



## UT Southwestern leads largest study on treatment for depression

DALLAS - Jan. 1, 2006 - Phase one of a four-phase, six-year study on treatments for depression - the largest of its kind and led by researchers at UT Southwestern Medical Center - showed nearly half fully recovered from their symptoms or had major improvement after treatment with an antidepressant medication.

Results of the study, involving nearly 3,000 patients at 41 sites, appear in the January issue of the *American Journal of Psychiatry*, include:

- A third of patients with major depressive disorder (MDD), when initially treated with a class of antidepressant medication called a selective serotonin reuptake inhibitor (SSRI) using specific guidelines and dosage amounts, fully recovered from their symptoms. Another 10 percent to 15 percent showed a response to the medication, or reduction of at least half their symptoms.
- Patients suffering from depression responded similarly whether treated by a primary-care doctor or a psychiatrist when both followed the same treatment strategies.
- Study participants - who were treated in "real-world" clinics for depression, as well as other medical and psychiatric conditions - responded similarly to medication as did individuals in earlier clinical trials who volunteered for studies and typically had no other medical problems.
- The highest response and remission rates came from study participants who were Caucasian, female, employed, and had higher levels of education or income.



**UT Southwestern served as the national coordinating center for the largest clinical trial on treatments for depression. Dr. A. John Rush, (left), vice chairman for research in psychiatry, was the study's principal investigator and Dr. Madhukar Trivedi, professor of psychiatry, was the lead author of the first phase-one study results.**

---

While additional results are yet to be published from phase two through phase four of the \$35 million clinical trial designated STAR\*D (Sequenced Treatment Alternatives to Relieve Depression), these first findings are significant because of the size and scope of the study, and because there is limited information currently available on successfully treating people with depression. STAR\*D was funded by the National Institute of Mental Health (NIMH).

STAR\*D was designed to focus on "real-world" patients with depression and help determine the most effective treatment strategies, particularly when individuals didn't respond to the first antidepressant medication tried. While there are numerous effective treatment options for depression - including nearly 20 Food and Drug Administration-approved antidepressants and several scientifically tested psychotherapies - no one treatment universally works. And, many people do not experience a satisfactory result from the first treatment used.

"STAR\*D is important because it represents the largest group of moderately to severely depressed patients studied, most of whom had either chronic or recurrent major depression, and the majority of whom also had concurrent other general medical or psychiatric disorders," said [Dr. A. John Rush](#), vice chairman for research in psychiatry at UT Southwestern and STAR\*D's principal investigator.

"What's also important is that nearly half of these patients significantly benefited from and showed a response to the medication, with one in three of those achieving a symptom-free state, after the first round of medication," Dr. Rush said.

Each year, about 19 million American adults - or 9.5 percent of the population - struggle with depression. MDD is a recurring and chronic illness, frequently returning for two or more episodes, each usually lasting two years or more. Depression is currently the fourth-most disabling illness worldwide and cost the United States an estimated \$83 billion in the year 2000.

"In the field of depression treatment, the burning question is, 'What are the best approaches for treatment of depression and more importantly, what are the next subsequent steps to take if the first one doesn't lead to full remission?'" said [Dr. Madhukar Trivedi](#), professor of psychiatry at UT Southwestern and lead author of the phase-one study.

"What's exciting about STAR\*D is that it's the first large clinical trial where we entered into the community of practitioners who were not doing research studies themselves, but were routinely treating patients with depression, both in primary care and specialty care," he said. "Rather than evaluate individuals who volunteer for studies - usually conducted for the purpose of FDA approval of a medication - these were patients already being treated for depression and often having other multiple illnesses and psychiatric conditions. The results from this study can thus easily be transferred to routine clinical practice in both primary and specialty care."

In the first phase of STAR\*D, nearly 3,000 patients in 23 psychiatric and 18 primary-care clinics were given the antidepressant Citalopram (brand name

Celexa) for up to 14 weeks. Clinicians evaluated patients at each visit for depressive symptoms and possible medication side effects and, using a "measurement-based care" treatment manual, could modify patient dosages based on each person's symptoms and side effects.

Of those studied, 33 percent achieved remissions (the virtual absence of symptoms) and a total of 47 percent showed a response rate (had symptoms reduced by at least half). Higher remission rates were found in Caucasians; women; better-educated and higher-income participants; individuals with private insurance, fewer other medical and psychiatric problems, better pre-treatment physical and mental function, greater satisfaction with life and shorter current depressive episodes. Being married or living with someone also appeared to have a positive effect.

"There does seem to be a group of social, demographic and clinical factors that may predict a better outcome when treating depression," Dr. Trivedi said.

Patients who did not achieve remission in the STAR\*D's phase-one trial were encouraged to continue. In phase two, participants were offered seven different treatment alternatives including switching to different medications or trying psychotherapy, or adding another medication or psychotherapy. Additional treatment options were available in phases three and four for patients who still did not become symptom-free. No placebo treatments were used in the study.

Researchers at 14 medical institutions worked together under the direction of UT Southwestern as the national coordinating center. Their goal is to provide better guidelines to clinicians in dealing with depressed patients, particularly in helping them decide which treatment strategies are the most effective when patients do not reach remission after one or more treatments. These guidelines also should help determine optimal medication dosage needed and how long a treatment strategy should be used before deciding it is ineffective and changing to another.

"One of the likely reasons we saw such positive results in this trial is because of the diligent management of patients," said Dr. Rush. "This approach, called measurement-based care, utilized routine measurement of symptoms and side effects to guide treatment dosing, and can be easily implemented in busy primary care and psychiatric practices."

Also participating from UT Southwestern in this phase-one study were [Dr. Diane Warden](#), assistant professor of psychiatry, [Dr. Kathy Shores-Wilson](#), adjunct assistant professor of psychiatry, and [Dr. Melanie M. Biggs](#), associate professor of family and community medicine and psychiatry. In addition, researchers from the Epidemiology Data Center, Graduate School of Public Health, University of Pittsburgh; Depression Clinical and Research Program, Massachusetts General Hospital; NIMH; Department of Psychiatry, University of Mississippi; Department of Psychiatry, University of Pittsburgh School of Medicine; The Sam and Rose Stein Institute for Research on Aging, University of California, San Diego, School of Medicine; the New York State Psychiatric Institute and Department of Psychiatry, College of Physicians and Surgeons of Columbia University; and the STAR\*D study team were included.

###

**Media Contact: Donna Steph Hansard**

214-648-3404

[donna.hansard@utsouthwestern.edu](mailto:donna.hansard@utsouthwestern.edu)

To automatically receive news releases from UT Southwestern via e-mail, subscribe at

[www.utsouthwestern.edu/receivenews](http://www.utsouthwestern.edu/receivenews)

---

Copyright 2006. The University of Texas Southwestern Medical Center at Dallas  
5323 Harry Hines Boulevard, Dallas, Texas 75390. Telephone 214-648-3111