Title of Research
Understanding the Nature and Magnitude of Cognitive Impairment in People with Major Depressive Disorder

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Summary of Research
The researchers request access to data describing cognitive, demographic, illness related and functional ability aspects of patients with major depressive disorder recruited for study CN162007. The study's title was 'A Multicenter, Randomized, Double-blind, Active-controlled, Comparative, Fixed-dose, Dose Response Study of the Efficacy and Safety of BMS-820836 in Patients with Treatment Resistant Major Depression.'[1] The sample studied prior to randomization is one of the largest and most well characterized groups of MDD ever studied with an extensive battery of cognitive tests. This therefore provides a unique opportunity to learn about nature cognitive impairment in MDD and any relationship to demographic and other health variables as well as the associations with functional disability. The researchers aim to examine the relationship of MDD to symptom severity, functional disability, treatment response, comorbid psychiatric and physical illness and cognitive genes.

Depressive disorders affect over 300 million people worldwide and are projected to become the leading cause of disability. Cognitive dysfunction is a common symptom of major depressive disorder (MDD). Studies of cognition in individuals with MDD indicate that episodic memory, attention, and executive function are the most commonly and severely impaired cognitive domains in acute depression. There is evidence that cognitive dysfunction persists in those whose core depressive symptoms have resolved. Most depression rating scales do not capture cognitive symptoms; hence the magnitude of this problem is underappreciated in routine practice.

Study CN162007 was conducted in four phases. In the first phase, patients were screened on inclusion/exclusion criteria. In the second phase, some 800 patients who met clinical criteria for MDD were provided with treatment with antidepressants for seven weeks. After that, all were assessed on a large battery of cognitive tests and rating scales for depressive symptoms, comorbid illness variables and physical health. They were also classified as to whether they had responded adequately to the antidepressant therapy. At this point, data relevant to understanding cognition and its relationship to depressive illness were available for the 800 study participants.

Study Design
A cross-sectional study design would be applied to data collected from the sample during the week seven assessment of study CN162007. Demographic data and potentially genetic data from the baseline assessment would also be required for these analyses. The aim of this study would be to understand:

- The nature and magnitude of cognitive impairment in people with depression
- The extent to which: the severity of depression is related to severity of cognitive impairment; a history of depressive illness impacts the magnitude of cognitive impairment; difficulties with cognitive function impact daily living and functional disability; and comorbid psychiatric disease moderates relationships between cognitive function and depression.
- Whether a history of failure to respond to antidepressant therapy is linked to cognitive dysfunction
- Whether patients diagnosed with treatment resistant depression have a different cognitive profile to

[1] http://adisinsight.springer.com/trials/700200219

patients who respond to therapy

- How variation in polymorphisms of genes known to be important for cognitive function (ApoE4, BDNF and COMT) can moderate relationships between depression and cognitive impairment.

Study Population

The study sample for this first part of the analysis will consist of all individuals who satisfied the CN162007 study inclusion and exclusion criteria and who completed the cognitive test battery at the week seven assessment.

Funding Source of Research

The cost of statistical analysis (including data transfer and data cleaning), data interpretation and data reporting will be conducted by CogState scientists or graduate students supervised by Maruff or Schembri.

Requested Study

CN162-007 (NCT01369095): A Multicenter, Randomized, Double-Blind, Active Controlled, Comparative, Fixed-Dose, Dose Response Study of the Efficacy and Safety of BMS-820836 in Patients With Treatment Resistant Major Depression (TRD)