# Atlas and Anatomy of PET/MRI, PET/CT and SPECT/CT

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# Preface

Since we published *Sectional Anatomy: PET/CT and SPECT/CT* in 2007, there has been a significant increase in the use of hybrid imaging in clinical practice and also reports of higher sensitivity and specificity than those of the single imaging modality, thus making the integrated approach a more accurate imaging test.

The precise lesion localization within the anatomic context, which frequently is critical, may not be possible in PET or SPECT. It is not easy to consider three dimensions in our mind's eye and view the relationship of the pathology with surrounding normal organs in axial, coronal, and sagittal imaging. With gradual improvement of instruments as well as software for attenuation corrections, we have used new PET/CT and SPECT/CT images and also added PET/MRI images.

In all hybrid imaging, a good workflow is paramount for cost-effectiveness in clinical practice. Since data acquisition on emission systems can only be dynamic or static, the major variations of imaging protocols are on the anatomic imaging side. This atlas intends to provide educational information on sectional anatomy and illustrate common pathologies for trainees and practitioners in the fields of nuclear medicine, radiology, oncology, neurology, cardiology, and general medicine.

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