



**Title** Recombinant-FSH as adjuvant in assisted reproduction. Some data on the efficacy and efficiency of recombinant-FSH related to FSH of urinary origin.

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**Reference** Brief Reports No. BR02/2000. February 2000

*Since the birth of the first girl conceived by in vitro fertilization in 1978, assisted human reproduction technologies have opened new, interesting procreation possibilities for many people with fertility problems. In the two decades that have elapsed since the first successful case, the development and acceptance of these techniques has increased considerably.*

This report assesses the relative efficacy of recombinant FSH (r-FSH) and the cost-effectiveness of drug consumption compared to FSH of urinary origin for the two main therapeutic indications for this hormone: controlled ovarian hyperstimulation in assisted human reproduction and ovulation induction in the hypothalamic-hypophyseal portal system.

Based on the results of a systematic review of the scientific literature, the following **conclusions and recommendations** were drawn:

- Recombinant FSH seems to be slightly more effective in terms of consumption, and generated between 3% and 4% more pregnancies than urinary forms, although in no cases do pregnancy rates surpass 30%.
- However, the supposed extra efficacy of the recombinant drug does not seem to offset the price difference. Taking this variable into account, recombinant FSH is about 40% less cost-effective than urinary FSH.
- At the prices used, recombinant FSH is not cost-effective in relatively young women (aged below 35 years) with well-defined sterility problems and without other additional risk factors.
- It is likely that in other groups of women, such as women with low ovarian response, the greater efficacy of recombinant FSH will be particularly cost-effective.
- One cannot draw conclusions on effectiveness and cost-effectiveness of the recombinant formula in other situations. Therefore, we need to set up mechanisms to learn more about these aspects and establish criteria based on knowledge about the convenience of both drugs.
- Nevertheless, social trends, scientific progress, and industry interests do not favor the consumption of urinary substances in the long term.

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