FROM BENCH TO SCREEN DISCOVERY
Milano, 4 febbraio 2025

RATIONALE

Over the past decade, immuno-oncology (IO) has revolutionized the treatment landscape for non-small cell lung cancer (NSCLC), offering new hope to patients with this challenging malignancy. The advent of immune checkpoint inhibitors (ICIs), particularly those targeting the programmed death-1 (PD-1) and programmed death-ligand 1 (PD-L1) pathways, has significantly improved survival outcomes for many patients, shifting the paradigm from conventional chemotherapy to more targeted immunotherapies.

Research over the last 10 years has highlighted the importance of biomarkers like PD-L1 expression and tumor mutational burden (TMB) in predicting response to these therapies. Clinical trials, such as KEYNOTE-001, CheckMate 017/057, and IMpower150, have demonstrated durable responses and improved overall survival in both first-line and second-line settings. However, despite these successes, only a subset of patients benefits from ICIs, and challenges remain in understanding mechanisms of resistance, optimizing combination therapies, and managing immune-related adverse events (irAEs).

Real-world data has been crucial in validating the efficacy and safety observed in clinical trials. Observational studies have shown that the benefits of ICIs extend to a broader, more diverse patient population, including those with comorbidities and older age, who are often underrepresented in clinical trials. Additionally, these studies have revealed that the incidence and management of irAEs may differ outside of controlled trial settings, highlighting the need for better real-world strategies to manage these complications.

Looking forward, the integration of real-world evidence with clinical research will be essential for refining patient selection, personalizing treatment approaches, and optimizing outcomes. Novel approaches, such as combining ICIs with targeted therapies, chemotherapy, and radiation, are under active investigation. Moreover, the development of next-generation immunotherapies and the exploration of new biomarkers promise to further advance the field.

In summary, the past decade has seen remarkable progress in immuno-oncology for NSCLC, transforming it into a more manageable disease for many. Bridging the gap between research findings and real-world practice will continue to be pivotal in maximizing the benefits of these therapies, ultimately improving survival and quality of life for patients.

The event will provide a comprehensive review of the last decade's breakthroughs in immuno-oncology for NSCLC, highlighting the synergy between clinical research and real-world data. It aims to foster dialogue on optimizing patient care, addressing current challenges, and shaping future therapeutic strategies.

Programma

13.00   Light Lunch
14:00   Welcome and Opening Remarks, Filippo de Braud

SESSION 1

Innovations from Diagnosis to Curative Surgery
MODERATORI: Luca Toschi (Humanitas), Marta Brambilla (INT)

14:10   From patient to cancer diagnosis: CAT model
        Giuseppe Lo Russo, INT
14:40   Digital Pathology and Pathogenomics: Catalyzing Innovation and Cost Efficiency
        Nicola Fusco - IEO
15.10   Next-Gen Surgery: Integrative Approaches and Future Perspectives, Piergiorgio Solli, INT

SESSION 2

The Evolving Landscape of Systemic Immunotherapy: Present and Future
MODERATORI: Alessandra Bulotta (San Raffaele), Giuseppe Lo Russo (INT)

15:40   Neo-Adjuvant/perioperative strategies in Immunotherapy: Setting New Standards
        Claudia Proto, INT

16.10   Immunotherapy in Metastatic NSCLC: First-Line Treatment, Emerging Challenges,
        and Innovative Clinical Trial Strategies
        Diego Signorelli, Niguarda

16:40   Advanced Radiotherapy for NSCLC: Maximizing Effectiveness, Minimizing Side Effects,
        Andrea Filippi, INT

17:00   Pain management in patient with lung cancer
        Augusto Caraceni

SESSION 3

Fighting resistance to each generation immunotherapy,
MODERATORI: Francesca Colonese (Monza), Diego Signorelli (Niguarda)

17.20   Overcoming Resistance to Immunotherapy:
        Next-generation of IO after first-line chemo and IO
        Giulia Galli, Pavia

17.40   Current and next IO-Biomarkers from metastatic to early IO, Roberto Ferrara, HSR

SESSION 4 (SPECIAL SESSION)
AI as a new opportunity for biomarker and drug allocation
MODERATORI: Carminia Della Corte, Roberto Ferrara (Niguarda)
18.10   AI in Oncology: From Bench to Screen – Transforming Discoveries
        (Moving Wet to Dry Discoveries)
        Arsela Prelaj, INT

18.40   Personalized Immunotherapy: From AI-Driven Insights to Bedside Decisions
        Giuseppe Viscardi, Monaldi

FINAL SESSION 5: IO FUTURE
MODERATORI: Alessandro De Toma (San Paolo), Lucia Bonomi (Bergamo)

19.10   Future Directions and Perspectives in Lung Cancer Immunotherapy and opening questions,
        Alessandro De Toma, San Paolo
        Panel Discussion and Q&A
        Partecipanti: Lucia Bonomi, Piergiorgio Solli, Andrea Filippi, Giuseppe Lo Russo,
        Claudia Proto, Alessandra Bulotta, Luca Toschi, Nicola Fusco, Diego Signorelli, Giulia Galli,
        Roberto Ferrara, Giuseppe Viscardi, Francesca Colonese, Alessandra Bulotta,
        Carminia Della Corte, Marta Brambilla

19.50   Closing Remarks
        Arsela Prelaj

20.0   Termine dei lavori