

by Phillip S. Katz, Ph. D., M.P.H, Director of Development for NEPET

# Breast Cancer Awareness Month Update

## PET Emerges as an Important Tool in the Fight Against Breast Cancer

October is Breast Cancer Awareness month, which is an opportune time to assess the tools health professionals are using in the fight against this disease. Over the past decade, the use of positron emission tomography, known as PET, has found an important role as a form of medical imaging that has the potential to play a significant and beneficial part in the management of breast cancer.

PET is a functional imaging tool that examines metabolism at the cellular level, which complements imaging studies such as X-ray, CT scan and MRI in providing information based on anatomy and structure.

The latest generation of PET scanners, known as PET-CT scanners, combine in one scan PET's ability to assess function and change at the cellular level with the ability of a CT scan to show detailed structural anatomy. The result is a fused study that allows clinicians to more accurately diagnose and treat patients.

### Scope of The Breast Cancer Problem

Breast cancer is the most common form of cancer among women in the United States and the second leading cause of death – after lung cancer – among American women. Data from the American



Cancer Society indicates that in 2007 some 180,000 women were found to have invasive breast cancer, with over 40,000 women dying from this disease. More compelling is the fact that over two million women in the United States presently live with a diagnosis of breast cancer.

### Tools for Fighting Breast Cancer: the Role of PET

Early detection and diagnosis – usually through self-examination and mammography screening – are essential in developing a clinical plan with effective treatment options. After a diagnosis of breast cancer is made, follow-up PET and PET-CT studies provide clinicians with an important medical imaging tool for “staging” the disease; that is, assessing the location and extent of the cancer. This can be invaluable in providing direction for patient management, particularly the type of therapy chosen by the oncologist and patient.

PET is also crucial for monitoring a patient's progress during treatment. In this regard, PET can play an important role in deciding the course of therapy while also allowing the clinician the time and opportunity to alter and refine approaches

 **KenozaCoffee.com**

✓ **ORDER ONLINE**  
✓ **RETAIL OUTLET**

**COFFEE & BREWERS**

  

**KENOZA VENDING • 67 W. MAIN STREET • MERRIMAC MA**  
**RETAIL: 7:30 AM - 4 PM MON - FRIDAY., 7:30 AM - 2 PM SATURDAY**

to the disease. For instance, through PET, the oncologist can determine in a timely fashion whether the patient's disease is or is not responding to a particular chemotherapy regimen. If the patient's disease is not responding, another regimen can be chosen that may be more effective. Significantly, Medicare and many other insurance programs now reimburse for this process of monitoring a breast cancer patient's response to therapy. Following treatment, PET can also determine whether there is residual disease or recurrence of disease.

**The Fight Against Other Cancers: the Role of PET**

The Center for Medicare and Medicaid Services has also recognized the cost effectiveness and clinical value of PET by granting Medicare coverage for PET in a number of clinical areas beyond breast cancer, including lung cancer, cervical cancer, colorectal cancer, lymphoma, melanoma, esophageal cancer, thyroid cancer and head and neck cancer. PET is also approved for determining whether heart tissue is viable prior to bypass surgery, for the differential diagnosis of Fronto-Temporal Dementia versus Alzheimer's disease and for locating the focus of epilepsy within the brain. Most commercial insurers and HMOs have followed Medicare's lead and now cover PET for all of these cancers.

Clinicians now have a number of tools available to them to assist in the early detection and treatment of breast cancer. PET and PET-CT scans are invaluable medical imaging tests that guide patient management, particularly in the selection of treatment options and in assessing a patient's response to therapy. | MVM

**New England PET Imaging System** has provided PET and PET-CT services to residents of the Merrimack Valley since 2000, with sites at Elliot Hospital in Manchester, Holy Family Hospital in Methuen, the Lowell General Hospital Cancer Center, Merrimack Valley Hospital in Haverhill, and Anna Jaques Hospital in Newburyport. For more information, please call (978) 689-4738 or visit [www.nepetimaging.com](http://www.nepetimaging.com).



Where Details  
Make The  
*Difference*

**FORD  
FLOWER CO.  
LLC**

83 South Broadway  
Salem, New Hampshire  
603-893-9955  
[www.fordflower.com](http://www.fordflower.com)

**Order Online, Any Day and Any Time!**



**FROM SPOOKY**



**OLD  
HOUSE  
Restoration  
INC.**

178 Main Street West Newbury, MA 01915  
Telephone 978.815.9932

[www.OldHouseRestorationInc.com](http://www.OldHouseRestorationInc.com)



**TO SPECTACULAR**

**Renovations & Remodeling**

Historic Restoration  
Structural Renovation  
Kitchens, Baths, Additions  
Experts in Antique Home Renovation  
and Restoration