



## REPORT

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**Patient:**  
**Date of Birth:**  
**Patient ID:**  
**Referring Practitioner:**  
**Reported By:**

**Scan Date:**  
**Report Ref:**  
**Report Type:** Full Body + Breast  
**Thermographer:**

**All normal protocols were observed**

**HISTORY AND SUBJECTIVE COMPLAINTS:**

Age/Gender: 49 year old female for full body to include initial breast scan

Occupation: RN, business owner

Current Symptoms: none reported  
Current Treatment: none reported  
Current Medication: none reported

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Mammogram/Ultrasound Hx: mammo 2006, surgical biopsy x2 right breast UOQ.

Ob/Gyn Hx: bilateral, lobular hyperplasia of breast; uterine ca dx 2006;  
hysterectomy partial; cholecystectomy 2006; repair of R ureter post surgical injury  
2006; L dermoid cyst unknown date

Dental Hx: fillings mercury; orthodontics in teens

Injuries: fell down a flight a flight of stairs 1997 laceration to L forehead and 15  
stitches-

Family Hx: breast ca M grandmother (alive); pancreatic ca mother (deceased)

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**THERMOGRAPHIC INTERPRETATION:**

**HEAD AND NECK:**

Frontal thermal activity appears to be muscular.

Hyperthermia towards the right side of the mouth is compatible with dental  
inflammation towards this side.

Increase is evident immediately anterior to the ear regions bilaterally; as such, TMJ  
dysfunction is a consideration in the presence of associated clinical symptoms.

Hyperthermia throughout the posterolateral neck regions appears to be muscular.

Specific intensity is evident at the carotid arteries and is suggestive of systemic  
inflammation/ elevated CRP levels.

There are no thermal findings to indicate sinus or thyroid gland dysfunction.

**BREAST:**

Some asymmetry is seen in the breasts. Hyperthermia is evident at the medial left  
breast 10 o' clock position as appreciated best on the frontal image. Upper quadrant  
hyperthermia is more extensive towards the left while more specific intensity is  
evident at the respective upper quadrants on the right. Findings on the respective  
sides do not appear suspicious at this time and may have a fibrocystic basis. They  
should be closely monitored in light of the positive family history for breast cancer.  
This study is suitable to be archived and compared with a repeat study in three  
months to establish a baseline, prior to annual testing.

There are no asymmetries present at the anterior or posterior torso that indicate an  
increased risk for cardiac dysfunction.

**BACK:**

Increase at the central upper back as well as towards the upper back/ upper scapular region on the left is indicative of increased muscular tension. Specific intensity is present at the mid back level as well as to either side of the sacral level. This is compatible with inflammation involving the thoracolumbar junction as well as the sacroiliac joints. Associated myofascial activity is evident throughout the lower back region. There is no indication as to retroperitoneal visceral dysfunction. No finding specifically with regards to the pancreas that is worrisome in the context of the patient's family history.

**ABDOMEN:**

A diffuse increase is noted towards the upper right and may correspond to the liver and associated irritation. Laboratory assessment is indicated. Increase throughout both lateral aspects is likely to be myofascial but dysfunction involving the ascending as well as the descending colon cannot be excluded. Correlation with any relevant clinical symptoms is recommended. Hyperthermia at the central pelvis is likely to be post surgical. Increase at the level of the pelvis bilaterally may correspond to the ovaries; further assessment is recommended.

**UPPER EXTREMITIES:**

Hyperthermic markings at the lateral shoulders/ lateral upper arms L > R appear to be myofascial. No joint related finding is evident.

**LOWER EXTREMITIES:**

Increase at the posterolateral aspect of both buttocks is compatible with underlying hip joint dysfunction. A vascular pattern is noted at the right foreleg and appears consistent with a superficial varicosity.

**DISCUSSION:**

The thermal findings in both breasts should be considered low risk for significant developing pathology pending the establishment of a stable baseline. Fibrocystic changes often present without definitive breast symptoms.

Liver function testing is recommended given right upper quadrant abdominal findings.

Further assessment is recommended with regards to the pelvic region. This should consist of clinical exam and possibly sonography at the discretion of the treating practitioner.

**FOLLOW-UP:**

Suggest clinical correlation of thermal findings with patients history and symptoms and standard follow-up breast imaging in three months before continuing with annual comparative studies.

**Clinical Impression with Thermography Breast Imaging-Reporting and Data System (T BI-RADS)**

**Left Breast: At Low Risk**

**Right Breast: At Low Risk**

**BREAST T BI-RADS CLASSIFICATION KEY:**

Within normal Limits (Normal)

This indicates a normal thermal profile with no thermal findings consistent with risk for disease or other developing pathology. Normal thermal contours, statistical analysis and differentials are recorded. Annual comparative follow-up is recommended after a stable baseline has been established.

At Low Risk (Non Suspicious)

This indicates low grade thermal activity which is not suspicious for serious pathology. Thermal findings may be associated with benign changes such as glandular hyperplasia, fibrocystic tissue and the development of cysts and fibroadenomas. Annual comparative follow-up is recommended after a stable

baseline has been established but more frequent follow-up may be clinically indicated. This does not rule out existing non-active or encapsulated tumors.

#### At Some risk (Equivocal)

These findings indicate thermal activity likely to represent benign changes such as inflammation, acute cysts or fibroadenoma, infection, or even normal personal variant. Clinical correlation is indicated with any associated history or symptoms. Other objective means of evaluating the breasts may be justified.

#### At Increased Risk (Abnormal)

This represents a significant risk for existing or developing malignant breast disease. Benign pathology or personal variant cannot be ruled out but is less likely. Clinical correlation is justified and objective evaluation and additional testing is indicated. A follow-up thermal study in 3 months should be part of a comprehensive testing panel.

#### At high Risk (Suspicious)

This represents a high risk of confirming malignant breast disease. Benign processes or personal variant are very unlikely. Urgent clinical correlation is indicated with a comprehensive panel of testing and evaluation with all possible alacrity. A follow-up thermal study in 3 months should be a part of this evaluation.

#### Previously Confirmed Malignancy

This represents a current diagnosis of malignant pathology in the patients history. Thermography will not show any cancers from a structural or pathological perspective. It will show positive physiological findings in 83% of malignancy (specificity), leaving 17% of cancers that present as thermographically silent due to the type of pathology, long term cancer which the body has accommodated or encapsulation and age of patient. The utility for including thermography as an adjunctive screening test in previously confirmed malignancy is for the establishment of a baseline and detection of any physiological change over time, correlation with other tests and the monitoring of response to treatment. Breast thermography screening is an adjunctive test to mammography, ultrasound and MRI and is a specialized physiological test designed to detect angiogenesis, hyperthermia from nitric oxide, estrogen dominance, lymph abnormality and inflammatory processes including inflammatory breast disease, all of which cannot be detected with structural tests. Follow-up and interval screening of less than 12 months should be determined by patients healthcare professional as considered appropriate.

#### **PROCEDURE:**

This patient was examined with digital infrared thermal imaging to identify thermal findings which may suggest abnormal physiology.

Thermography is a physiologic test, which demonstrates thermal patterns in skin temperature that may be normal or which may indicate disease or other abnormality. If abnormal heat patterns are identified relating to a specific region of interest or function, clinical correlation and further investigation may be necessary to assist your health care provider in diagnosis and treatment.

Thermal imaging is an adjunctive test, which contributes to the process of differential diagnosis, and is not independently diagnostic of pathology.

Breast thermography is a way of monitoring breast health over time. Every woman has a unique thermal pattern that should not change over time, like a fingerprint. The purpose of the two initial breast studies (usually obtained three months apart) is to establish the baseline pattern for each patient to which all future thermograms are compared to monitor stability. With continued breast health, the thermograms remain identical to the initial study. Changes may be identified on follow up studies that could represent physiological differences within the breast that warrant further investigation.

The ability to interpret the first breast study is limited since there are no previous images for comparison.

This exam is an adjunctive diagnostic procedure and all interpretive findings must be clinically correlated. DITI is not a substitute for mammography.

**PROTOCOLS:**

The thermographer certifies that this exam was conducted under standard and clinically acceptable protocols.

**PATIENT HISTORY:**

The interpretation represents objective descriptions of thermal patterns. Clinical significance of such patterns is interpreted in relation to and limited by the patient data and history provided.

**REPORTING:**

Results are reported by certified thermologists. Results are determined by studying the varying patterns and temperature differentials as recorded in the thermal images.

**NORMAL FINDINGS:**

Normal findings are diffuse thermal patterns with good symmetry between similar regions on both sides of the body. Comparative imaging may identify specific asymmetries that have remained stable and unchanged over time and therefore regarded as normal.

**ABNORMAL FINDINGS:**

Abnormal findings may be localized areas of hyperthermia or hypothermia, or thermal asymmetry between similar regions on both sides of the body with temperature differentials of more than 1° C. There may be vascular patterns that suggest pathology. Comparative imaging may identify specific changes or new asymmetries that warrant further investigation.

**The referring health care provider should contact the EMI administrator with any questions relating to this interpretive report.**

This Report is intended for use by trained health providers to assist in evaluation, diagnosis, and treatment. It is not intended for use by individuals for self-evaluation or self-diagnosis. This Report does not provide a diagnosis of illness, disease or other condition.

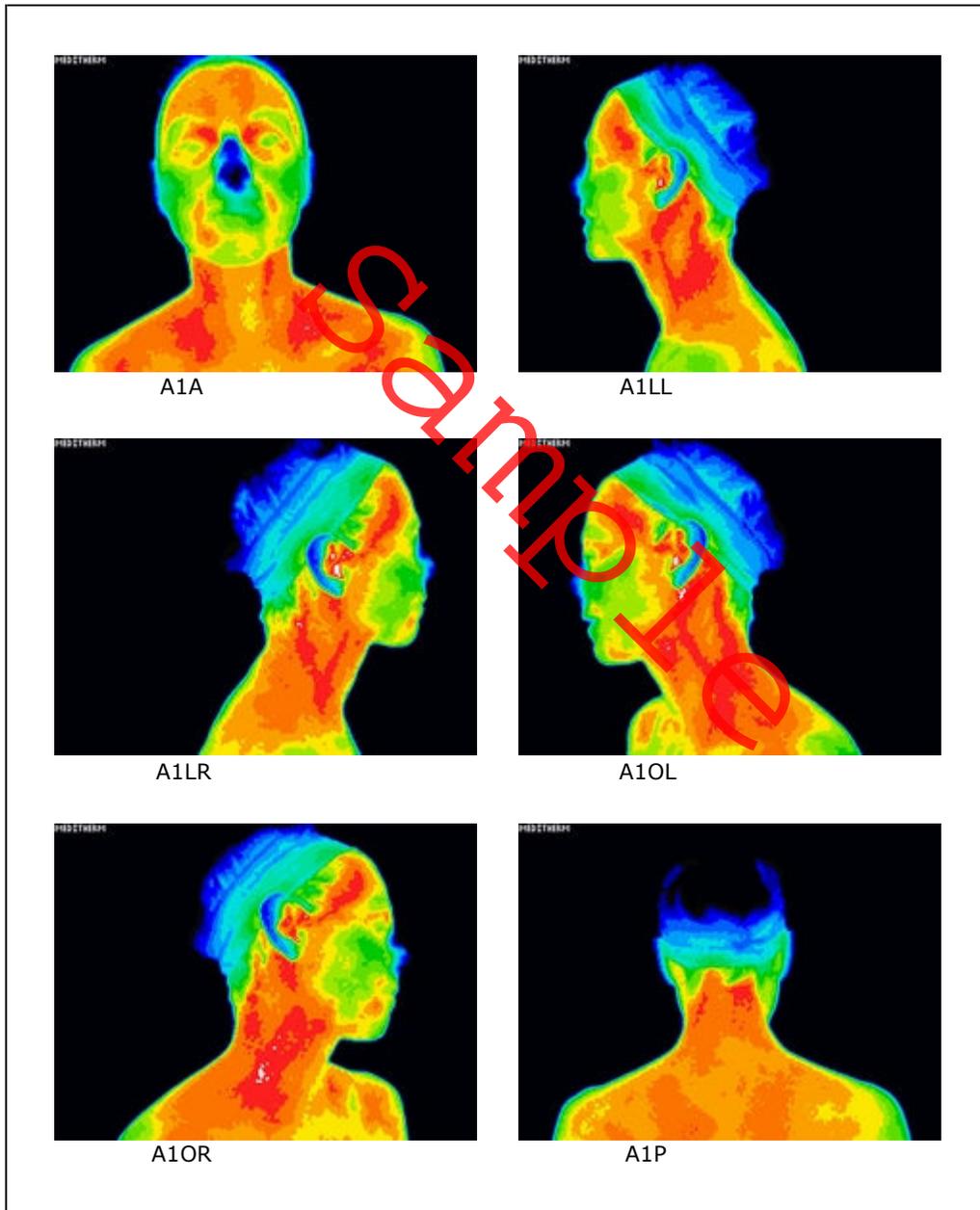


Electronic Medical Interpretation

## THERMOGRAMS

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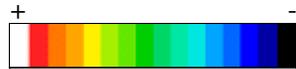
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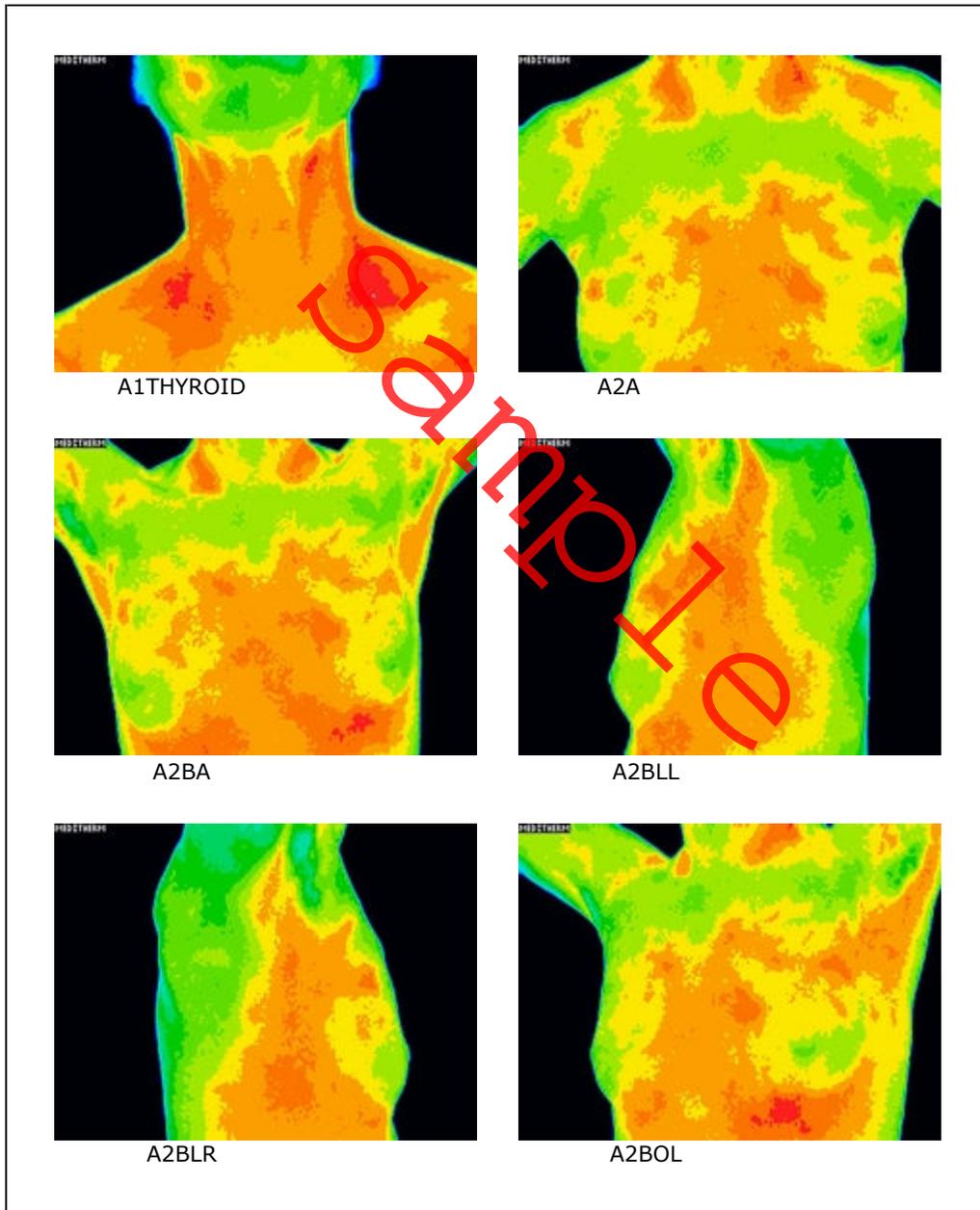


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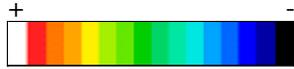
 thermograms @ standard 8° C color range

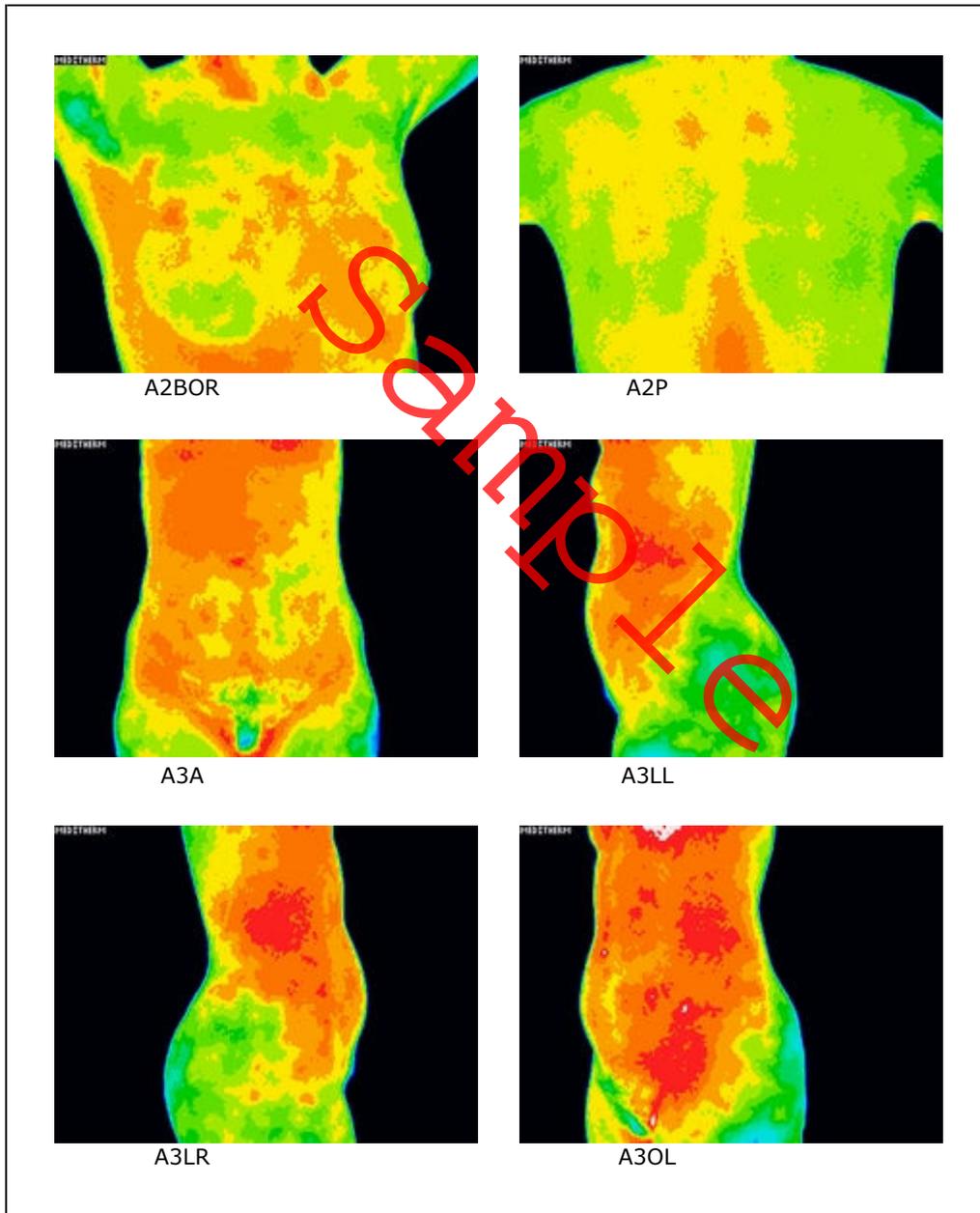


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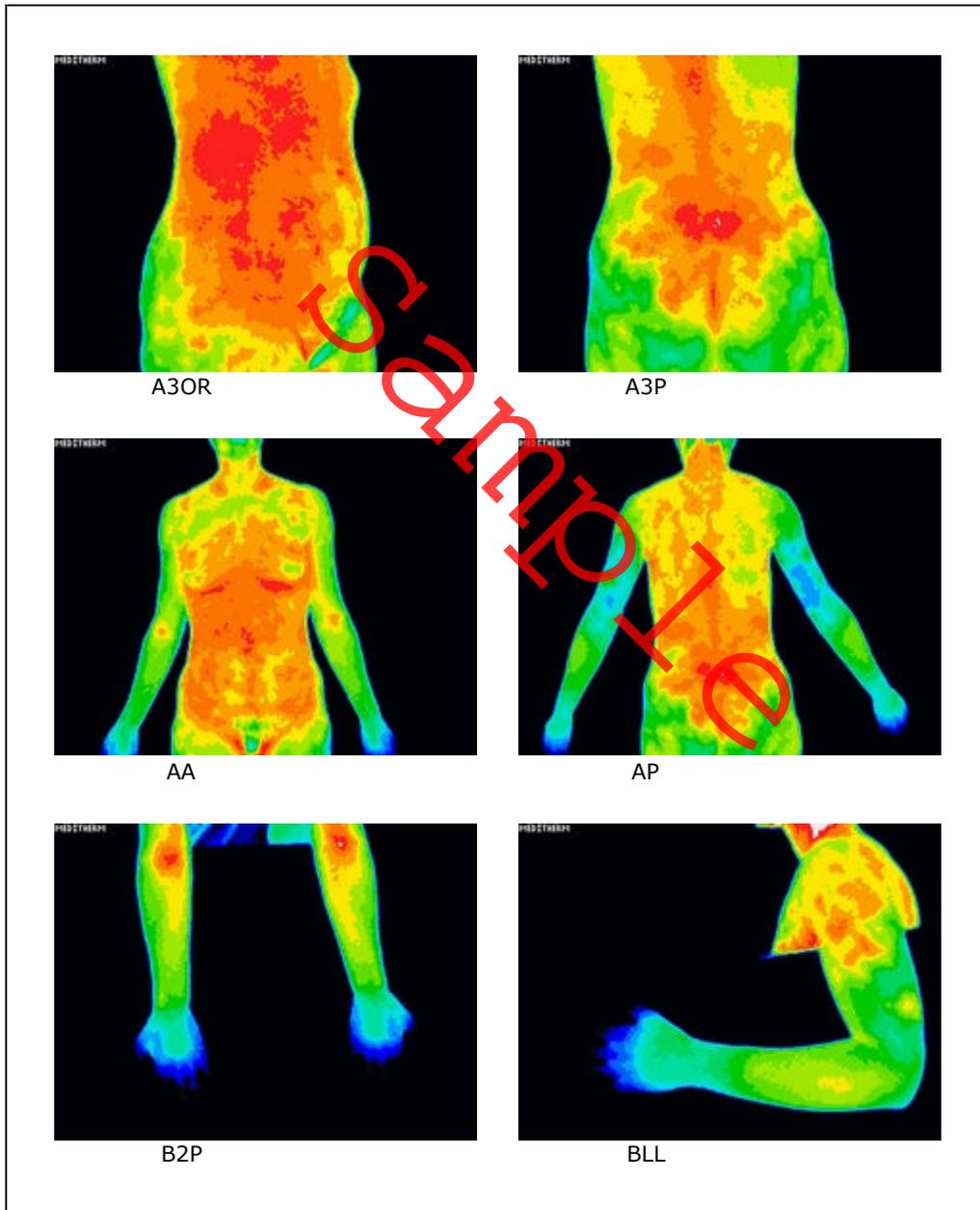


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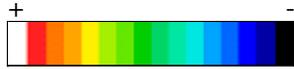
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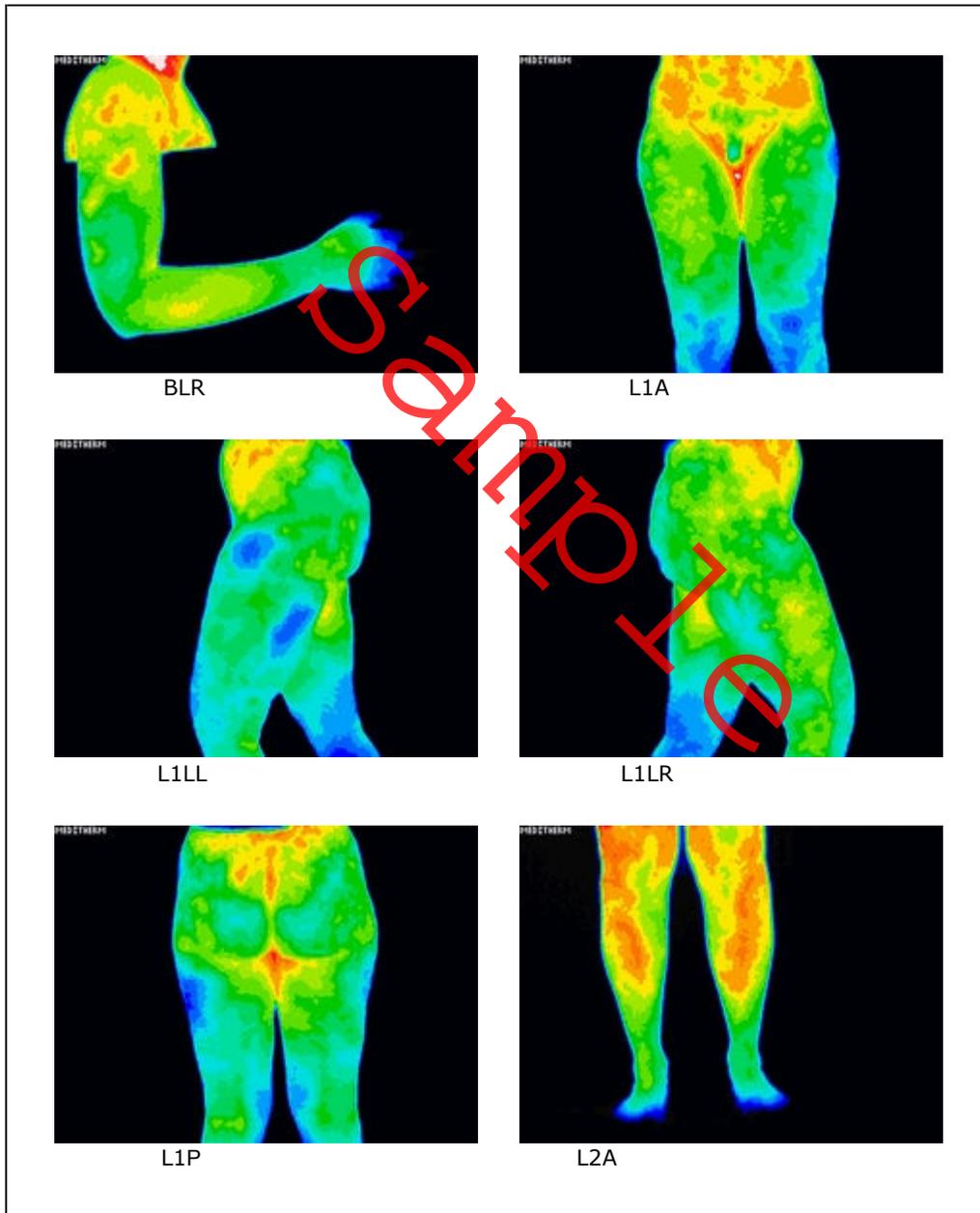


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