

**Supplementary Material 1.** Detailed search strategy

**MEDLINE**

(obesity[MeSH Terms] OR obesity[Title/Abstract] OR obese[Title/Abstract] OR overweight[Title/Abstract] OR (body weight[Title/Abstract]) OR (body mass index[MeSH Terms]) OR (body mass index[Title/Abstract]) OR BMI[Title/Abstract]) AND ((carcinoma, hepatocellular[MeSH Terms]) OR (hepatocellular carcinoma[Title/Abstract]) OR (hepatocellular carcinomas[Title/Abstract]) OR HCC[Title/Abstract] OR (liver[Title/Abstract] AND cancer[Title/Abstract] AND (risk[Title/Abstract] OR mortality[Title/Abstract]))) AND ("1990/01/01"[Date - Publication] : "2018/11/08"[Date - Publication]) NOT Review[Publication Type] NOT Meta-analysis[Publication Type]

**EMBASE**

(obesity:ab,ti OR obese:ab,ti OR overweight:ab,ti OR (body AND weight:ab,ti) OR (body AND mass AND index:ab,ti) OR bmi:ab,ti) AND (hepatocellular AND carcinoma:ab,ti OR (hepatocellular AND carcinomas:ab,ti) OR hcc:ab,ti OR (liver:ab,ti AND cancer:ab,ti AND (risk:ab,ti OR mortality:ab,ti))) AND [2012-2018]/py AND [embase]/lim NOT ('animal model'/de OR 'conference abstract' OR 'review':it OR 'conference review'/it OR 'conference paper'/it OR 'note'/it OR 'meta analysis'/de OR 'systematic review'/de OR 'meta analysis (topic)'/de OR 'systematic review (topic)'/de)

**Cochrane Library**

'obesity in Title Abstract Keyword OR obese in Title Abstract Keyword OR "body-weight" in Title Abstract Keyword OR body mass index in Title Abstract Keyword OR BMI in Title Abstract Keyword in All Text AND "hepatocellular carcinoma" in Title Abstract Keyword OR liver in Title Abstract Keyword AND cancer in Title Abstract Keyword in Title Abstract Keyword in All Text with Cochrane Library publication date Between Jan 1990 and Nov 2018'