

Identifying Patients for Pharmacogenomic Testing

UNWANTED SIDE EFFECTS



Patient Age: 45



Genetic Variability Profile

CYP2D6 poor metabolizer



Primary Psychiatric Diagnosis

Major Depressive Disorder

Target Psychiatric Symptoms

Excessive worry, feelings of helplessness, low energy and motivation, sleep disturbances, thoughts of death

Medication History

Previous: fluoxetine 20 mg, venlafaxine 150 mg

Current: vortioxetine 20 mg

Patient Reported Progress

Patient reports their symptoms are better managed, but the GI dysfunction and nausea are becoming intolerable.

Treatment Changes Considered Prior to the GeneSight Test

Discontinue current medication and initiate a different antidepressant



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

- ▶ The patient's current medication, vortioxetine, was listed in the red category (Significant Gene-Drug Interaction) of the patient's report.
- ▶ Vortioxetine was marked with Clinical Considerations 1 ("Serum levels may be too high, lower doses may be required."), 6 ("Use of this drug may increase risk of side effects."), and 8 ("FDA label identifies a potential gene-drug interaction for this medication.").
- ▶ Because patient's depression symptoms were managed, and tolerability issues may be related to genetic variability, a lower dose of vortioxetine may be an option. Drug labeling recommends a maximum dose of 10 mg in patients known to be CYP2D6 poor metabolizers.

Treatment Changes Made After the GeneSight Test

Decreased dose of vortioxetine to 10 mg daily

Patient Outcome

Using the patient's GeneSight report, the clinician was able to determine a potential cause of the patient's tolerability issues, and the results helped inform dosing decisions for the current medication.

Following dose reduction of vortioxetine, the patient reported fewer GI disturbances, and their depression symptoms remained well managed.