Supplementary Table. Details and summary of studies (*n*=7) removed during full-text review of search results due to lack of healthy control group.

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| **First author (year)** | **Country** | **PD-MCI** | **Comparison group** | | **Design** | **MCI criteria** | **Diagnostic criteria** | **Summary** |
|
| **n** | **Type** | **n** |
| Yarnall (2014) | UK | 44 | PD-NC | 75 | Longitudinal | Litvan et al., 2012 level 2 | UKPDS (Hughes et al., 1992) | All comparisons between groups on neuropsychological variables were significant, but groups already selected for cognitive differences.  The Incidence of Cognitive Impairment in Cohorts with Longitudinal Evaluation–PD (ICICLE-PD) cohort has resulted in multiple papers and included age-matched controls, but neuropsychological data not published in Yarnall (2014). See Lawson et al. (2016)  Data also provided on PD-MCI defined by deficits of 2 SD or more. |
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| Burdick (2014) | USA | 788 | - | - | Cross-sectional | Litvan et al., 2012 level 2 | UKPDS (Hughes et al., 1992) (except one location) | Investigates sensitivity of MMSE in detecting clinical diagnosis of MCI or PDD + range of cognitive profile in “normal” MMSE scores.  Removed as doesn’t have data divided by PD-MCI, PD-NI, etc (supplementary materials checked)  Word list (Hopkins) and processing speed/attention (Digit Symbol Coding tests) showed greatest impairments in cohort overall. |
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| Cholerton (2014) | USA | 95 | - | - | Cross-sectional | Litvan et al., 2012 level 2 | UKPDS (Hughes et al., 1992) | PC-MCI subdivided into single-domain and multiple domain subtype  Removed: multicentre study with different levels of cutoffs to determine impairment in different cohorts; these normative values for each were not reported nor a control group for use.  Multiple-domain PD-MCI was diagnosed in 95% of the sample. Most cognitive impairments were in the learning/memory and attention/working memory domains. |
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| Erro (2012) | Italy | 43 | PD-NC | 22 | Longitudinal | Litvan et al., 2012 level 1 | Clinical evaluation | Baseline and two-year follow up data included.  Considered subjective memory complaints and also MCI nonamnestic versus amnestic. No reports of neuropsychological results by domain. |
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| Pigott (2015) | USA | 141 | - | - | Prospective | Litvan et al., 2012 level 1 | UKPDS (Hughes et al., 1992) | Participants were *n*=141 PD + baseline normal cognition.  Approximately half of patients with PD with normal cognition at baseline develop cognitive impairment within 6 years and all new MCI cases progress to dementia within 5 years. Low baseline executive function, naming, processing speed/ attention, verbal memory and recognition were independent predictors of progress from PD-NC to PD-MCI. |
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| Williams-Gray (2007) | UK | - | - | - | Prospective. | By domain: 1 SD below  age and IQ-matched normative values | UKPDS (Gibb and Lees, 1988) | Amongst those not meeting criteria for dementia, the proportion of patients scoring below a specified cut-off value was calculated for each test to allow the profile of mild cognitive impairments at follow-up to be determined.  At baseline, 62% of patients were impaired on at least one neuropsychological test; 10% met criteria for dementia at follow-up. Amongst non-demented patients, visuospatial and executive deficits were more common at follow-up; Pattern Recognition Memory (temporal lobe dependent) less common. |
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| Weintraub (2015) | Multi-site | 247 | - | - | Prospective. | Litvan et al., 2012 level 1 | UKPDS (Gibb and Lees, 1988) equivalent | Formal cognitive categorization using MDS only available for a subset of patients and not provided separately. Healthy controls included but neuropsychological data not given.  Highest frequencies of impairment were in verbal memory and processing speed/ attention. Low levels of impairment were found in executive, working memory and visuospatial tasks. |

*CN = cognitively normal*