

HYBRID : Next generations of gene & cell therapies 8&9 February 2024

Day 1: 8 February 2024

8:00am Welcome coffee

8:45am Official speech

Bruno Bonnell, General Secretary for Investment – France 2030 (SGPI)

8:55am Opening ceremony

Thomas Lombes, Deputy CEO for strategy, Inserm, **Thierry Hulot**, Chairman of Leem, **Marc Bonneville**, Chairman of Ariis, **Rosalie Maurisse**, Head of Health - Innovation Department at Bpifrance

Session 1: 9:15am - 12:45pm

The challenges associated with future viral vectors and genome editing approaches

From the main challenges, avenues and prospects for new vectors to optimized delivery and safety, and tomorrow's genome-editing strategies

9:15am **Overview:**

Oumeya Adjali, Inserm - Gene therapy using AAV viral vectors ; from vector engineering to preclinical evaluation

9:35am **Short talks:**

- **Ana Buj-Bello**, Inserm - Next generation AAV vectors for gene therapy of muscle disorders
- **Alexis Duvergé**, CNRS - Specific Targeting of Cancer Cells by Lentiviral Vectors
- **Maria Grazia Biferi**, Spark Therapeutics - Targeting CNS with AAV in a large animal

10:10 am Questions & Answers

10:30 am Coffee break

11:05 am **Short talks:**

- **Annarita Miccio**, Inserm - Genome editing approaches for beta-hemoglobinopathies
- **Aurélie Bedel**, Bordeaux University - How to secure CRISPR-Cas9 use?
- **Stéphane Boissel**, Sparing Vision - Pioneering Genomics to Save Sight

11:40am Questions & Answers

11:55am **Round table:**

- **Sitra Tauscher-Wisniewski**, Novartis
- **Anne Douar**, Vivet Therapeutics
- **Annarita Miccio**, Inserm

12:45pm Lunch break

B2B Meetings: 1:00pm – 3:00pm

Session 2: 3:00pm – 5:00pm

New nucleic acid therapies : applications, vectorization

From prophylactic to therapeutic vaccines and the various potential uses of nucleic acids. Challenges and barriers associated with the uses of nucleic acids: shelf life, route of administration, targeting, etc.

3:00pm **Overview:**

- **Chantal Pichon**, Orléans University - The game changing potential of mRNA-based vaccines and therapeutics
- **Pierre Wils**, Sanofi - From Innovation to Industrialization: Challenges in Research and Development of mRNA Vaccines

3:35pm

- **Nathalie Mignet**, CNRS - Production of lipid nanoparticles formulations for gene and cell therapy
- **Philippe Barthélémy**, Bordeaux University - Therapeutic oligonucleotides: efficient and specific tools to combat diseases

4:00pm Questions & Answers

4:15pm **Round table:**

- **Paul Nioi**, Alnylam
- **Chantal Pichon**, Inserm
- **Anette Sommer**, Pfizer
- **Hélène Tran**, Servier
- **Pierre Wils**, Sanofi

B2B Meetings: 5:00pm – 6:30pm

Cocktail reception: 6:30pm – 8:00pm

Day 2: 9 February 2024

8:00am Welcome coffee

8:30am Keynotes **Cécile Martinat & Christophe Junot** - National research program in biotherapies and bioproduction

Session 3: 8:45am - 12:00pm

Immuno cell based therapies

How can the uses of CAR be extended beyond current applications? How can we improve delivery to solid tumours, the role of the tumour environment, survival, etc.? Applications beyond cancer.

8:45am **Overview:**

- **Tamas Shisha**, Novartis - An Open-label, Multicenter, Phase 1/2 Study to Assess Safety, Efficacy and Cellular Kinetics of YTB323, a CAR-T Cell Therapy Targeting CD19 for Severe Refractory SLE (Preliminary Results)

9:05am **Short talks:**

- **Mitra Suman**, Inserm - Optimizing Adoptive Cellular Therapies in Physio-Chemical Tumor Environments for Superior Anti-Cancer Efficacy without systemic toxicity
- **Emmanuel Donnadieu**, CNRS - Predicting efficacy and toxicity of CAR T cells using an ex vivo human model
- **Marie-Caroline Dieu-Nosjean**, Inserm - Manipulation of tertiary lymphoid structures as the third generation of immunotherapy
- **Georges Lourenço**, Mnemo Therapeutics - A new class of tumor targets for next-generation cancer immunotherapies

9:50am Questions & Answers

10:15am Coffee break

10:50am **Round table:**

- **Alessandro Crotta**, BMS
- **Viggo VanTendeloo**, J&J
- **Sante Cundari**, Kite- a Gilead company
- **Karine Rossignol**, SmartImmune
- **Emmanuel Donnadieu**, CNRS

11:40am **Keynote:**

- **Lise Alter**, Head of AIS - The missions of the Health Innovation Agency

12:00pm Lunch break

B2B Meetings: 12:00pm - 2:00pm

Session 4: 2:00pm - 4:30pm

Cell therapies and beyond

From the various therapeutic applications of cell therapies to exosomes: how to develop clinical uses of cell therapies, address characterisation issues, etc.? How to take full advantage of the coupling between therapeutic effect and vectorisation properties for exosomes.

2:00pm **Short talks:**

- **Louis Casteilla**, Toulouse University - MSC-based ATMP: present and future
- **Christelle Monville**, Evry University - A stem cell therapy pipeline with focus on retinitis pigmentosa and other rare indications with high unmet medical needs
- **Frédéric Desdouts**, Treefrog Therapeutics - Unlocking cell therapy for all
- **Christian Jorgensen**, CHU of Montpellier - Next generation cell therapies for osteoarticular diseases

2:45pm Questions & Answers

3:00pm **Overview:**

- **Philippe Menasché**, Paris Cité University - Cell Therapy of Heart Failure: Cells, Exosomes, RNAs?

3:20pm **Shot talks:**

- **Grégory Lavieu**, Inserm - Extracellular Vesicle-based vector for targeted therapeutics delivery
- **Jérémie Laurent**, Astraveus - Lakhesys, the microfluidics powered benchtop factory for cell & gene therapies to develop better products and solve scalability
- **Jérôme Bonnet**, Inserm - Programming bacteria as smart therapeutics

3:50pm Questions & Answers

4:10pm **Keynote:**

- **Alain Fischer**, Professor at the College of France, President of The French Academy of Sciences

Conclusive Keynote: 4:30pm

Marc Bonneville, Scientific and medical director of Merieux Institut, President of ARIIS

B2B Meetings: 4:30pm - 6:00pm