Pediatric CNS Germinoma
Hill-Kayser et al

Hill-Kayser and colleagues from the Pediatric Oncology editorial team have summarized the very best recent data on germinoma, a disease in which all efforts are now focused on minimizing toxicity while maintaining the current excellent disease control rates.
Page 227

Treating Oligometastatic Disease With SABR
Chang et al

These authors take a look at our current understanding of oligometastatic disease and lay down some principles to guide practice and future trials. They feel that response to systemic therapy is a good measure of those most likely to benefit and suggest how this, together with other available clinical parameters, may be combined in decision making.
Page 257

Beyond Oligometastases
Palma et al

Palma and colleagues take a contrarian view of oligometastatic disease. They argue that the state is somewhat arbitrarily defined and denies the vast majority of patients with metastatic disease ablative therapies. As a thought experiment, they ask us to consider treating all metastatic disease, not with the goal of cure, not even with ablative doses, but with the goal of growth delay and extended survival, much as we would use a systemic therapy.
Page 344

Single-Institution Phase 1/2 Prospective Clinical Trial of Single-Fraction, High-Gradient Adjuvant Partial-Breast Irradiation for Hormone Sensitive Stage 0-I Breast Cancer
Kennedy et al

This team from Washington University report a phase II study testing high-gradient, single-dose partial breast irradiation for early breast cancer. The dose to the surgical bed was 20Gy and 5Gy to the breast tissue 1cm away. With 25 months of median follow-up they describe good patient and physician-reported cosmesis and only one in-field recurrence in 50 patients.
Page 360

Taking Care with FLASH Radiation Therapy
Hendry

FLASH radiation is radiotherapy delivered at very high dose rates (40-150Gy/sec). It has a curious and poorly understood biology but seems to induce local hypoxia and thus radioprotection in normal tissues without sparing tumor tissue, which may already be hypoxic. Hendry discusses the strength of evidence for these mechanisms, and goes on to further discuss the role of threshold dose, hypofractionation, and proton therapy.

Ten-Year Outcomes of Moderately Hypofractionated Salvage Postprostatectomy Radiation Therapy
Chin et al

This group from Manchester UK have, as a matter of practice, used moderate hypofractionation in their salvage treatment for patients after prostatectomy. They report on 112 patients with a median of 10 years of follow-up. They report long term disease control outcomes comparable to conventionally fractionated RT and were able to
perform an external validation of the Tendulkar salvage nomogram. An associated editorial by Nagar and Spratt argues that the bar to adopt new hypo-fractionated regimens should, at minimum, focus on multi-center prospective trials demonstrating acceptable toxicity and QOL out at least to 2-3 years post-treatment. NRG GU003 will provide the answer.

Page 288

Radiation-Associated Secondary Malignancies in BRCA Mutation Carriers Treated for Breast Cancer

Schlosser et al

Radiation therapy, as part of standard breast cancer treatment, is associated with a small increased risk of in-field second primary malignancy (SM). SM rates following RT in BRCA mutation carriers, have rarely been reported. These authors from Israel analyzed a population of BRCA carriers irradiated for breast cancer with long follow-up. They identified no signal for an increased risk of radiation induced SMs compared to the general breast cancer population, and thus felt the risk, if present, to be very small. While larger cohorts and longer follow-up are needed, these results support the safety of radiation therapy in BRCA-carriers.

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Podcast

The latest podcast by Anthony Zietman, MD, Editor in Chief of the International Journal of Radiation Oncology, Biology, Physics focuses on:

Oligometastatic disease and beyond

https://www.redjournal.org/content/podcast