|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Quality assessment criteria | Acceptable ( ★) | Yamada 2007 | Lefascheur 2008 | Chen  2011 | Nakajima  2011 | Sutcliffe  2011 | Saleh  2015 |
| **Selection** | | | | | | | |
| Representativeness of exposed cohort? | Truly representative of the average adult in the community (Age/being at risk of disease) | ★ | ★ | ★ | ★ | ★ | ★ |
| Selection of the non-exposed cohort? | Drawn from same community as exposed cohort | ★ | ★ | ★ | ★ | ★ | ★ |
| Ascertainment of exposure? | Secure records, Structured interview | ★ | ★ | ★ | ★ | ★ | ★ |
| Demonstration that outcome of interest was not present at start of study? | Yes | ★ | ★ | ★ | ★ | ★ | ★ |
| **Comparison** | | | | | | | |
| Study controls for age/sex? | Yes | ★ | ★ | ★ | ★ | ★ | ★ |
| Study controls for any additional factors (at least three)? | Advanced disease, Duration of disease, LEDD, Preoperative response to Levodopa, Baseline Scores, Dementia, absence of structural brain abnormality | ★ | ★ | ★ |  |  |  |
| **Outcome** | | | | | | | |
| Assessment of outcome? | Independent blind assessment, record linkage | ★ | ★ |  |  |  |  |
| Was follow-up long enough for outcome to occur? | Follow up 3 and 12 months | ★ | ★ | ★ | ★ | ★ | ★ |
| Adequacy of follow-up of cohorts? | Complete follow-up, or subjects lost to follow-up unlikely to introduce bias | ★ | ★ | ★ | ★ | ★ | ★ |
| Overall Quality Score (Maximum = 9) |  | 9 | 9 | 8 | 7 | 7 | 7 |

Newcastle-Ottawa scale for assessment of quality of included studies – Cohort studies (each asterisk represents if individual criterion within the subsection was fulfilled). LEDD: Levodopa equivalent drug dosage