

Spindle cell polyps of the colon

There are several kinds of benign, predominantly spindle cell, mesenchymal polyps mainly involving the mucosa of the colon.

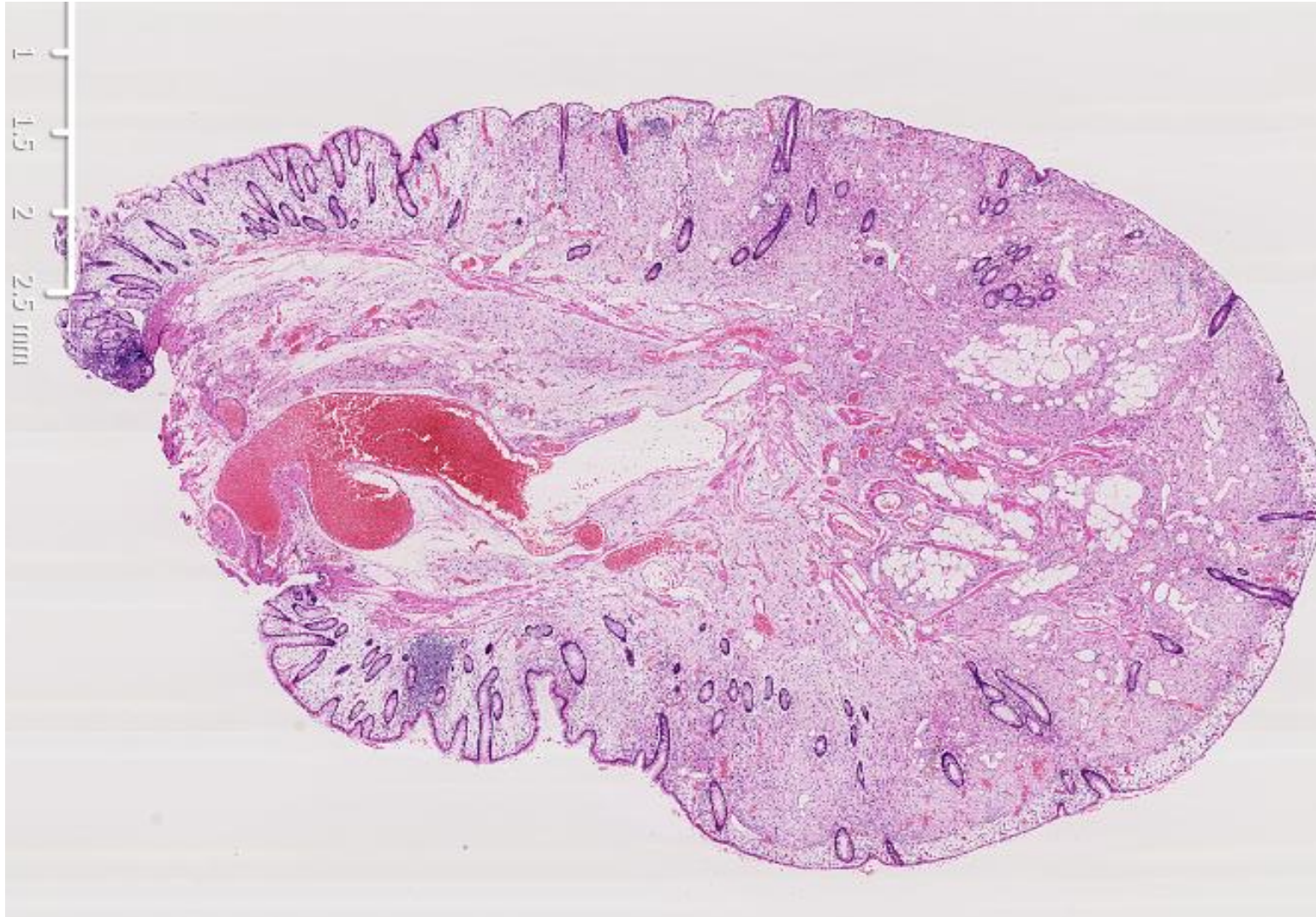
Pathologists see polypectomized specimens. These include perineurioma, smooth muscle hamartoma, Schwann cell hamartoma, ganglioneuroma, neurofibroma, inflammatory fibroid polyps and granular cell tumors.

Spindle cell polyps not categorized in these published names should be termed as benign unclassified mesenchymal polyps (BUMPs).

Representative features are presented here for comparison.

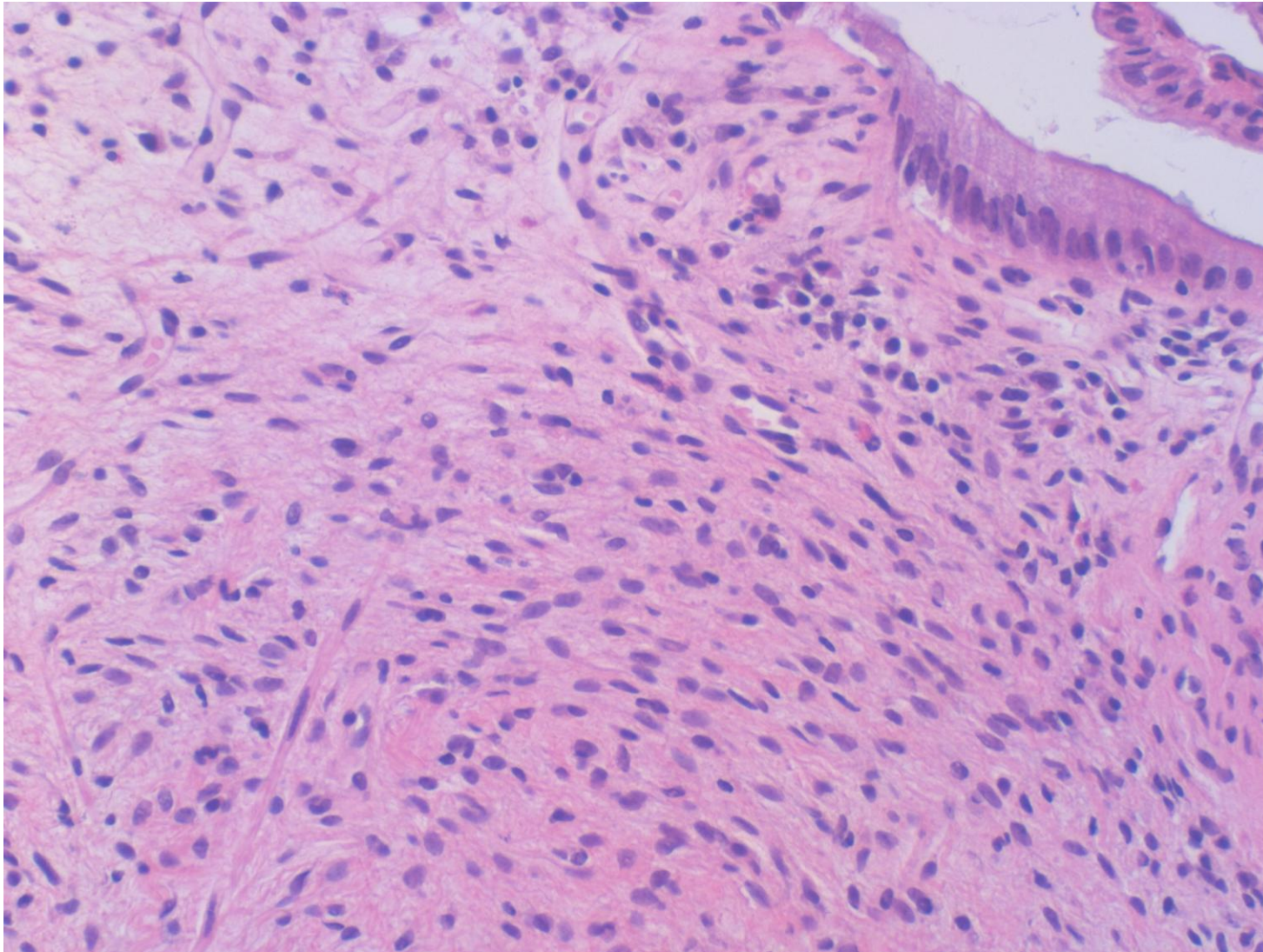
Ref.: Rittershaus AC, Appelman HD. Benign gastrointestinal mesenchymal BUMPS: a brief review of some spindle cell polyps with published names. Arch Pathol Lab Med 2011; 135(10): 1311-1319. doi: 10.5858/arpa.2011-0038-RA

Perineurioma (79F)-1



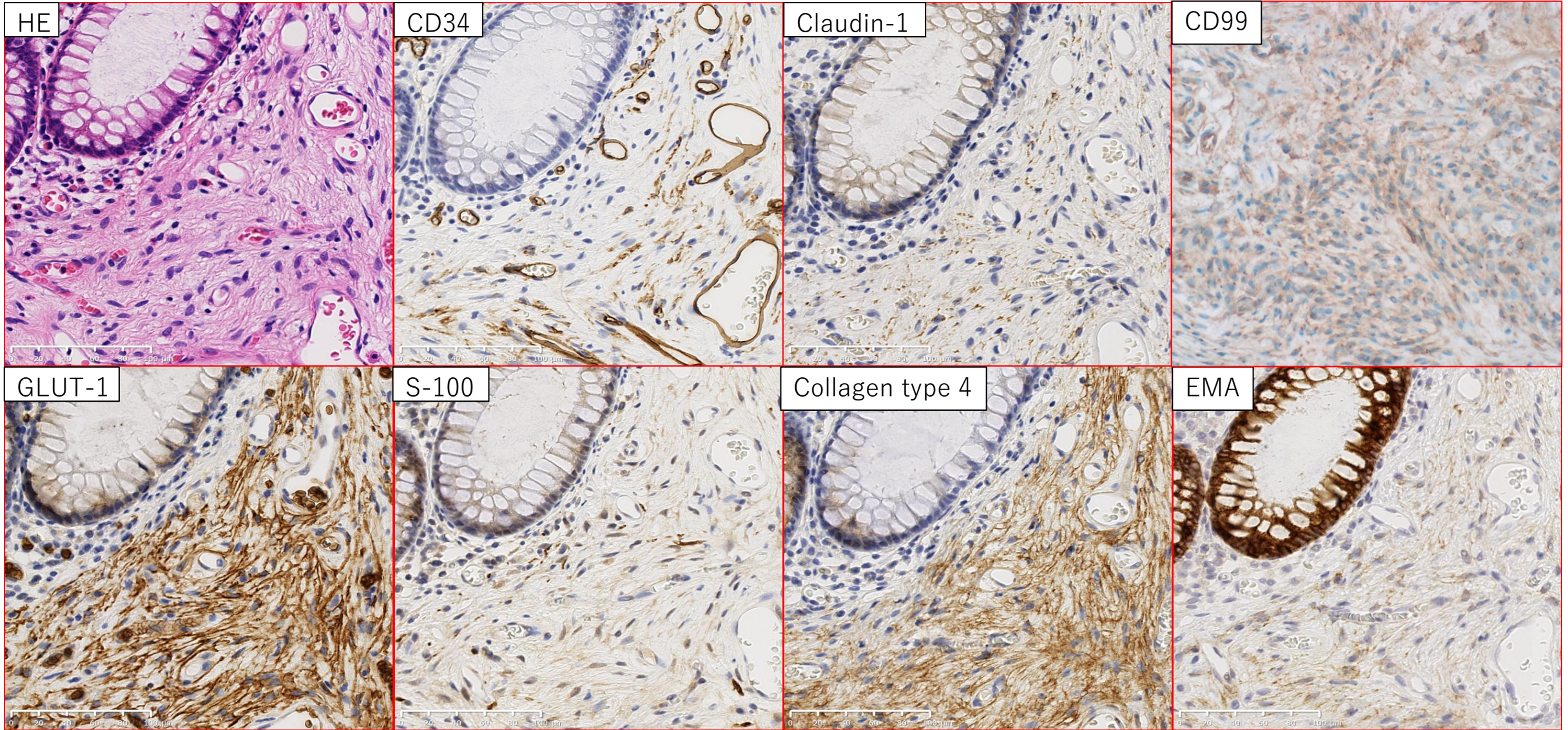
Perineurinoma (previously called benign fibroblastic polyp) is one typical example of spindle cell polyps of the colon. The lamina propria mucosae and submucosa are involved by the mesenchymal lesion. H&E-a1

Perineurioma (79F)-2



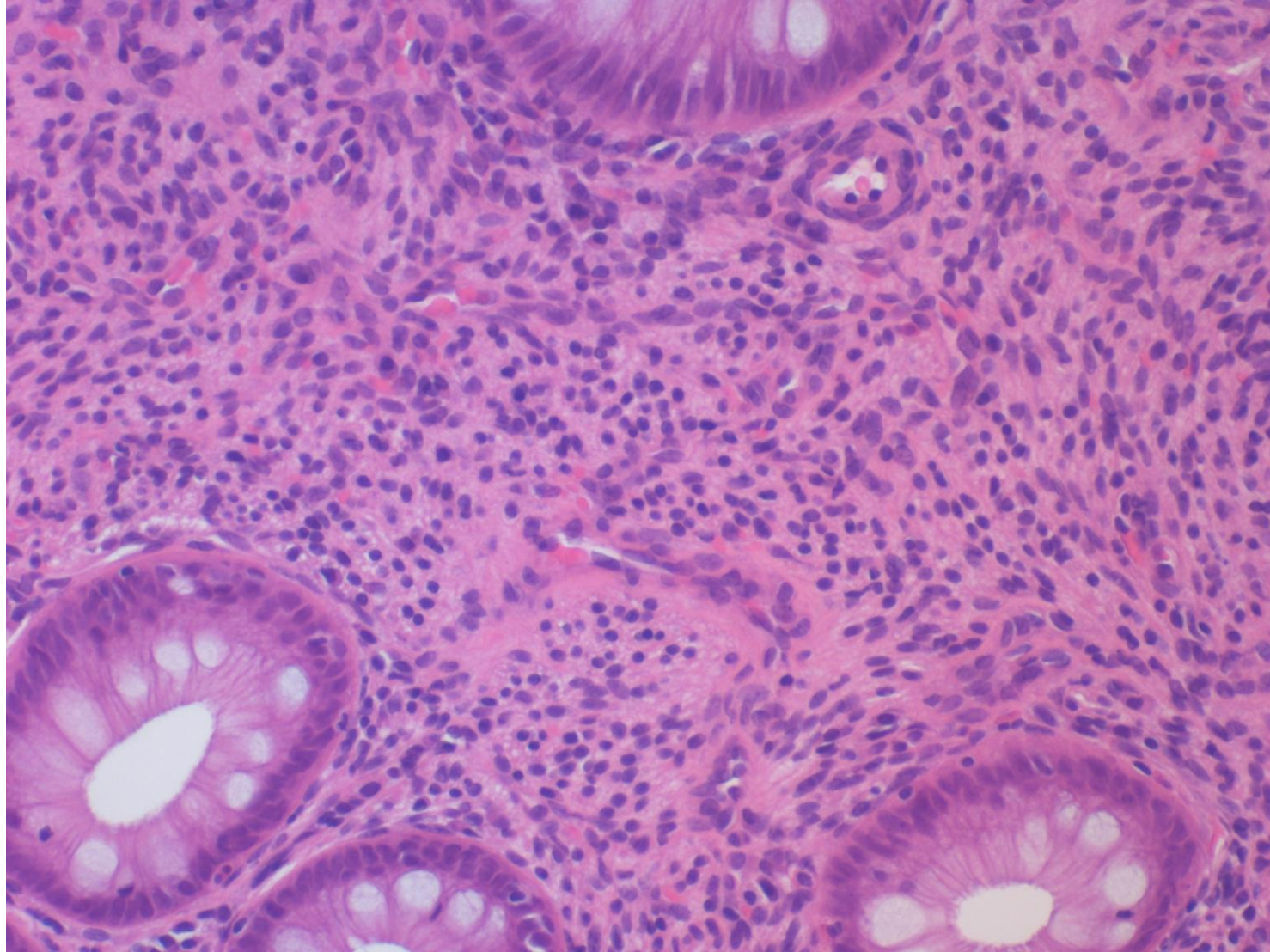
Perineurinoma (previously called benign fibroblastic polyp) is one typical example of spindle cell polyps of the colon. The lamina propria mucosae is involved by the mesenchymal lesion. H&E-a2

Perineurioma (79F)-3



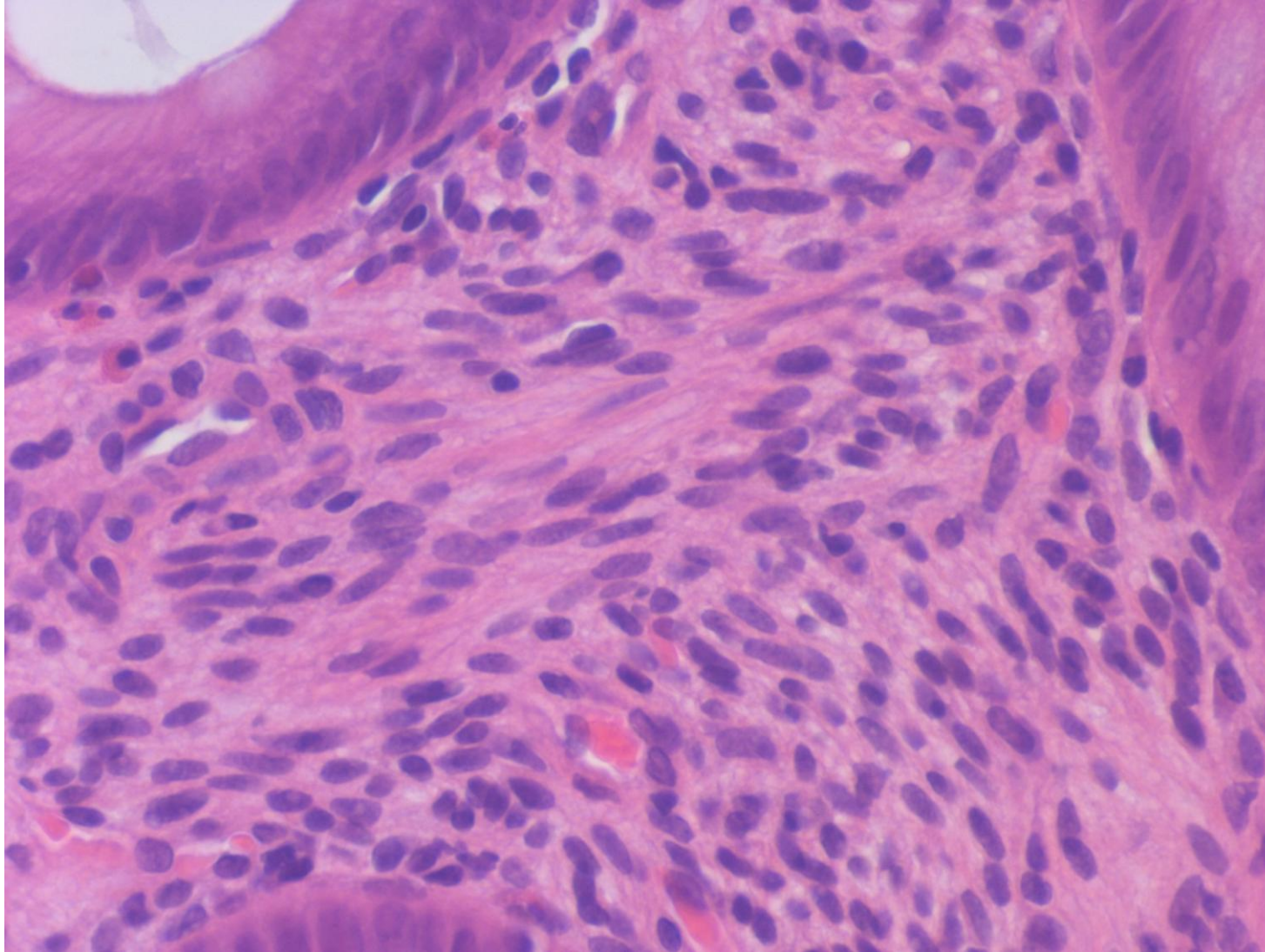
Perineurinoma (previously called benign fibroblastic polyp) is one typical example of spindle cell polyps of the colon. Perineurinoma cells express claudin-1, CD99, GLUT-1, collagen type 4 and EMA. CD34 and S-100 protein are negative. Immunostaining panel

Smooth muscle hamartoma (54M)-1



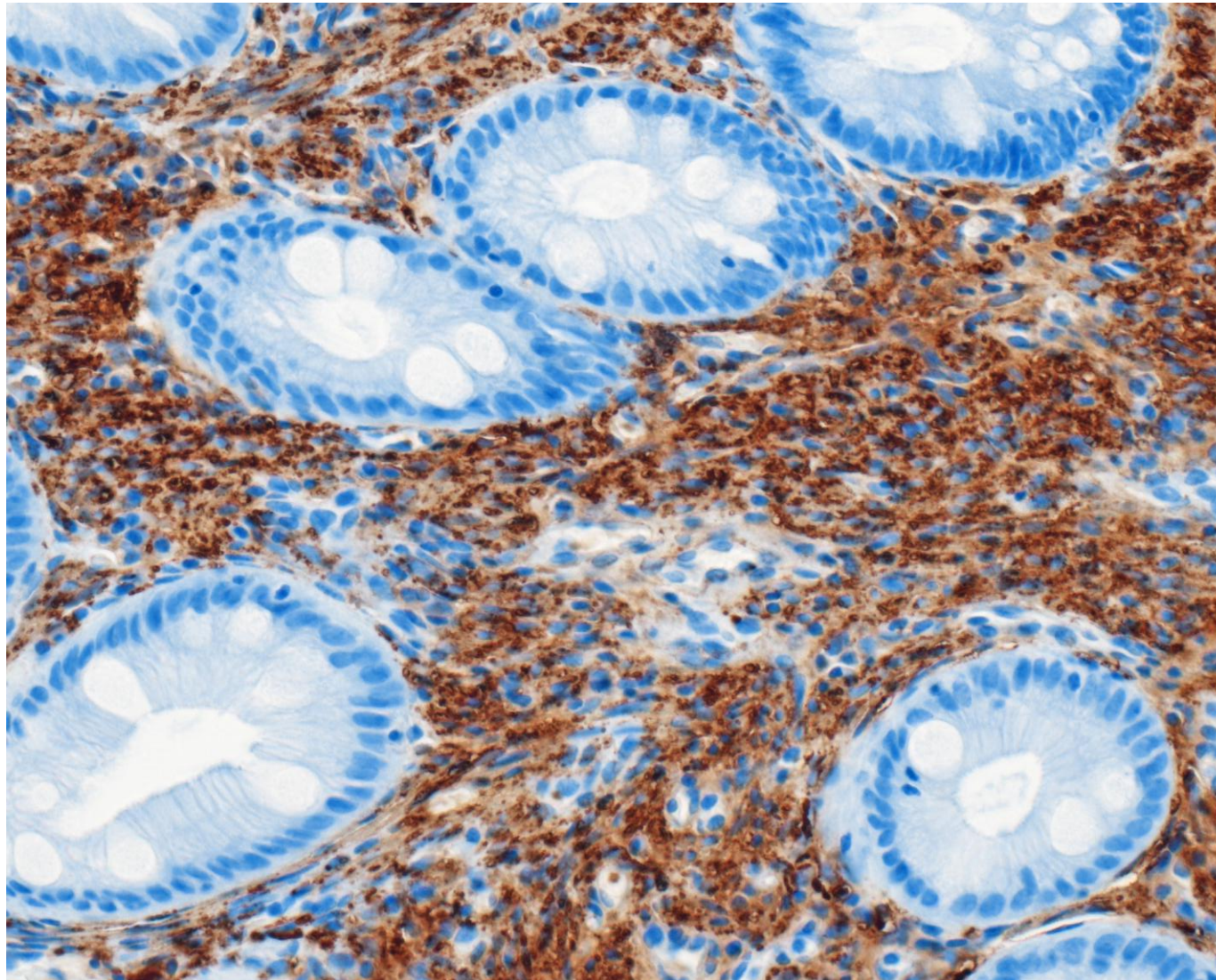
Smooth muscle hamartoma is another example of the spindle cell polyps of the colon. Bland spindle cells grow in the lamina propria mucosae with ill-defined margins. H&E-b1

Smooth muscle hamartoma (54M)-2



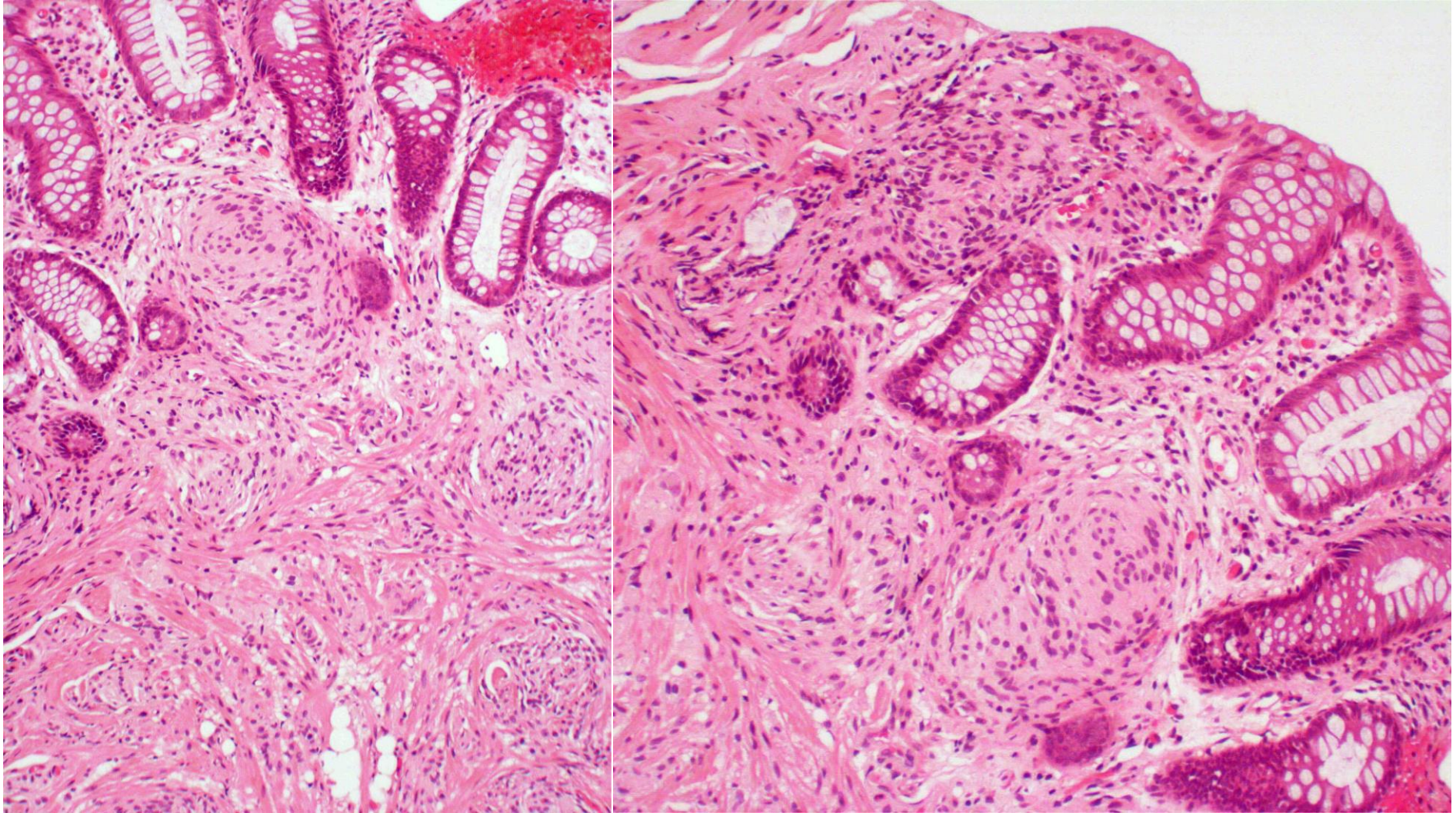
Smooth muscle hamartoma is another example of the spindle cell polyps of the colon. Bland spindle cells grow in the lamina propria mucosae with ill-defined margins. H&E-b2

Smooth muscle hamartoma (54M)-3



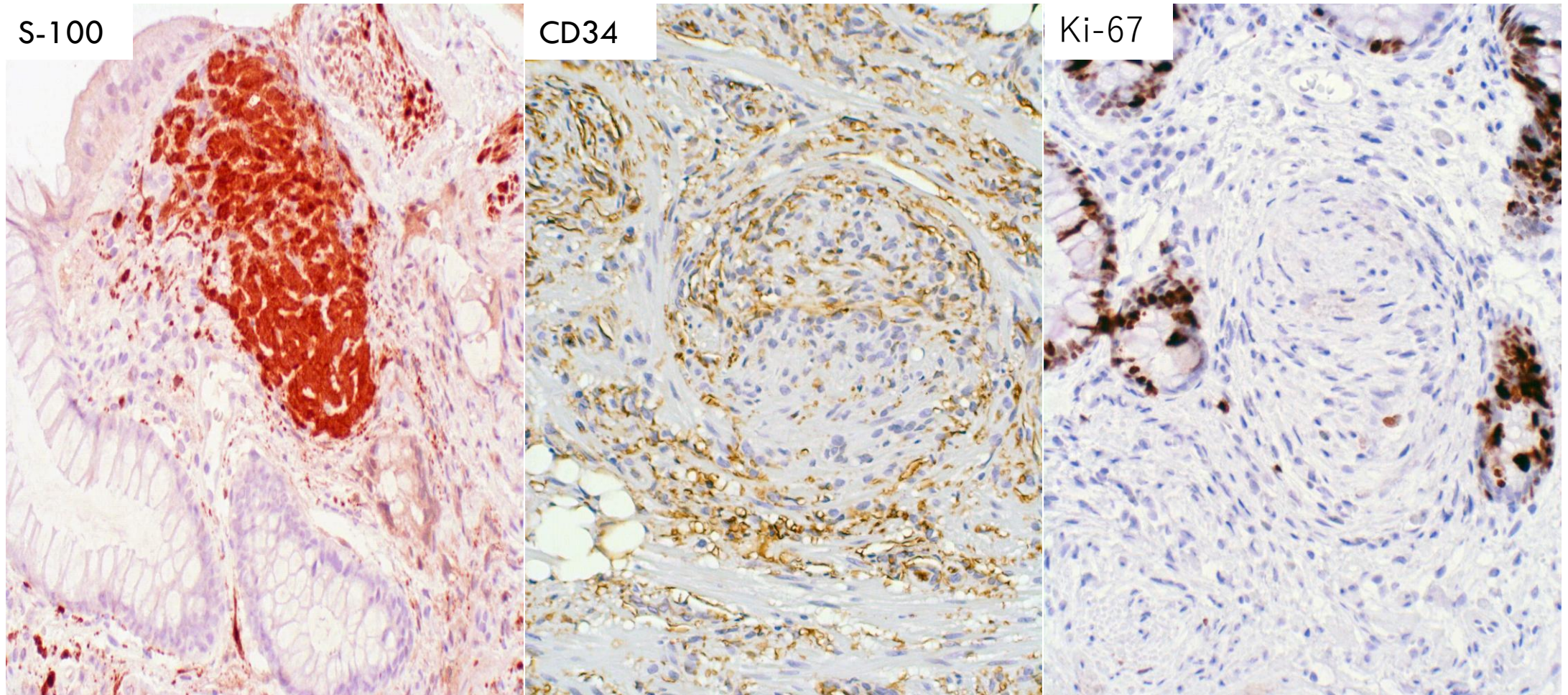
Smooth muscle hamartoma is another example of the spindle cell polyps of the colon. Bland spindle cells are strongly positive for SMA. Immunostaining for SMA

Schwann cell hamartoma (45M)-1



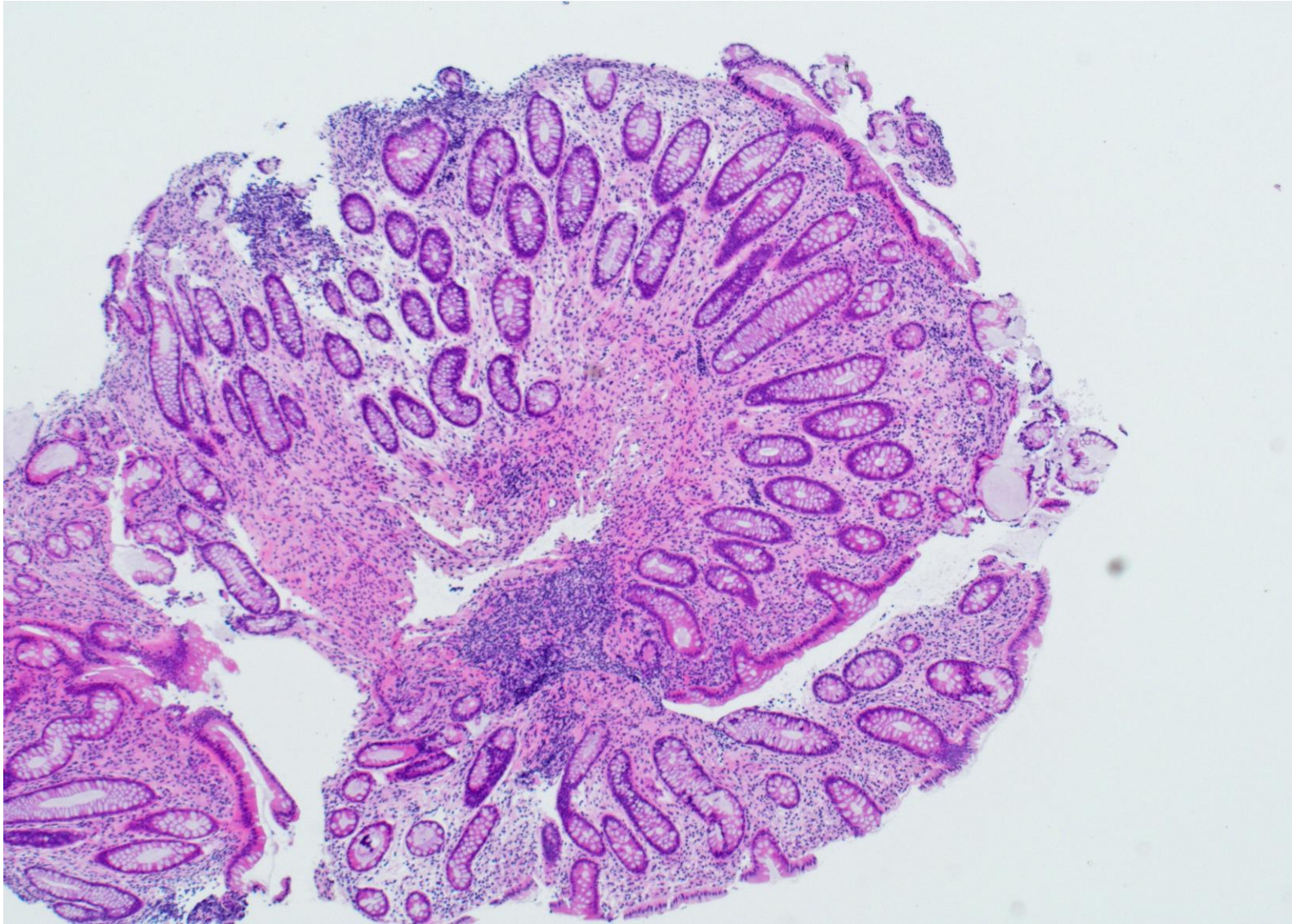
Schwann cell hamartoma shows nodular growth of bland spindle cells in the lamina propria mucosae with ill-defined margins. H&E-c

Schwann cell hamartoma (45M)-2



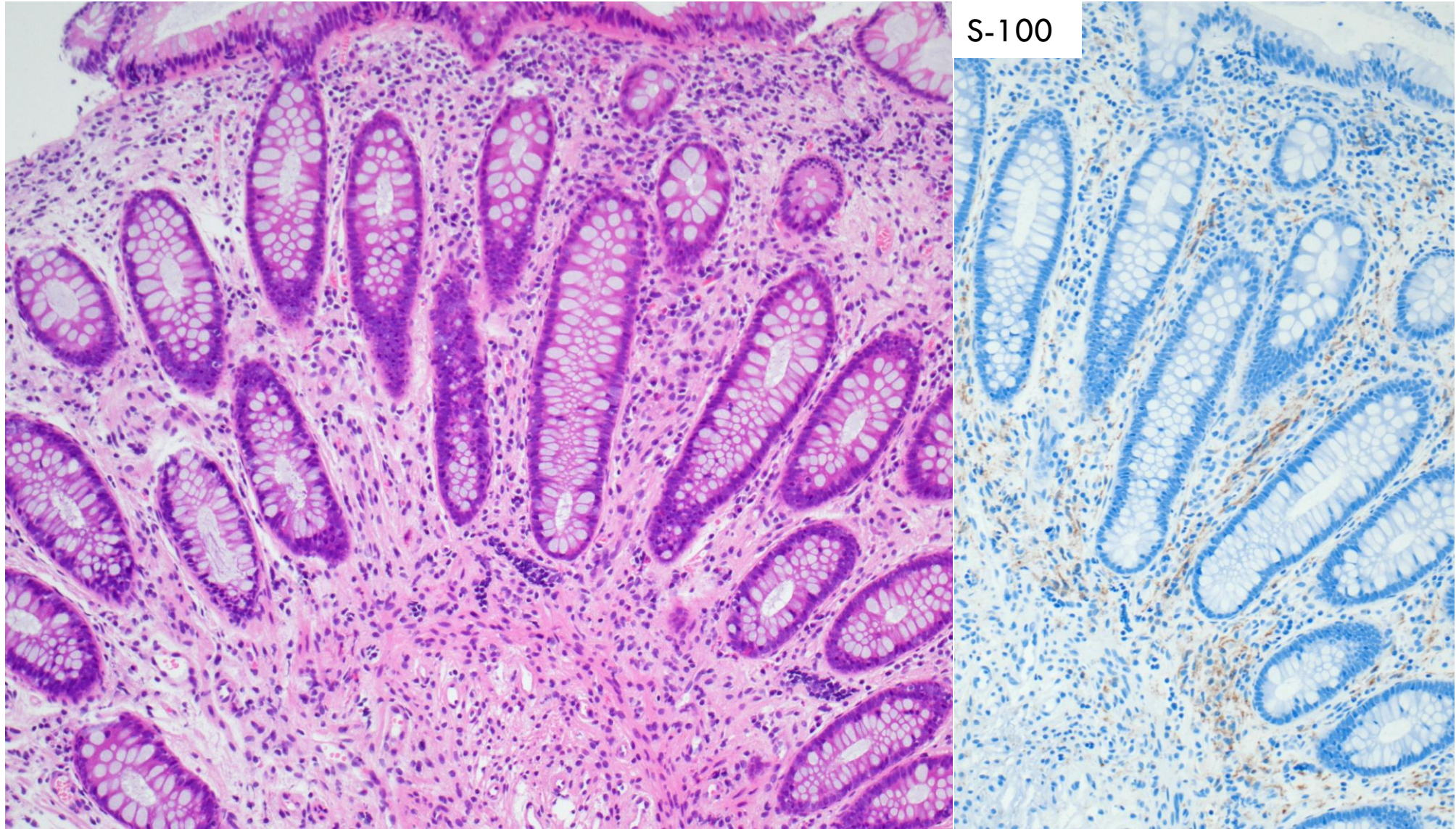
Schwann cell hamartoma shows nodular growth of bland spindle cells in the lamina propria mucosae. The nodule of the spindled cells are strongly immunoreactive for S-100 protein. CD34 is not expressed. Ki-67 labeling index is very low. Immunostaining panel

Neurofibroma-1



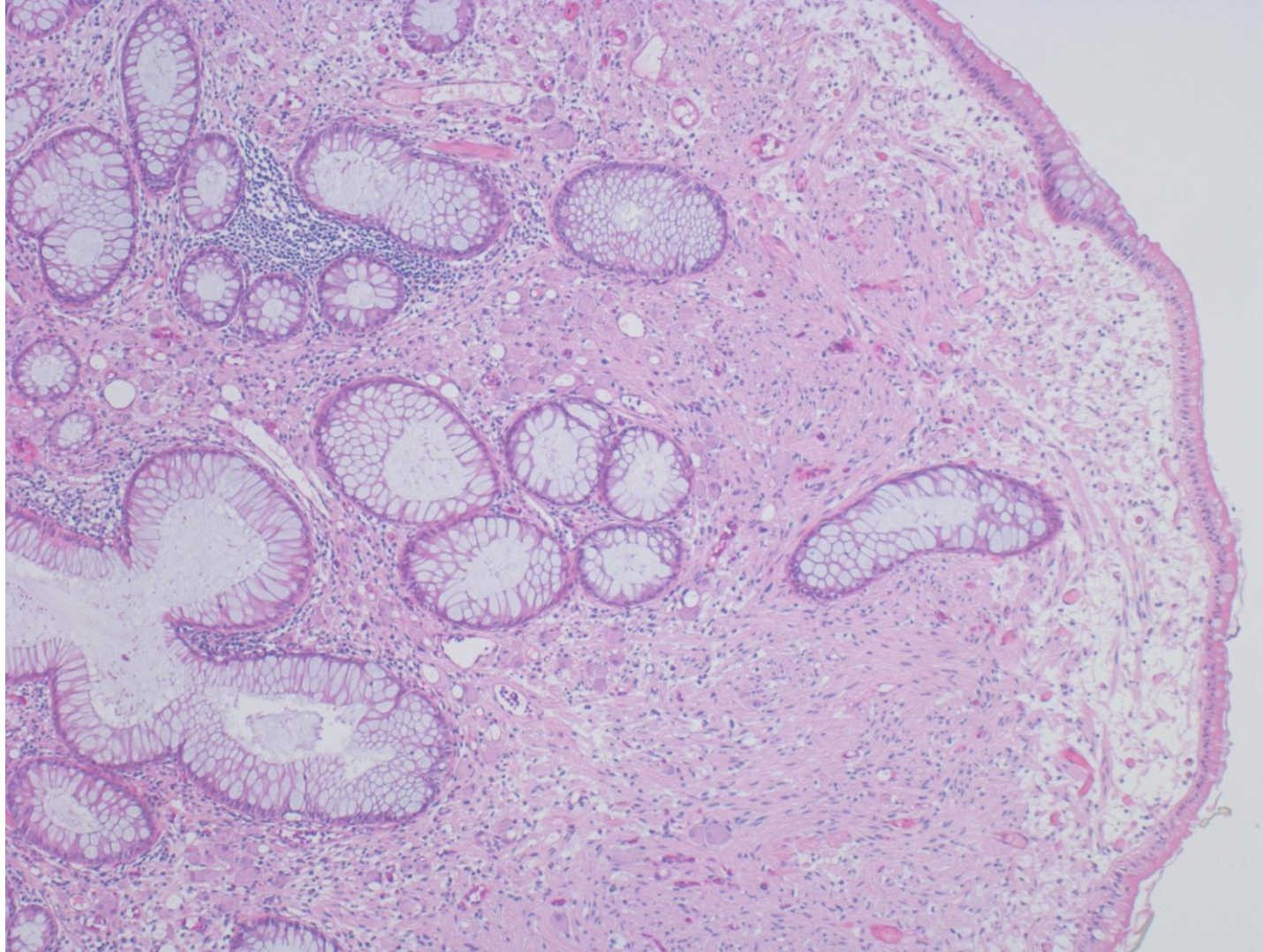
Neurofibroma shows spindle cell growth in the lamina propria mucosae through the submucosa. When multiple lesions are seen in the colonic mucosa, the possibility of neurofibromatosis should be considered. H&E-d1

Neurofibroma-2



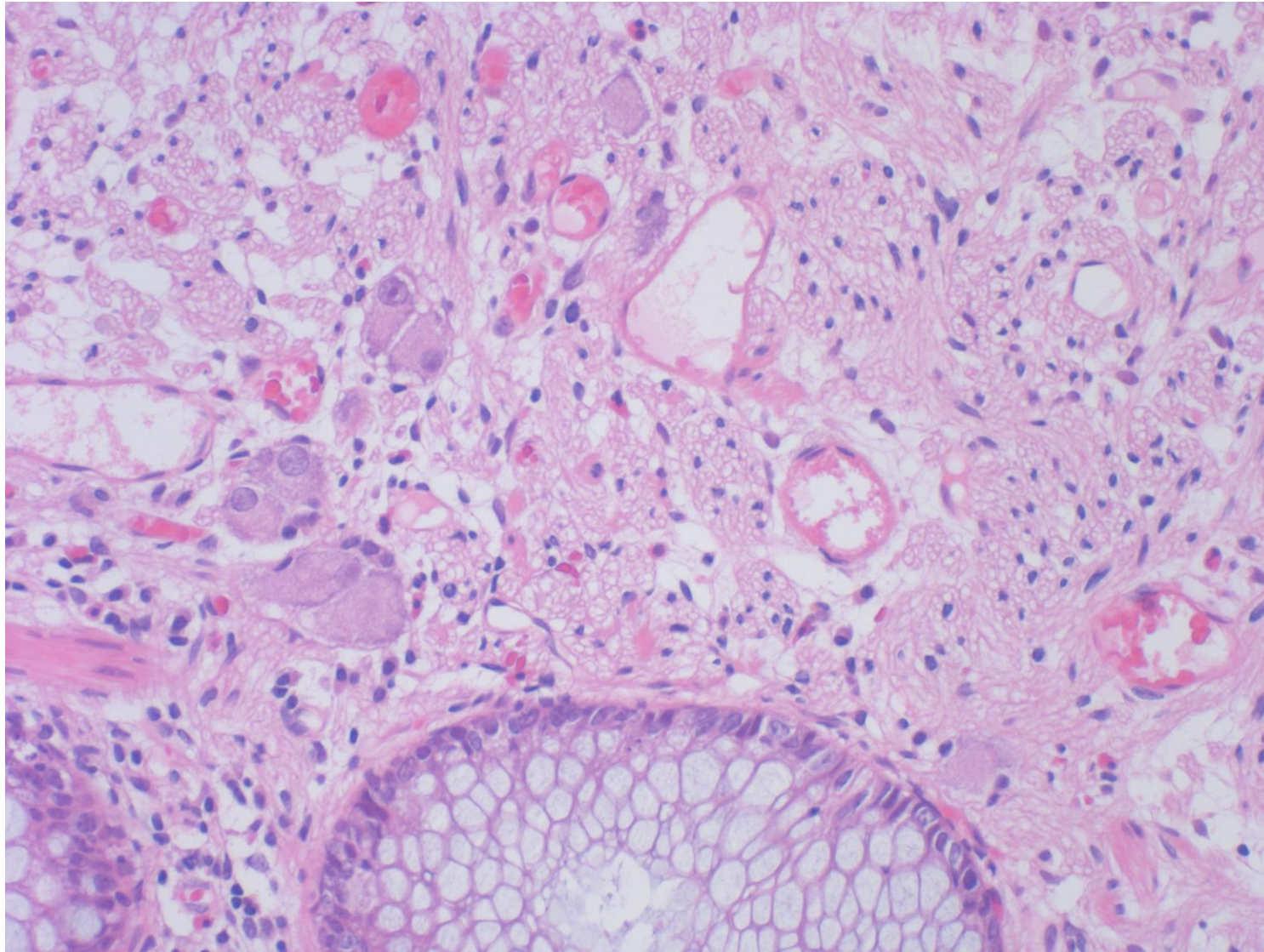
Neurofibroma shows spindle cell growth in the lamina propria mucosae through the submucosa. Part of the spindled cells are faintly positive for S-100 protein. Left: H&E-d2, right: immunostaining for S-100 protein

Ganglioneuroma (59F)-1



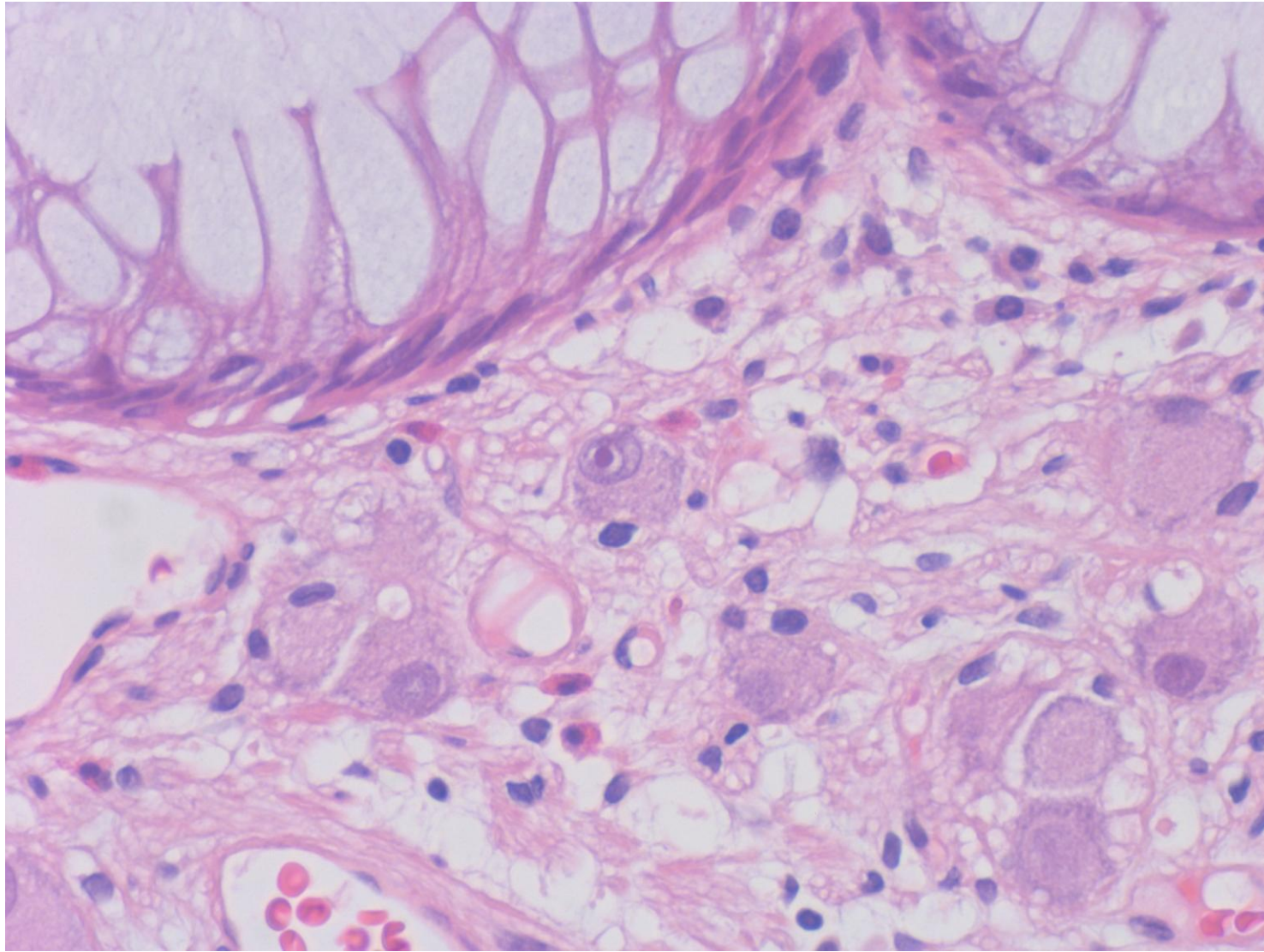
Ganglioneuroma of the colon reveals ill-defined, lamina propria growth of bland spindle (Schwann) cells. H&E-e1

Ganglioneuroma (59F)-2



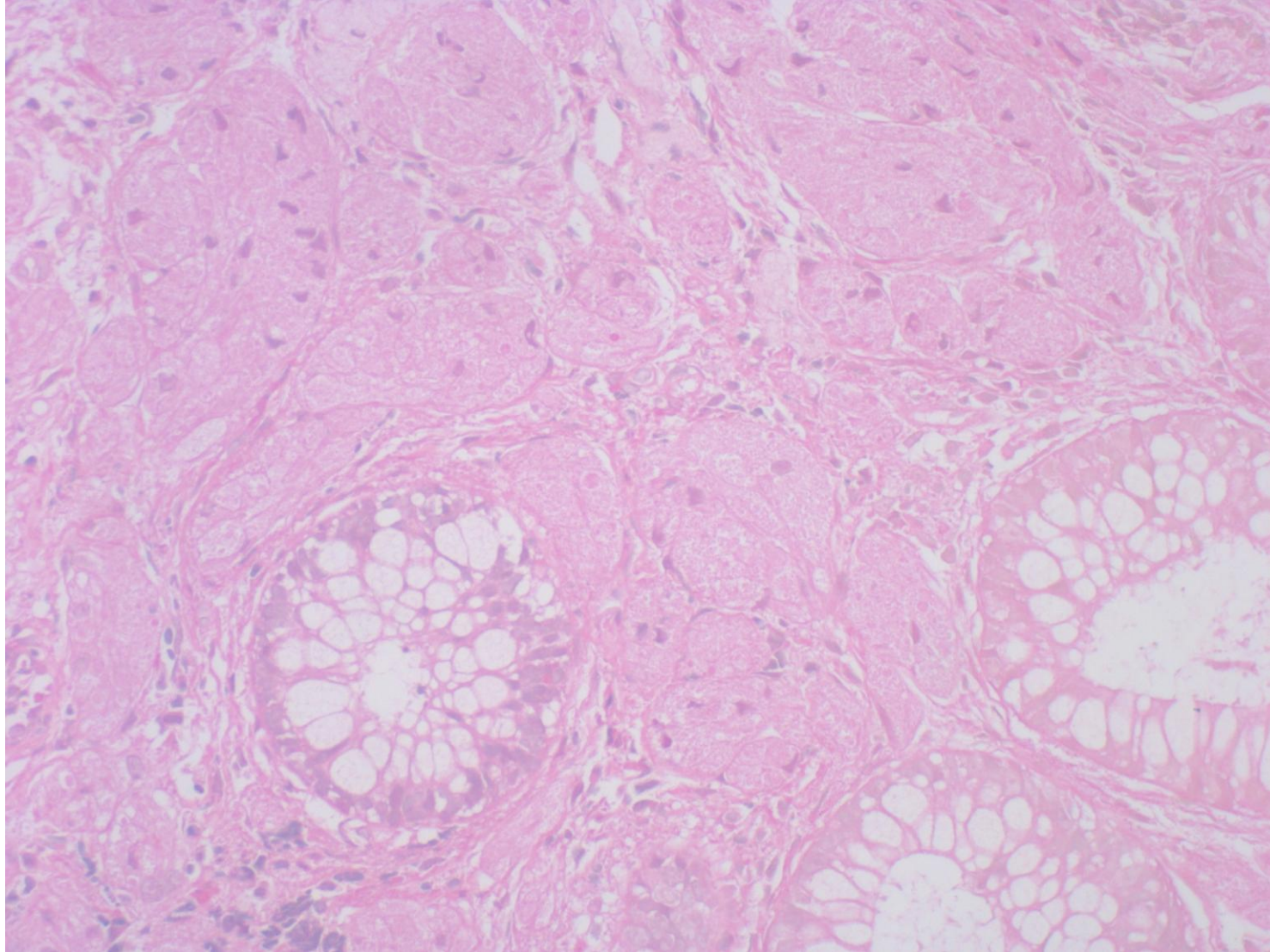
Ganglioneuroma of the colon reveals ill-defined, lamina propria growth of bland spindle cells. Ganglion cells are clustered among the spindle (Schwann) cell background. H&E-e2

Ganglioneuroma (59F)-3



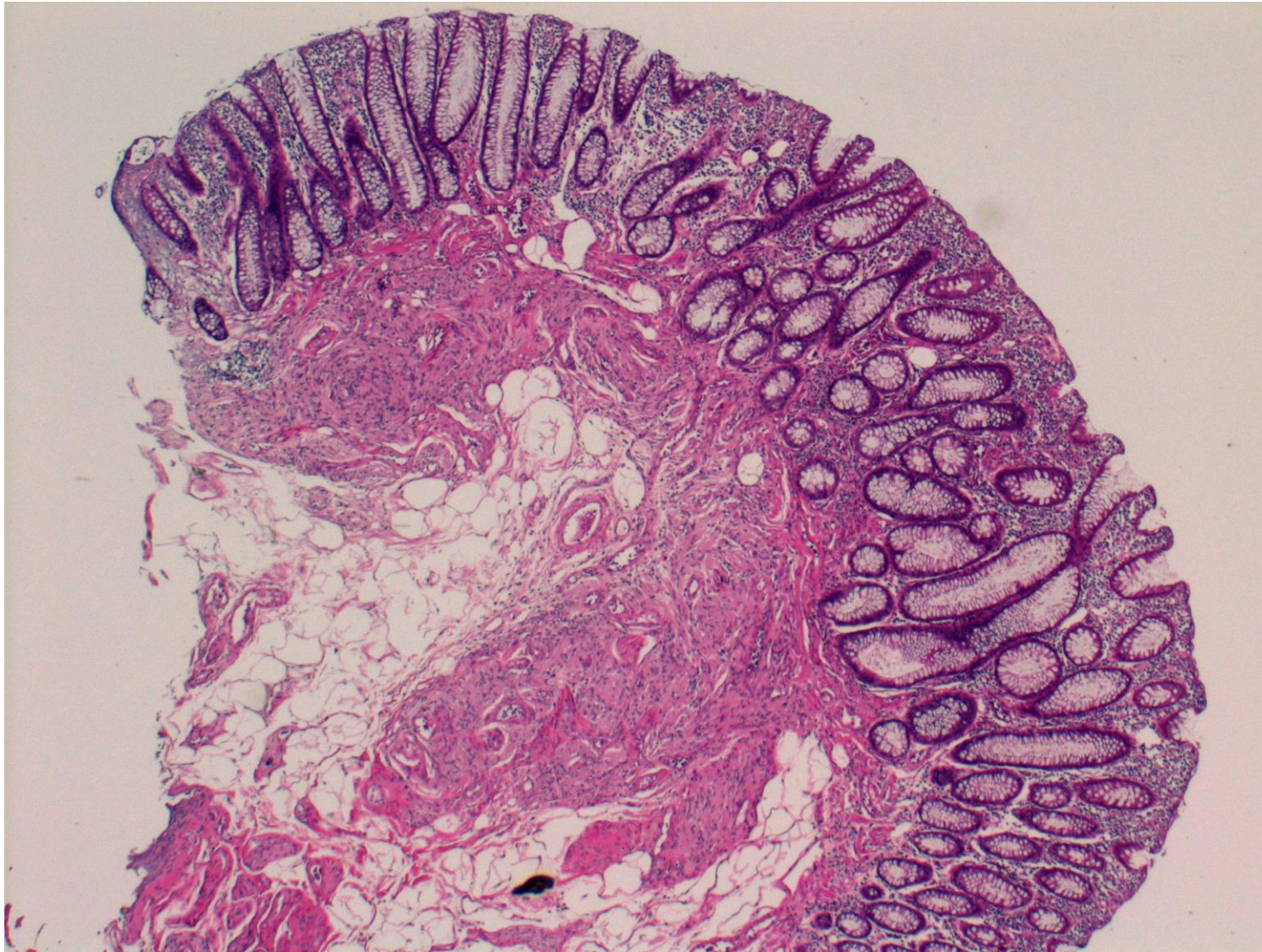
Ganglioneuroma of the colon reveals ill-defined, lamina propria growth of bland spindle cells. Ganglion cells are clustered among the spindle (Schwann) cell background. H&E-e3

Granular cell tumor (45M)



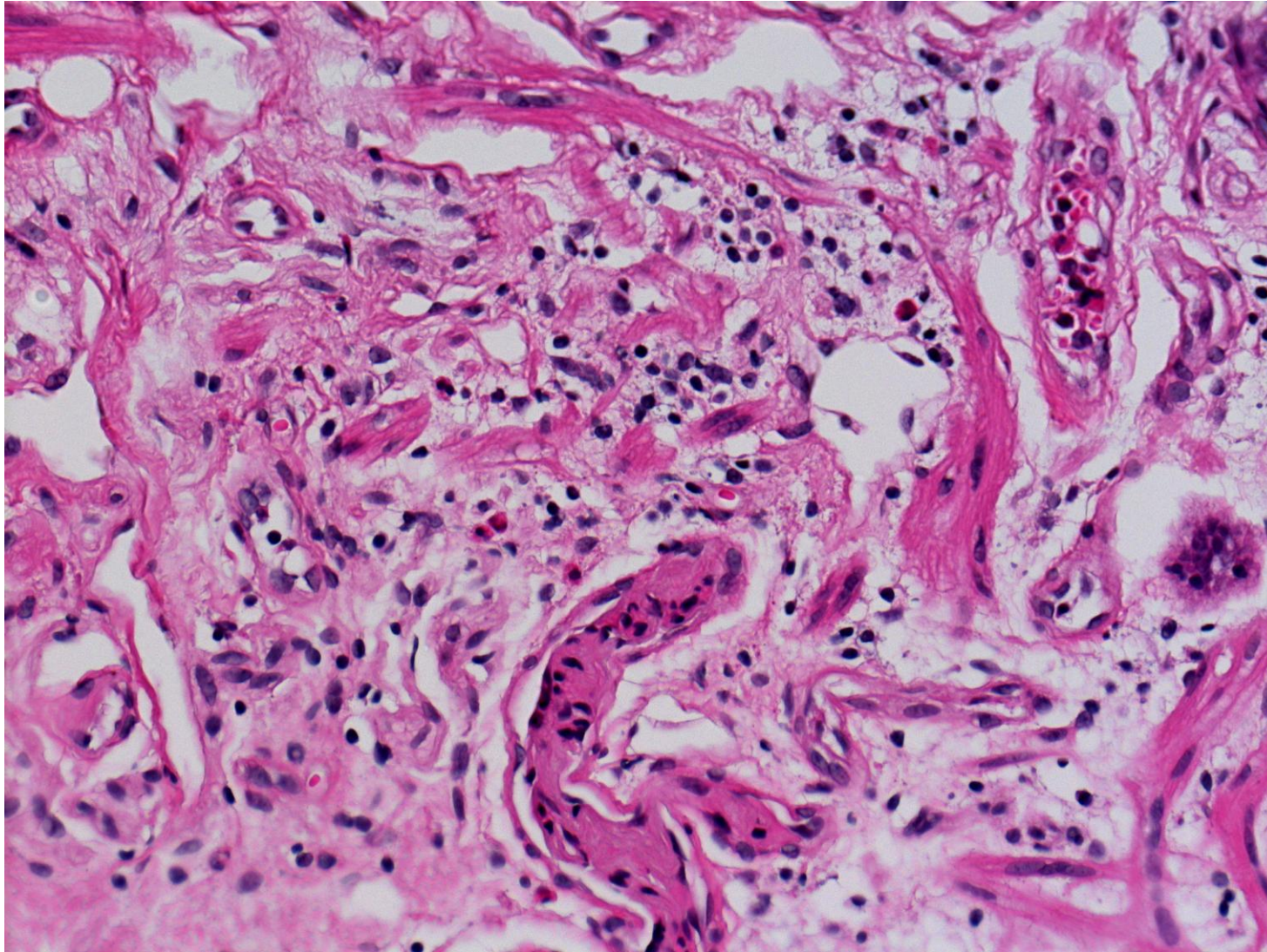
Granular cell tumor is composed of clustered plump spindled or epithelioid cells of Schwann cell origin, typically with granular cytoplasm. H&E-f

Inflammatory fibroid tumor (74M)-1



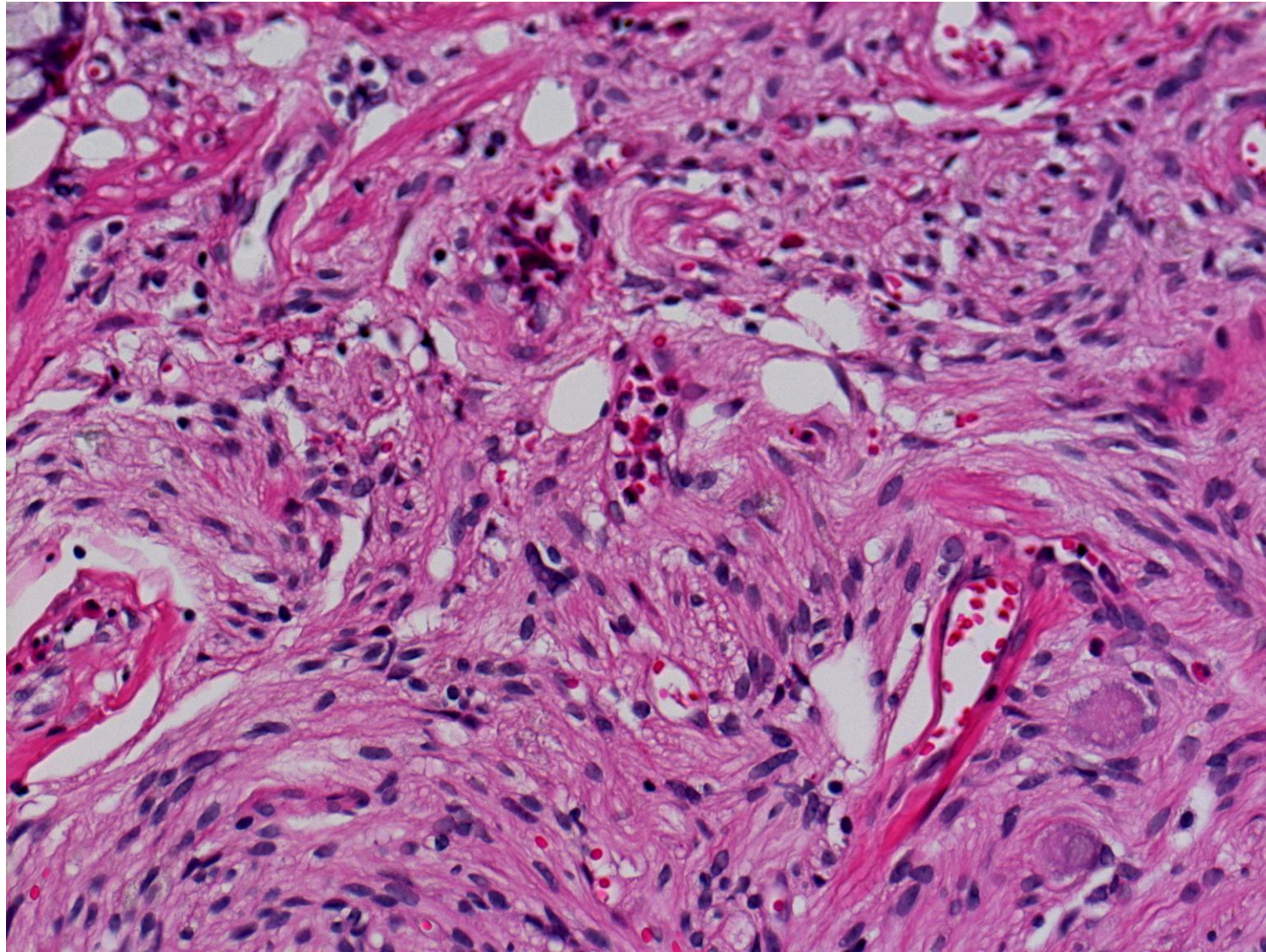
Inflammatory fibroid polyp reveals submucosal and focally intramucosal growth of spindled cells with relatively rich vascularity. H&E-g1

Inflammatory fibroid tumor (74M)-2



Inflammatory fibroid polyp reveals submucosal and focally intramucosal growth of spindled cells with relatively rich vascularity. Lymphocytic and eosinophilic infiltration is associated. H&E-g2

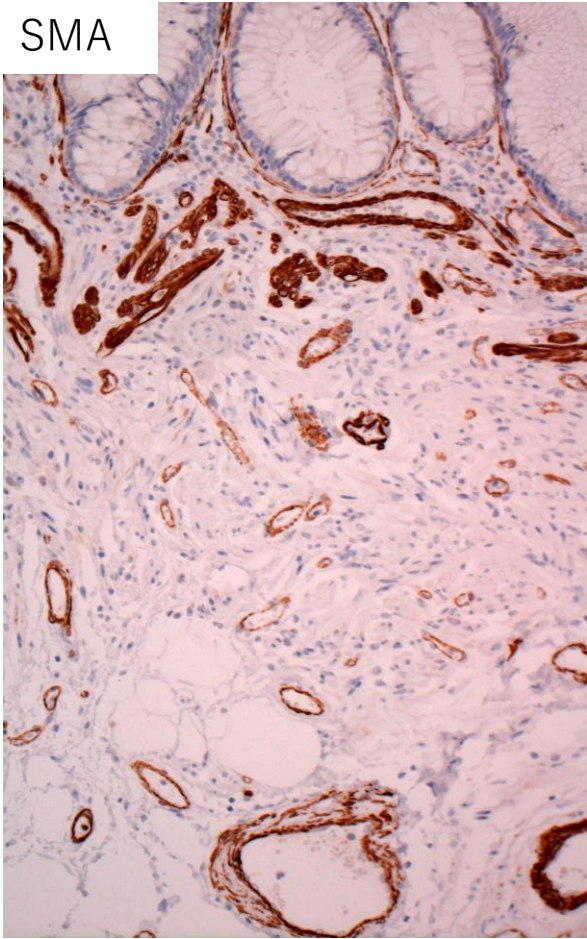
Inflammatory fibroid tumor (74M)-3



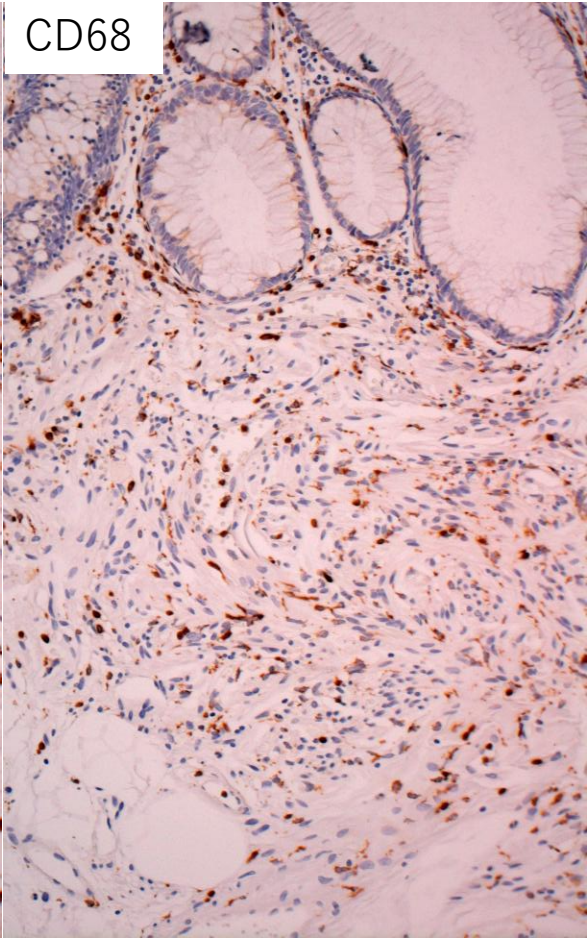
Inflammatory fibroid polyp reveals submucosal and focally intramucosal growth of spindled cells with relatively rich vascularity. Lymphocytic and eosinophilic infiltration is associated. H&E-g3

Inflammatory fibroid tumor (74M)-4

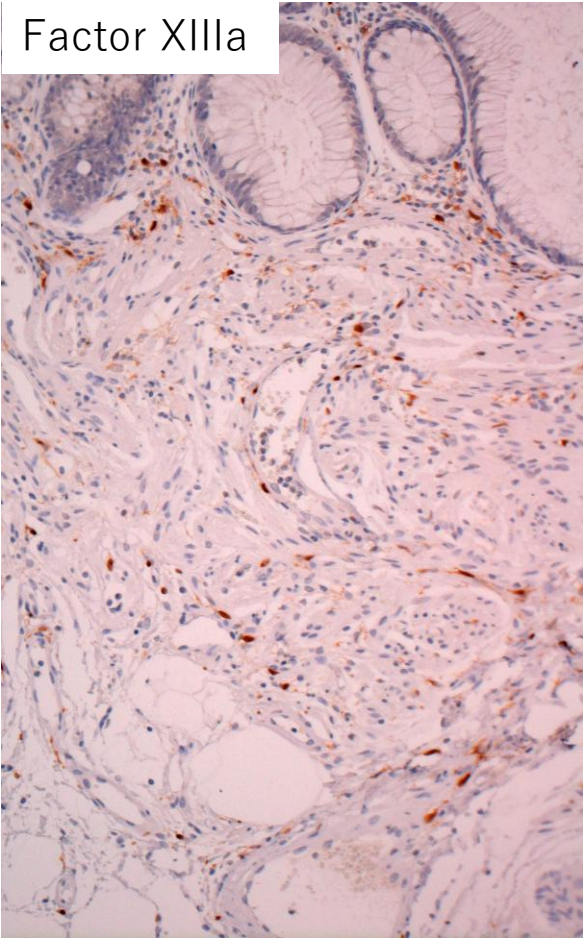
SMA



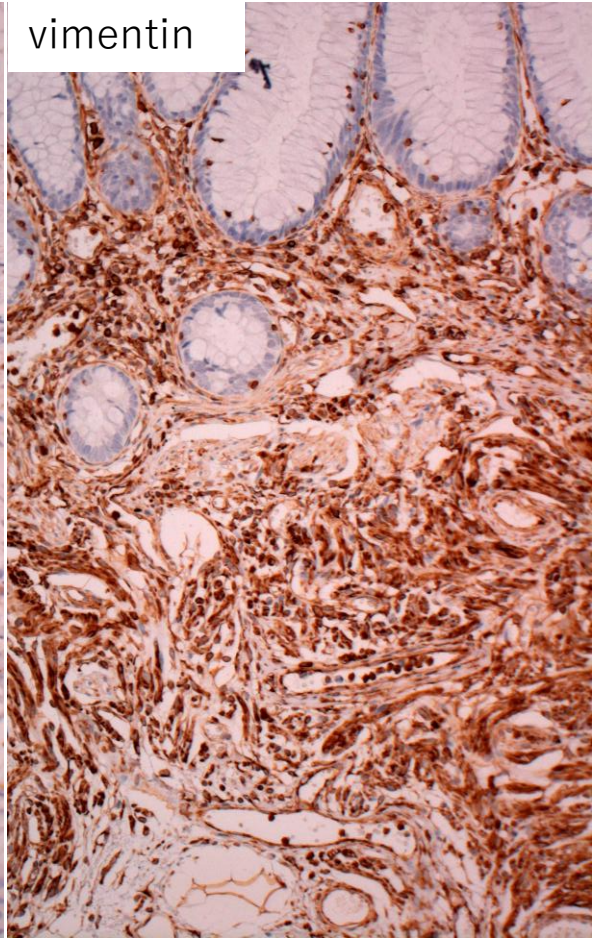
CD68



Factor XIIIa

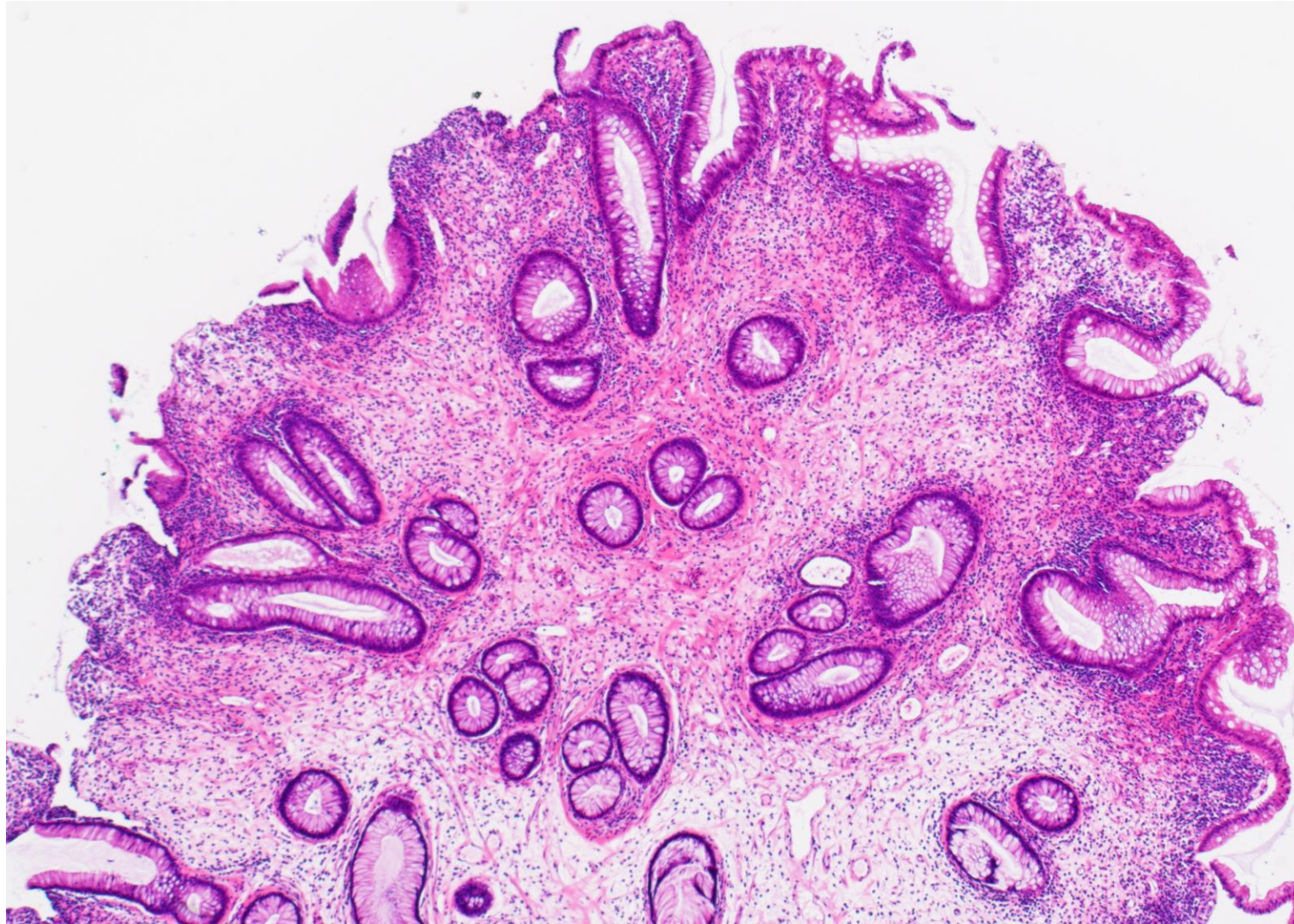


vimentin



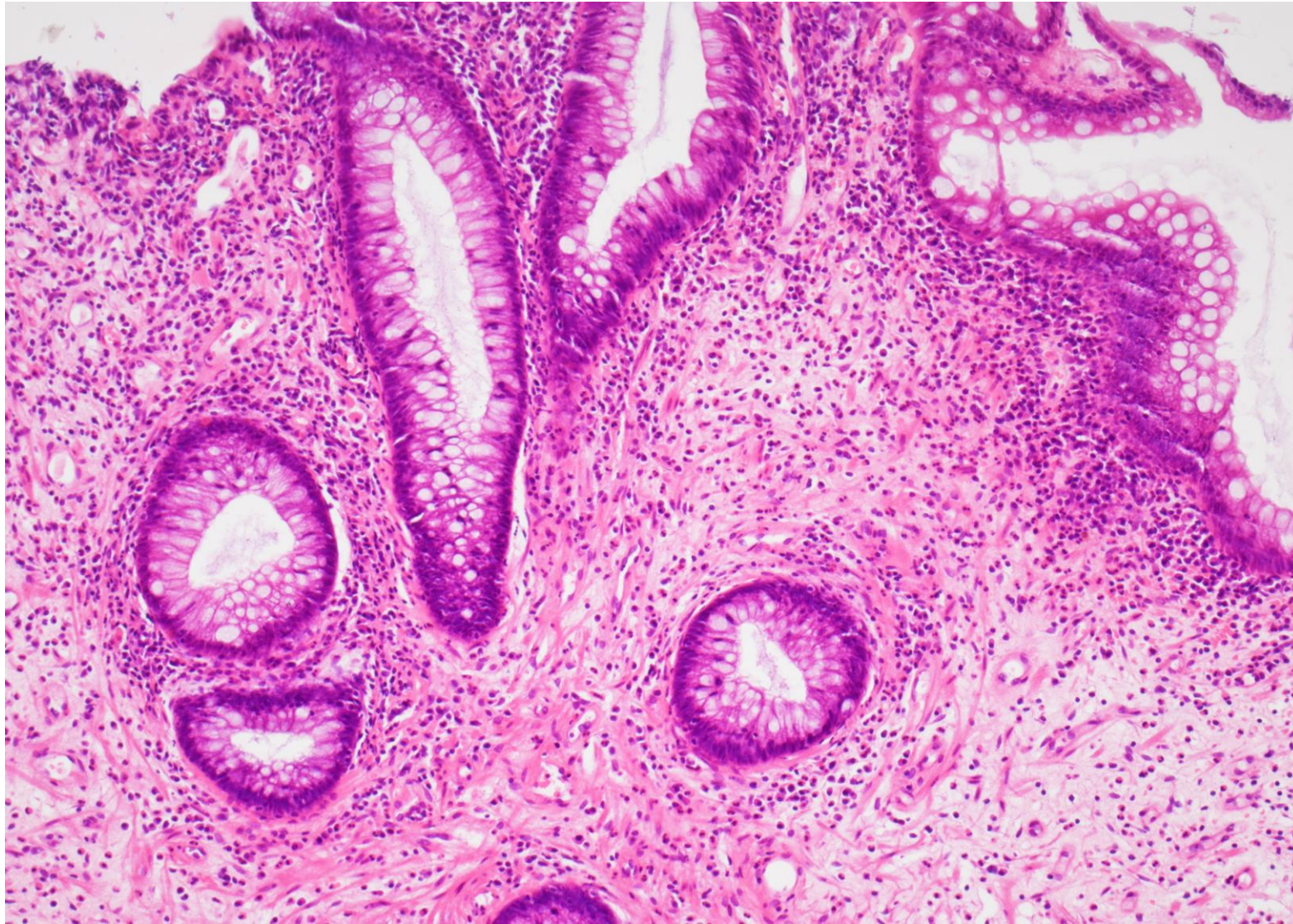
Inflammatory fibroid polyp reveals mucosal and submucosal growth of spindled cells. SMA is negative in the spindled cells but shows increased vascularity. CD68-positive macrophages are scattered in the lesion. Some fibroblastic cells express factor XIIIa. Vimentin is diffusely expressed in the spindled cells. Immunostaining panel

Benign unclassified mesenchymal polyp (40F)-1



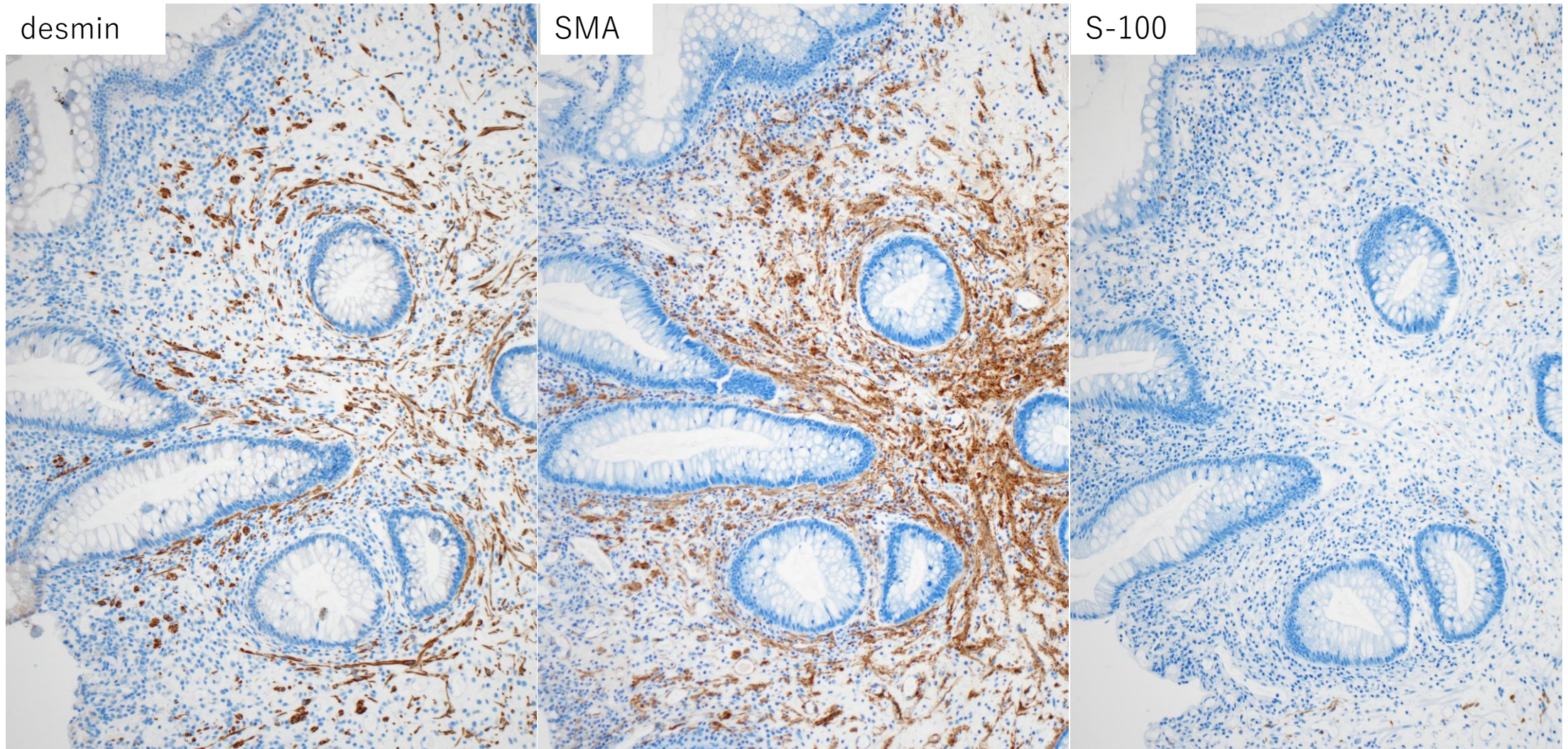
Benign unclassified mesenchymal polyp (BUMP) reveals spindle cell growth in the lamina propria mucosae. The term BUMP is used, when the lesion can not be categorized in the other established spindle cell polyps. H&E-h1

Benign unclassified mesenchymal polyp (40F)-2



Benign unclassified mesenchymal polyp (BUMP) reveals spindle cell growth in the lamina propria mucosae. The term BUMP is used, when the lesion can not be categorized in the other established spindle cell polyps. H&E-h2

Benign unclassified mesenchymal polyp (40F)-3



Benign unclassified mesenchymal polyp (BUMP) reveals spindle cell growth in the lamina propria mucosae. The spindle cells are not labeled for desmin, SMA or S-100 protein. Immunostaining panel