

## PHARMACOGENETICS OF SUICIDE RISK WITH ANTIDEPRESSANTS

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**Introduction:** The risk of suicide attempt and death by suicide during an antidepressant drug treatment for a major depression episode (MDE) remains unclear. Furthermore, this risk can be influenced by genetic factors, especially those involved in the serotonin pathway.

**Objectives:** We genotyped the variants of 6 candidate genes (including 5HTT/SLC6A4, TPH2, 5HTR1A, 1B & 2A) in 4000 outpatients treated with tianeptine for a MDE to search for an association with a suicide risk and the treatment response.

**Aims:** The goal of this study was to evaluate the pharmacogenetic role of the serotonin pathway in suicide risk during an antidepressant treatment.

**Methods:** A total of 4000 outpatients for a MDE were treated with tianeptine. The criteria for a MDE were examined by the clinicians according to the DSM-IV diagnosis and the duration of each symptom was recorded during the inclusion and at 4 to 8 weeks of treatment. The Hospital Anxiety and Depression Scale (HAD) was evaluated at the two visits. Suicide attempts, number and suicide idea of MADRS, before and during treatment, were recorded. DNA was extracted from saliva sample and genotyping of 22 single nucleotide polymorphisms (SNPs) was performed by Taqman assay.

**Results:** All clinical and genotyping data were collected for 3771 tianeptine-treated outpatients. A total of 450 subjects have reported suicide attempts before treatment and 24 during treatment.

**Conclusions:** The results of pharmacogenetic association for suicide risk during an antidepressant treatment will be presented during the workshop.