Supplemental material

	Representativeness of cohort	Selection of non-exposed cohort	Assessment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability	Assessment of outcome	Follow up long enough	Adequacy of follow up	Overall
Ros et al. 1987	Somewhat representative*	N/A	Structured interview*	Yes*	No controls applied	Record linkage*	Yes*	Subjects lost to follow up unlikely to introduce bias *	low
Heaton et al. 1993	Somewhat representative*	Same community*	Structured interview*	N/A	Study controls for laparoscopic cholecystectomy*	Self report	Yes *	Complete follow up *	low
Wilson et al. 1993	Somewhat representative*	Same community*	Structured interview*	Yes*	Study controls for laparoscopic cholecystectomy*	Record linkage* and self report	Not for all patients	Not adequate for all patients	`high
Fort et al. 1996	Somewhat representative*	Same community*	Surgical record and Structured interview*	Yes*	Study controls for laparoscopic cholecystectomy*	Record linkage* and self report	Yes *	Complete follow up *	low
Luman et al. 1996	Truly representative*	N/A	Surgical record and structured interview*	Yes *	No controls applied	Record linkage* and self report	Yes*	Complete follow up*	low
Gui et al. 1998	Truly representative*	N/A	Surgical record and structured interview*	Yes*	No controls applied	Record linkage* and self report	Yes*	Complete follow up*	low
Hearing et al. 1999	Somewhat representative*	Same community*	Surgical record and structured interview*	Yes*	Study controls for laparoscopic cholecystectomy*	Record linkage* and self report	Yes*	Subjects lost to follow up unlikely to introduce bias *	low
Sauter et al. 2002	Truly representative*	N/A	Surgical record and structured interview*	Yes*	No controls applied	Record linkage and self report *	No	Complete follow up*	high
Finan et al. 2006	Truly representative*	N/A	Surgical record and structured interview*	Yes*	No controls applied	Record linkage* and self report	Not for all patients	Subjects lost to follow up unlikely to introduce bias *	high
Fisher et al. 2008	Truly representative*	N/A	Surgical record and structured interview*	Yes*	No controls applied	Record linkage* and self report	Yes*	Complete follow up*	low
Mertens et al. 2009	Truly representative*	N/A	Self report*	Yes *	No controls applied	Self report *	No	Subjects lost to follow up unlikely to introduce bias *	high
Kim et al. 2014	Somewhat representative*	N/A	Surgical record*	Yes*	No controls applied	Record linkage*	Not for all patients	Complete follow up*	high
Yueh et al. 2014	Somewhat representative *	N/A	Surgical record and structured interview*	No	No controls applied	Record linkage* and self report	Yes*	Complete follow up*	high

Lamberts et al. 2015	Truly representative *	N/A	Surgical record and structured interview*	Yes*	No controls applied	Record linkage* and self report	No	Subjects lost to follow up could introduce bias	high
Wanjura et al. 2016	Truly representative*	Same community*	Surgical record and structured interview*	Yes*	Study controls for laparoscopic cholecystectomy*	Record linkage* and self report	Yes*	Complete follow up*	low
Del Grande et al. 2017	Somewhat representative *	N/A	Surgical record and structured interview*	Yes*	No controls applied	Record linkage* and self report	Yes*	Complete follow up*	low
Manriquez et al. 2017	Truly representative *	N/A	Surgical record and structured interview*	Yes*	No controls applied	Record linkage* and self report	Yes*	Complete follow up*	low
Talseth et al. 2017	Somewhat representative *	Same community*	Surgical record and structured interview*	Yes*	Study controls for laparoscopic cholecystectomy*	Record linkage* and self report	No	Subjects lost to follow up could introduce bias	high
Jasim et al. 2018	Somewhat representative *	N/A	Surgical record and structured interview*	Yes*	No controls applied	Record linkage* and self report	No	Complete follow up*	high

Supp. Table 1: Newcastle – Ottawa Quality assessment scale: Cohort studies

* = low bias

Study	Randomisation	Allocation concealment	Blinding	Outcome data	Analysis	Follow up	Risk of bias
McMahon et al. 1995	Randomisation method not adequately described	Allocation concealment unknown	Blinding unknown	Outcome data reported	ITT analysis	Adequate follow up	high
Kim et al. 2018	Randomization described	Allocation concealment unknown	Blinding unknown	Outcome data reported	Cluster analysis	Inadequate follow up	moderate

Supp. Table 2: Cochrane handbook assessment scale for risk of bias: $\ensuremath{\mathsf{R}}$