

# Module 2

## Adrenal and Pituitary Disorders

By Steven M. Smith, Pharm.D., MPH, BCPS; and Katherine Vogel Anderson, Pharm.D., BCACP

Reviewed by Michael P. Kane, Pharm.D., BCPS, BCACP; and Marianne E. Miller, Pharm.D., BCACP, CDE

### Learning Objectives

1. Distinguish the etiologies of adrenal excess and adrenal insufficiency (AI) according to clinical presentation and laboratory assessment.
2. Design an appropriate treatment plan for a patient with adrenal excess (hypercortisolism or hyperaldosteronism), including a monitoring plan to assess response and guide subsequent therapy changes.
3. Design an appropriate treatment plan for a patient with AI, including a monitoring plan to assess response and guide subsequent therapy changes.
4. Analyze differences among three common treatment modalities for growth hormone (GH) excess.
5. Devise a pharmacologic treatment plan for a patient with GH deficiency.
6. Classify causes of, and design an appropriate treatment plan for, panhypopituitarism.
7. Evaluate a patient with adrenal or pituitary disorders for the appropriateness of pharmacologic therapy compared with nonpharmacologic interventional therapy.

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# Thyroid and Parathyroid Disorders

By Eric Schneider, Pharm.D., BCPS

Reviewed by Andrea Traina, Pharm.D., BCPS, BCACP; and Kellie L. Knight, Pharm.D., BCPS

## Learning Objectives

1. Apply recent data on thyroid physiology and the risk of subclinical thyroid disease to the management of patients with thyroid disorders.
2. Design a pharmacotherapy plan for a pregnant patient with hypothyroidism to minimize fetal and maternal risks.
3. Apply current evidence relating to combination T<sub>3</sub> plus T<sub>4</sub> therapy in improving neuropsychological functioning in the patient with hypothyroidism.
4. Apply the conclusions from recent literature of Graves disease management to increase the probability of remission and minimize ophthalmopathy.
5. Assess the potential role of thyromimetic agents in the management of patients with dyslipidemia.
6. Devise an appropriate pharmacotherapeutic regimen for a patient with hypoparathyroidism.
7. Evaluate drugs used to manage hyperparathyroidism and develop strategies for their use.

# Hypogonadism

By Daniel M. Riche, Pharm.D., BCPS, CDE; and Justin J. Sherman, Pharm.D., MCS

Reviewed by Mary Wun-Len Lee, Pharm.D., FCCP, BCPS; and Jessica L. O'Neill, Pharm.D., BCACP

## Learning Objectives

1. Apply knowledge of the etiology and clinical presentation to identify patients with hypogonadism.
2. Distinguish between total testosterone, free testosterone, bioavailable testosterone, and other laboratory parameters associated with the diagnosis of hypogonadism and the goals of treatment with testosterone replacement therapy.
3. Evaluate the potential benefits and risks associated with the treatment of hypogonadism.
4. Justify appropriate treatment options for the patient with hypogonadism by evaluating the different formulations of testosterone available.
5. Apply an algorithm to assist in treatment decisions for hypogonadism.