

Genitourinary

Disease / Medical condition	Biomarker	Imaging Technique	Investigators	Comments	Disease Category
Abscess	Leukocyte accumulation	SPECT	Fischman AJ	Tc-99m HMPAO improvement over Tl-201 and Ga-67	Neurological Inflammatory Musculoskeletal Genitourinary Infectious disease Gastrointestinal
Adenopathy, lymphoma and metastatic disease	Lesion volume	US CT MRI	Harisinghani M Mueller PR O'Neill MJ Saini S	Anatomic marker of disease presence	Oncology / Neoplasm Genitourinary
Adrenal neoplasm	Relative % contrast washout	CT	Boland GW Hahn PF Mueller PR	Differential diagnosis of adrenal masses	Oncology / Neoplasm Genitourinary
Benign prostatic hypertrophy	Prostate volume	US CT MRI	Hahn PF Mueller PR O'Neill MJ		Oncology / Neoplasm Genitourinary
Intra-abdominal abscess	Cyst composition / tissue characterization	US CT MRI	Mueller P		Gastrointestinal Genitourinary Infectious disease
Ovarian neoplasm / presence and viability	Glucose metabolism	PET	Fischman AJ	Non-specific marker with wide variety of applications	Oncology / Neoplasm Genitourinary
	ROC curve analysis of 13 CT radiographic parameters	CT	O'Neill MJ	Predictive model of relative success of surgical cytoreduction	Oncology / Neoplasm Genitourinary
Prostate cancer	Prostate volume	US CT MRI	Hahn PF Mueller PR O'Neill MJ		Oncology / Neoplasm Genitourinary
Prostate cancer	Prostate-specific antigen (PSA)	Optical	Ntziachristos V Weissleder R	Active, stable Fluorochromes	Oncology / Neoplasm Genitourinary
Prostate cancer	Spermine levels	MRS magic angle spinning	Cheng LL Gonzalez RG	Proposed endogenous inhibitor of prostate CA growth	Oncology / Neoplasm Genitourinary
Renal neoplasm / primary and secondary	Cyst composition / tissue characterization	US CT MRI	Mueller PR		Oncology / Neoplasm Genitourinary
Renal neoplasm / primary and secondary	Glucose metabolism	PET	Fischman AJ		Oncology / Neoplasm Genitourinary
Renal neoplasm / primary and secondary	Lesion volume	US CT MRI	Mueller PR O'Neill MJ Saini S	Anatomic marker of disease presence	Oncology / Neoplasm Genitourinary

Genitourinary

Simple renal cysts	Cyst composition / tissue characterization Soft tissue inflammation	US CT MRI	Mueller PR		Oncology / Neoplasm Genitourinary
--------------------	---	-----------------	------------	--	--------------------------------------