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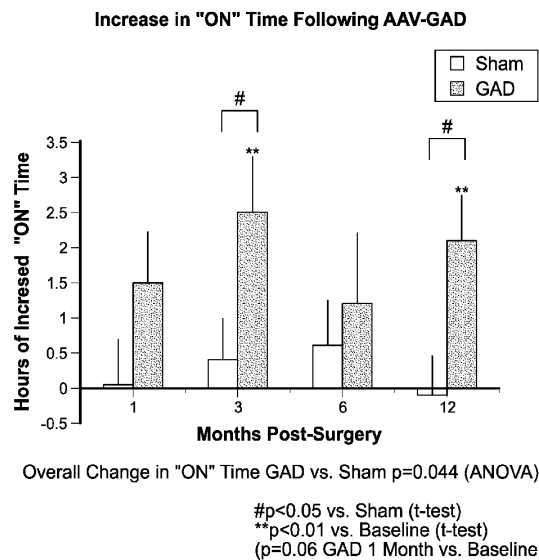
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(54) Title: METHODS FOR TREATING PARKINSON'S DISEASE



**Figure 1**

(57) **Abstract:** Disclosed are methods for treating neurological disorders such as Parkinson's disease (PD) using glutamic acid decarboxylase (GAD) and identifying PD patients that will be most receptive to the method of treating PD. In one aspect, the disclosure provides a method of treating PD in a subject in need thereof, the method comprising: (a) identifying a subject having less than about 10 hours, and preferably less than about 8 hours, of on-time per day; and (b) administering to the subject a composition comprising a therapeutically effective amount of one or more vectors to the subthalamic nucleus of the patient, wherein each vector comprises a nucleic acid sequence encoding glutamic acid decarboxylase (GAD) and wherein the subject's on-time is increased.

[Continued on next page]

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