



The elderly patient demented in an acute geriatric department: pilot study, monocentric, randomized on the use of aromatherapy as a complementary treatment tool to psychopharmacology in behavioral and psychological symptoms of dementia (BPSD)

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Statistical methodology

The Mann-Whitney test has been used to evaluate the statistical significance of the difference between the variations in scores ($T_3 - T_1$) regarding the two interest groups of patients (control and treated). The Mann-Whitney test has been used instead of the t-test for independent samples as the scores variations distributions between T_1 and T_3 are not Gaussian, with the exception of the "thymic" area.

The statistical significance of the differences between the variations in scores ($T_3 - T_1$) has been further explored using a linear regression model to account for the initial CIRS comorbidity index (that resulted slightly higher in the control group); it should be noted that Huber-Sandwich robust standard errors have been used because of the presence of heteroskedasticity. Moreover, because of the relatively reduced number of observations available, the estimate has been repeated using the median regression model to check the robustness of the results. Both estimates (not presented here for convenience) confirmed the results obtained with the Mann-Whitney test.