



an Open Access Journal by MDPI

Application of Proton Beam Therapy in Cancer Treatment

Guest Editors:

Dr. Erik W. Korevaar

Department of Radiation Oncology, University Medical Center Groningen, University of Groningen, 9712 CP Groningen, The Netherlands

Dr. Arjen van der Schaaf

Department of Radiation Oncology, University Medical Center Groningen, University of Groningen, 9712 CP Groningen, The Netherlands

Deadline for manuscript submissions: closed (15 October 2022)



mdpi.com/si/69166

Message from the Guest Editors

Dear Colleagues,

The advantageous physical characteristics of protons over other types of radiation for cancer treatment have been known for many years. However, due to the high investment costs, the number of proton facilities has remained low.

However, proton therapy is catching up, and the number of facilities around the world has quadrupled in the past two decades. The capacity is still limited, but NTCP modelbased patient selection has been implemented to optimally use resources and select patients that will benefit the most from protons. In addition, various developments have been introduced in the clinic, such as intensity modulation with pencil beam scanning, robust treatment plan optimization, Monte Carlo dose calculation and CBCT imaging.

This Special Issue will cover further improvements in the quality and efficiency of proton treatments. We look forward to FLASH radiotherapy, LET- and RBE-based planning, and proton arcs, to name a few.

Dr. Erik W. Korevaar Dr. Arjen van der Schaaf *Guest Editors*







an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Samuel C. Mok

Department of Gynecologic Oncology and Reproductive Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX 77030, USA

Message from the Editor-in-Chief

Cancers is an international online journal addressing both clinical and basic science issues related to cancer research. The journal is publishing in Open Access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases. **Journal Rank:** JCR - Q2 (*Oncology*) / CiteScore - Q1 (*Oncology*)

Contact Us

Cancers Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/cancers cancers@mdpi.com X@Cancers_MDPI