

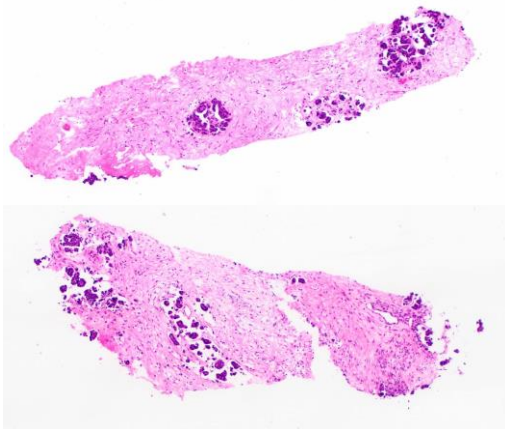
# IMMUNOHISTOCHEMICAL STUDIES IN GYNECOLOGIC PATHOLOGY

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UAB Department of Pathology

**UAB** THE UNIVERSITY OF  
ALABAMA AT BIRMINGHAM

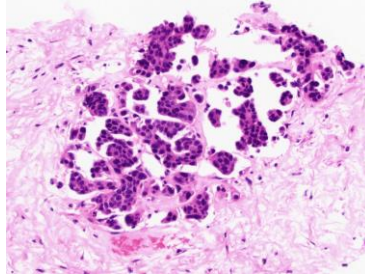
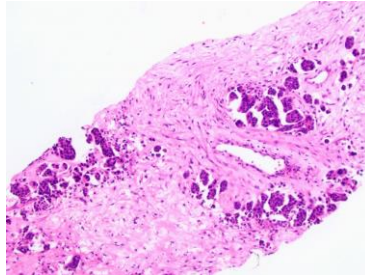
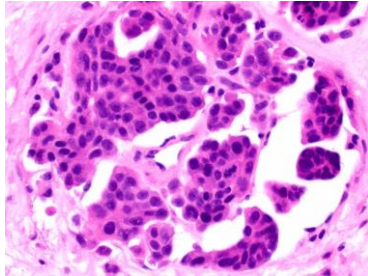
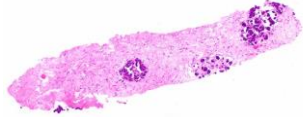
58 year-old female with omental mass,  
ascites, elevated CA 125

- Omental biopsy obtained

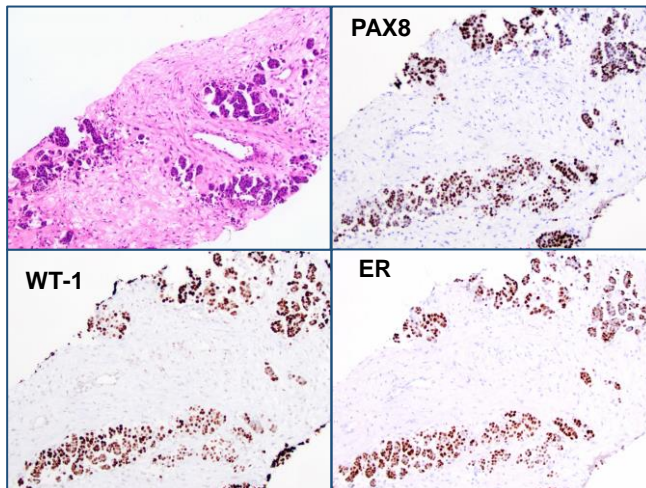


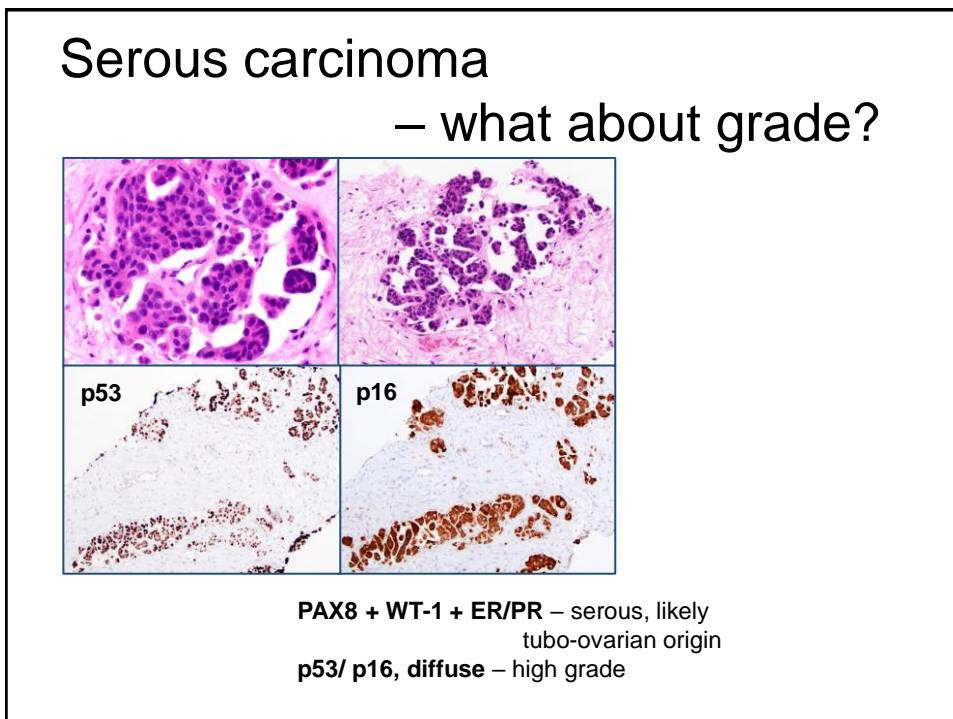
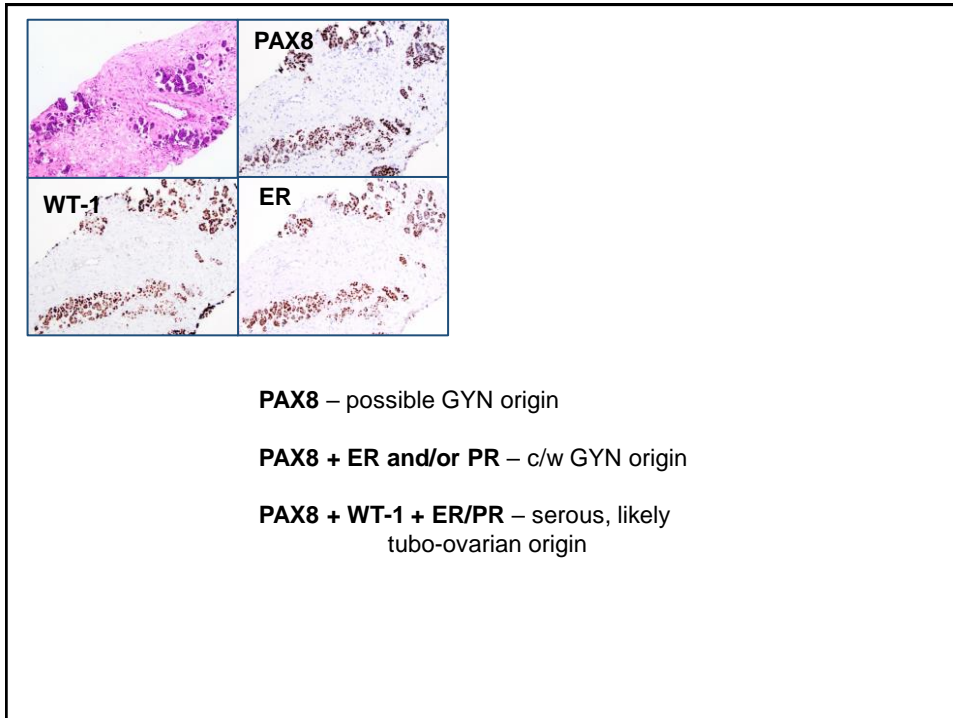
58 year-old female with omental mass,  
ascites, elevated CA 125

- Omental biopsy obtained



## Immunohistochemistry?

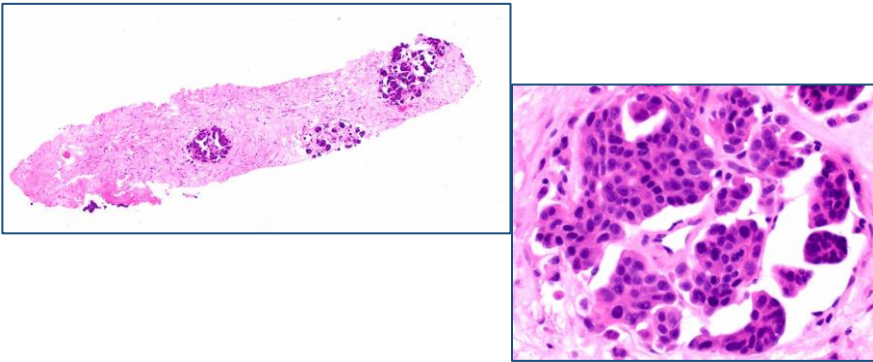




58 year-old female with omental mass, ascites,  
elevated CA 125

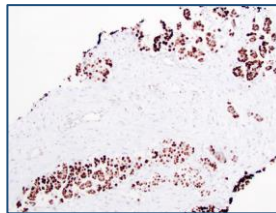
- Omental biopsy

High grade serous carcinoma, favor  
tubo-ovarian origin

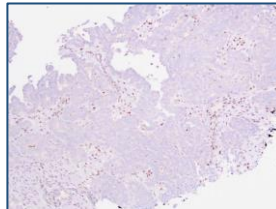


Patterns of p53 IHC  
correlating with *TP53* mutation

Strong and diffuse



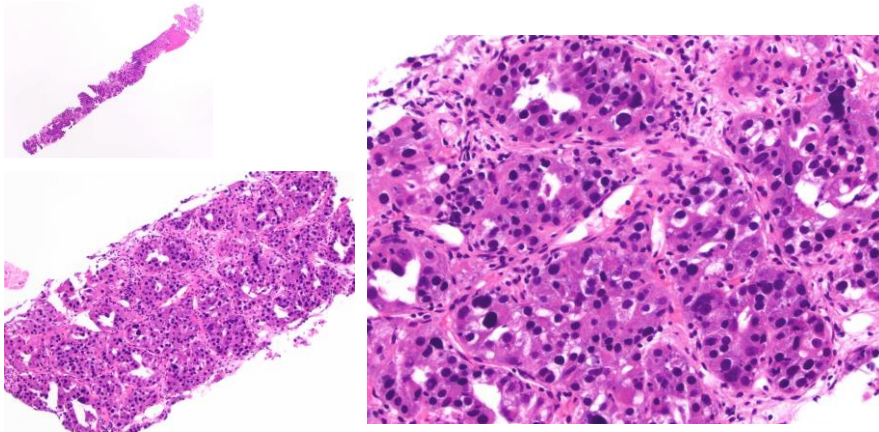
Negative  
– null pattern

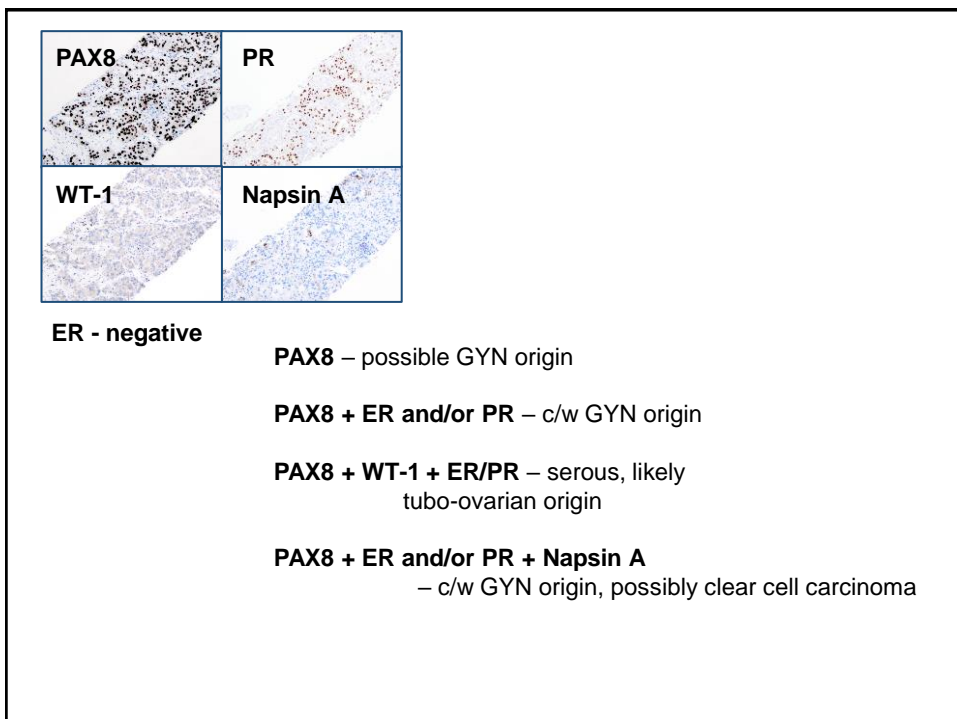
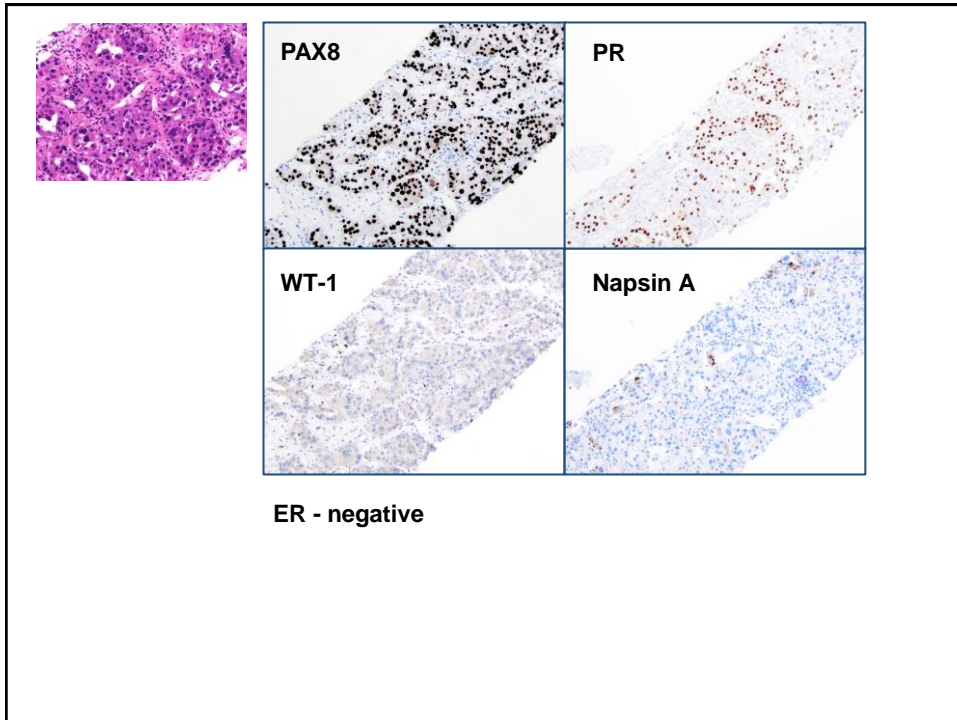


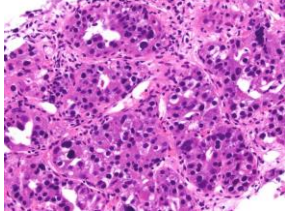
59 year-old female with pelvic mass,  
ascites, 20 lb weight loss, elevated CA 125  
Core biopsy of the mass is obtained



59 year-old female with pelvic mass,  
ascites, 20 lb weight loss, elevated CA 125  
Core biopsy of the mass is obtained





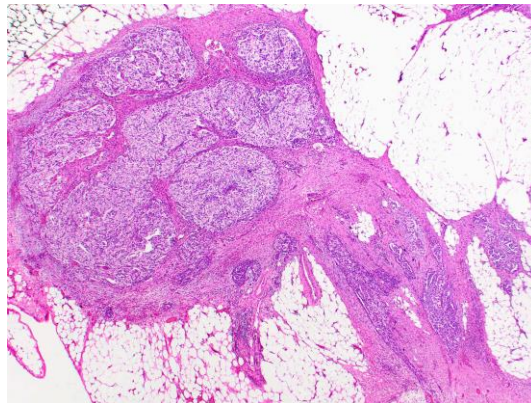
<b>PAX8</b>	<b>PR</b>	<p><b>PAX8</b> – possible GYN origin</p> <p><b>PAX8 + ER and/or PR</b> – c/w GYN origin</p> <p><b>PAX8 + WT-1 + ER/PR</b> – serous, likely tubo-ovarian origin</p> <p><b>PAX8 + ER and/or PR + Napsin A</b> – c/w GYN origin, possibly clear cell carcinoma</p>
<b>WT-1</b>	<b>Napsin A</b>	
<b>ER - negative</b>		
		

DS: High grade carcinoma, consistent with GYN tract origin  
 Comment: The immunoprofile suggest possibility of clear cell carcinoma; other histologic types cannot be completely excluded

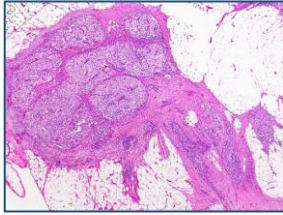
## Clear cell carcinoma vs. Clear cell change in high grade serous carcinoma

- 63 year-old with “ovarian cancer”, interval debulking after 3 cycles of neoadjuvant chemotherapy

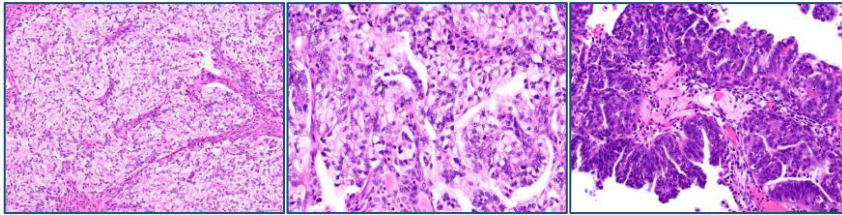
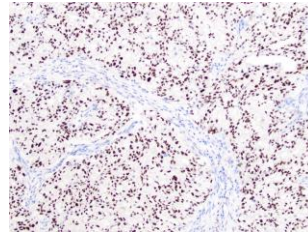
Omentum



## Clear cell carcinoma vs. Clear cell change in high grade serous carcinoma



WT-1

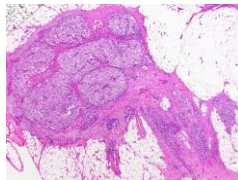


PAX8 +/ER +/ p53 +

## Clear cell carcinoma vs. Clear cell change in high grade serous carcinoma

- 63 year-old with “ovarian cancer”, interval debulking after 3 cycles of neoadjuvant chemotherapy

Omentum

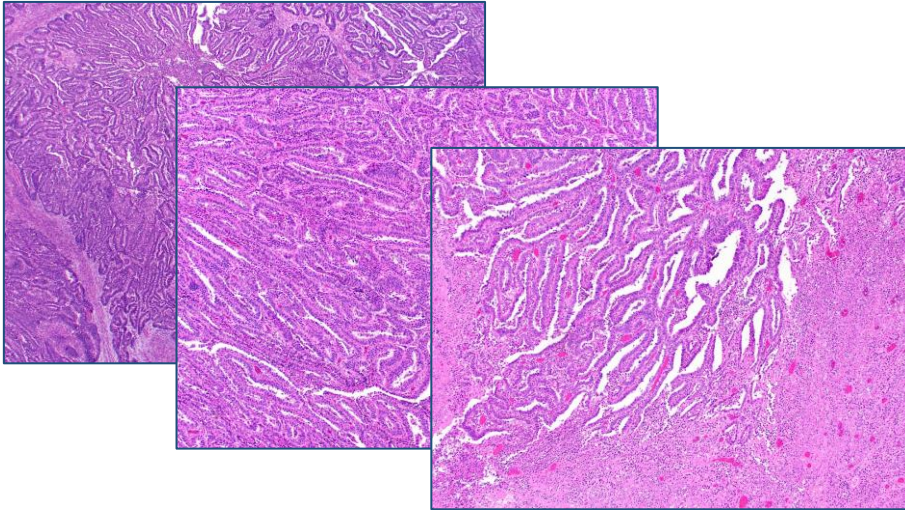


High grade serous carcinoma with  
therapy-related changes



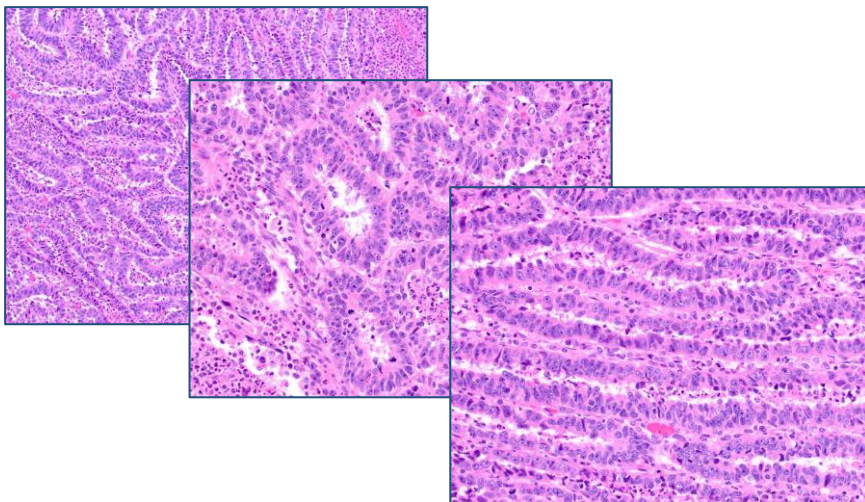
88 year-old with endometrial cancer  
Biopsy: Endometrioid carcinoma, FIGO grade 2

- TAHBSO performed

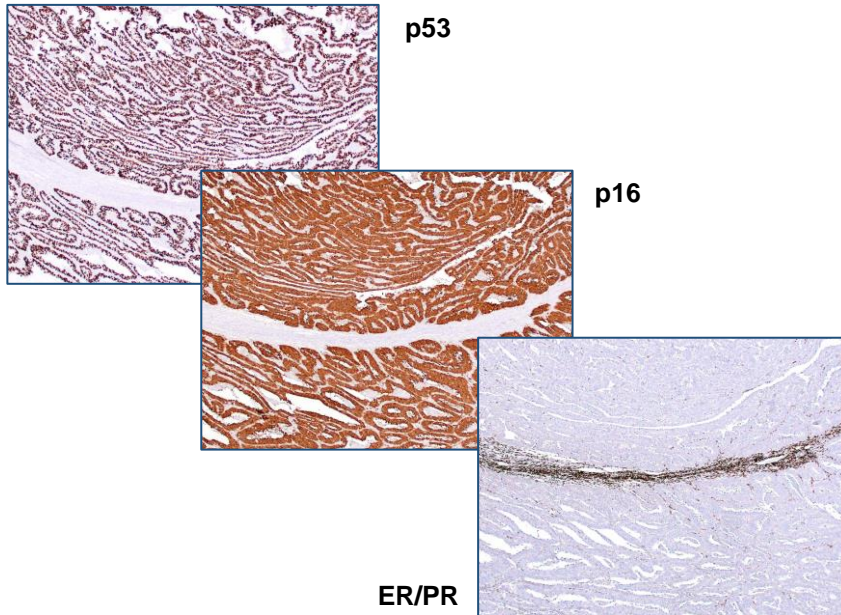


88 year-old with endometrial cancer  
Biopsy: Endometrioid carcinoma, FIGO grade 2

- TAHBSO performed

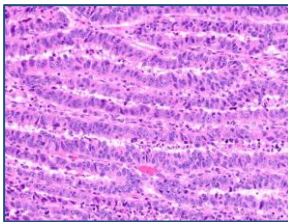


## Immunohistochemistry



88 year-old with endometrial cancer  
 Prior Biopsy: Endometrioid carcinoma, FIGO grade 2

- TAHBSO performed



Endometrial serous carcinoma

Typical immunoprofile

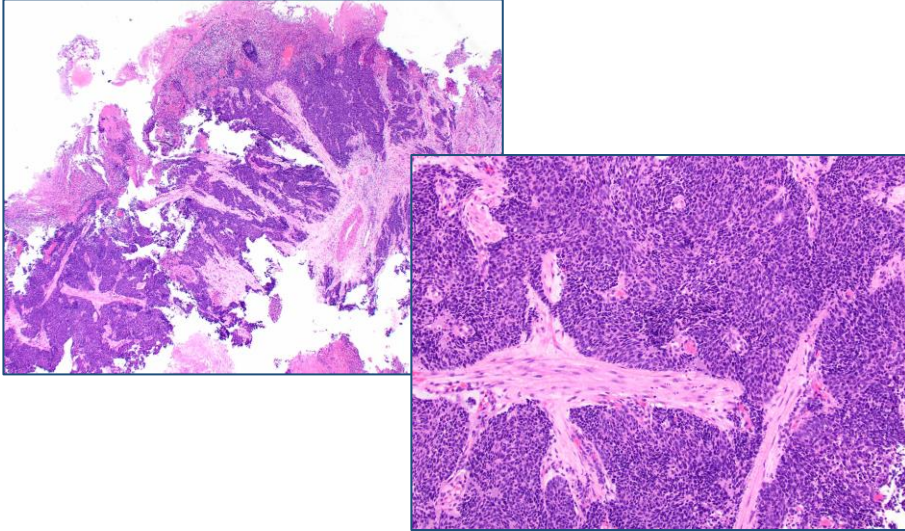
p53 – aberrant (strong, diffuse or lost/null)

p16 – strong diffuse

ER/PR – variable, often lost or decreased

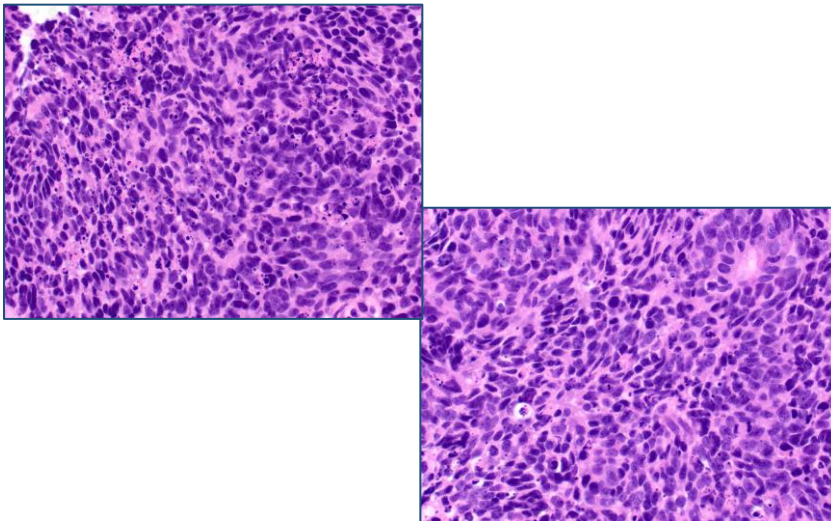
## 31 year old with cervical mass

- Cervical biopsy performed



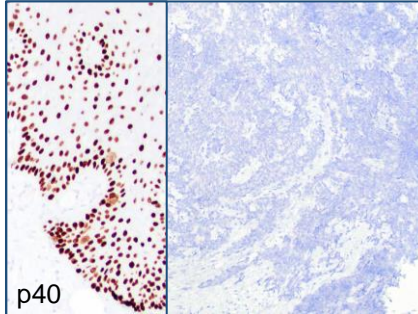
## 31 year old with cervical mass

- Cervical biopsy performed



## 31 year old with cervical mass

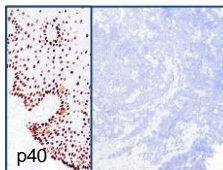
### • Immunohistochemistry



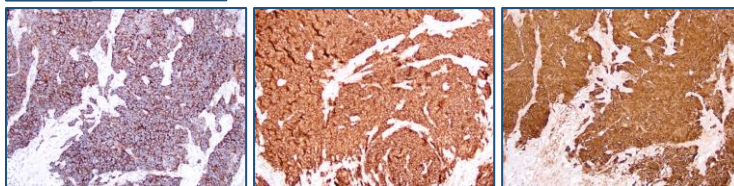
p40, p63, 34 $\beta$ E12, CK5/6 - negative

## 31 year old with cervical mass

### • Immunohistochemistry



p40, p63, 34 $\beta$ E12, CK5/6 - negative



Synaptophysin

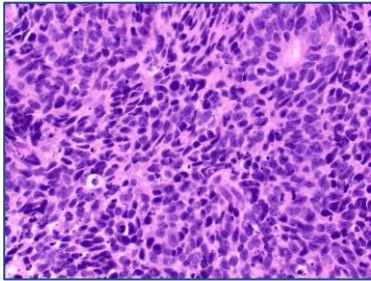
CD56

p16

Chromogranin - negative

## 31 year old with cervical mass

**Cervical biopsy**



High grade neuroendocrine carcinoma

Thank you !