Identifying Patients for Pharmacogenomic Testing

LOWER THAN DESIRED MEDICATION RESPONSE

Patient Age: 35

Genetic Variability Profile
Highly inducible CYP1A2 variant (smoker - 1 pack/day)

Primary Psychiatric Diagnosis
Bipolar II Disorder

Target Psychiatric Symptoms

Mood swings, depression, anxiety, irritability, impulsivity

Medication History

Previous: lamotrigine 200 mg, lithium 600 mg
Current: olanzapine 15 mg

Patient Reported Progress

Patient is not experiencing side effects from her current treatment, but stated she doesn't feel like her medication is effectively treating her symptoms. She reports feeling a lack of control and not like herself.

Treatment Changes Considered Prior to the GeneSight Test

Initiate clozapine

genesight®

This case study is a simplified, illustrative example of how insights from the GeneSight test can be used to help inform treatment. This is not a real GeneSight patient case. These genetic insights should be used within the context of a comprehensive medical assessment.

How Genetic Insights Helped Inform Treatment Decisions

Insights Revealed in the GeneSight® Report

- Olanzapine and clozapine were both listed in the red category (Significant Gene-Drug Interaction) of the “smokers” section of the patient’s report.
- Olanzapine and clozapine were both marked with Clinical Consideration 2, which indicated that “Serum levels may be too low, higher doses may be required.”
- Clinician was encouraged by olanzapine’s lack of side effects and deduced that the medication may require dose adjustments based on the test results and smoking status.
- Increasing the dose could be a potential option, rather than switching to a new medication, based on assessment of the patient and insights from testing.

Treatment Changes Made After the GeneSight Test

Decided against prescribing clozapine and instead increased the dose of olanzapine to 20 mg daily

Patient Outcome

Using insights from the GeneSight report and familiarity with the patient’s history, the clinician was able to make an informed adjustment to the treatment, rather than starting a new medication.

After moving to a higher dose, the patient displayed improved cognition and more stable behavior, with no more rapid cycling between moods.