

NKR 42 Delir PICO 6 Gennemgang af medicin

Review information

Authors

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Citation example: [Empty name]. NKR 42 Delir PICO 6 Gennemgang af medicin. Cochrane Database of Systematic Reviews [Year], Issue [Issue].

Contact person

[Empty name]

Dates

Assessed as Up-to-date:

Date of Search:

Next Stage Expected:

Protocol First Published: Not specified

Review First Published: Not specified

Last Citation Issue: Not specified

What's new

Date / Event	Description
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History

Date / Event	Description
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Characteristics of studies

Characteristics of included studies

Garcia Gollarte 2014

Methods	<p>Study design: Cluster randomized controlled trial</p> <p>Study grouping: Parallel group</p> <p>Open Label:</p> <p>Cluster RCT: YES</p>
Participants	<p>Baseline Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● Age (mean, SD): 84.24 (14.6) <p>Control</p> <ul style="list-style-type: none"> ● Age (mean, SD): 84.5 (10.4) <p>Included criteria: Persons older than 65 years, who had been living in the nursing home for at least 3 months and expected to stay in it for the length of the study, were clinically stable (no changes in prescription in the last 2 months) and accepted that their clinical data were used for the study were included.</p> <p>Excluded criteria: Residents receiving palliative care or those usually cared by other primary care providers outside the nursing home were excluded.</p> <p>Pretreatment: The only significant difference at baseline was a worse functional status, as measured by Barthel's activities of daily living index, in the intervention group. Adjusting for differences in this variable did not significantly change the results.</p>
Interventions	<p>Intervention Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● <i>Description:</i> A nursing home physician, expert in drug use in older people, delivered a structured educational intervention. The program included general aspects of prescription and drug use in geriatric patients, how to reduce the number of drugs, to perform a regular review of medications, to avoid inappropriate drug use, to discontinue

	<p>drugs that do not show benefits, and to avoid undertreatment with drugs that have shown benefits. It also discussed in detail some drugs frequently related to adverse drug reactions in older people. Educational material and references were given to participants. Finally, two 1-hour workshops reviewed practical real life cases and promoted practice changes in participants. The educator offered further on-demand advice on prescription for the next 6 months. This intervention was reinforced by a single review by the researchers, using standard appropriateness criteria [Screening Tool of Older Persons Prescriptions (STOPP) eScreening Tool to Alert Doctors to Right Treatment (START)], 26 of a random sample of 10 residents cared by each physician in the intervention group, with written feedback on the problems found.</p> <ul style="list-style-type: none"> ● <i>Duration (treatment/control):</i> A educational intervention first with two 1- hour workshops, after this there was further on demand advise on prescription as needed for 6 months ● <i>Duration (follow-up period, months):</i> 3 months after end of intervention <p>Control</p> <ul style="list-style-type: none"> ● <i>Description:</i> Physicians in the control group did not receive any intervention or information about an educational intervention been delivered in other centers ● <i>Duration (treatment/control):</i> ● <i>Duration (follow-up period, months):</i>
<p>Outcomes</p>	<p><i>Ded/Mortality (longest FU, min. 3 months)</i></p> <ul style="list-style-type: none"> ● Outcome type: Dichotomous Outcome ● Reporting: Fully reported ● Data value: Endpoint <p><i>Indlæggelsestil/Hospitalization (After discharge)</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Direction: Lower is better <p><i>Genindlæggelse/Readmissions (Longest FU, min. 3 months)</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome <p><i>Delirvarighed/Length of delirium (after discharge)</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome <p><i>Fald/Falls (After discharge)</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Fully reported

- **Direction:** Lower is better
- **Data value:** Endpoint

Udskrivelse til vanlig bolig/Discharge circumstances (After discharge)

- **Outcome type:** DichotomousOutcome

Funktionsevne/ADL function (After discharge)

- **Outcome type:** ContinuousOutcome

Opblussen-reboundeffekt/Exacerbation-rebound (After discharge)

- **Outcome type:** DichotomousOutcome

Forbrug af antipsykotika/Antipsychotics prescribed (After discharge)

- **Outcome type:** DichotomousOutcome
- **Reporting:** Fully reported
- **Direction:** Lower is better
- **Data value:** Endpoint

Delir-tilfælde/Episodes of delirium (Longest FU, min. 3 months)

- **Outcome type:** ContinuousOutcome
- **Reporting:** Fully reported
- **Direction:** Lower is better
- **Data value:** Endpoint

Days in hospital (Longest FU, min 3 months)

- **Outcome type:** ContinuousOutcome
- **Reporting:** Fully reported
- **Direction:** Lower is better
- **Data value:** Endpoint

Any episode of delirium (Longest FU, min. 3 months)

- **Outcome type:** DichotomousOutcome
- **Reporting:** Fully reported
- **Direction:** Lower is better
- **Data value:** Endpoint

Identification	<p>Sponsorship source: Funding not stated. The authors declare no conflict of interest</p> <p>Country: Spain</p> <p>Setting: A private organization of nursing homes in Spain.</p> <p>Comments:</p> <p>Authors name: García-Gollarte et al</p> <p>Institution: Universidad Católica de Valencia</p> <p>Email: fermin.garcia@ballesol.es , garciagollarte@gmail.es</p> <p>Address: Avenue Riba Roja, 54, 46183 La Eliana, Valencia, Spain.</p>
Notes	<p><i>Nkr 42 Delir on 26/04/2016 21:21</i></p> <p>Select</p> <p>Vurderer effekt af medicinsanering på plejehjem herunder antal delir tilfælde, således forebyggende!</p>

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Low risk	Quote: "Randomization was done using random number tables and was not based on characteristics of nursing homes, as they were mostly homogeneous (except in size)."
Allocation concealment	Unclear risk	Judgement Comment: Not described
Blinding of participants and personnel	High risk	Quote: "mostly homogeneous (except in size). Physicians in the control group did not receive any intervention or information about an educational inter- vention been delivered in other centers. Physicians in both groups were informed that there was a company program aimed to improve drug prescription (to explain why data on prescription were collected in their centers) but were blinded to the fact that the educational intervention was being assessed. A nursing home physician, expert" Judgement Comment: You cannot blind the fact that they receive an educational programme and advice on how to prescribe
Blinding of outcome assessors	Unclear risk	Judgement Comment: Data were collected systematically in the clinical records of the nursing homes.

Incomplete outcome data	Low risk	Judgement Comment: 302 out of 1018 lost to FU, of these 101 died and were accounted for. a similar no was excluded and slightly more were discharged in the intervention group.
Selective outcome reporting	Low risk	Judgement Comment: No protocol available but consistent method and results. Fully reported outcomes. No subgroup analysis
Other sources of bias	Low risk	Judgement Comment: None detected

Lapane 2011

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	For more info see the review by Clegg et al 2014

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Unclear risk	No information
Allocation concealment	Unclear risk	No information
Blinding of participants and personnel	High risk	Not blinded
Blinding of outcome assessors	High risk	Not blinded
Incomplete outcome data	Unclear risk	Not enough information
Selective outcome reporting	Low risk	None detected
Other sources of bias	Low risk	None detected

*Footnotes***Characteristics of excluded studies***Footnotes***Characteristics of studies awaiting classification***Footnotes***Characteristics of ongoing studies***Footnotes***Summary of findings tables****Additional tables****References to studies****Included studies*****Garcia Gollarte 2014***

Garcia-Gollarte, Fermin; Baleriola-Julvez, Jose; Ferrero-Lopez, Isabel; Cuenillas-Diaz, Alvaro; Cruz-Jentoft, Alfonso. An educational intervention on drug use in nursing homes improves health outcomes resource utilization and reduces inappropriate drug prescription. *Journal of the American Medical Directors Association* 2014;15(12):885-91. [DOI:]

Lapane 2011

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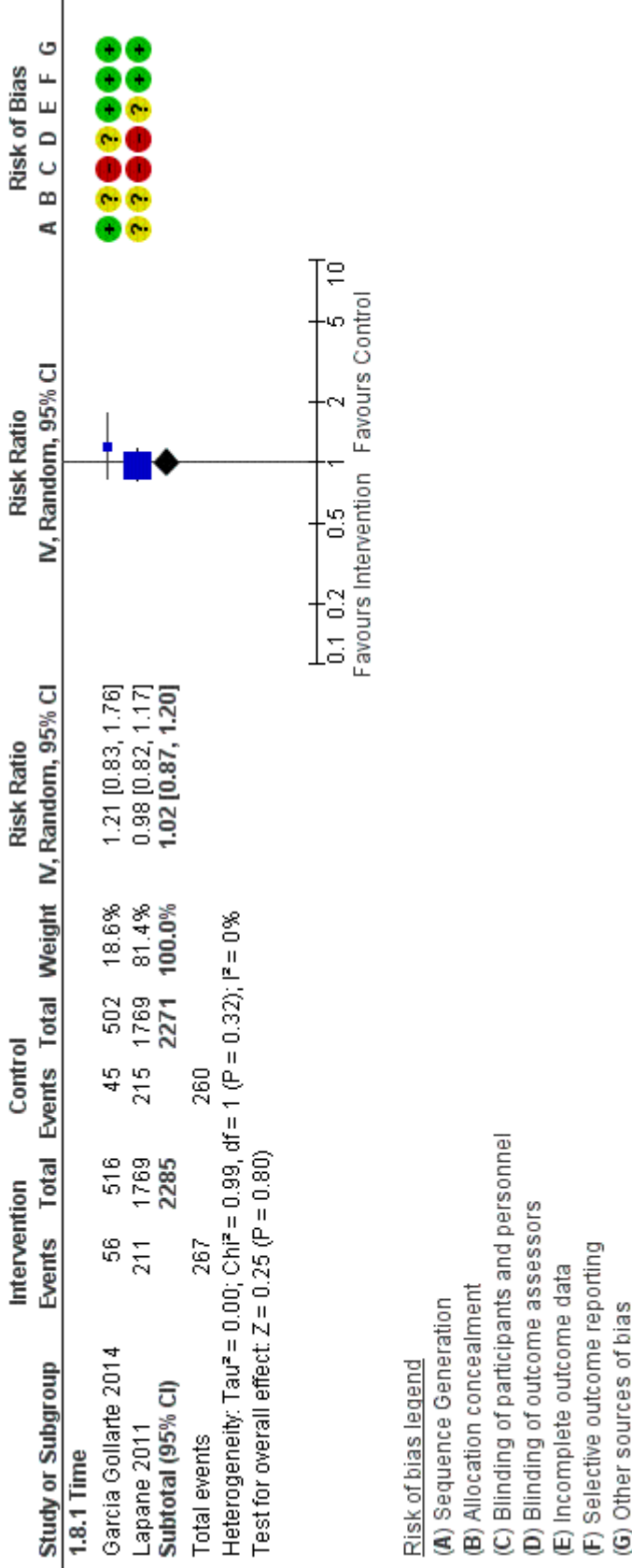
Excluded studies**Studies awaiting classification****Ongoing studies****Other references****Additional references****Other published versions of this review****Data and analyses****1 Intervention vs Control**

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Indlæggelsestid/Hospitalization (After discharge)	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.2 Genindlæggelser/Readmissions (Longest FU, min. 3 months)	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.3 Delirvarighed/Length of delirium (after discharge)	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.4 Fald/Falls (After discharge)	1	716	Mean Difference (IV, Fixed, 95% CI)	-0.11 [-0.22, 0.00]
1.4.1 Time	1	716	Mean Difference (IV, Fixed, 95% CI)	-0.11 [-0.22, 0.00]
1.5 Falls	1		Hazard Ratio (IV, Fixed, 95% CI)	1.03 [0.92, 1.15]
1.6 Delir-tilfælde/Episodes of delirium (Longest FU, min. 3 months)	1		Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.6.1 Time	1	716	Mean Difference (IV, Fixed, 95% CI)	-0.11 [-0.17, -0.05]

1.7 Days in hospital (Longest FU, min 3 months)	1			Mean Difference (IV, Fixed, 95% CI)	Subtotals only
1.7.1 Time	1	716		Mean Difference (IV, Fixed, 95% CI)	-0.23 [-0.57, 0.11]
1.8 Død/Mortality (longest FU, min. 3 months)	2			Risk Ratio (IV, Random, 95% CI)	Subtotals only
1.8.1 Time	2	4556		Risk Ratio (IV, Random, 95% CI)	1.02 [0.87, 1.20]
1.9 Udskrivelse til vanlig bolig/Discharge circumstances (After discharge)	1			Risk Ratio (IV, Fixed, 95% CI)	Subtotals only
1.9.1 Time	1	1018		Risk Ratio (IV, Fixed, 95% CI)	1.33 [0.96, 1.84]
1.10 Opblussen-reboundeffekt/Exacerbation-rebound (After discharge)	0			Risk Ratio (IV, Fixed, 95% CI)	No totals
1.11 Forbrug af antipsykotika/Antipsycotics prescribed (After discharge)	1			Risk Ratio (IV, Fixed, 95% CI)	Subtotals only
1.11.1 Time	1	716		Risk Ratio (IV, Fixed, 95% CI)	0.35 [0.18, 0.68]
1.12 Any episode of delirium (Longest FU, min. 3 months)	1			Risk Ratio (IV, Fixed, 95% CI)	Subtotals only
1.12.1 Time	1	716		Risk Ratio (IV, Fixed, 95% CI)	0.35 [0.18, 0.68]
1.13 Incidence of delirium	1			Hazard Ratio (IV, Fixed, 95% CI)	0.42 [0.34, 0.51]
1.14 Funktionsevne/ADL function (After discharge)	0	0		Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.15 Unplanned hospitalisation	1			Hazard Ratio (IV, Random, 95% CI)	0.89 [0.72, 1.10]
1.16 Mortality	1			Hazard Ratio (IV, Random, 95% CI)	0.88 [0.66, 1.17]

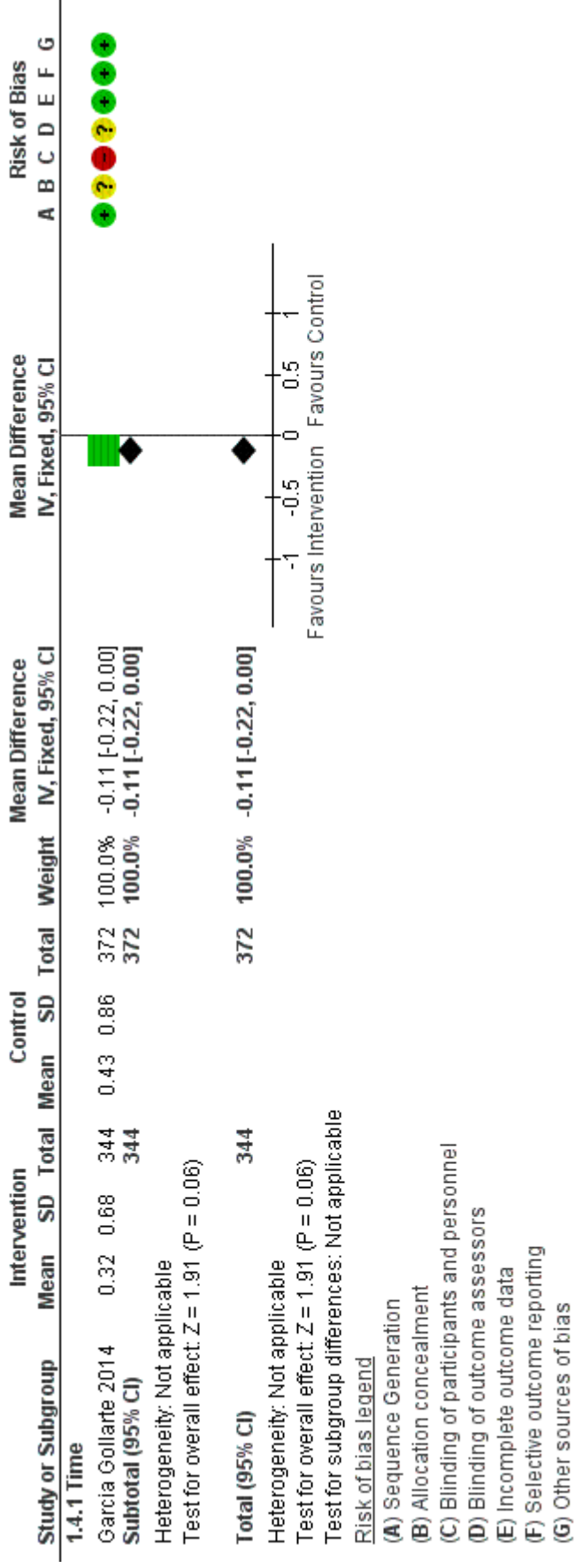
Figures

Figure 1 (Analysis 1.8)



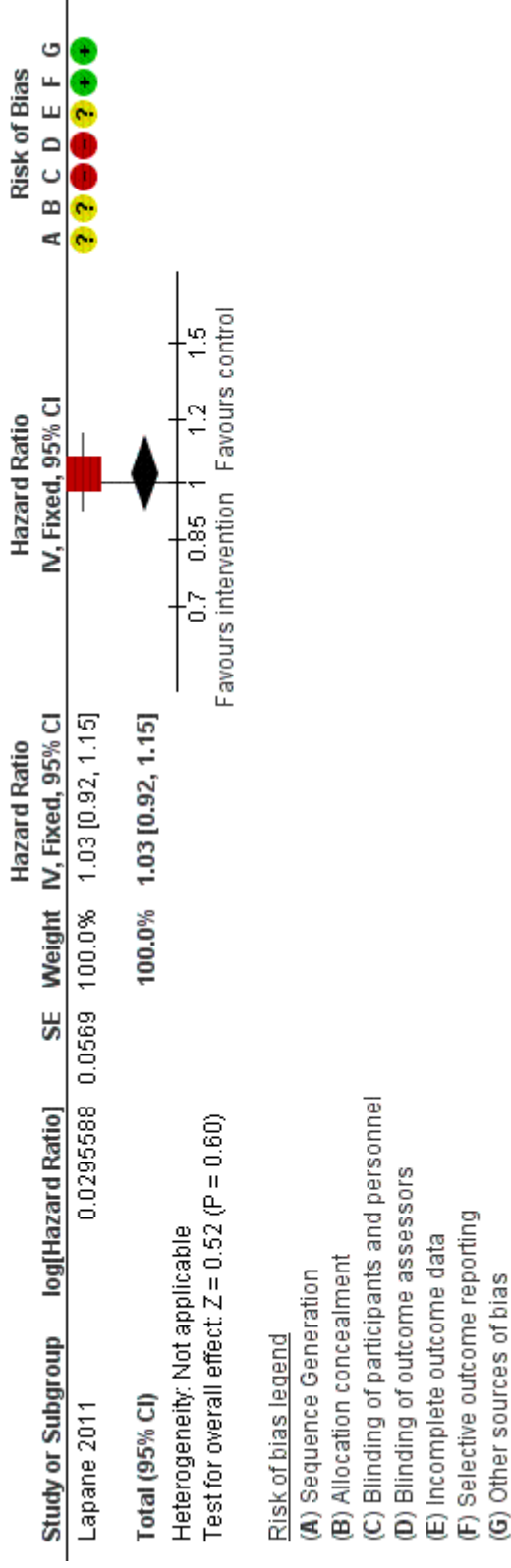
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.8 Død/Mortality (longest FU, min. 3 months).

Figure 2 (Analysis 1.4)



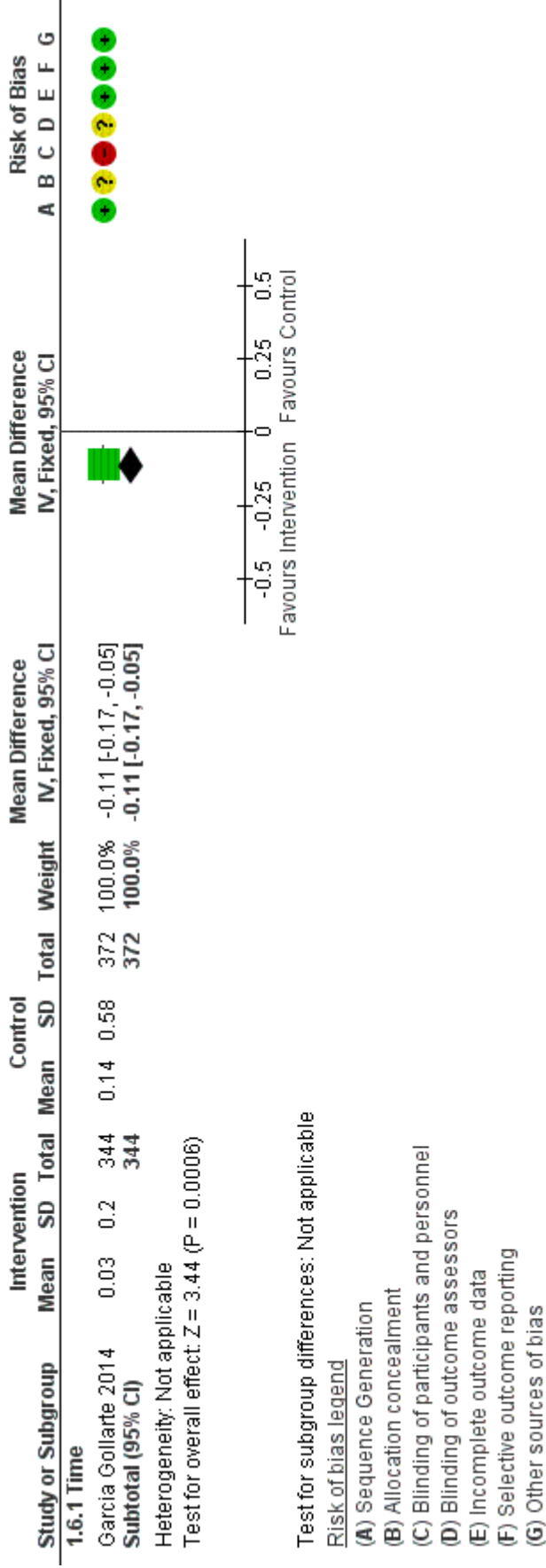
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.4 Fald/Falls (After discharge).

Figure 3 (Analysis 1.5)



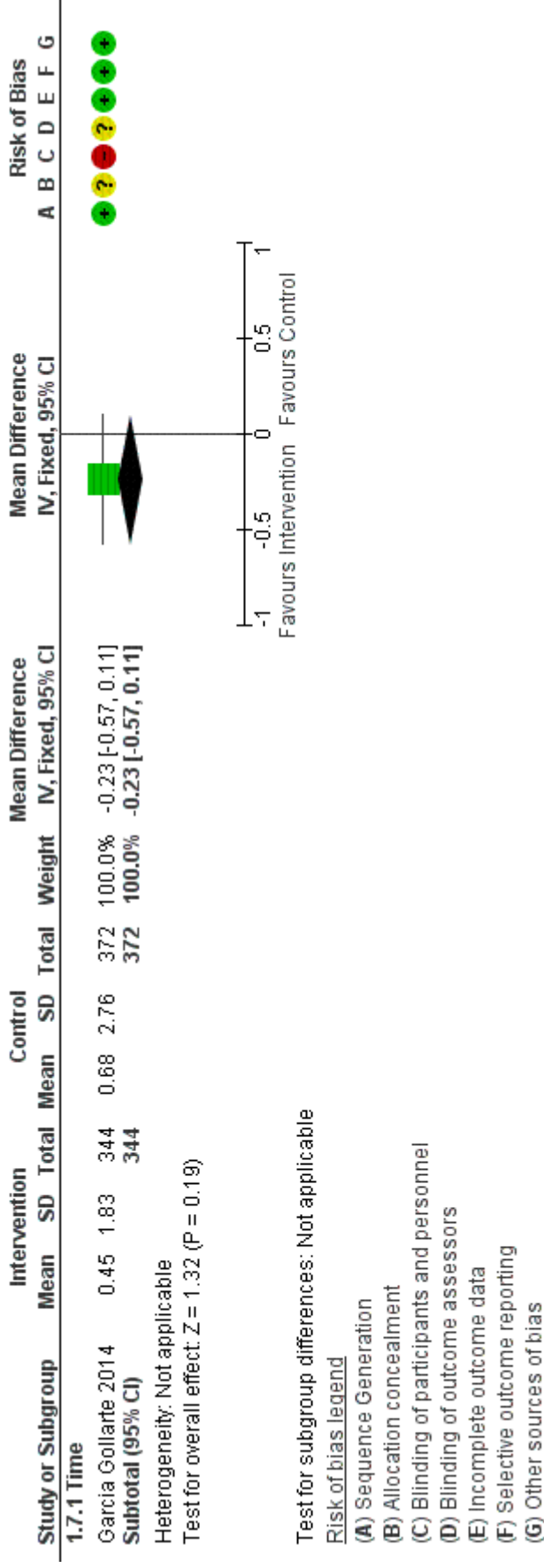
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.5 Falls.

Figure 4 (Analysis 1.6)



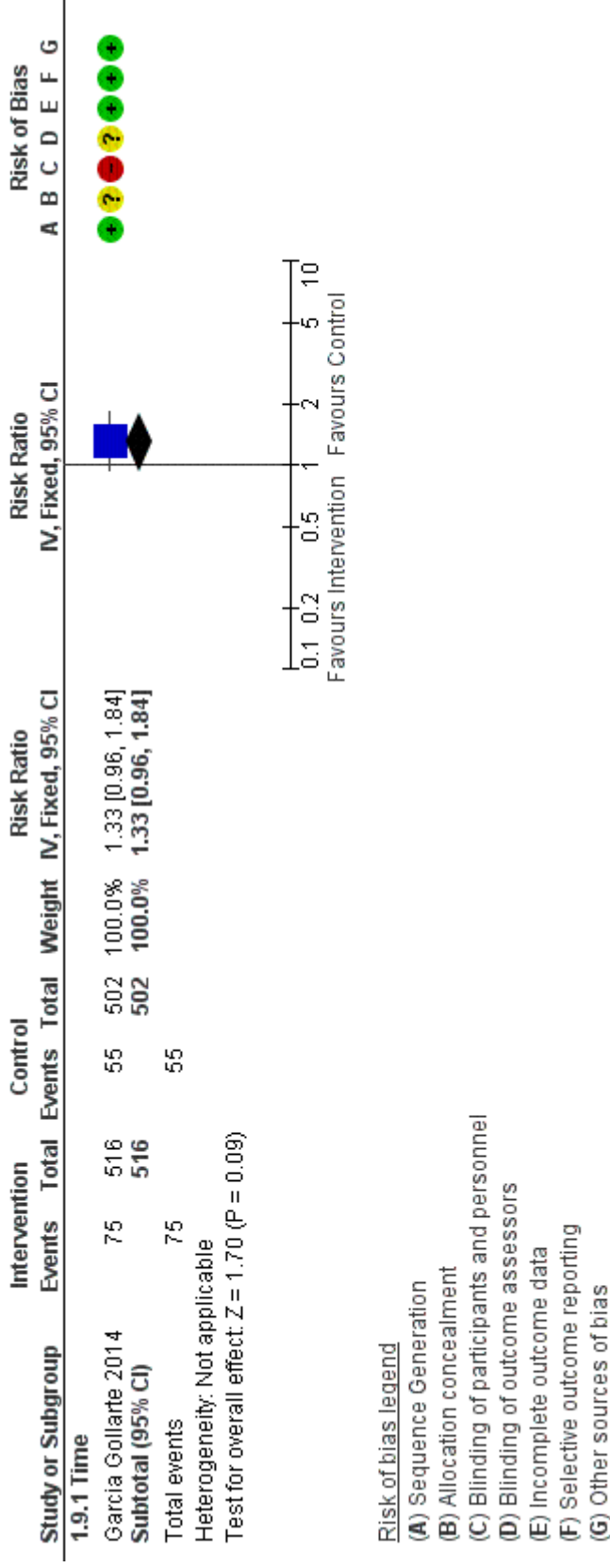
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.6 Delir-tilfælde/Episodes of delirium (Longest FU, min. 3 months).

Figure 5 (Analysis 1.7)



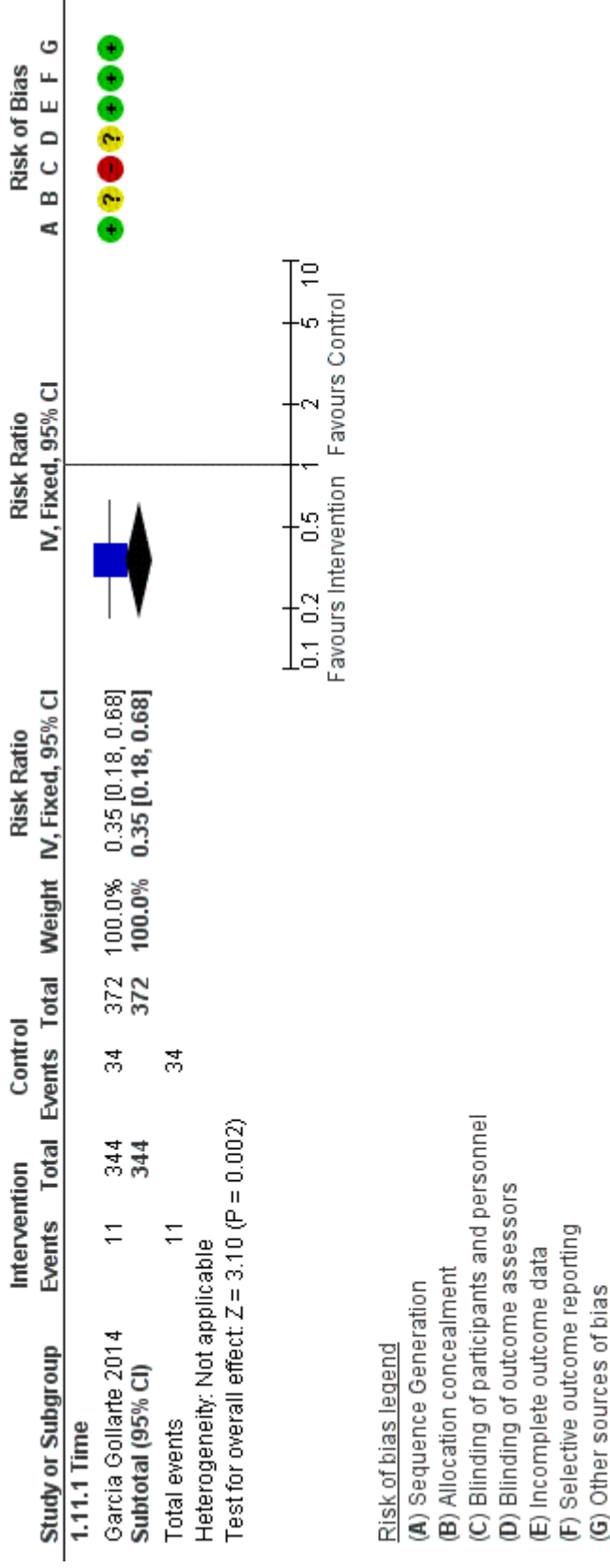
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.7 Days in hospital (Longest FU, min 3 months).

Figure 6 (Analysis 1.9)



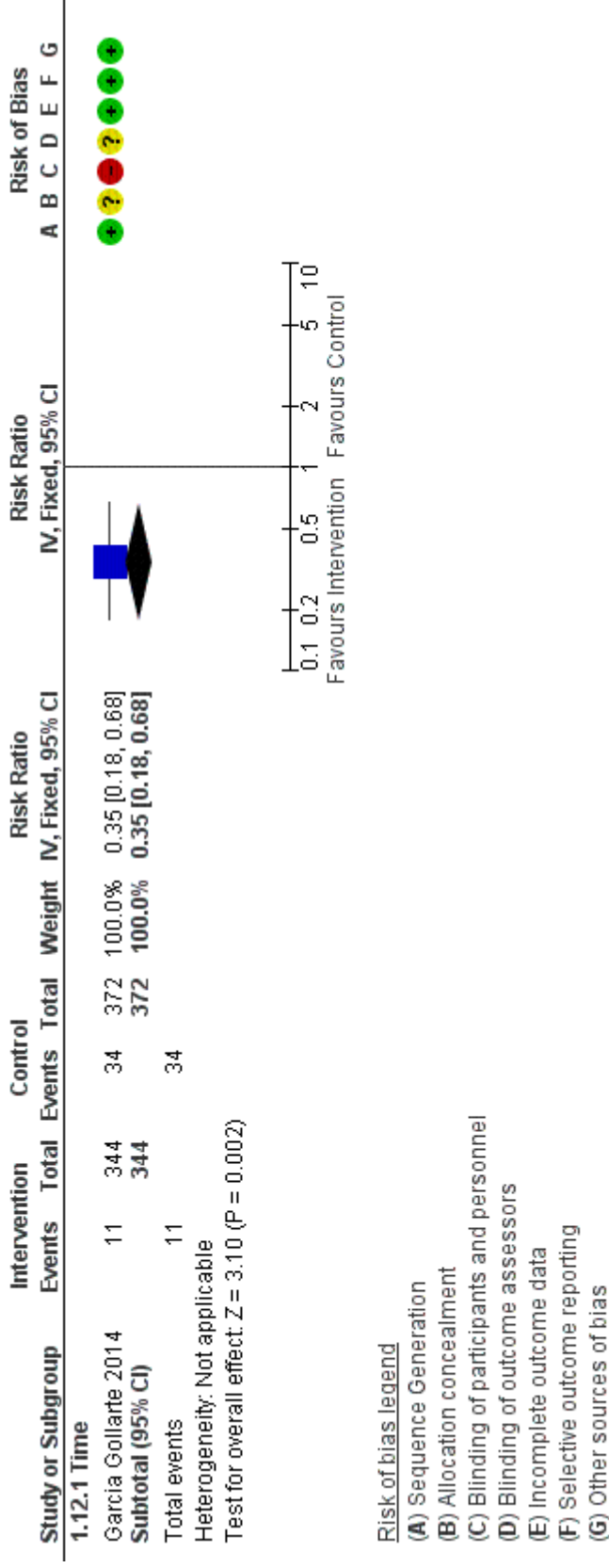
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.9 Udskrivelse til vanlig bolig/Discharge circumstances (After discharge).

Figure 7 (Analysis 1.11)



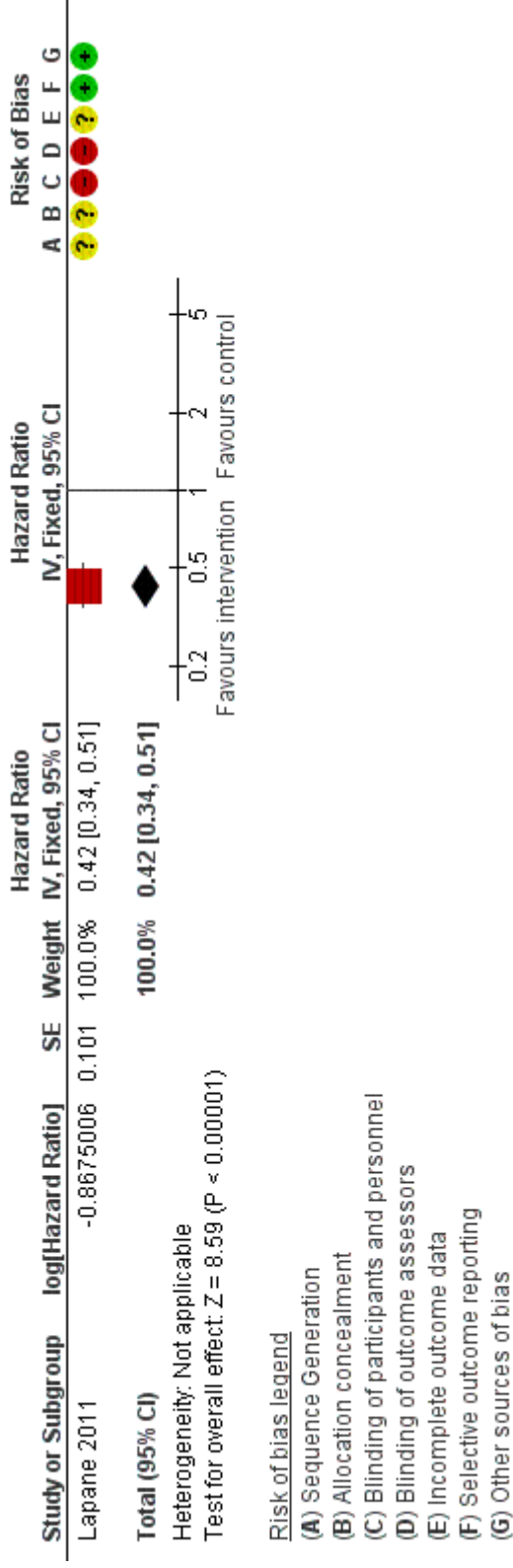
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.11 Forbrug af antipsykotika/Antipsycotics prescribed (After discharge).

Figure 8 (Analysis 1.12)



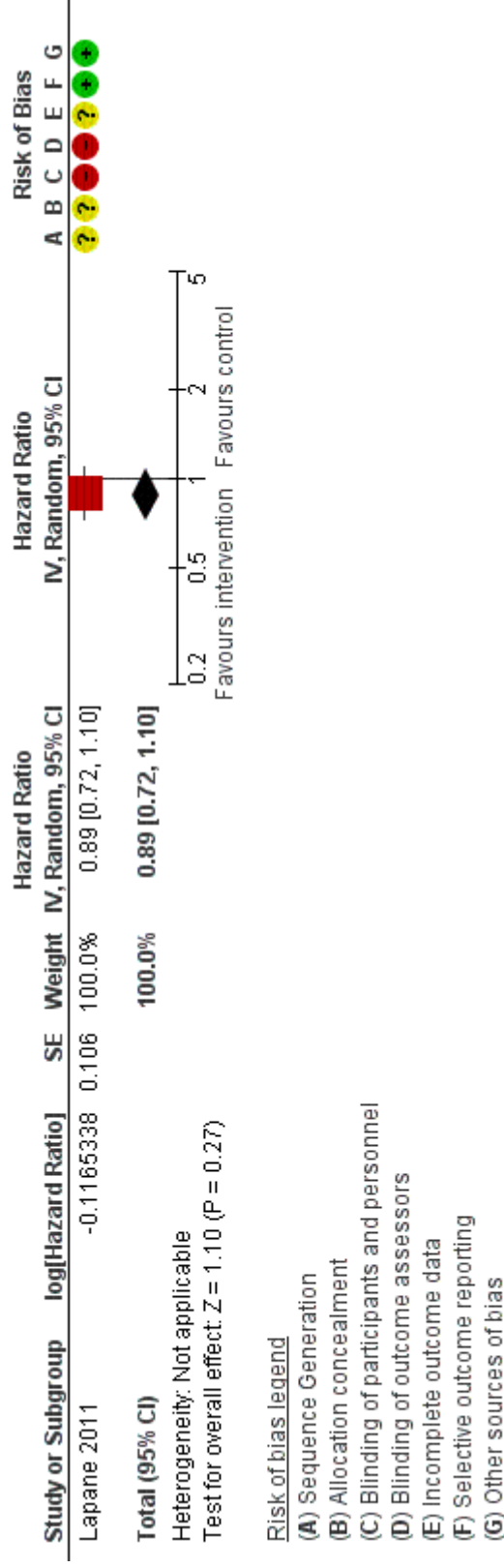
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.12 Any episode of delirium (Longest FU, min. 3 months).

Figure 9 (Analysis 1.13)



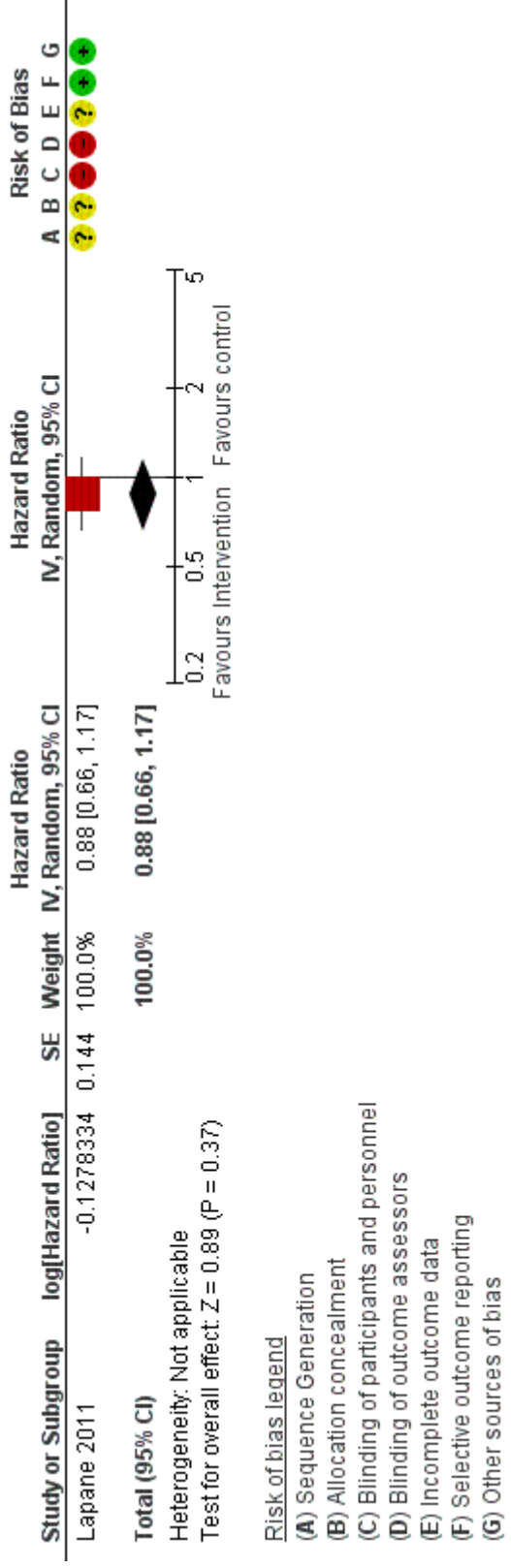
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.13 Incidence of delirium.

Figure 10 (Analysis 1.15)



Forest plot of comparison: 1 Intervention vs Control, outcome: 1.15 Unplanned hospitalisation.

Figure 11 (Analysis 1.16)



Forest plot of comparison: 1 Intervention vs Control, outcome: 1.16 Mortality.