Bioavailable serum estradiol may alter radiation risk of postmenopausal breast cancer: a nested case-control study

Higher levels of estradiol (one of three female sex hormones that form estrogen) have long been known to be associated with higher breast cancer rates. This paper indicates that radiation exposure may increase estradiol levels and result in an increased risk of breast cancer. However, the study had an extremely limited sample size (only 57 cases) as well as ambiguous results that might not be reproducible in other studies, necessitating cautious interpretation.

RERF’s objective with this brief outline is to succinctly explain our research for the lay public. Much of the technical content of the original paper has been omitted. For further details about the study, please refer to our longer online Summary Explanation or to the full paper published by the journal.