



[Home](#) » [News](#) » [Depression News](#) » Custom-Made Antidepressants

## Custom-Made Antidepressants

By: Psych Central Senior News Editor  
on Monday, Aug, 6, 2007

Reviewed by: [John M. Grohol, Psy.D.](#)  
on August 6, 2007 at 7:48 am

Although the cause of depression has not been fully identified, scientists do know that genetic and environmental factors play key roles in the onset of the disorder.

A pioneering study termed PREDICT-gene, finds that minimal exposure to stress can trigger depression for nearly a quarter of the population carrying the gene.

One of the environmental risk factors more often related to depression is exposure to threatening life events.

On the other side, from a genetic point of view, the serotonin transporter gene, with a crucial role in communication between neurons, is believed to predispose an individual to depression.

An international group of scientists, headed by professors from the University of Granada, has recently published in the journal *Molecular Psychiatry* the pioneering study PREDICT-gene, confirming the relation between allele s in the serotonin transporter gene and exposure to threatening life events in the onset of depression.

The study proves, for a population sample accounting for gender, age and family history of psychiatric disorders, that 24% of the Spanish population, comprising people with the s/s genotype, need minimal exposure to threatening life events, unlike individuals with s/l or l/l genotypes, thus confirming the relation between genetic and environmental factors in this mental disorder.

### Tailor-made antidepressants

The most important consequence of research on interaction between genetic and environmental factors is that, in a foreseeable future, scientists will be able to produce measures to predict response to antidepressants taking into account each individual's genotype, i. e. they will be able to design tailor-made drugs according to each person's genetic configuration and their exposure to environmental factors.

The research group headed by professor Cervilla Ballesteros and Gutiérrez Martínez is currently working at the University of Granada to open roads for psychopharmacogenetics, a field that will allow for individual treatments, tailor-made drugs, for each patient with depression, a disorder affecting one in every five Spaniards visiting the doctor's.

This study is framed in the international project PREDICT and is funded by the European Union and the Spanish Ministry of Education and Science.

One of its most important novelties is that it has been carried out through a very representative sample: a total of 737 people agreed to participate in the genetic tests, with ages ranging from 18 to 75, patients of nine primary care centres in the South of Spain.

That is why this is the first representative population-based replication of earlier research, as until now research had been done into restricted population samples, comprising only women, adolescents, twins or people with affective disorders.

Source: [University of Granada](#)

**Share:** [del.icio.us](#) | [Digg](#) | [Furl](#) | [Netscape](#) | [reddit](#) | [SU](#) | [Yahoo](#) |

### Related News Articles

- [Depression is Early Symptom of Parkinson's](#)
- [Suicide Warning Expanded on Antidepressants](#)
- [Antidepressants Lower Men's Alcohol Use](#)
- [Mental Health Care for IBS](#)
- [Increase Bone Risk Associated with Antidepressants](#)

### Related Clinical Articles

- [Antidepressants for Bipolar Disorder](#)
- [Key Points about Antidepressant Therapy](#)
- [Treatment for Asperger's Disorder](#)
- [What Can I Do About Panic Disorder?](#)
- [Depression Medications: Antidepressants](#)

[Trackback](#) this story from your site or blog.

[« BACK TO PREVIOUS PAGE](#) • [BOOKMARK THIS PAGE](#) • [PRINT VERSION](#) • [EMAIL TO A FRIEND](#) »

advertisement



[Home](#) • [About Us](#) • [Advertise with Us](#) • [Contact Us](#)  
[Privacy Policy](#) • [Terms of Use](#) • [Site Map](#) • [Disclaimer](#) • [Feeds](#)

[Download the Psych Central Toolbar](#)

Copyright © 1992-2007 Psych Central. All rights reserved.  
Site last updated: 6 Aug 2007