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To interview Chlebowski, contact Julia Gunther at <u>julia.gunther@aacr.org</u> or 770-403-7690. For a photo of Chlebowski, click <u>here</u>.

Postmenopausal Women Who Lose Weight May Have Reduced Breast Cancer Risk

SAN ANTONIO — Postmenopausal women who lose weight may have a significantly reduced chance of developing breast cancer, according to data presented at the 2017 <u>San Antonio Breast Cancer Symposium</u>, held Dec. 5–9.

"Breast cancer is among the leading types of cancer and causes of death in American women," said Rowan Chlebowski, MD, PhD, research professor in the Department of Medical Oncology and Therapeutics Research at City of Hope in Duarte, California. "Obesity rates have been increasing in the United States. We wanted to determine if there was a link between obesity and breast cancer risk."

Several studies have associated high body mass index (BMI) with increased breast cancer risk, noted Chlebowski. While this risk factor is largely preventable, it is estimated that more than 65 percent of American women are overweight or obese.

"We wanted to determine if weight loss was associated with lower breast cancer incidence, as studies have not been able to consistently show that losing weight reduces the risk of breast cancer," said Chlebowski. Past studies have been limited to analyses with self-reported measurements, while the prospective study conducted by Chlebowski and colleagues utilizes a short-term, three-year period of measured body weight and height followed by a long period of follow-up.

Chlebowski and colleagues analyzed data from the Women's Health Initiative (WHI) Observational Study. This program tracks the health of postmenopausal women between the ages of 50 and 79. Participants who had a normal mammogram, no prior breast cancer, and were not underweight (BMI \geq 18.5) were eligible for enrollment in Chlebowski's study. Measurements for height and weight were obtained upon enrollment, and measurements were reassessed three years following.

At baseline, 41 percent of women were normal weight, 34 percent were overweight, and 25 percent were obese.

Of the 61,335 patients enrolled in Chlebowski's study, 3,061 developed invasive breast cancer during an average of 11.4 years of follow-up. Compared to women with stable weight, those who lost weight (\geq 5 percent weight change) were 12 percent less likely to develop breast cancer following multivariable analysis. Weight loss of \geq 15 percent was associated with a 37 percent reduction in breast cancer risk.

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"In the three-year window of the study, relatively modest weight loss was associated with significant lowering of breast cancer incidence," said Chlebowski. "From this study, we have evidence that a weight loss strategy can be effective in lowering breast cancer risk in postmenopausal women."

While weight gain (≥ 5 percent weight change) was not associated with increased overall breast cancer risk, it was associated with more than 50 percent increased risk of triple-negative breast cancer.

The study was supported by the National Institutes of Health (NIH). Chlebowski is a consultant for Novartis, Astra Zeneca, Genentech, and Amgen.

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About SABCS:

The mission of the 2017 San Antonio Breast Cancer Symposium is to produce a unique and comprehensive scientific meeting that encompasses the full spectrum of breast cancer research, facilitating the rapid translation of new knowledge into better care for patients with breast cancer. The UT Health San Antonio Cancer Center, the American Association for Cancer Research (AACR), and Baylor College of Medicine are joint sponsors of the San Antonio Breast Cancer Symposium. This collaboration utilizes the clinical strengths of the UT Health San Antonio Cancer Center and Baylor and the AACR's scientific prestige in basic, translational, and clinical cancer research to expedite the delivery of the latest scientific advances to the clinic. For more information about the symposium, please visit www.sabcs.org.