

## Best of ASTRO Patient Takeaway

Across the world, radiation oncologists are actively researching safe and effective radiation treatments, including more personalized approaches and studies of lower doses for a variety of cancers. The following research studies were presented during the ASTRO Annual Meeting in October 2020. Annually, ASTRO hosts the largest gathering of radiation oncology professionals in the world to share the latest science and research, all designed to improve patient care, support clinical practice and advance science and research in the field of radiation oncology.

The information provided below highlights the research provided in the studies included in the Best of ASTRO onDemand course. This information is not intended as medical advice. It is important to review and discuss all treatment options, including radiation therapy with your primary care physician before determining which option or combination of options is best for you and your lifestyle.

### Palliative Care

**Discussant: Joshua Jones, MD**

**Patient Takeaways prepared by J. Ben Wilkinson, MD**

#### **Influence of the Pain Duration on Pain Outcomes Following Palliative Radiotherapy**

Dr. Saito found that patients who have cancer-related pain for a shorter period of time before radiation therapy tend to have cancer-related pain for a shorter period of time after treatment. This research team also found that patients can live to develop other types of non-cancer pain as well.

#### **Validation of Model for Estimating Life Expectancy with Bone Metastases**

A web-based software program called Oncospace looks like it can predict how long someone will live with cancer that has spread to the bone. In this abstract, researchers describe how community practice information was used to verify that this model is accurate.

#### **Classifying Patients at Risk of Death at Time of Palliative Radiation Consult**

Several factors were shown to be linked with the chance of a patient dying quickly after palliative radiation. Some of these include age of the patient, performance status, whether there was cancer in the liver, the number of cancer metastasis, the albumin level in the blood and whether a patient had been in the hospital in the past three months.

#### **Randomized Study Looking at Two Treatments of Ultra-Precise Radiation or Five Treatments of Lower Dose Radiation to the Spine**

Patients in both study groups had significant lowering of their pain. Two times more patients who received the higher-dose form of treatment (stereotactic) had a complete response of their pain compared to those who received the lower standard dose of radiation at both three months and six months.

#### **Stereotactic Radiation Therapy for Non-Spine Bone Metastases**

Interesting information was included in this abstract that suggests high-dose, ultra-precise radiation therapy (stereotactic) treatment may have a higher degree of pain control in areas of cancer that have spread to bones outside the spine. Data about using these types of high-dose treatments in areas other than the spine will be important in years to come.

#### **Use of Targeted Therapy and Stereotactic Radiation Therapy for Large Tumors**

This abstract showed that mixing high-dose radiation therapy with a type of immune therapy (pembrolizumab) showed impressive rates of control of the tumor, even in patients where their whole tumor could not be fully covered by the radiation therapy because of its large size.

#### **Long-Term Results of SABR-COMET Trial**

An update to a very important clinical trial was presented this year at ASTRO. In 2018, the SABR-COMET trial showed that treatment of limited areas of cancer spread (called oligometastatic disease) with ultra-precise, high-dose radiation therapy can lead to improved disease control and longer survival. In this update, both disease control and overall survival were still nearly two times higher when stereotactic treatment of limited sites of disease was included as part of the initial treatment plan.

#### **Impact of Serious Illness Conversation on Length of Palliative Radiotherapy**

Researchers showed that having conversations on how serious a patient's illness is can influence the number of radiation treatments and total dose prescribed. The authors of this abstract also showed that more serious illness conversations were documented by medical oncologists than by radiation oncologists.