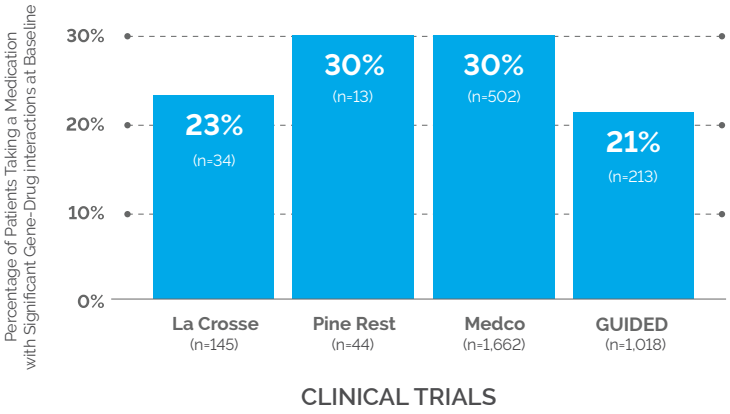
genesight®

Find out how genetics may be impacting your treatment decisions

Patients respond to medications differently

Genetic variability may undermine medication choices and may be a factor in treatment failure.

Significant gene-drug interactions were identified at baseline across multiple clinical studies.



The lack of genetic insight may make switching and dose adjustments more difficult.

GUIDED

(Genomics Used to Improve DEpression Decisions)

- Largest pharmacogenomic randomized controlled trial (RCT) in mental health
- Assessed impact of the GeneSight® Psychotropic test on depression treatment response compared to treatment as usual (TAU)

Study Design

- 1,167 subjects with major depressive disorder
- Patient and rater blinded
- Patients failed at least one psychotropic medication

Key Findings

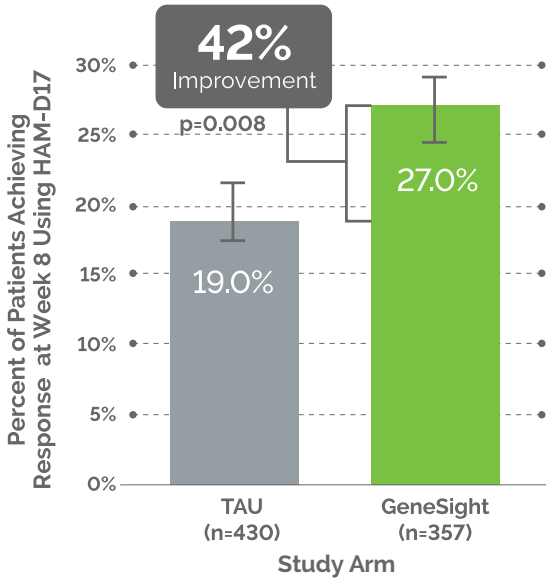
GeneSight vs. TAU at 8 weeks:

- The primary endpoint of symptom improvement trended towards, but did not achieve statistical significance. There was an 11% relative improvement (3% absolute improvement; p=.107)
- Response rate showed a 30% relative improvement (6% absolute improvement; p=0.013)
- Remission showed a 50% relative improvement (5% absolute improvement; p=0.007)

GeneSight® outperformed TAU on clinical endpoints among patients on medications with gene-drug interactions

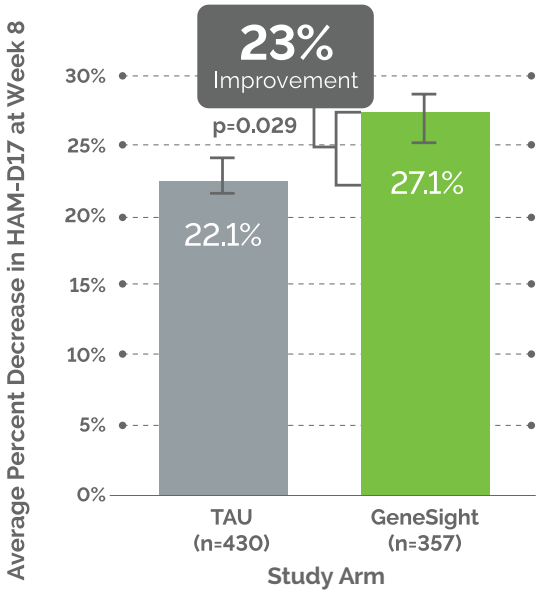
The GeneSight test may have the greatest potential to help patients whose treatment resistance may be related to gene-drug interactions. Therefore, a post-hoc analysis was performed on patients taking medications subject to gene-drug interactions at baseline (yellow and red categories). This excludes the 31% of patients entering the study on medications with no gene-drug interactions (green category).

RESPONSE



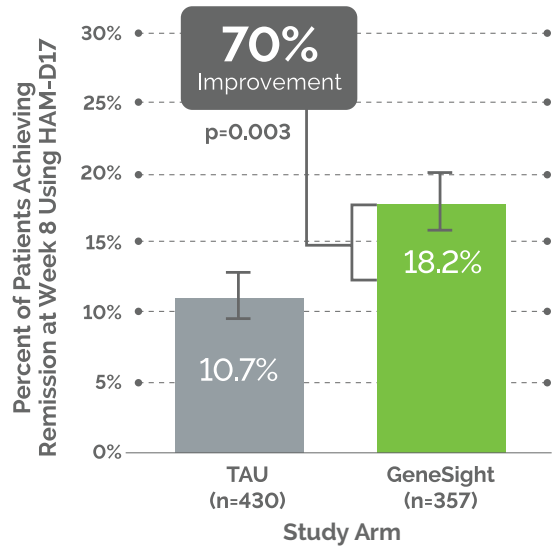
The GeneSight arm experienced a 42% relative improvement and an 8% absolute improvement in response rates at Week 8 compared to TAU.

SYMPTOM IMPROVEMENT



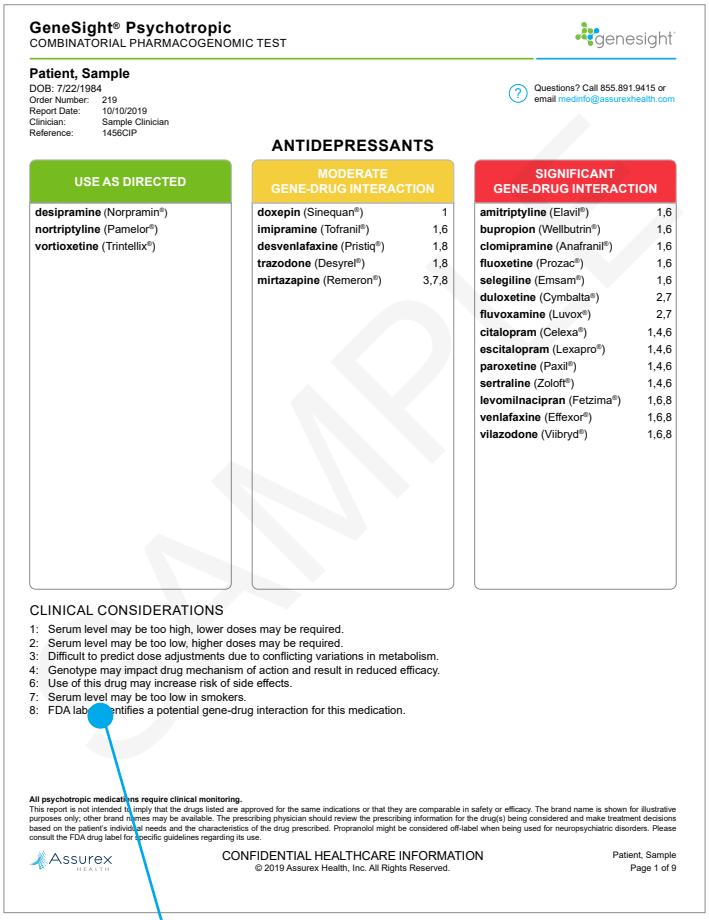
The GeneSight arm experienced a 23% relative improvement and a 5% absolute improvement in symptoms at Week 8 compared to TAU.

REMISSION



The GeneSight arm experienced a 70% relative improvement and a 7% absolute improvement in remission rates at Week 8 compared to TAU.

The GeneSight® report is easy to understand



GeneSight® Psychotropic
COMBINATORIAL PHARMACOGENOMIC TEST

genesight

Patient, Sample
DOB: 7/22/1984
Order Number: 219
Report Date: 10/10/2019
Clinician: Sample Clinician
Reference: 1456CIP

Questions? Call 855.891.9415 or email medinfo@assurexhealth.com

ANTIDEPRESSANTS

USE AS DIRECTED	MODERATE GENE-DRUG INTERACTION		SIGNIFICANT GENE-DRUG INTERACTION	
desipramine (Norpramin®)	**doxepin** (Sinequan®)	1	**amitriptyline** (Elavil®)	1,6
nortriptyline (Pamelor®)	**imipramine** (Tofranil®)	1,6	**bupropion** (Wellbutrin®)	1,6
vortioxetine (Trintellix®)	**desvenlafaxine** (Pristiq®)	1,8	**clomipramine** (Anafranil®)	1,6
	trazodone (Desyrel®)	1,8	**fluoxetine** (Prozac®)	1,6
	mirtazapine (Remeron®)	3,7,8	**selegiline** (Emsam®)	1,6
			duloxetine (Cymbalta®)	2,7
			fluvoxamine (Luvox®)	2,7
			citalopram (Celexa®)	1,4,6
			escitalopram (Lexapro®)	1,4,6
			paroxetine (Paxil®)	1,4,6
			sertraline (Zoloft®)	1,4,6
			levomilnacipran (Fetzima®)	1,6,8
			venlafaxine (Effexor®)	1,6,8
			vilazodone (Viibryd®)	1,6,8

CLINICAL CONSIDERATIONS
1: Serum level may be too high, lower doses may be required.
2: Serum level may be too low, higher doses may be required.
3: Difficult to predict dose adjustments due to conflicting variations in metabolism.
4: Genotype may impact drug mechanism of action and result in reduced efficacy.
6: Use of this drug may increase risk of side effects.
7: Serum level may be too low in smokers.
8: FDA label identifies a potential gene-drug interaction for this medication.

All psychotropic medications require clinical monitoring.
This report is not intended to imply that the drugs listed are approved for the same indications or that they are comparable in safety or efficacy. The brand name is shown for illustrative purposes only; other brand names may be available. The prescribing physician should review the prescribing information for the drug(s) being considered and make treatment decisions based on the patient's individual needs and the characteristics of the drug prescribed. Propranolol might be considered off-label when being used for neuropsychiatric disorders. Please consult the FDA drug label for specific guidelines regarding its use.

Assurex HEALTH

CONFIDENTIAL HEALTHCARE INFORMATION

Clinical Considerations state the rationale for a medication's classification and offer treatment adjustments if a clinician desires to use this medication.

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Use As Directed

These medications are not associated with any known genetic issues that would be expected to change patient medication response.

Moderate Gene-Drug Interaction

These medications may require dose adjustments in order to have the desired effect or they may be less likely to work.

Significant Gene-Drug Interaction

These medications are likely to require dose adjustments in order to have the desired effect, may be less likely to work or may cause side effects.

Additional genotype/phenotype information for each gene tested and more gene-drug interaction information are also in the report.

Not all patients who receive the GeneSight Psychotropic test will achieve improved clinical outcomes.

Who can benefit from the GeneSight test?

- New patients with a previous medication failure
- Patients who are experiencing lower than desired medication response
- Patients who are currently experiencing unwanted side effects

Genetics may be undermining your medication choices. Consider GeneSight.

Customer Service
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Medical Information
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Greden JF, et al. Impact of pharmacogenomics on clinical outcomes in major depressive disorder in the GUIDED trial: A large, patient- and rater-blinded, randomized, controlled study, Journal of Psychiatric Research (2019), doi: https://doi.org/10.1016/j.jpsychires.2019.01.003.

Thase ME, Parikh SV, Rothschild AJ et al. Impact of pharmacogenomics on clinical outcomes for patients taking medications with gene-drug interactions in a randomized, controlled trial. J Clin Psychiatry, 2019;80(6):19m12910.

GSPS.003.19Y