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FOR IMMEDIATE RELEASE

POSITION STATEMENT ON THERMOGRAPHY

Responding to a report issued by CBC news November 27, 2012, representatives from Thermography Clinic Inc. want Canadians to be accurately informed about breast thermography, its benefits and limitations.

Thermography, as a whole, should not be discredited simply because of the misinformation and low integrity of one company. We at Thermography Clinic Inc. and its affiliates have been consistently cautious and strict not to sell fear, and to stay true to fact. We do not embellish thermography, nor do we use aggressive marketing techniques.

Accountability and Regulation:

The use of Thermography has internationally established protocols and procedures that, when adhered to, provide women with further information that may be useful to their health. We will be submitting an application for regulation with provincial authorities across Canada to ensure that thermography is available and held to the highest standards.

Studies:

Please refer to http://www.thermographyclinic.com/study-index for a list of thermography studies.

FDA Approved:

The American Food and Drug Administration (FDA) approved medical thermography an adjunctive test in breast cancer screening in 1982. We agree with the FDA position that thermography is not a stand-alone technology and have never deviated from this position in our practice.

Right to Proactive Health Care:

We believe that women deserve choice when it comes to their health. Thermography provides women and their health care practitioners with additional information. It is not intended to replace mammography. Studies have shown that Breast Thermography, combined with structural testing (mammography) and self-breast examination, provides women with information they can use to make their

health decisions.

Over many years, we have helped thousands of women with breast health and prevention. We work with utmost integrity and care. We believe many women would not be alive today if we did not have this knowledge and technology. Unfortunately, many women will suffer immensely if the use of thermography is prohibited.

BREAST THERMOGRAPHY – AN OVERVIEW

Breast thermography is a physiological test that provides information on temperature and infrared heat patterns of the breast. Because the skin naturally emits thermal radiation (heat), it is well suited to infrared imaging. Thermography differs from mammography in that it provides information on the biological activity of the breast versus the gross internal anatomy. Infrared imaging is a functional test, whereas mammography is a structural test.

As a functional test, thermography can detect breast abnormalities that other screening methods cannot identify, namely thermal and vascular changes. The increased metabolic activity seen on a breast thermogram can be an indication of injury, mastitis, fibrocystic breast disease or cancer. These functional changes are thought to take place before the onset of structural changes that can occur in diseased or cancerous states. A persistent abnormal thermogram can alert the physician to the need for further investigation and identify women who need to be more closely monitored.

Because thermograms in a healthy woman remain remarkably constant, serial thermograms can assess tissue changes over time. A healthy initial thermogram serves as a baseline to compare future thermograms against.

Recognizing the Limitations of Thermal Imaging

Thermography cannot, and does not, diagnose breast cancer. This is true also for anatomical tests such as mammograms, ultrasounds and magnetic resonance imaging. Such tests provide information on the different aspects of the disease process and identify the need for further investigations. A biopsy of the breast and accompanying histological evaluation is the only definitive diagnostic test for breast cancer.

Understanding the Strengths of Breast Thermography

Thermography is a non-invasive, contact-free procedure that doesn't require compression of the breasts. There is no exposure to radiation, which means repeat tests are safe and without risk. One of the key benefits of thermography is its effectiveness in women with dense breasts, making it suitable for:

Younger women – approximately 18% of breast cancers are diagnosed in women during their forties. Women who develop breast cancer at a younger age tend to have more rapidly growing cancers that are more likely to metastasize.

Women taking hormone therapy – results from the Women's Health Initiative trial revealed a significant increase in invasive breast cancer when taking synthetic hormone replacement therapy. Serial thermograms can also help monitor the effects of hormone treatment for fibrocystic breasts.

Women with fibrocystic changes – fibrous breasts are very dense and can mask early cancers, particularly if no micro calcifications are present. Research shows that approximately 40% of women with fibrocystic disease and an abnormal thermogram develop breast cancer within 5 years. Conversely, women with fibrocystic disease and a normal thermogram have a less than 3% likelihood of developing breast cancer. Thermography can also provide early warnings of breast abnormalities and highlight potentially suspicious cases particularly when mammographic and clinical exams are equivocal, or non-specific.

Thermography as an Independent Risk Marker An estimated 60-70% of women diagnosed with breast cancer have none of the obvious risk factors. For this reason, breast cancer has been considered an equal opportunity killer. According to researchers, a persistent abnormal thermogram is thought to be the single greatest indicator of breast cancer risk and is considered 10 times more important than a positive family history for the disease.

The Value of Thermography as a Complementary Tool An increase in the detection rate of breast cancer has been demonstrated in a number of peer-reviewed studies with the combined use of clinical breast examination, mammography and thermography. In one study using high-resolution thermography, an abnormal thermogram coupled with a positive mammogram and clinical breast exam was associated with a 98% sensitivity rate for breast cancer detection. Results from a recent 2010 trial showed an 89% sensitivity rate for the detection of breast cancer in women under 50 when thermal imaging and mammography were combined. The increase in sensitivity relates to the fact that mammography and thermography do not always identify the same lesion.

Summary

Thermography is not a competitor to, nor a replacement for mammography. Rather, it is an adjunct tool that can identify areas of abnormal thermal symmetry, which are often associated with underlying pathology. When used together with mammography, thermography may contribute to the best possible evaluation of breast health.

THERMOGRAPHY CLINIC INC.

References:

Agnese DM. Advances in breast imaging. *Surg Technol Int.* 2005;14:51-56.

Arora N, Martins D, Ruggerio D, et al. Effectiveness of a noninvasive digital infrared thermal imaging system in the detection of breast cancer. *Am J Surg.* Oct 2008;196(4):523-526.

Berg WA. Benefits of screening mammography. *Jama.* Jan 13 2010;303(2):168-169.

de Thibault de Boesinghe L. The value of thermography for the diagnosis, prognosis and surveillance of non-palpable breast cancer. *J Belge Radiol.* Oct 1990;73(5):375-378.

Gautherie M, Haehnel P, Walter JP, Keith LG. Thermovascular changes associated with in situ and minimal breast cancers. Results of an ongoing prospective study after four years. *J Reprod Med.* Nov 1987;32(11):833-842.

Gautherie M. Thermobiological assessment of benign and malignant breast diseases. *Am J Obstet Gynecol.* Dec 15 1983;147(8):861-869.

Gautherie M, Gros CM. Breast thermography and cancer risk prediction. *Cancer.* Jan 1 1980;45(1):51-56.

Gautherie M. Thermopathology of breast cancer: measurement and analysis of in vivo temperature and blood flow. *Ann N Y Acad Sci.* 1980;335:383-415.

Head JF, Elliott RL. Infrared imaging: making progress in fulfilling its medical promise. *IEEE Eng Med Biol Mag.* Nov- Dec 2002;21(6):80-85.

Head JF, Wang F, Lipari CA, Elliott RL. The important role of infrared imaging in breast cancer. *IEEE Eng Med Biol Mag.* May-Jun 2000;19(3):52-57.

Isard HJ, Becker W, Shilo R, Ostrum BJ. Breast thermography after four years and 10000 studies. *Am J Roentgenol Radium Ther Nucl Med.* Aug 1972;115(4):811-821.

Isard HJ. Other imaging techniques. *Cancer.* Feb 1 1984;53(3 Suppl):658-664.

Jones CH, Greening WP, Davey JB, McKinna JA, Greeves VJ. Thermography of the female breast: a five-year study in relation to the detection and prognosis of cancer. *Br J Radiol.* Jul 1975;48(571):532-538.

Joro R, Laaperi AL, Dastidar P, et al. Imaging of breast cancer with mid- and long-wave infrared camera. *J Med Eng Technol.* May-Jun 2008;32(3):189-197.

Keith, LG, Oleszczuk JJ, Laguens M. Are mammography and palpation sufficient for breast cancer screening? A dissenting opinion. *J Womens Health Gend Based Med.* Jan-Feb 2002;11(1):17-25.

Kennedy DA, Lee T, Seely D. A comparative review of thermography as a breast cancer screening technique. *Integr Cancer Ther.* Mar 2009;8(1):9-16.

Keyserlingk JR, Ahlgren PD, Yu E, Belliveau N, Yassa M. Functional infrared imaging of the breast. *IEEE Eng Med Biol Mag.* May-Jun 2000;19(3):30-41.

Lin QY, Yang HQ, Xie SS, Wang YH, Ye Z, Chen SQ. Detecting early breast tumour by finite element thermal analysis. *J Med Eng Technol.* 2009;33(4):274-280.

Mital M, Scott EP. Thermal detection of embedded tumors using infrared imaging. *J Biomech Eng.* Feb 2007;129(1):33-39.

Ng EY, Kee EC. Advanced integrated technique in breast cancer thermography. *J Med Eng Technol.* Mar-Apr 2008;32(2):103-114

Ng EY, Ung LN, Ng FC, Sim LS. Statistical analysis of healthy and malignant breast thermography. *J Med Eng Technol.* Nov-Dec 2001;25(6):253-263.

Nyirjesy I, Billingsley FS. Detection of breast carcinoma in a gynecologic practice. *Obstet Gynecol.* Dec 1984;64(6):747-751.

Parisky YR, Sardi A, Hamm R, et al. Efficacy of computerized infrared imaging analysis to evaluate mammographically suspicious lesions. *AJR Am J Roentgenol.* Jan 2003;180(1):263-269.

Plotnikoff G, Carolyn T. Emerging controversies in breast imaging: is there a place for thermography? *Minn Med.* Dec 2009;92(12):37-39, 56.

Rossouw JE, Anderson GL, Prentice RL, et al. Risks and benefits of estrogen plus progestin in healthy postmenopausal women: principal results From the Women's Health Initiative randomized controlled trial. *Jama.* Jul 17 2002;288(3):321-333.

Stark AM. The value of risk factors in screening for breast cancer. *Eur J Surg Oncol.* Jun 1985;11(2):147-150.

Stark AM, Way S. The screening of well women for the early detection of breast cancer using clinical examination with thermography and mammography. *Cancer.* Jun 1974;33(6):1671-1679.

Wishart GC, Campisi M, Boswell M, et al. The accuracy of digital infrared imaging for breast cancer detection in women undergoing breast biopsy. *Eur J Surg Oncol.* Jun 2010;36(6):535-540.