

**Predictors of long-term safinamide response in the multicenter Help Network**

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*Background:* Several pharmacological strategies have been proposed for the treatment of motor fluctuations in Parkinson's disease (PD). Still, the long-term use of safinamide and other treatments in real-life scenario is theme of debate [1-2].

*Objective:* To evaluate the long-term impact of safinamide in Parkinson's disease complicated by motor fluctuations, in a large real life multicenter setting.

*Methods:* The Healthy East Lombardy Parkinson (HELP) network involve movement disorder outpatient clinic and rehabilitation centers adopting a shared digital platform to include motor variables and treatments of patients with motor fluctuations. PD patients with motor fluctuations who underwent safinamide treatment were selected and motor and non-motor assessment was evaluated at baseline and after long-term treatment.

*Results:* Seven-hundred-twenty-one patients were included in the network- of them, 313 presented motor fluctuations and 184 were treated with safinamide (Mean age  $69 \pm 8.9$ , mean disease duration  $6.4 \pm 4.6$ , mean UPDRS-III  $21.0 \pm 11.8$  in ON, mean UPDRS-IV  $2.9 \pm 3.3$ ). Middle/long-term follow-up data were available for 120 subjects (Mean follow-up duration 13.9 months). Safinamide was associated with significant improvement in motor and non-motor scores in most patients at 12 months, whereas we observed a slight increase in global motor severity and fluctuations increasing from 12 to 48 months. Better and longer response were associated with shorter onset of motor complication, independently from baseline age, sex, disease severity and LEDD.

*Conclusions:* Safinamide showed middle/long-term benefit for motor complications in Parkinson's disease. Further studies are needed in order to confirm the association between early fluctuations and longer treatment benefit.

**References:**

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