

Special Issue

Development and Use of Photon Knife in Intracranial Disease

Message from the Guest Editors

Photon knife is a well-known tool for the treatment of intracranial lesions, including vascular malformation, benign or malignant tumors, as well as functional disorders. The well-established instruments for intracranial radiosurgery include LINAC-based surgery by X-knife, Novalis, gamma knife, and CyberKnife, which have different dose-response curve steepness, homogeneity, accuracy, and feasibility. Recently, the combination of these approaches with imaging techniques, molecular probes, targeted therapy, and artificial intelligence has moved photon knife into a new era. In addition, the new appearance of infectious diseases such as COVID-19 also required several modifications to reduce contact with patients by altering the fraction or frequency of frame-based treatment. Hence, we invite authors to contribute manuscripts to this Special Issue. Manuscripts on all aspects of the diagnosis and treatment of radiosurgery are welcomed, especially those relating to new imaging techniques, the application of molecular probes, combined targeted therapy, the application of AI, and the alteration of treatment protocol influenced by COVID-19.

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