

MUDr. Tomáš Sedláček

Medicyt, s.r.o.

Bioptické a cytologické laboratórium Trenčín

# Prípad SD-IAP č. 770



# Vyhlásenie o konflikte záujmov autora

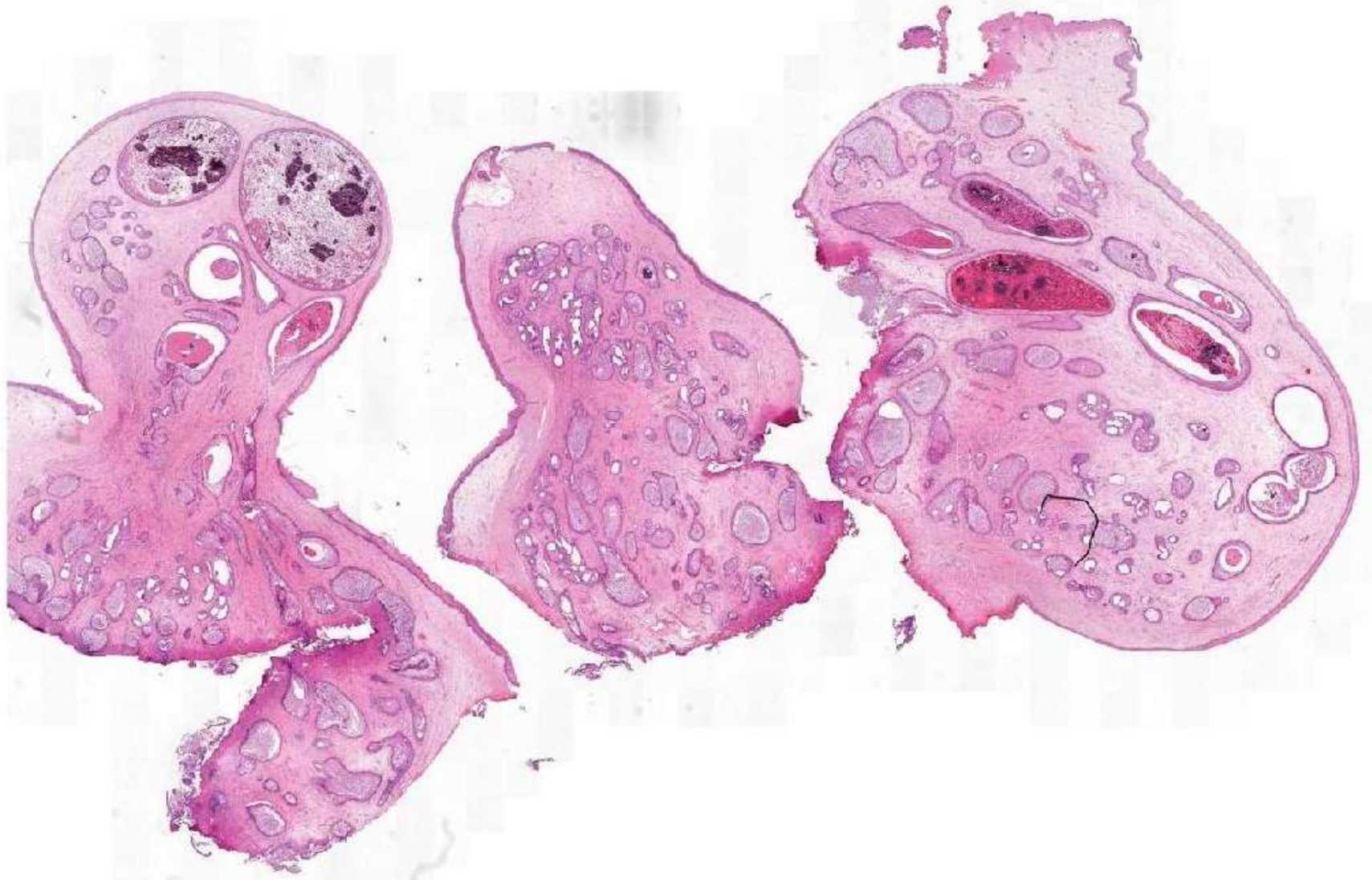
**Nemám potenciálny konflikt záujmov**

Forma finančného prepojenia	Spoločnosť
Participácia na klinických štúdiách/firemnom grante	nie
Nepeňažné plnenie (v zmysle zákona)	nie
Prednášajúci	nie
Akcionár	nie
Konzultant/odborný poradca	nie
Ostatné príjmy (špecifikovať)	nie

Podľa UEMS (upravené v zmysle slovenskej legislatívy)

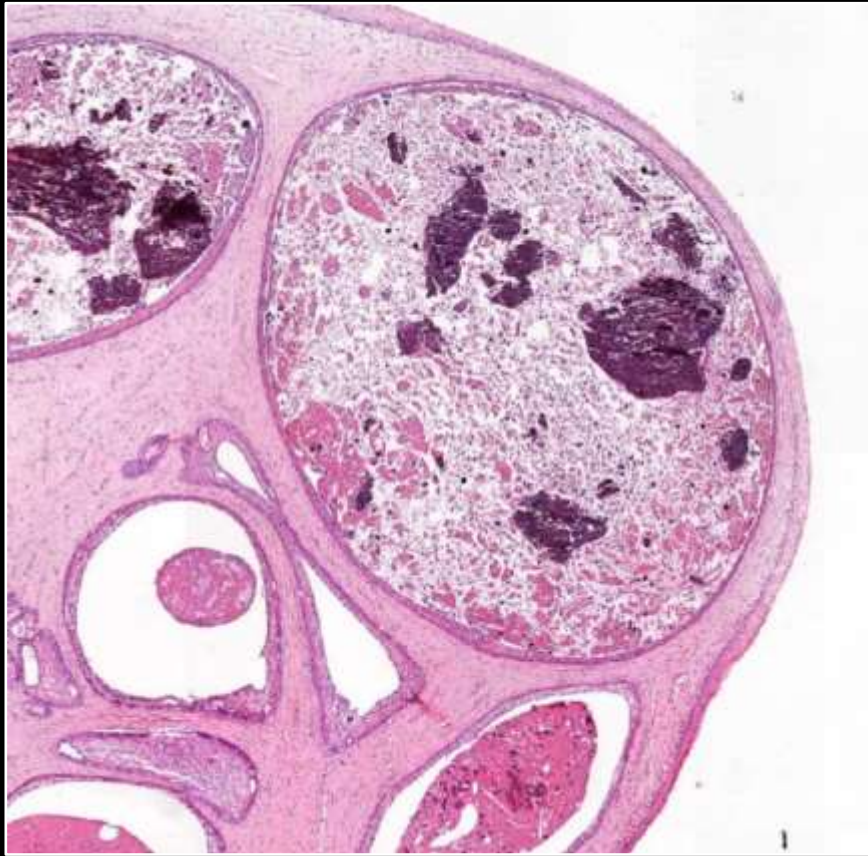
# Klinické údaje

- 71-ročná žena
- **Tumor cervicis uteri**
- St. post ME part.
- St. post ANLD I. dx.
- St. post RT, CHT, HT
- Excízia tumoru **1,5 cm**

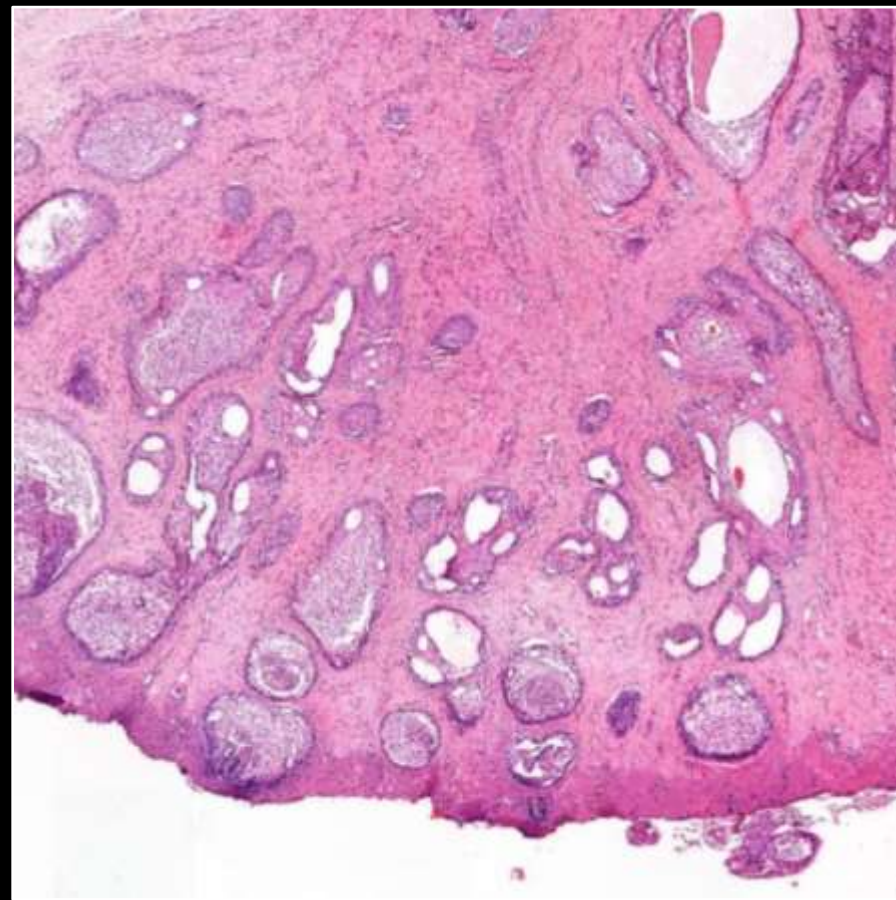
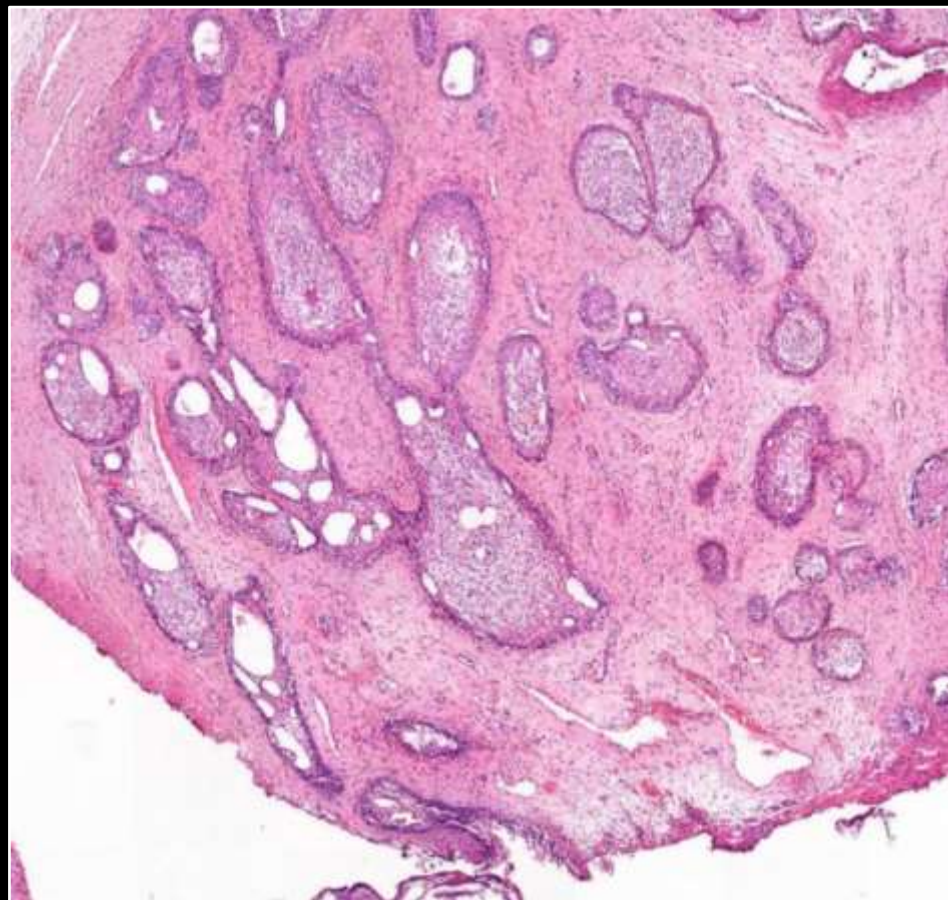




# Mikroskopický obraz

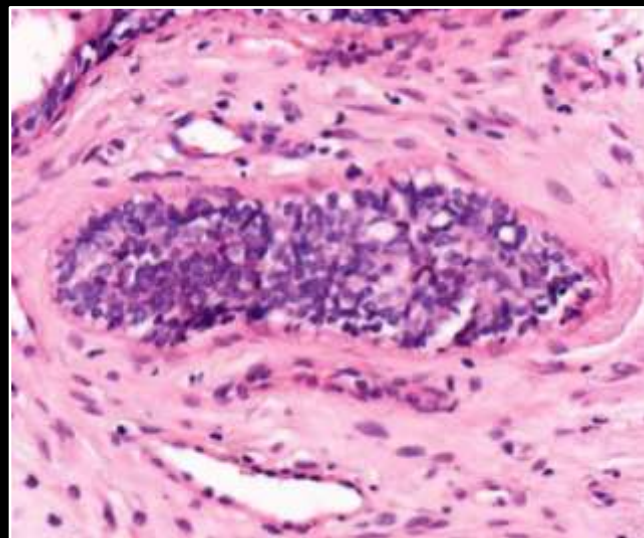
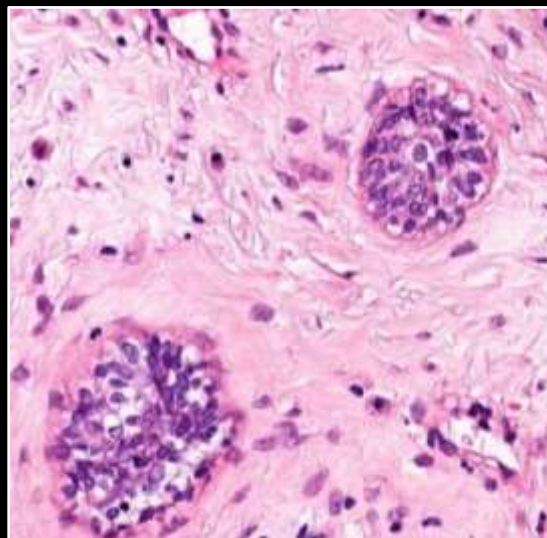
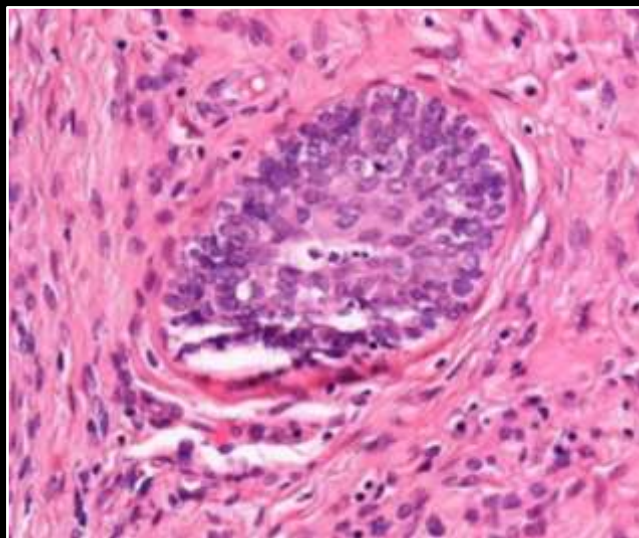
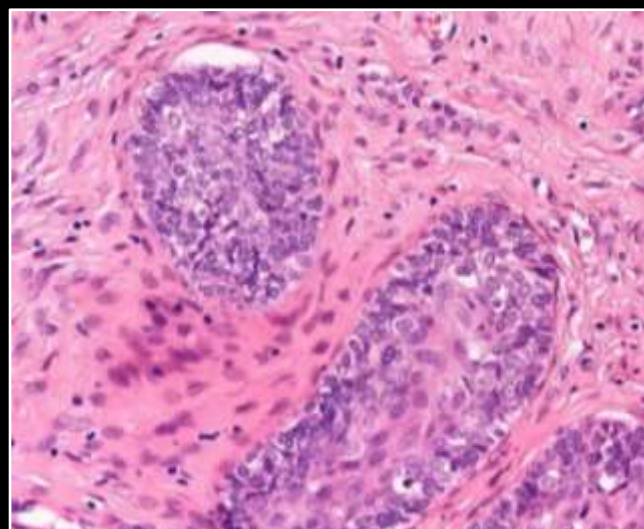
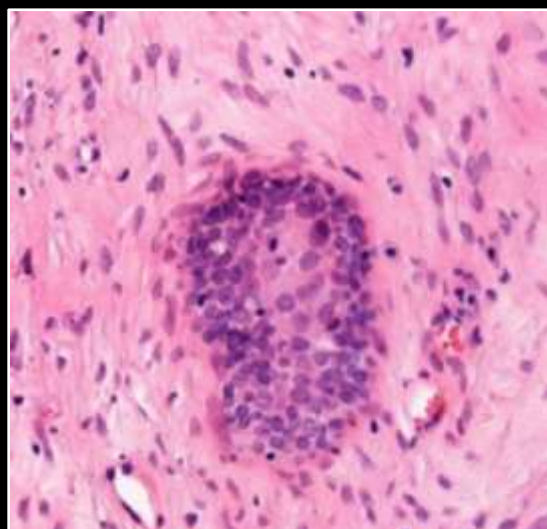
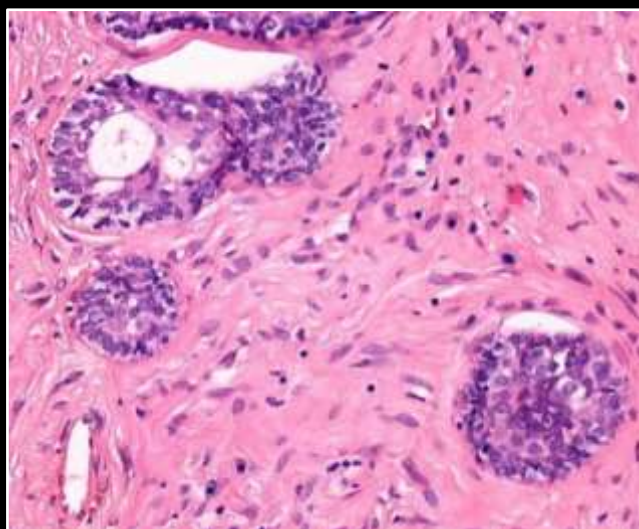


# Mikroskopický obraz



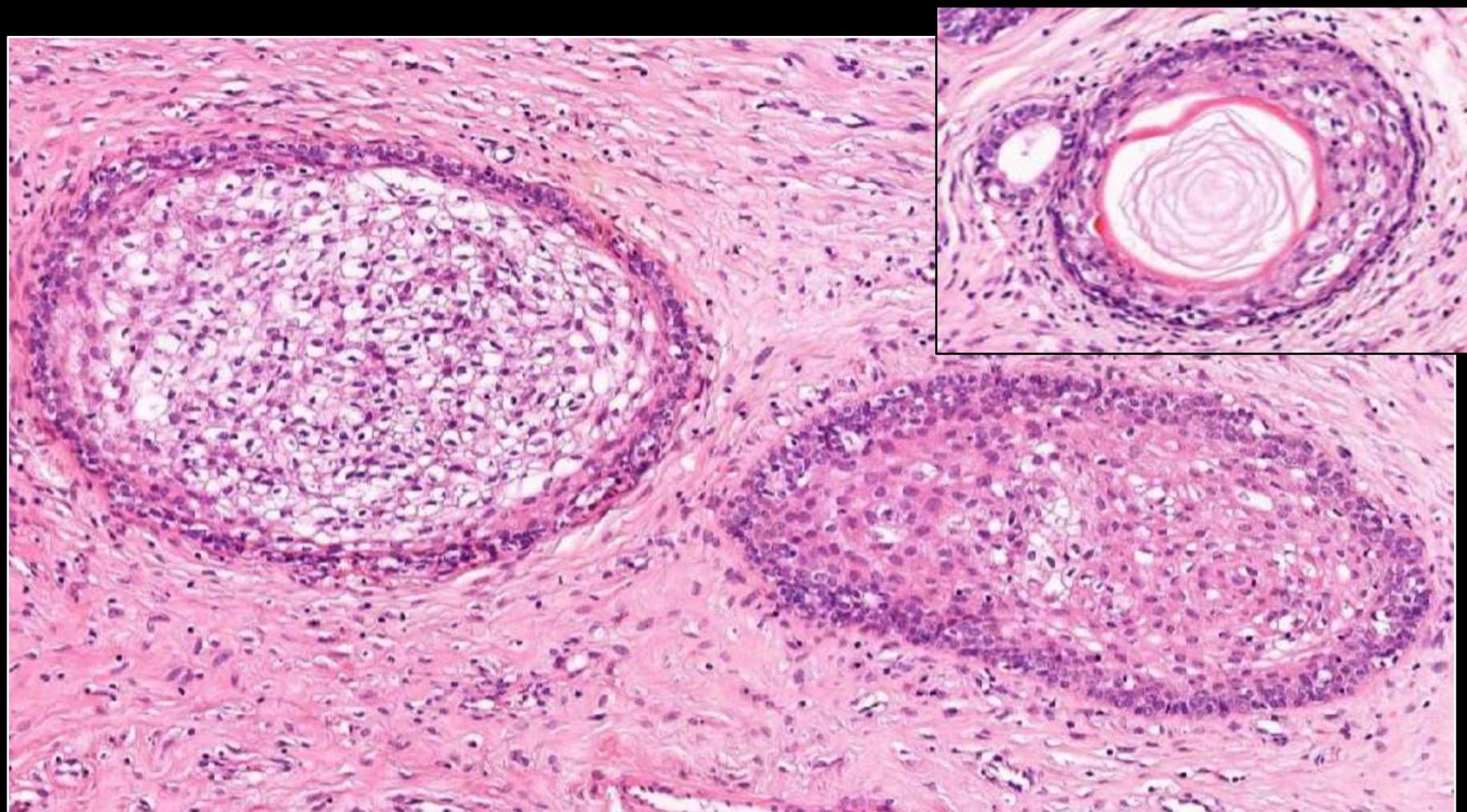


# Mikroskopický obraz



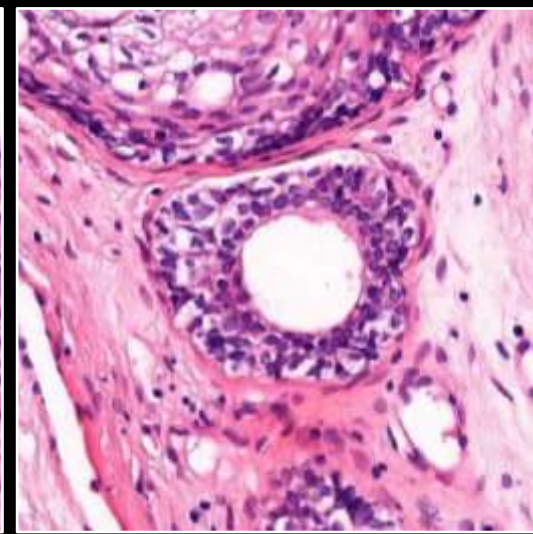
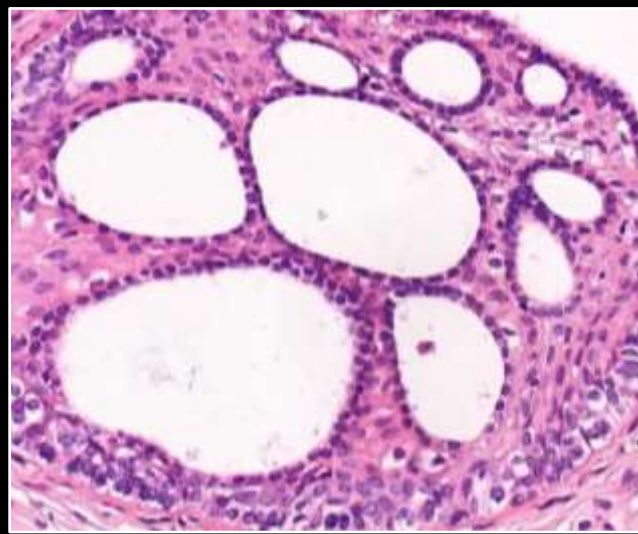
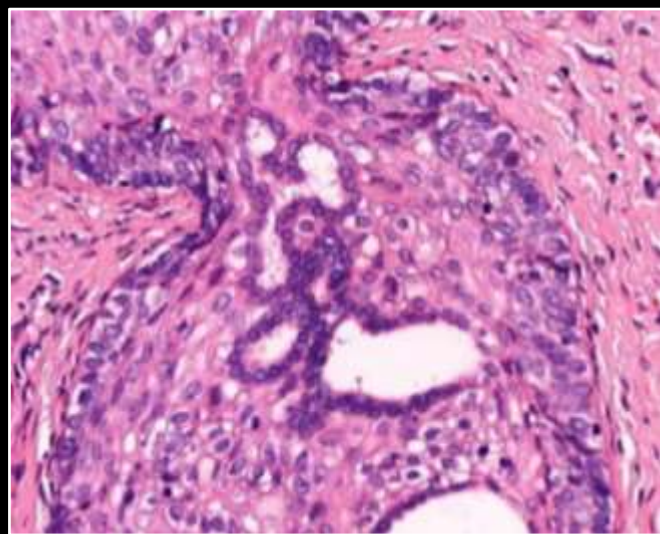
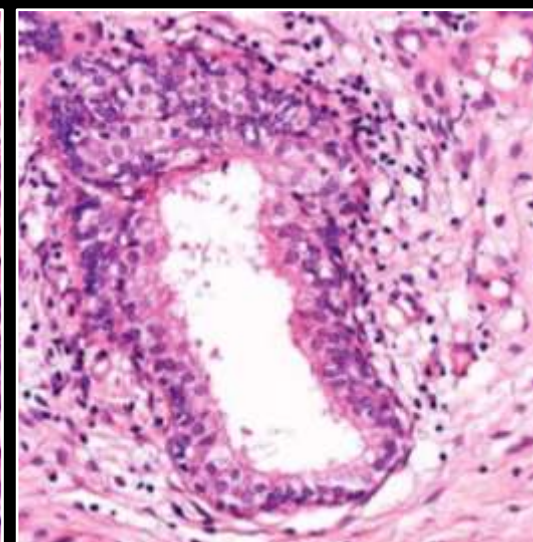
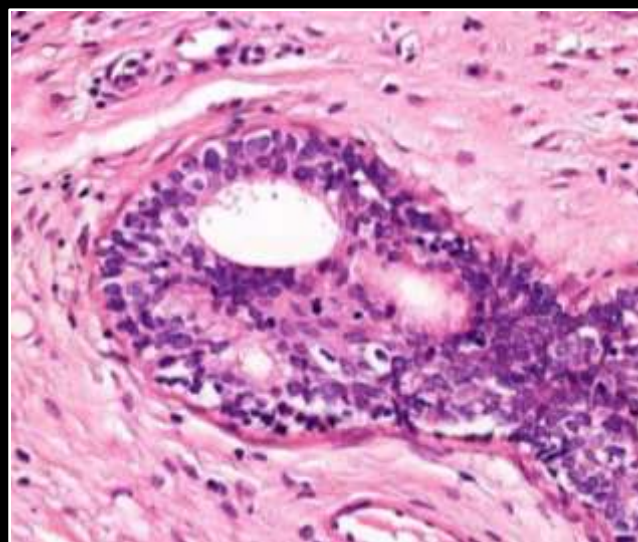
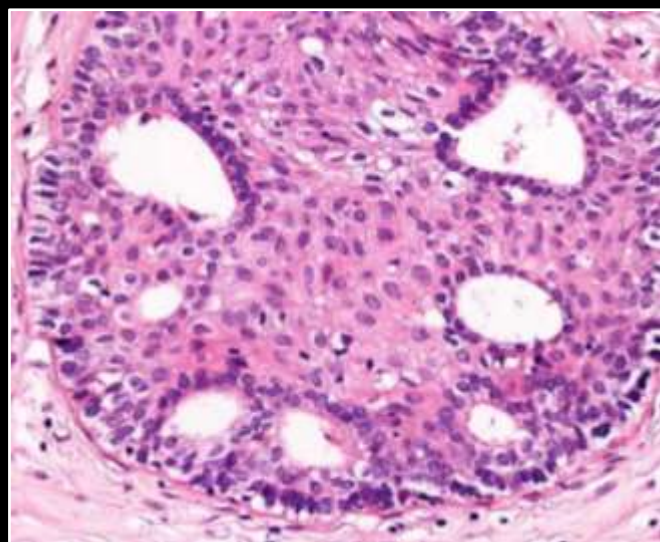


# Mikroskopický obraz





# Mikroskopický obraz



Pred **6** mesiacmi **biopsia TU lézie**

- patolog.fraktúry ľavej klavikuly
- CA mammae l.sin - duktálny - pred 10 rokmi, odliečená, odvtedy sledovaná t.č. dľa CT de novo početné nodulácie, **MTS skeletu** stavcov, rebier, klavikuly

Nález: **Nediagnostický**, bez nádoru.

Pred **5** mesiacmi **OC ster z cervixu**

- bez klinického nálezu

Cytologický záver: **NILM**





## Adenoid Basal Epithelioma of the Uterine Cervix in 21-Year-Old Patient. Report of a Case with Histologic and Immunohistochemical Study

Zámečník M<sub>1</sub>, Skřivánek A<sub>2</sub>

1Šikl's Department of Pathology, Medical Faculty Hospital, Charles University, Pilsen, Czech Republic

2Private Gynecologic Surgery, Olomouc, Czech Republic

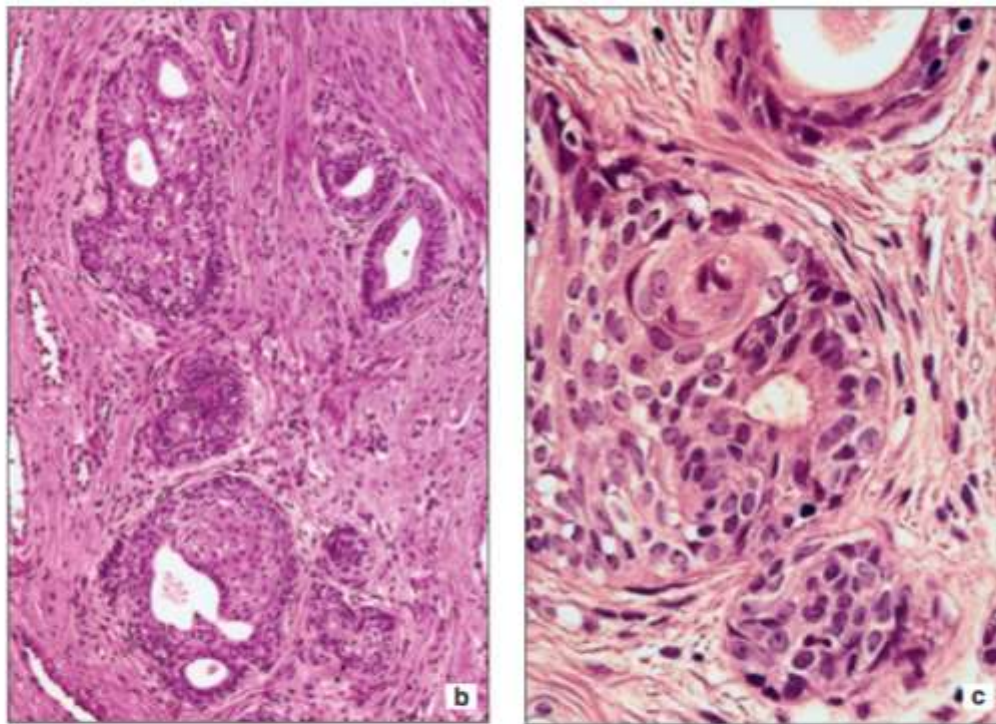


Fig. 1. Histological findings. A, low-power view shows ABE without connection with cervical epithelium. B, the islands of ABE contain basal cells that differentiate toward both squamous and glandular direction. C, at high-power, the basaloid cell morphology and some cilia-like structure on the luminal cell membrane of the glandular cells (on the center of the photomicrograph) are seen

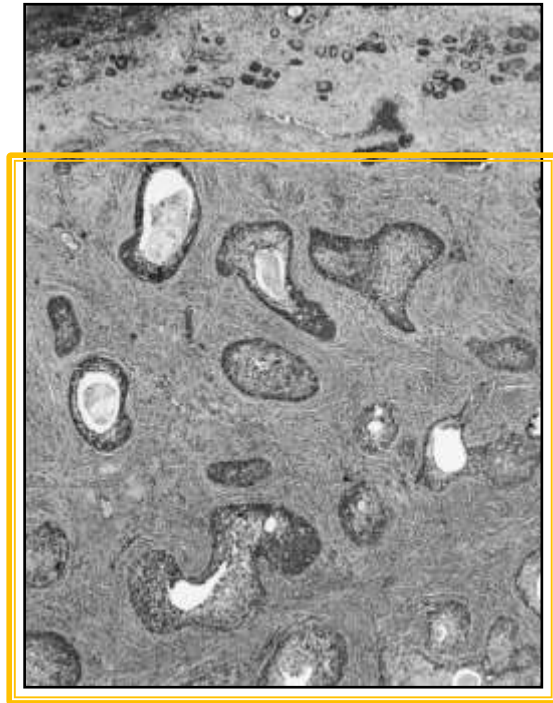
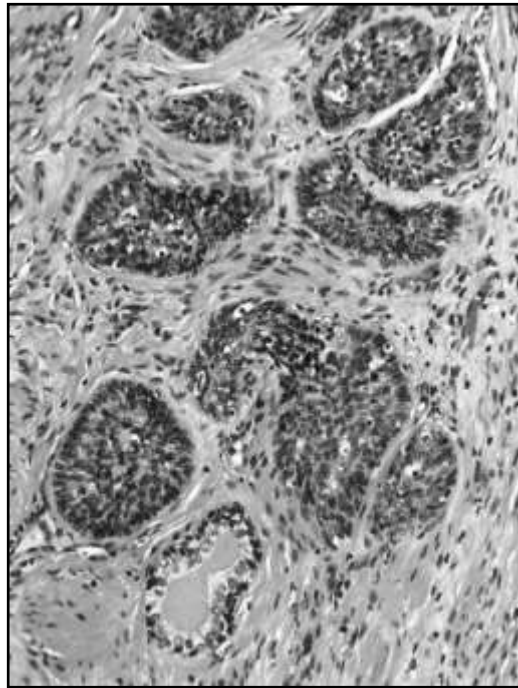
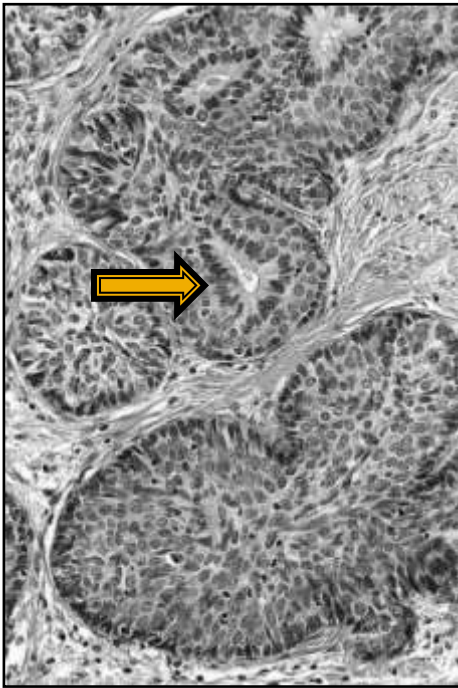


**Cervical adenoid basal tumors comprised of adenoid basal epithelioma associated with various types of invasive carcinoma: Clinicopathologic features, human papillomavirus DNA detection, and P16 expression**

**Parwani AV<sup>a</sup>, Smith Sehdev AE<sup>a</sup>, Kurman RJ<sup>a,b</sup>, Ronnett BM<sup>a,b</sup>**

<sup>a</sup>Department of Pathology, The Johns Hopkins University School of Medicine and Hospital, Baltimore, MD 21231, USA

<sup>b</sup>Department of Gynecology and Obstetrics, The Johns Hopkins University School of Medicine and Hospital, Baltimore, MD 21231, USA



Adenoid basal epithelioma (the associated invasive carcinoma is not illustrated). The low-grade noninfiltrative component is illustrated. Nests of tumor display **basaloid, squamous, and glandular** differentiation.

**Invasive squamous carcinoma** associated with adenoid basal epithelioma (top).

## Adenoid basal carcinoma of the cervix: report of 10 cases with reference to the expression of 3 basal cell antibodies

Zhao Y<sub>1</sub>, Liu Y<sub>2</sub>, Li W<sub>2</sub>, Shang S<sub>2</sub>

1Department of Surgical Pathology, The Affiliated Children's Hospital, School of Medicine, Zhejiang University, Hangzhou 310000, Zhejiang Province, P. R. China; 2Department of Center Lab, The Affiliated Children's Hospital, School of Medicine, Zhejiang University, Hangzhou 310000, Zhejiang Province, P. R. China

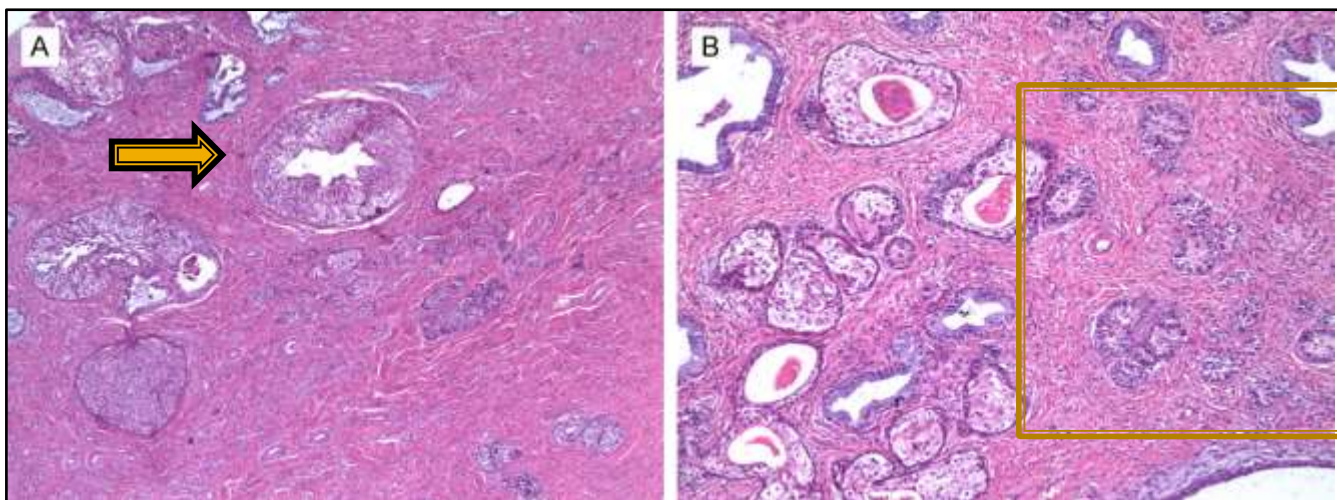


Figure 1. Adenoid basal carcinoma of the uterine cervix, hematoxylin and eosin.

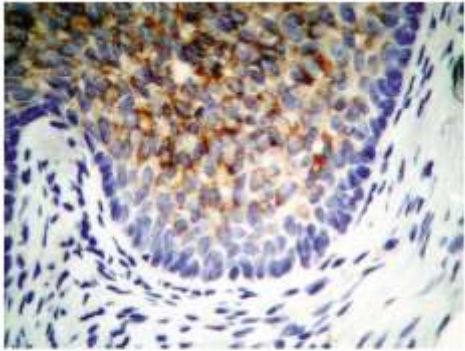
- A. Scanning magnification view of adenoid basal carcinoma. The tumor cells are arranged in small nests with associated **high-grade squamous intraepithelial lesion** lying ahead.
- B. Intermediate power view, showing a transition from squamous differentiation foci to **typical adenoid basal cell nests**.



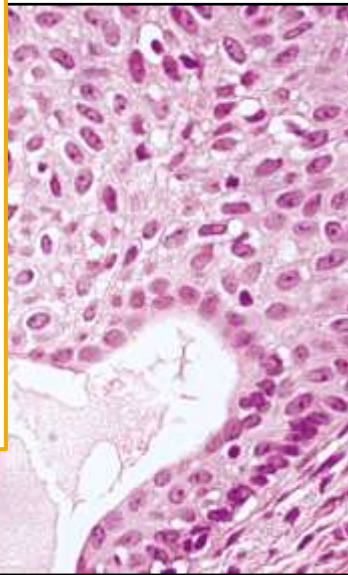
## Adenoid basal carcinoma of the cervix in a 20-year-old female: a case report

DePond WD, Flauta VS, Lingamfelter DCh, et al.

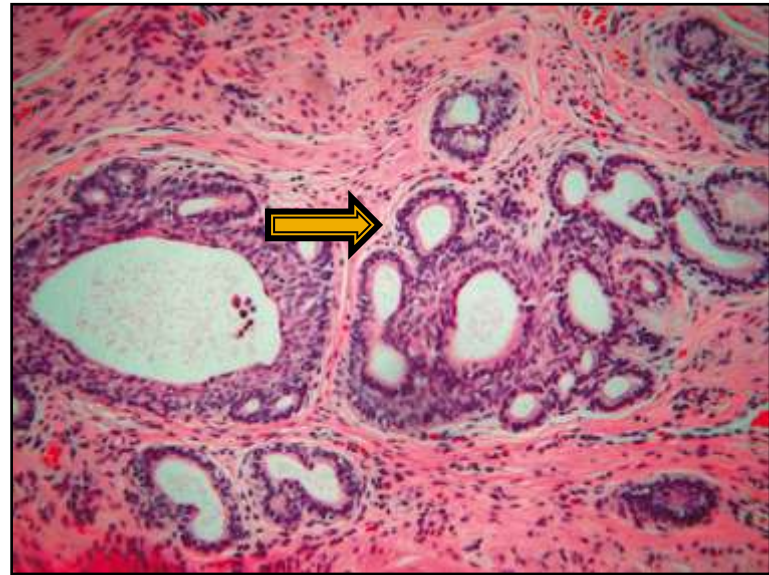
Department of Pathology, University of Missouri-Kansas City School of Medicine and Truman Medical Centers, Kansas City, Missouri, USA



**Figure 3 (EMA, ×40):** Most of the tumor cells within the nests show a strong, diffuse cellular membrane staining. The peripheral palisading cells show a uniform lack of reactivity to the antibody.



**(H&E, ×100):** A palisading arrangement around the periphery of this cellular nest is striking.

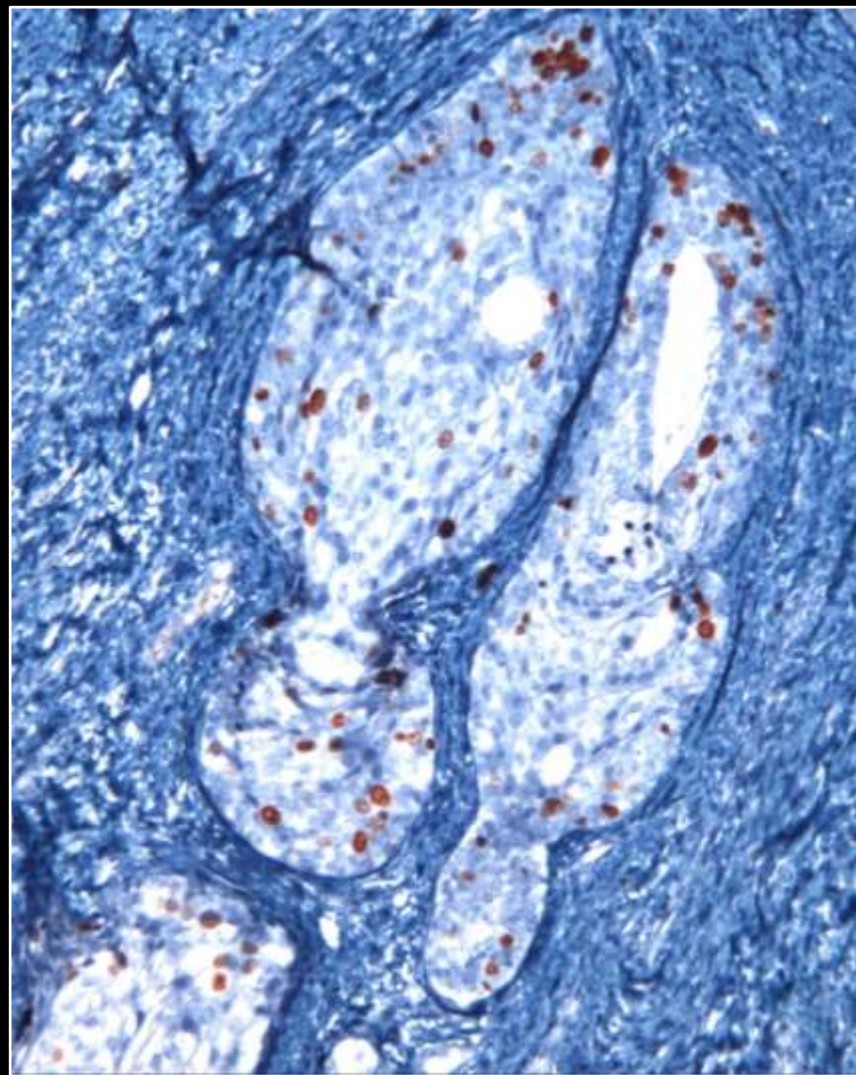
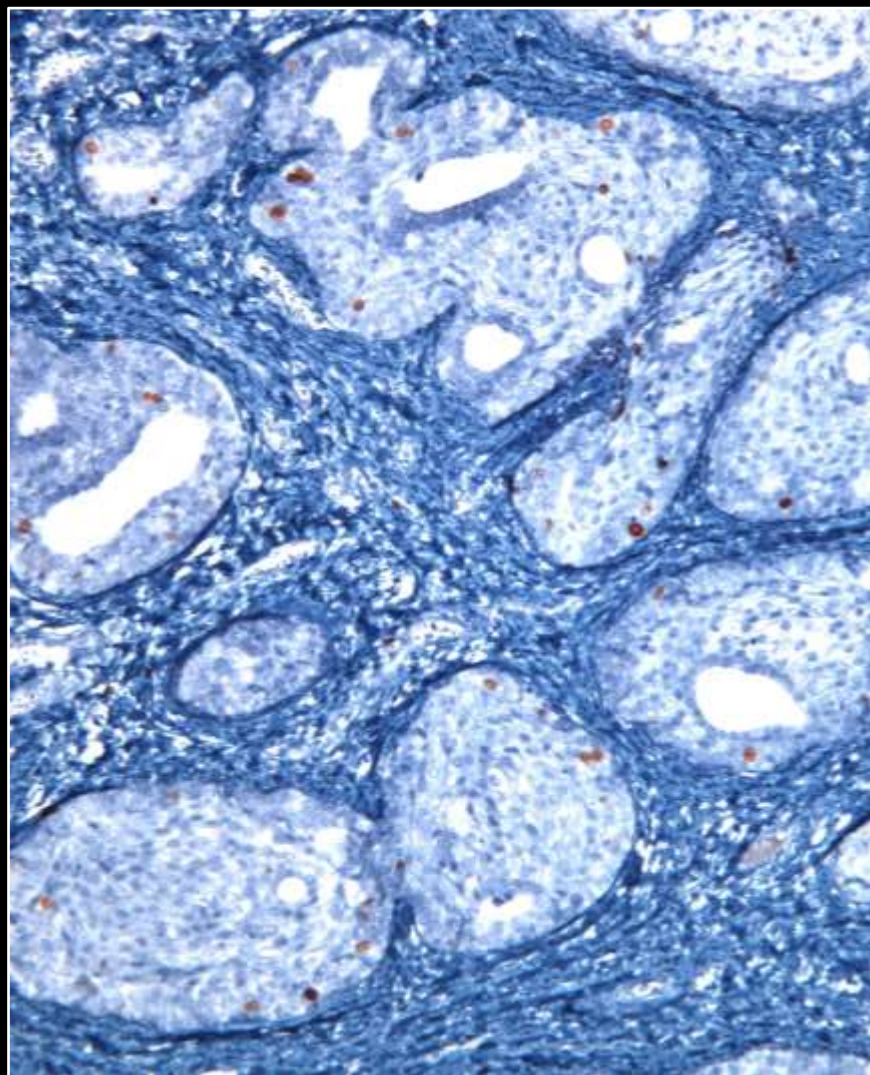


**(H&E, ×10):** The cervical stroma shows scattered cellular proliferations arranged in nests with peripheral palisading and microcyst formation. A stromal reaction to these nests is absent.



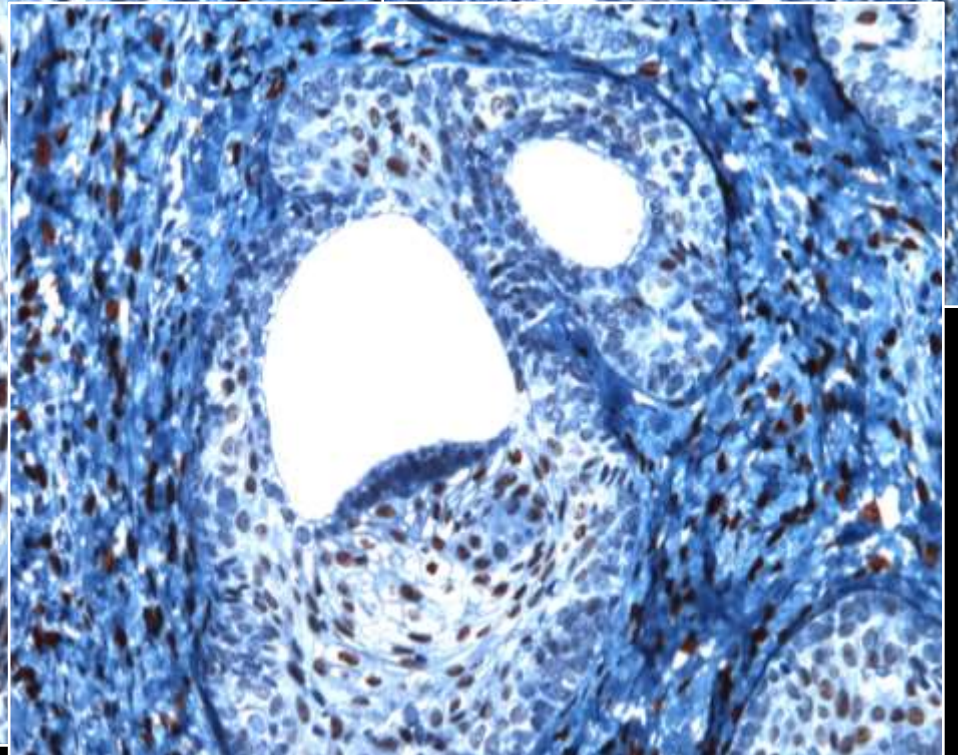
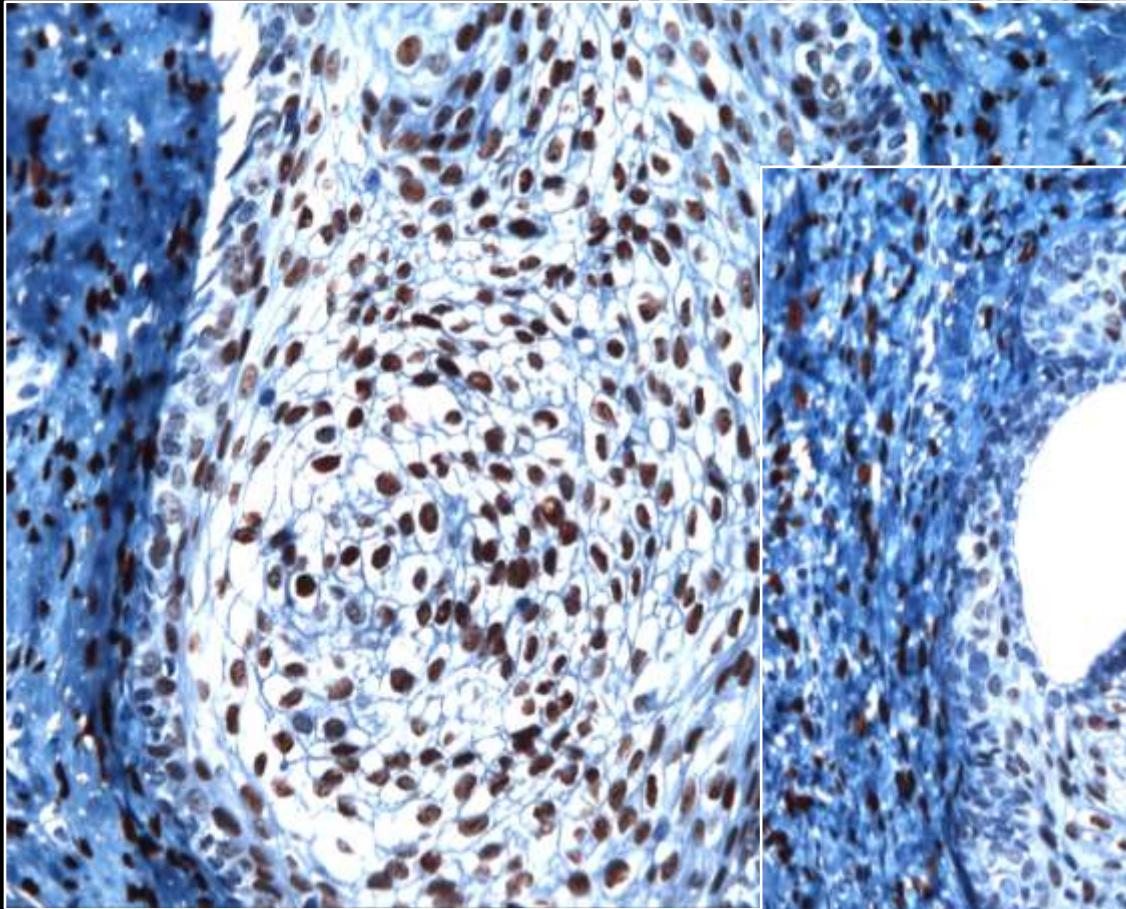
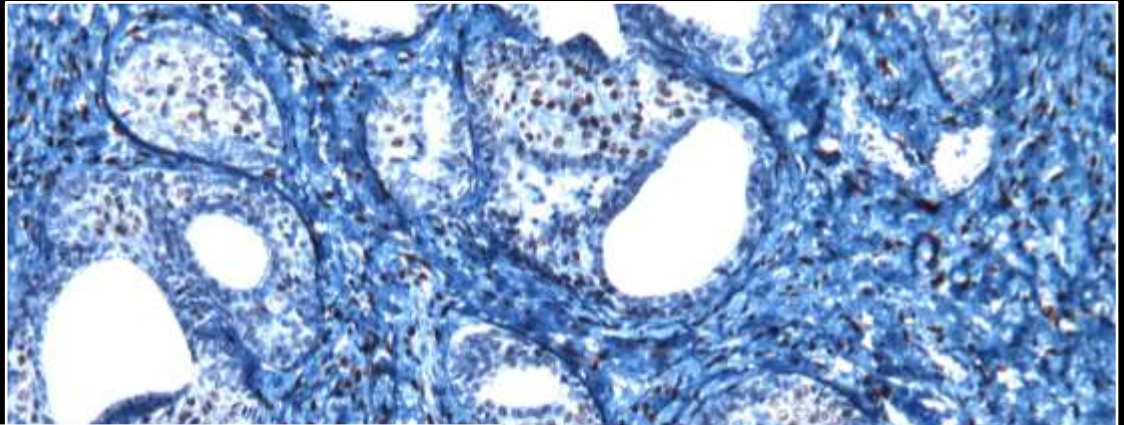


# Proliferačný index Ki-67



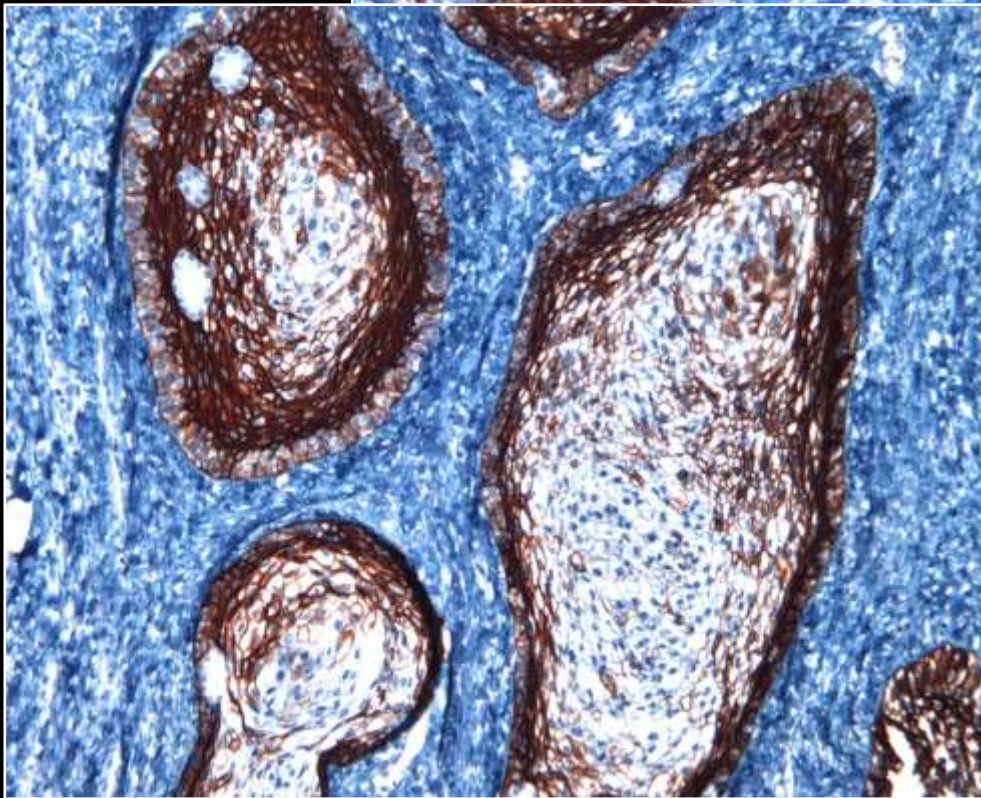
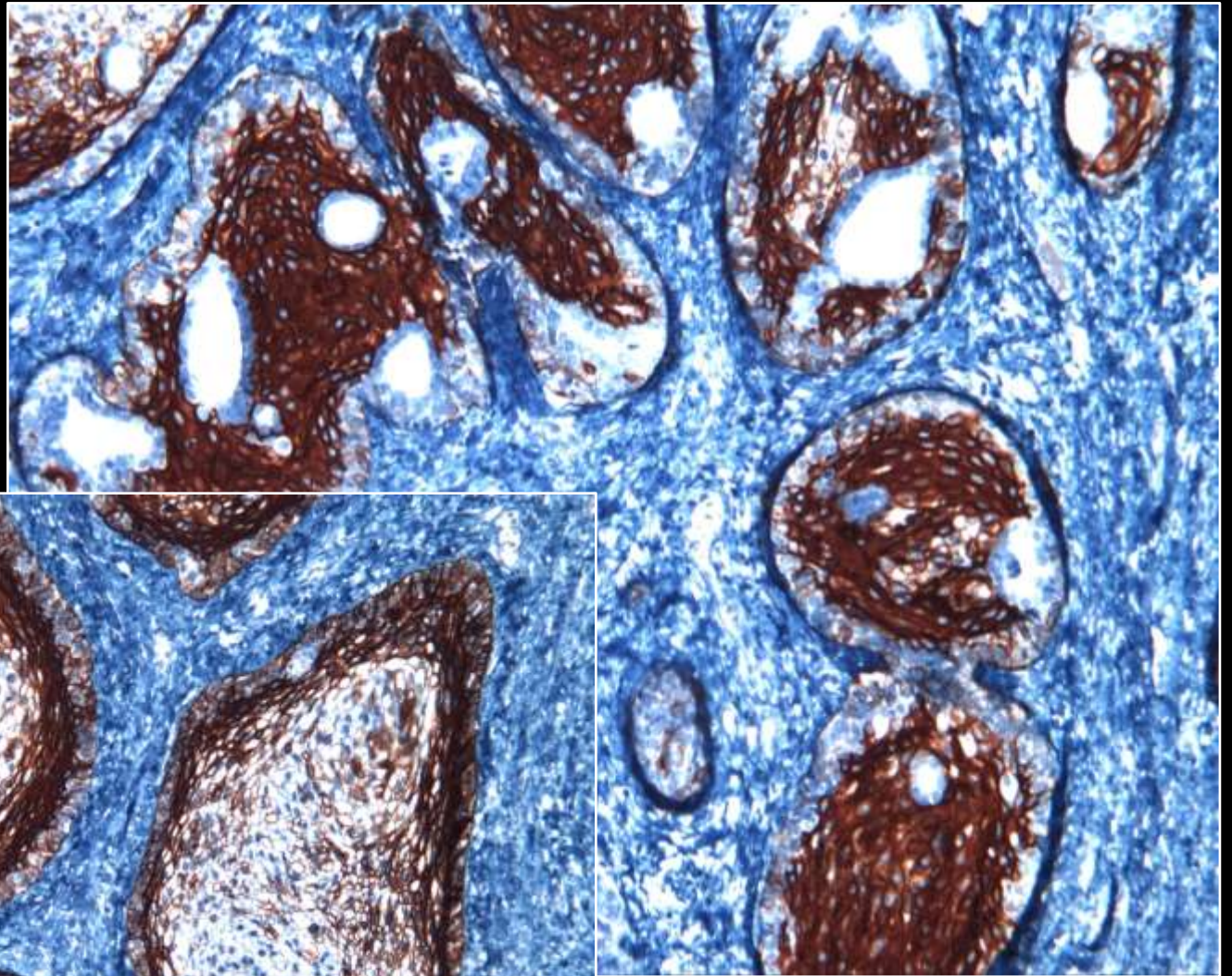


ER receptor



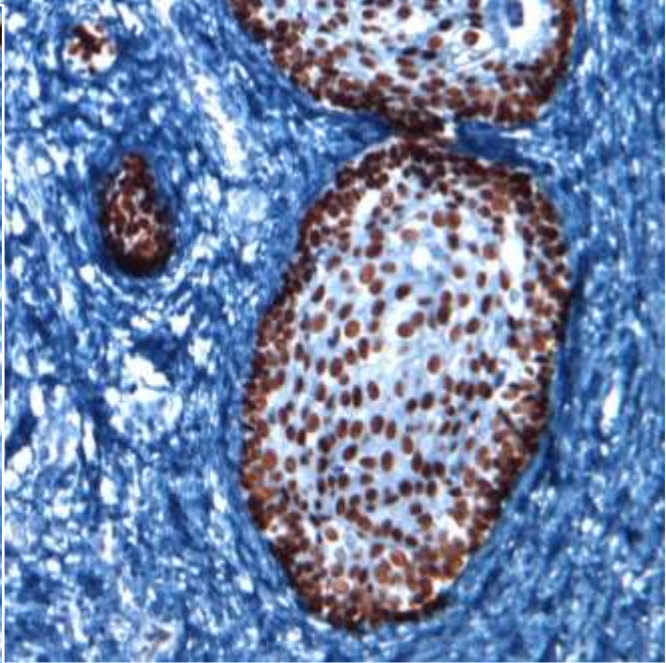
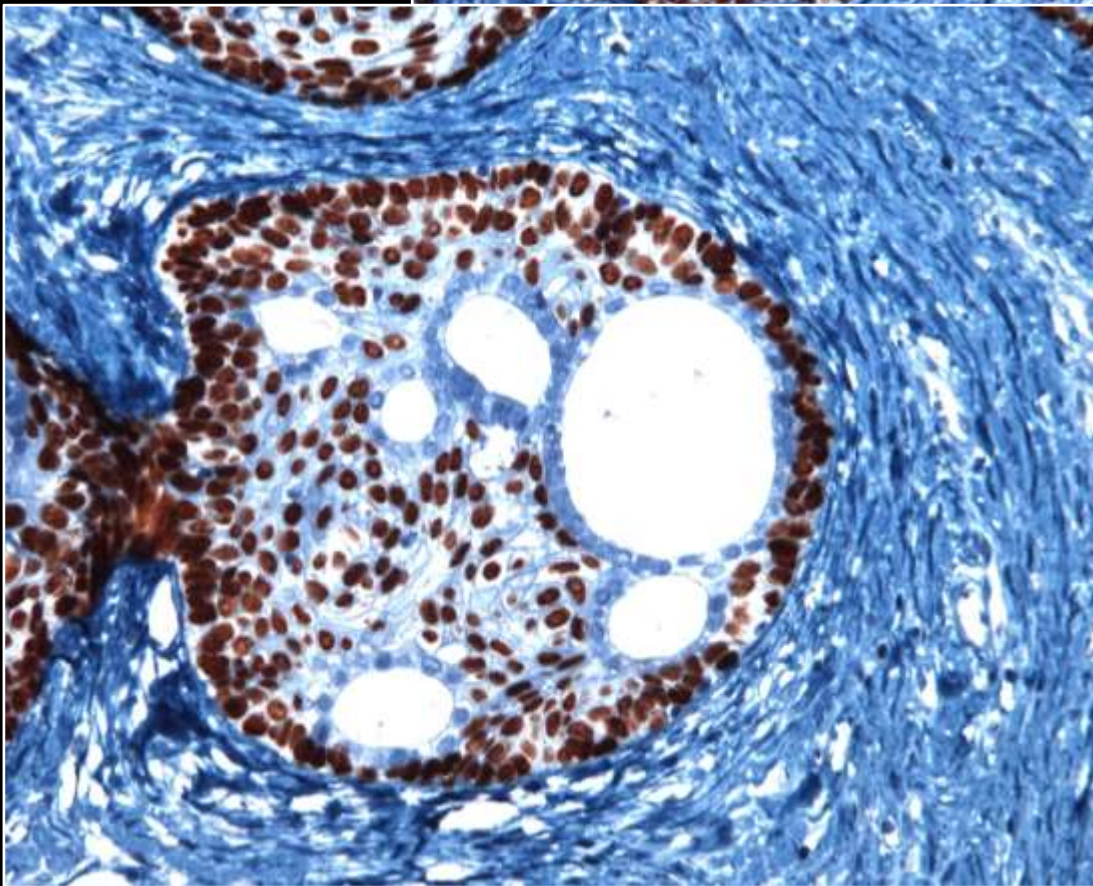
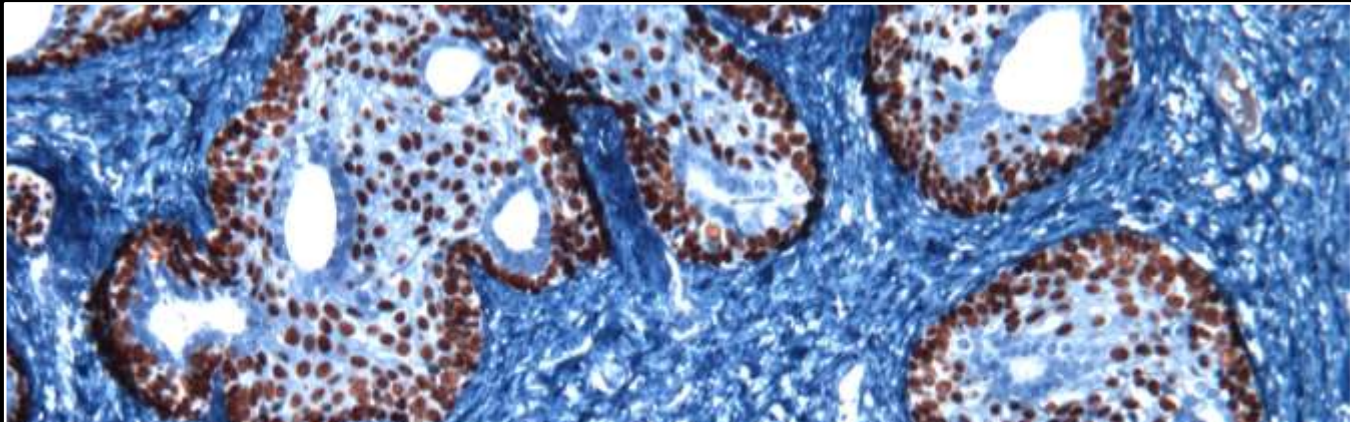


CK5/6



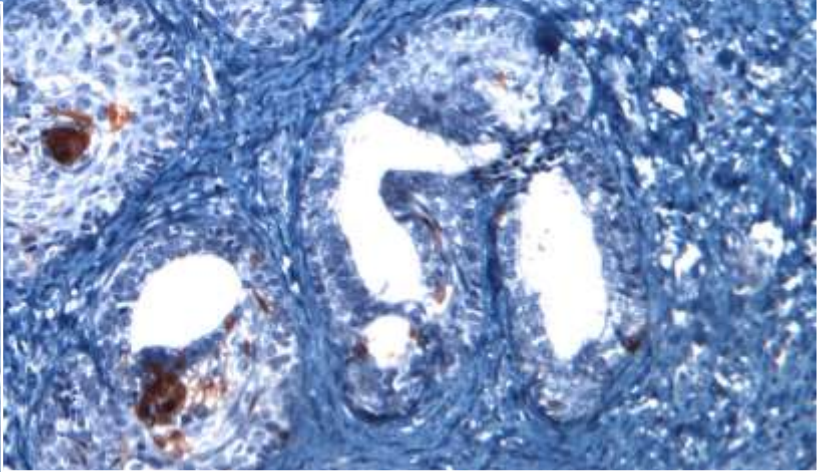
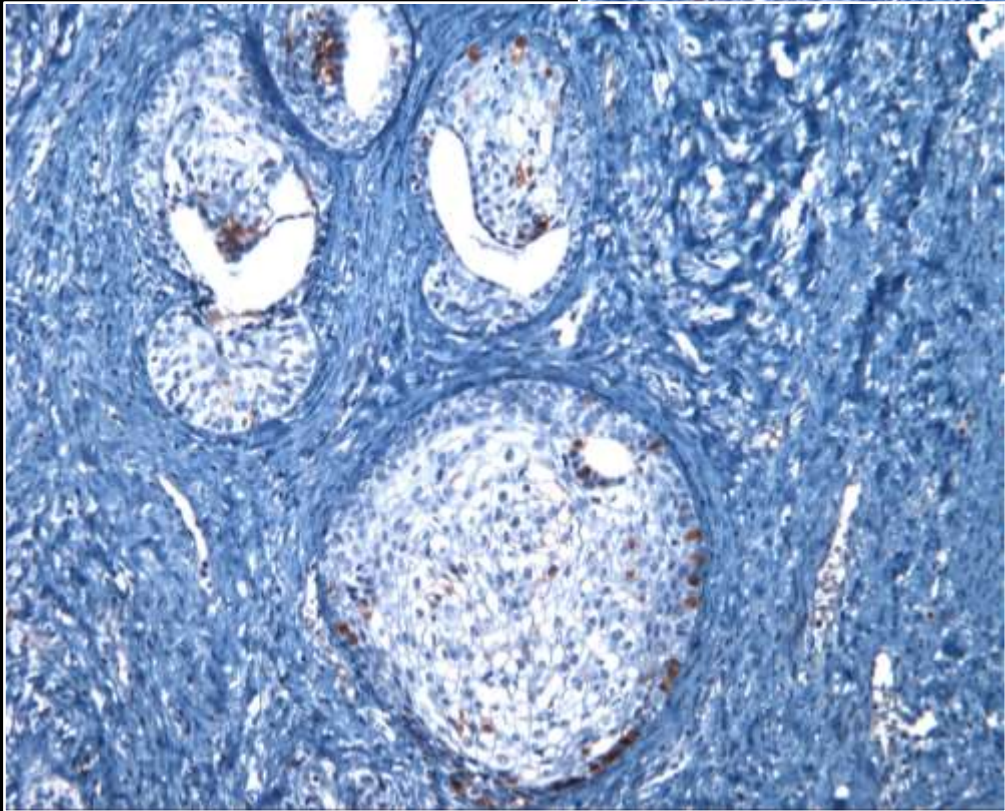
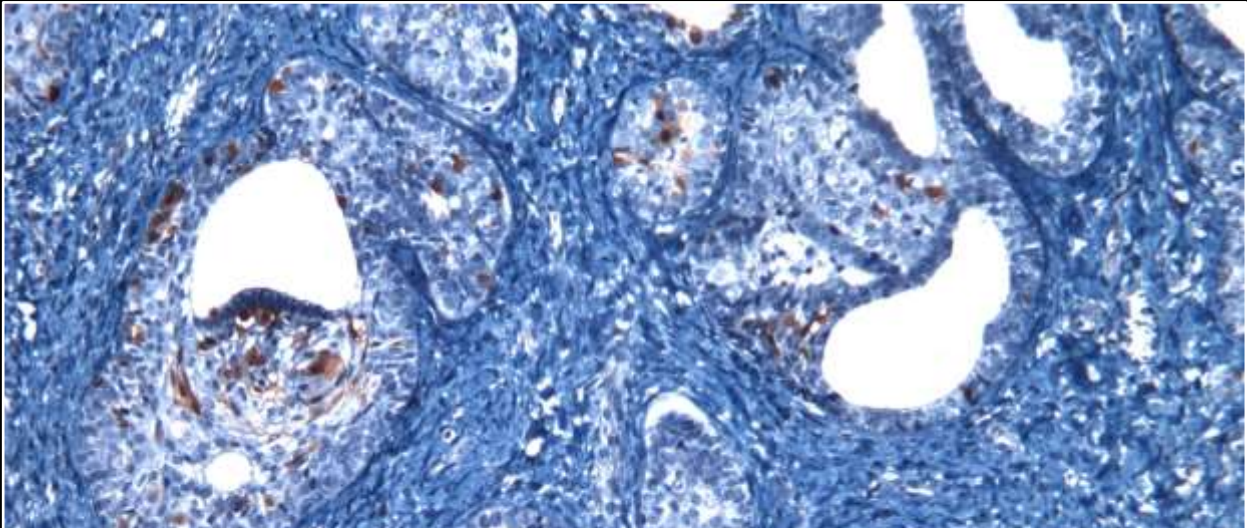


p63

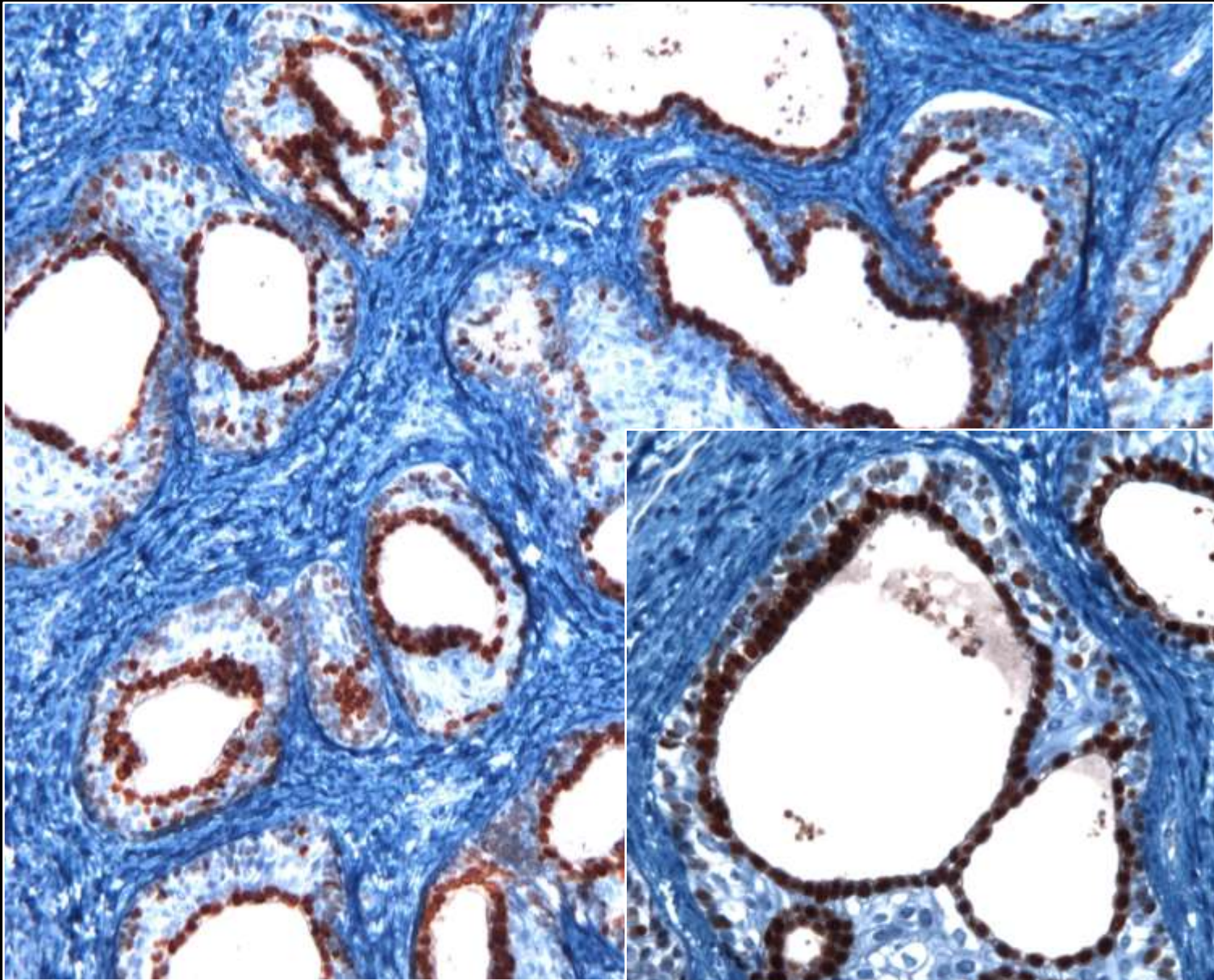




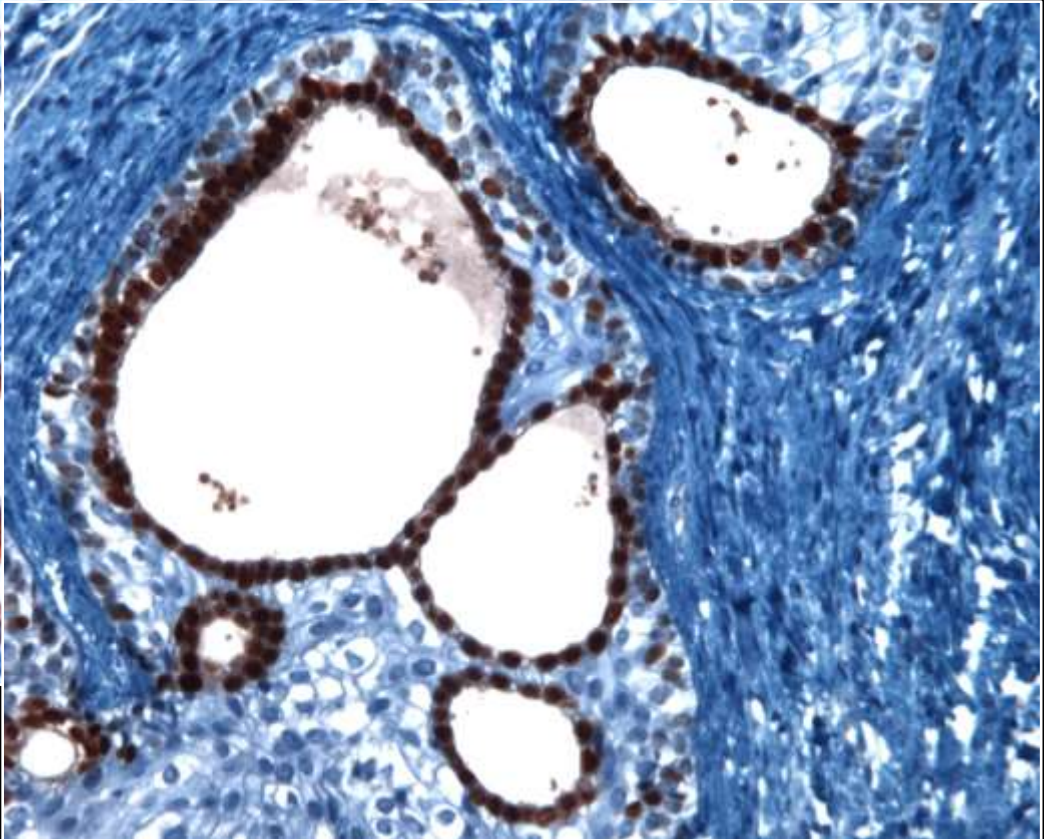
p16







**NKX3.1**







Na prednej stene **pošvy**  
**polyp** na širokej báze

Odstránený **kompletne**  
na histologické vyšetrenie

**Portio s negatívnym** nálezom



**Vaginal  
Tubulosquamous Polyp  
(Ectopic Prostatic Tissue)**



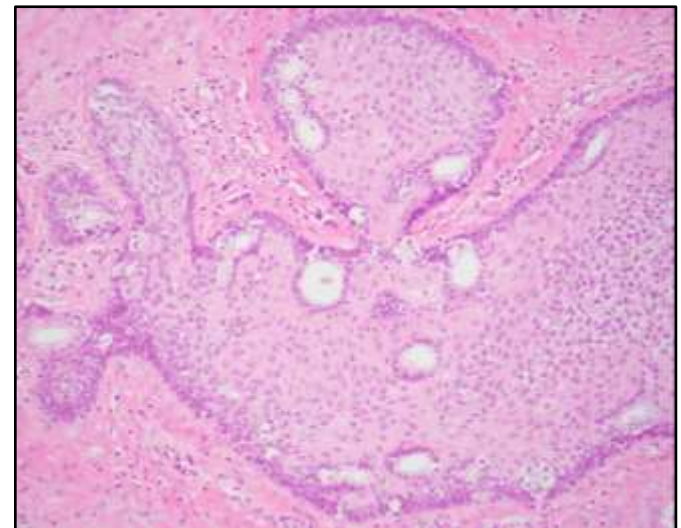
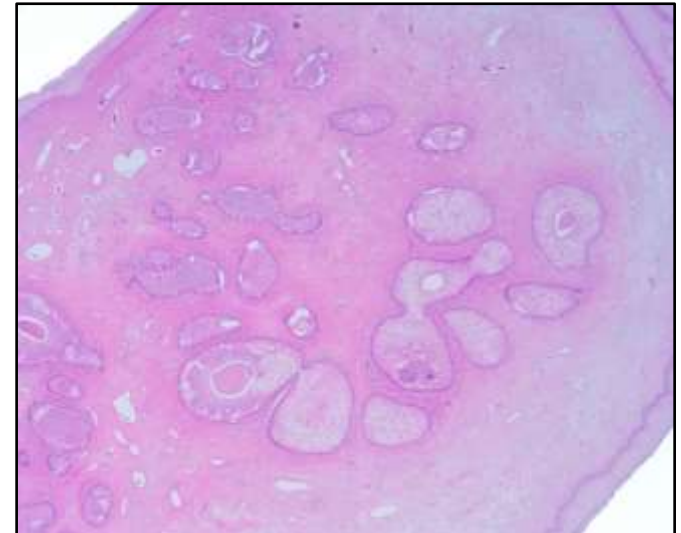
# Vaginal Tubulosquamous Polyp

(WHO 2020)

## Benign polyp

- squamous and tubular
- collagenous stroma
- ectopic prostatic tissue

- upper vagina
- 39-78 years
- incidental finding, polypoid, small (1-3 cm)
- derived from periurethral Skene glands
- tubules (inner layer) **PSA+, PAP+, NKX3.1+**
- squamous elements **p63+, GATA3+**



*Am J Surg Pathol*, 2007 Jul;31(7):1013-9

## Tubulo-squamous Polyp

*A Report of Ten Cases of a Distinctive Hitherto Uncharacterized Vaginal Polyp*

McCluggage WG, Young RH

Department of Pathology,  
Royal Group of Hospitals Trust,  
Belfast, Northern Ireland

*The epithelial elements:*

- predominantly glycogenated or nonglycogenated squamous
- small tubules at the periphery

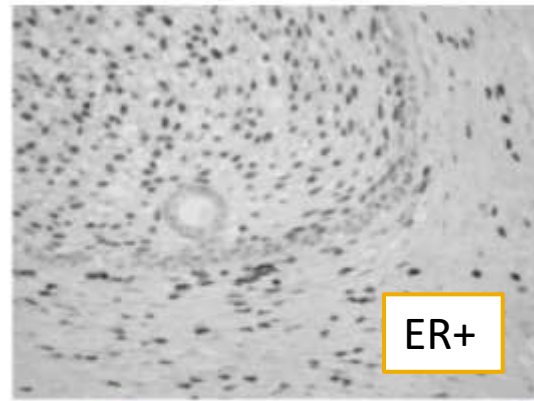


FIGURE 8. The squamous and stromal elements both exhibit nuclear ER positivity.

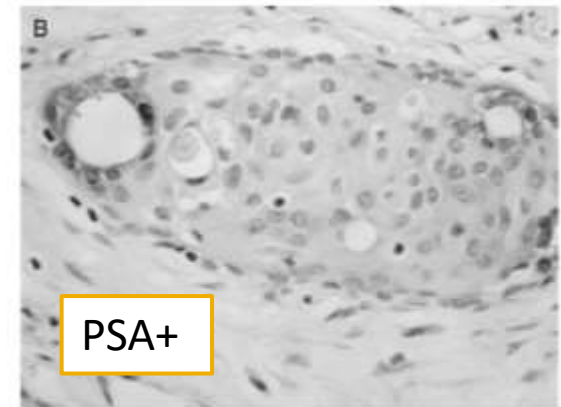
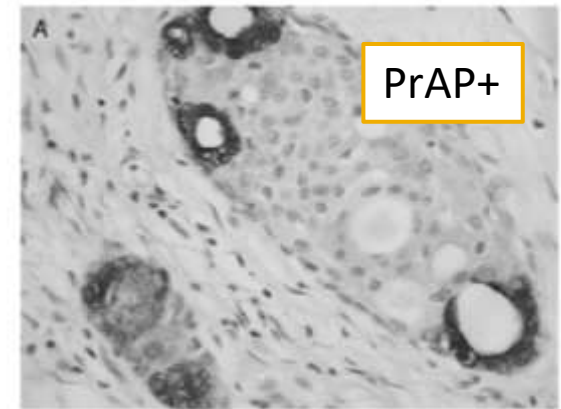


FIGURE 9. Positive immunohistochemical staining of epithelium lining some of the tubules with PrAP (A) and prostate-specific antigen (B).

... we term "**tubulo-squamous polyp of the vagina,**

... several cases reported in the literature as **vaginal mixed tumor** or **Brenner tumor** are likely examples of this entity

... positive staining with prostatic acid phosphatase and prostate-specific antigen raises the possibility of **ectopic prostatic tissue**



## Prostatic-type Tissue in the Lower Female Genital Tract: A Morphologic Spectrum, Including Vaginal Tubulosquamous Polyp, Adenomyomatous Hyperplasia of Paraurethral Skene Glands (Female Prostate), and Ectopic Lesion in the Vulva

Kazakov DV, Stewart CJR, Kacerovska D, et al.

Šikl's Department of Pathology, Medical Faculty Hospital, Charles University, Pilsen, Czech Republic

*It is concluded that prostatic type tissue*

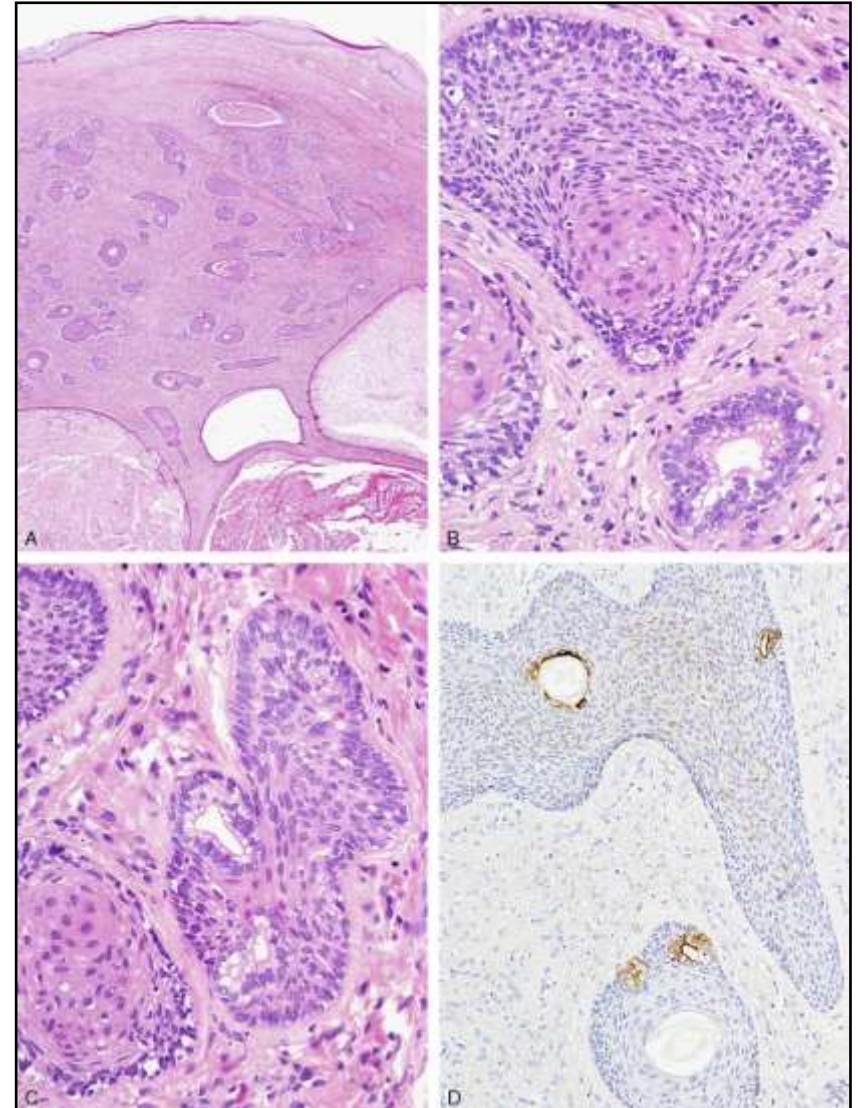
- hyperplasia of Skene glands
- ectopic glands in the vulva
- benign and malignant lesions in the cervix and vagina

### Vaginal tubulosquamous polyp

may be a closely related lesion with **positivity for PSA and PrAP**,

these markers are not entirely specific for prostatic tissue

*(salivary gland neoplasms, extramammary Paget disease, rectal and ovarian carcinoid tumors, breast carcinomas, pancreatic neoplasms, and nephrogenic adenoma)*



**FIGURE 3.** Case 6: **Tubulosquamous polyp.** Expansile nests of squamous type containing small tubules located usually at the periphery. Note squamous morules and basaloid cell differentiation with peripheral palisading (A, B, C). **PSA positivity** is present in the tubular areas. (D)

## NKX3.1 as a Marker of Prostatic Origin in Metastatic Tumors

Gurel B, Ali TZ, Montgomery EA, et al.

Department of Pathology, Johns Hopkins University School of Medicine and Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Baltimore  
Department of Pathology, University of Maryland Medical Center, Baltimore

for metastatic prostatic adenocarcinomas

**The sensitivity** was **98.6%** (68/69 cases positive)

1/349 nonprostatic tumors positive

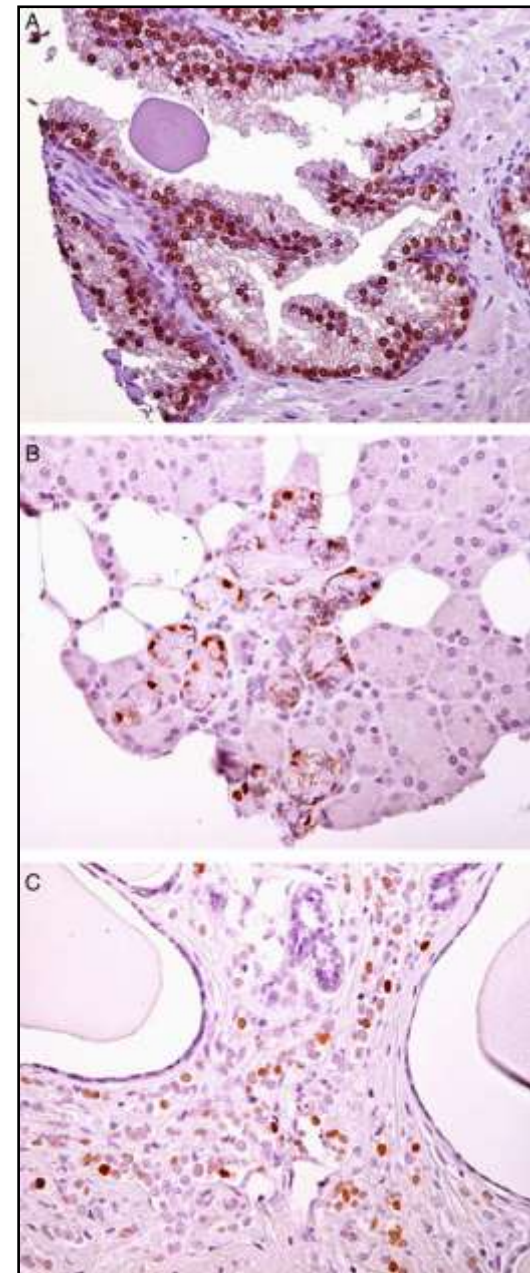
**The specificity** of NKX3.1 was **99.7%**

### FIGURE 1. NKX3.1 staining

A, normal prostate tissue.

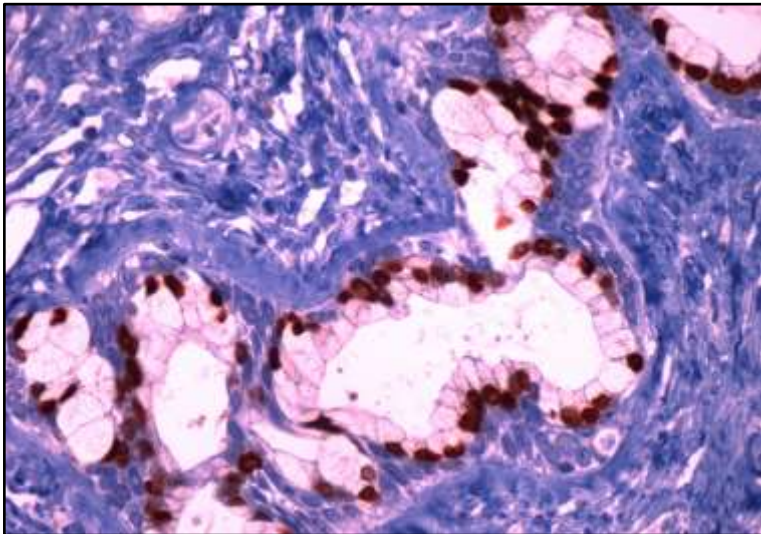
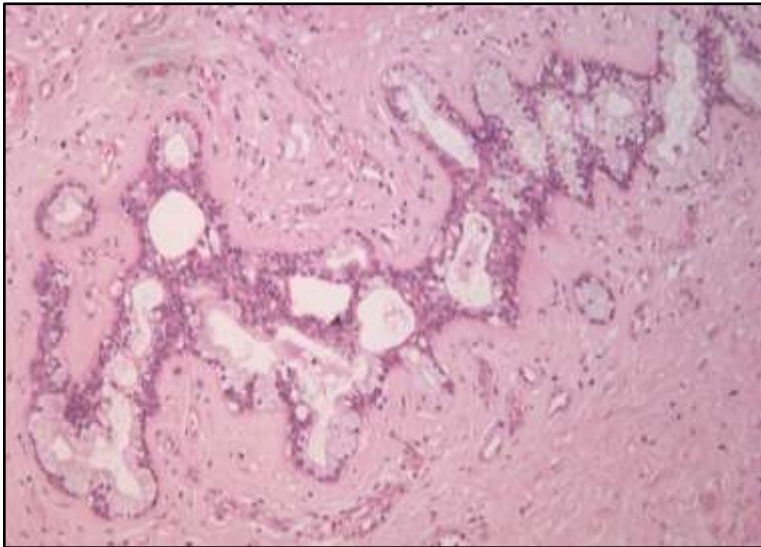
B, normal salivary gland tissue, limited to the mucinous glands.

C, one positive case of invasive lobular carcinoma of the breast.

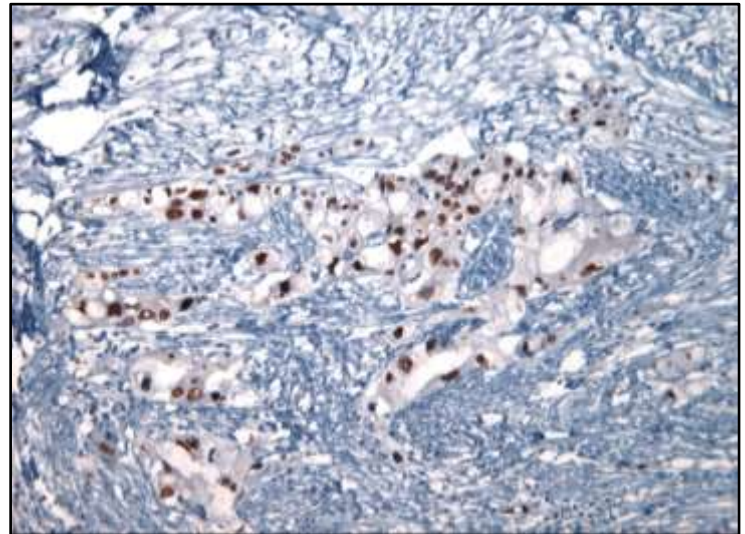
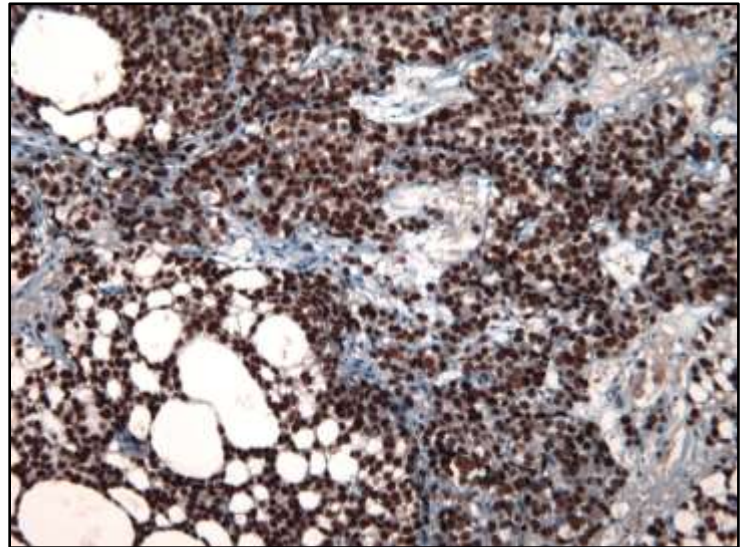




## Skene glands



## Prostate marker NKX3.1



# Diferenciálna diagnóza

## Adenoid basal carcinoma / epithelioma

*Am J Surg Pathol*, 1998 Aug;22(8):965-75.

### Adenoid basal epitheliomas of the uterine cervix: a reevaluation of distinctive cervical basaloid lesions currently classified as adenoid basal carcinoma and adenoid basal hyperplasia

Brainard JA, Hart WR Department of Anatomic Pathology, The Cleveland Clinic Foundation, Ohio 44195, USA

12 adenoid basal carcinomas and 3 adenoid basal hyperplasias

Associated neoplastic squamous lesion was present in 92%  
**high-grade cervical intraepithelial neoplasia in 10 cases**  
microinvasive squamous cell carcinoma in one

- (1) **adenoid basal carcinoma is not a malignant neoplasm**  
does not produce a grossly visible lesion  
has never metastasized to regional lymph nodes or elsewhere  
has never itself caused death
- (2) histologically atypical tumors with distinctly **malignant features should not be** regarded as adenoid basal carcinoma
- (3) adenoid basal hyperplasia probably is a small adenoid basal carcinoma  
we propose the term "**adenoid basal epithelioma**"

**Reduce the likelihood of unnecessarily aggressive treatment**

## WHO Classification of Tumours

2014

Adenoid basal carcinoma 8098/3

*Synonym*

Adenoid basal epithelioma

2020 5th Edition

Adenoid basal carcinoma 8098/3

*Acceptable*

Adenoid basal epithelioma; low-grade adenoid basal tumour

**Non-mass-forming lesion**

*Infiltrative small nests or cords*

*Bland basaloid cells*

**Absence of stromal reaction**

**p16 positive (block-type)**

**More than 90% HSIL**

**Pure form – no metastatic potential**

**Adenoid basal hyperplasia**

*Non-neoplastic, p16-, (deep less than 1 mm /2014/)*

**Mixed carcinoma**

*invasive squamous carcinoma - outcome depends*



# Diferenciálna diagnóza

## Adenoid basal carcinoma / epithelioma

*Diagn Pathol, 2006 Aug 15;1:18*

### Adenoid basal lesions of the uterine cervix: evolving terminology and clinicopathological concepts

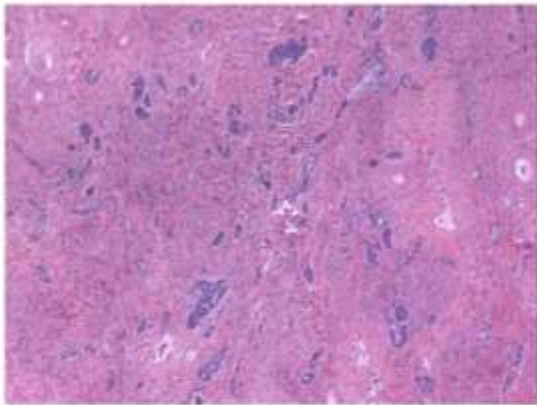
Russell MJ, Fadare O Department of Pathology, Wilford Hall Medical Center, Lackland AFB, TX, USA

ABLs - unique in human oncology / **term carcinoma** (without an in-situ suffix) is applied  
**has not been shown to recur, metastasize or cause death**

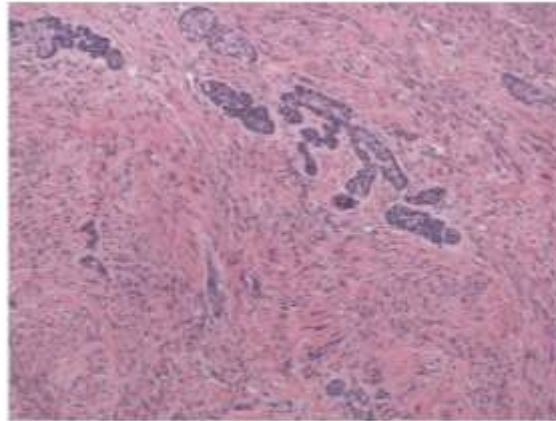
#### Adenoid Basal Epithelioma (ABE)

ominous implications - social, psychological, medical, financial - of a "carcinoma" diagnosis

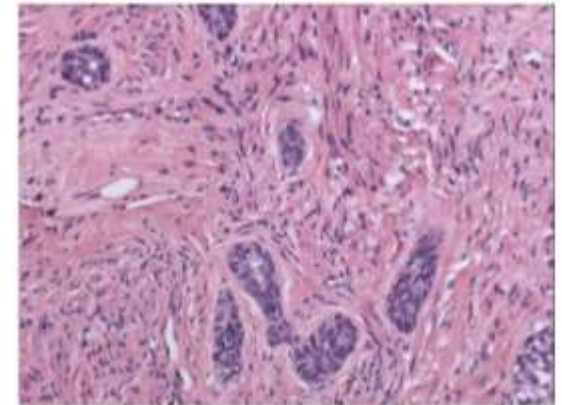
Morphologically **impure lesions should not be** designated ABC or ABE



**Figure 1**  
Scanning magnification view of a pure adenoid basal lesion (adenoid basal epithelioma), showing an infiltrative proliferation of basaloid nests. (hematoxylin and eosin, original magnification 10×)



**Figure 2**  
Intermediate power view of adenoid basal nests. Note the lack of any significant stromal reaction. (hematoxylin and eosin, original magnification 20×)



**Figure 3**  
High power view of adenoid basal nests, each comprised of monomorphic, small cells with basaloid, round to oval nuclei, inconspicuous nucleoli and scant cytoplasm (hematoxylin and eosin, original magnification 60×).

# Diferenciálna diagnóza

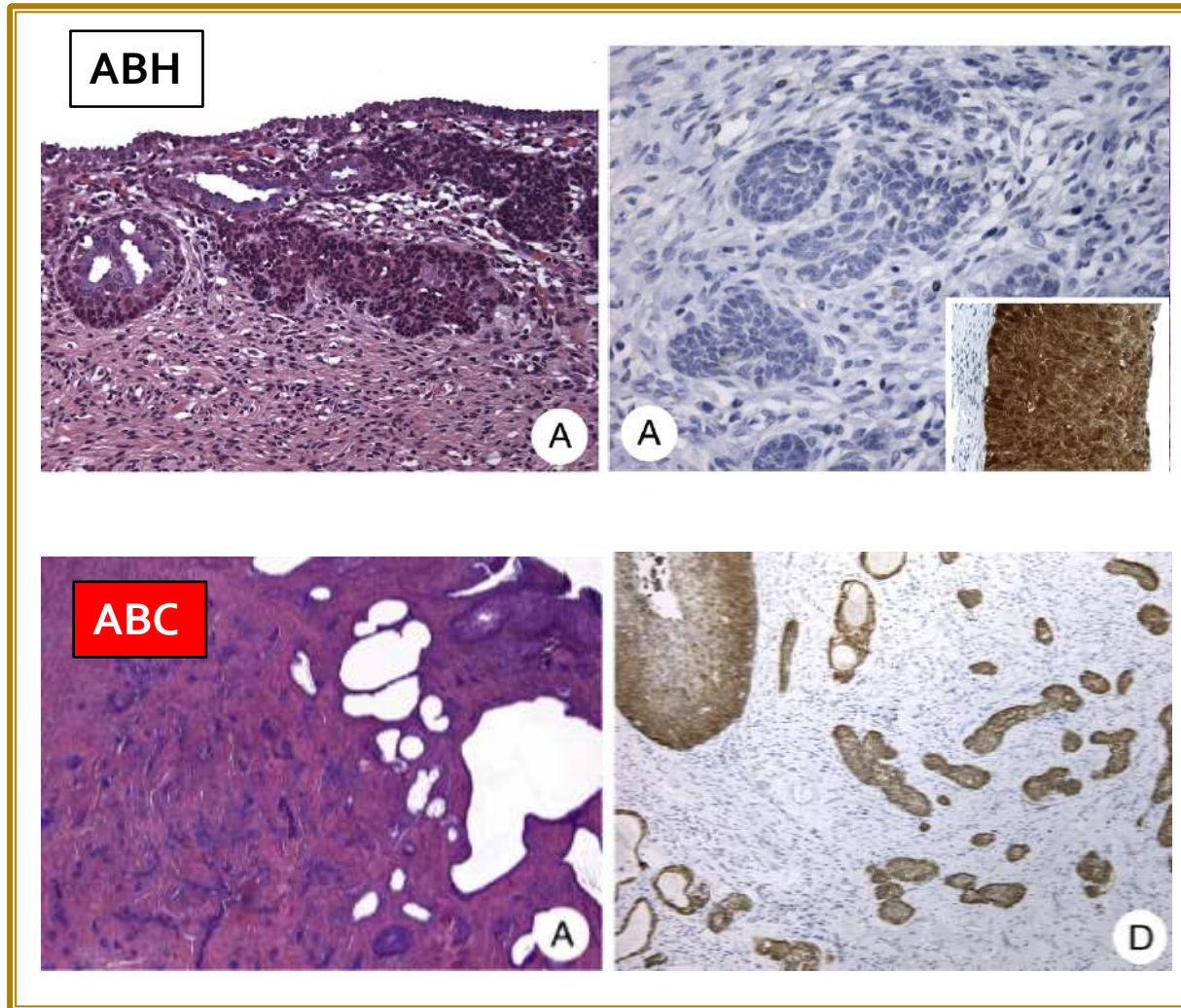
## Adenoid basal carcinoma / epithelioma

*Hum Pathol, 2012 Dec;43(12):2255-65*

**Adenoid basal hyperplasia  
of the uterine cervix:  
a lesion of reserve cell type,  
distinct from adenoid basal carcinoma**

Kerdraon O  
Cornélius A  
Farine MO  
Boulanger L  
Wacrenier A

Institut de Pathologie,  
Centre Hospitalier Régional et  
Universitaire de Lille,  
Avenue Oscar Lambret,  
59037 Lille,  
France





# Diferenciálna diagnóza

## Adenoid basal carcinoma / epithelioma

Int J Gynecol Pathol, 2016 Jan;35(1):82-91

Application of p16 Immunohistochemistry and RNA In Situ Hybridization in the Classification of Adenoid Basal Tumors of the Cervix

Goyal A

Cleveland Clinic, Cleveland, Ohio

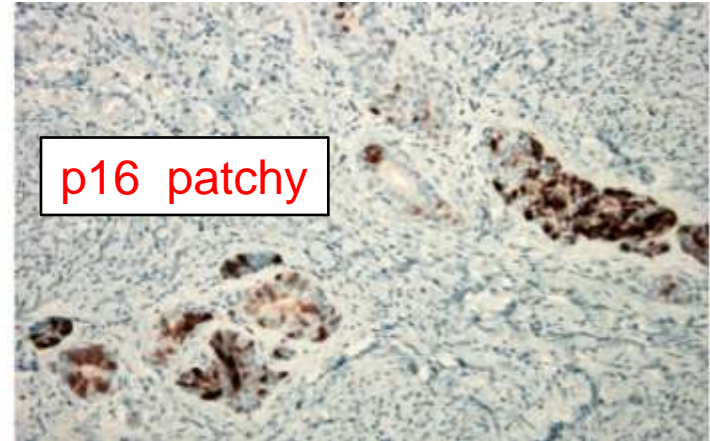
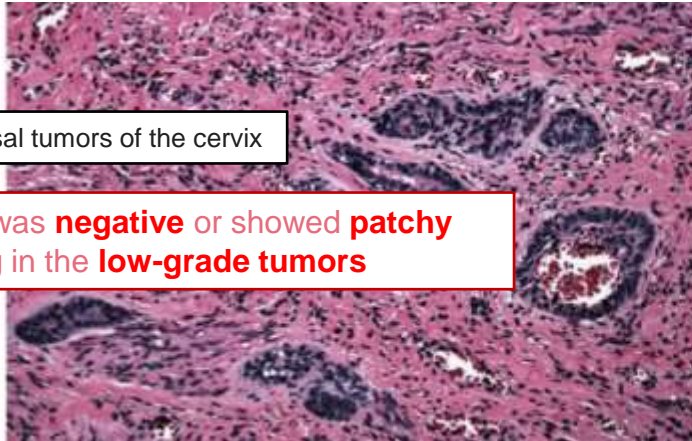
Wang Z

Przybycin ChG

Yang B

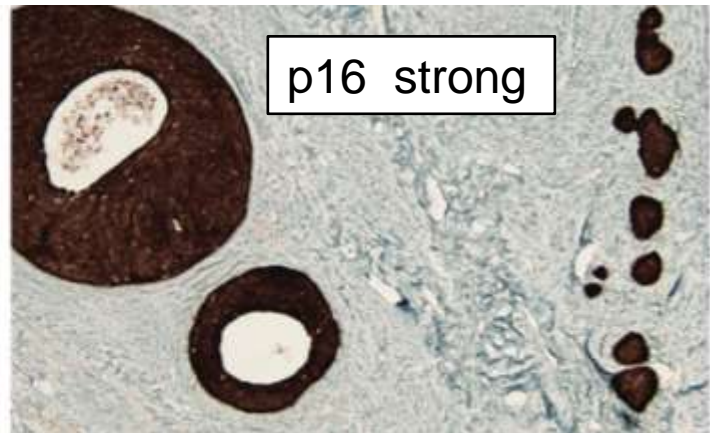
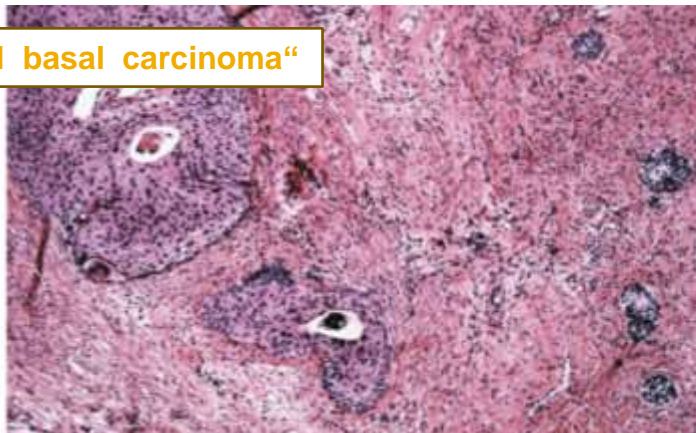
17 cases of adenoid basal tumors of the cervix

p16 immunostain was **negative** or showed **patchy** cytoplasmic staining in the **low-grade tumors**



p16 patchy

„Invasive adenoid basal carcinoma“



p16 strong

# Diferenciálna diagnóza

## Adenoid basal carcinoma / epithelioma

*Pathology, 2021 Feb;53(2):193-198*

**NKX3.1 expression in cervical 'adenoid basal cell carcinoma': another gynaecological lesion with prostatic differentiation?**

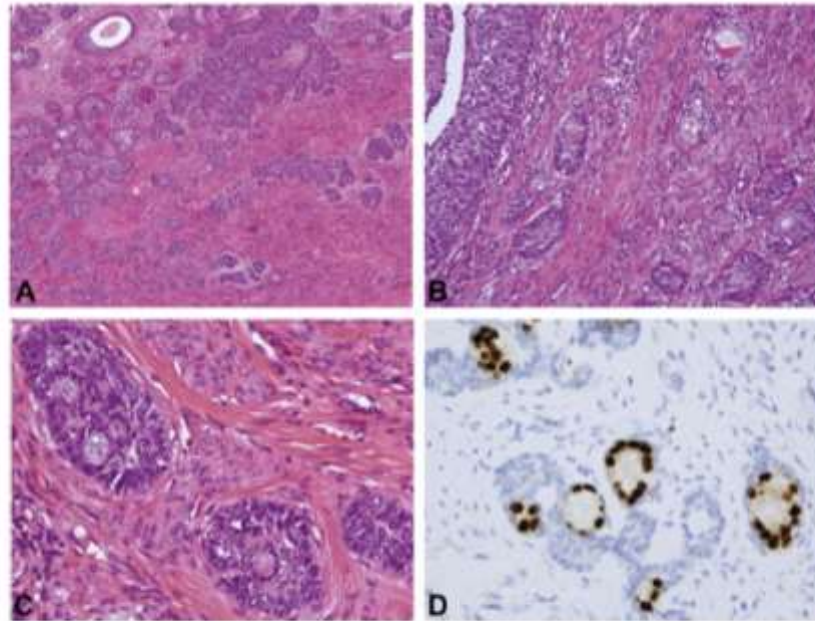
Stewart CJR <sup>1</sup>, Moses J <sup>2</sup>

recently encountered  
a case of ABC  
positive for NKX3.1  
no expression of PSA or PAP

subsequent  
review of five cervical ABCs  
all were NKX3.1 positive

some ABC may in fact  
represent a variant of  
prostatic differentiation  
within the cervix

possibly analogous to  
basal cell hyperplasia  
of the prostate



**Fig. 2** (A) HSIL (upper left) with ABC involving cervical stroma (lower). (B) Higher magnification showing HSIL involving an endocervical crypt (left) with adjacent small basaloid nests and tubules of ABC (right). Some tubules show eosinophilic luminal secretion. (C) Occasional small cribriform spaces are present surrounding mucinous or hyaline material. (D) Immunohistochemistry for NKX3.1 highlights the luminal cells.

<sup>1</sup> Department of Pathology, King Edward Memorial Hospital, Perth, WA, Australia; School of Women's and Infants' Health, University of Western Australia, WA, Australia

<sup>2</sup> LabPlus, Auckland City Hospital, Auckland, New Zealand



# Diferenciálna diagnóza

## Mixed adenoid basal / (basaloid) squamous carcinoma

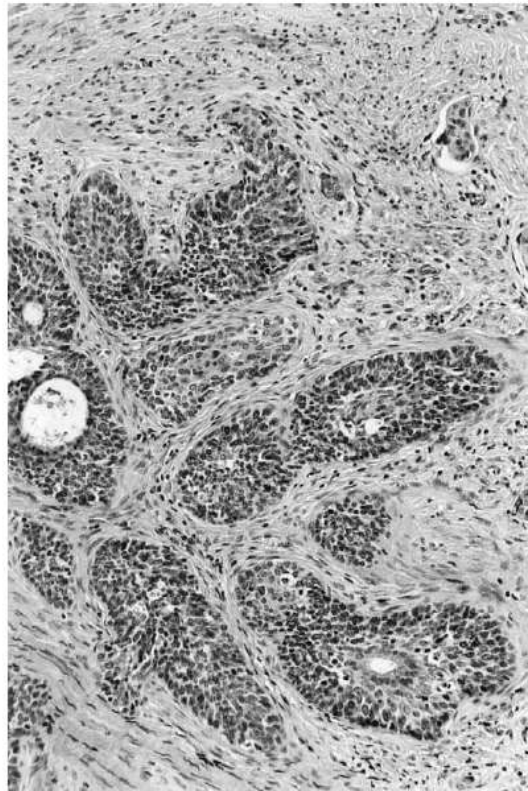
Cervical adenoid basal tumors comprised of adenoid basal epithelioma associated with various types of invasive carcinoma:

Clinicopathologic features,  
human papillomavirus DNA  
detection, and P16 expression

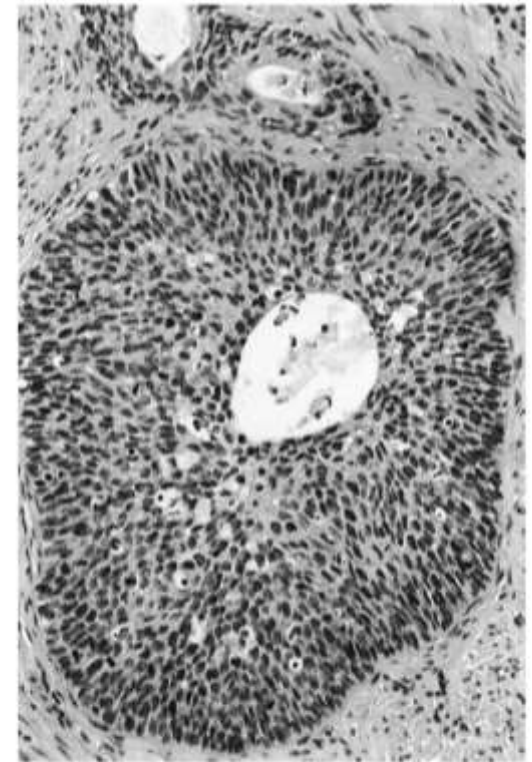
Parwani AV  
Smith Sehdev AE  
Kurman RJ, et al.

Department of Pathology,  
The Johns Hopkins University School  
of Medicine and Hospital, Baltimore,  
MD 21231, USA

*Human Pathology (2005) 36, 82–90*



**Fig. 4** Invasive adenoid basal carcinoma. This deeply invasive tumor displays predominantly basaloid and focal glandular differentiation. A focus of tumor is present within a lymphatic space (upper right).

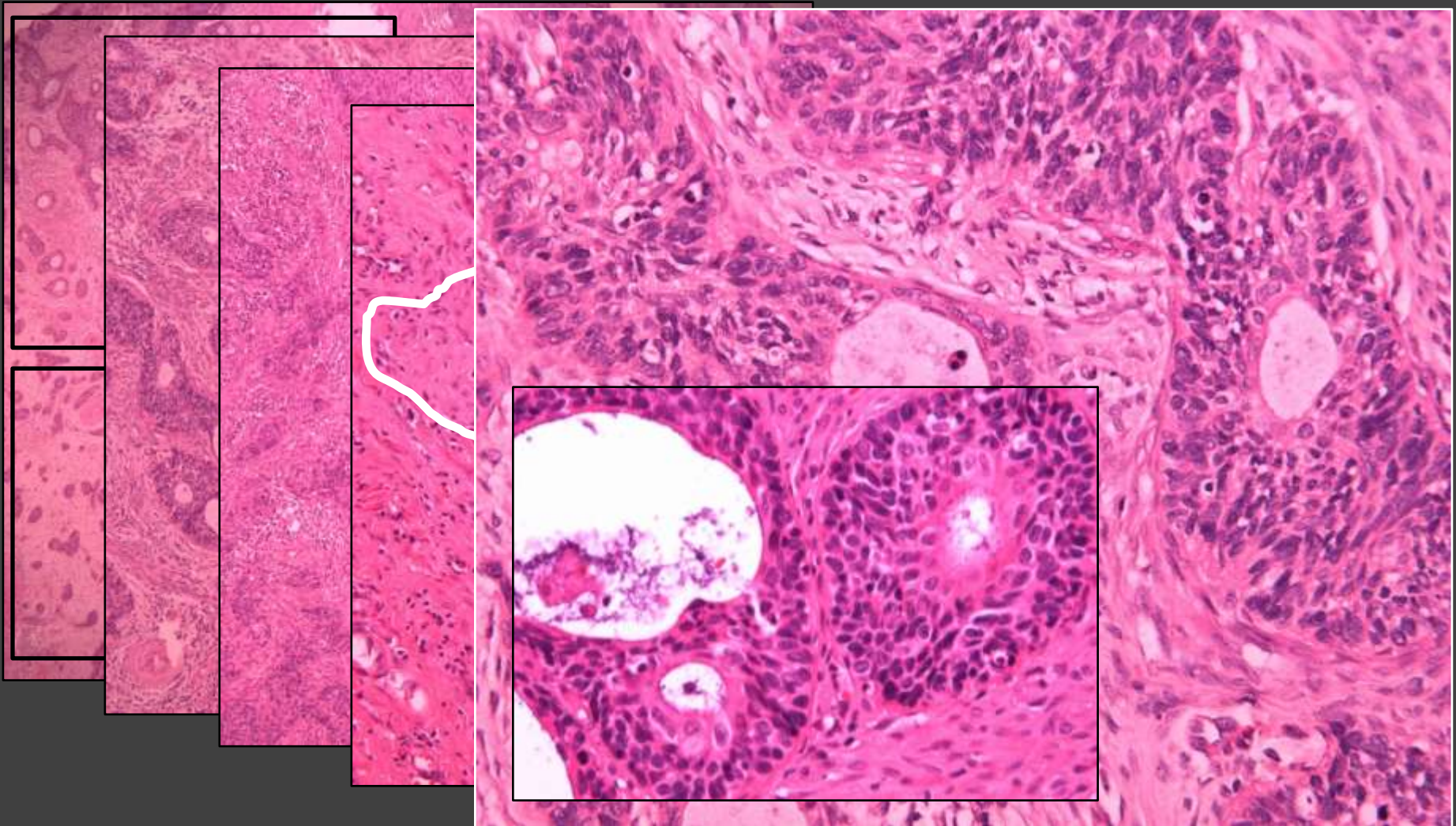


**Fig. 5** Invasive adenoid basal/squamous carcinoma. Basaloid differentiation in the carcinoma is characterized by cells with scanty cytoplasm and peripheral palisading. The smaller nest of tumor at the top displays glandular ("adenoid") differentiation. There is nuclear atypia, and numerous mitotic figures are evident.



# Diferenciálna diagnóza

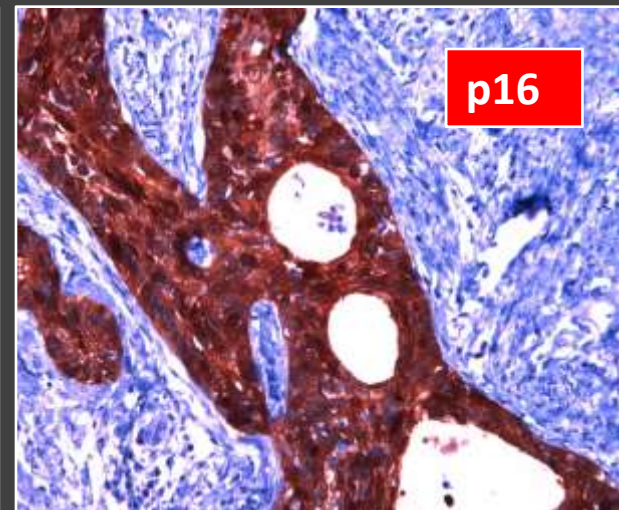
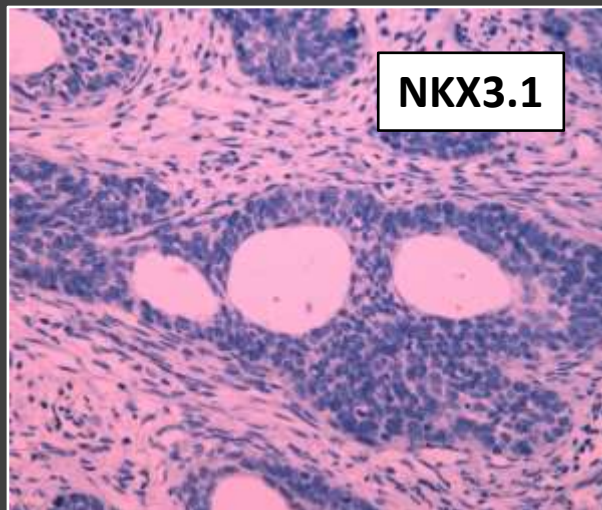
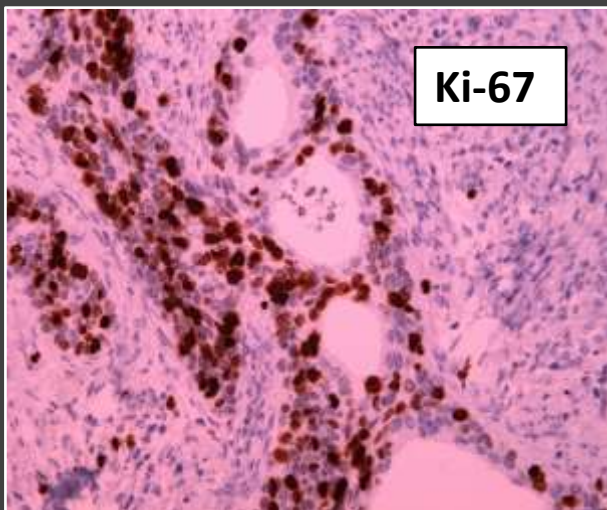
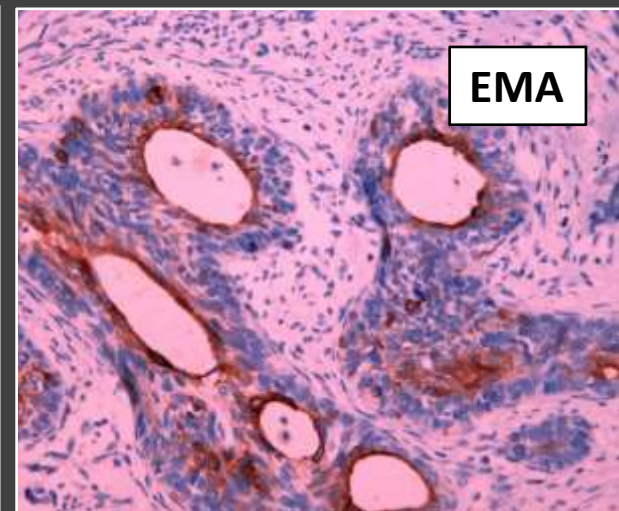
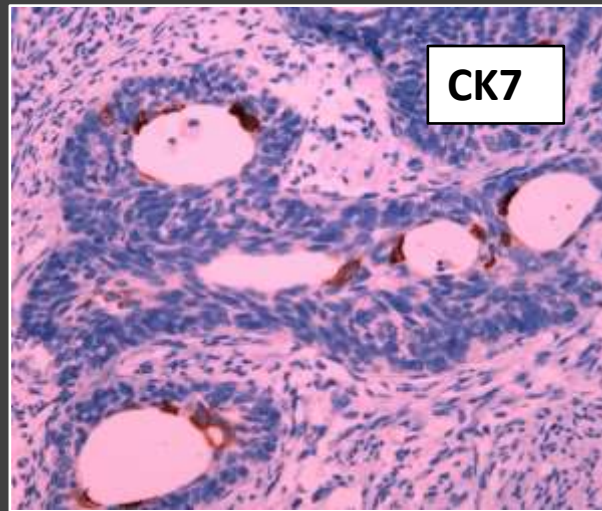
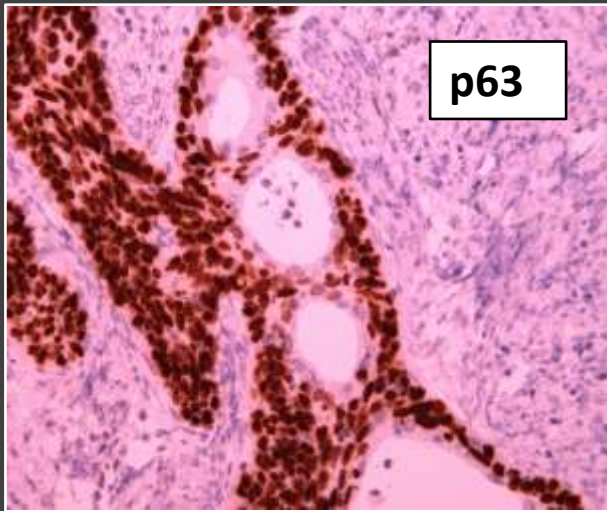
Mixed adenoid basal / (basaloid) squamous carcinoma





# Diferenciálna diagnóza

Mixed adenoid basal / (basaloid) squamous carcinoma





# Diferenciálna diagnóza

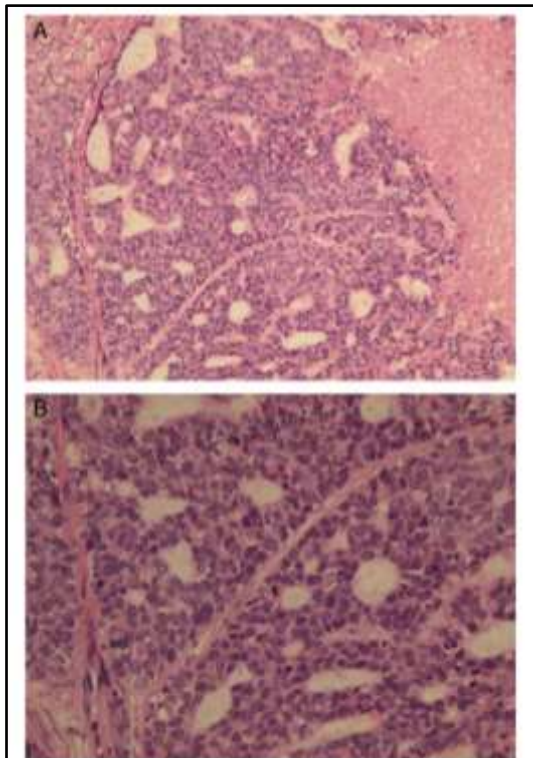
## Adenoid cystic carcinoma (WHO 2014)

*Int J Gynecol Pathol, 2012 Jan;31(1):25-32*

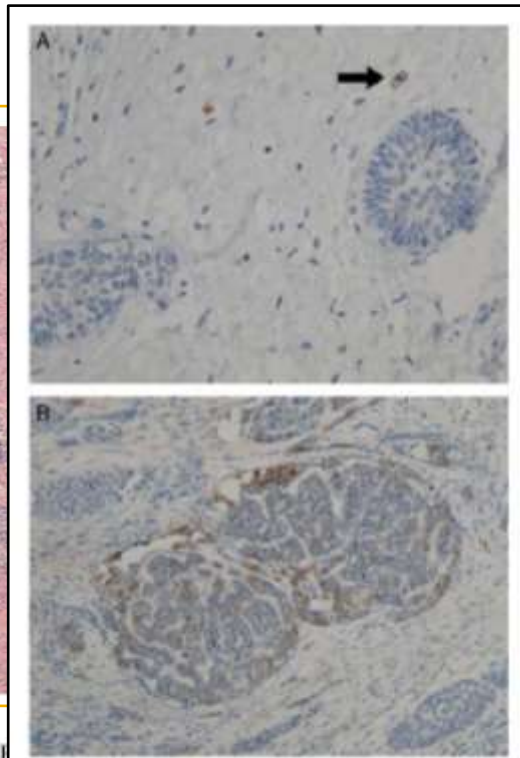
**Adenoid basal carcinoma of the uterine cervix: clinicopathologic features of 12 cases with reference to CD117 expression**

Chen TD, Chuang HCh, Lee Ly

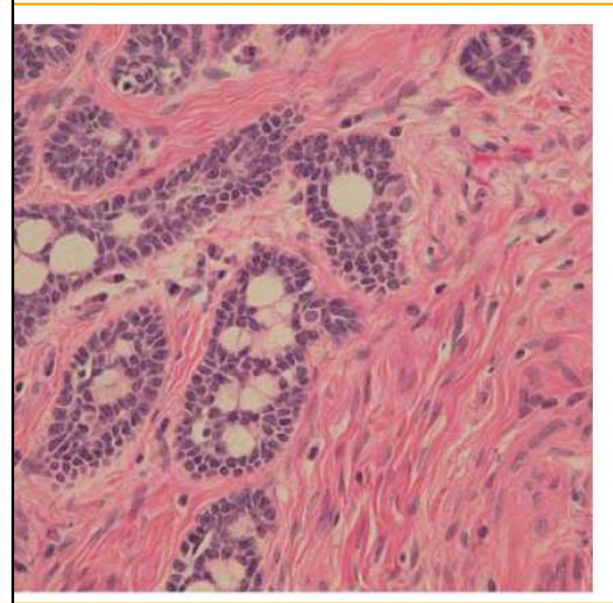
Department of Pathology, Chang Gung Memorial Hospital, Guishan Township, Taoyuan County, Taiwan



**FIG. 2.** Adenoid cystic carcinoma (ACC) of the uterine cervix, hematoxylin and eosin. (A) ACC arranged in sheet, trabecular, or cribriform patterns with extended necrosis (magnification: 200 ×). (B) Pleomorphic tumor cells with elevated mitotic rate and nuclear-to-cytoplasmic ratio (magnification: 400 ×).



**FIG. 3.** CD117 immunohistochemistry of adenoid basal carcinoma (ABC) and adenoid cystic carcinoma. (A) Negative expression in ABC. Mast cells represent the internal positive control (arrow, magnification: 400 ×). (B) Focal positivity (+) of CD117 in adenoid cystic carcinoma (magnification: 200 ×).

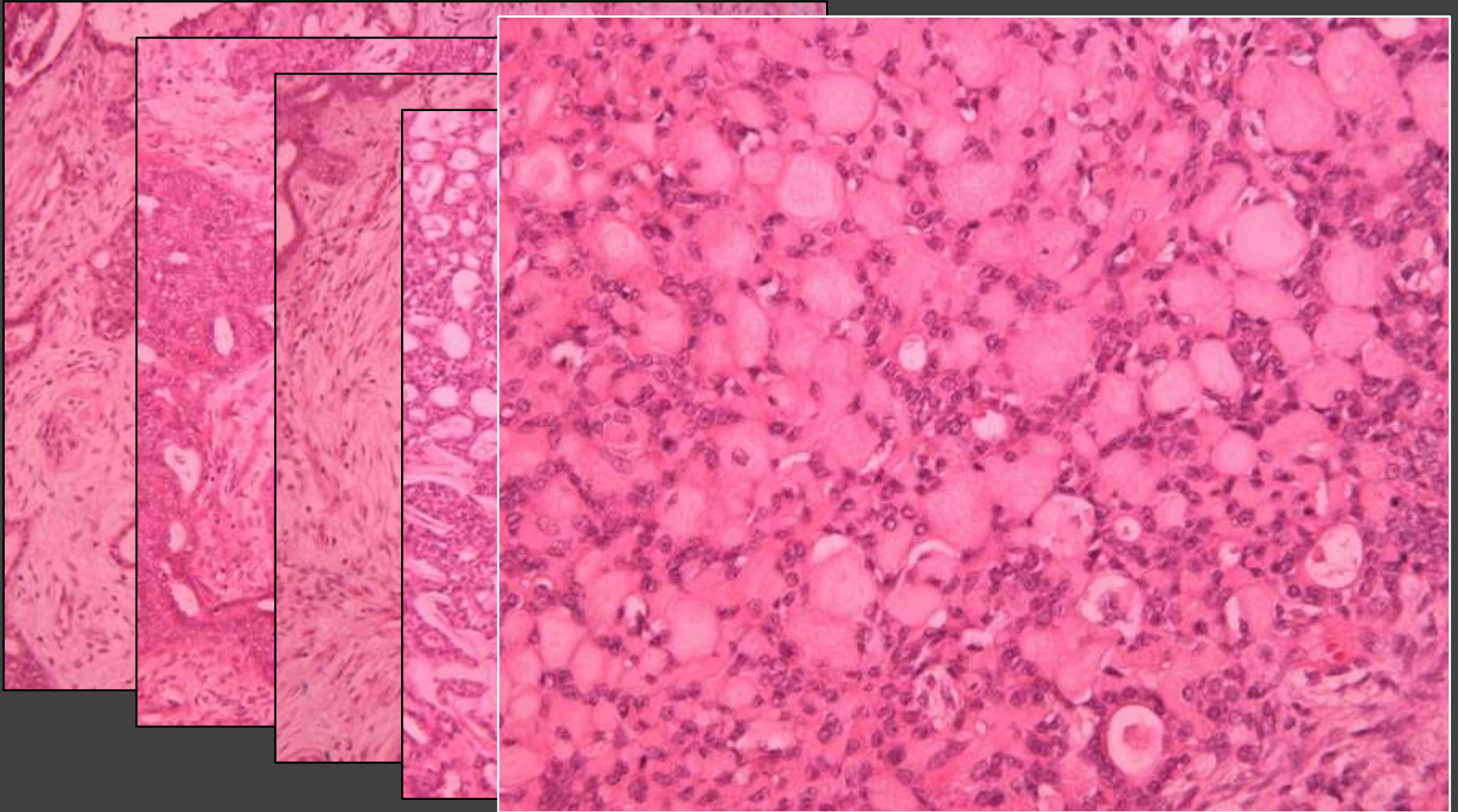


**(A)** Typical ABC composed of multiple small, round-bulbar pattern (magnification: 100 ×). **(B)** ABC with squamous metaplasia (magnification: 200 ×).

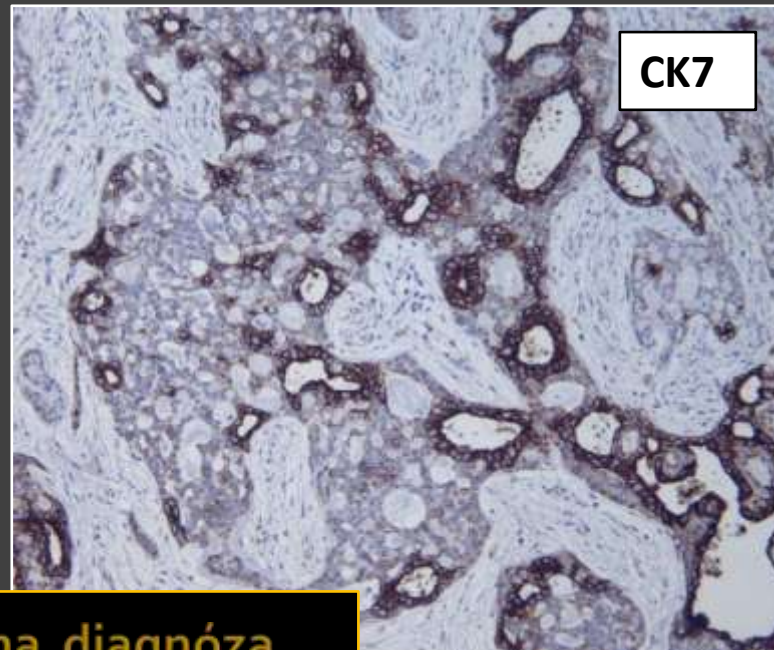
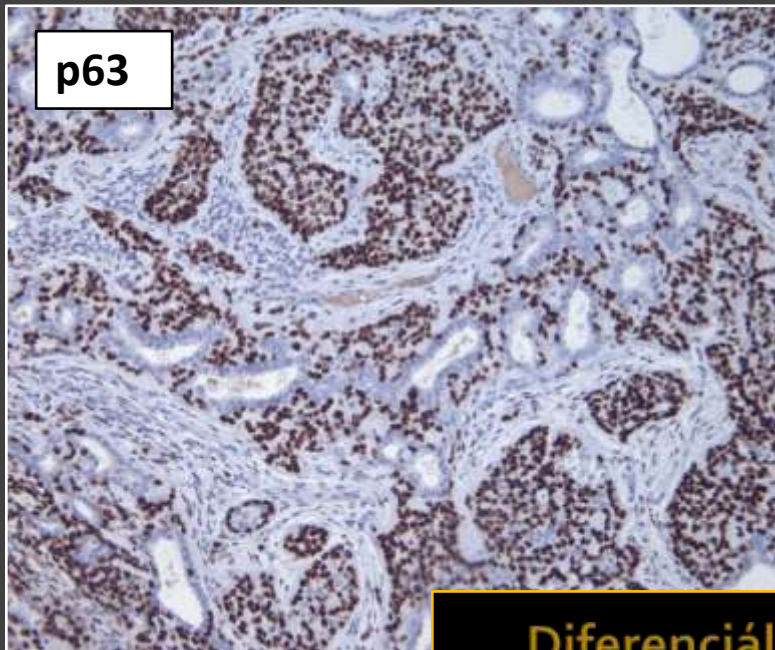


# Diferenciálna diagnóza

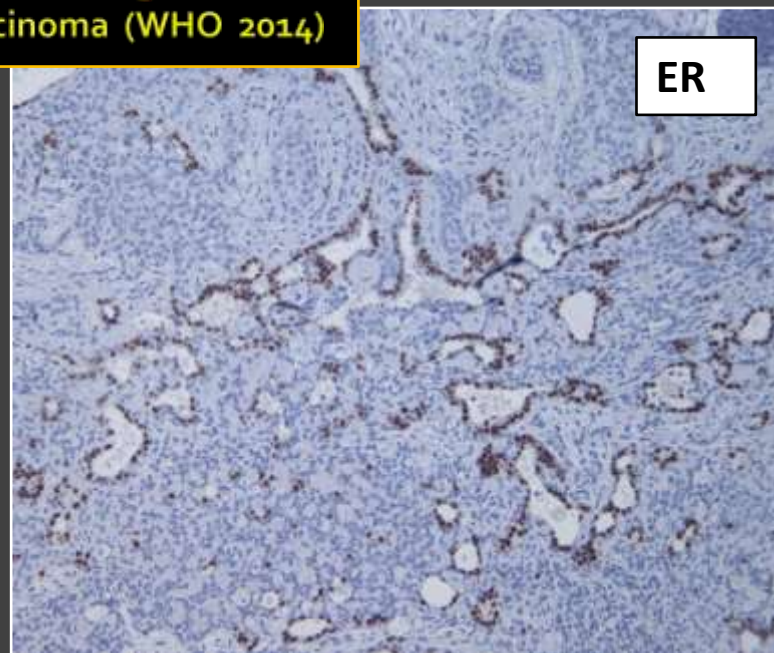
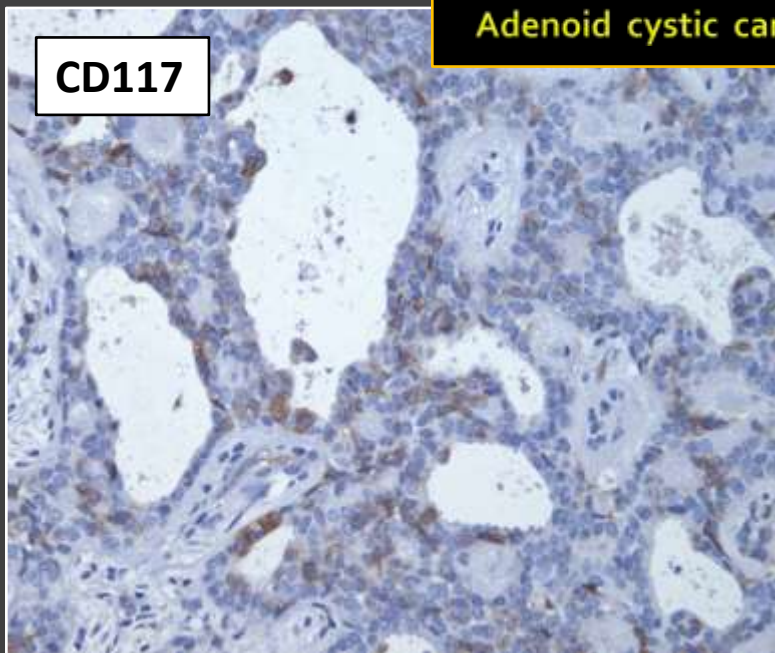
## Adenoid cystic carcinoma (WHO 2014)







**Diferenciálna diagnóza**  
**Adenoid cystic carcinoma (WHO 2014)**







**ĎAKUJEM ZA POZORNOST**

