



CME Session 3

Infection and Inflammation Committee

Sunday, October 18, 15:00–16:30

Session Title

Immune Cell Imaging

Chairpersons

Olivier Gheysens (Brussels, Belgium)

Begoña Rodríguez-Alfonso (Madrid, Spain)

Programme

- | | |
|-------------|--|
| 15:00–15:20 | Christopher Buckley (Oxford, United Kingdom): Cellular targeting in cancer and inflammation. |
| 15:20–15:45 | Jane Sosabowski (London, United Kingdom): Imaging Immune Cells: From Preclinical Models to Clinical Translation |
| 15:45–16:10 | Laura Evangelista (Milan, Italy): Imaging the Immune Response in Cancer: New Frontiers in Immuno-Oncology |
| 16:10–16:30 | Priscilla Guglielmo (Bergamo, Italy): Immune Cell Imaging in Inflammation & Infection: Mapping the Immune Landscape |

Educational Objectives

1. Describe the biological rationale and key methodologies for imaging immune cells and immune responses in vivo.
2. Evaluate current and emerging applications of immune cell imaging in cancer, infection, and inflammatory diseases.
3. Discuss translational challenges and opportunities in advancing immune cell imaging from preclinical research to clinical practice.

Summary

Immune cell imaging is rapidly advancing our ability to characterise immune responses in vivo and across disease states. This session will examine the scientific basis and translational applications of immune cell imaging, from fundamental immunological concepts to clinical implementation. Topics include imaging immune responses in cancer, emerging opportunities in immuno-oncology, advances in preclinical imaging technologies that support translational research, and the application of immune cell imaging to infection and inflammatory diseases. The session will highlight how molecular imaging can provide spatial and temporal insights into immune cell dynamics, supporting precision diagnostics and therapeutic development.

Key Words

Immune cell imaging; Inflammation; Infection; Translational imaging; Immune response; Precision medicine.