



<sup>a</sup>Free testosterone is preferred in individuals with conditions that alter SHBG concentrations. The following conditions are associated with **decreased SHBG levels**: diabetes mellitus, obesity, use of certain medications (ie, glucocorticoids, progestins, or androgenic steroids), hypothyroidism, nephrotic syndrome, acromegaly, and variants in the *SHBG* gene. The following conditions are associated with **increased SHBG levels**: HIV, aging, hyperthyroidism, cirrhosis/hepatitis, use of certain medications (ie, anticonvulsants or estrogens), and variants in the *SHBG* gene.

<sup>b</sup>For testosterone test options, see the [Testosterone Tests Comparison](#) table.

| Abbreviations |                              |
|---------------|------------------------------|
| LH            | Luteinizing hormone          |
| FSH           | Follicle-stimulating hormone |
| SHBG          | Sex hormone-binding globulin |

**Reference**  
 Bhasin S, Brito JP, Cunningham GR, et al. Testosterone therapy in men with hypogonadism: an Endocrine Society clinical practice guideline. *J Clin Endocrinol Metab.* 2018;103(5):1715-1744.