



Bioventix Presentation: 30 March 2020

Coronavirus (COVID-19) Statement & Comments

- We will endeavour to make some comment about COVID-19 and its possible impact on Bioventix, accepting the fact that such statements can be quickly overtaken by events
 - Our understanding of the impact may not become clear for a number of months
- Comments will appear in the following slides highlighted in this format

Bioventix (Farnham)



■ Purification and testing



■ 14 staff (12 FTEs) in a Bioventix-owned property



■ New cell culture incubators

■ investment in facilities and equipment will be extended to the new technology lab during 2020. Additional expenditure ~£100k (~£500k total)



■ Reduced lab resource will be focussed on SMA production and supply using the bioreactors featured above

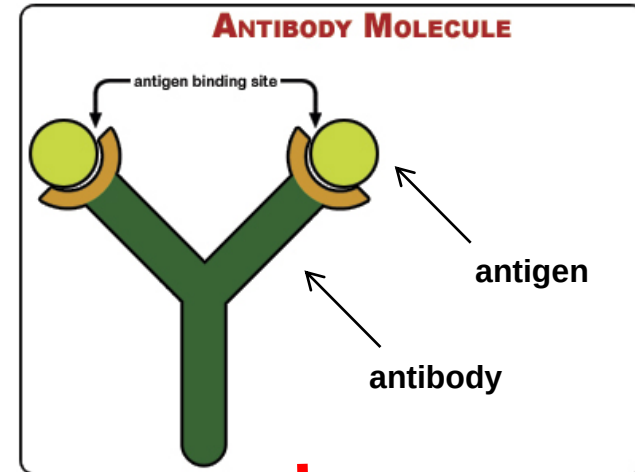
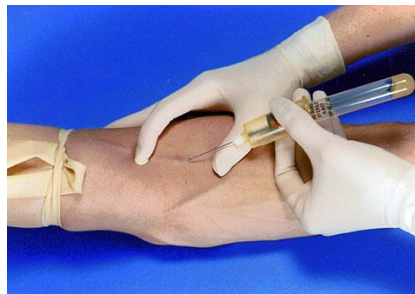


Automated Blood Testing



■ Bioventix creates and manufactures sheep monoclonal antibodies (SMAs). Customers incorporate these antibodies in reagent packs for use on automated blood-testing machines

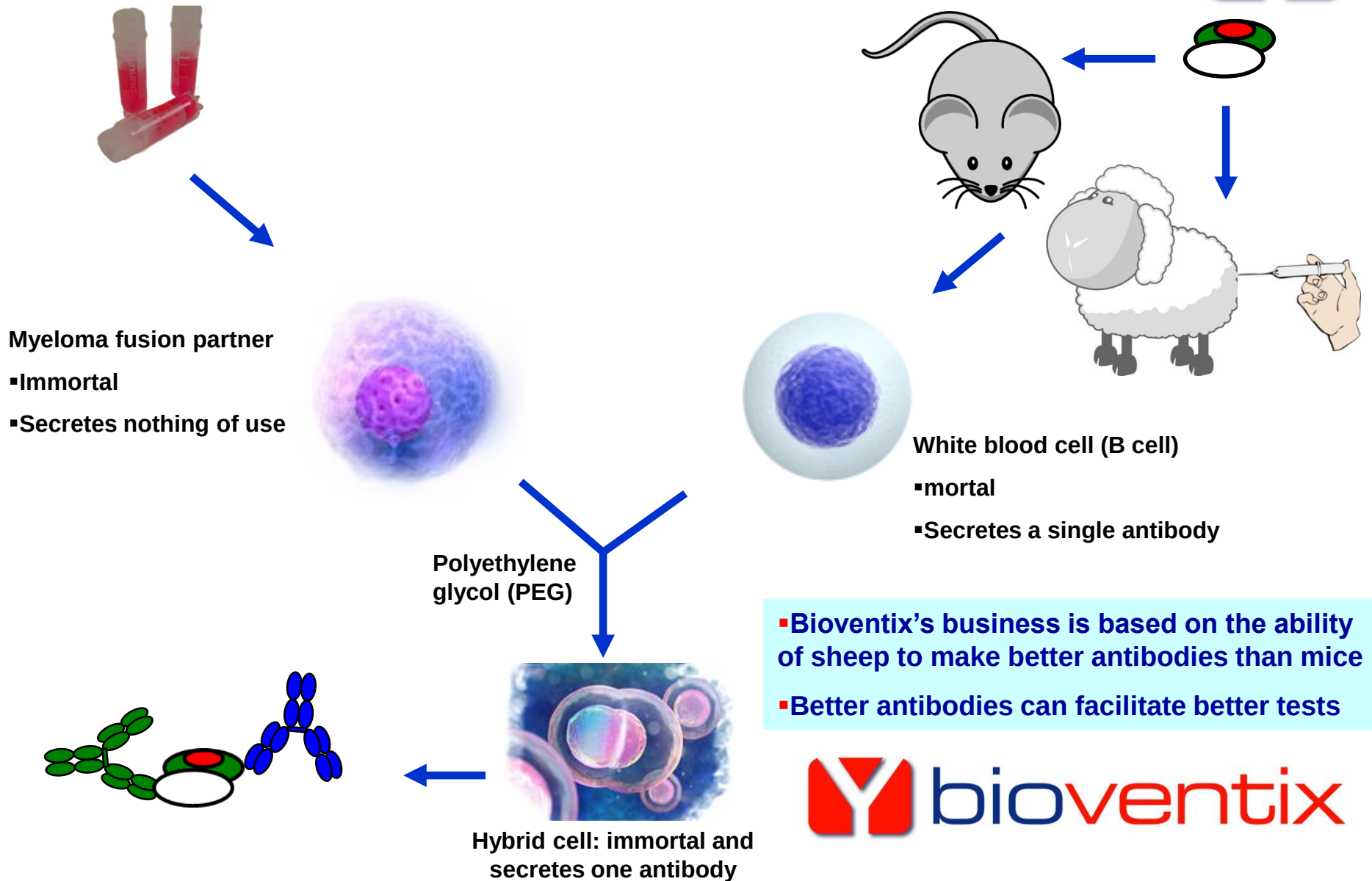
■ In most affected areas, governments have prioritised healthcare and associated services such as diagnostic products



■ Bioventix sells liquid “physical” SMAs and derives royalties from their downstream use



Creating Antibodies



Why SMAs? (testosterone)



Clinical Chemistry 49, No. 8, 2003

Clinical Chemistry 49:8
1381–1395 (2003)

Endocrinology and
Metabolism

Testosterone Measured by 10 Immunoassays and
by Isotope-Dilution Gas Chromatography–Mass
Spectrometry in Sera from 116 Men,
Women, and Children

JOËLLE TAIEB,¹ BRUNO MATHIAN,² FRANÇOISE MILLOT,³ MARIE-CLAUDE PATRICOT,²
ELISABETH MATHIEU,⁴ NICOLE QUEYREL,⁵ ISABELLE LACROIX,⁶ CLAUDE SOMMA-DELPERO,⁷ and
PHILIPPE BOUDOU^{8*}

■ In 2003, it became clear that testosterone testing for women was inadequate

Editorial

Immunoassays for Testosterone in Women: Better than a Guess?

Endocrine Abstracts (2008) 16 P631

Development of an Elecsys® Testosterone II Immunoassay with an improved performance for measurement of testosterone in women

Judit Oldekamp, Klaus Hirzel, Erich Schneider & Dieter Gassner

Roche Diagnostics GmbH, Penzberg, Germany.

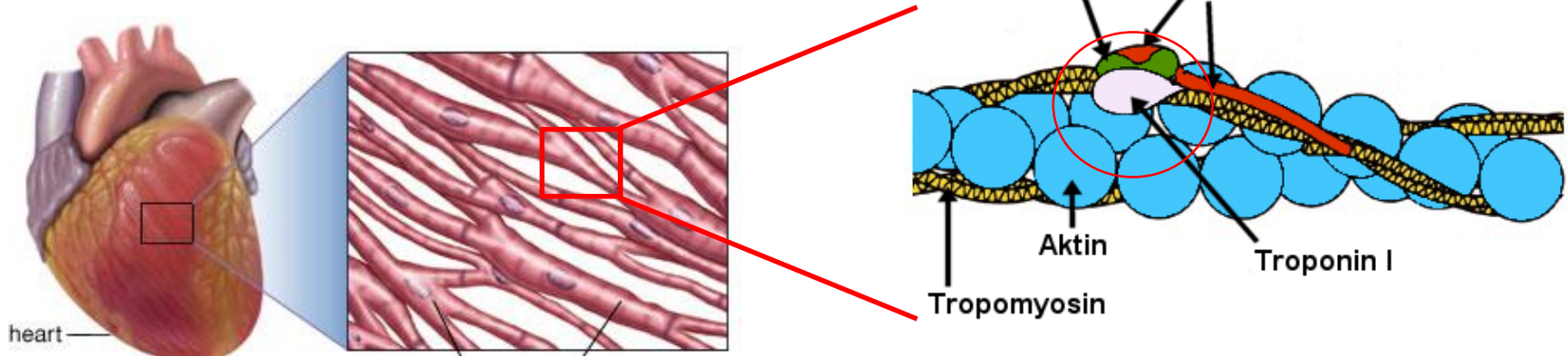
Immunoassays for testosterone produce sometimes incorrectly high results in female samples. The reasons of this phenomenon are not fully understood, but interference by cross-reacting substances and inaccurate calibration can be critical. One known endogenous interfering substance is dehydroepiandrosterone sulphate (DHEA-S). Other substances still have to be identified.

An Elecsys® Testosterone II assay using a new high affinity sheep monoclonal antibody (Bioventix SMA testo3.6A3) is currently in the development pipeline for the Elecsys and cobas e immunoassay platforms.

■ Roche published their prototype assay in 2008 and launched this assay in 2009

■ It is the Bioventix antibody that made this possible

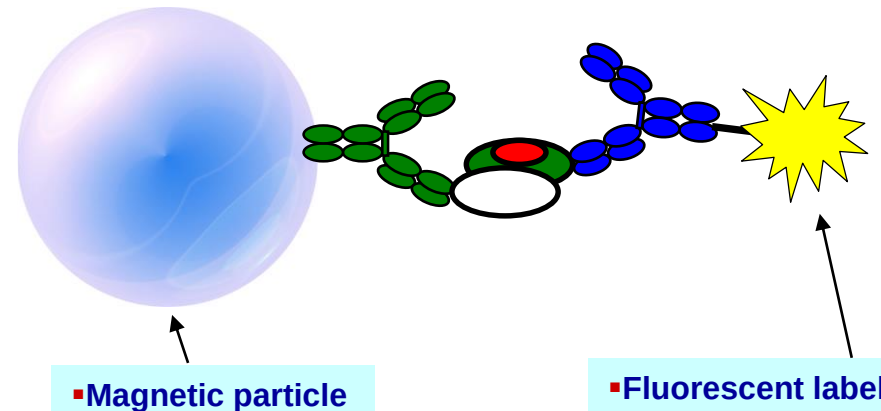
Why SMAs? (troponin)



▪ Most COVID-19 patients have elevated troponin levels as measured by new high sensitivity assays. Higher levels have been associated with poor prognosis but the clinical value of such testing is the subject of debate

▪ Troponin is a component of heart muscle that leaks out after a heart attack

▪ A new improved Siemens assay for troponin (ie to help diagnose chest pain) which uses Bioventix antibodies was released in ex-US markets in May 2017 and in the US in July 2018



▪ Magnetic particle

▪ Fluorescent label

Key Financials

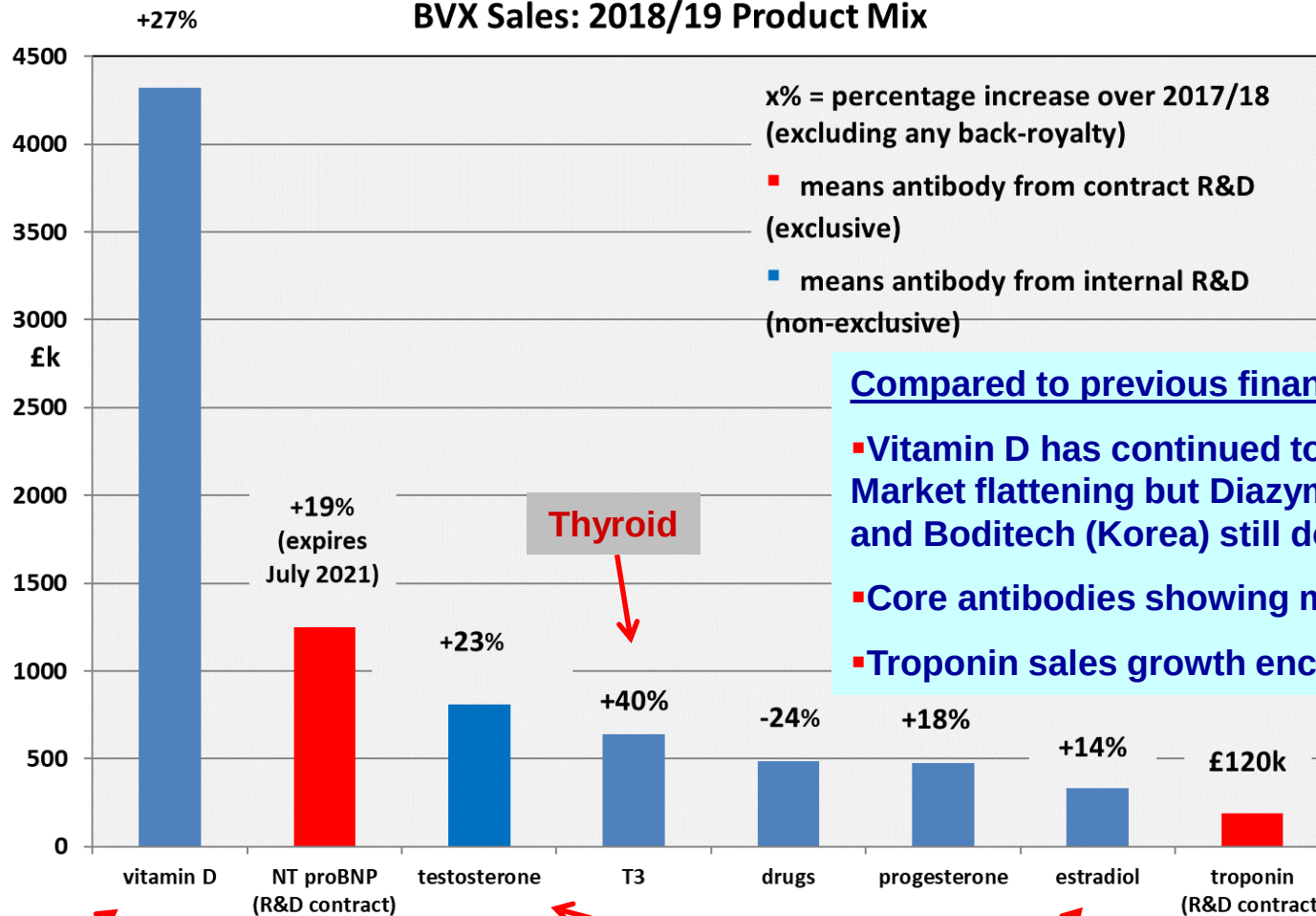


£ ('000)	Year to 30.6.19	½ year to 30.12.18	½ year to 30.12.19 (+17%)	Finncap 2019/20 10,100
Sales	9,290	4,364	5,099 (+17%)	10,100
P/(L) before tax (finncap numbers are adjusted)	6,965	3,246	4,097 (+26%)	7,660
P/(L) after tax (finncap numbers are adjusted)	5,861	2,746	3,428 (+25%)	6,360
Period-end cash	6,537	5,456	5,530	
Total regular dividend per share (p)	73			88
Split between Spring/Autumn	30/43	30	36	36/52
Special dividend	47			
Year dividend total	120			

- Revenues increased for vitamin D and some other core antibody products
- Newer product sales (T4, andro & biotin) were individually modest but collectively additive
- Costs include expenditure on the pollution project and higher depreciation related to capex at the Farnham facility

- It is possible that routine diagnostic testing is reduced as hospital resources are refocussed towards COVID-19
- Bioventix has a resilient business and it is our current plan not to deviate from our established dividend policy

BVX Sales: 2018/19 Product Mix



Heart failure



Fertility



Chest pain

Pipeline Development 2020



↑ Increasing potential value	high	Secretoneurin/SN (CardiNor) Amyloid (Pre-Diagnostics) Cardiac MyC (King's)	Pollution biomonitoring	
	medium		Biotin (blocking Abs) virus (contract) T4 (thyroxine)	
	Low		thyroglobulin (contract) Vitamin (contract)	Cancer (contract)
		Low	Medium	high
Increasing probability of success →				

- No significant commercial news from CardiNor & PreDx
- Prototype lab test for pollution exposure established
- First biotin blocking antibodies delivered Dec 2019



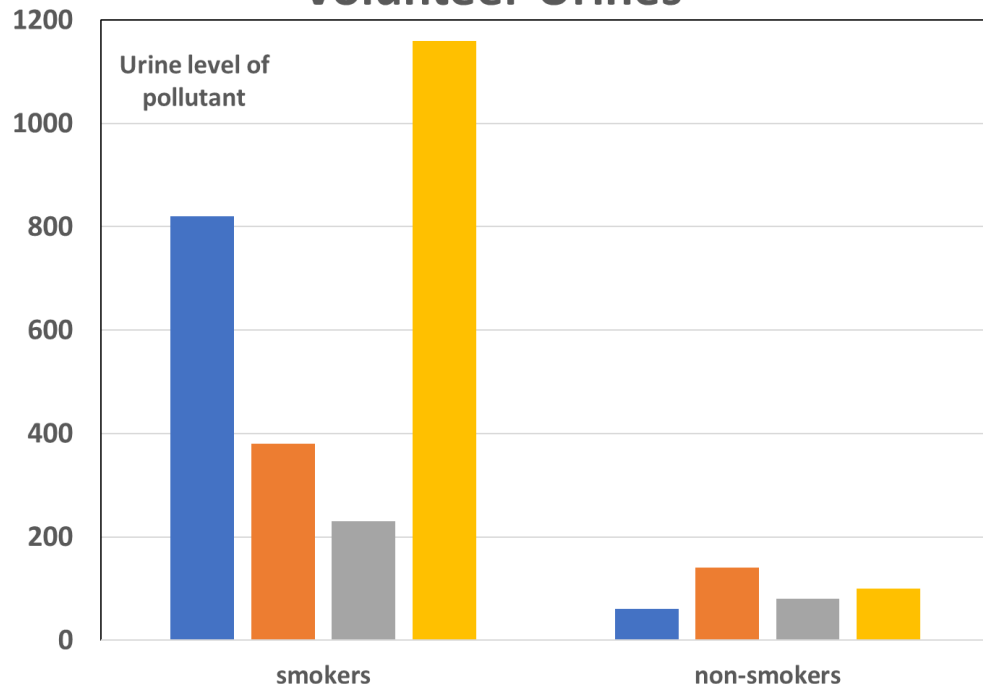
Pollution Exposure and Bio-Monitoring



- Fixed and portable devices are able to monitor NO_x & PM_{2.5} particles derived from combustion processes that pollute air
- The objective is to test individual pollution exposure through urine testing

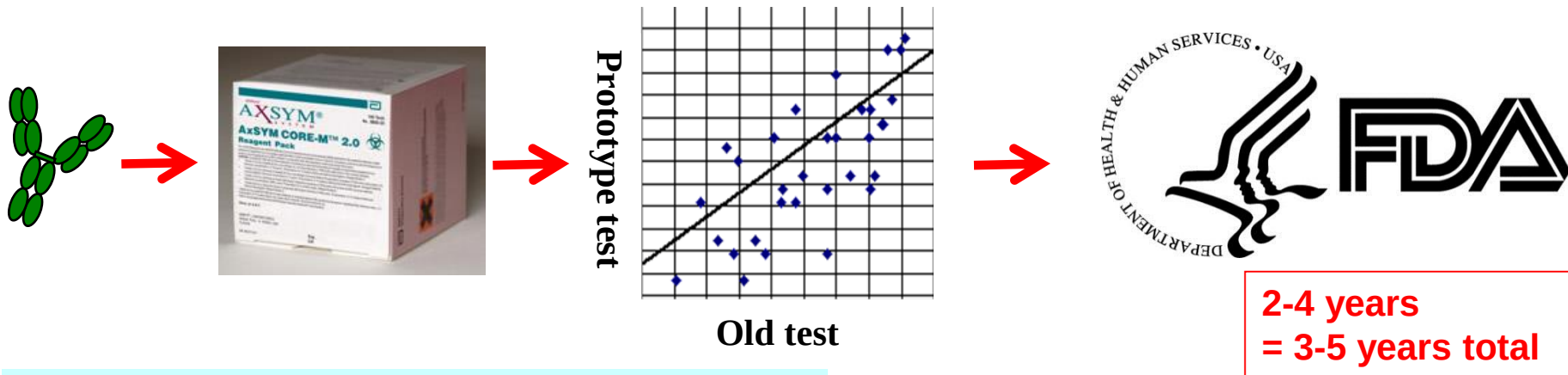
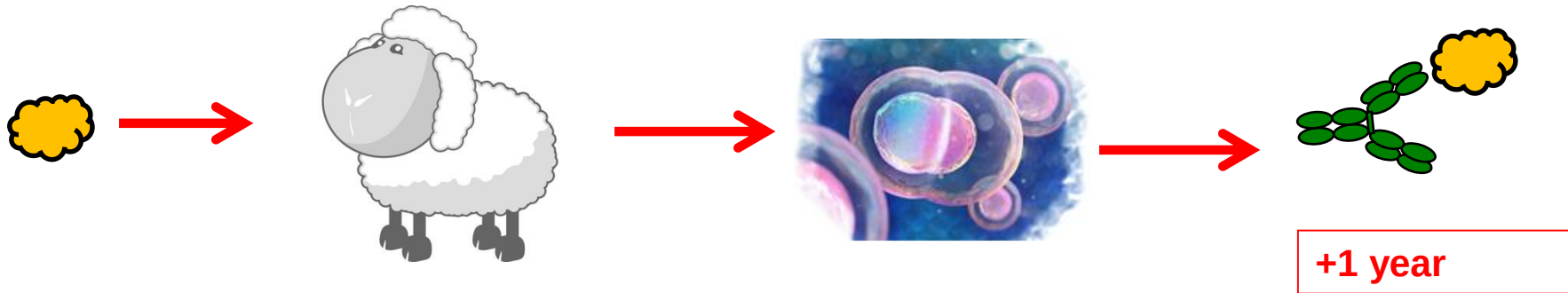
- Pollution awareness is likely to return after the world has recovered from COVID-19 and this could fit our development plans for 2021/22

Volunteer Urines



- A lab-based “ELISA” urine test has been successfully demonstrated at Bioventix. Note the expected difference between smokers and non-smokers
- Further validation work is planned with industrial and academic partners
- Development of a commercial kit will take place during the second half of calendar 2020
- It is possible that sales to academic pollution researchers could start during 2021

Business Dynamics



- Bioventix takes about 1 year to make antibodies
- Customers take 2-4 years to: formulate a prototype test; conduct field trials; submit data to regulatory authorities; obtain marketing approval
- This is an impediment to revenue growth – but delivers longer term revenue continuity



Selected Shareholder Base



Institution	Shares (1000s)	%
Sanford DeLand (Castlefield)	985	19.0
Liontrust	522	10.1
Canaccord (Hargreave Hale)	512	9.9
Peter Harrison	428	8.2
Gresham House (Livingbridge)	356	6.9
Jupiter Asset Management	200	3.9
Wasatch Advisors, Inc (Salt Lake City)	151	2.9
Miton Group	149	2.9
Schroder Investment Management	118	2.3
Danske Bank	84	1.6
Edentree Investment Management	62	1.2

Total shares = 5,189,335 (Mar 2020)

▪ From permissions, other available data and TR-1 forms received as at Mar 2020



Bioventix Directors



- Peter Harrison, CEO
- >30 years experience of antibody technology at Celltech, KS Biomedix & Bioventix



- Ian Nicholson, Chairman
- >30 years experience of commercial development within biotechnology including Amersham, Celltech, Chroma, Clinigen & Consort Medical



- Treena Turner, Finance Director
- Partner at Wise & Co accountants in Farnham. >10 years experience of Bioventix and accounts preparation



- Nick McCooke, Non-executive Director
- >30 years experience of biotech industry (including diagnostics R&D) at Celltech, Solexa & Pronota

Conclusions and Outlook



- A very encouraging start to the 2019/2020 financial year
- COVID-19 could have an impact on sales as routine blood-testing at hospitals continues but at a lower volume as resources are switched to COVID-19 patients
- Further evidence of the troponin roll-out gathering momentum
- Significant technical success with the pollution exposure project