

# Reproductive Function of Central Precocious Puberty in Girls A Systematic Review

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## INTRODUCTION

GnRH analogues are the treatment of choice for central precocious puberty. It has been proven beneficial effects on final adult height, but the reproductive function has many debate especially about PCOS. The criteria used for the diagnosis of PCOS can be more difficult to judge because it is not uniform between the studies. Usually Rotterdam criteria is used for diagnosis of PCOS. According to criteria, PCOS could be diagnosed, by two of the following three features: 1) oligo- or anovulation, 2) clinical and/or biochemical signs of hyper-androgenism, or 3) polycystic ovaries.

## OBJECTIVES & METHODS

The Medline, Cochrane, EMBASE, Web of Science, SCOPUS data bases were searched for studies published up to January 22, 2016 using key phrases "precocious puberty/early puberty," and "GnRH analogue." We were unified in 2003 Rotterdam criteria to the diagnostic criteria for PCOS.

Records identified through database searching Medline(1002), EMBASE(1673), Cochrane(69), Web of Science(965), SCOPUS(1685)

Records after duplicates removed (n =3254)

Records screened (n =3254)

Records excluded (n =3223)

Full-text articles assessed for eligibility (n =31)

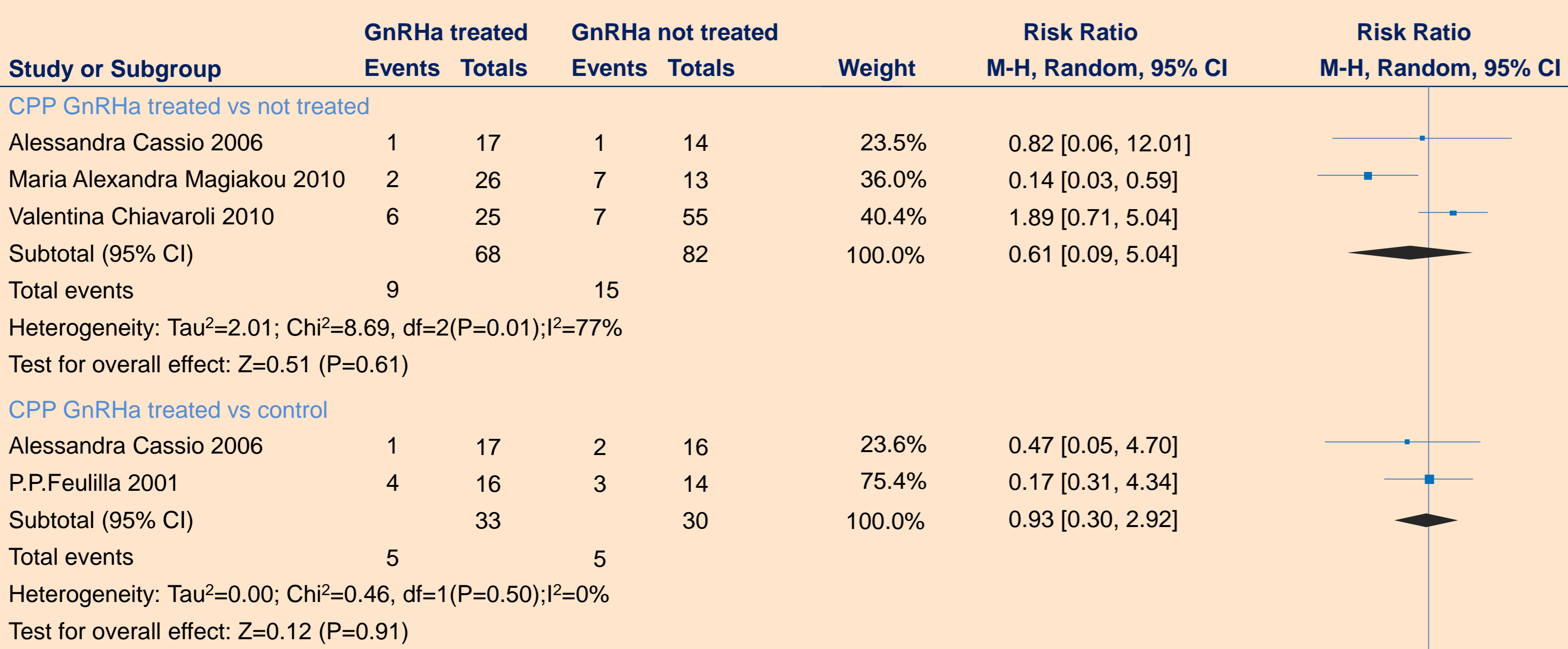
Full-text articles excluded, with reasons (n =18)

Studies included in quantitative synthesis (meta-analysis) (n =13)

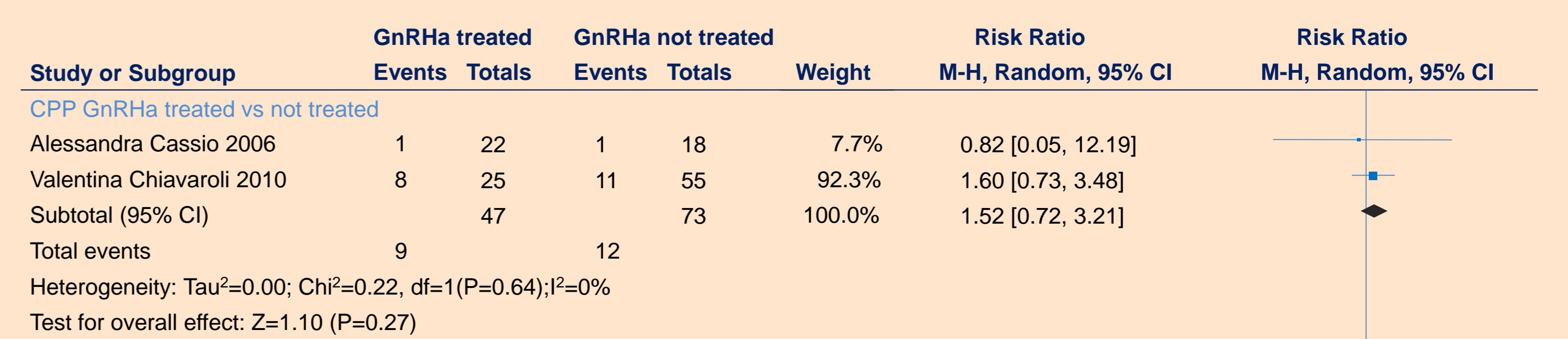
## RESULTS

The initial literature search yielded 3254 articles after the removal of duplicates. Of these, 3223 were excluded as not meeting inclusion criteria or non-relevant, leaving 31 reports for full-text review to assess eligibility.

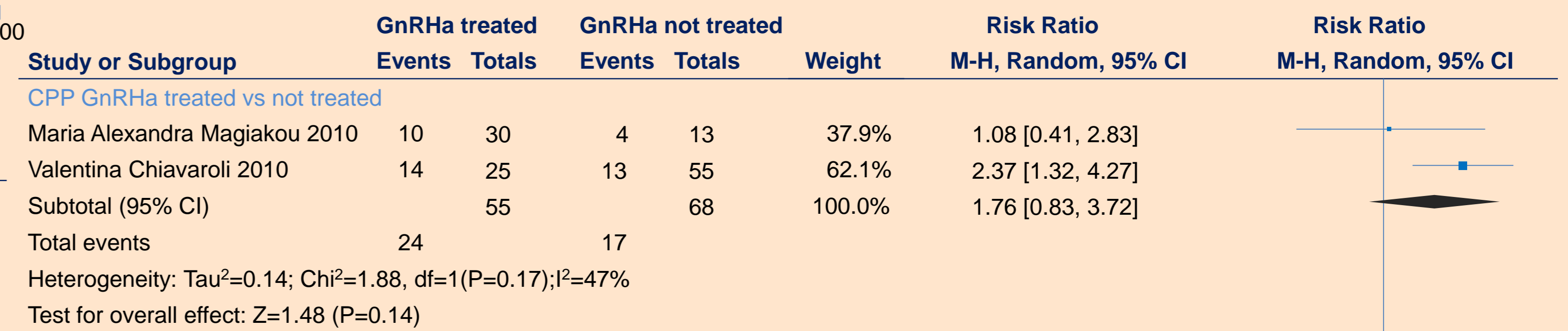
### Polycystic Ovary Morphology



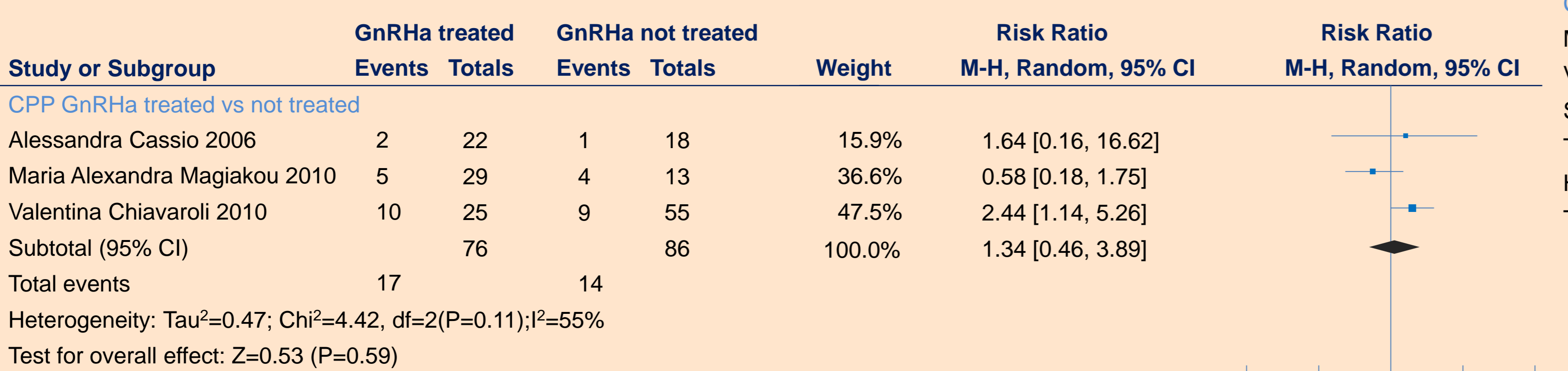
### Oligomenorrhea



### Hyperandrogenism



### Polycystic Ovary Syndrome



## CONCLUSIONS

Based on the studied literature, CPP patients with GnRH analogue treatment has a regular menstrual cycle at 80.5%. The available evidence supports little confidence regarding the impact of CPP with or without GnRH analogues on the develop of PCOS but suggests that early puberty in girls may increase the risk of PCOS. In order to increase the strength of the results, well-designed cohort studies with large sample size should be performed in future.

### Disclosure Information

Ji Hyun, Kim. M.D.

I have no financial relationships to disclose

