

# ACADEMIE INTERNATIONALE DE PATHOLOGIE DIVISION FRANÇAISE

## Cancers gastriques (sporadic and familial) et états précancéreux

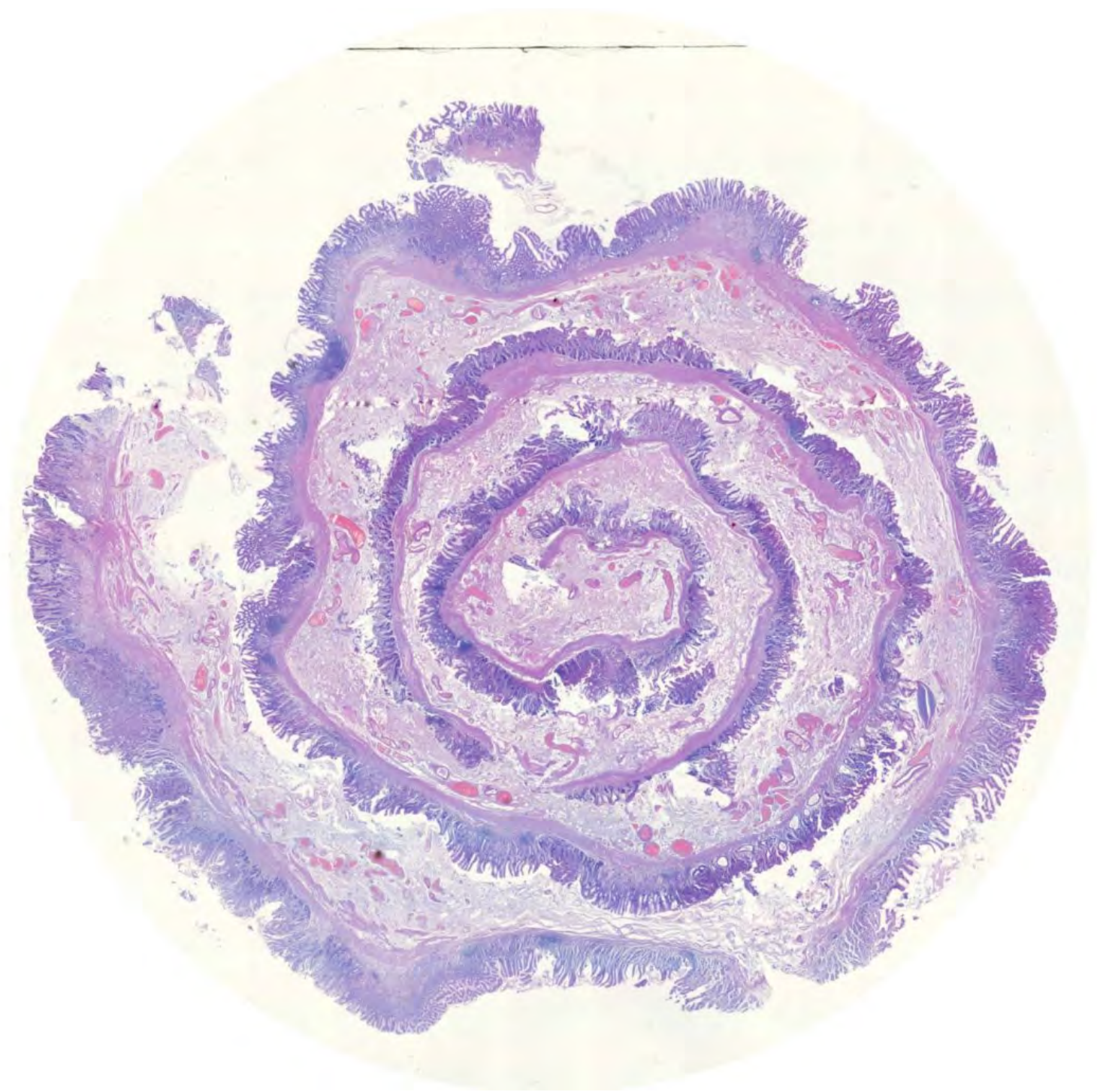
### Cas 1

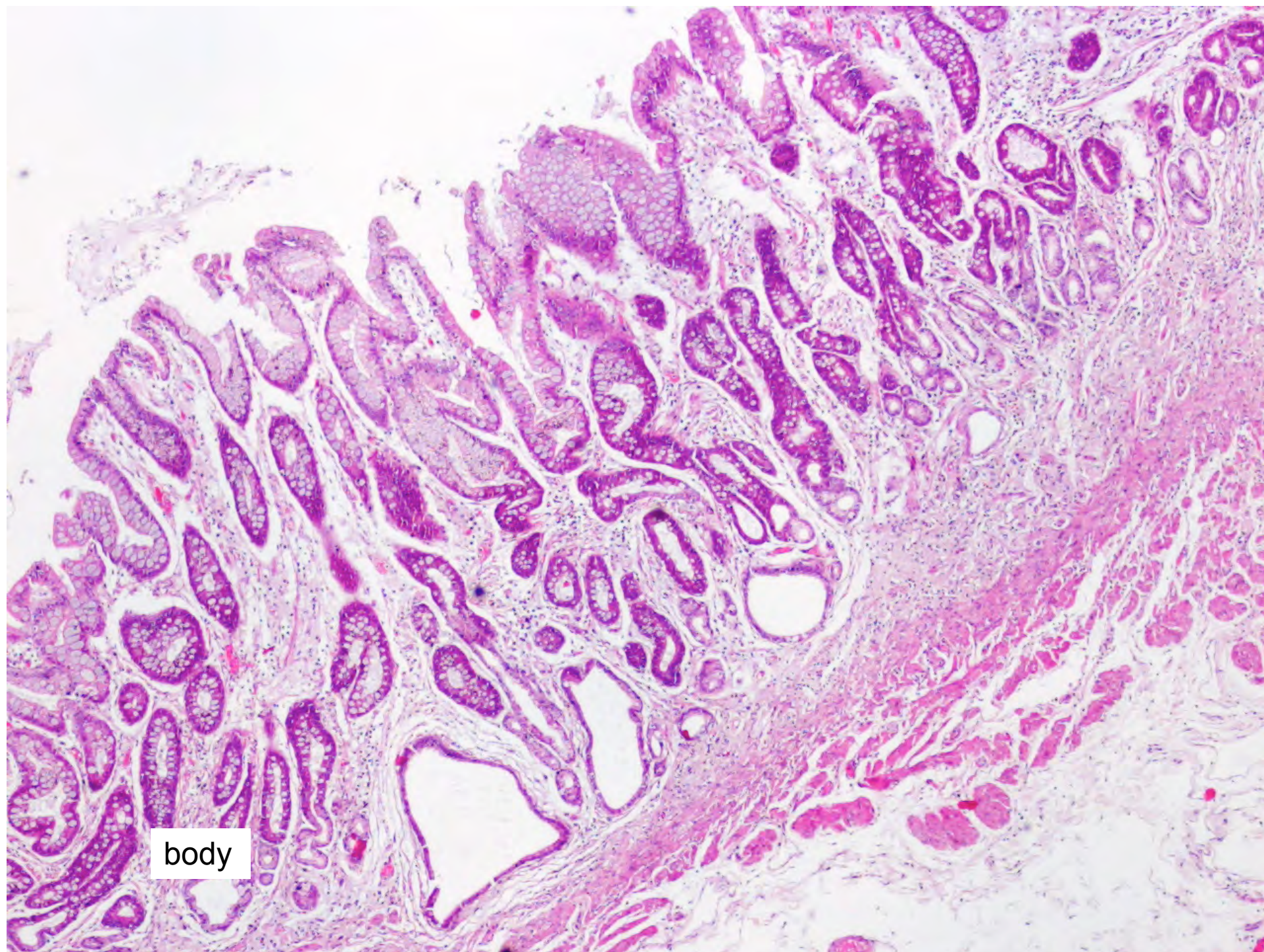


Fátima Carneiro  
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Porto, Portugal

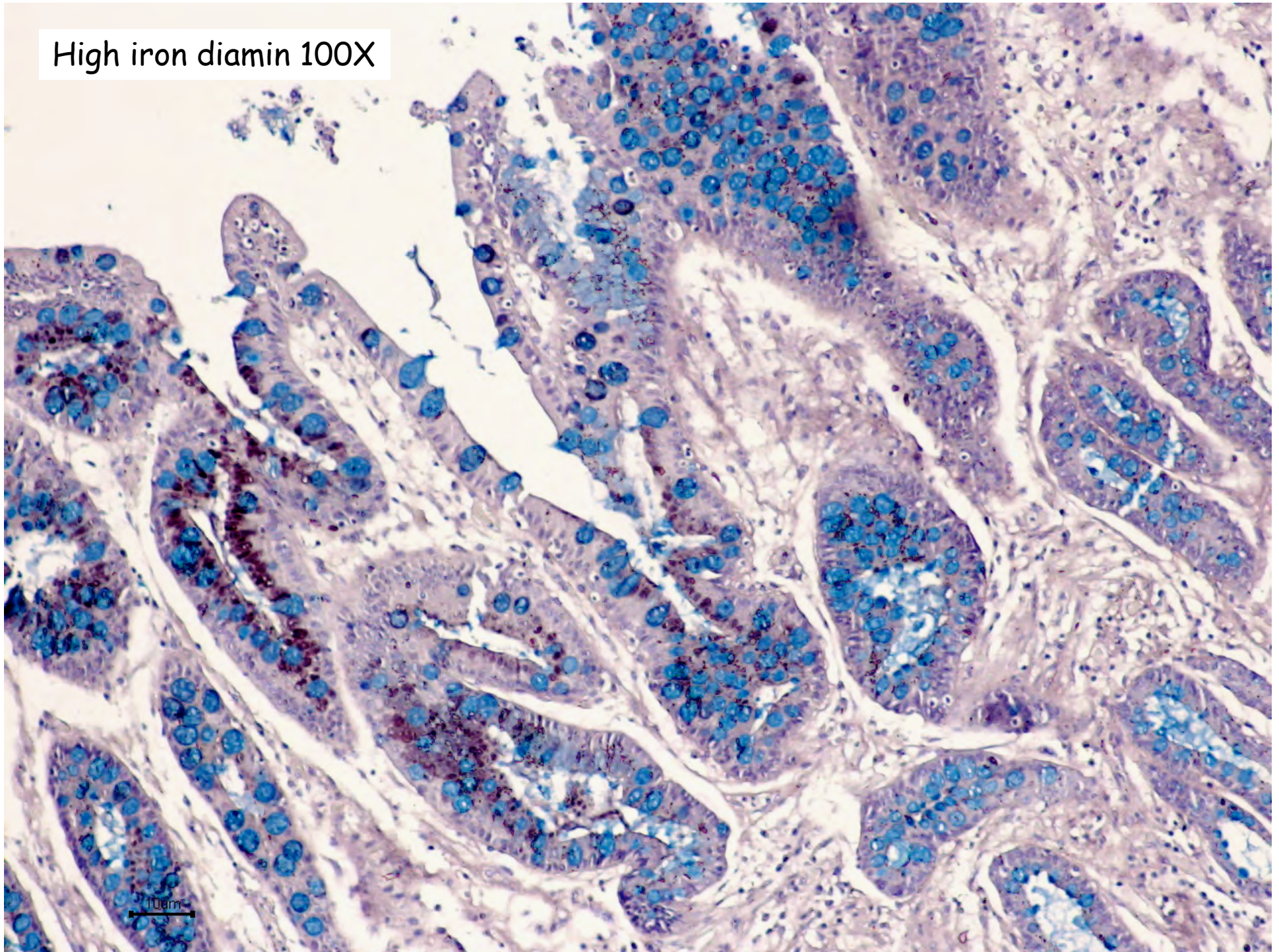


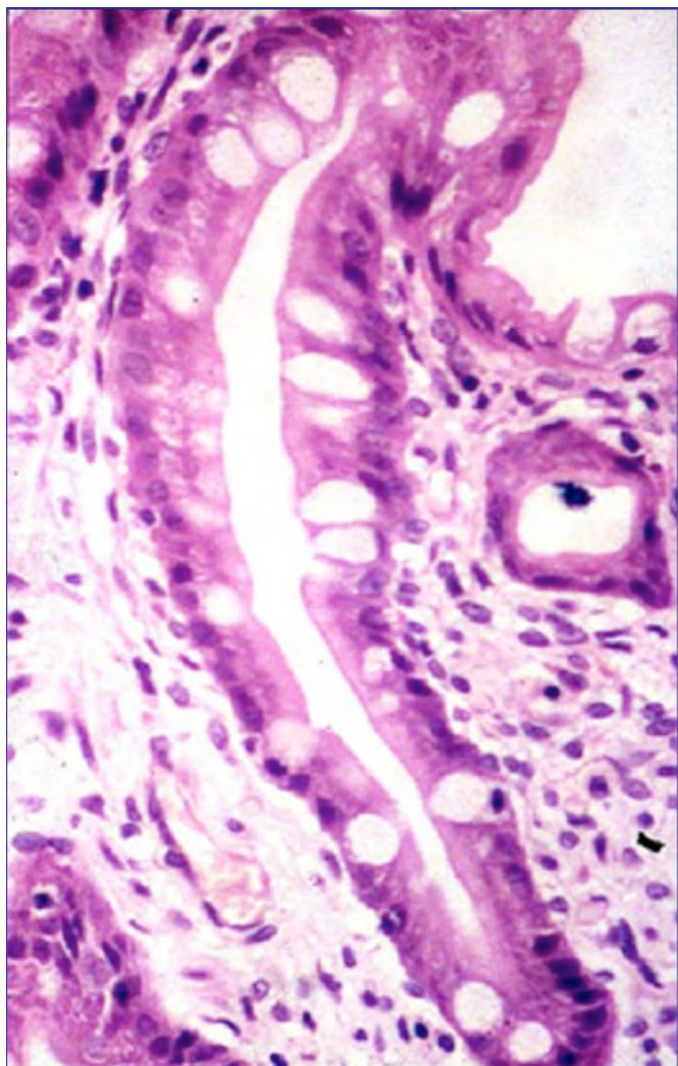
*Case 1 - H04/6023 - Male, 65 y, rugosity of antral gastric mucosa*





High iron diamin 100X





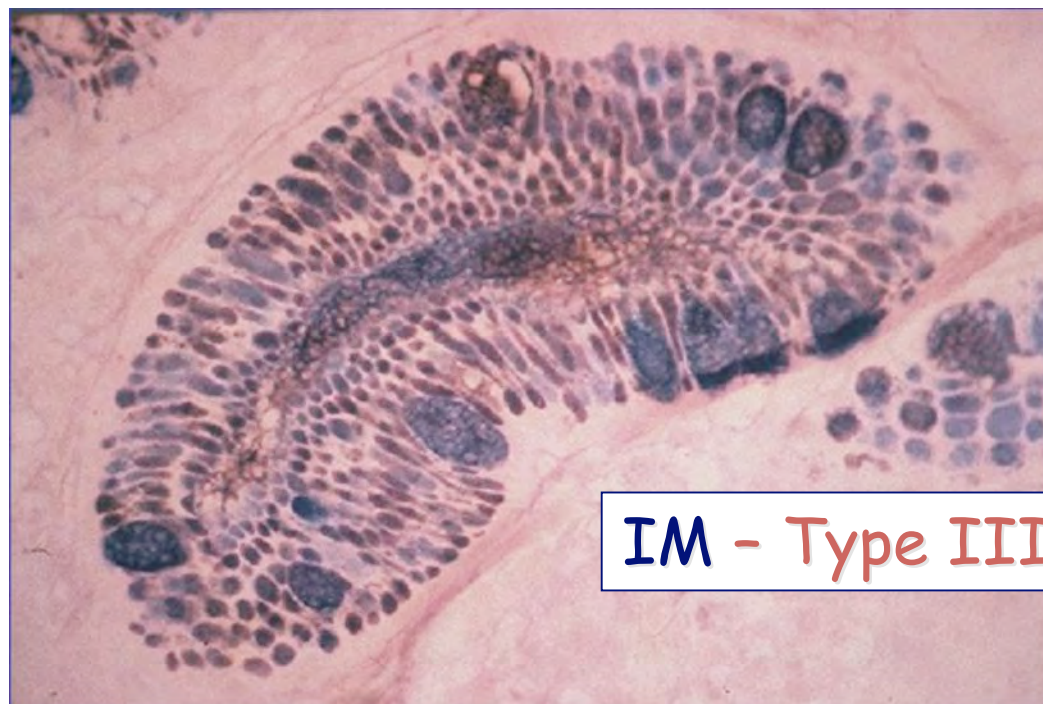
Jass JR & Filipe MI  
Histochem J 13: 931, 1981

# Intestinal metaplasia (IM)

Type I - complete

Type II - incomplete

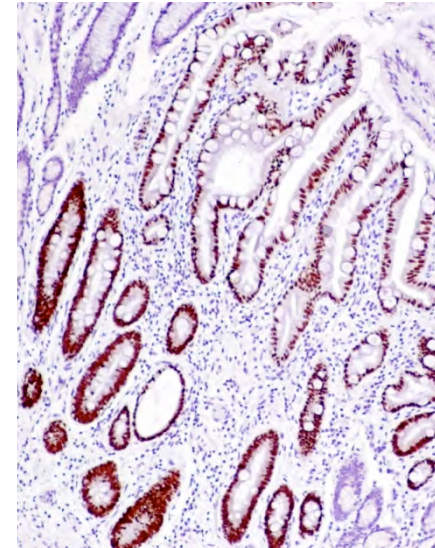
Type III - incomplete



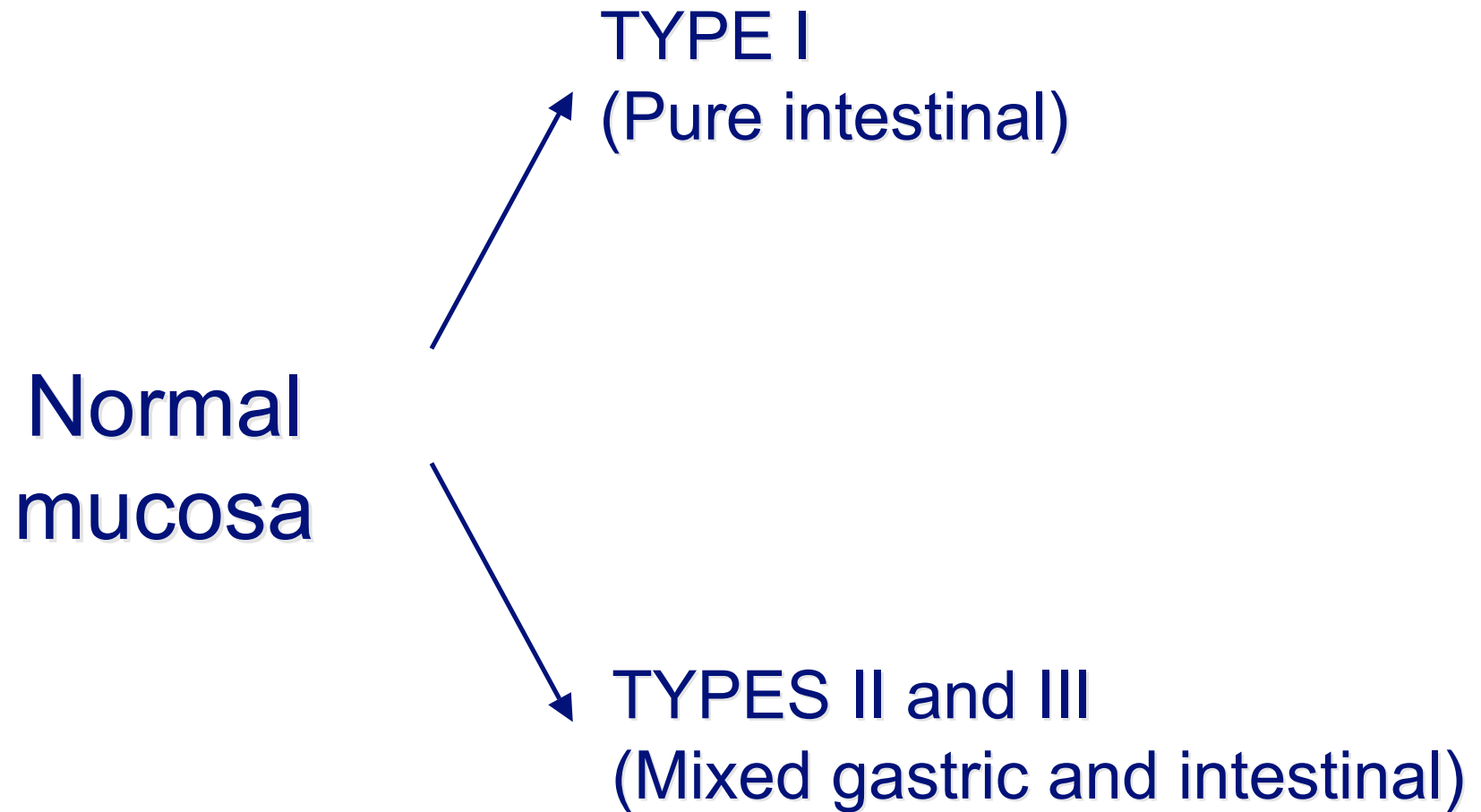
IM - Type III

# MUCIN EXPRESSION PATTERN IN INTESTINAL METAPLASIA

TYPE I (Pure intestinal)  
~~MUC 5AC, MUC6, MUC2~~



TYPES II/III (Mixed gastric/intestinal)  
MUC1, MUC 5AC, MUC6 + MUC2



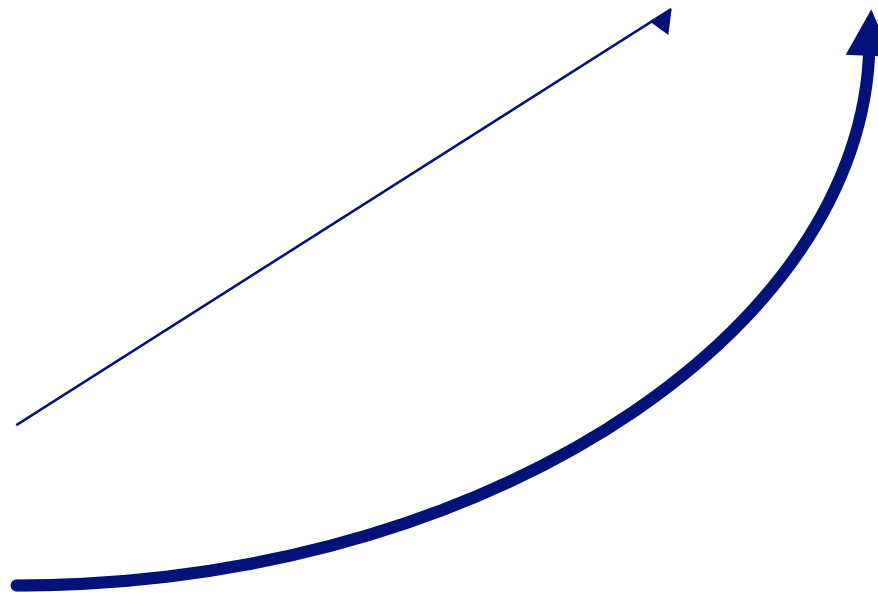
Reis C *et al*  
Cancer Res 59: 1003, 1999

INTESTINAL  
METAPLASIA ↔ GASTRIC CARCINOMA

Type I

Type II

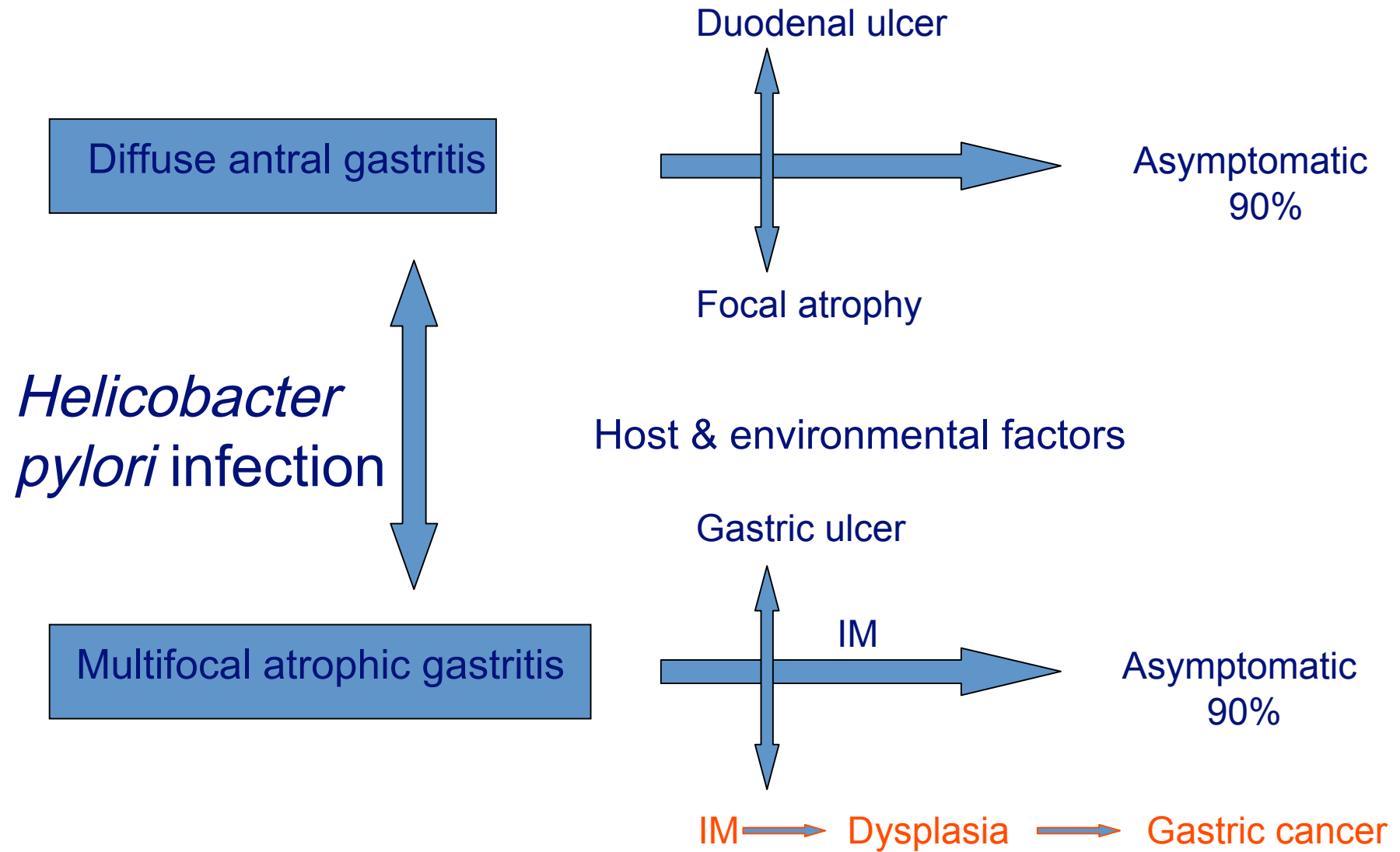
Type III

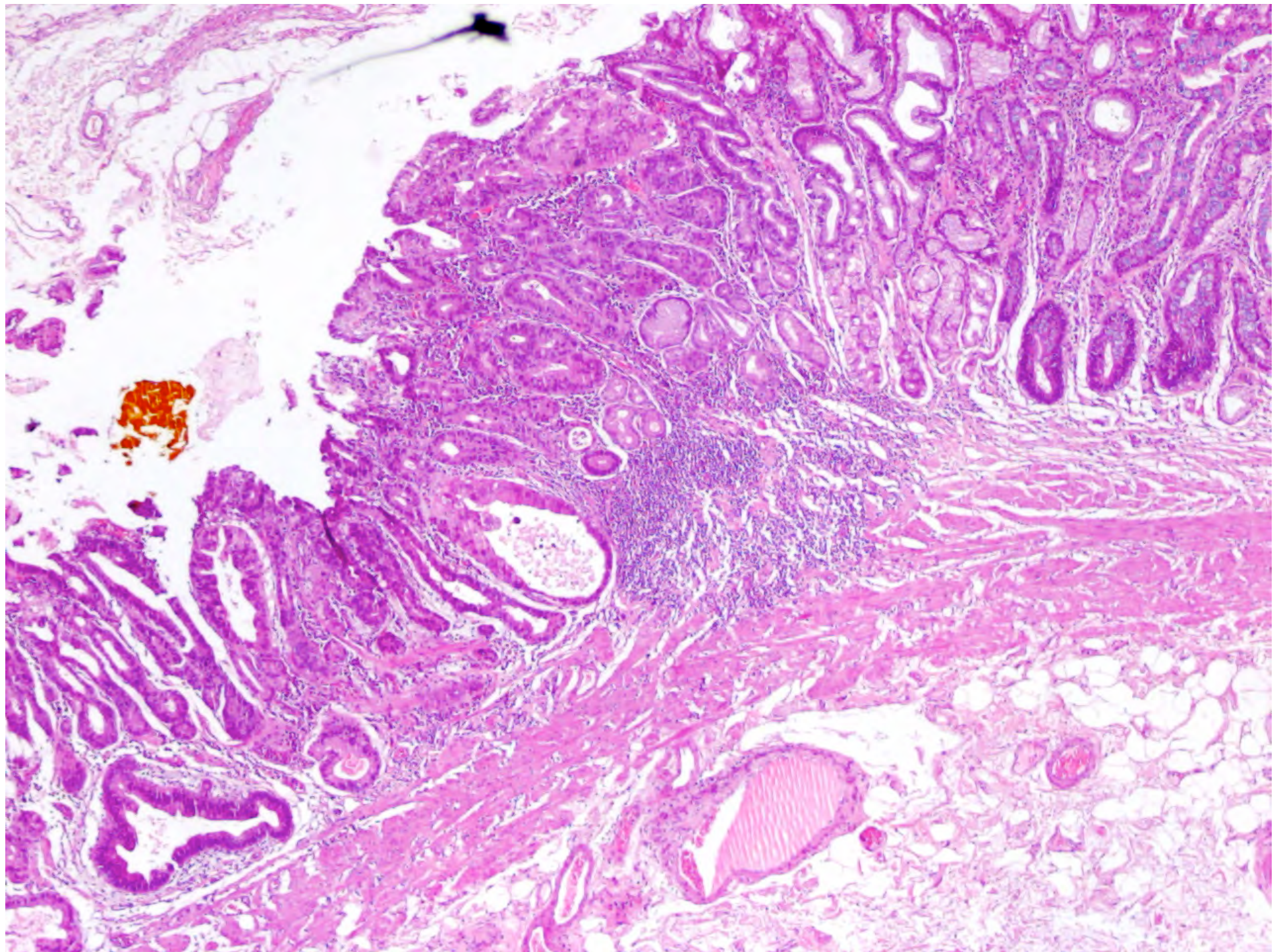


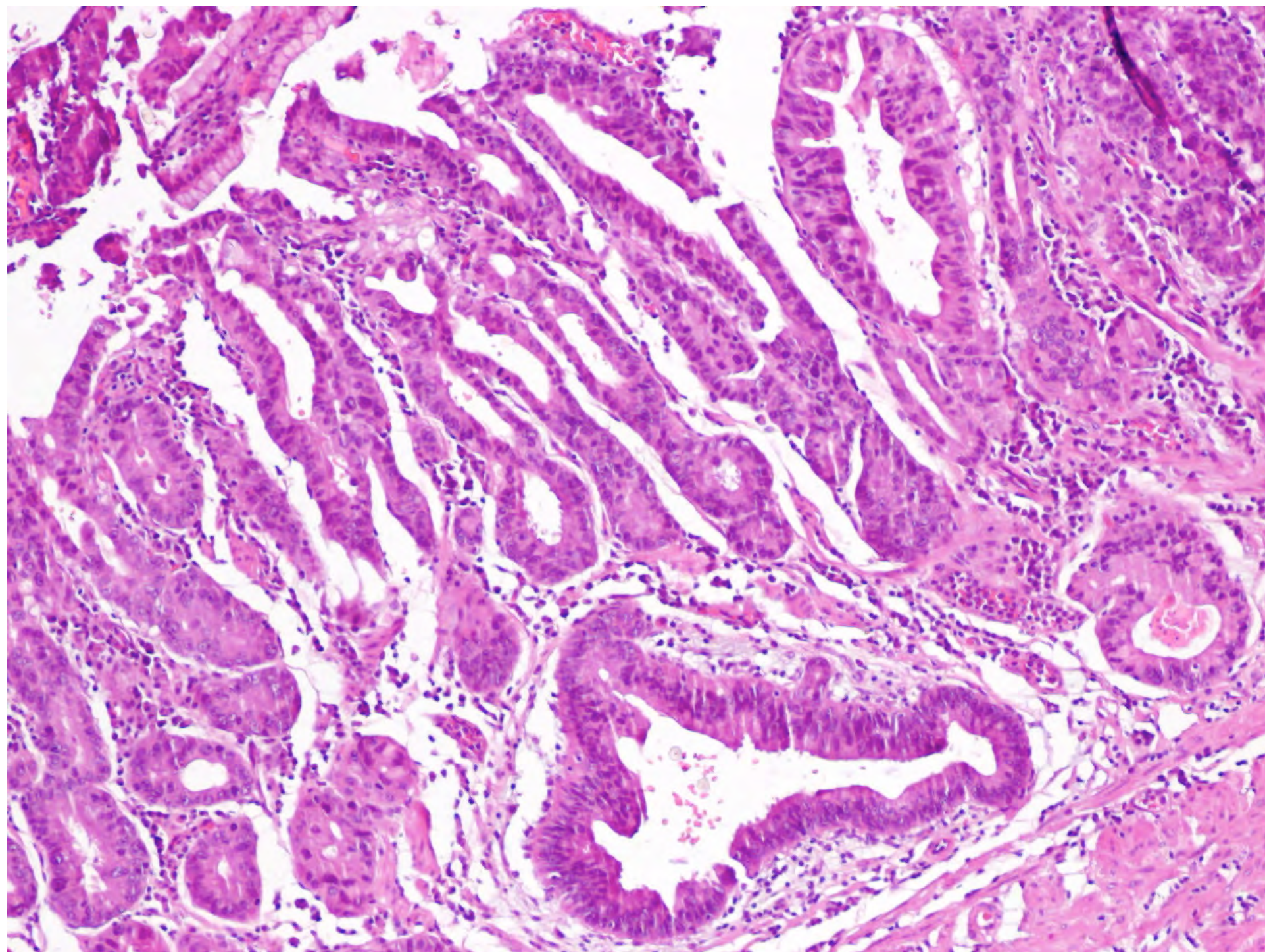
Filipe F *et al.* Int J Cancer 57: 324, 1994  
Reis C *et al.* Cancer Res 59: 1003, 1999

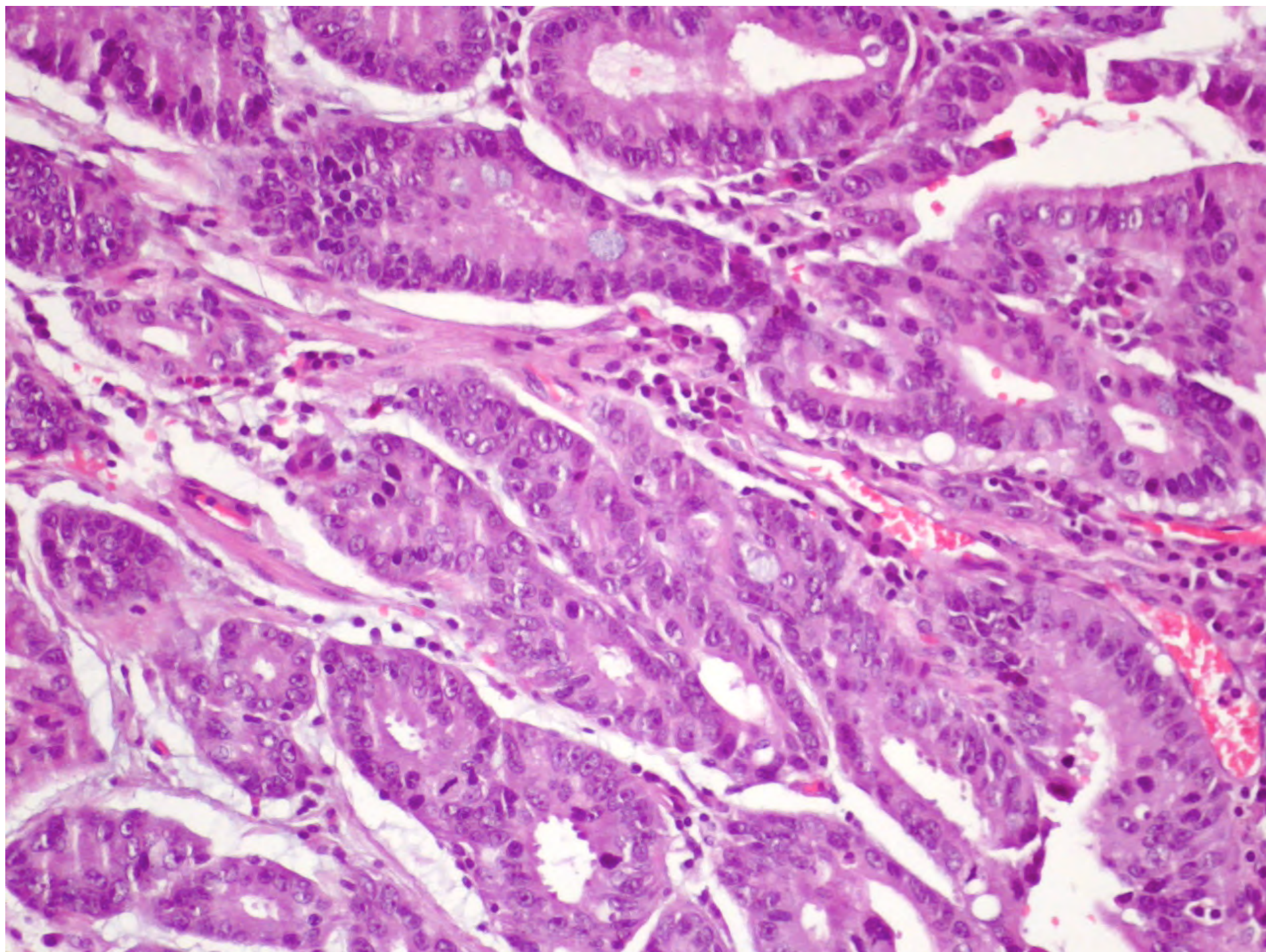
# Effects of *Helicobacter pylori* eradication on reversal of gastric atrophy or intestinal metaplasia

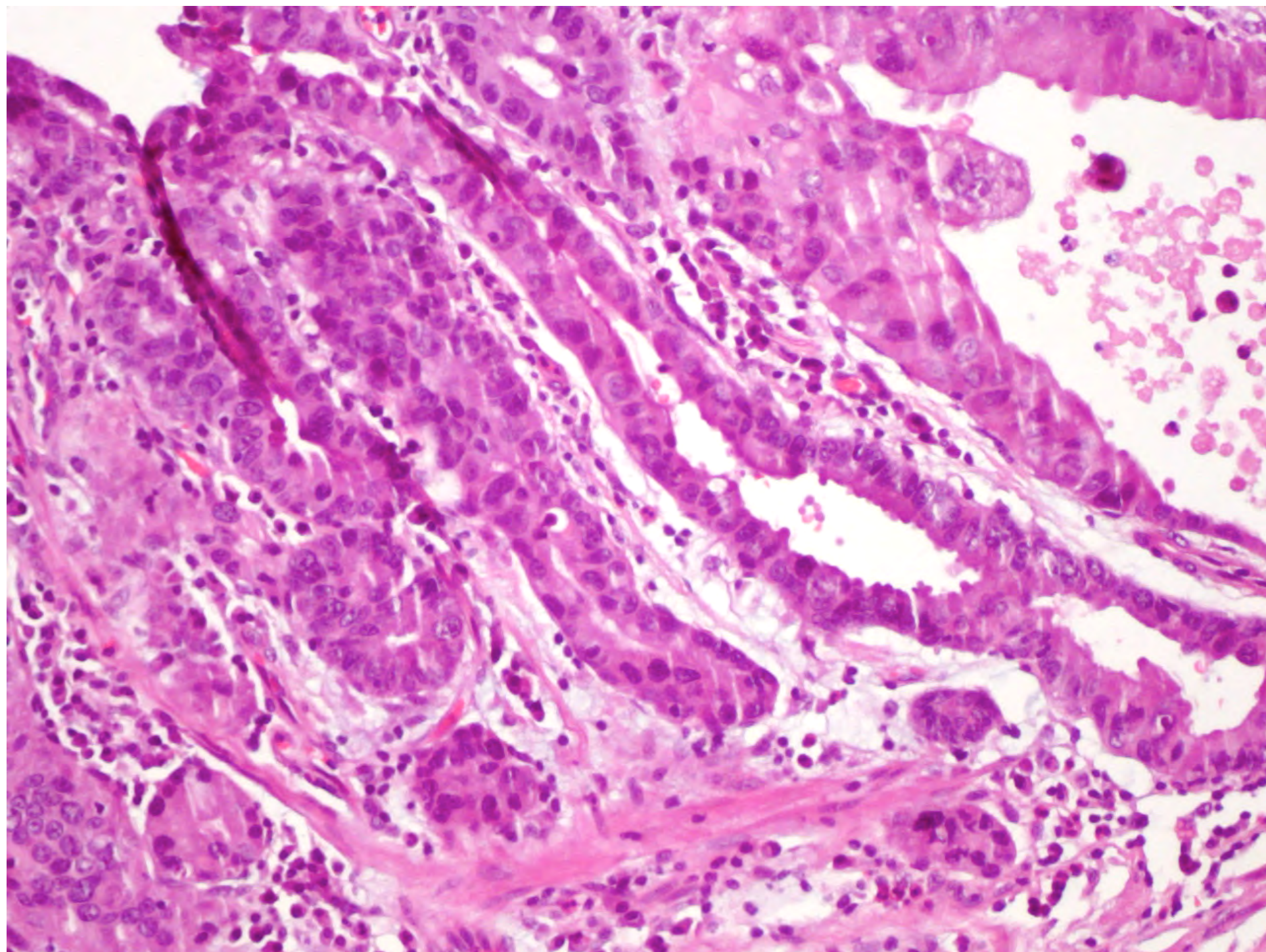
| Reference                            | Design/no of pts                                     | Follow-up | Outcome                                    | Country     |
|--------------------------------------|------------------------------------------------------|-----------|--------------------------------------------|-------------|
| Wong BCY <i>et al</i> , 2002         | Prospective, randomized/1628                         | 60-84     | Slowing of progression of CAG and IM       | China       |
| Ito M <i>et al</i> , 2002            | Prospective/22 pts                                   | 60        | Regression of CAG/IM                       | Japan       |
| Correa P <i>et al</i> , 2000         | Prospective randomized intervention trial/controlled | 72        | Regression of IM in treated (15%) pts      | Colombia    |
| El-Omar EM <i>et al</i> , 2000       | Prospective, controlled/200                          | 12        | No change in IM, regression of CAG         | UK          |
| Uemura N <i>et al</i> , 1997         | Prospective non-randomized gastric cancer pts/132    | 24/36     | Decreased severity of IM                   | Japan       |
| Van der Hulst RW <i>et al</i> , 1997 | Prospective, controlled/155                          | 12        | No change in IM, regardless of cagA status | Netherlands |

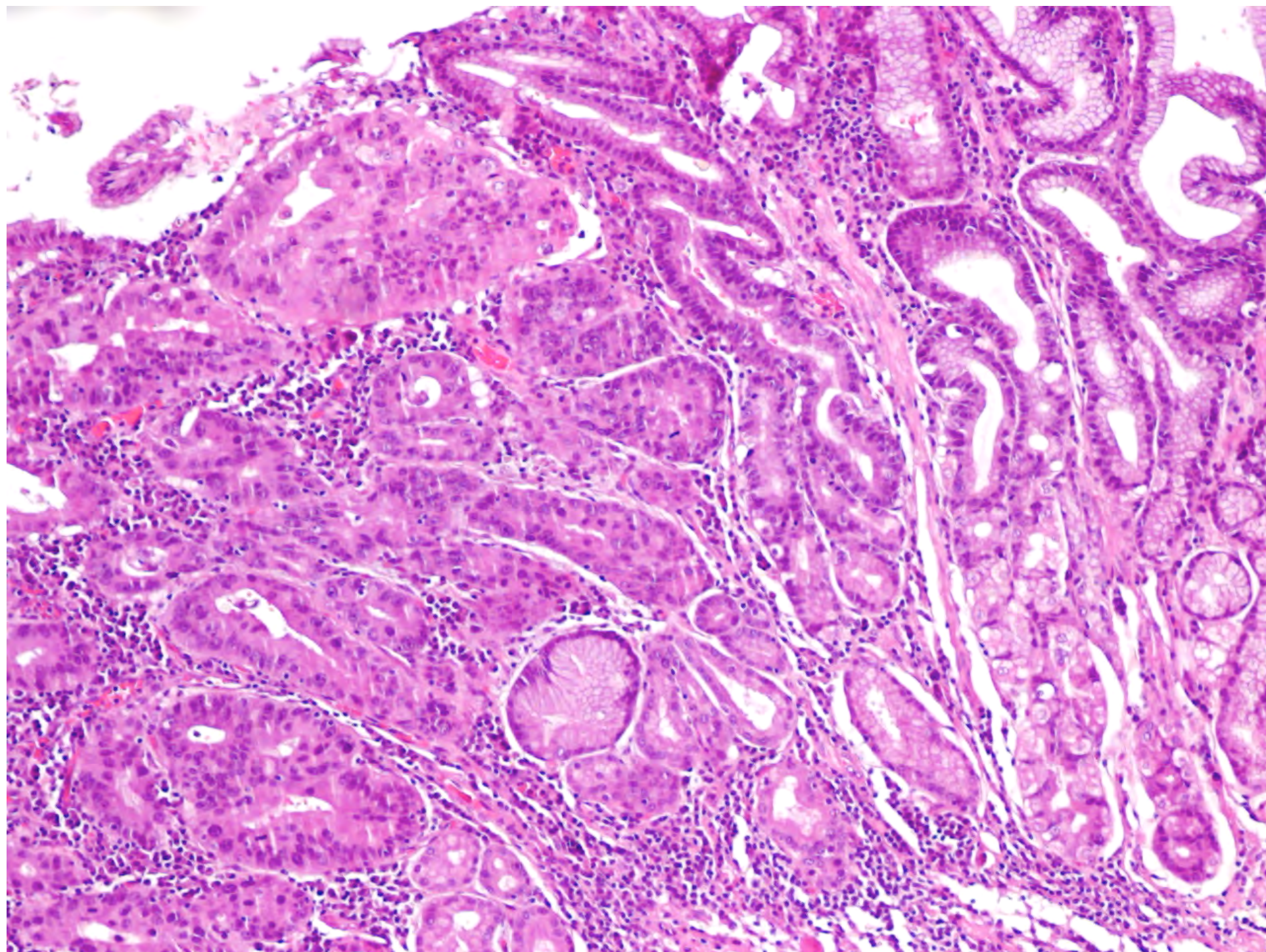


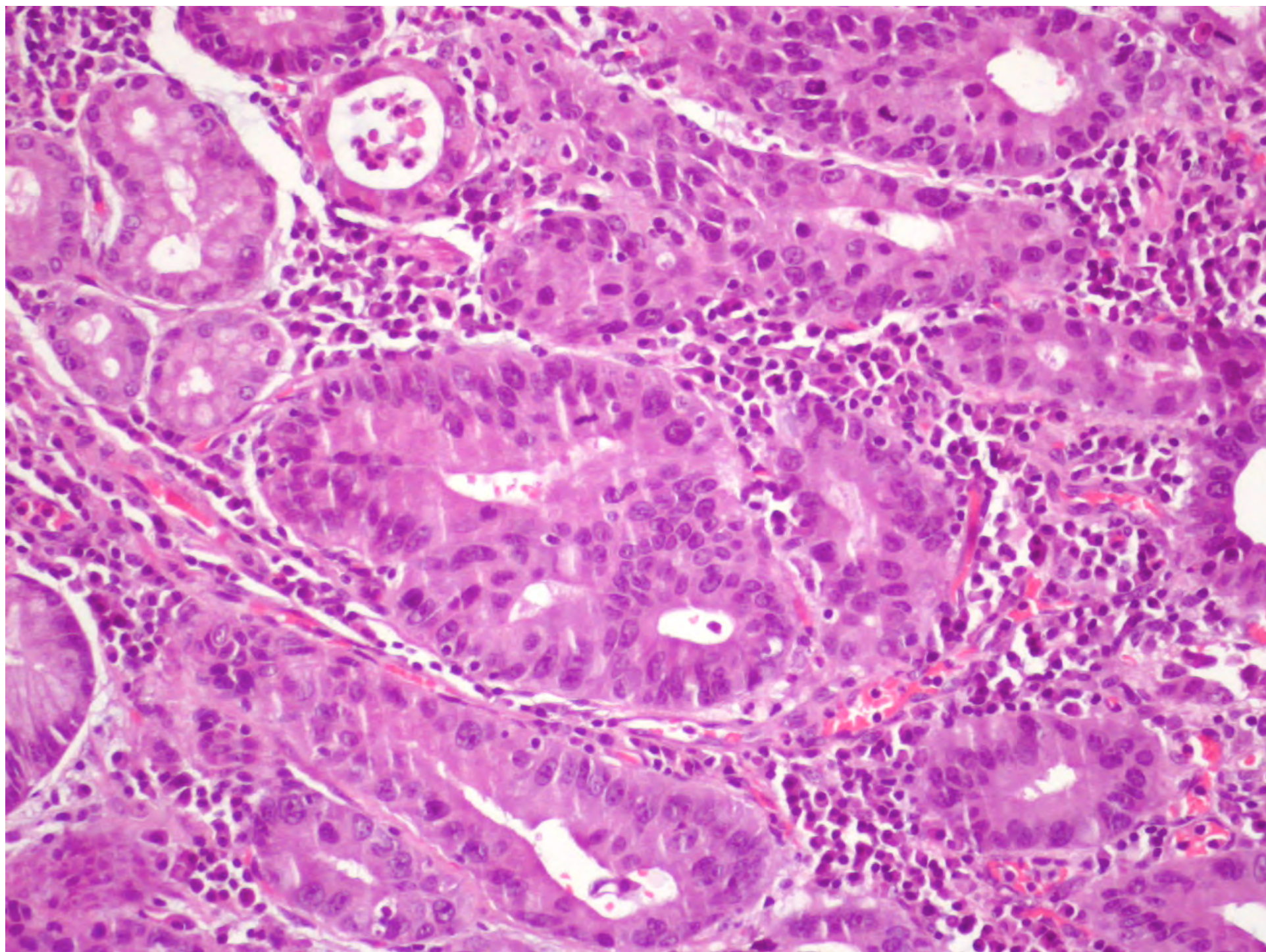


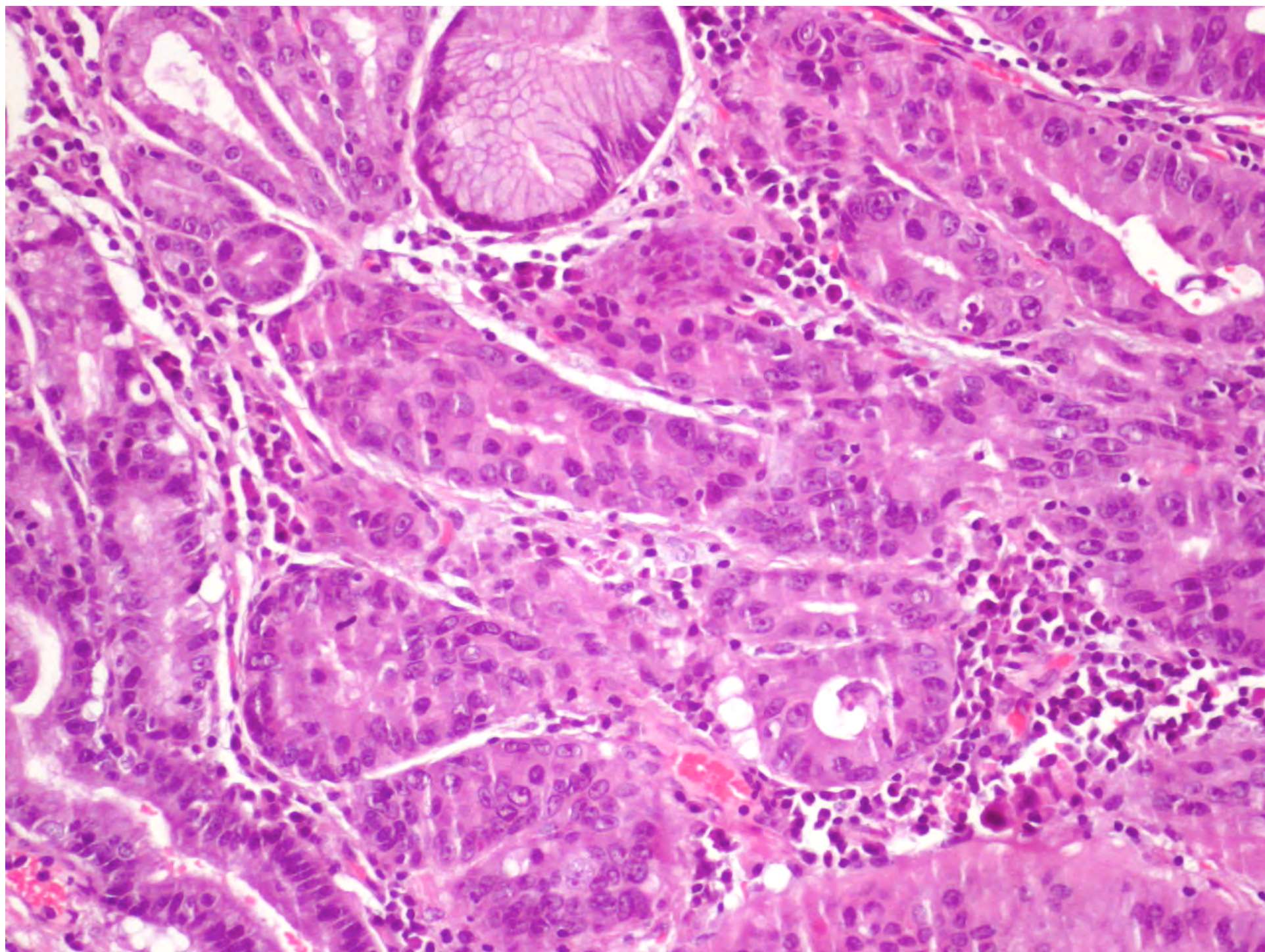


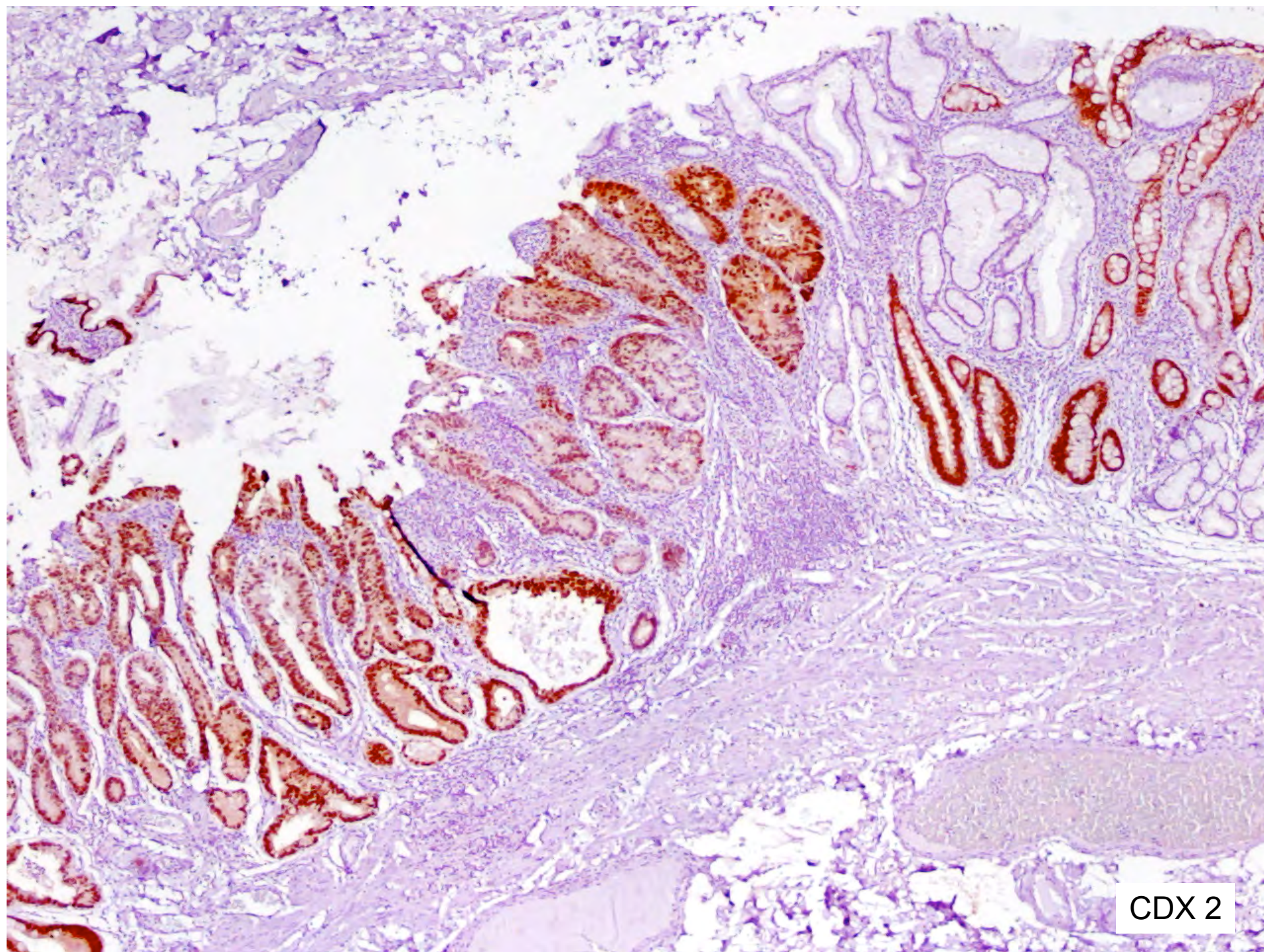




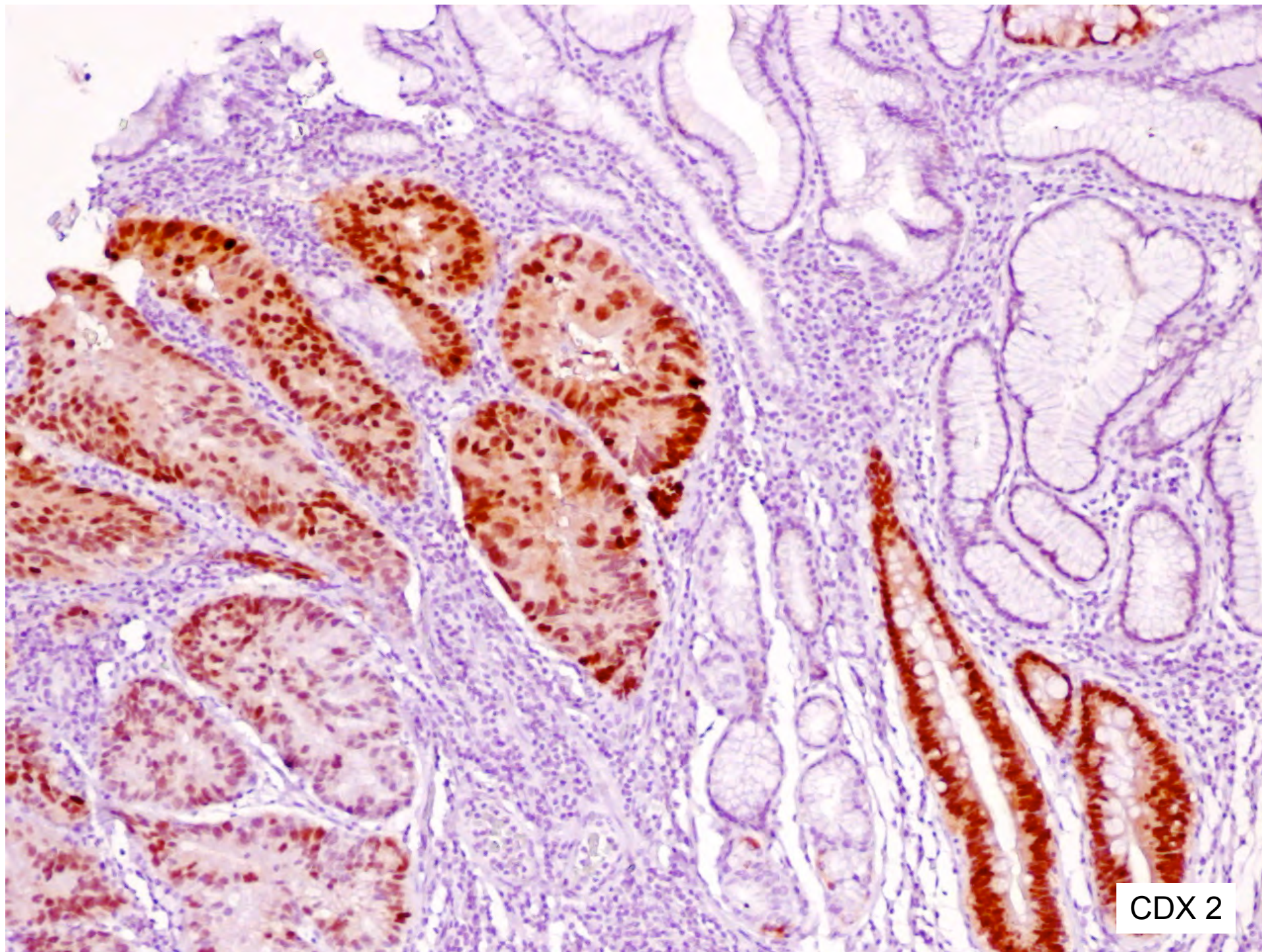








CDX 2



CDX 2

## Vienna classification of gastrointestinal epithelial neoplasia

- 1 Negative for neoplasia/dysplasia
- 2 Indefinite for neoplasia/dysplasia
- 3 Non-invasive low grade neoplasia  
(low grade adenoma/dysplasia)
- 4 Non-invasive high grade neoplasia
  - 4.1 High grade adenoma/dysplasia
  - 4.2 Non-invasive carcinoma (*in situ*)
  - 4.3 Suspicion of invasive carcinoma
- 5 Invasive neoplasia
  - 5.1 Intramucosal carcinoma
  - 5.2 Submucosal carcinoma or beyond

### The **new** Vienna classification

- 4 Non-invasive high grade neoplasia**
  - 4.1 High grade adenoma/dysplasia
  - 4.2 Non-invasive carcinoma (*in situ*)
  - 4.3 Suspicion of invasive carcinoma
  - 4.4 Intramucosal carcinoma**
- 5 Invasive neoplasia (Submucosal carcinoma or beyond)**

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Schlemper RJ *et al*: The Vienna classification of gastrointestinal epithelial neoplasia. Gut 47: 251, 2000

Stolte M: The new Vienna classification of epithelial neoplasia of the gastrointestinal tract: advantages and disadvantages. Virchows Archiv 442: 99, 2003

| (New) WHO classification                                                                                                              | "Old" nomenclature       | Padova classification                                                | Vienna classification                                                                                   | Updated Vienna classification                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| No intra-epithelial neoplasia                                                                                                         | Negative for dysplasia   | Negative for non-invasive neoplasia (Category 1)                     | Negative for neoplasia/dysplasia (Category 1)                                                           | No neoplasia (Category 1)                                                                               |
| Indefinite for intra-epithelial neoplasia                                                                                             | Indefinite for dysplasia | Indefinite for non-invasive neoplasia (Category 2)                   | Indefinite for neoplasia/dysplasia (Category 2)                                                         | Indefinite for neoplasia (Category 2)                                                                   |
| Low grade intra-epithelial neoplasia<br>(syn. low grade adenoma; low grade dysplasia)                                                 | Low grade dysplasia      | Low-grade non-invasive neoplasia (Category 3)                        | Non-invasive low grade neoplasia (low grade adenoma/dysplasia) (Category 3)                             | Low-grade adenoma/dysplasia (Category 3)                                                                |
| High grade intra-epithelial neoplasia<br>(syn. high grade adenoma; high grade dysplasia, non-invasive <u>intramucosal carcinoma</u> ) | High grade dysplasia     | High-grade non-invasive neoplasia (Category 3)                       | High grade adenoma/dysplasia (Category 4.1) & Non-invasive carcinoma (carcinoma in situ) (Category 4.2) | High-grade adenoma/dysplasia (Category 4.1) & Non-invasive carcinoma (carcinoma in situ) (Category 4.2) |
| <u>Intramucosal</u> invasive neoplasia<br>(syn. <u>intramucosal carcinoma</u> )                                                       | High grade dysplasia     | (Suspicious for) <u>intramucosal</u> invasive carcinoma (Category 4) | Suspicion of invasive carcinoma (Category 4.3) & <u>Intramucosal carcinoma</u> (Category 5.1)           | Suspicion for invasive carcinoma (Category 4.3) & <u>Intramucosal carcinoma</u> (Category 4.4)          |
| Invasive neoplasia<br>(syn. invasive carcinoma)                                                                                       | Carcinoma                | Carcinoma (Category 5)                                               | <u>Submucosal carcinoma</u> or beyond (Category 5.2)                                                    | <u>Submucosal</u> invasive carcinoma or beyond (Category 5)                                             |

□

Intramucosal carcinoma in the background of chronic atrophic gastritis with intestinal metaplasia (incomplete type)