



Bioventix Presentation: March 2018

- Bioventix & antibodies for blood testing
- Bioventix portfolio of antibodies and their advantages
- 2017/18 interim results and analysis
- Business continuity
- Shareholders & the Board
- Conclusions & outlook

Location and Skills



■ Farnham location



■ Creation and manufacture of high affinity sheep antibodies (SMAs)



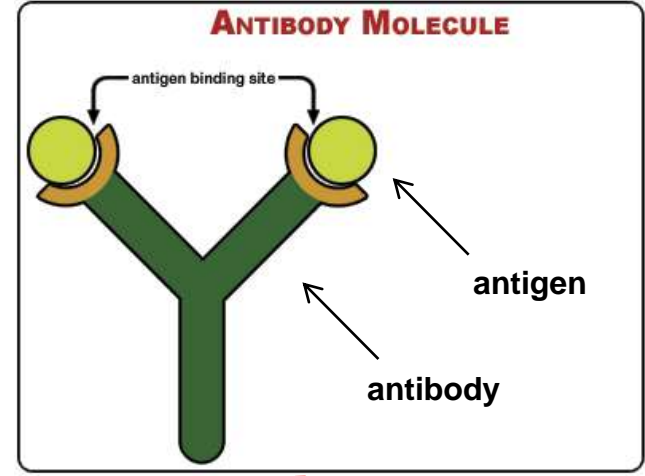
■ 12 staff in a Bioventix-owned property



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



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

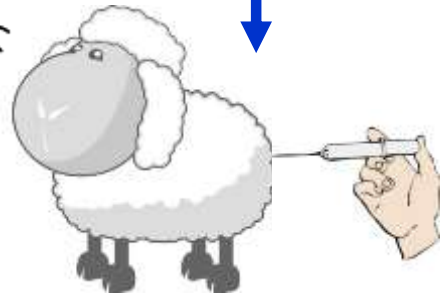


Creating Antibodies



Myeloma fusion partner

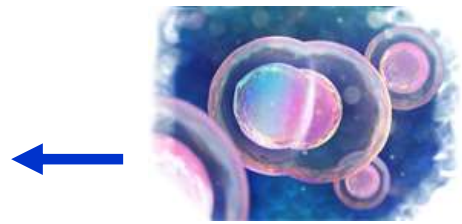
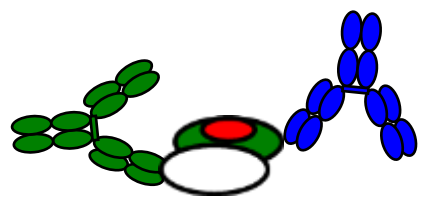
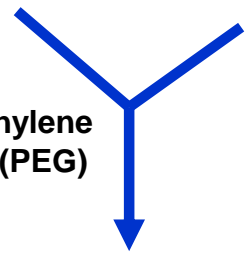
- Immortal
- Secretes nothing of use



White blood cell (B cell)

- Mortal
- Secretes a single antibody

Polyethylene glycol (PEG)



Hybrid cell: immortal and secretes one antibody

- Bioventix's business is based on the ability of sheep to make better antibodies than mice
- Better antibodies can facilitate better tests



Why SMAs? (testosterone)



Clinical Chemistry 49, No. 8, 2003

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

Editorial

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 TAÏEB,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*}

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.

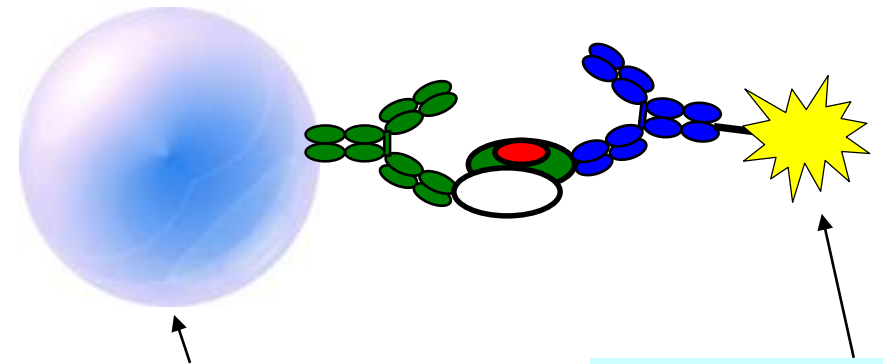
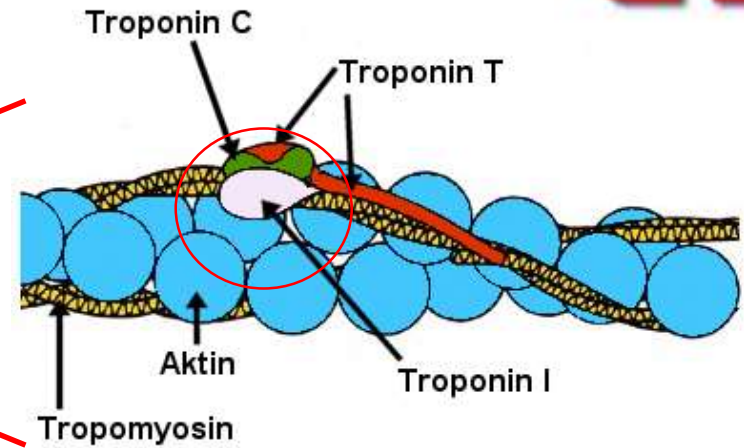
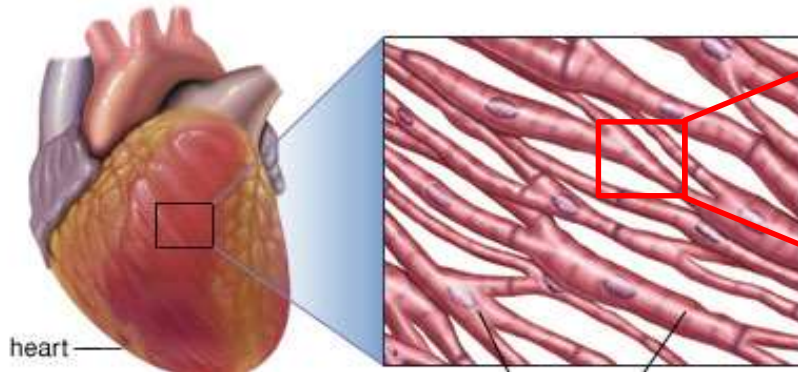
Immunoassays for testosterone produce sometimes incorrectly high results in female samples. The reasons of this phenomenon are not fully understood, but interference by cross-reacting substances and inaccurate calibration can be critical. One known endogenous interfering substance is dehydroepiandrosterone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

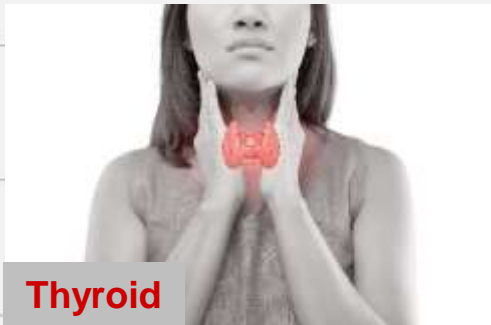
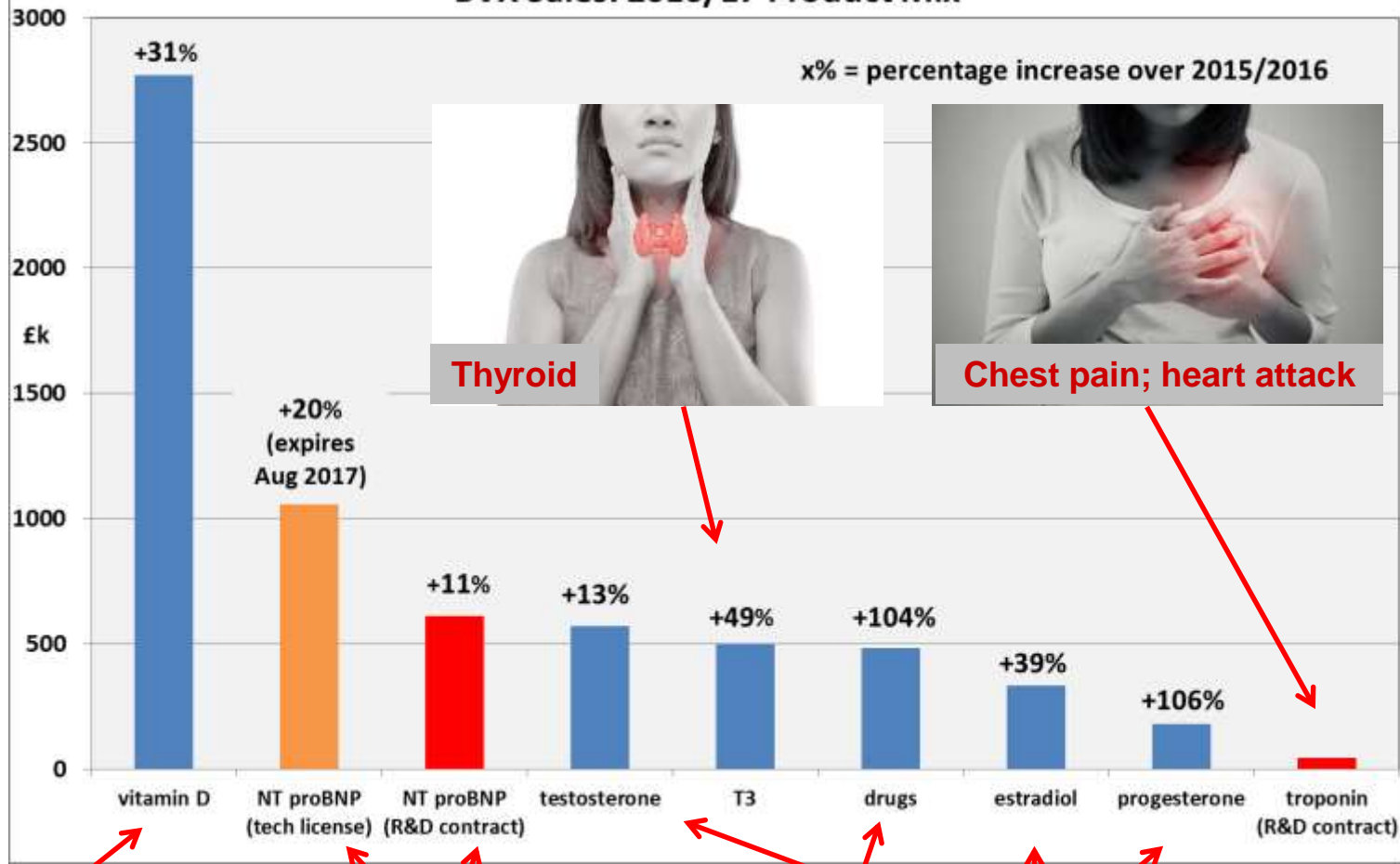


▪Magnetic particle

▪Fluorescent label

- 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) was released in ex-US markets in May 2017

BVX Sales: 2016/17 Product Mix



▪ Clinician education and familiarisation and the need to change hospital protocols is likely to mean sales from the new Siemens assay gear up during 2018

2017/18: Interims Headlines



• Turnover:	£4.3M (2016/17: £3.1M)	+38%
• Excluding back-royalty	£3.5M	+13%
• Profit before tax:	£3.4M (2016/17: £2.5M)	+36%
• Cash at 31 Dec:	£5.6M (31 Dec 2016 5.1M)	+£0.5M
• First interim dividend:	25p/share (April 2017: 20p)	+25%

▪ The back-royalty was reported by a customer after having identified a product code for which royalties had mistakenly not been paid since 2014. This mistake was revealed after a routine internal audit

▪ Dividend policy reflects continuity



Key Financials March 2018



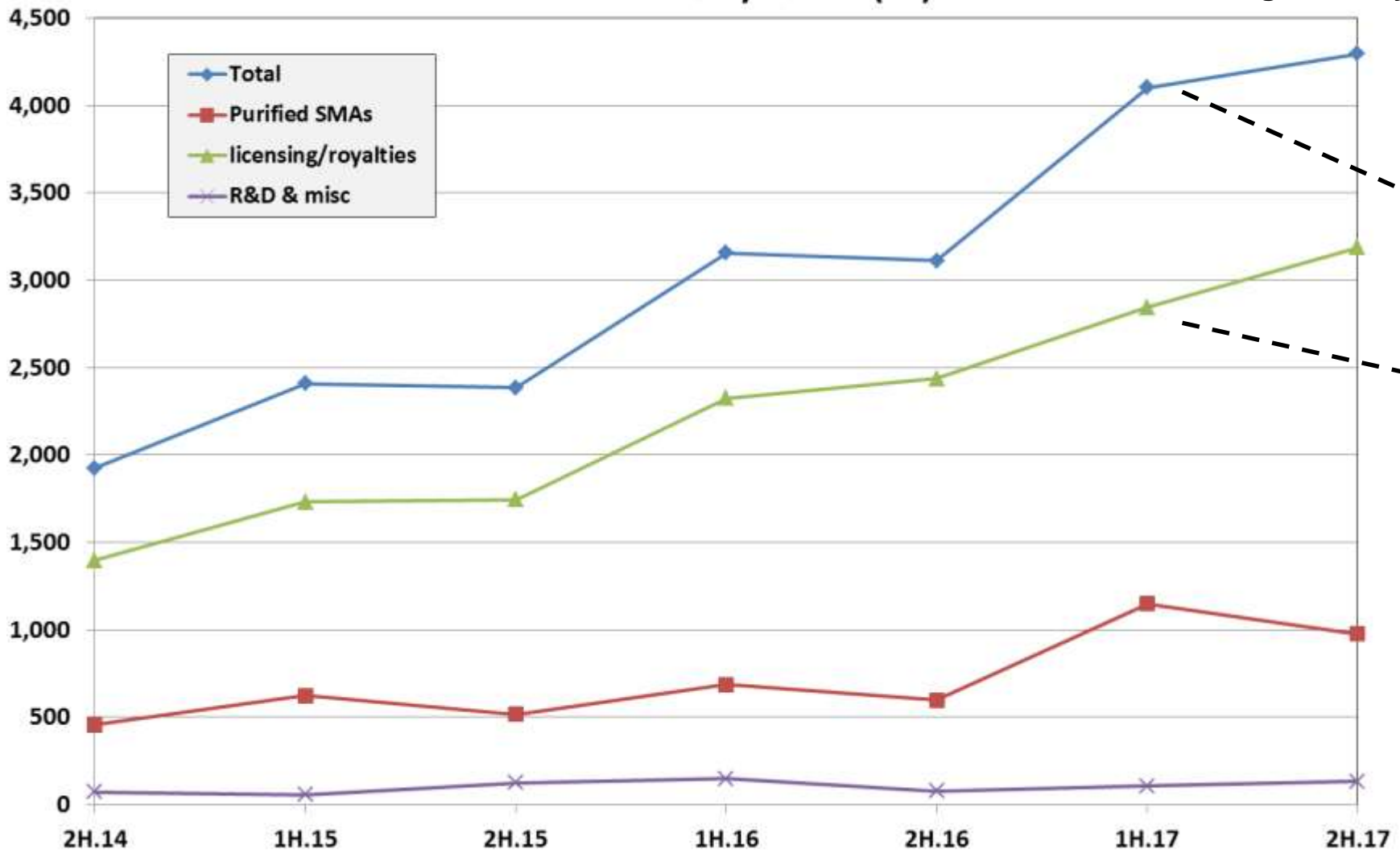
£ ('000)	Year to 30.6.16	Year to 30.6.17	½ year to 31.12.17	finnCap (Mar 18)
Sales (excluding back-royalty)	5,517	7,245	4,295 3,522	8,000 7,200
P/(L) before tax (excluding back-royalty)	4,219	5,771	3,400 2,628	6,300 5,500
P/(L) after tax (including back-royalty)	3,494	4,922	2,822	5,300
Period-end cash	5,380	6,166	5,590	
Total dividend distribution	3,200	4,600	1,285	3,200
Dividend per share (p)	42.5	51		61
Spring/Autumn	16.5/26	20/31	25/-	25/36
(special)	20	40		

Excluding £772k back-royalty



Half-Year Sales by Sector (£k)

--- excluding back-royalty



- Physical antibody sales ~£400k higher than 2H.16 (similar to 1H.17) as vitD, tetracycline and ethyl glucuronide sold well
- Underlying royalties similar to 2H.16 as ~£400k of Roche NT-proBNP replaced by vitD, progesterone & NT-proBNP (contract stream)



Now Available! High-Sensitivity Troponin I Assay

Accurate results you can trust, allowing fast triage of chest pain patients



Siemens Healthineers is pleased to announce the new High-Sensitivity Troponin I assay* on the Dimension® EXL™ and Dimension Vista® Systems.

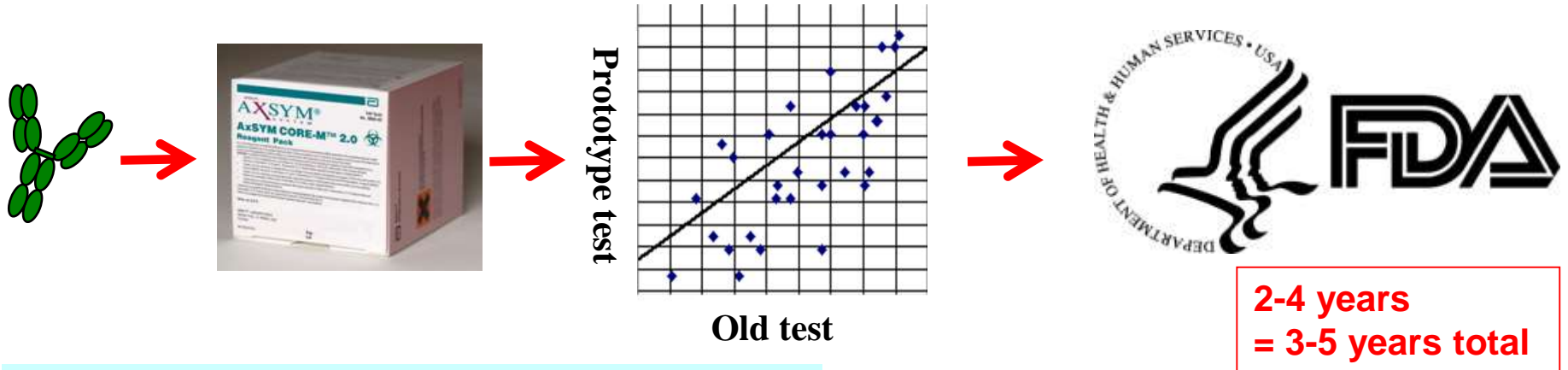
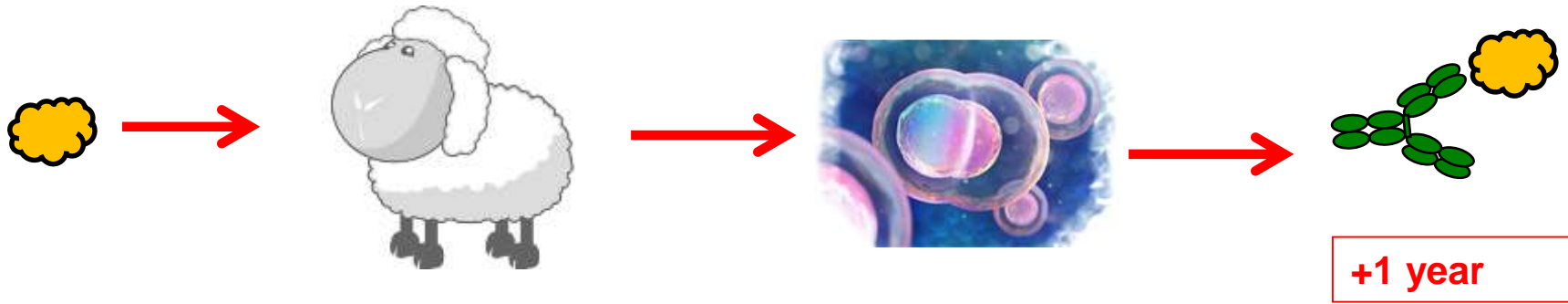
- Offers improved cardiac patient care with a true high-sensitivity troponin I assay that meets the current guideline recommendations.¹⁻³
- Provides confidence in patient results at the low end of the assay range with precision that provides the ability to measure slight, yet critical, changes between serial troponin I values.
- Delivers proven, trusted LOCI technology coupled with three new monoclonal antibodies.

[Download assay specifications](#)

- Released on the Siemens Centaur platform in May 2017
- Now available on Dimension platforms
- Use at Siemens customers (ex-US) expected to grow during calendar 2018

bioventix

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)	%
Miton Group	562	10.9
Peter Harrison	428	8.3
Sandford DeLand	415	8.1
Livingbridge	384	7.5
Canaccord (Hargreave Hale)	329	6.4
Wasatch Advisors, Inc	151	3.0

Total shares = 5,138,674

▪ From available public data and TR-1 forms received as at Feb 2018



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



- 2017/18:
 - Interims: increased vitamin D sales and other antibody sales have more than made up for the loss of ~£400k from a revenue stream that terminated August 2017
 - Full year: increased sales from our high sensitivity troponin project expected during calendar 2018
- 2018-2020: growth linked to success of Siemens & their high sensitivity troponin project
- 2020-2030: growth linked to new products emerging from the company's R&D pipeline and collaborative work with new biomarkers