

## **IS THE EFFECT OF MAO-B INHIBITORS CLINICALLY RELEVANT?**

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MAO-B inhibitors used in the treatment of Parkinson's disease are selegiline and rasagiline. The second generation MAO-B inhibitor rasagiline contains several advantages compared to selegiline. Firstly, it has a higher efficacy and secondly less side effects. Selegiline may cause hypotension, cardiac problems and hallucinations which results partially from its metabolites, amphetamine and methamphetamine. In contrast rasagiline has side effects which are on the placebo levels if international randomized double-blind studies are taken into account. For this reason, this paper will concentrate on rasagiline exclusively. While most clinicians agree on advantages of rasagiline such as once daily application and missing side effects the perception of efficacy is differing amongst experts. For this reason, it may be of interest that there are several studies such as LARGO and PRESTO which showed that the addition of rasagiline to levo-dopa could improve OFF-time at least in the same range like entacapone (COMT inhibitor). If comparisons are made between the improvement of early morning akinesia after a defined off, the substance is as potent as the dopamine agonist rotigotine (RECOVER study), although it must be stressed that there is no comparative study available. It is also of note that rasagiline can improve non-motor symptoms such as fatigue and in some patients even freezing could be improved.

In summary, there is good reason to stress, that rasagiline is not only extremely safe and convenient in application but also an efficacious substance both in de novo patients and certainly also in patients in advanced stages of Parkinson's disease.