

# ESMO Virtual Advanced Course on Liquid Biopsy for Cancer Management

## Programme

**ESMO VIRTUAL  
ADVANCED COURSE**

**15-16 JUNE 2021**

**Co-Chairs**

Ryan Corcoran, United States  
Joaquin Mateo, Spain

# ESMO VIRTUAL ADVANCED COURSE PROGRAMME

## LIQUID BIOPSY FOR CANCER MANAGEMENT

### 15-16 June 2021

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**CO-CHAIRS:** Ryan Corcoran, United States  
Joaquin Mateo, Spain

**SPEAKERS:** Christopher Z. Abbosh, United Kingdom  
Catherine Alix-Panabières, France  
Daniel De Carvalho, Canada  
Francesca Demichelis, Italy  
Van Morris, United States  
Fernanda Mosele, France  
Florent Moulière, Netherlands  
Christian Rolfo, United States  
Giulia Siravegna, United States  
Lilian Siu, Canada  
Victor Velculescu, United States

## LEARNING OBJECTIVES

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- To understand the principles of blood-based liquid biopsies and the available methodologies for isolating tumor material from blood samples
- To review and discuss data for liquid biopsy-based assessments as endpoints of antitumor activity in clinical trials
- To understand the potential and limitations of liquid biopsy-based tumor genomic profiling for patient stratification and detection of predictive biomarkers of response to therapy
- To learn how the assessment of tumor heterogeneity and evolution based on liquid biopsy assays can improve cancer treatment

## ACCREDITATION

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The programme of this event has been accredited with **6 ESMO-MORA category 1 points**. Recertification is necessary for medical oncologists to remain professionally certified by ESMO. Recertification guarantees that a certified medical oncologist has continued to update his/her knowledge and continues to possess the necessary skills and standards for the practice of medical oncology. For future details, please refer to [esmo.org](http://esmo.org).

Programme timings are to be considered CEST (Central European Summer Time)

## Tuesday, 15 June 2021

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- 15:00-15:10    **Welcome and learning objectives review**  
5'              Ryan Corcoran, US and Joaquin Mateo, ES
- 5'              **Icebreaker activity (interactive questions to assess the familiarity of the attendees with liquid biopsies and genomic profiling)**
- 15:10-16:10    **Session 1**  
**Fundamental principles of liquid biopsies**
- 15'              **Origin of CTC and methods for their isolation and molecular analyses**  
Catherine Alix-Panabières, FR
- 15'              **Origin of cfDNA and tumor EVs**  
Florent Moulière, NL
- 15'              **Liquid biopsy in non-blood fluids**  
Giulia Siravegna, US
- 15'              Discussion, Q&A  
Faculty
- 16:10-17:10    **Session 2**  
**Bringing liquid biopsy into clinics**
- 15'              **NGS, liquid biopsies and predictive biomarkers for targeted therapies: opportunities and limitations of the assays**  
Christopher Z. Abbosh, UK
- 15'              **Studying drug resistance and tumor evolution in liquid biopsies**  
Christian Rolfo, US
- 15'              **The ESMO Recommendations for multigene sequencing in clinical practice**  
Fernanda Mosele, FR
- 15'              Discussion, Q&A  
Faculty
- 17:10-17:20    **Virtual Break**
- 17:20-18:20    **Session 3**  
**Quantitative liquid-biopsy biomarkers as clinical trials end point**
- 15'              **Circulating tumor cell count kinetics as surrogate endpoint of antitumor activity**  
Joaquin Mateo, ES
- 15'              **Liquid biopsy and biomarkers for precise use of immunotherapy**  
Lillian Siu, CA

- 15' Role of cfDNA in monitoring response and relapse: the example of liquid biopsy minimal residual disease as clinical trial endpoint  
Van Morris, US
- 15' Discussion, Q&A  
Faculty
- 18:20-18:30 **Closing of Day 1**

## **Wednesday, 16 June 2021**

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- 15:00-16:00 **Session 4**  
**Going the extra mile – novel applications of liquid biopsies**
- 15' Principles and challenges for early cancer detection  
Daniel De Carvalho, CA
- 15' Study of ctDNA fragments and tissue of origin – potential applications for cancer diagnosis  
Victor Velculescu, US
- 15' **Methylation studies in liquid biopsy – potential clinical utility**  
Francesca Demichelis, IT
- 15' Discussion, Q&A  
Faculty
- 16:00-18:00 **WORKSHOPS (explanation of the objectives and methodology for the WORKSHOPS)**  
5' Ryan Corcoran, US and Joaquin Mateo, ES
- 16:05-17:05 **WORKSHOP 1**  
40' Identification of predictive biomarkers of response to target agents from liquid biopsy profiling/Minimal Residual Disease  
Ryan Corcoran, US  
20' Discussion
- 17:05-17:15 Virtual coffee break
- 17:15-18:15 **WORKSHOP 2**  
40' Clinical trial design for qualification of novel liquid biopsy-based endpoints  
Joaquin Mateo, ES  
20' Discussion
- Closing remarks  
5' **Review of key take-home messages**  
Ryan Corcoran, US and Joaquin Mateo, ES