

# Call For Abstract

The Call for Abstracts will open on December 11<sup>th</sup>, 2025.

We invite researchers, clinicians, and innovators to submit original work aligned with one of the conference's five scientific areas:

1. **Image-based and multimodal AI** - *example topics:* AI for screening, diagnosis, workflow optimization, treatment decision-making, prognosis, predictive biomarkers ...
2. **Explainable and trustworthy AI** - *example topics:* Explainable AI, transparency, ethics and regulation, privacy, federated learning, synthetic data approaches ...
3. **Agentic AI and Large Language Models** - *example topics:* Novel applications of agentic systems, LLMs, and foundation models in oncology
4. **Multi-omics, drug discovery, and prevention** - *example topics:* Integrative multi-omics, AI-driven drug discovery, prevention research, exposome, AI for single -omics ...
5. **Digital health and AI-enabled care** - *example topics:* apps and wearable devices, real-world data and patient empowerment, digital twins, digital medicine, telemedicine, AI clinical trial design, trial matching ...

Abstracts will be evaluated through a blind review process, by two independent reviewers in avoidance of conflicts of interest, and will be assessed based on the following criteria:

- *Scientific soundness; methodological rigor, and feasibility*
- *Innovation and potential impact of the work proposed*
- *Clarity of the objectives and the results where available*
- *Quality of the presentation*

The author of the best-ranked abstracts in each of the five areas will be invited to present their work in a flash talk (10 minutes) during the event.

Abstracts should be submitted on web platform - <https://www.aiforoncology.it/> by **February 3<sup>rd</sup> EoB** at the latest.

The results will be announced to all presenters by March 4<sup>th</sup>.

## SUBMISSION DEADLINES

11<sup>th</sup> December 2025 open call

16<sup>th</sup> February 2026 submission deadline

04<sup>th</sup> March 2026 Outcome notifications

SCIENTIFIC PROVIDER AND CONGRESS ORGANIZER



Events srl

Via Lorenzo Lotto 9, 60019 Senigallia (AN)  
Via Sabotino 14, 20135 Milano (MI)  
[www.events-communication.com](http://www.events-communication.com)



Sistema Socio Sanitario



# 1<sup>st</sup> Annual MEETING ESAC (European Interdisciplinary Society for AI in Cancer Research)

4<sup>th</sup> Edition

# AI FOR ONCOLOGY and Cancer Research

PRESIDENTS OF THE CONFERENCE

Arsela Prelaj, Jakob Nikolas Kather

MILAN, ITALY  
7<sup>th</sup> - 8<sup>th</sup> MAY  
2026

UNDER THE AUSPICES OF



## Overview

The AI for Oncology Conference aims to equip participants with a comprehensive understanding of how advanced AI technologies are transforming cancer care and research. As AI innovation accelerates, its applications in oncology are becoming essential across the spectrum of diagnosis, treatment, and research. From integrating diverse datasets, such as multiomics, imaging, and clinical data, to advancing diagnostic precision, AI is enabling the discovery of patterns that traditional methods often overlook.

Participants will explore how AI-driven platforms are improving the integration of data, leading to more accurate diagnostics and personalized treatment approaches for cancers such as lung, breast, and colorectal cancers. Innovations in radiomics and digital pathology will also be highlighted, showcasing how AI enhances the analysis of imaging data and histopathology, particularly for challenging cancers like pancreatic, liver prostate, and head and neck tumors.

The conference will further delve into the role of AI in optimizing clinical research, from designing clinical trials to refining targeted therapies and immunotherapies.

Case studies will illustrate how AI is driving advances in cancer care, including applications in melanoma, NSCLC, and ovarian cancers, where predictive algorithms can identify the best treatment regimens, from adaptive radiation therapy to chemotherapy or immunotherapy dosing. The integration of Large Language Models and Foundation Models offers new ways to analyze clinical data, providing real-time, evidence-based recommendations that assist oncologists in selecting the most effective therapies, whether hormonal treatments for breast cancer or

targeted/immunotherapy drugs for NSCLC or unknown primary tumors.

Additionally, the conference will emphasize the need for collaboration across healthcare providers, researchers, and industry partners, underscoring how such partnerships enhance diagnostic accuracy and treatment delivery for various cancer types, including breast, lung, and gastrointestinal cancers. Ultimately, the conference will provide a platform for participants to gain insights into cutting-edge AI advancements and how they can be applied to improve cancer diagnosis, treatment, and patient outcomes across a range of cancer types.

The shared knowledge and diverse experiences will enable clinicians, researchers, and technologists to further develop and implement innovative AI solutions in oncology.

## Format

The event will cover two days. The speakers will have a diverse background to reflect the spectrum of Artificial Intelligence research (and beyond), from Artificial Intelligence engineering experts, to clinicians and translational researchers, and hybrid figures such as clinical Artificial Intelligence specialists. Faculty members represent worldwide centers of excellence in the field. The attendance is expected to mirror this variety, along with participants with a more specific background in imaging and pathology.

The conference also includes poster sessions, with prizes for the best posters in various AI fields. Participants will also be encouraged to participate to a call for abstracts, with the opportunity to present their work in flash talks during the symposium.

## PRESIDENTS OF THE CONFERENCE

**Arsela Prelaj**, *Esac President, MD, PhD, Medical Oncologist, Thoracic Oncology Unit, Department of Medical Oncology, Fondazione IRCCS Istituto Nazionale Tumori, Head Of Artificial Intelligence for Oncology Lab, Milano, Italy*

**Jakob Nikolas Kather**, *Esac Elect-President, MD, MSc, Professor of Medicine and Computer Science TUD Dresden University of Technology Dresden, Germany*

## SCIENTIFIC COMMITTEE

**Mihaela Aldea**  
**Julien Calderaro**  
**Mireia Crispin**  
**Filippo de Braud**  
**Helena Linardou**  
**Claes Lundström**  
**Vanja Miskovic**  
**Alessandra Pedrocchi**  
**Raquel Pérez-Lopez**  
**Daniel Truhn**  
**Loic Verlingue**

## SCIENTIFIC SECRETARIAT

**Narmin Ghaffari Laleh**  
**Giovanni Scoazec**

## General Information

### CONGRESS VENUE

Politecnico di Milano  
Trifoglio Building - Campus Leonardo  
Via Bonardi, 9 - 20133 Milano

### REGISTRATION

Registration will be open soon  
Registrations fees:  
Free for Esac Members [www.esac-network.eu/register/](http://www.esac-network.eu/register/)  
Non Members 150,00 Euro  
You may register for IN-PERSON OR ONLINE-ONLY ACCESS

For information: [segreteria@events-communication.com](mailto:segreteria@events-communication.com)

### OFFICIAL LANGUAGE AND TIME

The official language is English  
The official Time is Central European Summer Time (CEST), UTC +2  
CME CREDITS  
CME accreditation (valid for Italian participants only) for Medical Doctor.  
Italian CME credits will be granted to those participants who attend at least 90% of scientific works, II in the questionnaire assessment of perceived quality and duly II in the evaluation questionnaires answering correctly 75% of the questions.

- 8.00 a.m.** Registrations open
- 8.30 a.m.** **POSTER SESSION**
- 9.30 a.m.** Welcome session  
**Arsela Prelaj, Jakob Nikolas Kather**  
**Giovanni Apolone**  
*President OEIC, Organisation of European Cancer Institutes*  
**Maria Teresa Montella**  
*General Director, Fondazione IRCCS INT*  
**Paolo Corradini**  
*Scientific Director, Fondazione IRCCS INT*  
**Filippo de Braud**  
*Director, Dpt. of Oncology and Hemato-Oncology, Fondazione IRCCS INT*  
**Donatella Sciuto**  
*Chancellor, PoliMi*  
**Alessandra Pedrocchi**  
*Full Professor, PoliMi*  
**Bruno Aratri**  
*IPOP Onlus*  
**Emanuele Monti**  
*Presidente IX Commissione Permanente Sostenibilità Sociale, Casa e Famiglia Regione Lombardia*
- 9.50 a.m.** AI From patients perspective  
**Massimo Di Maio**  
*President of AIOM*
- 10.00 a.m.** AI in Low and Middle income countries  
**Evis Sala**  
*Minister of Health and Social Welfare of Albania*

- 10.10 a.m.** Introduction from ESAC steering committee  
**Mireia Crispin Ortuzar, Helena Linardou, Narmin Ghaffari Laleh**

**SESSION 1 plenary**  
**FROM DATA TO INSIGHT:  
BUILDING RELIABLE FOUNDATIONS FOR AI IN CANCER**

*Chairs: Iwona Lugowska, Claes Lundstrom*

- 10.15 a.m.** Bias at the source: understanding and mitigating data imbalances in NSCLC and immunotherapy  
**Vanja Miskovic**
- 10.30 a.m.** Small data, big trouble: rare cancer bias in AI training sets  
**Guillaume Jaume**
- 10.45 a.m.** Discussion
- 10.55 a.m.** Technical challenges for implementation and interoperability  
**Jens Kleesiek**
- 11.15 a.m.** USE CASE  
Lessons from the clinic: data quality pitfalls in AI-based early detection: breast cancer example  
**Francisco Sanchez-Vega**
- 11.25 a.m.** Discussion
- 11.35 a.m.** **Coffee Break**

**Session 2 plenary**  
**LLMS AND COPILOTS FOR CANCER RESEARCH AND TREATMENT**

*Chairs: Jakob Nikolas Kather, Arsela Prelaj*

- 11.55 a.m.** LLMs in cancer research: real-world colorectal cancer examples  
**Isabella Wiest**
- 12.15 p.m.** KEYNOTE LECTURE  
AI as medical copilot for treatment decision-making  
**Faisal Mahmood**
- 12.55 p.m.** Best Oral 1
- 1.05 p.m.** Discussion
- 1.15 p.m.** **Lunch Break**

**Session 3 plenary**  
**AGENTIC AI**

*Chairs: Luca Agnelli, Mark Carman*

- 2.15 p.m.** AI agents integration for tumor boards and IO treatment decision  
**Federica Corso**
- 2.30 p.m.** Multiagents for clinical trial matching and phase 1 pan-cancer treatment selection  
**Loic Verlingue**
- 2.45 p.m.** SOTA of AI agents in cancer research  
**Dyke Ferber**
- 3.00 p.m.** Discussion



## Session 4A

### CLINICAL IMPLEMENTATION OF AI IN ONCOLOGY

Chairs: **Julien Calderaro, Luca Boldrini**

- 3.20 p.m.** AI-driven pathology in clinical practice: head and neck and other cancers example use case  
**Alexander Pearson**
- 3.35 p.m.** DL and risk stratification in radiology application: kidney and prostate cancer use case  
**Keno Bressemer**
- 3.45 p.m.** AI in image-guided interventions and surgical decision support in lung cancer diseases  
**Nikolaos Koufos**
- 3.55 p.m.** AI applications in radiotherapy for oropharyngeal cancer and osteonecrosis  
**Laia Humbert**
- 4.05 p.m.** Deploying an AI tool in routine clinical workflow (barriers and breakthroughs)  
**Mihaela Aldea**
- 4.15 p.m.** Discussion

**4.35 p.m.**

## Parallel - Round Tables

## Session 4B

### TRUSTWORTHY AND RESPONSIBLE AI IN CANCER

Chairs: **Evangelia Christodoulou, Fabio Pagni**

- 3.20 p.m.** LLMs: How to explain to Doctors and Patients?  
**Fons van der Sommen**
- 3.30 p.m.** Evaluation process for generative AI  
**Jacqueline Lammert**
- 3.40 p.m.** Explainable AI for doctors: example in breast cancer  
**Luigi De Angelis**
- 3.50 p.m.** Best Oral 2
- 4.00 p.m.** Navigating regulatory pathways for AI medical devices in Europe and beyond  
**Carlo Rossi Chauvenet**
- 4.15 p.m.** Discussion

**Coffee Break**

## Session 4C

### TECHNOLOGY TRANSFER OF AI SOLUTIONS IN HEALTHCARE

Chairs: **Alberto Redaelli, Alessandra Turi**

- 3.20 p.m.** Title TBC  
**Jorge Reis-Filho**
- 3.35 p.m.** The Italian strategy for AI for healthcare Technology transfer (TBC)  
**Donatella Proto**  
**Claudi Biffoli**
- 3.50 p.m.** Pathway to a patent for DL in colonoscopy  
**Elena De Momi**
- 4.00 p.m.** USE CASE 1  
**Mattias Rantalainen**
- 4.10 p.m.** USE CASE 2  
**Victor Savevski**
- 4.20 p.m.** Discussion

## 5A Industry Symposium

Chair: **Francesco Trovò, Laura Mazzeo**

**5.00 p.m.** TBC

## Special plenary

Chairs: **Nicola Fusco, Vincenzo L'Imperio**

- 6.00 p.m.** What will the future look like?  
**Daniel Truhn**
- 6.40 p.m.** End of Conference Day 1
- 6.40 p.m.** **General Assembly Meeting ESAC**

## Parallel Sessions no CME

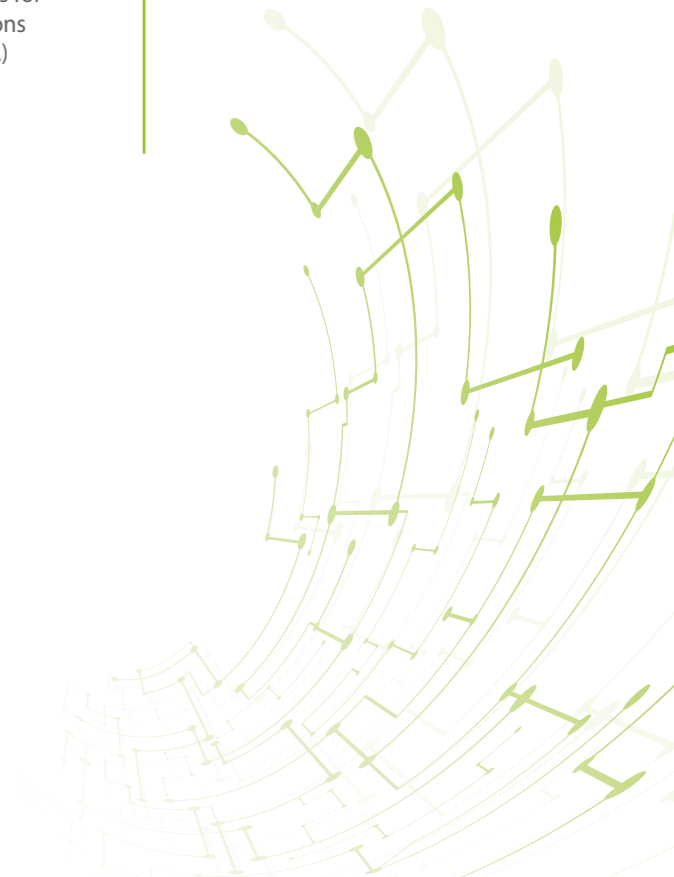
## 5B Meet the experts

Moderators: **Narmin Ghaffari Laleh, Giovanni Scoazec**

- 5.00 p.m.** 3 faculty members for informal discussions (groups of 30, e.g.)  
**TBC**

## 5C Tech Symposium

Moderators: **TBD**



**8.30 a.m. POSTER SESSION**  
The participants will present their posters

Introduction

Moderator: **Filippo Pesapane, Leonardo Provenzano**

**9.30 a.m.** AI pros and cons: promises versus bottlenecks

Debate: **Marco Gustav, Marcello Restelli**

**Session 6 plenary**  
**ETHICS AND PATIENT-CENTERED RESEARCH**

Chairs: **Helena Linardou, Marina Chiara Garassino, Alessandra Pedrocchi**

**10.00 a.m.** Patient autonomy, uncertainty human values, trust and distrust in an AI context  
**Delia Nicoara**

**10.15 a.m.** AI in digital health, QoL and toxicity (e.g., ILD) in pancancer patients treated with immunotherapy  
**Jarushka Naidoo**

**10.30 a.m.** Balancing clinical utility and privacy concerns in data  
**Fidelia Cascini**

**10.45 a.m.** How to design ethical clinical trials using AI for Immunotherapy, target therapies (e.g. EGFR, ALK, ROS1, RET etc) and ADCs  
**Arsela Prelaj**

**11.00 a.m.** Discussion

**11.10 a.m. Coffee Break**

**Parallel Sessions**

**Session 7A**

**SYNTHETIC DATA AND SYNTHETIC PATIENTS**

Chairs: **Alberto Traverso, Pietro Pinoli**

**11.50 a.m.** The promise of synthetic data: current evidence and limitations in the breast cancer setting  
**Oliver Diaz**

**12.05 p.m.** Synthetic arms versus RWD arms versus control arms in trials  
Debate: **Miriam Koopman, Rodrigo Dienstmann**

**12.25 p.m.** Multimodal synthetic data - how to generate images and omics in longitudinal fashion in breast and other cancers  
**Saverio D'Amico**

**12.40 p.m.** Discussion

**1.00 p.m.**

**Session 7B**

**MULTIMODAL AND MULTI-AI**

Chairs: **Antonio Marra, Raquel Perez-Lopez**

**11.50 a.m.** VLMs for treatment prediction in ovarian and kidney cancer  
**Zeyu Gao**

**12.05 p.m.** Toward Clinically Deployable AI models: Safeguards Against Distribution Shifts  
**Jana Lipkova**

**12.20 p.m.** LLMs for target and drug discovery: a personalized therapy for every single patient  
**Matteo Sacco**

**12.40 p.m.** Discussion

**Lunch Break**

## Session 8 plenary

### MULTIOMICS AND FOUNDATION MODELS

Chairs: **Mireia Crispin Ortuzar**, **Giuseppe Curigliano**

- 2.00 p.m.** Foundation models for multiomics and spatial omics applications in hematological diseases  
**Sizun Jiang**
- 2.20 p.m.** Pan-cancer multiomics science: how and when in the research and the clinical settings  
**Sohrab Shah**
- 2.40 p.m.** Technical and implementation challenges of AI in multi-omics research: cancers of unknown primary example  
**Julien Vibert**
- 2.50 p.m.** Discussion

## Session 9 plenary

### CLOSING SESSION AND PRIZES

Chairs: **Robert Lugowski**, **Luca Invernizzi**, **Marco Masseroli**

- 3.00 p.m.** Agents in Clinical Practice  
**Danielle Bitterman**
- 3.40 p.m.** Best oral or 'honorable mentions' from poster evaluation
- 3.50 p.m.** Best oral or 'honorable mentions' from poster evaluation
- 4.00 p.m.** Poster Prize and ESAC Awards
- 4.10 p.m.** Nature Medicine in AI  
**Mattia Andreoletti**
- 4.20 p.m.** AI in 2040: the light and dark side  
**Jakob Nikolas Kather**
- 4.30 p.m.** GoodBye Words  
**Arsela Prelaj**, **Jakob Nikolas Kather**, *Presidents*

## Faculty

**Luca Agnelli**, Fondazione IRCCS Istituto Nazionale Tumori, Milan, Italy  
**Mihaela Aldea**, Gustave Roussy, Villejuif, France  
**Mattia Andreoletti**, Nature Medicine, Milan, Italy  
**Claudi Biffoli**, Ministry of Enterprises and Made in Italy  
**Danielle Bitterman**, Harvard Medical School, Boston, USA  
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**Keno Bressemer**, Technical University Munich, Germany  
**Julien Calderaro**, Henri Mondor Hospital, Créteil, France  
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**Oliver Diaz**, University of Barcelona, Spain  
**Rodrigo Dienstmann**, Vall d'Hebron Institute of Oncology, Barcelona, Spain  
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**Vincenzo L'imperio**, University of Milano-Bicocca, Milan, Italy  
**Helena Linardou**, Metropolitan Hospital of Athens, Greece  
**Jana Lipkova**, University of California, Irvine, USA  
**Robert Lugowski**, Co-Chair Innovation and start-ups Committee Esac, Poland  
**Iwona Lugowska**, Maria Skłodowska-Curie National Research Institute and Oncology Centre, Warsaw, Poland  
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**Vanja Mišković**, Politecnico di Milano, Milan, Italy  
**Jarushka Naidoo**, Beaumont Hospital Dublin and RCSI, Dublin, Ireland  
**Delia Nicoara**, Institutul Oncologic „Prof. Dr. Ion Chiricuță”, Cluj-Napoca, Romania  
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**Marcello Restelli**, Politecnico di Milano, Milan, Italy  
**Carlo Rossi Chauvenet**, SDA Bocconi School of Management, Milan, Italy  
**Francisco Sanchez-Vega**, Memorial Sloan Kettering Cancer Center, New York, USA  
**Evis Sala**, Minister of Health and Social Welfare of Albania  
**Matteo Sacco**, University of Chicago, USA  
**Victor Savevski**, Humanitas AI Center, Milan, Italy  
**Giovanni Scoazec**, ESAC - European Interdisciplinary Society for AI in Cancer Research, Milan, Italy  
**Sohrab Shah**, Memorial Sloan Kettering Cancer Center, New York, USA  
**Alberto Traverso**, Vita-Salute San Raffaele University, Milan, Italy  
**Francesco Trovò**, Politecnico di Milano, Milan, Italy  
**Daniel Truhn**, Aachen University Hospital, Germany  
**Alessandra Turi**, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy  
**Fons van der Sommen**, Eindhoven University of Technology, Eindhoven, the Netherlands  
**Loic Verlingue**, Centre Léon Bérard, Lyon, France  
**Julien Vibert**, University of Heidelberg, Germany  
**Isabella Wiest**, Else Kröner Fresenius Center for Digital Health, Dresden, Germany