**Supplementary Table 1.** The Newcastle-Ottawa Scale for risk of bias assessment of cohort studies included in the meta-analysis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Study | Selection | Comparability | Outcome | Qualityscore |
| Representativenessof Exposed Cohort | Selection ofNonexposed | Ascertainmentof Exposure | Outcome NotPresent at Start | Assessment of Outcome | Adequate Follow- Up Length | Adequacy ofFollow-Up |
| Watanabe et al. [62]  | ☆ | ★ | ★ | ★ | ★ | ★ | ☆ | ★ | 6 |
| Bjarnison et al. [9] | ★ | ★ | ★ | ★ | ★★ | ★ | ★ | ★ | 9 |
| Dogan et al. [17] | ★ | ★ | ★ | ★ | ★ | ☆ | ★ | ★ | 7 |
| Gumina et al. [24] | ☆ | ★ | ★ | ★ | ★ | ★ | ☆ | ☆ | 5 |
| İncesoy et al. [28] | ★ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | 8 |
| Jeong et al. [31] | ☆ | ★ | ★ | ★ | ★ | ★ | ★ | ★ | 7 |
| Longo et al. [40] | ☆ | ★ | ★ | ☆ | ★ | ☆ | ★ | ★ | 5 |
| Spiegl et al. [58] | ☆ | ★ | ★ | ☆ | ☆ | ☆ | ★ | ★ | 4 |

★ = score of 1; ★★ = score of 2; ☆ = score of 0.

**Supplementary Table 2.** Methodological quality of the included studies, based on the Agency for Healthcare Research and Quality (AHRQ) assessing the quality of cross-sectional studies

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Study | Define the source of information(survey, recordreview) | List inclusionand exclusioncriteria forexposed andunexposedsubjects (cases and controls)or refer topreviouspublications | Indicate timeperiod used foridentifyingpatients | Indicatewhether ornot participantswere consecutiveif notpopulation-based | Indicate ifevaluators ofsubjectivecomponents ofstudy were masked to other aspects of the status of the participants | Describe anyassessmentsundertaken forquality assurancepurposes(such as, test/retestof primaryoutcomemeasurements) | Explain anypatientexclusionsfrom analysis | Describe howconfoundingwas assessedand/orcontrolled | If applicable,explain howmissing datawere handledin the analysis | Summarizepatientresponserates andcompletenessof datacollection | Clarifywhatfollow-up,if any, wasexpectedand thepercentageof patientsfor whichincomplete data or follow-upwas obtained | Qualityscore |
| Haveri et al [27] | Yes | Yes | Yes | Yes | NA | Yes | Yes | NA | Yes | Yes | No | 8 |
| Jeong et al. [29] | Yes | Yes | Yes | NA | NA | Yes | Yes | NA | No | Yes | NA | 6 |
| Kim et al. [34] | Yes | Yes | Yes | Yes | NA | Yes | Yes | NA | No | Yes | NA | 7 |
| Lee et al. [37]  | Yes | Yes | Yes | Yes | Yes | No | Yes | NA | No | Yes | No | 6 |
| Mehta et al. [41] | Yes | Yes | No | Yes | Yes | No | Yes | NA | No | Yes | No | 6 |
| Shinagawa et al. [56] | Yes | Yes | Yes | Yes | Yes | Yes | Yes | NA | No | Yes | No | 8 |
| Abate et al. [1] | Yes | Yes | Yes | Yes | NA | Yes | Yes | NA | No | Yes | NA | 7 |
| Applegate et al. [4] | Yes | Yes | Yes | Yes | NA | Yes | Yes | Yes | No | NA | NA | 7 |
| Atala et al. [5] | Yes | Yes | Yes | Yes | Yes | NA | Yes | NA | Yes | Yes | No | 8 |
| Blonna et al. [10] | Yes | Yes | Yes | Yes | NA | Yes | Yes | NA | Yes | No | Yes | 8 |
| Cunningham et al. [16] | Yes | Yes | Yes | Yes | NA | NA | Yes | Yes | No | Yes | NA | 7 |
| Figueiredo et al. [20] | Yes | Yes | No | Yes | Yes | No | Yes | NA | No | Yes | No | 6 |
| Motta et al. [44] | Yes | Yes | Yes | Yes | Yes | Yes | Yes | NA | Yes | No | Yes | 9 |
| Mohamed et al [43] | Yes | Yes | No | Yes | Yes | No | Yes | NA | No | Yes | No | 6 |
| Park et al. [48] | Yes | Yes | No | NA | Yes | No | Yes | Yes | No | No | Yes | 6 |
| Passaretti et al. [49] | Yes | Yes | Yes | Yes | NA | Yes | Yes | NA | Yes | Yes | No | 8 |
| Yamamoto et al. [64] | Yes | Yes | Yes | Yes | NA | Yes | NA | Yes | Yes | Yes | No | 8 |
| van Kampen et al. [61] | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | NA | 9 |

NA = unclear.