Debate:

Do COMT Inhibitors have a future?

Joaquim Ferreira. Yes

COMT inhibitors are an important pharmacological class for the treatment of motor fluctuations in Parkinson's disease (PD). However, issues such as the magnitude of the effect, relevancy of the benefit, safety and best time for their use are still matters of discussion. Best data available comparing entacapone with placebo concludes on a reduction of 41 minutes of daily OFF time and the clinical relevancy of such an effect may be questioned. On the other hand, although there is a consensus regarding the higher potency of tolcapone, its utilisation is limited due to safety concerns on liver toxicity. Conversely, other antiparkinsonian drugs like the dopamine agonists and the MAO-B inhibitors have also demonstrated efficacy for the treatment of wearing-off and these questions the best strategy for the sequential use of the different alternatives in the management of the disease. Considering all these factors, the future of COMT-I for the management of PD is dependent on having new drugs which are more potent, safer or easier to use and which additional benefits they add to the currently available armamentarium. The recently available data from a new COMT inhibitor, opicapone, currently under evaluation by the European Medicines Agency, argues in favour of the possibility to have new drugs which add potency compared with the old COMT-I, with a simpler mode of administration which may add a benefit for the use of this pharmacological class.