

## Reply: long-term retention rate of pramipexole in the treatment of Parkinson's disease

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To the editor:

Keränen and colleagues have investigated the retention rate on pramipexole (PRX) among patients diagnosed with idiopathic Parkinson's disease (PD) in a University Hospital in Finland. Moreover, they investigated reasons for PRX discontinuation, and they tried to identify determinants for PRX discontinuation. We welcome their study as a first initiative to identify reasons for discontinuation and possible determinants.

The authors pointed out that they found a retention rate of PRX in PD patients that was higher (63% at 3 years) than we found in our cohort (40% at 3 years) [1], despite similarities in patient characteristics. We agree that differences in study methods may have contributed to variation in findings. In our study, we assessed the (dis)continuation of PRX treatment with prescription data from pharmacies whereas Keränen et al. used records of physicians. In our opinion, several factors have to be taken into account. Firstly, it is possible that not all

changes in medication (discontinuation, dose changes) are written down in medical records. Therefore, some patients that have discontinued could be missed. Secondly, there remains a possibility that some patients have discontinued their medication without informing their physician. There is evidence for non-adherence in patients with PD measured with a computerised monitoring system [2]. However, studies investigating whether patients actually get their medication from the pharmacy are lacking. Lastly, the number of visits to the treating physician (in the study of Keränen et al.) or to the pharmacy (in our study) could be a factor in the precision of the estimation of discontinuation. The mean length of PRX prescriptions in our study was 47 days. This implies that we had an evaluation moment (use or no use) every 47 days. We do not know the frequency of visits to the treating physician in the study of Keränen et al.

Keränen et al. found two non-genetic factors that were associated with PRX discontinuation: orthostatic hypotension and entacapone treatment prior to PRX treatment. These findings are an interesting supplement to our study. We think, however, that genetic factors should also be studied in the future [3].

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