

Major depression

Used studies and abstracts

1. V. G. Alexeev, L. V. Kuznekova EIS System (Galvanic Skin responses measurement device) in adjunct to Treatments' monitoring and to diagnosis with the conventional methods. Botkin 2006

Abstract

Clinical investigations were conducted at the S.P. Botkin Hospital from May 20, 2006, to September 1, 2006, in order to evaluate the Bioimpedance parameters provide from a device named Electro Interstitial Scan (E.I.S), we performed drug administration studies. 53 patients presented major depression diagnosed by conventional examinations and were undergoing no treatment. SSRI treatment follow-up being undertaken on one hand with the EIS System and on the other hand by conventional methods.

SSRI treatment monitoring

The findings indicate that there were a significant positive correlations between SDC 9/10 and the treatment Response at D+30 ($\rho = 0.484$, $p < 0.001$) and D+45 and D+60 ($\rho = 0.557$, $p < 0.001$). The findings indicate that there were a significant positive correlations between EPA-SPA 9/10 and the treatment Response at D+45 ($\rho = 0.709$, $p < 0.001$) and D+60 ($\rho = 0.804$, $p < 0.001$).

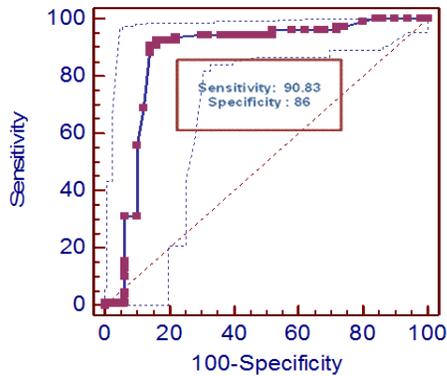
The major depression data shows the significant positive correlations between SDC 9/10 and the treatment response (R) for D+ 30 and it also provide evidence of significant positive correlation between ESG HF/VLF and the treatment response (R) for D+45 and D+60 measurements.

According to the above clinical investigations including 53 subjects diagnosed and control group 2 indicators were investigated for the major depression:

Forehead SDC+: decreased in major depression

Forehead alpha parameter: decreased in major depression

Comparison of the Roc curves major depression /above indicators and final Roc curve including the 2 indicators



ROC curve		
Variable	SDC+ and Alpha P	
Classification variable	Major Depression	
Sample size		103
Positive group :	diagnosis = 1	53
Negative group :	diagnosis = 0	50
Disease prevalence (%)		68.6
Area under the ROC curve (AUC)		0.869
Standard Error ^a		0.0392
95% Confidence Interval ^b		0.806 to 0.917
z statistic		9.414
Significance level P (Area=0.5)		<0.0001