**Appendix 3: Quality assessment included studies in the PICO 3 analysis:** Newcastle-Ottawa scale for observational studies

**Table 1: The Newcastle-Ottawa scale for assessment of quality of studies included in the completion chemo-radiotherapy (cTME) analysis**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study reference** | **Selection** | | | | **Comparability** | **Outcome** | | | **Overall score**  **(7 ⋆)** |
| *Representativeness of the exposed cohort.* | *Selection of the non-exposed cohort* | *Ascertainment of exposure* | *Demonstration that outcome of interest was not present at start of study* | *Comparability of cohorts on the basis of the design or analysis* | *Assessment of outcome* | *Was follow-up long enough for outcomes to occur?* | *Adequacy of follow up of cohorts* |
| Ramirez J. M, et al. 2011 | ⋆ | - | ⋆ | ⋆ | - - | ⋆ | ⋆ | ⋆ | ⋆⋆⋆⋆⋆⋆ (6) |
| Balyasnikova S, et al. 2016 | ⋆ | ⋆ | ⋆ | ⋆ | **⋆ -** | ⋆ | ⋆/- | - | ⋆⋆⋆⋆⋆⋆/⋆ (6/7) |
| Jeong J-U, et al. 2016 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | **⋆** | **⋆** | ⋆⋆⋆⋆⋆⋆ (6) |
| Rackley P.T, et al. 2016 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | **⋆** | **-** | ⋆⋆⋆⋆⋆ (5) |
| Smith M. F, et al. 2019 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | **-** | **⋆** | ⋆⋆⋆⋆⋆ (5) |
| Hershmann M.J, et al.  2003 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | **-** | **-** | ⋆⋆⋆⋆ (4) |
| Min B. S, et al. 2007 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | **⋆** | **⋆** | ⋆⋆⋆⋆⋆⋆ (6) |
| Sun G, et al. 2014 | **⋆** | **⋆** | **⋆** | **⋆** | **⋆ -** | **⋆** | **-** | **⋆** | ⋆⋆⋆⋆⋆⋆ (6) |
| Lee S, et al. 2015 | **⋆** | **⋆** | **⋆** | **⋆** | **⋆ -** | **⋆** | **-** | **-** | ⋆⋆⋆⋆⋆⋆ (6) |

**Appendix 3. : The Newcastle-Ottawa scale for assessment of quality of studies included in the completion surgery (cTME) analysis.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study reference**  **Appendix 3. : The Newcastle-Ottawa scale for assessment of quality of studies included in the completion surgery (cTME) analysis.** | **Selection** | | | | **Comparability** | **Outcome** | | | **Overall score**  **(9 ⋆)** |
| *Representativeness of the exposed cohort.* | *Selection of the non-exposed cohort* | *Ascertainment of exposure* | *Demonstration that outcome of interest was not present at start of study* | *Comparability of cohorts on the basis of the design or analysis* | *Assessment of outcome* | *Was follow-up long enough for outcomes to occur?* | *Adequacy of follow up of cohorts* |
| Junginger T, et al. 2019 | ⋆ | - | ⋆ | ⋆ | - - | ⋆ | ⋆ | - | ⋆⋆⋆⋆⋆ (5) |
| Levic K, et al. 2012 | ⋆ | - | ⋆ | ⋆ | ⋆ ⋆ | ⋆ | ⋆ | - | ⋆⋆⋆⋆⋆⋆⋆ (7) |
| Nozawa H, et al. 2020 | ⋆ | ⋆ | ⋆ | ⋆ | ⋆ - | ⋆ | ⋆ | - | ⋆⋆⋆⋆⋆⋆⋆ (7) |
| Borschitz T, et al. 2006 | ⋆ | ⋆ | ⋆ | ⋆ | - - | ⋆ | ⋆ | - | ⋆⋆⋆⋆⋆⋆ (6) |
| Hahnloser D, et al. 2005 | ⋆ | - | ⋆ | ⋆ | ⋆ - | ⋆ | - | - | ⋆⋆⋆⋆⋆ (5) |
| Piessen G, et al. 2011 | ⋆ | ⋆ | ⋆ | ⋆ | ⋆ ⋆ | - | ⋆ | - | ⋆⋆⋆⋆⋆⋆⋆ (7) |
| Hompes R, et al. 2013 | ⋆ | - | ⋆ | ⋆ | - - | ⋆ | ⋆ | ⋆ | ⋆⋆⋆⋆⋆⋆ (6) |
| Clermonts S.H.E.M, et al. 2020 | ⋆ | ⋆ | ⋆ | ⋆ | ⋆ ⋆ | ⋆ | - | - | ⋆⋆⋆⋆⋆⋆⋆ (7) |
| Coton C, et al. 2018 | ⋆ | - | ⋆ | ⋆ | - ⋆ | ⋆ | ⋆ | - | ⋆⋆⋆⋆⋆⋆ (6) |
| Motino M, et al. 2013 | ⋆ | ⋆ | ⋆ | ⋆ | - ⋆ | ⋆ | ⋆ | - | ⋆⋆⋆⋆⋆⋆⋆ (7) |

**Appendix 3. The Newcastle-Ottawa scale for assessment of quality of studies included in the salvage surgery (sTME) for local recurrence analysis.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Study reference** | **Selection** | | | | **Comparability** | **Outcome** | | | **Overall score** |
| *Representativeness of the exposed cohort.* | *Selection of the non-exposed cohort* | *Ascertainment of exposure* | *Demonstration that outcome of interest was not present at start of study* | *Comparability of cohorts on the basis of the design or analysis* | *Assessment of outcome* | *Was follow-up long enough for outcomes to occur?* | *Adequacy of follow up of cohorts* |
| Bikhchandani J, et al. 2015 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | **⋆** | **⋆** | **⋆⋆⋆⋆⋆⋆** (6) |
| Friel CM, et al. 2001 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | **⋆** | **⋆** | **⋆⋆⋆⋆⋆⋆** (6) |
| Borschitz T, et al. 2008 | **⋆** | **⋆** | **⋆** | **⋆** | **⋆** - | **⋆** | **⋆** | ⋆ | **⋆⋆⋆⋆⋆⋆⋆⋆⋆** (9) |
| Weiser MR, et al. 2005 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | - | **⋆** | **⋆⋆⋆⋆⋆** (5) |
| Doornebosch PG, et al. 2010 | **⋆** | **⋆** | **⋆** | **⋆** | **⋆** - | **⋆** | **⋆** | **⋆** | **⋆⋆⋆⋆⋆⋆⋆⋆** (8) |
| Stipa F, et al. 2012 | **⋆** | - | **⋆** | **⋆** | - - | **⋆** | **⋆** | **⋆** | **⋆⋆⋆⋆⋆⋆** (6) |
| You YN, et al. 2012 | **-** | - | **⋆** | **⋆** | - - | **⋆** | **⋆** | **⋆** | **⋆⋆⋆⋆⋆** (5) |