



PATIENT	PRESENTING CLINICAL SIGNS
Lucia Bach	Patient booked for lumpectomy, elevated liver enzymes.
SPECIES	Abnormal PE/Chem/CBC/UA Results: Pre-anesthetic bloodwork showed elevated ALT : 308, AST: 75 , GGT: 14 , TCHO: 11.3. Had bile acids test run on Dec 20 - indicated hepatobiliary disease PRE: 5.3, POST: 69.7
Canine	
BREED	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Shepherd Mix	Urinary System
SEX	The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no urine mineral or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic change were noted.
Spayed Female	
AGE	The area of the aortic trifurcation was free of pathology.
7 Years	Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 6.1 cm in length. The right kidney measured 6.1 cm in length.
WEIGHT	
24.6	
INTERPRETED BY	Adrenal Glands
R. McKenzie Daniel, DVM, DABVP	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.67 cm width at the caudal pole.
	The right adrenal gland was overtly normal in size, position and shape. The right adrenal gland measured 0.54 cm width at the caudal pole.
IMAGING PERFORMED BY	Spleen
Dr. Gira	The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal to adequate in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.
HOSPITAL NAME	
Argo Vet	
REFERRING VET	Liver
Dr. Leung	The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The visualized portal vein exhibited subjective adequate volume and normal cranial branching.
INVOICE	
12928	
DATE	The gallbladder was non distended in size with minor nonorganized biliary sludge. The common bile duct was not definitively visualized with no evidence of posthepatic stasis or obstruction.
01/02/2026	Gastrointestinal



PATIENT

Lucia Bach

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained minor retained pyloric fluid and mild lumen gas with no signs of ileus, obstruction or foreign material.

SPECIES

Canine

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

BREED

Shepherd Mix

Normal visible colon wall layers were present with apparent formed feces in lumen.

SEX

Spayed Female

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

AGE

7 Years

No overt lymphadenopathy or peritoneal effusion was present.

WEIGHT

24.6

ULTRASONOGRAPHIC FINDINGS

- Sonographically unremarkable normal volume liver.
- Normal gallbladder with mild nonorganized bile sediment.
- Normal kidneys and urinary bladder- no evidence of renal or urinary bladder mineral/calculi.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of intrahepatic or extrahepatic macroscopic shunt. Primary hepatic parenchyma disease such as nonspecific inflammatory disease with potential for portal hypoplasia/microvascular dysplasia is possible. Further assessment may include (assuming normal clotting status) screening hepatic FNA cytology to assess for inflammatory cell type. A definitive diagnosis would require biopsies for histopathology. Assuming patient is nonclinical, hepatosupportive medications and monitoring would be reasonable. Anesthetic risk is considered mild if evidence of normal Bun, cholesterol, albumin and glucose levels.

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP

IMAGING PERFORMED BY

Dr. Gira

HOSPITAL NAME

Argo Vet

REFERRING VET

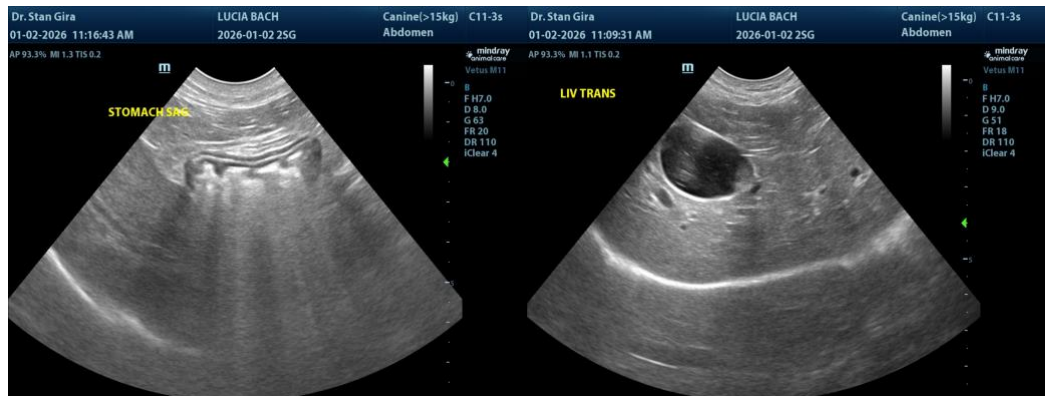
Dr. Leung

INVOICE

12928

DATE

01/02/2026





PATIENT

Lucia Bach

SPECIES

Canine

BREED

Shepherd Mix

SEX

Spayed Female

AGE

7 Years

WEIGHT

24.6

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Dr. Gira

HOSPITAL NAME

Argo Vet

REFERRING VET

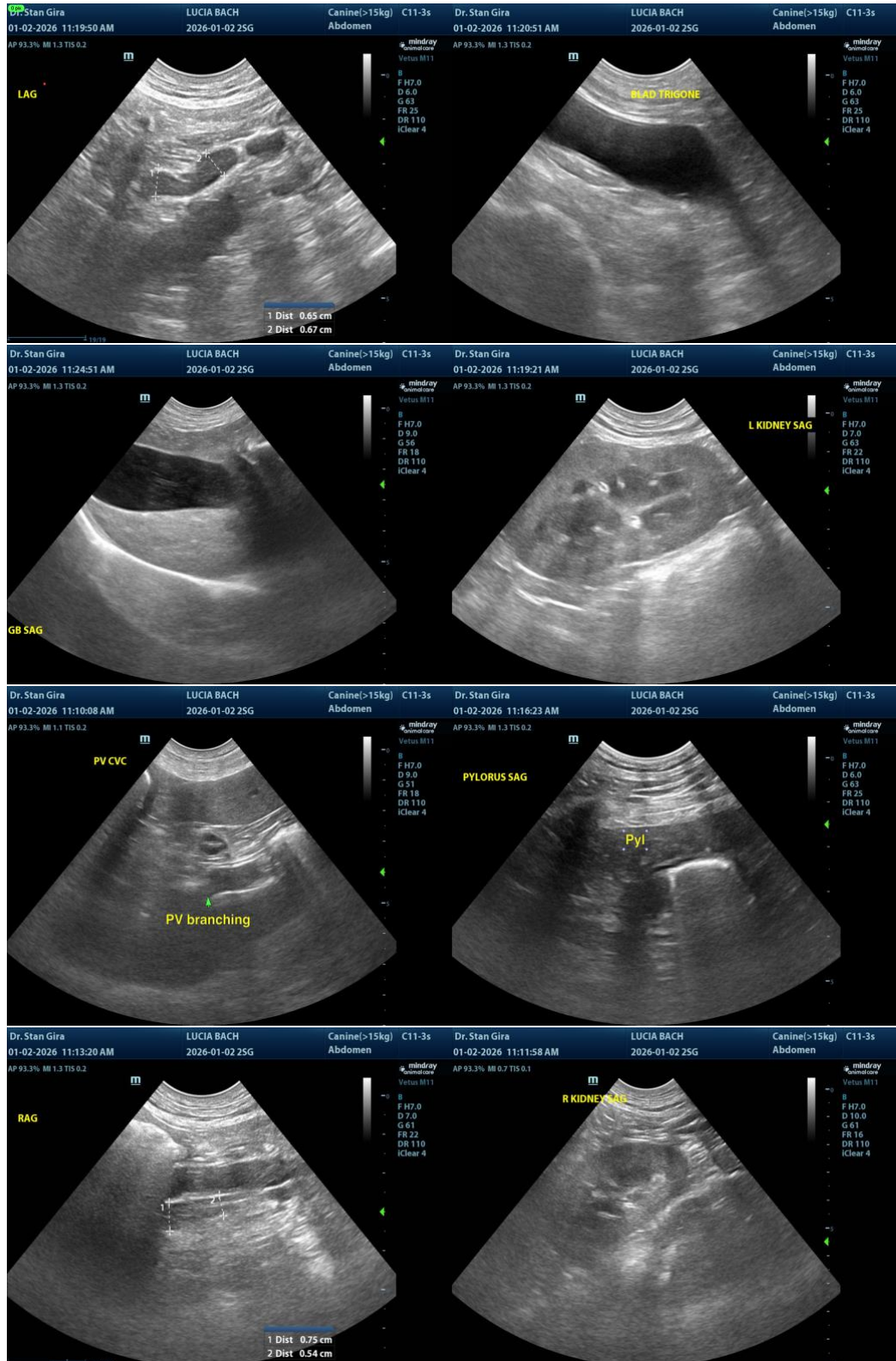
Dr. Leung

INVOICE

12928

DATE

01/02/2026





PATIENT

Lucia Bach

SPECIES

Canine

BREED

Shepherd Mix

SEX

Spayed Female

AGE

7 Years

WEIGHT

24.6

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Dr. Gira

HOSPITAL NAME

Argo Vet

REFERRING VET

Dr. Leung

INVOICE

12928

DATE

01/02/2026

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com