

2ND MILAN ME[E]T IMMUNE CONFERENCE

ACC  MED

ACCADEMIA NAZIONALE DI MEDICINA

SEZIONE DI ONCOLOGIA

How Metabolism Meets the Immune System in Human Malignancies

Milan, May 3rd-4th 2024

Course Director
Filippo de Braud

10 CME
credits

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Objectives

Preclinical and clinical studies demonstrate how the modulation of systemic and tumor metabolism influences crucial properties of human neoplasms, namely cancer cell growth, invasion, immunoregulation, metastasis and response to standard treatments, including chemotherapy, immunotherapy and targeted therapies.

The objective of this Conference is to bring together national and international experts in the field of pre-clinical and clinical research on cancer metabolism and immunology, with the aim of sharing and discussing the most recent advances in this field of research.

In particular, the Speakers will discuss experimental therapeutic strategies which, through the modulation of host and tumor metabolism, are able to impact on the activation status of specific populations of the immune system involved in antitumor immune response.

Particular attention will be paid to the clinical implications of these experimental strategies, specifically to metabolic treatments, both nutritional or pharmacological ones, which have demonstrated antitumor and immunomodulatory effects, especially when used in combination with standard anticancer therapies in pre-clinical studies, and that are currently being tested in clinical trials.

Addressed to

Medical oncologists, clinical nutritionists, pathologists, radiologists, radiation oncologists. Biologists.

With the endorsement of:



UNIVERSITÀ DEGLI STUDI
DI MILANO



Fondazione IRCCS
Istituto Nazionale dei Tumori

Sistema Socio Sanitaria



Regione
Lombardia



Program

Friday, May 3rd

12.00 *Registration and welcome coffee*

13.00 Meeting introduction
Giovanni Apolone

■ **SESSION 1**
■ **Open debates on calorie restriction in cancer patients**
■ Chair: Filippo de Braud, Paolo Pedrazzoli

13.30 Calorie restriction in cancer patients: past, present and future perspectives
Filippo de Braud

13.55 Balancing metabolite restriction and supplementation in triple negative breast cancer metabolism
Claudio Vernieri

The point of view of nutritionists: an Oxford debate

14.20 Specific nutrient fasting in cancer multimodal treatment: why YES
Samir Giuseppe Sukkar

14.40 Specific nutrient fasting in cancer multimodal treatment: why NOT
Riccardo Caccialanza

15.00 Trying to find a balance between extreme views
Paolo Pedrazzoli

15.20 Discussion

15.40 *Coffee break*

■ **SESSION 2**
■ **How to characterize human malignancies from a immunometabolic point of view**
■ Chair: Massimo Di Nicola, Gabriella Sozzi

16.10 Standard and investigational pathological approaches to study cancer metabolism
Giancarlo Pruneri

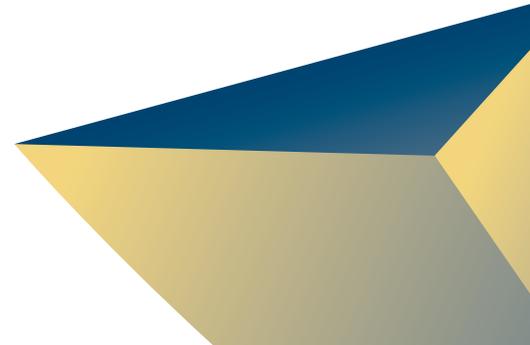
16.30 Single-cell RNA-seq and spatial transcriptomics
Massimiliano Pagani

16.50 Targeting amino acid metabolism as a therapeutic strategy against pancreatic cancer
Marco Foiani

17.10 Untargeted and targeted metabolomics to study cancer metabolism
Angela Bachi

17.30 Discussion

18.15 Adjourn



Saturday, May 4th

- **SESSION 3**
 - **Nutritional interventions and physical activity in cancer therapy: clinical evidence and ongoing trials**
 - Chair: Andrea Antonuzzo, Claudio Vernieri
- 9.00 Fasting-mimicking diet in addition to neoadjuvant chemotherapy in breast cancer patients: the Dutch experience
Judith R. Kroep
- 9.25 Impact of weight loss and physical exercise on clinical outcomes in cancer patients
Jennifer Ligibel
- 9.50 Calory restriction and physical exercise in addition to chemoimmunotherapy in early stage triple-negative breast cancer
Christine Desmedt
- 10.15 Fasting-like approaches in cancer treatment: the German experience
Andreas Michalsen
- 10.40 Discussion
- LECTURE**
- 11.00 Implementing the methodology of clinical trial design in the field of calorie restriction
Paolo Bruzzi
- LECTURE**
- 11.30 The role of gut and tumor microbiota in tumor immunomodulation and response to therapies
Laurence Zitvogel

12.00 Discussion

12.30 *Lunch*

- **SESSION 4**
 - **Fasting-mimicking diet in cancer treatment: different experiences from different countries**
 - Chair: Mario Paolo Colombo, Filippo de Braud
- 14.30 Modulating intratumor metabolism to boost antitumor immunity/ Immunometabolism: a new frontier of cancer research
Guido Kroemer
- 14.55 Emerging metabolic targets and therapeutical strategies in cancer treatment
Matthew Vander Heiden
- 15.20 Fasting and fasting-mimicking diets in cancer therapy: tumor cell autonomous and immune-mediated mechanisms
Valter Longo
- 15.45 Discussion
- 16.10 Take home messages
Filippo de Braud and Claudio Vernieri
- 16.30 Adjourn

Course Director

Filippo de Braud

Unimi - Università degli Studi

Dipartimento di Oncologia Medica

S.C. Oncologia Medica 1

Fondazione IRCCS Istituto Nazionale dei Tumori

Milano

Scientific Committee

Claudio Vernieri

Unimi - Università degli Studi

Dipartimento di Oncologia Medica

Fondazione IRCCS Istituto Nazionale dei Tumori

IFOM ETS, Istituto di Oncologia Molecolare

Milano

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Laurence Zitvogel, Villejuif (France)

Meeting venue

Aula Magna

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Milano

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