ALEXANDRIA, Va., ARLINGTON, Va., ROSEMONT, Ill. — Three leading national cancer organizations today issued a joint clinical practice guideline update for physicians treating women with breast cancer who have undergone a mastectomy. The update provides additional considerations for physicians to determine which patients might benefit from postmastectomy radiotherapy (PMRT).

“We still don’t have a single, validated formula that can determine who needs PMRT, but we hope that the research evidence summarized in this guideline update will help doctors and patients make more informed decisions,” said Stephen B. Edge, MD, co-chair of the Expert Panel that developed the guideline update. “We also hope that this publication will spur more research into patient and tumor characteristics that predict risk of recurrence after mastectomy.”

The American Society of Clinical Oncology (ASCO), the American Society for Radiation Oncology (ASTRO) and the Society of Surgical Oncology (SSO) together published the new guideline update in their respective journals, the Journal of Clinical Oncology, Practical Radiation Oncology.
"In an era of personalized medicine, we want to be sure that we offer the right care to the right patients. Thanks to advances in systemic therapy, fewer women need radiation therapy after a mastectomy," said Abram Recht, MD, co-chair of the Expert Panel that developed the guideline update. “This means we can be more selective when recommending this treatment to our patients.”

The guideline update states that there is strong evidence showing that PMRT reduces the risk of breast cancer recurrence. It provides evidence-based recommendations for the use of postmastectomy radiotherapy in: patients with T1-2 tumors (tumors smaller than 5 cm) and 1 to 3 positive lymph nodes; patients undergoing neoadjuvant systemic therapy (NAST); and patients with T1-2 tumors and a positive sentinel node biopsy. The Expert Panel also addressed technical aspects of radiotherapy, such as the optimal extent of regional nodal irradiation (RNI).

“For many women, PMRT reduces the risk of local and regional failure, but physicians must weigh this benefit with the considerable side effects associated with this treatment,” said Bruce G. Haffty, MD, immediate past chair of ASTRO’s Board of Directors. “This cooperative guideline underscores the complexity inherent in decisions related to PMRT, as well as the importance of clinical judgment in treatment planning.”

To develop this guideline update, an Expert Panel reviewed relevant literature published between January 2001 and July 2015. This included a meta-analysis of 22 clinical trials published in 2014, which provides evidence that PMRT is highly effective at preventing local breast cancer recurrence.

Key recommendations of the guideline update are as follows:

- Decision to use PMRT should involve providers from all treating disciplines as well as the patient. Doctors and patients should discuss risks and benefits to determine the best treatment approach for the patient.
- For women with T1-2 breast cancer and 1-3 positive lymph nodes, PMRT reduces the risk of recurrence and breast cancer death. However, for some patients with a low risk of recurrence, the potential complications of PMRT may outweigh the benefit.
- When making decisions on recommending PMRT, doctors should consider patient and tumor characteristics that may diminish the benefit of PMRT or increase the risk of complications.
- Patients with T1-2 tumors with a positive sentinel node biopsy who elect to omit axillary lymph node dissection should receive PMRT only if there is already sufficient information to justify its use without needing to know that additional axillary nodes are involved.
- Patients with axillary nodal involvement that persists following neoadjuvant systemic therapy should receive PMRT.
- Radiation should generally be given to both the internal mammary nodes and the supraclavicular-axillary apical nodes in addition to the chest wall or reconstructed breast when PMRT is used for patients with positive axillary lymph nodes.
“This guideline highlights the need to individualize therapy as well as identifies areas where more research is needed,” said Monica Morrow, MD, FACS, the SSO representative on the Expert Panel that developed the guideline update. “It emphasizes that we are moving beyond a simplistic one size fits all approach to more tailored therapy which will improve benefits for patients.”

The guideline update is available at www.asco.org/pmrt-guideline.

Information for patients about breast cancer is available at cancer.net/breast.

ASCO encourages feedback on its guidelines from oncologists, practitioners and patients through the ASCO Guidelines Wiki at www.asco.org/guidelineswiki.

For an embargoed copy of the guideline update, please contact Amanda Narod via email or at 571-483-1795.

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**About ASTRO:**

ASTRO is the premier radiation oncology society in the world, with more than 10,000 members who are physicians, nurses, biologists, physicists, radiation therapists, dosimetrists and other health care professionals who specialize in treating patients with radiation therapies. As the leading organization in radiation oncology, the Society is dedicated to improving patient care through professional education and training, support for clinical practice and health policy standards, advancement of science and research, and advocacy. ASTRO publishes three medical journals, *International Journal of Radiation Oncology • Biology • Physics* (www.redjournal.org), *Practical Radiation Oncology* (www.practicalradonc.org) and *Advances in Radiation Oncology* (www.advancesradonc.org); developed and maintains an extensive patient website, RT Answers (www.rtanswers.org); and created the Radiation Oncology Institute (www.roinstitute.org), a nonprofit foundation to support research and education efforts around the world that enhance and confirm the critical role of radiation therapy in improving cancer treatment. To learn more about ASTRO, visit www.astro.org.

**About SSO:**

The Society of Surgical Oncology (SSO) is the premier organization for surgeons and health care providers dedicated to advancing and promoting the science and treatment of cancer. The Society’s focus on all solid-tumor disease sites is reflected in its Annual Cancer Symposium, monthly scientific journal (Annals of Surgical Oncology), educational initiatives and committee structure. The Society’s mission is to improve multidisciplinary patient care by advancing the
science, education and practice of cancer surgery worldwide.

**About ASCO:**

Founded in 1964, the American Society of Clinical Oncology, Inc. (ASCO®) is committed to making a world of difference in cancer care. As the world's leading organization of its kind, ASCO represents more than 40,000 oncology professionals who care for people living with cancer. Through research, education, and promotion of the highest-quality patient care, ASCO works to conquer cancer and create a world where cancer is prevented or cured, and every survivor is healthy. ASCO is supported by its affiliate organization, the Conquer Cancer Foundation. Learn more at [www.ASCO.org](http://www.ASCO.org), explore patient education resources at [www.Cancer.Net](http://www.Cancer.Net), and follow us on Facebook, Twitter, LinkedIn, and YouTube.