

Table S1 Search strategy used in PubMed database.

No.	Search terms
1	Statin[MeSH Terms]
2	Statin*
3	Atorvastatin
4	Cerivastatin
5	Fluvastatin
6	Lovastatin
7	Pravastatin
8	Rosuvastatin
9	Simvastatin
10	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9
11	Hepatocellular carcinoma[MeSH Terms]
12	HCC
13	Liver Neoplasms[MeSH Terms]
14	liver cell tumor
15	liver cell carcinoma
16	liver cell neoplasm
17	liver cell carcinoma
18	#11 or #12 or #13 or #14 or #15 or #16 or #17
19	10 or 18

Table S2 The results of meta regression analysis

Variable	t	P> t
Study design	-0.04	0.969
Baseline risk	-0.14	0.890
Confounders adjustment	0.01	0.996
Area	-0.25	0.806
No. of Participants	-0.15	0.886
No. of HCC	-0.10	0.921
Literature quality	-0.16	0.879
Age	-0.45	0.659
Pharmacokinetics	-3.47	0.002
Dose of statins	-1.05	0.309

Table S3. Assessment of methodological quality of the cohort and case-control studies according to the Newcastle – Ottawa Scale

Cohort study	Selection				Comparability		Outcome		Total Score
	Representativeness of the exposed cohort	Selection of the non-exposed cohort	Ascertainment of exposure	Outcome of present at start of study	Control for important factor	Assessment of outcome	Follow-up long enough	Adequacy of follow up	
Friis S 2004	★	★	★	★	★	★	-	★	7
Friedman G D 2007	★	★	★	★	★	★	★	★	8
Marelli C 2011	★	★	★	★	★	★	★	★	8
Tsan Y T 2012	★	★	★	-	★	★	★	★	7
Chen 2015	★	★	★	★	★	★	★	★	8
Mohanty A 2015	★	★	★	★	★	★	-	★	7
Hisang J C 2015	★	★	★	★	★	★	★	★	8
Simon T G 2016	★	★	★	★	★	★	-	★	7
Tran Kim Tu 2019(a)	★	★	★	-	★	★	★	★	7
Kaplan D E 2019	★	★	★	★	★	★	-	★	7
Case-Control	Selection				Comparability		Outcome		Total

study	Adequate definition cases	of	Representative- ness of cases	Selection of controls	Definitio n of controls	Control for importa nt factor	Ascertainme nt of Exposure	Same method for cases and controls	Non-respon se rate	I Score
El-Serag HB 2009	-		★	★	★	★★	★	★	★	8
Chiu H F 2011	-		★	★	★	★★	★	★	-	7
Leung H W 2012	★		★	★	★	★	★	★	★	8
Björkhem-Bergm an L 2014	-		★	★	★	★★	★	★	★	8
McGlynn K A 2015	-		★	★	★	★★	★	★	★	8
Chen H H 2016	★		★	★	★	★	★	★	-	7
Chang F M 2017	★		★	★	★	★★	★	★	-	8
Kim G 2018	★		★	★	-	★★	★	★	-	7
Tran Kim Tu 2019(b)	★		★	★	-	★	★	★	-	6

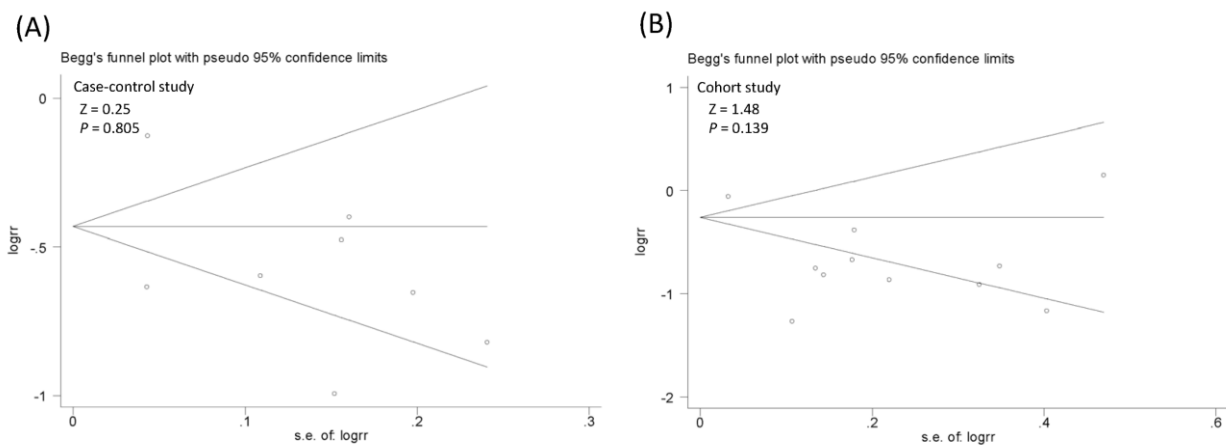
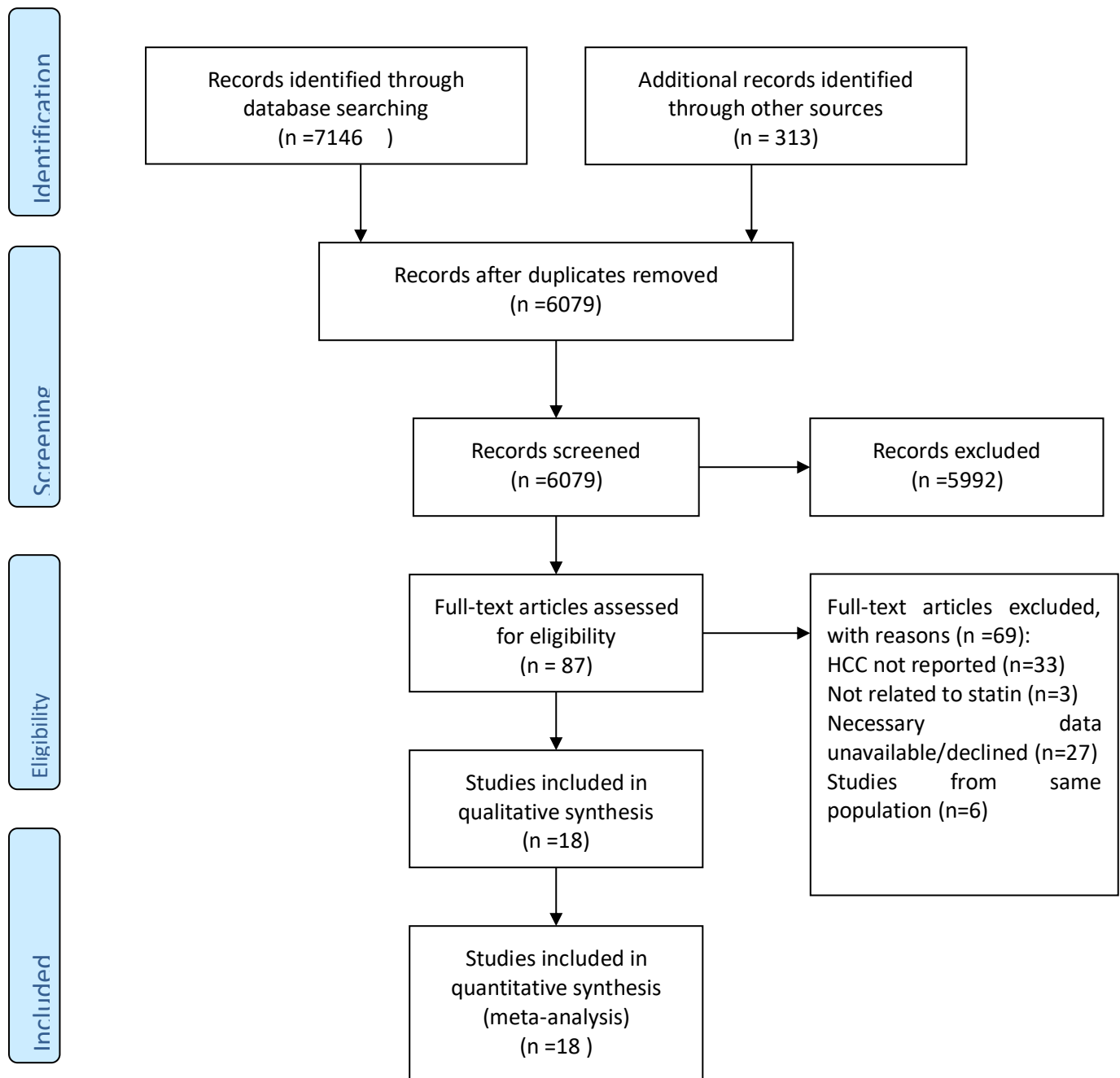


Figure S1.



PRISMA 2009 Flow Diagram



From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit www.prisma-statement.org.