

## Raquel's biosketch

Dr Raquel Perez-Lopez is an experienced academic radiologist trained at Bellvitge University Hospital in Barcelona (Spain) and the Royal Marsden Hospital and the Institute of Cancer Research in London (UK). Her PhD studies enabled her to identify the value of whole-body diffusion-weighted MRI as a prognostic and response biomarker of bone metastases in prostate cancer, that in turn led to the completion of the first prospective clinical trial in this context. Importantly, the studies in which she collaborated over her PhD resulted in over fifteen manuscripts that she first or co-authored in prestigious titles including NEJM, Cell, Cancer Discovery and Radiology.

Raquel joined VHIO in late 2017 as Team Leader of VHIO's newly established Radiomics Group. The group's efforts center on advancing precision imaging in personalized medicine, towards ultimately improving outcomes for cancer patients by applying mathematical methods to image processing and artificial intelligence in the biomedical field. Over the last two years, the Radiomics Group has collaborated with the Early Clinical Trials Unit at VHIO, towards the development of novel predictive and early response biomarkers for immunotherapies. Thanks to the support of an AZ PoC Award and the CRIS Foundation Talent Award, the multidisciplinary VHIO team has initiated the first prospective study of multiparametric MRI as a response biomarker of immune checkpoint inhibitors. The Radiomics Group recent work has resulted in several manuscripts in prestigious titles including Clinical Cancer Research and Radiology.

Dr. Perez Lopez is co-investigator of several international research structures: 1) ImmunelImage (H2020 IMI2 <https://www.immune-image.eu>) aiming to develop and implement novel imaging biomarkers for immunotherapy; 2) CCE-DART Consortium (H2020), aiming to optimize clinical trial design by, among others, the implementation of novel predictive and early response biomarkers; 3) she is an active member of the Cancer Core Europe-Imaging Task Force leading the first radiomics study within the consortium and also collaborating with the Data Sharing Task Force towards developing a platform for secure data sharing including imaging among the CCE centers and beyond; 4) Dr Perez Lopez was awarded a Prostate Cancer Foundation(PCF)-Young Investigator Award and co-leads the PCF Imaging Working Group aiming to develop novel imaging biomarkers towards supporting translational research in cancer and, ultimately, improve prostate cancer patients care and 5) Dr. Perez-Lopez is the PI & coordinator of two multicentric national consortia PreCIMet funded by La Marató and PREDICT funded by the CRIS Foundation.