## CS02-02 - PREDICTION OF THERAPEUTIC OUTCOME IN TREATMENT RESISTANT DEPRESSION

M.Bares<sup>1,2</sup>, T.Novak<sup>1,2</sup>, C.Höschl<sup>1,2</sup>

<sup>1</sup>Prague Psychiatric Center, <sup>2</sup>The Department of Psychiatry and Medical Psychology, <sup>3</sup>rd Medical Faculty, Charles University Prague, Prague, Czech Republic

Treatment resistant depression (TRD) is relatively common condition and represents significant public health problem. Applying usual definitions of response it affects 20-30% of depressive patients and this proportion rises up to 60% if remission is used as a criterion [1]. One of ways to improve the therapeutic outcome in depression is to identify patients who are more likely to benefit from treatment, i.e. to predict the treatment response [3]. There are many reports suggesting either biological or psychological predictors of response, but many of them are good only to inspire future studies. The requirements for "clinical" predictors are in fact more stringent. Positive and negative predictive values, cost and availability of used predictive tests as well as easy measure qualify factors associated with treatment outcome as useful clinical predictors. There are many methodological issues that must be taken into account in looking for predictors, such as an outcome definition, time frame, definition of patients' population (subtype of depression), medication adherence, sample size, adequacy of treatment etc. Several key predictors of treatment outcome have been identified and replicated in previous studies, including depression severity, subtype of depression, early improvement of depressive symptoms, baseline cholesterol plasma level, psychomotor slowing, theta cordance and other QEEG predictors, anterior cingulate metabolism, 5-HTT polymorphism etc.[2]. Herewith we briefly review recent studies on treatment prediction in patients with resistant depression and contribute to this topic with our own results (cordance, early improvement of depressive symptoms, etc.). Despite of intensive research in this field there is a lack of studies that would prospectively validate the predictive ability of identified predictors. Another goal of future research would be to integrate current concepts of prediction (neurophysiological, clinical, genetic, neuroimaging findings) in order to improve its validity for clinical outcome.

## References:

[1] Fekadu A, Wooderson SC, Markopoulo K, Donaldson C, Papadopoulos A, Cleare AJ. What happens to patients with treatment-resistant depression? A systematic review of medium to long term outcome studies. J Affect Disord 2009;116:4-11. [2] Kemp AH, Gordon E, Rush AJ, Williams LM. Improving the prediction of treatment response in depression: integration of clinical, cognitive, psychophysiological, neuroimaging, and genetic measures. CNS Spectr 2008;13:1066-86. [3] Papakostas GI, Fava M. Predictors, moderators, and mediators (correlates) of treatment outcome in major depressive disorder. Dialogues Clin Neurosci 2008;10:439-51.