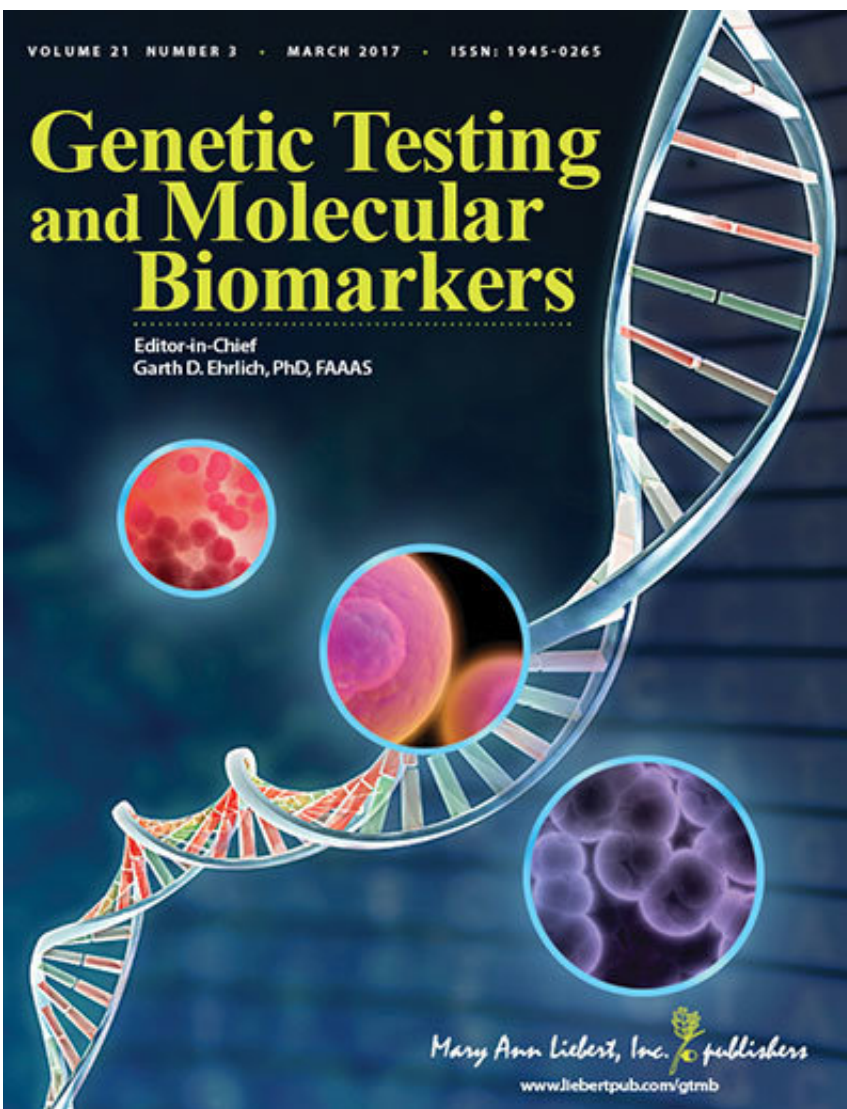


Researchers examine role of gene variation linked to major depressive disorder

December 5 2017



Credit: Mary Ann Liebert, Inc., publishers

A new study assessed the effects of a SLC6A15 gene variant on resting-state brain function in patients with major depressive disorder (MDD), comparing the results with those in healthy individuals. Based on the results of genotyping and functional magnetic resonance imaging (fMRI) of the brain, researchers identified an association between a specific SLC6A15 polymorphism and resting-state brain function in multiple brain regions in patients with MDD, as reported in *Genetic Testing and Molecular Biomarkers*.

The study by Kerang Zhang and coauthors from the First Hospital and First Clinical Medical College of Shanxi Medical University (Taiyuan, China) focused on patients experiencing their first episode of MDD. The researchers showed differences in hemodynamic activity across various brain regions that correlated with the presence of the SLC6A15 gene variant. They reported an association between genotype and fMRI results of the corpus callosum, cingulum, and the frontal, parietal, and temporal lobes in the article entitled "A Combined Study of SLC6A15 Gene Polymorphism and the Resting-State Functional Magnetic Resonance Imaging in First-Episode Drug-Naive Major Depressive Disorder."

"This is absolutely bleeding-edge neurogenetics that combines genotyping with both clinical diagnoses and fMRI-defined phenotypes," says *Genetic Testing and Molecular Biomarkers* Editor-in-Chief Garth D. Ehrlich, PhD, FAAAS, Professor of Microbiology and Immunology, Executive Director, Center for Genomic Sciences and Center for Advanced Microbial Processing, Institute for Molecular Medicine and Infectious Disease, Drexel College of Medicine (Philadelphia, PA).

More information: Lijuan Wang et al, A Combined Study of SLC6A15 Gene Polymorphism and the Resting-State Functional Magnetic Resonance Imaging in First-Episode Drug-Naive Major Depressive Disorder, *Genetic Testing and Molecular Biomarkers* (2017). [DOI: 10.1089/gtmb.2016.0426](https://doi.org/10.1089/gtmb.2016.0426)

Provided by Mary Ann Liebert, Inc

Citation: Researchers examine role of gene variation linked to major depressive disorder (2017, December 5) retrieved 25 April 2024 from <https://medicalxpress.com/news/2017-12-role-gene-variation-linked-major.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.