

# Manual: tools to predict chance of leg lymphedema after pelvic lymph node removal

## Why

There are many methods for detecting lymphedema. Each method evaluates a specific characteristic of lymphedema, such as volume, extracellular water, skin thickness and moisture content of the skin and subcutaneous tissue.

Many scientific studies have been conducted on people with lymphedema in the upper limbs. However, these results cannot simply be transferred to the lower limbs.

In addition, the (limited) scientific research on the detection of leg lymphedema has many limitations (such as small sample size, only one measurement method investigated). Therefore, a prospective observational study was conducted with the aim of determining which measurement method or combination of methods has the best accuracy for the early detection of leg lymphedema.

## Who

The tools can be used to monitor patients who have undergone surgery for prostate or bladder cancer and are at risk of developing lymphedema in the leg.

## Wat

Research was conducted to determine which (combination of) measurement method(s) are most diagnostically accurate for detecting leg lymphedema. Three different combinations of measurement tools for detecting leg lymphedema were developed. These combinations included two bioimpedance devices and the pitting test:

- 1) SOZO (L-Dex) + pitting test
- 2) SOZO (R0 arm/ R0 leg ratio) + pitting test
- 3) InBody (ECW leg) + pitting test  
(ECW: extracellular water)

## Where

These tools can be used in any specialized lymphedema center or any (physiotherapy) practice that has one or both bioimpedance devices available.

## How

After measuring your patient, you can enter the results of the measurement into the tool, which will calculate the risk of lymphedema for the leg in question. The tool uses a baseline measurement (= measurement before the operation) as a reference, given that

the risk of bilateral lymphedema means that the other leg cannot be used as a reference.

Select one of the three tools you wish to use. The tool has two tabs: “Explanation” and “Result”.

The first tab contains a description of the fields and how to use the tool to obtain the result. In the second tab, you can enter the results of your measurement, after which you will obtain the result.

For statistical reasons, it was not possible in this study to determine a cutoff point for the detection of lymphedema.