Search strategy in EmBase:

- 1. Liver Transplantation/or Liver Transplantations/or Liver Grafting/or LT/or Hepatic Transplantation/or Liver Transplant/or Hepatic Transplantations.
- 2. Hepatitis B virus.
- 3. Recurrence/or Recurrences/or Recrudescence/or Recrudescences/or Relapse/or Relapses.
- 4. Risk Factor/or Health Correlates/or Risk Scores/or Risk Score/or Risk Factor Scores/or Risk Factor Score/or Population at Risk/or Populations at Risk.
- 5. 1 and 2 and 3 and 4.

Assessment of Study Quality

First author/year	Quality indicators from NOS								
	Selection (0–4)				Comparability (0–2)	Outcome (0–3)			Score (0–9)
	1	2	3	4	1	1	2	3	Total
Bae (2015)	1	1	1	1	1	1	0	1	7
Campos-Varela (2011)	1	1	1	1	1	1	1	1	8
Idilman (2016)	1	0	1	1	1	1	1	1	7
Hwang (2008)	1	1	1	1	1	1	1	1	8
Kim (2013)	1	1	1	1	1	1	0	1	7
Kiyici (2008)	1	1	1	1	1	1	0	0	6
Lens (2018)	1	0	1	1	1	1	1	1	7
Yu (2019)	1	1	1	1	2	1	1	1	9
Na (2014)	1	1	1	1	2	1	1	1	9
Lee (2013)	1	1	1	1	1	1	0	1	7
Xu (2011)	1	1	1	1	1	1	1	1	8
Saab (2009)	1	1	1	1	2	1	1	1	9
Woo (2008)	1	1	1	1	1	1	1	1	8
Faria (2008)	1	1	1	1	1	1	1	1	8
Gane (2007)	1	1	1	1	0	1	0	1	6
Marzano (2005)	1	1	1	1	1	1	1	1	8
Shen (2015)	1	1	1	1	0	1	0	0	5
Wei-Chen (2019)	1	1	1	1	1	1	1	1	8
Vatansever (2019)	1	1	1	1	2	1	1	1	9
Gao (2014)	1	1	1	1	1	1	1	1	8
Jiang (2013)	1	1	1	1	1	1	1	1	8
Degertekin (2010)	1	1	1	1	1	1	1	1	8
Yi (2007)	1	1	1	1	1	1	0	1	7
Hu (2014)	1	1	1	1	1	1	1	1	8
Li (2011)	1	1	1	1	1	1	1	0	7
Zhang (2016)	1	1	1	1	1	1	1	1	8

NOS: Newcastle–Ottawa Scale.

NEWCASTLE–OTTAWA QUALITY ASSESSMENT SCALE

COHORT STUDIES

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability.

Selection

(1) Representativeness of the exposed cohort:

(a) truly representative of the average PSC patient in the community*****.

(b) somewhat representative of the average PSC patient in the community*****.

(c) selected group of users, e.g., nurses, volunteers.

(d) no description of the derivation of the cohort.

(2) Selection of the non-exposed cohort:

(a) drawn from the same community as the exposed cohort***.**

(b) drawn from a different source.

(c) no description of the derivation of the non-exposed cohort.

(3) Ascertainment of exposure:

(a) secure medical record***.**

(b) structured interview***.**

(c) written self-report.

(d) no description.

(4) Demonstration that outcome of interest was not present at start of study:

(a) yes*****.

(b) no.

Comparability

(1) Comparability of cohorts on the basis of the design or analysis:

(a) study controls for inflammatory bowel disease***.**

(b) study controls for any additional factor***.**

Outcome

(1) Assessment of outcome:

(a) medical imaging/histology***.**

(b) record linkage***.**

(c) self-report.

(d) no description.

(2) Was median or mean follow-up long enough for outcomes to occur:

(a) yes (at least 5 years)***.**

(b) no.

(3) Adequacy of follow up of cohorts:

(a) complete follow up — all subjects accounted for***.**

(b) subjects lost to follow up unlikely to introduce bias — small number lost <20% to follow-up, or description provided of those lost***.**

(c) follow-up rate > 20% (select an adequate %) and no description of those lost.

(d) no statement.

Wells GA, Shea B, O'Connel, D, *et al*. The Newcastle-Ottawa scale (NOS) for assessing the quality of nonrandomised studies in meta-analyses. Available from: http://www ohri ca/programs/clinical_epidemiology/oxford htm 2009 Feb 1.