

Endocrine

Disease / Medical condition	Biomarker	Imaging Technique	Investigators	Comments
AIDS wasting syndrome	Body fat composition	CT	Rosenthal DI	
AIDS wasting syndrome / lipodystrophy	Increased abdominal visceral fat associated with decreased bone mineral density	Quantitative CT Dual energy X-ray absorptiometry (DEXA)	Rosenthal DI	
Allergic drug reaction	Increased pulmonary interstitial markings	CT	McLoud TC Shepard J	
Calculus disease	MR cholangio-pancreatography	MRI	Sahani D Prasad S	
Cholecystitis	Gallstones, gallbladder wall thickening	US CT MRI	Hahn PF O'Neill MJ Mueller P	
Choledo-cholithiasis	Biliary ductal dilatation	US CT MRI	Hahn PF O'Neill MJ Mueller P	
Cholelithiasis	Gallstones	US CT MRI	Hahn PF O'Neill MJ Mueller P	
Diabetes	Directed molecular probes for beta cell mass	MRI	Moore A Bogdanov AJ Weissleder R	
Hepatic focal nodular hyperplasia	Liver tissue characterization	MRI	Hahn PF Halpern EF Sahani D	Using combined ferrumoxide / Gd-DPTA
Hepatic focal nodular hyperplasia	Liver tissue characterization	MRI	Hahn PF Harisinghani M Mueller PR Weissleder R	Using ultrasmall superpara-magnetic iron oxide, mangafodipir trisodium
Myocarditis	Myocardial function contractility Perfusion / diffusion	MRI	Brady T	
Myocarditis	Myocardial function contractility Perfusion / diffusion	Nuclear medicine	Fischman A	
Myopathy	Soft tissue inflammation	MRI	Palmer W Rosenthal DI	
Obesity	Body fat composition	Quantitative CT MRI US	Rosenthal DI	
Osteopenia	Bone mineral density	Plain radiographs Dual energy X-ray absorptiometry (DEXA) CT	Rosenthal DI	Must establish bone strength as well as density

Endocrine

Osteoporosis	Bone mineral density	Plain radiographs Dual energy X-ray absorptiometry (DEXA) CT	Rosenthal DI	Must establish bone strength as well as density
Pancreatic function	Acinar cell receptor binding	MRI	Brady TJ Shen TT Weissleder R	Secretin monocrySTALLINE iron oxide nanoparticles (MION)
Pancreatitis	Chemotactic peptide uptake	SPECT	Fischman AJ	Via 99mTc labeled peptide analog
Pancreatitis	Ductal irregularity or obstruction	MRI	Prasad S Sahani D Saini S	Visualized by MR cholangio-pancreatography (MRCP)
Renal disease	Decreased regional blood flow Hippuran clearance	PET	Alpert NM Fischman AJ	
Thyroid carcinoma	Cystic nodal metastases	US	Hahn PF Harisinghani M Mueller PR O'Neill MJ	