## LETTER TO THE EDITOR

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## **Response to "Parkinson's disease mild cognitive** impairment classifications and neurobehavioral symptoms"

A recent paper, "Parkinson's disease mild cognitive impairment classifications and neurobehavioral symptoms" (McDermott et al., 2017), provides an interesting comparison of the influence of different criteria for Parkinson's disease with mild cognitive impairment (PD-MCI) on progression to dementia (PDD). Unfortunately, McDermott et al. (2017) incorrectly stated that "only 21% of PD-MCI participants (identified with a 1.5 SD cut-off) converted to PDD within four years" (p.6) in our study (Wood et al., 2016). However, the important point made by Wood et al. (2016) was that the proportion of conversions to PDD was 51% when the PD-MCI diagnosis required a minimum of two 1.5 SD impairments within any single cognitive domain, whereas additional PD-MCI patients classified with one impairment at 1.5 SD in each of the two domains (but never two impairments in the same domain) had a nonsignificant risk of dementia relative to non-MCI patients (11% vs. 6% converted, respectively). Our PDD conversion rate was 38% when combining both 1.5 SD criteria (21/56 PD-MCI patients vs. 4/65 non-MCI patients converted); McDermott et al. (2017) found a 42% conversion rate over three years for similarly described PD-MCI patients (10/24 PD-MCI patients vs. 0/27 non-MCI patients converted). Our study was also part of a multinational study (n = 467) showing that PD-MCI has predictive validity beyond known demographic and PD-specific factors of influence

(Hoogland et al., 2017). All three studies found that multiple cognitive domain impairments are common in PD-MCI. Nonetheless, the research community needs to clarify the association between PD-MCI subtypes and, especially, the optimal cognitive markers for dementia risk in PD patients.

## References

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