

LABORATORY COLLECTION MANUAL	CORTROSYN® STIMULATION TEST
Effective Date: 1-2004	Page 1 of 1

I. PURPOSE OF TEST:

Severe hypo function of the pituitary-adrenal axis is usually associated with low plasma cortisol levels. However, a basal level is not always evidence of adrenal insufficiency and does not give adequate information to make the diagnosis. Many patients that have been diagnosed with adrenal insufficiency have normal basal cortisol levels. An abnormal cortisol level only occurs when the patient is stressed. For this reason a criterion that should be used in establishing the diagnosis is the failure to respond to adequate corticotrophin stimulation. When presumptive adrenal insufficiency is diagnosed by a low CORTROSYN® test, further studies are indicated to determine if it is primary or secondary.

II. DOSAGE AND ADMINISTRATION

CORTROSYN® for injection may be administered intramuscularly or as a direct intravenous injection when used as a rapid screening test of adrenal function. Dosage and administration is per physician's orders.

III. TESTING PROTOCOL

- A. Order a Cortrosyn Stimulation test.
- B. Laboratory staff will draw a control (basal) blood sample for cortisol testing just prior to the administration of the medication.
- C. Nursing Administers the CORTROSYN® (For Outpatients, nurses from Centralized Scheduling will administer the medication)
- D. Laboratory staff will then draw a second blood sample for cortisol testing exactly 60 minutes after the medication is given.

IV. EXPECTED RESULTS:

- A. The control cortisol level should exceed 5 micrograms/deciliter. (Range is 5µ/dl -25µ/dl)
- B. Plasma cortisol level usually peak about 45-60 minutes after the does of CORTROSYN®. The normal response is an approximate doubling of the basal plasma cortisol level

V. PROCEDURE NOTES:

- A. If physician orders a 30-minute specimen in addition to the 60-minute specimen, order and perform a CORTISOL 30-MIN POST STIMULATION test in addition to the Cortisol Stimulation Test.
- B. If physician orders the second blood sample for cortisol testing at 30 minutes after the medication is given, instead of a 60-min Post stimulation test, order and perform a CORTISOL 30-MIN POST STIMULATION test at the 30-minute interval per physician's orders. If performing only pre-stimulation and 30-minute specimens, please TNP 60-minute specimen of the Cortisol Stimulation Test.
- C. The 30-minute level should show an increase of at least 7 µ/dl over above the basal level.
- D. If there are no orders for a specific time interval, the 60-minutes post administration of CORTROSYN® is the preferred time interval.

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Reference:

CORTROSYN® Package insert, Organon Inc. 2002.