


## SCHEDULE-AT-A-GLANCE

Monday, October 2

7:00 a.m. - 8:00 a.m. 

Radiation Oncology Policy Update Breakfast  
Room 5

7:00 a.m. - 8:00 a.m.

International Breakfast  
Room 6 B

8:00 a.m. - 8:30 a.m.

SH 01 - Central Nervous System  
Room 6 C/F

8:00 a.m. - 8:30 a.m.

SH 02 - Breast  
Room 6 D/E

8:00 a.m. - 9:00 a.m.

EDU 06 - Fearless - A Multidisciplinary Approach to Recognizing and Addressing Fear of Cancer Recurrence in Cancer Survivors  
Room 30 A/B/C

8:00 a.m. - 9:00 a.m.

EDU 07 - ASTRO/IASLC Joint Session - Modern Principles in the Diagnosis and Management of Radiation Pneumonitis  
Room 33

8:00 a.m. - 9:00 a.m.

EDU 08 - Pushing the Boundaries: Re-Irradiation for Pediatric Brain Tumors  
Room 30 D/E

8:00 a.m. - 9:00 a.m.

Panel 05 - ASTRO/SWRO Joint Session - Getting It All Done - Practical Strategies at All Career Stages  
Room 2

8:00 a.m. - 9:00 a.m.

Panel 06 - Salivary and Sinonasal Tumors: Multi-Disciplinary Individualization of Patient Care  
Room 29

8:00 a.m. - 9:00 a.m.

Panel 07 - ASTRO/SPRO Joint Session - Palliative Re-Irradiation  
Room 1

8:00 a.m. - 9:00 a.m.

ST 01 - Delivering Equitable and Sustainable Oncologic Care in a Changing Environment - Identifying Opportunities to Reduce, Reuse, Recycle  
Room 31

8:00 a.m. - 9:00 a.m.

SS 07 - Bio 2: Genomics, Biomarkers, and Tumor Biology  
Room 4

*Continued on next page*



## Clinical Trials session highlights advances in radiation therapy that improve patient experiences, reduce health care costs

BY LAURA WILLIAMSON, SCIENCE WRITER

**THE CLINICAL TRIALS SESSION** focused on advances in radiation therapy that expanded treatment options for people with a wide range of cancers, improving the patient experience and reducing health care costs. The session was moderated by Kenneth Rosenzweig, MD, FASTRO, Icahn School of Medicine, Mount Sinai in New York City and Andrea Ng, MD, FASTRO, MPH, Dana-Farber/Brigham and Women's Cancer Center in Boston.

The session's first presentation was given by Bradford Hoppe, MD, MPH, FASTRO, from the Mayo Clinic in Jacksonville, Florida, whom Dr. Rosenzweig introduced as one of two recipients of the 2023 Leibel Memorial Award. The Award is given to early- to mid-career American Board of Radiology certified or board-eligible principal

investigators chosen each year by the Annual Meeting Steering Committee based on their abstract's peer-reviewed scores.

Dr. Hoppe presented "Consolidative Radiotherapy in Place of Autologous Stem Cell Transplant in Patients with Low-Risk Relapsed/Refractory (R/R) Classic Hodgkin Lymphoma (cHL) Treated with Nivolumab plus Brentuximab Vedotin." In this study, investigators wanted to know if they could replace high dose therapy and autologous stem cell transplant — treatments that are costly and carry a high rate of adverse side effects — with the less intensive combination of nivolumab and brentuximab vedotin, followed by consolidative involved site radiation therapy (ISRT). Their findings suggest this treatment regimen is an effective second line therapy for

*Continued on page 4*



## Presidential Symposium brings patient perspective into focus, explores future directions and challenges for clinical trials domestically and globally

BY JENNIFER JANG, ASTRO COMMUNICATIONS

**THE PRESIDENTIAL SYMPOSIUM** offered perspectives for attendees to explore as they considered patients' roles in clinical trials. ASTRO President Jeff Michalski, MD, MBA, FASTRO, chose this year's theme to shine a spotlight on patient engagement in advancing research and clinical care.

James Dignam, PhD, moderated Session I on Clinical Trial Design, setting the stage looking at the challenges of trials, including the tension between broad inclusivity versus focused application, rapidity of results versus reliable

definite endpoints. Dr. Dignam noted, "prospective clinical trials as yet remain the bedrock of evidence-based medicine, lending the most credible information about effectiveness of interventions."

Nolan Wages, PhD, spoke on "Novel Designs for Contemporary Early Phase Trials," including more efficient early phase designs that yield correct dosing, and trials that explore late onset of toxicities. Efficacy without toxicity is the most desirable endpoints.

*Continued on page 6*



Inside  
This  
Issue

### RADIATION ONCOLOGY INSTITUTE

An update from the ROI — celebrating new awards and successes.

Page 6

### HEALTH POLICY FELLOWS

Meet the six HP Fellows and learn more about the program.

Page 7

### PRESS HIGHLIGHTS

Highlights from ASTRO's press program and news briefings.

Page 7

### RAD ONC WORKFORCE

More on ASTRO's recently released workforce study.

Page 13

## Industry-Expert Theater



# Current Controversies in Prostate Cancer Perirectal Gel Spacing

Monday, Oct. 2, 2023

Noon – 1 p.m. PDT

Theater 1

Lunch will be provided\*

### MODERATOR



#### Steven J. Frank, M.D.

Professor and Deputy Head, Division of Radiation Oncology, Executive Director, Particle Therapy Institute, The University of Texas MD Anderson Cancer Center, Houston, Texas, U.S.

### PRESENTERS

#### SpaceOAR™ Hydrogel: Facts & myths



#### Michael Zelefsky, M.D.

Radiation Oncologist, Professor of Radiation Oncology, Director, Genitourinary Oncology and Brachytherapy, Perlmutter Cancer Center New York University School of Medicine, New York, New York, U.S.

#### Clinical utility of SpaceOAR Vue™ Hydrogel CT visibility



#### Jason Efstathiou, M.D., DPhil, FASTRO, FACRO

Radiation Oncologist, Professor of Radiation Oncology, Harvard Medical School, Vice-Chair, Faculty & Academic Affairs, and Director, Genitourinary Service, Department of Radiation Oncology, Clinical Co-Director, The Claire and John Bertucci Center for Genitourinary Cancers, Massachusetts General Hospital, Boston, Massachusetts, U.S.

#### The necessary ingredients for a quality SpaceOAR™ Hydrogel placement



#### Brian Baumann, M.D.

Radiation Oncologist, Springfield Clinic Cancer Center, Springfield, Illinois, U.S.

#### Reflections on building a high-volume SpaceOAR™ Hydrogel center



#### Daniel Spratt, M.D.

Radiation Oncologist, Vincent K Smith Chair of Radiation Oncology, UH Seidman Cancer Center, Chair and Professor, Department of Radiation Oncology, Case Western Reserve University, Cleveland, Ohio, U.S.

## ASTRO Annual Meeting 2023 | Visit booth #2235

\*This invitation is extended only to Healthcare Providers. Spouses and other guests are not permitted to attend. Vermont licensed physicians are not permitted to attend. Additionally, Government employees should consult with their agency's or institution's ethics officer or ethics committee to confirm your attendance is permitted.

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# SCHEDULE AT A GLANCE

Monday, October 2

**8:00 a.m. - 9:00 a.m.**

**QP 03** - Phys 1: Segmentation  
 Room 8

**9:15 a.m. - 10:15 a.m.**

**Keynote Address 01:** Cancer Support 3.0: A New Era in Compassion  
 Arif Kamal, MD, MBA, MHS, American Cancer Society  
 Ballroom 20

**9:30 a.m. - 10:00 a.m.**

**PRO Meet the EIC**  
 Lobby D, near the ASTRO Resource Center

**10:30 a.m. - 12:00 p.m.**

**EDU 09** - Developing as an Early Career Physician  
 Room 31

**10:45 a.m. - 11:45 a.m.**

**QP 04** - Bio 3: Normal Tissue Injury and Immuno-oncology  
 Room 8

**10:45 a.m. - 11:45 a.m.**

**QP 05** - H&N 1: Optimizing Patient-Centered Quality of Life and Function  
 Room 7

**10:45 a.m. - 12:00 p.m.**

**ST 02** - Narrative Medicine and the Practice of Crafting Stories  
 Room 2

**10:45 a.m. - 12:00 p.m.**

**International 04** - International Radiation Oncology Training and Educational Opportunities  
 Room 5

**10:45 a.m. - 12:00 p.m.**

**EDU 10** - Which Patients Benefit from Radiation Therapy in Diffuse Large B-Cell Lymphoma in 2023? Recent Evidence and Future Developments  
 Room 33

**10:45 a.m. - 12:00 p.m.**

**Panel 08** - Evolving Therapeutic Strategies in the Multidisciplinary Management of Patients with Hepatocellular Carcinoma - Improving Outcomes  
 Room 1

**10:45 a.m. - 12:00 p.m.**

**EDU 12** - Brachytherapy for Cervical Cancer from A to Z: Optimizing Patient Selection, Treatment Delivery, and Patient Experience  
 Room 29

**10:45 a.m. - 12:00 p.m.**

**SS 08** - GU 2: Clinical Trials in Prostate Cancer  
 Room 6 C/F

**10:45 a.m. - 12:00 p.m.**

**SS 09** - Lung 1: Clinical Trials and ctDNA Prognosticators for NSCLC  
 Room 6 D/E

**10:45 a.m. - 12:00 p.m.**

**SS 10** - Phys 2: Best of Physics  
 Room 30 A/B/C

**10:45 a.m. - 12:00 p.m.**

**PQA 02** - Central Nervous System and Palliative Care  
 Hall B2

**12:00 p.m. - 1:00 p.m.**

**The Women of ASTRO Luncheon** - Family Leave: Are We Making Progress? Sponsored by AAWR-ASTRO-SWRO-ROWPG  
 Room 6 B

**1:00 p.m. - 1:30 p.m.**

**Presidential Address**  
 Jeff Michalski, MD, MBA, FASTRO  
 Ballroom 20

**1:30 p.m. - 3:00 p.m.**

**Plenary Session**  
 Ballroom 20

**3:00 p.m. - 4:00 p.m.**

**Panel 09** - Current Approaches to Management of Bone Sarcomas in Adolescent and Young Adult Patients  
 Room 29

**3:00 p.m. - 4:00 p.m.**

**Panel 10** - Challenging Cases in Patient Safety: The Nation's Experience Navigating New Technologies as Told to RO-ILS  
 Room 4

**3:00 p.m. - 4:00 p.m.**

**Panel 11** - Oligometastatic Prostate Cancer: How Far Do We Go?  
 Room 6 C/F

**3:00 p.m. - 4:00 p.m.**

**Panel 12** - Leptomeningeal Metastases: Novel Therapies, Future Directions, and the Patient's Perspective  
 Room 6 A

**3:00 p.m. - 4:00 p.m.**

**Panel 14** - ASTRO/NRG Joint Session - Far Beyond "Thoughts and Prayers": Crafting an Interdisciplinary DEI Action Toolkit to Enhance Basic to Clinical Cancer Research  
 Room 2

**3:00 p.m. - 4:00 p.m.**

**EDU 13** - Clinical Considerations and Practical Approaches to Re-Irradiation  
 Room 1

**3:00 p.m. - 4:00 p.m.**

**International 05** - Role of Private Sector and Industry in Improving Radiation Access in Low- and Middle-Income Countries  
 Room 5

**3:00 p.m. - 4:00 p.m.**

**SS 11** - GU 3: Novel Prognostication Techniques for Prostate Cancer  
 Room 6 D/E

**3:00 p.m. - 4:00 p.m.**

**SS 12** - Phys 3: FLASH and Novel Techniques  
 Room 30 A/B/C

**3:00 p.m. - 4:00 p.m.**

**SS 13** - GYN 2: Improving Patient Centered Outcomes through Clinical Trials in Gynecological Cancers  
 Room 31

**3:00 p.m. - 4:00 p.m.**

**SS 14** - Bio 4: Experimental Therapeutics and Molecular Imaging  
 Room 30 D/E

**3:00 p.m. - 4:00 p.m.**

**QP 06** - HSR 1: Centering the Patient in Health Services Research  
 Room 8

**3:00 p.m. - 4:00 p.m.**

**PQA 03** - Breast Cancer and Nonmalignant Disease  
 Hall B2

**4:00 p.m. - 5:00 p.m.**

**Diversity, Equity, and Inclusion Reception**  
 Room 32

**4:00 p.m. - 5:00 p.m.**

**Exhibit Hall Networking Reception**  
 Hall B-G

**5:00 p.m. - 6:00 p.m.**

**Panel 13** - Automatic Segmentation in Radiation Oncology  
 Room 6 D/E

**5:00 p.m. - 6:00 p.m.**

**International 06** - Models of Global Health Faculty Track: No One Track Fits All!  
 Room 5

**5:00 p.m. - 6:00 p.m.**

**EDU 14** - American Board of Radiology: 2023 Updates and Discussion  
 Room 30 D/E

**5:00 p.m. - 6:00 p.m.**

**EDU 15** - Elective Nodal Irradiation and Radiation-Immunotherapy Combinations: Biological and Clinical Insights  
 Room 30 A/B/C

**5:00 p.m. - 6:00 p.m.**

**SS 15** - Breast 2: Toxicity  
 Room 6 C/F

**5:00 p.m. - 6:00 p.m.**

**SS 16** - Phys 4: Motion Monitoring and Deep Learning  
 Room 1

**5:00 p.m. - 6:00 p.m.**

**SS 17** - HEME 1: Supercharged CAR T Cell Therapy: When, Where, and How Hard to Strike With Radiation for Lymphomas  
 Room 31

**5:00 p.m. - 6:00 p.m.**

**QP 07** - Lung 2: Immune Checkpoint Inhibition (ICI): Incorporation Into SCLC Management; Impacts on Toxicity for LA-NSCLC  
 Room 8

**5:00 p.m. - 6:00 p.m.**

**PQA 04** - Biology and Patient Reported Outcomes  
 Hall B2

# STREET TALK

**What is one thing you want attendees to know about your presentation?**



"We are thrilled to have leaders in the field speak to the biomarker-based advances in gynecologic malignancies. Topics will range from HPV ctDNA and cfDNA for HPV-mediated cervical cancers to machine learning and mismatch

repair/estrogen receptor status in endometrial cancers. Attendees will learn the applications and future directions of such data in future clinical trials." - Parul N. Barry, MD



"Online adaptive radiotherapy (ART) is firmly here to stay within our field, just like IMRT planning took the field by storm in the 1990s. Now, there are numerous treatment platforms capable of online ART, including CT-guided technology.

This is all possible because the on-board imaging is phenomenal, almost to the point of being like diagnostic scanners. It is easier than ever to translate CT-guided ART to high impact sites like the upper abdomen, where ART arguably has the biggest potential for early clinical impact. I am so excited to help make online ART maximally globally accessible by using CT-guided platforms."

- Lauren Henke, MD



"I am so excited to present on the ASTRO/ESTRO Joint Session: An Overview of ASTRO and ESTRO Oligometastatic NSCLC Clinical Practice Guidelines and Case Review and Interactive Discussion. What I want people to take away from this

is that oligometastatic disease is quite prevalent and we need to have a role in this special subset of patients whom we can really help with radiation by extending their survival and controlling their disease longer. I think this often goes unrecognized in the era of modern systemic therapies since there are so many of them, and often people forget to incorporate local therapy, which really can give the patient a better quality of life and prolong survival. I hope people take away from this the importance of our local therapies and radiation therapy in the setting of oligometastatic disease."

- Salma Jabbour, MD

## ASTRO Daily News 2023

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## CLINICAL TRIALS CONTINUED

children and young adults with low-risk relapsed/refractory classic Hodgkin lymphoma (RRHL).

“This regimen was very well tolerated with limited grade 3 treatment-related adverse events and no new toxicities detected within 100 days of follow-up,” Dr. Hoppe said. “The findings suggest children and young adults with low-risk, relapsed classic Hodgkin lymphoma can be salvaged with low toxicity chemoimmunotherapy and ISRT and may not require high dose therapy for cure.”

Next, lead study author Kathrin Kirchheiner, PhD, MSc, of the Medical University of Vienna in Austria, presented “Association Between Regular Vaginal Dilation and/or Sexual Activity and Long-Term Vaginal Morbidity in Cervical Cancer Survivors.” This large, multi-institutional study found regular sexual activity and/or use of a vaginal dilator could reduce the risk for long-term, irreversible side effects in people with cervical cancer who had been treated with a combination of chemotherapy, external beam radiation therapy and brachytherapy.

Those who had regular intercourse and used a vaginal dilator had the lowest risk of vaginal stenosis, followed by sexually active people not using dilators and people who only used dilators. The highest risk was for those who did neither. However, while the risk for vaginal stenosis was lower, regular dilation raised the risk for mild vaginal dryness and bleeding. “These data are based on correlations and do not represent a cause and effect so we cannot draw any solid conclusions,” Dr. Kirchheiner said. “But the long-term data support the clinical recommendation for dilation and sexual activity after radiation.”

“Curing cancer is always our first priority,” she said. “But with a growing number of relatively young cervical cancer survivors, the prevention and management of side effects becomes increasingly important to ensure a better quality of life.”

Shankar Siva, PhD, MBBS, of the Peter MacCallum Cancer Centre in Australia, presented “TROG 15.03/ANZUP International Multicenter Phase II Trial of Focal Ablative STereotactic RAdiotherapy for Cancers of the Kidney (FASTRACK II).” This multi-center, phase II trial found targeted, high-dose radiation achieved 100% local control and cancer-specific survival for longer than three years among older people with renal cell carcinoma whose tumors were inoperable.

Dr. Siva pointed out that kidney cancer has been increasing worldwide over the past several decades, most rapidly among people 70 and older, many of whom are at high risk for surgery or who have inoperable tumors. “We’ve demonstrated that a novel treatment — SABR — delivered in an outpatient setting is able to achieve unprecedented efficacy for patients with inoperable kidney cancer,” he said. “There’s an unmet need for curing this type of cancer and our findings point to the potential of radiation therapy to address that need.”

“Long-Term Follow-Up Analysis of NRG Oncology RTOG 0415: A Randomized Phase III Non-Inferiority

Study Comparing Two Fractionation Schedules in Patients with Favorable-Risk Prostate Cancer” was presented by lead study author W. Robert Lee, MD, MS, MEd, FASTRO, Duke University Medical Center in Durham, North Carolina. Investigators provided a long-term update of this randomized trial, confirming that a hypofractionated radiation schedule was just as effective as — if not better than — a conventional radiation schedule for patients with low-risk prostate cancer. At a median follow up of over 12 years, they showed that long-term disease-free survival was non-inferior to conventionally fractionated radiation, biochemical failure was reduced with hypofractionation and there were no significant differences in late-grade 3 or 4 toxicity between the two arms.

“Long-Term Outcomes of NRG/RTOG 0126, a Randomized Trial of High Dose (79.2Gy) vs. Standard Dose (70.2Gy) Radiation Therapy (RT) for Men with Localized Prostate Cancer,” was presented by ASTRO President Jeff Michalski, MD, MBA, FASTRO, of Washington University in St. Louis. In the long-term update of this phase III trial for patients with localized prostate cancer, investigators confirmed that, at a median follow up of 12 years, escalating the radiation dose continued to have no effect on overall survival, but significantly improved the time to prostate cancer death, incidence of biochemical failure, time to local progression and time to distant metastases and need for salvage therapies. They also had higher rates of grade 2 toxicities, but there was no difference in grade 3 toxicities between the two arms.

Discussant Dayssy Alexandra Diaz Pardo, MD, MS, from The Ohio State University in Columbus, Ohio, said both Dr. Lee’s and Dr. Michalski’s studies “changed paradigms about how we treat prostate cancer” and could result in decreased costs to the health care system.

Next, “Patient-Reported and Toxicity Results from the FABREC Study: A Multicenter Randomized Trial of Hypofractionated vs. Conventionally Fractionated Postmastectomy Radiation Therapy After Implant-Based Reconstruction,” was presented by senior study author Rinaa Punglia, MD, MPH, FASTRO, of the Dana-Farber Brigham Cancer Center in Boston. In a first-of-its-kind study, investigators compared quality-of-life and clinical outcomes of hypofractionated and conventionally fractionated radiation therapy for people with breast cancer who underwent implant-based breast reconstruction immediately following a mastectomy.

They found the shorter-course radiation was just as effective as long-course therapy without increasing side effects and slightly improved quality of life for women under 45 years old, saving them time and money. Treatment breaks also were significantly reduced using hypofractionation.

“Enzalutamide or Placebo Plus Leuprolide Acetate and Enzalutamide Monotherapy in Men with High-Risk Biochemically Recurrent Prostate Cancer and Prior Radiotherapy: EMBARK Subgroup Analysis,” was presented






# P-Cure Booth #4023

by Swetha Sridharan, MD, Calvary Mater Newcastle Hospital in Waratah, New South Wales, Australia. This was a subgroup analysis from a phase III study of patients with high-risk biochemical recurrence treated with hormone therapy, comparing metastasis-free survival in people with and without prior radiotherapy.

Dr. Sridharan's team had previously shown treatment with the hormone combination therapy of enzalutamide plus leuprolide acetate and enzalutamide monotherapy were superior to placebo plus leuprolide acetate. This new subgroup analysis found the benefit may be limited to people who had prior radiation.

The session concluded with a presentation from Denise Bernhardt, MD, Technical University of Munich (TUM), Radiation Oncology in Bavaria, who reported findings from "Stereotactic Radiotherapy vs. Whole Brain Radiation Therapy for Patients with 1-10 Brain Metastases from Small Cell Lung Cancer: Results of the Randomized ENCEPHALON (ARO 2018-9) Trial." This pilot trial was a prospective, randomized, two-arm phase II study to compare tumor control and neurocognitive risks in patients treated with stereotactic radiotherapy (SRT) versus those treated with whole brain radiation therapy (WBRT).

Dr. Bernhardt said WBRT has been the standard of care for patients with small cell lung cancer and brain metastases, even though there is low evidence to support this. In her study, she showed patients treated with WBRT had significantly greater risk for a decline in neurocognitive function three months following treatment than those in the SRT arm, with no significant difference in survival probability between the two groups. The findings led her to conclude that SRT should be considered a standard of care for people with brain metastases from SCLC.

These studies can be found in the Proceedings of the 2023 ASTRO Annual Meeting. 



## FDA-cleared Proton System in Linac Vaults

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# Celebrating Innovations: New Awards and Successes from ROI

**FROM DELIVERING NEW AWARDS** to launching the new request for research grant proposals, the Radiation Oncology Institute (ROI) — ASTRO's Research foundation — had a lot to celebrate during their inaugural Sunday Brunch. The event welcomed attendees to announce three new Publication Excellence Awards and celebrate advancements in research funded by ROI.

## 2023 Publication Excellence Award winners

ROI honored three exceptional early career investigators for their outstanding contributions to the field as the lead authors of recent manuscripts that address an important problem or critical barrier to progress in radiation oncology and have the potential to change practice.

This year's ROI Publication Excellence Award winners are:

- **Joshua Palmer, MD, The Ohio State University**  
“Association of Long-term Outcomes with Stereotactic Radiosurgery vs. Whole-Brain Radiotherapy for Resected Brain Metastasis” published in JAMA Oncology
- **Alexander Rühle, MD, Leipzig University**  
“Evaluation of Concomitant Systemic Treatment in Older Adults with Head and Neck Squamous Cell Carcinoma Undergoing Definitive Radiotherapy” published in JAMA Network Open

- **Leila Tchelebi, MD, Northwell Health**  
“A Decade of Prospective Peer Review: Impact on Safety Culture and Lessons Learned in a Multicenter Radiation Medicine Department” published in Practical Radiation Oncology

## ROI grantees discuss unique collaboration

Collaborators and past ROI award winners Julian Hong, MD, MS, and Nitin Ohri, MD, MS, shared how they ended up working together on a new machine learning (ML) algorithm that analyzes daily step counts to predict hospitalization for patients undergoing chemoradiation. Dr. Ohri was one of the first radiation oncologists to investigate how wearables can enhance cancer care and received a grant from ROI in 2016 to conduct a clinical trial of a walking program that gave patients daily step count goals through activity trackers. Dr. Hong won the 2021 ROI Publication Award for his research using ML to direct care and reduce the likelihood that a patient would require acute care during radiation or chemoradiation.

Dr. Ohri and Dr. Hong independently combined their expertise, and part of the grant that Dr. Hong received in conjunction with the Publication Award supported their work on the new ML algorithm, which uses some of the step count data that was collected during Dr.



Ohri's ROI-funded clinical trial. They presented preliminary results at last year's ASTRO Annual Meeting that showed that adding step counts to the ML model better predicted hospitalization risk. Progress in this promising area of research continues. Dr. Ohri is leading an NRG clinical trial on step counts, and Dr. Hong was awarded an R01 grant from the National Cancer Institute to test the ML model at multiple institutions over five years.

“ROI is the only charity accelerating progress in radiation therapy,” shared Colleen Lawton, MD, FASTRO, President of the ROI Board of Trustees. “Since 2006, ROI has funded more than \$4.3 million in research to drive bold and innovative ideas to improve the lives of people with cancer.”

To learn more about ROI's new research funding opportunity “Advancing Care for All: Innovations to Drive Access to Radiotherapy”, or to learn how to make a donation to drive the work of ROI, visit their booth in Hall E Lobby or [ROIInstitute.org](http://ROIInstitute.org).

## PRESIDENTIAL SYMPOSIUM CONTINUED

Matthew Sydes, MSc, CStat, asked “Can We Improve Late Phase Clinical Trials?” He reviewed STAMPEDE, with examples of expedited recruitment, research waste and how to speed up data and reports into practice. The trial has gone on to deliver practice-changing results multiple times.

Eleanor Walker, MD, moderated Session II, Diversity in Clinical Trials, introducing issues surrounding underrepresentation. Lack of diversity poses numerous problems: bias, inability to generalize study findings, safety and efficacy issues, and delays in progress.

Panel participants included Desiree A.H. Walker, patient advocate; Karen Winkfield, MD, PhD, FASTRO; Electra Paskett, PhD; and Brian Rivers, PhD, MPH. They stressed the importance of diversity both within enrolled subjects and the research team.

Other ideas to incorporate including for LGBTQ+, native and rural populations, potentially involve multi-level approaches toward research participation, and options such as novel digital tools, navigators, and resources such as CBOs, faith-based organizations, i.e., sites of trust. Dr. Rivers summarized: “We must dismantle the structural barriers that exist within our health system.”

Bryan Hwang, MD, and Barbara Barclay, Patient Advocate, facilitated the third session as a “fireside chat,” comprised of participant voices from clinical research.

Participants Catherine Circo, Roberta Albany and Joseph Radocchio revealed factors that patients face when deciding to participate. Ms. Albany had her son in mind: “Most of us do want to participate because we understand if we're not in it, then how can we know if treatments are going to help us save our lives?”

Mr. Radocchio wanted to help push science forward, influenced by learning that certain options like immunotherapy could become part of standard of care.

Themes of building trust continued to emerge. Ms. Albany gave a practical idea of having clinicians wearing buttons saying, “Ask me about clinical trials,” an inexpensive way to encourage asking early on to improve outcomes.

The final session, led by Mitchell Machtay, MD, FASTRO, was comprised of leadership including Quynh-Thu Le, MD, FASTRO, Winette van der Graaf, MD, PhD, Trevor Leong, MD, and May Abdel-Wahab, MD, PhD, FASTRO. Together, they highlighted challenges and opportunities facing multiple international organizations, providing updates from various international societies.

Specifically, Dr. Le provided updates on NRG Oncology (NRG), noting that the goal of the NCTN System is to perform late-stage cancer trials that define the standards of care for the U.S. and the world, and that current aims are to investigate and

test novel medical technologies. Dr. van der Graaf provided updates on European Organisation for Research and Treatment of Cancer (EORTC), with the mission of EORTC to improve the quality of life and survival rates of patients, by generating robust medical evidence, setting standards, and acting as a reference for methodological research.

Dr. Leong updated on the Trans-Tasman Radiation Oncology Group Cancer Research (TROG) and stressed that the major challenge is to maintain a diverse portfolio of clinical trials that is available to cancer patients. Dr. Abdel-Wahab of International Atomic Energy Agency (IAEA) shared: “Research policies that lack advance consultation, provide excessive demands, and are overly broad in reach threaten to reverse progress in international collaboration.”

Dr. Michalski closed with summarizing that opportunities are abundant to make trials more efficient and effective. Looking at issues of inclusivity and disparities, concrete suggestions are available on how to engage and advocate for patients to enroll in clinical trials. The refrain emerged repeatedly: build trust and work with patient advocates prior to cancer onset. And cementing those intentions, a big takeaway was the exhortation to clinicians, simply ask. So many are willing to participate if simply asked in the first place.



## Next generation of health policy leaders participate in ASTRO's Health Policy Fellowship

BY AMAR REWARI, MD, MBA

**ASTRO IS AN ACTIVE AND ENGAGED PARTICIPANT** on several health policy fronts, including radiation oncology code development and valuation, coding guidance, payer engagement and payment reform. These health policy initiatives are driven by the physician leaders on ASTRO's Health Policy Committee who provide thought leadership and subject matter expertise.

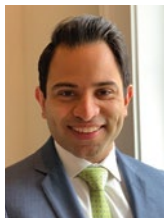
To ensure that the next generation of health policy leaders is ready to take the helm, ASTRO developed its Health Policy Fellowship program, which is designed to provide exposure to ASTRO's reimbursement and coding activities. The Fellowship is a year-long program designed to develop competency and leadership in radiation oncology coding and coding guidance, as well as the creation, revision and valuation of radiation oncology CPT codes through the AMA CPT and RUC processes. Additionally, Health Policy Fellows learn the importance of strategy development, planning and implementation in response to Medicare and third-party payer reimbursement and coverage issues, including the Medicare Physician Fee Schedule and hospital outpatient payment rules.

After completing the program, Fellows are expected to remain highly active and engaged in the ongoing health policy activities of ASTRO. In fact, many of ASTRO's current CPT and RUC advisors and committee leaders (including me) are former Health Policy Fellows. This year's class of Health Policy Fellows is listed below and includes five radiation oncologists and one medical physicist. Many are attending this year's Annual Meeting (look for the "Health Policy Fellow" ribbon on their name badge), and if you are interested in becoming an ASTRO Health Policy Fellow, be sure to ask them about their experience with the program or speak with a member of ASTRO's Health Policy staff.



### Bhisham Chera, MD, FASTRO

Dr. Chera is a Professor of Radiation Oncology and Otolaryngology and Endowed Chair at the Medical University of South Carolina. He is also the Vice Chairman for Safety and Quality Assurance. Dr. Chera received his bachelor's degree from Winthrop University and his medical degree from the Medical University of South Carolina.



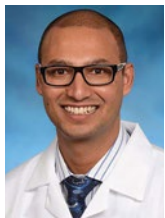
### Arpit Chhabra, MD

Dr. Chhabra is a radiation oncologist at the New York Proton Center and Mount Sinai Health System. Additionally, he serves as the Director of Education and is the Lead Physician for the International Relations Program. Dr. Chhabra received his bachelor's degree from Cornell University and his medical degree from the New York University School of Medicine.



### Varun Chowdhry, MD

Dr. Varun Chowdhry is an Associate Professor at Roswell Park Comprehensive Cancer Center and is the Medical Director of Southtowns Radiation Oncology in Orchard Park, New York. Dr. Chowdhry received his bachelor's degree from the University of Rochester and his medical degree from the State University of New York: Upstate Medical University.



### Naru Lamichhane, PhD

Dr. Lamichhane is a clinical medical physicist and Associate Professor at the University of Maryland School of Medicine. He received his bachelor's degree from Arcadia University and his PhD in Medical Physics from Virginia Commonwealth University.



### Maya Mathew, MD

Dr. Mathew is an Assistant Professor at Roswell Park Cancer Care Network and is Medical Director of Oneida Roswell Park Radiation Oncology Center. Dr. Mathew completed her graduate medical education in India. She completed a surgical internship at Penn State Hershey Medical Center and a radiation oncology residency at Loyola University Medical Center, Chicago.



### Sabin Motwani, MD

Dr. Motwani is an Associate Professor of Radiation Oncology at Rutgers, Robert Wood Johnson Medical School. He provides radiation oncology services for the Robert Wood Johnson Barnabas Health Medical Group Northern Region at Jersey City Medical Center and Newark Beth Israel Medical Center. Dr. Motwani received his bachelor's degree from the University of California, Los Angeles and his medical degree from the University of California, Irvine.

# PRESS HIGHLIGHTS

### SBRT as effective as conventional radiation for people with intermediate risk, localized prostate cancer

Nicholas van As, MD, The Royal Marsden NHS Foundation Trust, London, United Kingdom, et al.

PACE B is a multi-center, international phase III study to investigate whether SBRT was non-inferior to conventional radiation for treating people with intermediate risk, localized prostate cancer. The study enrolled 874 people who preferred radiation treatment or were unsuitable for surgery. Patients received either SBRT consisting of five fractions over one to two weeks (36.25 Gy total dose), or standard radiation consisting of 39 fractions over 7.5 weeks (78 Gy) or 20 fractions over four weeks (62 Gy). The study found that people can be treated as effectively using fewer and higher doses of radiation therapy delivered over five treatment sessions as they can with lower doses delivered over several weeks.

### Liquid biopsies can rapidly detect residual disease following cervical chemoradiation, study finds

Kathy Han, MD, University of Toronto and Princess Margaret Cancer Centre, University Health Network, Toronto, ON, Canada, et al.

This new study aims to validate findings from a previous pilot study that showed that people with detectable HPV ctDNA at the end of chemoradiation had worse outcomes than those with no detectable HPV ctDNA in a larger sample of patients, using both dPCR and more sophisticated HPV sequencing tests. The result showed that 53% of patients with detectable HPV ctDNA immediately following chemoradiation were progression-free two years later, compared to 87% of patients without detectable HPV ctDNA immediately after treatment. The study showed that both liquid biopsy tests were equally effective in accurately identifying patients with a high risk of cervical cancer recurrence after the completion of chemoradiation.

### A precision medicine navigator can mitigate inequities associated with utilization of genomic tests in Black men with prostate cancer

Alexander J. Allen, M, University of Maryland School of Medicine, Baltimore, MD, et al.

The authors hypothesized that the use of precision medicine navigators (PMNs) may decrease inequalities in standard of care (SOC) genomic test use among Black men with prostate cancer.

They conducted a retrospective study comparing how frequently patients with prostate cancer in a large health care system received genetic testing from the seven months prior to the arrival of a precision medicine navigator (PMN) to the seven months post-PMN. They found that more Black patients received SOC genomic testing for prostate cancer with the inclusion of a PMN. Black patients seen by the PMN were six times more likely to receive testing than those not seen by a PMN. The presence of a clinical navigator to act as a liaison between people with prostate cancer and the health care system greatly increases the likelihood that patients, especially Black patients, will receive advanced testing that can help predict the severity of their disease and guide treatment.





# HAVE WE HIT A WALL IN LA SCCHN?

FACING UP TO IMPORTANT QUESTIONS  
ABOUT RESISTANCE TO APOPTOSIS

WHAT ARE THE  
UNMET NEEDS OF PATIENTS  
WITH LA SCCHN?

HOW DOES SCCHN  
RESIST APOPTOSIS?

WHAT ROLE DO  
APOPTOSIS PROTEINS  
PLAY IN RESISTANCE?

Look closer.  
Get answers.

**BOOTH #3435**

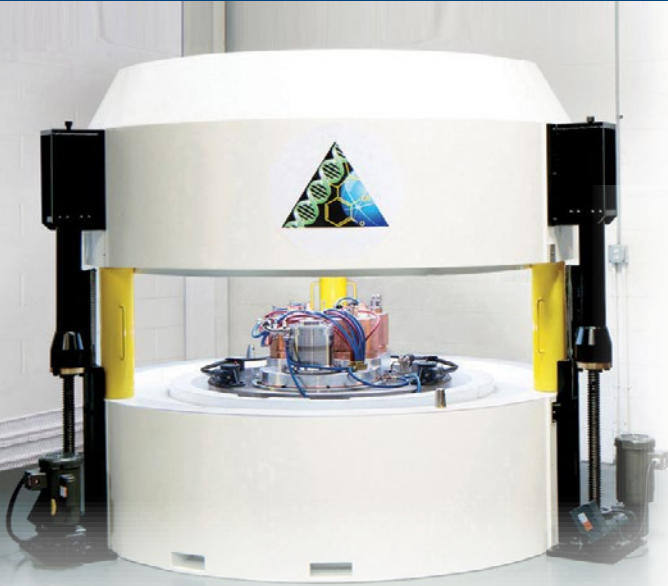


Explore the data at [TheWallinSCCHN.com](http://TheWallinSCCHN.com)

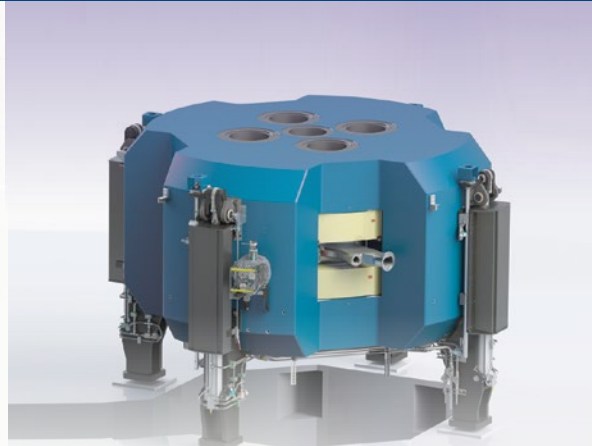




# Photos of ASTRO 2023

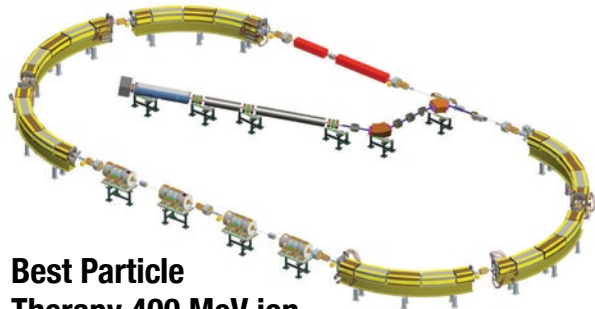
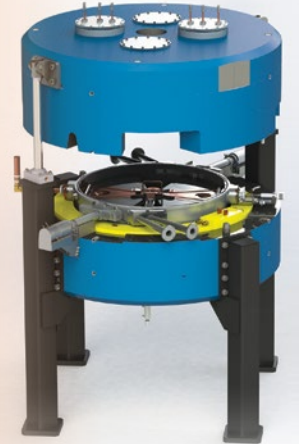


**Best BG-95 Sub-Compact Self-Shielded Cyclotron with Optional Second Chemistry Module**

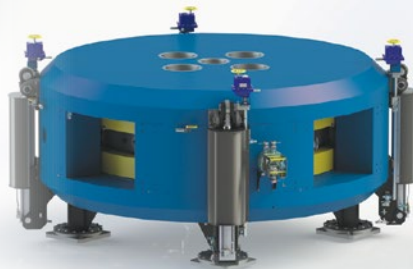


**Best Model B35ADP Alpha/Deuteron/Proton Cyclotron**

**Best Model 6-15 MeV Compact High Current/Variable Energy Proton Cyclotron**



**Best Particle Therapy 400 MeV ion Rapid Cycling Medical Synchrotron (iRCMS)**

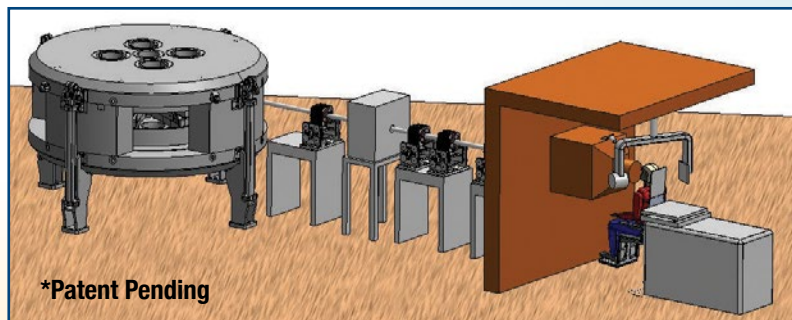


**Best Model 70p Cyclotron for Radioisotopes Production and Research**

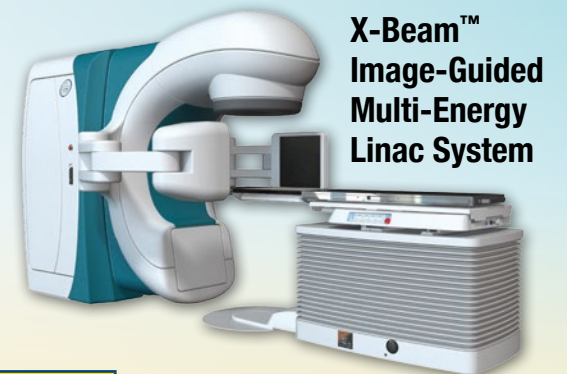


**X-Beam™ Robotic Radiosurgery System**

**NEW! Best Model 200p Cyclotron—Variable Energy Proton Beam for Radiation Therapy\***



\*Patent Pending



**X-Beam™ Image-Guided Multi-Energy Linac System**

<b>B100 Cyclotron</b>	7.5 MeV	<ul style="list-style-type: none"> <li>Capable of producing: <math>^{18}\text{F}</math> and <math>\text{Na}^{24}</math></li> <li>Single or batch dose production</li> <li>Integrated self-shielded cyclotron, chemistry module and FDG QC module</li> <li>Complete production lab in a 5 x 5 meter area</li> </ul>
<b>BG-95 Cyclotron</b>	1-9.5 MeV	<ul style="list-style-type: none"> <li>Low energy, self-shielded compact system capable of producing: <math>^{18}\text{F}</math>, <math>\text{Na}^{24}</math>, <math>^{18}\text{F}</math>-MISO, <math>^{18}\text{F}</math>-FLT, <math>^{18}\text{F}</math>-Choline, <math>^{18}\text{F}</math>-DOPA, <math>^{18}\text{F}</math>-PSMA, <math>^{13}\text{N}</math> and <math>^{68}\text{Ga}</math></li> </ul>
<b>Best Cyclotrons</b>	1-3 MeV	<ul style="list-style-type: none"> <li>Deuterons for materials analysis*</li> </ul>
	70-200 MeV	<ul style="list-style-type: none"> <li>For Proton Therapy*</li> </ul>
	3-90 MeV	<ul style="list-style-type: none"> <li>High current proton beams for neutron production and delivery*</li> </ul>
<b>B6-15 Cyclotron</b>	1-15 MeV	<ul style="list-style-type: none"> <li>Proton only, capable of high current up to 1000 Micro Amps, for medical radioisotopes</li> </ul>
<b>B25 Cyclotron</b>	20, 15-25 MeV	<ul style="list-style-type: none"> <li>Proton only, capable of high current up to 1000 Micro Amps, for medical radioisotopes</li> </ul>
<b>B25u-35adp Cyclotron</b>	25-35 MeV	<ul style="list-style-type: none"> <li>Proton or alpha/deuteron/proton, capable of high current up to 1000 Micro Amps, for medical radioisotopes</li> </ul>
<b>B35 Cyclotron</b>	35 MeV	<ul style="list-style-type: none"> <li>Proton only system for medical radioisotopes production</li> </ul>
<b>B70/70adp Cyclotron</b>	35-70 MeV	<ul style="list-style-type: none"> <li>Proton only or alpha/deuteron/proton systems, capable of high current up to 1000 Micro Amps, for medical radioisotopes</li> </ul>

\*Some products are under development and not available for sale currently.



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# The Radiation Oncologist Workforce Today and Beyond 2030

BY CHIRAG SHAH, MD, CHELSEA PINNIX, MD, PHD, AND NEHA VAPIWALA, MD, FASTRO



**ON TUESDAY OCTOBER 3, THE SESSION** “The ASTRO Workforce Study: Final Results and Steps Forward” will be held at 2:30 p.m. in Room 32. The session will be moderated by Chirag Shah, MD, and Pranshu Mohindra, MD. Presentations will include an overview of the workforce study commissioned by ASTRO and conducted by Health Management Associates (HMA). Dr. Mohindra will present HMA methodology and key findings followed by an analysis of best case and worst case scenarios by James Bates, MD, and Dr. Shah will review limitations of the model and next steps. The session will conclude with a panel discussion along with a question-and-answer session with Bruce Haffty, MD, MS, Chelsea Pinnix, MD, PhD, Hadley Sharp, MD, and Neha Vapiwala, MD, FASTRO, who will share their impressions of the analysis and its findings as well as implications and next steps.

Over the past decade, concern has arisen regarding a potential imbalance in the United States (U.S.) radiation oncology workforce, with substantial increases in the number of radiation oncology residency positions (new programs and program expansions) coupled with unclear changes in demand for radiation oncology services. This has led to mounting doubts about the justification for training a growing number of radiation oncology residents and the availability of future job prospects for these graduates. These issues have consequently contributed to rising concern among U.S. medical students, translating into declining numbers of medical students applying and matching into radiation oncology, and correspondingly greater numbers of unfilled residency positions, many of which are then filled via the Supplemental Offer and Acceptance Process (SOAP).

To address these concerns, ASTRO has acted on multiple fronts. First, in February 2022, the ASTRO Board of Directors released a workforce statement that noted:

“... we encourage stakeholders to carefully consider the following factors as they evaluate the size, selection process and scope of their training programs:


1. The quality and extent of each candidate’s interest in radiation oncology.
2. How the specialty as a whole, as well as individual programs can engage, recruit and retain diverse applicants.
3. Availability of sufficient resources for clinical operations so that the priority for residents is training and education.
4. The future expected need for radiation oncologists in their region.
5. Whether participation in the SOAP is warranted and in the best long-term interest of providing quality training, innovation and patient care.”

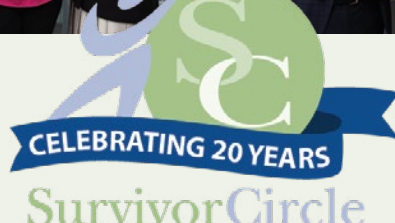
**Attend tomorrow’s session: The ASTRO Workforce Study: Final Results and Steps Forward**

**Tuesday, October 3 | 2:30 p.m. in Room 32**

Concurrently, ASTRO released a request for proposals to perform a U.S. radiation oncology workforce analysis to better understand the supply of radiation oncologists, the demand for radiation oncology services, and how the supply-demand balance has changed over time. HMA was chosen to perform the independent analysis with the final report titled, “Projected Supply and Demand for Radiation Oncologists in the U.S. in 2025 and 2030.” The model assessed for radiation oncologist supply (new graduates, exits from the specialty), potential changes in demand (growth of Medicare beneficiaries, hypofractionation, loss of indications, new indications), and radiation oncologist productivity (work RVUs produced). The model was only able to project until 2030 given the potential for substantial changes facing the specialty in the years to come. In the short term, the analysis found relative balance between supply and demand with the primary driver of demand growth in the model being growth of Medicare beneficiaries. Of note, the results of the HMA analysis also suggest that given the projected decline in Medicare beneficiary growth beginning in 2030, that supply (i.e., residency graduates) will need to decline starting with the 2025 residency application season (given the five-year lag between matching and graduating a training program) in order to maintain the balance. An interactive modeling tool (available at [www.astro.org/modeling\\_tool](http://www.astro.org/modeling_tool)) was also provided for ASTRO members to input various data and to further explore the projections.

The ASTRO Workforce Task Force provided a review of the model and its analysis along with a discussion of implications and next steps for the specialty. In summary, while the workforce appears balanced in the short term, the Task Force noted that key results of the analysis support that expansion of trainee positions (through both new programs and increases in resident complements of existing programs) is not warranted at this time. Additionally, given the uncertainty of high-impact changes anticipated in the near future (i.e., Medicare beneficiary growth reduction, changing reimbursement, incorporation of artificial intelligence, etc.), the Task Force noted that substantial reductions in the current number of trainee positions may be needed in the event of the worst case scenario of substantial oversupply in the radiation oncology workforce based on the HMA analysis. Finally, the Task Force noted that the SOAP process should be utilized cautiously in order to maintain the quality of the radiation oncology workforce; rather than programs attempting to fill all unfilled positions, each program “should consider forgoing the SOAP process to fill their resident complement or only consider candidates who have demonstrated a strong interest in radiation oncology as a primary choice.”


Moving forward, given the dynamic nature of key indicators used in this model, and given the potential for better case scenarios to evolve, the ASTRO Workforce Committee will continue to follow key metrics from the analysis (i.e., number of radiation oncologists, productivity, FTE metrics) when evaluating the job market for any potential changes. 



## Survivor Circle Celebrates 20 years of giving, 2023 Survivor Circle Grants awarded Sunday

**YESTERDAY MORNING**, ASTRO awarded this year’s recipients, Breast Cancer Angels and Cancer Support Community Los Angeles (CSCLA), with Survivor Circle Grants of \$12,500 each for the services they provide.

Survivor Circle was created in 2003 to honor cancer survivors by recognizing organizations that further the fight for survivorship. ASTRO has raised well over \$500,000 since the inception of the program, almost wholly from the generous support of our exhibitors, 100% of which has gone to grant recipients.

Learn more about the 2023 Survivor Circle Grant recipients at [www.astro.org/SCgrant](http://www.astro.org/SCgrant). 

## INDUSTRY-EXPERT THEATERS

Hall C on the right-hand side of the Exhibit Hall  
and 28 AB, Upper Level

MONDAY, OCTOBER 2

### 📍 Theater 1

12:00 p.m. – 1:00 p.m.

Boston Scientific

*Current Controversies in Prostate Cancer Perirectal Gel Spacing*

### 📍 Theater 2

12:00 p.m. – 1:00 p.m.

GammaTile

*Improving Local Control of Brain Tumors with Surgically Targeted Radiation Therapy (STaRT): A GammaTile Overview*

### 📍 Room 28 AB, Upper Level

12:00 p.m. – 1:00 p.m.

Lantheus

*PSMA PET in Prostate Cancer: A Case-Based Discussion*

### 📍 Theater 1

2:00 p.m. – 3:00 p.m.

Philips

*Innovation in Practice: Philips Delivers Precise, Adaptive and Personalized Care Solutions to Radiotherapy*

### 📍 Theater 2

2:00 p.m. – 3:00 p.m.

Novartis Pharmaceutical Corporation

*PSMA-Targeted Radioligand Therapy in mCRPC: A Novel Approach*

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## INDUSTRY SATELLITE SYMPOSIA

6:30 p.m. - 7:30 p.m.

Dinner and registration will begin at 6:30 p.m.

*CME-Accredited Symposium*

*Revolutionary Approaches to Improve Therapeutic Results in Unresectable Locally Advanced Squamous Cell Carcinoma of the Head and Neck*

Location: Manchester Grand Hyatt San Diego

Hillcrest ABCD

1 Market Place

San Diego, CA

**CME Credits:** Global Learning Collaborative designates this live activity for a maximum of 1.0 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Target audience:** This activity is designed to meet the educational needs of medical oncologists, pathologists, radiation oncologists, and other health care professionals treating patients with head and neck cancers.

### Learning Objectives:

1. Identify the various factors that contribute to the recurrence or progression of locally advanced squamous cell carcinoma of the head and neck (SCCHN)
2. Evaluate the risks, benefits and limitations of currently available treatment options for managing patients with locally advanced SCCHN, and develop a comprehensive management plan based on patient-specific factors
3. Discuss the mechanisms of action of agents currently under investigation for the treatment of locally advanced SCCHN with those of currently available treatment options, and potential implications for patient care
4. Assess the therapeutic potential and potential impact on current treatment paradigms of emerging agents being investigated for the management of locally advanced SCCHN
5. Compare the definitions, benefits and limitations of early endpoints used in oncology trials and their relation to patient outcomes
6. Describe the evidence, rationale and clinical significance of early endpoints used in ongoing clinical trials in locally advanced SCCHN

### Topics:

- |                       |  |
|-----------------------|--|
| 6:30 p.m. – 6:33 p.m. | Welcome and Introductions  |
| 6:33 p.m. – 6:43 p.m. | Raising Awareness of Emerging Evidence in LA SCCHN<br>Presented by Dr. Ezra Cohen            |
| 6:43 p.m. – 6:58 p.m. | A Comprehensive Analysis of IAPs<br>Presented by Dr. Kevin Harrington                        |
| 6:58 p.m. – 7:08 p.m. | Current Landscape of LA SCCHN<br>Presented by Dr. Deborah Wong                               |
| 7:08 p.m. – 7:20 p.m. | Understanding Clinical Trials and Their Endpoints in LA SCCHN<br>Presented by Dr. Ezra Cohen |
| 7:20 p.m. – 7:30 p.m. | Audience Question and Answer Session   |

### Faculty:

1. Ezra Cohen, MD, University of California, San Diego Health
2. Kevin Harrington, MBBS, PhD, The Institute of Cancer Research
3. Deborah J. Wong, MD, PhD, UCLA Health

This activity is supported by an independent educational grant from EMD Serono, Inc. EMD Serono, Inc. is the Healthcare business of Merck KGaA, Darmstadt, Germany.



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