

# Preface

## Modern Imaging of the Mediastinum



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*Editor*

The mediastinum is an anatomically complex region of the thorax that includes numerous organs and structures from which a wide variety of abnormalities arise that may be of neoplastic, infectious/inflammatory, congenital, vascular, or lymphatic etiology. Scientific knowledge regarding the mediastinum and many of its associated neoplasms has advanced tremendously through the work of the International Thymic Malignancy Interest Group (ITMIG), a multidisciplinary society of experts in surgery, oncology, pathology, radiology, and neurology founded in 2010. ITMIG has developed and published numerous standards and policy papers and collaborated with the International Association for the Study of Lung Cancer to create the first standardized TNM staging system for thymic epithelial neoplasms. One of these standards is a classification system that divides the mediastinum into 3 unique compartments based on cross-sectional imaging techniques, such as computed tomography (CT), magnetic resonance (MR) imaging, and PET/CT: the prevascular, visceral, and paravertebral compartments. This modern model of the mediastinum represents a significant step forward, as cross-sectional imaging modalities are the primary method of evaluating normal structures, anatomic variants, and abnormalities in this region of the thorax. It is anticipated that the widespread implementation of this model will improve lesion characterization, assist health care professionals in generating a focused differential diagnosis for detected masses, and facilitate appropriate biopsy and treatment plans.

In this issue of the *Radiologic Clinics*, titled “Imaging of the Mediastinum,” my colleagues and I present an updated exploration of the role of radiologists in the evaluation of suspected or known mediastinal disease. The articles in this issue include a wide range of topics, some of which are broad and review advances in the imaging of specific mediastinal compartments, using the ITMIG model as substrate. Others are more specific and delve into the details of the TNM staging system for such cancers as esophageal cancer and thymic epithelial neoplasms. Several radiologic-pathologic correlation articles bridge the gap between imaging findings, staging systems, and histopathologic analysis. Finally, excellent focused reviews are included on the expanding role of MR imaging in the evaluation of mediastinal abnormalities, potential pitfalls in evaluating mediastinal masses, and the methods used by interventional radiologists to biopsy and treat mediastinal lesions. I sincerely thank the authors for contributing their time and expertise to this innovative issue on imaging of the mediastinum.

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