

Subcommittee Name: AI subcommittee (PTCOG AI)

Co-chairs

Name	Country	Term started	Term ends*
Lennart Volz	Germany	2025	2027
Hao Peng	USA	2025	2027

** The term of office is 3 years and may be renewed once, for a maximum total service of 6 years. It is recommended that the 3 co-chairs come from 3 different continents (America, Asia, Europe). To ensure continuity, it is recommended that the co-chairs step down on a staggered basis following their first three-year term.*

Describe the subcommittees main achievements

Since its official kick-off at PTCOG63 in Buenos Aires, the AI subcommittee has worked on several projects:

Establish 8 working groups dedicated to AI use in PT.

Treatment planning, dose calculation, imaging, adaptation, QA, patient referral and outcome prediction, clinical workflow efficiency, radiobiology

Commenced “AI in particle therapy” special issue in IJPT.

Currently 6 published articles in collection, more in the pipeline.

First workshop dedicated to AI in particle therapy.

We established the AI4P|RT workshop among members of the subcommittee. The workshop brings together experts from ML/computer science with experts in PT to create a lasting community (<https://indico.psi.ch/event/18878/>)

PTCOG Position paper for AI in particle therapy

Work ongoing, to be submitted by the end of summer

PT AI repository catalog: <https://lenvol.github.io/particle-therapy-ai-catalog/>

Work is ongoing to integrate it into RS4RT.org initiative

DoseRAD grand challenge <https://doserad2026.grand-challenge.org/>

Initialized by LMU (Prof. G. Landry) together with PTCOG AI, in terms of submissions, one of the top performing challenges on the grand-challenges platform.

Should the subcommittee continue its work (Yes/No)? Yes

Planned tasks for the next two years

- **Finish ongoing tasks (within 1 year): PTCOG position paper**
- **Create PT specific data and code hub within the RS4RT.org initiative**
- **Offer e-learning materials**
Webinars on AI for particle therapy; E-learning material such as relevant python notebooks for beginner and intermediate level researchers.
- **Conduct survey on AI use and wish list for AI tools at Particle Therapy Centers**

Please circulate this form to all subcommittee members and once agreed upon by the subcommittee submit it to: secretariat@ptcog.online (cc: m.durante@gsi.de) within:

August 30, 2026

Please attach the list of subcommittee members (name and country).

The information contained in this form and the list of members will be uploaded on the webpage of your subcommittee (see: <https://ptcog.online/subcommittee/>).