

INTRODUCTION

OBJECTIVE: The effects of addition of growth hormone to patients during in vitro fertilization and embryo transfer (IVF-ET) are controversial. We try to compare the clinical outcomes of patients undergoing IVF-ET supplemented with or without growth hormone.

METHOD: Databases including Pubmed, EMBASE, Web of Science and Cochrane library were searched for randomized controlled trials of growth hormone AND IVF/ICSI/ART (assisted reproduction/ reproductive). Two independent reviewers performed the selection of references, assessment of reference quality and extraction of data. Meta-analyses were performed based on above references.

RESULTS

There are totally 17 randomized controlled trials were included into this meta analysis (Figure 1 shows the flow diagram of recruitment of studies).

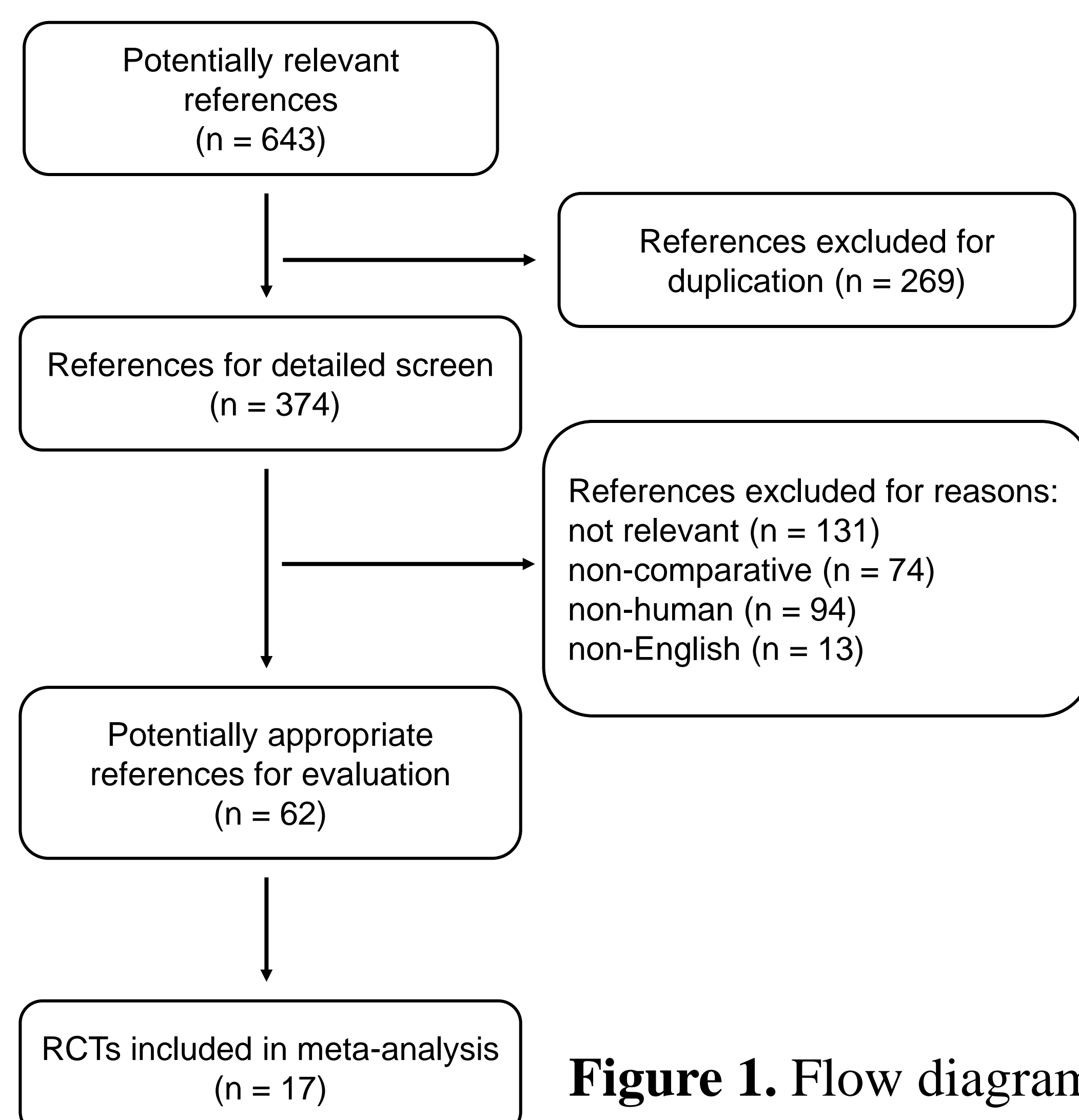


Figure 1. Flow diagram of recruitment of studies

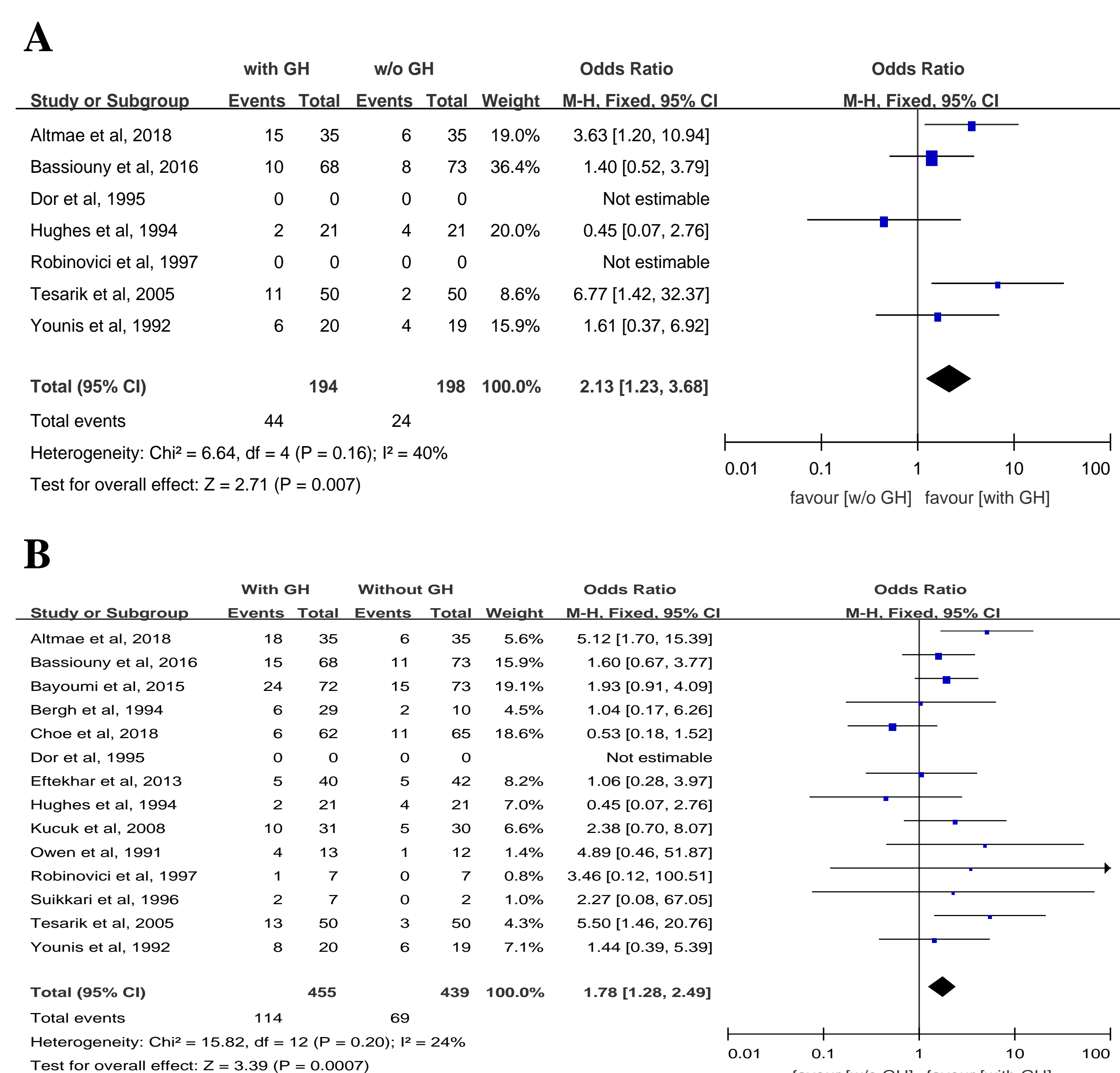


Figure 2. Forest plots of comparisons of primary outcomes, including live birth rate (A) and clinical pregnancy rate (B).

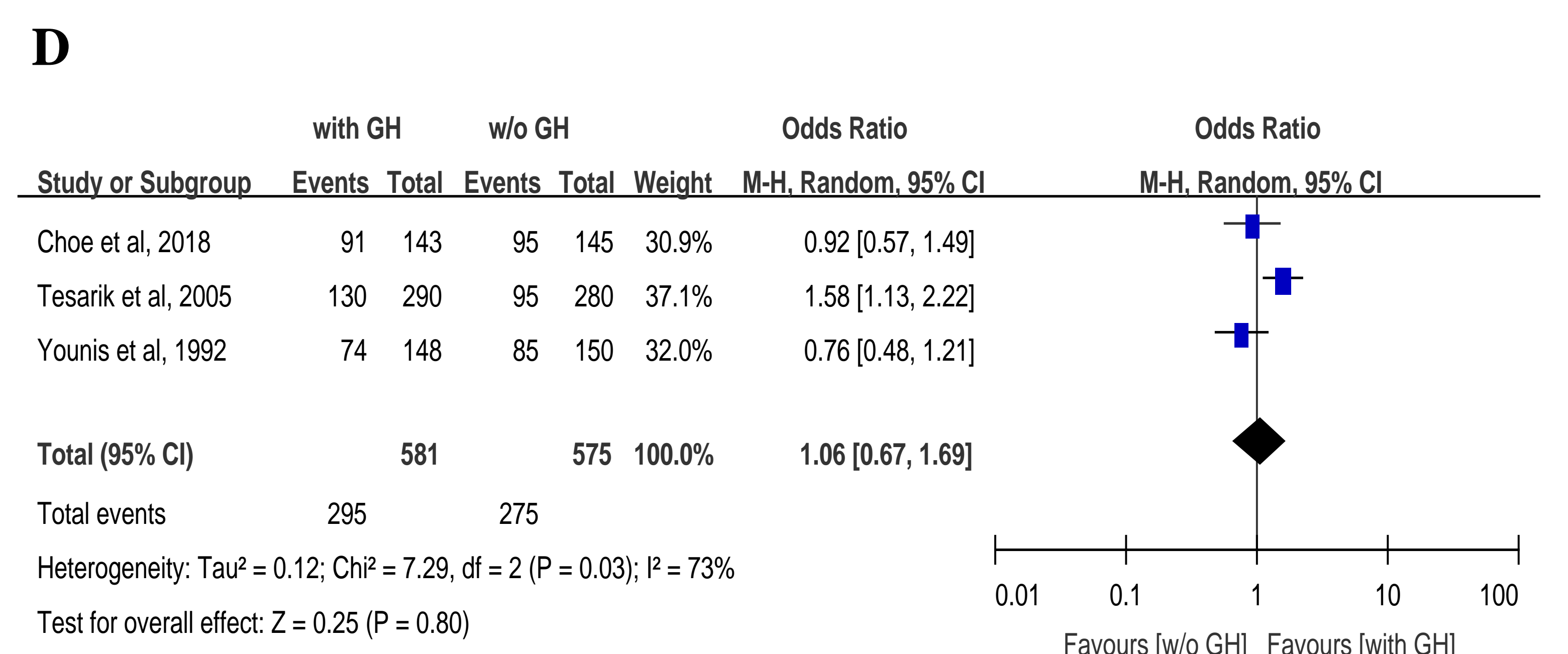
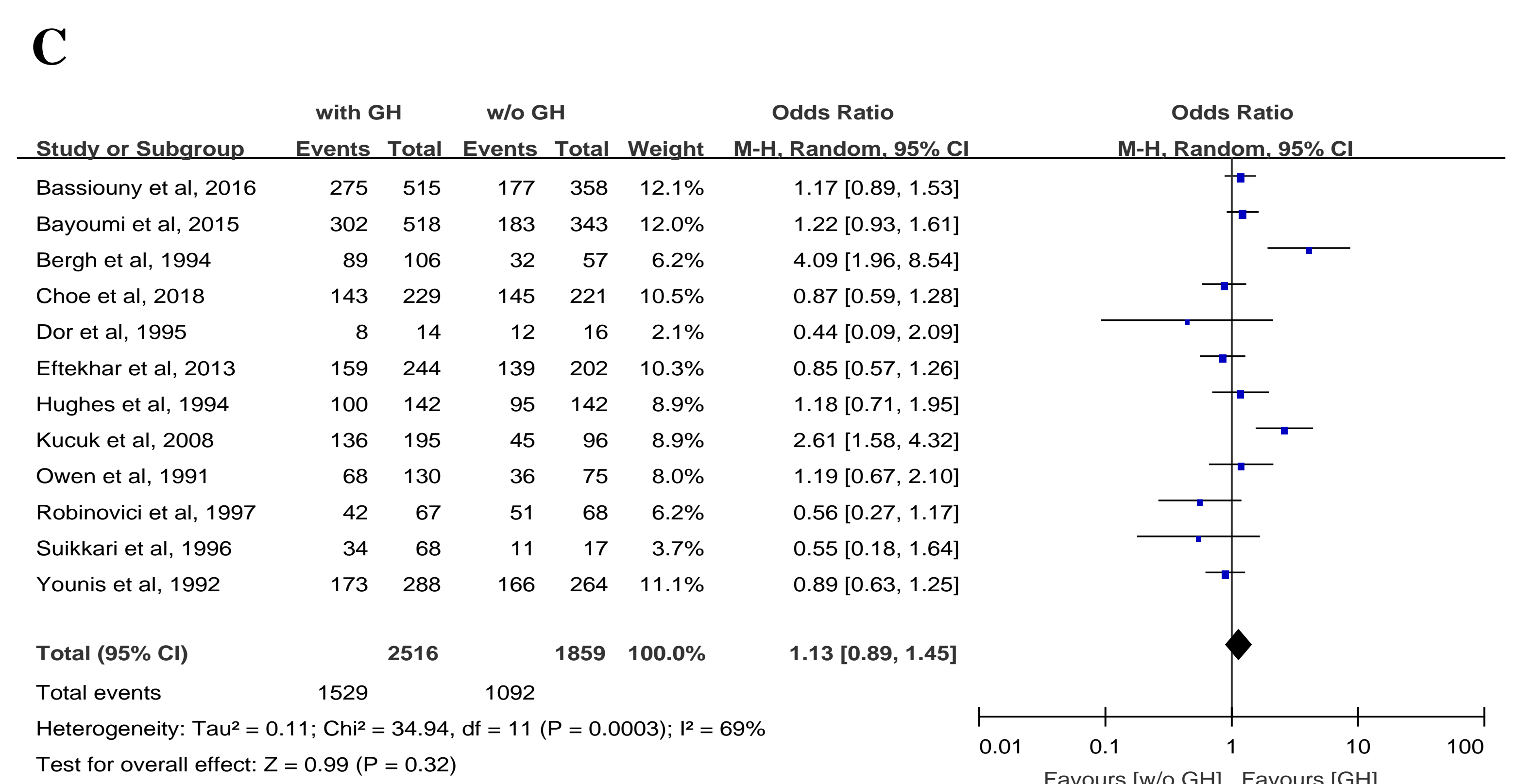
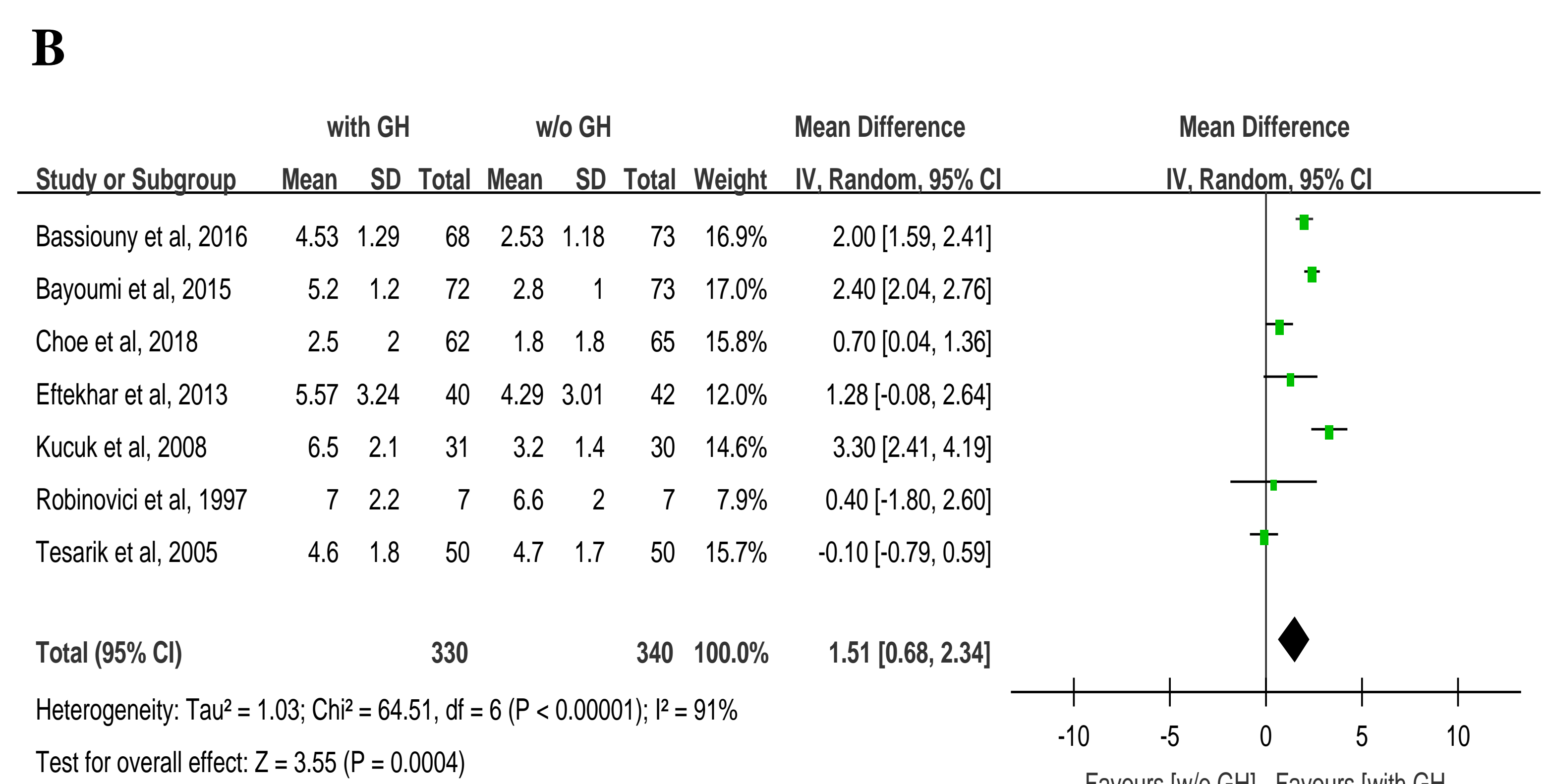
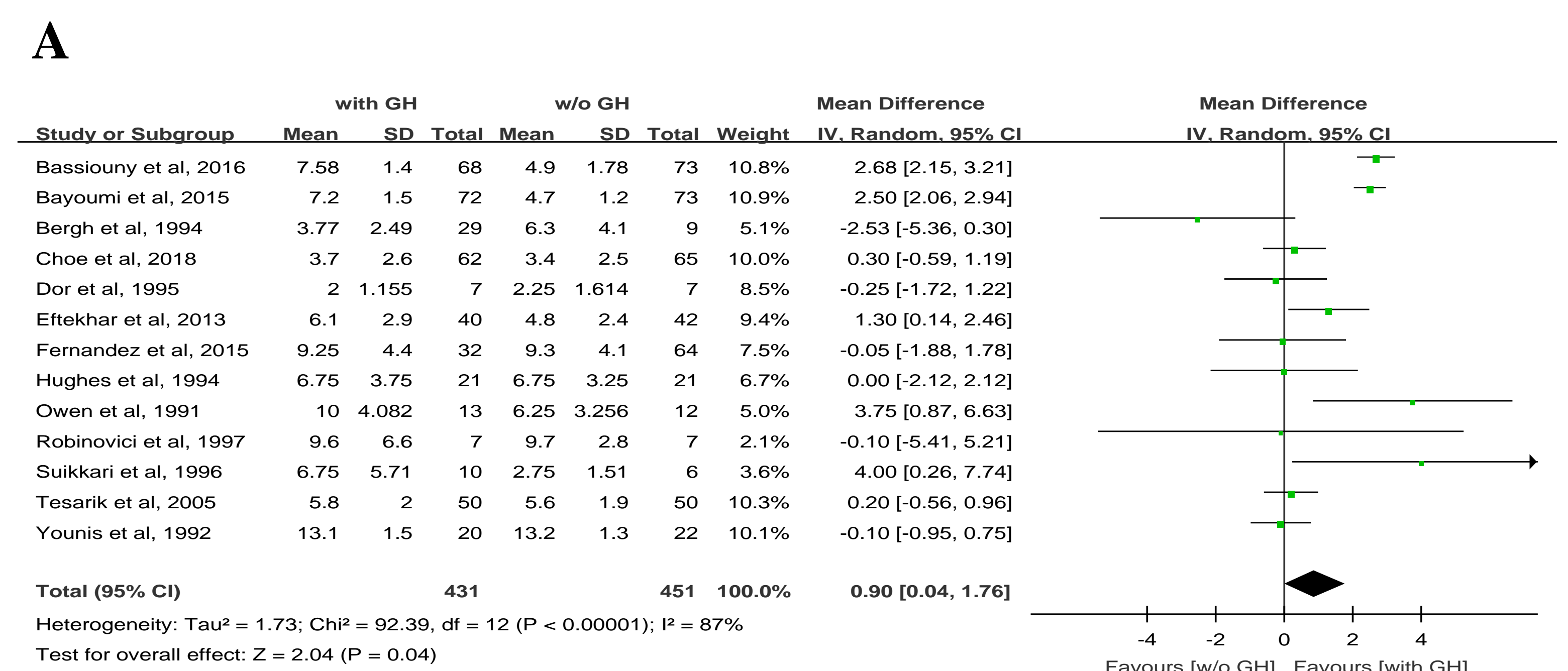


Figure 3. Forest plots of comparisons of secondary outcomes, including number of oocytes retrieved (A), number of MII oocytes (B), fertilization rate (C), numbers of good embryos (D).

CONCLUSION

Supplemented with growth hormone could significantly increase live birth rate, clinical pregnancy rate, number of oocytes retrieved, number of MII oocytes, but showed minimal effect on fertilization rate, numbers of good embryos.