Supplementary Table 1. Quality Assessment of the included studies using modified Newcastle-Ottawa Scale (NOS)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Study | Selection | | | | Comparability | | Outcome | | | Total  (max score:9\*) |
| *Representativeness of the exposed cohort*  *(max score:\*)* | *Selection of non-exposed*  *(max score:\*)* | *Ascertainment of exposure*  *(max score:\*)* | *Demonstration that outcome of interest was not present at start of study*  *(max score:\*)* | *Comparable for onset seasons*  *(max score:\*)* | *Study controls for other factors*  *(max score:\*)* | *Assessment of outcome*  *(max score:\*)* | *Was follow up long enough for outcomes to occur(max score:\*)* | *Adequacy of follow up(max score:\*)* |
| Xiao, J.  [1] | \* | \* | \* | \* | \* | \* | \* | \* | - | 8\* |
| Ullrich, A.  [2] | \* | \* | \* | \* | \* | \* | \* | - | - | 7\* |
| Steffen, R.  [3] | \* | \* | \* | \* | \* | - | \* | - | - | 6\* |
| Lim,J. T  [4] | \* | - | \* | \* | \* | \* | \* | \* | - | 7\* |
| Rahim, M. H.  [5] | \* | - | \* | \* | - | - | \* | - | - | 4\* |
| Plasencia-D. R.  [6] | \* | \* | - | \* | \* | \* | \* | \* | - | 7\* |
| Song-Q.O  [7] | \* | \* | \* | \* | \* | \* | \* | \* | - | 8\* |
| Niriella, M. A.  [8] | \* | - | - | \* | \* | - | \* | - | - | 4\* |
| Liyanage, P.  [9] | \* | \* | \* | \* | \* | \* | \* | - | - | 7\* |
| Lim, J. T.  [10] | \* | \* | \* | \* | \* | \* | \* | - | - | 7\* |
| Lim, J. T.  [11] | \* | \* | \* | \* | \* | \* | \* | \* | - | 8\* |
| Li, N.  [12] | \* | \* | \* | \* | \* | - | \* | \* | - | 7\* |
| Conceição, G. M. S  [13] | \* | - | \* | \* | - | \* | \* | \* | - | 6\* |
| Bright, A  [14] | \* | \* | \* | \* | \* | - | \* | - | - | 6\* |
| Lai, C.C.  [15] | \* | - | \* | \* | \* | - | \* | \* | - | 6\* |
| Chen, Y.  [16] | \* | \* | \* | \* | \* | \* | \* | \* | \*a | 9\* |
| Chavhan, S. S  [17] | \* | - | - | - | \* | - | \* | \* | - | 4\* |
| Lu, X  [18] | \* | \* | \* | \* | \* | - | \* | \* | - | 7\* |

Detailed item and criteria in above modified Newcastle-Ottawa Scale (NOS) as following:

1.Selection of non-exposed: the incidence of the non-exposed can represent the history incidence level \*

2. Ascertainment of exposure: the article detailed the timing of NPIs for COVID-19\*

3. Demonstration that outcome of interest was not present at start of study: the non-exposed group was not exposed to NPIs for COVID-19\*

4. Comparable for onset seasons: incidence rates in the exposed and non-exposed groups were compared over the same period\*

5. Was follow up long enough for outcomes to occur: the observation time of exposure group included the peak of dengue epidemic\*

6. Adequacy of follow up: the influence factors of underreporting were the same in the exposed and non-exposed groups\*

a. The study found no evidence that the under-reporting rate was higher or lower than past years.