ONCOLOGIE

Call for Special Issue Papers

Special Issue on Radiotherapy and Artificial Intelligence

Guest Editors

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Please submit your manuscript until 29-February-2024 to https://mc.manuscriptcentral.com/oncologie

Radiotherapy (RT) is an oncological discipline playing a relevant role in the multimodal treatment approach for the majority of cancer patients.

Artificial Intelligence (AI) uses complex mathematical algorithms to perform tasks that normally require human intelligence, such as visual perception, pattern recognition, decision-making, and problem-solving. It is divided into two types: Machine Learning and Deep Learning.

AI is becoming increasingly popular and has several applications in RT: it can be used for the prognostic stratification of patients, in the preparation phase for radiation treatment, in predicting toxicity and response to treatment, in the delivery phase of radiotherapy, to allow a better organization of patient workflow and thus in personalization of treatment.

AI can become fundamental for personalizing treatments, making them faster, more effective, less toxic in the frame of omics-based treatment personalization. The aim of this special issue is to collect studies that aim to analyze and improve the applications of AI in radiation treatment.
We welcome contributions in the form of perspectives, reviews or original research articles on the topics of RT and AI in the following topics but not limited to:

- Application of AI in RT treatment planning
- Application of AI in RT treatment delivery
- Application of AI in RT treatment evaluation
- Technologies suitable for AI in RT
- AI algorithms applied to RT

The special issue focuses on:

- Radiotherapy
- Cancer
- Artificial Intelligence
- Machine Learning
- Deep Learning

Original research articles, review articles, and perspectives are welcome for the special issue (https://www.degruyter.com/journal/key/oncologie/html).

Publication of the special issue is planned for end of April 2024.

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