

Status of The European Particle Therapy Network (EPTN)

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First meeting of EPTN

8 May 2015 ESTRO office

- European Particle Therapy Network (EPTN) was established in 2015 in response to the **increasing number** of particle therapy centres in Europe
- Important to **cooperate among centres** and **integrate particles** (i.e. protons and carbons) in the framework of **clinical research networks**
- Particle therapy needs to be well **aligned with other radiation techniques** as well as with general developments in cancer research and patient care
- All major European centres interested in particle therapy were invited, with **28 centres** and two research organisations (**EORTC**, **CERN**) represented
- It was emphasized that the initiative should be **fully inclusive and integrative**
- The participants agreed to have joint European initiatives and cooperation in PT and to launch smaller **working parties (WPs)**

EPTN workshops:

WP	Title	Coordinators
1	Scoring of normal tissue reactions and tumour response particle/photon radiotherapy; endpoint definitions, outcome database	Hans Langendijk (Groningen, The Netherlands) Mechthild Krause (Dresden, Germany) Roberto Orecchia (Milan, Italy)
2	Dose assessment, quality assurance, dummy runs, technology inventory	Oliver Jäckel (Heidelberg, Germany) Sairos Safai (Villigen, Switzerland) Stefan Menkel (Dresden, Germany)
3	Trials inventory (website); 'Towards joint clinical trials'	Karin Hausterman (Leuven, Belgium) Cai Grau (Aarhus, Denmark) Daniel Zips (Tübingen, Germany) Jacques Balosso (Grenoble, France)
4	Image guidance in particle therapy	Aswin Hoffmann (Dresden, Germany) Alessandra Bolsi (Villigen, Switzerland)
5	TPS in particle therapy	Håkan Nyström (Uppsala, Sweden) Tony Lomax (Villigen, Switzerland)
6	Radiobiology, RBE	Manjit Dosanjh (Geneva, Switzerland) Bleddyn Jones (Oxford, U.K.) Jörg Pawelke (Dresden, Germany) Jan Alsner (Aarhus, Denmark) Martin Prutschy (Zurich, Switzerland)
7	Health Economy	Yolande Lievens (Ghent, Belgium) Klaus Nagels (Bayreuth, Germany)

Second meeting

18 May 2016 ESTRO office

- 27 centres, EORTC and CERN.
- Update on the activities of the WPs and discuss the way forward.



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Vision and scope for clinical trials in a European network (WP3)

- Emphasis should be on performing high quality trials with properly selected candidates and using relevant, validated clinical endpoints
- A small number of pivotal RCTs are urgently needed, but most patients will enter other types of controlled trials, and we need to develop / test / validate the methodologies (e.g. “cohort multiple RCT”)
- Model-based selection (as predictive biomarker) is a useful concept for NTCP based studies, and this concept should later be extended to incorporate also TCP
- European centers must join forces to create such trials and evidence soon
- Trials involving state-of-the-art photon RT are welcome, as particle therapy should be seen as an integral component of radiation oncology
- European trials should be open to accredited centers with expertise and relative high numbers who wish to collaborate
- Prospective collection of high quality data for proton patients treated outside of clinical trials (using common ontology and data collection forms)
- There is a need to develop a European QA platform for particle therapy trials

Full report from all WPs in latest ESTRO newsletter



www.estro.org/about

Conclusions from the meeting

- Education and training issues will need to be addressed
- Particle therapy is expensive so collaboration is important:
 - We should engage with industry in a way that ensures that participating centres have control over patient data
 - Joint efforts to source funding from the European Commission
- We need to map what centres are doing to be able to identify gaps for future work
- A subgroup for paediatric tumours is needed
- The group agreed that a more tangible association with ESTRO would be more meaningful for recognition and requested to become a task force of ESTRO. The ESTRO board will consider the request
- The EPTN will next meet in Brussels 2017