

# Updated Breast Cancer Surveillance Recommendations for Female Survivors of Childhood, Adolescent, and Young Adult Cancer From the International Guideline Harmonization Group.

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Departments of Pediatrics and Medicine, Memorial Sloan Kettering Cancer Center, New York, NY 12 Dana-Farber Cancer Institute, Boston, MA 13 Department of Paediatric Oncology, Birmingham Children's Hospital, NHS Foundation Trust, Birmingham, United Kingdom 14 Centre for Research in Epidemiology and Population Health, Cancer and Radiation team, University of Paris-Sud, Villejuif, France 15 Department of Pediatric and Adolescent Hematology/Oncology, CHU Angers, Angers, France 16 Department of Paediatric and Adolescent Haematology/Oncology, Great North Children's Hospital and Newcastle University Centre for Cancer, Newcastle upon Tyne, United Kingdom 17 Department of Pediatric Oncology, Emma Children's Hospital, Amsterdam University Medical Center, University of Amsterdam, the Netherlands 18 Department of Medicine, Duke University School of Medicine, Durham, NC Renée Mulder, PhD, Princess Máxima Center for Pediatric Oncology, Heidelberglaan 25, 3584 CS Utrecht, the Netherlands; e-mail: r.l.mulder@prinsesmaximacentrum.nl . 10 12 2020 29 9 2020 38 35 370392 4194 4207 17 8 2020 10 12 2021 10 12 2021 25 09 2021 02 04 2024 © 2020 by American Society of Clinical Oncology 2020 American Society of Clinical Oncology PURPOSE As new evidence is available, the International Late Effects of Childhood Cancer Guideline Harmonization Group has updated breast cancer surveillance recommendations for female survivors of childhood, adolescent, and young adult cancer.

We used evidence-based methods to apply new knowledge in refining the international harmonized recommendations developed in 2013. The guideline panel updated the systematic literature review, developed evidence summaries, appraised the evidence, and updated recommendations on the basis of evidence, clinical judgement, and consideration of benefits versus the harms of the surveillance interventions while attaining flexibility in implementation across different health care systems. The GRADE Evidence-to-Decision framework was used to translate evidence to recommendations. A survivor information form was developed to counsel survivors about the potential harms and benefits of surveillance.

The literature update identified new study findings related to the effects of prescribed moderate-dose chest radiation (10 to 19 Gy), radiation dose-volume, anthracyclines and alkylating agents in non-chest irradiated survivors, and the effects of ovarian function on breast cancer risk. Moreover, new data from prospective investigations were available regarding the performance metrics of mammography and magnetic resonance imaging among survivors of Hodgkin lymphoma. Modified recommendations include the performance of mammography and breast magnetic resonance imaging for survivors treated with 10 Gy or greater chest radiation (strong recommendation) and upper abdominal radiation exposing breast tissue at a young age (moderate recommendation) at least annually up to age 60 years. As a result of inconsistent evidence, no recommendation could be formulated for routine breast cancer surveillance for survivors treated with any type of anthracyclines in the absence of chest radiation.

The newly identified evidence prompted significant change to the recommendations formulated in 2013 related to moderate-dose chest radiation and anthracycline exposure as well as breast cancer surveillance modality.