



RESEARCH PROJECTS

Report on the eighth workshop of the European Particle Therapy Network

5 October 2022

Particle Therapy Interuniversity Centre, Leuven, Belgium

The European Particle Therapy Network (EPTN) is a task force of the European Society for Radiotherapy and Oncology (ESTRO). The task force was launched in 2017 as the number of clinical proton-therapy facilities in Europe was increasing rapidly, from five in 2009 to become more than 30 in 2020. The majority of these centres are hospital-based and many are academic.

The eighth annual workshop was the first in-person meeting since the pandemic, and therefore it enjoyed wide representation; 35 participants came from 18 institutions in 11 European countries.

Proton-therapy events 2023

We presented a list of events relevant to the community that would take place in 2023. These included:

- Paul Scherrer Institut (PSI) Winter School: 15-20 January, PSI Villigen, Switzerland; <https://indico.psi.ch/event/13263/>
- a course in particle therapy at the ESTRO School: 26 February to 2 March, Madrid, Spain;
- [ESTRO - Particle Therapy](#)
- the 61st meeting of the particle therapy co-operative group (PTCOG 61): 12-17 June, Madrid, Spain; <https://www.ptcog.ch/index.php/next-ptcog-meetings>
- the lustrum symposium at the Groningen Proton Therapy Center, entitled 'Back to the future': 13-14 April; <https://www.protontherapy Groningen2023.com/> (lustrum means a five-year period, and the symposium marks the fifth anniversary of the centre); and
- the 9th EPTN workshop (date TBC)

Regarding the PTCOG 61 annual meeting in Madrid in 2023, it is foreseen that EPTN will have a dedicated session during the venue. EPTN is currently discussing with PTCOG's Scientific Program Subcommittee (SPS)

Publications

We are glad to see continued activity in the working parties (WPs), which has resulted in the publication of several papers and scientific reports. We encourage the community to use EPTN in the titles of publications as a way to highlight the activities of the network. We highlight these publications on the network homepage: www.estro.org/Science/EPTN.

1. Eekers DBP et al. Update of the EPTN atlas for CT- and MR-based contouring in Neuro-Oncology. *Radiother Oncol* 2021; 160: 259-265, 2021 <https://doi.org/10.1016/j.radonc.2021.05.013>
2. Sørensen BS, et al. Does the uncertainty in relative biological effectiveness affect patient treatment in proton therapy? *Radiother Oncol* 2021;163:177-84. <https://doi.org/10.1016/j.radonc.2021.08.016>
3. Heuchel L, et al. Is a variable proton RBE considered in clinical practice? - ESTRO survey among 25 proton centres. *Radiother Oncol* 161(Suppl.1) (2021) S313-314, DOI: 10.1016/S0167-8140(21)06904-8
4. De Roeck L, et al. The European particle therapy network (EPTN) consensus on the follow-up of adult patients with brain and skull-base tumours treated with photon or proton irradiation. *Radiother Oncol*. 2022 Jan 27;S0167-8140(22)00021-4. <https://doi.org/10.1016/j.radonc.2022.01.018>
5. Heuchel L, et al. Clinical use and future requirements of relative biological effectiveness: Survey among all European proton therapy centres. *Radiother Oncol* 2022; 172, P134-139, July 01, 2022 <https://doi.org/10.1016/j.radonc.2022.05.015>

Proton therapy centres

Some proton therapy centres have begun operations in the past year and a good number of centres are expected to be in operation by 2025.

- In the UK, the centre at University College London has been operating since 2021 with three gantries.
- In Norway, centres at Oslo and Bergen, with respectively two and one gantries, are to start operating in 2024/2025.
- In Belgium, it is planned that the Charleroi centre will start to operate in 2024. It has one gantry.
- In Italy, centres at Milan, Pavia and Aviano are to start operating respectively in 2025, 2022 and 2024. Each has one gantry.
- In Spain, the Cordoba centre, which has one gantry, is expected to start operating in 2022.
- In Switzerland, no active centre is planned for the time being.

The PTCOG website offers a good overview of particle therapy centres across the world.

You can read about progress across our seven WPs, updates from European Union (EU) projects and other initiatives of interest to the network at this link: <https://www.estro.org/Science/Activities/EPTN>

For reports of WPs presented at the meeting, please visit this link [>>>](#)

Damien Weber, Cai Grau & Dietmar Georg

Co-chairs, EPTN task force



Damien Weber, Switzerland



Cai Grau, Denmark



Dietmar Georg, Austria

