**Supplementary Table 3**. Assessment of the quality of the eligible studies based on NOS.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Case-control studies** | **Selection** | **Comparability5** | **Exposure** | **Total** |
| **Definition1** | **Representativeness2** | **Selection3** | **Definition4** | **Ascertainment6** | **Method7** | **Rate8** |
| Lai et al., 2011 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 9 |
| Young-Park et al., 2017 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 9 |
| Mclean et al., 2017 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 9 |
| **Cross-sectional studies** |  **Selection** | **Comparability5** | **Outcome** | **Total** |
| **Representativeness9** | **Sample size10** | **Non respondents11** | **Ascertainment of the exposure12** | **Assessment13** | **Statistical test14** |
| Giovannini et al., 2018 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 5 |
| Ishii et al., 2019 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 6 |
| Vetrano et al., 2013 | 1 | 0 | 1 | 1 | 2 | 1 | 1 | 7 |

1: Adequate definition of cases; 2: Consecutive or obviously representative series of cases; 3: Selection of controls: Community controls (0, 1); 4: Definition of controls: No history of disease; 5: Study controls for the most important factor or any additional factor; 6: Secure record (0, 1); 7: Same method of ascertainment for cases and controls; 8: Same non-response rate for both groups; 9: Truly or somewhat representative of the target population; 10: Justified and satisfactory (including sample size calculation); 11: Proportion of target sample recruited attains pre-specified target or basic summary of non-respondent characteristics in sampling frame recorded; 12: Vaccine records/vaccine registry/clinic registers/hospital records only; 13: Assessment of outcome and their methods validity; 14: a. Statistical test used to analyse the data clearly described, appropriate and measures of association presented including confidence intervals and probability level (p value)