

# Gonadotropin Releasing Hormone Stimulation Test

This test is used for suspected gonadotropin deficiency or excess.

There is no patient preparation required. Test may be performed any time of day. Fasting is not required.

## **Procedure:**

- 1** Draw serum sample for LH FSH estradiol.  
Make sure to label specimen with collection time as well as patient identification.
- 2** Give 100 ug factrel (GnRH) (2.5 ug/Kg) – IV bolus and record the time.
- 3** Draw additional serum samples for LH and FSH testing at 15, 30 and 45 minutes post-factrel injection. Make sure to label the specimens with collection time as well as patient identification.
- 4** Draw a serum sample for LH, FSH and Estradiol at 60 minutes post-factrel injection. Make sure to label the specimen with collection time as well as patient identification.
- 5** Centrifuge all blood samples and send to the laboratory.

## **Interpretation:**

Normal adults respond with four to 10 increments in LH, and the LH response usually exceeds that of FSH. Normal prepubertal children have an absent or minimal response to GnRH. Infants, however, may respond. The response is augmented with the onset of puberty.