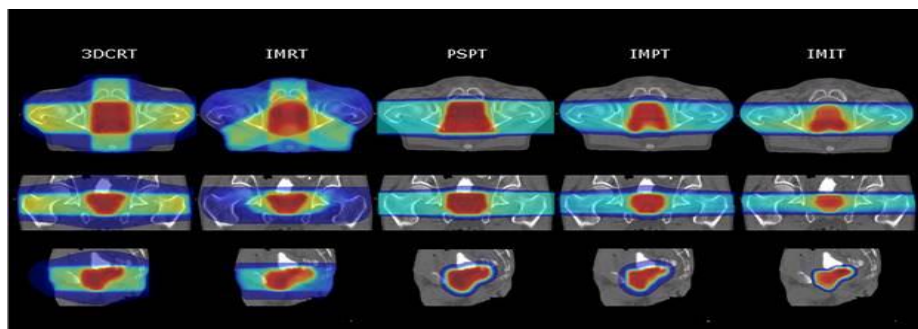


- Maastricht Radiation Oncology (MAASTRO), GROW, University Hospital Maastricht, The Netherlands
- Gesellschaft für Schwerionenforschung (GSI), Germany.
- Heidelberger Ionenstrahl-Therapie (HIT), Germany.
- Netherlands Cancer Institute (NKI), the Netherlands.
- University Medical Center Groningen (UMCG), the Netherlands
- University Hospital Ghent (UHG), Belgium.
- University Hospital Aachen, Germany.
- University Hospital Marburg (UHGM), Germany
- University of Oxford (JAI), United Kingdom
- Medical University of Vienna (MUV), Austria
- Paul Scherrer Institute (PSI), Switzerland.
- Centre de Protontherapie d'Orsay (CPO), France.
- National Institute of Radiological Sciences (NIRS), Japan.
- Limburg Oncology Center (LOC), Belgium.
- Massachusetts General Hospital (MGH) Boston, USA
- Madison Memorial Hospital (UOW), Madison, USA
- University hospital Pennsylvania (Upenn), Pennsylvania, USA.
- Liège University Hospital (CHU), Liège, Belgium
- University hospital Nijmegen (Radboud), Nijmegen, The Netherlands,



## News flash

- The ROCOCO **prostate** data have been analysed and UHG (Belgium) and MAASTRO are writing the first draft of the manuscript. The manuscript will be targeted for the Green journal (Radiotherapy and Oncology)



- The ROCOCO study "Photon versus particle therapy for **recurrent Head & Neck cancers**" is gaining momentum. A dataset from MAASTRO supplemented with data from the University hospital Nijmegen (Radboud, The Netherlands), was selected based on strict criteria (e.g. initial treatment plan IMRT, prescribed dose of the initial treatment plan, etc.). The names of the OARs have been changed according to international standards. Supplementary contouring of OARs that were lacking in the initial plan was done. A dummy run has been performed. Dummy run and protocol issues are to be discussed in an upcoming telephone conference (29-04-14). Eighteen patients are ready for treatment planning. MAASTRO will plan photon modality, Pennsylvania the proton modality and Marburg the carbon-ion part.
- The stage 1 NSCLC study, comparing the state-of-the-art photon treatment techniques Rapid Arc, Cyberknife, Tomotherapy, IMRT and SBRT with the treatment modalities proton therapy and carbon-ion therapy, is on-going. A dataset with MAASTRO stage I lung patients has been selected. The names of the OARs have been changed according to international standards. Supplementary contouring has been performed. To test planning issues a dummy run has been performed. Last week (15-04-14) a phone conference was held to discuss dummy run and protocol issues. Based on this phone conference the protocol is optimized and an additional dummy run patient has been uploaded for treatment planning. A second phone conference has been planned (29-04-14) to discuss resulting issues. Twenty five patients are ready for treatment planning. Photon therapy will be planned by MAASTRO (SBRT), Deventer (Tomotherapy), Eindhoven (IMRT), Liege (Cyberknife therapy) and the LOC (RadidArc therapy). Proton therapy will be planned in Pennsylvania and Marburg will take response for the carbon-ion part.

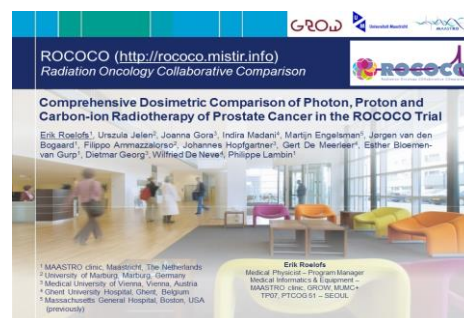
- The ROCOCO protocols “recurrent Head & Neck cancers”, “recurrent Lung cancers” and “Lung stage I Lung cancer” will be published on [www.ClinicalTrials.Gov](http://www.ClinicalTrials.Gov).
- The in silico planning study for prostate patients injected with a spacer gel between rectum and prostate is temporary on hold due to lacking imaging data. Participants having imaging data available are asked to contact Esther Bloemen ([esther.bloemen@maastro.nl](mailto:esther.bloemen@maastro.nl)).
- A new study based on a dataset from Nijmegen (the Netherlands) supplemented with UCL (Louvain, Belgium) has been initiated. The data set consists of **repeated head and neck CT data** during treatment to investigate adaptive radiotherapy. With this dataset we are also able to investigate the effect of weight loss and tumor response on the dose distribution and compare this effect for the three modalities.
- The ROCOCO study “Photon versus particle therapy for **re-irradiation of non-small cell lung cancers**” is proceeding. A dataset, based on MAASTRO patients undergoing high-dose re-irradiation after recurrent lung cancer, has been selected. OARs have been renamed according to international standards, missing contours have been delineated. At this moment work is being done to calculate DVHs of the OARs of the initial plan. The next step is to define the OAR dose restrictions for the recurrent part and start treatment planning.

### Scientific publications

- Ramaekers BL, Grutters JP, Pijls-Johannesma M, Lambin P, Joore MA, Langendijk JA. Protons in Head-and-Neck Cancer: Bridging the Gap of Evidence. *Int J Radiat Oncol Biol Phys.* 2012 Dec 27
- Hans Paul van der Laan, Tara A. van de Water, Heleen E. van Herpt, Miranda E.M.C. Christianen, Henk P. Bijl, Erik. W. Korevaar, Coen R. Rasch, Aart A. van 't Veld, Cornelis Schilstra, Johannes A. Langendijk, on behalf of the ROCOCO cooperative group. The potential of intensity-modulated proton radiotherapy to reduce swallowing dysfunction in head and neck cancer. *Acta Oncol.* Jun 19, 2012.
- Hans Paul van der Laan, Miranda E.M.C. Christianen, Hendrik P. Bijl, Cornelis Schilstra, Johannes A. Langendijk. The potential benefit of swallowing sparing intensity modulated radiotherapy to reduce swallowing dysfunction: an in silico planning comparative study. *Radiother Oncol.* Apr; 103(1):76-81 2012.
- Erik Roelofs, MSc, Martijn Engelsman, Coen Rasch, Lucas Persoon, Sima Qamhiyeh, Dirk de Ruyscher, Frank Verhaegen, Madelon Pijls-Johannesma, and Philippe Lambin; on behalf of the ROCOCO Consortium. Results of a Multicentric In Silico Clinical Trial (ROCOCO). Comparing Radiotherapy with Photons and Protons for Non-small Cell Lung Cancer. *Journal of Thoracic Oncology, Vol. 7, Number 1, January 2012.*
- Roelofs E, Persoon L, Qamhiyeh S, Verhaegen F, De Ruyscher D, Scholz M, Iancu G, Engelsman M, Rasch C, Zijp L, Meerleer GD, Coghe M, Langendijk J, Schilstra C, Pijls-Johannesma M, Lambin P. Design of and technical challenges involved in a framework for multicentric radiotherapy treatment planning studies. *Radiother Oncol.* Dec;97(3):567-71, 2010.

### Presentations

- Enlight meeting, Valencia (ES) 2009 (Posters)
- ESTRO Physics, Maastricht (NL) 2009 (Oral)
- PTCOG 48, Heidelberg (D) 2009 (Poster)
- ESTRO 29, Barcelona (ES) 2010 (Oral)
- PTCOG 49, Gunma (JP) 2010 (Poster)
- ESTRO 30, London (UK) 2011 (Oral)
- EuroCAT meeting, Aachen (DE) 2011 (Oral)
- PTCOG 51, Seoul (KR) 2012 (Oral)



### Conferences (2013/2014)

conference	when	were	Abstract deadline
3RD ESTRO FORUM	24-28 April, 2015	Barcelona, Spain	
PTCOG 53	June, 8 - 14, 2014	Shanghai, China	Oct 1, 2013 - Feb 14, 2014
ASTRO's 56th Annual Meeting	September 14-17, 2014	Atlanta	NA
PTCOG 54	May 18-23, 2015	San Diego, Ca, USA	NA