Enhancing Interventional Oncology





Interventional oncology continues to grow and evolve with the development of minimally invasive treatment options for cancer that are often faster, safer, and less painful alterna-

tives to surgery. Increasing clinical data and the potential of locoregional endovascular and percutaneous therapies to work in a synergistic manner with chemotherapy, targeted agents, and immunotherapy have galvanized the basic science and clinical research in this arena. Given the rapid advancements in technology and techniques, in this issue of *Endovascular Today*, it is our goal to provide practical insights and perspectives into the exciting current state of interventional oncology.

To open our coverage, Robert Abraham, MD; Robert Lewandowski, MD; Ripal T. Gandhi, MD; and David M. Liu, MD, share their collective insight on the technical and procedural innovations for yttrium-90 radioemboetlization, including an overview of the investigational next-generation technologies.

Then, Eric Wehrenberg-Klee, MD, and Suvranu "Shoey" Ganguli, MD, take a look back at some of the most significant interventional oncology studies published within the recent literature and contextualize the impact that each has had on the field.

Dr. Gandhi, along with Horacio Asbun, MD; Michael Chuong, MD; Filipe Kunzler, MD; and Govindarajan Narayanan, MD, deliver an update on the available minimally invasive therapies for the management of pancreatic cancer, including ablative options as well as radiation and endovascular therapies.

Next, we asked expert panelists to provide their top clinical and technical insights across a variety of oncology disease states. Our panel includes Siddharth A. Padia, MD, (hepatocellular carcinoma); Theodore Bryan, MD, Rebecca Bennett, MD, and Nadine Abi-Jaoudeh, MD, (cholangiocarcinoma); Raul N. Uppot, MD, (renal cell

carcinoma); Robert Suh, MD, (lung cancer); Paul I. Mallinson, MBChB, and Peter L. Munk, MDCM (pelvic bone metastases); and Miyuki Sone, MD, and Yasuaki Arai, MD, (palliative care).

Next, Darren Klass, MD; Anastasia Hadjivassiliou, MBBS; and John Chung, MD, offer a primer on available devices to aid in transradial access for hepatic oncologic interventions.

Edgar D. St. Amour, MD; David Hays, MD; and Dr. Gandhi, then contribute their top tips for interventional oncologists treating patients in an office-based setting, including gaining proper hospital backup, gathering appropriate support staff, and more.

Then, Joseph P. Erinjeri, MD, and Daniel Y. Sze, MD, offer interventional radiologists an overview of the relevant terms and concepts of immunology as well as an introduction to checkpoint inhibitors, a leading type of immunotherapy.

Our focus on interventional oncology concludes with an update on the treatment of cancer-associated thrombosis by Nicholas Fidelman, MD, including current recommendations, recently published trial data for anticoagulation therapy, and the application of endovascular interventions.

Finally, our featured interview is with Akhilesh K. Sista, MD, who discusses his journey in creating and overseeing the developing PE-TRACT trial, as well as his experience managing a pulmonary embolism response team in New York City, and more.

We want to thank the authors—who are truly global experts—for contributing to this issue and providing practical knowledge and technical tips and tricks that will be useful to the practicing interventionalist. It is our hope that continued research will result in well-defined quantifiable and reproducible outcomes, which will better define the role of interventional oncology in the spectrum of treatment options for patients with cancer.

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