BioTrinity 2020 Keynotes, Panel Discussion and Case Studies

Keynote: Innovative Transformation in Clinical Research, and Patient Healthcare

Mark Clein, CEO and Co-Founder of Precision for Medicine

Sponsored by:

- How digital technology will transform patient care, and what new breakthroughs are on the horizon
- How precision medicine will continue to develop and the impact this will have on patient treatment and outcomes
- How technological innovations in clinical trials will impact drug development

Panel Discussion: What’s New in Cell & Gene Therapy

Sponsored by: Lonza

Chair:

Hartmut Tintrup, Director Business Development, Cell Therapy & Viral Therapy, Lonza

Panellists:

Peter Dudek, Partner, MRL Ventures Fund
Johannes Holzmeister, CEO, Dinaqor
Franz Gerner, VP, Axovant Gene Therapies
Sharon Grimster, UK General Manager, ReNeuron
Cell and gene therapy represent the overlapping fields of biomedical research with similar therapeutic goals, which target DNA or RNA inside or outside the body.

The potential to directly alter human genes was first recognized nearly 50 years ago and since then, advances in scientific knowledge have led to a new and exciting era of medicine for patients, and in 2019 there are nearly 300 Cell and Gene Therapies in Development, addressing a broad Range of Diseases.

The panelists in this session will provide an update on the latest successes in Cell & Gene Therapy including recent product launches, the huge potential these offer to patients, and the challenges to overcome in order to achieve maximum global impact, along with:

- Overview on recent & upcoming commercial product launches
- What are the current manufacturing challenges in Cell & Gene Therapy to repeat the success of the mAb story?
- How far are we with respect to global standardization to address comparability?
- Overcoming manufacturing challenges to make treatments more affordable
- Which new technologies such as CRISPR/ RNA editing /Exosomes are emerging on the horizons?

Panel Discussion: What’s New in Antimicrobial Resistance

Chair:

Peter Jackson, Executive Director, AMR Centre

Panellists:

Ingrid Teigland Akay, Managing Partner, HADEAN Ventures

Mark Sutton, Scientific Leader - Healthcare Biotechnology, Public Health England

Nicholas Benedict, Board Member, Juvabis AG

Joanna Wiecek, Research Advisor, Drug Resistant Infections Programme, Wellcome Trust

Antimicrobial resistance (AMR) is a severe global threat, with a UN report recently revealing that if left unchecked, it could cause as many as 10 million deaths per year by 2050. A new report from Public Health England has found that there were an estimated 60,788 new antibiotic resistant severe infections in 2018; equivalent to 165 new antibiotic resistant infections per day.

But is overprescribing in primary care really the cause for this emerging issue? What are the other contributors, and what more can be done? Our expert panel will consider all aspects of this global threat, along with:
• What are the key scientific advances and alternative technologies that are driving the field?
• What are the alternative technologies on the horizon for tackling AMR?
• What threat does the use of antibiotics in agriculture have in AMR?
• Will 'delayed prescribing' make a difference to AMR?
• Are ‘short duration’ courses really justified by the science?
• How important are public campaigns for patients the dangers of overusing antibiotics
• Is AMR reversible?
• How will faster and more accurate diagnostic identification of bacteria lead to the reduction of AMR by appropriate prescribing?
• An update on research into using bacteriophage - a virus that consumes bacteria, to treat AMR
• What is the progress in developing vaccines to prevent the original infections from occurring?
• What role does a weak microbiome plan in AMR and what can be done to restore a healthy gut?
• Should the field be left to industry to develop or should government intervene by taking a stake in AMR R&D companies?
• Is the field investible enough – how could this be improved, and should research be subsidised by the government?

Brexit: An update for the Life Sciences Industry

James Tumbridge, an intellectual property lawyer, who has been a ministerial advisor, and holds elected office with the City of London, will take us through an update on the current status of the withdrawal of the UK with the EU, and what it means for the life sciences industry

Panel Discussion: What’s New in Oncology

Chair:

Khatereh Ahmadi, Executive Director, BD&L, Oncology, MSD LTD

Panellists:

Sarah Blagden, Associate Professor of Medical Oncology, University of Oxford
Hakan Goker, Vice President, Healthcare, M Ventures
John Beadle, CEO, PsiOxus
Tim Wilson, CEO, Epsilogen

Since 1992, there have been nearly 25 consecutive years of decline in overall incidence and mortality rates for all types of cancer. In addition, the number of
people living 5 years or more after a cancer diagnosis is projected to increase 31% by 2026, representing an increase of more than four million survivors in less than a decade.

New thinking, new research and new treatments are constantly evolving in Oncology, and this panel will bring together a group of experts from all corners of the industry to look at recent successes, and new launches on the horizon that have the potential to positively change the diagnosis and treatment options for millions of cancer patients around the world, including:

- An insight into new frontline treatments for Ovarian Cancer – how they will shape the way for treatments over the next decade
- How can Artificial Intelligence be used to help diagnose cancer and select the right treatment for an individual patient?
- Where are we with genomic testing of tumors to support the success of precision oncology
- How have the treatment of Rare Cancers developed?
- An insight into recent advances in molecular diagnostics, which allows some Breast Cancer patients to forgo chemotherapy
- How have Immunotherapy advances continued to grow and expand to cancers in which there have been few successes to date
- Have there been any improvements in the number of patients having access to cancer clinical trials
- An update on obesity and its impact on cancer incidence and outcomes.
- The importance of speeding up the process of applying newly available treatments to patients
- What are the major blocks to development of immune-oncology therapeutics? How are these being tackled and by whom?
- What’s the latest in the CAR-T field? Is the cytokine storm under control?
- Solid tumors are a tough target and what are the most promising developments?
- Can we push the adaptive clinical trial model further to accelerate progress and still maintain safety?
Panel Discussion: Where Now for Neurodegenerative Research?

Chair:

John Harris, CEO, OBN

Panellists:

David Reynolds, Venture Partner, Dementia Discovery Fund

Prof. Dame Pamela Shaw, University of Sheffield, Professor of Neurology

Huw Jones, CEO, Chronos Therapeutics

Patrik Verstreken, Scientific Director & Group Leader, VIB Center for Brain & Disease Research, KU Leuven, Department of Neurosciences, Leuven Brain Institute Laboratory for Neuronal Communication

Almost one in eight people died from dementia and Alzheimer’s disease in 2018, with the proportion increasing for the fourth consecutive year – up from 12.7% in 2017 to 12.8% in 2018. The number of people living with dementia in the UK is expected to rise to 1 million by 2021 and the increase in the numbers was a result of people living longer, surviving other illnesses and of the syndrome being better understood by doctors.

However, despite 40 years of research there remains a glaring absence of any significant breakthroughs for treating the most common neurodegenerative diseases.

This panel will bring together a group of industry thought leaders who will address what’s next for Neurodegenerative research, are there any promising treatments on the horizon, along with an assessment of the most recent news stories in this space including:

- Will improving the health and the stability of mitochondria have the potential to eliminate protein aggregate formation, a pathology broadly observed in many diseases?
- There is currently no single test which accurately diagnoses Alzheimer’s, how close are researchers to identifying a toolkit of non-invasive “biomarkers” to diagnose dementia, measure disease progression and monitor the effectiveness of new therapeutic drugs?
- Is there any real potential in the use of Prostate drug, Terazosin to slow the signs, symptoms, and complications of Parkinson's disease?
- How useful are the pioneering “buddy scheme” projects recently set up in Scotland, aimed at investigating dementia by pairing up university researchers with people who are living with the disease?
- What impact on research could a new study by neuroscientists at MIT have that aims to pinpoint the regions with the earliest emergence of amyloid in the brain and how this correlates with the progression of the disease?
• An insight into the recently approved Alzheimer’s disease treatment by China’s National Medical Products Administration that could benefit 500,000 patients a year
• Amyloid is dead! Long live amyloid! Where are we with this hypothesis?
• What are the latest hot areas of research on neurodegeneration and is the field of neurodegeneration converging with GeroScience and autophagy. What are the likely key areas where this could have impact?

Panel Discussion: Can Vaccines Meet the Challenge of Responding to an Outbreak?

Sponsored by:

Chair:

Matthew Duchars, CEO, VMIC UK

Panellists:

Prof. Adrian Hill, Professor of Human Genetics; Director of the Jenner Institute; University of Oxford

Bill Enright, CEO Vaccitech

Richard Hatchett, CEO, CEPI

Ian Rees, Inspector, Medicines & Healthcare Products Regulatory Agency

Coronavirus is the most recent example of an infectious disease that we (globally) were not prepared for. It is the latest in a series of unexpected outbreaks that have occurred recently (such as Zika, MERS, SARS, Ebola). The panel will discuss how vaccines can be used as a countermeasure for these diseases, together with more familiar pandemic/epidemic suspects (such as influenza, TB, malaria, etc). Some example areas for discussion include:

• How prepared are we to respond to known and unknown diseases with pandemic potential?
• Are vaccines a viable response?
• What are some of the barriers to being able to respond effectively?
• How should preparation and response to these types of outbreak be funded?
• How important is preparedness to an effective response?
• What are some of the most promising vaccine technologies to help combat these diseases?
• Are regulatory changes necessary to accelerate vaccine development, for these types of disease?
Panel Discussion: An Insight into US Trends in Life Sciences and the Opportunities they open in both UK and US markets

Sponsored by: VA BEACH BIO

Chair:

Taylor Adams, Director of Economic Development, Virginia Beach Bio

Panellists:

Bryan Morton, Operating Partner, EW Healthcare Partners

Cliff Culver, SVP, Precision Medicine Group

Stephen Morris, Industry Specialty Services and Life Sciences Managing Director, BDO McLean Office

Adey Pierce, Senior Project Manager, BDO USA

Pat Larabee, founder and President of Facility Logix

This panel discussion will feature a lineup of life sciences industry leaders, who will share their views on the next big life science trends that are likely to translate from the US to UK market, along with the benefits and challenges they may generate. Areas to be discussed include:

- With more companies launching successful Precision Medicine innovation, what can we learn from the US regarding the fundamental changes this will cause to existing supply chains and commercial models?
- Will a move towards ‘value-based pricing’ drive innovation across the industry on a global scale? Will companies follow the example set of using a direct-payment system?
- What effect will the use of AI have on streamlining the process of drug development and employee productivity, and will companies be left behind if they don’t implement the right data foundation?
- Embracing the convergence of big data companies and traditional healthcare structures, but should we be concerned about data security, patient privacy and data ownership?
- Accelerating the drug development process through improved interactions between companies, CRO’s and regulators
- What impact will the change in Big Pharma R&D strategy have on drug discovery in general – will this mean more opportunity for smaller and emerging companies?
- Will the US and UK governments strategy of ‘Prevention rather than Cure’ create a tangible impact on population health, and what will this mean for the industry?
Panel Discussion: Creating Value for your Shareholders in the Life Sciences Industry

Sponsored by: BDO

Chair:
Ian Oliver, Audit Partner, UK Head of Life Sciences, BDO

Panellists:
James Otter, Royal Society Entrepreneur in Residence, Institute for Life Sciences, University of Southampton
Ros Deegan, CEO, OMass Therapeutics
Jamie Austin, Corporate Finance Partner, Head of Private Equity, BDO
Robert Tansley, Partner at Cambridge Innovation Capital

This session will look at the management practices of life sciences companies, in the context of creating value for shareholders. The expert panel will be addressing a range of considerations for how a company’s management team can employ smart business decisions to increase shareholder value, whilst also reflecting on the predicted impact that the current COVID-19 crisis will have on companies in the R&D sector both in the UK & US markets in the short, medium and long-term:

M&A and trade sales – the opportunities for value creation need to be at the heart of sound decision making; what are the risks to consider and what is on offer to shareholders when looking at all acquisition and exit opportunities. Ultimately companies that both acquire as well as divest tend to deliver higher shareholder returns if they act at the correct inflexion point

IPO strategies – optimal listing market for enterprises. When to list and what are the costs and timelines involved. Pros and cons of IPO verses trade sale in the current environment

Importance of strong communication – by disclosing strong, timely and transparent financial reports in a corporate performance statement, you will encourage longer term thinking by shareholders, by lessening investor uncertainty by avoiding surprises. Ensuring communication is relevant and complies with local accounting practices and reporting requirements in different jurisdictions

Being open and reactive to change – value-creating growth is a strategic challenge, and to succeed, companies must be good at recognising and developing new, potentially disruptive technologies and strategies that their business can adopt, reacting to industry demands and trends. Company leaders need to have the courage to press the go button at the right time to increase the operational and financial health of their company to create greater shareholder value. Build-in resilience / agility and be prepared to pivot to plan B if required
Efficient capital utilisation to increase value – how management can consider outsourcing low-value activities when others can perform them for less money or focusing on the activities that are both high-value and where your company has a competitive advantage

Raising capital – getting the timing right time and from the appropriate providers to protect existing shareholders from excessive dilution whilst maintaining liquidity in the business. Timing of raises in a period of falling markets and constrained liquidity

Panel Discussion: What’s New in Medical Diagnostics

Chair:
Jonathan Rohll, Head of Business Information, OBN

Panellists:
Chris Allen, Business Development - EMEA Clinical Sequencing Division, ThermoFisher Scientific
Diana Saraceni, Founder and Managing Partner, Panakès Partners SGR SpA
Billy Boyle, CEO, Owlstone
Julie-Ann O’Hare, Director of Biosciences, Randox
Gail Hayward, Associate Professor, Nuffield Department for Primary Care Health Sciences, Deputy Director, NIHR Community Healthcare MedTech and IVD Cooperative, General Practitioner, Academic Clinical Fellow training lead and Clinical Teaching Associate, Exeter College

Medical and clinical diagnostics is the practice of detecting, identifying and monitoring a disease or medical disorder, and is a research space undergoing a huge and exciting technological evolution, with new diagnostic tools and devices regularly coming to market.

The panel will look at the potential impact that the most recent advances will have on the diagnosis and onward treatment of patients with a broad range of conditions, including:

- How will the medical diagnostic space develop given the many small players
- How is AI being used to reshape the medical diagnostics pathway
- What improvements are there in the accuracy and speed of cancer detection. How close are we to having personalized cancer treatment?
- What will the impact be of improved connectivity of data, practitioners and patients on patient management?
- What are the latest developments in early detection of neurological degeneration? Is early diagnosis always a good thing?
• How MRI scans are evolving with a new economical lower strength scan that deliver far more accurate medical diagnosis
• The impact of the use of nanoparticles to light up and image tumors located well below the surface of the skin, that will give a far clearer picture of tumor progression and predicted response to immunotherapy

Life Sciences Investment Update
Tim Haines, Chairman and Managing Partner of Abingworth, a bioscience investment firm, will be presenting a ‘Life Science Investment Update’, where he will share his expert views on investment trends in the UK and Internationally, which research areas are receiving the most interest and some advice for R&D companies currently fundraising. Tim will also share his thoughts on the impact that the current COVID-19 crisis will have on funding within the life sciences industry.

Panel Discussion: Mind the Skills Gap – Creating Industry Leaders of the Future
Sponsored by:

Chair:
Paul Edwards, Managing Partner, Horton International

Panellists:
Stephen Ward, Chief Manufacturing Officer, Cell and Gene Therapy Catapult
Tony Bradshaw, Associate Consultant and Coach, Bradshaw Talent Management
Hayley MacKenzie, HR Director, Oxford Immunotec
Ian Rhodes, CEO, Karoo CGT

It is clear that big data and informatics will underpin the future success of our sector, however in the current climate organisations are struggling to translate a deluge of data into better decision making, with CEO’s working to bridge the gaps in their own capabilities.

There is a shortage of skilled talent to clean, integrate, and extract value from big data and move beyond baby steps toward AI, but where and how will this skills gap be filled in the future?

This panel will consider and discuss the following:
• What are the key skills that are in short supply and how to combat the shortfall in the short, medium and long-term?
• How skilled people required by the sector will need to come directly from education or from other related sectors
• How it will be necessary for organisations to offer structured, high-quality training
• Is cross-sector movement of people with data skills effective or is health/life science sector experience necessary for success
• The importance of ensuring that re-skilling is standard practice and that a fit-for-purpose and blended vocational and academic pathway exists
• The importance of offering apprenticeships in the sector
• How the industry can better align and work with organisations including the British Science Association to encourage more young people into STEM subjects at university
• What policies are needed to ensure that the UK remains an attractive option for scientists post-Brexit

Inspirational Case Study: Catherine Beech, CEO, Exonate

We are pleased to welcome Catherine Beech, CEO of Exonate to BioTrinity Digital 2020. She will be sharing some insight into her extensive and highly successful career in the biotech and pharmaceutical industry and will include:

• Career highlights
• The importance of evolving your business strategy, and being open to change and opportunity
• Why a strong team is integral to success?
• Experience in securing funding for a growing company
• An example of any challenges and advice to others going through similar challenges?
• Lessons learnt from others in the industry, and lessons you would share
• Who inspires you, both business leaders and company innovation?
• Plus a little bit of the magic unique to her!

Keynote: A research update and assessment of the COVID-19 pandemic

Prof. Nico Callewaert, Director of VIB-UGent Center for Medical Biotechnology will give an update on work at the VIB to develop neutralizing antibodies.