

# What's new in Cervical Carcinoma?

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# Squamous lesions: update in classification

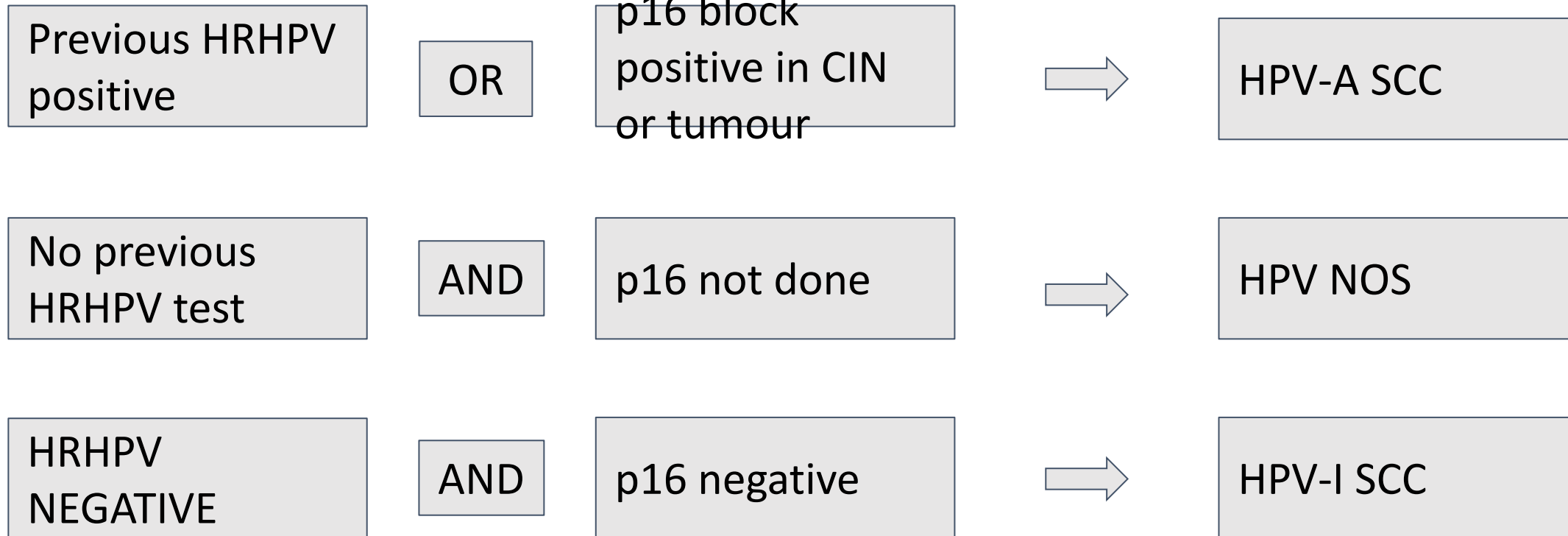
- 2014 WHO Classification of cervical squamous cell carcinomas (SCC) had multiple morphological types, such as keratinizing, nonkeratinizing, basaloid, warty, papillary, squamotransitional, verrucous, and lymphoepithelioma-like.
- These represent growth patterns and not tumor types and were of no prognostic significance.
- The 2020 WHO Classification categorizes cervical SCC into HPV-associated and HPV-independent types, similar to other sites.

WHO 2014	WHO 2020 <sup>1</sup>
Squamous cell carcinoma, usual type	Squamous cell carcinoma, HPV-associated
Keratinizing	Squamous cell carcinoma, HPV-independent
Nonkeratinizing	Squamous cell carcinoma, NOS
Papillary	
Basaloid	
Warty	
Verrucous	
Squamotransitional	
Lymphoepithelioma-like	

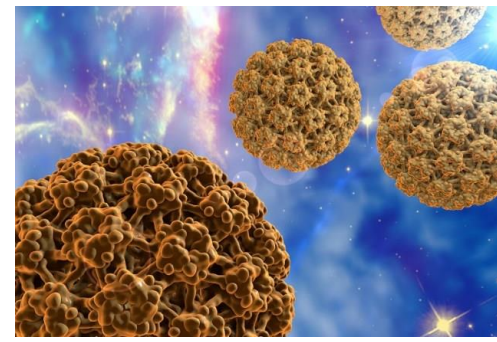
McCluggage, WG. Progress in the pathological arena of gynecological cancers. *Int J Gynecol Obstet.* 2021; 155(Suppl. 1): 107– 114.

- In most sites, the division into HPV-associated and HPV-independent SCC is important as there is a generally better prognosis for HPV-associated neoplasms e.g.vulva.
- Only 7% of cervical SCC are not associated HPV, no prognostic difference known, and no management difference.
- HPV independent SCC is indistinguishable from HPV associated SCC and ancillary investigation is required.
- p16 can be lost in the invasive component of SCC

# Can/should we test all SCCs and divide them into HPV-Associated/HPV-Independent types



# Cervical Epithelial Lesions

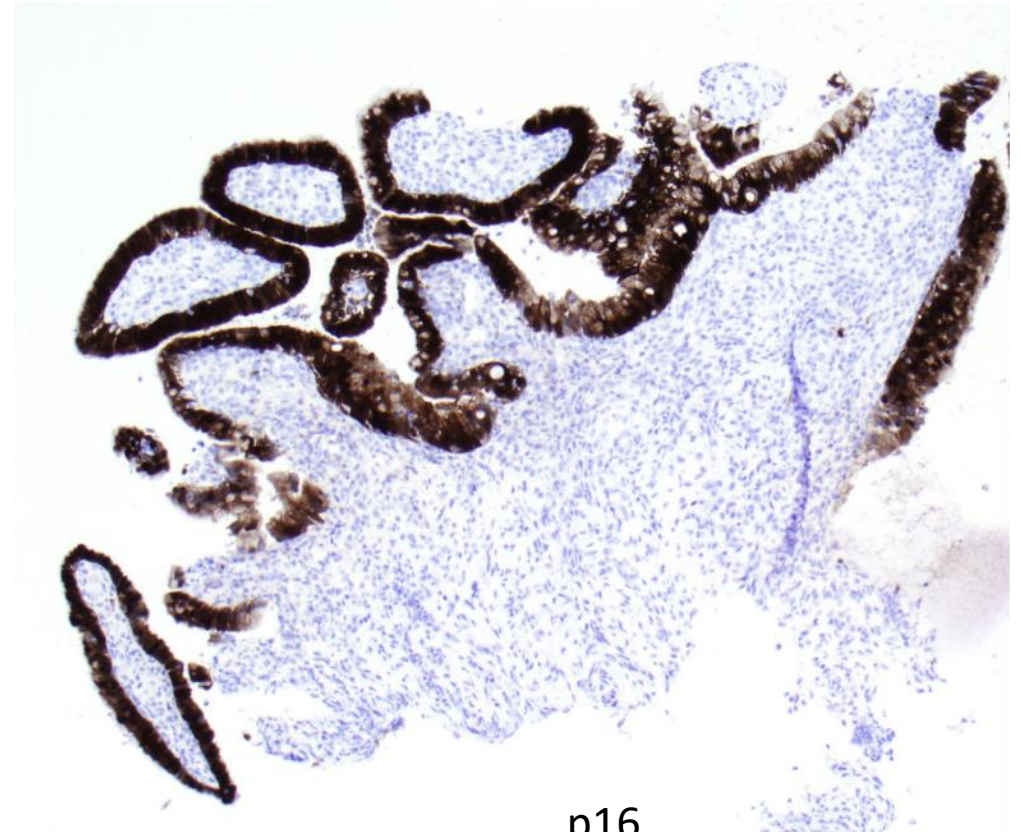
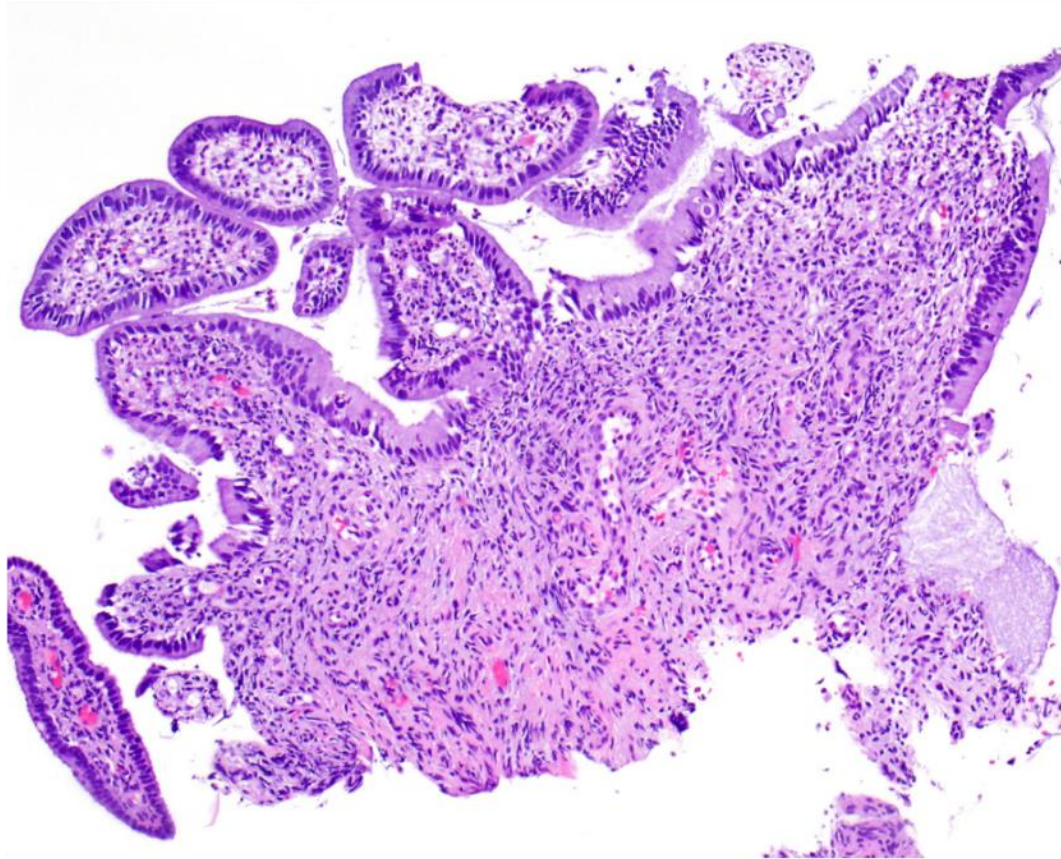


- Cervical epithelial pathology is dominated by HPV infection and its neoplastic consequences
- HPV infection has traditionally been considered necessary for the development of cervical carcinoma
- A significant proportion of cervical carcinomas, in particular adenocarcinomas, are not associated with HPV infection
- HPV-independent cervical carcinomas are generally more aggressive than HPV-associated carcinomas
- *WHO 2020* differs from previous editions by dividing epithelial tumours and their precursors on the basis of their association (or lack thereof) with HPV infection

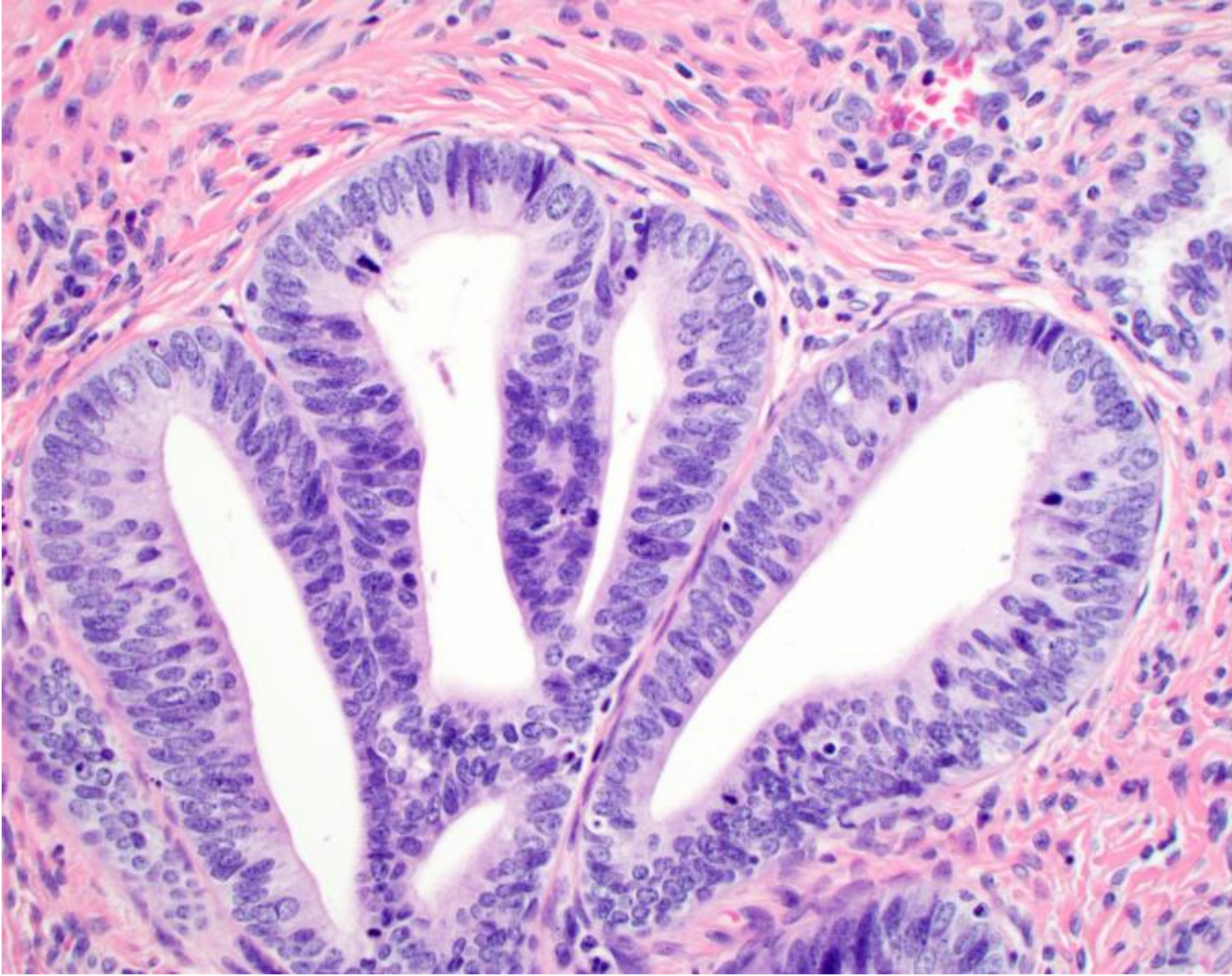
ALMOST ALL CASES OF  
**CERVICAL CANCER**  
ARE CAUSED BY



**HPV**

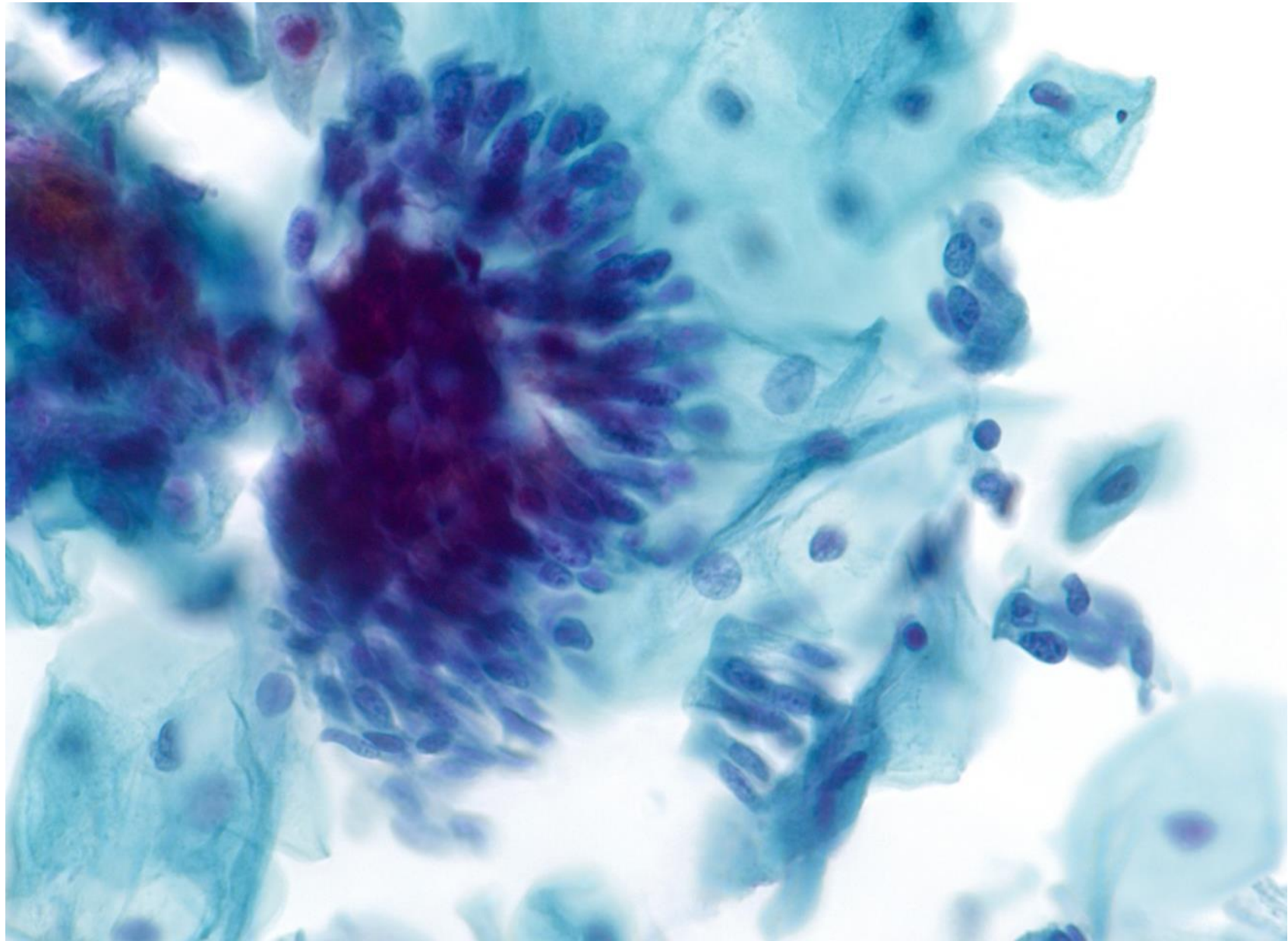


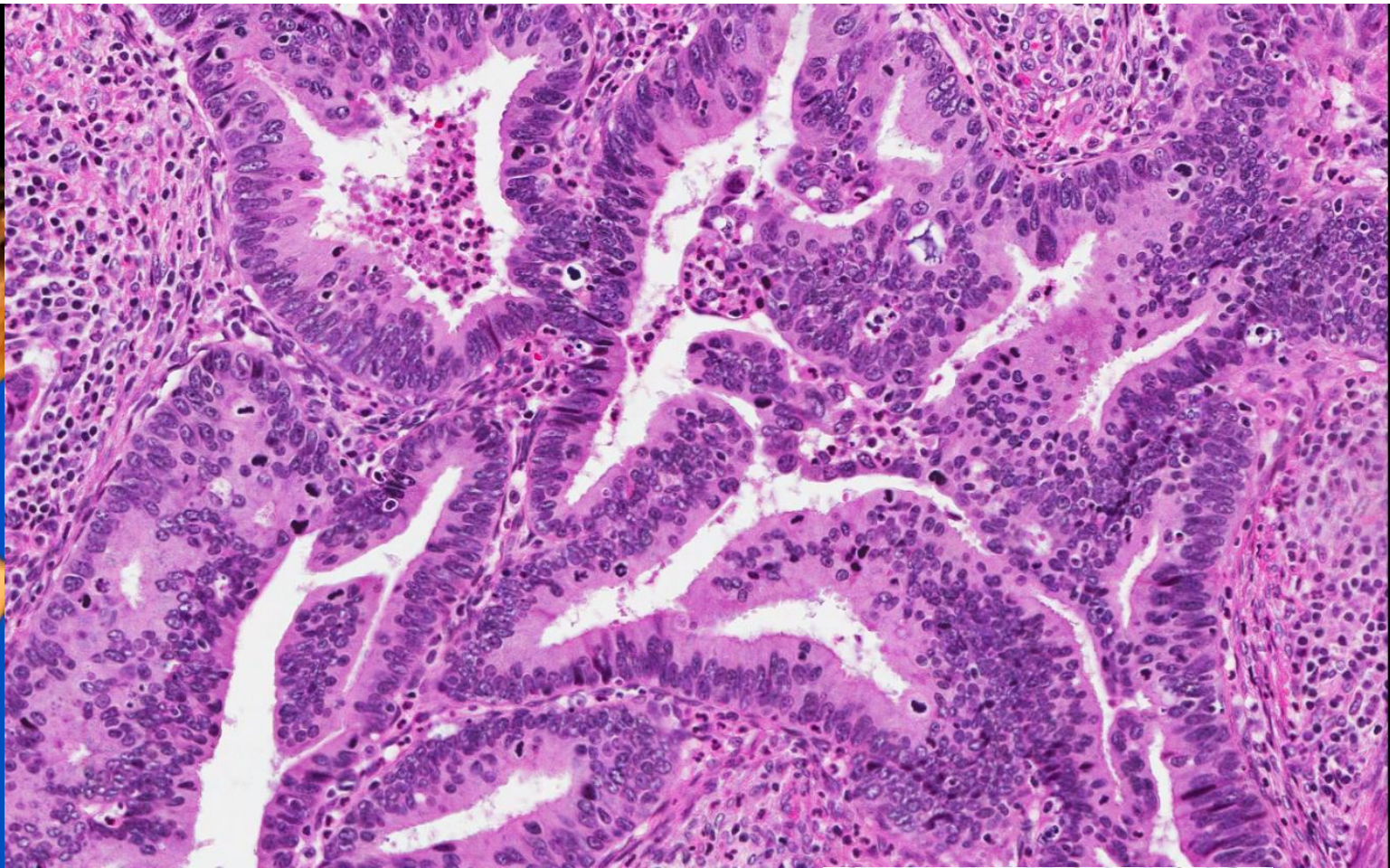
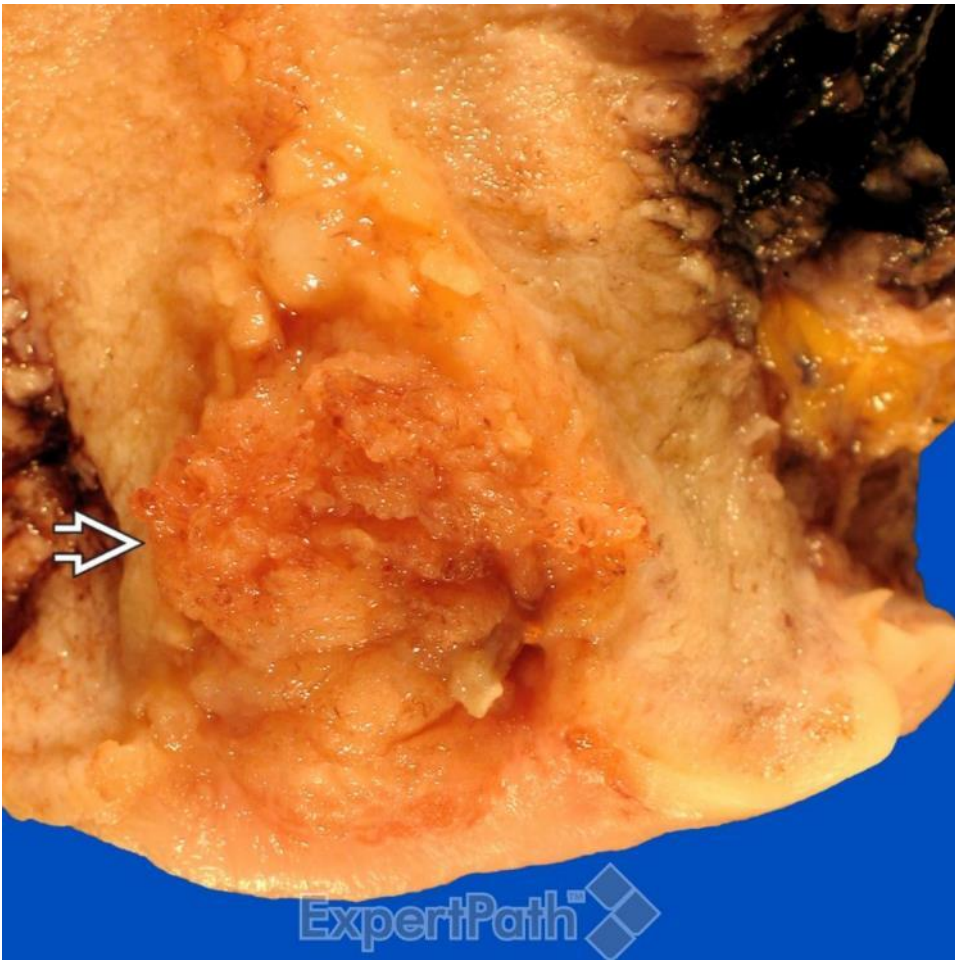
**Adenocarcinoma in situ, HPV-associated**



**Adenocarcinoma in situ, HPV-associated**

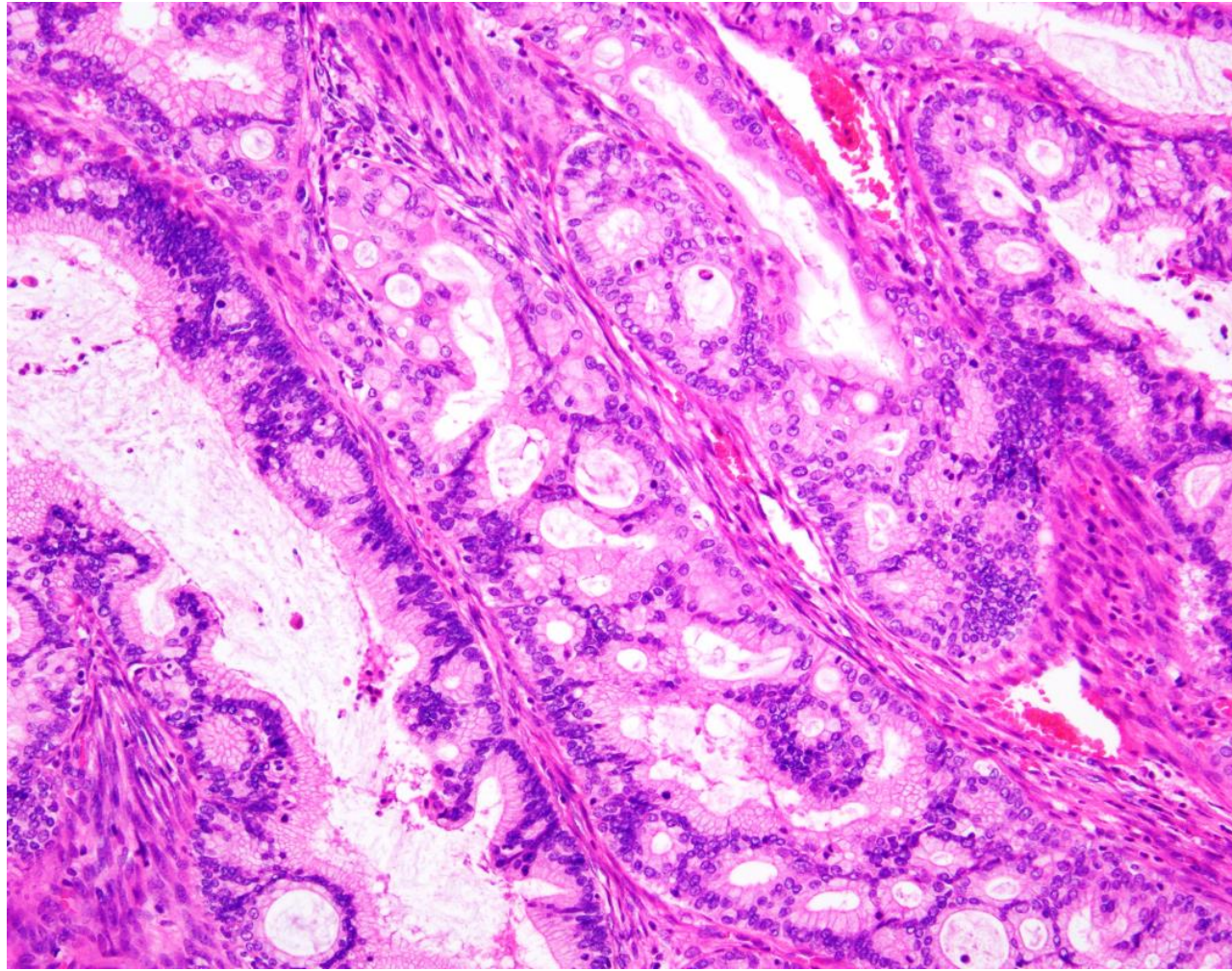




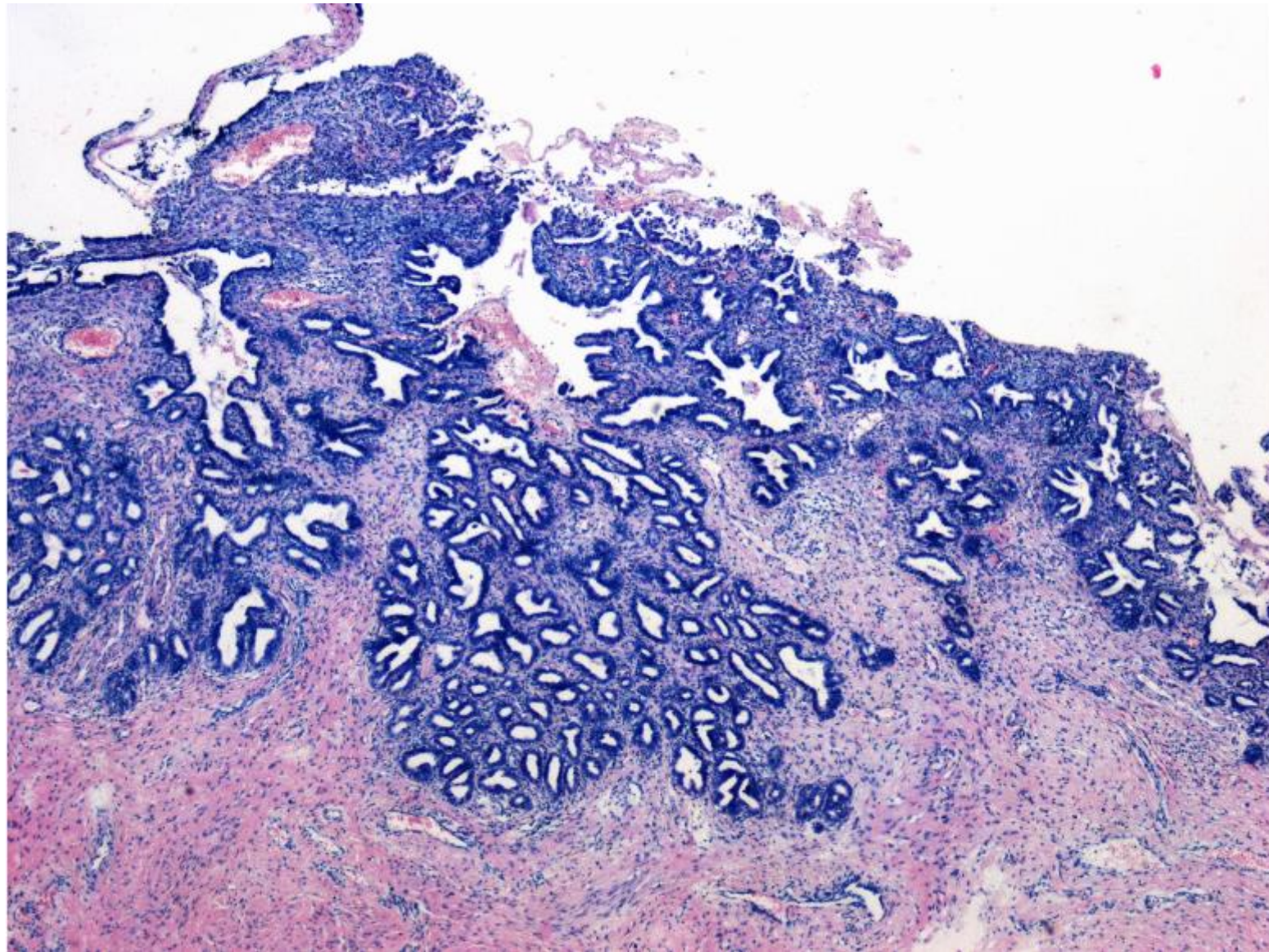


Adenocarcinoma, HPV-associated



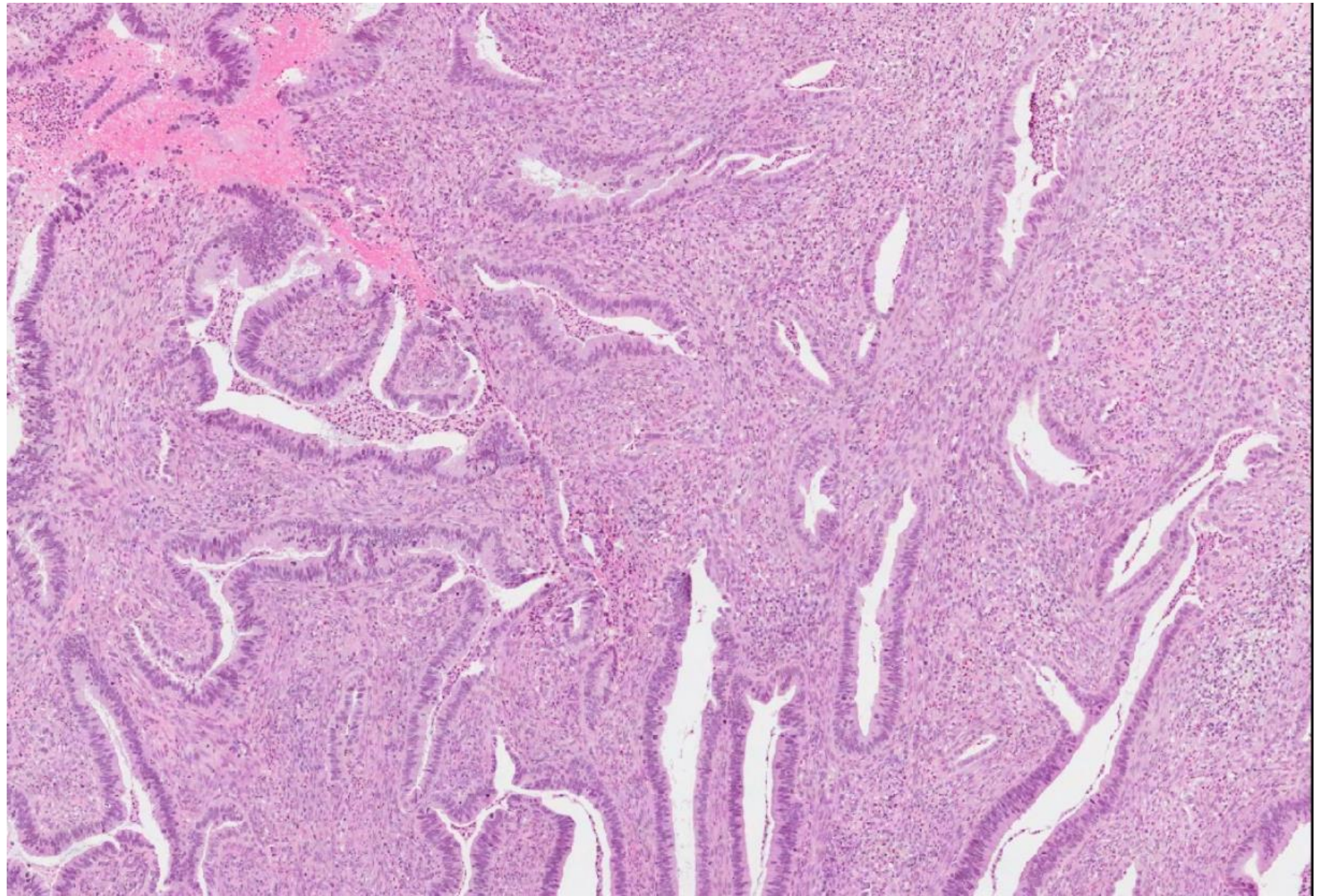


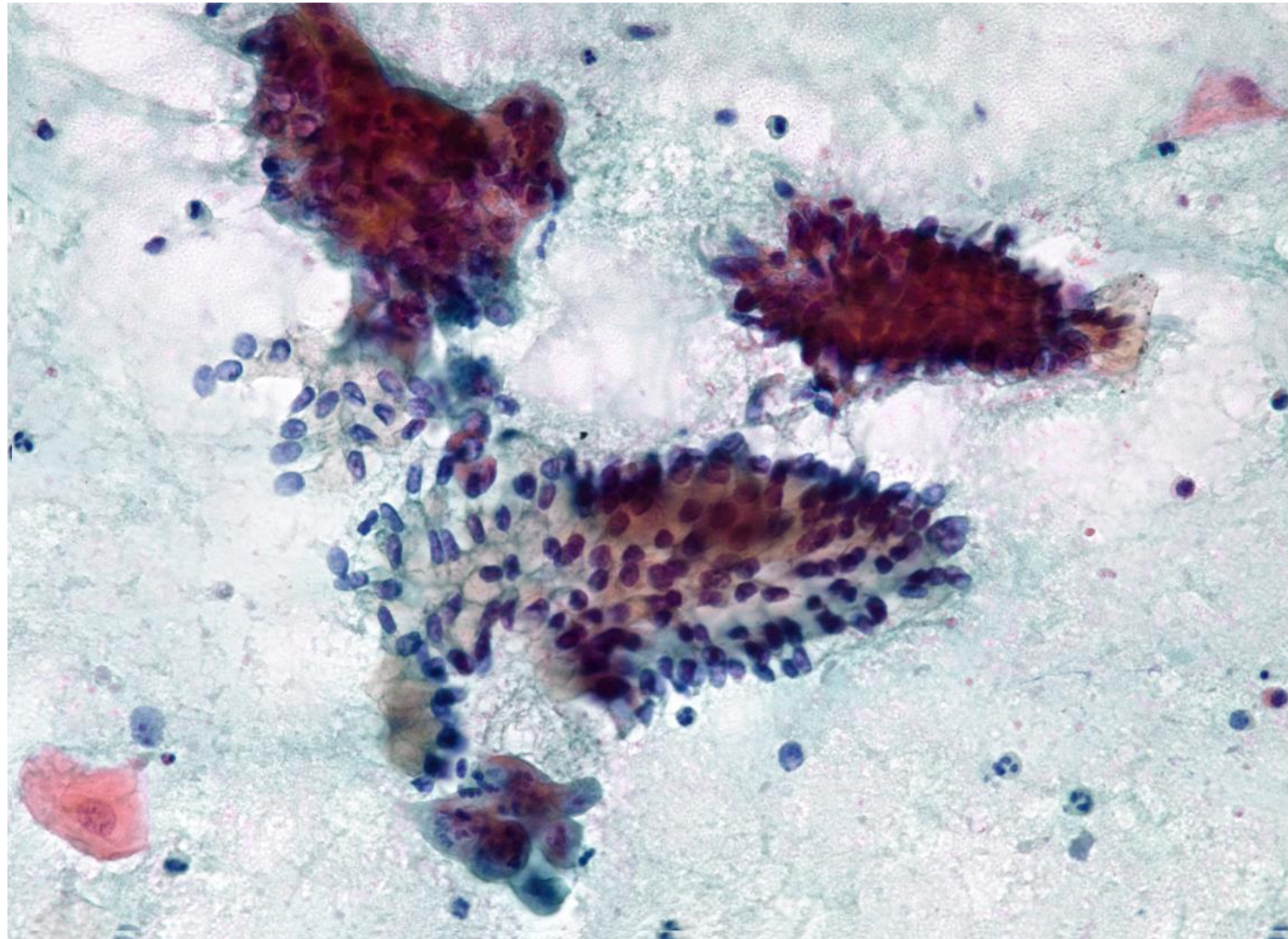
**Adenocarcinoma, HPV-associated, mucinous**



**Adenocarcinoma, HPV-associated  
Pattern A**

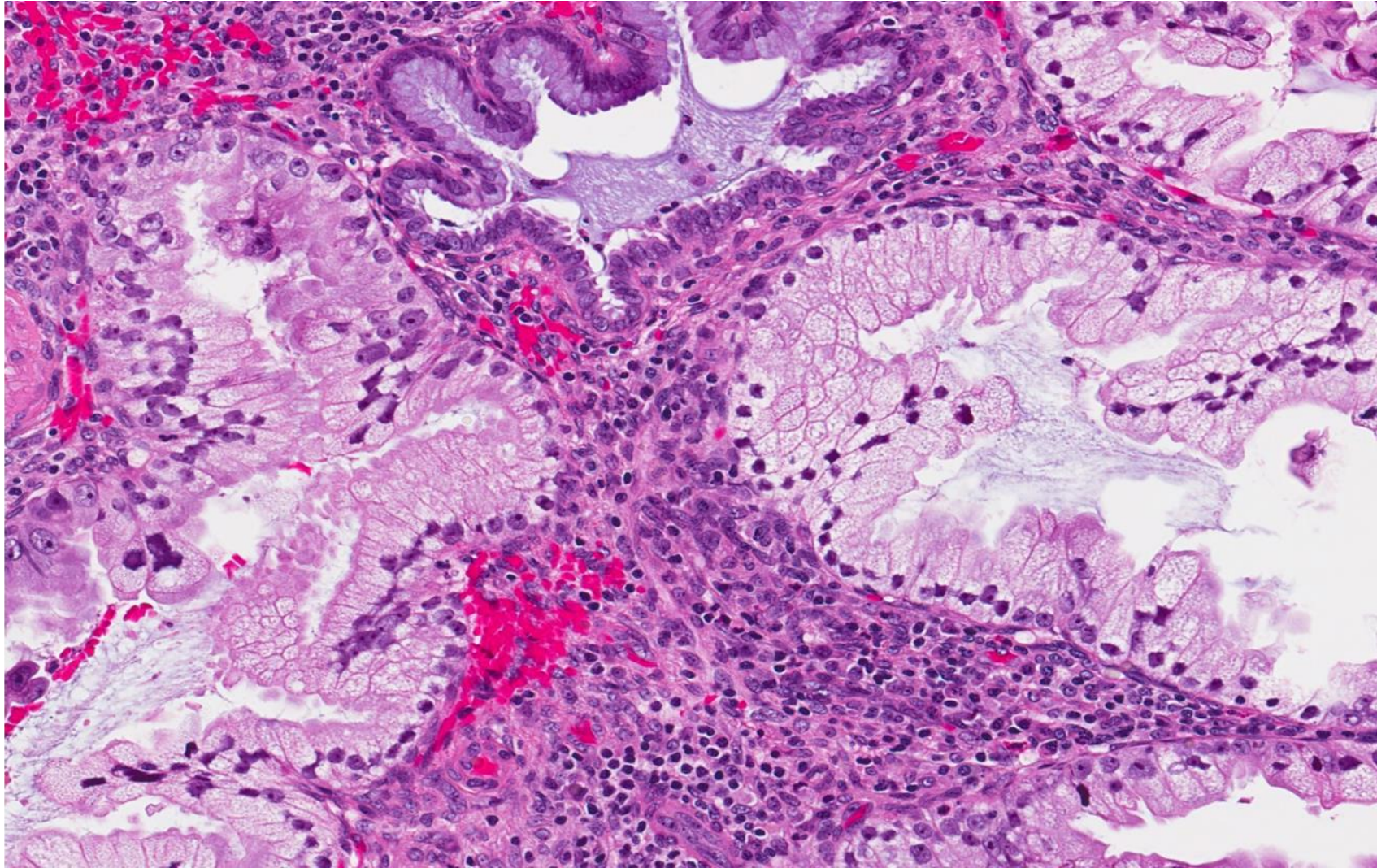
**Adenocarcinoma, HPV-associated  
Pattern C**





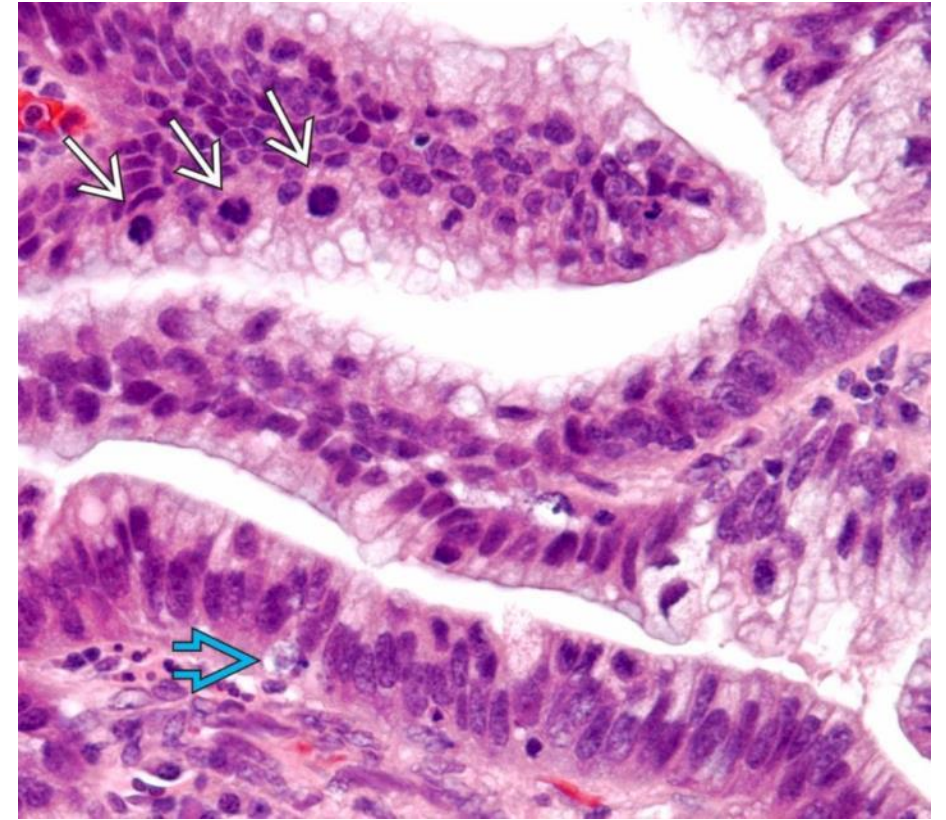
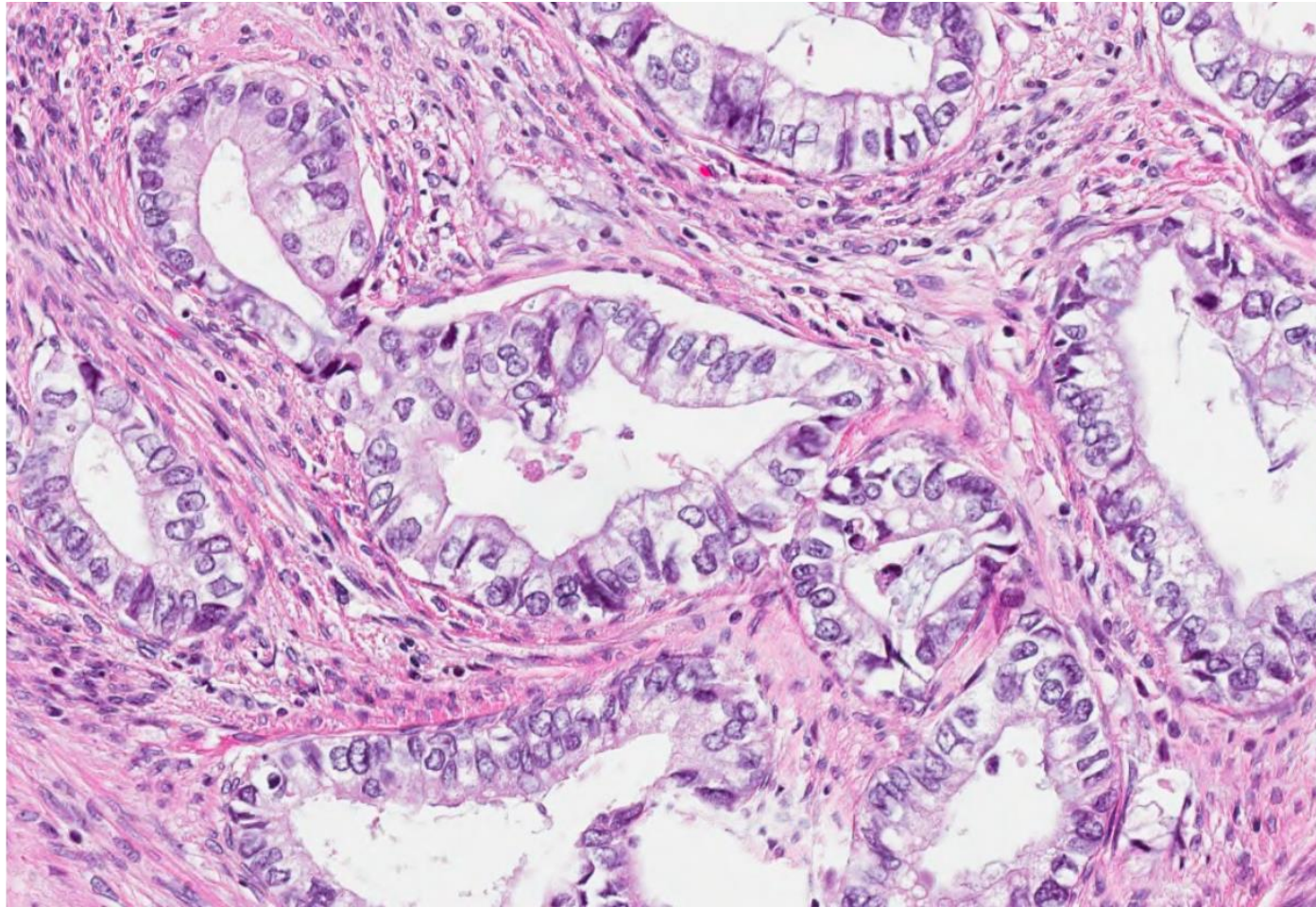
# Adenocarcinoma, HPV-independent [<20%]

- Adenocarcinoma, HPV-independent, gastric type [15%]
  - Invasive adenocarcinoma showing gastric differentiation, unrelated to HPV infection
  - Older age range , mean 50-55 yrs
- Adenocarcinoma, HPV-independent, clear cell type [3%]
- Adenocarcinoma, HPV-independent, mesonephric type [1%]

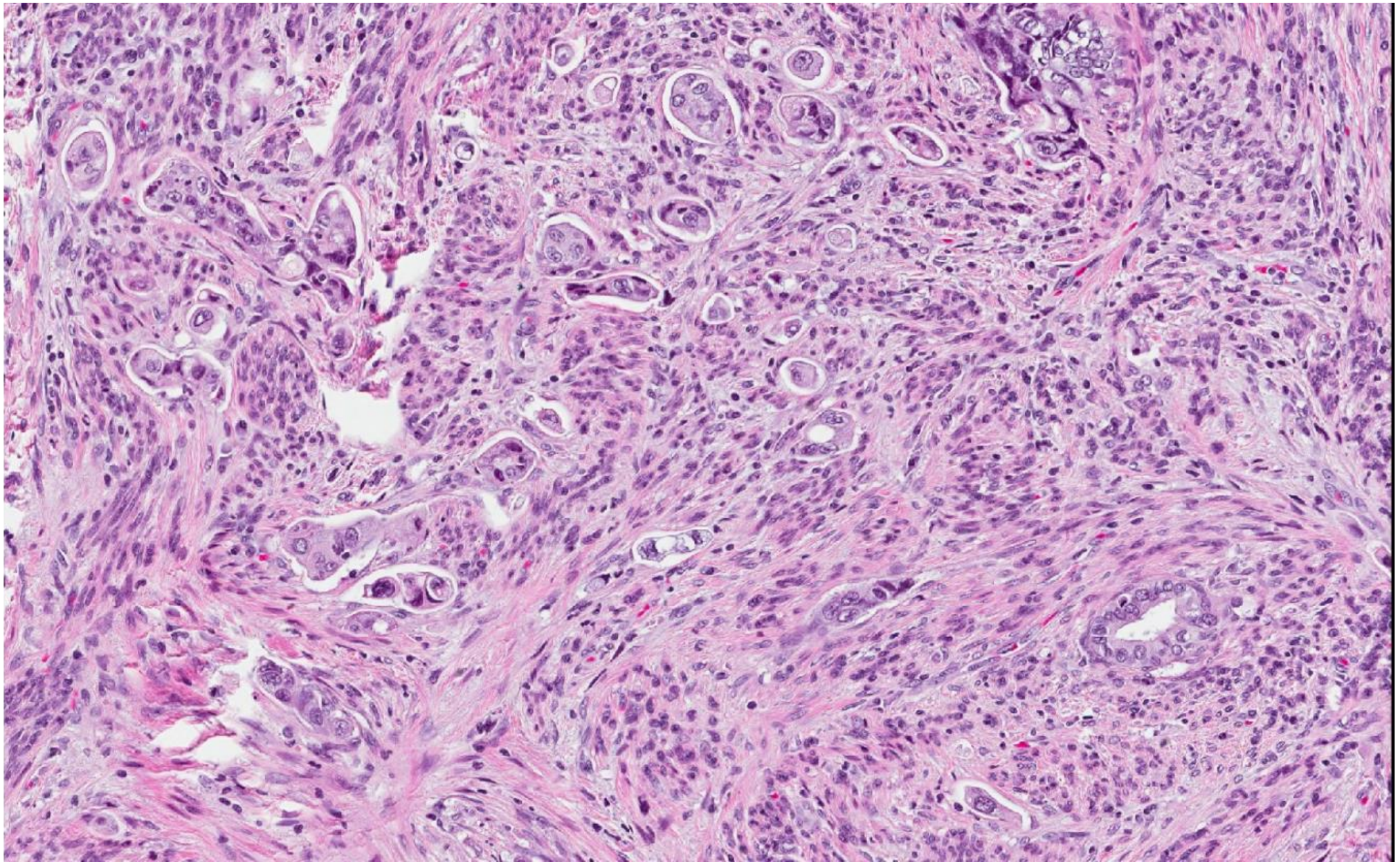


**Adenocarcinoma, HPV-independent, gastric type**



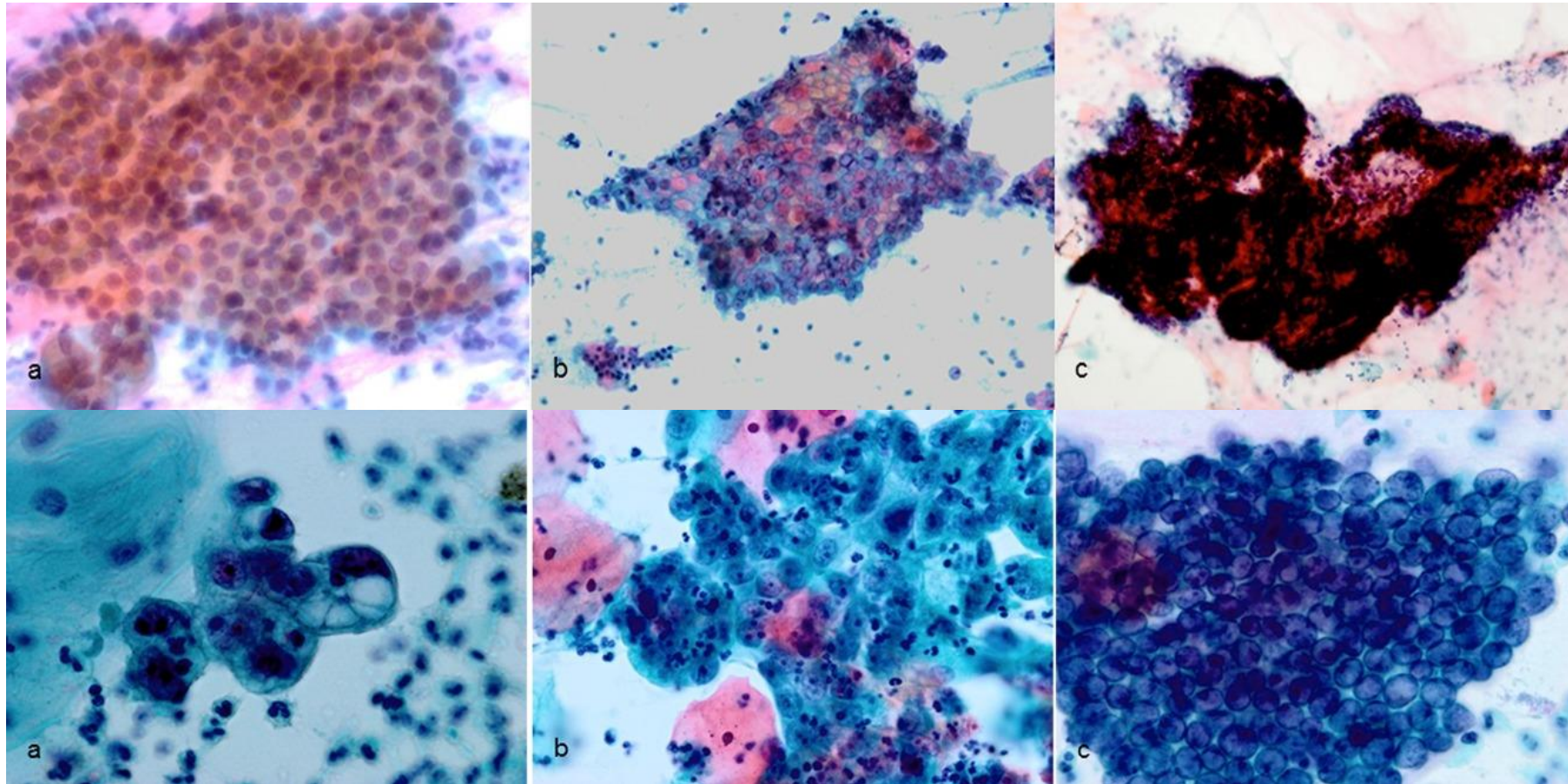


**Adenocarcinoma, HPV-independent, gastric type**



**Adenocarcinoma, HPV-independent, gastric type**

# Cytologic features of gastric-type adenocarcinoma of the uterine cervix

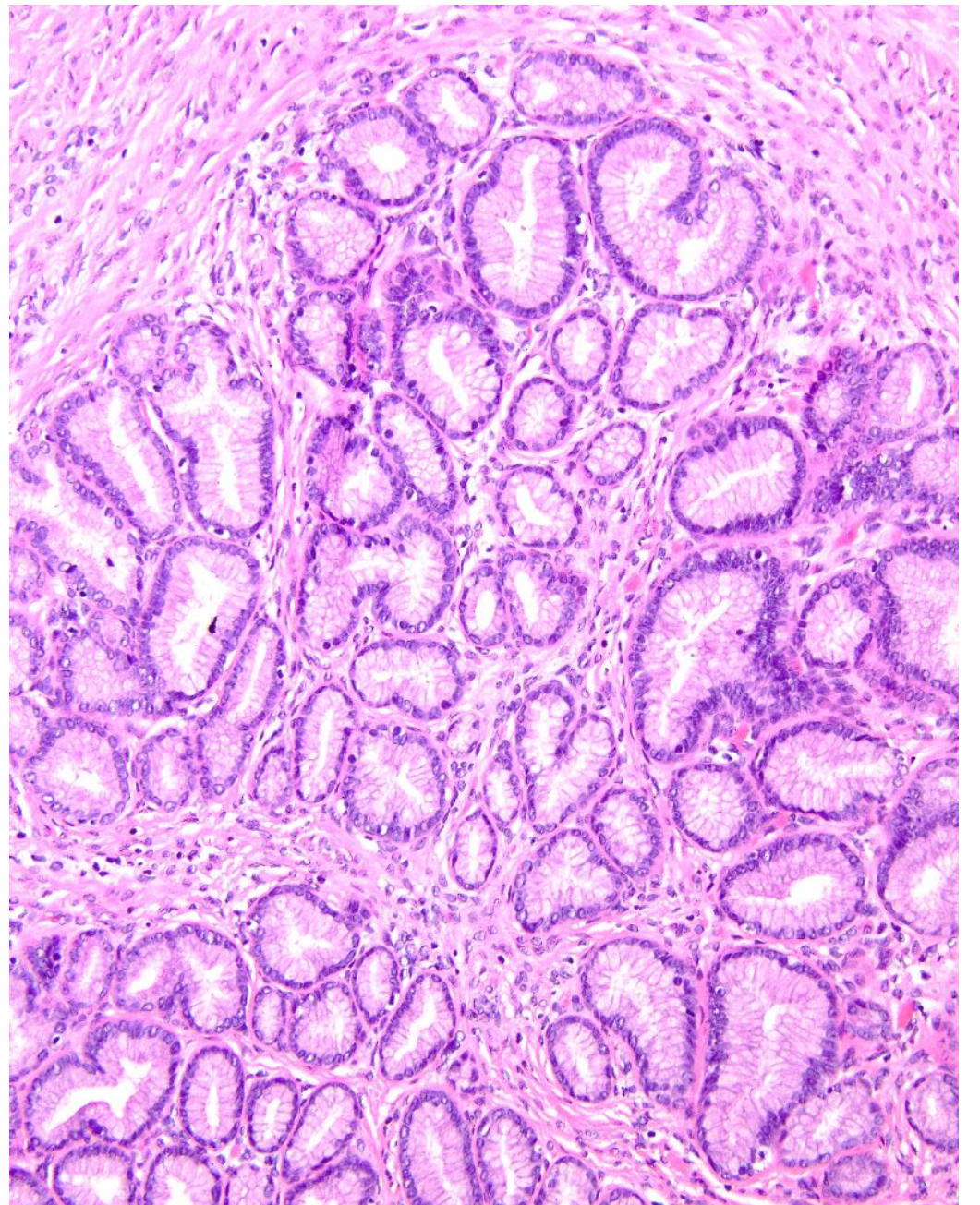
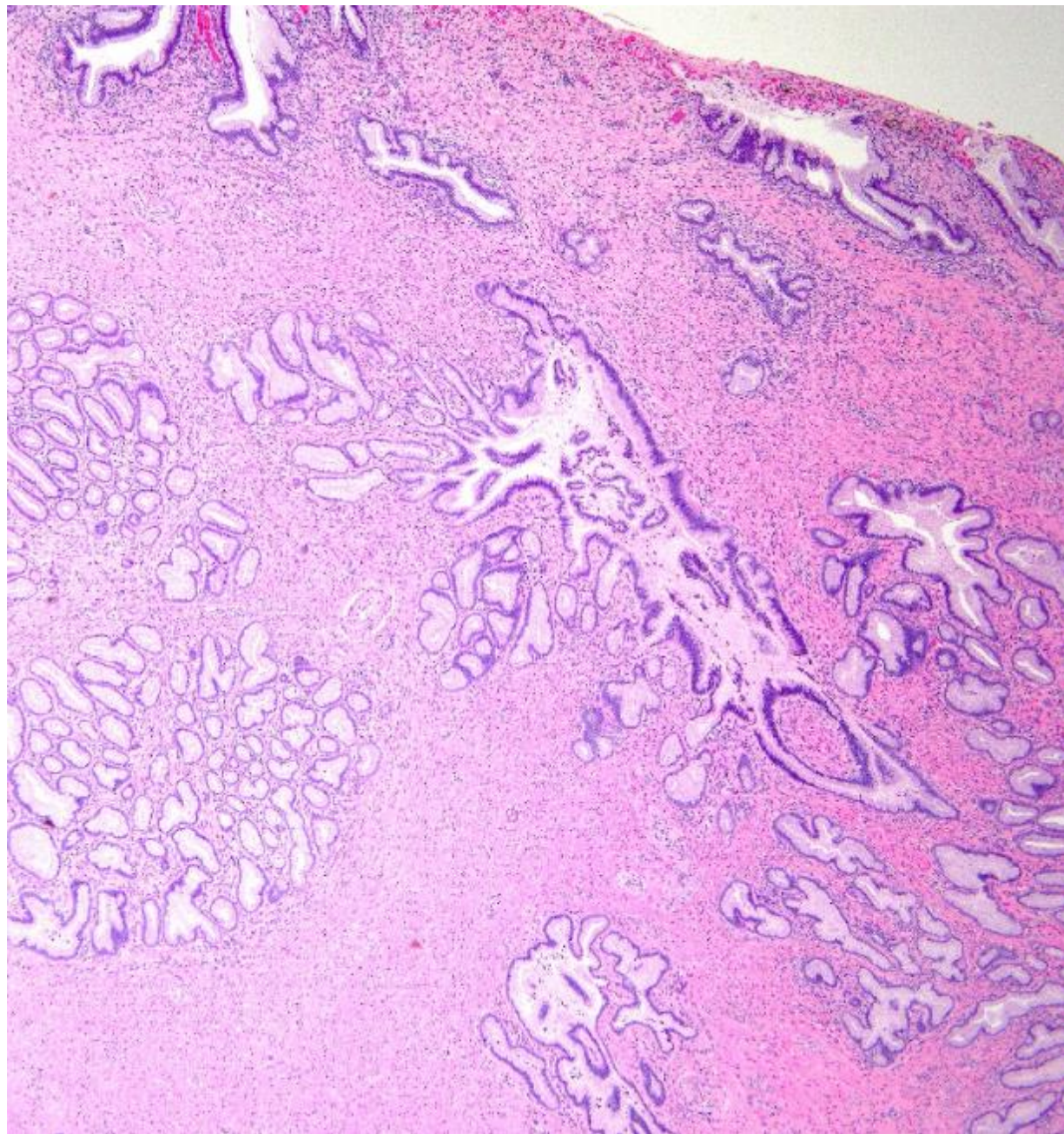


# The characteristic cytologic findings of GAS

- (1) monolayered and honeycomb sheets,
- (2) vacuolar and/or foamy cytoplasm,
- (3) intracytoplasmic neutrophil entrapment, and
- (4) vesicular nuclei with prominent nucleoli.

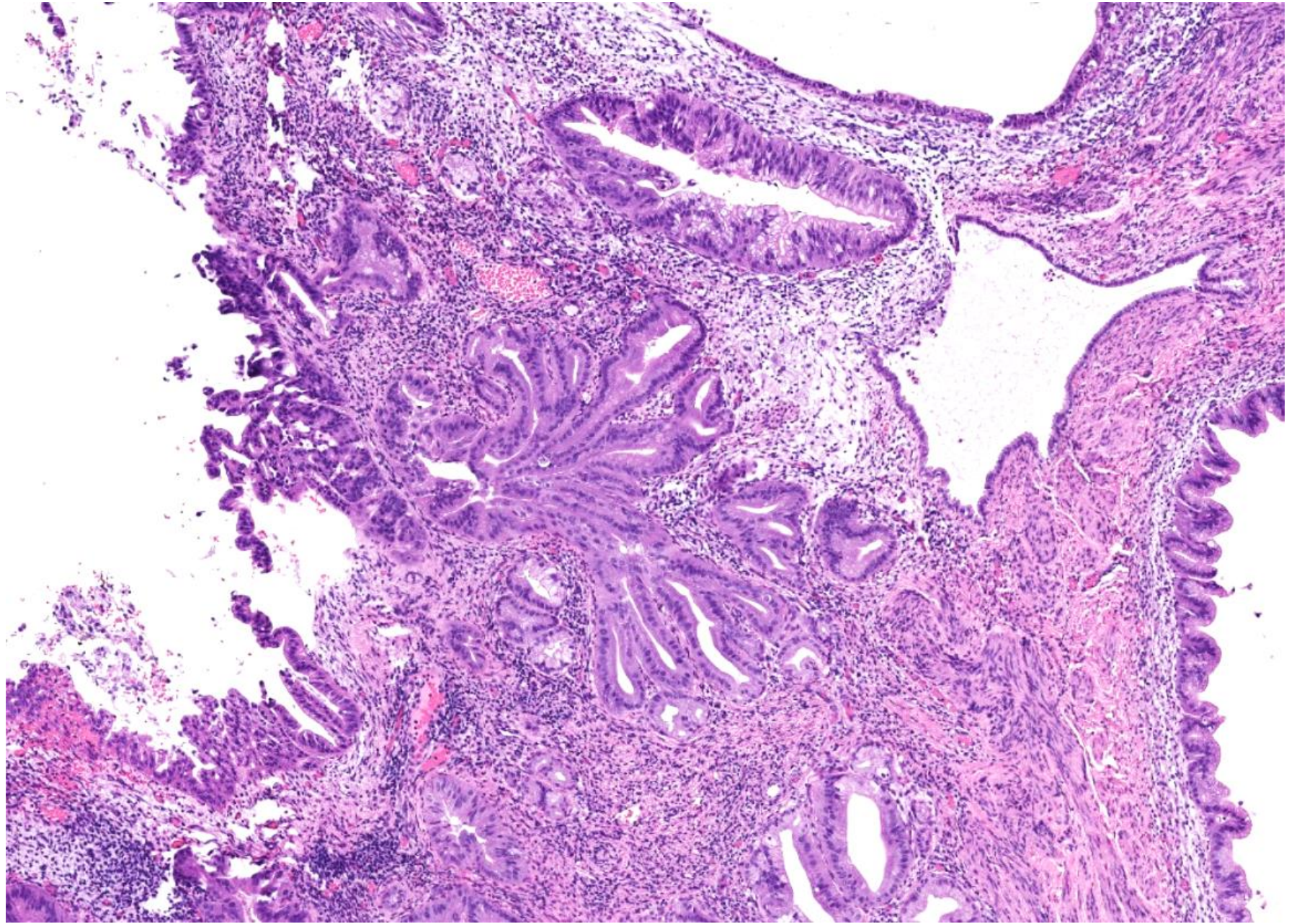
# Nice to have

- Adenocarcinoma in situ, HPV-associated
- Adenocarcinoma, HPV-associated
- **Adenocarcinoma in situ, HPV-independent,**
- Adenocarcinoma, HPV - independent



*Lobular endocervical glandular hyperplasia)*

gastric-type  
adenocarcinoma in situ;



## Interpretation of Endocervical Cells With Gastric-Type Mucin on Pap Smears

### A Proposal for a Cytologic Category "Atypical Endocervical Cells With Gastric-Type Mucin"

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