

# POSITION PAPER ON DIGITAL INFRARED IMAGING OF THE BREAST

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## Abstract :

*There is great optimism for the future of the diagnosis and management of breast cancer.*

*Genetic and clinical researchers continue to work hard in an attempt to answer the scientific questions that continue to delay a cure for this terrible disease.*

*A vital component in the research process has been neglected because of media controversy, flawed research and in the past, limitations with interpretation of non digitized thermal images. Until such time as a cure has been found, the future progress in breast disease must be made in the fields of early detection and risk evaluation coupled with sound clinical decision making.*

*Digital Infrared Thermal Imaging (DITI) has been clearly demonstrated to be the earliest and safest risk marker of breast pathology, and the best case management tool available today in the ongoing monitoring and treatment of breast disease.*

*Thermal imaging, as a test of physiology, can detect subtle changes in breast temperature that indicate a variety of breast diseases and abnormalities. Unlike mammography, (currently the main method for breast cancer detection), DITI looks at the physiological component of breast abnormality, not the anatomical.*

*In simple terms, thermography is capable of detecting and measuring the body's physiologic response to abnormality while mammography is capable of detecting and measuring the structural or anatomical lesions present. It has been estimated that thermal imaging is 2-5 years ahead of mammography as a risk indicator.*

*By utilizing digital infrared thermal imaging under carefully controlled clinical protocols developed in the US and Europe, the most complete diagnosis can be made by combining the physiologic status of the patient with other assessment tools. Effective treatment can then be managed by the patients physician.*

## Introduction

Breast cancer and other breast diseases are a major issue in women's health today, particularly in advanced industrialized nations. Approximately 1% of breast cancer cases occur in men .

Scientists and health care researchers have been looking for decades at tools that can identify breast cancer reliably and quickly. It takes years for a tumor to grow, and the earliest possible indication of abnormality is needed to allow for the earliest possible treatment and intervention.

AGE	AVERAGE TUMOUR DOUBLING TIME
Under 50	80 days
Age 50 - 70	157 days
Over Age 70	188 days

Source: Cancer 71:3547-3551, 1993

A procedure which has gone largely unnoticed and under-utilised is Thermal Imaging of the breast. Digital infrared thermal imaging (DITI) offers the opportunity of earlier detection of breast disease than has been possible with breast self examination, physician palpation or mammography alone.