

ACADEMIE INTERNATIONALE DE PATHOLOGIE DIVISION FRANÇAISE

Cancers gastriques (sporadic and familial) et états précancéreux

Cas 5

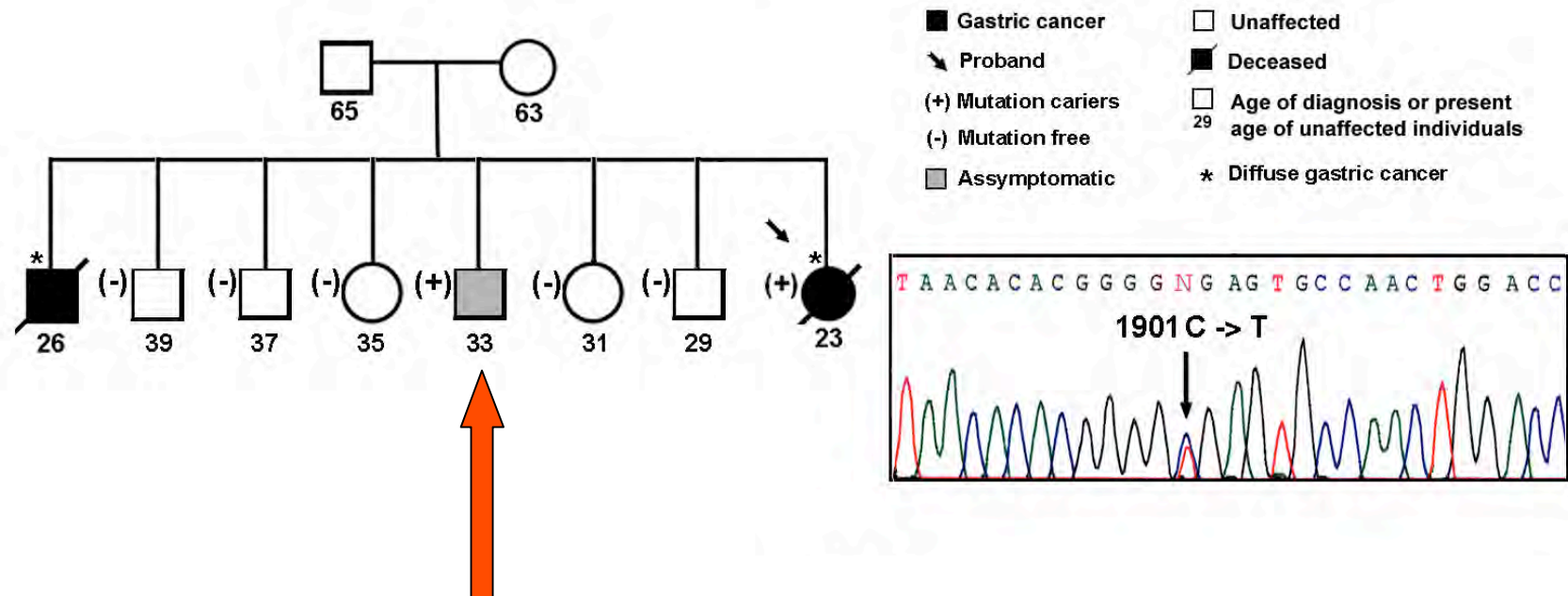


Fátima Carneiro
IPATIMUP & FMUP/HSJ
Porto, Portugal

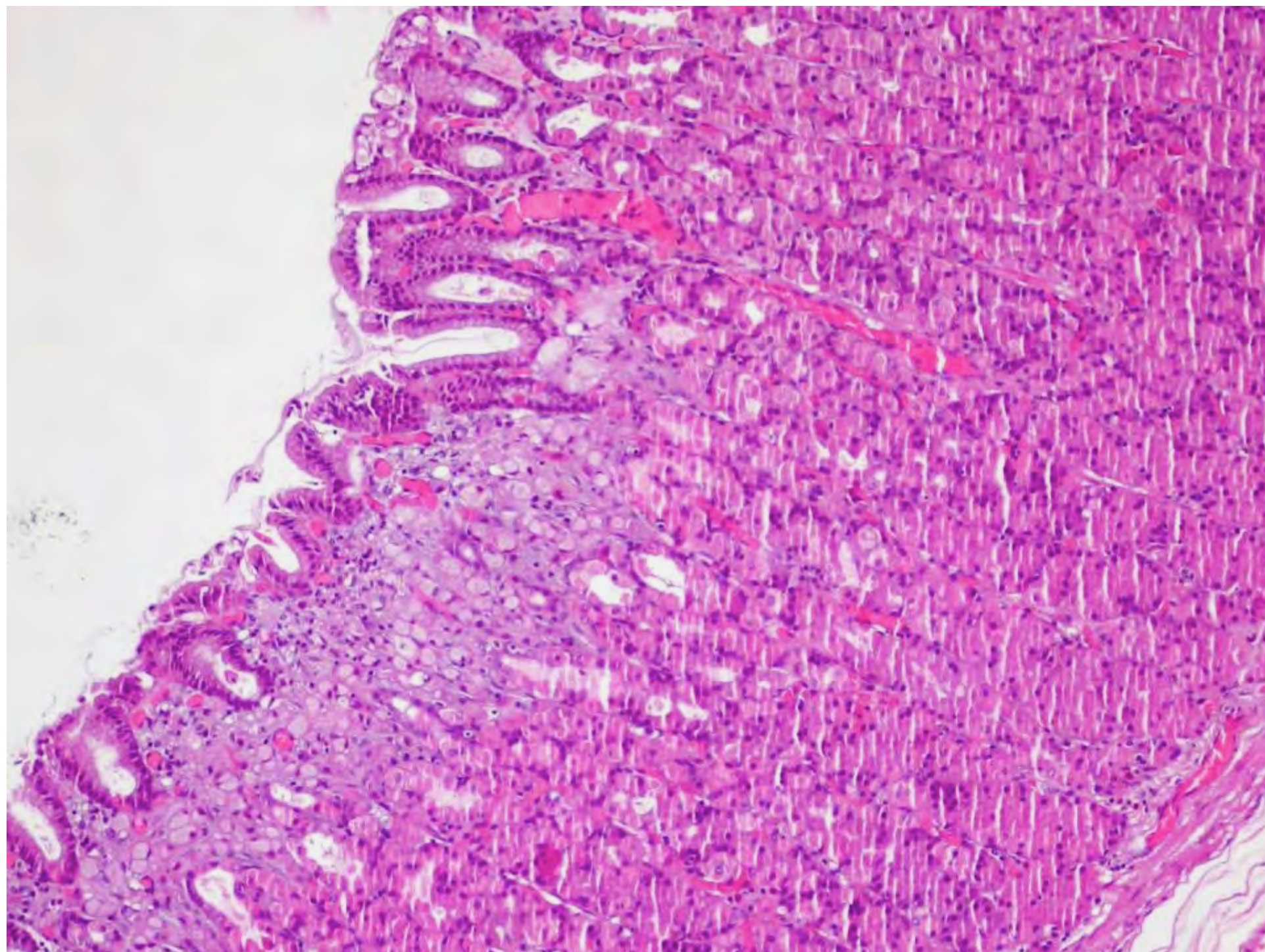


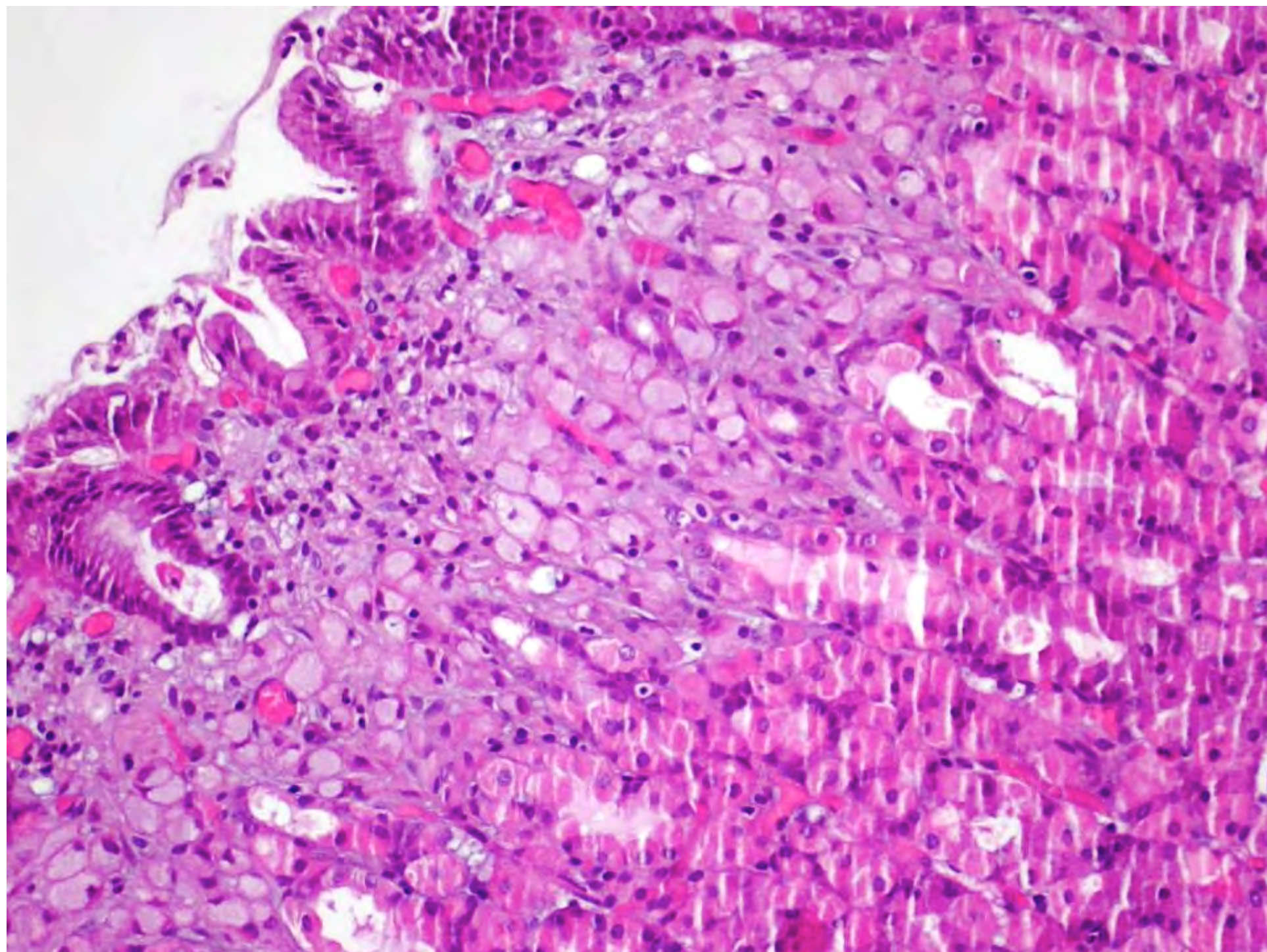
Case 5 - SS07/26092 - Male, 30 y, prophylactic gastrectomy

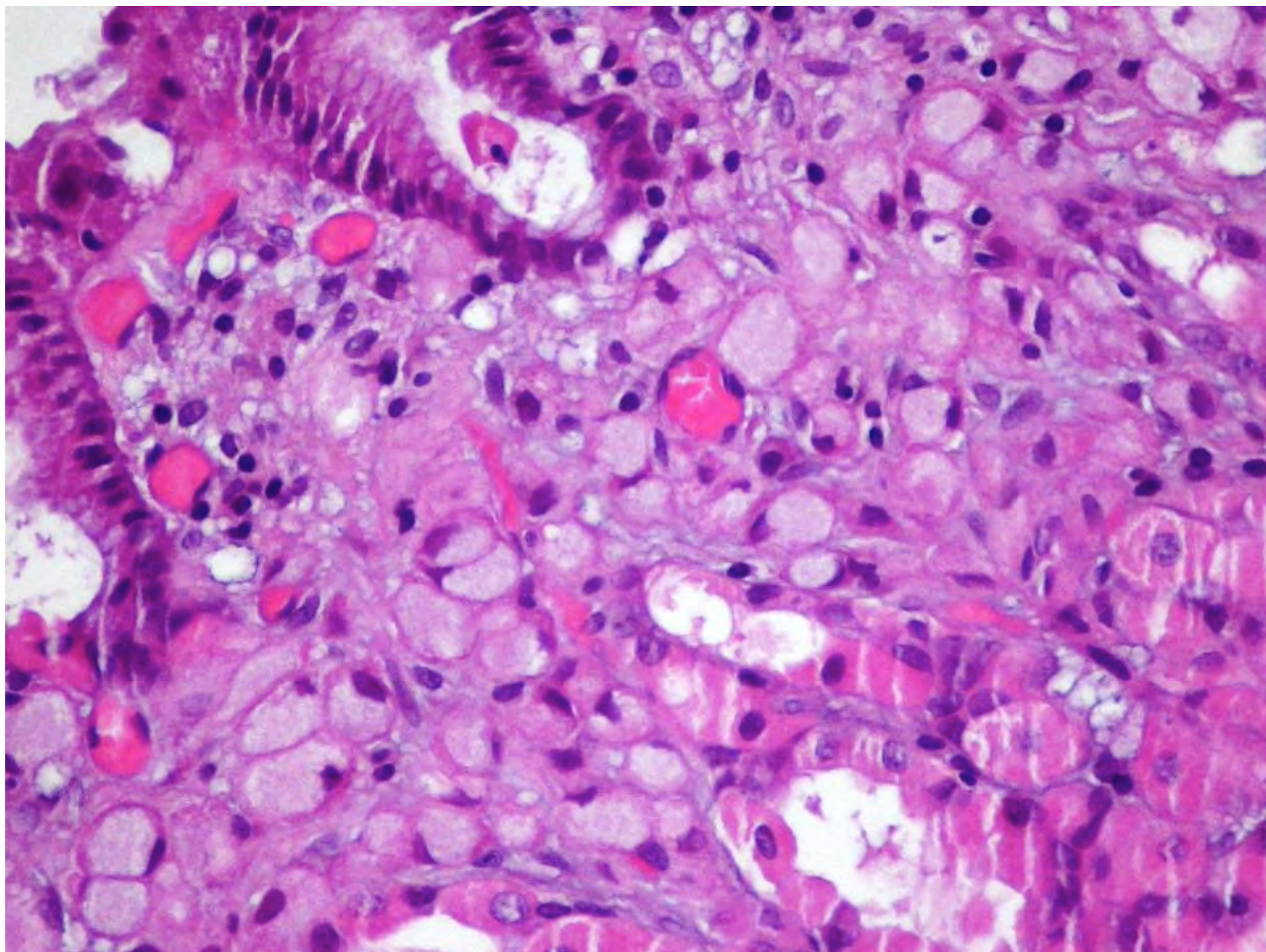
FGC#32

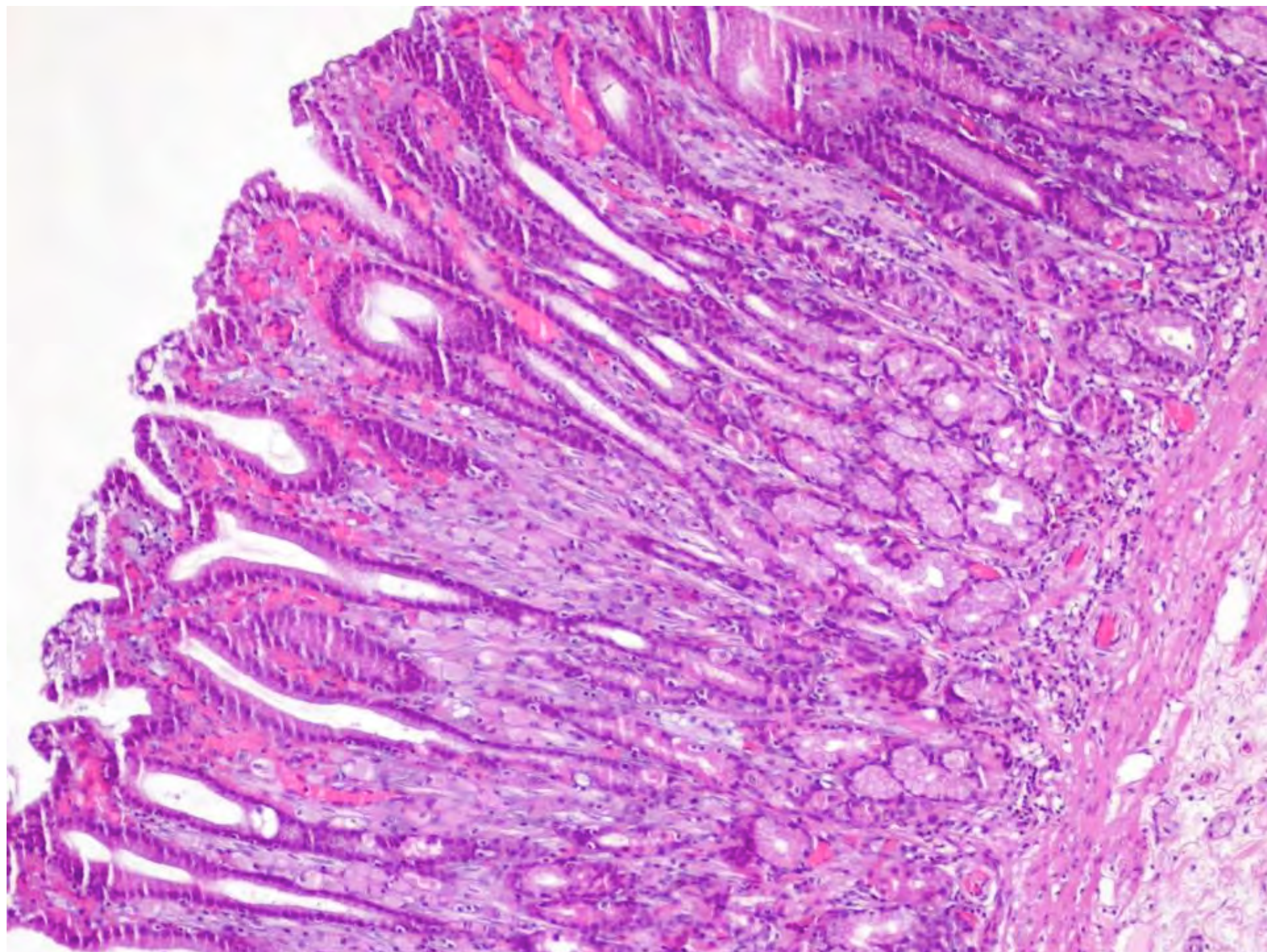


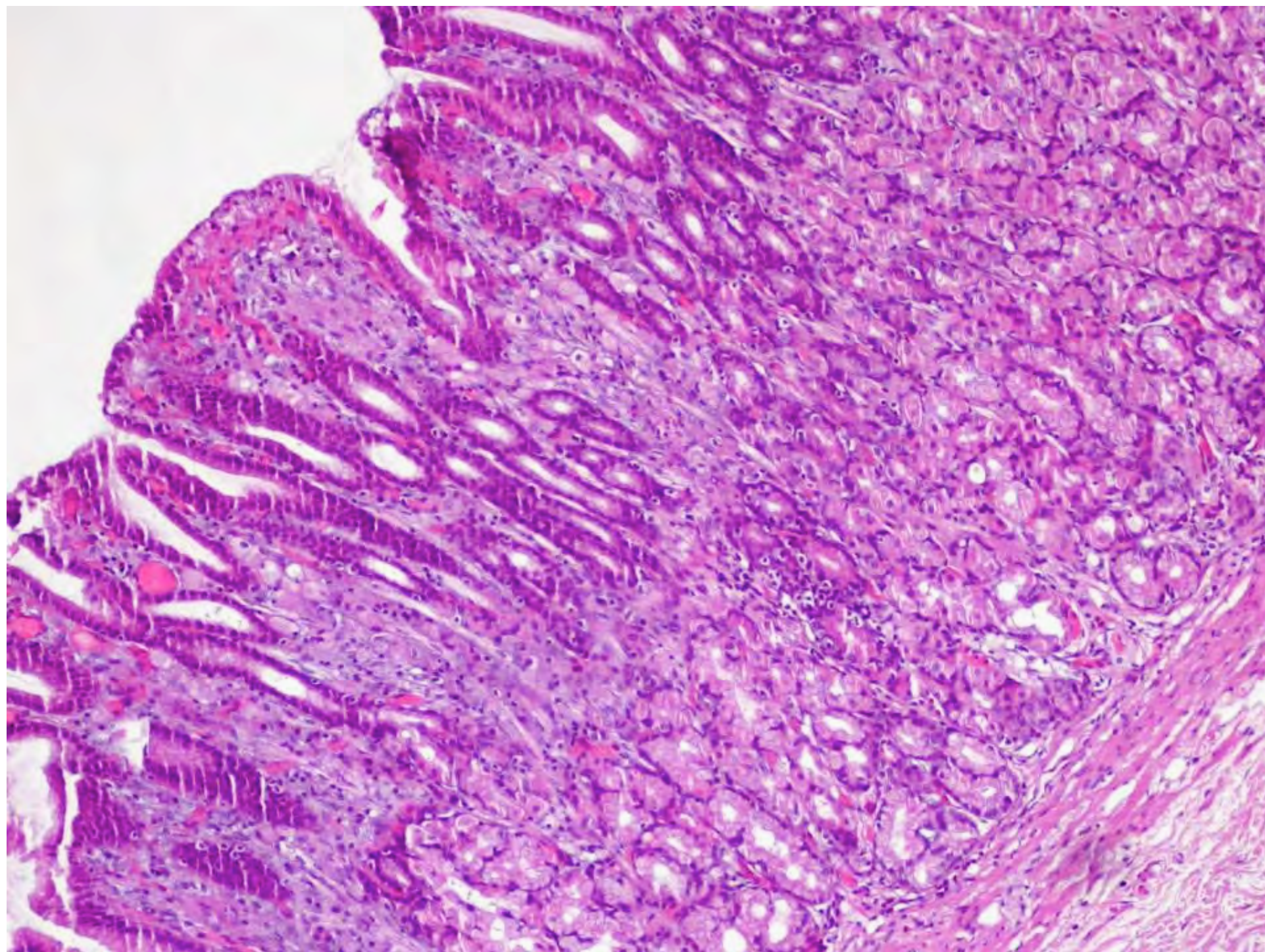
Oliveira *et al.*
Virchows Arch 446: 181-184, 2005

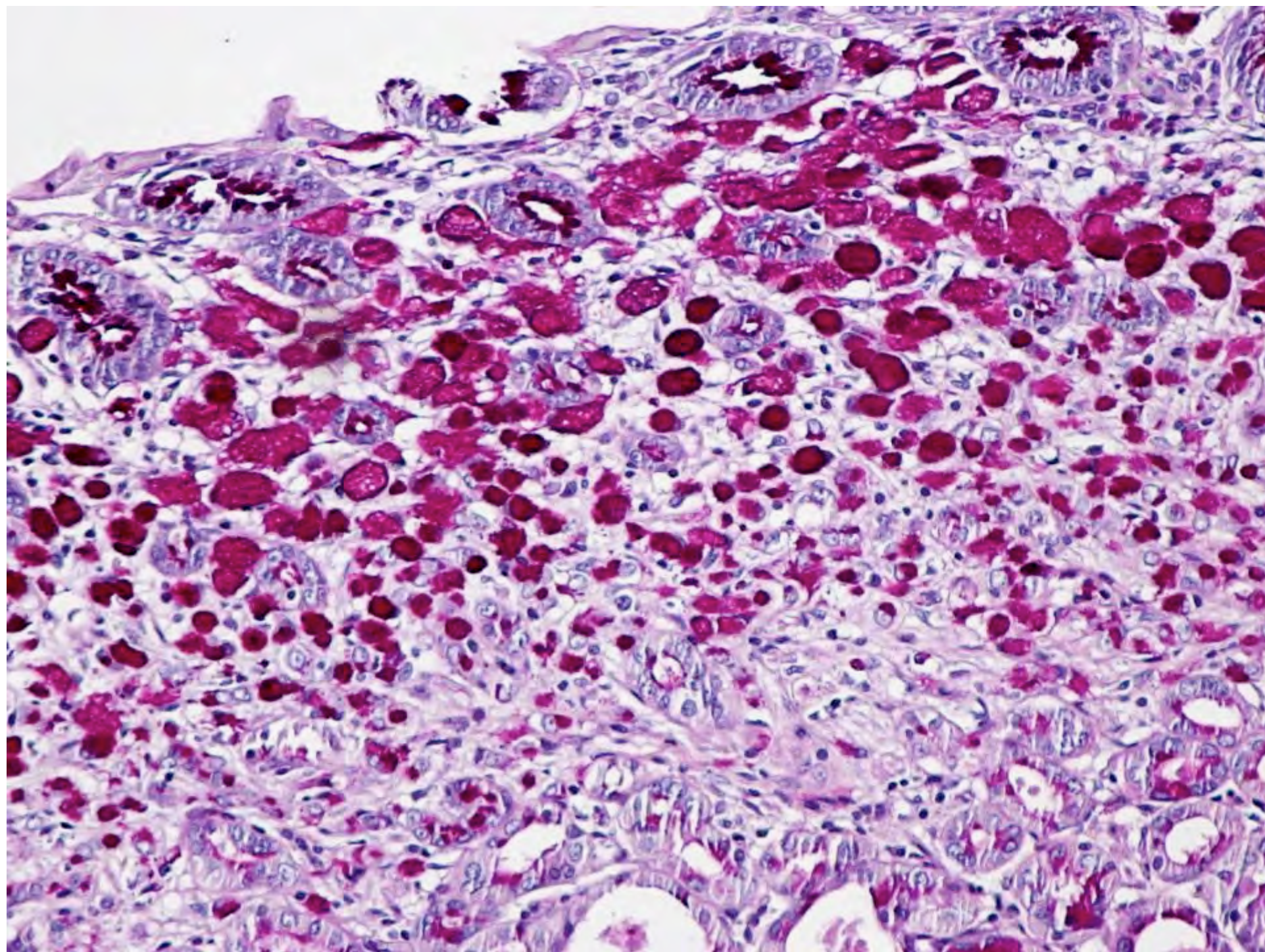


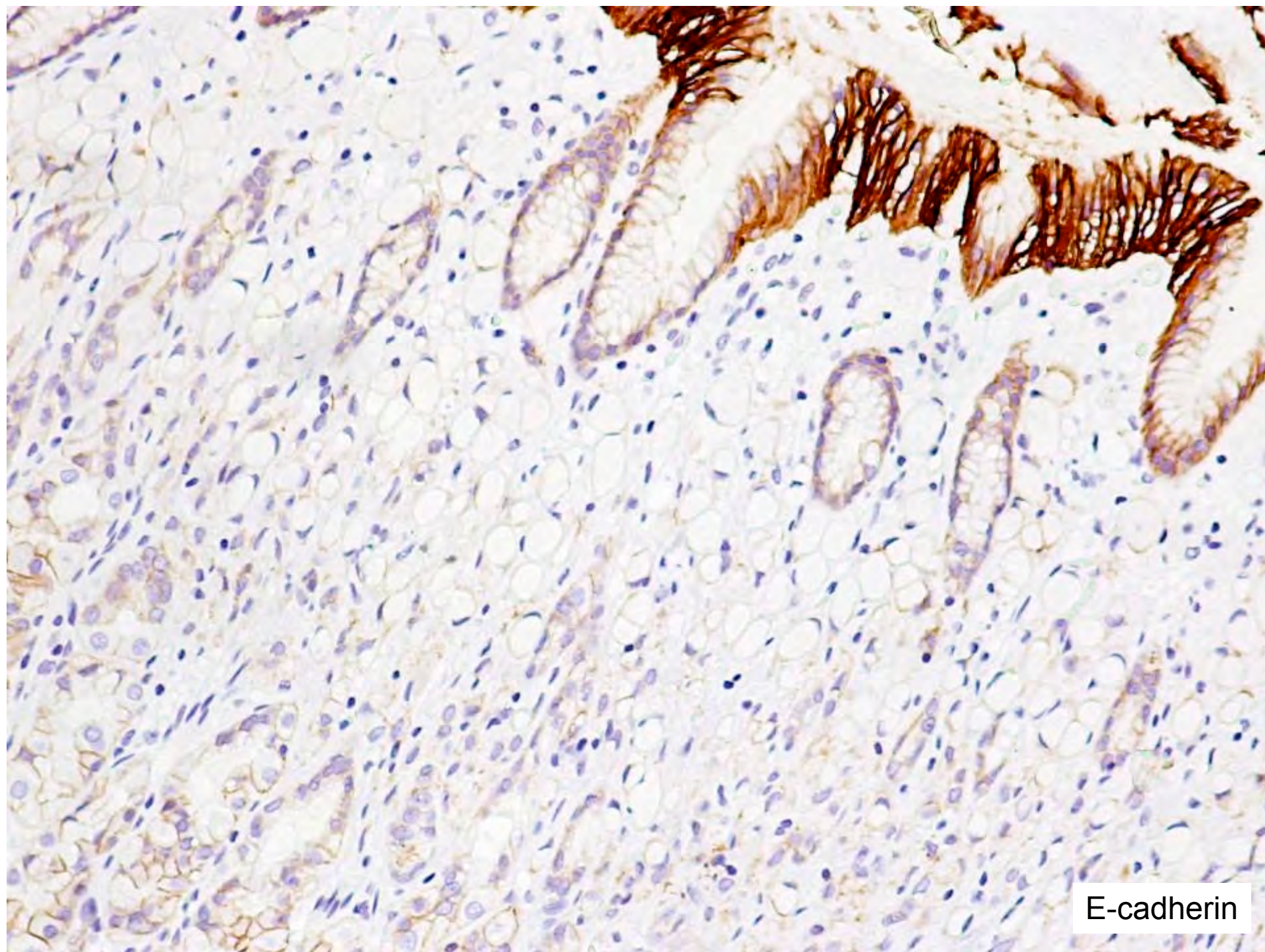




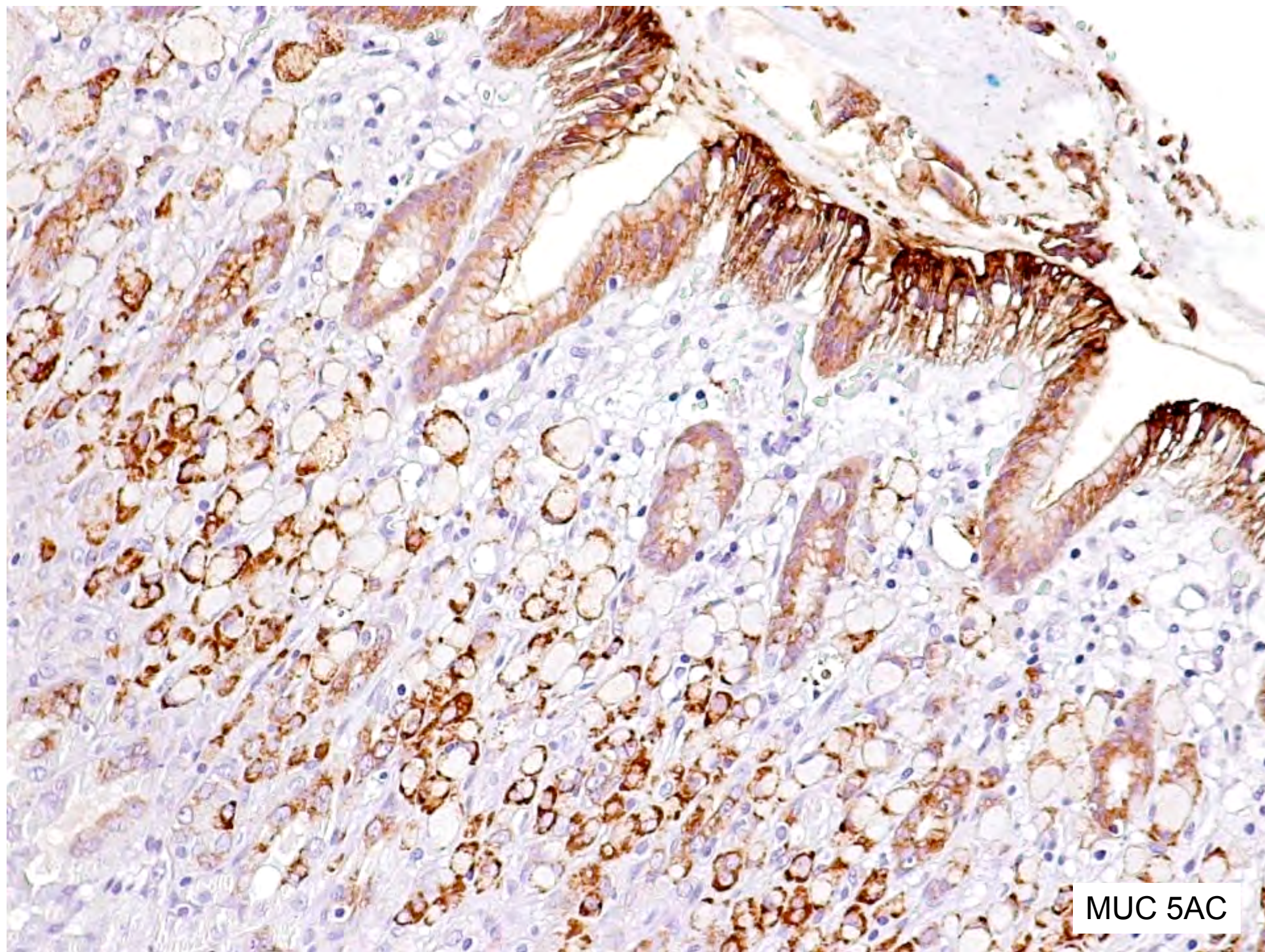




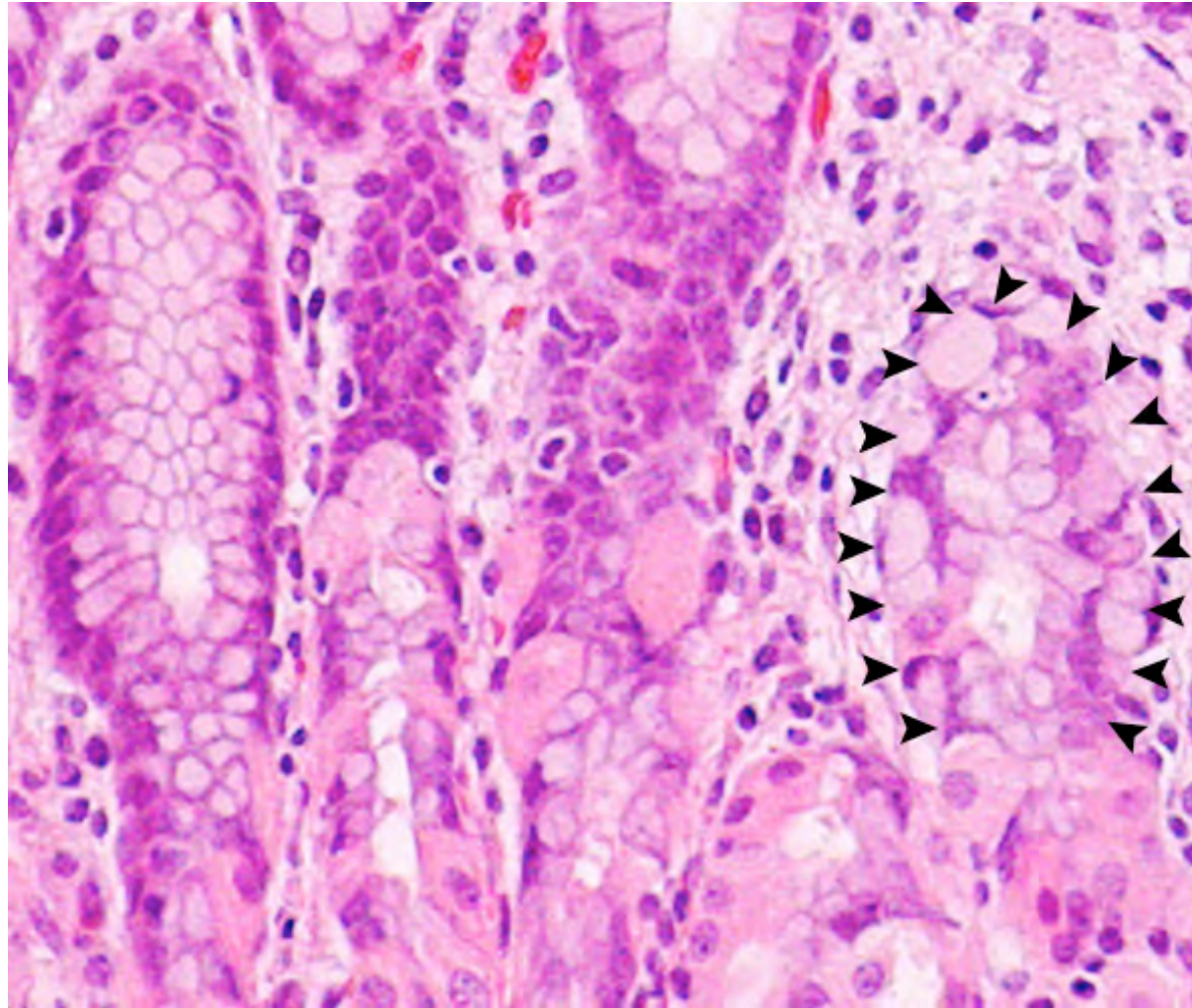


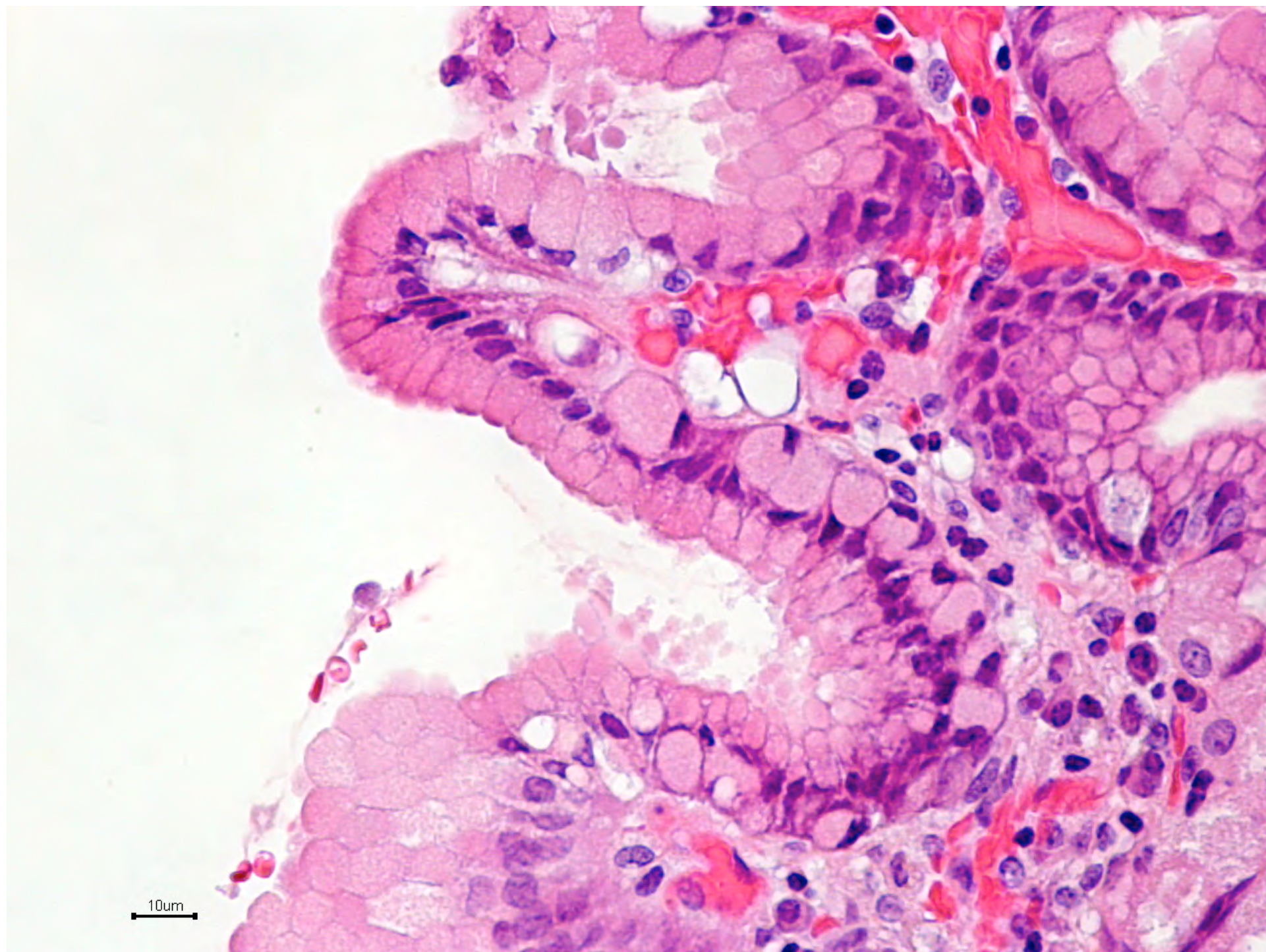


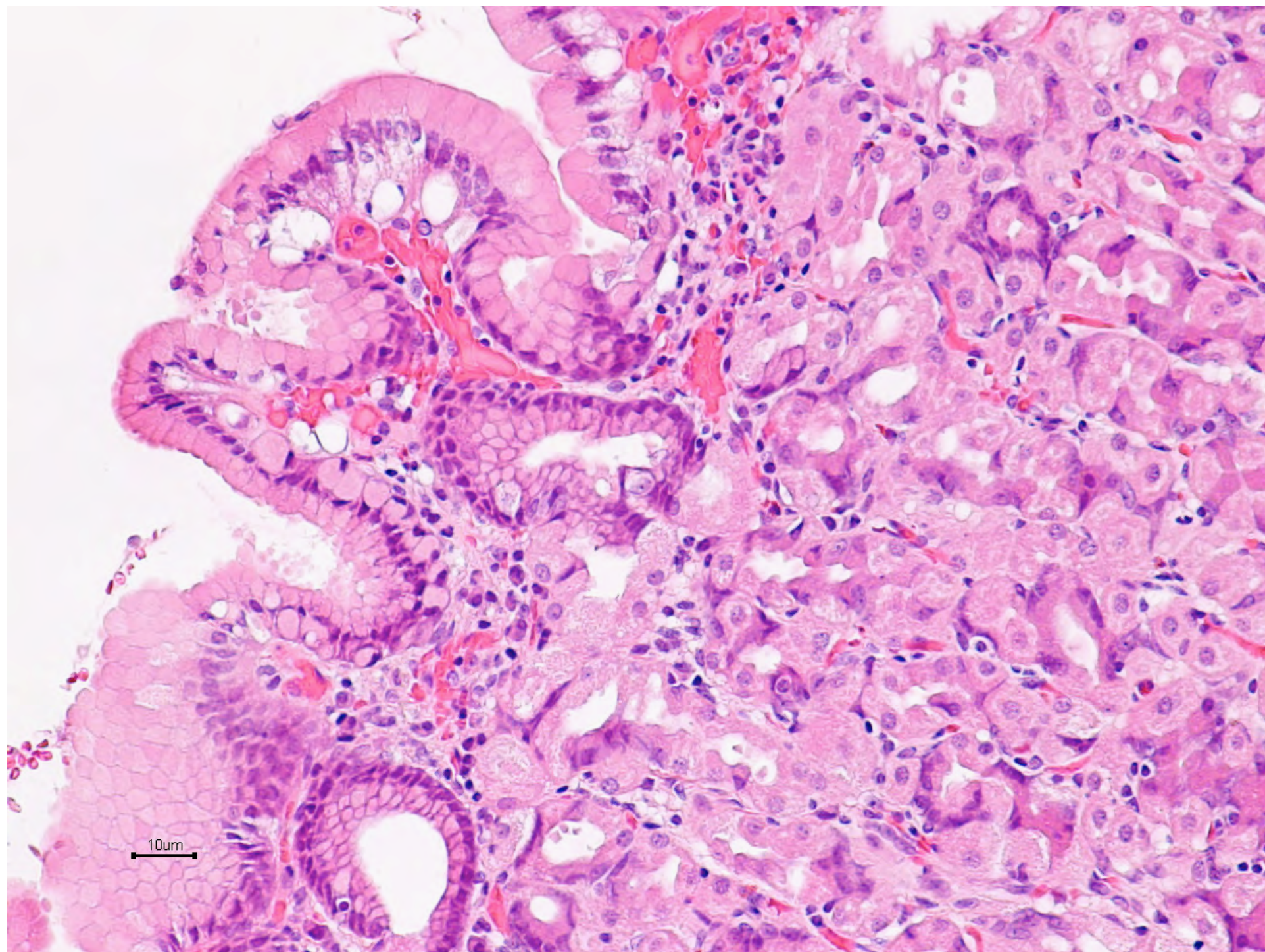
E-cadherin

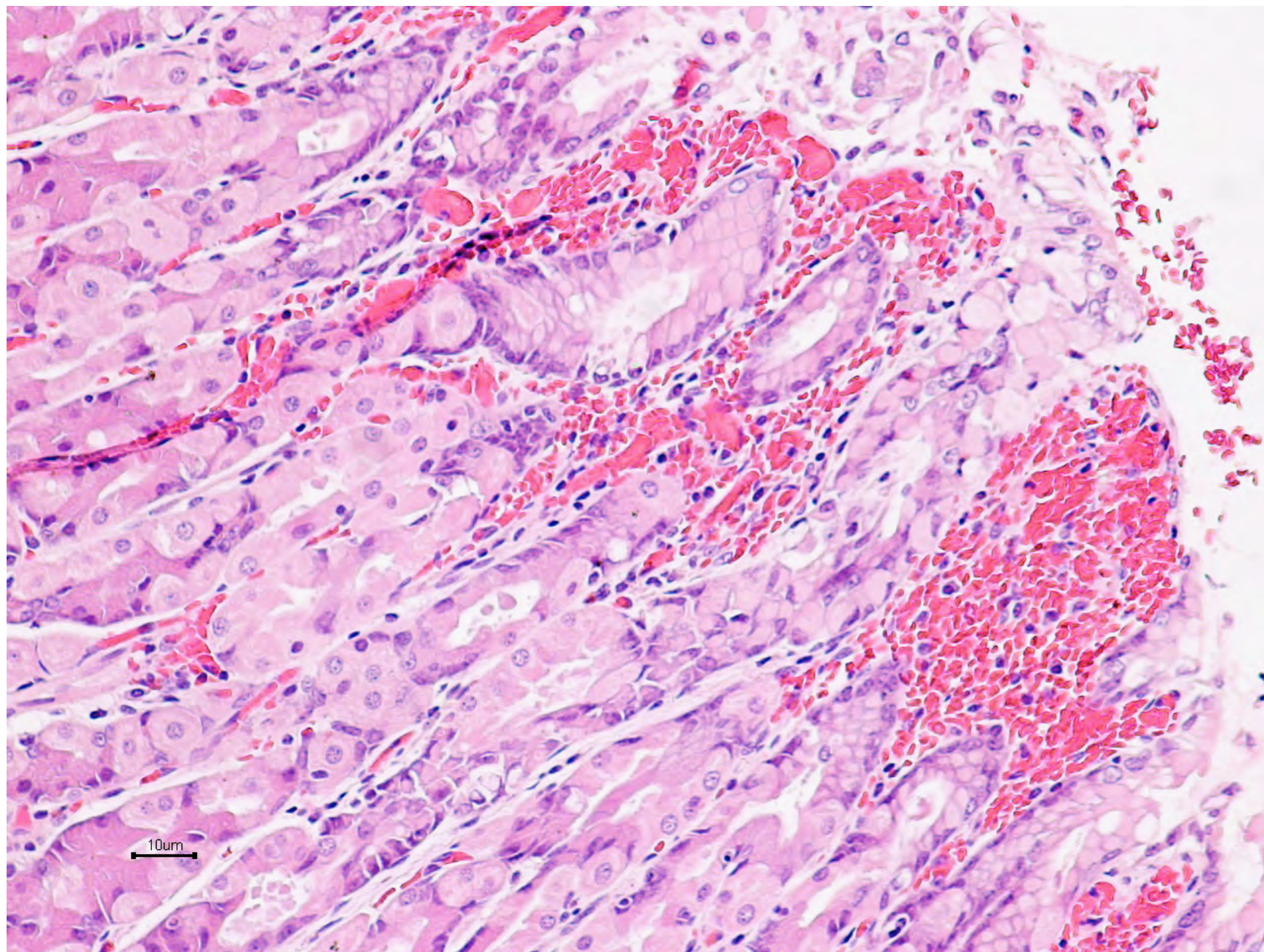


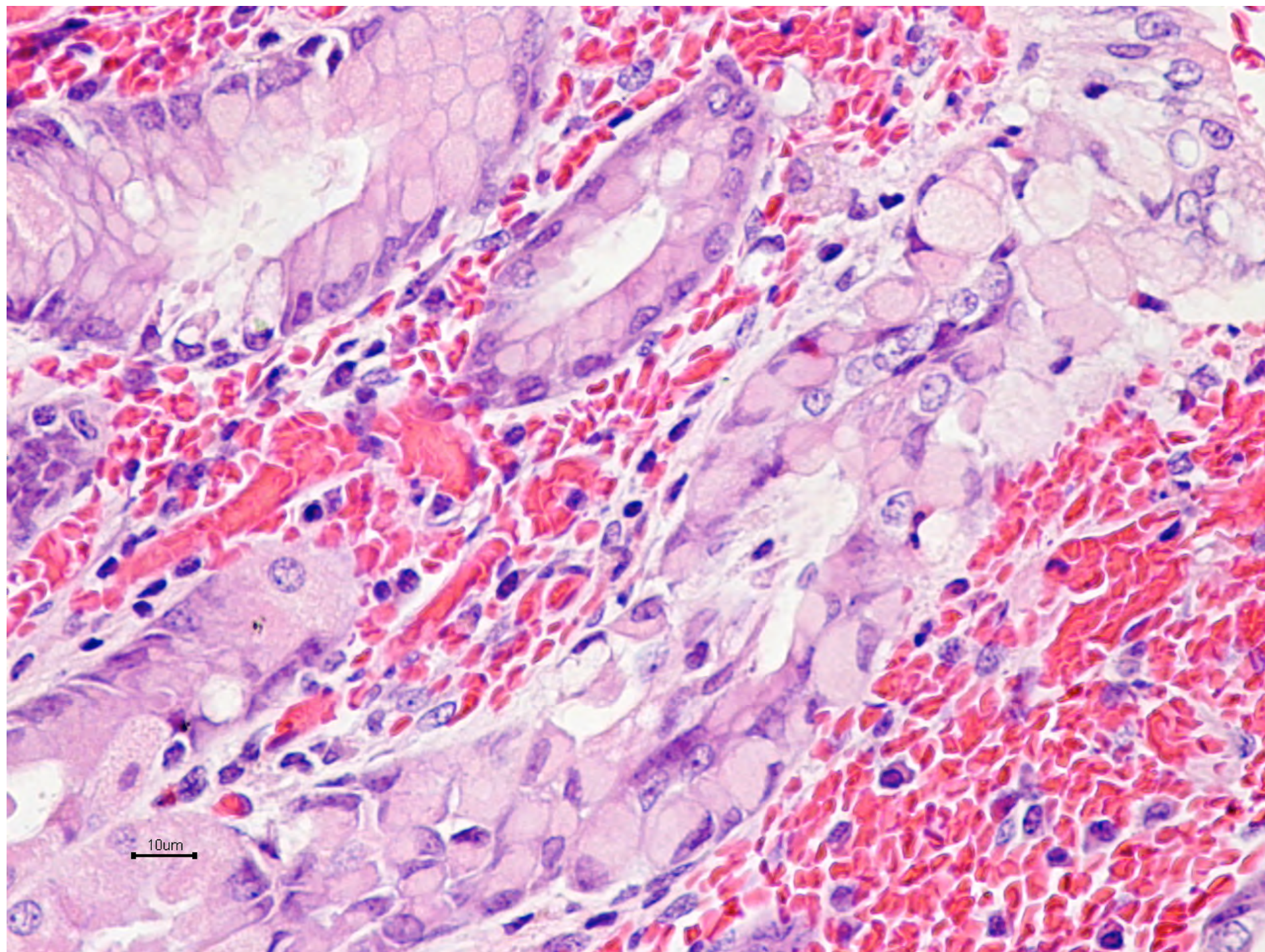
MUC 5AC

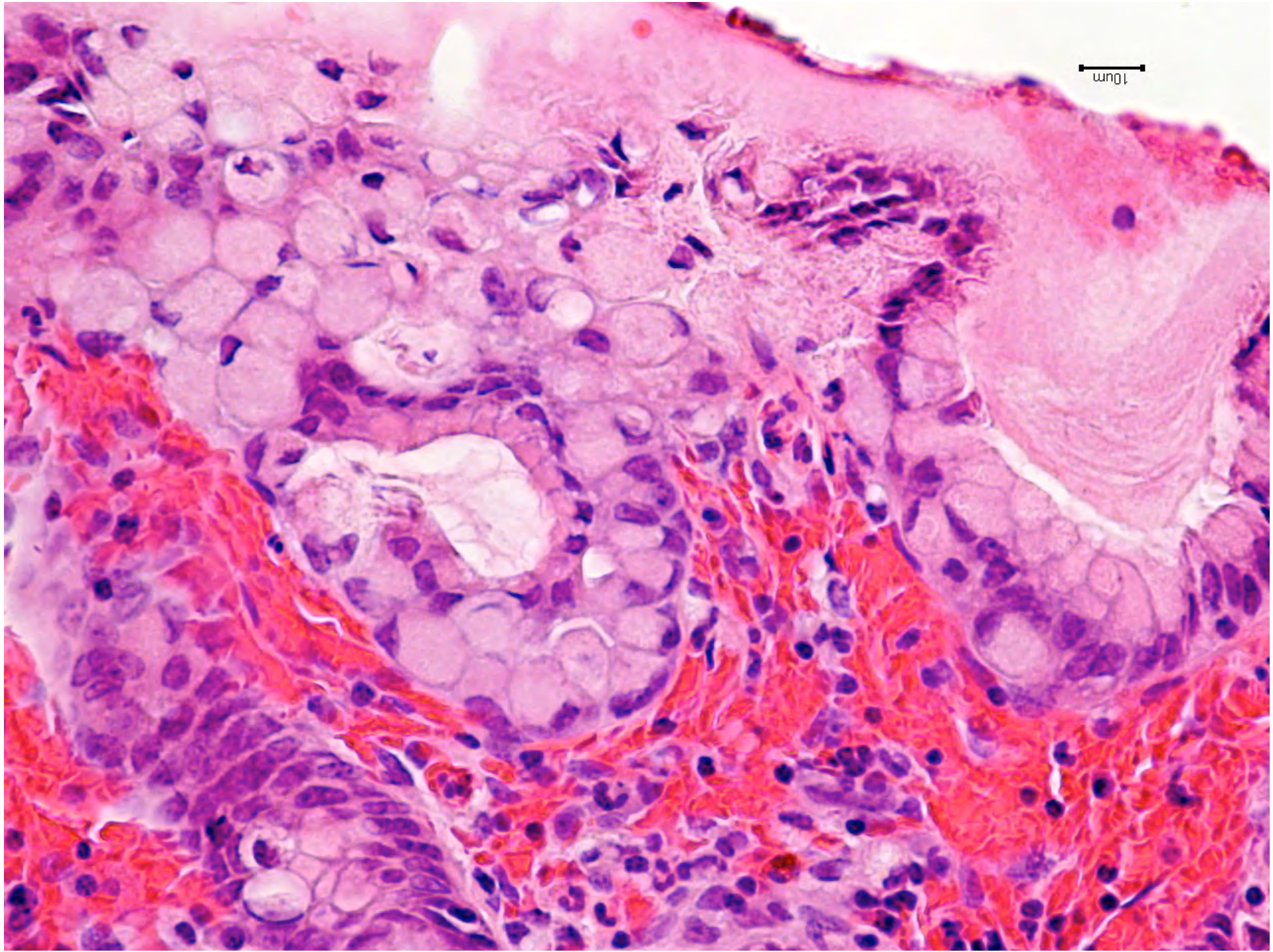


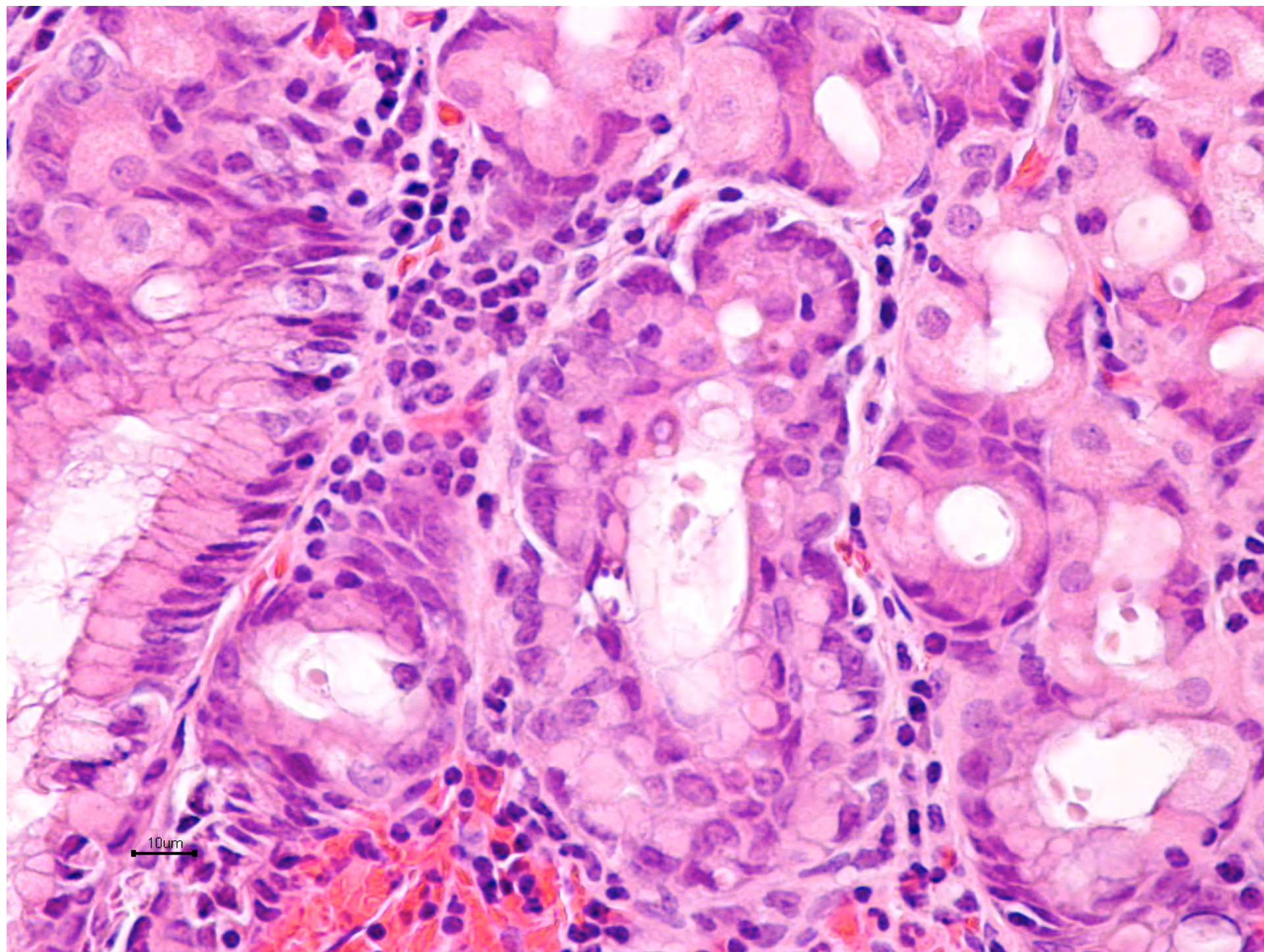


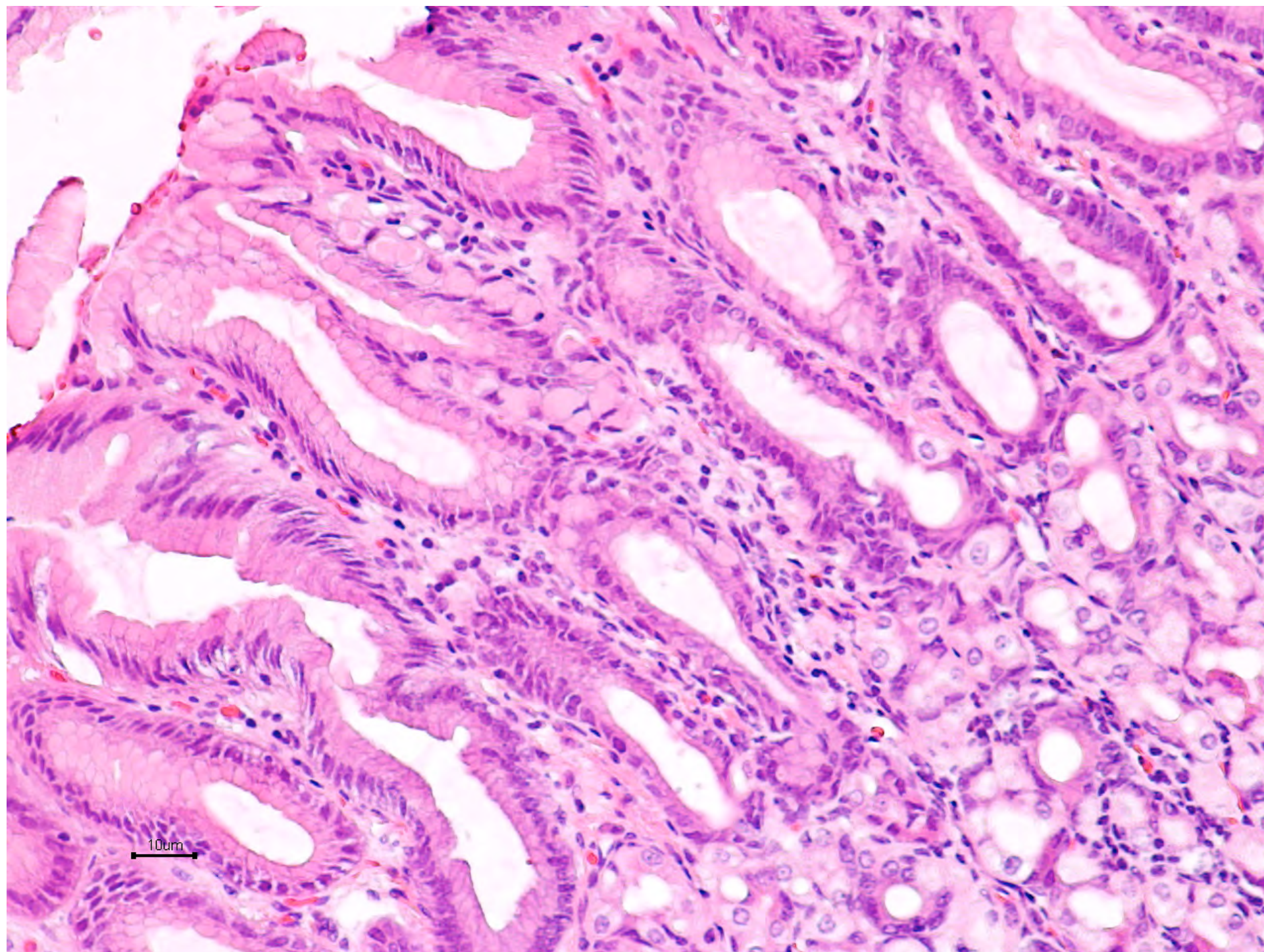


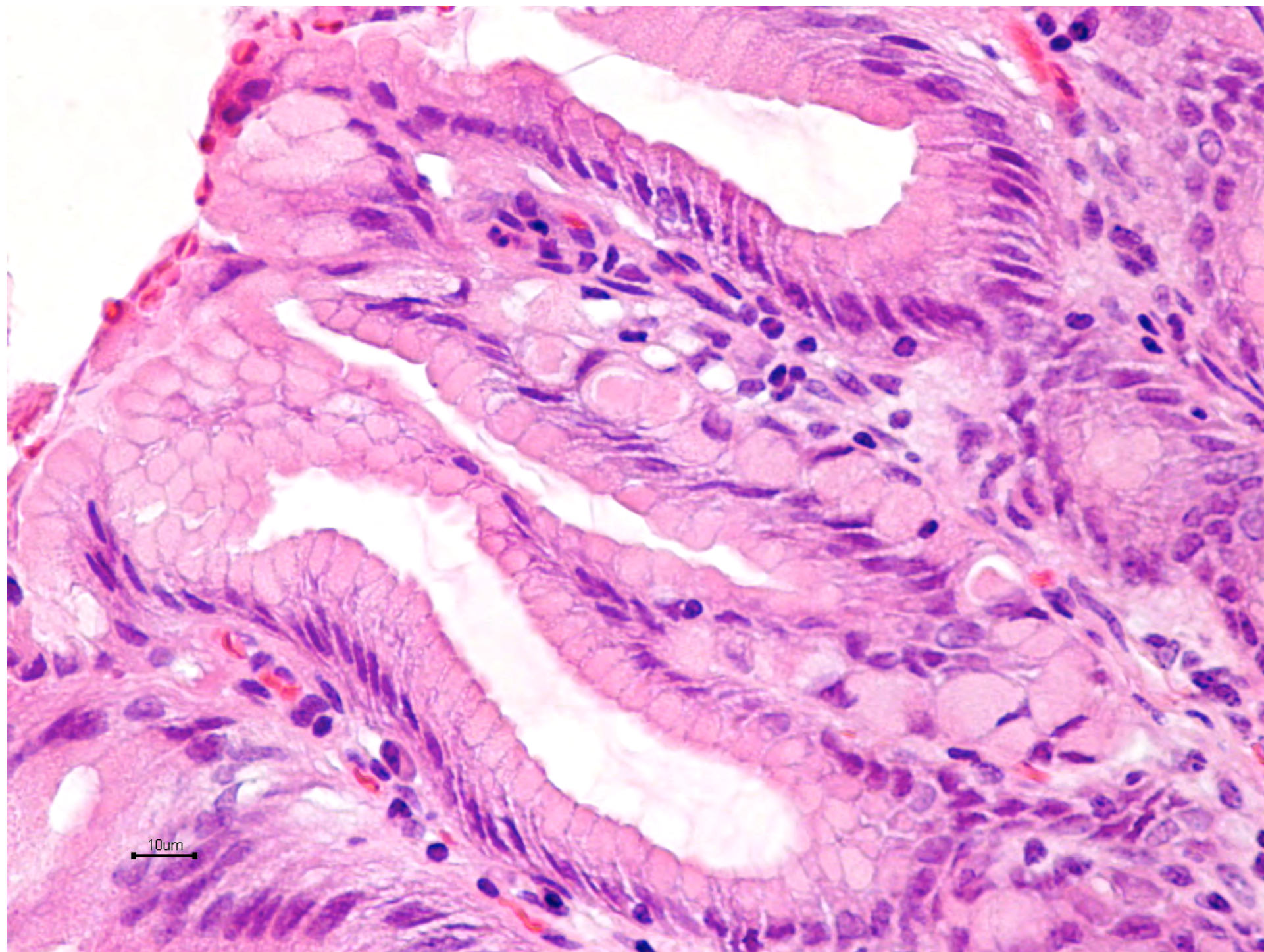






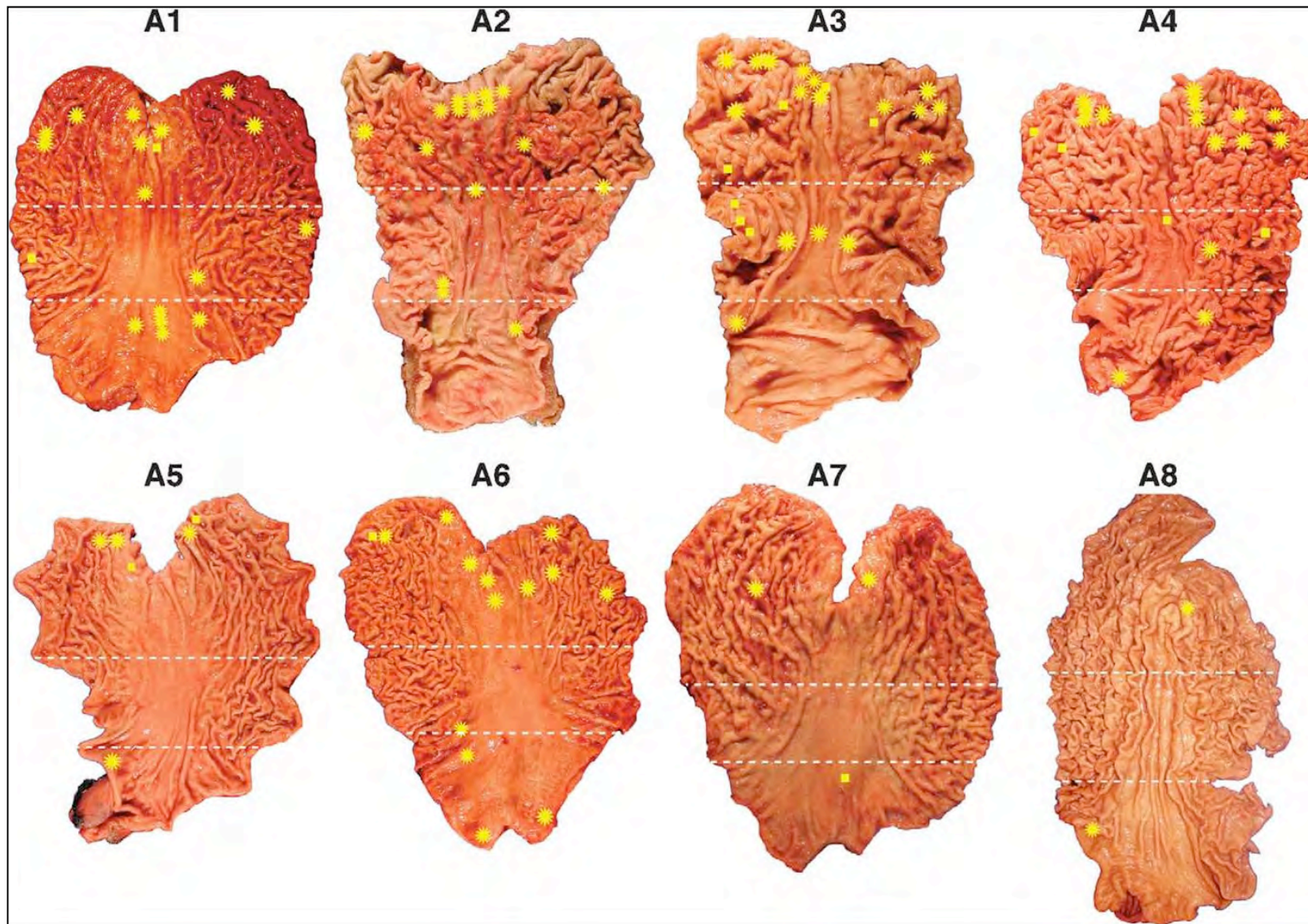






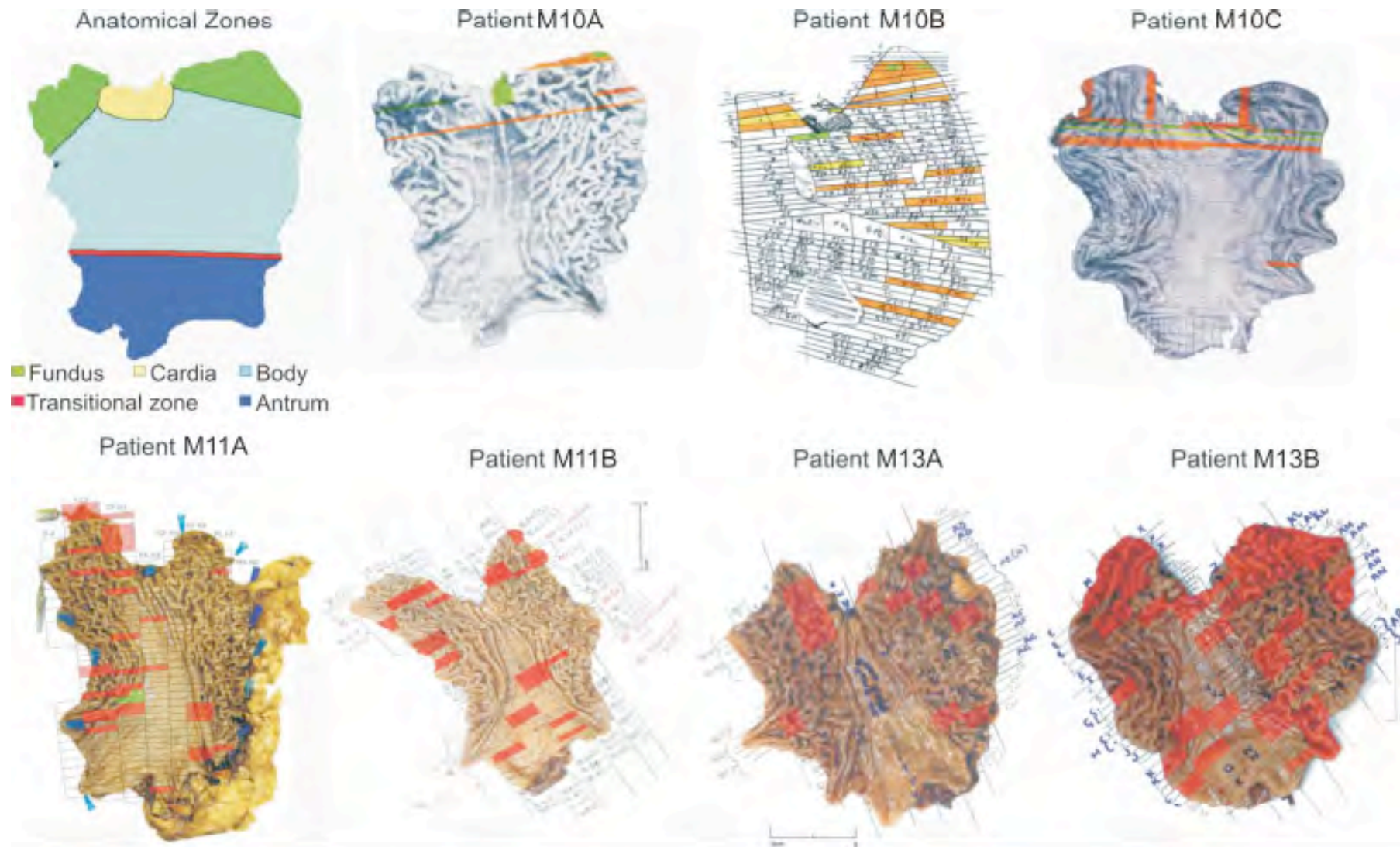
Multiple *foci* of Signet ring cell adc (WHO), diffuse ca (Laurén), isolated cell carcinoma with gastric differentiation (Carneiro) in an asymptomatic carrier of *CDH1* mutation, in the setting of Hereditary Diffuse Gastric Cancer (HDGC)

pTNM: T1aN0Mx



70% of the total signet ring cell foci were located within the proximal 1/3 of the stomach

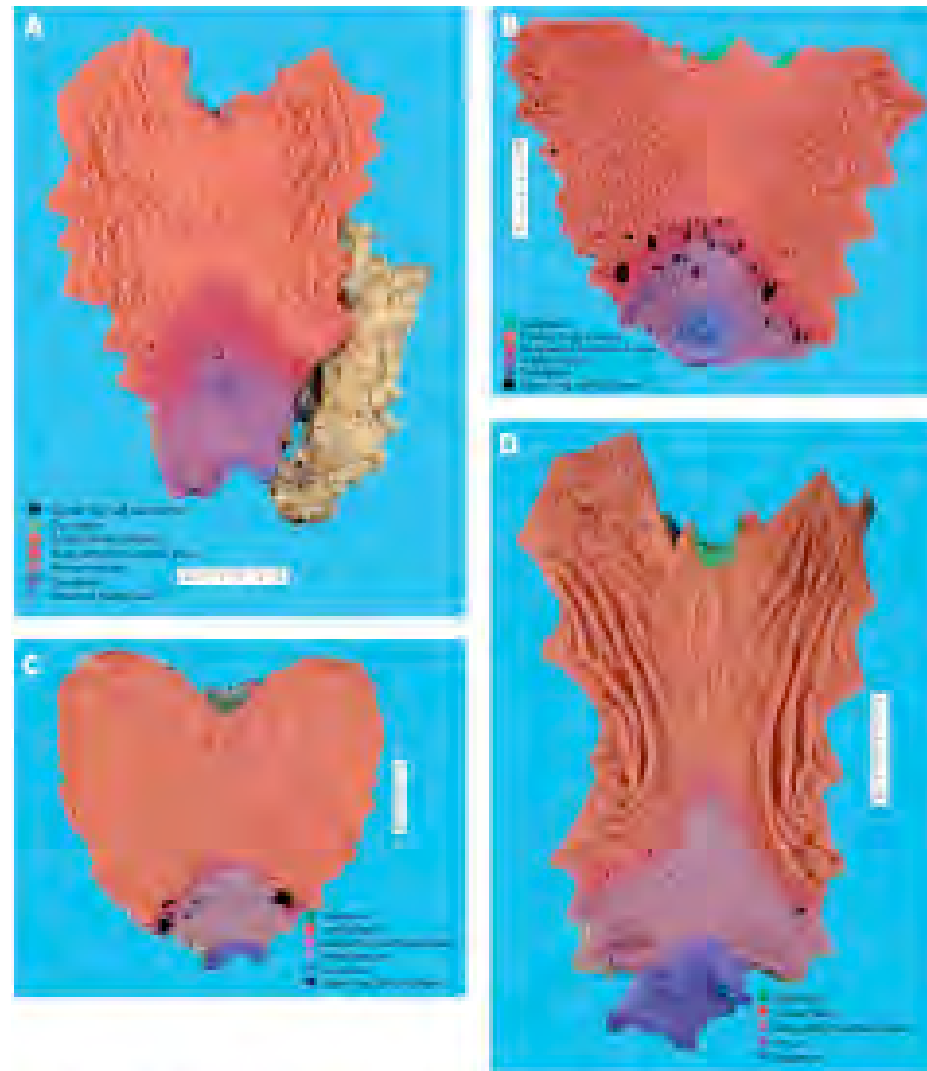
Rogers W *et al*
Am J Surg Pathol 32:799, 2008



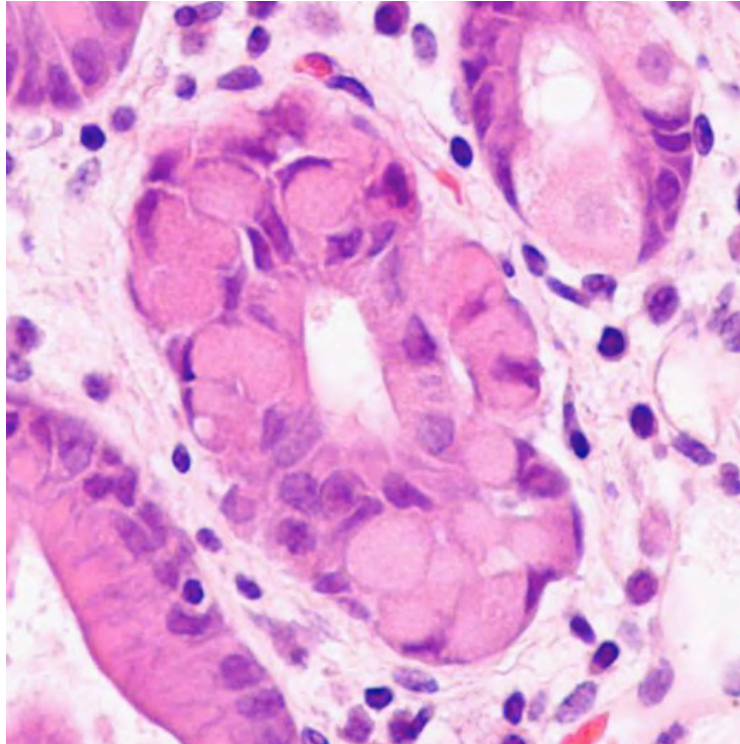
The highest number of *foci* was found in the fundus (44.7%) followed by the body (40.2%).

Barber M *et al*
J Pathol 216:295, 2008

Gastrectomies in New Zealand in CDH1 carriers



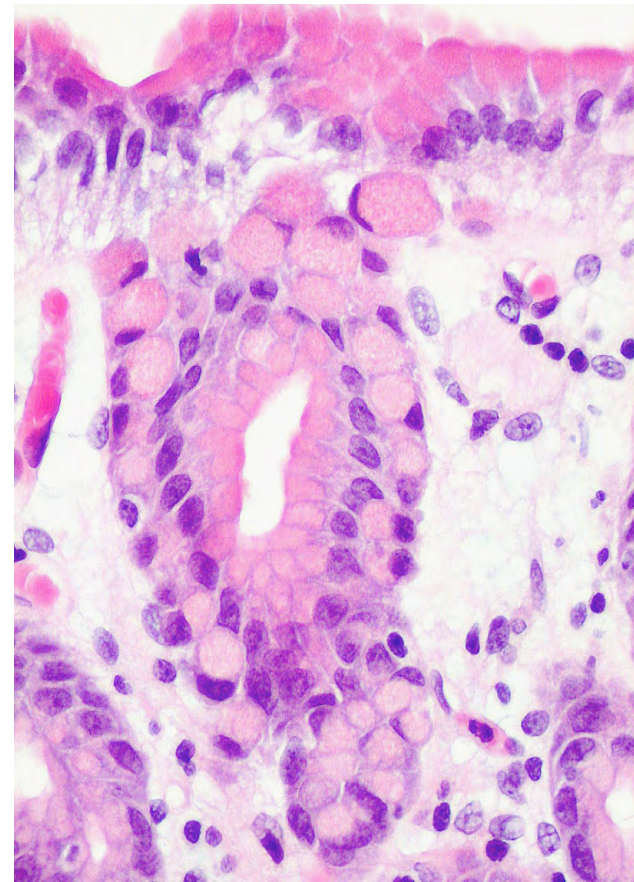
Charlton A *et al*: Hereditary diffuse gastric cancer: predominance of multiple foci of signet ring cell carcinoma in distal stomach and transitional zone.
Gut 53;814-820, 2004

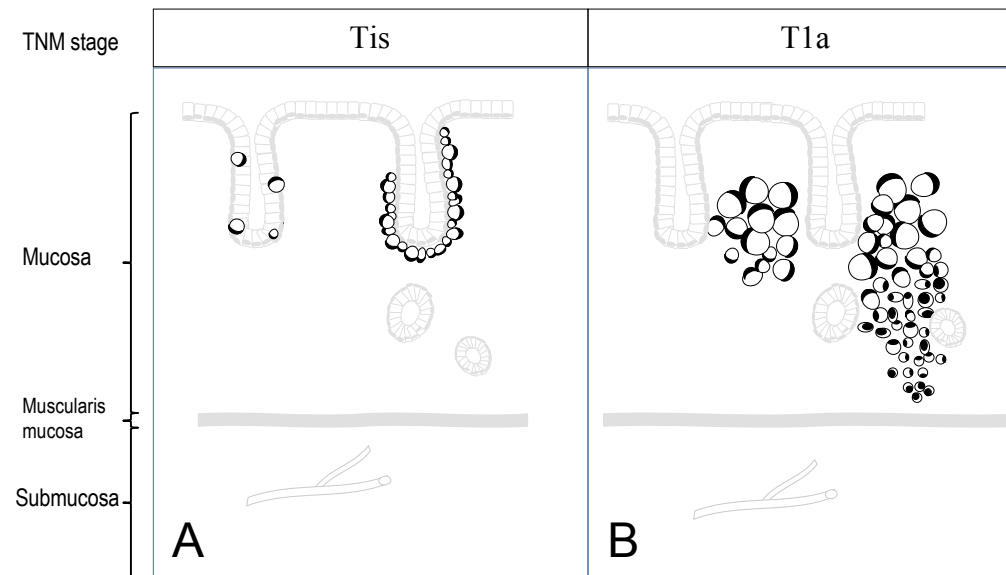


In situ (signet ring cell) carcinoma

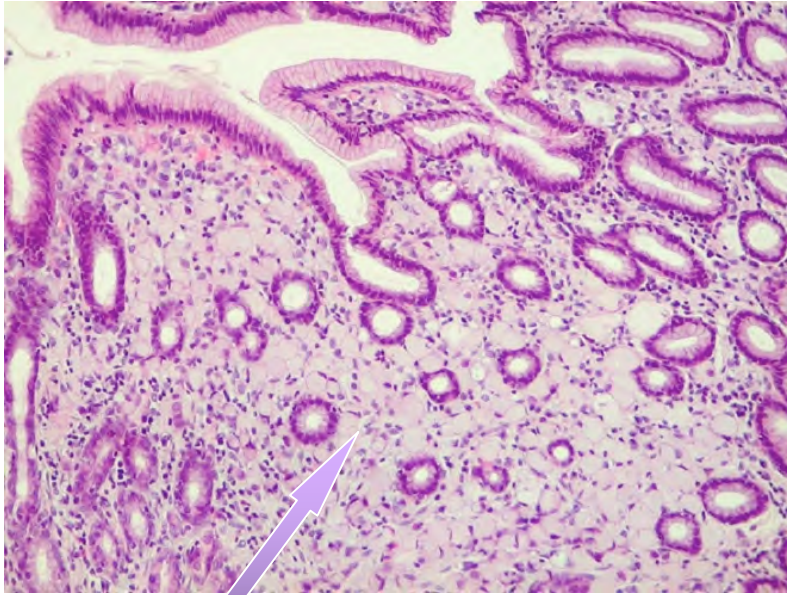
Pagetoid spread of signet ring cells:

Two-layer structure:
an inner layer composed of benign mucous cells
and an outer layer of signet ring cells.





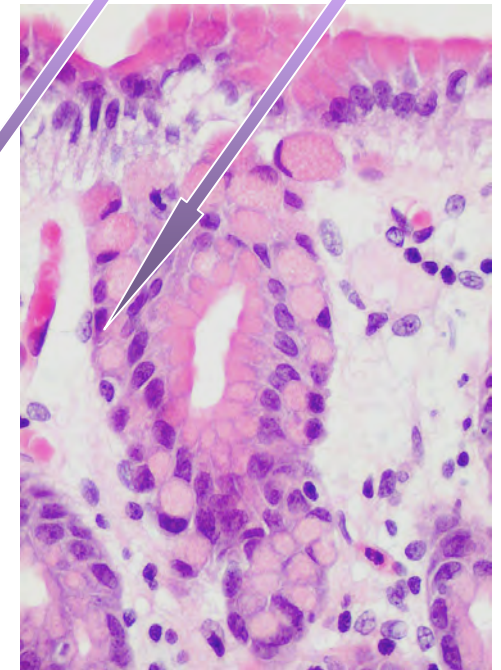
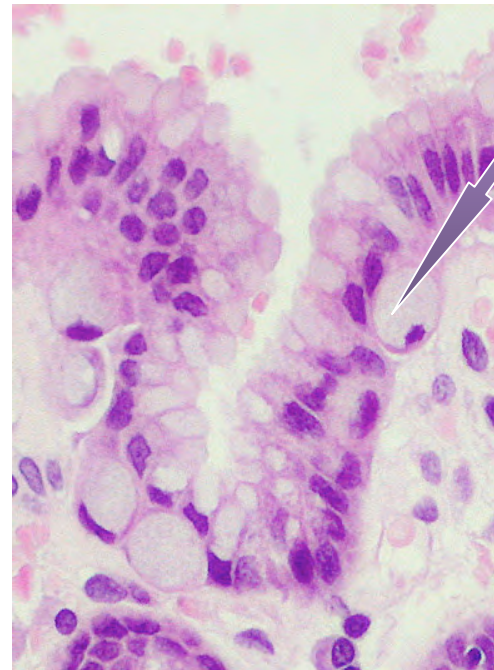
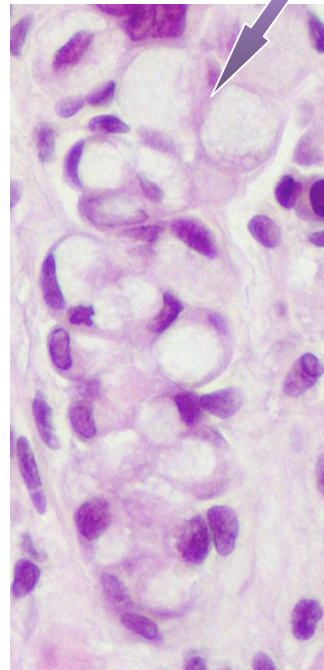
Carneiro F, Charlton A, Huntsman D
4th Edition of WHO book (in preparation)



Intramucosal
signet ring cell
carcinoma

Huntsman D, Carneiro F, Lewis F *et al*
N Engl J Med 344: 1904, 2001

In situ carcinoma and pagetoid spread



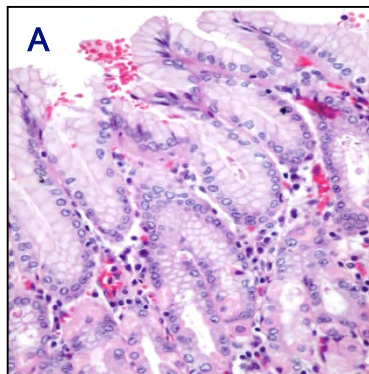
Carneiro F, Huntsman D, Smyrk T *et al*
J Pathol 203:681, 2004

Development model of HDGC

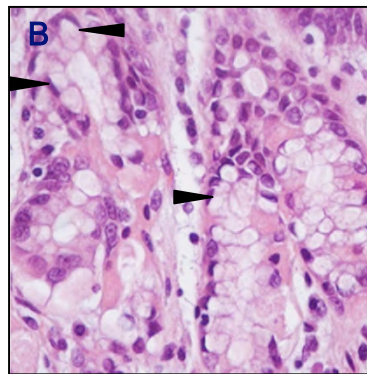
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Inactivation of second allele of *CDH1*

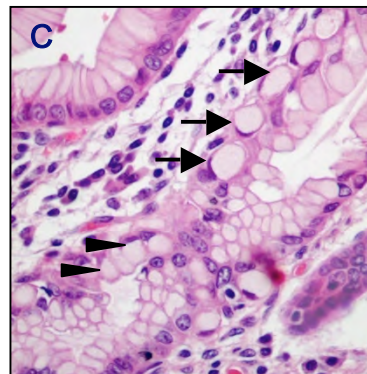
CDH1 germline mutation



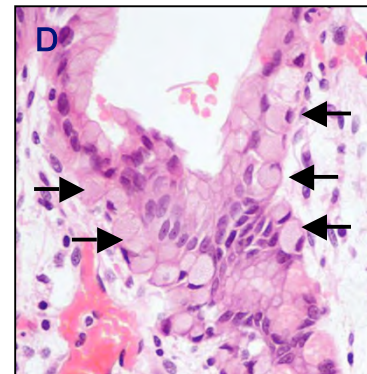
Non-neoplastic mucosa
with foveolar hyperplasia



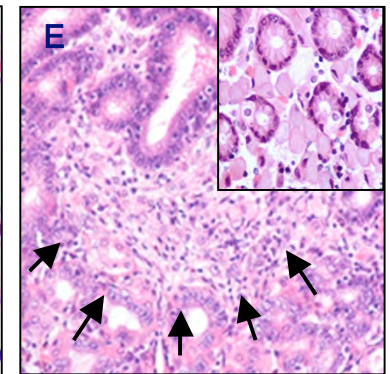
In situ signet ring cell
carcinoma



In situ signet ring cell
carcinoma and pagetoid spread



Pagetoid spread of signet
ring cell carcinoma



Early invasive (intramucosal)
signet ring cell carcinoma

Carneiro F *et al.*
J Clin Pathology 61:25-30, 2008



International Gastric Cancer
Linkage Consortium (IGCLC)

