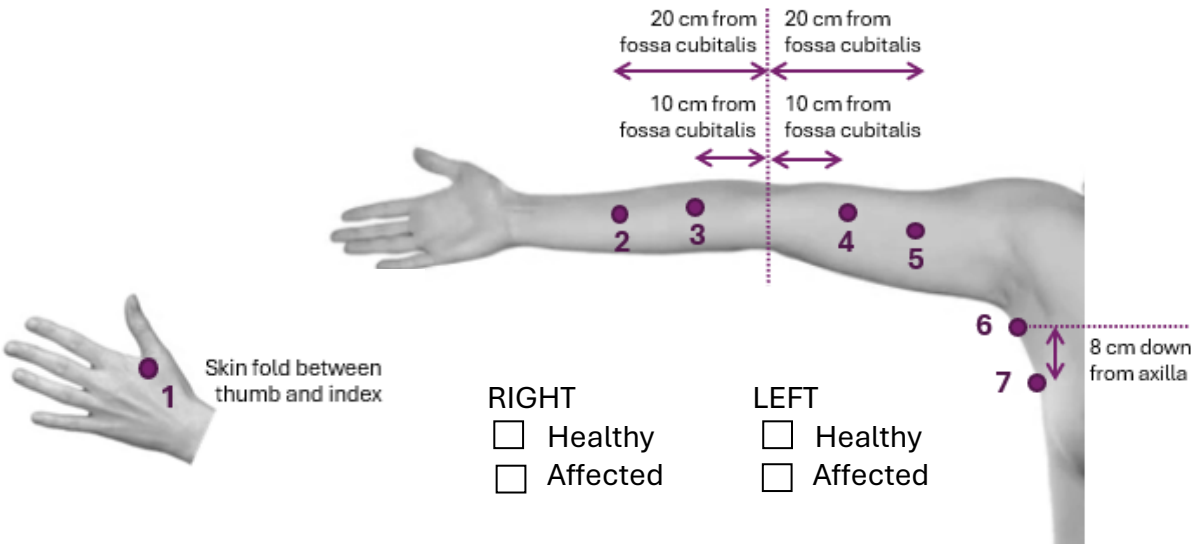


Measurement protocol for lymphedema in arm - LymphScanner

Subject’s name or id _____ Date _____



MEASUREMENT INSTRUCTIONS

- Measure with the LymphScanner at sites 1 to 7 in numerical order starting from site 1, first on the healthy side and then on the affected side at the corresponding location
 - Healthy side, site 1, affected side, site 1
 - Healthy side, site 2, affected side, site 2, etc.
- Record the readings from the device's display to the table below.

Site	Healthy Side (Ref)	Affected Side (PWC)	Ratio
1			
2			
3			
4			
5			
6			
7			

INTERPRETATION

Ratio is the quotient of the measurement values of affected side and healthy side. The LymphScanner calculates the ratio automatically when used in Scan mode.

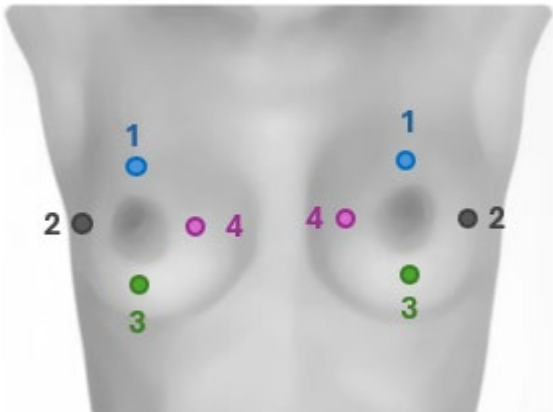
Ratio ≥ 1.20 indicates lymphedema.

Example Healthy Side: 33 %
Affected Side: 48 %
Ratio: 48 % / 33 % = 1.45

Reference: Tissue dielectric constant (TDC) measurements as a means of characterizing localized tissue water in arms of women with and without breast cancer treatment related lymphedema, H.N. Mayrovitz, D.N. Weingrad, S. Davey, Lymphology 47 (2014).

Measurement protocol for lymphedema in breast - LymphScanner

Subject’s name or id _____ Date _____



Site	Distance from nipple (cm)
1	
2	
3	
4	

RIGHT

☐ Healthy

☐ Affected

LEFT

☐ Healthy

☐ Affected

MEASUREMENT INSTRUCTIONS

- Measure with the LymphScanner at sites 1 to 7 in numerical order starting from site 1, first on the healthy side and then on the affected side at the corresponding location
 - Healthy side, site 1, affected side, site 1
 - Healthy side, site 2, affected side, site 2, etc.
- Record the readings from the device's display to the table below.

Site	Healthy Side (Ref)	Affected Side (PWC)	Ratio
1			
2			
3			
4			

INTERPRETATION

Ratio is the quotient of the measurement values of affected side and healthy side. The LymphScanner calculates the ratio automatically when used in Scan mode.

Ratio $\geq$ **1.40** indicates lymphedema.

Example Healthy Side: 33 %
Affected Side: 57 %
Ratio: 57 % / 33 % = 1.73

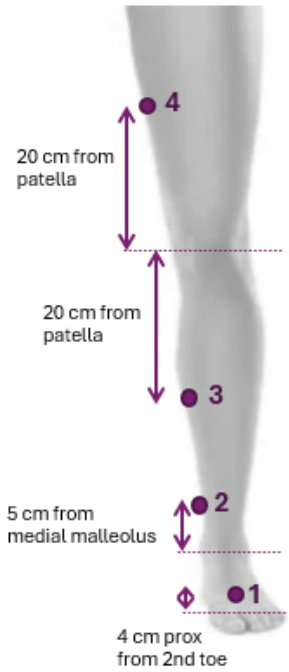
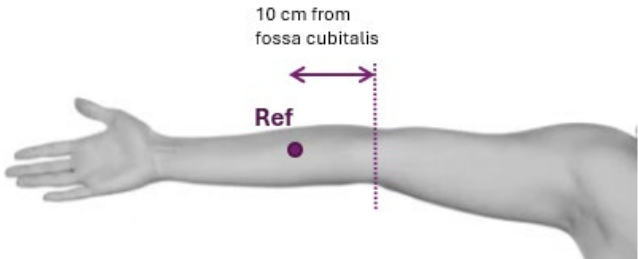
Reference: Breast Tissue Dielectric Constant as a Potential Breast Edema Assessment Parameter, H.N. Mayrovitz, C. Somarriba, D.N. Weingrad, Lymphatic research and biology, Vol. 20, No. 1, 2022.

Measurement protocol for lymphedema in leg - LymphScanner

Subject's name or id _____ Date _____

MEASUREMENT INSTRUCTIONS

- Select a reference site on volar forearm
- Measure the reference site with the LymphScanner and record the reading from the device's display to the table below
- Use the same site on the forearm as a reference for both legs
- Measure sites 1 – 3
- Record readings of all sites from the device's display to the table below
- Measure corresponding sites of the other leg and record reading to the table



Site	Forearm (Ref)	Left leg (PWC)	Ratio = Left leg (PWC)/ Forearm (Ref)	Right leg (PWC)	Ratio = Right leg (PWC)/ Forearm (Ref)
1					
2					
3					
4					

INTERPRETATION

Ratio is the quotient of the measurement values of the leg and the forearm.
 The LymphScanner calculates the ratio automatically when used in Scan mode.

Ratio ≥ 1.35 indicates lymphedema.

Example Forearm: 33 %
 Leg: 48 %
 Ratio: 48 % / 33 % = 1.45

Reference: Assessing Lower Extremity Lymphedema Using Upper and Lower Extremity Tissue Dielectric Constant Ratios: Method and Normal Reference Values, H.N. Mayrovitz, Lymphatic research and biology, Vol. 17, No. 4, 2019.