13th annual

WORLD ADVANCED THERAPIES & REGENERATIVE MEDICINE CONGRESS 2018

16-18 May 2018, Business Design Centre, London, UK

Research. Develop. Collaborate. Commercialise.

Featuring:

Cord Blood World Europe 2018

Co-located with:

World Precision Medicine Congress 2018

Featuring AI in Healthcare

Created by:

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WORLD
ADVANCED THERAPIES & REGENERATIVE MEDICINE
CONGRESS 2018

The 13th annual Advanced Therapies and Regenerative Medicine World Congress 2018 will bring together 800+ attendees and explore the rapidly developing world of next generation therapeutics and ATMPS. From clinical development to pricing, reimbursement and market access this congress will bring you the most exciting case studies and new data for immunotherapy, cell therapy, gene therapy, CARs and bioprocessing. Experts in every area will help you tackle the process and regulatory hurdles of developing all new therapeutic formats all the way through manufacture and into the clinic.

New this year:

- 2 tracks of bioprocessing: We've taken our 6-year-old bioprocessing event **Cell Culture and Downstream Processing World Congress** and integrated this content into the programme, this means more content looking at: automation, continuous bioprocessing, PAT, process modelling, monitoring and control of therapeutic manufacture
- New: In addition to the Precision Medicine World Congress the **AI in Healthcare 2018** will include some of the most exciting uses of technology for genomic medicine, patient management and data handling.
- Best cord blood agenda yet: now part of the Advanced Therapies and Regenerative Medicine Congress featuring talks from: Joanne Kurtzberg & Elizabeth Shpall

Taking place alongside the co-located 3rd annual World Precision Medicine Congress, and new AI in Healthcare Congress feature presentations and discussion from **300+ speakers, 10+ tracks of content across the 3 days** enabling networking opportunities with **800+ leading industry professionals**.

Choose the sessions which are most applicable to help your business plan for the future of ATMPs development and commercialisation

What's in store for 2018?

- Regulation, pricing, reimbursement & market access of advanced therapies
- CRISPR/Cell Line Development
- Regulatory updates
- Developments in clinical trials and translations of CAR-T
- Advances in chromatography and novel purification methods
- Biotech showcases
- Developments in clinical trials and translations of CAR-T
- Benefits and bottlenecks in continuous and automated manufacture
- Advances in autologous cell therapy (CAR-T cells, NK Cells, DCs, iPSCs & MSCs)
- Continuous manufacturing: drivers and critical enablers
- Investment & funding strategies
- Cord blood

With that in mind, we look forward to welcoming you to London.

Specific sessions across 4 tracks cover a multitude of topics, so there is something for everyone

Opening keynotes c-level speakers from pharma and biotech including an extra special keynote from Patrick Soon-Shiong, CEO of NantWorks

Over 800 of your peers in one room and access to the networking app to set up meeting with other delegates, speakers and sponsors.

Cord Blood World Europe 2018

Welcome back to the **4th Annual Cord Blood World Europe 2018**. You'll be excited to hear that the congress has joined forces with the larger World Advanced Therapies and Regenerative Medicine Congress. This is an **exceptional networking** opportunity to meet **senior clinicians, researchers, cord blood banks, regulators, not-for-profit organisations, pharma** and **biotech** from around the globe. **Discover** the latest applications for cord blood. **Learn** about the most up to date methods of expansion. **Discuss** critical issues faced by the cord blood industry.

Key topics include: **collection and storage, bioprocessing, novel applications of cord blood, expansion, engraftment, cord blood bank models, successful transplants, regulation, patient groups and clinical trials, utilisation of other cord tissue.**

What's in store for 2018?

- Engraftment
- Expansion
- Novel applications of cord blood
- Bioprocessing
- Collection and storage
- Cord blood bank models
- Successful transplants
- Regulation
- Patient groups and clinical trials
- Using AI in hospitals

Agenda Overview Day 1

Opening Keynotes | Opening Keynotes | Opening Keynotes | Opening Keynotes

Morning Break

Plenary Roundtable Session | Plenary Roundtable | Plenary Roundtable Session | Plenary Roundtable Session

Speed Networking | Speed Networking | Speed Networking | Speed Networking

Lunch

ATMP

The Cell & Gene C-level Forum
- Regulation & reimbursement, & market access
- Investment & funding strategies
- Clinical development & product release

Clinical Development of ATMPs
Clinical development of Immunotherapy & cell therapy

Advances in autologous cell therapy (CAR-T cells, NK Cells, DCs, iPSCs & MSCs)

Bioprocess

Process Development & Manufacturing – Gene Therapy
- New paradigms in manufacture: gene therapy and viral vectors
- Maintaining cold chain and logistics for gene therapy and viral vectors

Continuous manufacturing: drivers and critical enablers
- Automated manufacture of biologics
- Accelerated CMC & process development
- Media development

Cord Blood

Cord Blood
- Innovative applications of cord blood
- Collection, bioprocessing & storage
- Expansion & engraftment

Precision Medicine

Diagnostics
- Whole genome sequencing
- Liquid biopsy development and use
- Biomarker discovery and host biomarker approach

Big data and genomics
- Data security and sharing
- Information handling
- Big health data access
- Real world case studies and instights
- Integrating clinical and genomic information

Infrastructure and investment
- Innovation through public private partnerships
- Investment into precision medicine
- Accelerating precision medicine health

Collaborations
- Collabs between innovation/ pharma/biotech/academia

AI in Healthcare

Pharma & Research - Drug Discovery

Healthcare Delivery - Using AI in Hospitals

Afternoon Refreshments

Plenary Keynote | Plenary Keynote | Plenary Keynote | Plenary Keynote

Offsite Networking Drinks

Agenda Overview Day 2

Opening Keynotes | Opening Keynotes | Opening Keynotes | Opening Keynotes

Morning Break

ATMP

The Cell & Gene C-level Forum
- Regulation, Reimbursement & Commercialisation of Advanced Therapies around the Globe

Clinical Development of ATMPs
Immuno-oncology and cell therapy focus

Moving from phase II to phase III

Future of Regen Med and Organ Regeneration
- Starting materials, isolation & selection of target cells, cell culture, activation and stimulation
- Stem cells as a research tool
- Stem cell transplantations
- Tissue engineering and organ regeneration

Bioprocess

Process Development & Manufacturing – Gene Therapy
- Process development: Scale up and scale out
- GMP Manufacturing & formulation of finished product
- Non-clinical development programmes

Downstream Bioprocessing
- Continuous manufacture
- Single-use
- Media development
- Gene editing and CRIPR

Cord Blood

Cord Blood
- Public & private cord blood banking
- Regulation
- Banking other tissue

Precision Medicine

Plenary Roundtable Session

Speed Networking

Patient involvement in precision medicine panel
- What are the benefits of involving the public in precision medicine
- The patient experience with precision medicine and patient involvement
- How clinicians can improve the patient experience
- What are the barriers to involvement and how can they be overcome

AI in Healthcare

Machine Learning & Data

Healthcare delivery

Regulation for AI

Lunch

ATMP

The Cell & Gene C-level Forum
- Regulatory updates

Biotech showcases
Exciting academic spinouts and biotechs from around the world

Future of Regen Med and Organ Regeneration
- Starting materials, isolation & selection of target cells, cell culture, activation and stimulation
- Stem cells as a research tool
- Stem cell transplantations
- Tissue engineering and organ regeneration

Bioprocess

Process Development & Manufacturing
Process development: Scale up and scale out
- GMP Manufacturing & formulation of finished product
- Non-clinical development programmes

Supply Chain Management
- Cryopreservation & labelling
- Cell banking & repositories
- Logistics, Transport & Shipping

Cord Blood

Cord Blood
- Successes & challenges- from lab to clinic
- Cord blood transplant case studies
- Haploidentical vs cord blood transplants

Precision Medicine

Drug development
- Precision medicine approach to drug development across therapeutic areas
- Pharmacogenetics for drug development
- Genomic scale drug design

Precision medicine therapeutic development
- A look at developing precision medicine therapeutics across various therapy areas
- Oncology
- Rare disease
- Other therapeutic areas

AI in Healthcare

Data for AI

Safety in pharma

AI and pharma working together

Afternoon Refreshments

Plenary Keynote | Plenary Keynote | Plenary Keynote | Plenary Keynote

Poster Zone and Networking Drinks

Agenda Overview Day 3

ATMP

Gene editing, CRISPR, cell line development and using stem cells and a tool for drug discovery
- Gene editing, CRISPR, and cell line development as a tool for stem cell discovery
- Using iPSCs as a disease model in drug-discovery
- Characterisation and imaging assays
- Identifying drug targets and mechanisms
- Establishing technology platforms and assays that balance throughput and biological relevance

Future of Regen Med and Organ Regeneration
- Starting materials, isolation & selection of target cells, cell culture, activation and stimulation
- Stem cells as a research tool
- Stem cell transplantations
- Tissue engineering and organ regeneration

Precision Medicine

Beyond the genome
- Using proteomics, metabolomics, transcriptomics and the microbiome for precision medicine
- Whole body screening
- Integrated platforms
- Multi-omics

Precision medicine therapeutic development
- A look at developing precision medicine therapeutics across various therapy areas
- Oncology
- Rare disease
- Other therapeutic areas

Lunch

Closing Plenary – What to watch out for in 2018

Spotlight on speakers

Advanced Therapies

Combination therapy: an update on clinical trial design and translation

Margo Roberts, CSO, **Kite Pharma**

Harnessing patient data using stem cells to power precision medicine

Susan Solomon, CEO and Co-Founder, **New York Stem Cell Foundation**

Next generation CAR T cells

Renier J. Brentjens, Director, Cellular Therapeutics, **Memorial Sloan-Kettering Cancer Center**

Combination approaches for cancer immunotherapy, triggered by experience to date with Anti-CTLA-4 and Anti-PD-1 antibodies

Jon Wigginton, Chief Medical Officer and Senior Vice-President, Clinical Development, **MacroGenics**

TACTI-mel, two ACTive immunotherapies in melanoma: combination of an APC activator (IMP321 or LAG-3Ig) with Pembrolizumab

Frédéric Triebel, CSO & CMO, **Prima BioMed Ltd**

The transformation and clinical translation of regenerative medicine

Stephen Badylak, Professor, Department of Surgery, Director, Center for Pre-Clinical Tissue Engineering, Deputy Director, **McGowan Institute for Regenerative Medicine (MIRM)**

Anticipating the technologies and infrastructure to mainstream ATMPs in the clinic

Keith Thompson, CEO, **Cell and Gene Therapy Catapult**

A chemistry manufacturing and controls (CMC) perspective on late stage development for a CAR T cell product

Xiaobin Victor Lu, CMC Reviewer, CBER, Office of Tissues and Advanced Therapies, Division of Cellular and Gene Therapies, **U.S. Food and Drug Administration (via videolink)**

Developing best-in-class induced pluripotent stem cell (iPSC) therapies to cure a range of diseases

Eric Soller, Vice President of Corporate Development & Strategy, **BlueRock Therapeutics**

Cord Blood

Universal donor ex vivo expanded hematopoietic progenitor cells for clinical application: to the Neutrophil and Beyond

Colleen Delaney, Founder and Chief Medical Officer, **Nohla Therapeutics**

Cord blood expansion for engraftment and regenerative medicine

Elizabeth Shpall, Director, **MD Anderson Cancer Center**

Evaluating the efficacy of umbilical cord blood to improve outcomes for children with Autism

Joanne Kurtzberg, Director, Carolinas Cord Blood Bank, **Duke University**

Broadening product offerings in family banking- new revenue opportunities or a distraction to clients?

Todd McAllister, Executive Director, **Amnion Foundation**

Cord blood transplantation: rewind to (hopefully) fast forward

Filippo Milano, Associate Director Cord Blood Transplantation, **Fred Hutchinson Cancer Research Center**

2018 speakers

World Advanced Therapies & Regenerative Medicine speakers

AJAN REGINALD
Chief Executive Officer
Celixir

ALAIN VERTÈS
Managing Director
NxR Biotechnologies

ANDRES GUTIERREZ
Chief Medical Office
Oncolytics Biotech

ANTOINE HERON
Cell & Gene Therapy Commercial Development
Merck Group

BIJU PAREKKADAN
Associate Professor, **Bioengineering**
Harvard Co-founder, **Sentien Biotechnology**

BENJAMIN SHEPHERD
Director, Therapeutics
Organovo

BRIAN BORY
Global Product Manager, Cell Culture Media - Cell Therapy & Vaccines,
Sartorius Stedim Biotech

CÉDRIC GHEVAERT
Consultant Haematologist, Senior Lecturer in Transfusion Medicine, NHS-BT
University of Cambridge

CHAIM LEBOVITS
CEO
Brainstorm Cell Therapeutics

CHRISTOS SOTRIELIS
CAT Full Member, Patients' representative
EMA

DANILO MADDALO
Lab Head, Oncology Pharmacology
Novartis Institutes for BioMedical Research

DAVID GILHAM
VP Research & Development
Celyad

DETLEV PAROW
Head of Department, Care Management
DAK

DIDIER CAIZERGUES
Head of Regulatory Affairs Department
Genethon

DIEGO ARDIGÒ
Project Lead
Chiesi Group

DOMENICK BERTELLI
Partner
Putnam Associates

ERIC SOLLER
Vice President of Corporate Development & Strategy
BlueRock Therapeutics

EVA DAHLÉN
Senior Director, Business Development
Alligator Bioscience AB

FRANCESCO DAZZI
Professor of Regenerative and Haematological Medicine
King's College London

FRANK HECHT
Vice President Marketing and Sales
CellGenix GmbH

FRÉDÉRIC TRIEBEL
CSO & CMO
Immutep Limited

GIOVANNA LOMBARDI
Professor, Human Transplant Immunology, Transplantation Immunology & Mucosal Biology, MRC Centre for Transplantation,
King's College London (KCL)

GIUSEPPE MAZZA
Chief Executive & Scientific Officer
Engitix

HIROMU OZAKI
General Manager of Business Development Division
Healios K.K

IAN HUDSON
CEO
MHRA

IAN MCKAY
Innovation Lead
Innovate UK

JAMES NOBLE
CEO
Adaptimmune

JANE LEBKOWSKI
President of R&D
Asterias Biotherapeutics

JEFF ABBEY
CEO
Argos Therapeutics

JEFFREY S. BARTLETT
Chief Scientific Officer, Senior Vice President, Research and Development
Calimmune, Inc.

JOANNA MILLER
Science Director
Cell Therapy Sciences UK

JOHN MAHER
CSO
Leucid

JEF PINXTEREN
VP Operations
Promethera Biosciences

JON WIGGINTON
Chief Medical Officer and Senior Vice-President, Clinical Development
MacroGenics

ROBERT D. ALLEN
UK Programme and Alliance Director
Asterias Biotherapeutics

KEITH THOMPSON
CEO
Cell and Gene Therapy Catapult

MARC TURNER
Medical Director
SNBTS

MARGO ROBERTS
CSO
Kite Pharma

MARK ZIMMERMAN
Vice President, Business Development and Strategy
ViaCyte

MICHAEL JOHNSON
Market Development Engineering Manager
Entegris

MICHAEL LINDEN
Previously VP Gene Therapy & Head , GMI
Pfizer

MICHAEL STEIN
Chairman & CEO
Oxstem

MICHAEL WEST
Co-CEO, **BioTime**
CEO, **AgeX Therapeutics**

NEILS KOENIG
Head of department "Production metrology"
Fraunhofer Institute for Production Technology IPT

NICK CRABB
Programme Director – Scientific Affairs
NICE

NICK MEDCALF
Innovation Lead
Innovate UK

NORIO NAKATSUJI
Founding Director, Institute for Integrated Cell-Material Sciences (iCeMS)
Kyoto University, Kyoto, Japan

OHAD KARNIELI
Chair, Process and Product Development Subcommittee, **ISCT**
CEO & Co-Founder, **ATVIO**

PAUL FIRUTA
Chief Commercial Officer
UniQure

PAUL PETER TAK
Professor of Medicine, Rheumatology, Academic Medical Center, **University of Amsterdam AMC (**Senior Vice President of Research and Development Pipeline and Chief Immunology Officer, **GSK**
Board Member, **Galvani)**

PAULA SALMIKANGAS
Director for Biopharmaceuticals and ATMPs
NDA Advisory Board

PEDER OLOFSSON
Leader, Center for Bioelectronic Medicine, Department of Medicine
Karolinska Institutet

QASIM RAFIQ
Senior Lecturer in Bioprocessing of Regenerative, Cellular and Gene Therapy
UCL

ROGER SMITH
Professor, Equine Orthopaedics,
Royal Veterinary College (RVC)

SARAH PITLUCK
Global Pricing and Reimbursement
Spark Therapeutics

SILVIU ITESCU
CEO
Mesoblast

STEPHEN BADYLAK
Professor, Department of Surgery, Deputy Director, **McGowan Institute for Regenerative Medicine (MIRM)**
Director, **Center for Pre-Clinical Tissue Engineering within the Institute**

SUSAN SOLOMON
CEO and Co-Founder
New York Stem Cell Foundation

SUZANNE S. FARID
Professor of Bioprocess Systems Engineering
UCL

TODD MCALLISTER
Executive Director
Amnion Foundation

2018 speakers

World Advanced Therapies & Regenerative Medicine speakers

WEN BO WANG
Senior Vice President, Cell Therapy R&D, Cellular Dynamics International (CDI)
a FUJIFILM company

YEN CHOO
CEO
Progenitor Therapeutics

ZAMI ABERMAN
Chairman & CEO
Pluristem Therapeutics

JOHN MADSEN
Head of PD Operations
FUJIFILM Diosynth Biotechnologies Texas

Representative from
Maxcyte

Representative from
ThermoFisher

DAVID SMITH
Head of Innovation and Engineering
Hitachi Chemicals Advanced Therapeutics Solutions, LLC

PASCALE V GUILLOT
Head of the Cellular Reprogramming and Perinatal Therapy
University College London Institute for Women's Health

JOANNE KURTZBERG
Director, Carolinas Cord Blood Bank
Duke University

MICHAEL SOKOLOV
COO, **DataHow AG**
Lecturer, **ETH**

THERESA ANN DEISHER
CEO & President
AVM Biotechnology

HATIM HEMEDA
CEO
PL BioScience

IVAN WALL
Professor in Regenerative Medicine, Cell & Gene Therapy Bioprocessing, School of Life & Health Sciences
Aston University

RENIER J. BRENTJENS
Director, Cellular Therapeutics
Memorial Sloan-Kettering Cancer Center

Representative from
Anemocyte

Bioprocessing

AJOY VELAYUDHAN
Professor of Bioprocess Engineering and Biotechnology
UCL

ALESSANDRO BUTTE
Senior Researcher
ETH Group

BO KARA
Head Process Development, Advanced Therapy Delivery
GSK

BRIAN BORY
Global Product Manager, Cell Culture Media - Cell Therapy & Vaccines
Sartorius Stedim Biotech

CHARLES HAYNES
Chemical & Biological Engineering
University of British Columbia

CORNELIA KASPER
Full University Professor
BOKU

CRISTIANA BOI
Assistant Professor
DICAM

DAVID WURM
Group Integrated Bioprocess Development
Vienna University of Technology

DYLAN JONES
Principal Scientist
Genzyme

HANSJÖRG HAUSER
Dept. of Scientific Strategy
Helmholtz Centre for Infection Research GmbH

HARALD BRADL
Director & Head of Cell Culture Development
Boehringer Ingelheim

HELENE FAUSTRAUP-KILDEGAARD
Senior Researcher and Co PI
Technical University of Denmark

HELEN TAYTON-MARTIN
COO
Adaptimmune

HITTO KAUFMANN
Global Vice President of Biopharmaceutical Development and Platform Innovation
Sanofi

HOLGER LAUX
Fellow
Novartis

JOHN CAMPBELL
Associate Director, Research, Development & Innovation, SNBTS
National Science Laboratory

KUMAR DHANASEKHARAN
Senior Director & Head, Biologics Process & Analytical Development
Amicus Therapeutics

MANUEL CARRONDO
Professor of Chemical & Biochemical Engineering, **FCT-UNL**
Vice-President, **IBET**

MARIJKE WYNANTS
MSAT Lead
Sanofi

MARY MURPHY
Senior Lecturer in Regenerative Medicine
Principal Investigator Orthobiology, **REMEDI**

MASSIMO MORBIDELLI
Professor of Chemical and Bio Engineering
ETH Zurich

MAYA FÜRSTENAU-SHARP
Marketing Manager, Regenerative Medicine
Sartorius Stedim Biotech

NICOLAS URBIETA
USP Process Scientist, BST / BioRealization
Sanofi

OLIVER SPADIUT
Integrated Bioprocess Development, Chemical Engineering
TU Wien

OTTO WILHELM-MERTEN
Head of Applied Vectorology and Innovation group
Genethon

PAULA MELEADY
Associate Director, CHO Cell proteomics
NICB

SERGEY A. PILETSKY
Professor of Bioanalytical Chemistry, Chemistry Department, College of Science & Engineering
University of Leicester

STEPHANO MENEGATTI
Assistant Professor in Chemical and Biomolecular Engineering
University California, Santa Barbara

STEVE OH
Advisor
Brilliant Research Pte. Ltd.

VERONIQUE CHOTTEAU
Principal Investigator, Cell Technology Group, School of Biotechnology
KTH – Royal Institute of Technology

MARK SAWICKI
Chief Commercial Officer
Cryoport

MIRIAM HAAK
Director Business Development,
Miltenyi Biotec GmbH

JEF PINXTEREN
VP Operations
Promethera Biosciences

JOHN MADSEN
Head of PD Operations
FUJIFILM Diosynth Biotechnologies Texas

STEFANO BAILA
Director of Operations & Business Development
Anemocyte

BENOIT CHAMPLUVIER
Chief Technology and Manufacturing Officer
Bone Therapeutics

2018 speakers

Bioprocessing

David Smith
Head of Innovation and Engineering
Hitachi Chemicals Advanced Therapeutics Solutions, LLC

Representative from
Miltenyi Biotec

Cord Blood speakers

JOANNE KURTZBERG
Director, **Carolinas Cord Blood Bank,** Chief Scientific Officer, **Robertson Clinical & Translational Cell Therapy Program,** Director, **Pediatric Blood and Marrow**

COLLEEN DELANEY
Founder and Chief Medical Officer
Nohla Therapeutics

ELIZABETH SHPALL
Professor, **Howard and Lee Smith Chair in Cancer Research,** Director, **Cell Therapy Laboratory and Cord Blood Bank,** Deputy-Chair, **Stem Cell Transplantation and Cellular Therapy, MD Anderson Cancer Center**

FILIPPO MILANO
Associate Director Cord Blood Transplantation
Fred Hutchinson Cancer Research Center

KATY REZVANI
Director of Translational Research
MD Anderson Cancer Center

ANDRE GOMES
CEO
Stemlab

ANDREA PICCIN
Consultant Haematologist, Transfusion Service
San Maurizio Regional Hospital

DANIEL SURBEK
Professor, Acting Chairman, Department of Gynaecology and Obstetrics
University Hospital Bern

GLYN STACEY
Executive Director
International Stem Cell Banking Initiative

JONAS WANG
CEO/Chariman
StemCyte International

KATE FALCON GIRARD
Director of Medical and Scientific Affairs
Viacord

GOCHA SHATIRISHVILI
Medical Director
Geocord

DIANA HERNANDEZ
Group Leader Immunotherapy
Anthony Nolan

HECTOR MAYANI
Head
Oncology Research Unit, IMSS Medical Center

JAAP BOELEANS
Haematology Consultant, Blood and Marrow Transplantation program
UMC Utrecht

MOSHE ISRAELI
Director of Tissue Typing Laboratory
Rabin Medical Centre

KATE SNEDDON
CEO
Biovault

TODD MCALLISTER
Executive Director
Amnion Foundation

WARACHAYA FONGSARUN
Medical Director
Thai StemLife

SALMAAN DALVI
CEO
Precious Cells Biobank

RAJEEV GUPTA
Senior Lecturer, Haematology
UCLH

KAY POULTON
Consultant in Histocompatibility and Immunogenetics, Director, Transplantation Laboratory
Manchester Royal Infirmary, MFT

AMNON PELZ
CEO
Taburit

HELEN PAPADAKI
Professor of Haematology
Public CBB of Crete

IRENE MARTINI
Owner and Scientific Director
Smart Bank

LORENZO BELTRAME
Lorenzo Beltrame
University of Trento

WOLFGANG KNIRSCH
CEO
Vita34

MARKO STRBAD
CEO
Biobanka

CHARIS OBER
Founder
Save the Cord Foundation

BETH SHAZ
CMO
New York Blood Center

MITCHELL CAIRO
Chief, Pediatric Hematology/Oncology & Stem Cell Transplantation
New York Medical College

KAVITA RAJ
Consultant Haematologist
Guy's and St Thomas' Hospital

MARIA CRAIG
Professor of Paediatric Endocrinology
The Children's Hospital at Westmead

JOSHUA HARE
Professor of Medicine
University of Miami

SKY SUMMERS
Parent patient advocate

JANE APPERLEY
Chairman of the Department of Haematology
London Imperial

QASIM RAFIQ
Senior Lecturer
UCLH

MAYUR ABHAYA
Mayur Abhaya
LifeCell

YAEL MARGOLIN
President and CEO
Gamida Cell

MARIA RENDE
Biotherapy Sales Specialist
Macopharma

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DAY 1 ADVANCED THERAPIES Wednesday 16th May

08:00 Registration opens

08:50 Welcome remarks from Terrapinn

Jessica Robinson, Project Director, Terrapinn

08:55 Chair's opening remarks

PLENARY: Opening keynotes

08:30 OPENING KEYNOTE PRESENTATION: **The NANT cancer vaccine**

- Harnessing innate & adaptive immunotherapy across all tumor types, a paradigm change in cancer care

Hans Klingerman, VP, Research and Development, NantKwest

Keynote interviews on the current trends and future implications of ATMP in medicine: How can we benefit patients?

09:00 Combination therapy: an update on clinical trial design and translation

Margo Roberts, CSO, Kite Pharma

09:25 KEYNOTE INTERVIEW

Eric Soller, Vice President of Corporate Development & Strategy, BlueRock Therapeutics

09:50 Delivering Advanced Therapies at scale: from manufacturing to the clinic

- Current technologies will get the therapies into the clinic but how are they going to become mainstream products?
- What's needed in manufacturing and supply chain?
- What's needed to ensure routine clinical adoption?

Keith Thompson, CEO, Cell and Gene Therapy Catapult

10:15 Industry on the edge: The speed of clinical success and the challenge of commercialization

- Clinical successes expected in 2017/2018 have provided great momentum and anticipation
- Major gaps in process industrialization still exist and present challenges to commercial economics
- Best practices for strategy and implementation provide options for risk mitigation and opportunities to accelerate industrial success

Robert Shaw, Vice President and General Manager for Cell Culture and Cell Therapy, BioProduction Division, Thermo Fisher Scientific *(TBC)*

10:40 Networking refreshment break

11:40 Plenary Round Table Discussion Session
Process Development & Manufacturing Focus

TABLE 1 **Regulatory and scientific challenges for global development** **Paula Salmikangas,** Director for Biopharmaceuticals and ATMPs, **NDA Advisory Board**	TABLE 2 **Raw material supply for the commercial manufacturing of cell and gene therapies** **Frank Hecht,** Vice President Marketing and Sales, **CellGenix GmbH**	TABLE 3 **Gene therapy and recombinant viral vectors manufacturing: A variation of the traditional biopharmaceutical production process or a challenge for novel and customized needs?** **Brian Bory,** Global Product Manager, Cell Culture Media - Cell Therapy & Vaccines, **Sartorius Stedim Biotech**	TABLE 4 **The future of cell therapy manufacturing technologies: All-in-one platforms or unit operation-specific devices?** **David Smith,** Head of Innovation and Engineering, **Hitachi Chemicals Advanced Therapeutics Solutions, LLC**
TABLE 5 **Strategies for autologous therapy infrastructure**	TABLE 6 **Implementation and supply chain for next-generation therapies**	TABLE 7 **Automation and process development**	TABLE 8 **Progresses in mesenchymal stem cell therapeutics** **Ivan Wall,** Professor in Regenerative Medicine, Cell & Gene Therapy Bioprocessing, School of Life & Health Sciences, **Aston University**

DAY 1 ADVANCED THERAPIES Wednesday 16th May

12:35 Speed Networking:
A fun, exciting and effective way to make a lot of initial connections (in a very different environment from the standard business networking meetings)

13:00 Networking lunch

PANEL DISCUSSION: **Exploring the crossover between human and veterinary applications for stem cells**

CHAIR: **Alain Vertès,** Managing Director, **NxR Biotechnologies**
Roger Smith, Professor, Equine Orthopaedics, **Royal Veterinary College (RVC)**
Joanna Miller, Science Director, **Cell Therapy Sciences UK**
Jeffrey Schaffer, Director of Veterinary Professional Services, **VetStem**

	C-Level Forum	Clinical development of Immunotherapy & cell therapy	Product, process & manufacturing development of ATMPs	Continuous manufacturing: drivers and critical enablers
	Regulation, Reimbursement & Commercialisation of Advanced Therapies around the Globe CHAIR: **Matthew Durdy,** CBO, **Cell Therapy Catapult**	**Developments in clinical trials and translations of CAR-T**	**New paradigms in manufacture: gene therapy and viral vectors**	**Automation of manufacture next generation therapeutics**
14:30	**Why the USA has so many more $multi-billion biotechs than Europe?** **James Noble,** CEO, **Adaptimmune**	PANEL DISCUSSION: **How can clinical challenges be overcome to enable CAR-T and immunotherapy to help more patients?** **Margo Roberts,** CSO, **Kite Pharma** **David Gilham,** VP Research & Development, **Celyad** **Helen Tayton-Martin,** COO, **Adaptimmune** **John Maher,** CSO, **Leucid** **Andre Choulika,** CEO, **Cellectis**	**Case study: Meeting the demand of lentiviral vector production - clinical and commercial** • The route to the world first commercial process for lentiviral vectors • Production strategies to meet increasing demands **Jeffrey S. Bartlett,** Chief Scientific Officer, Senior Vice President, Research and Development, **Calimmune, Inc**	**Towards novel solutions for automated stem cell production - challenges and potentials for advanced therapy manufacturing** • Considerations for achieving end-to-end process automation with adaptive cell processing • Examples for automated platform concepts for closed and fully automated production of cells • Potential of industry 4.0 for cell manufacture and a glance into the future **Jelena Ochs,** Head of Business Unit, **Fraunhofer Institute for Production Technology IPT**
14:50	**Public Market fundraising for Regen Med companies** • How to attract long-term and suitable investors to emerging technologies with complex manufacturing and regulatory stories. • Import of identifying those investors that understand and appreciate these innovative stories. • Overcoming past perceptions of regen med wastelands of the late 90's / early 2000's by addressing objections head-on **Adam Gridley,** President & CEO, **Histogenics**		**Bringing the cost of vector manufacture down to tackle the bottleneck of commercial scale autologous manufacture** • What progresses have been made in vector manufacture? • Bringing the cost of vector manufacturing down to improve autologous cell manufacturing • What steps need to be taken to make T-Cell processing fully commercially viable **Bo Kara,** Head Process Development Cell Gene Therapy CMC, **GSK**	**The Autostem project** • Progress in the fundamental cell biology (isolation, use of novel antibodies etc.) • Bioprocessing • Automation and how each is brought together **Qasim Rafiq,** Senior Lecturer (Associate Professor), Bioprocessing of Regenerative, Cellular and Gene Therapies, Department of Biochemical Engineering, **UCL** **Mary Murphy,** Senior Lecturer in Regenerative Medicine; Principal Investigator Orthobiology, **REMEDI** **Neils Koenig,** Head of department "Production metrology", **Fraunhofer Institute for Production Technology IPT** **Jelena Ochs,** Head of Business Unit, **Fraunhofer Institute for Production Technology IPT**

15:10

PANEL DISCUSSION: **Pricing, reimbursement, and market access for cell & gene therapies: challenges and potential solutions**

- Pricing and reimbursement to-date of pioneering cell and gene therapies in the EU and US
- Challenges and approaches to defining and demonstrating therapy value, including perspectives on NICE & ICER reviews
- The range of reimbursement models likely to emerge (multi-year, outcomes-based, other value-based arrangements, etc.)
- How partners and intermediaries might fit into and shape future value chains

CHAIR: **Domenick Bertelli,** Partner, **Putnam Associates**

PANELLISTS: **Paul Firuta,** Chief Commercial Officer, **UniQure**

Sarah Pitluck, Global Pricing and Reimbursement, **Spark Therapeutics**

15:30

Overcoming the limitations of CAR-T by stimulating NK cells

David Gilham, VP Research & Development, **Celyad**

Novel standards to generate gene-modified cellular products with Lentiviral vectors

- Lentiviral vectors are a clinically proven to safely and efficiently generate gene-modified cells, such as CAR-T cells.
- Large-scale Lentiviral vector manufacturing using a chemically defined, serum free suspension (CD-SFS) process has been successfully developed at Lentigen
- Tailored process development and manufacturing of cell products using the CliniMACS Prodigy® Technology within a robust and cost-effective workflow

Miriam Haak, Director Business Development, **Miltenyi Biotec**

(Panel discussion continued)

Off-The-Shelf CAR-Ts: How do we overcome CAR T immunotherapy limitations

- Gene-editing is a potent technology for the creation off-the-shelf CAR-Ts
- Potential ease to re-dose a patient of this novel cell therapeutic strategy
- Universal CAR-Ts to disrupt the treatment paradigm of cancer

Andre Choulika, CEO, **Cellectis**

The production of a novel scFv against coeliac disease – from gene to final product

- Introduction to coeliac disease and a novel scFV for treatment
- Overview of the scFV inclusion body process and challenges therewith
- Integrated Bioprocessing – how does one Unit Operation influence the other in the scFv IB process?
- Is the final product useful and competitive to available treatment

David Wurm, Group Integrated Bioprocess Development, **Vienna University of Technology**

Implementing process optimization to accelerate cell therapy commercial readiness

- Two cases studies will be presented on optimizing approaches for manufacturing at scales necessary for cell-based therapies, (1) human mesenchymal stem cells (hMSCs) on microcarriers, and (2) induced pluripotent stem cells (hiPSCs) as aggregates
- Optimized conditions leverage a fed-batch protocol that is easily translated for scale, increases cell yield, and reduces production costs.
- hMSC and hiPSC characterization for phenotype and function via immunocytochemistry, flow cytometry and cell differentiation to ensure cell-based product quality

Antoine Heron, Cell & Gene Therapy Commercial Development, **Merck Group**

16:00 Networking refreshment break

Seminar Theatre: Bioelectronic Medicine – New technology targeting molecular mechanisms

Paul Peter Tak, Professor of Medicine, Rheumatology, Academic Medical Centre, **University of Amsterdam AMC** (Senior Vice President of Research and Development Pipeline and Chief Immunology Officer, **GSK** & Board Member, **Galvani)**

Peder Olofsson, Leader, Center for Bioelectronic Medicine, Department of Medicine, **Karolinska Institutet** *(invited)*

	Investment & funding strategies	Developments in clinical trials and translations of CAR-T	Maintaining downstream process, cold chain and logistics for next generation therapeutics	
16:40	**Infrastructure and investment to drive pivotal late-stage clinical trials and clinical delivery of cell and gene therapies** • How do Innovate UK and its family of networks and innovation centres address a range of issues including logistics, clinical delivery and patient tracking? • Collecting information that can be used to support pricing and reimbursement. • Supporting both pivotal late-stage clinical trials and clinical delivery of cell and gene therapies? **Ian McKay & Nick Medcalf,** Innovation Leads, **Innovate UK**	**Clinical development of regulatory T cells (Tregs) to assist solid organ transplantation** • What we know from clinical trials involving liver and renal transplantation • Tackling the challenges of autologous TRegs expansion • Steps needed to get to phase II and new work using CARs with T-Regs **Giovanna Lombardi,** Professor, Human Transplant Immunology, Transplantation Immunology & Mucosal Biology, MRC Centre for Transplantation, **King's College London**	**Viral DSP development, stem cell and cell therapy purification and concentration** • GMP and coping with the complexity of purifying new format products • Tackling the challenges of variability and maintaining high standards of quality during purification • Ensuring high purity and lack of contamination when preparing product release **Manuel Carrondo,** Professor of Chemical & Biochemical Engineering, FCT-UNL, Vice-President, **IBET**	**Suspension Vero cell line for production of viral vaccines and viral therapeutics** As the acceptances of viral vectors as a delivery system for therapeutics grows, biomanufacturers are looking for an alternative to the classical adherent cell production models **John Madsen,** Head of PD Operations, **FUJIFILM Diosynth Biotechnologies Texas**
17:05	PANEL: **A new landscape for investment and innovation in the UK** • How do Innovate UK and its family of networks and innovation centres support innovative advanced therapy businesses? • How does government investment support the development of new partnerships and supply chains? • How will the UK's Industrial Strategy drive growth in the sector? CHAIRS: **Ian McKay & Nick Medcalf,** Innovation Leads, **Innovate UK** **Ohad Karnieli,** Chair, **Process and Product Development Subcommittee, ISCT;** CEO & Co-Founder, **ATVIO Biotechnology** **Alex Pemberton,** Programme Manager UKRMP, **Medical Research Council**	**Dissecting the latest clinical data and commercial business models for leading European and US CAR-T cell and TCR therapy developers** **Helen Tayton-Martin,** COO, **Adaptimmune**	**Future regulatory considerations for regenerative therapy** • GMP and coping with the complexity of purifying new format products • Tackling the challenges of variability and maintaining high standards of quality during purification **Mark Sawicki,** Chief Commercial Officer, **Cryoport**	PANEL DISCUSSION: **how to approach automation for scaled-up manufacture of cell and gene therapies** **Rodney Rietze,** Senior Research Investigator, Cell and Gene Therapies, **Novartis** **Qasim Rafiq,** Senior Lecturer (Associate Professor), Bioprocessing of Regenerative, Cellular and Gene Therapies, Department of Biochemical Engineering, **UCL** **Mary Murphy,** Senior Lecturer in Regenerative Medicine; Principal Investigator Orthobiology, **REMEDI** **Neils Koenig,** Head of department "Production metrology", **Fraunhofer Institute for Production Technology IPT** **Jelena Ochs,** Head of Business Unit, **Fraunhofer Institute for Production Technology IPT** **John Campbell,** Associate Director, Research, Development & Innovation, **SNBTS, National Science Laboratory**
17:30		**Intra tumour application of CAR-T therapy to treat solid head and neck cancer** • Robust manufacture of T4 immunotherapy can be achieved from lymphopenic patients with advanced head and neck cancer using a blood draw • Intratumoural T4 immunotherapy of head and neck cancer has proven safe to date, at doses of up to 100 million CAR T-cells • Cautious dose escalation will proceed in order to define the maximum tolerated dose of this immunotherapy **John Maher,** CSO, **Leucid**	**Process, manufacturing, analytics and logistics: the pillars of ATMPs commercialization** **Stefano Baila,** Director of Operations & Business Development, **Anemocyte**	
17:55	KEYNOTE: **The transformation and clinical translation of regenerative medicine** • Lessons learned from failed stem cell therapy and tissue engineering • The role of the immune system in tissue/organ development, homeostasis, response to injury and regeneration • The role of nanovesicles in functional tissue reconstruction **Stephen Badylak,** Professor, Department of Surgery, Director, McGowan Center of Pre-Clinical Studies, Deputy Director, **McGowan Institute for Regenerative Medicine (MIRM)**			
18:20	End of Day 1 – External Network			

KEYNOTE SESSION: **Immuno-oncology and strategies to improve patient success**

08:50 CHAIR: **Alain Vertès,** Managing Director, **NxR Biotechnologies**

09:00

Combination approaches for cancer immunotherapy, triggered by experience to date with Anti-CTLA-4 and Anti-PD-1 antibodies

- There are several challenges to be considered in developing new combination immunotherapy regimens
- Bispecific antibodies offer a novel approach for targeting multiple immunoregulatory pathways, including PD-1, LAG-3 and CTLA-4 among others

Jon Wigginton, Chief Medical Officer and Senior Vice-President, Clinical Development, **MacroGenics**

09:20

Next generation CAR T cells

Renier J. Brentjens, Director, Cellular Therapeutics, **Memorial Sloan-Kettering Cancer Center**

09:40

Process development for T-cell expansion in the ambr15 stirred-tank bioreactor system

- Cellular immunotherapy bioprocessing
- Stirred-tank bioreactors and T-cell expansion
- Process development for T-cell expansion

Maya Fürstenau-Sharp, Marketing Manager, Regenerative Medicine, **Sartorius Stedim Biotech**

10:00

LAG-3: the next immune checkpoint after CTLA-4 and PD-1/PDL-1?

- LAG-3/ MHC class II interactions and their modulation in both cancer and auto-immune diseases
- Combination therapy with anti-LAG-3 and anti-PD-1 mAb in oncology: where do we stand?
- Combination therapy with eftilagimod alpha (LAG-3Ig) and chemotherapy or anti-PD-1 mAb

Frédéric Triebel, CSO & CMO, **Immutep Ltd.**

10:20

Envisioning the advanced therapies superior delivery platform

- End-to-end service solutions for delivery
- Global platforms for delivery
- Advancing therapies to commercialization and enabling commercial delivery

Robert Preti, Chief Executive Officer and President, **Hitachi Chemical Advanced Therapeutics Solutions, LLC**

10:40 Networking refreshment break

C-Level Forum	Clinical development of ATMPs	Product, process & manufacturing development of ATMPs	Product, process & manufacturing development
Regulation, pricing, reimbursement & market access of advanced therapies around the globe CHAIR: **Martin Pöhlchen,** Partner, **Alira Health**	**Moving from phase II to phase III**	**Cell line development and gene editing for the production therapeutics**	**Benefits and bottlenecks in continuous and automated manufacture**
11:40 **Panel discussion: Assessment of health technology and market access globally, challenges and pricing** • How are the logistical challenges for cell and gene therapies going to work in the years ahead? • Affordability and sustainability. How are health authorities going to pay? • Process of health technology assessment • ROI considerations: what makes this product profitable?	**Trials with an immuno-oncolytic reovirus being tested in different oncology indications** **Andres Gutierrez,** Chief Medical Officer, **Oncolytics**	**Generation of superior host cell lines for biomanufacturing** **Holger Laux,** Fellow, **Novartis**	**Continuous integrated manufacturing of therapeutic proteins** • New concepts for the up and downstream processing of biomaterials • Peculiarities of continuous processing • Advances on perfusion bioreactors **Massimo Morbidelli,** Professor of Chemical and Bio Engineering, **ETH Zurich**

12:00	**Nick Crabb,** Programme Director – Scientific Affairs, **NICE** **Diego Ardigo,** Project Leader, ATMP's, **Chiesi Farmaceutici SpA** **Eduardo Bravo,** Managing Director & CEO, **TiGenix;** President, **European Biopharmaceutical Enterprises (EBE) Board of Directors** **Detlev Parow,** Head of Department, Care Management, **DAK**	**Developing later stage translation for novel therapeutic approaches** • Defining a new route for gene therapy, challenges and advantages • The correct pathway for industrialising gene therapy and regenerative medicine is still under development, how can we move forward? • What can we expect from gene therapy in 2018? **Michael Linden,** Previously VP **Gene Therapy** & Head, GMI, **Pfizer**	**Developing cell therapies with iPSC Technologies** • CDI has four internal cell therapy programs on Ocular, Cardiac, Oncology and Parkinson's disease. Open to strategic partnerships. • CDI can offer cGMP iPSC lines from common HLA haplotypes as a platform for cell therapy, with reprogramming license out and contract custom MCB/WCB. Our partners and customers can get a jump start. • CDI can provide third parties with contract development and manufacturing services (CDMO) to speed development of their cell therapy project by putting together each party's unparalleled know-how and expertise **Wen Bo Wang,** Senior Vice President, Cell Therapy R&D, Cellular Dynamics International (CDI), **a FUJIFILM company**	**Converging technologies driving innovation in Biomanufacturing** • Further integration of upstream, downstream, formulation development and analytics • Increasing the understanding on how the process defines the product • Process intensification will be key **Hitto Kaufmann,** Global Vice President of Biopharmaceutical Development and Platform Innovation, **Sanofi**
12:20	**GMP for ATMP: an update** • Bracing for the impact of evolution to GMP guidelines specific to ATMPS • How to ready yourself for what's new and what's coming in the realm of GMP compliance for ATMPS in Europe? • Creative approaches to overcoming Europe's GMP capacity shortfall: how diverse public and private sector organizations are employing innovative partnering models and initiatives to meet ATMP manufacturing needs at commercial scale **Didier Caizergues,** Head of Regulatory Affairs Department, **Généthon**	**Developing a pluripotent stem cell based implant for the treatment of the dry form of age related macular degeneration** **Jane Lebkowski,** CSO, President, Research & Development, **Asterias Biotherapeutics**	**Maintaining quality with a robust supply chain; a thought to media decisions** • Robust data set around cGMP media for sustainable production of cell therapy products • Streamlined development pathway with Development-by-Design (DbD) through a robust line of key raw material qualifications • Case study that maximizes mesenchymal stem cell (MSC) yield with a directly scalable culture method **David Smith,** Head of Innovation and Engineering, **Hitachi Chemicals Advanced Therapeutics Solutions, LLC**	**Chormatogram fingerprinting to follow integrated bioprocesses** • A toolbox comprising HPLC and chemometric tools allows monitoring the impurity pattern along an entire bioprocess • Only minutes after sampling a result is presented and actions can be taken • This tool facilitates continuous manufacturing **Oliver Spadiut,** Integrated Bioprocess Development, Chemical Engineering, **TU Wien**
12:40	**Phase III data on cell-therapy for the treatment of heart failure and seeking regulatory approval in Japan** **Silviu Itescu,** CEO, **Mesoblast**	**A paradigm shift in cell therapy: current data on how product effects clinical outcomes** **Francesco Dazzi,** Professor of Regenerative and Haematological Medicine, **King's College London**	**Economic expansion of quality mesenchymal stem cells at scale under serum-free conditions** • Isolation of human mesenchymal stem cells in a three-dimensional environment • Approaches for upscaling the expansion of stem cells • Differentiation under dynamic conditions **Cornelia** Kasper, Full University Professor, **BOKU**	**Optimising continuous and automated manufacture and bioprocessing** *Speaking opportunity available Please contact Erica Baeta (+44 (0)207 092 1152, erica.baeta@terrapinn.com) for further details*

13:00 Networking Lunch

Featured during the break: Workshop/panel discussion by Thermo Fisher Scientific

	Regulatory updates	Advances in autologous cell therapy (CAR-T cells, NK Cells, DCs, iPSCs & MSCs)	Manufacture and logistics of next generation therapeutics	PAT, process modelling, monitoring and control
			CHAIRED BY: **Harald Bradl,** Director Cell Culture Development, **Boehringer Ingelheim**	
14:30	**A Chemistry Manufacturing and Controls (CMC) Perspective on Late Stage Development for a CAR T Cell Product** • Familiar with the overall lifecycle of a CAR T cell therapy product development pathway • Familiar with the basic US FDA regulatory expectations for a CAR T cell product BLA with emphasis on chemistry, manufacturing (CMC) and controls perspective • Learn practical "points to consider" for a well-defined CAR T cell manufacturing process in preparation for late stage clinical trials and a biologics license application (BLA) VIA VIDEO LINK: **Xiaobin Victor Lu,** CMC Reviewer, CBER, Office of Tissues and Advanced Therapies, Division of Cellular and Gene Therapies, **U.S. Food and Drug Administration**	**Clinical development of the world's first iPSC-derived MSC therapeutic product** • Experience gained from conducting the world's first clinical trial of an allogeneic, iPSC-derived cell therapy product • New, second-generation approach to manufacturing therapeutic MSCs that provides a robust, consistent product without reliance upon multiple donors • Progress toward delivering a successful product for graft-versus-host disease and potentially other targets. **Ross A Macdonald, Managing** Director & Chief Executive Officer, **Cynata Therapeutics Limited**	**Cell therapy process economics for successful development, manufacture and commercialisation** **Robert D. Allen**, UK Programme and Alliance Director, **Asterias Biotherapeutics**	**Defining a robust cell culture process control strategy for biologics launch processes – the application and limitations of small-scale and large-scale data** • Process Control strategy prerequisites – CQA determination and Process Risk assessment (FMEA) • SSM Qualification • Process Characterization Studies: from De-risking to PAR studies – PAR calculation for critical parameters, NOR definition **Nicolas Urbieta,** USP Scientist, **Sanofi**
14:50	**The regulation of ATMPs in the UK** • What support is available for companies from early in the development process? • Designing clinical trials in a way that comes up with the evidence regulators need to accelerate ATMPs • Ensuring safety while reducing cost of development: working together with regulators to make the approval process more efficient • Impact of Brexit and other initiatives **Ian Hudson,** CEO, **MHRA**	**Engineering cell therapeutics for controlled drug delivery - clinical case studies** • Distinguish the pharmacology of cell therapy by classifying therapeutic compartment of action • Identify the most appropriate administration route and engineered drug delivery system for a given condition • Explore examples of clinically applied cell therapies that have engineered delivery and compare outcomes **Biju Parekkadan,** Associate Professor, Bioengineering; Harvard Co-founder, **Sentien Biotechnology**	**Moving from translational early cellular therapeutics manufacturing to larger scale manufacture to support pivotal clinical trials** • Automation in advanced therapeutics manufacturing • Mesenchymal and T-Cell banking • Incremental improvement of processes already in use and clinical trial in order to streamline manufacturing and achieve increases in scale **John Campbell,** Associate Director, Research, Development & Innovation, **SNBTS, National Science Laboratory**	**A holistic approach to analytical support, for the biotech industry** • Growing demand for new analytical tools; • Increasing infrastructure costs; • Subcontracting of analytical work **Sergey Piletsky,** Professor in Bioanalytical Chemistry, **University of Leicester**
15:10	PANEL DISCUSSION: **What are the key new international developments? Ask the regulators!** Panel Discussion on new regulatory considerations followed by questions from the audience **Ian Hudson,** CEO, **MHRA** **Rocio Salvador-Roldan,** Policy Officer, DG Health, **European Commission** **Christos Sotrielis,** CAT Full Member, Patients' representative, **EMA** **Amy Thomas,** Head of Regulatory Development, **HTA**	**Placental derived cell for allogeneic treatment of solid cancer** • Modifying cell secretion for cancer treatment. • Route of cell administration and efficacy. • In Vivo results: Triple Negative Breast Cancer (TNBC) treatment. **Zami Aberman,** Chairman & CEO, **Pluristem Therapeutics**	**Clinical applications of MaxCyte's cell engineering technology for gene editing** • Robust non-viral method for transient expression of gene editing tools • Minimized risk of "on target, off tumor" toxicity • High-performance delivery platform is rapid, automated, and cGMP-compliant **Jessica Carmen,** Director, BD Cellular Therapies, **MaxCyte** *(TBC)*	**Applications of process analytics in continuous downstream processing** • Conti flow manufacturing can have an enormous impact on manufacturing in terms of quality, quality and cost • Moreover, it is possible to design conti flow systems that are inherently more controllable than batch processes • To take advantage of these control possibilities requires us to develop robust and reliable real-time process measurements **Dylan Jones,** Principal Scientist, **Genzyme**

15:30	*(Panel discussion continued)*	**New data on a novel stem cell combination product for diabetes - development and clinical update** • What we know now: experiences from early clinical trials • Developing a Stem Cell product pipeline • Addressing combination product challenges **Mark Zimmerman,** Vice President, Business Development and Strategy, **ViaCyte**	**Improvements of AAV vector production using the baculovirus system** • Intensification of rAAV manufacturing • Improvement of baculovirus constructs • Improvement of AAV vector titers and quality **Otto-Wilhelm Merten,** Head of the Applied Vectorology and Innovation Group, **Généthon**	**Practical interpretation of process validation guidelines for the validation of an Antibody Drug Conjugate (ADC)** • Interpretation of PV guidelines to develop a practical approach for stage I activities (examples of activities and approaches) • Executing validation activities and maintaining consistent approaches for multiple processes of an ADC, across different CMOs • Coordinating activities across multiple cross-functional teams **James Leverone,** Head of Process Engineering and Validation, **ImmunoGen**
15:50	Networking refreshment break			
		Biotech showcases CHAIR: **Alain Vertès,** Managing Director, **NxR Biotechnologies**		**Advances in chromatography and novel purification methods**
16:30	**Industry perspective: overcoming regulatory issues in cell therapy** **Ajan** Reginald, Chief Executive Officer, **Celixir**	**Making blood cells in vitro for clinical use: when basic science needs to find the pathway to translational studies** • Designing basic experiments bearing in mind the long term requirement of affordability and manufacturing process costs • Identifying the bottle necks and using genome editing to answer these challenges • In vivo environment: technologies that can reproduce it in the dish **Cédric Ghevaert,** Consultant Haematologist, Senior Lecturer in Transfusion Medicine. NHS-BT, **University of Cambridge**	**Autologous and allogeneic cell therapy process economics for successful commercialisation** **Suzanne S. Farid,** Professor of Bioprocess Systems Engineering, **UCL**	**Challenges with downstream process development for non-antibody non-platform molecules** • Improving HCP reduction • Intermediate hold times • Scalability and manufacturability **Kumar Dhanasekharan,** Senior Director and Head, Biologics Process and Analytical Development, **Amicus Therapeutics**
16:50	PANEL: **The regulatory landscape for cell based therapies has changed dramatically in the last 12 months** • What Impact Will These Changes Really Have? • How is the FDA policing point of care stem cell clinics? • Do New Regulations Really Improve Patient Access to 'Legitimate' Treatments? • What Needs to Be Done to Improve Safe Access to Cell-based Therapies? • Is the Risk Benefit Ratio Really in Tune with Patient Needs? CHAIR: **Todd McAllister,** Executive Director, **Amnion Foundation** **Marc Penn,** Director of Research & Development, **Okyanos** (confirmed) **Joanne Kurtzberg,** Director, **Carolinas Cord Blood Bank, Duke University** (confirmed) **Sky Summer, Cure CP**	**Liver tissue engineering: from extracorporeal liver device to implantable tissues** • Basic concept of tissue engineering • Decellularization-recellularization technology • Hepatic regenerative medicine **Giuseppe Mazza,** Chief Executive & Scientific Officer, **Engitix**	**Performance of single-use bags in cryopreservation conditions** • Compare mechanical properties of single-use film polymers in cryogenic conditions • Understand glass transition temperature and how it relates to single-use bag performance • Discover how high purity fluoropolymers are being successfully implemented for cold temperature storage **Michael Johnson,** Market Development Engineering Manager, **Entegris**	**Composite ceramic monolithic columns for chromatografic separations** • Flow properties • The challenge of functionalization • Impact on biomolecule downstream process **Cristiana Boi,** President of the European Membrane Society, Assistant Professor, **DICAM**

17:10

(Panel discussion continued)

Pioneering unique cell programming therapies to treat degenerative diseases with high unmet medical needs

Michael Stein, Chairman & CEO, **Oxstem**

Strategies for upscaling the manufacturing of liver-derived mesenchymal stem cells

- Maximizing the expansion potential using working cell banks
- Advantages of chemically defined media
- Implementing single-use bioreactors

Jef Pinxteren, VP Operations, **Promethera Biosciences**

Light distilleries of cells and proteins

Proteins and cells are bound on the adsorbent in dark and are recovered by applying light at a specific wavelength This is a (hopefully) very innovative and safe manner to purify therapeutics that are so biochemically delicate that current purification strategies fail. We call this technology "Light distilleries of cells and proteins

Stefano Menegatti, Assistant Professor, **NCSU**

17:50 Poster Viewing and Networking Reception
End of day 2

	Cell therapy discovery and applications	Regenerative Medicine
	CRISPR/Cell Line Development	**New frontiers in repair and replacement of diseased tissues and organs**
08:55	**Chair's opening remarks** CHAIR: **Gopalan Narayanan,** Vice-President, Disruptive Biologics, **Voisin Consulting Life Sciences**	**Chair's opening remarks** CHAIR: **Yen Choo,** CEO, **Progenitor Therapeutics**
09:00	**CRISPR goes in vivo to make preclinic more predictive** • Past models in preclinic: what was good and what was bad • Application of genome editing for somatic cells engineering: advantages and perspectives • The future ahead: overoptimistic vs skeptical visions **Danilo Maddalo,** Lab Head, Oncology Pharmacology, **Novartis Institutes for BioMedical Research**	**BrainStorm's NurOwn® treatment for neurodegenerative diseases** • Innovative adult Stem Cell therapy • In clinical development for ALS (MND - Motorneuron Disease): 3 completed clinical trials • Mechanism of action and next steps for clinical translation **Chaim Lebovits,** CEO, **Brainstorm Cell Therapeutics**
09:25	**Application of omics data, screening and genome editing to improve CHO cell factories** • An update on strategies to engineer improved CHO cell factories • Predictive host cell line engineering with target integration • Increasing the efficiency of precise gene editing to improve product yield and quality. **Helene Faustrup Kildegaard,** Co-Principal investigator, The Novo Nordisk Foundation Center for Biosustainability, **Technical University of Denmark**	**How the development of tissue therapies can aid the development of functional organ replacements** • Practical insights into Organovo's tissue engineering technology that has capabilities working with a variety of cell types • Where are there opportunities to collaborate in order to advance developments in using tissue engineering for organ regeneration? • Next steps from supplemental tissue therapies towards larger replacement tissues and eventually full organ regeneration **Benjamin Shepherd,** Director, **Therapeutics, Organovo**
09:50	**Engineering cells and animals as models for therapies** • Application of Synthetic Biology approaches • Engineering transgene expression stability in cells and mice • Engineering mice as models for therapeutic vaccination **Hansjörg Hauser,** Head of Department Gene Regulation and Differentiation, **Helmholtz Centre for Infection Research**	**Ground-breaking Japan regulation for regenerative medicine: How Healios thrives to capitalize on it while ensuring global outreach** **Hiromu Ozaki,** General Manager of Business Development Division, **Healios K.K.**
10:15	**Cell therapy for neurorepair** • Foetal stem cells are neuroprotective against neonatal hypoxia is he Mia • Transplantation reduces brain lesion • Mechanisms of action involve adenosine **Pascale V Guillot,** Head of the Cellular Reprogramming and Perinatal Therapy, **University College London Institute for Women's Health**	**Human PSC-derived cardiomyocytes neurons and 3D Micro-tissue constructs for mature/reliable stem cell products in drug discovery and cell therapy** • Robust cytokine-free differentiation of cardiomyocytes from human ES/iPS cells by combination of small chemical compounds. • Construction of 3D micro-tissue devices with aligned nanofibers for production of mature and reliable cardiomyocyte functions. • Human PSC-derived neurons for making CNS disease/healthy models and micro-tissue products. **Norio Nakatsuji,** Professor Emeritus, Kyoto University & Chief Advisor, **Stem Cell & Device Laboratory, Inc**
10:40	Networking refreshment break	
11:40	**Keynote: Harnessing patient data using stem cells to power precision medicine** **Susan Solomon,** CEO and Co-Founder, **New York Stem Cell Foundation**	
12:00	**Small molecule drug discovery to selectively stimulate regenerative processes** • Collaborating with big pharma for successful target discovery • Using ATMP knowledge to target and stimulate specific biochemical signalling pathways • Use traditional pharmaceutical drug screening technologies to discover synthetic small molecule modulators of regenerative pathways **Yen Choo,** CEO, **Progenitor Therapeutics**	

12:20	**A randomised controlled trial of allogeneic corneal epithelial stem cell transplantation.** • Transplantation of deceased-donor derived allogeneic corneal epithelial stem cells on amniotic membrane is feasible and safe • Whilst the supply chain for such a product is challenging in can be managed • Very careful manufacturing, characterisation and clinical trial management is required in order to obtain meaningful evaluation of these kinds of advanced therapies **Marc Turner,** Medical Director, **SNBTS**
12:40	**Strategies for preserving cell loss in animal models and humans** **Roger Smith,** Professor, Equine Orthopaedics, **Royal Veterinary College (RVC)**
13:00	Networking Lunch
	CLOSING KEYNOTES: **What's next for ATMPs?**
14:00	**What's new in the field of aging and regeneration?** • How can molecular and AI technologies help regenerate damaged tissue in humans? • What are the current challenges with induced tissue regeneration and how are we tackling them? • Combining pluripotent stem cell and iTR technology to form new company AgeX **Michael West,** Co-CEO, BioTime & CEO, **AgeX Therapeutics**
14:20	PRESENTATIONS: **Combination immunotherapy strategies across pharma and biotech** • Five, 10 minute presentations covering the combination immunotherapy strategies from 5 different companies • Panel to follow PANEL: **Combination immunotherapy strategies across pharma and biotech** • High level pharma companies come together to discuss their strategies for tackling cancer • Each company will give a 5-minute presentation on their strategy, and a fire side discussion on oncology focused strategies will follow • Strategies will cover cytotherapy, checkpoint inhibitors, combination therapy, sequential therapy, approaches to solid tumours, treatments and diagnostics CHAIR: **Alain Vertès,** Managing Director, **NxR Biotechnologies** **Jon Wigginton,** Chief Medical Officer and Senior Vice-President, Clinical Development, **MacroGenics** **Frédéric Triebel,** CSO & CMO, **Prima BioMed Ltd**
15:20	End of Day 3

08:00 **Registration opens**

08:50 **Conference doors open**

OPENING KEYNOTES: **Innovative Applications of Cord Blood**

09:00 **Opening remarks from Terrapinn**

09:05 **Opening remarks from the chair**

Moshe Israeli, Project Director, **Terrapinn**

09:10 **Evaluating the efficacy of umbilical cord blood to improve outcomes for children with Autism**

- An update from Joanne's latest clinical trials
- Umbilical cord blood-derived cell therapies may have potential in alleviating ASD symptoms by modulating inflammatory processes in the brain
- Looking to the future of cord blood clinical use

Joanne Kurtzberg, Director, **Paediatric Blood and Marrow Transplant Program,** Chief Scientific and Medical Officer, Robertson Clinical and Translational Cell Therapy Program, **Duke University**

09:35 **Regeneration of mucosal tissues using Cord Blood preparates**

- Platelet gel from cord blood (CBPG) is a recently developed blood component for topical use
- We report a case of life-threatening mucositis after high-dose chemotherapy with fotemustine and cytarabine that was successfully treated with CBPG
- This case supports the need to conduct controlled studies comparing the efficacy of autologous and allogeneic platelet gel from adult and umbilical cord blood for the topical treatment of severe oral mucositis occurring after high-dose chemotherapy

Andrea Piccin, Consultant Haematologist, **San Maurizio Regional Hospital**

10:05 **Private-public partnership in hybrid cord blood and tissue banking**

- Professor Surbek is currently a Full Professor (Ordinarius) for Gynecology and Obstetrics at the University of Berne; Acting Chair, Dept. of Obstetrics and Gynecology; Head, Division of Obstetrics and Feto-Maternal Medicine, University Hospital Insel, Berne. Head, Research Laboratory for Prenatal Medicine

Daniel Surbek, Professor, Acting Chairman, Department of Gynaecology and Obstetrics, **University Hospital Bern**

10:30 **Cord blood transplantation: rewind to (hopefully) fast forward**

- Cord blood transplantation activity in USA
- Advantages and disadvantages of using cord blood as source of stem cells
- Comparison of cord blood transplantation vs. unrelated donors transplants
- Overview of new clinical applications to improve outcomes in patients with undergoing cord blood transplantation

Filippo Milano, Associate Director Cord Blood Transplantation, **Fred Hutchinson Cancer Research Center**

10:50 Networking break

11:50 **Roundtable discussion session**

TABLE 1 **Diversification- moving from transplant to advanced therapies** **Glyn Stacey,** Director, **UK Stem Cell Bank**	TABLE 2 **Optimising cord blood bank business models** **Amnon Pelz,** CEO, **Taburit**	TABLE 3 **Regulatory Issues in Cord Blood Banking in Europe** **Lorenzo Beltrame,** Researcher, **University of Exeter**
TABLE 4 **Regulations for cell therapies including cord blood** **Marko Strbad,** CEO, **Biobanka**	TABLE 5 **A true understanding of the biology of cord blood stem cells** **Irene Martini,** Lecturer, **Sapienza University**	

12:50 Speed networking

13:10 Networking Lunch

14:30 **Research update: tackling the challenges around successful processing and storage of cord tissue**

- The impact of collection technique, including microbiological contamination
- Donor variability
- Optimal methods for processing

Kate Sneddon, Chief Executive Officer, **Biovault Technical Ltd.**

Qasim Rafiq, Senior Lecturer, **UCL**

14:50 PANEL DISCUSSION: **lessons learnt from cord blood collection, bioprocessing and storage**

- Review of CB thawing procedures
- Best practices recommendations
- Cryopreservation and cross-sample contamination

Maria Rende, Biotherapy Sales Specialist, **Macopharma**

Kate Sneddon, CEO, **Biovault Technical Ltd.**

Diana Hernandez, Group Leader Immunotherapy, **Anthony Nolan**

15:30 **An effective logistical case study for stem cell collection, storage and use in Thailand**

- The challenges of storing, collecting and processing stem cells in South East Asia
- Overview of processes and how challenges can be overcome
- Successful case studies

Warachaya Fongsarun, Medical Director, **Thai StemLife**

15:50 **Timing of cord clamping and impact on cord blood collection**

- Delayed clamping of the umbilical cord after birth has been a subject of controversy and debate
- Overview of evidence
- Suggested Industry responsibility and actions

Kate Falcon Girard, Director of Medical and Scientific Affairs, **Viacord**

16:10 Networking Break

Expansion and Engraftment

CHAIR: **Beth Shaz,** CMO, **New York Blood Center**

16:40 **Expanded use of public cord blood banked units**

- Cell expansion of human cord blood progenitor cells to improve patient outcomes
- Creating next generation of products from high quality public cord blood units through reprogramming of CD34+ cells into induced pluripotent stem cells
- Non-hematopoietic use of umbilical cord blood

Beth Shaz, CMO, **New York Blood Center**

17:00 **The safety and efficacy of human placental derived stem cells in combination with unrelated cord blood transplantation in children**

- Background on UCBT and HPDSC
- Hematopoietic engraftment following UCBT & HPDSC
- Immune Reconstitution following UCBT & HPDSC
- Probability of Acute and Chronic GVHD following UCBT & HPDSC

Mitchell Cairo, Chief, Pediatric Hematology/Oncology & Stem Cell Transplantation, **New York Medical College**

17:20 **The science behind ex vivo manipulation of CB HSCs for transplantation**

- A consultant haematologist at UCLH and a Senior Lecturer at the UCL Cancer institute: his interests include understanding cell fate choices in haematopoietic stem cells
- Rajeev Gupta is currently carrying out some fascinating work encompassing pre-treating CB HSCs with various techniques, and studying those effects on engraftment

Rajeev Gupta, Consultant Haematologist, **UCL**

17:40 **NiCord® Breakthrough Therapy Designation - addressing the unmet need in BMT with a novel graft modality**

- NiCord is an ex vivo expanded cell graft derived from umbilical cord stem cells
- A phase 3 randomized controlled multi-national registration study is enrolling patients
- NiCord is expected to double the number of indicated patients to transplant

Yael Margolin, President and CEO, **Gamida Cell**

18.00 **Ex vivo expansion of cord blood hematopoietic stem cells - from formulation to manufacturing process CombiCult-combinatorial cell culture as a platform to find optimal media compositions for the stem cell applications**

- Application of CombiCult for HSC expansion
- Identification of media formulations that enrich the HSC compartment
- In vitro analysis of expanded cells
- Identification of GMP-compliant processes for HSC cell expansion

Diana Hernandez, Group Leader Immunotherapy, **Anthony Nolan**

18:30 Offsite Drinks Reception

08:00 **Registration opens**

08:50 **Conference doors open**

Opening keynotes

09:00 **Recap of Day 1 and chair's opening remarks for Day 2**

09:10 **Universal donor ex vivo expanded hematopoietic progenitor cells for clinical application: to the Neutrophil and Beyond**

- Ex vivo expansion in human hematopoietic stem cells
- Bench to bedside translation and development of a universal donor product
- Clinical application of universal donor stem cell product in stem cell transplant and chemo induced neutropenia

Colleen Delaney, Founder and Chief Medical Officer, **Nohla Therapeutics**

09:30 **Cord blood expansion for engraftment and regenerative medicine**

- Current state of the art for cord blood expansion in the transplant setting
- MSCs for regenerative medicine and GVHD
- Will discuss the GMP production of cord blood tissue derived MSCs for clinical use

Elizabeth Shpall, Director, **MD Anderson Cancer Center**

09:50 **Allele-level HLA matching for umbilical cord blood transplantation for non-malignant diseases in children: A retrospective analysis**

- The effects of allele-level matching at a higher resolution—HLA-A, HLA-B, HLA-C, and HLA-DRB1
- Data supports a change from current practice:
- Selection of unrelated umbilical cord blood units for transplantation for non-malignant diseases should consider allele-level HLA matching at HLA-A, HLA-B, HLA-C, and HLA-DRB

Jaap Boelens, Haematology Consultant, Blood and Marrow Transplantation program, **UMC Utrecht**

10:10 **The Commercialization of StemCyte International Ltd. and its operational challenge**

- The success of StemCyte's "Dual Track" business strategy!
- The development of MonoNuclear Cells (UCBMNC) Platform Technology
- The Operational Challenge of Regenerative Cell Therapy

Jonas Wang, CEO/Chairman, **StemCyte International**

10.30 Networking Break

Cord Blood Banking

14:50 PANEL DISCUSSION: **collaborative cord blood banking**

- Why aren't all European blood banks joining the CBA?
- Tackling lack of communication between researchers, biobanks and regulators
- How to increase international circulation of cord units

Andre Gomes, Chief Executive Officer, **Stemlab**

Margaret Sleeboom Faulkner, Professor, **University of Sussex (reserved)**

11:50 **Broadening product offerings in family banking- new revenue opportunities or a distraction to clients**

- Plureon offers licenses to a branded placenta banking technology for private family banking
- Amnion is a nonprofit public stem cell bank that uses the same technology, and is focused on developing clinical applications for these cells
- Together, these platforms present an extension of the current cord blood banking model that may improve overall penetration rates

Todd McAllister, Executive Director, **Amnion Foundation**

12:10 **The IMSS Cord Blood Bank: a Mexican public bank with one of the largest utilisation rates in the world**

- 13 years of work and challenges
- Biomedical research and clinical results

Hector Mayani, Head, Oncology Research Unit, **IMSS Medical Center**

12:30 PANEL DISCUSSION: **How can we get more patients publicly donating?**

- Issues around lack of ethnic diversity
- How to educate the general public
- How will the launch of World Cord Blood Day help the cause?

Charis Ober, Founder, **Save the Cord Foundation**
Salmaan Dalvi, Director Stem Cells Programme, **Precious Cells**
Helen Papadaki, Professor of Haematology, **Public CBB of Crete**

13:00 Networking lunch

Successes and Challenges: from Lab to Clinic

14:10 **Can frequency of therapeutic application of stem cells be influenced?**

- The meaning of availability, reimbursement, gaining scientific reputation and clinical evidence
- How do incentives (reimbursement, scientific reputation) influence frequency of therapeutic applications of stem cells

Wolfgang Knirsch, Chief Executive Officer, **Vita34**

14:30 **Off-the-shelf CAR-engineered cord blood derived natural killer cells to treat cancer**

- Discuss approaches for the GMP grade expansion of cord blood derived natural killer cells for cellular therapy
- Discuss strategies to engineer cord blood derived natural killer cells to enhance their anti-tumor potency and in vivo persistence
- Present data on the first-in-human clinical trial of off-the-shelf CAR-engineered cord blood derived natural killer cells

Katy Rezvani, Director of Translational Research, **MD Anderson Cancer Center**

14:50 **Safety and efficacy of autologous cord blood intrathecal transplantation for children with autism spectrum disorders**

- Initial results from the first study to use cord blood stem cell intrathecal transplantation for autism treatment
- An explanation of how use of an Intrathecal injection provides the most optimal, shortest and safest delivery of cord blood cells direct to the brain

Gocha Shatirishvili, Medical Director, **Geocord**

15:10 **Cord blood for prevention of type 1 diabetes**

- CD4+CD25+ regulatory T cells (Treg) in umbilical cord blood provide potential as an immunotherapeutic tool
- Considerable evidence indicates that type 1 diabetes is characterised by abnormalities in Treg number and function.
- A pilot trial is currently underway in Australia that seeks to prevent type 1 diabetes with autologous cord blood in children with islet autoimmunity, who are at high risk of progression to type 1 diabetes

Maria Craig, Professor of Paediatric Endocrinology, **The Children's Hospital at Westmead**

15:30 Networking break

Successes and Challenges: from Lab to Clinic

16:10 **Intravenous infusion of umbilical cord tissue (UC) derived Mesenchymal Stem Cells (MSCs) versus bone marrow (BM) derived MSCs to evaluate cytokine suppression in Patients with chronic inflammation due to Metabolic Syndrome (CERES)**

- A Phase I/II, Randomized, Placebo-controlled Comparative Study to compare Umbilical Cord Tissue (UC) Derived Mesenchymal Stem Cells (MSCs) Versus Bone Marrow (BM) Derived MSCs

Joshua Hare, Professor of Medicine, **University of Miami**

16:30 **The 'Cord Blood Unit Selection Advisory Panel' (CBUSAP)**

- An overview of the CBUSAP: a voluntary group of experts with specialist knowledge in cord blood transplantation
- The aim of this panel is to support the use of CBU as a stem cell resource, increasing the understanding of how cords can be most effectively used
- Case studies: challenges and successful transplants

Kay Poulton, Consultant in Histocompatibility and Immunogenetics, Director, Transplantation Laboratory, **Manchester Royal Infirmary, MFT**

16:50 **Differential expression of cell cycle and WNT pathway-related genes accounts for differences in the growth and differentiation potential of Wharton's jelly and bone marrow-derived mesenchymal stem cells**

- In view of the current interest in exploring the clinical use of mesenchymal stem cells (MSCs) from different sources, we performed a side-by-side comparison of the biological properties of MSCs isolated from the Wharton's jelly (WJ), the most abundant MSC source in umbilical cord, with bone marrow (BM)-MSCs, the most extensively studied MSC population
- These data are anticipated to contribute to the better characterization of WJ-MSCs and BM-MSCs for potential clinical applications.

Helen Papadaki, Professor of Haematology, **Public CBB of Crete**

Haploidentical vs Cord Blood Transplantation

17:10 PANEL DISCUSSION: **haploidentical transplants**

- Discussions around the future of cord blood and haploidentical transplants- can they co-exist?

MODERATOR: **Moshe Israel,** Director of Tissue Typing Laboratory, **Rabin Medical Centre**
Kay Poulton, Consultant in Histocompatibility and Immunogenetics, **CMUH,** Chair, **BSHI**
Jane Apperley, Chairman of the Department of Haematology, **London Imperial**
Kavita Raj, Consultant Haematologist, **Guy's and St Thomas' Hospital**

17:45 **Chair's closing remarks**

18:00 Close of conference – see you next year!

On floor innovation zone

Seeking partnership, investment, licencing or looking to sell your technology? Want to hear about the latest innovative platforms? Looking to invest?

In 2018, we are again hosting the on-floor innovation zone, showcasing the newest tech, software and developments the industry has to offer. Innovation talks will be running on the 16th and 17th May, during the networking breaks, with talks, panels and pitch and partners.

Investors, big pharma, biotechs and academics will have the opportunity to see innovative pitches of new technologies, that could help you develop your business and take your work to the next level.

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Mastering the digital transformation challenge in biopharmaceutical processing

- Industry 4.0 vs. Biopharmaceutical Industry
- Bioprocess Data Analytics
- Process Modleing and Scale-Up
- Key Technology and Business Drivers for Digital Transformation in Biotech and Pharma

Michael Sokolov, COO, **DataHow AG**, Lecturer, **ETH**

Receptor mediated non-toxic lymphodepletion to replace chemotherapy preconditioning

- AVM0703 is a Phase I/II ready nontoxic alternative to cell therapy chemo preconditioning
- AVM0703 enhances cell engraftment and has excellent preclinical lymphodepletion data
- AVM0703 has 60+ years of safety data and spares neutrophils, RBCs, platelets, hematopoietic & mesenchymal stem cells, reducing infection risk
- AVM0703 can be administered intravenously or orally on outpatient basis
- AVM is seeking clinical experts, KOLs, licensees and financing partners

Theresa Ann Deisher, CEO & President, **AVM Biotechnology**

Human Platelet Lysate as Serum Alternative for Stem Cell Expansion in Regenerative Medicine

Hatim Hemeda, CEO, **PL BioScience**

Unique Stem Cells Aesthetic Treatments

- The Role of Stem Cells in the Aesthetic Industry
- Topical application versus injectable techniques
- Current trends and future directions of stem cells in cosmeceuticals

Bonny Chow, Stem Cell Program Manager, **HKCE**

Latest updates from Digipharm

Seminar theatre panel discussions

Panel discussion: exploring the crossover between human and veterinary applications for stem cells:

Chair: **Alain Vertès,** Managing Director, **NxR Biotechnologies**

Joanna Miller, Science Director, **Cell Therapy Sciences UK**

Roger Smith, Professor, Equine Orthopaedics, **Royal Veterinary College (RVC)**

Bioelectronic Medicine – New technology targeting molecular mechanisms

Paul Peter Tak, Professor of Medicine, Rheumatology, Academic Medical Centre, **University of Amsterdam AMC** (Senior Vice President of Research and Development Pipeline and Chief Immunology Officer, **GSK** & Board Member, **Galvani)**

Peder Olofsson, Leader, Center for Bioelectronic Medicine, Department of Medicine, **Karolinska Institutet** (invited)

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Frank Hecht, VP Marketing and Sales, **CellGenix GmbH**

"I really enjoyed the meeting. Nice mix of Precision Medicine and analytics. They also did a good job of recruiting excellent people to speak, and attend"

Professor of Laboratory Medicine and Pathology, **Mayo Clinic**

"Great for networking / partnering-type discussions & certain elements of manufacturing"

Rob Allen, Programme and Alliance Director, **Asterias Biotherapeutics INC.**

"Great selection of lecturers"

CEO, **Paralax Life Science**

"Really interesting conference and exhibition covering wide range of speakers and subjects"

Governance Board Member, Stratified Medicine Programme, **Cancer Research UK**

"Well organised; relevant topic; high level of presentation; networking possibilities"

Clinical Geneticist, **Radboud University Medical Centre Nijmegen**

"Very good meeting and I really enjoyed the different confent and formats in sessions."

John Campbell, Professor and Associate Director, **Scottish National Blood Transfusion Service**

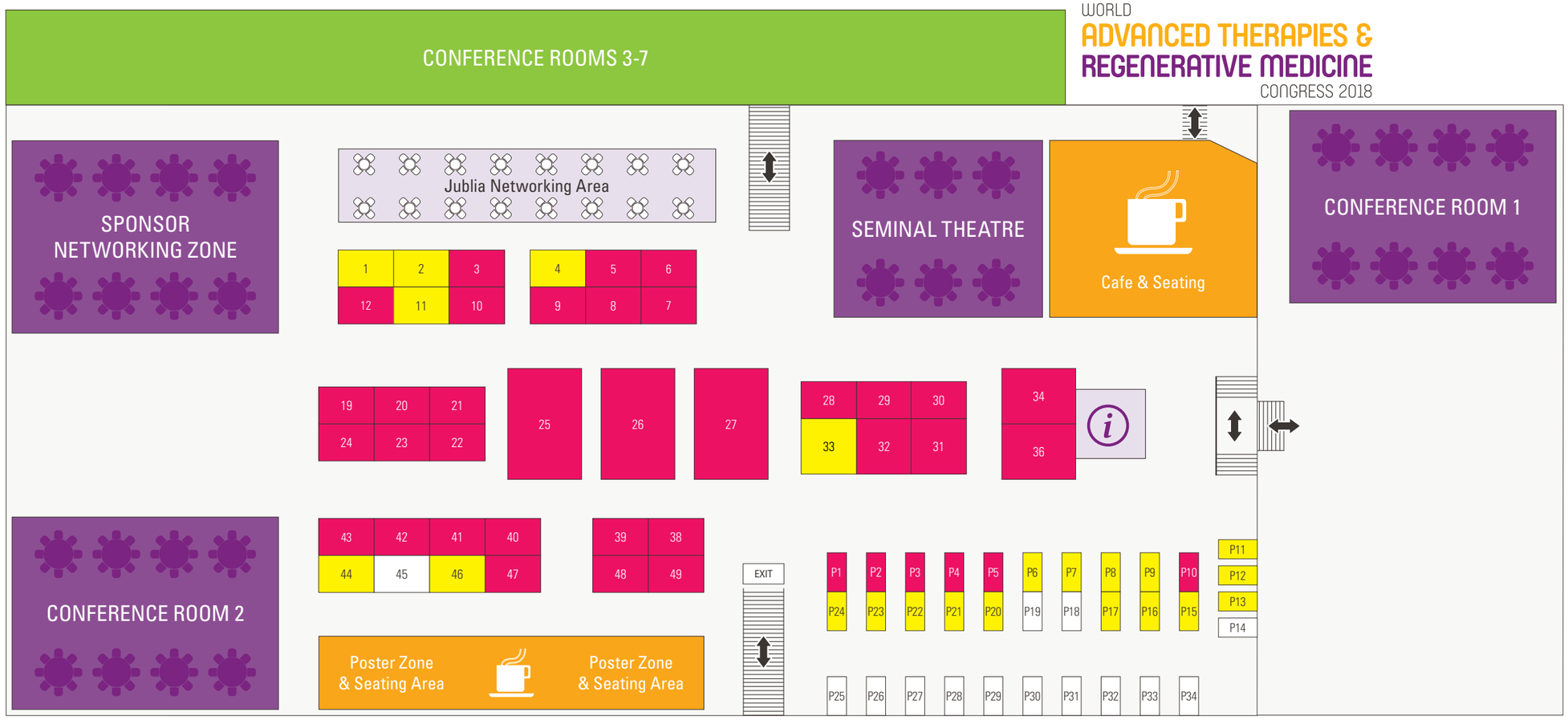
"There's a lot of information for cord blood banking and we have chances to discuss and exchange information with experts."

Warachaya Fongsarun, Medical Director, **THAI StemLife Co., Ltd.**

"Great format, plenty of breaks for meeting new people, and level of participation and quality of attendees was very high"

Managing Partner, **Forentis Fund**

The Exhibition



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Our extended lunch periods will provide you with ample time to network between sessions. These lunch formats allow for more opportunities for casual conversations and introductions, without compromising your time attending the conference sessions

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