Abstract:
Computed tomography (CT) represents the current standard imaging modality in muscle invasive bladder cancer; however, local tumor and lymph node staging is often impaired. Magnetic resonance imaging (MRI) with diffusion-weighted sequences, determination of apparent diffusion coefficient (ADC) values or utilization of supraparamagnetic iron nanoparticles potentially exhibits advantages in the assessment of local tumor and lymph node involvement and therefore might play a role in the staging of bladder tumor in the future. Likewise, positron emission tomography (PET) with the currently used tracers (18)F fluorodeoxyglucose ((18)F-FDG), (11)C-choline and (11)C-acetate is being investigated in bladder cancer patients, mostly in combination with diagnostic CT. Although promising results could be obtained for PET/CT investigations to some extent, the true value cannot be determined at present.