



Affimer[®]
pre|CISION[™]

Preliminary Results for the 12 Months Period Ending 31st December 2020

April 22nd 2021

Disclaimer: Important Notice

No representation or warranty, expressed or implied, is made or given by or on behalf of Avacta Group plc (the "Company" and, together with its subsidiaries and subsidiary undertakings, the "Group") or any of its directors or any other person as to the accuracy, completeness or fairness of the information contained in this presentation and no responsibility or liability is accepted for any such information. This presentation does not constitute an offer of securities by the Company and no investment decision or transaction in the securities of the Company should be made solely on the basis of the information contained in this presentation.

This presentation contains certain information which the Company's management believes is required to understand the performance of the Group. However, not all of the information in this presentation has been audited. Further, this presentation includes or implies statements or information that are, or may be deemed to be, "forward-looking statements". These forward-looking statements may use forward-looking terminology, including the terms "believes", "estimates", "anticipates", "expects", "intends", "may", "will" or "should". By their nature, forward-looking statements involve risks and uncertainties and recipients are cautioned that any such forward-looking statements are not guarantees of future performance. The Company's or the Group's actual results and performance may differ materially from the impression created by the forward-looking statements or any other information in this presentation.

The Company undertakes no obligation to update or revise any information contained in this presentation, except as may be required by applicable law or regulation. Nothing in this presentation is intended to be, or intended to be construed as, a profit forecast or a guide as to the performance, financial or otherwise, of the Company or the Group whether in the current or any future financial year.

This presentation and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other person.

Certain information in this presentation has been extracted from announcements made by the Company and this presentation is not a substitute for reading the Company's announcements in full.



Introduction

Today's Presentation Team



Dr Alastair Smith, CEO

- Over 15 years experience as a life sciences public company CEO.
- Science background with 13 years in academia – established a leading UK biophysics group.
- Founded Avacta in 2006.
- World class scientific and technical knowledge with a highly commercial mindset.



Tony Gardiner, CFO

- Over 20 years senior financial and operational experience across multiple sectors.
- 4 years as CFO of AIM listed Fusion IP plc, 5 years as Finance Director of Aedas/AHR Architects.
- Joined Avacta in 2016.



Neil Bell, Chief Development Officer

- Neil is responsible for late stage pre-clinical and early clinical development of Avacta's pipeline of pre|CISION™ pro-drugs and Affimer® immunotherapies.
- Over 30 years' experience in the drug development industry, having held senior positions in global pharmaceutical companies and innovative biotechs including Eisai, Pfizer and Ipsen, Teva, Daiichi-Sankyo and Autolus.
- Extensive experience of designing and leading Phase I to III clinical studies.

Group Overview



LSE: AVCT ~£620M market capitalization

Therapeutics Division

- Based in Cambridge, UK
- R&D Centre: 35 (inc 20 PhDs) scientists/technicians
- Clinical Development Group established including Translational Sciences, CMC, Clinical Operations
- In-house pre-clinical and clinical pipeline of novel cancer therapies
- Global partnerships (oncology, autoimmune, cell and gene therapy)

Affimer®

pre|CISION™

Diagnostics Division

- Based in Wetherby, UK
- R&D Centre and plc Headquarters
- 49 (inc 22 PhDs) scientists/technicians
- In-house DX product pipeline
- Global technology evaluations and partnerships (mostly undisclosed)

Affimer®





**Preliminary Results for the
Period Ended 31st December 2020**

Operational Highlights for the Period Ended 31st December 2020

Therapeutics

- AffyXell joint venture with Daewoong Pharmaceutical in South Korea and expansion of license with LG Chem to include Affimer XT[™].
- Expansion of Therapeutics team with appointment of Neil Bell as Chief Development Officer, plus a number of other senior hires to lead the pre-clinical and clinical development teams.
- Submitted the Clinical Trial Authorisation (CTA) for a phase 1 dose-escalation and expansion study of AVA6000 Pro-doxorubicin, Avacta's first pre|CISION[™] prodrug.



Post-period Highlights

- License agreement with Point Biopharma Inc to provide access to Avacta's pre|CISION[™] technology for the development of tumour-activated radiopharmaceuticals.
- AffyXell Therapeutics series A venture capital investment of \$7.3m.
- The Medicines and Healthcare products Regulatory Agency approved the CTA for AVA6000 Pro-doxorubicin.



Operational Highlights for the Period Ended 31st December 2020

Diagnostics

- Multiple development, manufacturing and commercial partnerships focused around SARS-CoV-2 antigen testing using Affimer reagents.
- Major licensing agreement with Astrea Bioseparations for the use of the Affimer platform in affinity purification applications.
- Expanded diagnostics division management and teams with three senior appointments.

Post-period Highlights

- Clinical evaluation of the AffiDX[®] SARS-CoV-2 antigen rapid test: sensitivity 98.0% (98 PCR positive samples with Ct up to 31; 100% for Ct<27) specificity 99% (102 negative samples).
- Collaboration with Bruker Corporation to evaluate the clinical utility and commercial potential of the BAMST[™] SARS-CoV-2 Antigen Test.
- Commercial partnership with Mologic.
- Royalty bearing license agreement with Biokit, a Werfen Company, to develop and commercialise an Affimer[®]-based in-vitro diagnostic test.
- Distribution agreement with Abcam plc for Affimer-based AffiRX[™] SARS-CoV-2 research ELISA.



Financial and Corporate highlights

- Fundraisings completed during the period raising £53.8 million to expand Diagnostics and Therapeutics programmes.
- Cash and short-term deposit balances at 31 December 2020 of £47.9 million (31 December 2019: £8.8 million).
- Revenues of £3.6 million for year ended 31 December 2020 (17-month period to 31 December 2019 "2019": £5.5 million).
- Operating loss of £21.3 million for year ended to 31 December 2020 (2019: £18.0 million).
- Increased R&D investment across diagnostics and therapeutic programmes, leading to reported loss of £18.9 million (2019: £15.6 million).
- Loss per ordinary share 8.4p (2019: 13.0p).
- Paul Fry appointed as Non-executive Director. Paul is Chief Financial Officer of Vectura Group plc.

Preliminary Results for the Year Ending 31st December 2020: Income Statement

	2020 (£m) (12 months)	2019 (£m) (17 months)
Revenue	3.64	5.51
Gross profit	2.18	4.07
Gross margin	60%	74%
R&D costs	(10.19)	(10.06)
Admin costs	(13.28)	(12.04)
Operating loss	(21.29)	(18.03)
Net financial costs	(0.05)	(0.02)
Taxation	2.45	2.44
Retained loss	(18.89)	(15.61)
Loss per share	8.37p	12.98p

Preliminary Results for the Year Ending 31st December 2020: Cash Flow and Balance Sheet

	2020 (£m)	2019 (£m)
Operating activities	(14.07)	(13.72)
Working capital	0.73	(0.72)
Tax and interest	2.70	1.43
Investment	(21.90)	(2.53)
Financing	51.65	19.11
Net cash inflow/(outflow)	19.11	3.57
Cash and short-term deposits	47.91	8.79
PPE (<i>inc. IFRS16 property leases</i>)	4.79	3.08
Intangible assets	9.42	11.80
Other net assets/(liabilities)	(0.19)	2.14
Net assets	61.93	25.81



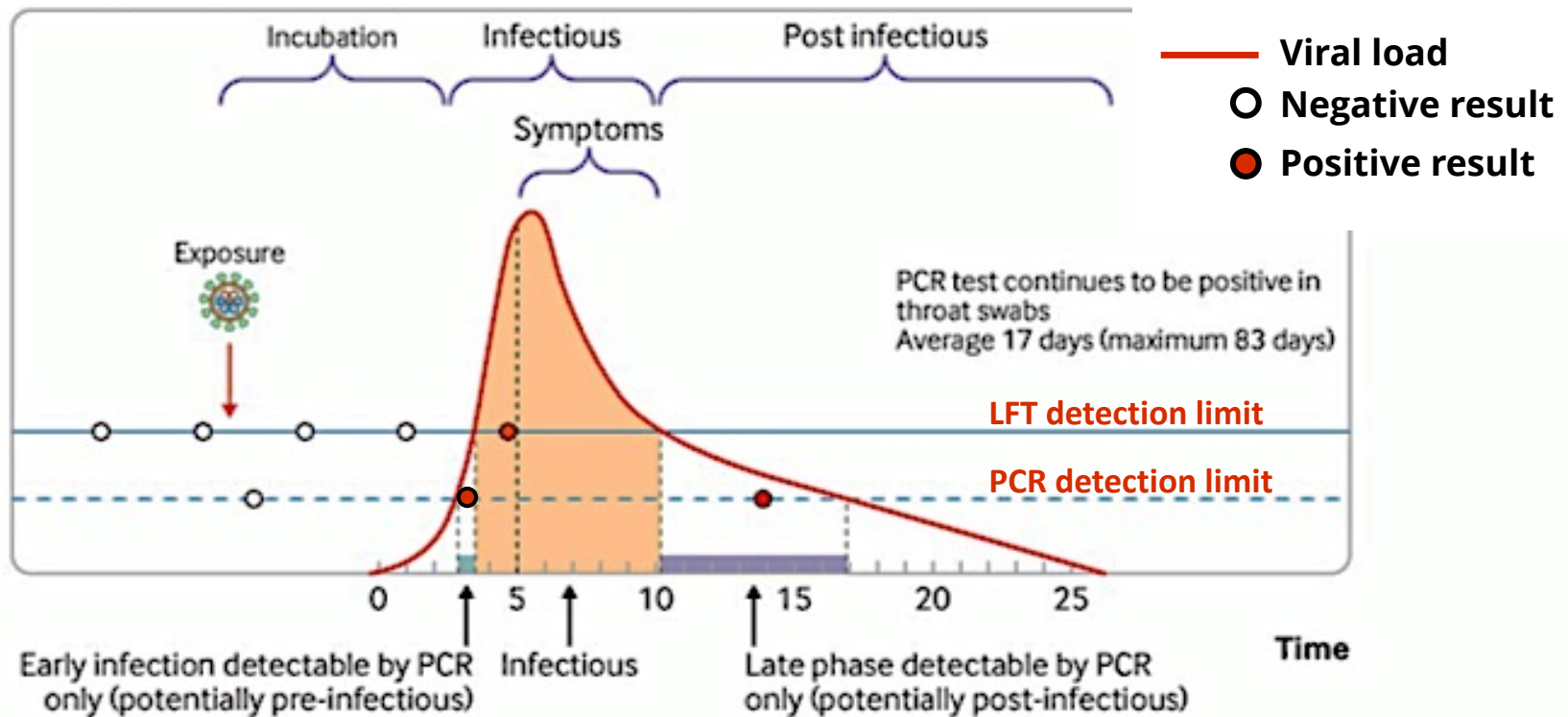
Avacta[®]

Business Update



PCR vs Lateral Flow Testing

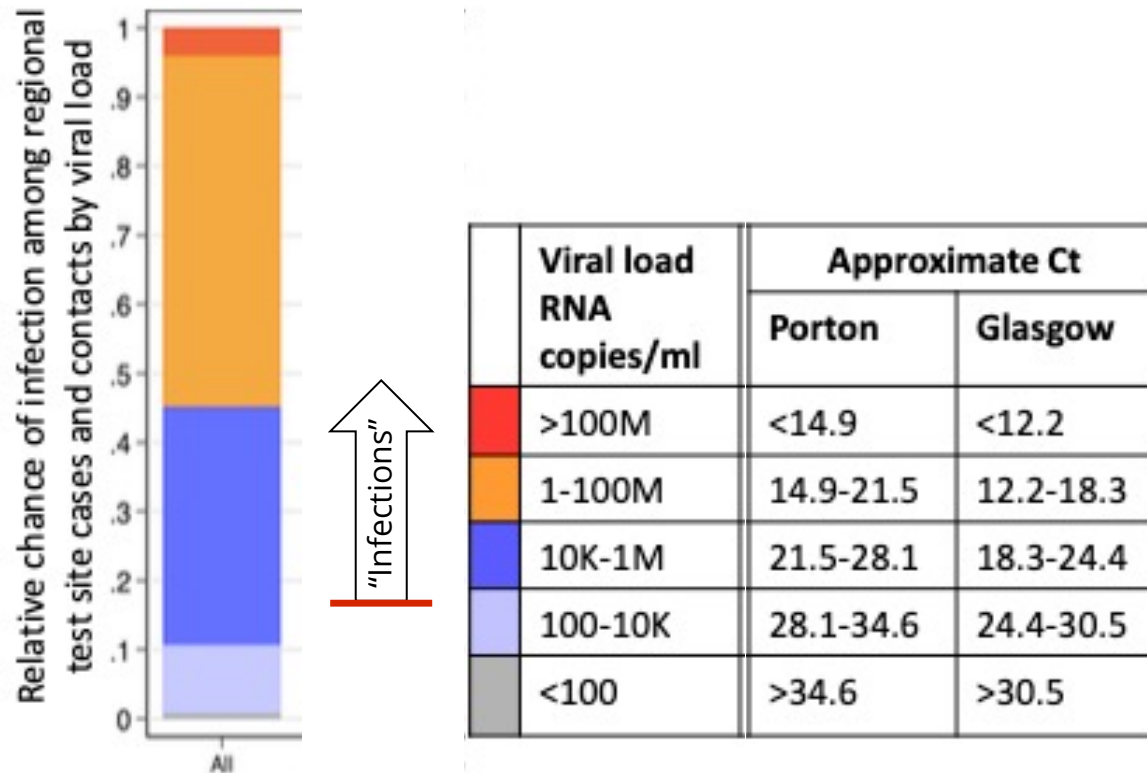
Correct application of rapid antigen testing to compliment centralised laboratory PCR testing



Crozier et al, BMJ 2021; 372:n208

What Does “Infectious” Really Mean?

Ct<27 suggested as a measure of an “infectious” viral load



Data taken from Liverpool COVID-SMART Pilot, Dec 2020.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950695/s0958-liverpool-covid-smart-evaluation.pdf

AffiDX[®] SARS-CoV-2 Antigen Rapid Test

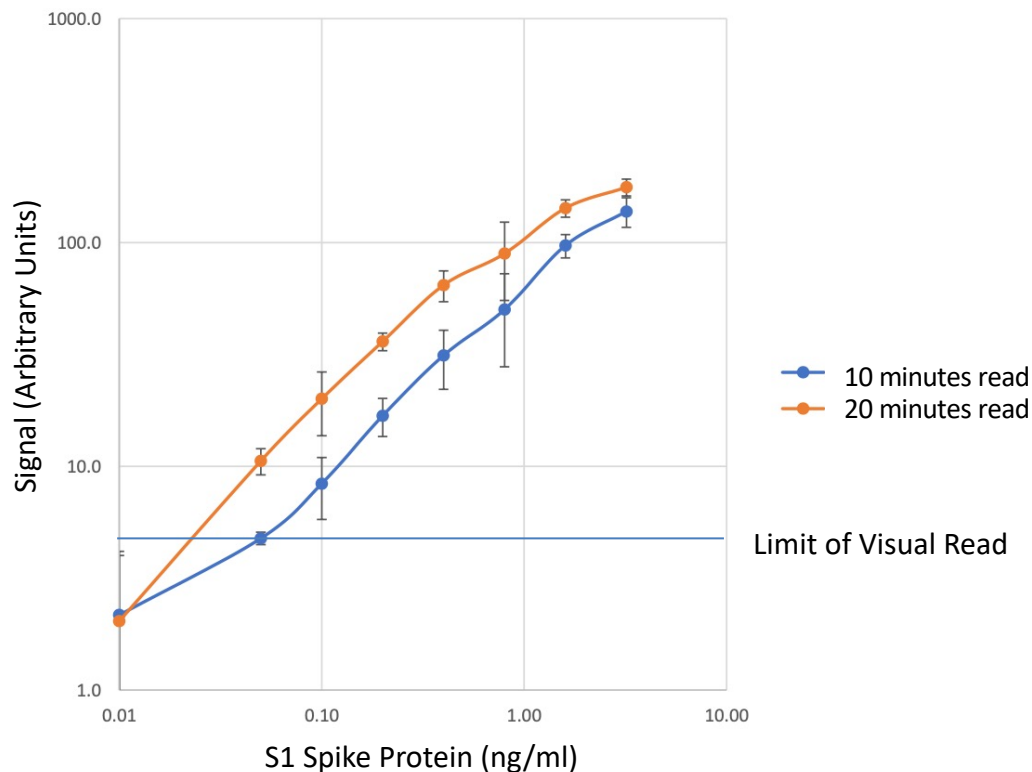
A 20 minutes rapid antigen test using anterior nasal sampling

INTENDED USE: The Avacta[®] AffiDX[®] SARS-CoV-2 antigen lateral flow test is a qualitative *in vitro* diagnostic (IVD) test to detect SARS-CoV-2 antigen in human anterior nasal swab samples. The test is to be used to identify individuals with higher viral loads of SARS-CoV-2 that increase the likelihood of transmitting the infection to others. The test is intended for professional use only.



Very high analytical sensitivity and excellent specificity to the original SARS-CoV-2 strain and key variants

Analytical Sensitivity using Negative Nasal Swab Eluate Spiked with SARS-CoV-2 Spike Protein



Analytical Specificity

- No cross reactivity of Affimer reagent with MERS-CoV S1, SARS-CoV-1 S1, HCoV-229E S1, HCoV-HKU1 S1, HCoV-NL63 S1 or HCoV-OC43 S1.
- Detects the B117, D614G and original strain (testing of other variants ongoing).

Visual readout in 20 minutes

Example COVID-19 Positive Clinical Results
(Test/Patient Identifiers Obscured)



Example COVID-19 Negative Clinical Results
(Test/Patient Identifiers Obscured)



Clinical Sensitivity (Ct<31) 98.0%; Clinical Specificity 99%

PCR ¹ Result (Ct Range)	Number of Samples Tested in Ct Range	Avacta [®] AffiDX [®]		Clinical Sensitivity by Ct Range		
		Positive	Negative	Cumulative Ct Range	% Cumulative Sensitivity	95% CI
< 27	52	52	0	0 - 27	100.0 %	(93.1 - 100.0 %)
27 - 28	7	6	1	0 - 28	98.3 %	(91.0 - 99.7 %)
28 - 29	18	18	0	0 - 29	98.7 %	(93.0 - 99.8 %)
29 - 30	19	19	0	0 - 30	99.0 %	(94.3 - 99.8 %)
> 30	2	1	1	All	98.0 %	(92.9 - 99.4 %)
TOTAL	98	96	2		98.0 %	(92.9 - 99.4 %)

PCR Result	Number of Negative Samples Tested	Avacta [®] AffiDX [®]		Clinical Specificity	
		Positive	Negative	% Specificity	95% CI
Negative	102	1	101	99.0 %	(94.7 - 99.8 %)

1. Applied Biosystems TaqPath COVID-19 CE-IVD RT-PCR Kit

Multiple UK manufacturing partners and in discussion with additional overseas manufacturing capacity

- Close collaboration with Mologic instrumental in achieving final lateral flow test architecture.
- Global Access Diagnostics (GAD) already in an advanced state of manufacturing readiness for this test design.
- GAD is already making product that is being used for verification and validation studies for CE marking and first commercial batches.
- Both Abingdon and BBI are now establishing the manufacturing processes equivalent to GAD's.
- Combined UK manufacturing capacity when fully scaled-up that is available to Avacta (depending on access to equipment funded by HM Government) is 5 – 30 million tests per month.
- Additional manufacturing capacity being sought overseas.

In discussion with over 20 distributors covering 25 European territories for AffiDX® SARS-CoV-2 antigen rapid test for professional-use

- Clinical validation
 - Completed
- Verification of manufactured batches against product specifications (by end April)
 - Analytical performance data
 - Stability data (accelerated)
- CE marking for professional-use expected in early May.
- Commercial roll-out to commence in May
 - Good progress being made with distributors and OEM partners in Europe
 - Ongoing, but slow, dialogue with DHSC/PHE
 - Working in parallel towards CE marking for consumer self-testing
 - Reviewing US regulatory strategy

Other COVID and non-COVID Opportunities

- Collaboration with Adeptrix and Bruker Corporation to evaluate the clinical utility and commercial potential of the BAMS™ SARS-CoV-2 Antigen Test.
- Clinical evaluation of performance still ongoing (low sample availability now) at a UK hospital site.
- Well-established PCR-testing capacity in most countries has removed the need for mass spectrometer based additional capacity.
- Avacta is working closely with Bruker and Adeptrix to review the commercial strategy for the SARS-CoV-2 assay and for a wider range of BAMS proteomics tests.

- Distribution agreement with Abcam plc for Affimer-based AffiRX™ SARS-CoV-2 research ELISA.

- Licensing agreement with Astrea Bioseparations for the use of the Affimer platform in affinity purification applications in bioprocessing.
- Initially non-exclusive but with the option to take exclusive if certain performance criteria are met.

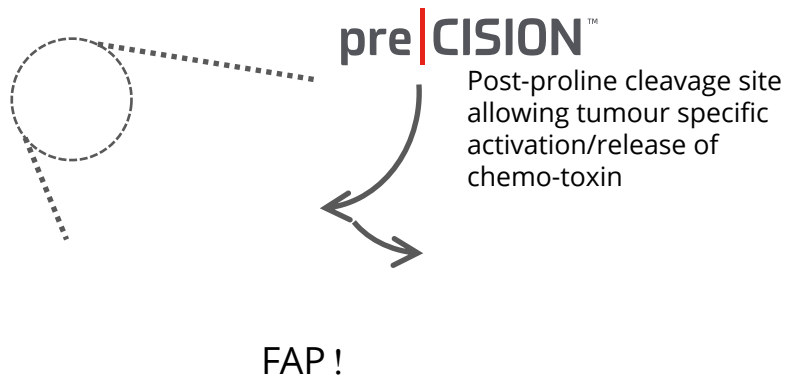


The pre|CISION™ Platform

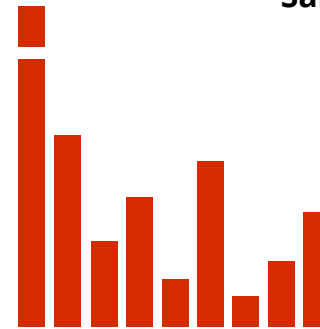
Tumour Targeted Activation of Cancer Therapies

What is pre|CISION?

- pre|CISION™ is a highly specific substrate for fibroblast activation protein-1 (FAP!), an enzyme that is highly upregulated in most solid tumours.
- pre|CISION™ prevents cytotoxins from entering cells rendering them inert until activated in the tumour microenvironment by FAP.
- pre|CISION™ can also be incorporated into a drug conjugate linker for release of the warhead in the tumour microenvironment.
- Substrate exclusively licensed from Tufts University.



**Average Induction of FAP!
Activity in Tumour Relative to
Sample Matched Serum**



Highly Specific to FAP!

AVA6000 addresses the safety issues of a \$1bn generic chemotherapy

Background

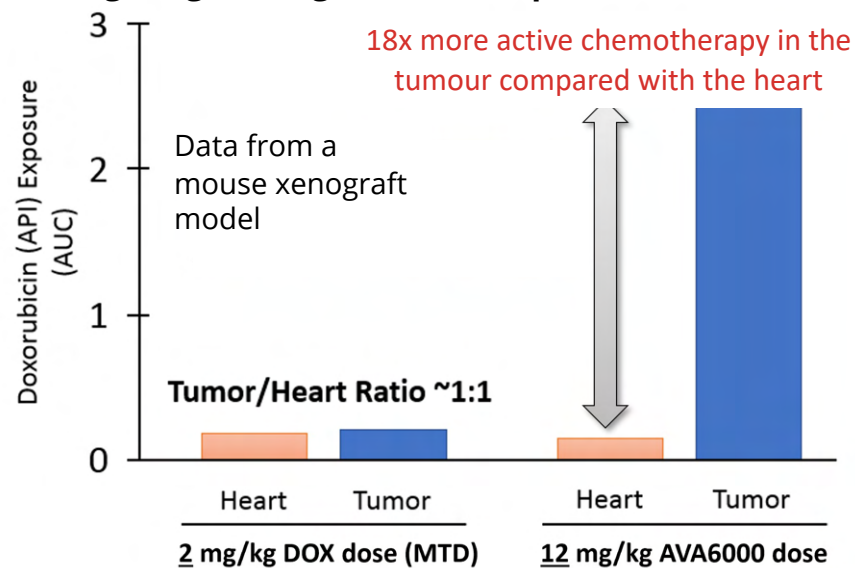
Doxorubicin has been the standard of care treatment for advanced soft tissue sarcoma (ASTS) for 40 years.

Treatment is limited to six cycles (60-75 mg/m² every 3 weeks) due to cumulative cardio-toxicity (450mg/m²).

Nevertheless, the global market for this generic drug is \$1bn.

Improved safety could permit many more cycles of treatment per patient at the same dosing level.

Targeting of Drug to Tumour Spares Heart Tissue

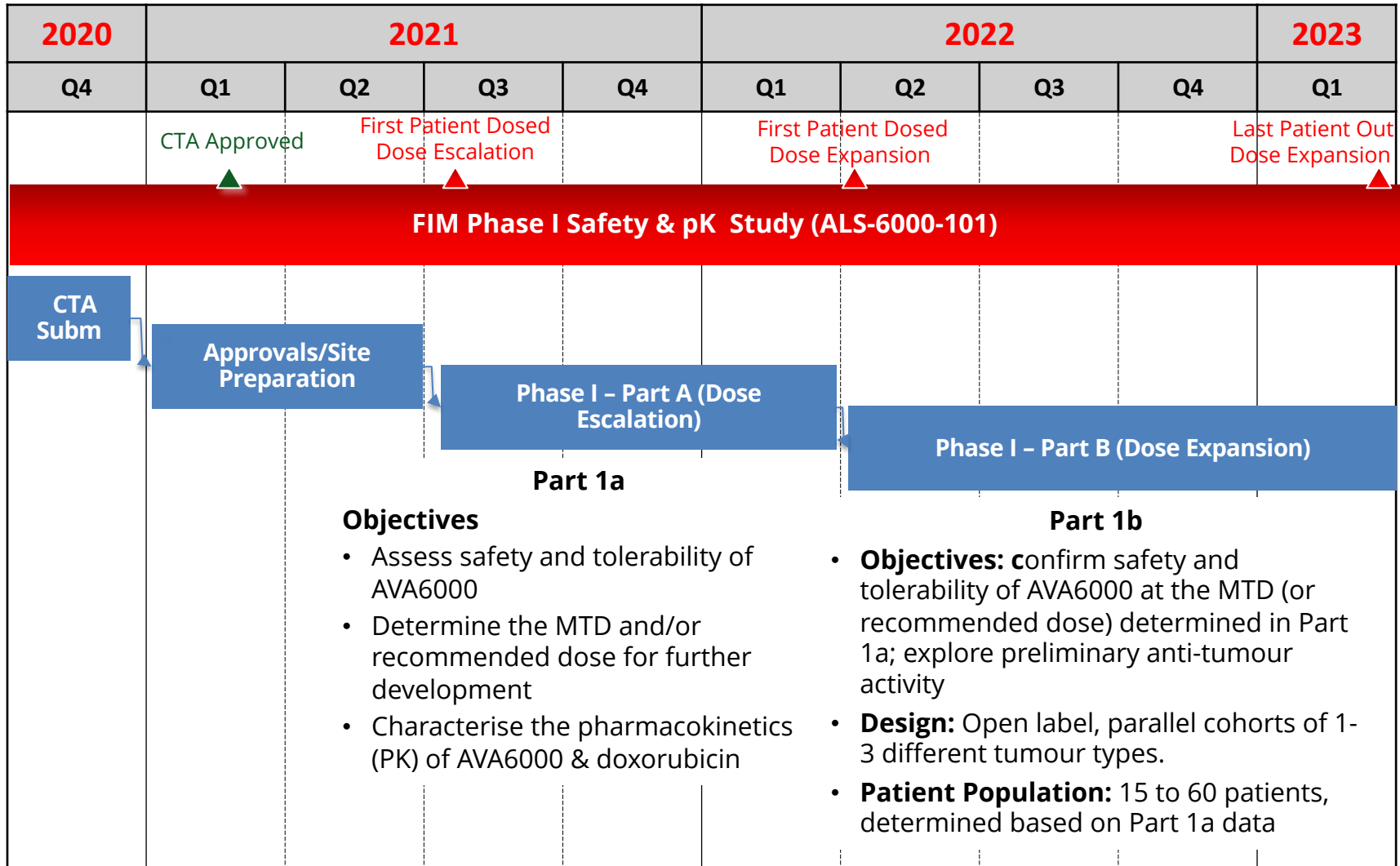


AVA6000 Market Opportunity

For three indications only (ASTS, breast and ovarian cancer) peak sales for a safer/more efficacious form of dox in the US/EU alone is estimated to be \$1.5bn* pa with a 5-10% royalty to Avacta plus development milestones in near term.

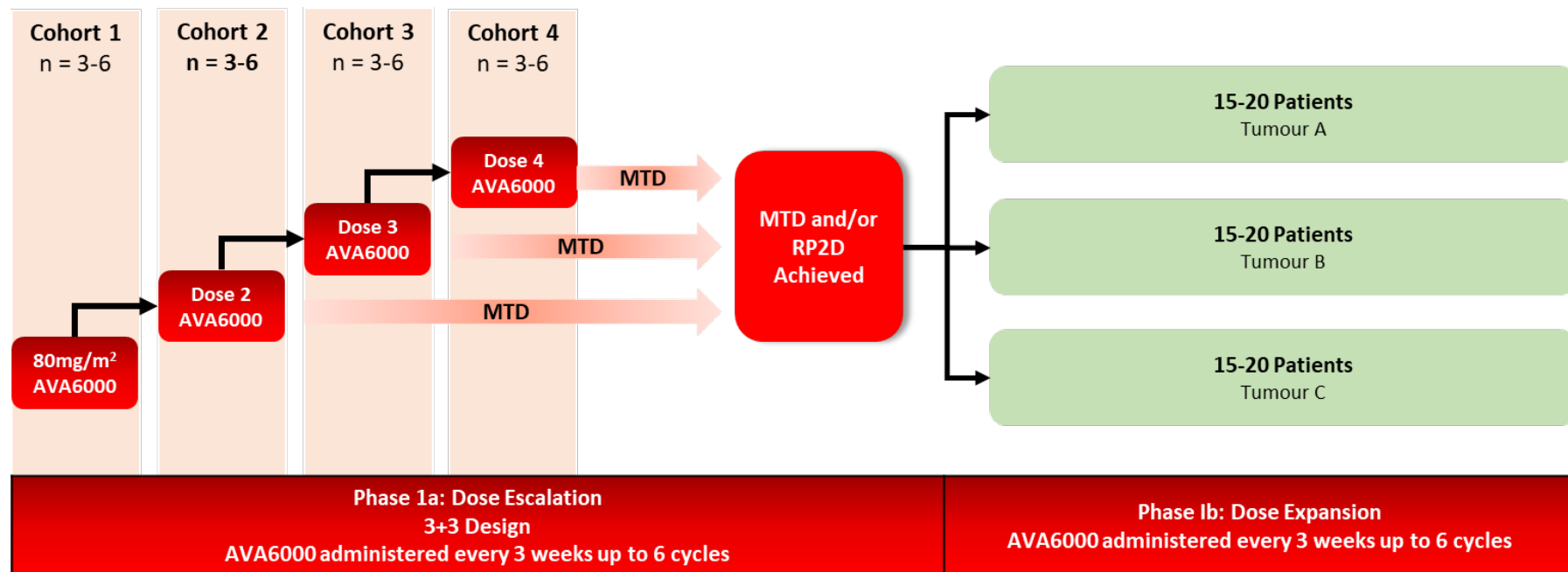
* Commercial Evaluation: AVA6000 (Globe Life Sciences, March 2020)

AVA6000 Phase I Study Timeline



MTD - Maximum Tolerated Dose

AVA6000 Phase I Study Design



- Phase 1, Open-Label, Dose Escalation (3+3) followed by Dose Expansion
- Starting dose for Cohort 1 of 80mg/m² AVA6000 (administered every 3 weeks)
- Subsequent AVA6000 Doses following a modified Fibonacci series and guided by both safety data & PK data
- 15- 20 patients in dose-escalation phase; 15-60 patients in dose expansion phase
- Locally advanced (unresectable) or metastatic solid tumours
 - Dose Escalation: Pancreatic, Colorectal, Breast, Ovarian, NSCLC, SCCHN, Soft-tissue sarcoma and bladder
 - Dose Expansion: Select 1-3 tumour types based on data from Phase 1a

The Wider pre|CISION Pro-drug Opportunity

pre|CISION can be widely applied to a range of other chemotherapies in a market worth \$56.5B with CAGR of 11.50% driven by increased cancer detection rates

Example: Velcade

- Bortezomib (Velcade, Takeda Pharmaceuticals) had annual sales of \$1.2bn (2018)
- **BUT - approval limited to multiple myeloma because of dose limiting toxicities,**
- **AND - coming off patent by 2022.**

Example: Taxanes

- Taxanes, such as the generic Paclitaxel, are used to treat a range of cancers such as prostate, breast and cervical.
- Paclitaxel has global sales of \$2.96bn (2018) and is expected to generate revenue of \$6.63bn by end of 2025.
- **BUT - significant toxicities, such as myelosuppression and peripheral neuropathy, limit the effectiveness of paclitaxel-based treatment regimens.**

Ideal for pre|CISION tumour activation to create safer and proprietary pro-drugs.

Conservatively assume the pre|CISION prodrug versions of these can achieve similar market sizes delivering 5-10% royalty to Avacta plus development milestones.

Potential for a pipeline of pre|CISION pro-drugs, some of which have already been synthesized, with an addressable market of many \$bn pa.

Including but not limited to:

- preCISION proteasome inhibitor
- preCISION Paclitaxel
- preCISION Oxaliplatin
- preCISION Gemcitabine
- preCISION Capecitabine
- preCISION PARP inhibitor
- preCISION PD-1 Inhibitor
- preCISION AKT inhibitor
- preCISION Balixafortide

Partnered Programmes Update



- (2018) multi-target agreement to develop Affimer® therapeutics in several disease areas.
- (2020) partnership expanded to include Avacta's Affimer XT™ technology for serum-half life extension.
- Developing a serum half-life extended PD-L1 Affimer antagonist to be commercialized by LG Chem.



- (2019) collaboration and option agreement to develop Affimer-drug conjugates combining Affimer® technology with (PBD)-based warhead and linker technologies (licensed by ADCT from AstraZeneca).
- Avacta is generating Affimer proteins for targeting.
- ADC will carry out pre-clinical research to evaluate these with a view to clinical development.



- (2021) a license for Avacta's pre|CISION technology for the development of tumour-activated radiopharmaceuticals.
- Potential to improve targeting the radioligand treatment to cancer cells.
- First programme initiated.



- (2020) JV (AffyXell) developing next generation cell and gene therapies incorporating Affimer proteins.
- Substantial progress made in generating Affimer proteins against the first two targets.
- AffyXell Series A funding of \$7.3m to achieve key pre-clinical milestones.
- Anticipate in vivo proof-of-concept for at least one in 2021.

Summary

Major value inflection points in the near term across the Group

- **Diagnostics: Commercial launch of high performance AffiDX[®] SARS-CoV-2 antigen lateral flow rapid test now imminent**
 - There will be an ongoing global need for sensitive and reliable COVID-19 testing for many years.
 - AffiDX[®] SARS-CoV-2 antigen lateral flow test
 - Clinical sensitivity (all Ct values test): 98.0% and (Ct<27): 100%
 - Clinical Specificity: 99%
 - CE marked for professional-use and commercially available in May
 - Substantial progress made with potential distributors, end-users and OEM partners
 - UK manufacturing capacity of millions pcm; overseas capacity may well be required
- **Therapeutics: good progress has been maintained despite expected COVID related working restrictions**
 - AVA6000 pro-doxorubicin: expecting to dose first patient at the start of Q3; potential IND filing in Q4.
 - Partnered programmes all progressing well plus expansion of LG Chem agreement to include Affimer XT[™]; AffyXell Series A funding of \$7.3m to achieve key pre-clinical milestones.
 - In-house Affimer immunotherapy and pre | CISION[™] pro-drug pipeline expansion underway.
 - Multiple development candidate selection milestones across all programmes during next 12 months.
- **Strong balance sheet to support core businesses and working capital for COVID testing opportunity**



Avacta[®]

Joint Broker and Nomad
FinnCap, London
www.finncap.com
T +44 (0) 207 220 0500

Joint Broker
Stifel Nicolaus Europe Limited
www.stifel.com
Tel: +44 (0) 207 710 7600

US Investor Relations
TKDY Advisors, New York
Thomas Lawrence
Thomas@tkdyadvisors.com
www.tkdyadvisors.com

FTI Consulting (Financial Media and IR)
Avacta.LS@fticonsulting.com
www.fticonsulting.com
Tel: +44 (0) 203 727 1000