

## **Statistics and analysis**

All data are expressed as the mean  $\pm$  SD for each group. The data were analyzed by one-way analysis of variance (ANOVA) followed by Least Significant Differences Test (LSD) or Tamhane's T2 and Spearman correlation using SPSS 23.0 software (New York, USA). P-value<0.05 was considered indicative of statistical significance. GraphPad Prism 5.0 software MultiExperiment Viewer software (v4.9.0) were used to reveal statistical analysis. Single or two factor network analysis using Networkx, a complex network analysis toolkit.