

## SNV -521CT (rs1800955) of promoter region of gene DRD4 as a genetic predictor of the risk of developing Antipsychotic-induced Tardive Dyskinesia



**Elena Vaiman**

Russian Federation Ministry of Health, Russia

### Abstract

The aim of the research: Study of association of antipsychotic-induced tardive dyskinesia (TD) with single nucleotide variant (SNV) -521CT (rs1800955) of promoter region of gene DRD4 encoding dopamine receptor D4.

Materials and methods: We tested 65 patients with a diagnosis of F20 to determine the severity of TD on the background of antipsychotic (AP) monotherapy on the scales BARS, SAS, ESRS. The molecular genetic study of carriage of SNV rs1800995 of DRD4 gene promoter was carried out. The first group of observations - 22 patients (33.8%), who received AP of first generation (APFG). The second group of observations - 43 patients (66.2%), who received AP of second generation (APSG). Testing was carried out in dynamics: 1 visit - before AP therapy; 2 visit - 8 weeks after the start of therapy.

Conclusion: The results of the pilot pharmacogenetic study indicate that the carrier of allelic variants of rs1800955 polymorphism in the promoter part of the gene DRD4 encoding the dopamine receptor D4 is not associated with the development of AP-induced TD in the study population, which may be due to the peculiarities of gene drift and sample size.

### Biography:

Elena Vaiman is a resident neurologist and young researcher of FSBI "V. M. Bekhterev National Medical Research Center for Psychiatry and Neurology", St. Petersburg. She published 7 articles and she was a coauthor of the monograph "Clinical Psychopharmacogenetics." Elena also writes a Ph.D.

### Recent Publications:

1. Genetic Factors of Nitric Oxide's System in Psychoneurologic Disorders
2. Diagnostic methods of Antipsychotic-induced Extrapyramide Disorders
3. Antipsychotic-induced tardive dyskinesia as a serious adverse effect in the Psychopharmacotherapy of schizophrenia



[9<sup>th</sup> International Conference on Neurological Disorders and Stroke](#) | Rome, Italy | February 28-29, 2020

**Citation:** Elena Vaiman, *SNV -521CT (rs1800955) of promoter region of gene DRD4 as a genetic predictor of the risk of developing antipsychotic-induced tardive dyskinesia*, Stroke 2020, 9th International Conference on Neurological Disorders and Stroke, Rome, Italy, February 28-29, 2020, 04