

Subcommittee Name: Carbon Ion Radiation Therapy Guidelines Sub-Committee

Co-chairs

Name	Country	Term started	Term ends*
Bradford Hoppe	USA	June 2024	June 28/29
Hitoshi Ishikawa	Japan	June 2024	June 28/29
Thomas Friedrich	Germany	June 2024	June 27

* 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.

Subcommittee Achievements: Since its formation, the CIRT Guidelines Subcommittee has established an international collaborative framework to advance evidence-based guidance for CIRT. The committee has focused on consolidating current knowledge, reducing variability in clinical practice, promoting education, and fostering collaborative research across institutions. The subcommittee has developed a portfolio of five coordinated projects spanning guideline development, clinical practice evaluation, and assessment of the current research landscape. The Clinical Application of Relative Biological Effectiveness (RBE) project brought together representatives from six carbon ion centers, two commercial treatment planning system vendors, and one research institute to address one of the most important challenges in CIRT. This collaboration produced an international consensus manuscript reviewing current clinical implementation of RBE models and providing practical recommendations for safe clinical application. The work was presented at PTCOG 2026 and is currently under journal review. The committee also completed a comprehensive review of the global landscape of active CIRT clinical trials, creating a resource that summarizes ongoing studies and identifies opportunities for collaboration. This work was presented at PTCOG 2026 and is undergoing manuscript review. In addition, the subcommittee launched international practice pattern surveys in lung cancer, pancreatic cancer, and pediatric malignancies in collaboration with the PTCOG Thoracic, GI, and Pediatric Subcommittees. Together, these initiatives have established a sustainable project pipeline that tracks concepts through publication while strengthening collaboration across the international CIRT community.

Do you maintain a mailing list of subcommittee members (Yes/No)? Yes

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

If yes, please describe the planned activities and goals for the next 3 years – Over the next three years, the CIRT Guidelines Subcommittee will build on its current projects to develop practical, evidence-based guidance that supports safe and consistent implementation of carbon ion radiotherapy worldwide. A major priority will be publication of the RBE consensus manuscript, followed by development of recommendations describing appropriate clinical validation of RBE models and strategies for implementation across treatment planning systems and institutions. The committee will complete and publish the ongoing international surveys of lung cancer, pancreatic cancer, and pediatric CIRT practice patterns. These studies will identify areas of consensus and variation among treatment centers and provide the evidence base for future disease-specific guideline documents. Additional surveys in other disease sites will be considered as new CIRT programs become operational. The subcommittee will continue to maintain and update the global landscape of active CIRT clinical trials to facilitate collaboration, identify research gaps, and encourage multicenter studies. Collaboration with other PTCOG disease site subcommittees will remain a priority to ensure guideline development reflects multidisciplinary expertise and contemporary clinical practice. The committee also plans to expand educational activities through PTCOG presentations, peer-reviewed publications, webinars, and workshops while recruiting participation from established and emerging CIRT centers. These efforts will promote international harmonization of CIRT practice, strengthen collaborative research, and ultimately improve patient outcomes.

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/>).