

Cancer Immunology & Immunotherapy meeting – 10 september 2018

De Cancer Immunology & Immunotherapy meeting wordt georganiseerd binnen het onderzoeksthema *Cancer development and immune defense* van het Radboudumc te Nijmegen, en wordt vier keer per jaar gehouden. De meeting is gericht op het presenteren en bediscussiëren van nieuwe ongepubliceerde data binnen het Cancer Immunology & Immunotherapy onderzoeksveld. Daarnaast is er ruimte om te netwerken, en mogelijke samenwerkingen aan te gaan.

Title: Immune checkpoint inhibitors in sepsis: what can we learn from the oncologist?

Affiliation: Dr. Matthijs Kox, assistant professor Intensive Care, Radboudumc

Scope: Despite decades of research into a specific immune system-targeting adjunctive therapy for sepsis, no effective compound has been discovered yet. As such, apart from antibiotics, source control, resuscitation and organ support, not a single adjunctive treatment is currently used in clinical practice. Over the last years, immune checkpoint inhibitors such as the anti-PD-1 antibody Nivolumab have emerged as effective treatments for various forms of cancer. Because immune checkpoint molecules are also implicated in the pathogenesis of sepsis, this type of therapy represents a promising treatment option for septic patients. This lecture provides an overview of the role of immune checkpoint molecules in the pathogenesis of sepsis and the current status of immune checkpoint inhibitors as a treatment modality for this lethal disease.

Title: "Hypoxia and therapy resistance in breast cancer".

Affiliation: Dr. Paul Span, Radiotherapy & OncoImmunology laboratory, department of Radiation Oncology, RIMLS, Radboud university medical center

Scope: "Solid tumors, such as breast, lung, and head-and-neck cancer, exhibit a variable amount of available oxygen, leading to temporally and locally heterogeneous levels of hypoxia. Through several mechanisms, hypoxia induces resistance to different treatment regimens, such as radiotherapy. Both preclinical in vitro data, and validation of these results in biobanked patiënt samples will be shown".