

Ms. Neely,

My name is David S. Buck, MD, FACR. I am a Board Certified Radiologist who has specialized in breast imaging and care for over 25 years. I am a past President of the Pittsburgh Mammographers' Society, the Pittsburgh Roentgen Society, and the Pennsylvania Radiological Society, and a Fellow of the American College of Radiology. I was also a Clinical Assistant Professor of Radiology at the University of Pittsburgh School of Medicine. I am presently the Chairman of Radiology for Excela Health System in Greensburg, PA.

Your story on Pittsburgh Today about breast thermography was concerning for several reasons. Most importantly, breast thermography is not approved by the Food and Drug Administration for use as a screening tool for breast cancer and CANNOT replace mammography. Scientific proof for thermography as a tool for diagnosing breast cancer is virtually non-existent, whereas mammography has been scientifically proven repeatedly to be the most cost-effective tool for breast cancer screening based on its sensitivity to detect early changes related to breast cancer. Other imaging tools such as MRI, Ultrasound, and in some cases nuclear medicine tests such as Positron Emission Tomography and Gamma imaging, are used to further evaluate potential or known abnormalities. Of note, I know of no medical breast imaging specialist that would use thermography for any purpose during a work up for breast cancer.

In my experience, thermography is of no use to anyone, except those who promote it. I have been asked to evaluate patients who have had "abnormal" thermograms, and have found no correlation between thermograms and mammography, unless the cancer is extremely large and palpable, in which case it is unnecessary anyway. Claims that thermography can detect breast cancer before mammography is scientific trash. In fact, I think providers of thermography are a racket, with potentially suspect financial relationships with the "doctors" who provide it for their patients, typically chiropractors. This is not a turf battle between Chiropractic and Medicine, this is a matter of factual, scientific evidence.

The FDA issued this News Release two years ago:

## FDA NEWS RELEASE

For Immediate Release: June 2, 2011

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### FDA: Breast thermography not a substitute for mammography

*Telethermographic, 'infrared' devices not approved for primary cancer screening*

The U.S. Food and Drug Administration today warned women not to substitute breast thermography for mammography to screen for breast cancer.

Unlike mammography, in which an X-ray of the breast is taken, thermography produces an infrared image that shows the patterns of heat and blood flow on or near the surface of the body. Some health care providers claim thermography is superior to mammography as a screening method for breast cancer because it does not require radiation exposure or breast compression.

However, the FDA is unaware of any valid scientific evidence showing that thermography, when used alone, is effective in screening for breast cancer. To date, the FDA has not approved a thermography device (also referred to as a telethermographic device) for use as a stand-alone to screen or diagnose breast cancer. The FDA has cleared thermography devices for use only as an additional diagnostic tool for breast cancer screening and diagnosis. Therefore, FDA says, thermography devices should not be used as a stand-alone method for breast cancer screening or diagnosis.

"Mammography is still the most effective screening method for detecting breast cancer in its early, most treatable stages," said Helen Barr, M.D., director of the Division of Mammography Quality and Radiation Programs in the FDA's Center for Devices and Radiological Health. "Women should not rely solely on thermography for the screening or diagnosis of breast cancer."

The FDA has issued warning letters to some health care providers who have been promoting the inappropriate use of breast thermography. The letters instructed the providers to cease making claims that thermography devices, when

used alone, are an effective means of detecting breast cancer. Claims have, for instance, appeared on some providers' websites.

The FDA encourages women to:

- Have regular mammograms according to screening guidelines or as recommended by their health care provider;
- Follow their health care provider's recommendations for additional breast diagnostic procedures, such as various mammographic views, clinical breast exam, breast ultrasound, MRI or biopsy; additional procedures could include thermography;
- Remember that thermography is not a substitute for mammography and should not be used by itself for breast cancer screening or diagnosis.

"While there is plenty of evidence that mammography is effective in breast cancer detection, there is simply no evidence that thermography can take its place," said Barr.

I would be eager to talk to you about this, or advise you on who to have on your show to discuss mammography and other imaging techniques truly useful in diagnosing breast diseases. Pittsburgh is fortunate to have many nationally and globally recognized experts in this field, and I would gladly refer you to them. My primary concern is for the women who need good, high-quality screening for breast cancer, and I hope that this information is useful to you.

Sincerely,

David S. Buck, MD, FACP  
Chairman, Department of Radiology  
Excela Health System