

Table S5. Risk of bias assessment of cohort and cross-sectional studies and the authors' judgements about each downgraded study.

Author, year	Was selection of exposed and non-exposed drawn from the same population?	Can we be confident in the exposure assessment?	Can we be confident that the outcome of interest was not present at the beginning of study	Did the study match exposed and unexposed for all variables that are associated with the outcome of interest or did the statistical analysis adjust for these prognostic variables?	Can we be confident in the assessment of the presence or absence of prognostic factors?	Can we be confident in the outcome assessment?	Was the follow-up of cohorts adequate?	Were co-interventions similar between groups?
Cohort study								
Kamel et al. 2007	Definitely yes.	Probably not. Self-reported exposure.	Probably yes.	Definitely not. No adjustment for major confounding factors.	Probably yes.	Definitely not. Self-reported PD.	Probably not. Loss of more than 10% of participants.	Definitely not. Major co-interventions were not investigated.
Cross-sectional study								
Engel et al. 2001	Definitely not. Different populations; exposed recruited from rural occupations vs. non-exposed recruited from occupations not related to agriculture.	Probably not. Self-reported exposure.	Definitely not. Cross-sectional studies don't have a follow-up period, since the exposures and outcomes are assessed at the same time.	Probably not. The variable "duration of exposure" was not considered in the adjustments.	Probably yes.	Definitely not. Only parkinsonism investigated.	Definitely not. Cross-sectional studies don't have a follow-up period.	Definitely not. Major co-interventions were not investigated.

All answers as: definitely yes (low risk of bias), probably yes, probably not, definitely not (high risk of bias).