

10/2016

★ Essential tremor (Müller, 2016)

Stefanie Müller, et al.

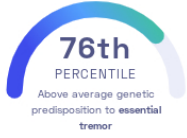
Brain

Brain Muscles

STUDY SUMMARY

Identification of 3 genetic variants associated with essential tremor.

YOUR RESULT



STUDY DESCRIPTION

Essential tremor is a neurological disorder characterized by involuntary shaking, especially of the hands, legs, and head. Essential tremor occurs when one tries to use the affected muscles during voluntary movements such as eating and writing. This differentiates the essential tremor from Parkinson's disease that causes shaking of resting muscles. This genome-wide association study identified 3 genetic variants that are associated with essential tremor by examining the genomes of over 9,000 individuals of European ancestry.

DID YOU KNOW?

Physical therapy can help those affected by essential tremor. In addition to exercises, the utilization of heavier versions of daily objects (silverware, pens, etc.) can help reduce the shaking movements.



YOUR DETAILED RESULTS

To calculate your genetic predisposition to essential tremor we summed up the effects of genetic variants that were linked to essential tremor in the study that this report is based on. These variants can be found in the table below. The variants highlighted in green have **positive effect sizes** and increase your genetic predisposition to essential tremor. The variants highlighted in blue have **negative effects sizes** and decrease your genetic predisposition to essential tremor. Variants that are not highlighted are not found in your genome and do not affect your genetic predisposition to essential tremor. By adding up the effect sizes of the highlighted variants we calculated your polygenic score for essential tremor to be **0.09**. To determine whether your score is high or low, we compared it to the scores of 5,000 other Nebula Genomics users. We found that your polygenic score for essential tremor is in the **76th percentile**. This means that it is higher than the polygenic scores 76% of people. We consider this to be an **above average genetic predisposition to essential tremor**. However, please note that genetic predispositions do not account for important non-genetic factors like lifestyle. Furthermore, the genetics of most traits has not been fully understood yet and many associations between traits and genetic variants remain unknown. For additional explanations, click on the column titles in the table below and visit our Nebula Library tutorial.

VARIANT [ⓘ]	YOUR GENOTYPE [ⓘ]	EFFECT SIZE [ⓘ]	VARIANT FREQUENCY [ⓘ]	SIGNIFICANCE [ⓘ]
rs10937625_C	T / C	-0.22 (↓)	25%	5.21 x 10 ⁻¹⁰
rs17590046_C	T / T	-0.24 (-)	18%	1.39 x 10 ⁻⁹
rs12764057_G	G / G	0.16 (↑)	34%	1.19 x 10 ⁻⁸