

June 20, 2018

PDQ Screening and Prevention Editorial Board c/o Barnett S. Kramer, M.D. Editor-in-Chief National Cancer Institute Room 5E410 9609 Medical Center Drive Bethesda, MD 20892

Re: Breast Cancer Screening (PDQ®)—Health Professional Version

We are writing on behalf of the Commission on Breast Imaging of the American College of Radiology to express our concern with the recently updated Physician Data Query (PDQ) summary on Breast Cancer Screening, including the June 1, 2018 update. Because we understand the important function of PDQs in guiding medical decision-making, we believe it is critical that the content reflect a balanced and comprehensive assessment of research and the scientific literature on the topic. As breast imagers who are intimately familiar with the literature on breast cancer screening, it is our view that the PDQ summary on Breast Cancer Screening is incomplete in its review of the literature and unbalanced in its assessment of the benefits of screening mammography. We respectfully urge your reconsideration of this PDQ in light of the comments contained herein and the complete body of research and literature available on this topic.

We note that this summary relies heavily on the work of H. Gilbert Welch, MD in marginalizing the impact of breast cancer screening, suggesting mammography contributes to breast cancer overdiagnosis with little overall benefit. Dr. Welch derives his measure of overdiagnosis largely from an underestimation of background breast cancer incidence. (1) While the summary does note a broad range in the estimates of overdiagnosis, it emphasizes the higher range of these estimates, including its updated highlight of a Netherlands study that concluded that half of breast cancers detected by screening represent overdiagnosis. In contrast, a study by R. Edward Hendrick, PhD concludes that, in the United States, overdiagnosis of breast cancer is under 10%. (2)

Despite nine randomized control trials that, in aggregate, clearly demonstrate an association between breast cancer mortality reduction and screening mammography, this summary gives special attention to the Canadian National Breast Screening Studies (NBSS) at the expense of others. This study notoriously undervalues screening. It also fails to note flaws in NBSS, such as questions about its fundamental design and image quality. (3)

The summary update features a study of simulation models that estimates the relative contributions of screening and treatment to mortality reduction, but there is comparatively less emphasis on

observational studies that show a substantial association in mortality reduction related to screening alone. Indeed, a very large Canadian study published in 2014 confirmed an average reduction in breast cancer mortality of 40% for women who participated in screening, but this study is not included in summary references. (4)

In 2017, the American College of Radiology (ACR) issued its guidelines for breast cancer screening for average risk women. (5) This guideline thoroughly summarizes the literature in support of screening. On behalf of the ACR Commission on Breast Imaging, we strongly encourage the Editorial Board to consider this broader spectrum of evidence in future revisions to its summary. We would welcome the opportunity to discuss this matter with you in more detail and to provide additional information or respond to specific questions you may have. Please contact Gloria Romanelli or Priscilla Butler at 703-648-8900 with any questions or requests.

Sincerely,

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Chair, American College of Radiology Commission on Breast Imaging

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Chair, Committee on Government Relations for the American College of Radiology Commission on Breast Imaging

- 1. Monticciolo, DL, Helvie MA, and Hendrick RE. Current Issues in the Overdiagnosis and Overtreatment of Breast Cancer. AJR February 2018; 210:1-7
- 2. Hendrick, RE. Obligate Overdiagnosis Due to Mammographic Screening: A Direct Estimate for U.S. Women. Radiology May 2018; 287(2):391-397
- 3. Kopans DB. The Canadian National Breast Screening Studies are compromised and their results unreliable. They should not factor into decisions about breast cancer screening. Breast Cancer Res Treat August 2017; 165(1): 9-15
- 4. Coldman A, Phillips N, Wilson C, et al. Pan-Canadian Study of Mammography Screening and Mortality from Breast Cancer. JNCI November 2014; 106(11)
- 5. Monticciolo DL, Newell MS, Hendrick RE, et al. Breast cancer screening for average-risk women: recommendations from the ACR Commission on Breast Imaging. J Am Coll Radiol 2017;14:1137-43