Title: Is the perioperative change in ultrasound-based diaphragmatic inspiratory amplitude predictive of postoperative atelectasis? A prospective observational study in obese patients undergoing bariatric surgery.

Protocol 994/19

Statistical analysis

The statistical analysis of the data obtained will be conducted using SPSS software version 24 (release 24.0 64-bit edition, International Buisness Machines Corp.).

The verification of the normality of distribution of the analyzed data will be carried out through Shapiro-Wilk tests. In the case of data with parametric distribution, the descriptive statistical analysis will be conducted considering mean and standard deviation; in the case of data with non-parametric distribution, the median value and interquartile values (25%-75%) will be considered.

The univariate analysis will be conducted, in the case of data with parametric distribution, through the Student t-test. For the univariate analysis of data with non-parametric distribution, the Wilcoxon test will be used, in the case of dependent variables, and the Mann-Whitney test in the case of independent variables. For the study of correlations between variables, the Spearman's correlation coefficient per row will be applied.