Updated 8/21/2023 KB

Indication	Protocol Name	Special Instructions	Enteric Contrast
AAA post-stent or open surgical repair	ABD CTA 3 PHASE (WO/ART/VEN), ABD/PEL		1 cup water prior to scan unless contraindicated.
Abdominal abscess (suspected or known)	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan
Abdominal aortic injury	ABD CTA 3 PHASE (WO/ART/VEN), ABD/PEL		1 cup water prior to scan unless contraindicated.
Abdominal distension	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Abdominal fluid collection	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Abdominal free air	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min
Abdominal pain	ROUTINE ABD W, ROUTINE ABD/PEL W	All lower abdominal pain indications should have CT abdomen AND pelvis. Do not perform a CT abdomen only for lower abdominal pain without approval from a	1 cup water prior to scan unless contraindicated.
Acute pancreatitis	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Acute renal failure (not on permanent dialysis)	ABD WO, ABD/PEL WO		1 cup water prior to scan unless contraindicated.

Adrenal adenoma (ordered without IV)	ABD WO, ABD/PEL WO		1 cup water prior to scan unless contraindicated.
Adrenal adenoma initial evaluation	ADRENAL 4 PHASE		1 cup water prior to scan unless contraindicated.
Adrenal adenoma follow up or Adrenal nodule follow up NOT SURGICAL PLANNING	ABD wo, ABD/PEL WO or ABD with, ABD/PEL with	We are following up on size of adenoma. Non con is all that is needed for this measurment.	1 cup water prior to scan unless contraindicated.
Adrenalectomy	2 phase liver		1 cup water prior to scan unless contraindicated.
Adrenal hematoma or adrenal hematoma follow up	3 phase adrenal		1 cup water prior to scan unless contraindicated.
Adrenal nodule/ mass initial evaluation, new indeteminate adrenal mass/ nodule, Pheochromocytoma, Pre-OP/surgical planning, adrenal mass initial evaluation	ADRENAL 4 PHASE		1 cup water prior to scan unless contraindicated.
Adrenal Pheochromocytoma follow up	LIVER 2 PHASE (ART/VEN)	There should be a prior 4 phase in isite on these.	1 cup water prior to scan unless contraindicated.
Adrenocortical carcinoma surveillance and response evaluation	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Alcoholic Hepatitis	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Ampullary duct neoplasm	PANCREAS 2 PHASE (ART/VEN)		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Anastomotic leak after anorectal or colonic surgical intervention	ROUTINE PELVIS W		Rectal contrast: Mix 100 mL Omnipaque® 350 (i.e. one bottle) in one gallon of water. Shake well and pour 1500-1800 mL into enema bag (discard any left over), then administer the mixture rectally per patient tolerance.

Angiodysplasia	ENTEROGRAPHY 2 PHASE (ART/VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Angiosarcoma	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Anti-glomerular basement membrane (anti-GBM) disease	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Aortic dissection	ABD CTA 2 PHASE DISSECTION (WO/ART)	1 cup water prior to scan unless contraindicated.
Aortic intramural hematoma	ABD CTA 2 PHASE DISSECTION (WO/ART)	1 cup water prior to scan unless contraindicated.
Aortic stenosis	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Aortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Appendicitis	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Arteriovenous Malformation (AVM) of any organ (first exam)	ABD CTA 3 PHASE (WO/ART/VEN), ABD/PEL	1 cup water prior to scan unless contraindicated.
Autoimmune Hepatitis	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
AV fistula formation for any reasons	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
AVM of any organ (follow up)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
AVM post embolization	CTA 3 PHASE (NON/ART/VEN), ABD/PEL CTA	None
Bariatric surgery (Post-operative)	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer 150 mL pre-mixed positive enteric contrast on the table, immediately prior to scan.
Behçet syndrome (BS)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Biliary adenocarcinoma (i.e., cholangiocarcinoma)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Biliary adenoma (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.

Biliary adenoma (initial exam)	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Biliary dilitation of unkown cause	PANCREAS 2 PHASE (ART/VEN)		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Biliary Stricture	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Biloma	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan
Bladder Cancer	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Bladder Fistula	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	None
Bladder Injury	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	None
Bladder Leak	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	None
Bladder Trauma	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	None
Bleeding after recent surgery (first exam)	LIVER 3 PHASE (WO/ART/VEN)		None
Bloating	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Bosniak renal cyst (2F, IIF, 3, III, 4, or IV)	RENAL 3 PHASE		1 cup water prior to scan unless contraindicated.

Bowel leak	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min
Bowel obstruction	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Bowel perforation	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min
Breast cancer	LIVER 3 PHASE (WO/ART/VEN)	Exams ordered as CT with IV contrast should ideally be changed to CT without/with IV contrst. If insurance will not provide pre-approval, do 2 phase (Art / Ven) liver, ideally on dual energy or spectral CT scanner.	1 cup water prior to scan unless contraindicated.
Bronchial carcinoid tumor of the lung	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.
Budd–Chiari syndrome	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Castleman disease	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Cholangiocarcinoma or Klatskin Tumor	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Cholecystitis	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Choledochal cyst	PANCREAS 2 PHASE (ART/VEN)		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Choriocarcinoma	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.

Chronic anemia	ENTEROGRAPHY 2 PHASE (ART/VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Chronic liver disease (CLD)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Chronic pancreatitis	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Chronic pancreatitis surgical planning	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Chronic periaortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Churg-Strauss syndrome	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Cirrhosis	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Cogan syndrome (CS)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Colitis	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Collecting system cancer	UROGRAM 3 PHASE	1 cup water prior to scan unless contraindicated.
Colocutaneous Fistula	ROUTINE ABD W, ROUTINE ABD/PEL W	Rectal contrast: Mix 100 mL Omnipaque <sup>®</sup> 350 (i.e. one bottle) in one gallon of water. Shake well and pour 1500-1800 mL into enema bag (discard any left over), then administer the mixture rectally per patient tolerance.
Colon cancer post ablation or embolization	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Colon cancer post ablation or embolization (first exam) (If requested)	LIVER 3 PHASE (WO/ART/VEN)	1 cup water prior to scan unless contraindicated.

Colon cancer surveillance, staging, and response evaluation	ROUTINE ABD W, ROUTINE ABD/PEL W		None unless peritoneal disease (administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min
Colonic fistula (suspected or known)	ROUTINE PELVIS W		Rectal contrast: Mix 100 mL Omnipaque <sup>®</sup> 350 (i.e. one bottle) in one gallon of water. Shake well and pour 1500-1800 mL into enema bag (discard any left over), then administer the mixture rectally per patient tolerance.
Colovaginal fistula	ROUTINE ABD W, ROUTINE ABD/PEL W		Rectal contrast: Mix 100 mL Omnipaque® 350 (i.e. one bottle) in one gallon of water. Shake well and pour 1500-1800 mL into enema bag (discard any left over), then administer the mixture rectally per patient tolerance.
Colovesical fistula	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	None
Complicated diverticulitis follow up	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 500 mL 2.5 hours prior to scan; Via G-tube >> 500 mL 2.5 hours prior to scan; Via J-tube >> 250 mL 2.5 hours prior to scan <b>OR</b> rectal contrast (If requested by ordering provider): Mix 100 mL Omnipaque® 350 (i.e. one bottle) in one gallon of water. Shake well and pour 1500-1800 mL into enema bag (discard any left over), then administer the mixture rectally per patient tolerance.
Complicated renal cyst	RENAL 3 PHASE		1 cup water prior to scan unless contraindicated.

Congenital collecting system abnormality	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Consult a radiologist for unclear indications	ROUTINE ABD/PEL W&WO	Confirm protocol with a radiologist	1 cup water prior to scan unless contraindicated.
Crohn's disease	ENTEROGRAPHY SINGLE PHASE (VEN)		Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Crohn's disease with suspected or known fistula	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Cryoglobulinaemic vasculitis (CV)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Cystic renal mass surveillance	RENAL 3 PHASE		1 cup water prior to scan unless contraindicated.
Cystitis	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Desmoid tumor	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan

Diverticulitis	ROUTINE ABD W, ROUTINE ABD/PEL W	None unless abscess or leak (administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 2.5 hours prior to scan; Via G-tube >> 500 mL 2.5 hours prior to scan; Via J-tube >> 250 mL 2.5 hours prior to scan <b>OR</b> Rectal contrast (If requested by ordering provider): Mix 100 mL Omnipaque® 350 (i.e. one bottle) in one gallon of water. Shake well and pour 1500-1800 mL into enema bag (discard any left over), then administer the mixture rectally per patient tolerance.)
Duodenal adenoma	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Duodenal cancer (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to
Duodenal mass	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Duodenal polyp or polyps	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to
DVT of large vessel or IVC	ABD CT VENOGRAM (CTV), ABD/PEL CT VEN	1 cup water prior to scan unless contraindicated.
Ectopic Cushing	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Elevated liver function tests (LFTs)	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Endocarditis	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.

Enteritis	ENTEROGRAPHY SINGLE PHASE (VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Enterocutaneous Fistula (suspected or known)	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min
Enterovaginal Fistula	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan
Eosinophilic granulomatosis with polyangiitis (EGPA)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Esophageal leak	CHEST ESOPHAGRAM	Administer 100 mL pre-mixed positive enteric contrast on the table. Patient should hold last mouthful and swallow contrast during scan
Esophageal perforation	CHEST ESOPHAGRAM	Administer 100 mL pre-mixed positive enteric contrast on the table. Patient should hold last mouthful and swallow contrast during scan
Familial adenomatous polyposis (FAP)	ENTEROGRAPHY SINGLE PHASE (VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Fatty Liver	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Fever	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Fibromuscular dysplasia	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.

Fluid collection	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min
Focal nodular hyperplasia - FNH (follow up)	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.
Fournier's gangrene	ROUTINE PELVIS W	Include groin and thighs	None
Gallbladder cancer	ROUTINE ABD W, ROUTINE ABD/PEL W		None unless peritoneal disease (administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.)
Gallbladder polyp	ROUTINE ABD W, ROUTINE ABD/PEL W		None unless peritoneal disease (administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min
Gastrinoma	PANCREAS 2 PHASE (ART/VEN)		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Gastrointestinal stromal tumor (GIST)	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.
GI Bleed - Emergent or Acute	GI BLEED 3 PHASE	Inpatient / ED only (not for outpatient)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table. In an emergency do NOT wait to administer
GI Bleed - Nonemergent or chronic	ENTEROGRAPHY 2 PHASE (ART/VEN)		Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.

Giant cell arteritis (GCA)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Glucagonoma	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Gluteal Abscess	ROUTINE PELVIS W	None unless otherwise indicated
Goodpasture syndrome	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Granulomatosis with polyangiitis (GPA)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Grade IV or V renal laceration (follow up)	UROGRAM 4 PHASE	1 cup water prior to scan unless contraindicated.
Gynecologic cancer (cervical, endometrial, uterine, ovarian, or fallopian tube)	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
HCC post-treatment (e.g., chemoembolization, ablation, RFA)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
HCC screening	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
HCC surveillance	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Hemangioendothelioma (follow up)	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Hemangioendothelioma (initial exam)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Hemangioma (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Hemangioma (Initial exam)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Hemangiopericytoma (follow up)	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Hemangiopericytoma (initial exam)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Hematochezia	GI BLEED 3 PHASE	NONE

Hematuria (gross, macrohematuria, microhematuria)	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Hemorrhagic Angiomyolipoma (AML)	RENAL 3 PHASE		1 cup water prior to scan unless contraindicated.
Hemorrhagic pancreatitis (initial exam)	PANCREAS 2 PHASE (ART/VEN)		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Hemorrhagic pancreatitis (follow up)	PANCREAS 2 PHASE (ART/VEN)	For follow up without concern for vascular complications (i.e., to evaluate interval size changes): Routine Enhanced CT with positive oral contrast	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Henoch-Schönlein purpura	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Hepatic angiosarcoma (initial exam)	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Hepatic arterial infusion pump. (HAIP)	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.
Hepatic artery aneurysm	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Hepatic artery thrombus	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Hepatic sarcoidosis	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Hepatic vein thrombosis in trauma or non-cancer patients	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.
Hepatitis	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Hepatoblastoma (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Hepatoblastoma (initial exam)	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Hernia evaluation (ordered with IV)	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Hernia evaluation (ordered without IV)	ABD WO, ABD/PEL WO		1 cup water prior to scan unless contraindicated.

Hydronephrosis (initial exam)	UROGRAM 3 PHASE	1 cup water prior to scan unless contraindicated.
Hypocomplementaemic urticarial vasculitis (HUV)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
latrogenic external iliac artery pseudoaneurysm	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
IgA Vasculitis (IgAV)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
lliac compression or obstruction	ABD CT VENOGRAM (CTV), ABD/PEL CT VEN	1 cup water prior to scan unless contraindicated.
Immune complex small vessel vasculitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Indeterminate renal mass (initial exam)	RENAL 3 PHASE	1 cup water prior to scan unless contraindicated.
Infection	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Infectious Aortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Inflammatory abdominal aortic aneurysm (IAAA)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Inflammatory bowel disease (IBD)	ENTEROGRAPHY SINGLE PHASE (VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Inflammatory bowel disease (IBD) with suspected or known fistula	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Interstitial pancreatitis	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan

Intestinal arteriovenous malformations (AVMs)	ENTEROGRAPHY 2 PHASE (ART/VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Intestinal carcinoid	ENTEROGRAPHY 2 PHASE (ART/VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Intestinal hereditary hemorrhagic telangiectasia (HHT)	ENTEROGRAPHY 2 PHASE (ART/VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Intestinal neuroendocrine tumor (NET)	ENTEROGRAPHY 2 PHASE (ART/VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Intraductal papillary mucinous neoplasm (IPMN)	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Intussusception	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Irritable bowel syndrome (IBS)	ENTEROGRAPHY SINGLE PHASE (VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Islet cell tumor or insulinoma	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Isolated periaortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.

Jaundice	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Kawasaki disease (KD)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Lactic acidosis	CTA/CTV (mesenteric ischemia protocol)	1 cup water prior to scan unless contraindicated.
Leiomyosarcoma	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Liver carcinoid	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Liver cyst follow up	Routine	1 cup water prior to scan unless contraindicated.
Liver cyst initial or complicated liver cyst/ lesion	LIVER 3 PHASE (WO/ART/VEN)	1 cup water prior to scan unless contraindicated.
Liver fibrosis or hepatic fibrosis	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Liver Infarction in trauma or non-cancer patients	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Liver laceration or trauma	LIVER 3 PHASE (WO/ART/VEN)	1 cup water prior to scan unless contraindicated.
Liver lesion of unknown origin (initial exam)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Liver mass found on routine CT or ultrasound	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Liver transplant evaluation	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Lupus vasculitis (SLE)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
LVAD pre-surgical evaluation (ordered as CTA)	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
LVAD pre-surgical evaluation (ordered with IV)	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.

LVAD pre-surgical evaluation (ordered without IV)	ABD WO, ABD/PEL WO	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min
Lymphoma	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
May-Thurner Syndrome	ABD CT VENOGRAM (CTV), ABD/PEL CT VEN	1 cup water prior to scan unless contraindicated.
Median arcuate ligament syndrome (MALS)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Medium Vessel Vasculitis (MVV)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Medullary nephrocalcinosis	ABD WO, ABD/PEL WO	1 cup water prior to scan unless contraindicated.
Melanoma	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Melena	ENTEROGRAPHY 2 PHASE (ART/VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Merkel cell carcinoma of the skin	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Mesenteric hematoma	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Mesenteric ischemia	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Metastatic pancreatic adenocarcinoma	ROUTINE ABD W, ROUTINE ABD/PEL W	None unless peritoneal disease (administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan )
Metastatic renal cell carcinoma (RCC)	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.

Microscopic polyangiitis (MPA)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Most routine exams	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Mycotic aortic aneurysm	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Myelodysplastic syndrome	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Necrotizing pancreatitis (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer 250 mL pre-mixed positive enteric contrast 15 min prior to scan and 250 mL on the table, immediately prior to scan. If via G-tube >> Administer 250 mL pre-mixed positive enteric contrast on the table, immediately prior to scan.
Necrotizing pancreatitis (initial exam at UAB)	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Nephrolithiasis	ABD WO, ABD/PEL WO	1 cup water prior to scan unless contraindicated.
Neuroendocrine liver metastases	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Nonalcoholic Steatohepatitis (NASH)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Nonspecific symptoms or mass	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Nutcracker syndrome (first exam)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Nutcracker syndrome (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Omental caking	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Oncocytoma	RENAL 3 PHASE	1 cup water prior to scan unless contraindicated.

Other abdominal aortic branch aneurysm	ABD CTA SINGLE PHASE (ART), ABD/PEL	1 cup water prior to scan unless
	СТА	contraindicated.
Pancreas carcinoid	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup)
		of water 15 mins prior to scan and 16 oz.
		(i.e., 2 cups) immediately
		prior to scan
		Administer 8 oz. (240 mL i.e., a cup)
Pancreas neuroendocrine tumor (PNET)	PANCREAS 2 PHASE (ART/VEN)	of water 15 mins prior to scan and 16 oz.
		(i.e., 2 cups) immediately
		prior to scan
Pancreatic adenocarcinoma (staging, pre/post neoadjuvant	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup)
therapy, surgical planning, and post surgical evaluation)		of water 15 mins prior to scan and 16 oz.
		(i.e., 2 cups) immediately
		prior to scan
		Administer 8 oz. (240 mL i.e., a cup) of
Pancreatic carcinoma in situ (PCIN)	PANCREAS 2 PHASE (ART/VEN)	water 15 mins prior to scan and 16 oz.
	PANCREAS Z PHASE (ART/VEN)	(i.e., 2 cups) immediately
		prior to scan
		Administer 8 oz. (240 mL i.e., a cup)
Paneroatic aust	PANCREAS 2 PHASE (ART/VEN)	of water 15 mins prior to scan and 16 oz.
Pancreatic cyst	PANCREAS Z PHASE (ART/VEN)	(i.e., 2 cups) immediately
		prior to scan
		Administer 8 oz. (240 mL i.e., a cup)
Pancreatic ductal dilatation of unkown cause	PANCREAS 2 PHASE (ART/VEN)	of water 15 mins prior to scan and 16 oz.
rancieatic ductar unatation of unkown cause	FANCREAS Z FINASE (ART/VEN)	(i.e., 2 cups) immediately
		prior to scan
		Administer 8 oz. (240 mL i.e., a cup)
Pancreatic mass	PANCREAS 2 PHASE (ART/VEN)	of water 15 mins prior to scan and
		16 oz. (i.e., 2 cups) immediately prior to
		scan
		Administer 250 mL pre-mixed
		positive enteric contrast 15 min prior to
		scan and 250 mL on the table,
Pancreatic necrosis (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W	immediately prior to scan. If via G-tube >>
		Administer 250 mL pre-mixed positive
		enteric contrast
		on the table, immediately prior to scan.
Pancreatic necrosis (initial exam at UAB)	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup)
		of water 15 mins prior to scan and
		16 oz. (i.e., 2 cups) immediately prior to
		scan

Pancreatic pseudocyst	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer 250 mL pre-mixed positive enteric contrast 15 min prior to scan and 250 mL on the table, immediately prior to scan. If via G-tube >> Administer 250 mL pre-mixed positive enteric contrast on the table, immediately prior to scan.
Pancreatitis	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Pancreatitis with pseudoaneurysm	PANCREAS 2 PHASE (ART/VEN)		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Paraganglioma	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.
Partial nephrectomy	RENAL 3 PHASE		1 cup water prior to scan unless contraindicated.
Patent urachus	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	none
Pelvic abscess (suspected or known)	ROUTINE PELVIS W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 ml
Pelvic fluid collection	ROUTINE PELVIS W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Pelvic mass	ROUTINE PELVIS W		None

Pelvic mass in females Pelvic pain Pelvic trauma	ROUTINE PELVIS W ROUTINE PELVIS W ROUTINE PELVIS W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.NoneNone unless otherwise indicated
Pelvic varices	ABD CT VENOGRAM (CTV), ABD/PEL CT VEN	None unless otherwise indicated
Percutaneous gastrostomy (PEG) tube check	GASTROSTOMY TUBE CHECK	100 ml positive enteric contrast through G-tube with patient in lateral position. Lay supine and scan.
Perforation after anorectal or colonic surgical intervention	ROUTINE PELVIS W	Rectal contrast: Mix 100 mL Omnipaque <sup>®</sup> 350 (i.e. one bottle) in one gallon of water. Shake well and pour 1500-1800 mL into enema bag (discard any left over), then administer the mixture rectally per patient tolerance.
Perianal abscess	ROUTINE PELVIS W	None unless otherwise indicated
Perianal fistula	ROUTINE PELVIS W	None unless otherwise indicated
Peripheral arterial (PA) prior and after bypass procedure	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Peripheral vascular (PV) femoral bypass prior and after bypass procedure	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Peritoneal cancer or tumor	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.

Peritoneal carcinomatosis	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Peritoneal nodule Placental trophoblastic tumor (PSTT)	ROUTINE ABD W, ROUTINE ABD/PEL W ROUTINE ABD W, ROUTINE ABD/PEL W		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan. 1 cup water prior to scan unless
			contraindicated.
Pneumomediastinum	CHEST ESOPHAGRAM		Administer 100 mL pre-mixed positive enteric contrast on the table. Patient should hold last mouthful and swallow contrast during scan
Polyarteritis nodosa (PAN)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Porcelain Gallbladder	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Portal hypertension	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Portal vein (PV) thrombosis in trauma or non-cancer patients	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.
Portal vein thrombus	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Post Portal Vein Embolization in cancer patients (PVE)	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Post-operative bladder injury	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	none
Pre-stent abdominal aortic aneurysm (AAA) evaluation	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Presurgical evaluation for DIEP flap breast reconstruction.	CTA FIX PROTOCOL		1 cup water prior to scan unless contraindicated.

Presurgical planning for ectopic Cushing's	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Presurgical planning for liver mass (except HCC or cholangiocarcinoma)	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Primary sclerosing cholangitis (PSC)	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Prior to blood and marrow transplantation (BMT)	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Prior to bone marrow stem cell transplantation (SCT)	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Prior to heart or lung transplantation	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Prior to hematopoietic stem cell transplantation (HSCT)	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Prior to percutaneous gastrostomy (PEG) tube placement (ordered with IV	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Prior to percutaneous gastrostomy (PEG) tube placement (ordered withou	ABD WO, ABD/PEL WO	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Prior varicocele embolization	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Pseudomyxoma peritonei	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Pyelonephritis	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Pyogenic aortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Radiation-induced aortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Radical, complete, or total nephrectomy (follow up for RCC)	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.

Radical, complete, or total nephrectomy (initial exam)	RENAL 3 PHASE	1 cup water prior to scan unless contraindicated.
Recent surgery (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W	Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan.
Rectal fistula (suspected or known)	ROUTINE PELVIS W	Rectal contrast: Mix 100 mL Omnipaque <sup>®</sup> 350 (i.e. one bottle) in one gallon of water. Shake well and pour 1500-1800 mL into enema bag (discard any left over), then administer the mixture rectally per patient tolerance.
Renal abscess	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Renal artery stenosis	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Renal calculi	ABD WO, ABD/PEL WO	1 cup water prior to scan unless contraindicated.
Renal Cell Carcinoma, RCC (non-metastatic)	RENAL 3 PHASE	1 cup water prior to scan unless contraindicated.
Renal donor evaluation	CTA RENAL DONOR	1 cup water prior to scan unless contraindicated.
Renal Infarction in trauma or non-cancer patients	LIVER 2 PHASE (ART/VEN)	1 cup water prior to scan unless contraindicated.
Renal laceration Grade IV or V (follow up)	UROGRAM 4 PHASE	1 cup water prior to scan unless contraindicated.
Renal mass ablation	RENAL 3 PHASE	1 cup water prior to scan unless contraindicated.
Renal mass surveillance - previously characterized mass	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Renal stones	ABD WO, ABD/PEL WO	1 cup water prior to scan unless contraindicated.
Renal transplant recipient evaluation (ordered without IV)	PELVIS WO	None
Renal transplant recipient evaluation (ordered without/with IV)	ROUTINE ABD/PEL W&WO	1 cup water prior to scan unless contraindicated.
Renal vein thrombus	RENAL 3 PHASE	1 cup water prior to scan unless contraindicated.

Renovascular hypertension	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Retroperitoneal bleed - Emergent or Acute	GI BLEED 3 PHASE	Inpatient / ED only (not for outpatient)	None
Retroperitoneal fibrosis	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Rheumatoid vasculitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Routine Angiomyolipoma (AML) surveillance (ordered with IV)	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Routine Angiomyolipoma (AML) surveillance (ordered without IV)	ABD WO, ABD/PEL WO		1 cup water prior to scan unless contraindicated.
Routine cancer surveillance, staging, and response evaluation	ROUTINE ABD W, ROUTINE ABD/PEL W		None unless peritoneal disease (administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL 60 min prior to scan )
Sarcoid vasculitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Sarcomatoid renal cell carcinoma	RENAL 3 PHASE		1 cup water prior to scan unless contraindicated.
Schwannoma	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Sclerosing mesenteritis	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Secondary Vasculitides	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Septic emboli	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Severe adverse reaction to iodinated contrast	ABD WO, ABD/PEL WO	Check with Radiologist RE: premed if oral is indicated.	1 cup water prior to scan unless contraindicated.
Severe chronic kidney disease (GFR <30)	ABD WO, ABD/PEL WO		Administer pre-mixed positive enteric contrast as follow: Oral route >> 250 mL 60 min prior to scan and 250 mL 30 min prior to scan; Via G-tube >> 500 mL 60 min prior to scan; Via J-tube >> 250 mL

SMA stenosis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
SMA Syndrome	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Small bowel adenoma, polyp(s), or mass	ENTEROGRAPHY SINGLE PHASE (VEN)	Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Small Vessel Vasculitis (SVV)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Sneddon syndrome	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Somatostatinoma	PANCREAS 2 PHASE (ART/VEN)	Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Spindle cell renal carcinoma	RENAL 3 PHASE	1 cup water prior to scan unless contraindicated.
Splenic artery aneurysm	ABD CTA SINGLE PHASE (ART), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.
Splenic artery embolization (first exam)	ABD CTA 3 PHASE (WO/ART/VEN), ABD/PEL	1 cup water prior to scan unless contraindicated.
Splenic hamartoma	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Splenic laceration or trauma	LIVER 3 PHASE (WO/ART/VEN)	1 cup water prior to scan unless contraindicated.
Splenic sequestration	ROUTINE ABD W, ROUTINE ABD/PEL W	1 cup water prior to scan unless contraindicated.
Spontaneous perinephric hematoma (initial exam)	RENAL 3 PHASE	1 cup water prior to scan unless contraindicated.
Steatosis	LIVER 4 PHASE	1 cup water prior to scan unless contraindicated.
Suspected aortic leak or extravasation	ABD CTA 3 PHASE (WO/ART/VEN), ABD/PEL	1 cup water prior to scan unless contraindicated.
Suspected venous thrombus	ABD CT VENOGRAM (CTV), ABD/PEL CT VEN	1 cup water prior to scan unless contraindicated.
Syphilitic aortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA	1 cup water prior to scan unless contraindicated.

Takayasu arteritis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Testicular cancer (follow up)	ROUTINE ABD W, ROUTINE ABD/PEL W	No need to include scrotum in field of view.	1 cup water prior to scan unless contraindicated.
Testicular cancer (initial staging or recent surgery)	ROUTINE ABD W, ROUTINE ABD/PEL W	Include the scrotum in the field of view.	1 cup water prior to scan unless contraindicated.
Thrombophlebitis	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Thyroid carcinoma	LIVER 2 PHASE (ART/VEN)		1 cup water prior to scan unless contraindicated.
Transjugular Intrahepatic portosystemic shunt (TIPS) evaluation	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Trauma	ROUTINE ABD W, ROUTINE ABD/PEL W		None
Tuberculous aortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Ulcerative colitis	ENTEROGRAPHY SINGLE PHASE (VEN)		Three bottles of Breeza (500 ML each) separated by 20 min i.e., 1 bottle at 60, 40 and 20 mins prior the scan, then 8 oz. (240 mL i.e., a cup) of water on the exam table.
Uncomplicated pancreatitis	ROUTINE ABD W, ROUTINE ABD/PEL W		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Unknown Aortitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Ureteral cancer	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Ureteral injury	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Ureteral or periureteral mass	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Ureteral stricture	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Ureteral trauma	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Urinary tract infection (UTI)	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.

Urothelial calculi	ABD WO, ABD/PEL WO		1 cup water prior to scan unless contraindicated.
Urothelial cancer	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Urothelial mass	UROGRAM 3 PHASE		1 cup water prior to scan unless contraindicated.
Variable Vessel Vasculitis (VVV)	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Varicocele	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Varicose Veins	ABD CT VENOGRAM (CTV), ABD/PEL CT VEN		1 cup water prior to scan unless contraindicated.
Vasculitis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Vesicouterine fistula	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	none
Vesicovaginal fistula	CYSTOGRAM	Empty bladder phase is not required if cystogram follows standard Abd/Pel CT.	None
Vipoma	PANCREAS 2 PHASE (ART/VEN)		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan
Viral Hepatitis (e.g., HCV, HBV)	LIVER 4 PHASE		1 cup water prior to scan unless contraindicated.
Wegener granulomatosis	ABD CTA 2 PHASE (ART/VEN), ABD/PEL CTA		1 cup water prior to scan unless contraindicated.
Weight loss	ROUTINE ABD W, ROUTINE ABD/PEL W		1 cup water prior to scan unless contraindicated.
Whipple procedure	PANCREAS 2 PHASE (ART/VEN)		Administer 8 oz. (240 mL i.e., a cup) of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan Administer 8 oz. (240 mL i.e., a cup)
Zollinger-Ellison Syndrome	PANCREAS 2 PHASE (ART/VEN)		of water 15 mins prior to scan and 16 oz. (i.e., 2 cups) immediately prior to scan