

## Stage 1

**Question:** pancreas cancer segmentation.

**Reason:** In a healthy abdomen, the pancreas is situated retroperitoneally, extending from the duodenum to the spleen, with its head positioned anterior to the inferior vena cava and posterior to the gastric antrum. Surrounding anatomical structures include the liver on the right, the spleen on the left, and the kidneys posteriorly, while the portal vein and superior mesenteric artery run along the pancreatic body. In contrast, the identification of lesions within the pancreatic head reveals a focal hypodense region that exhibits reduced attenuation compared to the adjacent pancreatic tissue, **indicating potential necrosis or cystic degeneration**. This lesion is characterized by irregular margins and subtle infiltration into the surrounding fat planes, which raises concerns for invasive growth. Additionally, there is a notable absence of calcifications or hemorrhagic features within the affected area.

**Answer:** The Pancreas Cancer is located at [[236, 275, 248, 289]]. The mask is <seg>.

## Stage 2

**Question:** pancreas cancer segmentation.

**Reason:** In a typical abdominal CT scan, the pancreas presents as a homogeneous structure extending from the duodenum to the spleen, exhibiting clear margins and consistent density, while being surrounded by vital anatomical features such as the liver on the right, kidneys posteriorly, and bowel loops anteriorly, with vascular structures like the superior mesenteric artery and vein traversing its anterior aspect. In contrast, when assessing pathological conditions, specific abnormalities **may include irregular margins, heterogeneous density, and potential displacement of adjacent vessels**, indicating **possible mass effect or invasion into surrounding tissues**, such as the splenic vein, which **could suggest advanced disease**. Additionally, the presence of **peri-pancreatic fat stranding may indicate inflammatory or infiltrative changes**.

**Answer:** The Pancreas Cancer is located at [[235, 200, 298, 246]]. The mask is <seg>.



Input



Stage 1 Output  
Dice = 20.40%



Stage 2 Output  
Dice = 83.80%



Ground Truth

## Stage 1

**Question:** Using this image, outline the pigmented lesion.

**Reason:** In the process of identifying lesions from normal tissue, the surrounding skin typically displays a uniform pinkish-tan hue with subtle linear patterns that represent the distribution of collagen fibers, alongside sparse hair follicles and sebaceous glands, which are characterized by their small, round, and uniformly distributed appearance. In contrast, the lesion itself is centrally located within the examined area and exhibits an irregular shape with scalloped margins, indicative of asymmetry. Its coloration is heterogeneous, featuring a **central region of dark brown or black pigmentation**, suggestive of melanin accumulation, along with peripheral areas of lighter tan and reddish tones, which may indicate inflammation or vascular changes. Additionally, the lesion presents with a disrupted pigment network, where lines are irregularly spaced and poorly defined, and there are no visible signs of a halo effect or regression patterns.

**Answer:** The pigmented lesion is located at [[67, 15, 439, 338]]. The mask is <seg>.



Input



Stage 1 Output  
Dice = 16.77%



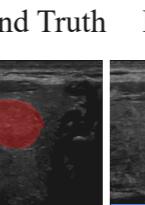
Stage 2 Output  
Dice = 82.91%



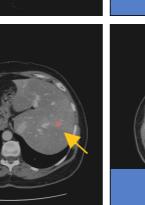
Ground Truth

## Prompt

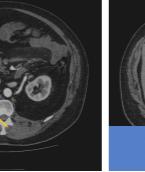
Please highlight the thyroid nodule.



Dice : 14.66%



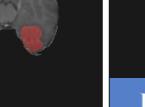
Dice : 0%



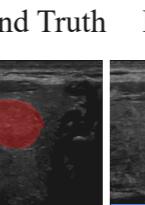
Dice : 90.06%



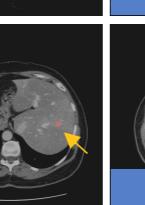
Dice : 94.68%



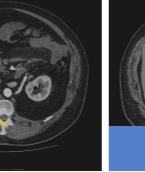
Dice : 94.21%



Dice : 0.75%



Dice : 0%



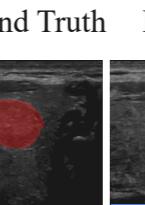
Dice : 90.20%



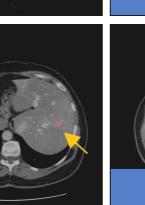
Dice : 94.21%



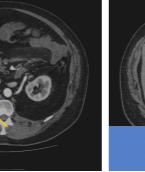
Dice : 94.21%



Dice : 1.95%



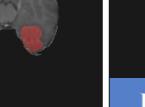
Dice : 0%



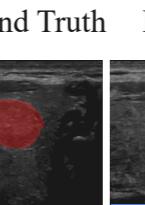
Dice : 0%



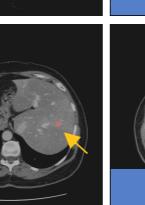
Dice : 66.74%



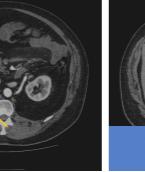
Dice : 66.74%



Dice : 49.03%



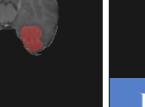
Dice : 0%



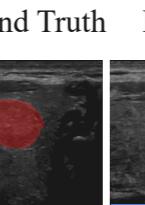
Dice : 14.17%



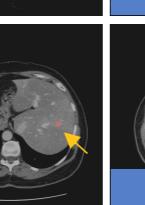
Dice : 80.07%



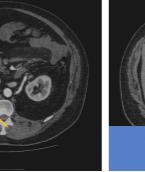
Dice : 80.07%



Dice : 41.69%



Dice : 0%



Dice : 28.05%



Dice : 84.05%

