

Summary Recommendations

1. As a basic principle, informed consent plays a crucial role in genetic testing. Tests should only be carried out if patients have been informed about potential risks (including significant implications for their daily life) and have consented to the procedure.
2. For major adulthood psychiatric disorders such as depression, bipolar disorder, substance dependence, and schizophrenia, single genetic variants are not sufficient to cause disease, and there are no genetic tests that can establish a diagnosis or predict individual risk.
3. Although they lack diagnostic specificity, certain copy number variants (CNVs) are more prevalent in individuals with autism spectrum disorders, schizophrenia, or other psychiatric disorders. Identification of these CNVs in such patients may help diagnose rare conditions that have important medical and psychiatric implications for individual patients and may inform family counseling. Identification of de novo CNVs may also have a place in counseling for certain psychiatric disorders.
4. Agencies such as the US FDA have begun to include pharmacogenomic information in drug labeling and recommend genetic testing for some specific psychiatric drugs. We suggest clinicians consider such recommendations in treatment decisions.
5. Evidence remains inconclusive as to the possible clinical utility of CYP450 genetic testing in psychiatry, but more research is needed.
6. Professional genetic counseling is important when considering genetic testing or returning genetic test results to individuals. We recommend that all genetic tests with health implications should be accompanied by professional genetic counseling. For patients with psychiatric illness, or for tests that relate to psychiatric conditions, counseling by professionals with clinical expertise in mental health is important.
7. In genome-wide testing, the possibility of incidental or secondary findings must be communicated in a clear and open manner and procedures for dealing with such findings should be made explicit.
8. We advocate the development and dissemination of clinical and community education programs to educate mental health professionals in genetic medicine, safeguard the privacy of individuals' genetic testing results, and reduce stigma in the community.
9. Expanded research efforts are needed to clarify the role of genetic testing in psychiatry.