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**EARLY IMPROVEMENT OF DEPRESSIVE SYMPTOMS AND REDUCTION OF PREFRONTAL CORDANCE AS PREDICTORS OF RESPONSE TO VENLAFAXINE ER IN PATIENTS WITH RESISTANT DEPRESSION**

**M. Bares**<sup>1</sup>, T. Novak<sup>1</sup>, M. Brunovsky<sup>2</sup>, M. Kopecek<sup>3</sup>, C. H<sup>1</sup>schl<sup>1</sup>

<sup>1</sup>2nd Department, Prague Psychiatric Centre, Prague, Czech Republic ; <sup>2</sup>EEG Laboratory, Prague Psychiatric Centre, Prague, Czech Republic ;

<sup>3</sup>3rd Department, Prague Psychiatric Centre, Prague, Czech Republic

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**Introduction:** Previous studies demonstrated the role of early improvement of depressive symptoms and change of QEEG prefrontal cordance in the outcome prediction of antidepressant treatment in depressive patients.

**Objective:** The aim of study was to compare change of prefrontal QEEG theta cordance at week 1 and reduction of depressive symptoms at week 2 in the prediction of response to venlafaxine ER in patients with resistant depression.

**Methods:** All patients (n=43) were hospitalized at Prague Psychiatric Center and were treated with venlafaxine for 4 weeks or more. Depressive symptoms were assessed using MADRS at baseline, week 2 and at the end of study. EEG data were monitored at baseline and after week 1.

Cordance was computed at 3 frontal electrodes in theta frequency band.

**Results:** There were no significant differences between change of cordance at week 1 and reduction of depressive symptoms at week 2 in predictive ability in terms of AUC of ROC analysis ( $0.78 \pm 0.07$  vs  $0.74 \pm 0.08$ ;  $p=0.75$ ). Using  $\geq 20\%$  reduction of MADRS and reduction of cordance value as indicators of response we did not detect significant difference in their predictive parameters. The model combining both measures yielded value of AUC ROC analysis 0.86 (nonsignificantly better than individual predictors). Positive and negative predictive values of proposed models were 0.93 and 0.75.

**Conclusion:** Both parameters were identified as predictors with comparable ability to differentiate between responders and non-responders.

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