

# MEET 2WIN

**Oncology** Partnering Convention  
**9th EDITION**

## Insights from Roundtable Discussions at MEET2WIN Convention

**MAY 16 & 17 2024**

*Synthesis prepared by Rajhans Sharma*

# ROUND TABLE I

## SPOTLIGHT ON THE FUTURE OF ONCOLOGY

### MODERATION

Muriel DAHAN

R&D Director



### Introduction & overview on the oncology landscape

Jean-Yves BLAY

President



### The oncogenomics revolution

Antoine ITALIANO

Head Early Phase Trials & Sarcoma Unit



### AI for the diagnosis of CUP

Julien VIBERT

MD Assistant Clinical Manager



### Therapeutic vaccines

François GHIRINGHELLI

Medical Oncology Prof



### New-generation ADCs

Charles DUMONTET

CRCL Deputy Director & Chair of Hospices Civils Lyon council



## 1. Introduction and overview of the oncology landscape



- Jean-Yves BLAY discussed the evolving landscape of oncology, highlighting advancements in diagnosis, treatment strategies, and the integration of innovative technologies like genomics and artificial intelligence.
- Key points included the need for updated clinical guidelines, the impact of artificial intelligence on pathology diagnosis, the importance of decentralized healthcare systems, and the development of novel personalized treatments such as immunotherapy and antibody drug conjugates.
- Targeted treatments and oncogene-derived therapies are advancing, with a focus on personalized medicine and molecular characterization for improved patient outcomes.
- Immunotherapy, T-cell therapy, and antibody drug conjugates are emerging as transformative treatments for various cancers, showing promising results in clinical studies.



## 2. The Oncogenomics revolution

- Antoine ITALIANO discussed the evolution of tumor characterization methods, particularly the shift towards precision medicine and genetic-driven clinical trials in oncology. The use of next-generation sequencing and circulating tumor DNA sequencing were highlighted as significant advancements in improving cancer patient management.



- Biomarker-driven strategies in clinical trials have resulted in better objective response rates, progression-free survival, and overall survival for patients. The shift in drug development for cancer patients has moved towards a tumor-agnostic approach, focusing on the biology and genetic drivers of individual tumors.
- The use of liquid biopsy, particularly circulating tumor DNA sequencing, has revolutionized tumor profiling by capturing tumor heterogeneity and detecting actionable alterations in patients where tissue biopsy was not feasible.

### **3. New-Generation ADCs**



- Charles DUMONTET discussed the recent developments in antibody drug conjugates (ADCs) in anti-cancer pharmacology, including their mechanism of action, toxicity issues, and future prospects.
- He highlighted the importance of novel coupling technologies, alternative payloads, and the need to define the positioning of ADC therapies in the immunotherapy landscape.
- Various types of ADCs, their potency, and the development of novel coupling technologies were discussed. Drug to antibody ratios and the significance of different types of ADCs were highlighted. He emphasized the need for ADCs with high antigenic specificity, reduced toxicity, and alternative payloads.
- The importance of defining the positioning of ADC therapies in the immunotherapy landscape, using BCMA targeted therapies in multiple myeloma as an example, was emphasized. Understanding which patient population will benefit the most from different types of therapies and their toxicity profiles was discussed.

### **4. AI for the diagnosis of CUP**



- Julien VIBERT discusses the use of AI innovation in oncology, focusing on a specific tool developed for diagnosing cancer of unknown primary (CUP) using transcriptomic data. The tool has been successfully deployed in clinical practice and has significantly impacted patient care in France.
- He describes the tool, a variational autoencoder, that was developed to analyze over 50,000 features in transcriptomic data to identify the primitive origin of tumors.
- The tool successfully diagnosed a rare case of extra renal cell carcinoma, leading to a tailored treatment and complete response in the patient for over four years. The tool has been extended to a large series of cases, with an 80% success rate in determining the tissue of origin, and has been deployed nationally in France, significantly impacting patient care.
- Emphasizes that while AI cannot replace doctors, mastering AI tools can make doctors more effective, despite challenges related to privacy and interpretability.

### **5. Therapeutic vaccines**



- François Ghiringhelli discussed the revolutionary cancer vaccine therapy, focusing on the development of neoantigens and personalized mRNA vaccines for the treatment of melanoma.
- Key points included challenges in antigen selection, results of trials combining mRNA vaccine (mRNA-4157 [V940]) with Merck's cancer drug KEYTRUDA, and strategies to improve vaccine efficacy across different platforms and adjuvants.
- Different platforms like adenovirus and mRNA are being explored to target RAS mutations in colorectal cancer. Selection of adjuvants remains a challenge, with ongoing research to improve vaccine effectiveness.
- Directly targeting dendritic cells with virus-based vaccines is a potential strategy to improve CD8 priority. The use of oncolytic viruses and their combination with mRNA or DNA for personalized vaccination are considered alternative strategies

# ROUND TABLE 2

What are the keys to successful deals and collaboration ?

## CONVERGENCE OF INTERESTS

### MODERATION

Jean-Yves BONNEFOY

 SYNDIVIA  
President



### What do pharma companies expect ?

Khatereh AHMADI

Exe Director, Oncology Search & Evaluation Lead, EU Hub



Sasha HUHALOV

Head Oncology Search & Evaluation, CEI



### What do startups expect ?

Frederic CAROFF



CEO

Karine CHORRO



CEO

Eric HALIOUA



CEO

Sasha KONIEV



CEO

Karine ROSSIGNOL



CEO

The discussion focused on the importance of collaborations between startups and pharma companies, with discussions on experiences, challenges, and strategies for successful partnerships. Key points included presentations from startup representatives, experiences with pharma deals, and insights from pharma search and evaluation teams. Discussion revolved around the importance of strong data supporting mechanisms, strategic partnerships, and exploring new modalities while considering scientific advancements.

### 1. Startup Experience with Pharma Deals

- Karine Chorro from Phost'in Therapeutics shared her startup's journey, challenges, and decisions in dealing with pharma, focusing on IP protection and strategic partnerships.
- Challenges included the need to balance early-stage deals with long-term global partnerships and the importance of maintaining control over manufacturing.



### 2. Biotech Company Experience and Strategy

- Syndivia, represented by Sasha Koniev, discussed their focus on antibody drug conjugates, past successes, and strategies for anticipating future trends in the field.
- The company emphasized data-driven decision-making, avoiding crowd thinking, and the importance of strategic partnerships for product development.



### 3. Therapeutic Cancer Vaccine Development

- PDC\*Line Pharma, led by Eric Halioua, highlighted their cancer vaccine development, achievements, and partnerships, including a deal with LG Chem Asia.
- The company emphasized the importance of collaborations, fundraising success, and the role of academic partnerships in generating positive data.



### 4. Innovative Cell Therapy Platform

- Smart Immune, led by Karine Rossignol, discussed their unique cell therapy platform, challenges in engaging with pharma, and the focus on immune system reset for infections and cancer.
- The company highlighted the impact of MATWIN Prize, business model evolution, and ongoing discussions with pharma for potential partnerships.



## 5. Immunotherapy Development for Metastatic Cancer

- Hephaistos Pharma, represented by Frederick Caroff, shared insights on their immunotherapy targeting innate immunity for metastatic cancer treatment.
- The company emphasized the importance of feedback from pharma, successful fundraising, academic collaborations, and strategic partnerships for product development.



## 6. Pharma Search and Evaluation Process

- Takeda's search and evaluation team, led by Sasha Huhlov, discussed their role in external innovation, strategic partnerships, and the importance of aligning opportunities with the company's therapeutic strategy.
- The team highlighted the need for a balanced portfolio, risk assessment, and biomarker-driven approaches in evaluating collaborations with biotechs.



## 7. Business Development at MSD

- Khatereh Ahmadi from MSD shared insights on the company's focus areas in oncology, criteria for collaboration, and the importance of data packages, IP, and biomarker-driven approaches.
- The discussion emphasized building early relationships, addressing data gaps transparently, and aligning innovations with pharma's strategic goals.



## 8. Team dynamics in partnerships

- Startups, especially founders lacking in IP expertise, should gather the right expertise around them through consultants to ensure the company's success.
- The importance of team dynamics in partnerships was emphasized, highlighting the need for strong connectivity and collaboration between scientific teams.
- Having the right expertise, chemistry, and alignment between teams was considered crucial for successful collaborations in the pharmaceutical industry.

## 9. IP protection for startups

- Startups were advised to consider confidentiality agreements with pharma companies to protect their technologies and intellectual property.
- Legal representation should be consulted to ensure comfort with disclosing information and safeguarding IP during early discussions

# ROUND TABLE 3

## ACCELERATING THE TRANSFORMATION OF HEALTH INNOVATION

### MODERATION



Lucia ROBERT



Benjamin GAREL



### USA - BOSTON & SAN DIEGO



Dominique VERHELLE

CEO



### QUEBEC



Etienne LAURENT

CEO



### BELGIUM



Eric HALIOUA

CEO



### SWITZERLAND



Raphael MARTINOU

CEO



**Let's compare our ecosystems and organizations!  
Sharing experience of start-ups from different ecosystems**

The discussion covered the experiences of startup founders in the biotechnology and pharmaceutical sectors from various countries, discussing the journey of starting up innovative companies, securing funding, overcoming regional challenges, and developing new therapies. It also touched upon the challenges of raising funds in Europe and the US, the impact of COVID-19 on investment trends, and offered advice for entrepreneurs on networking, team building, and strategic governance.

### 1. Dominique's Journey in Biotech and Entrepreneurship in the USA

- Dominique pursued a career in drug discovery, transitioning from academia to industry, gaining experience within international companies such as Celgene, Pfizer, Third Rock Ventures and Takeda.
- She co-founded NextRNA Therapeutics in Boston in 2021, focusing on long non-coding RNA as potential therapeutic targets.
- Dominique highlighted the importance of innovation, risk-taking, and surrounding oneself with experienced individuals in the entrepreneurial journey.

### 2. Etienne's Venture with MISO chip in Canada

- Etienne, having background in biomedical engineering co-founded MISO chip in Montreal in 2019, to commercialize a new tumor-on-chip platform for drug development and personalized cancer care.
- Challenges in Montreal included securing VC funding for diagnostics and accessing specialized lab space, despite support for non-dilutive funding and academic collaborations.
- He encourages entrepreneurs to talk to lots of VCs and align your project with their vision, create IP and carefully analyse a market.

### 3. Eric's Experience with PDC\*Line Pharma in Belgium

- Eric is a serial entrepreneur with having co-founded several biotech companies, along with his team raised in total €170 million from VCs, and bring four drug candidates from research to clinics.
- PDC\*Line Pharma focuses on cancer vaccines using a unique cell line derived from a rare leukemia subtype.
- Eric highlights the cycle of crisis and good phase in raising the funds from VCs, also anticipate the cycle by correlating it with fluctuation in the market.

#### **4. Rafael's Journey with MPC Therapeutics in Switzerland**

- Rafael co-founded MPC Therapeutics in Geneva, leveraging a discovery by his father a Professor at the University of Geneva, in mitochondria research.
- Challenges included securing early-stage funding, navigating tech transfer, and finding a good team. He appreciated Switzerland's supportive startup ecosystem for accessing industry-specific mentors from reputed big pharms and raising non-dilutive funds
- He advises entrepreneurs not rush into launching the company but rather stay with the university or incubator until mature.

#### **5. Challenges of raising fund**

- Investors aim to foresee the means to earn profit from a start-up by evaluating if the company can be purchased or enter into an IPO. Keeping this in mind the startup aligns their business plan with the expectation to raise funds.
- Boston has a plethora of VC networks and since 2022 market has been doing good hence investors are willing to invest. On top of the business plan, investors carefully evaluate the board of members.
- In Canada the space of diagnostic companies is limited thus the VCs are hesitant to take risks until they see a clear road map for commercialization and reimbursement. In such case Canadian companies do benefit from neighboring with the USA as they can access the VC across the borders.
- Belgium and Switzerland, have a successful fundraising situation due to favorable ecosystems and investor networks.

#### **6. Impact of COVID-19 on Investment Trends**

- The shift in investment criteria, requires companies to be supported with a large set of data packages and ready for clinical trials.
- The transition from Series A to Series B becomes tremendously difficult and thus several companies are struggling for their existence.
- Inflation and increase in interest rates post COVID-19 have pushed companies to save money thus resulting in mass layoffs.
- Understanding the cycle of crisis in biotech, this rough market phase should be anticipated by the management. This requires diversifying the investor portfolio, searching for non-dilutive deals, and being optimistic.

#### **7. Advise for Entrepreneurs to choose their country**

- Choosing the USA to launch a startup offers entrepreneurs access to capital and investment opportunities, as well as a supportive ecosystem with robust infrastructure and resources for business growth.
- Canada has collaborated with several countries to encourage foreign companies to enter the Canadian market and benefit from non-dilutive funding.
- Switzerland has the headquarters of several biotech and pharma companies, and the incubators of big pharma are available for collaborations, talent pool, and quality of life.
- Belgium has a flexible regulatory board, access to strong biotech pharma companies, government support towards startup culture, benefits for hiring international researchers, and quality of life.

#### **8. Strategic Governance and Board Composition**

- Emphasis on the need for good governance and balanced board composition.
- Importance of negotiating board member composition with investors for a stable equilibrium.
- The balance of the board of members between the independent, management and investors should be equally distributed.
- The member selection prerequisite Key opinion leaders in their field as they are the gateway to developing the network for an entrepreneur.