August 12, 2015

Lisa Chong, PhD

Senior Editor, Science

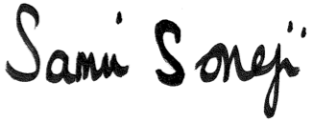
Dear Dr. Chong,

We are pleased to submit our manuscript entitled “Quantifying the Contribution of Earlier Detection and Advancements in Treatment on the Gain in Life Expectancy for US Breast Cancer Patients Since 1975” for consideration as a report. Mammography screening in the US has become the subject of intense public and scientific controversy. The controversy over screening arose and persists, in part, because of disagreement over its value and the precise contributions of earlier detection and advancements in breast cancer treatment.

In this report, we directly address this long-standing controversy and quantify—for the first time—the contribution of screening on the gain in life expectancy among breast cancer patients based on the actual experience of women in the US. We conclude life expectancy increased 10.94 years between 1975 and 2002 for a 40-year old newly diagnosed breast cancer patient. Advancements in breast cancer treatment contributed more to this gain in life expectancy than earlier detection: 6.79 years (62%) versus 2.92 years (27%). Advancements in the treatment of other diseases contributed the remaining 1.25 years to this gain (11%). Our study provides greater clarity to the longstanding debate on the value of mammography screening by quantifying the realized benefit of earlier detection against which its potential harms can be measured.

Two colleagues provided helpful comments on the analysis and conclusions of this report: H. Gilbert Welch (Dartmouth College) and Jonathan Skinner (Dartmouth College). Thus, Dr. Welch and Dr. Skinner would not be able to provide an unbiased review of the submitted report.

Sincerely,



Samir Soneji, PhD

Dartmouth College

cc: Hiram Beltrán-Sánchez, PhD

University of California, Los Angeles