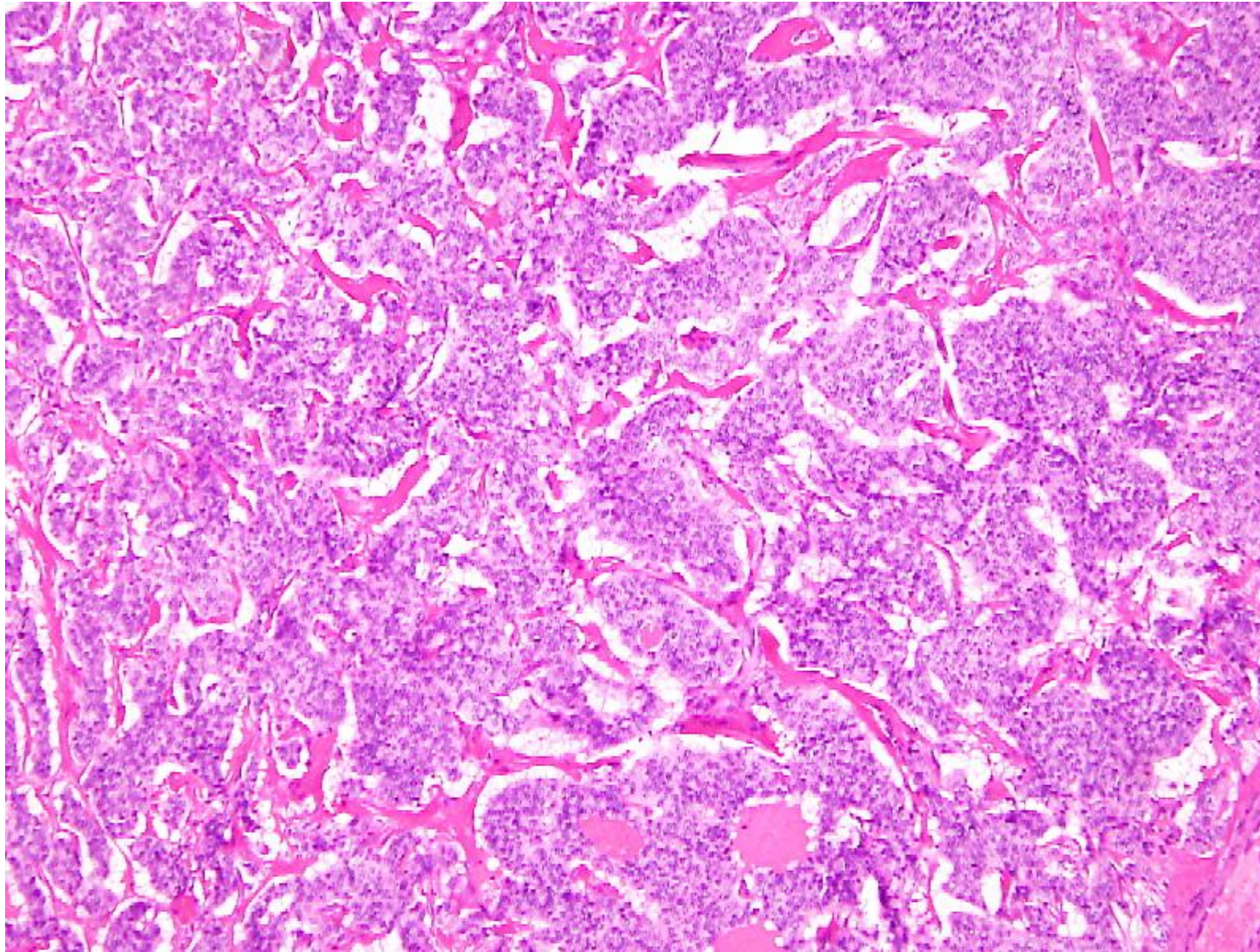


Omental metastasis of duodenal carcinoid tumor

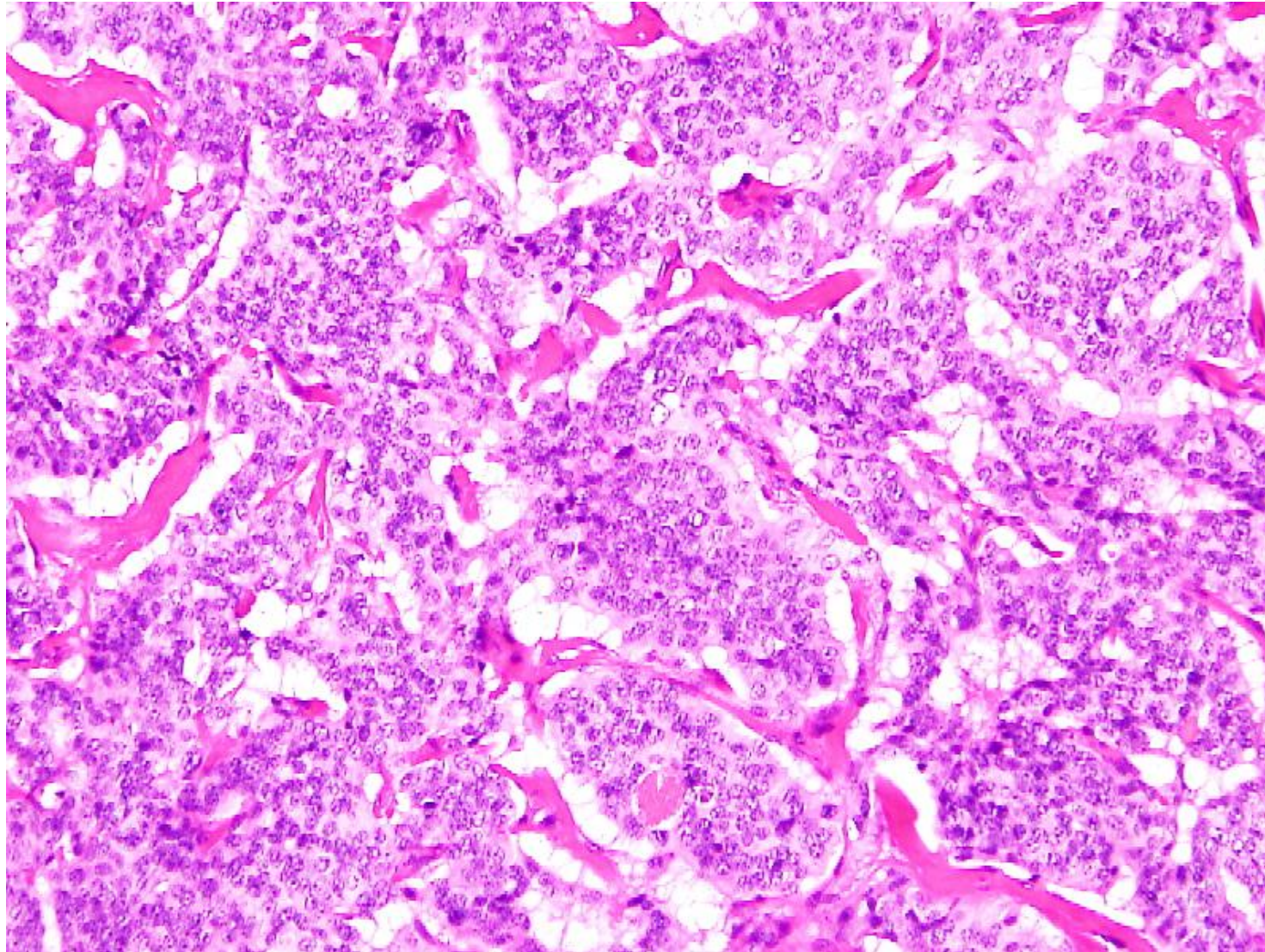
Carcinoid tumor (well differentiated neuroendocrine tumor: NET) are classified by mitotic count and proliferative index (Ki-67): NET G1: mitotic count $< 2/2 \text{ mm}^2$ and $< 3\%$ Ki-67 index, NET G2: mitotic count 2-20/2 mm^2 or 3-20% Ki-67 index, NET G3: mitoses $>20/2 \text{ mm}^2$ or $>20\%$ Ki-67 index. Metastasis may occur in the order $G3 > G2 > G1$. The liver is the most common site of metastasis. Most functioning tumors (except for insulinoma), such as gastrinoma, glucagonoma, somatostatinoma, ACTHoma, VIPoma and serotoninoma have liver metastasis. Here, a duodenal carcinoid (NET, G1) metastatic to the omentum is presented.

Ref.-1: Zuetenhorst JM, Taal BG. Metastatic carcinoid tumors: a clinical review. *Oncologist* 2005; 10(2): 123-131. doi: 10.1634/theoncologist.10-2-123

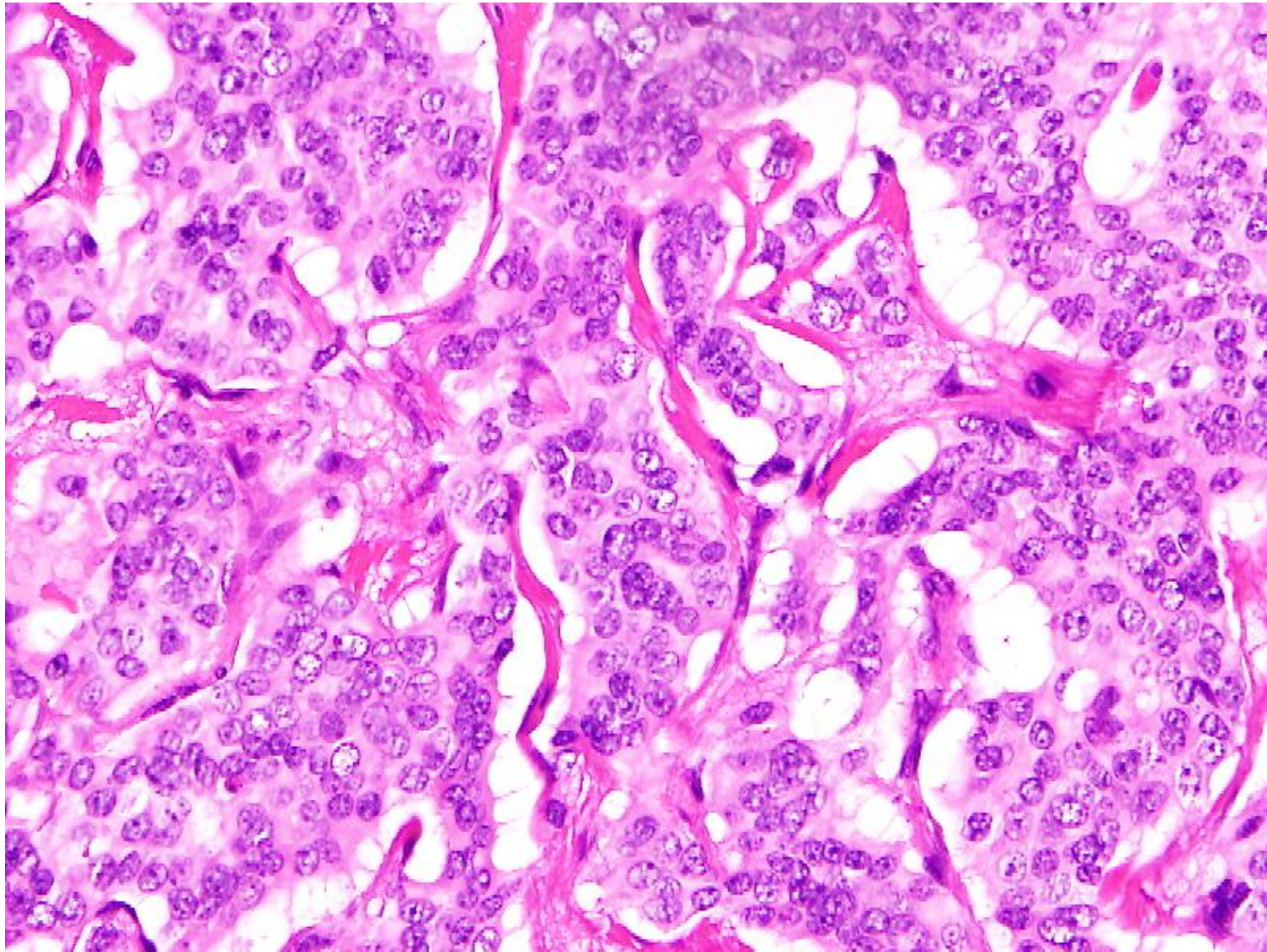
Ref.-2: Rytych J, et al. Well differentiated neuroendocrine tumor. PathologyOutlines.com website. 2024. <https://www.pathologyoutlines.com/topic/pancreasWDNET.html>



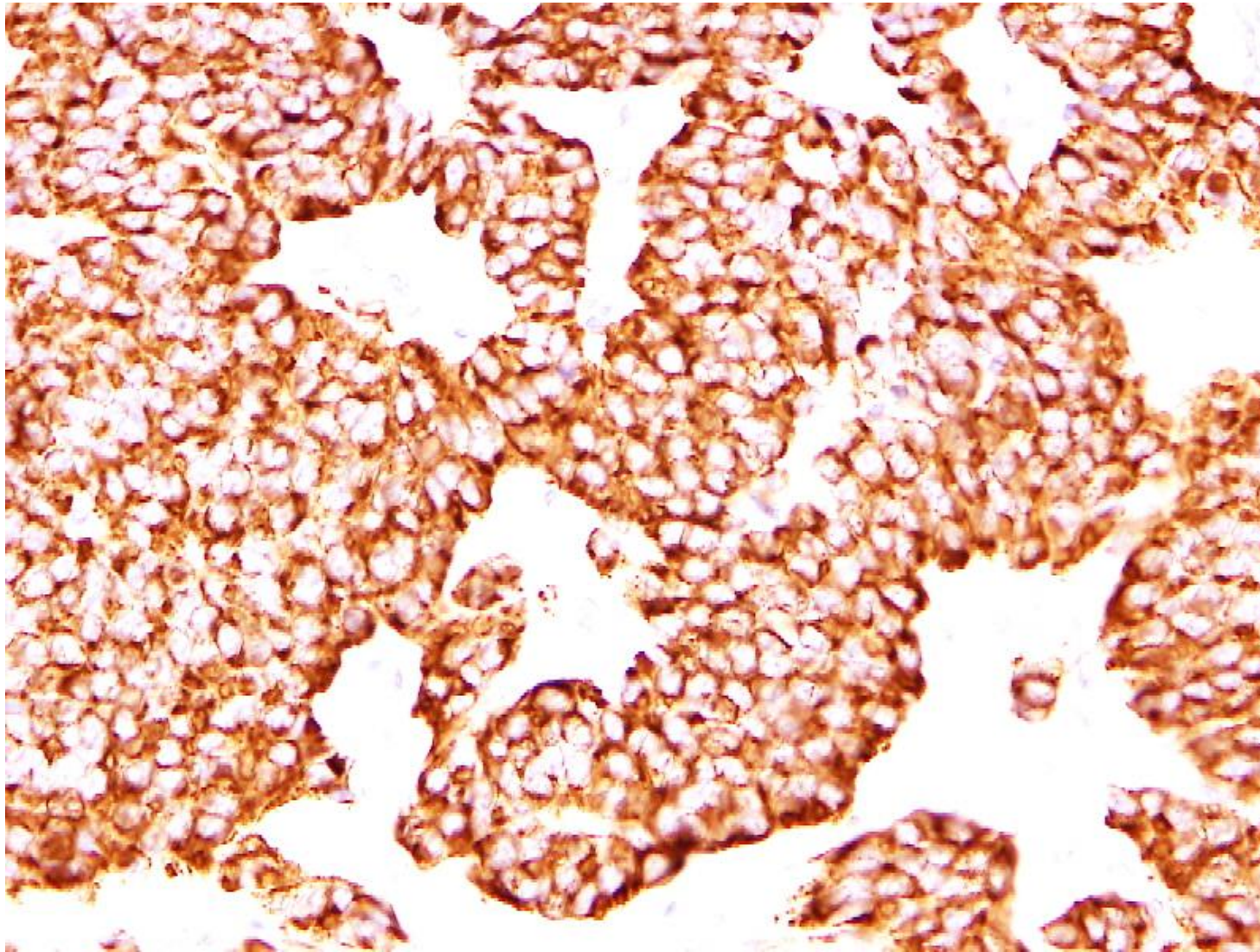
Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells grow with a fused trabecular arrangement and rich vascularity in the stroma. H&E-1



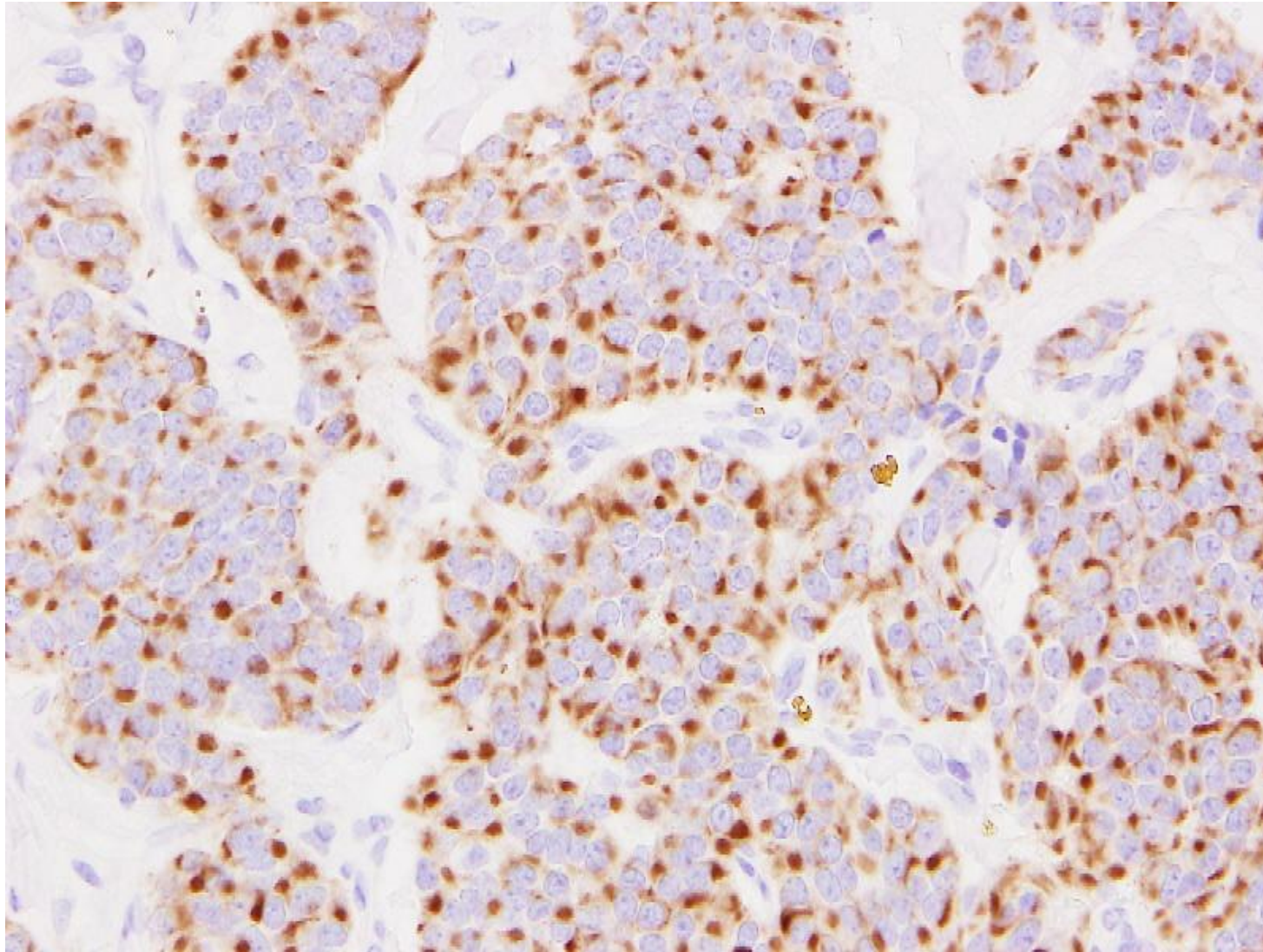
Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells grow with a fused trabecular arrangement and rich vascularity in the stroma. H&E-2



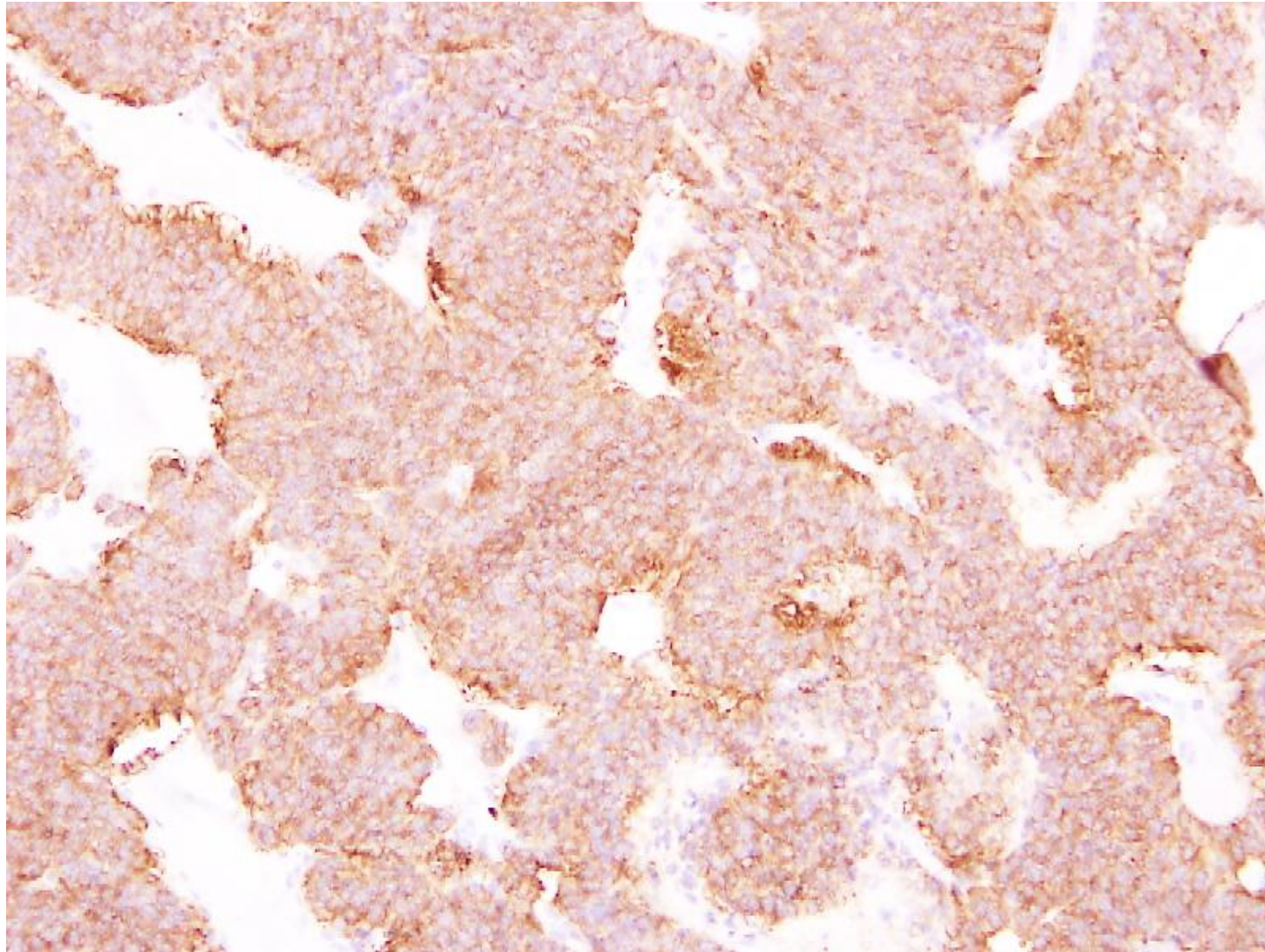
Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells grow with a fused trabecular arrangement and rich vascularity in the stroma. Mitoses are scarcely observed. H&E-3



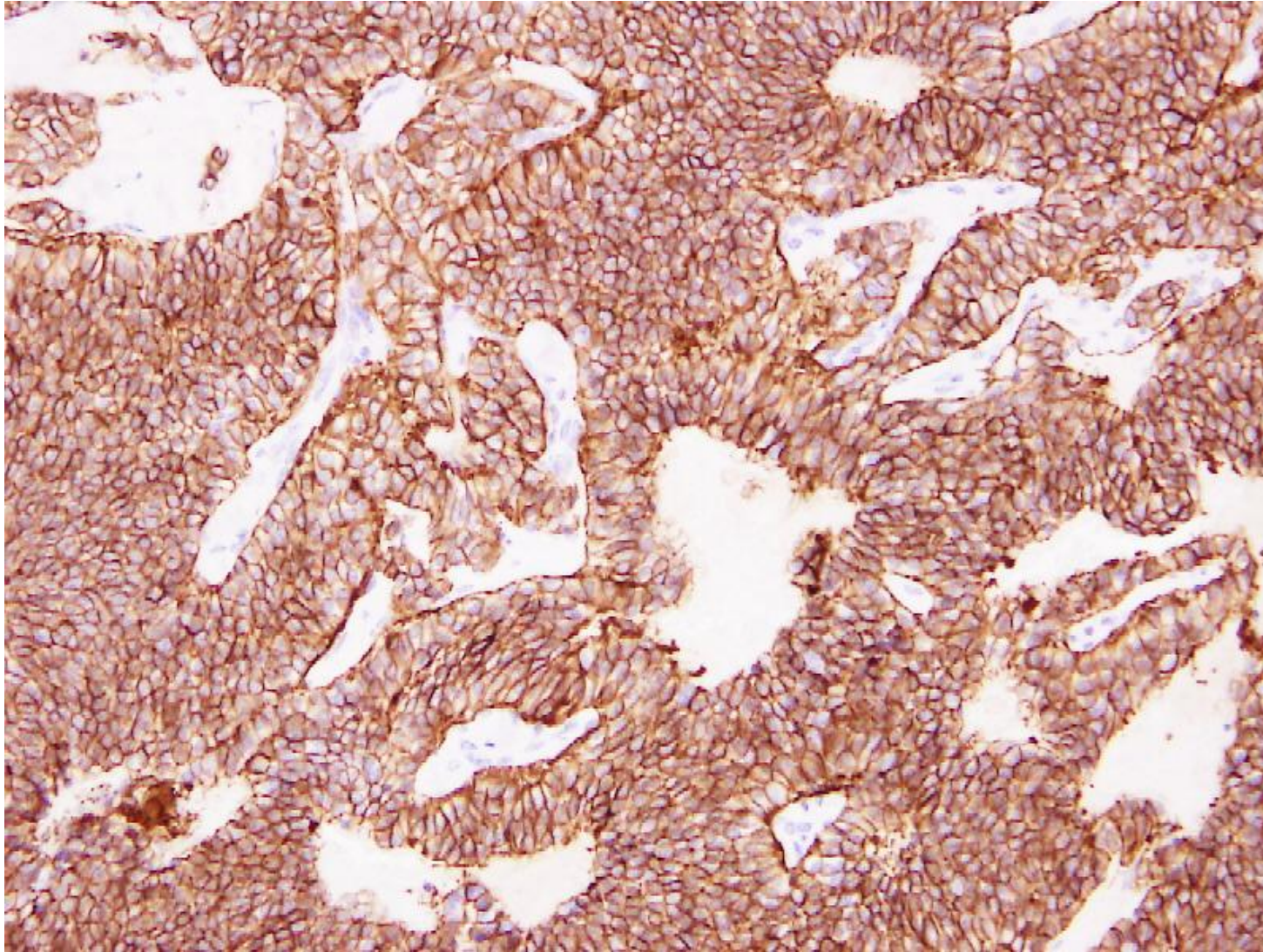
Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells diffusely express pan-cytokeratin AE1/AE3. Immunostaining for CK (AE1/AE3)



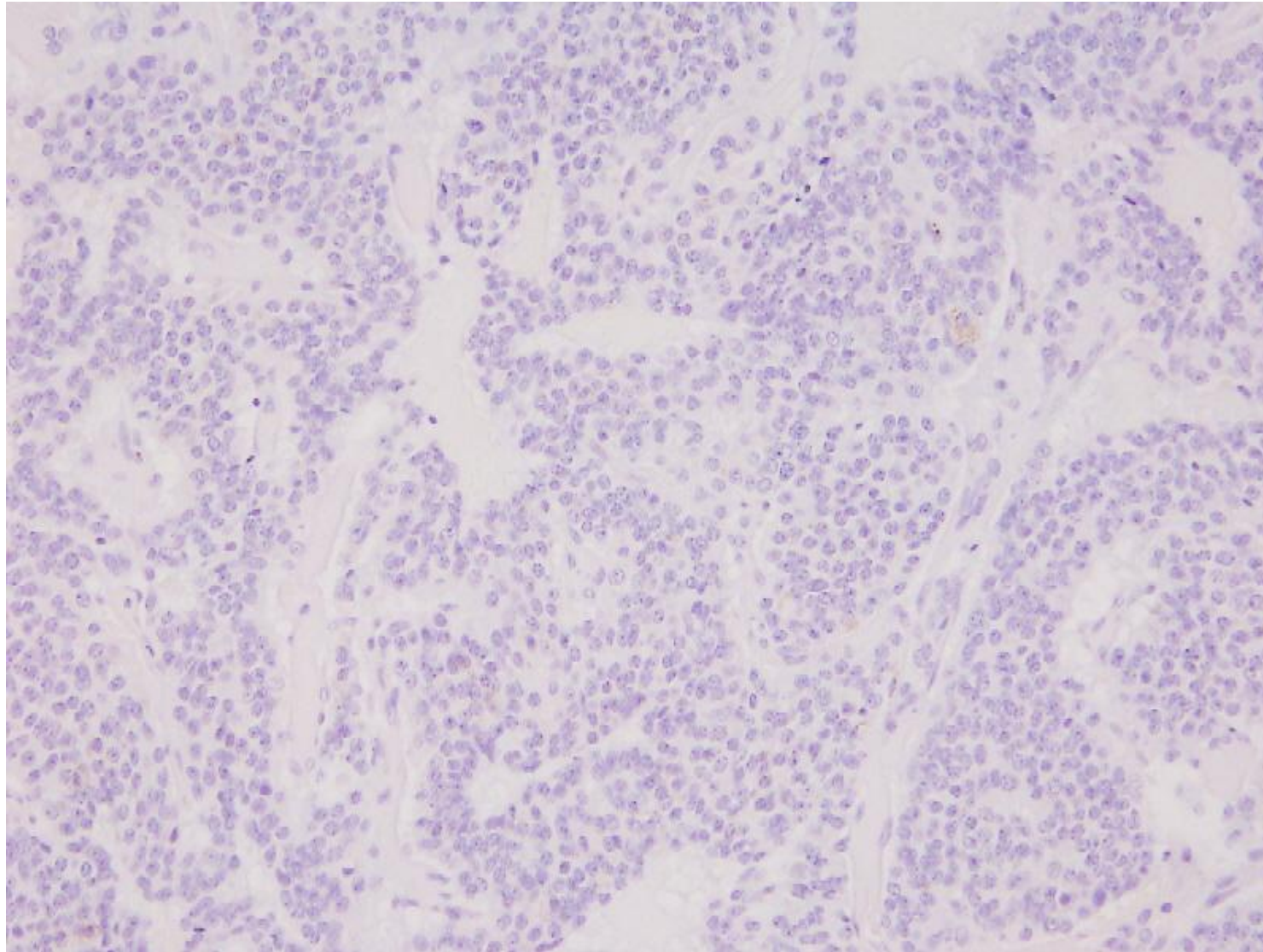
Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells express low-molecular weight cytokeratin CAM5.2 in the Golgi area in the cytoplasm. Immunostaining for CK (CAM5.2)



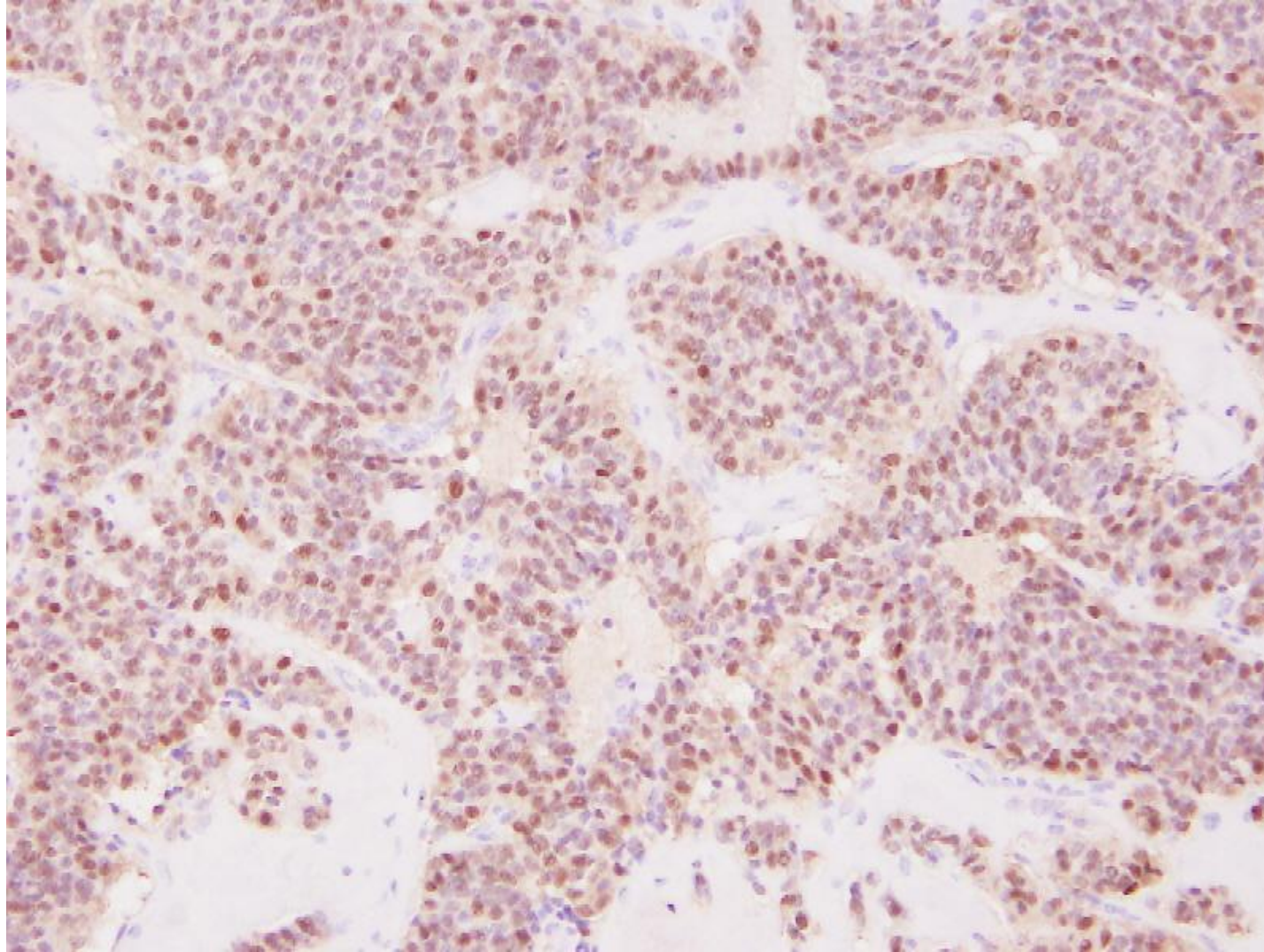
Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells diffusely express synaptophysin. Immunostaining for synaptophysin



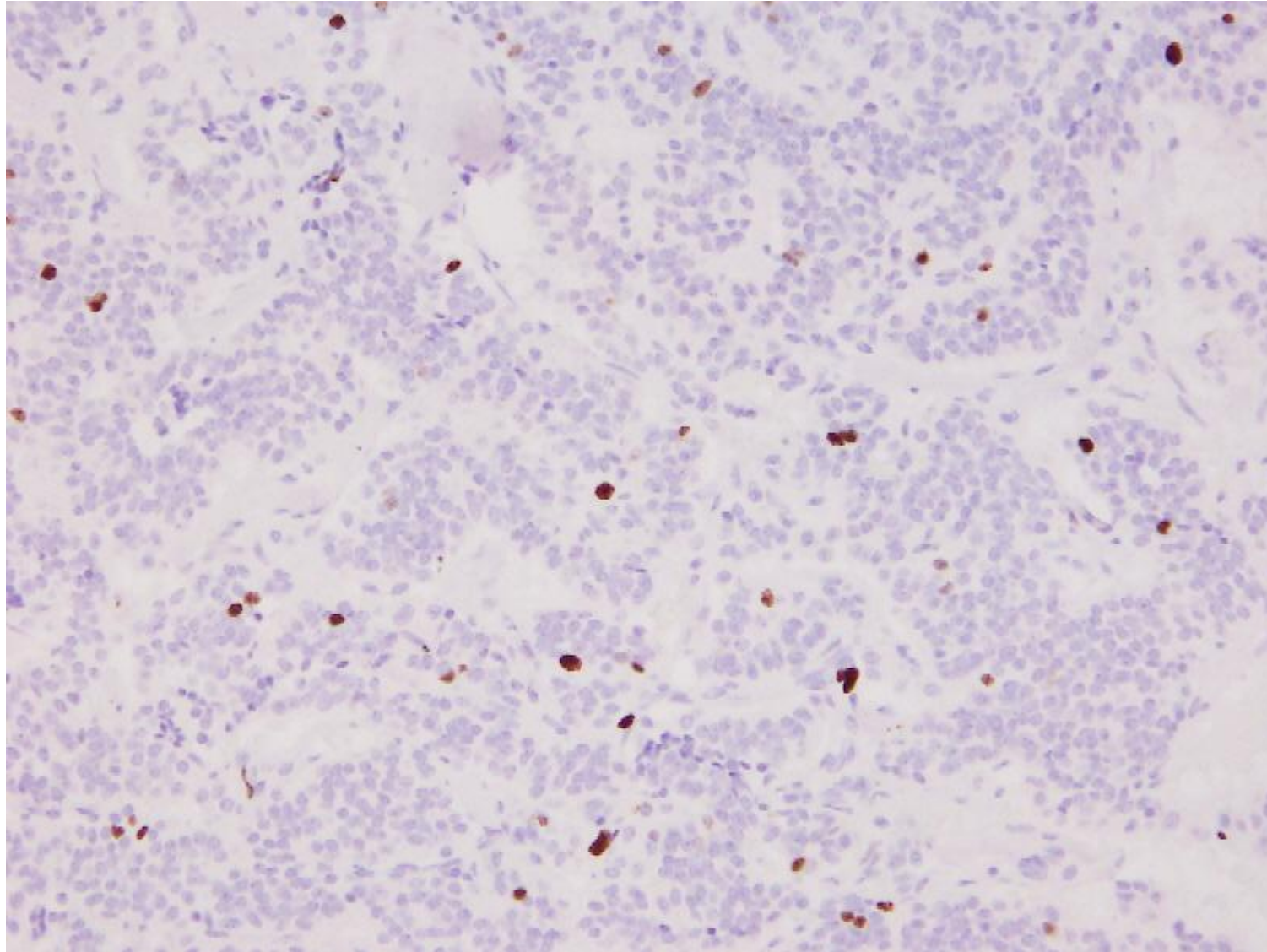
Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells diffusely express NCAM (CD56) on the plasma membrane. Immunostaining for NCAM (CD56)



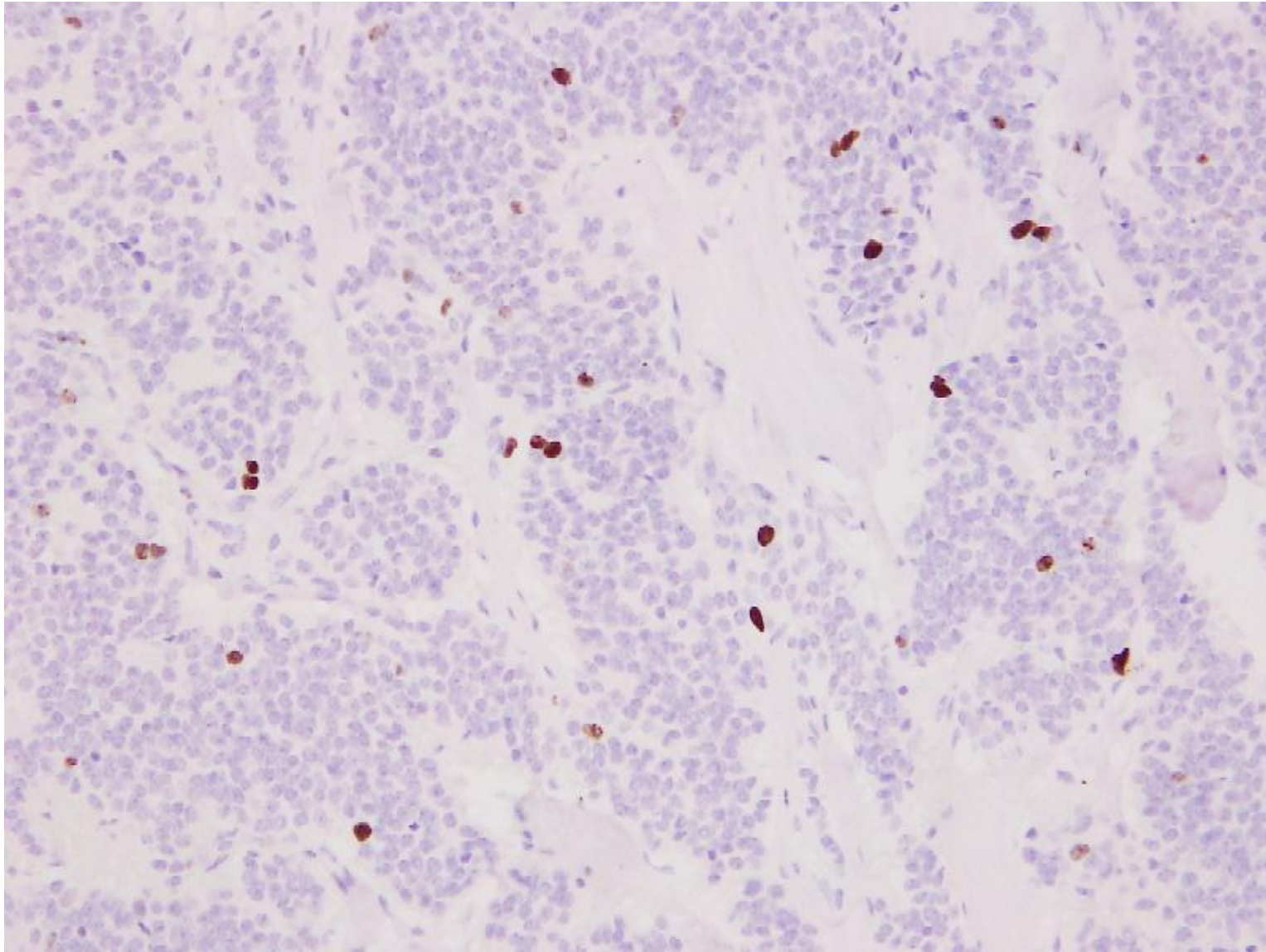
Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells lack expression of chromogranin A. Immunostaining for chromogranin A



Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Monomorphous tumor cells express S-100 protein in the nuclei. Immunostaining for S-100 protein



Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Ki-67 labeling index of the monomorphous tumor cells is around 2%. Immunostaining for Ki-67 (1)



Omental metastasis of duodenal carcinoid tumor (NET, G1) is seen in a 40-year-old man. Ki-67 labeling index of the monomorphous tumor cells is around 2%. Immunostaining for Ki-67 (2)