The field of genito-urinary oncology is rapidly evolving at virtually every level. Significant advances have been made in our understanding of the molecular and cellular events which contribute to the generation of GU malignancies. At the same time, similar advances have been made in the clinical arena which have improved the diagnosis and treatment of urologic cancers. This volume attempts to summarize those advances which most impact us as clinicians, and has been divided into three sections. Section One, `Diagnostic advances: the use of molecular medicine in the diagnosis and prognosis of GU malignancies', details how epidemiologic studies and new molecular techniques are impacting our ability to diagnose and treat GU tumors. Section Two, `Surgical and radiation advances', details the recent major advances in the treatment of organ-confined cancers. Section Three, `Medical advances', addresses major issues in the treatment of metastatic disease. This volume will serve as a compendium of the advances, both at the basic science and clinical levels, which are currently impacting practicing oncologists and urologists.