

**ST 1: Keynote: Intra Ocular Proton Therapy at HZB**

Time: Tuesday 9:30–10:00

Location: PC 203

**Invited Talk**

ST 1.1 Tue 9:30 PC 203

**25 years of intra ocular proton therapy at HZB** — ●JENS HEUFELDER<sup>1,2</sup>, DINO CORDINI<sup>1,2</sup>, ROLAND STARK<sup>1,2</sup>, ANDREAS WEBER<sup>1,2</sup>, JOHANNES GOLLRAD<sup>3</sup>, GEORGIOS KOURKAFAS<sup>4</sup>, OLIVER ZEITZ<sup>2</sup>, ANDREA DENKER<sup>4</sup>, DANIEL ZIPS<sup>3</sup>, and ANTONIA JOUSSEN<sup>2</sup> — <sup>1</sup>Charité - Universitätsmedizin Berlin, BerlinProtonen am HZB, Berlin, Deutschland — <sup>2</sup>Charité - Universitätsmedizin Berlin, Klinik für Augenheilkunde CBF, Berlin, Deutschland — <sup>3</sup>Charité - Universitätsmedizin Berlin, Klinik für Strahlentherapie und Radioonkologie CBF, Berlin, Deutschland — <sup>4</sup>Helmholtz-Zentrum Berlin für Materialien und Energie, Protonentherapie, Berlin, Deutschland

For 25 years, the Department of Ophthalmology of the Charité - Universitätsmedizin Berlin has been successfully irradiating intra-ocular

tumors at the Helmholtz-Zentrum Berlin für Materialien und Energie in close cooperation with the Charité's Department of Radiation Oncology and Radiotherapy. During this period, over 4600 patients, mainly from Germany, were treated. The primary indication is uveal melanoma (90%). Other indications are iris melanoma and intra-ocular hemangiomas. For choroidal melanomas, the tumor control rate is over 96% and the eye preservation rate 94%. These successes are based on excellent interdisciplinary cooperation between all departments involved and the continuous further development of the procedures and methods used.

This article provides an insight into the technical and clinical developments of the last 25 years in areas such as radiation planning, dosimetry, application and research (flash therapy).