

Supplementary Material 1. Number of studies by modality and system

Modality	Number of studies	Anatomic system	Number of studies
CT	50	Abdomen	41
X-ray	41	Neuro	35
MRI	30	Thorax	21
Fluoroscopy	4	Musculoskeletal	18
Angiography	3	Head and neck	8
USG	1	Cardiovascular	6

CT, computed tomography; MRI, magnetic resonans imaging; USG, ultrasonography.

Supplementary Material 2. Prompt designs for each experimental condition

1. Radiologic image only

You will be presented with a radiologic image. Based solely on this image, determine the most likely diagnosis. Do not assume any clinical information or consider answer choices. Justify your decision based on visible imaging findings only.

2. Clinical information only

You will be given clinical information about a patient. Based solely on this clinical context, suggest the most likely radiologic diagnosis. Do not assume access to any imaging or answer choices. Base your answer purely on the clinical scenario.

3. Options only

Choose the most appropriate diagnosis from the list of options provided below. Do not assume access to clinical or imaging data. Base your selection on your general medical knowledge and reasoning.

4. Radiologic image + clinical information

You will be provided with a radiologic image and associated clinical information. Based on both inputs, determine the most likely diagnosis. Do not use any external answer choices. Explain your reasoning by integrating imaging and clinical features.

5. Radiologic image + options

You will be shown a radiologic image along with several diagnostic options. Choose the most appropriate diagnosis based on the image alone. Do not assume any clinical context. Justify your answer using the image findings.

6. Clinical information + options

You will receive clinical information and a list of possible diagnoses. Select the most likely diagnosis based only on the clinical details and the listed options. Do not incorporate any imaging data in your reasoning.

7. Radiologic image + clinical information + options

You will receive a radiologic image, relevant clinical information, and a list of diagnostic options. Choose the most likely diagnosis by integrating all three components. Justify your answer with reference to imaging, clinical findings, and option relevance.