Use genetics to personalize your clinical decision making — and find the best path sooner

Finding the right treatment takes time

Despite the availability of effective treatments for many psychiatric diseases, including mood and anxiety disorders, achieving the best treatment can take weeks or months. Patients can become discouraged, discontinue treatments and experience prolonged suffering.

An estimated two-thirds of patients with depression will not respond to first-line treatment, and more than one-third will become treatment resistant.

The Genecept Assay can shorten the path to finding effective treatments

The Genecept Assay is a genetic test designed to help clinicians optimize treatment decisions and choose medications more likely to be safe and effective.

• Identifies variations in 18 key genes relevant to psychiatric treatment that indicate which therapies are likely to work as intended and not result in unwanted side effects or adverse events
• Easily administered as a cheek swab test
• Every result report includes a complimentary individualized consultation with an expert

The Genecept Assay covers a wide range of psychiatric disorders

Candidates for testing include:

• Patients living with depression, anxiety, OCD, ADHD, bipolar disorder, PTSD, autism, schizophrenia, chronic pain and substance abuse
• Any patient without optimal treatment response: previously failed treatment trials, poor response or adverse events
• Patients with polypharmacy
• Patients with psychiatric and medical comorbidities
• Patients with medication adherence issues

The Genecept Assay reports are easy to read, understand and share

Three types of test results are possible:

• A positive or clinically significant gene result
• A negative or non-clinically significant gene result (normal)
• An indeterminate gene result (may trigger a retest, or a gene variation of uncertain clinical significance – this result type is rare)

The Genecept Assay report walks you through the genetic results and their treatment implications in detail. The report is easy to explain to patients, and the results help you have productive conversations about treatment with patients and families to improve adherence.

Complimentary consultation service

With each Genecept Assay report, Dynacare includes an optional and complimentary expert consultation service, enabling you to consult with a physician or pharmacist to help determine optimal treatment.

Case example: SLC6A4 in the treatment of intractable depression

30-year-old Caucasian female presented with intractable depression and severe anxiety along with a history of failure to a number of SSRIs.

Genecept Assay result

Genetic testing revealed the patient to carry a variant in the SLC6A4 gene that plays a role in inhibiting serotonin reuptake and increase risk for failure with SSRIs. This result was consistent with the patient’s previous medication history, having failed multiple SSRI trials over 10 years. Also found was an MTHFR gene variant, C677T, that may reduce production of methylfolate, which is needed for the synthesis of neurotransmitters.

Treatment change

The antidepressant mirtazapine (15 mg) was initiated at bedtime and then titrated up to 45 mg. Mirtazapine was chosen for serotonergic modulation via an alternative mechanism from the serotonin transporter.

Treatment also included continuing clonazepam for anxiety, adding l-methylecgonine and discontinuing risperidone, which had been prescribed for a questionable diagnosis of bipolar type II disorder.

Outcome

On this regimen developed using the Genecept Assay results, the patient reported improved mood and has been able to attend work consistently and exercise daily. Her affect and energy both improved.

In a retrospective analysis of health claims data, individuals with Genecept Assay-guided treatment were significantly different from those who received standard treatment.

• improved patient adherence

In a retrospective analysis of health claims data, individuals with Genecept Assay-guided treatment were significantly different from those who received standard treatment.

• Significant cost savings

In a retrospective analysis of health claims data, individuals with Genecept Assay-guided treatment were significantly different from those who received standard treatment.

• Improved quality of life

Clinical trial results

Studies have shown that using the Genecept Assay has resulted in significant improvements in clinical and economic outcomes.

Measurable clinical improvement, physician-reported

In a naturalistic study of 665 patients, clinician-rated data using the Clinician Global Impression Improvement scale (CGI) showed that:

• 87% of patients demonstrated a clinically measurable improvement
• 80% of patients showed a significant clinical improvement (rated much improved or very much improved)
• 93% of patients reported as treatment resistant, 81% demonstrated a clinically measurable improvement

Measurable patient improvement, patient-reported

In the same study, patients reported significant:

• Decreases in depression
• Decreases in anxiety
• Decreases in medication side effects
• Increases in quality of life

Improved patient adherence

In a retrospective analysis of health claims data, individuals with Genecept Assay-guided treatment were significantly more medication adherent (p<.001) than patients with standard treatment.

The Genecept Assay can shorten the path to effective treatment, offering new hope for your patients.

*Based on industry averages; for illustration purposes only.

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Physiological Role

- Pharmacodynamic (CYP450s)
  - Pharmacokinetic (CYP450s)

Treatment Impact

- The Genecept Assay includes:
  - An expanded panel for greater insight

Impact of Mutation

- 12 pharmacodynamic genes, 6 pharmacokinetic genes
- A report with more than 195 citations to the literature supported in peer-reviewed publications to affect 18 well-characterized, well-annotated genes, extensively


Learn more about the Genecept Assay. Contact Dynacare at 888.988.1888 or dynacare.ca.