

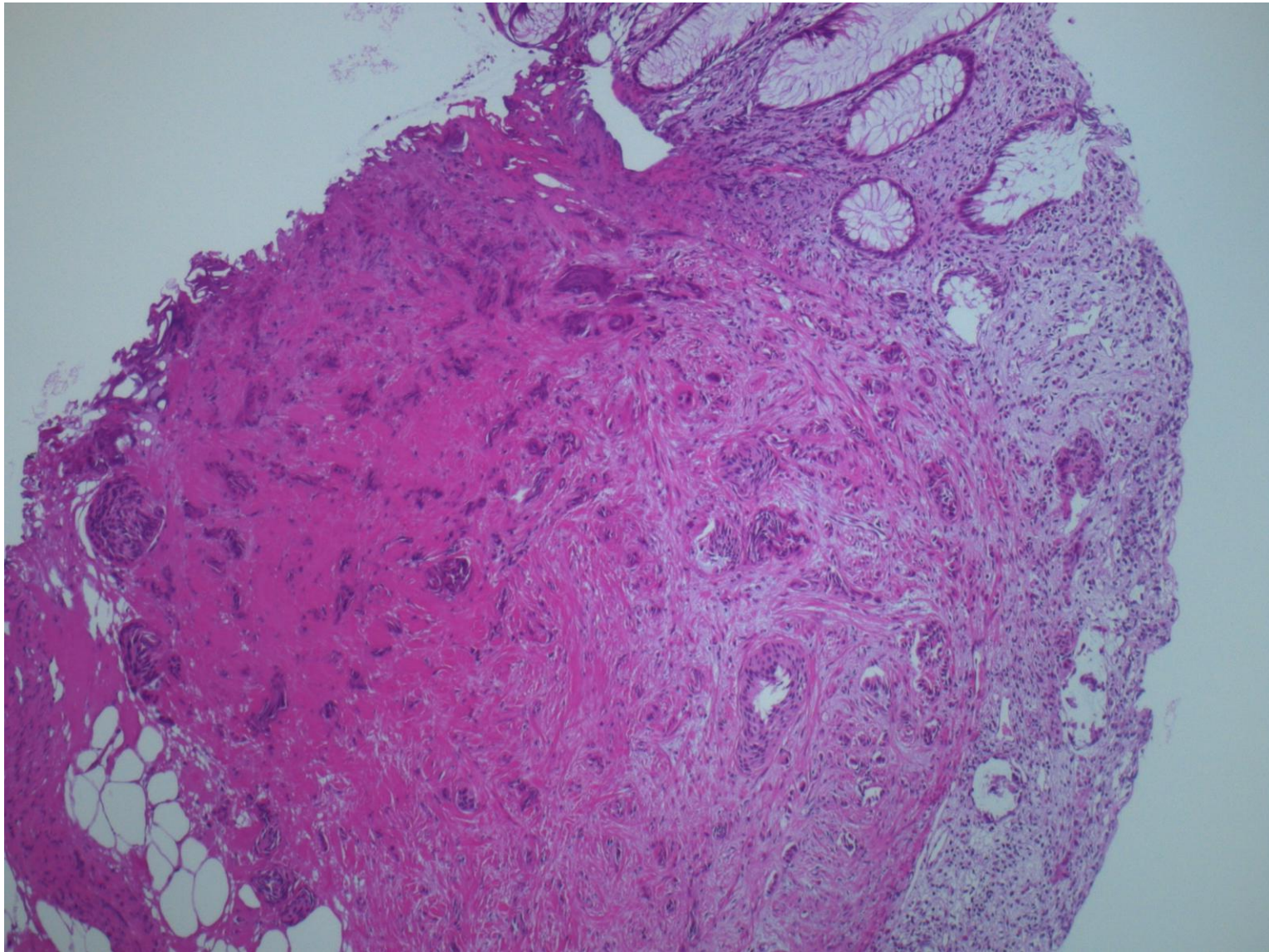
# Carcinoid tumor of the sigmoid colon

In Japan, Korea and China, carcinoid tumors of the large intestine are predominantly seen in the rectum. Colonic occurrence of carcinoid tumor is extremely rare. In contrast, in the Euro-american countries, colonic carcinoid tumors are relatively common. Waisberg et al have described, right-sided colon (cecum) is a preferred site of occurrence in Brazil. The difference among the ethnic groups is quite noteworthy. An exceptionally rare occurrence of carcinoid tumor in the sigmoid colon in a 49-year-old Japanese male patient is described herein.

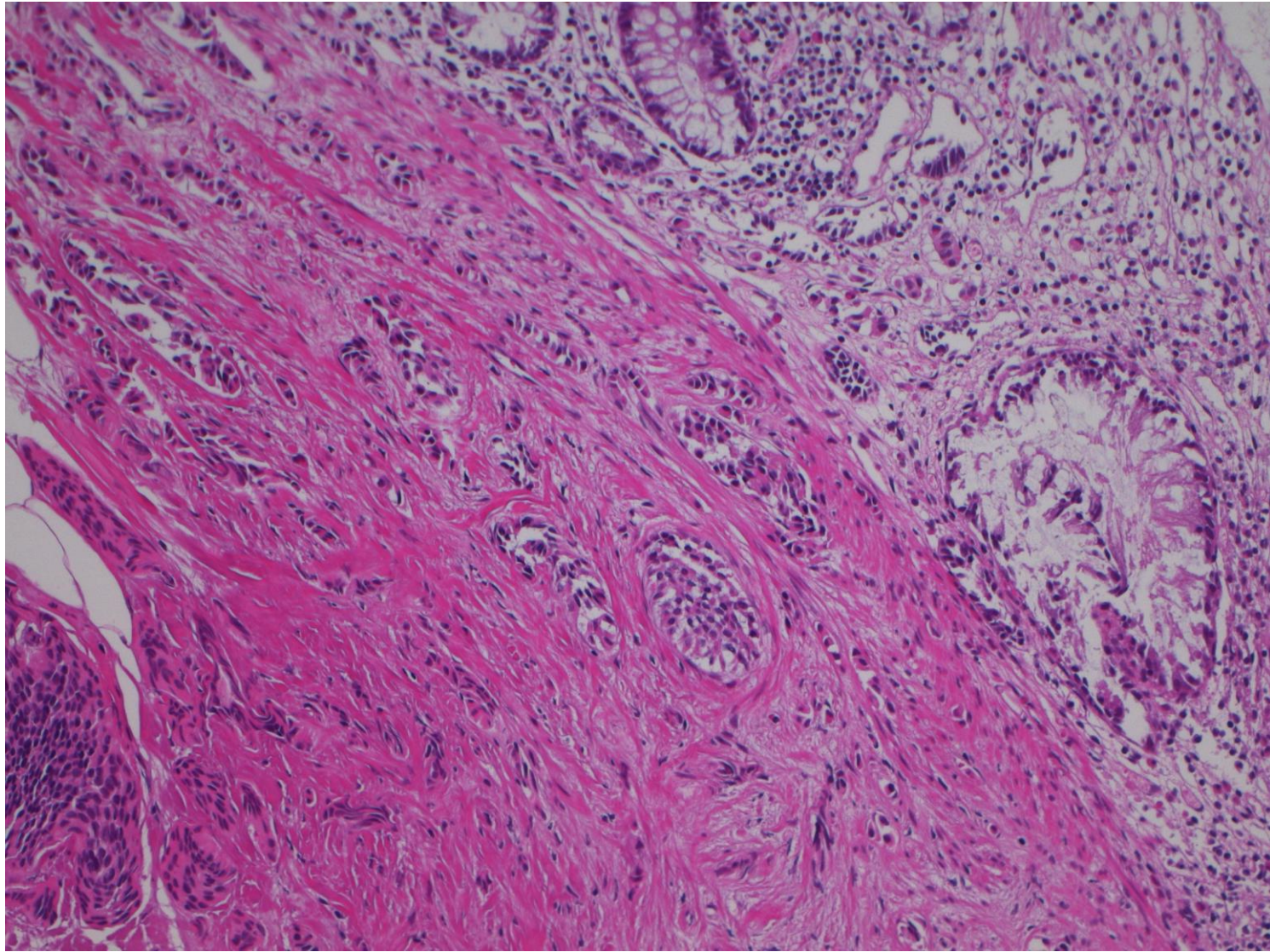
Ref.-1: Waisberg DR, et al. Colonic carcinoid tumors: a clinicopathologic study of 23 patients from a single institution. *Arq Gastroenterol* 2009; 46(4): 288-293. doi: 10.1590/s0004-28032009000400008

Ref.-2: Colonoscopy Study Group of Korean Society of Coloproctology. Clinical characteristics of colorectal carcinoid tumors. *J Korean Soc Coloproctol* 2011; 27(1): 17-20. doi: 10.3393/jksc.2011.27.1.17

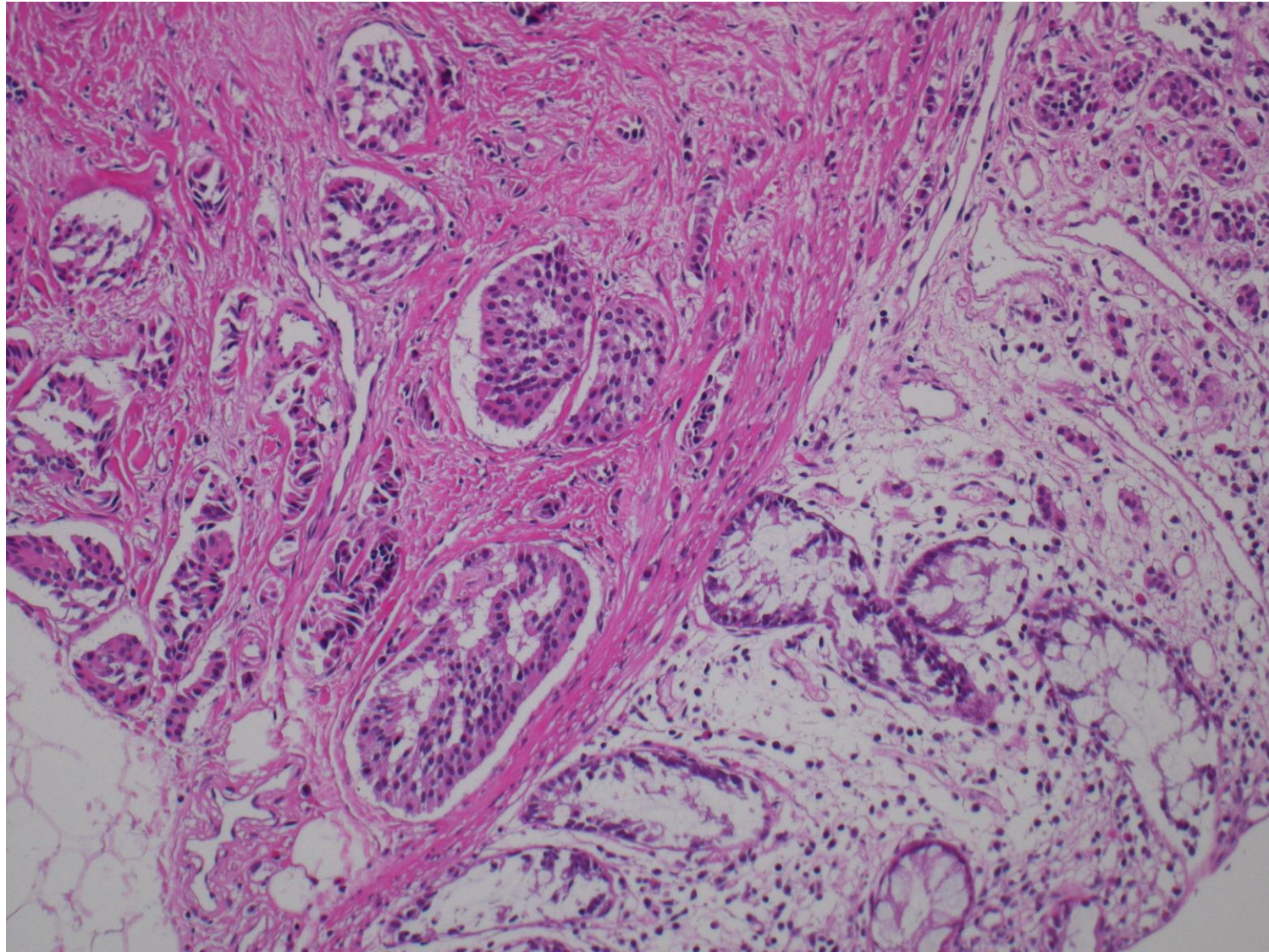
Ref.-3: Zhou B, et al. High vimentin expression with E-cadherin expression loss predicts a poor prognosis after resection of grade 1 and 2 pancreatic neuroendocrine tumors. *BMC Cancer* 2021; 21(1): 334. doi: 10.1186/s12885-021-08062-6



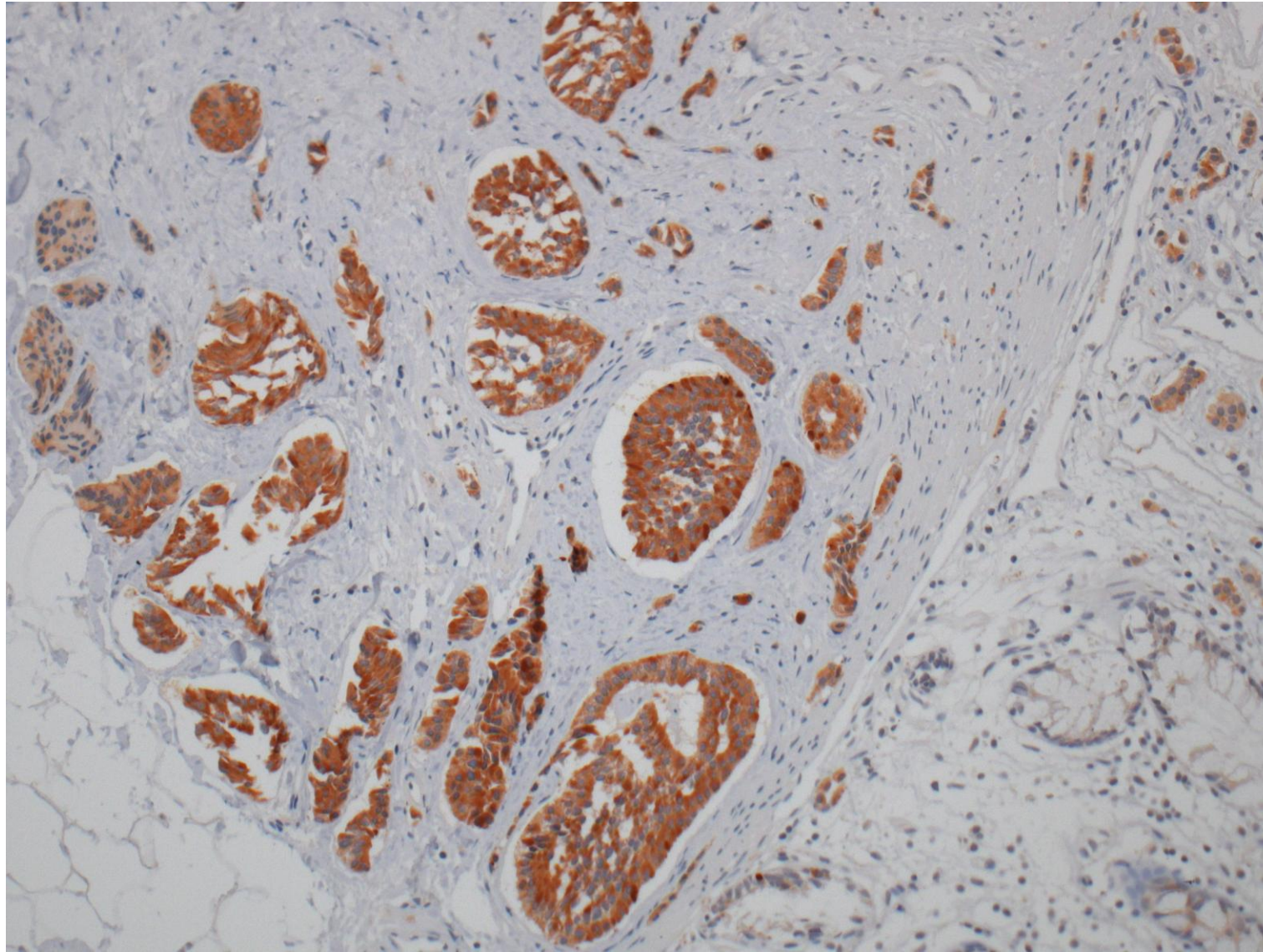
A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. H&E-1



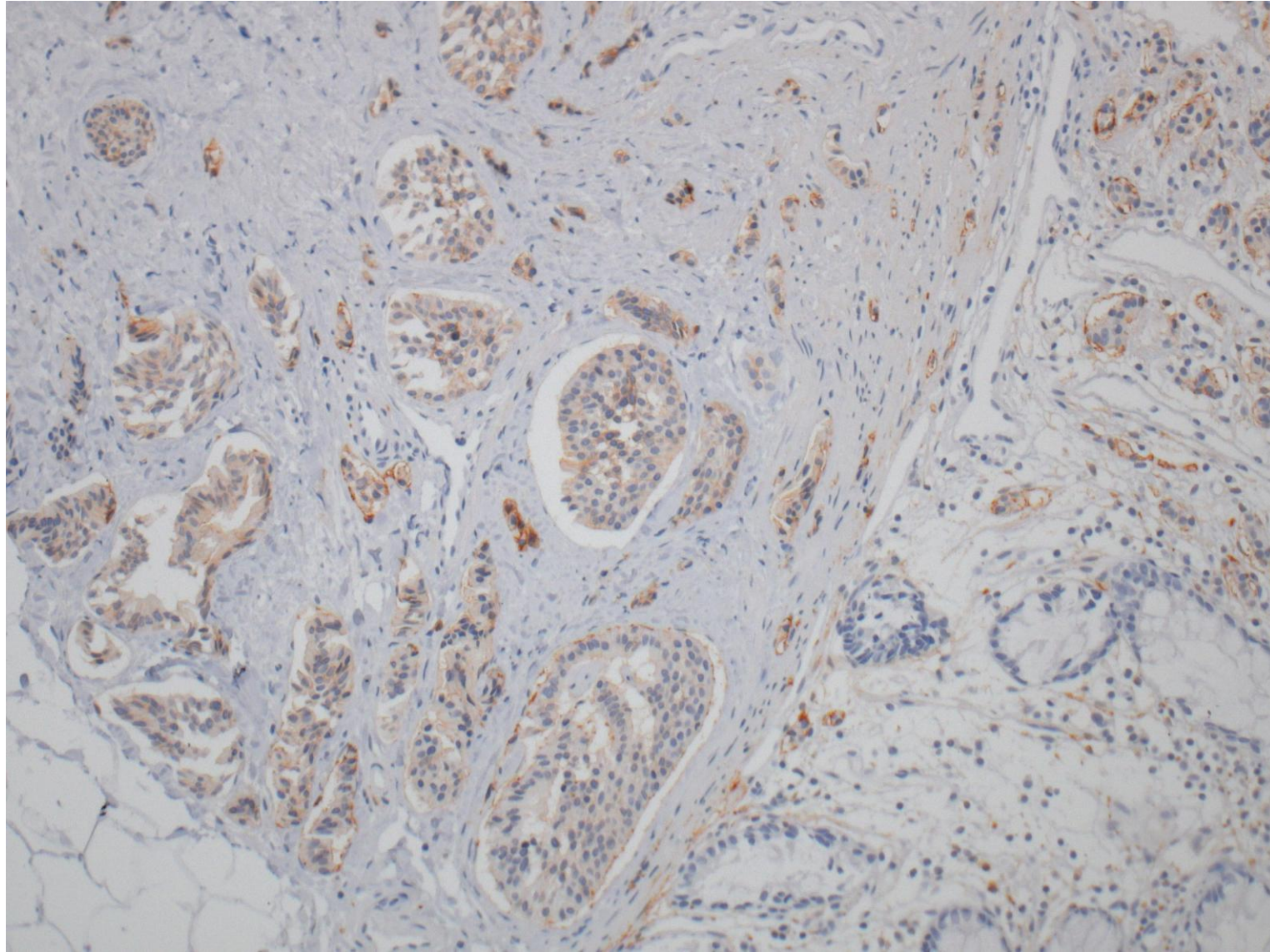
A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. Intramucosal involvement is focally observed. H&E-2



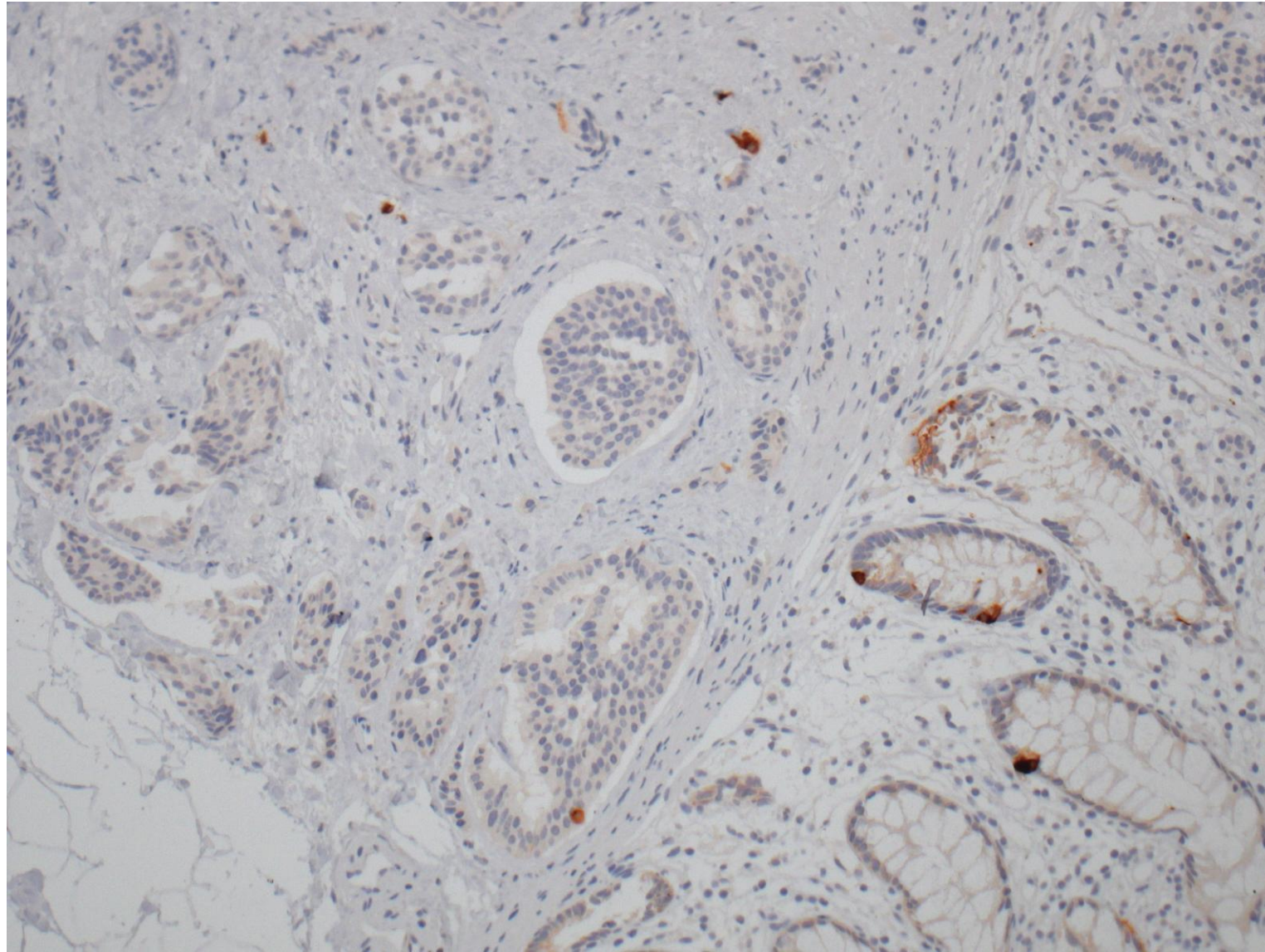
A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. Intramucosal involvement is focally observed. H&E-3



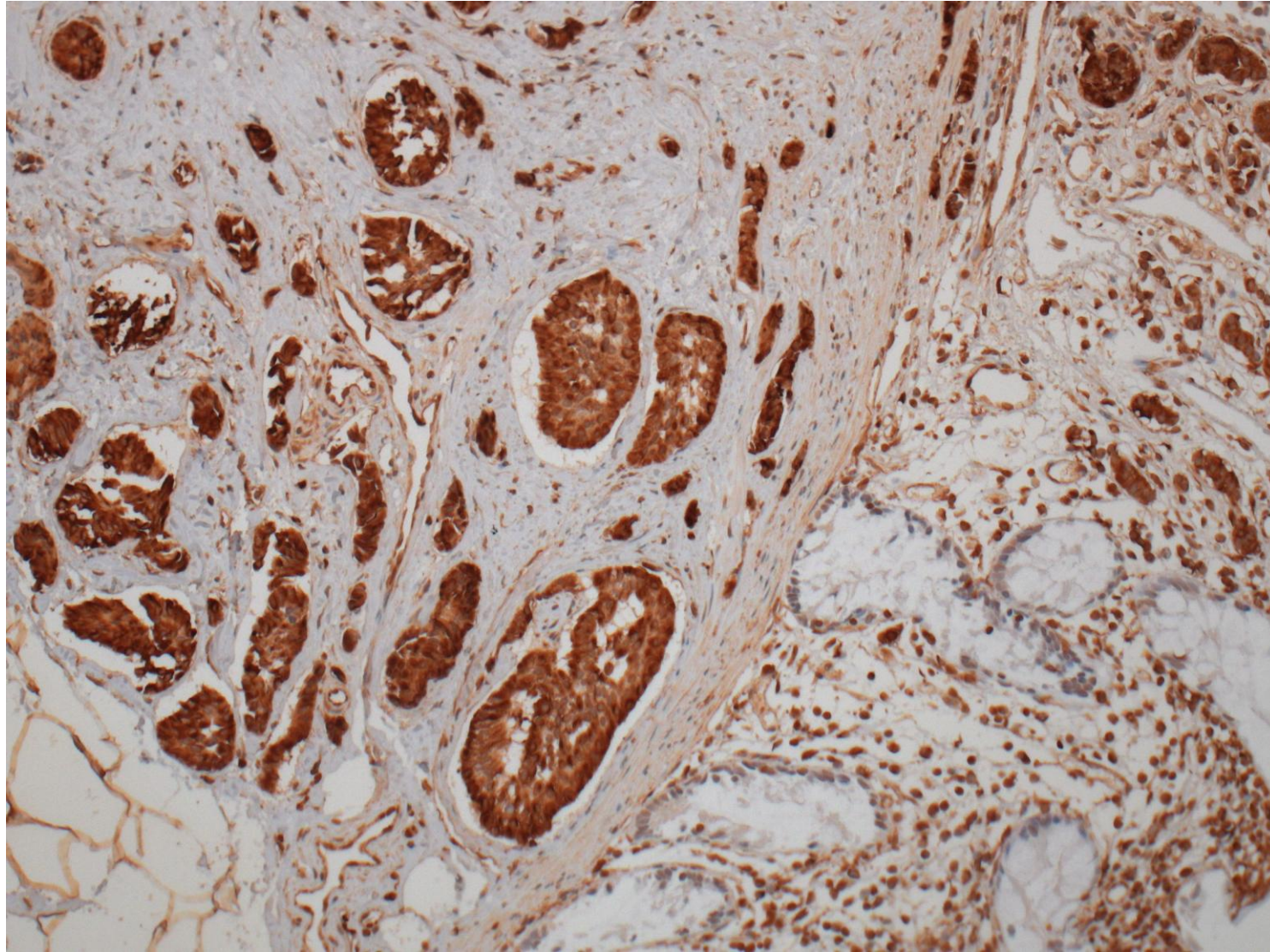
A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. The tumor cells are diffusely immunoreactive for synaptophysin. Immunostaining for synaptophysin



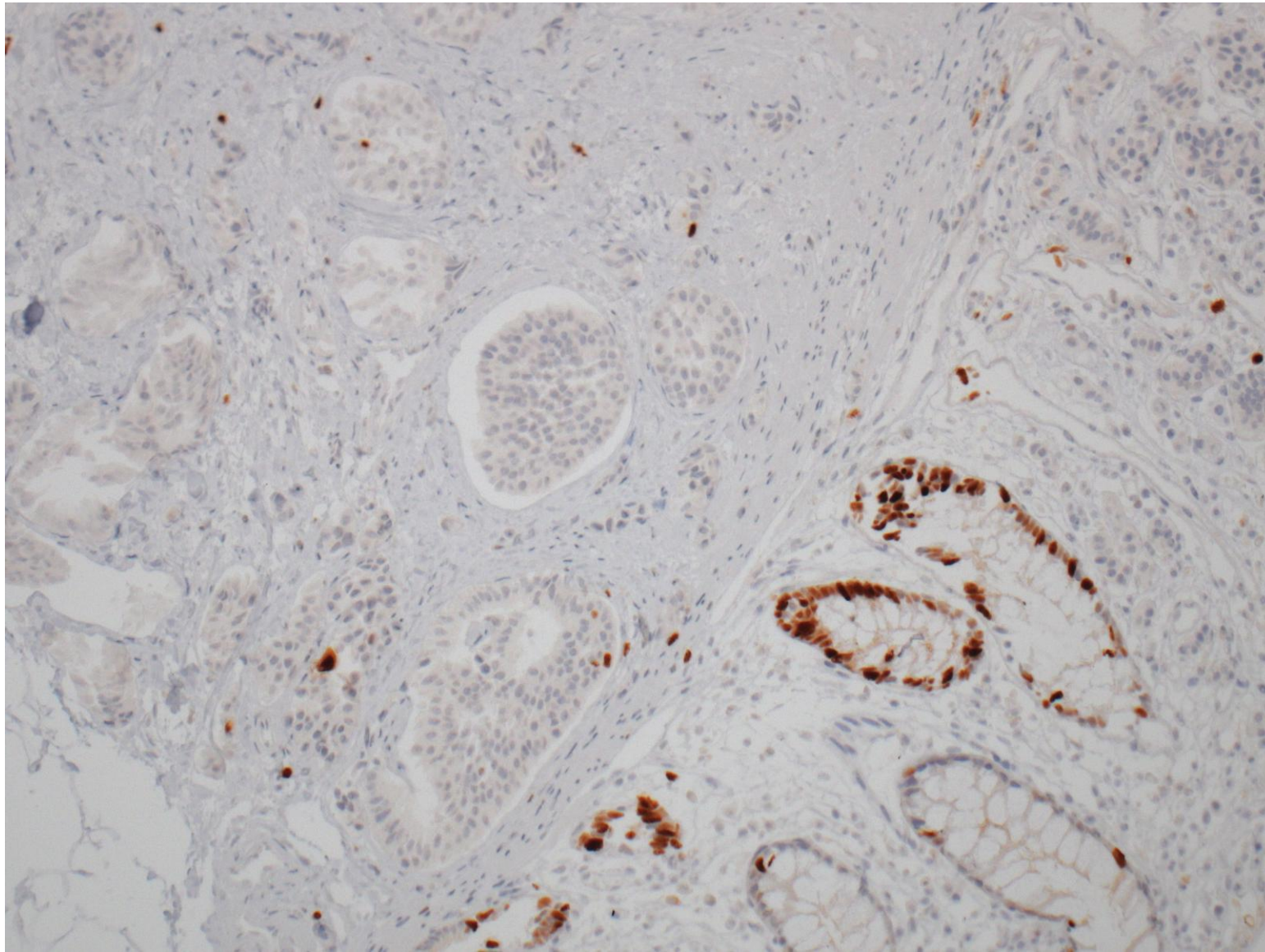
A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. The tumor cells are weakly immunoreactive for NCAM (CD56). Immunostaining for NCAM (CD56)



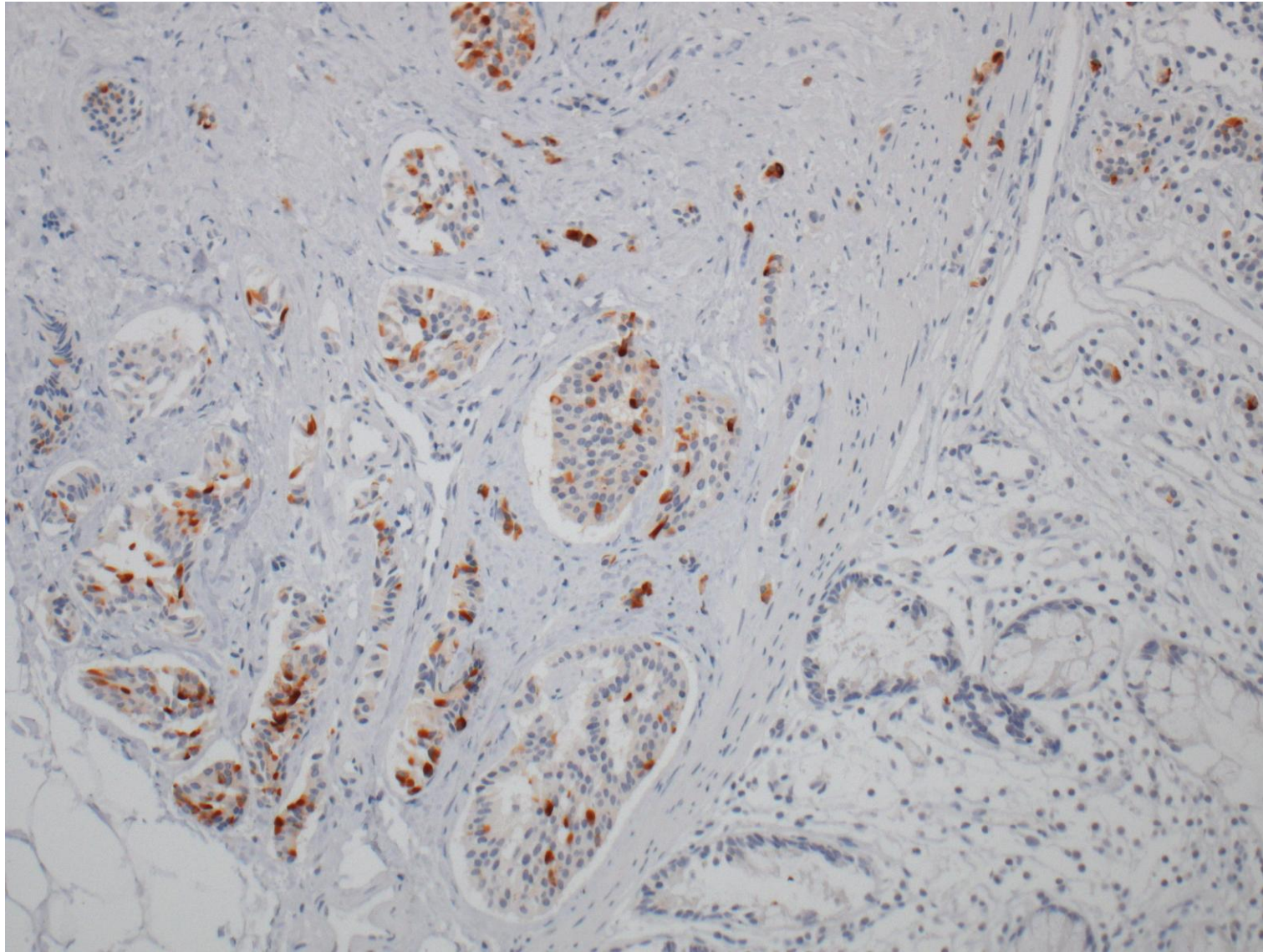
A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. The tumor cells are fundamentally negative for chromogranin A. Immunostaining for chromogranin A



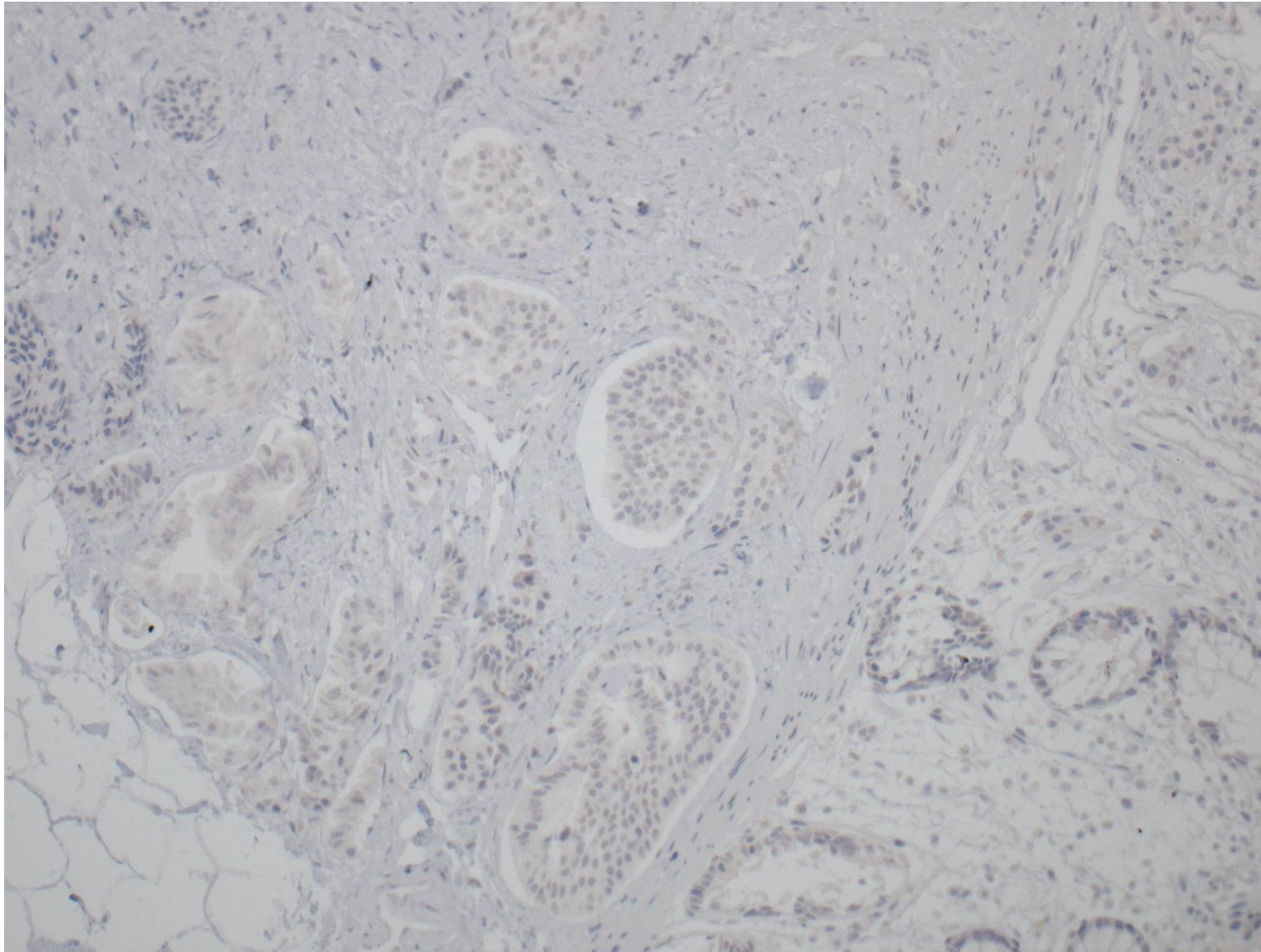
A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. The tumor cells are diffusely and strongly immunoreactive for vimentin. Reportedly, high vimentin expression with loss of E-cadherin expression is correlated with nodal and distant metastasis. Immunostaining for vimentin



A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. Ki-67 labeling index of the tumor cells is low  $<3\%$ . Immunostaining for Ki-67



A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. The tumor cells are moderately immunoreactive for somatostatin. Immunostaining for somatostatin



A biopsy from the sigmoid colon from a 49-year-old Japanese male patient shows submucosally invading and desmoplastic carcinoid tumor. The tumor cells are negative for bovine pancreatic polypeptide (BPP). Immunostaining for BPP