

# Columbia University Medical Center New York-Presbyterian Hospital

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Dear Andy,

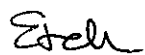
Once again my colleagues and I at Columbia University Medical Center and Memorial Sloan Kettering Cancer Center here in New York and at Soroka University Medical Center in Beer Sheva, Israel, wish to salute the work of the Cure Breast Cancer Foundation and to thank CBCF for its ongoing research support provided as a grant for our studies at Soroka exploring the relationships between osteoporosis and breast cancer.

The research was initiated with a retrospective analysis that assessed the relationship between bone mineral density (BMD) and the risk of subsequent breast cancer in the population of women residing in southern Israel. That study revealed that women who developed breast cancer had on average higher levels of BMD than women who did not. These findings have been published in the international journal, PLOS ONE. We also learned that during a period of 5 years of follow up after the BMD that the risk of sustaining an osteoporotic fracture was significantly higher – by about one third – in women with breast cancer as compared with women without breast cancer. Interestingly the level of BMD was similar in both those with and without breast cancer in the women who had fractures. Thus, the higher risk of osteoporotic fracture is not simply a function of BMD, which reflects the quantity of bone in the skeleton, but likely reflects something that is impaired in the quality of the bone, independent of BMD. This is an extremely important finding, and the data have been submitted for publication to the journal Breast Cancer, a Nature Partner Journal, where as of this date it has been provisionally accepted for publication.

The second part of the study is a long term prospective study, now in its fourth year since initiation, comparing BMD values and bone health data from newly diagnosed breast cancer patients and from non-breast cancer controls who are well matched with the breast cancer patients for age, weight and other clinical characteristics. These women all receive a BMD test and undergo extensive testing of blood samples for various hormonal factors and markers reflecting bone metabolism. We will be collecting clinical data for a period of two years after enrollment regarding fracture outcomes in both breast cancer patients and controls. To date 346 patients with newly diagnosed breast cancer have been enrolled with a target enrollment of 400 such patients, and enrollment of controls is following (to obtain well matched women) with a current enrollment of 185 women.

The studies are important sources of new information and are truly unique in terms of the questions that are being addressed and the populations being studied. We look forward to continuing the ongoing prospective study, and we are very grateful to the CBCF for the research grant that has made the work possible.

With very best wishes,

A handwritten signature in cursive script, appearing to read "Ethel".

Ethel S. Siris, MD