**Supplementary Table S7. Search Strategies**

Embase

Clinical Trial SLR

|  |  |  |  |
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| **Embase 1974 to 2020 May 20** | | | |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract cancer/ | 41533 |
|  | 2 | exp biliary tract tumor/ | 48203 |
|  | 3 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 5395 |
|  | 4 | exp bile duct cancer/ | 31282 |
|  | 5 | exp bile duct tumor/ | 34709 |
|  | 6 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 35499 |
|  | 7 | exp gallbladder cancer/ | 10904 |
|  | 8 | exp gallbladder tumor/ | 13523 |
|  | 9 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 14584 |
|  | 10 | exp cholangiocarcinoma/ | 27419 |
|  | 11 | exp Klatskin Tumor/ | 868 |
|  | 12 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 22732 |
|  | 13 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 807 |
|  | 14 | or/1-13 | 52987 |
| *Study design, single-arm trials* | 15 | (single-arm or single arm or clinical trial or non-randomized trial or nonrandomized trial).mp. | 1549072 |
| *Study design, SIGN filters for RCT evidence* | 16 | Clinical Trial/ | 973362 |
|  | 17 | Randomized Controlled Trial/ | 602940 |
|  | 18 | controlled clinical trial/ | 463740 |
|  | 19 | multicenter study/ | 250585 |
|  | 20 | Phase 3 clinical trial/ | 46801 |
|  | 21 | Phase 4 clinical trial/ | 3875 |
|  | 22 | exp RANDOMIZATION/ | 86977 |
|  | 23 | Single Blind Procedure/ | 38864 |
|  | 24 | Double Blind Procedure/ | 172218 |
|  | 25 | Crossover Procedure/ | 63058 |
|  | 26 | PLACEBO/ | 349873 |
|  | 27 | randomi?ed controlled trial$.tw. | 227880 |
|  | 28 | rct.tw. | 37006 |
|  | 29 | (random$ adj2 allocat$).tw. | 42823 |
|  | 30 | single blind$.tw. | 24836 |
|  | 31 | double blind$.tw. | 208852 |
|  | 32 | ((treble or triple) adj blind$).tw. | 1158 |
|  | 33 | placebo$.tw. | 307295 |
|  | 34 | Prospective Study/ | 599729 |
|  | 35 | or/16-34 | 2310363 |
|  | 36 | Case Study/ | 68989 |
|  | 37 | case report.tw. | 411807 |
|  | 38 | abstract report/ or letter/ | 1141603 |
|  | 39 | Conference proceeding.pt. | 0 |
|  | 40 | Conference abstract.pt. | 3783272 |
|  | 41 | Editorial.pt. | 651714 |
|  | 42 | Letter.pt. | 1111124 |
|  | 43 | Note.pt. | 795749 |
|  | 44 | or/36-43 | 6787948 |
|  | 45 | 35 not 44 | 1715725 |
| *Combined Strategy* | 46 | 14 and (15 or 45) | 5403 |
| *Limits, animal studies* | 47 | limit 46 to animal | 28 |
| *Limits, conference proceedings* | 48 | limit 46 to conference abstract status or conference abstract or conference paper or conference review | 1652154 |
| ***Final Strategy*** | ***49*** | ***46 not (47 or 48)*** | ***4212*** |

Clinical RWE SLR

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| **Embase 1974 to 2020 July 17** | | | |
| **Search Executed on 17 July 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract cancer/ | 42260 |
|  | 2 | exp biliary tract tumor/ | 48964 |
|  | 3 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 5506 |
|  | 4 | exp bile duct cancer/ | 31838 |
|  | 5 | exp bile duct tumor/ | 35283 |
|  | 6 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 36082 |
|  | 7 | exp gallbladder cancer/ | 11073 |
|  | 8 | exp gallbladder tumor/ | 13709 |
|  | 9 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 14786 |
|  | 10 | exp cholangiocarcinoma/ | 27928 |
|  | 11 | exp Klatskin Tumor/ | 876 |
|  | 12 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 23176 |
|  | 13 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 2501 |
|  | 14 | or/1-13 | 54888 |
| *Study design, SIGN filters for Observational Evidence* | 15 | Clinical study/ | 155444 |
|  | 16 | Case control study/ | 157827 |
|  | 17 | Family study/ | 26047 |
|  | 18 | Longitudinal study/ | 141569 |
|  | 19 | Retrospective study/ | 936186 |
|  | 20 | Prospective study/ | 612271 |
|  | 21 | Randomized controlled trials/ | 182322 |
|  | 22 | 20 not 21 | 605752 |
|  | 23 | Cohort analysis/ | 595310 |
|  | 24 | (Cohort adj (study or studies)).mp. | 308634 |
|  | 25 | (Case control adj (study or studies)).tw. | 134224 |
|  | 26 | (follow up adj (study or studies)).tw. | 63400 |
|  | 27 | (observational adj (study or studies)).tw. | 168187 |
|  | 28 | (epidemiologic$ adj (study or studies)).tw. | 106386 |
|  | 29 | (cross sectional adj (study or studies)).tw. | 219688 |
|  | 30 | or/15-19, 22-29 | 2733205 |
| *Combined Strategy* | 31 | 14 and 30 | 9,947 |
| *Limits, animal studies* | 32 | limit 31 to animal | 25 |
| *Limits, conference proceedings* | 33 | limit 31 to conference abstract status or conference abstract or conference paper or conference review | 2496 |
| ***Final Strategy*** | ***34*** | ***31 not (32 or 33)*** | ***7436*** |

HRQoL SLR

|  |  |  |  |
| --- | --- | --- | --- |
| **Embase 1974 to 2020 May 20** | | | |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract cancer/ | 41,533 |
|  | 2 | exp biliary tract tumor/ | 48,203 |
|  | 3 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 5,395 |
|  | 4 | exp bile duct cancer/ | 31,282 |
|  | 5 | exp bile duct tumor/ | 34,709 |
|  | 6 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 35,499 |
|  | 7 | exp gallbladder cancer/ | 10,904 |
|  | 8 | exp gallbladder tumor/ | 1,353 |
|  | 9 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 14,584 |
|  | 10 | exp cholangiocarcinoma/ | 27,419 |
|  | 11 | exp Klatskin Tumor/ | 868 |
|  | 12 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 22,732 |
|  | 13 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 2,438 |
|  | 14 | or/1-13 | 54,029 |
| *HRQoL* | 15 | exp Quality of Life/ | 485,168 |
|  | 16 | (quality of life OR quality-of-life or QoL or HRQoL or HQL or patient reported OR patient-reported OR satisfaction or disability OR functional status OR physical function).mp. | 1,173,335 |
|  | 17 | (quality of wellbeing or quality of well being or index of wellbeing or index of well being or qwb).mp. | 744 |
|  | 18 | Utility.mp | 288,930 |
|  | 19 | (utility or utilities or disutility or disutilities).mp. | 916 |
|  | 20 | (time trade off or time tradeoff or time trade-off or visual analog scale or visual analogue scale or standard gamble or discrete choice experiment).mp. | 104,175 |
|  | 21 | (hui or hui1 or hui2 or hui3).mp. | 3,155 |
|  | 22 | (euroqol or euro qol or eq or euroqual or euro qual or eq5d or eq 5d or eq-5d or eq-5\* or eq5\*).mp. | 27,078 |
|  | 23 | (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirty six or short form thirtysix or short form thirty six).mp. | 47,895 |
|  | 24 | (sf6 or sf 6 or SF 6D or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).mp. | 3,704 |
|  | 25 | (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).mp. | 10,946 |
|  | 26 | (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).mp. | 61 |
|  | 27 | (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).mp. | 508 |
|  | 28 | (FACT-G or FACT-Hep or eortc or EORTC QLQ-C-30).mp. | 18,798 |
|  | 29 | (functional assessment of cancer therapy).mp. | 4,001 |
|  | 30 | (functional living index cancer).mp. | 141 |
|  | 31 | or/15-30 | 1,521,570 |
| *Combined Strategy* | 32 | 14 and 31 | 2,333 |
| *Limits, animal studies* | 33 | limit 32 to animal | 21 |
| *Limits, conference proceedings* | 34 | limit 32 to (conference abstract status or conference abstract or conference paper or conference review) | 655 |
| ***Final Strategy*** | ***35*** | ***32 not (33 or 34)*** | ***1,665*** |

Economic Burden SLR

|  |  |  |  |
| --- | --- | --- | --- |
| **Embase 1974 to 2020 May 20** | | | |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract cancer/ | 41533 |
|  | 2 | exp biliary tract tumor/ | 48203 |
|  | 3 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 5395 |
|  | 4 | exp bile duct cancer/ | 31282 |
|  | 5 | exp bile duct tumor/ | 34709 |
|  | 6 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 35499 |
|  | 7 | exp gallbladder cancer/ | 10904 |
|  | 8 | exp gallbladder tumor/ | 13523 |
|  | 9 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 14584 |
|  | 10 | exp cholangiocarcinoma/ | 27419 |
|  | 11 | exp Klatskin Tumor/ | 868 |
|  | 12 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 22732 |
|  | 13 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 807 |
|  | 14 | or/1-13 | 52987 |
| *Economic Terms* | 15 | exp socioeconomics/ | 376748 |
|  | 16 | exp cost benefit analysis/ | 83988 |
|  | 17 | exp cost utility analysis/ | 9614 |
|  | 18 | exp cost effectiveness analysis/ | 150210 |
|  | 19 | exp cost of illness/ | 19073 |
|  | 20 | (economic\* or pharmacoeconomic\* or pharmaceutical economic\* or cost-benefit or cost-utility or cost-effectiveness or budget impact or Markov).mp. | 905151 |
|  | 21 | exp costs/ | 346294 |
|  | 22 | (costs or cost or financ\* or reimbursement).mp. | 1196808 |
|  | 23 | (resource utilization or resource utilisation).mp. or ((resource or health state or health care or healthcare).mp. AND (utilisation or utilization).mp.) | 154493 |
|  | 24 | exp Quality-Adjusted Life Year/ | 26340 |
|  | 25 | (qaly\* or qald\* or qale\* or qtime\* or life year or life years or daly\* or diability adjusted life).mp. | 41560 |
|  | 26 | exp presenteeism/ | 1233 |
|  | 27 | exp employment/ | 91977 |
|  | 28 | exp productivity/ | 39150 |
|  | 29 | (absenteeism or presenteeism or employment or indirect cost or indirect expenditur\* or long-term disability or medical leave or missed work or presenteeism or productivity or short-term disability or sick day or sick leave or societal cost or work or work day loss or work disability or work incapacity or work loss or work time loss or workforce dropout or efficiency or sickness presence or productivity lost or productivity loss or time lost or lost productivity or Sick Leave or Disability Leave or Sick Days or Illness days or illness day or medical leave or retirement or work\* compensation or work\* benefit or work\* impairment or home bound or homebound). mp. | 1955354 |
|  | 30 | or/15-29 | 3675256 |
| *Combined Strategy* | 31 | 14 and 30 | 2437 |
| *Limits, animal studies* | 32 | limit 31 to animal | 55 |
| *Limits, conference proceedings* | 33 | limit 31 to (conference abstract status or conference abstract or conference paper or conference review) | 708 |
| ***Final Strategy*** | 34 | ***31 not (32 or 33)*** | ***1694*** |

Medline

Clinical Trial SLR

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| **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to May 20, 2020** | | | |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract neoplasms/ | 28255 |
|  | 2 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 4080 |
|  | 3 | exp bile duct neoplasms/ | 17926 |
|  | 4 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 18943 |
|  | 5 | exp gallbladder neoplasms/ | 8720 |
|  | 6 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 10532 |
|  | 7 | exp cholangiocarcinoma/ | 9146 |
|  | 8 | exp Klatskin Tumor/ | 666 |
|  | 9 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 15485 |
|  | 10 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 4101 |
|  | 11 | or/1-10 | 37842 |
| *Study design, single-arm trials* | 12 | (single-arm or single arm or clinical study or trial or non-random\* or nonrandom\*).mp. | 1254391 |
| *Study design, SIGN filters for RCT evidence* | 13 | Randomized Controlled Trials as Topic/ | 132961 |
|  | 14 | randomized controlled trial/ | 505941 |
|  | 15 | Random Allocation/ | 102780 |
|  | 16 | Double Blind Method/ | 157691 |
|  | 17 | Single Blind Method/ | 28533 |
|  | 18 | clinical trial/ | 522767 |
|  | 19 | clinical trial, phase i.pt | 20289 |
|  | 20 | clinical trial, phase ii.pt | 32589 |
|  | 21 | clinical trial, phase iii.pt | 16607 |
|  | 22 | clinical trial, phase iv.pt | 1874 |
|  | 23 | controlled clinical trial.pt | 93677 |
|  | 24 | randomized controlled trial.pt | 505941 |
|  | 25 | multicenter study.pt | 271944 |
|  | 26 | clinical trial.pt | 522767 |
|  | 27 | exp Clinical Trials as topic/ | 340461 |
|  | 28 | or/13-27 | 1359862 |
|  | 29 | (clinical adj trial$).tw | 363068 |
|  | 30 | ((singl$ or doubl$ or treb$ or tripl$) adj (blind$3 or mask$3)).tw | 171726 |
|  | 31 | PLACEBOS/ | 34879 |
|  | 32 | placebo$.tw | 214556 |
|  | 33 | randomly allocated.tw | 28408 |
|  | 34 | (allocated adj2 random$).tw | 31702 |
|  | 35 | or/29-34 | 630835 |
|  | 36 | 12 or 28 or 35 | 1860063 |
|  | 37 | case report.tw | 308416 |
|  | 38 | letter/ | 1078022 |
|  | 39 | historical article/ | 358197 |
|  | 40 | or/37-39 | 1728849 |
|  | 41 | 36 not 40 | 1817696 |
| *Combined Strategy* | 42 | 11 and 41 | 2392 |
| *Limits, animal studies* | 43 | limit 42 to animal | 123 |
| *Limits, conference proceedings* | 44 | limit 42 to (clinical conference or congress or consensus development conference or consensus development conference, nih) | 5 |
| ***Final Strategy*** | ***45*** | ***42 not (43 or 44)*** | ***2264*** |

Clinical RWE SLR

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| **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to July 17, 2020** | | | |
| **Search Executed on 17 July 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract neoplasms/ | 28443 |
|  | 2 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 4131 |
|  | 3 | exp bile duct neoplasms/ | 18062 |
|  | 4 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 19086 |
|  | 5 | exp gallbladder neoplasms/ | 8755 |
|  | 6 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 10614 |
|  | 7 | exp cholangiocarcinoma/ | 9285 |
|  | 8 | exp Klatskin Tumor/ | 676 |
|  | 9 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 15710 |
|  | 10 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 4510 |
|  | 11 | or/1-10 | 38432 |
| *Study design, SIGN filters for Observational Evidence* | 12 | Epidemiologic studies/ | 8359 |
|  | 13 | Exp case control studies/ | 1090907 |
|  | 14 | Exp cohort studies/ | 2011434 |
|  | 15 | Case control.tw. | 125669 |
|  | 16 | (cohort adj (study or studies)).tw. | 207379 |
|  | 17 | Cohort analy$.tw. | 8086 |
|  | 18 | (Follow up adj (study or studies)).tw. | 49305 |
|  | 19 | (observational adj (study or studies)).tw. | 107455 |
|  | 20 | Longitudinal.tw. | 245831 |
|  | 21 | Retrospective.tw. | 533285 |
|  | 22 | Cross sectional.tw. | 354600 |
|  | 23 | Cross-sectional studies/ | 332296 |
|  | 24 | or/12-23 | 3020277 |
| *Combined Strategy* | 25 | 11 and 24 | 8361 |
| *Limits, animal studies* | 26 | limit 25 to animal | 139 |
| *Limits, conference proceedings* | 27 | limit 25 to (clinical conference or congress or consensus development conference or consensus development conference, nih) | 4 |
| ***Final Strategy*** | ***28*** | ***25 not (26 or 27)*** | ***8218*** |

HRQoL SLR

|  |  |  |  |
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| **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to May 11, 2020** | | | |
| **Search Executed on 12 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract neoplasms/ | 28,255 |
|  | 2 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 4,080 |
|  | 3 | exp bile duct neoplasms/ | 17,926 |
|  | 4 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 18,943 |
|  | 5 | exp gallbladder neoplasms/ | 8,720 |
|  | 6 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 10,532 |
|  | 7 | exp cholangiocarcinoma/ | 9,146 |
|  | 8 | exp Klatskin Tumor/ | 666 |
|  | 9 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 15,485 |
|  | 10 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 4,487 |
|  | 11 | or/1-10 | 38,067 |
| *HRQoL* | 12 | exp Quality of Life/ | 192,157 |
|  | 13 | (quality of life OR quality-of-life or QoL or HRQoL or HQL or patient reported OR patient-reported OR satisfaction or disability OR functional status OR physical function).mp. | 755,652 |
|  | 14 | (quality of wellbeing or quality of well being or index of wellbeing or index of well being or qwb).mp. | 577 |
|  | 15 | (utility or utilities) | 204,450 |
|  | 16 | (disutility or disutilities) | 460 |
|  | 17 | (time trade off or time tradeoff or time trade-off or visual analog scale or visual analogue scale or standard gamble or discrete choice experiment).mp. | 52,869 |
|  | 18 | (hui or hui1 or hui2 or hui3).mp. | 1,519 |
|  | 19 | (euroqol or euro qol or eq or euroqual or euro qual or eq5d or eq 5d or eq-5d or eq-5\* or eq5\*).mp. | 15,755 |
|  | 20 | (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirty six or short form thirtysix or short form thirty six).mp. | 25,536 |
|  | 21 | (sf6 or sf 6 or SF 6D or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).mp. | 2,812 |
|  | 22 | (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).mp. | 5,786 |
|  | 23 | (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).mp. | 34 |
|  | 24 | (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).mp. | 403 |
|  | 25 | (FACT-G or FACT-Hep or eortc or EORTC QLQ-C-30).mp. | 8,720 |
|  | 26 | (functional assessment of cancer therapy).mp. | 2,167 |
|  | 27 | (functional living index cancer).mp. | 112 |
|  | 28 | or/12-27 | 991,897 |
| *Combined Strategy* | 29 | 11 and 28 | 1,057 |
| *Limits, animal studies* | 30 | limit 29 to animal | 25 |
| *Limits, conference proceedings* | 31 | limit 29 to (clinical conference or congress or consensus development conference or consensus development conference, nih) | 5 |
| ***Final Strategy*** | ***32*** | ***29 not (30 or 31)*** | ***1,027*** |

Economic Burden SLR

|  |  |  |  |
| --- | --- | --- | --- |
| **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to May 20, 2020** | | | |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract neoplasms/ | 28255 |
|  | 2 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 4080 |
|  | 3 | exp bile duct neoplasms/ | 17926 |
|  | 4 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 18943 |
|  | 5 | exp gallbladder neoplasms/ | 8720 |
|  | 6 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 10532 |
|  | 7 | exp cholangiocarcinoma/ | 9146 |
|  | 8 | exp Klatskin Tumor/ | 666 |
|  | 9 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 15485 |
|  | 10 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 4101 |
|  | 11 | or/1-10 | 37842 |
| *Economic Terms* | 12 | exp cost benefit analysis/ | 80480 |
|  | 13 | exp cost utility analysis/ | 80480 |
|  | 14 | exp cost effectiveness analysis/ | 80480 |
|  | 15 | exp cost of illness/ | 26901 |
|  | 16 | (economic\* or pharmacoeconomic\* or pharmaceutical economic\* or cost-benefit or cost-utility or cost-effectiveness or budget impact or Markov).mp. | 731122 |
|  | 17 | exp costs/ | 235213 |
|  | 18 | (costs or cost or financ\* or reimbursement).mp. | 776907 |
|  | 19 | (resource utilization or resource utilisation).mp. or ((resource or health state or health care or healthcare).mp. AND (utilisation or utilization).mp.) | 60315 |
|  | 20 | exp Quality-Adjusted Life Year/ | 12064 |
|  | 21 | (qaly\* or qald\* or qale\* or qtime\* or life year or life years or daly\* or diability adjusted life).mp. | 24492 |
|  | 22 | exp presenteeism/ | 289 |
|  | 23 | exp employment/ | 85779 |
|  | 24 | exp productivity/ | 35014 |
|  | 25 | (absenteeism or presenteeism or employment or indirect cost or indirect expenditur\* or long-term disability or medical leave or missed work or presenteeism or productivity or short-term disability or sick day or sick leave or societal cost or work or work day loss or work disability or work incapacity or work loss or work time loss or workforce dropout or efficiency or sickness presence or productivity lost or productivity loss or time lost or lost productivity or Sick Leave or Disability Leave or Sick Days or Illness days or illness day or medical leave or retirement or work\* compensation or work\* benefit or work\* impairment or home bound or homebound).mp. | 1551442 |
|  | 26 | or/12-25 | 2614824 |
| *Combined Strategy* | 27 | 11 and 26 | 1005 |
| *Limits, animal studies* | 28 | limit 27 to animal | 92 |
| *Limits, conference proceedings* | 29 | limit 27 to (clinical conference or congress or consensus development conference or consensus development conference, nih) | 4 |
| ***Final Strategy*** | ***30*** | ***27 not (28 or 29)*** | ***909*** |

CCTR

Clinical Trial SLR

|  |  |  |  |
| --- | --- | --- | --- |
| **EBM Reviews - Cochrane Central Register of Controlled Trials March 2020** | | |  |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract neoplasms/ | 422 |
|  | 2 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 552 |
|  | 3 | exp bile duct neoplasms/ | 224 |
|  | 4 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 888 |
|  | 5 | exp gallbladder neoplasms/ | 82 |
|  | 6 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 354 |
|  | 7 | exp cholangiocarcinoma/ | 207 |
|  | 8 | exp Klatskin Tumor/ | 0 |
|  | 9 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 761 |
|  | 10 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 135 |
|  | 11 | or/1-10 | 1728 |
| *Limits, conference proceedings* | 12 | limit 11 to (conference or congresses or consensus development conference) | 61 |
| ***Final Strategy*** | ***13*** | ***11 not 12*** | ***1667*** |

HRQoL SLR

|  |  |  |  |
| --- | --- | --- | --- |
| **EBM Reviews - Cochrane Central Register of Controlled Trials March 2020** | | |  |
| **Search Executed on 12 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract neoplasms/ | 422 |
|  | 2 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 552 |
|  | 3 | exp bile duct neoplasms/ | 224 |
|  | 4 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 888 |
|  | 5 | exp gallbladder neoplasms/ | 82 |
|  | 6 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 354 |
|  | 7 | exp cholangiocarcinoma/ | 207 |
|  | 8 | exp Klatskin Tumor/ | - |
|  | 9 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 761 |
|  | 10 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 135 |
|  | 11 | or/1-10 | 1,728 |
| *HRQoL* | 12 | exp Quality of Life/ | 22,870 |
|  | 13 | (quality of life OR quality-of-life or QoL or HRQoL or HQL or patient reported OR patient-reported OR satisfaction or disability OR functional status OR physical function).mp. | 184,388 |
|  | 14 | (quality of wellbeing or quality of well being or index of wellbeing or index of well being or qwb).mp. | 530 |
|  | 15 | (utility or utilities) | 15,835 |
|  | 16 | (disutility or disutilities) | 78 |
|  | 17 | (time trade off or time tradeoff or time trade-off or visual analog scale or visual analogue scale or standard gamble).mp. | 42,421 |
|  | 18 | (hui or hui1 or hui2 or hui3).mp. | 247 |
|  | 19 | (euroqol or euro qol or eq or euroqual or euro qual or eq5d or eq 5d or eq-5d or eq-5\* or eq5\*).mp. | 9,369 |
|  | 20 | (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirty six or short form thirtysix or short form thirty six).mp. | 12,977 |
|  | 21 | (sf6 or sf 6 or SF 6D or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).mp. | 437 |
|  | 22 | (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).mp. | 2,698 |
|  | 23 | (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).mp. | 15 |
|  | 24 | (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).mp. | 84 |
|  | 25 | (FACT-G or eortc or EORTC QLQ-C-30).mp. | 6,070 |
|  | 26 | (functional assessment of cancer therapy).mp. | 1,312 |
|  | 27 | (functional living index cancer).mp. | 49 |
|  | 28 | or/12-27 | 230,456 |
| *Combined Strategy* | 29 | 11 and 28 | 251 |
| *Limits, conference proceedings* | 30 | limit 30 to (conference or congresses or consensus development conference) | **3** |
| ***Final Strategy*** | ***31*** | ***29 not 30*** | ***248*** |

Economic Burden SLR

|  |  |  |  |
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| **EBM Reviews - Cochrane Central Register of Controlled Trials March 2020** | | |  |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp biliary tract neoplasms/ | 422 |
|  | 2 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 552 |
|  | 3 | exp bile duct neoplasms/ | 224 |
|  | 4 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 888 |
|  | 5 | exp gallbladder neoplasms/ | 82 |
|  | 6 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 354 |
|  | 7 | exp cholangiocarcinoma/ | 207 |
|  | 8 | exp Klatskin Tumor/ | 0 |
|  | 9 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 761 |
|  | 10 | (exp ampulla of vater/ and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp.) or (ampullary cancer or ampullary carcinoma or ampullary neoplasm or ampullary tumor or ampullary tumour).mp. | 135 |
|  | 11 | or/1-10 | 1728 |
| *Economic Terms* | 12 | exp cost benefit analysis/ | 6836 |
|  | 13 | exp cost of illness/ | 834 |
|  | 14 | (economic\* or pharmacoeconomic\* or pharmaceutical economic\* or cost-benefit or cost-utility or cost-effectiveness or budget impact or Markov).mp. | 40676 |
|  | 15 | exp costs/ | 10354 |
|  | 16 | (costs or cost or financ\* or reimbursement).mp. | 74455 |
|  | 17 | (resource utilization or resource utilisation).mp. or ((resource or health state or health care or healthcare).mp. AND (utilisation or utilization).mp.) | 8320 |
|  | 18 | exp Quality-Adjusted Life Year/ | 1219 |
|  | 19 | (qaly\* or qald\* or qale\* or qtime\* or life year or life years or daly\* or diability adjusted life).mp. | 5962 |
|  | 20 | exp employment/ | 1823 |
|  | 21 | exp productivity/ | 333 |
|  | 22 | (absenteeism or presenteeism or employment or indirect cost or indirect expenditur\* or long-term disability or medical leave or missed work or presenteeism or productivity or short-term disability or sick day or sick leave or societal cost or work or work day loss or work disability or work incapacity or work loss or work time loss or workforce dropout or efficiency or sickness presence or productivity lost or productivity loss or time lost or lost productivity or Sick Leave or Disability Leave or Sick Days or Illness days or illness day or medical leave or retirement or work\* compensation or work\* benefit or work\* impairment or home bound or homebound).mp. | 65667 |
|  | 23 | or/12-22 | 143263 |
| *Combined Strategy* | 24 | 11 and 23 | 109 |
| *Limits, conference proceedings* | 25 | limit 24 to (conference or congresses or consensus development conference) | 2 |
| ***Final Strategy*** | ***26*** | ***24 not 25*** | ***107*** |

EconLit

|  |  |  |  |
| --- | --- | --- | --- |
| **Econlit 1886 to May 07, 2020** | | | |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 0 |
|  | 2 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 0 |
|  | 3 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 0 |
|  | 4 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 0 |
|  | 5 | (ampulla of vater or ampullary).mp. and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp. | 0 |
| ***Combined strategy*** | ***6*** | ***or/1-5*** | ***0*** |

NHS EED

|  |  |  |  |
| --- | --- | --- | --- |
| **NHS Economic Evaluation Database to First Quarter 2016** | | | |
| **Search Executed on 21 May 2020** | | | |
| **Criteria** |  | **Search terms** | **Results** |
| *Population* | 1 | exp Biliary Tract Neoplasms/ | 13 |
|  | 2 | (biliary tract cancer\* or biliary tract cancer carcinoma or biliary tract neoplasm\* or biliary tract tumor\* or biliary tract tumour\* or cancer of the biliary tract or cancer of biliary tract).mp. | 2 |
|  | 3 | exp bile duct neoplasms/ | 9 |
|  | 4 | (bile duct cancer\* or bile duct carcinoma\* or bile duct neoplasm\* or bile duct tumor\* or bile duct tumour\* or cancer of the bile duct or cancer of bile duct).mp. | 9 |
|  | 5 | exp gallbladder neoplasms/ | 2 |
|  | 6 | (gallbladder cancer\* or gallbladder carcinoma\* or gallbladder neoplasm\* or gallbladder tumor\* or gallbladder tumour\* or cancer of the gallbladder or cancer of gallbladder).mp. | 5 |
|  | 7 | exp cholangiocarcinoma/ | 4 |
|  | 8 | (cholangiocarcinoma\* or cholangiocellular cancer\* or cholangiocellular carcinoma\* or cholangiocellular neoplasm\* or cholangiocellular tumor or cholangiocellular tumour or biliary tree cancer\* or biliary tree carcinoma\* or biliary tree neoplasm\* or biliary tree neoplasm\* or biliary tree tumor\* or biliary tree tumour\* or Klatskin\* tumor\* or Klatskin\* tumour).mp. | 8 |
|  | 9 | (ampulla of vater or ampullary).mp. and (cancer\* or cancers\* or neoplasm\* or tumor\* or tumour\*).mp. | 4 |
| ***Combined strategy*** | ***10*** | ***or/1-9*** | ***24*** |