



Universidade de Brasília

Antioxidants for preventing preeclampsia: a systematic review

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Objective

- Antioxidants for preventing preeclampsia and other maternal and fetal complications in women



Databases Research

- MEDLINE, Embase, Cochrane Central, mRCT, CRD, ISI Web of Science, Lilacs, SciELO and Scopus databases;
- No language restriction;
- No limits on date of publication;
- The references were researched to verify potential eligible studies;
- Grey literature: ProQuest Theses, Banco de Teses da Capes, FIGO, FEBRASGO.

Study Selection

- Screening the titles and abstracts;
- No authors' study blinding.
- Two reviewers independently and consensus

Eligibility Criteria

- Randomized Controlled trials;
- Antioxidants X placebo or no antioxidants;
- Low, moderate or high risk;
- Outcome preeclampsia.

Data Extraction

- Specific form
 - Preeclampsia
 - Severe preeclampsia
 - Preterm birth
 - Small-for-gestational-age infants
 - Baby death
 - Side-effects
- RevMan 5.1.2 & STATA 11

Quality Assessment & Risk of Bias

- Cochrane Handbook (Higgins 2011)
 - Random sequence generation
 - Allocation concealment
 - Blinding of participants and personnel
 - Blinding of outcome assessment
 - Incomplete outcome data
 - Selective reporting
 - Other bias

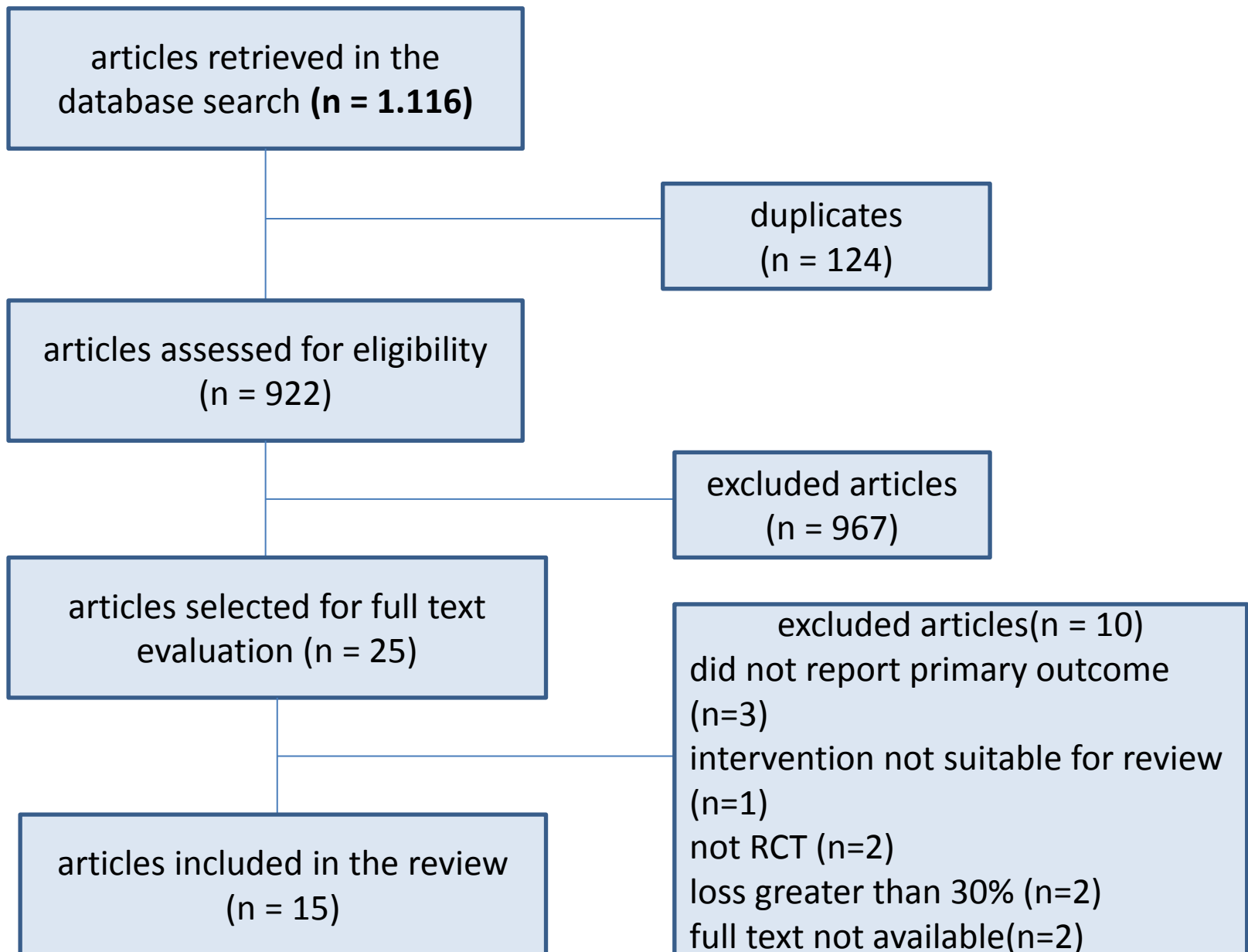
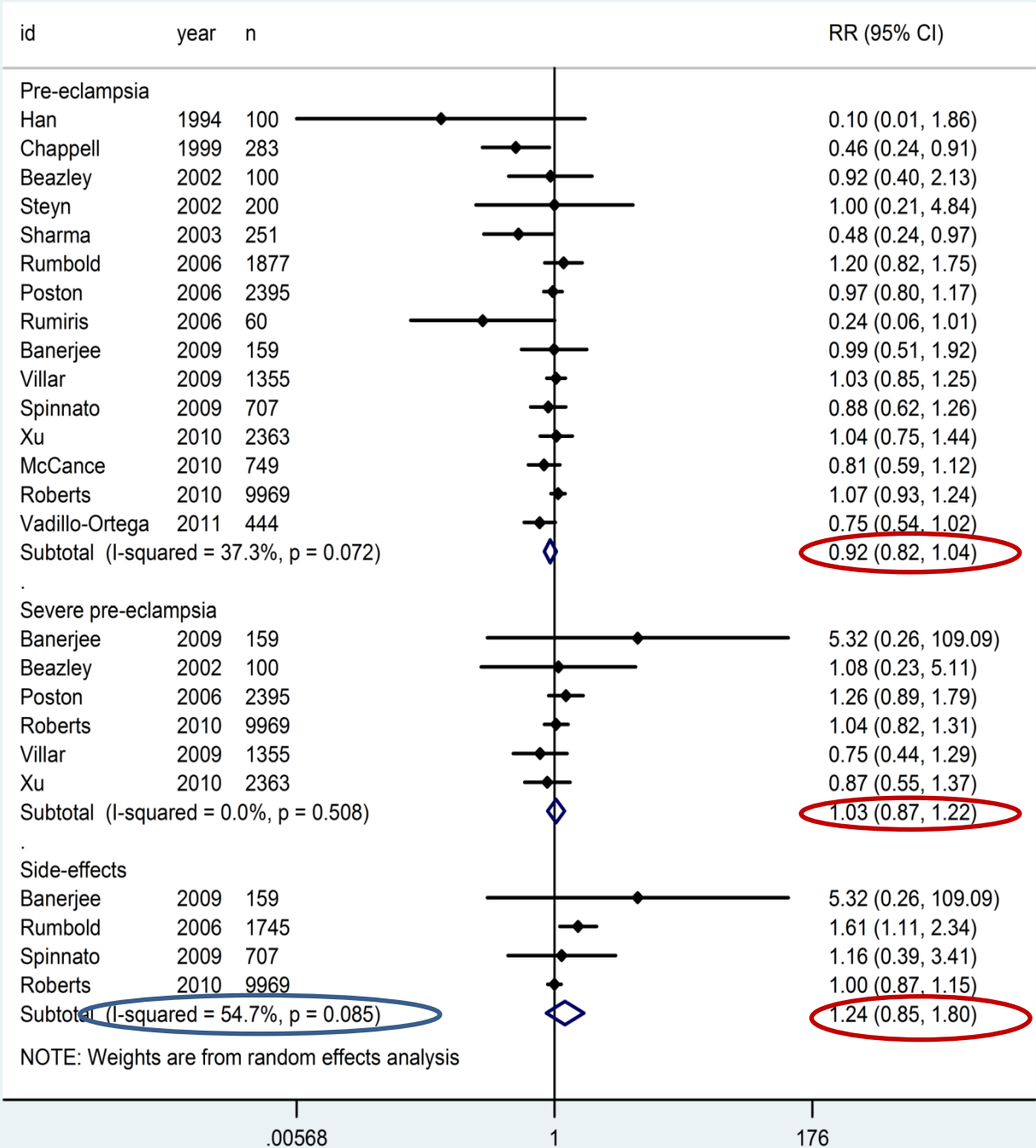
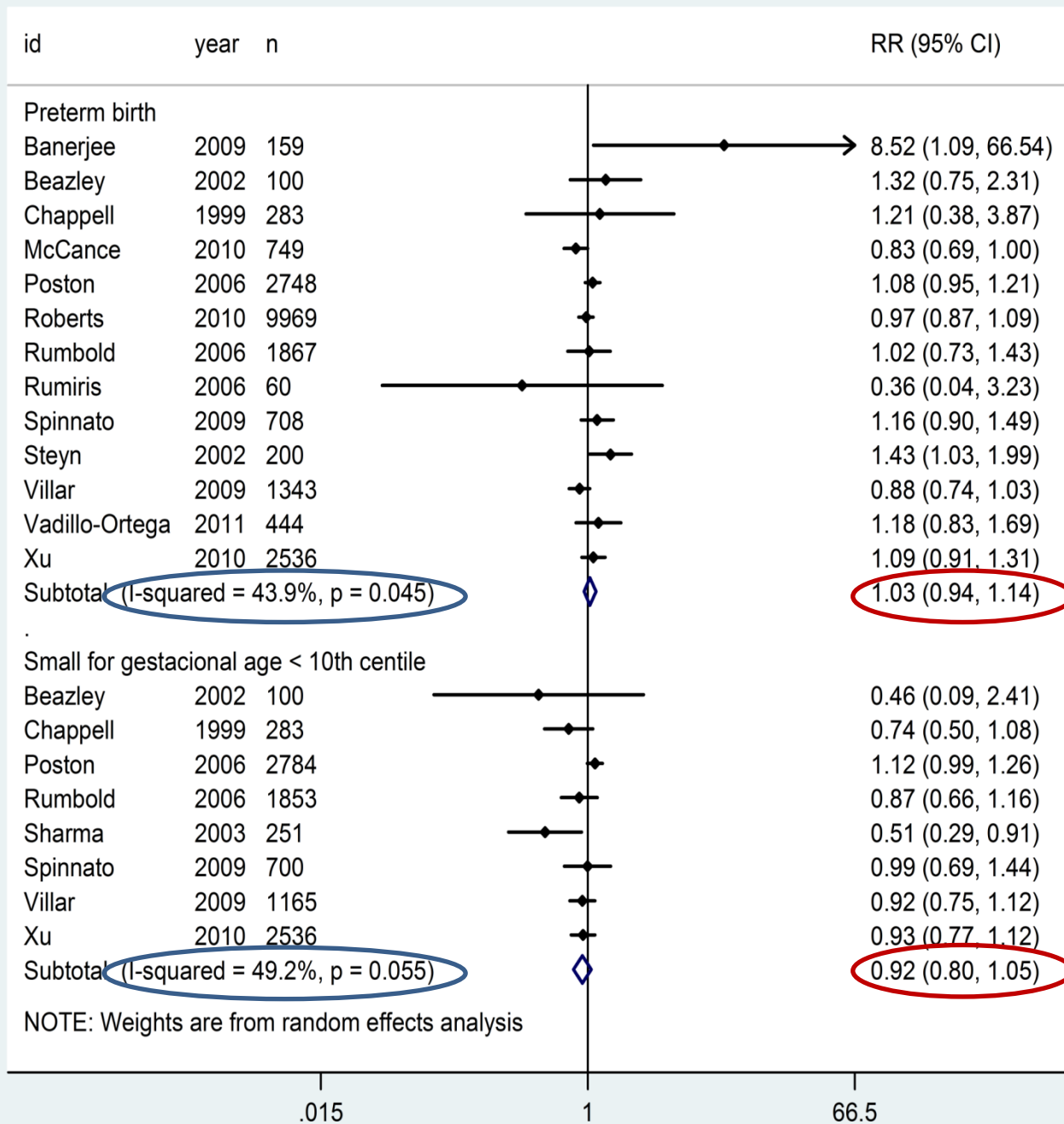
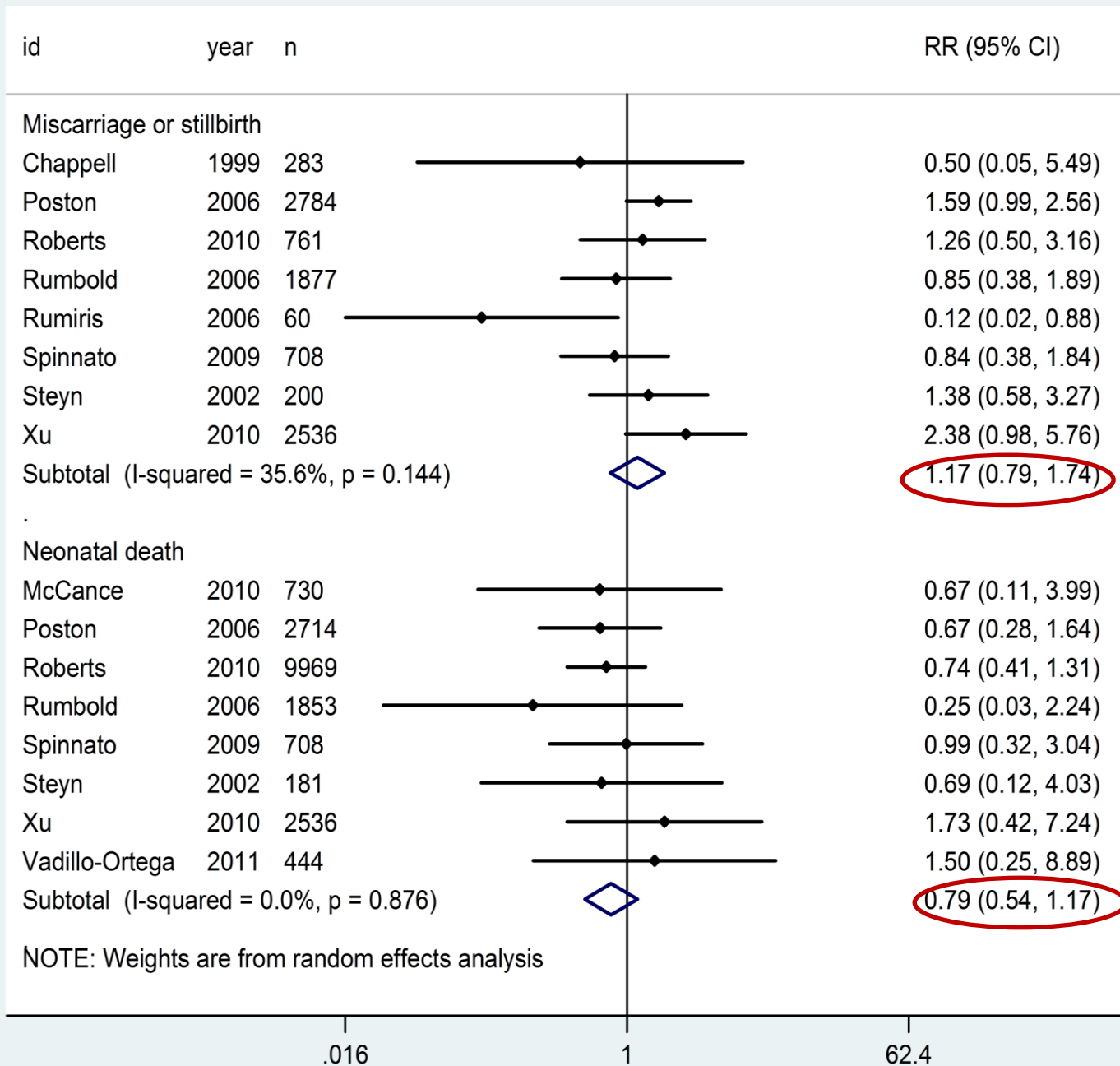


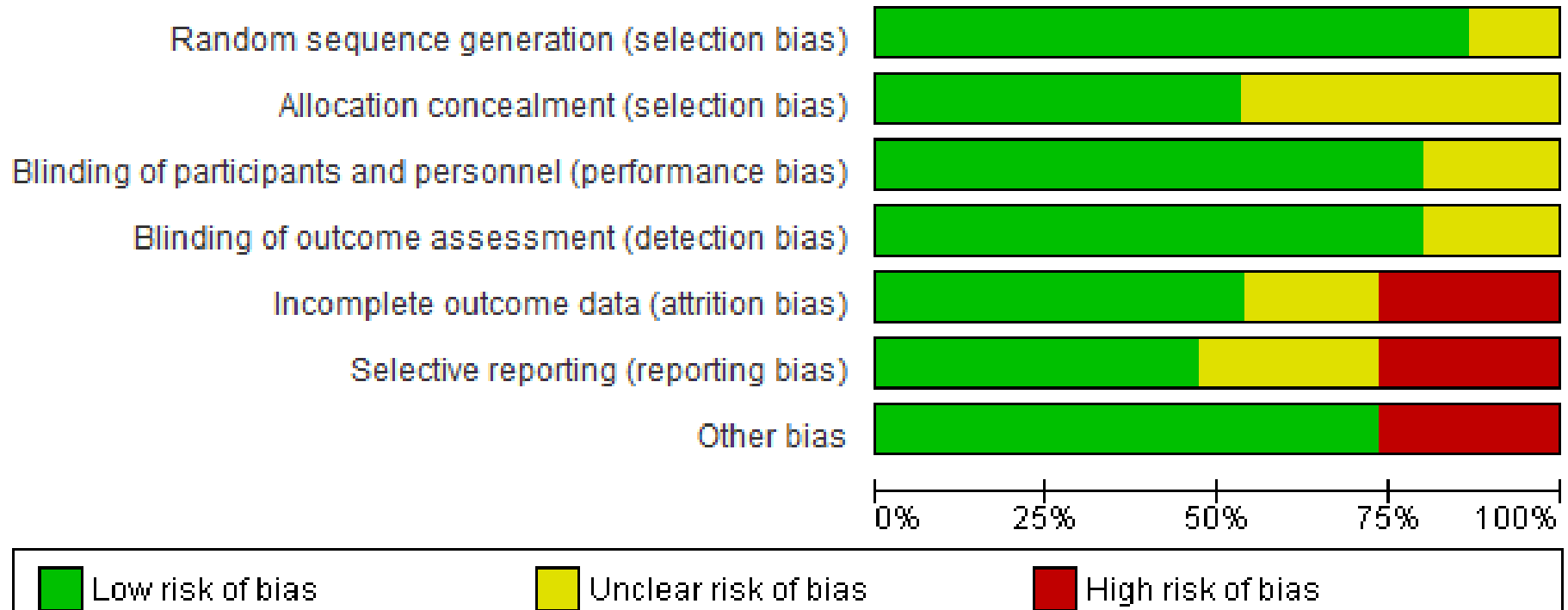
Figure 1. Flow chart of study selection







Quality assessment




Previous Evidence

- Six systematic reviews
- Similar results in four SR (Polyzos 2007, Rumbold 2008, Basaran 2010, Conde-Agudelo 2011)
- Only vitamin C (Rumbold 2005a)
 - Higher risk of preterm birth
 - Lower risk of preeclampsia
- Only vitamin E (Rumbold 2005b)
 - Lower risk of preeclampsia

Conclusion

- The evidence does not support the use of antioxidants
- Additional studies would probably not alter this result.



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Thank you!

Funding



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