**Appendix A: Supplemental table 1:** Newcastle-Ottawa Scale and quality data.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Publication** | **Year** | **Newcastle-Ottawa Scale** | | | | | | | | |
| **Selection** | | | | **Comparability** | **Outcome** | | | **Total** |
| **Representativeness of exposed cohort** | **Selection of the non-exposed cohort** | **Ascertainment of exposure** | **Outcome demonstration at start** |  | **Assessment of outcome** | **Follow-up long enough for outcome to occur** | **Adequacy of follow-up** |
| El Azeem  Hamaguchi  Haring  Hwang  Lee  Lu  Ruttmann  Stepanova  Yu  Zheng | 2013  2007  2009  2008  2006  2009  2005  2012  2008  2018 | \*  \*  \*  \*  \*  \*  \*  \*  \*  \* | \*  \*  \*  \*  \*  \*  \*  \*  \*  \* | \*  \*  \*  \*  \*  \*  \*  \*  \*  \* | \*  \*  \*  \*  \*  \*  \*  \*  \*  \* | \* \*  \*\*  \*\*  \*\*  \*\*  \*\*  \*\*  \*\*  \*\*  \*\* | \*  \*  \*  \*  \*  \*  \*  \*  \*  \* | \*  \*  \*  \*  \*  \*  \*  \*  \*  \* | \*  \*  \*  \*  \*  \*  \*  \*  \*  \* | 9  9  9  9  9  9  9  9  9  9 |

The Newcastle-Ottawa Scale (NOS) evaluates the included studies based on selection, comparability and outcome. The maximum score for each criterion is 4, 2 and 3, respectively, with the maximum total score equaling 9.

**Supplemental table 2:** Quality data for eligible data sets.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Publication** | **Year** | **Objective defined** | **Outcome described** | **Characteristics described** | **Confounders described** | **Main findings outlined** | **Heterogenous population** | **Individuals generating data blinded to outcomes** | **Reproducibility assessed** | **Recruiting all subjects over same time period** |
| El Azeem | 2013 | Yes | Yes | Yes | Yes | Yes | No | NS | Yes | Yes |
| Hamaguchi | 2007 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Haring | 2009 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Hwang | 2008 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Lee | 2006 | Yes | Yes | Yes | Yes | Yes | No | Yes | No | Yes |
| Lu | 2009 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Ruttmann | 2005 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Stepanova | 2012 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Yu | 2008 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |
| Zheng | 2018 | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes |

NS: Not specified