



**BORDERLINE SERÖZ TÜMÖRLER**  
**MİKROPAPİLLER**  
**BORDERLINE TÜMÖR; NONİNVAZİF**  
**DÜŞÜK DERECELİ SERÖZ KARSİNOM**  
**ve**  
**MİKROİNVAZYON KAVRAMI**

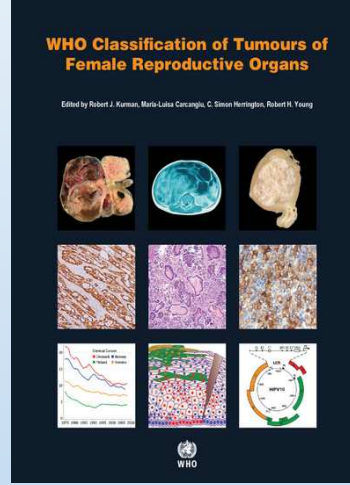
*Dr Funda Eren*

*Marmara Üniversitesi Tıp Fakültesi Patoloji ABD*

*Ulusal Patoloji Kongresi*

*Bursa, 14-10-2015*

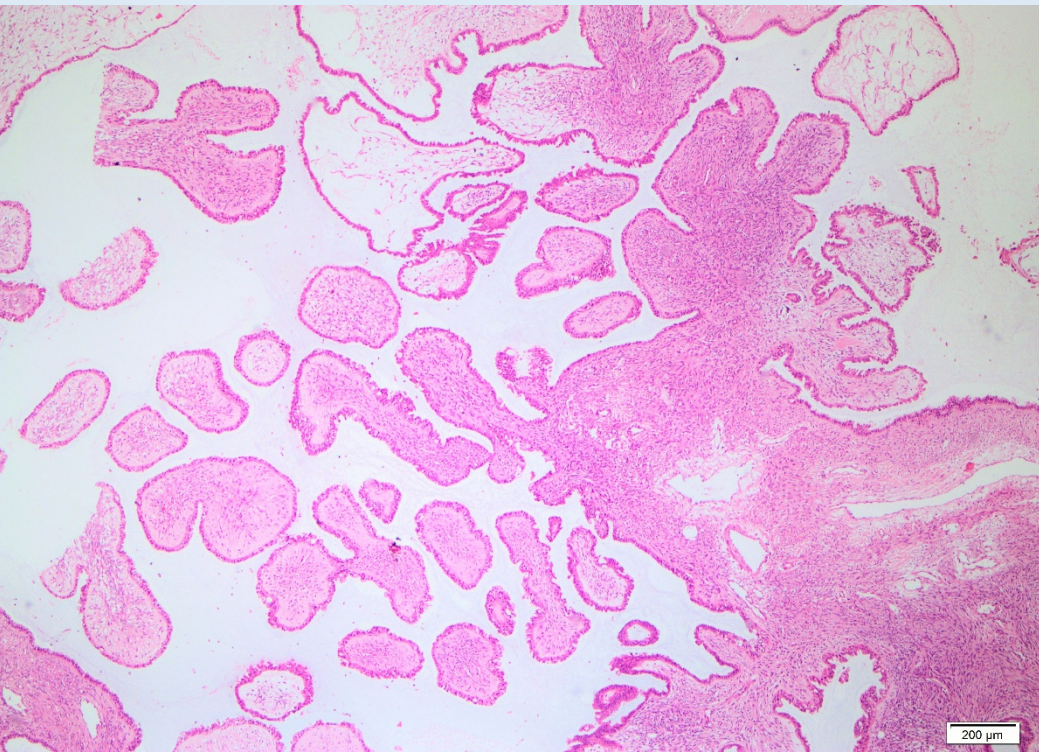
# SERÖZ BORDERLINE TÜMÖR/ATİPİK PROLİFERATİF SERÖZ TÜMÖR (DSÖ 2014)



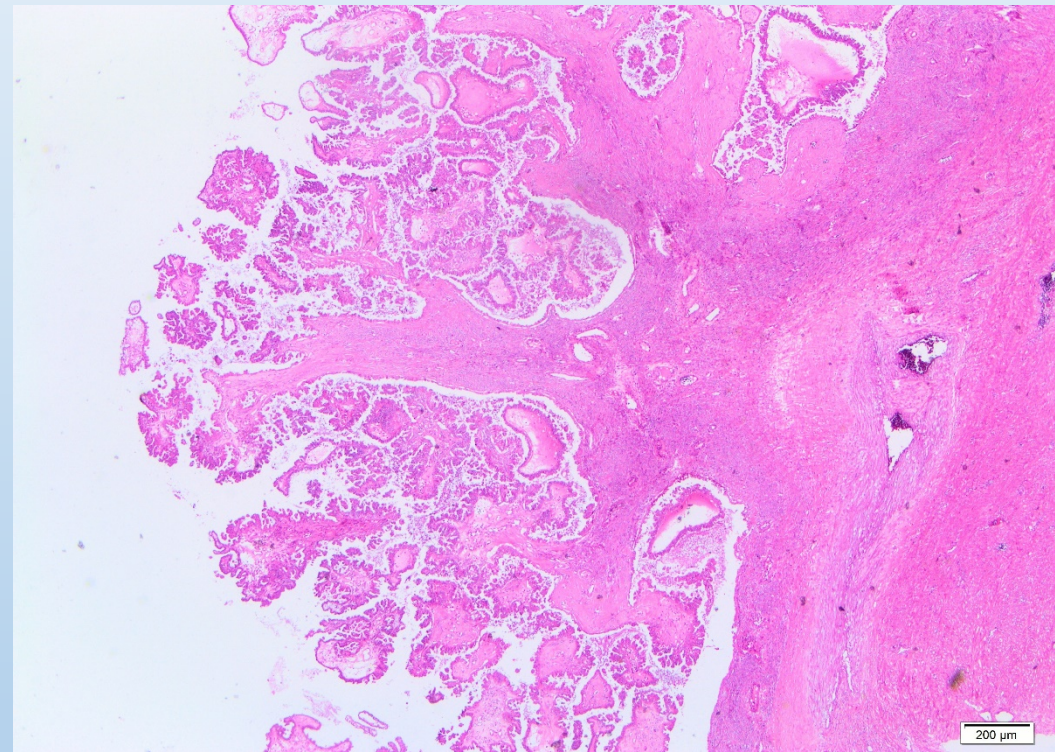
- Benign seröz tümörden daha fazla ama düşük dereceli seröz karsinomdan daha az proliferasyon ve atipi gösteren tümörler

# SERÖZ BORDERLINE TÜMÖR/ ATİPİK PROLİFERATİF SERÖZ TÜMÖR

<b>Sıklık</b>	<b>%10-15, tüm seröz tümörler</b>
<b>Yaş</b>	<b>Ort. 40</b>
<b>Tedavi</b>	<b>Konservatif cerrahi/TAH BSO</b>
<b>Prognoz</b>	<b>Evre 1: %100 Evre 2-4: % 95-89</b>



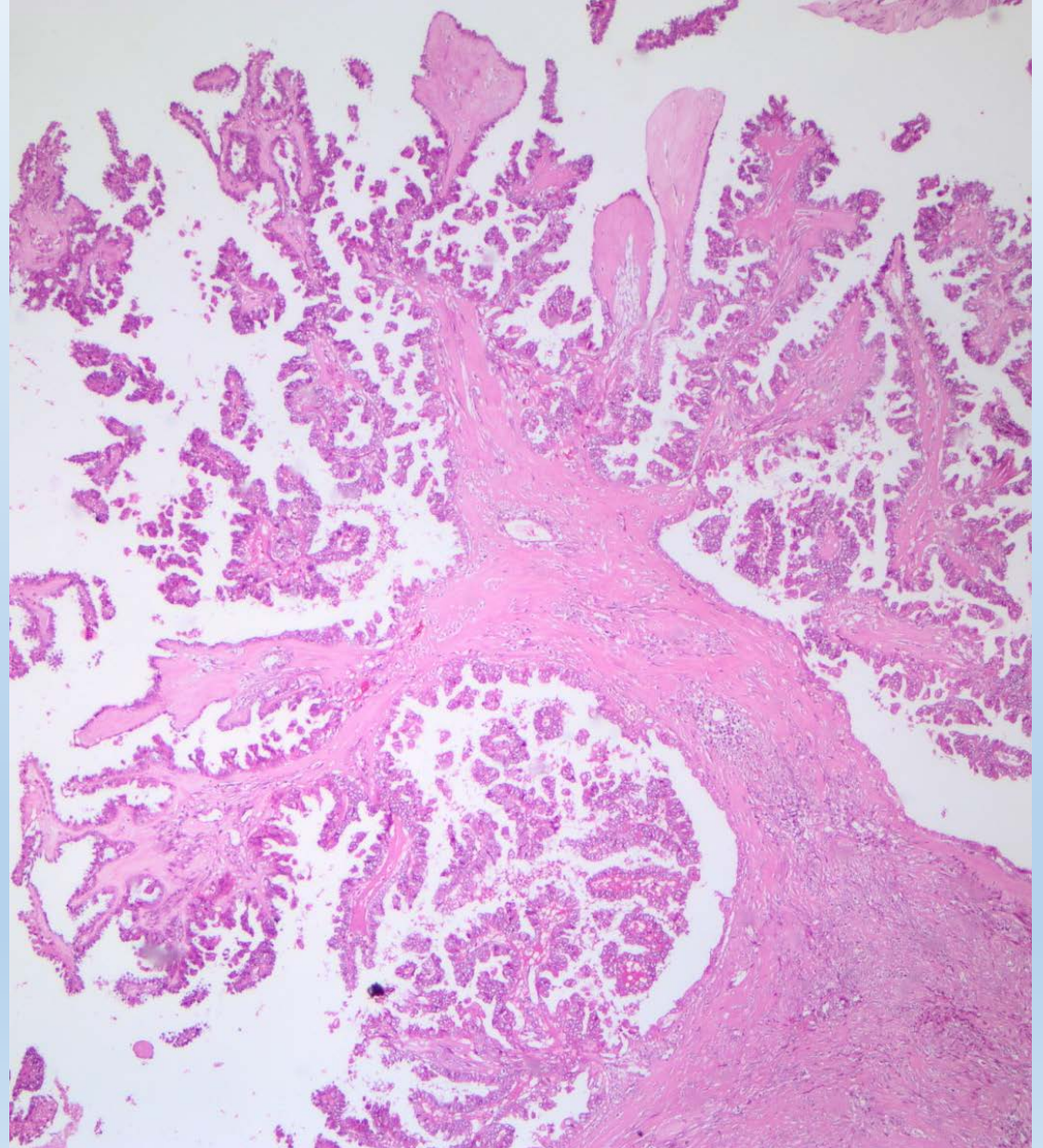
SERÖZ KİSTADENOM



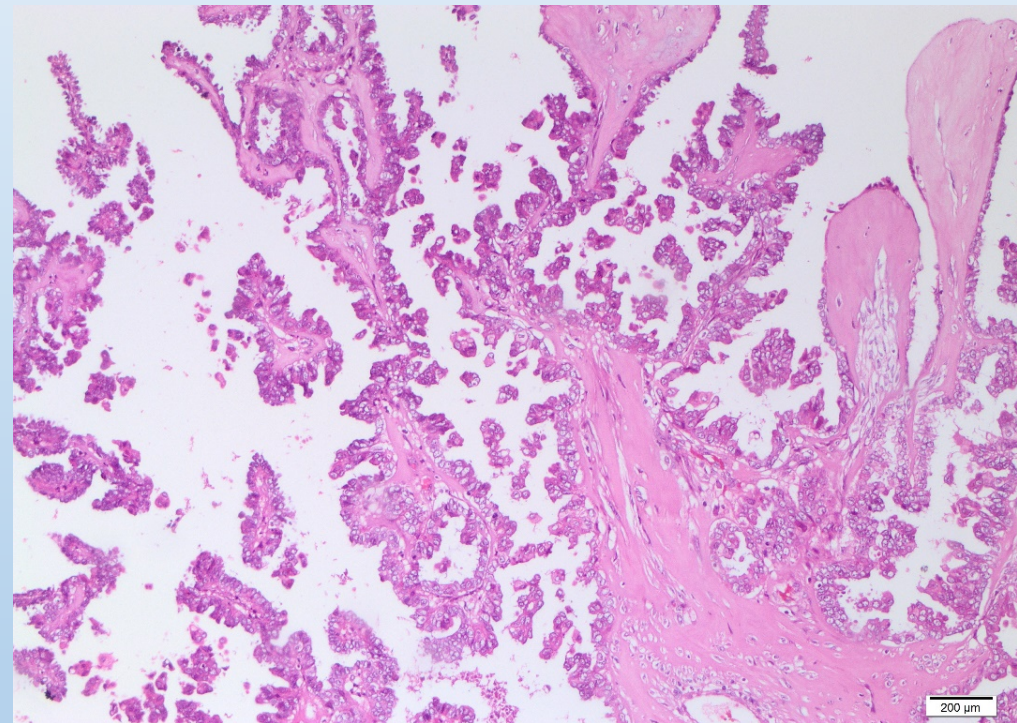
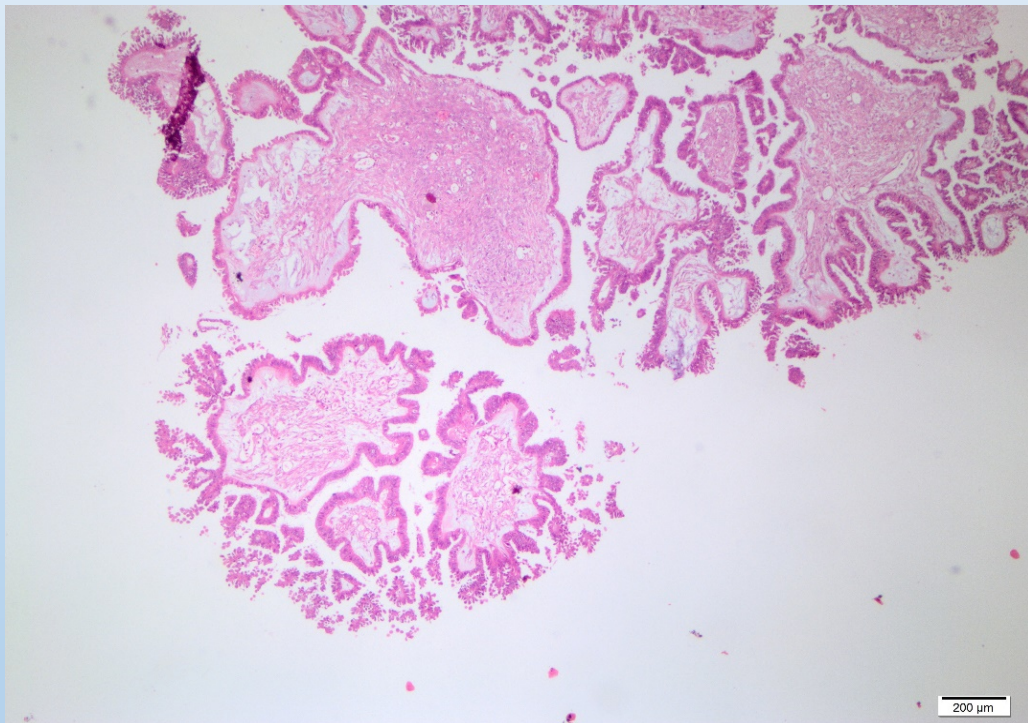
SEROZ BORDERLINE

# Mikroskopi

- Hiyerarşik dallanma,
- Kopmuş küçük tomurcuklar



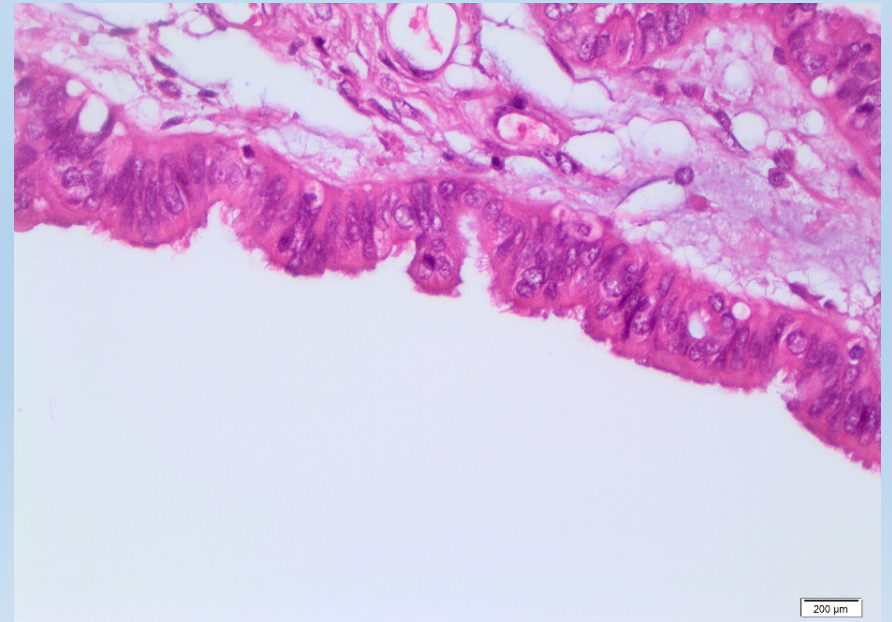
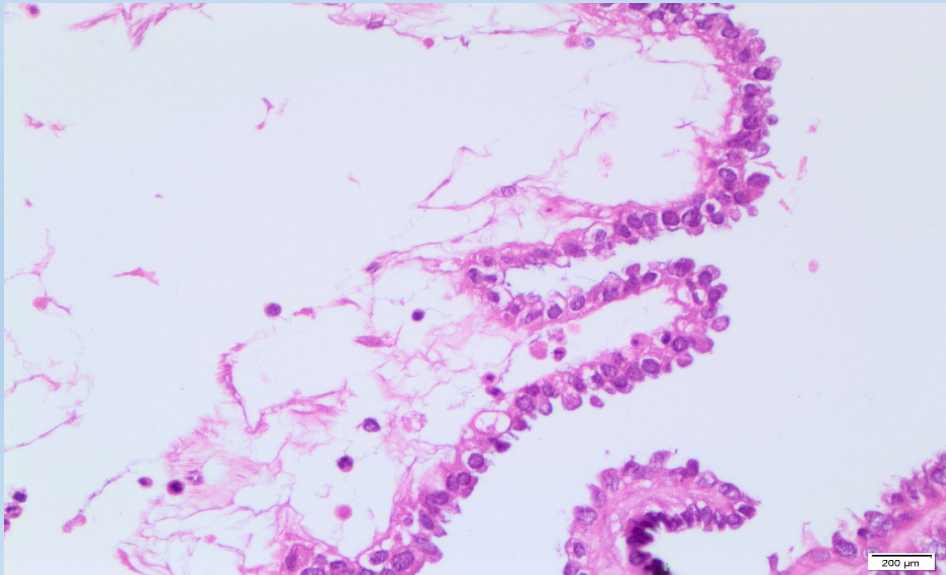
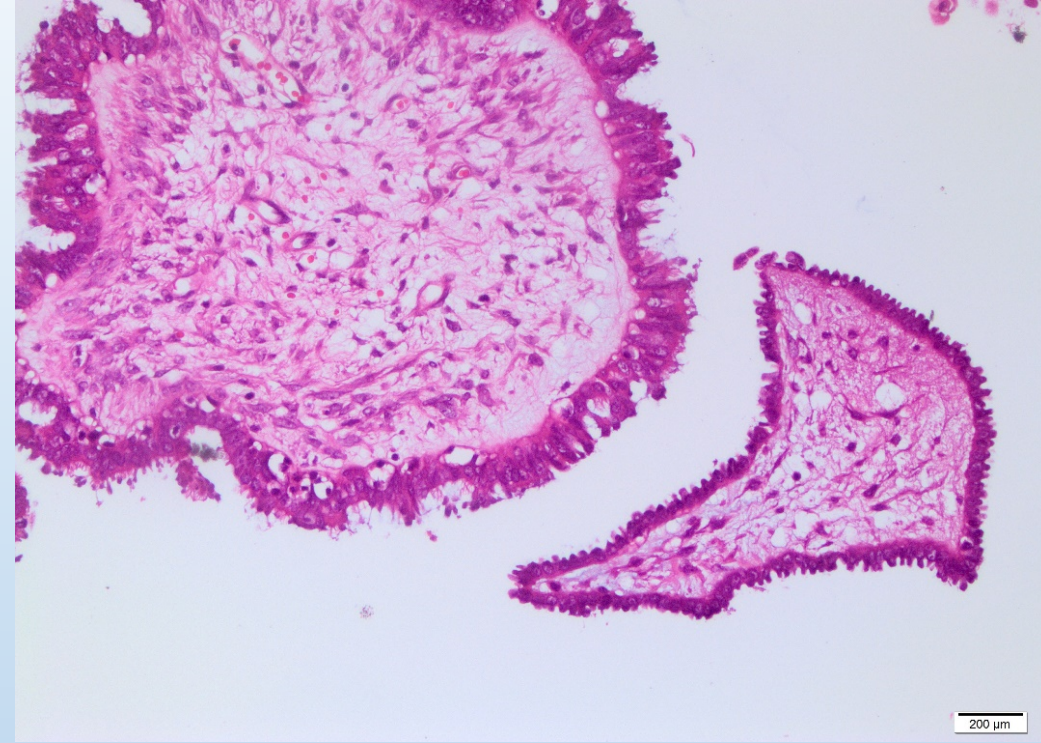
# Mikroskopi



# Mikroskopi

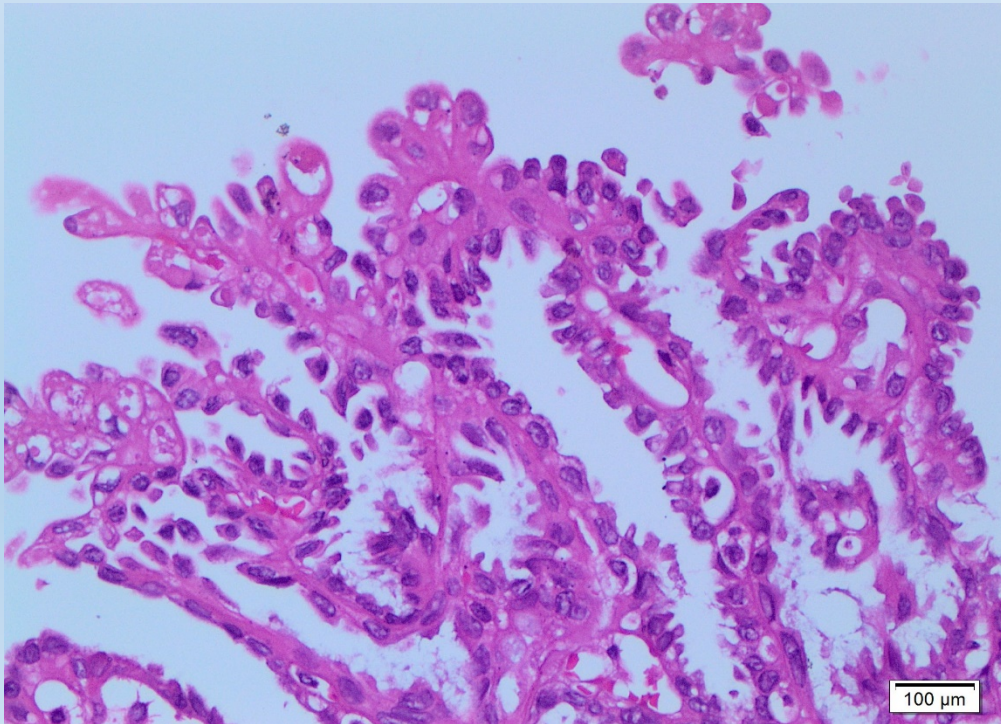
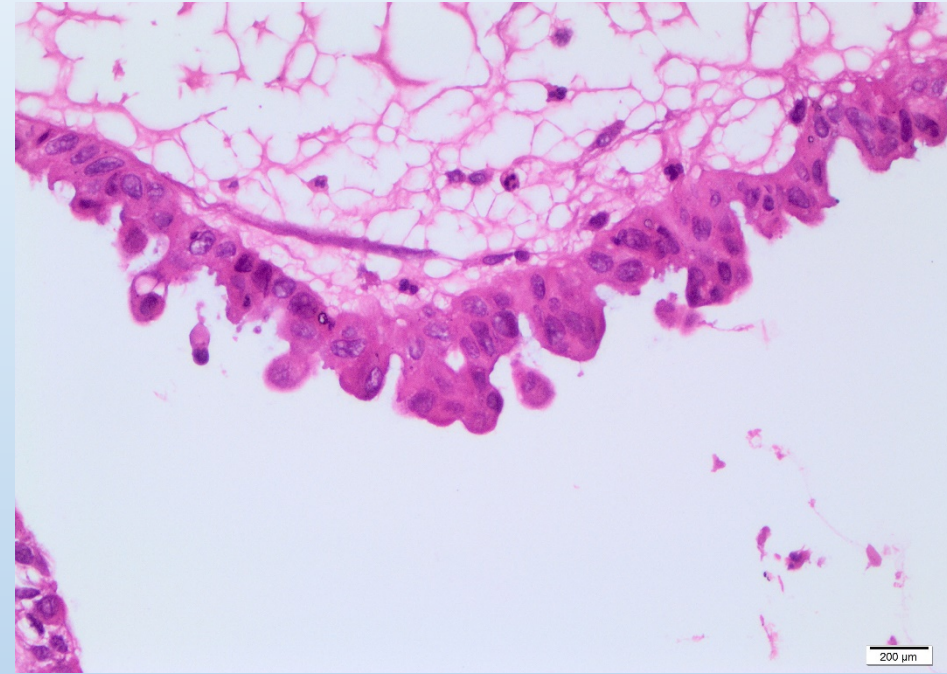
- Stratifiye/nonstratifiye
- Kübik/kolumnar hücreler

\*Hemen her zaman silyalı

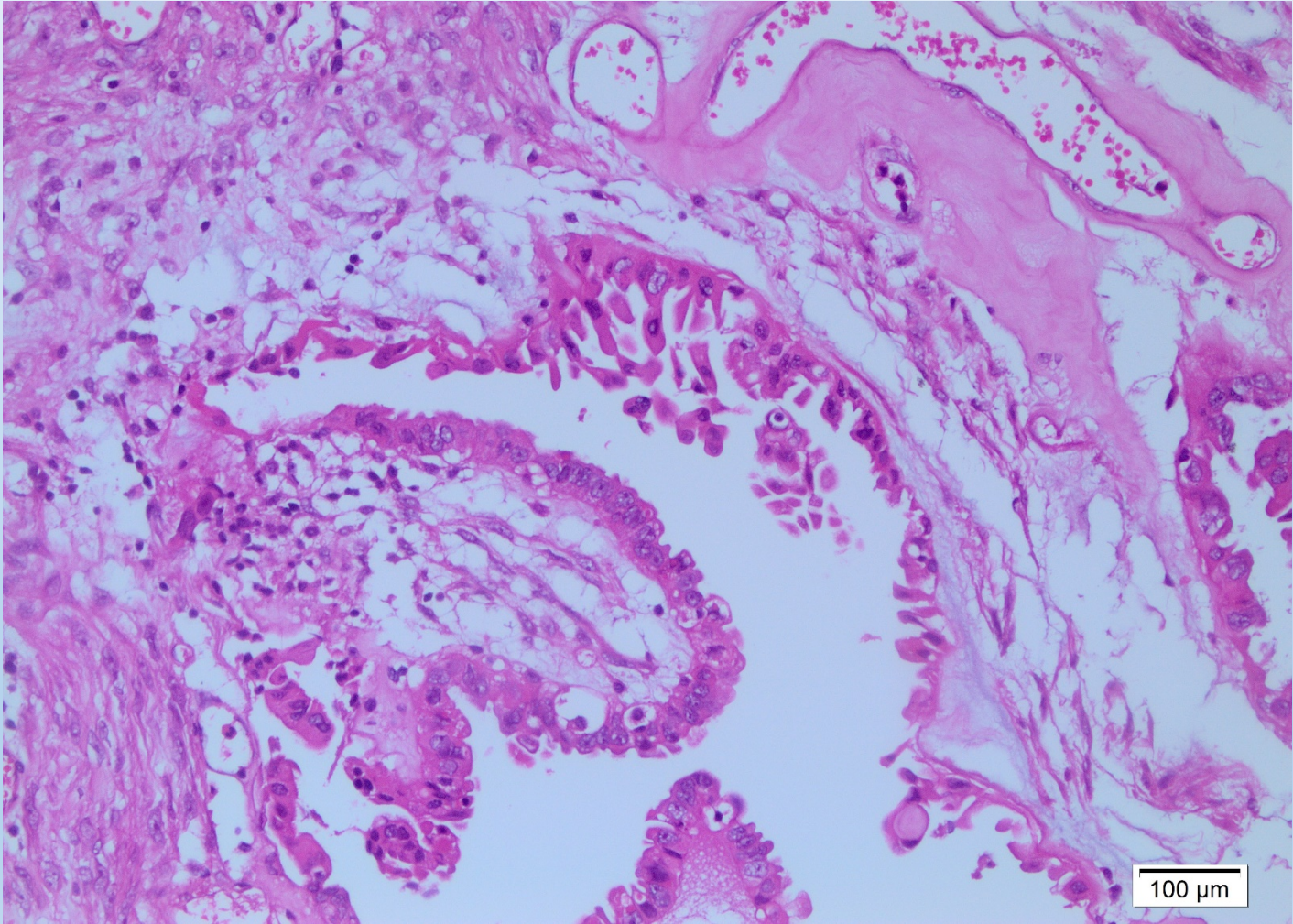


# Mikroskopi

- Kabara ivisi/poligonal
- Eosinofilik sitoplazma, belirgin nukleol

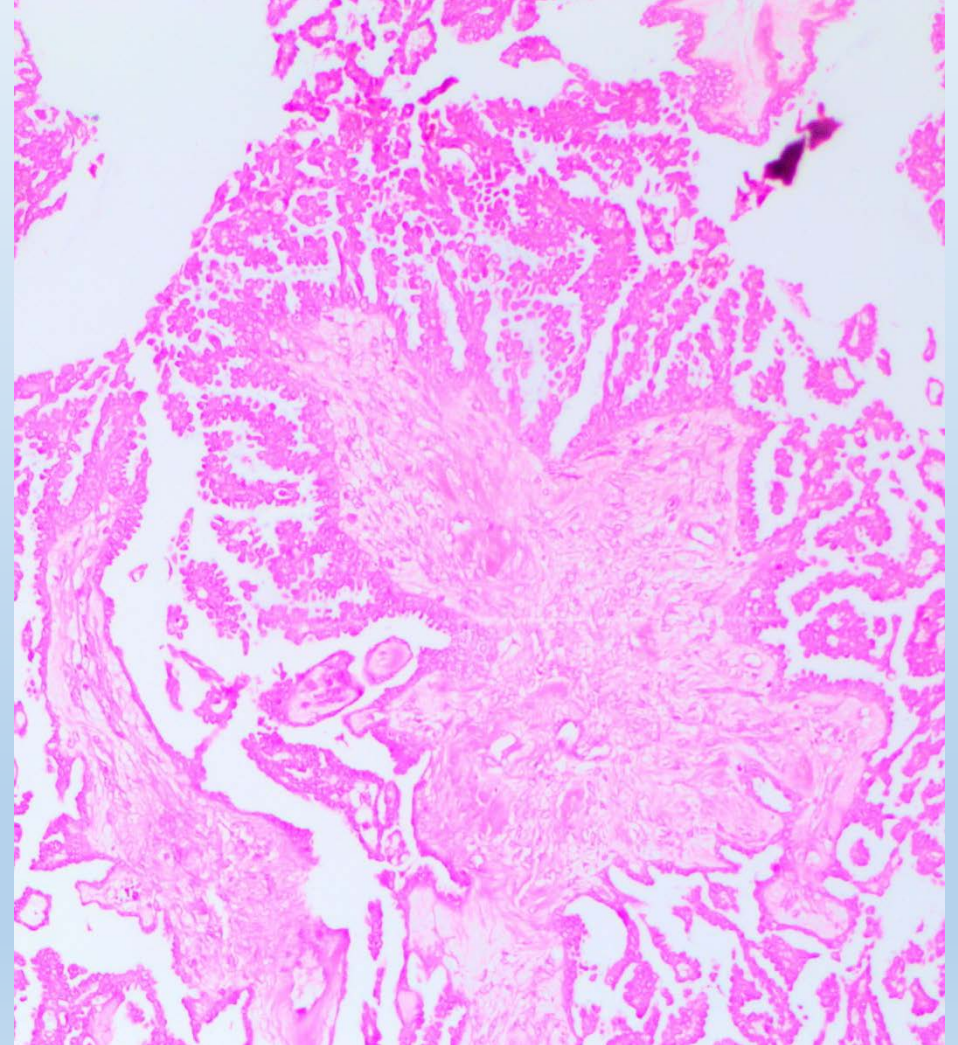
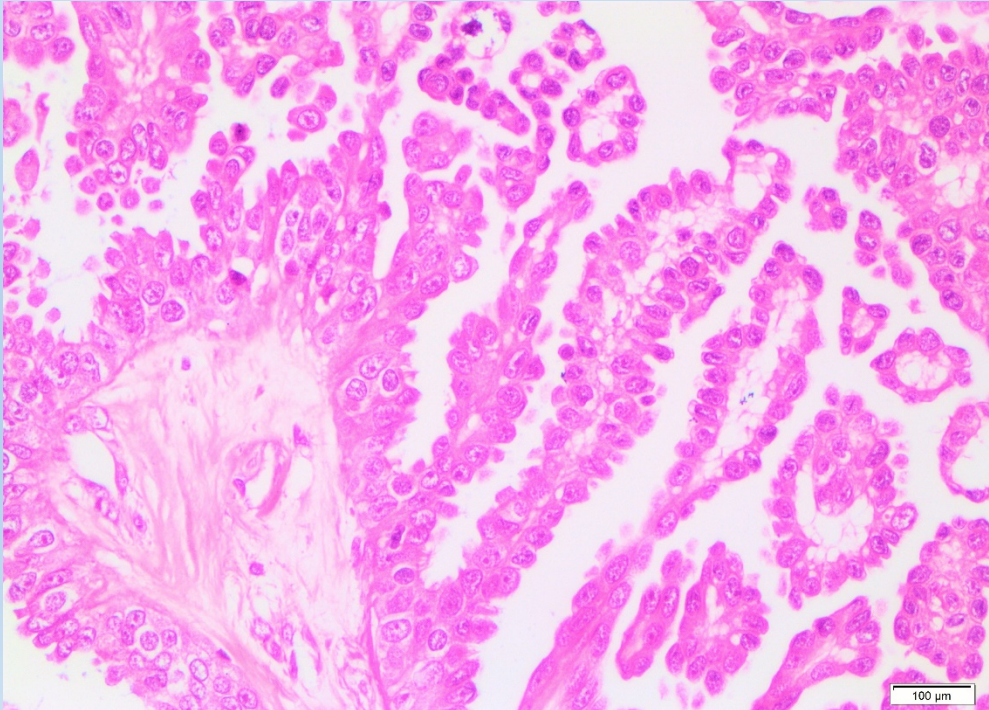




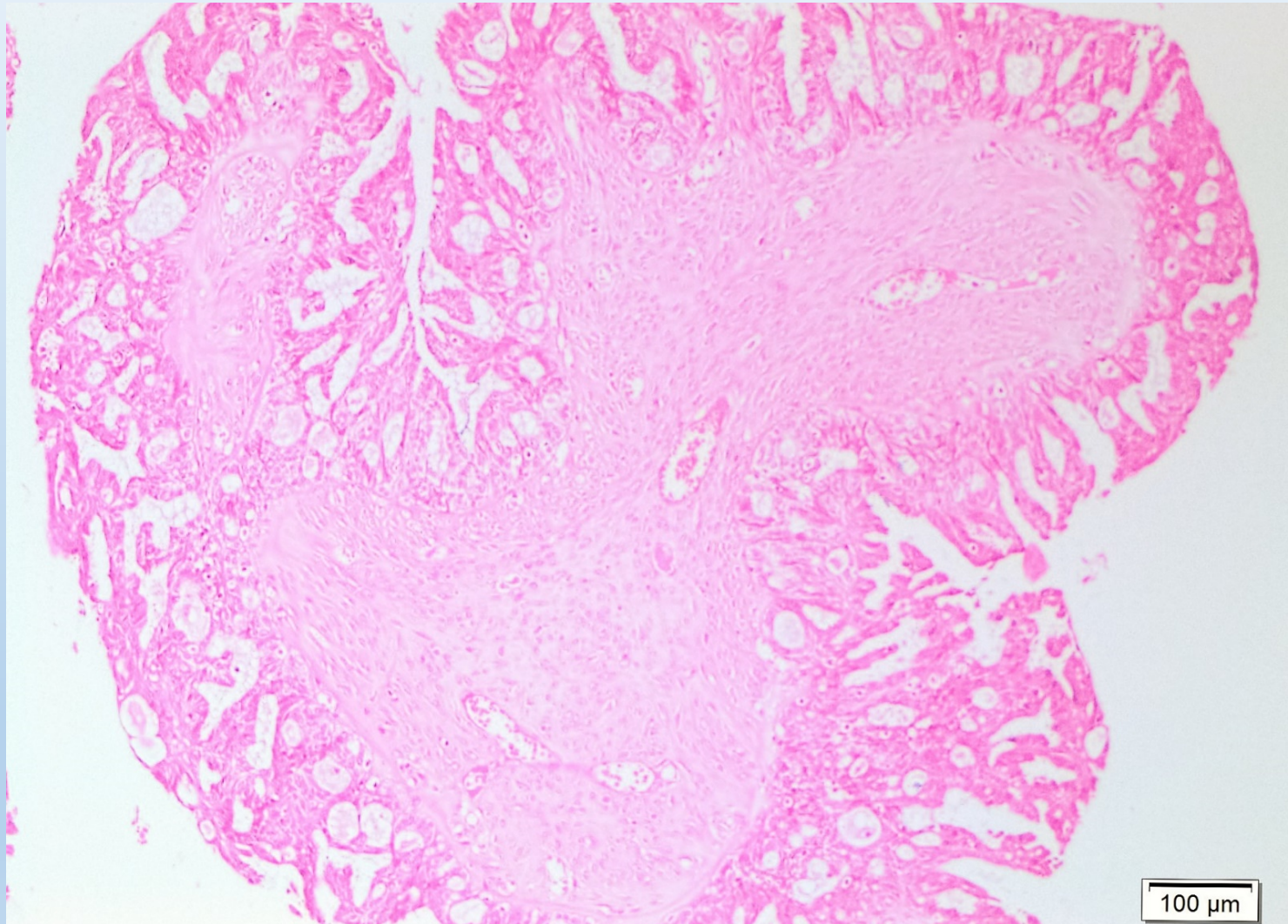


# Mikropapiller/Kribriform Morfoloji

- Hiyerarşik olmayan dallanma
- Mikropapiller/kribriform pattern
  - \*Uzunluđu geniřliđinden ~5 kat fazla
  - \*Stroması çok ince ya da yok



# Mikropapiller/Kribriform Morfoloji

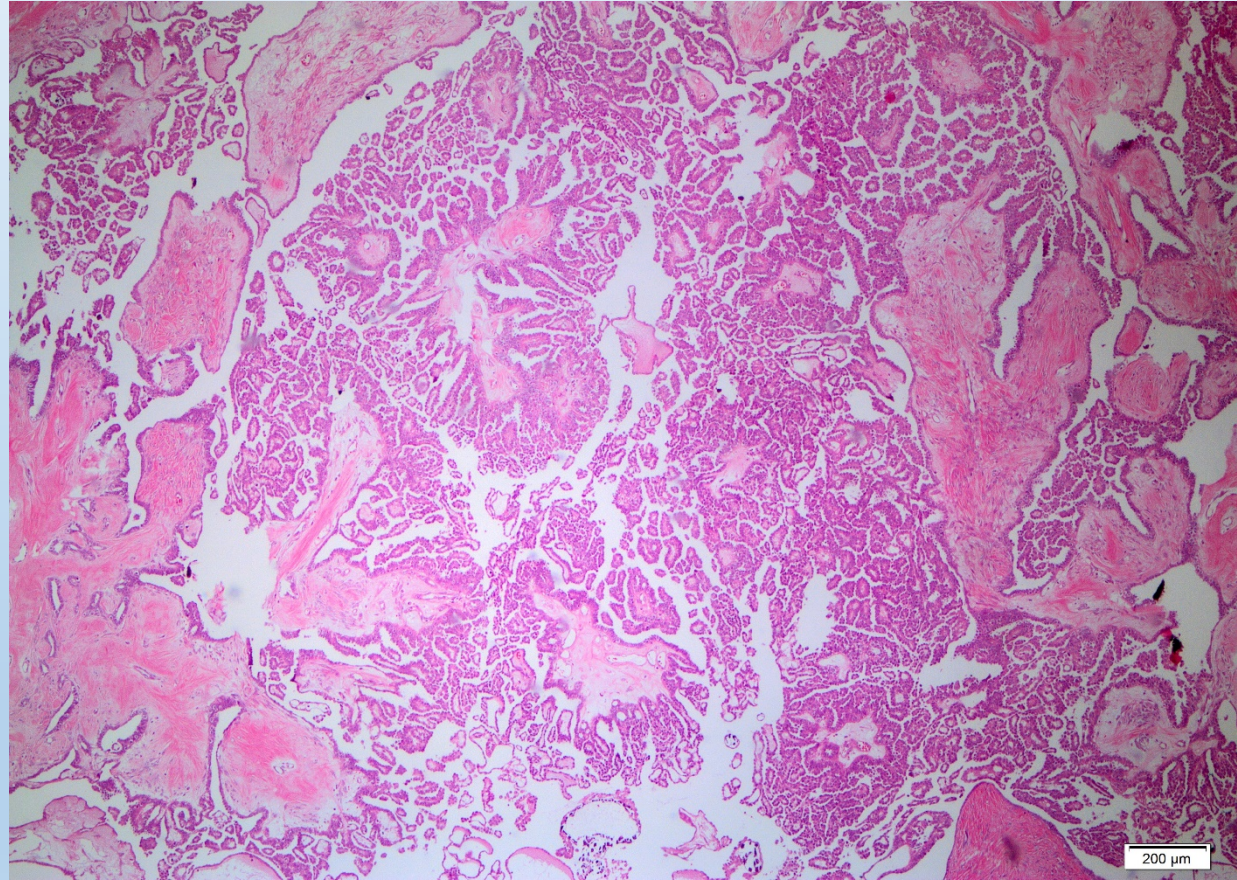


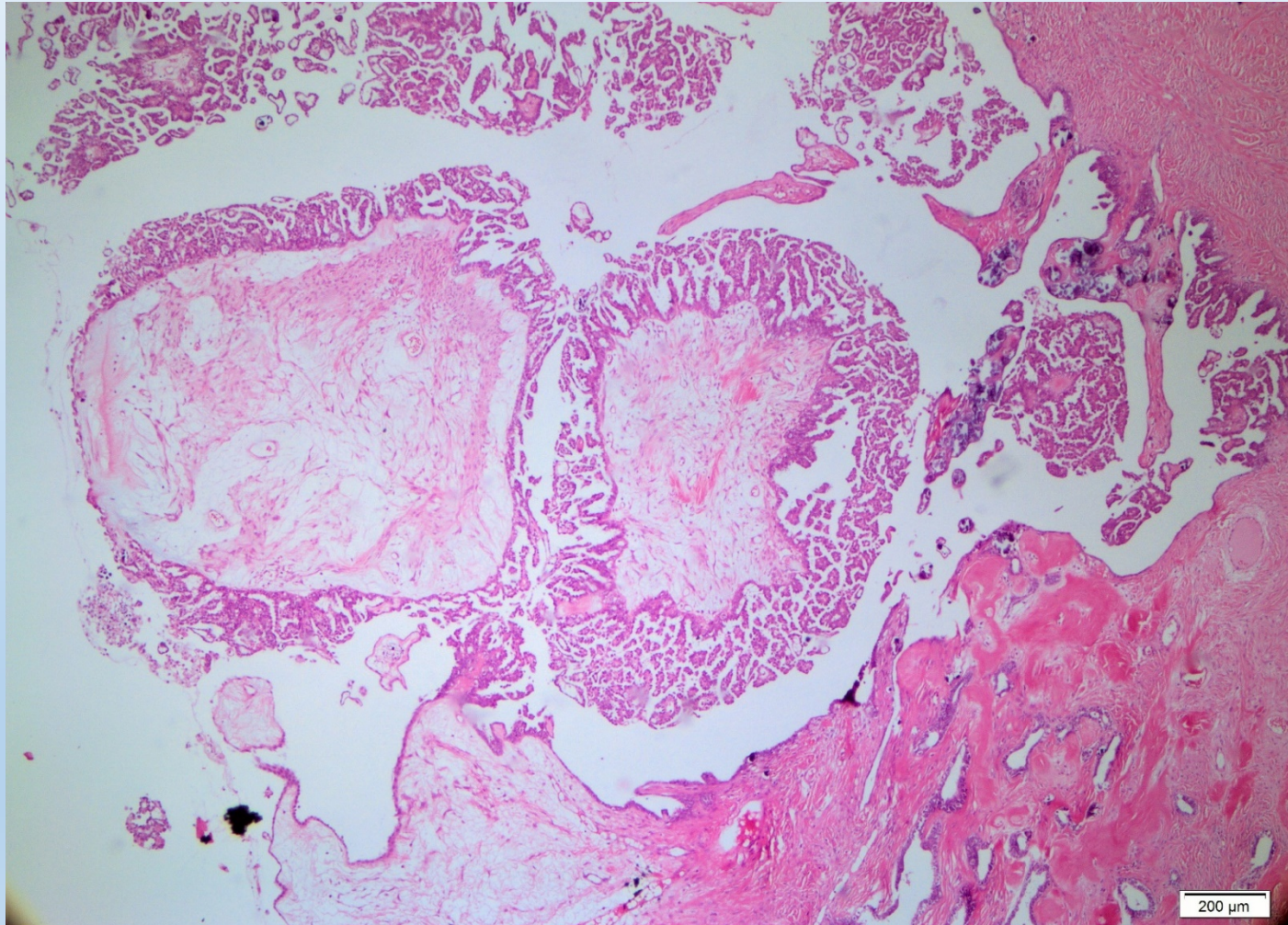
- *Micropapillary Serous Carcinoma of the Ovary: A Distinctive Low-grade Carcinoma Related to Serous Borderline Tumors*
- Burks, R. Tucker M.D.; Sherman, Mark E. M.D.; Kurman, Robert J. M.D. Am J Surg Pathol: 20(11), November 1996, pp 1319-1330
- *Subclassification of Serous Borderline Tumors of the Ovary into Benign Malignant Types: A Clinicopathologic Study of 65 Advanced Stage Cases*
- Seidman, Jeffrey D. M.D.; Kurman, Robert J. M.D.
- AmJ Surg Pathol: 20(11), November 1996, pp 1331-1345

# Seröz Borderline Tümör Mikropapiller Varyant / Noninvaziv Düşük Dereceli Seröz Karsinom (WHO 2014)

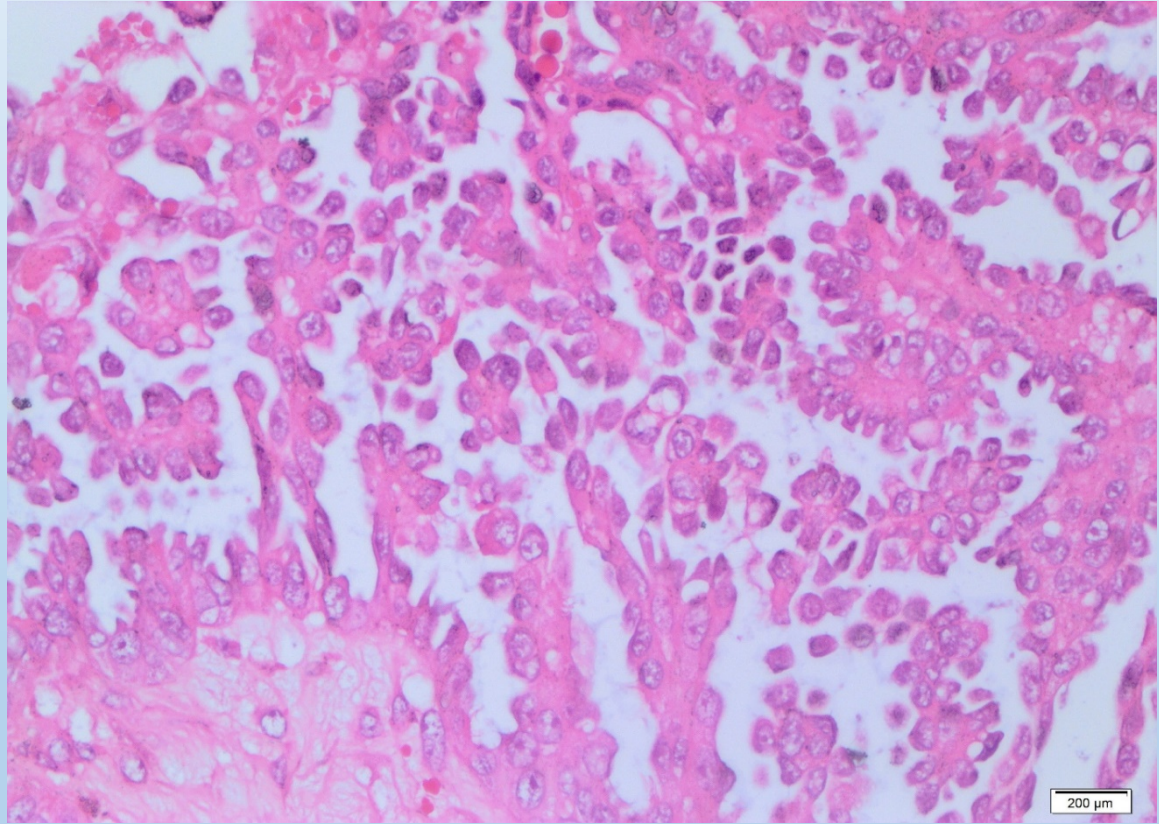
- Mikropapiller patern > 5mm  
+
- Borderline tümörde görülenden daha fazla atipi

\*%5-10





- Kübik/poligonal N/S oran yüksek
- Eosinofilik nukleol
- Silya yok



**Seröz Borderline Tümör**

**Mikropapiller /Kribriform  
Varyant**

**Düşük dereceli seröz karsinom**



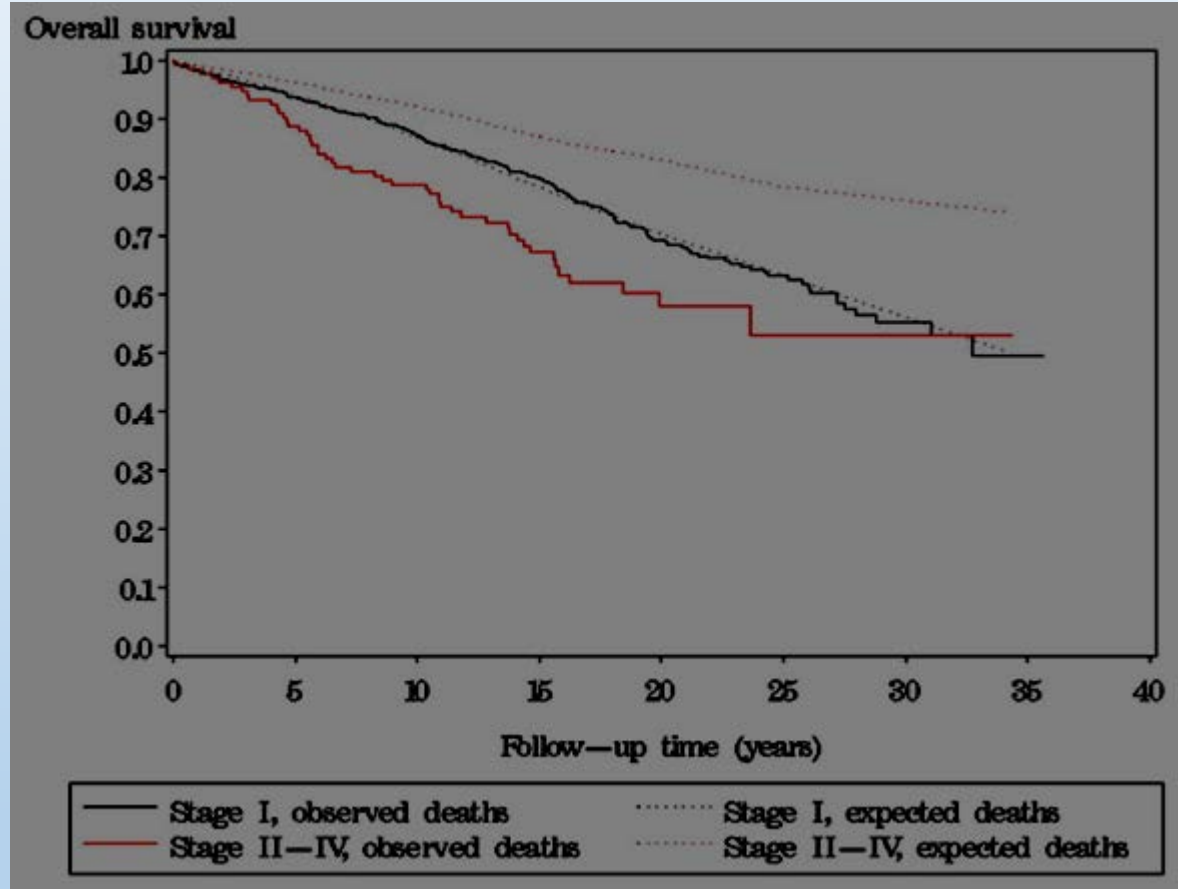


- *Gynecol Oncol.* 2014 August ; 134(2): 267–273.
- **A nationwide study of serous “borderline” ovarian tumors in Denmark 1978–2002: Centralized pathology review and overall survival compared with the general population**
- **Charlotte Gerd Hannibal<sup>a</sup>, Russell Vang<sup>b,c</sup>, Jette Junged, Kirsten Frederiksen<sup>a</sup>, Anette Kjaerbye-Thygesen<sup>a</sup>, Klaus Kaae Andersen<sup>a</sup>, Ann Tabor<sup>e</sup>, Robert J. Kurman<sup>b,c,f</sup>, and Susanne K. Kjaer<sup>a,g,\*</sup>**

**942 OLGU**

# Prognoz

- **Evre 1:**
- Klasik+ mikropapiller:  
*Normal populasyon ile benzer*
- **Evre 2-4:**
- Klasik+ mikropapiller:  
*Normal populasyondan düşük*



# Seroz Borderline Tümör Klasik vs Mikropapiller Varyant

Aynı evrede survi benzer  
ancak

- *Mikropapiller borderline: ileri evre ve invaziv implant oranı yüksek*

- En geniş çap <5mm olan mikropapiller morfoloji görürsek ne yapalım?
1. Seröz Borderline tümör
  2. Mikropapiller morfoloji gösteren seröz borderline tümör ???
  3. Not: Küçük odak (lar) halinde (<5mm.) mikropapiller morfoloji izlenmiştir.

- Seröz Borderline tümör / Mikropapiller variant SBT



Stromal  
invazyon

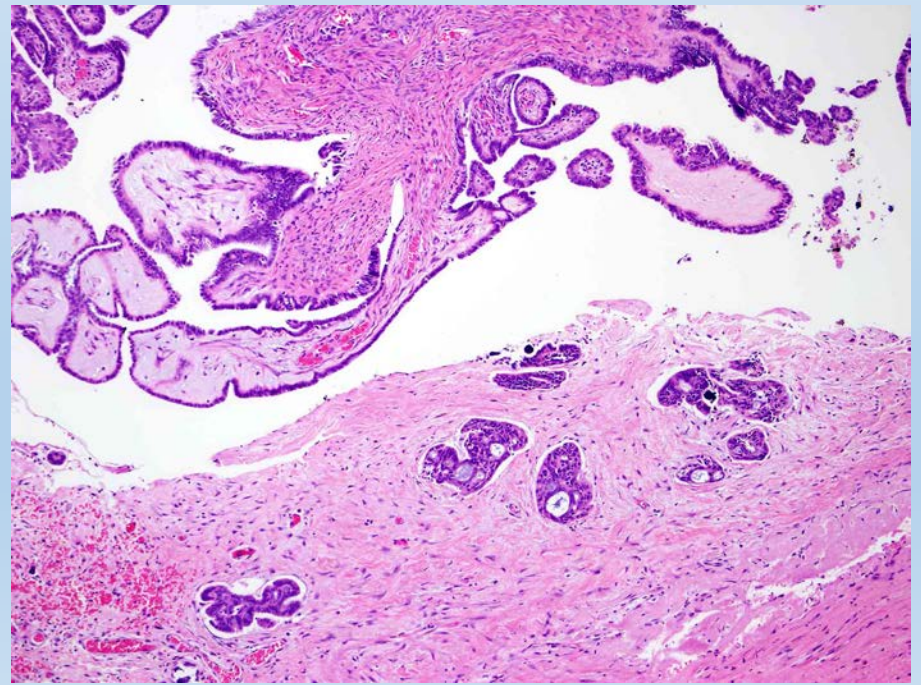
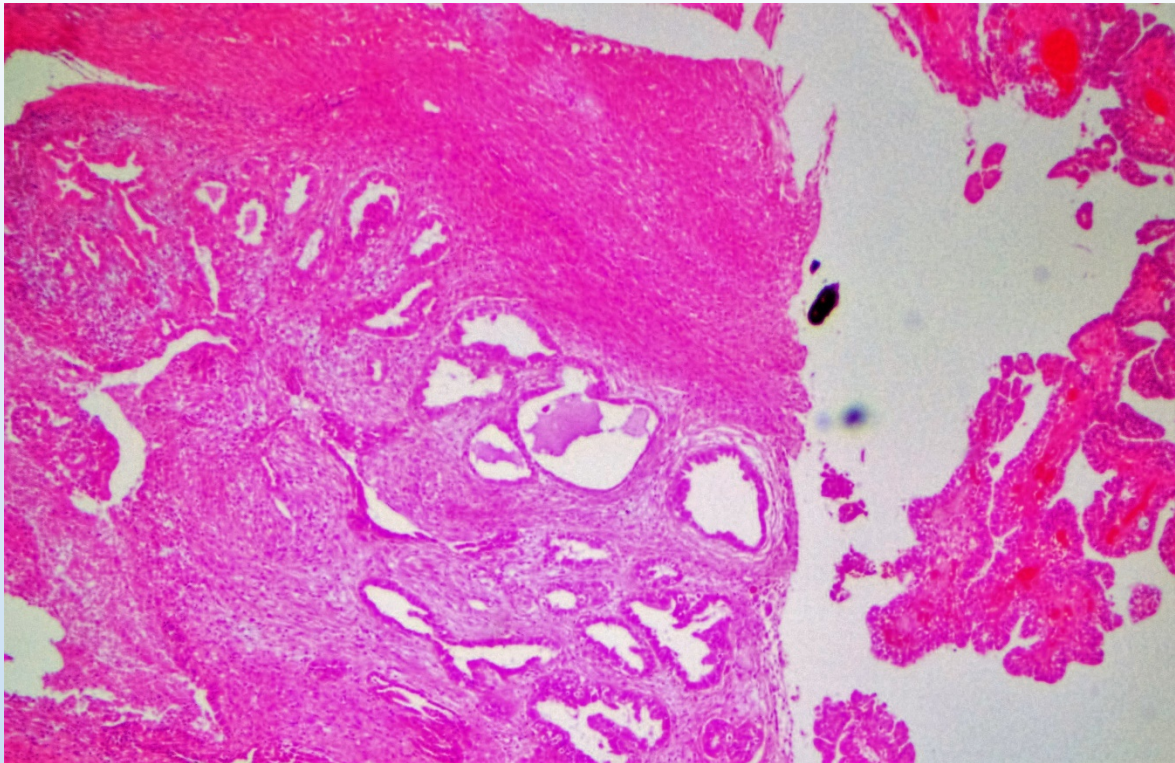
- Düşük dereceli seröz karsinom

# Seröz Borderline Tümörde Mikroinvazyon Kavramı

- Stromada en geniş 3 (5) mm. lineer çapta

ya da

- 10mm<sup>2</sup> alan içinde invazyon odakları



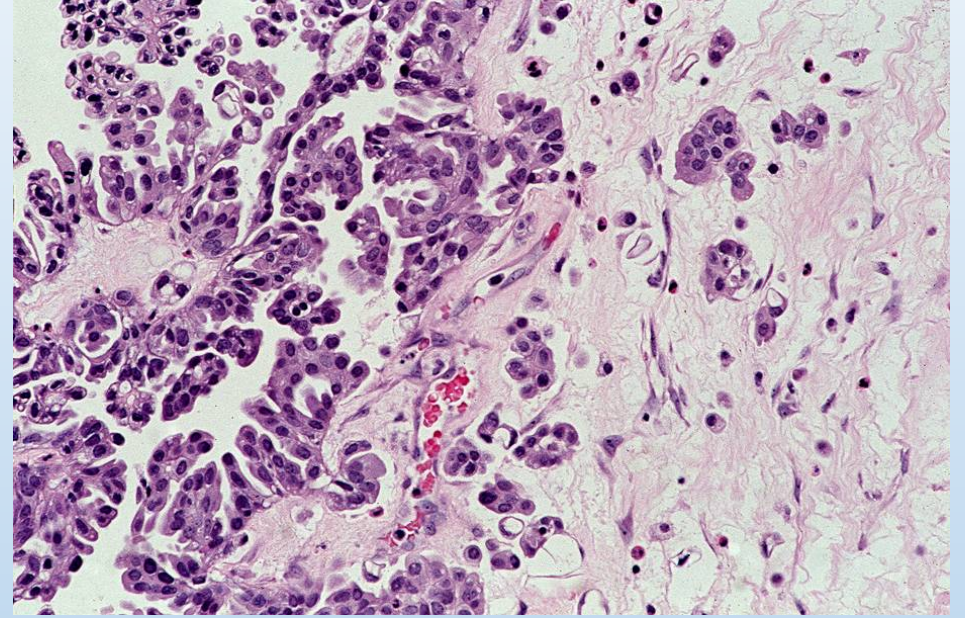
# Mikroinvazyonun morfolojisi

- Eosinofilik sitoplazmalı hücreler

\*Tek tek

\*küçük gruplar

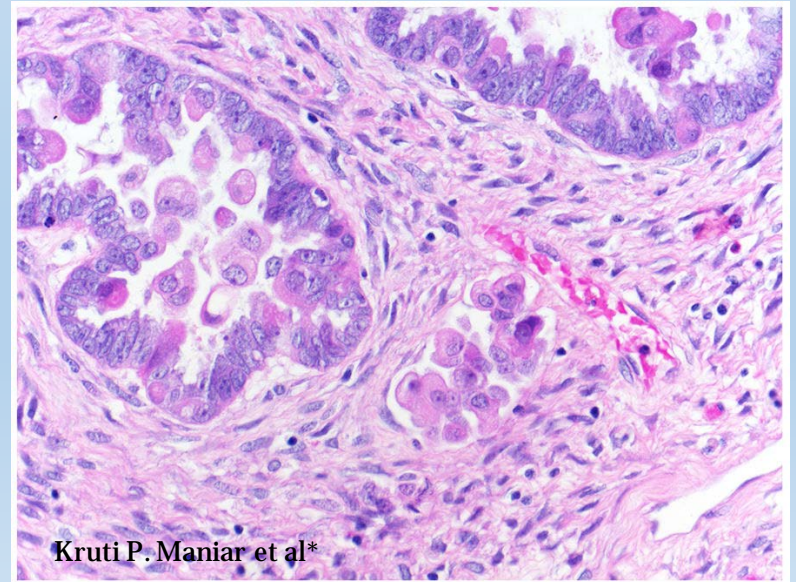
\*papiller yapılar



- Etraflarında boşluk

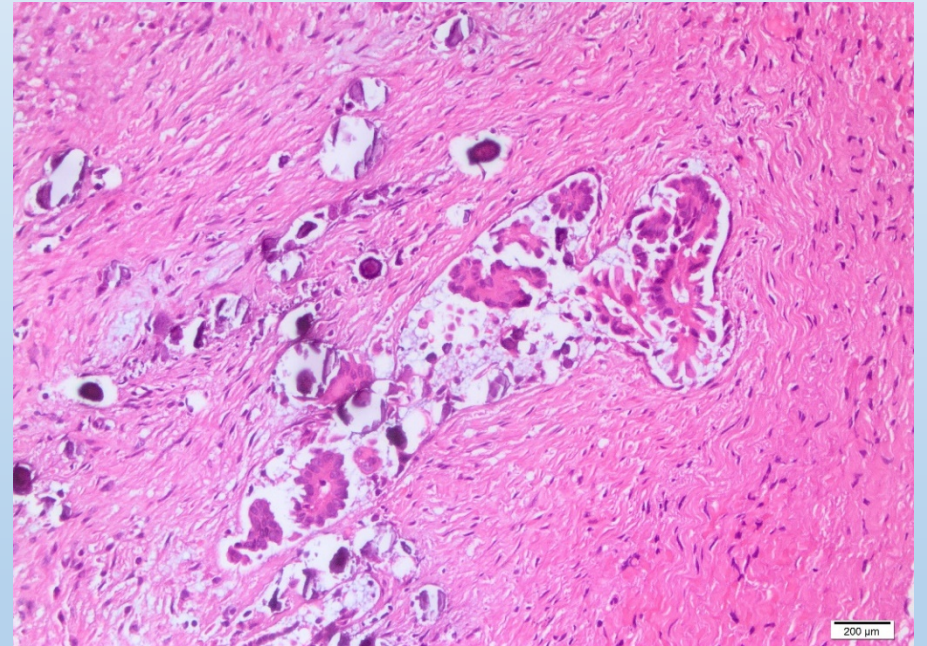
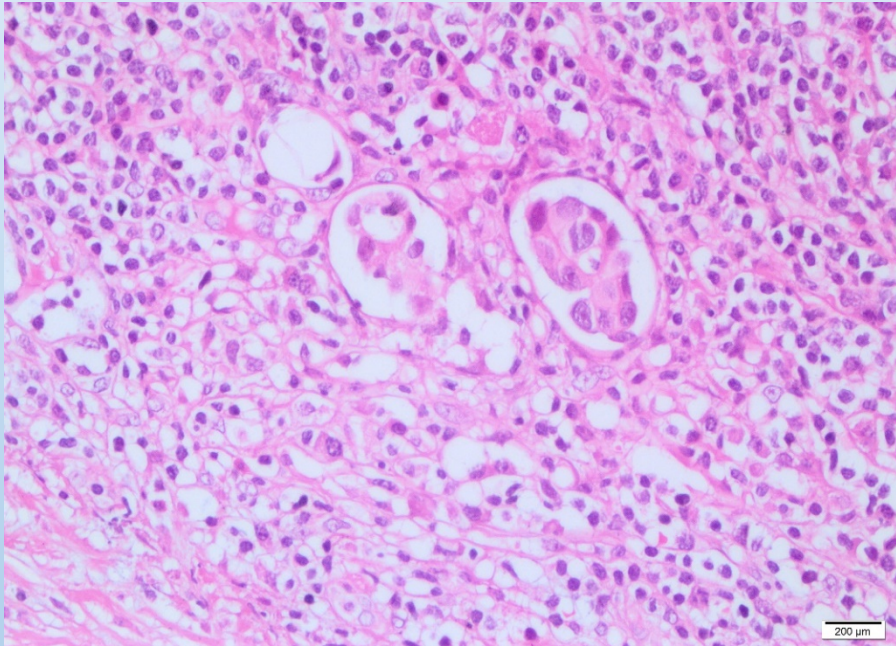
\*%10-25

\**Gebelikte sık*





# Mikroinvazyonun morfolojisi



Noninvaziv  
implant

# MİKROİNVAZYONUN PROGNOZLA İLİŞKİSİ

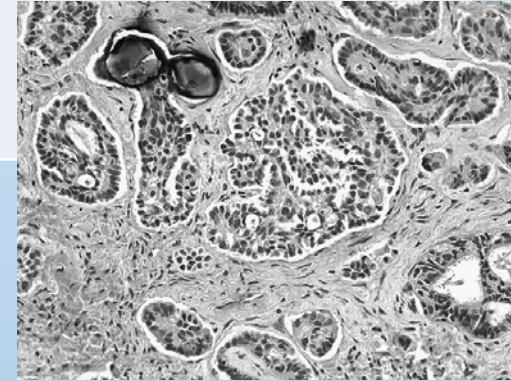
	Histological type	Borderline ovarian tumour with microinvasion				Mean follow-up (months)
		Number	Recurrences (n)	% invasive recurrence (n)*	Deaths related to disease (n)*	
Katzenstein (1978) <sup>58</sup>	SBOT	7	0	0	0	131
Bell (1990) <sup>59</sup>	21 SBOT	21	1	0	0	62.4
Casey (1993) <sup>510</sup>	SBOT	2	0	0	0	175
Hanselaar (1993) <sup>511</sup>	SBOT	9	0	0	0	54
Tan (1994) <sup>512</sup>	SBOT†	2	1	0	0	26.4
Siriaungkul (1995) <sup>45</sup>	54 MBOT	7	0	0	0	..
Kennedy (1996) <sup>513</sup>	76 SBOT	4	0	0	0	99
Nayar (1996) <sup>514</sup>	126 SBOT	7	0	0	0	96
Seidman (1996) <sup>17</sup>	65 SBOT	4	0	0	0	95
Hoerl (1998) <sup>46</sup>	49 MBOT	14	0	0	0	71
Eichhorn (1999) <sup>51</sup>	84 SBOT	9	1	0	0	74.4
Riopel (1999) <sup>47</sup>	73 MBOT	8	0	0	0	33
Lee (2000) <sup>48</sup>	171 MBOT	7	0	0	0	..
Nomura (2000) <sup>49</sup>	25 MBOT	4	0	0	0	85
McKenney (2006) <sup>50</sup>	SBOT	50	9	67% (6)‡	7§	92.4
Kim (2007) <sup>51</sup>	118 MBOT	37	0	0	0	60.4
Laurent (2009) <sup>515</sup>	10 SBOT	10	5	0	0	62
Kane (2009) <sup>45</sup>	18 SBOT¶	8	3	33%	1	38 (median)
Koskas (2011) <sup>52</sup>	97 MBOT	8	0	0	0	48
Khunamornpong (2011) <sup>53</sup>	171 MBOT	31	4	0	0	168
Total	..	249	24 (10%)	3% (7)	8 (3%)	..

Supplementary references (S) are listed in the appendix. SBOT=serous borderline ovarian tumour. MBOT=mucinous borderline ovarian tumour. \*Implant subtypes during initial management. †With lymph-node involvement. ‡2 indeterminate, 1 invasive, 1 invasive and micropapillary pattern, 2 microinvasion only. §2 indeterminate, 1 invasive, 1 invasive and micropapillary pattern, 1 micropapillary pattern, 2 microinvasion only. ¶With implants. ||1 micropapillary pattern and non-invasive.

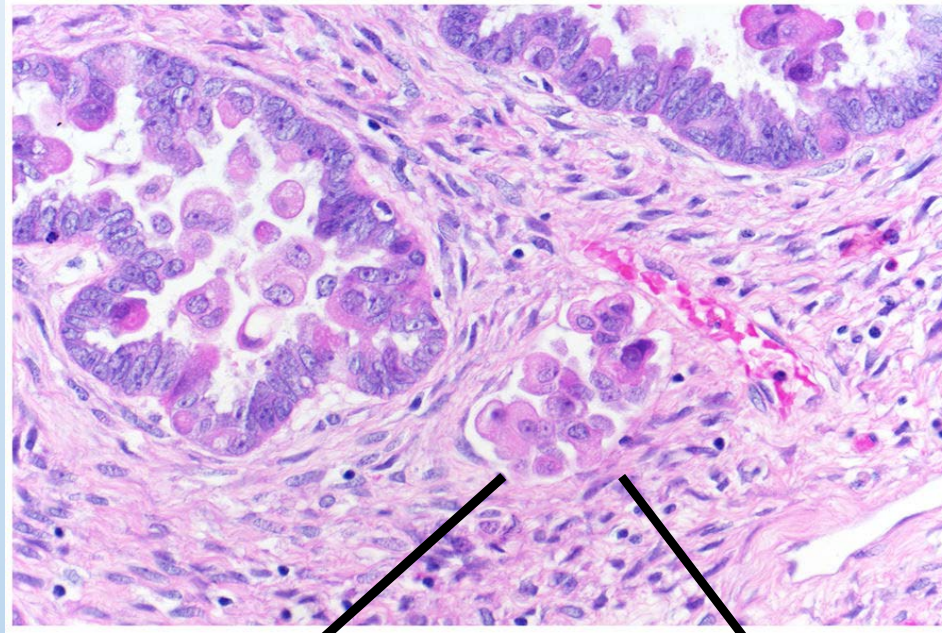
Morfoloji	Prognoz
*Eosinofilik sitoplazmalı tek hücre/grup/papilla	SBT ile aynı
*Mikropapilla/kribriform patern	?? ??



Eosinofilik hücreler  
nonproliferatif, terminal  
diferansiye hücreler \*



# Seröz Borderline Tümörde Mikroinvazyon Kavramı

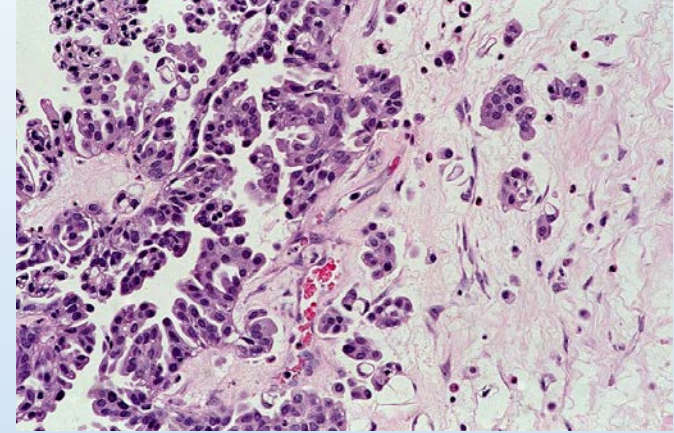


<<3-5mm  
Mikroinvazif SBT

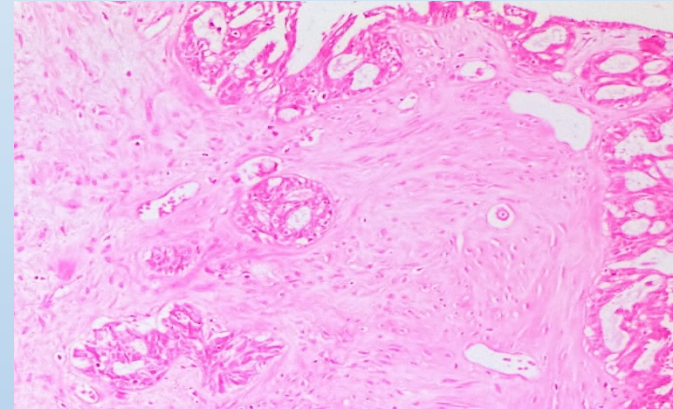
>3-5mm  
Seröz Karsinom ????

# Mikroinvazyon Sonuç

1-Klasik Mikroinvazyon



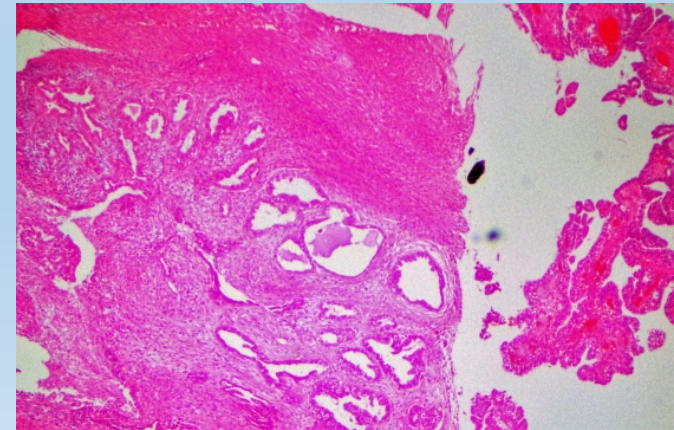
2-Mikropapiller/Kribriform morfolojide mikroinvazyon



3-Destruktif invazyon

<5mm. Mikroinvasiv karsinom  
???

KESİN BİLGİ YOK!!!



# SERÖZ BORDERLİNE TÜMÖRÜ DEĞERLENDİRİKEN .....

