

# Exsys Case Study

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## In Vitro Fertilization Cycle Stimulation

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Nothing says “mission critical” like the precise timing for cycle stimulation needed in infertility diagnosis and treatment. Below are the results from a knowledge automation system that was presented at the World Congress of In Vitro Fertilization and Embryo Transfer.

The following factors were built into the system:

- ◆ Cycle day
- ◆ Urinary luterinizing hormone (LH)
- ◆ Yesterday’s and today’s serum-estradiol (E2)
- ◆ Yesterday’s and today’s progesterone (P)
- ◆ Increase of E2 and P
- ◆ The number and size of sonographically measured follicles.

The system displayed the correct choice in over 90% of cases after extensive testing. It is the opinion of many doctors that this knowledge automation system presents a valuable tool to simplify routine procedures in IVF programs. It is also used as a teaching instrument for residents. This system dramatically speeds up decision-making processes for treatment.

