

Use of Scopolamine for Treatment of Depression

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Current drug treatments for depression are inadequate, with a 3-4 week response lag and most drugs are effective for only 30-40% of patients. About 13 of patients are not responsive to any currently available drug. Administration of I.V. scopolamine has been found to cause a rapid anti-depressant response in a majority of patients within 24 hours. The antidepressant effect lasts days to weeks. Adverse side-effects are short-term (1-2 hours) and generally mild (dryness of mouth; drowsiness).

A long history of use for other indications that provide a large base of toxicity and dosage data, combined with the pressing Public Health need for rapid treatment of depression, allows for an accelerated approval process. NIMH is currently conducting clinical trials.

The cost of mental illness in terms of debility and lost productivity is greater than that of heart disease or cancer. The current market for antidepressants is in the billions. The immediate use is expected to be in acute care settings. There are over 30,000 suicides yearly, with about 90% of these in the clinically depressed. Longer-term development of more patient friendly, self-administered dosage forms should take a significant share of the market of anti-depressants.

Two companies have submitted applications for exclusive licenses and are discussing a CRADA with the scientists.