**Supplementary Information: Full Search Strategies (all searched performed 25 January 2022)**

Embase (Embase.com, Elsevier)

|  |  |  |
| --- | --- | --- |
| **No.** | **Query** | **Results** |
| 1 | transjugular intrahepatic portosystemic shunt'/exp OR 'tips' OR 'tipss' OR 'transjugular intrahepatic porta systemic shunt\*' OR 'transjugular intrahepatic portacaval shunt\*' OR 'transjugular intrahepatic portal systemic shunt\*' OR 'transjugular intrahepatic portasystemic shunt\*' OR 'transjugular intrahepatic portasystemic stent\*' OR 'transjugular intrahepatic porto systemic shunt\*' OR 'transjugular intrahepatic porto systemic stent\*' OR 'transjugular intrahepatic porto systemic stent shunt\*' OR 'transjugular intrahepatic portocaval shunt\*' OR 'transjugular intrahepatic portosystemic shunt\*' OR 'transjugular intrahepatic portosystemic stent\*' OR 'transjugular intrahepatic portosystemic stent shunt\*' OR 'transjugular intrahepatic shunt\*' OR 'transjugular intrahepatic stent\*' | 49049 |
| 2 | 'liver cirrhosis'/exp OR cirrhosis OR cirrhotic OR 'liver fibros\*' OR 'hepatic fibros\*' | 266483 |
| 3 | 'aged'/exp OR elderly OR 'senior citizen\*' OR 'over 65' OR 'over sixty' OR '65 years' OR '65 yrs' OR '65 yr' OR 'over 70' OR 'over seventy' OR '70 years' OR '70 yrs' OR '70 yr' OR 'over 75' OR 'over seventy five' OR '75 years' OR '75 yrs' OR '75 yr' OR 'over 80' OR 'over eighty' OR '80 years' OR '80 yrs' OR '80 yr' OR 'over 85' OR 'over eighty five' OR '85 years' OR '85 yrs' OR '85 yr' | 3666414 |
| 4 | #1 AND #2 | 5065 |
| 5 | #3 AND #4 | 870 |
| 6 | 'hospital readmission'/exp OR readmit\* OR readmiss\* OR rehospital\* OR 're admit\*' OR 're admiss\*' OR 're hospital\*' | 107696 |
| 7 | (('30 day\*' OR 'thirty day\*' OR '1 month\*' OR 'one month\*') NEAR/8 mortalit\*) OR (('30 day\*' OR 'thirty day\*' OR '1 month\*' OR 'one month\*') AND 'mortality'/exp) | 92429 |
| 8 | 'hepatic encephalopathy'/exp OR 'hepatic encephalopath\*' OR 'ammoniac encephalopath\*' OR 'hepato cerebral disease\*' OR 'hepatocerebral disease\*' OR 'hepatocerebral syndrome\*' OR hepatoencephalopath\* OR 'hepatogenous encephalopath\*' OR 'liver encephalopath\*' OR 'porta cava encephalopath\*' OR 'portacaval encephalopath\*' OR 'portal encephalopath\*' OR 'portal systemic encephalopath\*' OR 'portocaval encephalopath\*' | 25494 |
| 9 | #5 AND #6 | 20 |
| 10 | #5 AND #7 | 54 |
| 11 | #5 AND #8 | 239 |
| 12 | #9 OR #10 OR #11 | 279 |
| 13 | #12 NOT ([animals]/lim NOT [humans]/lim) | 278 |
| 14 | #13 NOT ('conference review'/it OR 'editorial'/it OR 'letter'/it OR 'note'/it OR 'review'/it OR 'short survey'/it OR 'tombstone'/it OR 'case report'/de OR 'meta analysis'/de OR 'meta analysis topic'/de OR 'practice guideline'/de OR 'systematic review'/de OR 'systematic review topic'/de) | 214 |

MEDLINE (PubMed, National Center for Biotechnology Information, National Library of Medicine)

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| **Search number** | **Query** | **Results** |
| 1 | "Portasystemic Shunt, Transjugular Intrahepatic"[Mesh] OR transjugular-intrahepatic-portosystemic-shunt\* OR "TIPS" OR "TIPSS" OR transjugular-intrahepatic-porta-systemic-shunt\* OR transjugular-intrahepatic-portacaval-shunt\* OR transjugular-intrahepatic-portal-systemic-shunt\* OR transjugular-intrahepatic-portasystemic-shunt\* OR transjugular-intrahepatic-portasystemic-stent\* OR transjugular-intrahepatic-porto-systemic-shunt\* OR transjugular-intrahepatic-porto-systemic-stent\* OR transjugular-intrahepatic-porto-systemic-stent-shunt\* OR transjugular-intrahepatic-portocaval-shunt\* OR transjugular-intrahepatic-portosystemic-shunt\* OR transjugular-intrahepatic-portosystemic-stent\* OR transjugular-intrahepatic-portosystemic-stent-shunt\* OR transjugular-intrahepatic-shunt\* OR transjugular-intrahepatic-stent\* | 37,437 |
| 2 | "Liver Cirrhosis"[Mesh] OR "cirrhosis" OR "cirrhotic" OR liver-fibros\* OR hepatic-fibros\* | 152,332 |
| 3 | "Aged"[Mesh] OR "elderly" OR senior-citizen\* OR "over 65" OR "over sixty" OR "65 years" OR "65 yrs" OR "65 yr" OR "over 70" OR "over seventy" OR "70 years" OR "70 yrs" OR "70 yr" OR "over 75" OR "over seventy five" OR "75 years" OR "75 yrs" OR "75 yr" OR "over 80" OR "over eighty" OR "80 years" OR "80 yrs" OR "80 yr" OR "over 85" OR "over eighty five" OR "85 years" OR "85 yrs" OR "85 yr" | 3,499,961 |
| 4 | #1 AND #2 | 2,368 |
| 5 | #3 AND #4 | 605 |
| 6 | "Patient Readmission"[Mesh] OR readmit\* OR readmiss\* OR rehospital\* OR re-admit\* OR re-admiss\* OR re-hospital\* | 52,985 |
| 7 | ("30 day" OR "thirty day" OR "1 month" OR "one month") AND (mortalit\* OR "Mortality"[Mesh] OR "mortality"[Subheading]) | 44,716 |
| 8 | "Hepatic Encephalopathy"[Mesh] OR Hepatic-encephalopath\* OR ammoniac-encephalopath\* OR hepato-cerebral-disease\* OR hepatocerebral-disease\* OR hepatocerebral-syndrome\* OR hepatoencephalopath\* OR hepatogenous-encephalopath\* OR liver-encephalopath\* OR porta-cava-encephalopath\* OR portacaval-encephalopath\* OR portal-encephalopath\* OR portal-systemic-encephalopath\* OR portocaval-encephalopath\* | 15,056 |
| 9 | #5 AND #6 | 3 |
| 10 | #5 AND #7 | 33 |
| 11 | #5 AND #8 | 155 |
| 12 | #9 OR #10 OR #11 | 177 |
| 13 | #12 NOT ("case reports"[Publication Type] OR "comment"[Publication Type] OR "editorial"[Publication Type] OR "guideline"[Publication Type] OR "introductory journal article"[Publication Type] OR "meta analysis"[Publication Type] OR "news"[Publication Type] OR "retracted publication"[Publication Type] OR "review"[Publication Type] OR "systematic review"[Publication Type]) | 161 |

Cochrane Central Register of Controlled Trials (CochraneLibrary.com platform, Wiley, Issue 12 of 12, Dec 2021)

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| --- | --- | --- |
| **ID** | **Search** | **Hits** |
| #1 | [mh "Portasystemic Shunt, Transjugular Intrahepatic"] OR transjugular-intrahepatic-portosystemic-shunt\* OR "TIPS" OR "TIPSS" OR transjugular-intrahepatic-porta-systemic-shunt\* OR transjugular-intrahepatic-portacaval-shunt\* OR transjugular-intrahepatic-portal-systemic-shunt\* OR transjugular-intrahepatic-portasystemic-shunt\* OR transjugular-intrahepatic-portasystemic-stent\* OR transjugular-intrahepatic-porto-systemic-shunt\* OR transjugular-intrahepatic-porto-systemic-stent\* OR transjugular-intrahepatic-porto-systemic-stent-shunt\* OR transjugular-intrahepatic-portocaval-shunt\* OR transjugular-intrahepatic-portosystemic-shunt\* OR transjugular-intrahepatic-portosystemic-stent\* OR transjugular-intrahepatic-portosystemic-stent-shunt\* OR transjugular-intrahepatic-shunt\* OR transjugular-intrahepatic-stent\* | 1989 |
| #2 | [mh "Liver Cirrhosis"] OR "cirrhosis" OR "cirrhotic" OR liver-fibros\* OR hepatic-fibros\* | 12288 |
| #3 | [mh "Aged"] OR "elderly" OR senior-citizen\* OR "over 65" OR "over sixty" OR "65 years" OR "65 yrs" OR "65 yr" OR "over 70" OR "over seventy" OR "70 years" OR "70 yrs" OR "70 yr" OR "over 75" OR "over seventy five" OR "75 years" OR "75 yrs" OR "75 yr" OR "over 80" OR "over eighty" OR "80 years" OR "80 yrs" OR "80 yr" OR "over 85" OR "over eighty five" OR "85 years" OR "85 yrs" OR "85 yr" | 305895 |
| #4 | #1 AND #2 | 329 |
| #5 | #3 AND #4 | 60 |
| #6 | [mh "Patient Readmission"] OR readmit\* OR readmiss\* OR rehospital\* OR re-admit\* OR re-admiss\* OR re-hospital\* | 10721 |
| #7 | ("30 day" OR "thirty day" OR "1 month" OR "one month") AND (mortalit\* OR [mh "Mortality"] OR [mh /MO]) | 7087 |
| #8 | [mh "Hepatic Encephalopathy"] OR Hepatic-encephalopath\* OR ammoniac-encephalopath\* OR hepato-cerebral-disease\* OR hepatocerebral-disease\* OR hepatocerebral-syndrome\* OR hepatoencephalopath\* OR hepatogenous-encephalopath\* OR liver-encephalopath\* OR porta-cava-encephalopath\* OR portacaval-encephalopath\* OR portal-encephalopath\* OR portal-systemic-encephalopath\* OR portocaval-encephalopath\* | 1818 |
| #9 | #5 AND #6 | 0 |
| #10 | #5 AND #7 | 4 |
| #11 | #5 AND #8 | 34 |
| #12 | #9 OR #10 OR #11 | 37 |
|  | Trials matching "#12 - #9 OR #10 OR #11" | 34 |

Web of Science Core Collection (Web of Science Platform, Clarivate, Editions = Arts & Humanities Citation Index, Emerging Sources Citation Index [previous 5 years], Conference Proceedings Citation Index, Science Citation Index-EXPANDED, and Social Science Citation Index)

|  |  |
| --- | --- |
| Search | Results |
| transjugular-intrahepatic-portosystemic-shunt\* OR "TIPS" OR "TIPSS" OR transjugular-intrahepatic-porta-systemic-shunt\* OR transjugular-intrahepatic-portacaval-shunt\* OR transjugular-intrahepatic-portal-systemic-shunt\* OR transjugular-intrahepatic-portasystemic-shunt\* OR transjugular-intrahepatic-portasystemic-stent\* OR transjugular-intrahepatic-porto-systemic-shunt\* OR transjugular-intrahepatic-porto-systemic-stent\* OR transjugular-intrahepatic-porto-systemic-stent-shunt\* OR transjugular-intrahepatic-portocaval-shunt\* OR transjugular-intrahepatic-portosystemic-shunt\* OR transjugular-intrahepatic-portosystemic-stent\* OR transjugular-intrahepatic-portosystemic-stent-shunt\* OR transjugular-intrahepatic-shunt\* OR transjugular-intrahepatic-stent\* (Topic)  AND  cirrhosis OR cirrhotic OR liver-fibros\* OR hepatic-fibros\* (Topic)  AND  geront\* OR geriatr\* OR elderly OR senior-citizen\* OR over-65 OR over-sixty OR 65-years OR 65-yrs OR 65-yr OR over-70 OR over-seventy OR 70-years OR 70-yrs OR 70-yr OR over-75 OR over-seventy-five OR 75-years OR 75-yrs OR 75-yr OR over-80 OR over-eighty OR 80-years OR 80-yrs OR 80-yr OR over-85 OR over-eighty-five OR 85-years OR 85-yrs OR 85-yr (Topic)  AND  readmit\* OR readmiss\* OR rehospital\* OR re-admit\* OR re-admiss\* OR re-hospital\* OR ((30-day\* OR thirty-day\* OR 1-month\* OR one-month\*) NEAR/8 mortalit\*) OR Hepatic-encephalopath\* OR ammoniac-encephalopath\* OR hepato-cerebral-disease\* OR hepatocerebral-disease\* OR hepatocerebral-syndrome\* OR hepatoencephalopath\* OR hepatogenous-encephalopath\* OR liver-encephalopath\* OR porta-cava-encephalopath\* OR portacaval-encephalopath\* OR portal-encephalopath\* OR portal-systemic-encephalopath\* OR portocaval-encephalopath\* (Topic) | 9 |