


752 **E Supplementary Materials**

753 This section provides detailed examples of our tasks. Choices highlighted in yellow represent the
754 ground truth. In the responses, correct answers are highlighted in green, while incorrect ones are
755 highlighted in red.

Example for Artifact Recognition

Question: Is there an artifact present in the image?

Options:
A. Yes, there is an artifact present in the image.
B. No, the image appears normal without any artifacts.



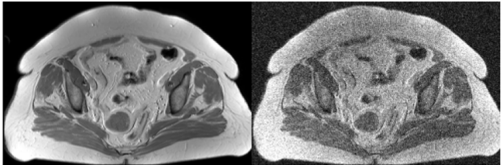
Claude Response:
A. Yes, there is an artifact present in the image.

Figure 13: Example for Artifact Recognition

Example for Noise Recognition

Question: Here are two medical images. One of them has added noise. Which one is the noised image?

Options:
A. Left
B. Right



Claude Response:
B. Right

Figure 14: Example for Noise Recognition

Example for Modality Recognition

Question: What type of medical imaging is this image?

Options:

- A. Radiography
- B. Ultrasound
- C. Magnetic Resonance Imaging
- D. Pathology



Claude Response:

- A. Radiography

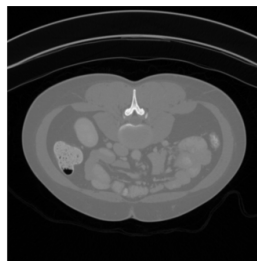
Figure 15: Example for Modality Recognition

Example for View Recognition

Question: What is the view position of this CT image?

Options:

- A. sagittal
- B. axial
- C. coronal



Claude Response:

- B. axial

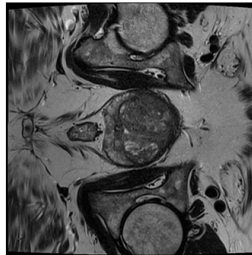
Figure 16: Example for View Recognition

Example for Body Part Recognition

Question: What body part is shown in this MRI?

Options:

- A. Head
- B. Chest
- C. Abdomen
- D. Pelvis



Claude Response:

D. Pelvis

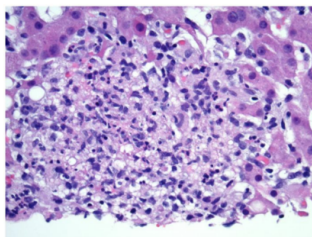
Figure 17: Example for Body Part Recognition

Example for Magnification Recognition

Question: Based on the field of view and visible detail, is this image captured under low-power ($\leq 10\times$) or high-power ($\geq 20\times$) magnification?

Options:

- A. Low-power field (e.g., overview of tissue, $\leq 10\times$)
- B. High-power field (e.g., individual cells and nuclei, $\geq 20\times$)



Claude Response:

B. High-power field (e.g., individual cells and nuclei, $\geq 20\times$)

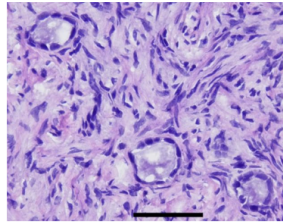
Figure 18: Example for Magnification Recognition

Example for Stain Recognition

Question: What is the type of staining used in this image?

Options:

- A. H&E
- B. Masson's Trichrome
- C. PAS
- D. Wright's stain



Claude Response:

A. H&E

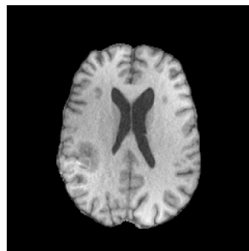
Figure 19: Example for Stain Recognition

Example for Imaging tech. Recognition

Question: Which MRI sub-modality does the image below correspond to?

Options:

- A. T1
- B. T2
- C. Flair
- B. dwi



Claude Response:

A. T1

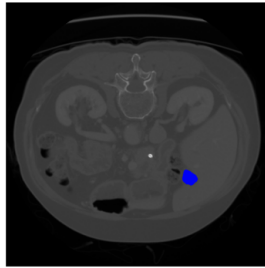
Figure 20: Example for Imaging Technique Recognition

Example for Organ/Tissue Recognition

Question: : What organ is highlighted in this image?

Options:

- A. Right lung
- B. Gallbladder
- C. Pulmonary artery
- D. Left kidney



Claude Response:

D. Left kidney

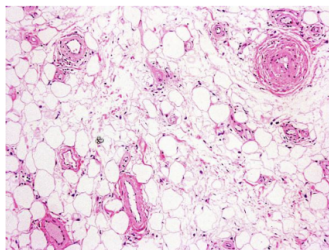
Figure 21: Example for Organ Recognition

Example for Organ/Tissue Recognition

Question: What is the organ or tissue in this image?

Options:

- A. Liver
- B. Adipose tissue
- C. Skeletal muscle
- D. Kidney



Claude Response:

D. Left kidney

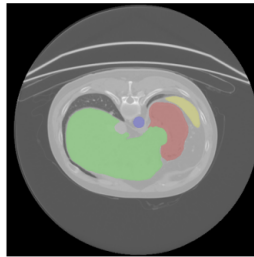
Figure 22: Example for Tissue Recognition

Example for Organ Location

Question: Which color represents aorta in this image?

Options:

- A. Red
- B. Green
- C. Blue
- D. Yellow



Claude Response:

A. Red

Figure 23: Example for Organ Location

Example for Organ Erasure Recognition

Question: Which anatomical structure has been removed or edited in this AI-edited X-ray image?

Options:

- A. Left lung
- B. Right lung
- C. Heart
- D. First rib



Claude Response:

C. Heart

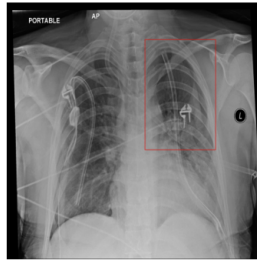
Figure 24: Example for Organ Erasure Recognition

Example for Lesion Recognition

Question: What abnormality is inside the red box in this image?

Options:

- A. Atelectasis
- B. Pneumothorax
- C. Cardiomegaly
- D. Fibrosis



Claude Response:

- B. Pneumothorax

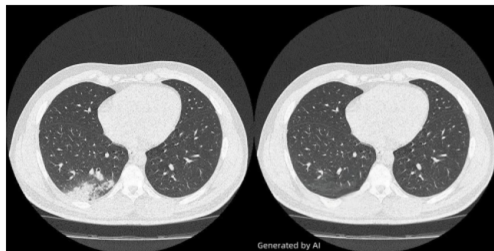
Figure 25: Example for Lesion Recognition

Example for Lesion Erasure Recognition

Question: What abnormality is inside the red box in this image?

Options:

- A. Lung nodule
- B. Lung cancer
- C. Pleural effusion
- D. Lung infections



Claude Response:

- C. Pleural effusion

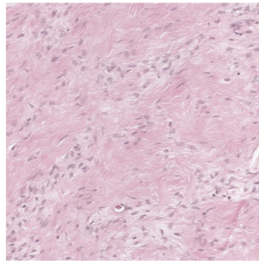
Figure 26: Example for Lesion Erasure Recognition

Example for Morphology Description

Question: Which of the following best describes the cellular morphology observed in the slide?

Options:

- A. Spindle cells arranged in tightly packed, parallel fascicles
- B. Spindle cells aligned in a whorled, storiform pattern
- C. Spindle cells loosely distributed in a disorganized matrix
- D. Spindle cells forming solid sheets without architectural arrangement



Claude Response:

C. Spindle cells loosely distributed in a disorganized matrix

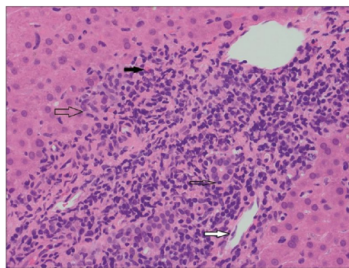
Figure 27: Example for Morphology Description

Example for Diagnosis

Question: What is the most likely histopathological diagnosis for this slide?

Options:

- A. Interface hepatitis with lymphocytic infiltration
- B. Presence of a leukocyte within a hepatocyte
- C. Endothelial lifting in a portal venule
- D. An eosinophilic leukocyte in the sinusoidal space



Claude Response:

A. Interface hepatitis with lymphocytic infiltration

Figure 28: Example for Diagnosis