

**The horizontal ridge augmentation using equine xenograft and a collagenated
porcine cortical lamina membrane:**

A clinical, radiographic and histological prospective study

Statistical Analysis Plan

Date: March 8, 2019

The statistical package software for social sciences (SPSS for Windows, Chicago, IL, USA, version 25.0) was performed for statistical analysis of the data. The alpha error was set at $-p\text{-value} < 0.05$. Frequency and percentage were utilized to describe categorical variables. Mean and standard-deviation were used for continuous variables.

- Repeated measure analysis of variance with two within-subjects factors (Time: Baseline and six months; distance: 0mm, 2mm, 4mm, and 6 mm) was performed to compare the mean bone level within groups. It was followed by univariate analyses and Bonferroni post hoc tests.
- Repeated measure analysis of variance with one within-subjects factor (distance: 0mm, 2mm, 4mm, and 6 mm) followed by Bonferroni post hoc tests was used to compare the mean horizontal gain.
- Repeated measure analysis of variance with one within-subjects factor (level: buccal, median, lingual) followed by Bonferroni post hoc tests was executed to compare the mean vertical gain.
- One sample t tests were used to compare the mean vertical gain with a theoretical value “0” that supposed the absence of gain.
- Student t tests were performed to compare continuous variables between two groups.
- Pearson correlation coefficients were calculated to assess the relationship between continuous variables.

Kruskal-Wallis tests were used to compare histomorphometric measurements between different levels.