Supplementary Table 1: Newcastle-Ottowa Scale for Qualitative Analysis

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| --- | --- | --- | --- |
| **Author** | **Selection** | **Comparability** | **Outcomes** |
|  | Representation of patients with ASD | Selection of patients with ASD | Ascertainment of exposure to either treatment option | Demonstration that outcome of interest was present at start of study | Reporting of transcatheter interventionReporting of surgical intervention | Assessment of outcomes | Follow-up long enough for outcomes to occur  | Adequacy reporting of outcomes |
| Bettencourt N (2003) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** | **\*** | **\*** |
| Boudiche S (2019) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Bialkowski J (2004) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** | **\*** | **\*** |
| Butera G (B)(2006)  | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** |  | **\*** |
| Bove T(2005) |  | **\*** | **\*** |  | **\*****\*** | **\*** | **\*** | **\*** |
| Tanghoj G (2019) |  | **\*** |  |  | **\*****\*** | **\*** | **\*** |  |
| Sun KP(2020) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** | **\*** | **\*** |
| Fujii Y(2020) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** | **\*** | **\*** |
| Chen TH(2015) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Bolcal C(2017) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Rudzîtis A(2017) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** |  |
| Siddiqui WT(2014) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Schneeberger Y (2017) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** | **\*** | **\*** |
| Durongpisitkul K(2002) | **\*** | **\*** | **\*** | \*  | **\*****\*** | **\*** | **\*** | **\*** |
| Quek SC(2010) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** |  | **\*** |
| Kodaira M(2017) | \* | \* | \* | \* | \*\* | \* |  | \* |
| Castaldi B(2015) | \* | \* | \* | \* | \*\* | \* | \* | \* |
| Bakar SN(2018) |  | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Rosas M(2007) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Mojadidi MK(2019) | \* | **\*** | **\*** | **\*** | **\*****\*** | **\*** | \* | **\*** |
| Kotowycz MA(2013) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Thomson JDR(2002) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Hughes ML(2002) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** |  | **\*** |
| Askari B(2018) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** |  | **\*** |
| Formigari R(2001) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Qi H(2020) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Butera G (A)(2005)  | **\*** | **\*** | **\*** | **\*** | **\*** | **\*** | **\***  | **\*** |
| Jones TK(2007) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Qiu HF(2019) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** | **\*** | **\*** |
| Suchon E(2009) | **\*** | **\*** | **\*** |  | **\*****\*** | **\*** | **\*** | **\*** |
| Ananthakrishna Pillai A(2019) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
| Kadirogullari E(2020) | **\*** | **\*** | **\*** | **\*** | **\*****\*** |  | **\*** |  |
| Ooi YK(2016) | **\*** | **\*** | **\*** | **\*** | **\*****\*** | **\*** | **\*** | **\*** |
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