

DUAL-PLANE RULE

Every parenchymal organ & bowel segment must be captured in both sagittal & transverse planes.

ORIENTATION

Sagittal views: Cranial to Left.
Transverse views: Patient Right to Left side of display screen.

SWEEP QUALITY

Margin-to-margin continuous sweeps lasting 3–5 sec (~30 fps).
Avoid rapid or jerky passes.

LESION STANDARDS

Any focal/diffuse lesion: 3D calipers (L×H×W) in 2 planes + focused sweep ± color Doppler.

SYSTEMS 1 TO 5: HEPATOBILIARY, SPLEEN, RENAL, ADRENALS & ALIMENTARY**1. Liver & Biliary**

3 Sweeps

5 Stills

CINELOOP SWEEPS (3)

- **Left lobes:** Transverse margin-to-margin
- **Right & GB:** Sagittal across fossa & hilus
- **Vessels & CVC:** Sagittal drain into CVC

STATIC STILL VIEWS (5)

- Left lobes sagittal (diaphragm & contour)
- Right lobes & gallbladder sagittal
- Gallbladder transverse (lumen & wall)
- Common bile duct at duodenal papilla
- Liver vs. falciform fat acoustic interface

REQUIRED CALIPERS

CBD diameter: at papilla
GB wall: if thickened/contracted

2. Spleen

2 Sweeps

3 Stills

CINELOOP SWEEPS (2)

- **Head & Body:** Sagittal from fundus along body
- **Body & Tail:** Continuous sweep along ventral wall to distal apex

STATIC STILL VIEWS (3)

- Splenic head (adjacent to stomach & L kidney)
- Splenic body & hilus (splenic veins)
- Splenic tail (apex & fine reticular texture)

REQUIRED CALIPERS

Focal lesions: 3D measurements in orthogonal planes
Assess splenic vein caliber

3. Left Kidney & Adrenal

2 Sweeps

4 Stills

CINELOOP SWEEPS (2)

- **Sagittal sweep:** Capsule-to-capsule
- **Transverse sweep:** Cranial pole to caudal pole through renal pelvis

STATIC STILL VIEWS (4)

- Left kidney sagittal bipolar length (calipers)
- Dorsal plane ("pancake" view, corticomedullary)
- Transverse view at renal pelvis (hilus at 6:00)
- Left adrenal gland sagittal (bilobed poles)

REQUIRED CALIPERS

Kidney length: Bipolar (cm)
Renal pelvis
L Adrenal: Caudal pole height (mm)

4. Right Kidney & Adrenal

2 Sweeps

4 Stills

CINELOOP SWEEPS (2)

- **Sagittal sweep:** Capsule-to-capsule
- **Transverse sweep:** Cranial pole to caudal pole through renal pelvis

STATIC STILL VIEWS (4)

- Right kidney sagittal bipolar length (calipers)
- Dorsal plane (corticomedullary architecture)
- Transverse view at renal pelvis
- Right adrenal gland sagittal (adjacent to CVC)

REQUIRED CALIPERS

Kidney length: Bipolar (cm)
Renal pelvis
R Adrenal: Caudal pole height (mm)

5. Alimentary Tract

4 Sweeps

6 Stills

CINELOOP SWEEPS (4)

- **Stomach:** Fundus, body, and pylorus
- **Duodenum:** Right flank descending loop
- **Jejunum & Ileum**
- **Colon:** Descending colon to pelvis

STATIC STILL VIEWS (6)

- Gastric body/antrum transverse (layered wall)
- Duodenum sagittal (wall layers & lumen)
- Jejunum sagittal (wall symmetry)
- Ileum sagittal (prominent muscularis layer)
- Ileoceocolic junction / Cecum
- Descending colon transverse (thin wall profile)

REQUIRED CALIPERS

Wall thickness (lumen-to-serosa)

SYSTEMS 6 TO 10: PANCREAS, BLADDER, VESSELS, LYMPH NODES & REPRODUCTIVE

6. Pancreas

2 Sweeps

2 Stills

CINELOOP SWEEPS (2)

- **Right lobe sweep:** Tracing along descending duodenum & pancreaticoduodenal vessels
- **Left lobe / body sweep:** Between stomach greater curvature and transverse colon

STATIC STILL VIEWS (2)

- Right lobe longitudinal (adjacent to duodenum & mesenteric fat)
- Left lobe / body transverse/oblique (caudal to stomach)

REQUIRED CALIPERS

Lobe thickness / width: Measure if enlarged, hypoechoic, or nodular
Document echogenicity of surrounding peripancreatic mesentery

7. Urinary Bladder & Urethra

2 Sweeps

3 Stills

CINELOOP SWEEPS (2)

- **Bladder sagittal sweep:** Apex, lumen, dependent dorsal wall, and trigone
- **Bladder transverse sweep:** Cranial apex down to proximal pelvic urethra

STATIC STILL VIEWS (3)

- Bladder sagittal midline (maximum distension)
- Bladder transverse (mid-body symmetry & floor)
- Trigone & proximal urethra (papillae ± color Doppler for ureteral jets)

REQUIRED CALIPERS

Dorsal wall thickness: Calipers on distended wall
Urethral diameter: If dilated or containing intraluminal calculi

8. Peritoneum & Great Vessels

2 Sweeps

2 Stills

CINELOOP SWEEPS (2)

- **Aorta & CVC sweep:** Longitudinal tracing through dorsal mid-abdomen
- **Dependent effusion survey:** Subdiaphragmatic, splenorenal, & pelvic recesses

STATIC STILL VIEWS (2)

- Longitudinal Aorta and CVC parallel interface
- Retroperitoneal space showing normal fat architecture & absence of fluid/masses

REQUIRED CALIPERS

Aorta luminal diameter: Used for kidney-to-aorta ratio
Effusion pocket depth: If peritoneal fluid present

9. Lymph Nodes

1 Sweep

3 Stills

CINELOOP SWEEPS (1)

- **Aortic bifurcation sweep:** Transverse/sagittal across terminal aorta/CVC to iliac vessels

STATIC STILL VIEWS (3)

- Medial iliac lymph nodes (sagittal view)
- Jejunal (mesenteric) lymph nodes (sagittal)
- Sentinel cranial nodes (hepatic, gastric, duodenal)

REQUIRED CALIPERS

Medial iliac short axis: Thickness in DV plane
Jejunal node short axis

10. Reproductive Tract

1–2 Sweeps

2–3 Stills

CINELOOP SWEEPS (1–2)

- **Female:** Sweep dorsal to bladder neck to ovaries
- **Male:** Transverse prostate sweep (cranial to caudal pole) ± intact testes/epididymides

STATIC STILL VIEWS (2–3)

- **Female:** Uterine body sagittal + bilateral ovarian beds (stump/ovaries)
- **Male:** Prostate sagittal + transverse (bilobed symmetry & parenchyma)

REQUIRED CALIPERS

Female: Uterine body diameter
Male: Prostate transverse height and width (cm)

21 – 23

CINELOOP SWEEPS

34 – 37

STATIC STILL IMAGES

55 – 60

TOTAL TARGET INSTANCES