Supplementary table 5a. Risk of bias for case reports

|  | Demographics | History | Condition/  presentation | Diagnositc tests | Interventions | Post-intervention condition | Adverse events | **Total score** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Agabna et al., 2021 |  |  |  |  |  |  |  |  |
| Ayrolles et al., 2020 |  |  |  |  |  |  |  |  |
| Barnardo et al., 2007 |  |  |  |  |  |  |  |  |
| Brownsteein et al., 2021 |  |  |  |  |  |  |  |  |
| Cowan et al., 2022 |  |  |  |  |  |  |  |  |
| Culleton et al., 2022 |  |  |  |  |  |  |  |  |
| Deckert et al., 1992 |  |  |  |  |  |  |  |  |
| Diab et al., 2022 |  |  |  |  |  |  |  |  |
| Diemer et al., 2018 |  |  |  |  |  |  |  |  |
| Dormeuil et al., 2016 |  |  |  |  |  |  |  |  |
| Engel et al., 2023 |  |  |  |  |  |  |  |  |
| Faedda et al., 2015 |  |  |  |  |  |  |  |  |
| Galosi et al., 2021 |  |  |  |  |  |  |  |  |
| Gobbi et al., 2008 |  |  |  |  |  |  |  |  |
| Grande et al., 2011 |  |  |  |  |  |  |  |  |
| Hauptman et al., 2021 |  |  |  |  |  |  |  |  |
| Hibbs et al., 2022 |  |  |  |  |  |  |  |  |
| Holm et al., 2013 |  |  |  |  |  |  |  |  |
| Jungova et al., 2018 |  |  |  |  |  |  |  |  |
| Katz et al., 2022 |  |  |  |  |  |  |  |  |
| Legrand et al., 2023 |  |  |  |  |  |  |  |  |
| Leroy et al., 2018 |  |  |  |  |  |  |  |  |
| Maley et al., 2012 |  |  |  |  |  |  |  |  |
| Manysheva et al., 2021 |  |  |  |  |  |  |  |  |
| McKelvey et al., 2017 |  |  |  |  |  |  |  |  |
| Messias et al., 2013 |  |  |  |  |  |  |  |  |
| Minamisawa et al., 2023 |  |  |  |  |  |  |  |  |
| Mizobuchi et al., 2023 |  |  |  |  |  |  |  |  |
| Montano et al., 2021 |  |  |  |  |  |  |  |  |
| Mormando et al., 2021 |  |  |  |  |  |  |  |  |
| Offenstadt et al., 1980 |  |  |  |  |  |  |  |  |
| Oliveros et al., 2009 |  |  |  |  |  |  |  |  |
| Pawar et al., 2013 |  |  |  |  |  |  |  |  |
| Persico et al., 2022 |  |  |  |  |  |  |  |  |
| Pollini et al., 2020 |  |  |  |  |  |  |  |  |
| Poser et al., 2015 |  |  |  |  |  |  |  |  |
| Ryu et al., 2009 |  |  |  |  |  |  |  |  |
| Sachdev et al., 2002 |  |  |  |  |  |  |  |  |
| Sheikhi et al., 2015 |  |  |  |  |  |  |  |  |
| Shetageriet et al., 2011 |  |  |  |  |  |  |  |  |
| Shillington et al., 2021 |  |  |  |  |  |  |  |  |
| Slavnic et al., 2022 |  |  |  |  |  |  |  |  |
| Stowe et al., 2014 |  |  |  |  |  |  |  |  |
| Termini et al., 2023 |  |  |  |  |  |  |  |  |
| Torr et al., 2014 |  |  |  |  |  |  |  |  |
| Van Mierlo et al., 202 |  |  |  |  |  |  |  |  |
| Varshitha et al., 2019 |  |  |  |  |  |  |  |  |
| Vieira et al., 2021 |  |  |  |  |  |  |  |  |
| Vithayathil et al., 2022 |  |  |  |  |  |  |  |  |
| White et al., 2021 |  |  |  |  |  |  |  |  |
| Winami et al., 2015 |  |  |  |  |  |  |  |  |
| Yang et al., 2023 |  |  |  |  |  |  |  |  |
| Ygland Rödström et al., 2021 |  |  |  |  |  |  |  |  |
| Zinstock et al., 2020 |  |  |  |  |  |  |  |  |

Low risk of bias Moderate risk of bias High risk of bias

Supplementary table 5b. Risk of bias for case series

|  | Clear inclusion criteria | Standard measurement | Good identification | Consecutive inclusion | Complete inclusion | Clear demographics | Clear clinical information | Clear outcomes | Clear setting | Statistics | Total score |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Alzahrani et al., 2023 |  |  |  |  |  |  |  |  |  |  |  |
| Arnott et al., 1972 |  |  |  |  |  |  |  |  |  |  |  |
| Bell et al., 2018 |  |  |  |  |  |  |  |  |  |  |  |
| Boot et al., 2022 |  |  |  |  |  |  |  |  |  |  |  |
| Breckpot et al., 2016 |  |  |  |  |  |  |  |  |  |  |  |
| Butcher et al., 2018 |  |  |  |  |  |  |  |  |  |  |  |
| Dille et al., 2023 |  |  |  |  |  |  |  |  |  |  |  |
| Ghaziuddin et al., 2015 |  |  |  |  |  |  |  |  |  |  |  |
| Jap et al., 2011 |  |  |  |  |  |  |  |  |  |  |  |
| Kohlenberg et al., 2020 |  |  |  |  |  |  |  |  |  |  |  |
| Loch et al., 2012 |  |  |  |  |  |  |  |  |  |  |  |
| Medjkane et al., 2021 |  |  |  |  |  |  |  |  |  |  |  |
| Miles et al., 2019 |  |  |  |  |  |  |  |  |  |  |  |
| Moyal et al., 2022 |  |  |  |  |  |  |  |  |  |  |  |
| Raj et al., 2014 |  |  |  |  |  |  |  |  |  |  |  |
| Sakhardande et al., 2021 |  |  |  |  |  |  |  |  |  |  |  |
| Samanci et al., 2021 |  |  |  |  |  |  |  |  |  |  |  |
| Serret et al., 2015 |  |  |  |  |  |  |  |  |  |  |  |
| Silva et al., 2022 |  |  |  |  |  |  |  |  |  |  |  |
| Stober et al., 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Verhoeven et al., 2020 |  |  |  |  |  |  |  |  |  |  |  |
| Yokotsuka-Ishida et al., 2021 |  |  |  |  |  |  |  |  |  |  |  |

Low risk of bias Moderate risk of bias High risk of bias

Supplementary table 5c. Risk of bias for cohort studies

|  | Similar groups | Similar exposure | Valid exposure | Confounders identified | Strategies to deal with confounders | Free of outcome at start | Valid outcome measurement | Sufficient follow-up time | Loss to follow-up | Strategies to deal with incomplete follow-up | Statistics | Total score |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lesch et al., 1994 |  |  |  |  |  |  |  |  |  |  |  |  |
| Pan et al., 2019 |  |  |  |  |  |  |  |  |  |  |  |  |
| Raffin et al., 2018 |  |  |  |  |  |  |  |  |  |  |  |  |
| Toyoto et al., 2001 |  |  |  |  |  |  |  |  |  |  |  |  |

Low risk of bias Moderate risk of bias High risk of bias

Supplementary table 5d. Risk of bias for case-control studies

|  | Comparable groups | Appropriate matching | Same criteria | Good exposure measurement | Consistent exposure measurement | Confounders identified | Strategies to deal with confounders | Standard outcome assessed | Exposure period long enough | Statistics | Total score |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bengel et al., 1998 |  |  |  |  |  |  |  |  |  |  |  |
| Gawlik et t al., 2016 |  |  |  |  |  |  |  |  |  |  |  |
| Gross et al., 2001 |  |  |  |  |  |  |  |  |  |  |  |
| Kaiser et al., 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Kury et al., 2003 |  |  |  |  |  |  |  |  |  |  |  |
| McKeane et al., 2004 |  |  |  |  |  |  |  |  |  |  |  |
| McQuillin et al., 2002 |  |  |  |  |  |  |  |  |  |  |  |
| Meyer et al., 2001 |  |  |  |  |  |  |  |  |  |  |  |
| Meyer et al., 2002 |  |  |  |  |  |  |  |  |  |  |  |
| Meyer et al., 2002 |  |  |  |  |  |  |  |  |  |  |  |
| Ohmori et al., 1999 |  |  |  |  |  |  |  |  |  |  |  |
| Rubie et al., 2003 |  |  |  |  |  |  |  |  |  |  |  |
| Schanze et al., 2011 |  |  |  |  |  |  |  |  |  |  |  |
| Selch et al., 2007 |  |  |  |  |  |  |  |  |  |  |  |
| Stober et al., 2000 |  |  |  |  |  |  |  |  |  |  |  |
| Stober et al., 2002 |  |  |  |  |  |  |  |  |  |  |  |
| Stober et al., 2005 |  |  |  |  |  |  |  |  |  |  |  |
| Stober et al., 2013 |  |  |  |  |  |  |  |  |  |  |  |
| Yang et al., 2013 |  |  |  |  |  |  |  |  |  |  |  |

Low risk of bias Moderate risk of bias High risk of bias