff on our behalf, which is currently restricted due to the ongoing Coronavirus pandemic. Dependent on this access, it is anticipated that headline results will be available and announced in Q3. Reporting will then be completed in line with regulatory requirements.

VAL401

VAL401 LICENSING EXPECTED TO COMPLETE Q3 2020

VAL401 has been developed by ValiSeek Limited, a 55% owned Valirx subsidiary. ValiSeek was set up in 2014 as a Joint Venture between Valirx and Tangent Reprofiling Limited (a SEEK group company) whereby Valirx provided funding and Tangent Reprofiling provided a licence to the patents for VAL401.

VAL401 has completed an open label, **pilot phase 2 clinical trial** in late stage non-small cell lung cancer patients. Although in a small patient group, with just 8 patients receiving VAL401, data indicated that some patients benefited from an **improved quality of life,** in particular in measures of pain and nausea; and when compared to a case-matched group of 20 patients from the same clinic who did not participate in the trial, demonstrated **statistically significant improved overall survival** from time of diagnosis.

Pharmacokinetic data was collected in all patients, and the analysis of this data published in 2019 *Eur J Drug Metab Pharmacokinet* **44,** 557–565 (2019). https://doi.org/10.1007/s13318-018-00538-4

A **randomised, placebo controlled clinical trial** has been planned to test VAL401 in recently diagnosed patients with **pancreatic ductal adenocarcinoma** in combination with standard of care therapy.

Valirx recently announced (14th January 2020) an arrangement with UK SME, Black Cat Bio Limited, whereby on completion of successful fund-raising by Black Cat, the VAL401 project will be exclusively licenced to Black Cat with the ValiSeek shareholders each holding a share in the equity of Black Cat; and the ValiSeek shareholders having an entitlement to future royalty payments.

Under this agreement Black Cat Bio would be solely responsible for the funding and execution of the next VAL401 clinical trial.

Confirmation of funding is expected within Q2 or Q3 2020, with licensing to be completed shortly after. If this arrangement is unsuccessful, alternative exploitation will be sought.

SCIENTIFIC PROGRAM REVIEW 19TH MAY 2020

VAL301

VAL301 EVALUATION BY JAPANESE PHARMA ANNOUNCED IN MAY 2020

VAL301 uses the same active drug as VAL201 but is focussed to the treatment of women with endometriosis.

On 4th July 2019 it was announced that Aptus Clinical had been engaged to work with Valirx to develop an outline of the work required to **prepare VAL301 for a clinical trial**.

Endometriosis typically effects women of child-bearing potential who are otherwise healthy, therefore **different preclinical toxicology requirements** are considered than were required for the clinical trial of men with prostate cancer. Aptus have helped to identify these requirements, and to outline appropriate clinical trial designs.

On 1st May 2020 it was announced that a Japanese pharma company has agreed a Material Transfer Agreement with Valirx whereby Valirx are supplying the VAL301 drug material, and the Japanese company will carry out a series of preclinical proof of concept and efficacy sudies of VAL301.

Although the Japanese company will be focussed on developing the project for use in endometriosis, their data will be available to inform the oncology program around VAL201.

NON-CORE PROJECTS UNDER CONSIDERATION FOR JOINT VENTURE OR SIMILAR ARRANGEMENT

GeneICE

GeneICE is a **technology platform** designed to control expression levels of genes that may be over or under expressed in disease states. VAL101 is the lead candidate produced by the platform, proposed to modulate BCl2 expression – implicated in many cancers.

At an **early discovery/preclinical** stage of development, the GeneICE program requires further significant scientific development. As announced on 30th April 2020, **GeneICE is considered a "non-core" program** and is part of the package of programs currently under consideration for immediate transfer out of the Valirx pipeline.

TRAC

TRAC is a technology acquired by Valirx for 75,000 Euros on 5th February 2015. Announced as conditionally sold for 800,000 Euros on 7th July 2016, 202,000 Euros was received and the technology reverted to Valirx in 2018, as reported in the 2018 financial statements.

TRAC is a tool to study expression characteristics of genes, and has potential use in the diagnostics arena – and has been used by a previous owner as part of a commercial service provision. As announced on 30th April 2020, **TRAC is considered a "non-core" program** and is part of the package of programs currently under consideration for immediate transfer out of the Valirx pipeline.

FitBio

The Intellectual Property assets acquired from FitBiotech Oy by Valirx for 5,000 Euros on 2nd May 2019 encompass a gene transfer unit, initially envisaged to be paired with the GeneICE products to create potential therapeutic products. As announced on 30th April 2020, **FitBio is considered a "non-core" program** and is part of the package of programs currently under consideration for immediate transfer out of the Valirx pipeline.

SCIENTIFIC PROGRAM REVIEW 19TH MAY 2020

For more information, please contact:

ValiRx plc	**Tel: +44 (0) 20 7073 2628**
	www.valirx.com
Suzanne Dilly	suzanne.dilly@valirx.com
Cairn Financial Advisers LLP (Nominated Adviser)	**Tel: +44 (0) 20 7213 0880**
Liam Murray / Jo Turner / Ludovico Lazzaretti	
Peterhouse Capital Limited (Sole Broker)	**Tel: +44 (0) 20 7469 0930**
Duncan Vasey / Lucy Williams / Eran Zucker	

Notes for Editors

About ValiRx

ValiRx is a biotechnology oncology focused company specialising in developing novel treatments for cancer.

The Company's business model focuses on identifying and in-licensing early stage projects, adding value through scientific development and then out-licensing therapeutic candidates early in the development process. By aiming for early-stage value creation, the company reduces risk while increasing the potential for realising value.

Until recently, cancer treatments relied on non-specific agents, such as chemotherapy. With the development of target-based agents, primed to attack cancer cells only, less toxic and more effective treatments are now possible.

The Company listed on the AIM Market of the London Stock Exchange in October 2006 and trades under the ticker symbol: VAL.