



NEWS RELEASE

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Welch Et Al. Data in *NEJM* Reinforces That Mammography Detects Breast Cancers Earlier and Saves Lives *Authors' Overdiagnosis and Survival Impact Claims Are Unsupported*

WASHINGTON, DC — The numerical data in Welch et al. (to be published Oct. 13, 2016, in the *New England Journal of Medicine*) clearly show that mammography screening catches more cancers early and reduces the number of women with cancers of advanced size. Smaller cancers result in better outcomes for women. This not only helps save lives, but also allows more women to have their cancers treated with less extensive surgery, fewer mastectomies, and less frequent or aggressive chemotherapy.

The Welch et al. data do not support the authors' conclusion that improved therapy is more key to breast cancer survival than mammography screening. Nor does the data support that mammography use leads to rampant overdiagnosis. The National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) database used by the authors does not provide the detailed information needed to support such claims. The baseline assumption on which the conclusions are based is contradicted by the primary author's previous papers and well-established research.

Fewer Large Tumors — Fewer Breast Cancer Deaths

This Welch et al. paper reiterated the SEER database finding that there has been a *30 percent decrease* in large tumors found in American women after screening became widespread. This major decline in large tumors is related to the documented increase in the detection of small invasive cancers. Not surprisingly, the same SEER database shows that since mammography screening proliferated in the mid-1980s, the U.S. breast cancer death rate, unchanged for the previous 50 years, has dropped nearly 37 percent. This is in keeping with large studies (Otto et al. and Coldman et al.) that have shown that in women who get regular mammograms, the risk of dying from breast cancer is cut nearly in half.

Incorrect Baseline Assumption

As a primary baseline for their calculations, the authors claim that annual growth in invasive breast cancer incidence was flat at 0 percent in years preceding the start of screening in the United States. This differs from a previous paper by Welch which claimed the incidence growth rate to be .25 percent annually. Both claims are unsupported. Accounting for the real underlying incidence of invasive breast cancer is important, as shown by Puliti et al., and based on actual patient data is just over 1 percent per year from 1940 to the start of the SEER program in 1974. Had the authors used the actual 1 percent breast cancer incidence growth rate, the findings would have been vastly different — showing no evidence of overdiagnosis and a marked decline in advanced cancers, which has led the decline in breast cancer death since screening began.

Given this significant flaw, it is not surprising that this Welch et al. paper's conclusions are debunked by a recent study in the *British Medical Journal*, which confirmed that early detection of breast cancer via

mammography is critical for improving breast cancer survival, regardless of therapy advances. Numerous other studies show that even when women have access to the latest therapies, deaths from breast cancer decline at a much higher rate in women who get mammograms.

Women Still Urged to Start Getting Annual Mammograms at Age 40

Despite differing guidelines by the American Cancer Society, the United States Preventive Services Task Force (USPSTF), National Comprehensive Cancer Network (NCCN), the American College of Radiology (ACR) and Society of Breast Imaging (SBI), all groups agree that the most lives are saved by annual screening beginning at age 40.

Given these facts, the ACR and SBI continue to recommend that women start getting annual mammograms at age 40 and continue to do so as long as they are in good health.

For more information regarding mammography and breast cancer screening, visit MammographySavesLives.org, RadiologyInfo.org and sbi-online.org/endtheconfusion.

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About the American College of Radiology

The American College of Radiology (ACR), founded in 1924, is a professional medical society dedicated to serving patients and society by empowering radiology professionals to advance the practice, science, and professions of radiological care.

About the Society of Breast Imaging

The Society of Breast Imaging (SBI), established in 1985, is a professional medical organization dedicated to improving the practice of breast imaging and the quality of medical education in breast imaging. The SBI also provides a medium for the exchange of ideas among those involved in breast imaging. The SBI includes leading international breast imaging specialists nationwide among its membership.

To arrange an interview with an ACR representative, please contact Shawn Farley at 703-648-8936, Maryann Verrillo at 703-390-9822 or email PR@acr.org.

To speak with an SBI representative, please contact Tim Tassa at 202-263-2580 or email ttassa@amplifypublicaffairs.net.