

Testosterone

Description	Testosterone can be measured randomly or as part of a dynamic function test. Measurement is useful in the investigation of abnormalities of reproductive function.
Indication	To facilitate the differential diagnosis of hypogonadism. To investigate male infertility or other sexual dysfunction, erectile dysfunction and gynaecomastia. To evaluate hypopituitarism and Klinefelter's syndrome. To investigate the causes of anovulation, amenorrhea, hirsutism and virilisation in women. To aid the diagnosis of polycystic ovarian syndrome, androgen secreting tumours, congenital adrenal hyperplasia and other endocrine and iatrogenic causes.
Additional Info	Circulating testosterone is strongly bound sex hormone-binding globulin and loosely bound to albumin, in male only 1-3% of testosterone remains unbound. Testosterone exhibit rhythmic variations in circulating concentrations, peaking at 9am.
Concurrent Tests	DHEA, androstenedione, LH, FSH, SHBG
Dietary Requirements	N/A
Interpretation	Low plasma testosterone level in men indicates hypogonadism, further differential diagnosis is necessary to distinguish primary from secondary causes. Elevated plasma testosterone in women is suggestive of the polycystic ovarian syndrome (PCO), ovarian tumour, congenital adrenal hyperplasia or adrenal tumour. Following surgery for adrenal or ovarian tumour failure of plasma testosterone to return to normal female levels indicates incomplete surgery or recurrence.
Collection Conditions	9am collection of sample preferred
Frequency of testing	As required