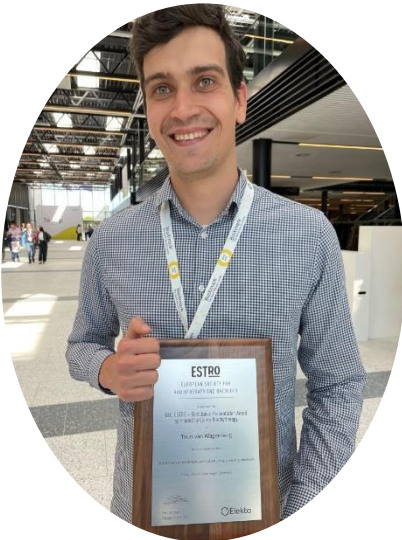




# CONFERENCES

## GEC-ESTRO Best Junior Presentation Award - sponsored by Elekta Brachytherapy



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### *What does this award mean to you?*

It is really nice to receive this award as it shows our research is going in the right direction. It shows that we are not just quite successfully monitoring brachytherapy treatments, but also that other researchers think it is relevant to improve in-vivo dosimetry methods for brachytherapy, because of the benefits such improvement could bring to the clinic.

### *To whom would you like to dedicate your award?*

I would like to dedicate this award to everyone at the Maastrro clinic who helps with our project. Everyone is very helpful and willing to share information and expertise, and this collaboration makes it much easier for us to do our research. In particular, I have to thank Dr Gabriel Fonseca and Professor Frank Verhaegen, who do not just work on this project with me but also help and guide me as a junior researcher and PhD student. Lastly, I also have to thank the Dutch Cancer Society KWF and Varian for giving us the opportunity to do this research by funding it.

### *What have been the highlights of your career?*

So far, I have really enjoyed the first two years of my PhD research and it is exciting to try to develop the iridium imaging system (IrlS), the Maastrro system that was designed and built in-house for in-vivo dosimetry for brachytherapy, which we are working on. To receive this award for this research has been a highlight for sure.

### *What is your next challenge?*

The next challenge for us is to use IrlS to obtain data from patients. We hope to be able to do this soon. So far, our method has worked well for the different phantoms that we have investigated, so we are confident that it will give good results for patients as well. With the data we acquire from patient treatments, we aim to verify with good accuracy the dose they received. Also, we want our system to recognise whether treatment errors are happening in real time so that we can increase the safety of brachytherapy treatments.

## *What do you think are the next challenges for radiation oncology community?*

Modernisation of the treatment methods is a challenge for physicists in brachytherapy. Brachytherapy is a very good option for radiation treatment, but I think we have to invest more than is invested at present in research that can improve the accuracy and effectiveness of the treatment. It seems that currently, innovation in brachytherapy is lagging behind that in other treatment modalities. There are a lot of opportunities, not just with in vivo dosimetry and treatment verification but also with, for example, 3D printing of applicators, more advanced treatment planning systems and much more.

