

Appendix 1: Search Strategy

- 1 randomized controlled trial.pt. or randomized.mp. or placebo.mp.
- 2 cirrhosis.mp.
- 3 albumin.mp.
- 4 1 and 2 and 3

Appendix 2: Quality assessment of included studies

Studies	Sequence Generation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessors	Incomplete outcome data	Selective outcome reporting	Baseline differences in participants
Abdel-Khalek 2010	Adequate, based on random numbers generated by SAS V6.12 statistical software	Unclear, allocation concealment not stated	Unclear, not stated	Unclear, not stated	Unclear, not stated	Adequate, no evidence of selective reporting.	Adequate, no baseline variation
Altman 1998	Adequate, random number table	Unclear, not stated	Unclear, not stated	Unclear, not stated	Adequate	Adequate, no evidence of selective reporting.	Adequate, no significant baseline variation
Choi 2002	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear	Adequate, no baseline variation
Fassio 1992	Unclear, doesn't state method of randomization	Unclear, not stated	Unclear, not stated	Unclear, not stated	Adequate	Adequate, no evidence of selective reporting.	Adequate, no baseline variation
Garcia-Compean 1993	Adequate, randomized with random number table	Unclear	Unclear, not stated	Unclear, not stated	Adequate	Adequate, no evidence of selective reporting.	Adequate, no significant baseline variation
Garcia-Compean 2002	Adequate, random number table	Unclear, not stated	Unclear, not stated	Unclear, not stated	Adequate	Adequate, no evidence of selective reporting.	Adequate, no baseline variation
Gines 1988	Adequate, randomly allocated to two groups (random number table)	Adequate, randomization was independent in each hospital	Unclear, not stated	Unclear, not stated	Adequate	Adequate, no evidence of selective reporting.	Adequate, no baseline variation
Gines 1996	Unclear, doesn't state method of randomization	Unclear, not stated	Unclear, not stated	Unclear, not stated	Adequate	Adequate, no evidence of selective reporting.	Adequate, no baseline variation
Guevara 2012	Adequate, sealed envelopes	Unclear, allocation concealment not stated	Unblinded	Inadequate, unblinded	Adequate	Adequate, no evidence of selective reporting.	Adequate, no baseline variation

Moreau 2006	Adequate, based on random numbers generated by SAS V6.12 statistical software	Unclear, allocation concealment not stated	Adequate, only nurses were aware	Unclear, not stated	Adequate	Adequate, no evidence of selective reporting.	Adequate, no baseline variation
Nazar 2009	Unclear, doesn't state method of randomization	Unclear, allocation concealment not stated	Unclear, not stated	Unclear, not stated	Unclear, not stated	Unclear	Inadequate, not stated
Planas 1990	Adequate, randomly allocated to two groups (random number table)	Adequate, randomization was independent in each hospital	Unclear, not stated	Unclear, not stated	Adequate	Adequate, no evidence of selective reporting.	Adequate, no baseline variation
Salemo 1991	Unclear	Unclear	Unclear	Unclear	Unclear	Adequate, no evidence of selective reporting.	Adequate, no significant baseline variation
Sola-Vera 2003	Adequate, random number table and sealed envelopes	Unclear, not stated	Unclear, not stated	Unclear, not stated	Unclear, not stated	Adequate, no evidence of selective reporting.	Adequate, no baseline variation
Sort 1999	Adequate, sealed envelopes containing the numbers of treatment assignments based on random numbers generated by the SAS module	Unclear, not stated	Unclear, not stated	Adequate, investigators blinded	Unclear, not stated	Adequate, no evidence of selective reporting.	Adequate, no baseline variation apart from in WCC and ascitic fluid PMN count
Xue 2002	Unclear, not stated	Unclear, not stated	Unclear, not stated	Unclear, not stated	Unclear, not stated	Unclear, very little analysis	Unclear, not stated

PRISMA Statement

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	3-4
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	3-4
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	NA
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	5
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	5
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Appendix
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	5-6
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	5-6
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	5-7

Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	6
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	5-7
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2 for each meta-analysis).	6-7

Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	6
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	6-7
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	8-10, Figure
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	8-10, Table
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	8, Appendix
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	Table
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	8-10
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	8, Appendix
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	8-10
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	11

Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	13
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	13
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	1