

Identifying Patients for Pharmacogenomic Testing

ELDERLY PATIENTS



Patient Age: 72



Genetic Variability Profile

CYP2C19 poor metabolizer, highly inducible
CYP1A2 variant (non-smoker)



Primary Psychiatric Diagnosis

Major Depressive Disorder:
Recurrent, Severe (PHQ9-25)

Target Psychiatric Symptoms

Depressed mood, agitation, feelings of hopelessness, rumination

Medication History

Previous: citalopram 20 mg

Current: escitalopram 20 mg

Patient Reported Progress

Patient is experiencing persistent hopelessness and depression. He also reports low appetite and difficulty sleeping.

Treatment Changes Considered Prior to the GeneSight Test

Discontinue escitalopram and initiate sertraline or mirtazapine



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 new medication being considered, sertraline, was listed in the red category (Significant Gene-Drug Interaction) of the patient's report.
- Sertraline was marked with Clinical Considerations 1 ("Serum levels may be too high, lower doses may be required.") and 6 ("Use of this drug may increase risk of side effects.")
- Clinician deduced that sertraline could be started at a lower dose, or an alternative medication deemed appropriate for this case could be selected.

Treatment Changes Made After the GeneSight Test

Decided against prescribing sertraline and instead initiated mirtazapine 7.5 mg, listed in the patient's green category (Use as Directed) for the "non-smokers" section of results

Patient Outcome

With the clinician considering two different medication options, the GeneSight test results helped them make a more informed decision in the context of their comprehensive medical assessment.

Patient displayed decreased depressive symptoms and higher motivation after initiating mirtazapine, along with improved sleep and appetite.