

## Post-doctoral researcher (36 hours/week)

### Targeting Cancer Cell Senescence

Maastricht lab, led by Marc Vooijs, conducts fundamental and translational research to provide the best and safest cancer combination treatment for every patient and is affiliated with the Maastricht Radiation Clinic and the Maastricht Comprehensive Cancer Centre. The lab has five research groups focused on tumour cell metabolism, immunotherapy, cell death, extracellular vesicles, and stem cell biology. We have core facilities for NextGen sequencing, iPSC facility, high resolution (live) optical and (cryo) electron microscopy and mass spectrometry imaging (M4I).

Therapy-induced senescence (TIS) is a growth arrest state frequently caused by anticancer agents. It results in the secretion of pro-tumorigenic factors that ultimately fuel tumour cell persistence, proliferation and (Immunotherapy) therapy resistance. A new and exciting area in radiotherapy is the combination with Immunotherapy. This project aims to identify and remove treatment-induced senescent cells using an Immune checkpoint blockade (mAb-PD-L2). In this Eurostars project, you will collaborate with Rejuveron, Screenin3D, TAmiRNA and Crownbio to obtain preclinical data demonstrating the efficacy of mAb-PD-L2 and develop a companion diagnostic to forward into clinical studies.

**In this position**, your work package involves deriving and characterizing patient-derived normal and cancer organoids and establishing the conditions for inducing treatment-induced senescence and secreted (response) biomarkers. You will work in close contact with other teams within the Maastricht lab using patient-derived models and other consortium members to combine PD-L2 targeting with immune cells to optimize the elimination of senescent tumour cells. Subsequently, the consortium will use the models to demonstrate safety and efficacy in vivo.

**You will be working** at the Radiotherapy department (Maastricht lab), at Maastricht University, the Netherlands. We closely collaborate with Maastricht, institute for radiotherapy ([www.maastricht.nl](http://www.maastricht.nl)). Within the lab, we have four PI-led teams focused on identifying actionable dependencies in tumour cells and the tumour microenvironment that can be targeted to enhance and prolong treatment response while preserving normal tissue function. Learn more about Maastricht lab's research groups at: <https://www.maastrichtlab.com/>

**We are looking for** an ambitious postdoc highly motivated in translational oncology to work together with an international consortium to achieve proof of concept for senescent tumour cell targeting to improve cancer treatment outcomes. Proficiency in English (minimum of IELTS 7 or equivalent), excellent communicative skills, and team player spirit are essential. You should be able to function independently, and prior experience with primary (patient) cell culture, Immune-oncology and GCP/BROK certification is preferred.

**We offer you** a full-time contract (36 hours/week) for an initial period of one year, with the intention for an extension with another year. You will be employed by Maastricht, where the Collective Labor Agreement for Hospitals ("[CAO Ziekenhuizen](http://www.caoziekenhuizen.nl)") applies. Your salary will be according to the salary scale FWG 60 (min. € 3.389,- max. € 4.964,- gross/month), depending on relevant work experience. Furthermore, you will receive an 8.33% holiday allowance and an 8.33% end-of-year bonus.

Also, we offer a wide range of options for personal development, including hard- and soft skills courses. We invest in the employability and vitality of our employees and offer discounts on, for example, sports subscriptions. Foreign applications may qualify for the 30% tax rule and moving cost reimbursement. Our HR department will assist with the application if a residence/work permit is required.

**More information** about this position will be gladly provided by Prof. Dr. Marc Vooijs, leader lab research Maastricht, by e-mail: [marc.vooijs@maastrichtuniversity.nl](mailto:marc.vooijs@maastrichtuniversity.nl) or Prof Dr Dirk de Ruyscher leader clinical trials [dirk.deruysscher@maastro.nl](mailto:dirk.deruysscher@maastro.nl) or by calling: +31-0614044640. More information on Maastricht lab can be found at <https://www.maastrolab.com/>.

**You can apply** until February 2<sup>nd</sup> 2023, by uploading your motivation letter and curriculum vitae on our website [www.maastro.nl](http://www.maastro.nl) (tab: jobs & academy). Interviews will be scheduled in the beginning of February. The preferred starting date is March 2023.

**About Maastricht:** The internationally acclaimed state-of-the-art radiotherapy institute Maastricht in Maastricht delivers cancer care in the Limburg region of the Netherlands, aiming to cure patients while preventing side effects of the treatments. With 330 employees, we contribute to this endeavour, in patient care, research and business operations. We are one of three centers in the Netherlands treating cancer patients with proton therapy. Furthermore, we have well-established research groups and work closely with Maastricht University and Maastricht University Hospital (MUMC+) in education, clinical and preclinical research. Does working in a dynamic and innovative organization appeal to you? Check our website, [www.maastro.nl](http://www.maastro.nl) and get in touch with us.