



Little is understood about the adaptive changes of the right ventricle to chronically increased afterload. Future investigations are needed to understand and better treat cor pulmonale. Less information is available about pulmonary thromboembolic disease, although new inhibitors of the coagulation cascade have been developed. Studies are needed in the area of genetic predisposition to thromboembolic disease and vascular dysfunction leading to thrombus formation. The role of thrombolytic therapy outside the setting of shock and the best management strategy after an unprovoked pulmonary embolism need to be clarified.

#### SUGGESTED READINGS

Barst RJ, Gibbs JS, Ghofrani HA, et al: Updated evidence-based treatment algorithm in pulmonary arterial hypertension, *J Am Coll Cardiol* 54(Suppl):S78–S84, 2009.

Lansberg MG, O'Donnell MJ, Khatri P, et al: Antithrombotic and thrombolytic therapy for ischemic stroke: antithrombotic therapy and prevention of

thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines, *Chest* 141(Suppl):7S–47S, 2012.

Newman JH, Phillips JA III, Loyd JE: Narrative review: the enigma of pulmonary arterial hypertension: new insights from genetic studies, *Ann Intern Med* 148:278–283, 2008.

Preston IR: Properly diagnosing pulmonary arterial hypertension, *Am J Cardiol* 111:2C–9C, 2013.

Stacher E, Graham BB, Hunt JM, et al: Modern age pathology of pulmonary arterial hypertension, *Am J Respir Crit Care Med* 186:261–272, 2012.

Stein PD, Woodard PK, Weg JG, et al: Diagnostic pathways in acute pulmonary embolism: recommendation of the PIOPED II investigators, *Am J Med* 119:1048–1055, 2006.

Tapson VF: Acute pulmonary embolism, *N Engl J Med* 358:1037–1052, 2008.

Wells PS, Anderson DR, Rodger M, et al: Excluding pulmonary embolism at the bedside without diagnostic imaging: management of patients with suspected pulmonary embolism presenting to the emergency department by using a simple clinical model and d-dimer, *Ann Intern Med* 135:98–107, 2001.