

Postdoc/PhD Vacancy

Bi-functional mAbs targeting innate immune checkpoints in Neuroblastoma



Radiotherapy & Oncology Laboratory
Department of Radiation Oncology



RIMLS The Radboud Institute for Molecular Life Sciences in the Netherlands is a leading European research school providing an outstanding research and educational setting at the RadboudUMC. The RIMLS focus is on basic science and its translation into pioneering treatments for diseases.

Radiotherapy & Oncology lab (Dept. of Radiation Oncology)

At the ROI lab, ~25 researchers aim at better understanding tumor cell interactions with the immune system using imaging, molecular-, cell biological- and immunological- techniques in relation to cancer therapies. Research is centred around the development of in situ cancer vaccines combining local tumor ablation and dendritic cell activation through immune adjuvants. In addition, the interplay between immune- and tumor cells is studied within the tumor microenvironment (TME). An important activity of the department is the translation of basic research into clinical application.

Project: Bi-functional mAbs targeting innate immune checkpoints in Neuroblastoma

Neuroblastoma (NBL) is a tumor responsible for 12% of cancer-related deaths in children. GD2 is a tumor-associated antigen and the primary target in NBL treatment with immunotherapy. Dinutuximab, a humanized anti-GD2 mAb has improved treatment of high-risk NBL patients, via activation of innate immune effector mechanisms. In this *Villa Joep* funded project and in collaboration with the *Prinses Maxima Center*, we will characterize unique bifunctional mAbs targeting GD2 and immune checkpoints to improve NBL therapy. Human NBL/immune cell interactions will be studied as well as NBL tumor models in syngeneic mice. Immune cell analysis and functional assays will be combined with molecular approaches and PET/SPECT imaging to study these bifunctional mAbs alone or in combination with cell-death inducing therapy.

Requirements

The preferred candidates will have a MSc or PhD degree in biomedical sciences or equivalent and proven interest in pre-clinical research and a passion for science. Candidates with a background in Cancer-immunology/biology/chemistry holding an article 9 certificate for working with experimental animals are especially invited to apply.

Terms of Employment

- PhD: 4 years/ 36 hours per week (fixed term)
- Post-doc: 2 years with possible extension

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