

1 **SUPPLEMENT 1**

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3 ***Complications and lymphedema assessment***

4 Surgical complications were categorized by Clavien – Dindo classification (1) and  
5 evaluated in the first 30 days of follow-up. The lymphedema assessment was  
6 performed through clinical assessment (physical examination by the researcher or  
7 surgeon) and lower limb perimetry. Perimetry was performed by the same  
8 professional that measured the lower limbs' diameter with a flexible tape, starting  
9 from the heel line with the floor, and superiorly every 10 cm with the patient naked  
10 and standing. Volumetry was calculated by truncated cone formula and considered  
11 altered after increase of 10% (2,3). Moreover, clinical examination consisted in edema  
12 evaluation, sensation of heaviness, characteristics of the skin, and clothes or shoes  
13 habit change. (4)

14 Severity of lymphedema was categorized according to the International Society of  
15 Lymphology reflecting clinical evaluation, inspection of lower limbs and patient report  
16 of symptoms. Briefly, stage I represents an early accumulation and regress with limb  
17 elevation. Pitting may occur. Stage II signifies that limb elevation alone rarely reduces  
18 tissue swelling and pitting is manifested. Stage III encompasses lymphostatic disease,  
19 with skin changes and absent pitting. (5)

20 Nevertheless, we considered weight gain as a confound factor for lymphedema  
21 diagnosis, where the increase in the Body Mass Index (BMI) increases measurements  
22 and consequently the volume of lower limbs. Therefore, the lower limb volume  
23 increase was not considered related to the weight gain when the Spearman correlation  
24 coefficient were -0.320 ( $p < 0.001$ ) and -0.223 ( $p = 0.011$ ) between right and left legs  
25 measured at 6 and 12 months.

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27 ***Surveillance and telemonitoring***

28 During COVID-19 pandemic, from March 2020 to June 2020, the patients' follow-up  
29 were done remotely by telemonitoring. Total of 26 women had follow-up assessment

30 time at 1, 6, and 12 months by telemonitoring and succeeded in 23 (88.5%) of the  
31 cases . (6) After the favorable experience of telemonitoring, patients with a lack of  
32 appointments during pandemic, patients' that did not meet the research follow-up  
33 visit window ( $\pm 15$  days) were evaluated by telemonitoring. A total of 37 (24.2%) QoL  
34 assessments were performed through telemonitoring and was mostly performed at 12  
35 months follow-up (n=27; 17.6%).

36 With regard of lymphedema evaluation, we had a higher loss at 12 months, where 19  
37 (12.4%) patients did not respond the QoL, and 66 patients (43.1%) did not undergo  
38 perimetry. We can rely this issue on the experience of QoL assessment by  
39 telemonitoring. Sixty-eight (44.7%) women did not have adjuvant treatment, leading to  
40 less frequent hospital visits and therefore less opportunity lower limbs perimetry  
41 measurement. Yet, loss of hospital follow-up was identified in 10 (6.5%) patients and  
42 only one patient did not have any QoL evaluation in postoperative follow-up.

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#### 44 **Statistical analysis**

45 Simple frequencies, mean, median and standard deviation of all variables were  
46 calculated. Associations between categorical variables were analyzed chi-square test  
47 and Fisher's test when appropriate. Continuous variables were analyzed using the t  
48 test for independent samples. When the normality assumption was violated, we used  
49 the nonparametric Mann-Whitney test. For correlation analysis between the BMI  
50 difference and volume difference, we used Spearman's s. QoL scores were analyzed  
51 following the EORTC manual (7,8) Logistic regression were used for risk assessment  
52 and factors of interest were adjusted in multivariate analysis, with odds ratio (OR) for  
53 relative risk for the outcome considering a 95% confidence interval (CI).

54 The volume of the perimetry was used the truncated cone formula to transform the  
55 measurements into volume. A 10% increase was used as a reference as the value of  
56 volume increase between the moments from the measurement of the volume of the  
57 limb considered in the evaluation of the pre-surgical moment.(9) The analyses were  
58 performed with SPSS 25.0.0.1 (IBM Corporation, 2019). For all tests,  $p < 0.05$  was  
59 significant.

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