

**International Symposium**  
**Resolving Cancer Heterogeneity:**  
**Drawing new horizons in precision medicine**



**Promoted by**



**FONDAZIONE  
INTERNAZIONALE  
MENARINI**

**Organized by**

**Department of Translational Molecular Pathology**  
University of Texas MD Anderson Cancer Center  
Houston (Texas -USA)

**Department of Tumor Biology**  
University Medical Center Hamburg-Eppendorf  
Hamburg (Germany)

**Congress Center | Old Post Office Building**  
**Washington DC | May, 11<sup>th</sup>|13<sup>th</sup> 2017**

**PROGRAM**

### Co-Presidents of the symposium

**Ignacio I. Wistuba**

*Department of Translational Molecular Pathology  
University of Texas MD Anderson Cancer Center  
Houston (TX-USA)*

**Klaus Pantel**

*Department of Tumor Biology  
University Medical Center Hamburg-Eppendorf  
Hamburg (Germany)*

### Promoted by

**Fondazione Internazionale Menarini**

Centro Direzionale Milanofiori  
Edificio L - Strada 6  
20089 Rozzano, Milan (Italy)  
Phone: +39 02 55308110  
Fax: +39 02 55305739  
milan@fondazione-menarini.it  
www.fondazione-menarini.it

### Organizing Secretariat

**DueCi Promotion srl**

Via C. Farini, 28  
40124 Bologna (Italy)  
Phone: +39 051 4841310  
Fax: +39 051 247165  
ggrillenzoni@duecipromotion.com  
www.duecipromotion.com

### Under the auspices of



## PROGRAM

3:00-4:00 pm Registration

4:00-4:15 pm **Welcome ceremony**  
**I. Wistuba** (*Houston, TX-USA*), **K. Pantel** (*Hamburg, D*)  
**Presidents of the congress**  
**A. Casini**  
**President of Fondazione Internazionale Menarini**

**SESSION I • Chairs:** **N.H. Stoecklein** (*Düsseldorf, D*),  
**F. De Braud** (*Milan, I*)

**Intra-tumor heterogeneity and genomics**

4:15-4:45 pm **M.R. Wang** (*Beijing, CN*)  
Molecular alterations and intratumor heterogeneity  
in esophageal squamous cell carcinoma

4:45-5:15 pm **M. Snuderl** (*New York, NY-USA*)  
Temporospatial heterogeneity of brain tumors

5:15-5:45 pm **J.P. Castaño** (*Córdoba, E*)  
Alternative splicing: an emergent hallmark  
in cancer and in tumor heterogeneity

5:45-6:15 pm **C. Bomzer** (*Milwaukee, WI-USA*)  
Breast cancer: genomic heterogeneity.  
A clinician's perspective

**Chairs:** **I. Wistuba** (*Houston, TX-USA*), **K. Pantel** (*Hamburg, D*)

6:15-7:00 pm **A. Futreal** (*Houston, TX-USA*)  
Keynote: Implications of intra-tumor heterogeneity for therapy

7:00-8:00 pm **Welcome reception**

**SESSION II • Chairs:** **C. Alix-Panabieres** (*Montpellier, F*),  
**K. Pantel** (*Hamburg, D*)

**Intra-tumor heterogeneity on immune response and single cell analysis**

8:00-8:30 am **S. Abrignani** (*Milan, I*)  
Heterogeneity of intratumoral T lymphocytes

8:30-9:00 am **T. Shibata** (*Tokyo, J*)  
Inter-patient heterogeneity in tumor microenvironment

9:00-9:30 am **J. Zhang** (*Houston, TX-USA*)  
Intra-tumor heterogeneity of lung cancer: beyond genomics

9:30-10:00 am **R. Dolcetti** (*Brisbane, AUS*)  
Personalized immunotherapy to overcome  
cancer heterogeneity

10:00-10:30 am *Coffee break*

10:30-11:00 am **S.A. Mani** (*Houston, TX-USA*)  
Role of cancer cell plasticity in tumor heterogeneity

11:00-11:30 am **N.H. Stoecklein** (*Düsseldorf, D*)  
CTC-analysis: new insights through molecular single cell analysis

11:30-12:00 am **O. Rozenblatt-Rosen** (*Cambridge, MA-USA*)  
Dissecting the tumor ecosystem with single cell RNA-Seq

12:00-12:30 pm **G. Stanta** (*Trieste, I*)  
Tumor heterogeneity: a complex approach for clinical  
research and diagnostics

12:30-2:00 pm *Lunch*

**SESSION III • Chairs: I. Wistuba** (*Houston, TX-USA*)  
**A. Scarpa** (*Verona, I*)

**Intra-tumor heterogeneity and cancer therapy**

- 2:00-2:30 pm**    **F. De Braud** (*Milan, I*)  
 Mechanism of resistance to target therapy and treatment strategy in solid tumors: focus on lung and colorectal cancer
- 2:30-3:00 pm**    **P. Metrakos** (*Montreal, CA*)  
 Heterogeneity in colorectal cancer metastasis and response to therapy: Vessel co-option mediates resistance to anti-angiogenic therapy in liver metastases
- 3:00-3:30 pm**    **R. Rosell** (*Barcelona, E*)  
 Kinome reprogramming in EGFR mutant NSCLC
- 3:30-4:00 pm**    *Coffee break*
- 4:00-4:30 pm**    **C. Paoletti** (*Ann Arbor, MI-USA*)  
 Using liquid biopsy to detect diverse mechanisms of resistance to endocrine therapy in hormone-receptor positive metastatic breast cancer
- 4:30-5:00 pm**    **M. Scaltriti** (*New York, NY-USA*)  
 PI3K inhibitors, how to treat and who?
- 5:00-5:30 pm**    **A. Scarpa** (*Verona, I*)  
 Cancer heterogeneity and molecular diagnostics
- 5:30 -6:00 pm**    **S.L. Carter** (*Boston, MA-USA*)  
 Computational dissection of intra-tumor genetic heterogeneity and applications to the study of cancer treatment, evolution, and metastasis

**SESSION IV • Chairs: J.W. Janni** (*Ulm, D*)  
**D. Marchetti** (*Houston, TX-USA*)

**Intra-tumor heterogeneity and liquid biopsy**

- 8:30-9:00**        **K. Pantel** (*Hamburg, D*)  
 Circulating tumor cells: molecular characterization and clinical applications in patients with solid tumors
- 9:00-9:30 am**    **C. Alix-Panabieres** (*Montpellier, F*)  
 Molecular portrait of metastasis-competent CTCs in colon cancer
- 9:30-10:00 am**    **H.A. Alvarez** (*Houston, TX-USA*)  
 Time and space continuum of tumor evolution through liquid biopsies
- 10:00-10:30 am**    **D. Marchetti** (*Houston, TX-USA*)  
 Transcriptomic interrogation and biomarker heterogeneity of breast cancer CTCs associated with brain metastasis
- 10:30-11:00 am**    *Coffee break*
- 11:00-11:30 am**    **D. Rothwell** (*Manchester, UK*)  
 Utilising CTCs to investigate tumour molecular status and heterogeneity in small cell lung cancer
- 11:30-12:00 am**    **J.W. Janni** (*Ulm, D*)  
 Clinical utility and perspectives of CTCs in advanced breast cancer
- 12:00-12:30 am**    **L. Terstappen** (*Enschede, NL*)  
 CTCs: past, present and future
- I. Wistuba** (*Houston, TX-USA*), **K. Pantel** (*Hamburg, D*)  
 Closing remarks
- 13:00-2:00 pm**    *Farewell lunch*

## FACULTY

### **Abrignani Sergio**

National Institute of Molecular Genetics "Romeo ed Enrica Invernizzi"  
and Università degli Studi di Milano, Italy

### **Alix-Panabieres Catherine**

Laboratoire Cellules Circulantes Rares Humaines (LCCRH),  
Département Biopathologie Cellulaire et Tissulaire des Tumeurs,  
CHRU de Montpellier, Université de Montpellier, France

### **Alvarez Hector A.**

Sheikh Ahmed Bin Zayed Al Nahyan Center for Pancreatic Cancer Research,  
The University of Texas MD Anderson Cancer Center, Houston, TX-USA

### **Bomzer Charles**

Aurora Cancer Care, Milwaukee, WI-USA

### **Carter Scott L.**

Harvard Chan School of Public Health  
Department of Biostatistics and Computational Biology,  
Dana-Farber Cancer Institute  
Broad Institute, Joint Center for Cancer Precision Medicine, Boston, MA-USA

### **Castaño Justo P.**

IMIBIC - Maimónides Institute for Biomedical Research at Córdoba  
and University of Córdoba, Spain

### **De Braud Filippo**

Department of Oncology, Università degli Studi di Milano;  
Department of Medical Oncology  
IRCCS Istituto Nazionale dei Tumori di Milano, Italy

### **Dolcetti Riccardo**

University of Queensland Diamantina Institute,  
Translational Research Institute, Brisbane, Australia  
CRO-National Cancer Institute, Aviano, Italy

### **Futreal Andrew**

The University of Texas MD Anderson Cancer Center, Houston, TX-USA

### **Janni Johann W.**

Department of Gynecology and Obstetrics,  
University Hospital Ulm, Ulm, Germany

### **Mani Sendurai A.**

Department of Translational Molecular Pathology,  
Division of Pathology/Lab Medicine,  
The University of Texas MD Anderson Cancer Center, Houston, TX-USA

### **Marchetti Dario**

Biomarker Research Program  
Institute of Academic Medicine,  
Houston Methodist Research Institute, Houston, TX-USA

### **Metrakos Peter**

Multi-Organ Transplant Program and Hepatic, Pancreatic  
and Biliary Program at McGill University Health Center,  
Glen Site at the Royal Victoria Hospital, Montreal, Canada

### **Pantel Klaus**

Department of Tumor Biology, University Medical Center  
Hamburg-Eppendorf, Hamburg, Germany

### **Paoletti Costanza**

Department of Internal Medicine,  
Division of Hematology Oncology, University of Michigan  
Comprehensive Cancer Center, Ann Arbor, MI-USA

### **Rosell Costa Rafael**

Cancer Biology and Precision Medicine Program,  
Catalan Institute of Oncology, Hospital Germans Trias i Pujol,  
Badalona, Barcelona, Spain

### **Rothwell Dominic G.**

Clinical and Experimental Pharmacology Group, Cancer Research UK  
Manchester Institute, The University of Manchester, UK

### **Rozenblatt-Rosen Orit**

Scientific Director, Klarman Cell Observatory,  
Broad Institute of MIT and Harvard, Cambridge, MA-USA

### **Scaltriti Maurizio**

Department of Pathology and Human Oncology & Pathogenesis Program  
Translational Science, Center for Molecular-Based Therapies,  
Memorial Sloan Kettering Cancer Center, New York, NY-USA

### **Scarpa Aldo**

ARC-Net Research Centre  
Department of Pathology, University and Hospital Trust of Verona, Italy

### **Shibata Tatsuhiro**

Laboratory of Molecular Medicine, The Institute of Medical Science,  
The University of Tokyo, Japan

### **Snuderl Matija**

Department of Pathology, New York University, New York, NY-USA

**Stanta Giorgio**

Department of Medical Sciences, University of Trieste, Italy

**Stoecklein Nikolas**

Hendrik Experimental Surgical Oncology,  
Department for General, Visceral, and Pediatric Surgery,  
University Hospital and Medical Faculty of the Heinrich-Heine-University  
Düsseldorf, Germany

**Terstappen Leon**

Medical Cell Biophysics, University of Twente, Enschede, The Netherlands

**Wang Ming-Rong**

State Key Laboratory of Molecular Oncology, Cancer Hospital,  
Peking Union Medical College,  
Chinese Academy of Medical Sciences, Beijing, China

**Wistuba Ignacio I.**

Department of Translational Molecular Pathology,  
The University of Texas MD Anderson Cancer Center, Houston, TX-USA

**Zhang Jianjun**

The University of Texas MD Anderson Medical Center, Houston, TX-USA

## GENERAL INFORMATION

### Meeting venue

The venue for the symposium is

**Congress Center**

Old Post Office Building  
1100 Pennsylvania Ave NW  
Washington, DC 20004 - USA

### Secretariat during the meeting

The Secretariat will be open at the following times:

Thursday May 11<sup>th</sup> from 03:00 p.m. to 07:00 p.m.

Friday May 12<sup>th</sup> from 07:30 a.m. to 06:00 p.m.

Saturday May 13<sup>th</sup> from 08:00 a.m. to 03:00 p.m.

### Official language

The official language of the meeting is English.

Simultaneous translation will not be provided.

### Attendees' registration

The symposium is free to attend, but on line registration is required.

Please link to the organizing secretariat website:

[www.duecipation.com](http://www.duecipation.com)

On line registrations will be accepted on a first-come, first-served basis and may be closed in advance whenever the maximum number of participants allowed in the venue will be reached.

### Registration includes

Access to scientific sessions, welcome reception,  
coffee breaks, lunch, program book, certificate of attendance.

