Future path of “Radiation at a Crossroads” highlighted by ASTRO President Paul Harari

In his Presidential Address yesterday, ASTRO President Paul Harari, MD, FASTRO, highlighted what he believes today’s breakthroughs in radiation oncology will mean for tomorrow’s cancer patients. Dr. Harari said that he sees the specialty as being characterized in the future by greater precision, increased cure rates, diminished side effects and more effective and durable palliative care. He added that he predicts treatment will become more cost-effective and noted the expanding role multidisciplinary cancer care will play in the field. Dr. Harari also emphasized the criticality of integrating cutting-edge technology with modern cancer biology to effectively achieve such benchmarks. But not all of the address was heavy on science, as he shared some personal aspects of cancer too. We caught up with Dr. Harari after his speech and asked him about some of the topics he discussed.

ASTRO Daily News: Dr. Harari, you told the stories of two patients who became close friends. Why were you inspired to share their journeys in your address?

Although my predominant message focused on advancing the broad discipline of radiation oncology into the future, it is always extremely important to me that we highlight and remember the human side of cancer. This helps bring forth the face of cancer and how we can and must do even better for these patients in the future.

You mentioned that while progress in oncology is ongoing, it has been somewhat step-wise in nature. Looking through your lens as an expert in the field, can you explain what aspects of research contribute to steady strides in cancer treatment and towards a cure in the future?

Continued on page 4

NCI director gives first keynote

By Tyler Beck and Lisa Braverman

Yesterday morning, Norman “Ned” Sharpless, MD, the National Cancer Institute (NCI) director, gave the first keynote. He began by discussing highlights from the past year, including data showing a steady decline in cancer deaths since the 1990s, as well as an increase in NIH and NCI funds.

Dr. Sharpless discussed his four key focus areas for the NCI, including basic science, workforce development, big data and clinical trials. For workforce development, he mentioned the implementation of R37 grants for early-career investigators to see if a longer funding term can improve research. Clinical trials will help to realize the power of cancer research through innovative design, administration and analyses. There has been an increase in funding for clinical trials, and Dr. Sharpless discussed several promising trials.

In the case of basic science, Dr. Sharpless said the NCI will be reaffirming its commitment to such research. To achieve this, the NCI hopes to reduce the burden of paperwork and provide more infrastructure for researchers, as well as increase the payline for basic science research.

Dr. Sharpless spoke about big data approaches to cancer care, noting that it can be difficult to explain the benefits of data aggregation, but that such information can allow physicians to tailor treatment in ways that can save lives.

After his remarks, Drs. Paul Harari, Brandon Mahal, Brian Marples and Catherine Park had the opportunity to pose questions to Dr. Sharpless.

Dr. Marples asked what areas of research NCI can fund now that they could not fund previously. NCI expects to see another increase in the next fiscal year for the RPG pool, but Dr. Sharpless acknowledged that the number of grant applications has been steadily rising.

Dr. Park asked a question about how the NCI can increase the diversity of the field. There are grants at the NCI that seek to identify diverse talent early, and they have traditionally focused on research training experiences in order to preserve the pipeline of cancer researchers and physicians.

Finally, Dr. Harari asked how we can advance the profile of radiation oncology. Dr. Sharpless suggested that novel combinations with immunotherapy and a focus on radio-pharmaceuticals will help capture national attention for the field.

Correction

A photo that was published in the last edition of ASTRO Daily News was associated with the incorrect story. The photo that accompanied the PRO Program story on page 5 was actually a photo of the Letter of Intent Writing Workshop. We regret the error.
Working better together in the liver

Progression Free Survival in the Liver

- Median PFS in the Liver (months)
  - FOLFOX6 (+bev*) (n = 263)
  - FOLFOX6 (+bev*) + SIR-Spheres® Y-90 resin microspheres (n = 267)

- 20.5 months (HR: 0.69, 95% CI 0.55–0.90; p = 0.002)
- + 7.9 months

Objective Response Rate in the Liver

- ORR: 6.0% vs. 1.9%
- p = 0.042

- Complete Response Rate
  - mFOLFOX6 (+bev*) (n = 263)
  - mFOLFOX6 (+bev*) + SIR-Spheres Y-90 resin microspheres (n = 267)

- 68.8% vs. 78.7%
- p = 0.020

- 3 x CR rate
  - p = 0.020

**Note:** The Primary Objective of General PFS was not met in this study.

**Cautions:** Federal Surgeon Generals: This device is intended for the treatment of hepatocellular carcinoma (HCC) in patients with unresectable HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refused curative treatment with systemic chemotherapy. This device is intended for the treatment of unresectable HCC in patients with HCC who have failed or refuse
SCHEDULE AT A GLANCE

Tuesday, October 23, 2018

7:45 a.m. – 8:15 a.m. Science Highlights – Gastrointestinal Room: 304; 0.50 CME 7:45 a.m. – 9:00 a.m. Education Sessions 1:15 CME • EDU 18 (Interactive) – Radiation in the Thorax: Clinical Pearl and Guidance from the Literature Room: 303 • EDU 19 (Live SA-CME) – Advances in Cervical Cancer Room: 214 C/D Ticketed Event • EDU 20 (Interactive) – Lowering the Radiation Dose in Lymphoma Treatment – Can We Go Lower?, Room: 217 A/B • EDU 21 – Survivorship Care: What Have We Learned in the Last Three Years?, Room: 005 • EDU 22 (Live SA-CME) – Clinical and Planning Approaches for Re-irradiation, Room: 006 Ticketed Event 7:45 a.m. – 9:00 a.m. Scientific Sessions 1.25 CME • SS 18 – Physics 4 – Imaging for Response Assessment 1, Room: Lila Cockrell Theatre • SS 19 – Biology 4 – Normal Tissue Radiobiology, Room: 008 • SS 20 – Sarcoma and Cutaneous Tumors, Room: 007 A/B • SS 21 – Breast 2 – Biology and SBRT, Room: 214 A/B • SS 22 – Late-breaking Abstracts Special Session, Room: 007 C/D 8:30 a.m. – 9:00 a.m. Science Highlights – Gynecourinary, Room: 304; 0.50 CME 9:00 a.m. – 9:15 a.m. Break 9:15 a.m. – 10:15 a.m. Keynote 2 • Mark Stevenson, Futurologist, Author and Broadcaster, Room: Stars at Night Ballroom, 1.00 CME 10:00 a.m. – 5:00 p.m. Exhibit Hall Open 10:00 a.m. – 5:00 p.m. Poster Viewing Open 10:15 a.m. – 11:30 a.m. Awards Ceremony, Room: Stars at Night Ballroom, 0.00 CME 10:45 a.m. – 11:30 a.m. ASTRO Connect Meet the Expert Physics: Booth #3145 – Emily Kowalski, MD, and Elizabeth Nichols, MD Breast: Booth #423 – Steven Chmura, MD, PhD CNS: Booth #2245 – Vinai Gondi, MD, and Minnie Mehta, MD, CHA, FASTRO GU: Booth #4045 – Daniel Spratt, MD Head and Neck: Booth #423 – Howard Sandler, MD, PhD MP: Booth #2245 – Krishna Redmond, MD, MPH Head and Neck: Booth #1520 – Min Yao, MD, PhD, FASTRO 11:00 a.m. – 11:30 a.m. ASTRO Bistro 11:30 a.m. – 1:00 p.m. Business Meeting Luncheon – Voting Members Only, Room: HemisFair Ballroom, 3.0 CME 1:00 p.m. – 2:30 p.m. Education Sessions 1.50 CME • EDU 23 (Interactive) – Ultra-hypofrac- tionated Therapy for Clinically Localized Prostate: Are We Finally Ready for Prime Time?, Room: 214 A/B • EDU 24 (Interactive) – Challenging Cases in the Management of Glomas, Room: 006 • EDU 25 (Live SA-CME) – Translational Genomics to Advance Precision Radiation Oncology, Room: 006 Ticketed Event 1:00 p.m. – 2:30 p.m. Panel Sessions: 1.50 CME • Panel 09 (Interactive) – Current and Future Applications for MR-guided Radiotherapy with Real-time Adaptive Radiation therapy, Room: Lila Cockrell Theatre • Panel 10 (Interactive) – Artificial Intelligence and Deep Learning within Radiation Oncology: Current Applications and Future Directions, Room: 304 1:00 p.m. – 2:30 p.m. Poster Discussion Sessions: 1.50 CME • PD 09 – Physics 5 – Imaging for Treatment Planning Room, 217 C/D • PD 10 – Head and Neck 2, Room: 217 A/B 1:00 p.m. – 2:30 p.m. Poster Viewing Q&A 3 – Physics, Palliative Care, Patient Safety, Education and History, Pediatric, Health Services Research, Non-malignant Tumors, Location: Innovation Hub, Exhibit Hall 3; 0 CME 1:00 p.m. – 2:30 p.m. Scientific Sessions: 1.50 CME • SS 23 – Breast 3 Room: 303 • SS 24 – OCN 1, Room: 007 A/B • SS 25 – Hematologic 2 – Translating Better Technology to Reduced Toxity, Room: 004 1:00 p.m. – 2:30 p.m. Workshop 05 (Interactive) – NC/ASTRO Diversity Symposium: Increasing Minority Enrollment in Clinical Trials in Radiation Oncology: Why and How, Room: 302; 1.50 CME 1:30 p.m. – 2:00 p.m. Meet the Editor – International Journal of Radiation Oncology Biology Physics (Red Journal), Anthony Zietman, MD, FASTRO, Location: Innovation Hub 1:30 p.m. – 2:15 p.m. ASTRO Connect Meet the Expert Physics: Booth #3145 – Jeffrey Burken, MD, MS, and Jona Hattangadi-Gluth, MD, MPH GU: Booth #4045 – Tony Wang, MD GU: Booth #4045 – Neha Vapiwala, MD Head and Neck: Booth #1520 – Min Yao, MD, PhD, FASTRO 1:45 p.m. – 4:45 p.m. Break 1:45 p.m. – 4:00 p.m. ASTRO Connect Meet the Expert Physics: Booth #3145 – Mary Feng, MD, Breast: Booth #423 – Dana Casey, MD, and Nadeem Riaz, MD, MS CNS: Booth #2245 – Kristen Redmond, MD, MPH GU: Booth #4045 – Robert Den, MD Head and Neck: Booth #1520 – Min Yao, MD, PhD, FASTRO 2:45 p.m. – 4:15 p.m. Poster Viewing Q&A 4, Poster, Lung, Patient Reported Outcomes, Nursing, Location: Innovation Hub, Exhibit Hall 3; 0 CME 2:45 p.m. – 4:15 p.m. Special Session 01 – Research Spotlight: ASTRO’s Research Award Winners, Room 005; 1.50 CME 3:15 p.m. – 4:00 p.m. ASTRO Connect Meet the Expert Physics: Booth #3145 – Mary Feng, MD, Breast: Booth #423 – Dana Casey, MD, and Nadeem Riaz, MD, MS CNS: Booth #2245 – Kristen Redmond, MD, MPH GU: Booth #4045 – Robert Den, MD Head and Neck: Booth #1520 – Min Yao, MD, PhD, FASTRO 4:15 p.m. – 4:45 p.m. Break 4:15 p.m. – 5:00 p.m. ASTRO Connect Meet the Expert Physics: Booth #3145 – Percy Lee, MD Breast: Booth #423 – Gary Freedman, MD CNS: Booth #2245 – Christina Irene Tisen, MD GU: Booth #4045 – Howard Sandles, MD, MS, FASTRO Head and Neck: Booth #1520 – Danielle Margalit, MD, MPH 4:30 p.m. – 5:00 p.m. Meet the Editor – International Journal of Radiation Oncology Biology Physics (Red Journal), Sue Yoon, MD, PhD, Location: Innovation Hub 4:45 p.m. – 6:15 p.m. Education Sessions 1.50 CME • EDU 29 (Interactive) – That Wasn’t in the Textbook! Challenging Cases in Palliative Care, Room: 008 • EDU 30 – Targeting Metabolism in Cancer, Room: 004 • EDU 31 (Interactive) – Challenging Cases in Lung Cancer: Oligometastatic Disease, Room: 303
Progress in oncology is accelerating with contributions from many individual disciplines. This is why team science and broad multidisciplinary collaborations are so critical to the future. We did not land a man on the moon with a few individual experts working in isolation, but rather with teams of experts working together towards a grand objective. The same goes for cancer cures that will be achieved by teams of experts working closely in collaboration. Radiation is an enormously powerful modality for cancer cure. We have a critically important seat at the cancer treatment table, and we can advance the impact of radiation much further by seeing and realizing opportunities for integrating radiation most effectively with other therapies.

You talked about partnering modern technology with the newest cancer biology. What will that look like going forward so that radiation oncologists may continue to move the needle closer to increasingly optimal cancer treatments?

Opportunities are now emerging to leverage information from modern imaging techniques and state-of-the-art cancer biology that can help us personalize radiation prescriptions for cancer patients in the future. This is an incredibly powerful objective for the future of radiation oncology. Not all tumors are the same, and in fact they are highly individualized. Therefore, treatments should be individualized based on specific characteristics of the tumor rather than using a blanket approach for all patients with lung or breast cancer, for example.

At last year’s Annual Meeting, in an ASTRO Daily News article, 2017 ASTRO President Dr. Brian Kavanagh referred to you as a “physician-scientist extraordinaire” and predicted this year’s meeting would “showcase cutting-edge innovations that have the potential to transform our methods of cancer treatment.” His thoughts were quite accurate. Do you feel the message in your address and the overall meeting are on target with your goal of highlighting the theme of “Translating Discovery to Cure”?

First, let me say that a wonderful compliment from Brian, Sunday’s Presidential Symposium actually was all about cutting-edge innovations and how radiation oncology can play an important role in these new arenas. In my address today, I strove to convey the message that the brilliant technologies developed in radiation oncology in recent years are poised to be dovetailed with emerging advances in modern cancer biology. We have the opportunity to dramatically increase cure rates for various tumors by marrying technology and biology, and are better positioned than ever to translate “discoveries to cure” over the next decade and beyond.

**ASTRO DAILY NEWS | Tuesday/Wednesday**

**Recap continued from page 1**

**SCHEDULE AT A GLANCE**

**Tuesday, October 23, 2018, continued**

- **4:45 p.m. – 6:15 p.m.**
  - Panel Sessions: 1.50 CME
    - Panel 08 – The Radiobiological Bases of Novel Radiation Treatment Schemes for Breast Cancer, Room: 006
    - Panel 13 (Interactive) – Practical Case Based Discussions of Single vs. Fractionated Stereotactic Radiosurgery for Benign Brain Tumors, Room: 007 C/D

- **6:15 p.m. – 8:15 p.m.**
  - Science Highlights – Breast Cancer, Room: 304; 0.50 CME

- **6:15 p.m. – 7:45 p.m.**
  - Poster Discussion Sessions: 1.50 CME
  - PD 13 – Physics 8 – Outcome Analysis and Response Imaging, Room: 217 C/D
  - PD 14 – Digital Health Information and Informatics, Room: 217 A/B

**Wednesday, October 24, 2018**

- **7:45 a.m. – 8:15 a.m.**
  - Science Highlights – Breast Cancer, Room: 304; 0.50 CME

- **7:45 a.m. – 9:00 a.m.**
  - Education Sessions, 1.25 CME
    - EGU 32 (Interactive) – 4-D CT/CBCT, 4-D MRI and Beyond 4-D Imaging, Room: 217 C/D
    - EGU 34 (Interactive) – Cancer of the Colon, Rectum and Anal, Room: 206
    - EGU 35 (Interactive) – New Combinations of Radiation and Systemic Therapies in Lung Cancer: Chemotherapy, Targeted Agents and Immunotherapy, Room: 006
    - EGU 36 (Live SA-CME) – How to Incorporate MRI and PET Imaging into Clinical Practice for Prostate Cancer Management, Room: 302

- **8:30 a.m. – 9:00 a.m.**
  - Science Highlights – Palliative Care, Room: 304; 0.50 CME

- **9:15 a.m. – 9:45 a.m.**
  - Break

- **9:15 a.m. – 10:00 a.m.**
  - Special 60th Anniversary Session – Trailblazers Contemplate the Legacy and Future of Radiation Oncology, Room: Stars at Night Ballroom, 0.75 CME
    - ASTRG Guidelines Highlight Session, Room: Stars at Night Ballroom, 0.75 CME

- **10:00 a.m. – 12:30 p.m.**
  - Lunch Break

- **10:45 a.m. – 11:00 a.m.**
  - Break

- **11:00 a.m. – 12:30 p.m.**
  - Education Sessions, 1.50 CME

- **12:30 p.m. – 1:30 p.m.**
  - Poster Discussion Sessions: 1.50 CME

- **1:30 p.m. – 3:00 p.m.**
  - Education Sessions, 1.50 CME
    - EDU 40 (Interactive) – Challenging Cases in the Management of Endometrial Cancer, Room: 302
    - EDU 41 – Practical Big Data – Applications and Results, Room: 008
    - EDU 42 – Cancer Stem Cells and Therapeutic Resistance, Room: 007 A/B

- **1:30 p.m. – 3:00 p.m.**
  - Panel Sessions, 1.50 CME
    - Panel 16 – Establishing Evidence-based Indications for Proton Beam Therapy: Have We Made Any Progress?, Room: 303

- **4:45 p.m. – 6:15 p.m.**
  - Poster Discussion Sessions: 1.50 CME
  - PD 29 – Physics 9 – Imaging for Treatment Planning, Room: 304
  - PD 30 – GU 4 – SBRT for Prostate and Renal Cancers, Room: 214 C/D
  - PD 31 – Head and Neck 3 – Strategies to Improve Outcomes and Minimize Toxicity in Oropharyngeal Cancer, Room: 214 A/B

**ASTRO DAILY NEWS | Tuesday/Wednesday**

**SCHEDULE AT A GLANCE**

**Tuesday, October 23, 2018, continued**

- **4:45 p.m. – 6:15 p.m.**
  - Panel Sessions: 1.50 CME
  - SS 29 – Physics 9 – Imaging for Treatment Planning, Room: 304
  - SS 30 – GU 4 – SBRT for Prostate and Renal Cancers, Room: 214 C/D
  - SS 31 – Head and Neck 3 – Strategies to Improve Outcomes and Minimize Toxicity in Oropharyngeal Cancer, Room: 214 A/B
Strategic plan update: elevating the profile of radiation oncology

By Jeff White, Director of Public Relations and Strategic Communications, jeff.white@astro.org

ASTRO adopted a new strategic plan in 2017 and one of the plan’s main priorities is to establish radiation oncology as the recognized leader in quality, innovation and value in multidisciplinary cancer care. To do this, we know that we must share information about the field of radiation oncology and advances in radiation therapy with a larger audience.

Earlier this year, we conducted research to learn from recent radiation therapy patients and better understand their expectations prior to treatment as well as their actual RT experiences. Part of what we learned was that patients viewed their radiation oncologist and the care team as a trusted part of their cancer treatment experience. Patients noted that while they received some good advance information about RT and possible side effects, in hindsight, many wished they had known a bit more about side effects.

Benjamin King, MD, Communications Committee Chair said, “The feedback from this survey helped guide the committee as we streamlined the side effects panels on the patient brochures to be more easily scannable yet comprehensive.”

We’ve taken the feedback from patients and used it to help inform updates to our RTAnswers patient education materials, including new graphics that showcase possible side effects and their duration. More of these patient research findings will be shared in a paper being written by a team of ASTRO members. Some of these results will be shared at the Business Lunch, taking place today, October 23 at 11:30 a.m. in Hemisfair Ballroom 3.

We also know that some of the best ways we can reach new audiences are to tap into our network of ASTRO members who may be affiliated with other medical organizations or patient groups. We’ve assembled a group of a dozen ASTRO members to serve on what we call the ASTRO Speaker’s Bureau. These multidisciplinary experts are working to identify ways to strategically reach beyond our traditional audiences into the broader referring physician and patient communities. The goal of the ASTRO Speaker’s Bureau is to raise awareness about advances in RT, increase the use of RTAnswers educational resources and materials and ensure that radiation oncology is included in discussions about multidisciplinary cancer treatment and care.

As we work with consumer media outlets on stories about RT treatments, patient examples are in great demand to help bring a news story to life. We are always looking for our members to help us identify patients they have treated who are willing to share their stories, either on the RTAnswers.org website or in a media interview. In the social media space, ASTRO is actively engaging with audiences, including patient groups, news outlets and the broader oncology community. Many of our members are active communicators via social channels such as Twitter and Facebook and we hope to see more ASTRO members embrace this growing space. We encourage you to follow ASTRO on Twitter and our newly launched Instagram feed at ASTRO_org.

Later this year, we plan to conduct additional audience research, this time with primary care and referring physicians. We hope to learn more about their knowledge of radiation oncology and the perceived barriers of them recommending radiation therapy for their patients. We thank all of our ASTRO members who are ambassadors for radiation oncology and welcome ideas for ways to reach a broader audience.

Men with low- and intermediate-risk prostate cancer can safely benefit from fewer, higher-dose radiation treatments

Stereotactic body radiation therapy (SBRT) is a safe and effective treatment for men with low- and intermediate-risk prostate cancer, according to a long-term, multi-institutional study. The study, presented by lead author A. Kiran, MD, with the David Geffen School of Medicine at the University of California, Los Angeles (UCLA), clears the way for patients who may wish to shorten their course of treatment without fear of increasing their risk for severe, adverse side effects. This multi-institutional consortium study includes data from 10 institutional trials and two large multi-institutional studies. It examines the long-term safety and efficacy of SBRT for low- and intermediate-risk prostate cancer in a cohort of 2,114 men enrolled in institutional phase II trials of SBRT from 2000 to 2012. The abstract will be presented in detail during a scientific session on Tuesday, October 23, 4:45–6:15 p.m., Room 214 C/D.

High-dose, high-precision radiation therapy safe and effective for kidney cancer patients with only one kidney

Treatment of renal cell carcinoma with SABR is as safe and effective for patients with one kidney as it is for those who have two, according to an analysis of the largest-ever, international dataset of solitary kidney patients to receive this emerging treatment. SABR has been shown to be effective in treating cancers in the lung, liver and spine using substantially higher doses of radiation delivered in a single, or just a few, treatment sessions. The abstract will be presented by lead author Johann J. M. Correa, MD, PhD, with London Health Sciences Center in London, Canada during an oral abstract session on Tuesday, October 23, from 4:45 p.m. to 6:15 p.m.

Combined therapy including pelvic lymph node radiation provides significant benefit for prostate cancer patients

The first report of a clinical trial shows that, for men who show signs of prostate cancer after their prostates were surgically removed, extending radiation therapy to the pelvic lymph nodes combined with adding short-term hormone therapy to standard treatment can extend the amount of time before their cancer spreads. The NRG Oncology/RTOG 0534 SPORRT trial is the first randomized trial to show a significant benefit of RT to the pelvic lymph nodes, and the second to show a benefit of short-term hormone therapy, when added to standard treatment of radiation therapy to the prostate bed. The abstract was presented at the Plenary Session on Monday by Alan Pollack, MD, PhD, with the University of Miami’s Sylvester Comprehensive Cancer Center.

Don’t miss Mark Stevenson in Tuesday’s Keynote

Author and futurologist on “The Future and What to Do About It”

The second keynote address of the 2018 Annual Meeting will be held in the Stars at Night Ballroom this morning, from 9:15 a.m. until 10:15 a.m., as author and futurologist Mark Stevenson touches on the major trends that he says will shape the world over the next two decades.

Mark Stevenson, “reluctant futurologist” and award-winning author of the best-selling “An Optimist’s Tour of the Future” and “We Do Things Differently,” is an expert on global trends and innovation. In this talk, he’ll give us a whistle stop tour of the good, the bad and the ugly of the next 20 years. How is the landscape of society going to change in terms of technology, energy, governance, health and commerce? And what are the principles that will help successful organizations and individuals innovate through constant change?

Stay Connected
Plenary Session highlights research aimed at personalized and new treatment combinations

By Melana Hydrick

At Monday’s Plenary Session, five of this year’s top-rated abstracts, which were selected from more than 1,900 submissions, were presented. ASTRO Annual Meeting Scientific Committee Chair Lisa A. Kachnic, MD, FASTRO, of Vanderbilt University Medical Center and Vice-chair Andrea Ng, MD, of Brigham and Women’s Hospital, moderated the session.

The first abstract showed that stereotactic ablative radiation (SABR) therapy added to standard of care (SOC) treatment for oligometastatic tumors resulted in better median overall survival (OS) and progression free survival (PFS) than SOC treatment alone. The study also looked at patient quality of life (QOL).

“Survival outcomes for patients with oligometastatic disease treated with SABR appear promising and may transform the management landscape for patients with limited metastatic disease,” said Dr. Kachnic.

The international study enrolled 99 patients from 2012 to 2016, each with one to five metastatic lesions, all of which were amenable to SABR therapy. Patients were stratified by the number of metastases (one to three versus four to five) and then randomized in a 1:2 ratio between palliative SOC treatments [Arm 1] versus SOC plus SABR to all metastatic lesions [Arm 2].

After a median follow-up of 27 months, the median OS and PFS were both higher in the SABR group. OS was 28 months in Arm 1 versus 41 months in Arm 2; PFS was six months in Arm 1 versus 12 months in Arm 2. Toxicity, rated as grade 2 or higher related to treatment, was two-thirds higher in the SABR group, with only nine percent of patients in Arm 1 reporting grade 2 or higher adverse events, compared with 30 percent reporting them in Arm 2. However, there were no significant differences in patient-reported quality of life between the two groups.

“In this research, the conclusions may be limited by patient selection and the increased morbidity in the SABR arm,” commented Dr. Kachnic. “As such, closer analysis of cases with increased adverse events in terms of sites of treatment and doses to surrounding organs-at-risk may further refine selection of patients for this approach.”

In the second abstract, researchers determined that in patients with locoregionally advanced human papillomavirus (HPV)-related oropharyngeal cancer, RT combined with cetuximab was non-inferior at five-year OS (the primary endpoint) to that of radiation and cisplatin.

The study showed that radiation with cetuximab was associated with worse OS and PFS compared with the standard treatment of radiation with concurrent cisplatin at five years. The phase III trial evaluated 805 patients randomized to either RT alone [Arm 1], RT + PBRT alone (Arm 2), RT + PBRT + STAD (Arm 3). The FFP primary endpoint included PSA nadir+2, clinical failure or death from any cause, and censoring for secondary salvage therapy was initiated prior to these events. The sample size provided 90 percent statistical power to detect a 10 percent absolute FFP improvement at five years in Arm 3 compared with Arm 1, and a 10 percent absolute improvement at five years in Arm 3 compared with Arm 2 at an overall alpha level of 0.025. The median follow-up for the analysis was 5.4 years, and results indicated the five-year FFP rates were 71.1 percent for Arm 1, 82.7 percent for Arm 2, and 89.1 percent for Arm 3.

“While it is reassuring that the results indicate no large increase in late effects, review of patient-reported outcomes would prove valuable in this regard,” said Dr. Kachnic. “Additional follow-up is also warranted here to define androgen receptor activity (AR-A) within the samples. After adjusting for other variables, the study group determined that low AR-A was independently prognostic for distant metastasis. African-American men were significantly more likely to have low AR-A, but their tumors were found to have significantly decreased double strand break repair pathway expression and hence increased predicted radiosensitivity. These findings were validated by clinical data from four RTOG trials on radiotherapy for prostate cancer, showing that African-American men had significantly improved outcomes compared with Caucasian men, with significantly lower rates of biochemical recurrence (HR 0.82, p=0.0005) and distant metastasis (HR 0.70, p=0.0008).”

“This is the first study showing potential differences in response to radiotherapy in African-American men compared with Caucasian men,” commented Dr. Ng. “If the findings are validated by future prospective studies, there may be some influence on treatment recommendations.”

In the final abstract, researchers explored escalating salvage therapy in patients with persistently detectable or rising PSA post-prostatectomy. The study found that the addition of four to six months of short-term androgen deprivation (STAD) therapy and pelvic lymph node radiation treatment (PLNRT) to post-prostatectomy prostate bed only salvage radiation therapy (PBRT) resulted in significant incremental improvements in freedom from progression (FFP).

The large, three-arm randomized trial evaluated results of 1,736 eligible patients from 2008 to 2015. Patients were assigned to one of three regimens: PBRT alone (Arm 1), PBRT + STAD (Arm 2), or PLNRT + PBRT + STAD (Arm 3). The FFP primary endpoint included PSA nadir+2, clinical failure or death from any cause, and censoring for secondary salvage therapy was initiated prior to these events. The sample size provided 90 percent statistical power to detect a 10 percent absolute FFP improvement at five years in Arm 2 compared with Arm 1, and a 10 percent absolute improvement at five years in Arm 3 compared with Arm 2 at an overall alpha level of 0.025. The median follow-up for the analysis was 5.4 years, and results indicated the five-year FFP rates were 71.1 percent for Arm 1, 82.7 percent for Arm 2, and 89.1 percent for Arm 3.

“For a summary of the last Plenary presentation, see page 5.”
Why do you attend ASTRO?

“The first ASTRO that I attended was in ’86 and in those days the organization and the conference was small enough that we all fit in one hotel. It has been wonderful to see the growth of the organization as well as the conference over many years. But it still retains its very congenial and sort of family-like atmosphere despite so many people attending.”

– Bruce Minsky, MD, FASTRO, MD Anderson Cancer Center

“We like interacting with radiation oncologists because they are our main market. It’s our biggest and most important conference of the year; it’s like our Super Bowl, especially with the global presence.”

– Julie Manning, Marketing and Communications, Augmenix

“Coming to ASTRO gives me the opportunity to meet and interact with clinicians whose research guides my clinical practice.”

– Joseph A. Miccio, MD, PGY-3 Resident, Yale Department of Therapeutic Radiology

“I come [to ASTRO] because it’s the largest radiation therapy conference. It enables networking with colleagues and friends. Since ASTRO is so broad, it allows me to see the data presented in other fora such as imaging, physics and other tumor sites. As it’s a major conference, practice-changing trials are presented here and it’s great to see the data firsthand.”

– Ananya Choudhury, PhD, MA, MRCP, FRCR, The Christie Foundation Trust

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ASTRO Bistro

TUESDAY BISTRO MENU

**Hearts of Lettuces Garden Salad**
- Cucumbers, Tomatoes, Bell Peppers,
- Red Onions & Radishes, Choice of Dressing
- GF V

**Pasta Salad**
- with Smoked Ham, Cheddar Cheese, Peas and Tarragon Aioli
- GF

**Parker House Butter Rolls and Pretzel Rolls**

**Roasted Green Apple-Ginger Brined Pork Loin, Natural Pork Jus**

**Vegan Panini with Roasted Portabellas,**
- Sun Dried Tomatoes, Spinach and Roasted
- Red Pepper-Chickpea Spread
- V

**Wild Rice Pilaf**
- GF V

**Grilled Season’s Vegetables**
- GF V

**Cherry Cheesecake & S’mores Cupcakes**
- Whole Fruit

**Iced Tea and Lemonade**
- GF

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2018 ANNUAL MEETING PROMOTIONAL SPONSORS

<table>
<thead>
<tr>
<th>2018 ANNUAL MEETING PROMOTIONAL SPONSORS</th>
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<tr>
<td><strong>Augmenix</strong></td>
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<td><strong>VIVO BIOTIX</strong></td>
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Images of ASTRO 2018

Enjoy these snapshots from the session rooms, halls and receptions of ASTRO’s 60th Annual Meeting, held October 21-24 in San Antonio, Texas.
Thoracic Cancers Symposium to highlight future directions for multidisciplinary care

By Ramesh Rengan, MD, PhD

Make plans to join us March 14-16, 2019, in San Diego at the Hilton San Diego Bayfront for the Multidisciplinary Thoracic Cancers Symposium. The meeting, co-sponsored by ASTRO, the American Society of Clinical Oncology and The Society of Thoracic Surgeons, brings together clinical and research thought leaders from all facets of thoracic oncology. We also welcome two new content advisers this year: the American College of Chest Physicians and the Society of Thoracic Radiology.

The Multidisciplinary Thoracic Cancers Symposium has been described by attendees as “a fantastic meeting for any physician involved in the care of lung cancer patients,” and “an exciting meeting which integrates various facets of clinical, translational and basic science.” One attendee from 2017 said that “the best meetings for thoracic medical oncology are always multidisciplinary,” and another attendee confirmed the multidisciplinary nature of the meeting: “As a thoracic surgeon without access to radiation therapy every day, I learned a new language.”

There are numerous recent and ongoing advances in the treatment of patients with thoracic malignancies. Advances are reported almost daily and failure to stay informed can lead to missed opportunities to improve patient care and outcomes. It is increasingly challenging for the clinician to be conversant on the optimal incorporation of these advances into daily practice. Additionally, while these newer approaches demonstrate significant promise, toxicities and adverse interactions have been observed.

This meeting will highlight the relevant strengths and limitations of integration of these cutting-edge approaches into the therapeutic paradigm for thoracic malignancies. It will feature interactive case discussions and tumor boards; educational sessions on multidisciplinary therapies, new targeted therapies, immunotherapy, treatment and screening guidelines and supportive care; and oral abstract sessions highlighting the most current, evidence-based practices. The goal of this meeting is to provide participants with updates on current clinical and translational initiatives in thoracic malignancies, including targeted therapy, immunotherapy, advanced radiation techniques, surgical methodologies and pathological advancements in molecular categorization that are relevant to daily clinical practice. Additionally, attendees will be updated on the appropriate integration of these advancements in their daily practice, including indication, patient selection, combinations of different therapeutic modalities, prevention and management of common toxicities.

The multidisciplinary format of the Thoracic Cancers Symposium fosters the continued collaboration of surgical, medical and radiation oncologists to provide the best cancer care for patients. The program is designed for all members of the care team, including medical oncologists, radiation oncologists, thoracic surgeons, physicists, nurses, diagnostic radiologists, pathologists, thoracic radiologists and pulmonary medicine physicians. Symposium attendees are encouraged to take advantage of the opportunity to network and share information with their colleagues in the field, as well as earn continuing education credits.

ASTRO is accredited with commendation by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. ASTRO designates this live activity for 16.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Interested in submitting a late-breaking abstract? The submission site will open December 12 and the deadline to submit a late-breaking abstract is January 16, 2019. Visit www.thoracicsymposium.org for more information. We hope to see you there!
NOW WITH PFS AND OS DATA

IMFINZI: THE FIRST AND ONLY APPROVED IMMUNOTHERAPY FOLLOWING CRT FOR PATIENTS WITH UNRESECTABLE STAGE III NSCLC

**Indication**

IMFINZI is indicated for the treatment of patients with unresectable Stage III non-small cell lung cancer (NSCLC) whose disease has not progressed following concurrent platinum-based chemotherapy and radiation therapy.

**Important Safety Information**

There are no contraindications for IMFINZI® (durvalumab).

IMFINZI can cause serious, potentially fatal adverse reactions including immune-mediated pneumonitis, hepatitis, colitis or diarrhea, endocrinopathies, nephritis, rash or dermatitis, other immune-mediated adverse reactions, infection, and infusion-related reactions. Please refer to the full Prescribing Information for important dosage modification and management information specific to adverse reactions.

PFS: progression-free survival; OS: overall survival; CRT: chemoradiation therapy; NSCLC: non-small cell lung cancer
**IMFINZI**

**durvalumab**

Injection for Intravenous Use 50 mg/mL

NOW WITH PFS AND OS DATA

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**PACIFIC study design**

- A large Phase III, randomized, double-blind, placebo-controlled, multicenter study of 713 patients with unresectable Stage III NSCLC whose disease had not progressed following concurrent platinum-based CRT‡1,3
- Enrollment was not restricted to any threshold for the level of PD-L1 expression3
- The study was designed to demonstrate superior PFS and OS of IMFINZI vs placebo1,3

**Safety and tolerability**

- At the time of OS analysis, the safety and tolerability profile for IMFINZI remained consistent with that reported at the time of PFS analysis2
- Serious, potentially fatal risks were seen with IMFINZI; serious adverse reactions occurred in 29% of patients receiving IMFINZI and 23% receiving placebo3
- The most frequent serious adverse reactions (≥2%) were pneumonitis or radiation pneumonitis and pneumonia1
- The most common adverse reactions (≥20%) were cough, fatigue, pneumonitis or radiation pneumonitis, upper respiratory tract infections, dyspnea, and rash1
- Discontinuation rates due to adverse events (regardless of causality) were 15% in patients receiving IMFINZI and 10% in patients receiving placebo3

*Measured based on RECIST v1.1 criteria by blinded independent central review (BICR).3

†Based on first planned OS interim analysis (42% maturity) of 299 deaths (61% of planned events).2

‡Absence of progression following at least 2 cycles of chemotherapy concurrent with radiation and a WHO performance status of 0 or 1.3

Please see additional Important Safety Information on next pages.
Important Safety Information (continued)

Immune-Mediated Pneumonitis
IMFINZI can cause immune-mediated pneumonitis, defined as requiring use of corticosteroids. Fatal cases have been reported. Monitor patients for signs and symptoms of pneumonitis and evaluate with radiographic imaging when suspected. Administer corticosteroids for Grade 2 or greater pneumonitis. Withhold IMFINZI for Grade 2 pneumonitis; permanently discontinue for Grade 3 or 4 pneumonitis.

In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, pneumonitis occurred in 5% of patients, including Grade 3 (0.8%), Grade 4 (<0.1%), and Grade 5 (0.3%) pneumonitis. Pneumonitis led to discontinuation of IMFINZI in 1.5% of the 1889 patients. In the PACIFIC study, the incidence of pneumonitis (including radiation pneumonitis) was 34%, including Grade 3 (3.4%) and Grade 5 (1.1%) pneumonitis in the IMFINZI arm. In the PACIFIC study, pneumonitis led to discontinuation of IMFINZI in 6% of patients.

Immune-Mediated Colitis
IMFINZI can cause immune-mediated colitis, defined as requiring use of corticosteroids. Fatal cases have been reported. Monitor patients for signs and symptoms of colitis during and after discontinuation of IMFINZI, including clinical chemistry monitoring. Administer corticosteroids for Grade 2 or higher elevations of ALT, AST, and/or total bilirubin. Withhold IMFINZI for ALT or AST greater than 3 but less than or equal to 8 times the ULN or total bilirubin greater than 1.5 but less than or equal to 5 times the ULN; permanently discontinue IMFINZI for ALT or AST greater than 8 times the ULN or total bilirubin greater than 5 times the ULN or concurrent ALT or AST greater than 3 times the ULN and total bilirubin greater than 2 times the ULN with no other cause.

In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, hepatitis occurred in 12% of patients, including Grade 3 (4.4%), Grade 4 (0.4%), and Grade 5 (0.2%) hepatitis. Hepatitis led to discontinuation of IMFINZI in 0.7% of the 1889 patients.

In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, colitis or diarrhea occurred in 18% of patients, including Grade 3 (1.0%) and Grade 4 (0.1%) colitis. Diarrhea or colitis led to discontinuation of IMFINZI in 0.4% of the 1889 patients.

Immune-Mediated Endocrinopathies
IMFINZI can cause immune-mediated endocrinopathies, including thyroid disorders, adrenal insufficiency, type 1 diabetes mellitus, and hypophysitis/hypopituitarism. Monitor patients for clinical signs and symptoms of endocrinopathies.

- Thyroid disorders—Monitor thyroid function prior to and periodically during treatment. Initiate hormone replacement therapy or medical management of hyperthyroidism as clinically indicated. Withhold IMFINZI for Grades 2–4 hyperthyroidism, until clinically stable. Continue IMFINZI for hypothyroidism.

In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, hypothyroidism occurred in 11% of patients, while hyperthyroidism occurred in 7% of patients. Thyroiditis occurred in 0.9% of patients, including Grade 3 (<0.1%). Hypothyroidism was preceded by thyroiditis or hyperthyroidism in 25% of patients.

- Adrenal insufficiency—Administer corticosteroids as clinically indicated and withhold IMFINZI until clinically stable for Grade 2 or higher adrenal insufficiency. In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, adrenal insufficiency occurred in 0.7% of patients, including Grade 3 (<0.1%) adrenal insufficiency.

- Type 1 diabetes mellitus—Initiate treatment with insulin as clinically indicated. Withhold IMFINZI for Grades 2–4 type 1 diabetes mellitus, until clinically stable. In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, type 1 diabetes mellitus occurred in <0.1% of patients.

- Hypophysitis—Administer corticosteroids and hormone replacement as clinically indicated and withhold IMFINZI until clinically stable for Grade 2 or higher hypophysitis. Hypopituitarism leading to adrenal insufficiency and diabetes insipidus occurred in <0.1% of 1889 patients with various cancers who received IMFINZI.

Immune-Mediated Nephritis
IMFINZI can cause immune-mediated nephritis, defined as evidence of renal dysfunction requiring use of corticosteroids. Fatal cases have occurred. Monitor patients for abnormal renal function tests prior to and periodically during treatment with IMFINZI. Administer corticosteroids as clinically indicated. Withhold IMFINZI for creatinine greater than 1.5 to 3 times the ULN; permanently discontinue IMFINZI and administer corticosteroids in patients with creatinine greater than 3 times the ULN.

In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, nephritis (reported as any of the following: increased creatinine or urea, acute kidney injury, renal failure, decreased glomerular filtration rate, tubulointerstitial nephritis, decreased creatinine clearance, glomerulonephritis, and nephritis) occurred in 6.3% of the patients including Grade 3 (1.1%), Grade 4 (0.2%), and Grade 5 (0.1%) nephritis. IMFINZI was discontinued in 0.3% of the 1889 patients.

Immune-Mediated Dermatologic Reactions
IMFINZI can cause immune-mediated rash. Bullous dermatitis and Stevens Johnson Syndrome (SJS)/toxic epidermal necrolysis (TEN) have occurred with other products in this class. Administer corticosteroids for Grade 2 rash or dermatitis lasting for more than 1 week or for Grade 3 or 4 rash or
dermatitis. Withhold IMFINZI for Grade 2 rash or dermatitis lasting longer than 1 week or Grade 3 rash or dermatitis; permanently discontinue IMFINZI in patients with Grade 4 rash or dermatitis.

In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, 26% of patients developed rash or dermatitis and 0.4% of the patients developed vitiligo. Rash or dermatitis led to discontinuation of IMFINZI in 0.1% of the 1889 patients.

Other Immune-Mediated Adverse Reactions

IMFINZI can cause severe and fatal immune-mediated adverse reactions. These immune-mediated reactions may involve any organ system. While immune-mediated reactions usually manifest during treatment with IMFINZI, immune-mediated adverse reactions can also manifest after discontinuation of IMFINZI. For suspected immune-mediated adverse reactions, exclude other causes and initiate corticosteroids as clinically indicated. Withhold IMFINZI for Grade 3 immune-mediated adverse reactions, unless clinical judgment indicates discontinuation; permanently discontinue IMFINZI for Grade 4 adverse reactions.

The following clinically significant, immune-mediated adverse reactions occurred at an incidence of less than 1% each in 1889 patients who received IMFINZI: aseptic meningitis, hemolytic anemia, immune thrombocytopenic purpura, myocarditis, myositis, and ocular inflammatory toxicity, including uveitis and keratitis. Additional clinically significant immune-mediated adverse reactions have been seen with other products in this class (see Warnings and Precautions Section 5.7 of IMFINZI full Prescribing Information).

Infection

IMFINZI can cause serious infections, including fatal cases. Monitor patients for signs and symptoms of infection and treat as clinically indicated. Withhold IMFINZI for Grade 3 or 4 infection, until clinically stable.

In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, infections occurred in 43% of patients, including Grade 3 (8%), Grade 4 (1.9%), and Grade 5 (1.0%). In patients with Stage III NSCLC in the PACIFIC study, the most common Grade 3 or higher infection was pneumonia, which occurred in 5% of patients.

Infusion-Related Reactions

IMFINZI can cause severe or life-threatening infusion-related reactions. Monitor patients for signs and symptoms of an infusion-related reaction. Interrupt or slow the rate of infusion for Grades 1–2 infusion-related reactions; permanently discontinue for Grades 3–4 infusion-related reactions.

In clinical studies enrolling 1889 patients with various cancers who received IMFINZI, infusion-related reactions occurred in 2.2% of patients, including Grade 3 (0.3%).

Embryo-Fetal Toxicity

Based on its mechanism of action and data from animal studies, IMFINZI can cause fetal harm when administered to a pregnant woman. There are no data on the use of IMFINZI in pregnant women. Advise pregnant women of the potential risk to a fetus and advise women of reproductive potential to use effective contraception during treatment and for at least 3 months after the last dose of IMFINZI.

Lactation

There is no information regarding the presence of IMFINZI in human milk; however, because of the potential for adverse reactions in breastfed infants from IMFINZI, advise women not to breastfeed during treatment and for at least 3 months after the last dose.

Most Common Adverse Reactions

- In patients with Stage III NSCLC in the PACIFIC study (IMFINZI n=475), the most common adverse reactions (≥20% of patients) were cough (40%), fatigue (34%), pneumonitis or radiation pneumonitis (34%), upper respiratory tract infections (26%), dyspnea (25%), and rash (23%). The most common Grade 3 or 4 adverse reaction (≥3%) was pneumonia (7%).

- In patients with Stage III NSCLC in the PACIFIC study (IMFINZI n=475), discontinuation due to adverse reactions occurred in 15% of patients in the IMFINZI arm. Serious adverse reactions occurred in 29% of patients receiving IMFINZI. The most frequent serious adverse reactions (≥2% of patients) were pneumonitis or radiation pneumonitis (7%) and pneumonia (6%). Fatal pneumonitis or radiation pneumonitis and fatal pneumonia occurred in <2% of patients and were similar across arms.

The safety and effectiveness of IMFINZI have not been established in pediatric patients.

Please see Brief Summary of complete Prescribing Information on adjacent pages.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.FDA.gov/medwatch or call 1-800-FDA-1088.

Recommended Dosages for Adverse Reactions

The recommended dose of IMFINZI is 10 mg/kg administered as an intravenous infusion over 60 minutes twice weekly until disease progression, unacceptable toxicity, or a maximum of 12 months.

Dosage Modifications for Adverse Reactions

No dose reductions are recommended. Withhold or discontinue IMFINZI to manage adverse reactions as described in Table 1.

Table 1. Recommended Dosage Modifications for Adverse Reactions

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>Dosage Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia (see Warnings and Precautions (5.7))</td>
<td>Grade 2 or greater: Withhold dose until Grade 1 or resolved and corticosteroid dose is less than or equal to prednisone 10 mg per day (or equivalent). Grade 3 or 4: Permanently discontinue.</td>
</tr>
<tr>
<td>for ALT or AST greater than 3 times the ULN or Total bilirubin greater than 5 times the ULN.</td>
<td>Withhold dose until Grade 4 or 5 times the ULN or Total bilirubin greater than 5 times the ULN.</td>
</tr>
<tr>
<td>ALT or AST greater than 8 times the ULN or Total bilirubin greater than 10 times the ULN.</td>
<td>Permanently discontinue.</td>
</tr>
<tr>
<td>Hyperthyroidism (see Warnings and Precautions (5.4))</td>
<td>Grade 2 or greater: Withhold dose until clinically stable. Grade 3 or 4: Permanently discontinue.</td>
</tr>
<tr>
<td>Adrenal Insufficiency or Hypophosphatemia (see Warnings and Precautions (5.6))</td>
<td>Grade 2-4: Withhold dose until clinically stable. Grade 5: Permanently discontinue.</td>
</tr>
<tr>
<td>Type 1 Diabetes Mellitus (see Warnings and Precautions (5.6))</td>
<td>Grade 2-4: Withhold dose until clinically stable.</td>
</tr>
<tr>
<td>Nephrotoxicity (see Warnings and Precautions (5.5))</td>
<td>Grade 2 or greater: Withhold dose until prednisone 10 mg per day (or equivalent). Grade 3 or 4: Permanently discontinue.</td>
</tr>
<tr>
<td>for Creatinine greater than 1.5 times the ULN.</td>
<td>Withhold dose until Grade 1 or resolved and corticosteroid dose is less than or equal to prednisone 10 mg per day (or equivalent).</td>
</tr>
<tr>
<td>for Creatinine greater than 3 times the ULN.</td>
<td>Withhold dose until Grade 1 or resolved and corticosteroid dose is less than or equal to prednisone 10 mg per day (or equivalent).</td>
</tr>
<tr>
<td>Rash or dermatitis (see Warnings and Precautions (5.6))</td>
<td>Grade 2 or greater: Withhold dose until clinically stable. Grade 3 or 4: Permanently discontinue.</td>
</tr>
<tr>
<td>Diarrhea (see Warnings and Precautions (5.6))</td>
<td>Grade 2 or greater: Withhold dose until clinically stable.</td>
</tr>
<tr>
<td>Infection (see Warnings and Precautions (5.6))</td>
<td>Grade 4: Permanently discontinue.</td>
</tr>
<tr>
<td>Infection-related adverse reactions (see Warnings and Precautions (5.3))</td>
<td>Grade 4 or 5: Withhold dose until clinically stable.</td>
</tr>
<tr>
<td>Grade 4 or 5: Permanently discontinue.</td>
<td></td>
</tr>
<tr>
<td>Other immune-mediated adverse reactions (see Warnings and Precautions (5.7))</td>
<td>Grade 2 or greater: Withhold dose until prednisone 10 mg per day (or equivalent).</td>
</tr>
<tr>
<td>Persistent Grade 2 or greater (3 or 4 adverse reaction continuing 12 weeks after last IMFINZI dose)</td>
<td>Grade 4: Permanently discontinue.</td>
</tr>
<tr>
<td>Recurrent Grade 3 or greater (12 adverse reaction)</td>
<td>Permanently discontinue.</td>
</tr>
</tbody>
</table>

General Information


IMFINZI® (durvalumab) injection, for intravenous use

Brief Summary of Prescribing Information. For complete prescribing information consult the full product labeling. Uncontrolled hypertension occurred in 7% of patients, including 3% of patients, including Grade 3 (< 0.1%) hypertension. Hypothyroidism was prevented by prior iodine consumption and isothiocyanate inhibition.
Intestinal-Related Reactions
IMFINZI can cause severe or life-threatening intestinal-related reactions. Monitor for signs and symptoms of intestinal-related reactions. Intestinal perforation, bowel obstruction, and fatal intestinal perforation can occur in patients treated with IMFINZI. Patients may present with abdominal pain, cramping, distention, or constipation. IMFINZI is contraindicated in patients with intestinal perforation, gangrene, or bowel necrosis.

Other Immune-Mediated Adverse Reactions
Immune-Mediated Dermatologic Reactions
• Immune-Mediated Colitis
• Immune-Mediated Neutropenia
• Immune-Mediated Dermatologic Reactions (see Warnings and Precautions (5.6) in the full Prescribing Information)
• Other Immune-Mediated Adverse Reactions (see Warnings and Precautions (5.7) in the full Prescribing Information)

Infections
Infections (see Data)

ADVERSE REACTIONS
The following adverse reactions are discussed in greater detail in other sections of the labeling:
• Immune-Mediated Pneumonitis (see Warnings and Precautions (5.1) in the full Prescribing Information)
• Immune-Mediated Hepatitis (see Warnings and Precautions (5.2) in the full Prescribing Information)
• Immune-Mediated Endocrinopathies (see Warnings and Precautions (5.3) in the full Prescribing Information)
• Immune-Mediated Nephritis (see Warnings and Precautions (5.5) in the full Prescribing Information)
• Infusion-Reactions (see Warnings and Precautions (5.8) in the full Prescribing Information)

Clinical Trials Experience
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The data described in the Warnings and Precautions section reflect exposure to IMFINZI in 1889 patients from the PACIFIC study (a randomized, placebo-controlled study that enrolled 475 patients with Stage III NSCLC). Study 1108 (an open-label, single-arm, multinational study that enrolled 191 patients with urothelial carcinoma and 779 patients with various other solid tumors), and an additional open-label, single-arm trial that enrolled 444 patients with metastatic lung cancer, an indication for which durvalumab is not approved. Across all studies, IMFINZI was administered at a dose of 10 mg/kg intravenously every 2 weeks. Among the 1889 patients, 38% were exposed for 6 months or more and 16% were exposed for 12 months or more. The data described in this section reflect exposure to IMFINZI in patients with Stage III NSCLC enrolled in the PACIFIC study.

Non-Small Cell Lung Cancer
The safety of IMFINZI in patients with Stage III NSCLC who completed concurrent platinum-based chemotherapy within 42 days prior to initiation of study drug was evaluated in the PACIFIC study, a randomized, double-blind, placebo-controlled, multicenter trial that enrolled 475 patients with Stage III NSCLC. Study 1108 (an open-label, single-arm, multinational study that enrolled 191 patients with urothelial carcinoma and 779 patients with various other solid tumors), and an additional open-label, single-arm trial that enrolled 444 patients with metastatic lung cancer, an indication for which durvalumab is not approved. Across all studies, IMFINZI was administered at a dose of 10 mg/kg intravenously every 2 weeks. Among the 1889 patients, 38% were exposed for 6 months or more and 16% were exposed for 12 months or more. The data described in this section reflect exposure to IMFINZI in patients with Stage III NSCLC enrolled in the PACIFIC study.

Summary of Other Relevant Clinical Trials
For Grade 1 or 2 infusion-related reactions, interrupt, slow the infusion, and monitor for signs and symptoms of infusion-related reactions. Do not restart the infusion.
This year’s Clinical Trials session included five groundbreaking studies from leaders in clinical radiation oncology research, providing attendees with updates on trials that could have an impact on standard of care for patients for years to come.

Jessika Contreras, MD, from Barnes-Jewish Hospital in St. Louis, presented evidence that elimination of post-operative radiation to the pathologically node negative (pN0) neck can vastly improve patient quality of life without significantly increasing local control. This could suggest a major shift in the standard of care for patients with squamous cell carcinoma of the head and neck, eliminating radiation treatment that can lead to side effects. Such a radical change would not be without controversy, as evidenced by the presentation’s discussant, Alexander Lin, MD, from the University of Pennsylvania. Dr. Lin pointed out that, while there were 72 patients in the study, they represented a myriad of primary tumor sites, and were representative of different biological states (such as HPV+ versus HPV- patients). Both Drs. Contreras and Lin acknowledged that it will be important to gather more data to support this new approach to the treatment of head and neck squamous cell carcinoma before it can be widely adopted in practice.

John Staffurth, MD, MB, from Cardiff University, gave an update on the progress of the Conventional or Hypofractionated High Dose Intensity Modulated Radiotherapy for Prostate Cancer (CHHiP) trial. The five-year findings of this noninferiority trial show evidence that hypofractionation (60 Gray in 20 fractions or 57 Gray in 19 fractions) reduces long-term sexual side effects with no significant effect on bowel or urinary side effects in patients with localized prostate cancer versus a traditional treatment schedule (74 Gray in 37 fractions). These results, obtained through patient-reported outcomes surveys, confirmed the data from the first two years of the trial, suggesting that hypofractionated treatment could be a viable option for improving quality of life for localized prostate cancer patients.

In a randomized trial studying the use of radiation after surgical excision for “good risk” ductal carcinoma in-situ (DCIS), Beryl McCormick, MD, FASTRO, and her colleagues at Memorial Sloan Kettering Cancer Center compared whole breast radiation therapy with no radiation in “good risk” patients. The objective was to assess the role of radiation therapy in decreasing local failure and preventing the need for mastectomy. Endpoints were local failure, contralateral breast failure and salvage mastectomy. Median follow-up for the more than 600 patients accrued was 12.4 years. While tamoxifen use was initially required in the protocol, it was made optional in 2001, with final tamoxifen use at 58 percent in the RT group and 66 percent in the non-RT group. Local failure in the ipsilateral breast was 11.4 percent for the non-irradiated group and 2.8 percent for the radiated group, with no statistical difference between the groups for contralateral breast events. More toxicities were reported in the radiated arm, but late radiation toxicity was low. In the defined “good risk” DCIS population, the addition of whole breast radiation following breast conservation surgery significantly reduced risk of any local recurrence. While this data provides evidence that irradiating these patients could reduce local failure, the authors noted that information should be used to inform a meaningful patient–doctor discussion of the risks, benefits and patients’ degree of comfort.

Summaries of the other two abstracts presented during the Clinical Trials session can be found on page 3 in Press Highlights. For more details on all of the studies presented, view or purchase the 2018 Annual Meeting Virtual Meeting at www.astro.org/virtualmeeting.
And the winners of the ROI 5K are ....

By Janet Hedrick

The results are in for the ninth annual Running Strong 5K Run for the Future to Benefit the Radiation Oncology Institute (ROI). On Monday morning, more than 230 attendees gathered at the Arneson River Theatre on the San Antonio River Walk to run or walk the 5K course along the renowned path on the river. Runners traveled along the River Walk and some parts of the historic Mission Trail for a memorable course that weaved through the city of San Antonio.

“THE ROI 5K is a staple event that makes ASTRO special. It shows our commitment to supporting others in our field, celebrating wellness and building new and lifelong friendships.” said 2017 and 2018 race winner Benjamin Li, MD, MBA.

Individual attendees competed for the titles of fastest male and female runners. Equally important, many race attendees set new personal best times, pushed beyond their limits, met new acquaintances and had fun in the process.

Congratulations to Ben Li, MD, of University of California, San Francisco who won the title of fastest male runner for the second year in a row with a time of 15:37 and Bree Eaton, MD, of Winship Cancer Institute of Emory University who won the title of fastest female runner with a time of 20:45.

Emory University pulled out the win for the second consecutive year with an average time of 17:42 and secured a $1,000 donation for the institution’s scholarship fund. Eight corporate teams participated in the Corporate Challenge. Elekta won the esteemed title and trophy for the corporate group of participants with an average time of 21.13.

Radiation Business Solutions (RBS), host of the race for the ninth year, established the Running Strong 5K Run for the Future to Benefit the ROI to support the important research and education programs funded by the Institute. Multiple companies generously help sponsor the event annually. This year’s sponsors included Elekta and Varian at the Hope Sponsor Level ($10,000), Accuray at the Compassion Sponsor Level ($5,000) and Northwest Medical Physics Center and Tier3MD at the Hatch Show Print Level ($1,500).

“The event brings together industry, academic institutions and ASTRO members to support groundbreaking research in a fun and unique way.” said ROI Vice President Colleen A.F. Lawton, MD, FASTRO. “We are so grateful to RBS for hosting this event each year and to the companies that help sponsor it.”

Sponsorships and registration fees from the 5K go directly to the ROI to fund research for the field of radiation oncology.

If you weren’t able to participate in the race, you can still join the effort to support research and education for the field of radiation oncology. Stop by Booth 1540 in the Innovation and Solution Showcase to make your 2018 donation to the ROI.

Virtual collection traces history of ASTRO’s journals

By Lisa Braverman, Managing Editor, Red Journal

In honor and celebration of ASTRO’s 60th anniversary, the Editors-in-Chief of the Red Journal, Practical Radiation Oncology and Advances in Radiation Oncology have compiled a special collection of articles entitled, “ASTRO at 60: The Evolution of Radiation Oncology.” The collection, which can be found at www.elsevier.com/health/journals/astro-at-60, charts the development of the field alongside the growth of ASTRO and its journals.

The special collection begins with a brief overview of the scientific focuses that have driven radiation oncology research over the last six decades. Each decade of published research is attached to a corresponding theme, guiding readers from 1970s Red Journal articles focused on combined modality therapy and organ preservation through recent work in Advances about big data, social media and disparities in care.

Journal editors Anthony Zietman, MD, FASTRO, W. Robert Lee, MD, FASTRO, and Robert Miller, MD, FASTRO, closely collaborated to curate the articles. Top-cited research, according to Scopus and Crossref, was included in the collection. Speaking to the importance of the collection, Dr. Zietman said, “Sometimes we forget how far the specialty has come in the 60 years since it took its own path independent of radiology. Reviewing this collection of papers, one can appreciate the amazing conceptual leaps and technological advances that have made our practice what it is today.”

In addition to highlighting the science that has energized the field since the 1970s, “ASTRO at 60” provides a glimpse into how the journals fit with the organization’s history and mission. Advancing the field of radiation oncology by their very nature, the journals have reported the latest outcomes and clinical trials research since the inception of the Red Journal. The 2000s have seen the important additions of Practical Radiation Oncology (PRO) and Advances in Radiation Oncology to ASTRO’s publishing program.

Dr. Lee noted that PRO focuses on patient safety, quality measurement and practice improvement. The practice-oriented journal houses ASTRO guidelines and guideline updates, serving as a key publication for researchers and practitioners continually seeking to improve patient outcomes and the safe and effective delivery of radiation therapy.

Advances – aptly-named – gazes to the future. Dr. Miller addressed the goals of the open access journal: “ASTRO’s Advances is looking forward to publishing how our membership addresses the truly great challenges facing radiation oncology in the 21st century – exploring the possibilities presented by big data, implementing evolving indications for immunotherapy, expanding how we communicate using social media in medicine, and addressing longstanding disparities in care delivery and underrepresentation of women and minorities in positions of leadership in radiation oncology. Advances provides a freely accessible, public platform, open to our members, to society at large, and to our patients and their caregivers, to publish, read and solve these issues.”

All three Editors-in-Chief will be available in the Innovation Hub Sunday through Tuesday to discuss the collection and answer questions about the journals they manage. Don’t miss the chance to contribute to the evolution of radiation oncology research by submitting your work to an ASTRO journal today!
ASTRO’s 2018 Gold Medalists: Patricia Eifel, MD, FASTRO, David Jaffray, PhD, and Ralph Weichselbaum, MD

ASTRO awards its annual gold medal to individuals who have made outstanding lifetime contributions in the field of radiation oncology. In the award’s 42nd consecutive year, the new awardees join an exclusive class of 84 Gold Medalists selected over the decades from the Society’s more than 10,000 members.

Patricia Eifel, MD, FASTRO, is known by many names: clinician, researcher, educator, author and mentor. But her name is most significantly synonymous with excellence in the field of gynecologic radiation oncology. For 30 years, she has been on staff at MD Anderson Cancer Center in Houston, including 20 years as the chief of gynecologic oncology service. Prior to her time there, she was the first woman hired as a faculty member at the Joint Center for Radiation Therapy at Harvard Medical School in 1982.

Internationally, Dr. Eifel is a sought-after speaker and educator. She delivered the ASTRO Refresher Course on cervical cancer for 15 years. She has written 68 book chapters and edited or authored three books, most recently Gynecologic Radiation Therapy: A Practical Guide, with Ann Klopp, MD. She has given 165 invited lectures nationally and internationally—from Kyoto to Cape Town to Kauai, Hawaii.

As a researcher, Dr. Eifel is both prolific and meticulous. She has published 180 articles in the field of radiation oncology. Her clinical database, which documents and analyzes the outcomes of thousands of patients treated with radiation therapy, is considered one of the most extensive in the field. This goldmine of data has led to many observations that have influenced clinical practice and trial designs around the world.

Dr. Eifel was lead author on the seminal study demonstrating that the addition of chemotherapy to radiation therapy improved survival for women with cervical cancer. The results of this study led to a new standard of care for cervical cancer. The resulting article, published in the Journal of Clinical Oncology, is one of the most widely cited in the field.

Her contributions to the field have gone beyond the clinic and the lab—as an ASTRO member since 1983, Dr. Eifel served as chair of the board of directors in 2008–2009. During her years on the board, ASTRO built a lobbying effort against self-referral. Also under her tenure, the Radiation Oncology Institute (ROI) was founded, ASTRO successfully lobbied against proposed cuts in Medicare reimbursement and the guidelines committees expanded.

David Jaffray, PhD, a leading medical physicist, is known for his innovation, leadership and scholarship. The head of the radiation physics department at Princess Margaret Cancer Centre in Toronto, Dr. Jaffray wears many additional hats—as the director of the Spatio-Temporal Targeting and Amplification of Radiation Response (STTARR) Innovation Centre; as the director of the Techna Institute for the Advancement of Technology for Health in the University Health Network; and as the executive vice president of technology and innovation, also with the University Health Network.

His most well-known contribution to the field is the development of the kilovoltage cone-beam CT (CBCT) for image-guided radiotherapy (IGRT). This technology revolutionized the field and changed the way patients are treated. CBCT-based IGRT significantly reduced margins, which led to a reduction of normal tissue toxicity. This change enabled the growth of stereotactic body radiation therapy to treat cancer—all due to the development of CBCT, which Dr. Jaffray led.

Dr. Jaffray’s work on CBCT has resulted in multiple patents and licenses. The original paper by Dr. Jaffray on the development of CBCT is one of the most highly cited papers in radiation oncology, with more than 1,200 citations. The increased use of IGRT meant more research was needed to test outcomes, so Dr. Jaffray developed a small-animal image-guided irradiator, which is indispensable for the field of radiobiology research.

With nearly 250 peer-reviewed publications and more than 300 invited lectures, Dr. Jaffray’s extensive CV reflects the impact his work has had on the field of radiation oncology. He has been awarded the major awards in the field of medical physics, including the Sylvia Sorkin-Greenfield Award, the Farrington Daniels Award and the Sylvia Fedoruk Award.

Ralph Weichselbaum, MD, is responsible for several important advances in the field of radiation oncology. He was one of the first investigators to recognize that radiation can activate signal transduction processes that result in activation of the immediate early genes and cytokine genes. He and his colleagues were among the first groups to systematically study multiagent chemotherapy and radiotherapy combinations in head and neck cancer.

He has been credited, along with colleague Samuel Hellman, MD, with describing the oligometastatic state. In 1995, the pair published the seminal Journal of Clinical Oncology article that posited there was a state in between a few and many metastases, which they termed oligometastasis. They further argued that these oligometastases could be successfully treated with high-dose radiation or surgery.

He is the Daniel K. Ludwig Distinguished Service Professor and Chair of the Department of Radiation and Cellular Oncology at the University of Chicago and the co-director of the Ludwig Center for Metastasis Research. With more than 850 published articles, Dr. Weichselbaum’s scientific investigations have run the gamut from radiobiology, radiochemistry, molecular biology, virology, translational science, medical utility theory, clinical research, anti-angiogenesis, immunology, the pathophysiology and molecular signature to predict metastatic state and new methods to inhibit the metastatic process.

As a result of investigating the oligometastatic state and the systemic effects of ablative radiotherapy, Dr. Weichselbaum’s research has focused on ways to combine radiation therapy with immunotherapy—using radiation to activate the immune system to attack cancer cells. This concept is now being studied in clinical trials.

Earlier this year, the American Society of Clinical Oncology honored him with the David A. Karnofsky Memorial Award and Lecture—one of three radiation oncologists to receive this award. He is one of 12 Donald K. Ludwig professors and the only radiation oncologist. He is a member of the Association of American Physicians and the National Academy of Medicine. He has also been identified as the most cited radiation oncologist of the past decade.

Be sure to join us for a special session with three past Gold Medalists to celebrate ASTRO’s 60th year on Wednesday at 9:15 a.m. in the Stars at Night Ballroom. Sarah S. Donaldson, MD, FASTRO, Stanford University; Carlos A. Perez, MD, FASTRO, Washington University (St. Louis) School of Medicine; and Lester J. Peters, MD, FASTRO, MD Anderson Radiation Oncology and Peter MacCallum Cancer Centre, will share their perspectives on the changes radiation oncology has experienced over the years and their predictions about the future.
The 2018 Fellows are:

- Soren Bentzen, DSc, PhD, University of Maryland School of Medicine, Baltimore
- Jeffrey C. Buchsbaum, MD, PhD, AM, National Cancer Institute, Rockville, Maryland
- Paul M. Busse, MD, PhD, Massachusetts General Hospital, Harvard Medical School, Boston
- Arnab Chakravarti, MD, The Ohio State University College of Medicine/Arthur G. James Cancer Hospital, Columbus, Ohio
- Joe Y. Chang, MD, PhD, The University of Texas MD Anderson Cancer Center, Houston
- Peter Y. Chen, MD, Beaumont Health System, Oakland University William Beaumont School of Medicine, Bloomfield Hills, Michigan
- Jason Chia-Hsien Cheng, MD, MS, PhD, National Taiwan University College of Medicine and Hospital, Taipei, Taiwan
- Indrin J. Chetty, PhD, Henry Ford Health System, Detroit

- Benjamin W. Corn, MD, Shaare Zedek Medical Center, Jerusalem
- Iris C. Gibbs, MD, Stanford Medicine, Stanford, California
- David Gius, MD, PhD, Northwestern University Feinberg School of Medicine, Chicago
- Eleanor E. R. Harris, MD, Case Western Reserve University and University Hospitals, Cleveland
- Mark D. Hurwitz, MD, Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia
- Reshma Jaggi, MD, PhD, University of Michigan, Ann Arbor, Michigan
- Ashesh B. Jani, MD, Emory University, Atlanta
- John A. Kalapurakal, MD, Northwestern University, Chicago
- Matthew S. Katz, MD, Radiation Oncology Associates PA, Lowell, Massachusetts
-Sameer Keole, MD, Mayo Clinic, Phoenix
- Feng-Ming Kong, MD, PhD, Case Western Reserve University, Cleveland
-Zhongxing Liao, MD, The University of Texas MD Anderson Cancer Center, Houston
- Mitchell Machtay, MD, University Hospitals Cleveland Medical Center, Cleveland
- Catherine Park, MD, University of California San Francisco, San Francisco
- Shilpen Patel, MD, Grail, Menlo Park, California
-Robert A. Price Jr., PhD, Fox Chase Cancer Center, Philadelphia
-David Raben, MD, University of Colorado Denver School of Medicine, Aurora, Colorado

- Hui-Kuo G. Shu, MD, PhD, Emory University, Atlanta
- Berend J. Slotman, MD, PhD, Amsterdam University Medical Center, Amsterdam
- Robert Timmerman, MD, University of Texas Southwestern Medical Center, Dallas
-Gregory M. M. Videtic, MD, CM, Cleveland Clinic, Cleveland
-Bhadrasain Vikram, MD, National Cancer Institute, Bethesda, Maryland
-Stephanie E. Weiss, MD, Fox Chase Cancer Center, Philadelphia

2018 ASTRO Fellows recognized at Awards Ceremony Tuesday

ASTRO has selected 35 distinguished members to receive the ASTRO Fellow (FASTRO) designation. The 2018 class of Fellows will be recognized during an awards ceremony held Tuesday in the Stars at Night Ballroom at 10:15 a.m.

The ASTRO Fellows Program recognizes individuals who have made significant contributions to radiation oncology and the Society through research, education, patient care and/or service to the field. Significant service to ASTRO is a prerequisite for consideration. Since its inception in 2006, the FASTRO designation has been awarded to just 327 of ASTRO’s more than 10,000 members worldwide.

The 2018 Fellows are:

- Indrin J. Chetty, PhD, Henry Ford Health System, Detroit
- Jason Chia-Hsien Cheng, MD, MS, PhD, National Taiwan University College of Medicine and Hospital, Taipei, Taiwan
- Peter Y. Chen, MD, Beaumont Health System, Detroit
- Arnab Chakravarti, MD, The Ohio State University College of Medicine/Arthur G. James Cancer Hospital, Columbus, Ohio
- Joe Y. Chang, MD, PhD, The University of Texas MD Anderson Cancer Center, Houston
- Peter Y. Chen, MD, Beaumont Health System, Oakland University William Beaumont School of Medicine, Bloomfield Hills, Michigan
- Jason Chia-Hsien Cheng, MD, MS, PhD, National Taiwan University College of Medicine and Hospital, Taipei, Taiwan
- Indrin J. Chetty, PhD, Henry Ford Health System, Detroit

- Benjamin W. Corn, MD, Shaare Zedek Medical Center, Jerusalem
- Iris C. Gibbs, MD, Stanford Medicine, Stanford, California
- David Gius, MD, PhD, Northwestern University Feinberg School of Medicine, Chicago
- Eleanor E. R. Harris, MD, Case Western Reserve University and University Hospitals, Cleveland
- Mark D. Hurwitz, MD, Sidney Kimmel Medical College at Thomas Jefferson University, Philadelphia
- Reshma Jaggi, MD, PhD, University of Michigan, Ann Arbor, Michigan
- Ashesh B. Jani, MD, Emory University, Atlanta
- John A. Kalapurakal, MD, Northwestern University, Chicago
- Matthew S. Katz, MD, Radiation Oncology Associates PA, Lowell, Massachusetts
-Sameer Keole, MD, Mayo Clinic, Phoenix
-Feng-Ming Kong, MD, PhD, Case Western Reserve University, Cleveland
-Zhongxing Liao, MD, The University of Texas MD Anderson Cancer Center, Houston
-Mitchell Machtay, MD, University Hospitals Cleveland Medical Center, Cleveland
-Catherine Park, MD, University of California San Francisco, San Francisco
-Shilpen Patel, MD, Grail, Menlo Park, California
-Robert A. Price Jr., PhD, Fox Chase Cancer Center, Philadelphia
-David Raben, MD, University of Colorado Denver School of Medicine, Aurora, Colorado

- Hui-Kuo G. Shu, MD, PhD, Emory University, Atlanta
- Berend J. Slotman, MD, PhD, Amsterdam University Medical Center, Amsterdam
- Robert Timmerman, MD, University of Texas Southwestern Medical Center, Dallas
-Gregory M. M. Videtic, MD, CM, Cleveland Clinic, Cleveland
-Bhadrasain Vikram, MD, National Cancer Institute, Bethesda, Maryland
-Stephanie E. Weiss, MD, Fox Chase Cancer Center, Philadelphia

2018 ANNUAL MEETING UNRESTRICTED EDUCATIONAL GRANT SUPPORTERS

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INDUSTRY-EXPERT THEATERS

This activity allows companies to present their noteworthy, new products and services through live presentations. Seating is available on a first-come, first-serve basis. The Industry-Expert Theater content and views expressed therein are those of the companies and not of ASTRO.

Lunch or other food and beverages may be provided by the companies, which may subject you to reporting under the Federal Sunshine Act (the Open Payments Program) or other state laws. Otherwise, food may be available for purchase prior to the start of an event in the ASTRO Bistro and concession areas.

Theaters 1 and 2 are located in the Innovation Hub in the Innovation and Solution Showcase (Exhibit Hall). Room 216 A/B is located on the Meeting Level.

Tuesday, October 23
Theater 2, Innovation Hub
SGRT: Advances in Accuracy and Improved Patient Experience
10:15 a.m. - 11:15 a.m.
Company: Vision RT Ltd.

Theater 1, Innovation Hub
MR-Guided Radiotherapy Clinical Outcomes: A Summary of Prospective Trials
12:30 p.m. - 1:30 p.m.
Company: ViewRay
Thoracic surgeon and professor at the University of Chicago Jessica Donington, MD, MS, has been selected as the 2018 ASTRO Honorary Member. She will be presented with the honor during an awards ceremony on Tuesday, from 10:15 a.m. to 11:30 a.m., in the Stars at Night Ballroom.

Honorary membership is the highest honor that ASTRO bestows upon cancer physicians and researchers who do not qualify for ASTRO membership—namely, those outside of the specialties of radiation oncology, radiobiology or medical physics. ASTRO Honorary Members must have made significant contributions to the specialty of radiation oncology.

Dr. Donington has long supported collaborations between thoracic surgeons and radiation oncologists to provide lung cancer patients with the best care. As one of two surgeons on the guideline committee, she was a key contributor to the recent ASTRO clinical practice statement on stereotactic body radiotherapy (SBRT) for early stage non-small cell lung cancer, released in 2017.

Dr. Donington has also been involved in ASTRO as a member of the steering committee for the 2017 Multidisciplinary Thoracic Cancers Symposium and is currently serving as co-chair of the 2019 symposium. She has participated in several ASTRO Annual Meetings as a speaker and attendee.

She recently became chief of general thoracic surgery and professor at the University of Chicago. From 2007 to 2018, she was an attending surgeon at New York University Langone Medical Center and associate professor at the NYU School of Medicine.

Prior to her time at NYU, Dr. Donington was at Stanford, where she collaborated with Quynh-Thu Le, MD, FASTRO, on a dose-escalation lung SBRT trial. That trial, published in the Journal of Thoracic Oncology in 2006, was one of the earliest lung SBRT trials in the United States evaluating single fraction SBRT in a phase I trial.

She has been a member of the NRG/RTOG Thoracic Malignancy committee for many years, serving since 2015 as the thoracic surgery co-chair for NRG/RTOG 0839. She has led or co-authored more than 90 papers, written 19 textbook chapters and made 79 presentations.

She has been invited to author multiple clinical guidelines in clinical oncology, including ASTRO’s, and was appointed to the editorial boards of several thoracic oncology journals and scientific advisory boards of multiple lung cancer foundations. ASTRO is honored to welcome Dr. Donington as a member of our Society.
ASTRO supports patients through Annual Survivor Circle Awards and Grants

Two Texas charities and two Texas cancer survivors are recognized through the Survivor Circle program

By Leah Kerkman Fogarty

Each year, ASTRO awards the Survivor Circle Award to cancer survivors and the Survivor Circle Grants to patient support organizations. Please stop by the Main Lobby, Street Level, at the Ask ASTRO booth to learn more about this year’s Survivor Circle recipients.

Survivor Circle Grants

Two Texas-based nonprofits, the Light and Salt Association and Candlelighters of El Paso, have been named the recipients of the ASTRO 2018 Survivor Circle grants. Each organization will receive a $10,000 grant to support their programs for those who have been affected by cancer.

Candlelighters of El Paso was formed in 1978 as an informal support group for parents of children with cancer. Candlelighters’ current continuum of care is offered in three main areas: emergency financial assistance, psychosocial programs and therapeutic services. The Light and Salt Association aims to assist the vulnerable Asian-American community in the greater Houston area through quality care and services, promoting healthy living and fostering a sense of community.

Survivor Circle Awards

For only the second time, two survivors—not one—were selected to receive the ASTRO Survivor Circle Award this year. Susan Rafte, a Houston breast cancer survivor, will be honored at an award ceremony during ASTRO’s 60th Annual Meeting in San Antonio. The second recipient, William Fults, will be posthumously awarded the honor.

The ASTRO Survivor Circle Award is an annual recognition of cancer survivors who have dedicated their time and energy in service and support of their local communities. Honorees are selected from the community in which ASTRO holds its Annual Meeting, where awardees are presented with the honor, along with $1,000.

The Survivor Circle award and grants are made possible through generous donations from exhibiting companies that participate in the Passport Program. This year’s Passport Program participants are: Augmenix, Blue Earth Diagnostics, CIVCO, Galera Therapeutics, Hitachi, Ltd., Mevion, Nanobiotix, Sirtex, UPMC Hillman Cancer Center, Vertual, Ltd., and Vision RT.

Annual Business Meeting focuses on how ASTRO has implemented strategic plan

ASTRO leadership will take advantage of today’s Annual Business Meeting luncheon to update members about how the organization has undertaken new initiatives aimed at increasing the profile of radiation oncology—one of the focal points of the strategic plan launched in 2017. All ASTRO voting members (Active, Affiliate and International members) should plan to attend the Business luncheon today, immediately following the Awards Ceremony in Hemisfair Ballroom 3 on the Ballroom Level.

First, ASTRO Chief Executive Officer Laura I. Thevenot will go over the political landscape of health care, including health care cost drivers and the potential for reform of the Affordable Care Act. She will also give an overview of the results from a patient survey of 403 people who underwent radiation therapy to treat cancer. This survey covered information on how treatment decisions were made, patient knowledge level and expectations regarding side effects, as well as general patient feedback. She will also touch upon some of the new features of this year’s Annual Meeting with a preview of what’s in store for future annual meetings.

ASTRO Chair Brian Kavanagh, MD, MPH, FASTRO, will reflect upon his time as ASTRO president and chair, recounting the new initiatives he carried out that were in line with ASTRO’s strategic plan. To view the strategic plan, please visit www.astro.org/strategicplan.

Dr. Kavanagh will also unveil the members of the new ASTRO Speakers’ Bureau. This bureau was created to further the reach of ASTRO and expand our subject matter experts available to speak to members of the press and others on matters related to radiation oncology.

Incoming ASTRO Chair and current President Paul Harari, MD, FASTRO, will then summarize his goals for the coming year, with an eye on the strategic plan core values of Improved Outcomes and Innovation. Specifically, Dr. Harari will speak to the development of new ASTRO programs that retain and foster the intellectual research talent currently entering the field of radiation oncology and consistently deliver the highest quality and value care to cancer patients.

In order to retain and foster the next generation of radiation oncologists, ASTRO has created new membership categories—student/graduate student, on their society.

Dr. Harari will discuss how ASTRO is developing and deepening relationships with international radiation oncology societies. The ASTRO Board held a special luncheon on Saturday with representatives of major international societies. These groups are now in talks about areas of potential collaboration, including educational activities and how to raise the profile of radiation oncology globally.

Please join us for this annual luncheon to learn more about what ASTRO is doing on behalf of its members and hear more about future directions.
Each year, ASTRO’s Science Education Program Development (SEPD) Committee is tasked with determining important topics in radiation oncology research, soliciting session submissions focusing on these topics and making recommendations to the Annual Meeting Program Committee on sessions that highlight the most relevant and exciting research in the field. This year was no exception, the SEPD committee identified 16 sessions, all of which have been designated as “Science Council Endorsed” sessions.

Be sure to add these Tuesday and Wednesday sessions to your conference planner:

**Tuesday, October 23 –**

1:00 p.m. – 2:30 p.m. – EDU 25 Translational Genomics to Advance Precision Radiation Oncology, Room 006, Kent Mouw, MD, PhD, Dana-Farber Cancer Institute

1:00 p.m. – 2:30 p.m. – Panel 09 Current and Future Applications for MR-guided Radiosurgery (MRgRT) with Real-time Adaptive Radiosurgery, Lila Cockrell Theatre, Moderator Percy Lee, MD, University of California, Los Angeles

1:00 p.m. – 2:30 p.m. – Panel 10 Artificial Intelligence and Deep Learning Within Radiation Oncology: Current Applications and Future Directions, Room 304, Moderators James Yu, MD, MHS, Yale University, and Sanjay Aneja, MD, Yale School of Medicine

2:45 p.m. – 4:15 p.m. – Special Session 01 Research Spotlight: ASTRO’s Research Award Winners, Room 005, Moderator Gary Kao, MD, PhD, University of Pennsylvania

**Wednesday, October 24 –**

7:45 AM – 9:00 a.m. – EDU 32 4-D CT/CBCT, 4-D MRI and Beyond 4-D Imaging, Room 217 C/D, Moderator Daniel Low, PhD, University of California, Los Angeles

11:00 a.m. – 12:30 p.m. – EDU 39 Clinical Trials Design and Methodology Education in Radiation Oncology, Room 007 A/B, Moderators Abigail Berman, MD, MSCE, University of Pennsylvania, and Neha Vapiwala, MD, University of Pennsylvania

11:00 a.m. – 12:30 p.m. – Panel 16 Exploiting the DNA Damage Response to Improve the Response to Radiation Therapy, Room 304, Moderators Henning Willers, MD, Massachusetts General Hospital, and Julie Schwarz, MD, PhD, Washington University School of Medicine

1:30 p.m. – 3:00 p.m. – Panel 19 Integrating Immunotherapy in the Definitive Setting in Radiation Oncology, Room 304, Moderator Percy Lee, MD, UCLA

3:15 p.m. – 4:45 p.m. – EDU 43 Promises and Pitfalls of Using MRI in Treatment Planning, Room 304, Moderator Carri Glide-Hurst, PhD, Henry Ford Hospital

3:15 p.m. – 4:45 p.m. – Panel 22 Translating Needs into Action: Adolescent and Young Adult Cancer Care for the Radiation Oncologist, Room 217 C/D, Moderator Shekinah Elmore, MD, MPH, Harvard University

On Sunday, Suzanne Evans, MD, moderated the panel session The How and Why of Applying Formal Risk Management Techniques for Quality Improvement. Yesterday, Randall Kimple, MD, PhD, moderated the education session, Integrating Biology into Clinical Practice for Viral Associated Cancers. There were also two panel sessions: NCI’s Quantitative Imaging Network: Development and Integration of Novel Tools for Oncology Clinical Trials and Patient Management, moderated by Hui-Kuo George Shu, MD, PhD, FASTRO, and John Buatti, MD, FASTRO, and The Translational Potential of Liquid Biopsies for Predicting Radiation Response, moderated by George Wilson, PhD.

Yesterday afternoon, the American Society of Clinical Oncology (ASCO) and ASTRO presented a joint session, Genomics to Personalize Breast Cancer Treatment: On the Evolving Road to Minimize Overtreatment, moderated by Peter Chen, MD, FASTRO.

If you missed these sessions, be sure to check out the Virtual Meeting to view slides and recordings, when available, online at www.astro.org/virtualmeeting.
ASTRO Advocacy: Get engaged and make a difference!
By Margarita Valdez, ASTRO’s assistant director of congressional relations

On June 25, more than 80 radiation oncologists arrived in Washington to advocate on behalf of their profession. The 2018 Advocacy Day agenda included a full day of expert speakers, including the Center for Medicare and Medicaid Innovation (CMMI) Chief Medical Officer, Anand Shah, MD, MPH, and Director of the Division of Specialty Payment Models, Ellen Lukens. These experts discussed the future of alternative payment models and listened to feedback from ASTRO members about a radiation oncology-specific model.

Other panel sessions included guest speakers from Capitol Hill. Staffers from the offices of Senator Richard Burr of North Carolina, Senator Debbie Stabenow of Michigan and Representative Devin Nunes of California discussed the future of health care in the 115th Congress, and what to expect in 2019. These discussions helped prepare attendees for their meetings the following day on Capitol Hill.

On June 26, attendees met with the offices of their senators and representatives to discuss ASTRO’s legislative priorities. These priorities include robust funding for the National Cancer Institute (NCI), preserving access to care for cancer patients, addressing issues with radiation oncology benefit managers and stable Medicare payments. ASTRO attendees invited their legislative offices to tour their facilities to get a better understanding of the complex work performed by a radiation therapy team, and they also invited members of Congress and their staff members to tour the oncology center at NCI.

As a result, members of Congress and their staffs have been visiting radiation oncology facilities across the country, including Ways and Means Health Subcommittee Chairman Peter Roskam, who toured the practice of William Hartsell, MD, ASTRO’s Health Policy Council Vice-chair. This tour enabled ASTRO members to share the complexities of treatment delivery and the need for ongoing research on cancer treatment. In addition, ASTRO President Paul M. Harari MD, FASTRO, hosted Representative Mark Pocan at the University of Wisconsin’s Department of Human Oncology, where Dr. Harari is Chairman. Dr. Harari led the Congressman on a tour of the radiation oncology facility. Tours give ASTRO members a chance to show members of Congress what is involved in treating a cancer patient with radiation therapy and everything that goes into running a successful radiation oncology facility.

If you are interested in getting engaged in advocacy and would like assistance in setting up a tour for your member of Congress, please contact camille.kidd@astro.org. Save the date for the 2019 Advocacy Day, which will be held April 29–30, 2019, in Washington.

ASTRO heads to Chicago for its 2019 Annual Meeting
By Theodore DeWeese, MD, FASTRO

Save the dates, September 15–18, 2019, as ASTRO celebrates its 61st Annual Meeting in Chicago. The theme of the 2019 meeting, “Innovate, Collaborate: Transform,” provides focus on a practical understanding of precision medicine and how radiation oncologists will select, manage and follow patients differently in the next 10 years. These advances will be underpinned by exciting new discoveries specific to the needs of radiation oncology and will be done in collaboration with colleagues in other oncologic disciplines to support care of patients both in the United States and around the world.

I invite you to think ahead and submit your scientific abstract. The Call for Abstracts will open on December 13, 2018, and close on February 13, 2019. The friendly and diverse city of Chicago will once again host ASTRO for what should be a lively, informative and memorable experience at McCormick Place West. I look forward to seeing you at ASTRO’s 61st Annual Meeting!

For updates on the ASTRO Annual Meeting, check out www.astro.org/annualmeeting.
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