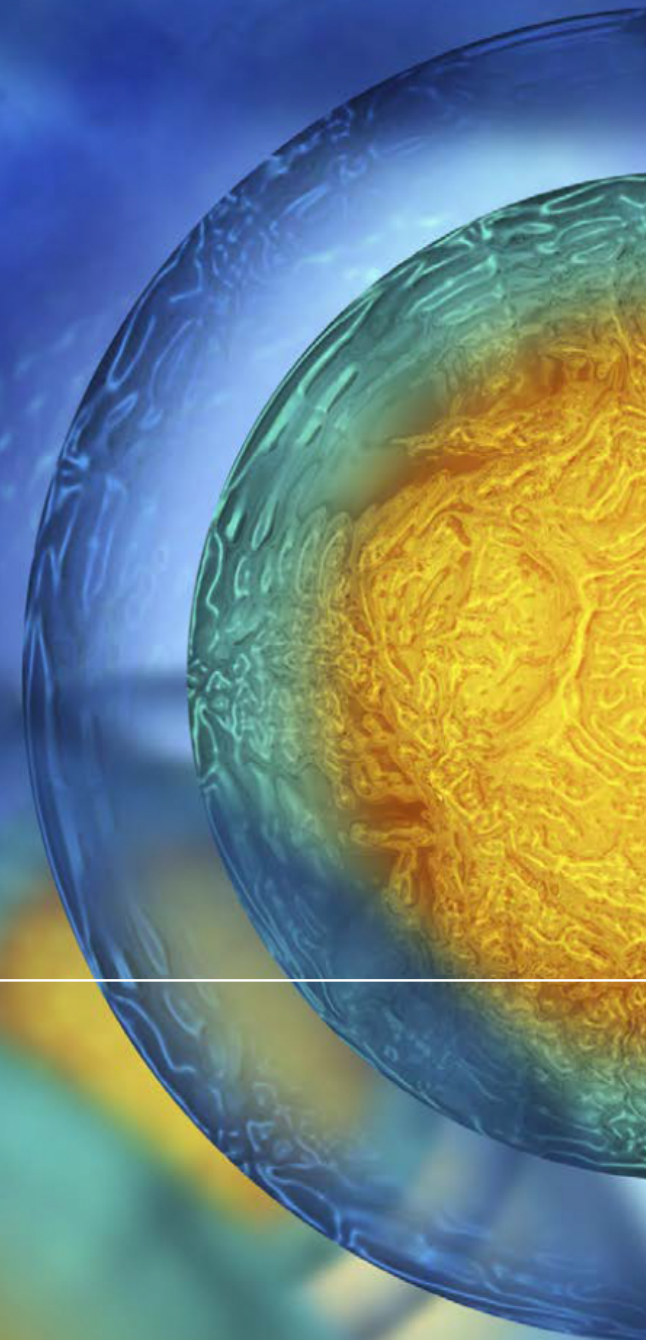


# Imperial Innovations

EIB Seminar, London  
22 October 2015



# Imperial Innovations Group PLC

Creates, builds and invests in pioneering technologies developed from outstanding scientific research

Focused on commercialising IP developed at or associated within the “Golden Triangle”

Exclusive TPA with Imperial College London

Since IPO in 2006:

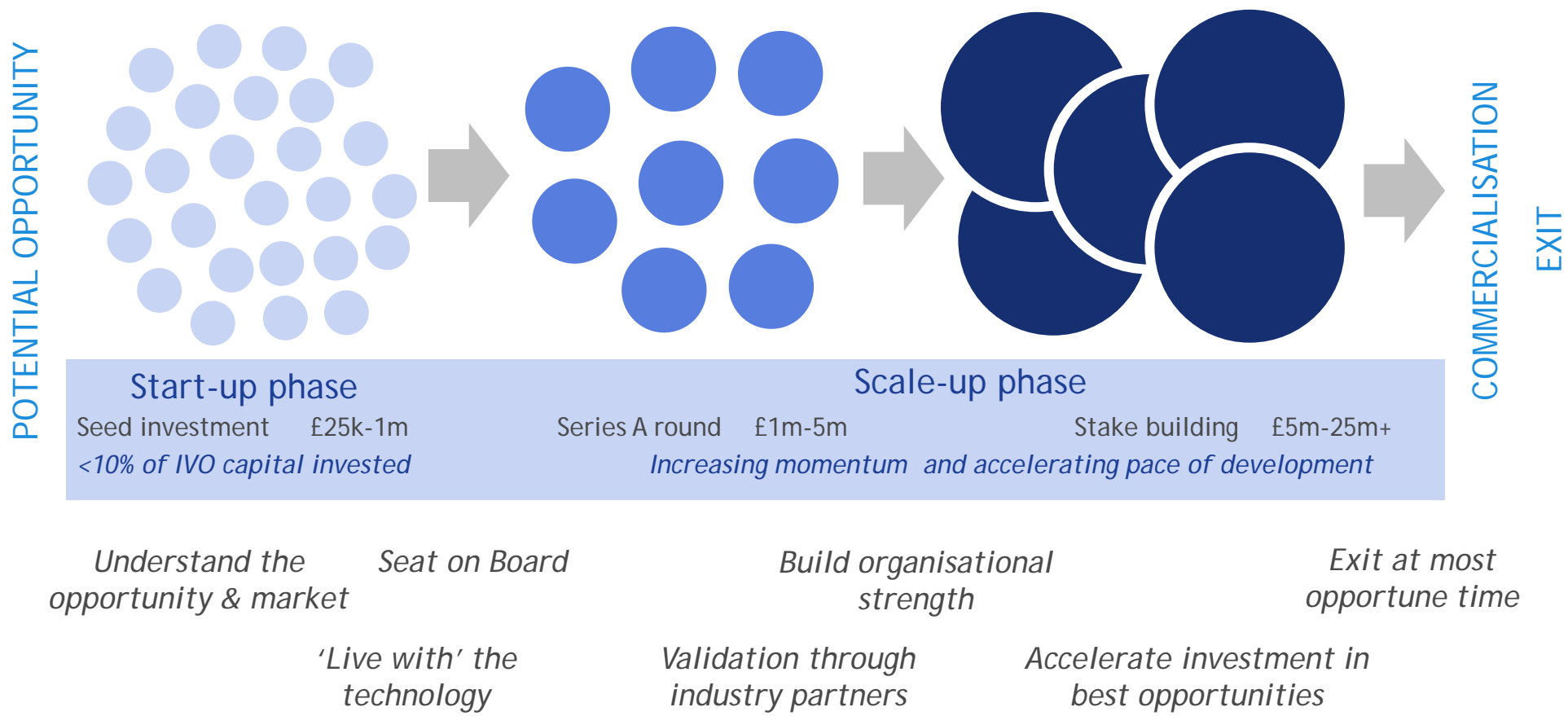
- Raised >£346.0m of equity from investors
- Created >100 spin out companies
- Attracted £1.3bn in venture investment for portfolio
- Created £106.8m of quoted investments through four IPOs
- Built an unlisted portfolio worth £220.4m
- Generated >£30m in net cash from proceeds of trade sales

£178.1m cash available for investment

- Including second EIB loan facility secured July 2015 (£50m)



# Integrated business model: from start-up to scale-up



**Continuity of funding with deep knowledge of assets**

# Our portfolio

Maturing portfolio comprises 39 accelerated growth companies

- Businesses we have co-founded, know intimately and can grow with ambition
- Average age of six largest private companies is 8.2 years old which have raised an average of £39.3m each

Adding 6-8 new companies per annum

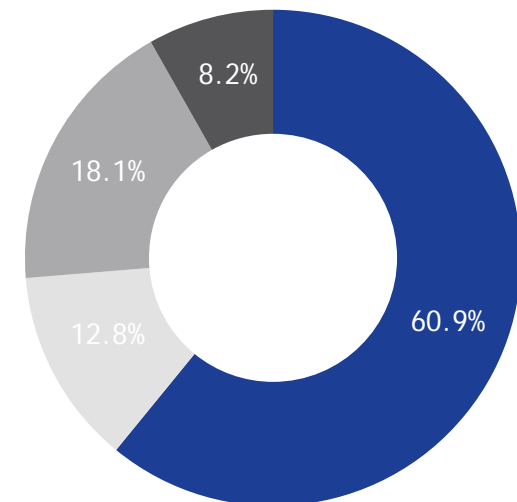
Focus on four key sectors at intersection of disruptive technology

Flexibility to allocate funds across sectors and stages

Portfolio valued at £327.2m

Along with co-investors we have invested >£1.3bn into UK innovation since IPO in 2006

Portfolio by sub-sector 31 July 2015



- Therapeutics
- Medtech & Diagnostics
- Engineering & Materials
- ICT& Digital

# Our first project with the EIB

£30m loan agreement (July 2013) to invest in the biotech & therapeutics

12-year term, drawn down in two tranches of £15m

Originally envisaged as a four-year project - we completed it in two!

The support of the EIB allowed us to invest in

- >£62m across 23 companies
- Add 7 new companies to our portfolio



Companies in our portfolio that have benefited from EIB support include those at the cutting-edge of cancer research, immunotherapy, hearing disorders cardio-vascular disease and diagnostics





# Our second project with the EIB

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£50m committed loan facility (July 2015)

12-year term, drawn down in two tranches of £15m

Draw down over a period of 2 years, repayable over a maximum of 9 years following the date of the first draw down

New loan is part of the InnovFin initiative to improve access to finance for research and innovation

Investment will focus on accelerating the growth of existing healthcare companies, plus adding ca. 3 new biotech/med-tech companies to the portfolio per annum

*“Imperial Innovations has set a benchmark for transforming cutting-edge research into some of the UK’s most exciting early stage biotech and medtech companies. The European Investment Bank is pleased to again support Imperial Innovations in helping new companies emerge from the world-class research emanating from the UK’s life science sector.”*

Jonathan Taylor, European Investment Bank Vice President

## Innovation in action

**£22.6m**  
Net investment  
carrying value

**27.9%**  
Percentage of  
issued share  
capital held

**£13.7m**  
Cumulative cash  
invested

### Overview

PsiOxus is developing novel therapeutics for serious diseases, with a particular focus upon cancer. The company's lead product, enadenotucirev (EnAd), is an oncolytic virus that has been specially engineered to destroy tumours and then prime patients' immune systems to continue fighting off their cancer.

EnAd is being evaluated in a number of different cancers including colorectal, ovarian, bladder lung and renal cell carcinoma.

### Market opportunity

One of the key features of the EnAd product is the fact that it is stable in human blood, a key differentiator when compared to other oncolytic viruses as this permits systemic administration (rather than requiring direct injection into the tumour).

EnAd is also being investigated as part of a combination therapy, where it could be used with other drugs such as checkpoint inhibitors, which work by blocking certain proteins that prevent the immune system from attacking cancer.

### Milestones completed

#### January 2015

EMA Grant orphan drug designation for EnAd for platinum-resistant epithelial ovarian cancer.

#### April 2015

Expansion of Phase I studies in EnAd to cover additional cancer types

#### May 2015

£25m Series C funding round in PsiOxus, with Innovations committing £7.0m to the round. Funding will allow PsiOxus to conduct a Phase I clinical study combining EnAd and an immune-checkpoint inhibitor in patients with metastatic colorectal cancer.



**John Beadle**  
CEO

Cofounder of PowderMed prior to its sale to Pfizer with previous roles at PowderJect, Pfizer and GSK

[www.psioxus.com](http://www.psioxus.com)



## Innovation in action

**£21.0m**  
Net investment  
carrying value

**27.0%**  
Percentage of  
issued share  
capital held

**£12.3m**  
Cumulative cash  
invested

### Overview

Developing T-cell immunotherapy of virally associated cancer and for the treatment of viral infection post bone-marrow transplantation. Cell Medica's products include: Cytorex EBV, for the treatment of cancers associated with the oncogenic Epstein-Barr virus (EBV); and two cell therapies for specific viral infections following bone marrow (hematopoietic stem cell) transplant: Cytovir CMV, for the treatment of cytomegalovirus infection and Cytovir ADV, for treatment of adenovirus infections.

### Market opportunity

Cytorex EBV has potential to access large market: non-Hodgkin lymphomas (6th most common cancer in the UK<sup>1</sup>) associated with EBV1. EBV-associated cancers have poor prognoses and few alternative treatments. Peak market estimate is \$1.0bn including existing cases in US&5EU<sup>2</sup>. The market for Cytovir products is driven by safety and also cost of treating patients with CMV/ADV infection - potential sales for both products estimated at \$250m in US&5EU in 2020.<sup>3</sup>

### Milestones completed

#### January 2014

Cytovir ADV EU Orphan drug

#### September 2014

Andrea Ponti, former Co-Head of Global Healthcare Investment Banking at JP Morgan as NED

#### November 2014

£50m Series B funding round

#### February 2015

Start of commercial cell therapy manufacturing at in Berlin

#### March 2015

FDA grant Orphan Drug designation for CMD-003. First patient in CITADEL Phase II trial.



**Gregg Sando**  
CEO

Founder and CEO. Gained MSc Immunology at Imperial following a career in investment banking in London and New York.

[www.cellmedica.co.uk](http://www.cellmedica.co.uk)

1. Cancer Research UK, 2. American Society of Hematology, 2005 Biology and Treatment of Epstein-Barr Virus-Associated Non-Hodgkin Lymphomas; 3. Apex Healthcare



## Innovation in action

**£20.9m**  
Net investment  
carrying value

**48.2%**  
Percentage of  
issued share  
capital held

**£13.7m**  
Cumulative cash  
invested

### Overview

Veryan has developed a three-dimensional stent technology, BioMimics 3D™, which improves upon the biomechanical and flow characteristics of straight tubular stents, particularly those used in arteries of the leg. Veryan's stents have a helical shape that mimics the natural geometry of the human vascular system and provoke a swirling blood flow within the stented artery. They also reduce the incidence of kinking or fracture (a common problem in longer stents in limbs) as bending strains are distributed across the entire 3D stent geometry.

### Market opportunity

Veryan's stents address unmet clinical need in restenosis, biomechanics and stent fracture in the treatment of peripheral arterial disease (PAD). A recent study showed over 200 million people worldwide live with PAD<sup>1</sup>. Market for treatments is expected to reach \$3.3 billion by 2017<sup>2</sup>.

Veryan has already gained a CE Mark enabling sales of its BioMimics 3D™ stent within EEA. In July 2015 the company started a new study in the USA with the aim of securing FDA approval.

### Milestones completed

#### Nov 2012

CE Mark for BioMimics 3D stent

#### May 2014

24 month data confirms BioMimics significant clinical benefit

#### January 2015

£18.0m Series B funding round

#### February 2015

Distribution deal with BioSensors, heralding the launch of sales outside the USA

#### July 2015

Enrolment of the first subject in its MIMICS-2 (FDA PMA study)



**Chas Taylor**  
CEO

20+ years experience in medical devices. Founder of Mednova (sold to Abbott Laboratories). Former senior management roles at CR Bard

[www.veryanmed.com](http://www.veryanmed.com)

Innovation  
in action

**£6.0m**  
Net investment  
carrying value

**21.2%**  
Percentage of  
issued share  
capital held

**£5.8m**  
Cumulative cash  
invested

## Overview

MISSION Therapeutics is a specialist pharmaceutical company developing cancer therapeutics based on new molecular understandings of human cell biology and the DNA damage response.

The company is developing small molecule drugs that target deubiquitylating enzymes (DUBS) involved in the DNA damage response, with the aim of inducing synthetic lethality, a powerful mechanism to selectively kill specific tumour cells.

## Market opportunity

Oncology treatments are a significant global market. Sales of molecular-targeted cancer therapies alone totalled \$19.5bn in 2009 in the seven major markets.

Sales of such therapies are forecast to reach \$38bn by 2019 (Datamonitor, 2010).

## Milestones completed

### November 2013

£20m Series B funding round from Imperial Innovations, Pfizer Ventures, Sofinnova Partners, SR One and Roche Venture Fund

### January 2015

Announced the appointment of Dr Anker Lundemose as Chief Executive Officer. Mission is his fourth CEO position and he has been involved in a total of six biotech exits/IPOs.

### March 2015

Won the new Life Science Innovation Award at the 25th Anniversary Business Weekly Awards ceremony



**Dr Anker  
Lundemose**  
CEO

Formerly CEO of Norwegian vaccine company Bionor Pharma, Dr Lundemose brings more than 25 years extensive experience to MISSION as it transitions from discovery to development.

[www.missiontherapeutics.com](http://www.missiontherapeutics.com)