Dear Readers,

I wish to inform you that the Polish Brachytherapy Society (PBS) members gathered for a General Assembly on Friday, 27 October, at the National Research Institute of Oncology in Gliwice, Poland. The meeting's primary purpose was to summarize the passing term and to vote for the position of PBS Chairman and PBS Main Board members. All members listed their achievements, exchanged ideas for the future, shared their commitments, and set goals to achieve in new cadency. The PBS Chairman mandate, for the second time, was handed over to Ass. Prof. Piotr Wojcieszek, MD, PhD. Congratulations!

The JCB Autumn Issue, 5/2023 (September/October), contains eleven manuscripts: seven clinical papers, one physics contribution, a case report, and two reviews. Similar to previous issues, as many as five papers relate to gynecological malignancies. The issue opens with a report from a tertiary institution in Serbia by Marija Zivkovic Radojevic *et al*., who investigated 5-year DFS in FIGO IA endometrial cancer patients. They concluded that adjuvant BT, pre-operative MR-based staging, and institutional healthcare quality contribute to DFS prolongation in high intermediate- and high-risk patients.

In a second paper, a group from India presented their prospective study results on toxicity profile and clinical outcome in patients with locally advanced cervical cancer (LACC). Treatment consisting of image-guided IMRT (plus weekly chemotherapy) and image-guided BT achieves a low toxicity profile (no grade 3 or 4) and loco-regional control at one and two years of 96% and 92%, respectively. The third manuscript was submitted by Devin Van Elburg *et al*. (Canada/USA), in which, for standardized dose reporting, the authors assessed the dose to vaginal mucosa for gynecologic template interstitial HDR-BT. They stated that for perineal template procedures, the 2 $cm^3$ volume is the smallest representative volume that reliably reports vaginal dose and, at a minimum, should be reported to establish dose and outcome evaluation.

In the fourth paper, Baoxi Liu *et al*. (China) explored differences in dosimetry and plan parameters in 3D-printing template-based intracavitary/interstitial interpolation technology using CT-guided HDR-BT in LACC. In the 3D-printing group, they identified a reduced dose for organs at risk while ensuring target coverage and conformation. The phenomenon was especially noticeable for plans with high-risk clinical target volume of 50-60 $cm^3$.

The fifth submission came from Andrew Hoover *et al*. (USA). They attempted to determine the dosimetric impact of BT applicator displacement during intracavitary (IC) and combined intracavitary/interstitial (IC/IS) HDR-BT in cervical cancer. As concluded, applicator displacements of greater than 2 mm result in statistically significant and clinically meaningful decreases in radiation dose to HR-CTV during 3D HDR-BT treatment planning, with a corresponding increase in rectal dose. IC/IS applicator displacements lead to relatively more significant differences than those of IC applicators.

The following two clinical investigations and one of the reviews are ocular melanoma-oriented.

Ewa Zwolińska *et al*. (Poznań, Poland) reviewed the long-term outcomes of ruthenium BT for iris and iridociliary melanoma. In a median follow-up of over 67 months, they noted only one (4%) recurrence. $^{106}$Ru-based BT with available applicators is an effective and safe way of eyeball-conserving treatment for iris and iridociliary melanomas. Furthermore, no significant late complications were observed.

In another manuscript by David Miguel *et al*. (Valladolid, Spain), the authors compared before and best-corrected visual acuity (VA) after iodine-125 episcleral brachytherapy for uveal melanoma. Based on over 72-month extended follow-up, the decrease and maintenance of VA depend on the patient's initial VA; most patients experience a marked VA worsening, and patients with a higher baseline retain VA best over time. Once the patient is cured of the eye malignancy, treatment sequelae may develop with time.

Weronika Mularska *et al*. (Poznań, Poland) provided a deep literature search on radiation retinopathy and maculopathy following episcleral BT for intra-ocular tumors, and comprehensively summarized currently available treatment options.

In a single physics contribution, Nozomi Nakajima *et al*. (Tsukuba, Japan) aimed to construct a system that analyzes the source dwell positions during BT irradiation using CT scout images. The proposed system can be easily implemented, and analyze the absolute coordinates of the source dwell positions in image-guided BT. It could prevent inaccurate irradiation by verifying whether BT was adequately performed.

In a case report, researchers from the USA presented the first application of GammaTile $^{131}$Cs-based BT with maximal safe resection of glioma in a patient with limited scleroderma. Because of its dosimetric and clinical advantages, the approach resulted in a 12-month post-resection with no evidence of disease recurrence, radiation necrosis, or skin changes to the surrounding scalp.

Last, but equally important paper, is an exciting systematic review submitted by an experienced Italian group (Catania, Rome, Bologna, Sassari). The study aimed to evaluate the efficacy of interventional radiotherapy (IRT BT) in primary nasopharyngeal cancer (NPC) in comparison with external beam radiotherapy (EBRT) alone. NPCs are very aggressive, and recurrence rate after radical therapy is high. The presented data suggest that IRT may improve the results of EBRT in primary NPC, especially when using new technologies.

I wish you all pleasant reading experiences,

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Editor-in-Chief,
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