



Endometrial stromal tümörler WHO-2014 sınıflamasında neler değişti?

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İ.Ü. Cerrahpaşa Tıp Fakültesi Patoloji AD



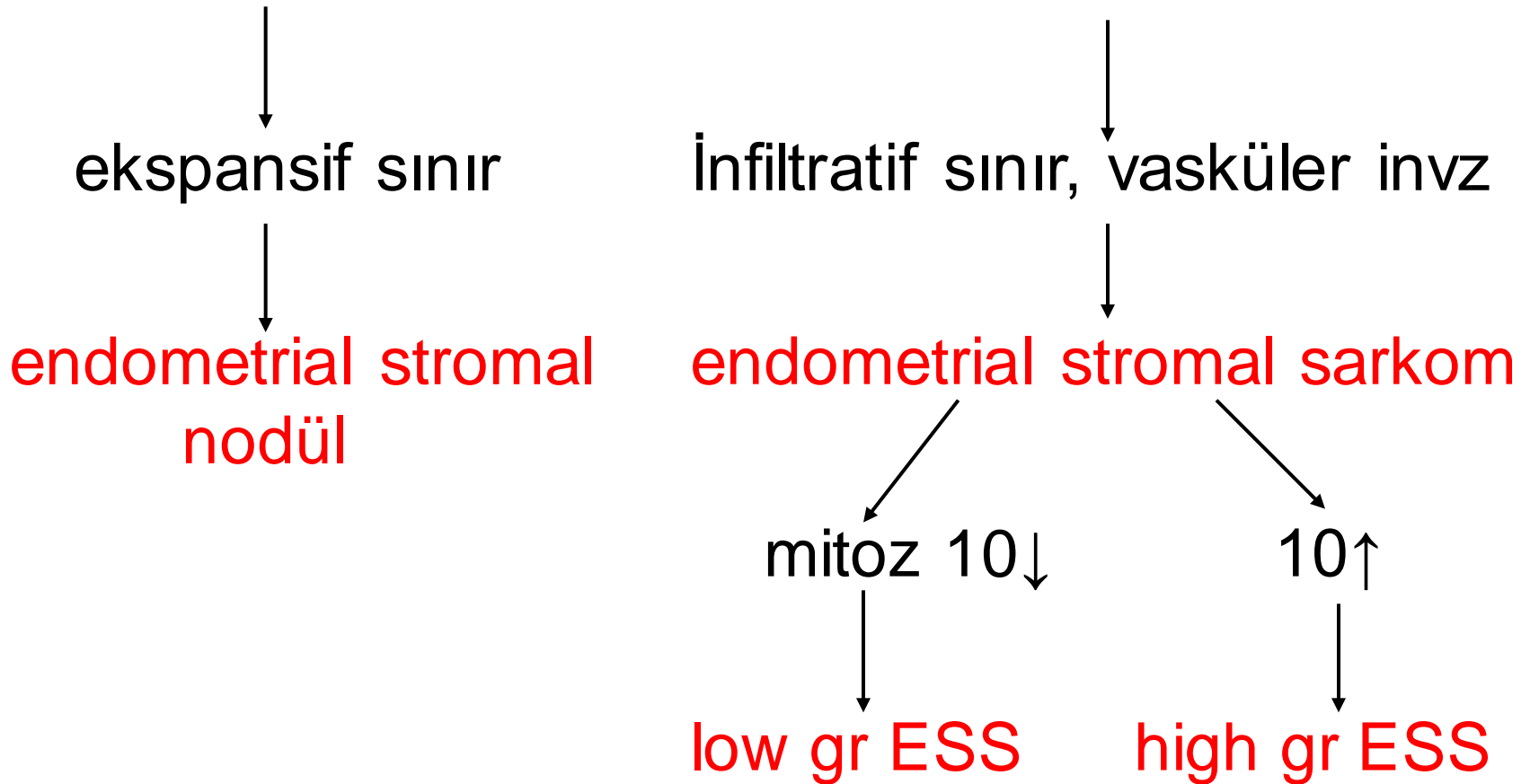
25. Ulusal Patoloji Kongresi
6. Sitopatoloji Kongresi
14 - 17 Ekim 2015 / Merinos AKKM - BURSA

Endometrial stromal tümör (1966)

- Endometrial stromal nodül
- Low grade endometrial stromal sarkom
- High grade endometrial stromal sarkom

Norris HJ, Taylor HB. Cancer 1966;19:755-66

Endometrial stromal tümör



High grade-ESS

heterojen grup!!!

- Hücresel atipi
- Mitoz
- Prognoz

farklılıkları

Endometrial stromal sarkom'da
low – high grade ayrımı
sadece mitozla göre yapılmamalı

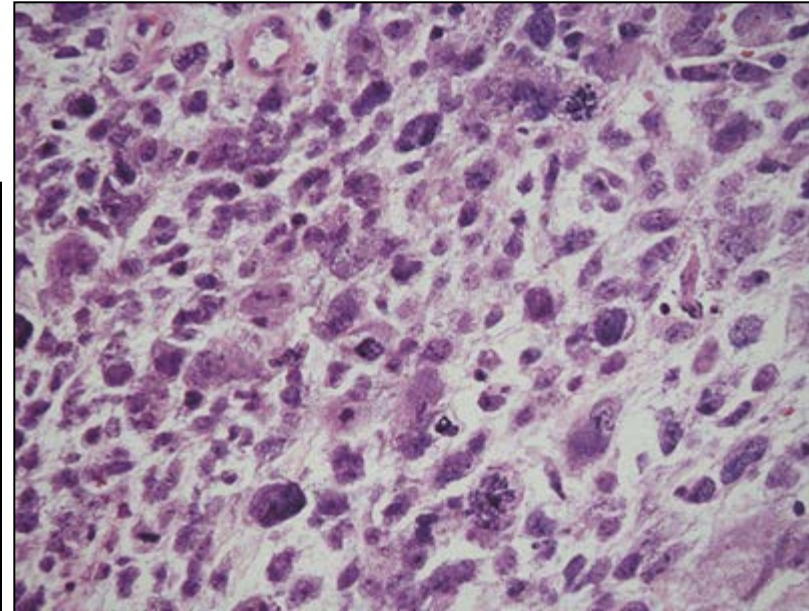
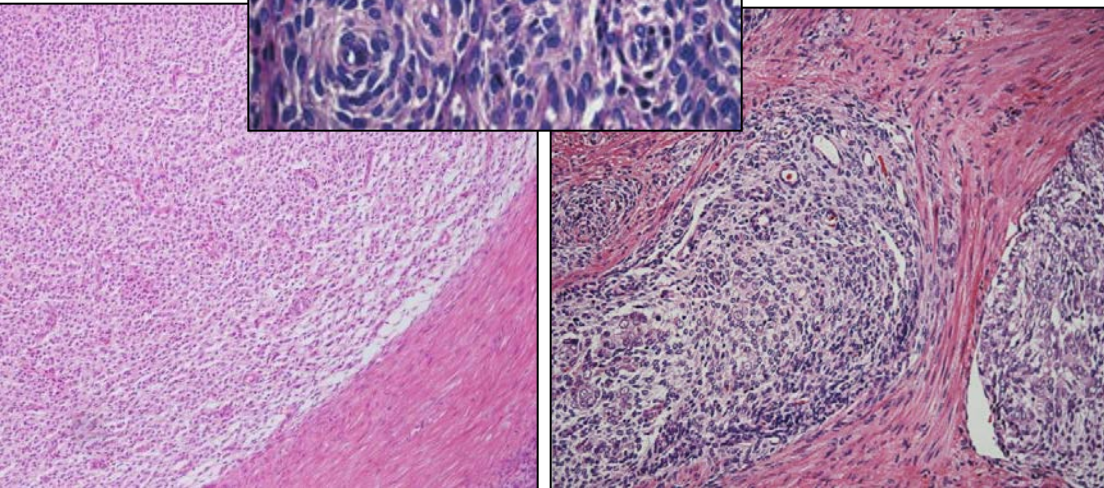
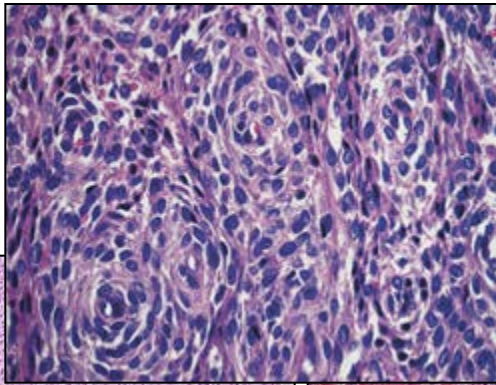
Evans HL. Cancer 1982;50:2170-8

Chang KL, et al. Am J Surg Pathol 1990;14:415-38

Endometrial stromal tümörler

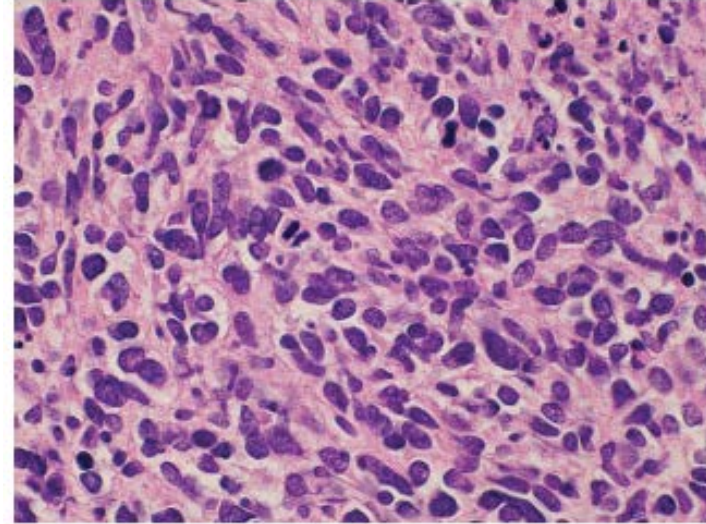
WHO-2003

- Endometrial stromal nodül
- Endometrial stromal sarkom-low grade
- İndiferansiye endometrial sarkom

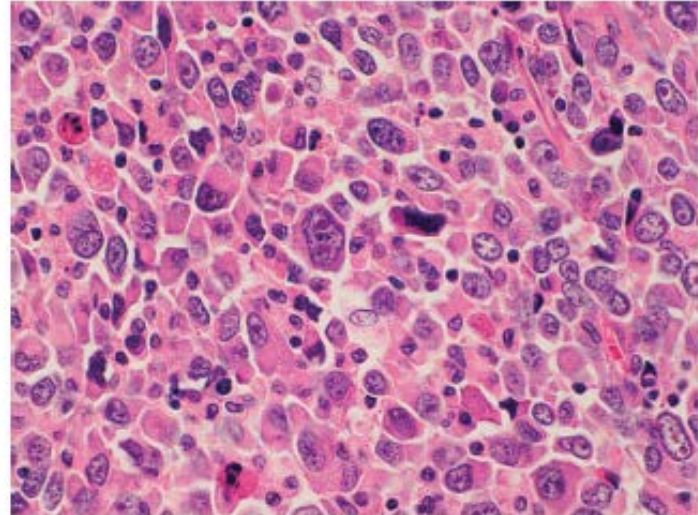


İndiferansiye endometrial sarkom

- İES-U (uniform hücreli)
 - Uniform nukleus
 - Fokal ESS tip damar çatısı
 - Fokal low grade komp.
 - Fokal permeatif invazyon



- İES-P (pleomorfik hücreli)
 - Belirgin pleomorfizm
 - Karakteristik damar çatısı yok
 - Destruktif myoinvazyon
 - Atipik mitoz



Endometrial Stromal Sarcomas and Related High-grade Sarcomas: Immunohistochemical and Molecular Genetic Study of 31 Cases

Shuichi Kurihara, MD, Yoshinao Oda, MD, PhD,* Yoshihiro Ohishi, MD, PhD,*
Atsuko Iwasa, MD,* Tomonari Takahira, MD, PhD,* Eisuke Kaneki, MD, PhD,†
Hiroaki Kobayashi, MD, PhD,† Norio Wake, MD, PhD,† and Masazumi Tsuneyoshi, MD, PhD**

(Am J Surg Pathol 2008;32:1228–1238)

	JAZF1-JJAZ	ER/PR	P53 mut	Ex
	%	%	%	%
ESS-LG	50	94	0	0
iES-U	33	57	0	57
iES-P	0	0	50	60

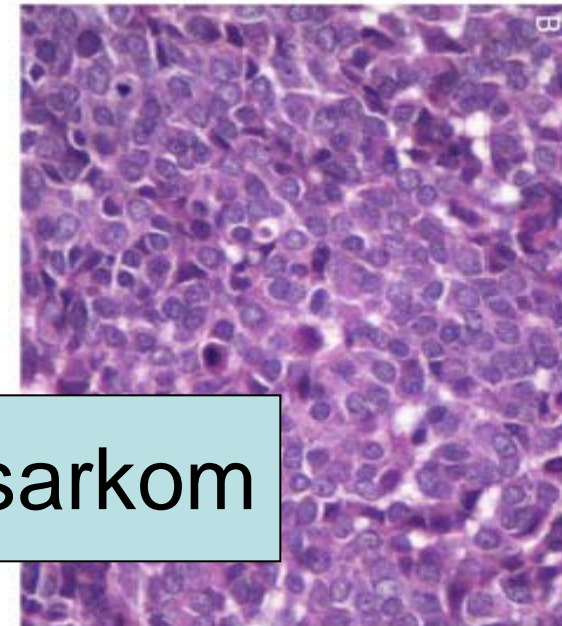
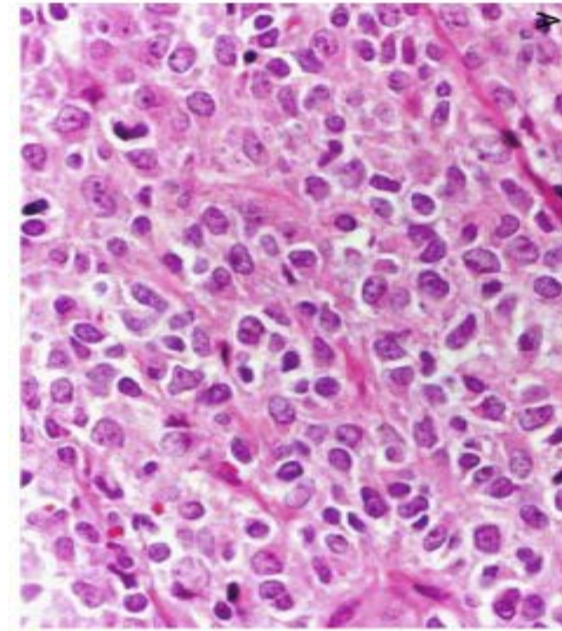
The Clinicopathologic Features of *YWHAE-FAM22* Endometrial Stromal Sarcomas: A Histologically High-grade and Clinically Aggressive Tumor

Cheng-Han Lee, MD, PhD,† Adrian Mariño-Enriquez, MD,* Wenbin Ou, PhD,**

(Am J Surg Pathol 2012;36:641–653)

- $t(10;17)(q22;p13)$ translokasyonu
- *YWHAE-FAM22A/B* gen füzyonu
- High grade, uniform nukleus
- LG-ESS benzeri alanlar +/-
- Permeatif invazyon
- Prognoz LG-ESS ve İES arası

High grade endometrial stromal sarkom



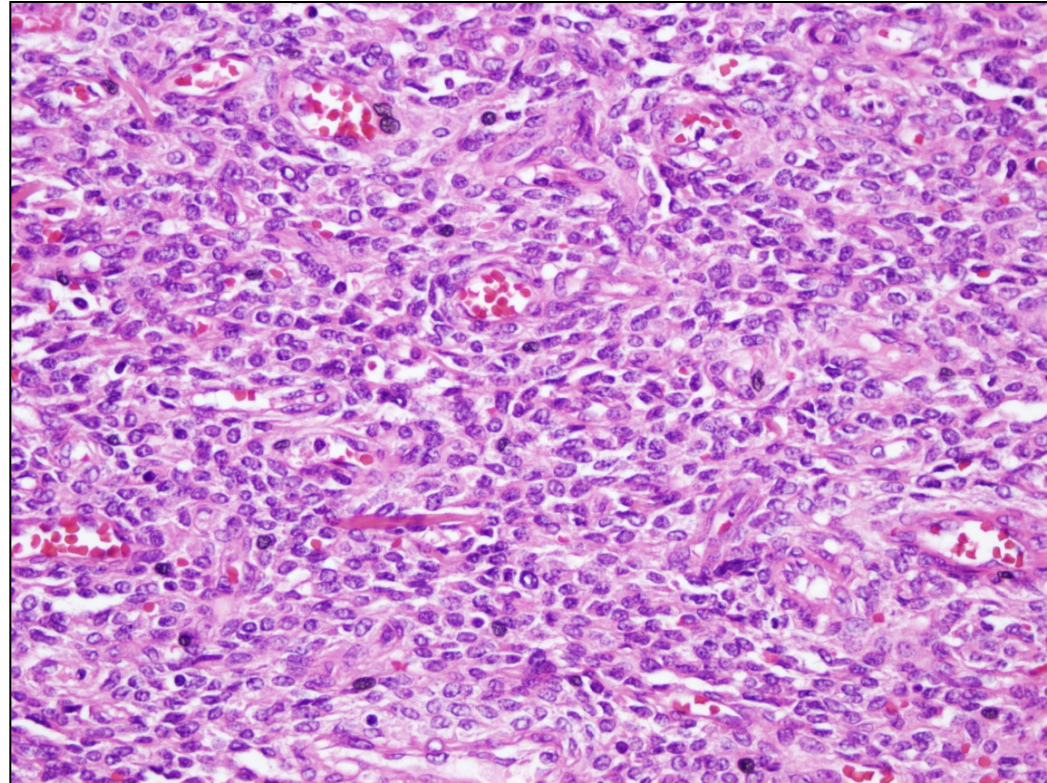
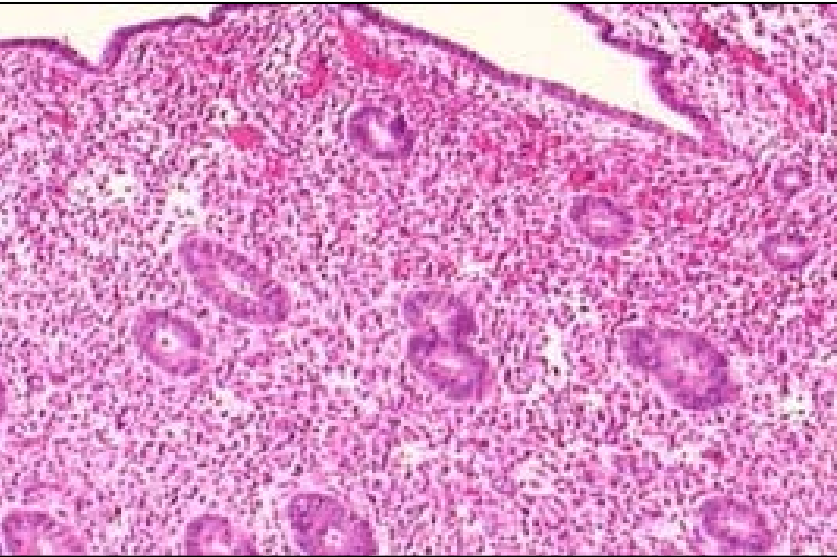
Endometrial stromal ve ilişkili tümörler (WHO-2014)

- Endometrial stromal nodül
- Low grade endometrial stromal sarkom
- High grade endometrial stromal sarkom
- İndiferansiye uterin sarkom
- Overin seks kord tümörüne benzeyen uterin tümör

Endometrial stromal nodül

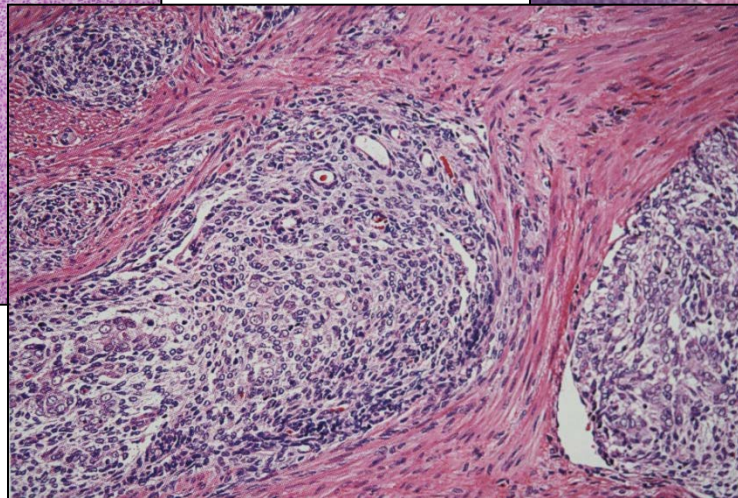
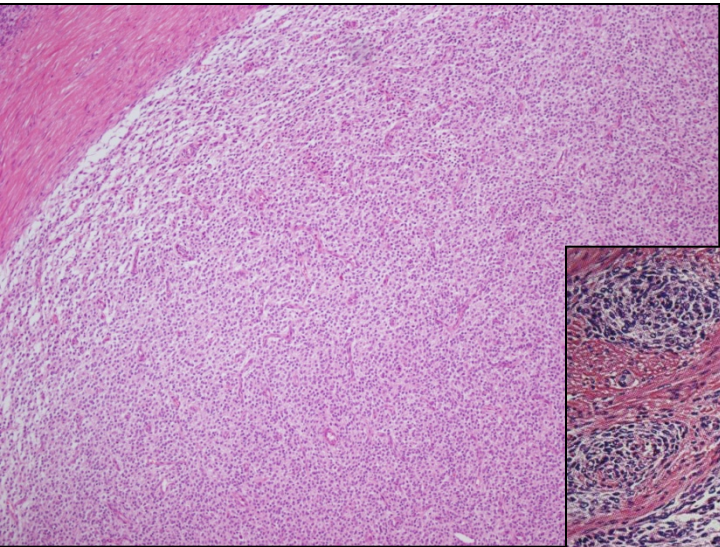
Low grade endometrial stromal sarkom

- Proliferatif faz endometrium stromasına benzer hc
- Karakteristik damar çatısı
- Atipi yok/hafif
- $t(7;17)(p21;q15)$
JAZF1-SUZ12 gen füzyonu



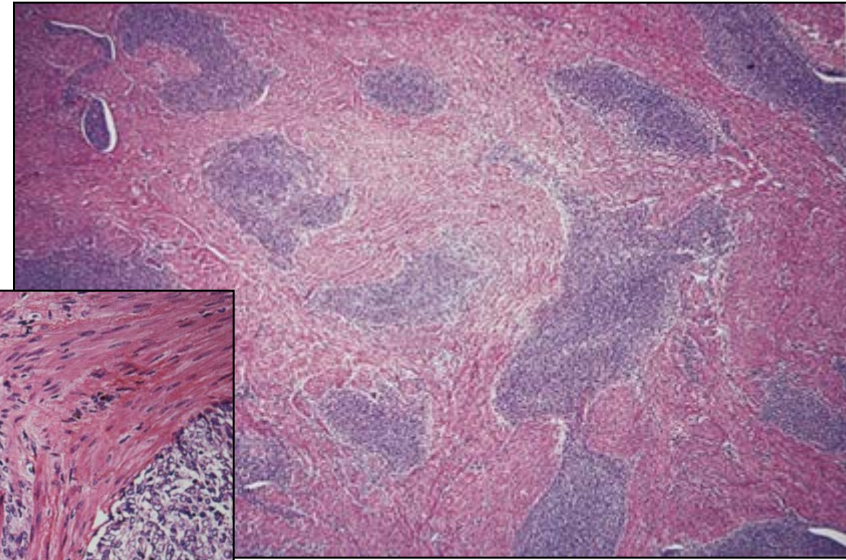
ESN

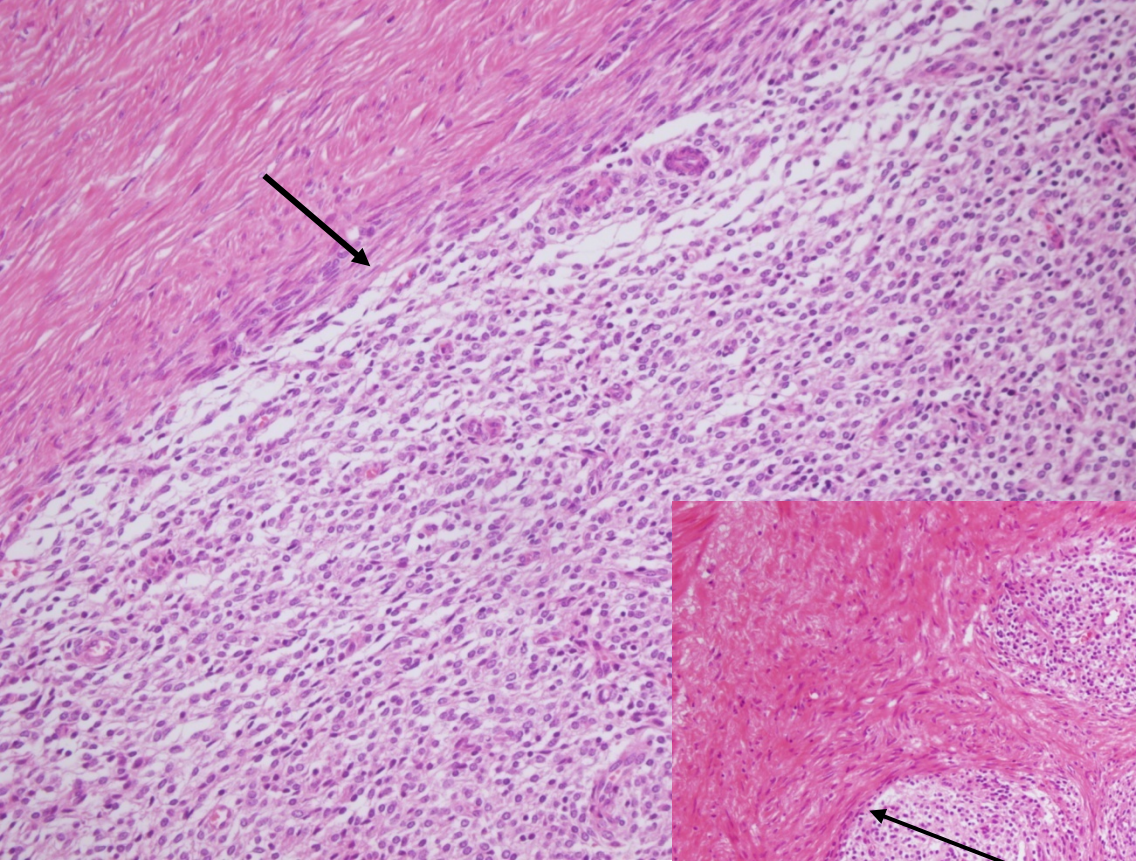
- Ekspansif sınır
- Fokal infiltrasyon
≤ 3 mm, 3 odak
- LVI yok



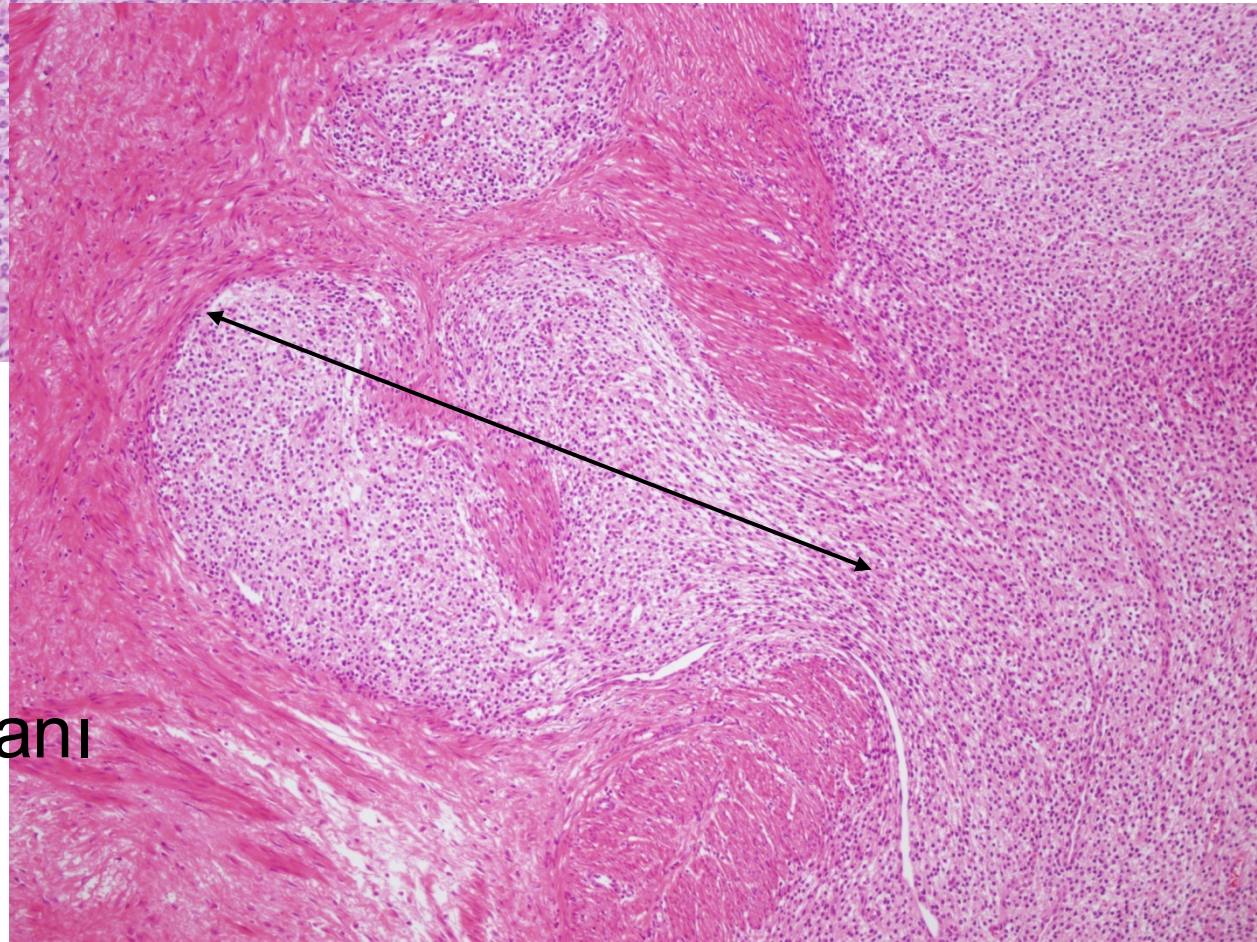
Low grade ESS

- Yaygın myometrial infiltrasyon
Permeatif, dil gibi
- LVI var



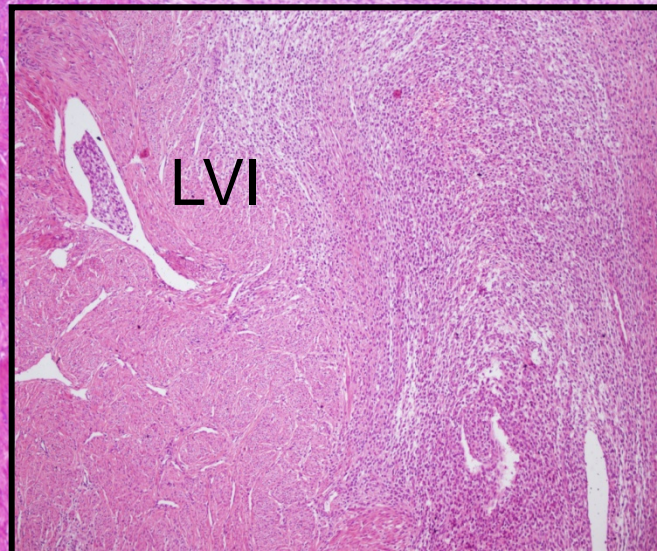
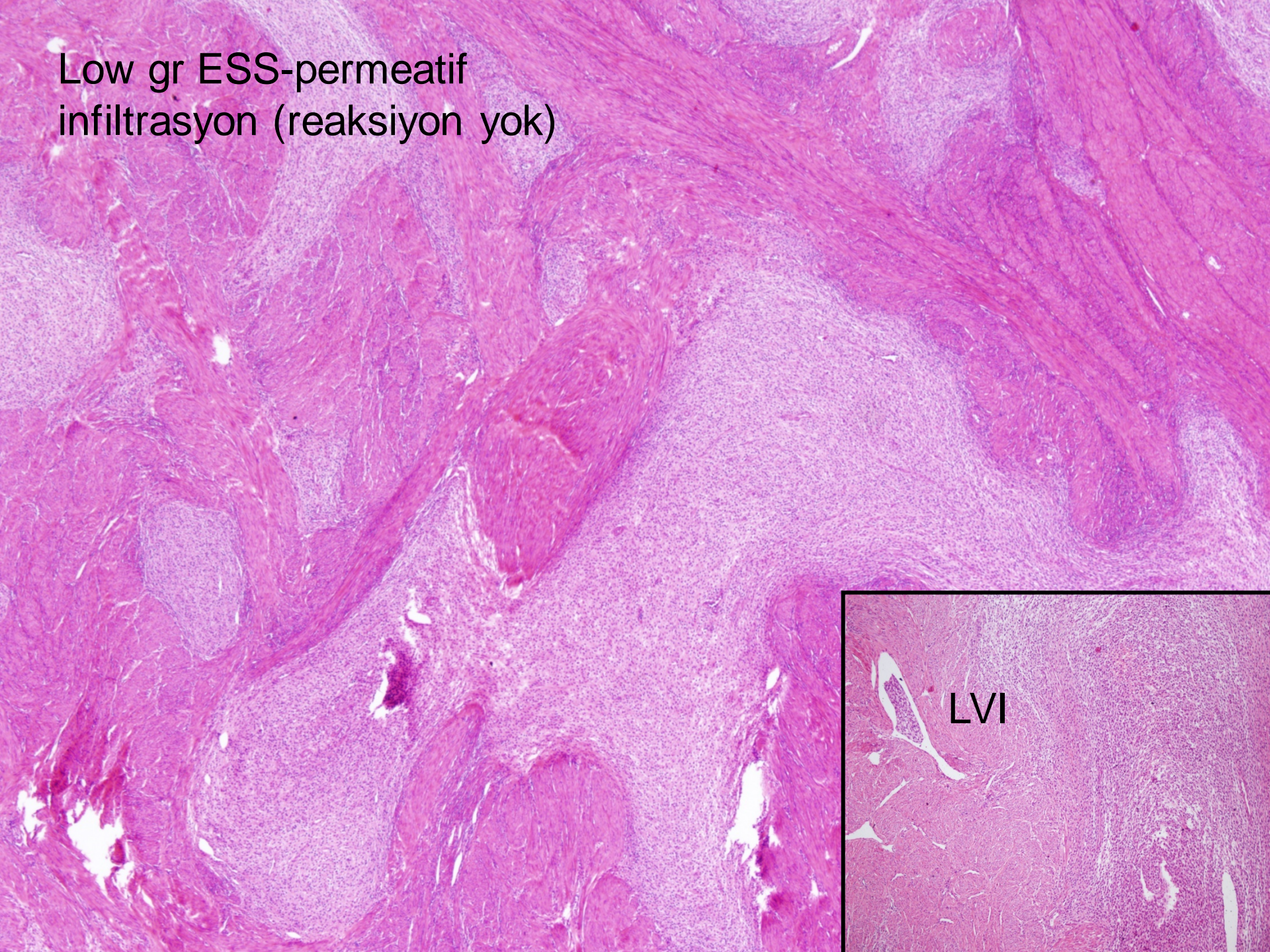


ESN- ekspansif sınır

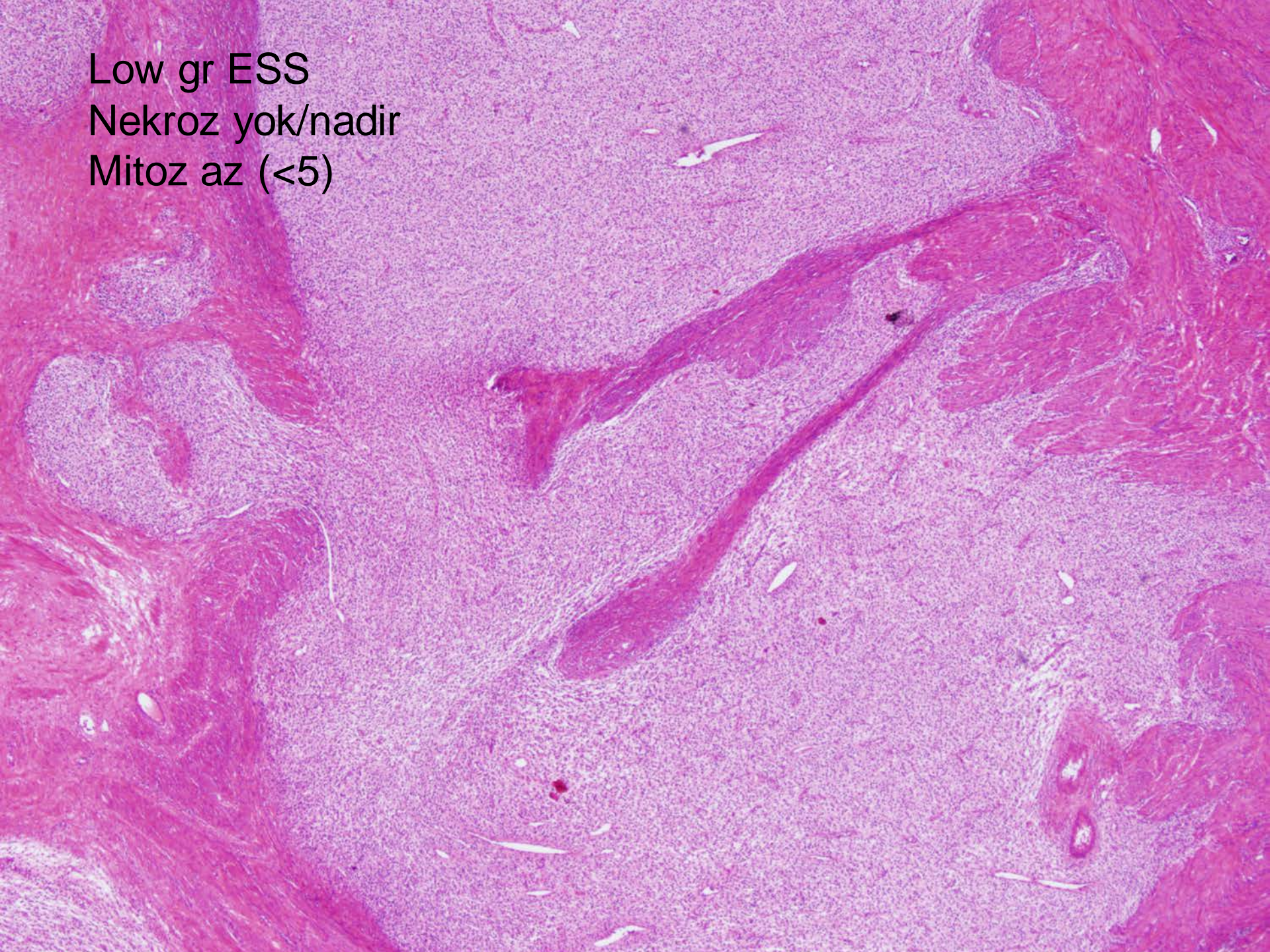


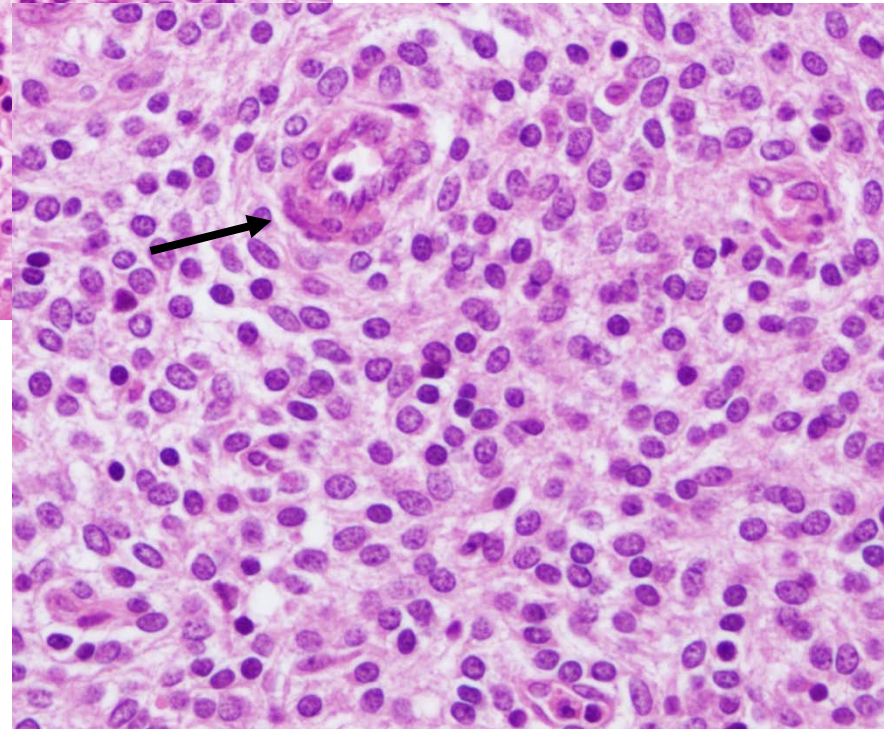
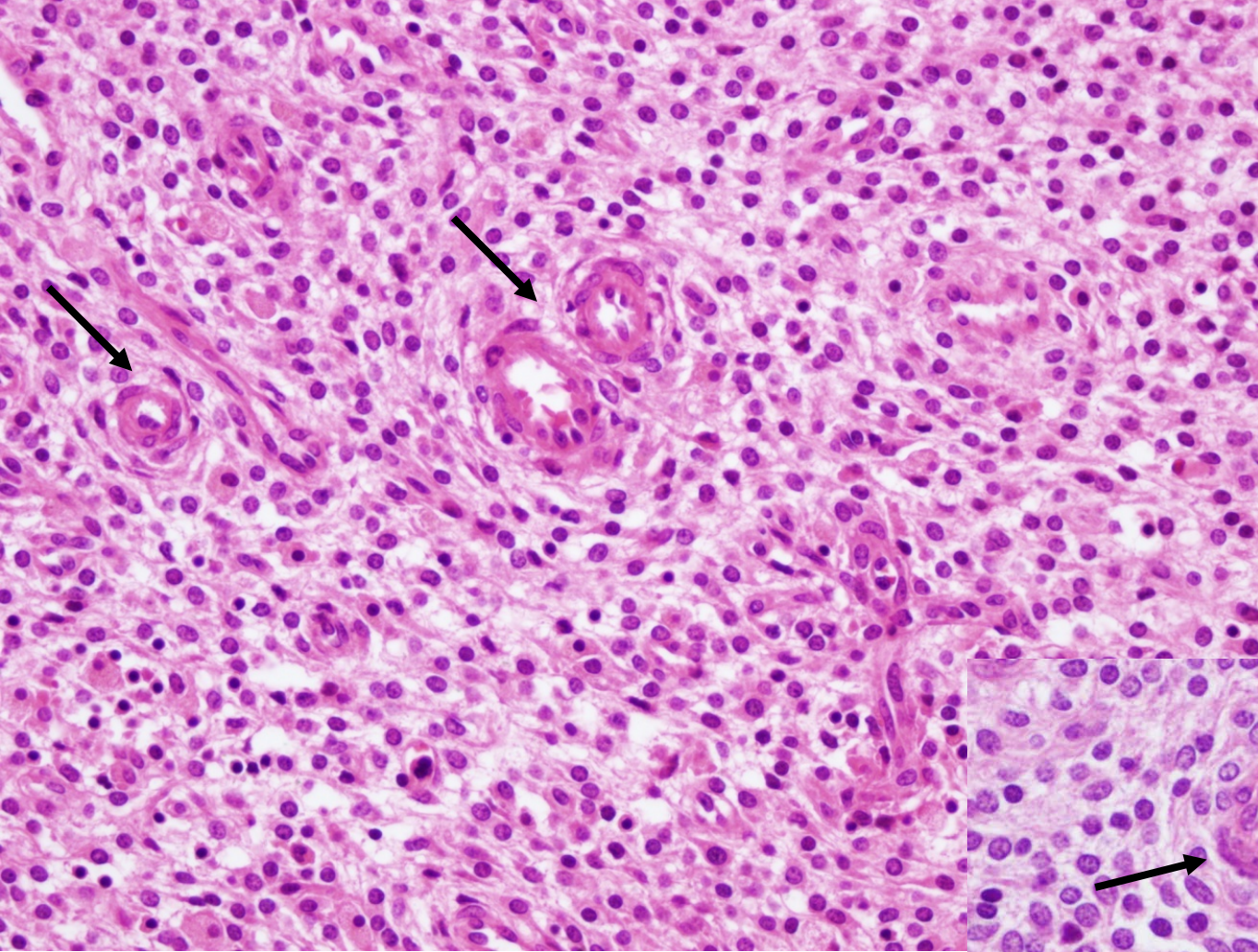
Fokal infiltrasyon alanı

Low gr ESS-permeatif
infiltrasyon (reaksiyon yok)



Low gr ESS
Nekroz yok/nadir
Mitoz az (<5)

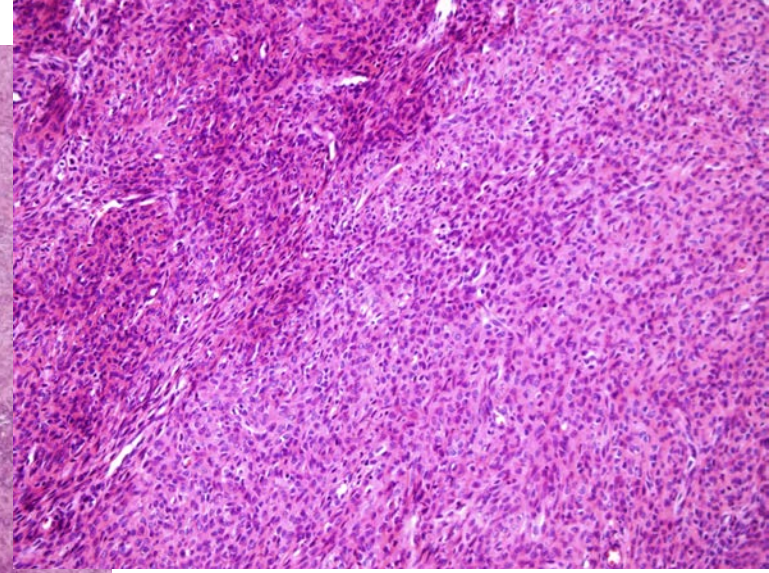




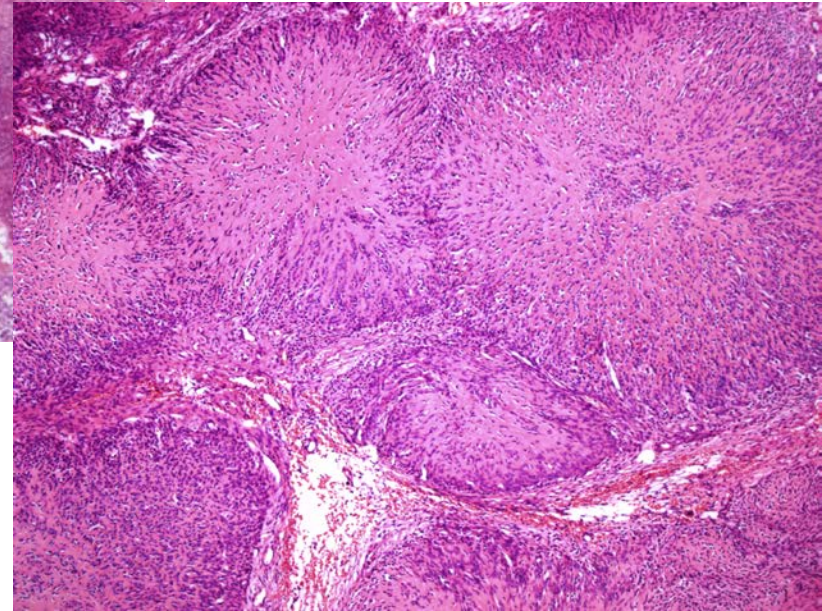
Küçük dar sitoplazmalı hc
Nukleus kontürleri düzgün

ESN ve LG-ESS varyantları

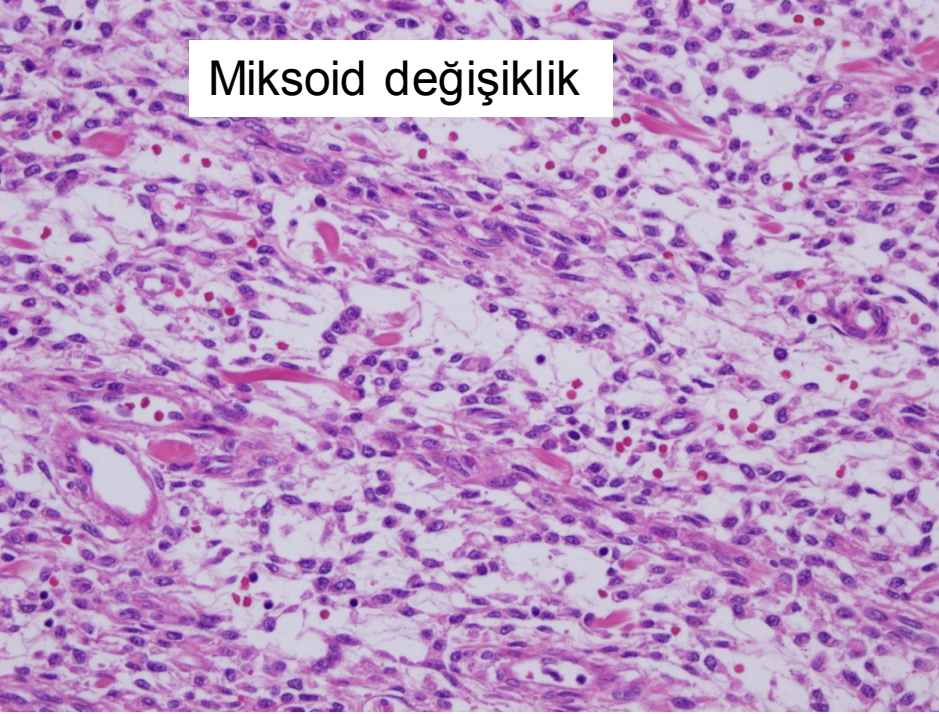
Düz kas diferansiasyonu



Yıldız patlaması
(starburst) paterni



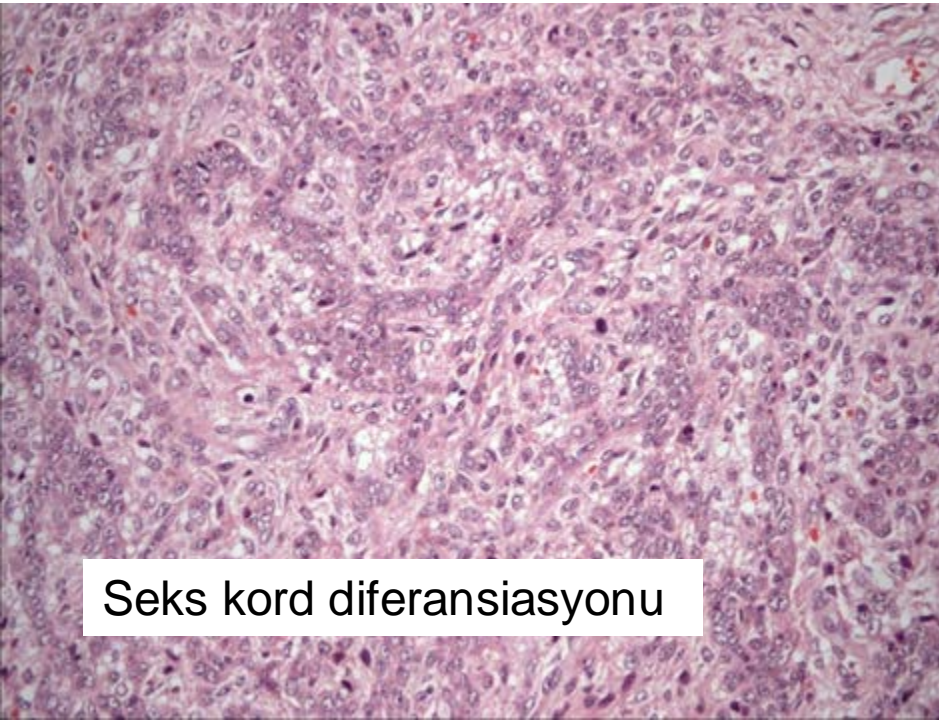
Miksoid deęişiklik



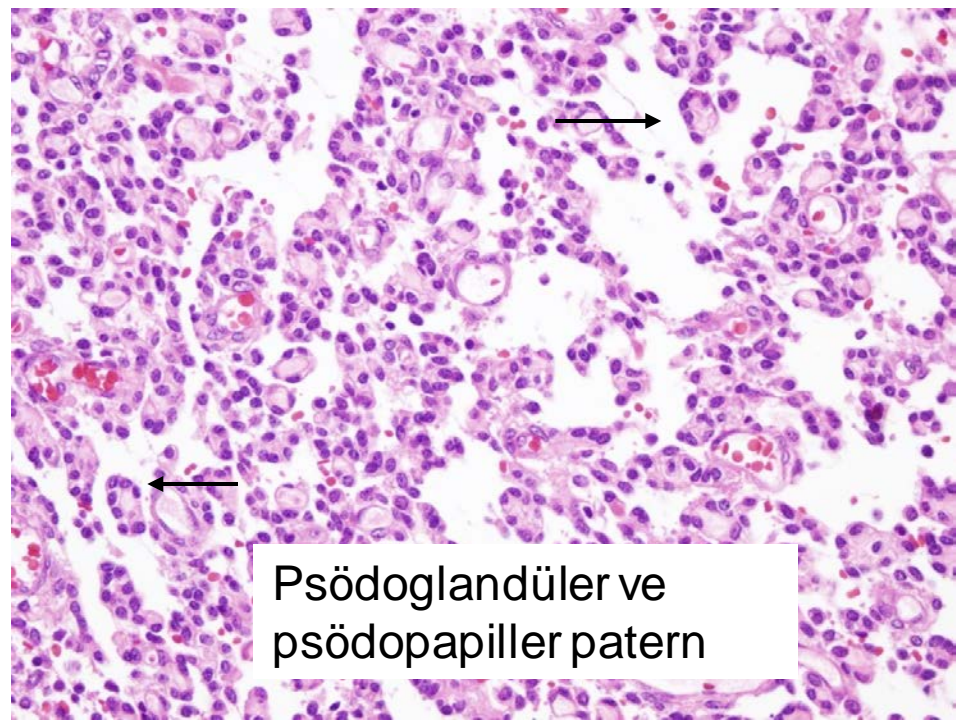
Hiyalin plaklar



Seks kord diferansiyasyonu



Psödoglandüler ve psödopapiller patern

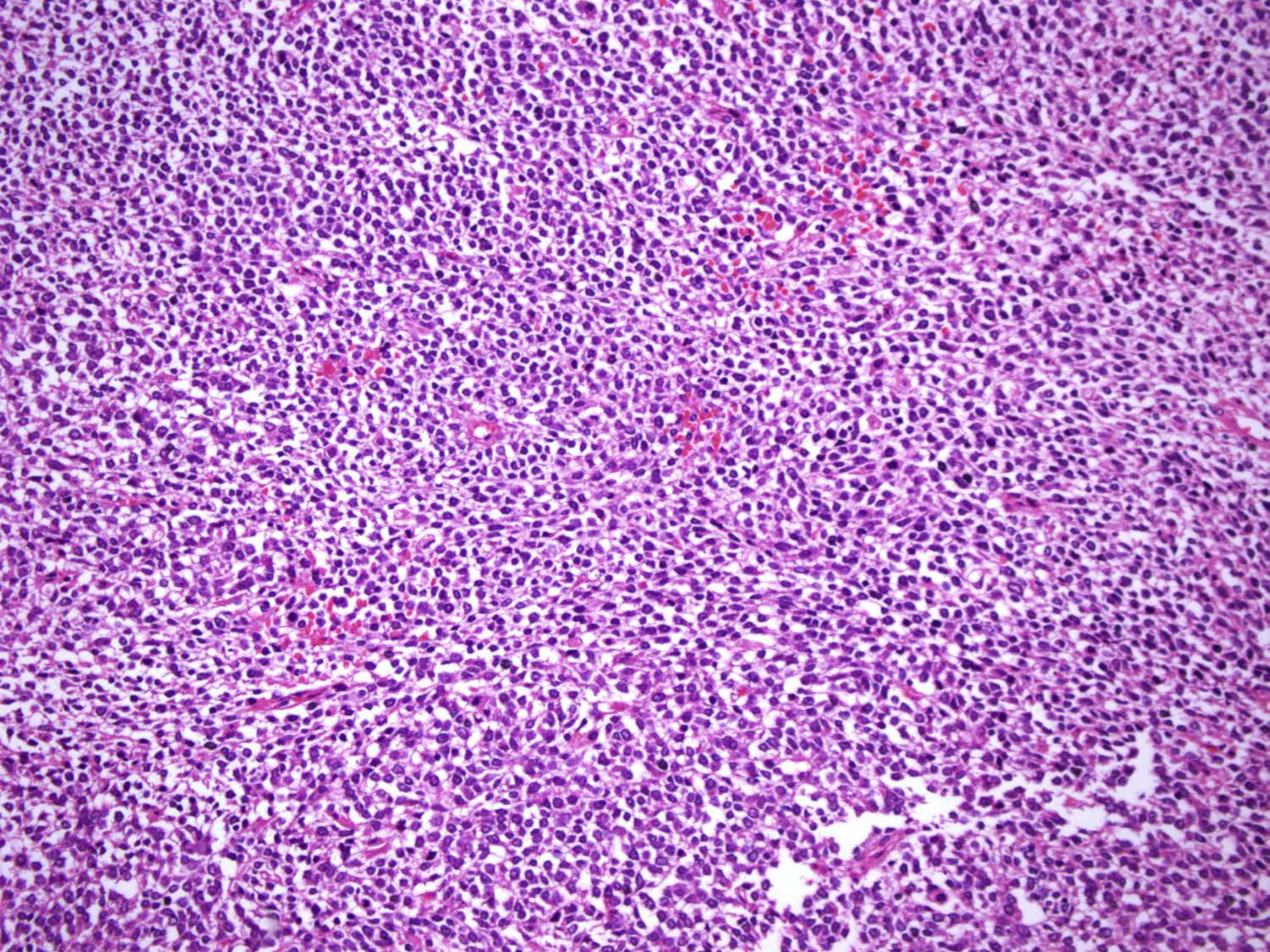


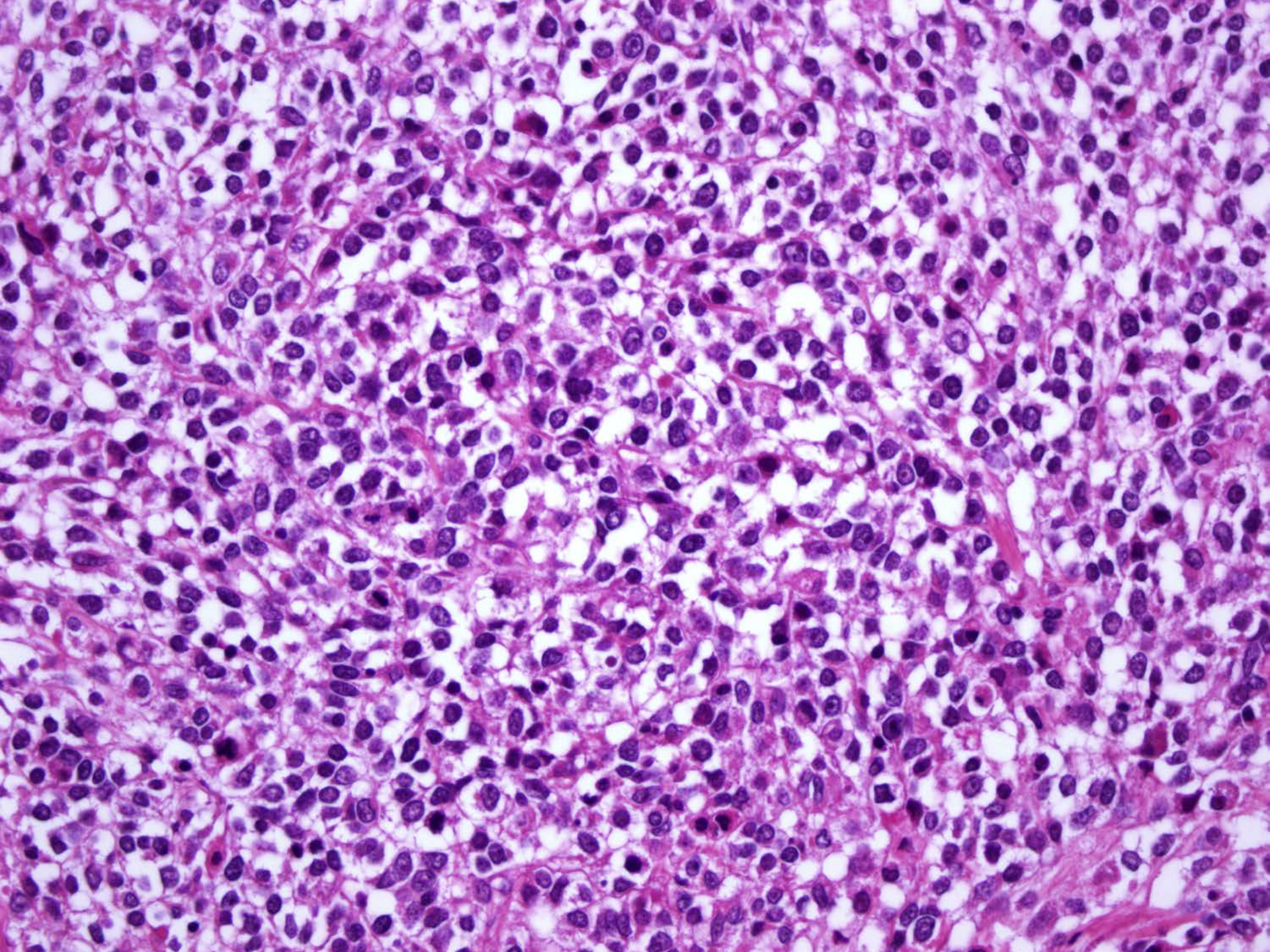
ESN ve LG-ESS'de immunhistokimya

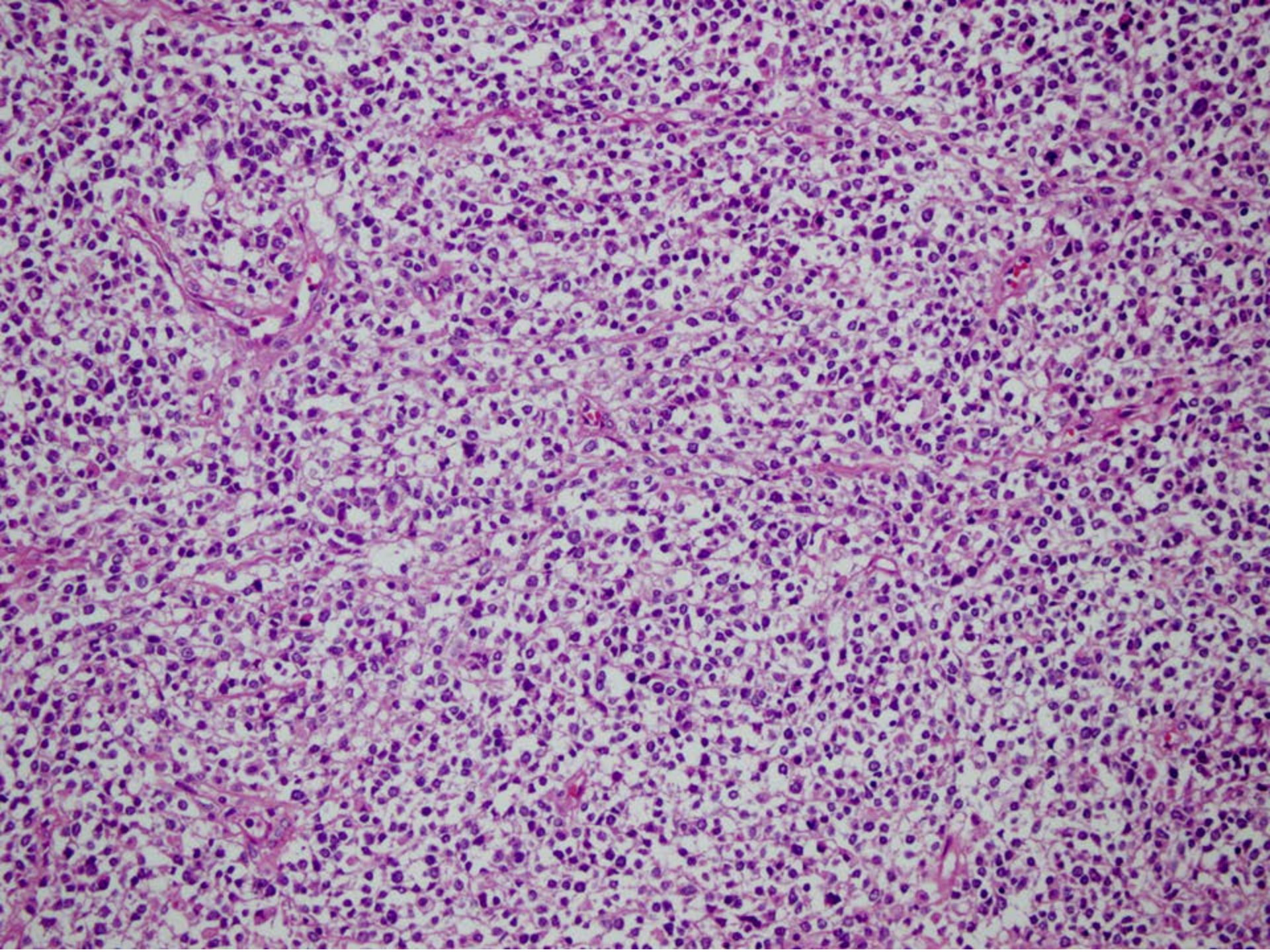
CD10	+
SMA	+/-
Desmin	+/-
Kaldesmon	-/fokal zayıf
ER/PR	+
Siklin D1	-

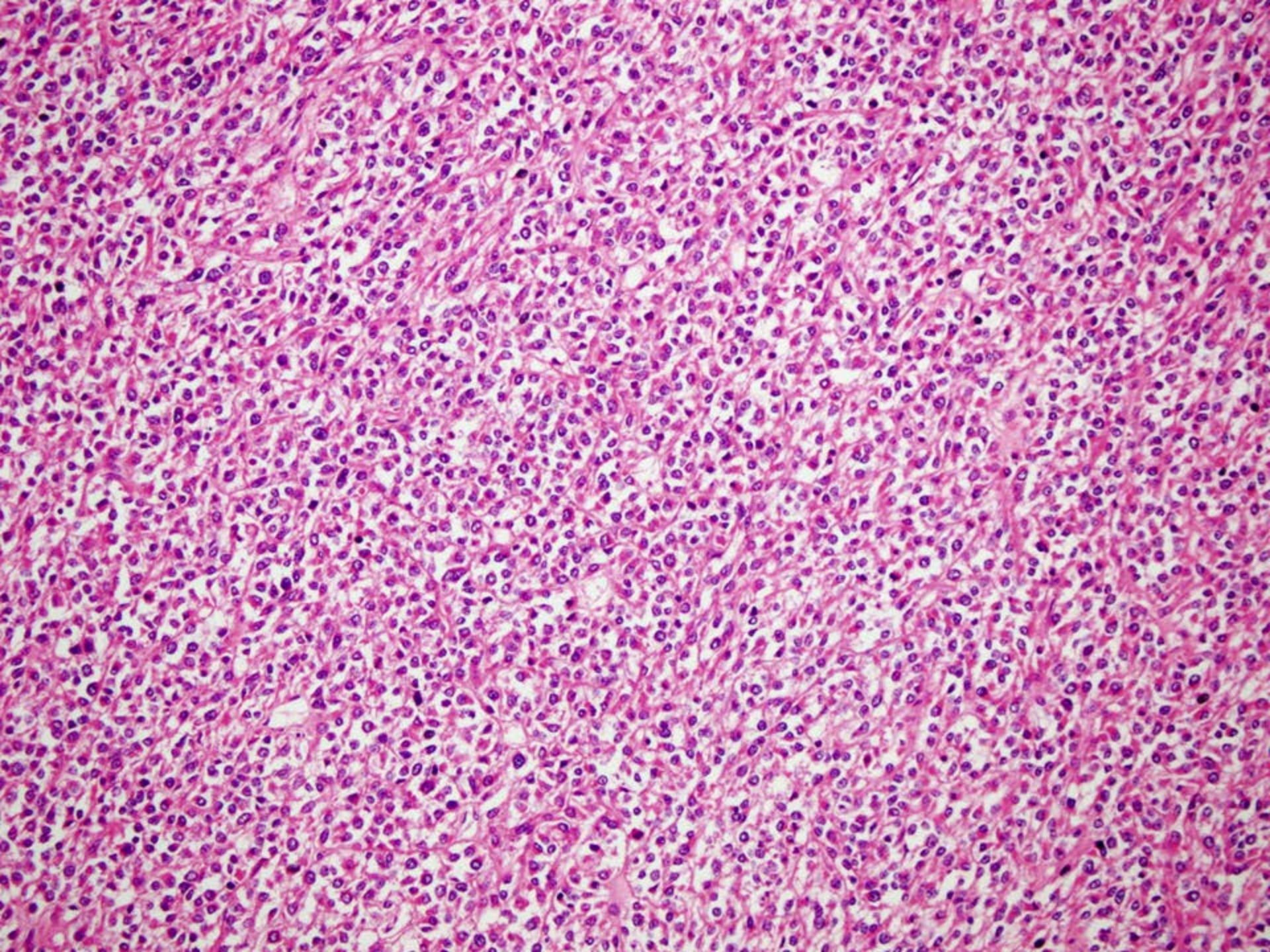
High grade ESS

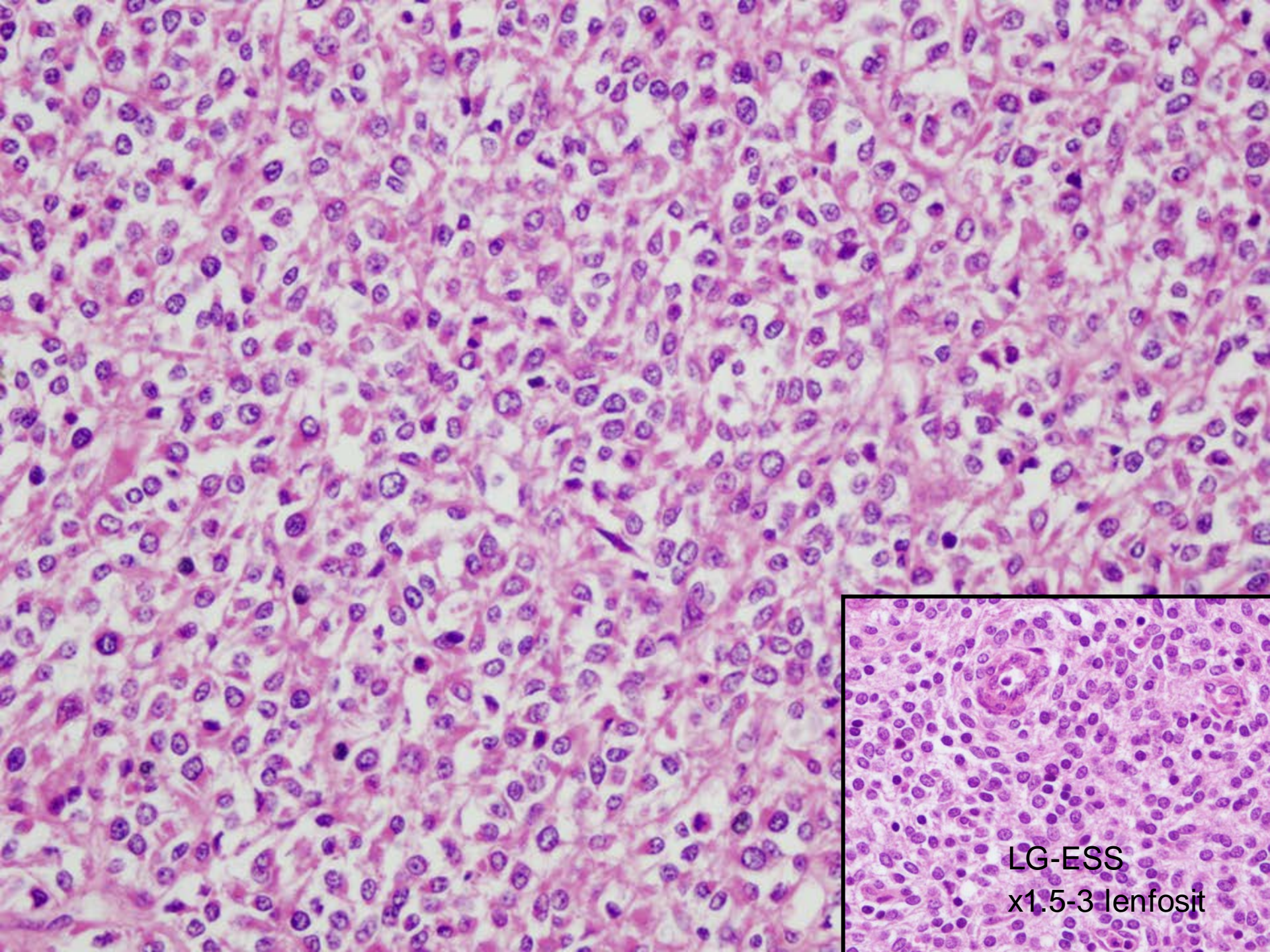
- t(10;17) (q22;p13) translokasyonu
- YWHAE-FAM22A/B gen füzyonu
- **High grade (epiteloid) komponent**
 - uniform, yuvarlak hc (x3-5 lenfosit)
 - İnce kapiller damar ağı
 - Diffuz, yuva yapıları
- **Low grade (iğsi) komponent**
 - Fibromiksoid, klasik low grade ESS
- Mitoz >10/10 BBA
- İnfiltratif ve destrüktif invazyon
- Nekroz ve LVI
- İleri evre



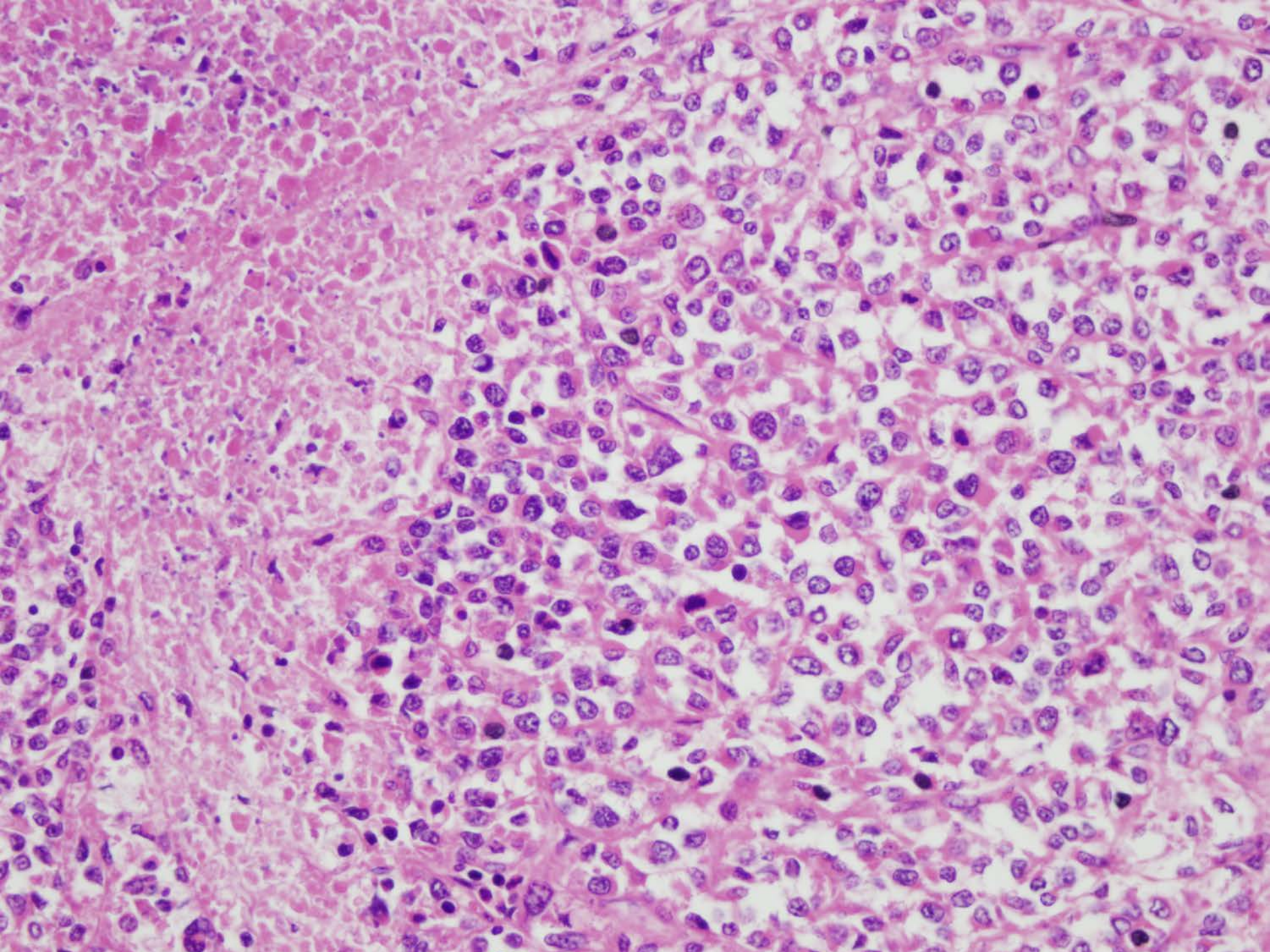


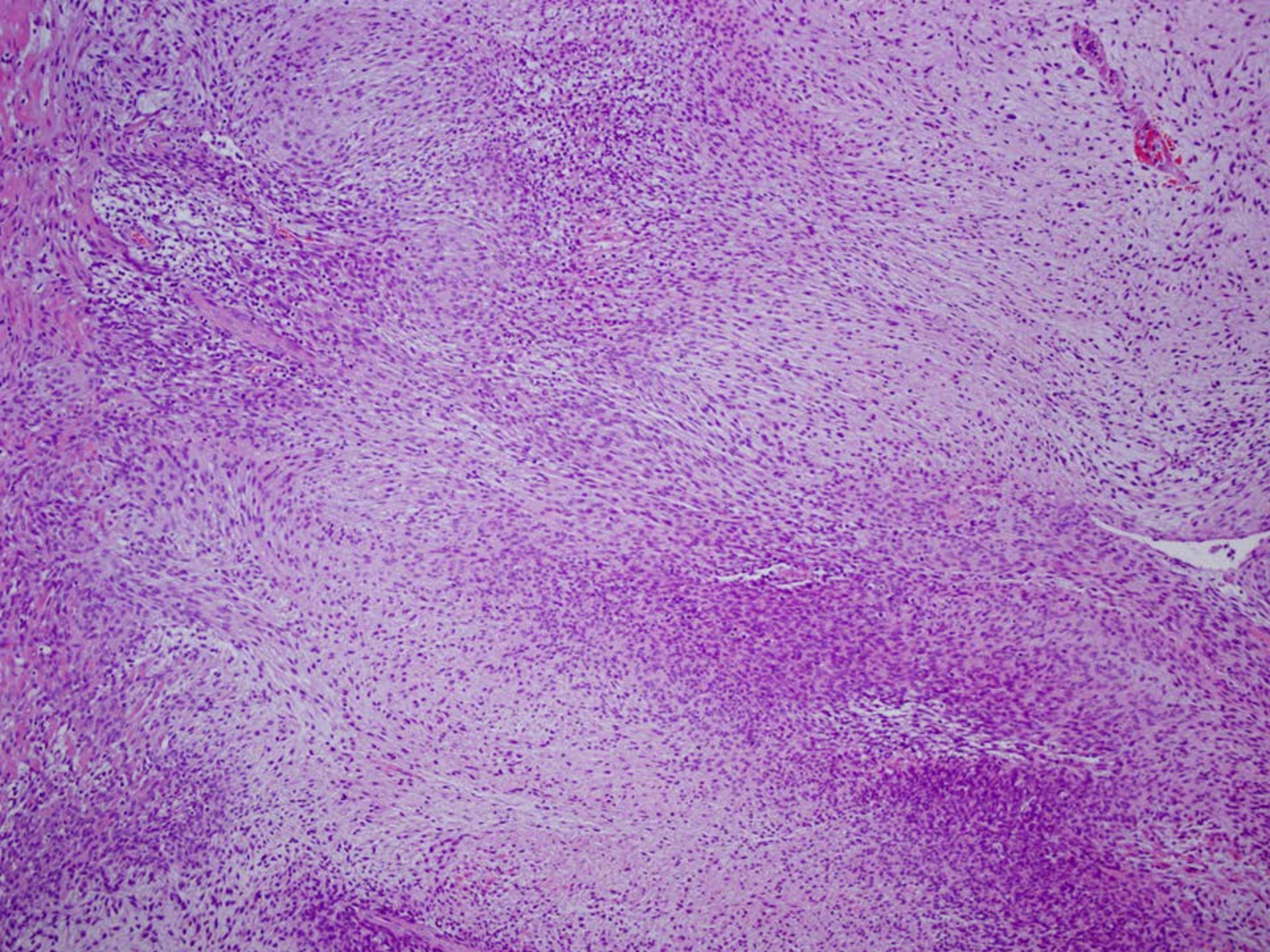


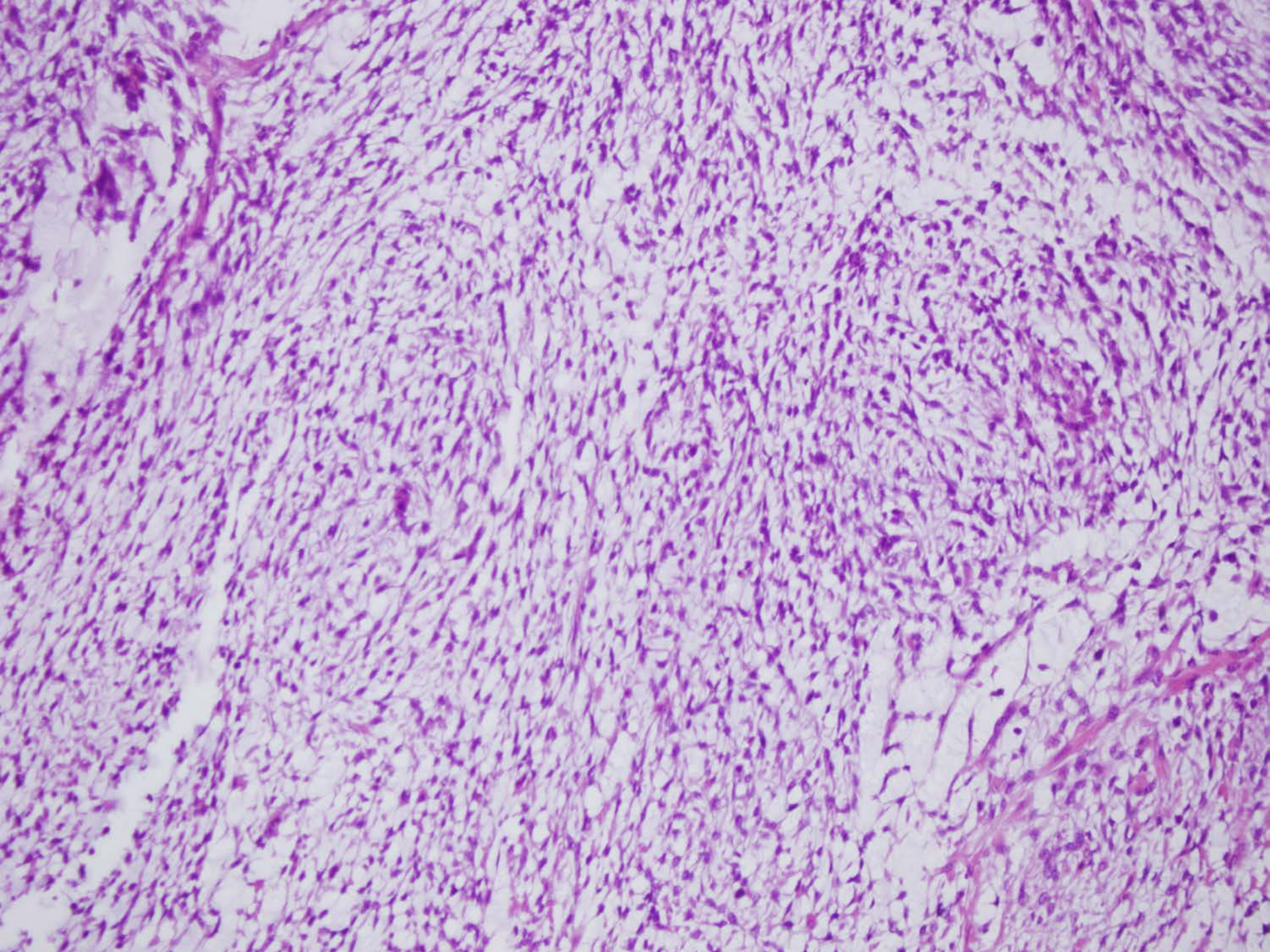




LG-ESS
x1.5-3 lenfosit







HG-ESS'de immunhistokimya

	High grade komp.	Low grade komp.
CD10	Negatif	Diffuz
SiklinD1	Diffuz (>%70)	Negatif/fokal +
ER/PR	Negatif	Diffuz
CD117	Sıklıkla +	Negatif/fokal +

İndiferansiye uterin sarkom

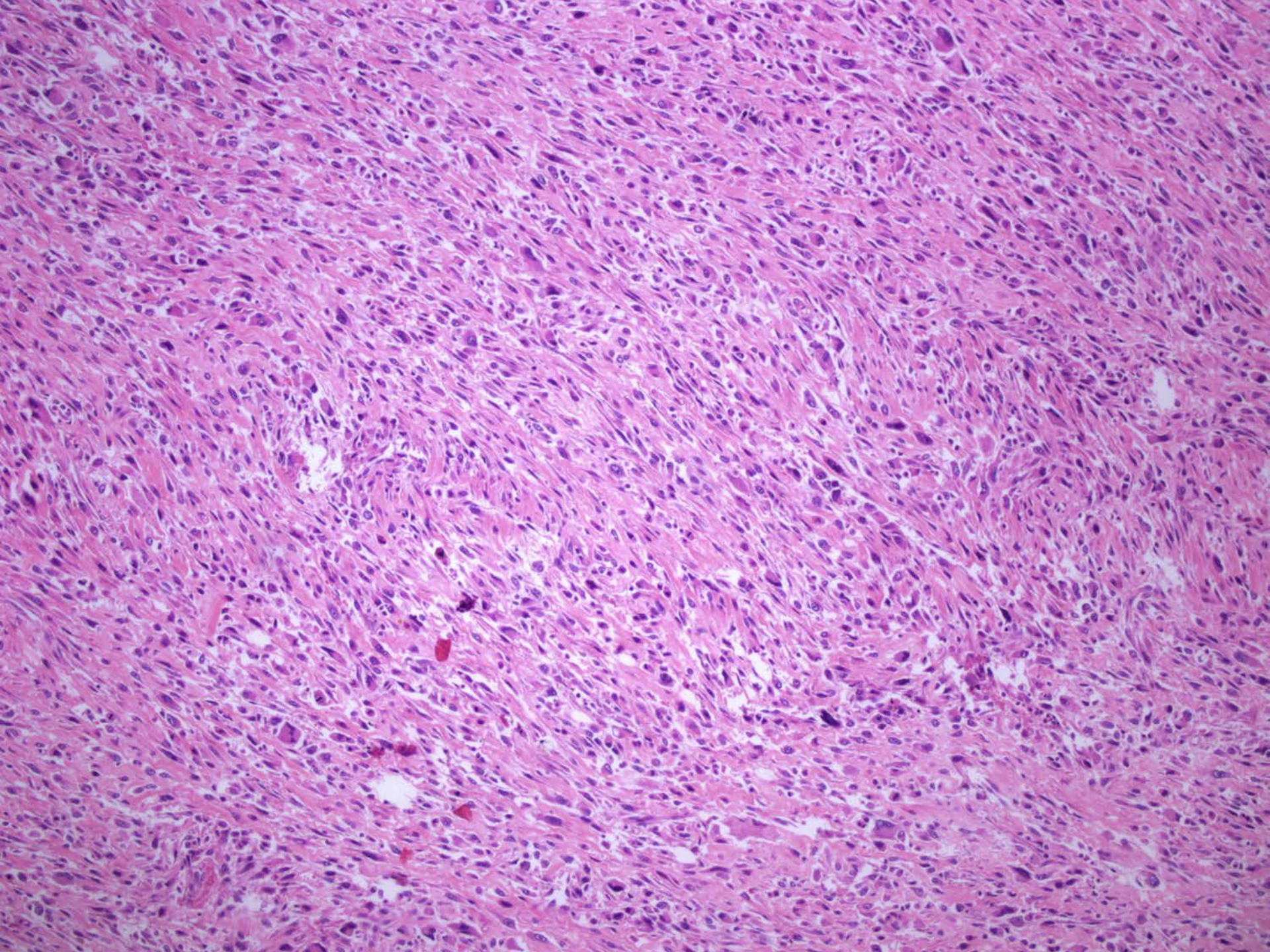
- Kompleks kromozomal deęişiklikler
(Kromozom kayıp yada kazanımları, P53 mut)
- Spesifik diferansiasyon yok
- Belirgin atipi ve pleomorfizm
- İęsi, poligonal hc
- Karakteristik damar çatısı yok
- Destrüktif invazyon
- Mitoz ↑, atipik mitoz
- Nekroz

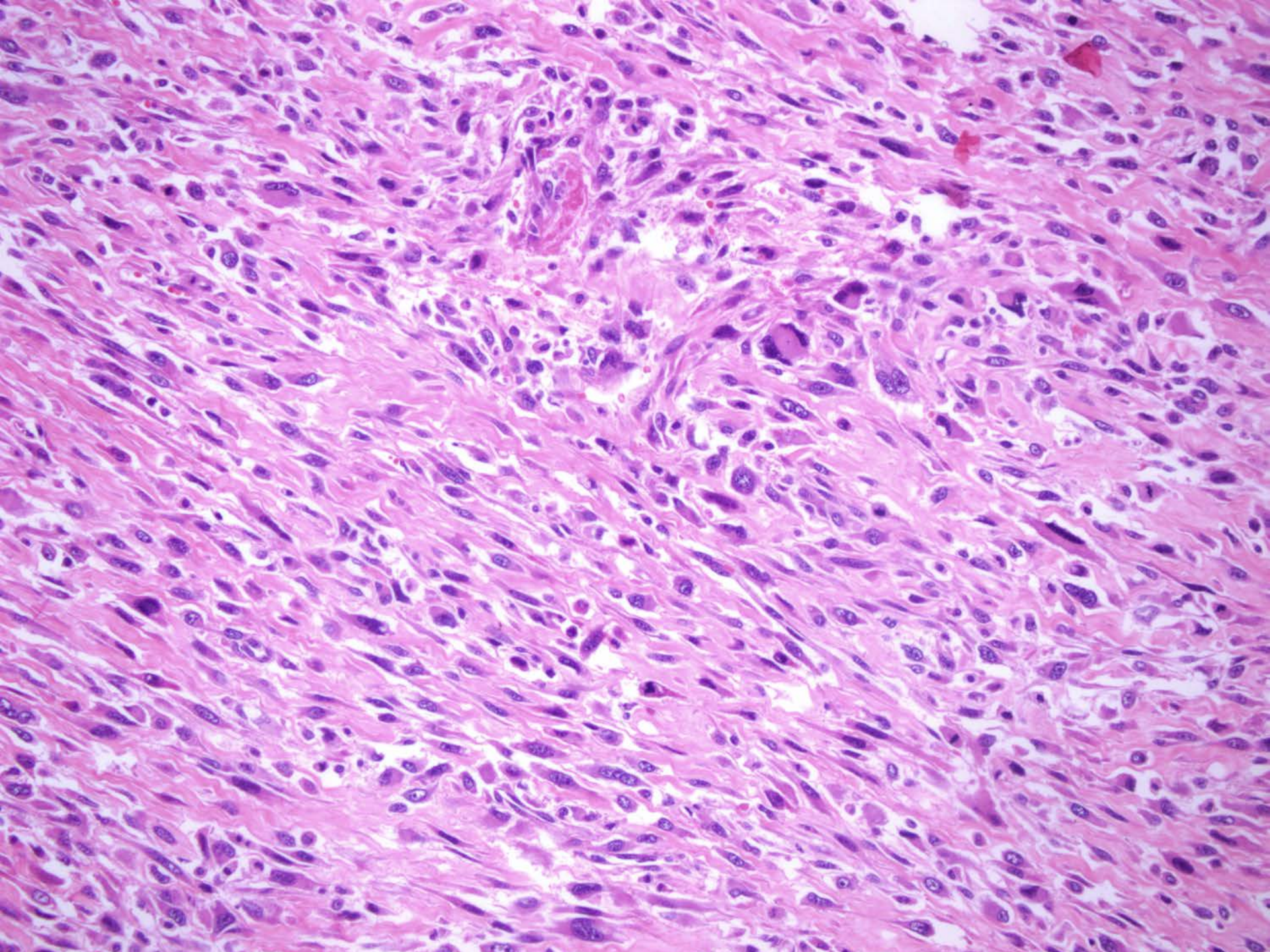
İndiferansiye uterin sarkom

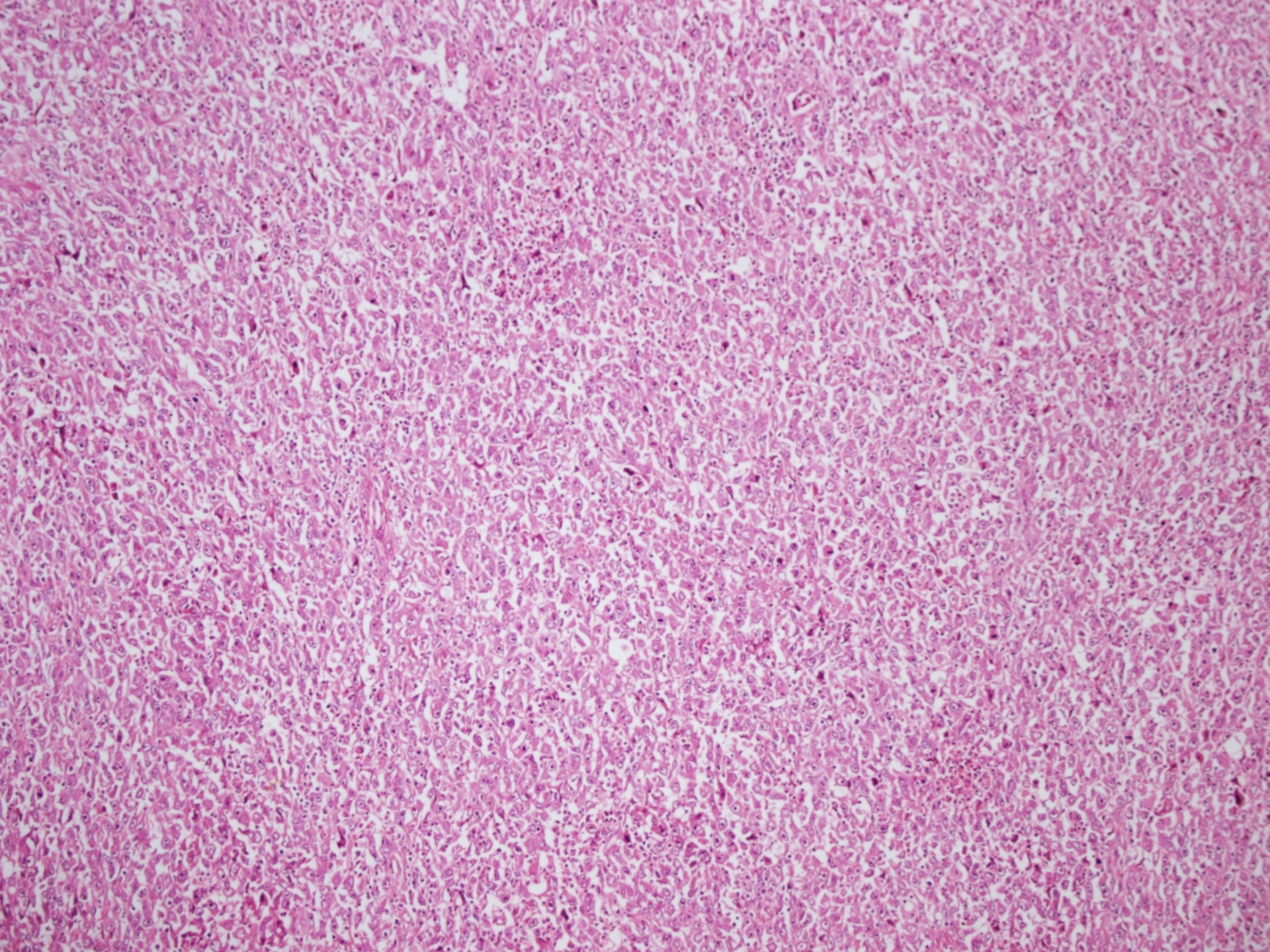
- Tanıtıcı İH boyanma özelliği yok
- Diğer high grade tümörler dışlanmalıdır
 - LMS
 - Sarkomatöz overgrowth gösteren adenosarkom
 - MMMT
 - İndiferansiye karsinom
 - Malign melanom
 - Lenfoma
 - Sekonder yumuşak doku tm

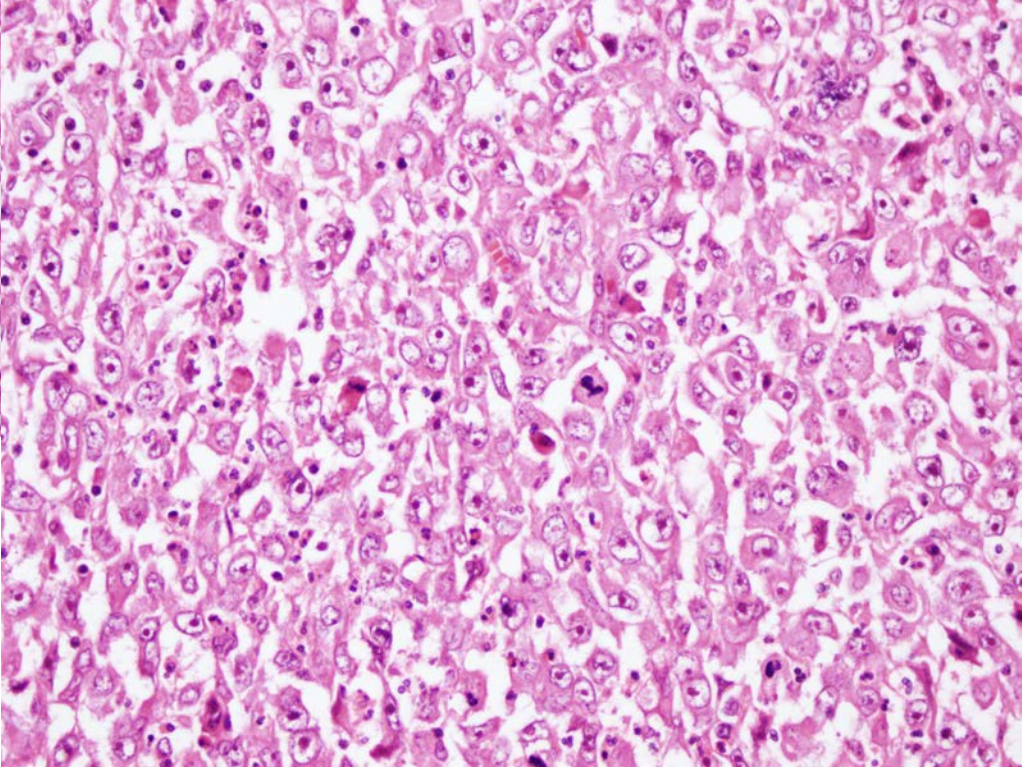
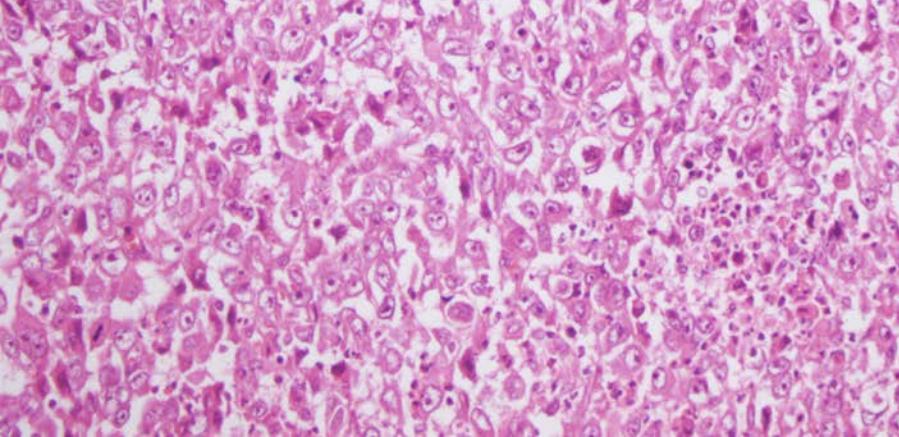
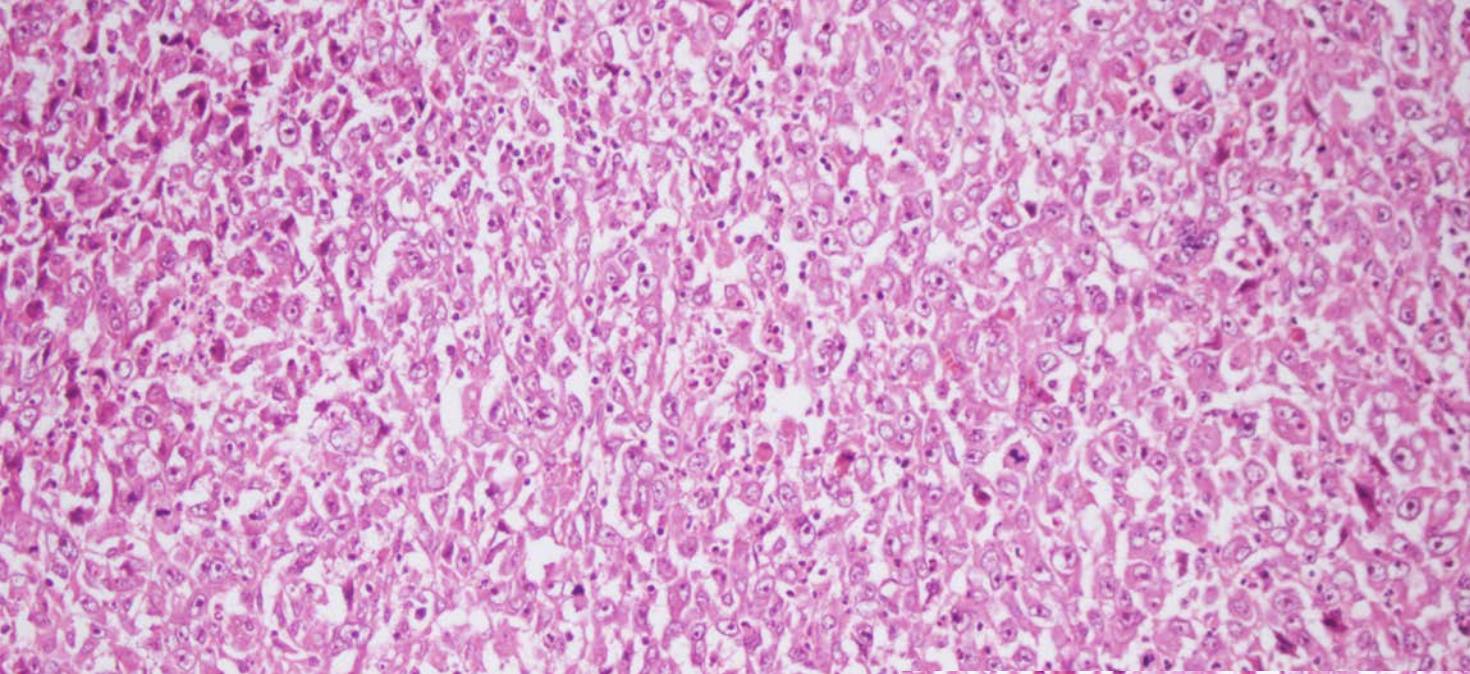
İndiferansiye uterin sarkom immunhistokimya bulguları

- CD10 → değişken (diffuz + olabilir)
- Siklin D1 → + (diffuz olabilir)
- SMA, desmin } Fokal + olabilir
- Keratin, EMA } Fokal + olabilir
- ER/PR → genellikle -
- P53 → +



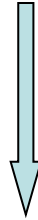






İndiferansiye uterin sarkom

Eşlik eden low grade ESS

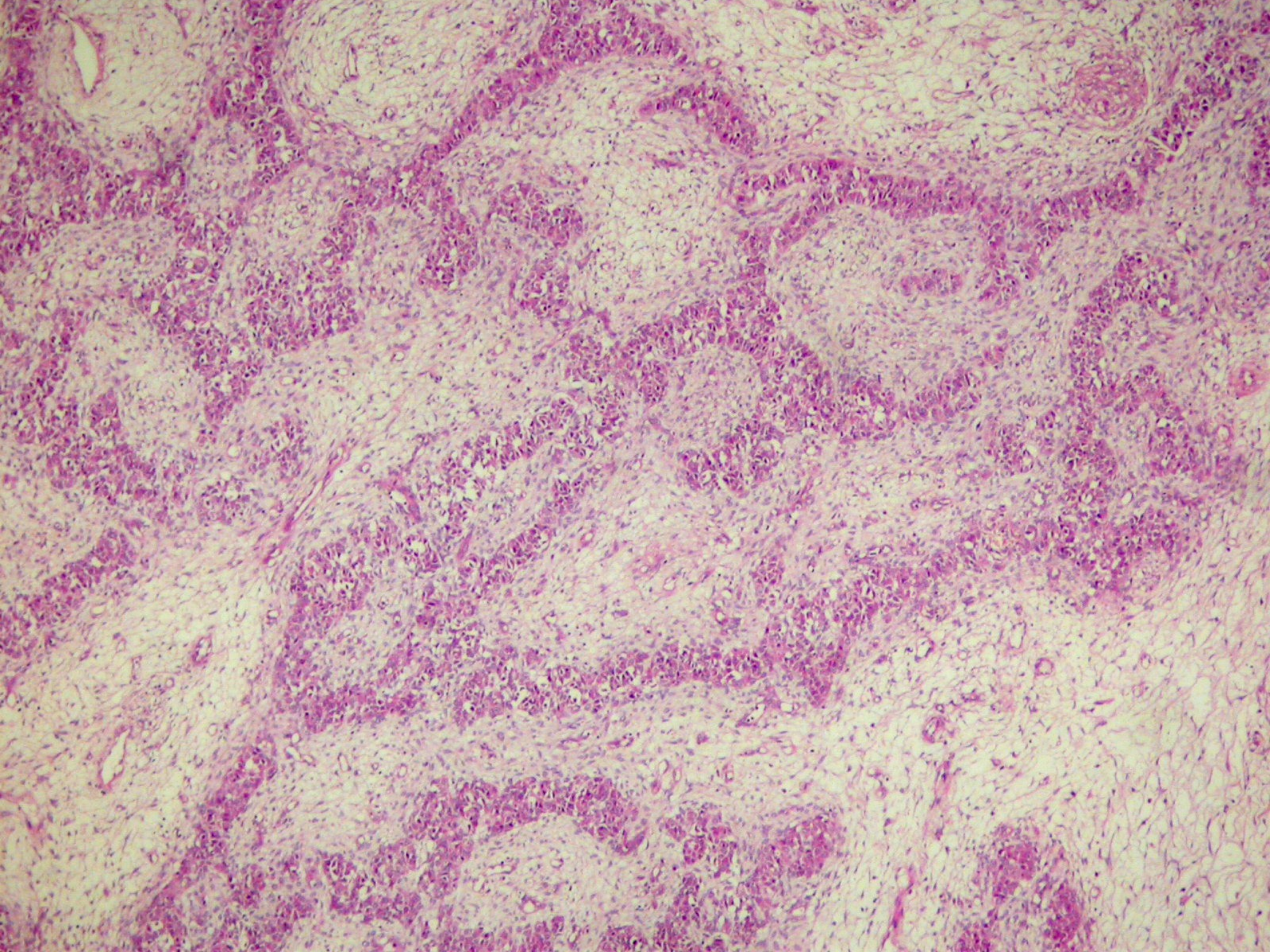


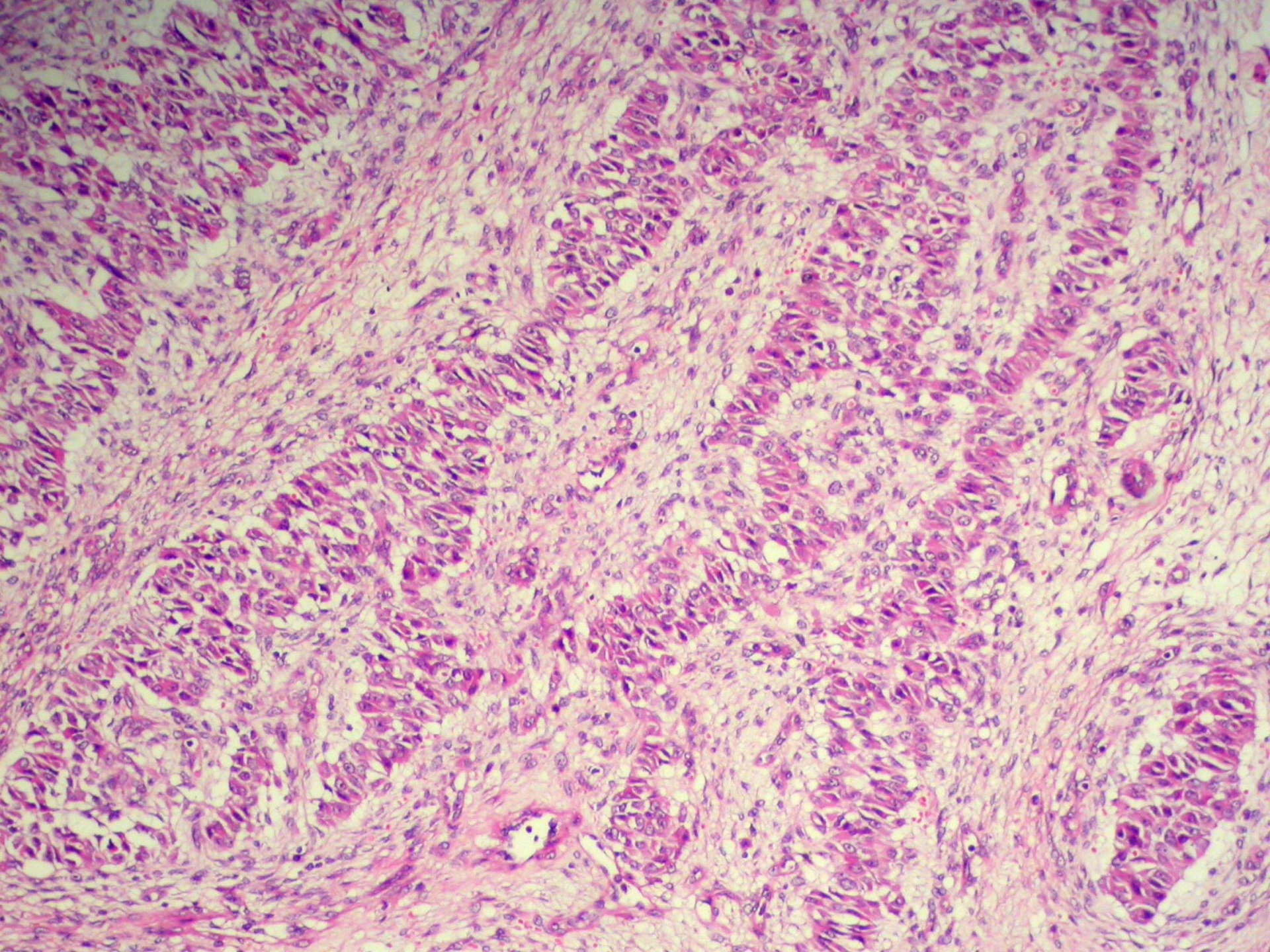
Dediferansiye LG-ESS

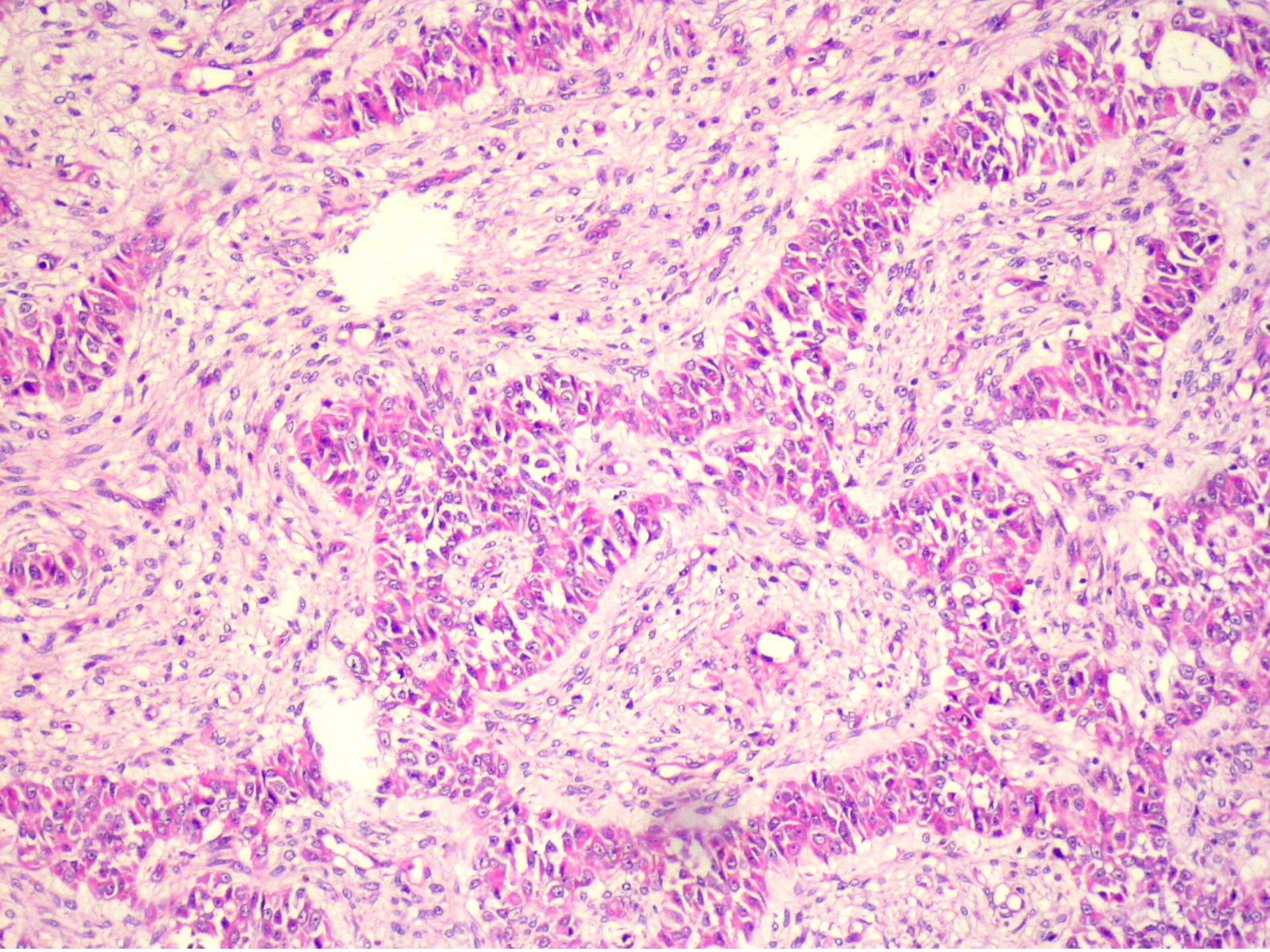
JAZF1-SUZ12 gen füzyonu

Overin seks kord tümörüne benzeyen uterin tümör

- Endometrial stromal tm komponenti yok
- Eozinofilik sitoplazmalı epiteloid hc
- Kordon, trabekül, tubul, yuva
- Seks kord belirteçleri ile pozitiflik
(kalretinin, melan-A, CD99, CD56, inhibin)
- Epitel ve düz kas belirteçleri pozitif
- CD10 sıklıkla pozitif
- Çoğu benign gidişli







Küretajda endometrial stromal tm tanısında sorunlar

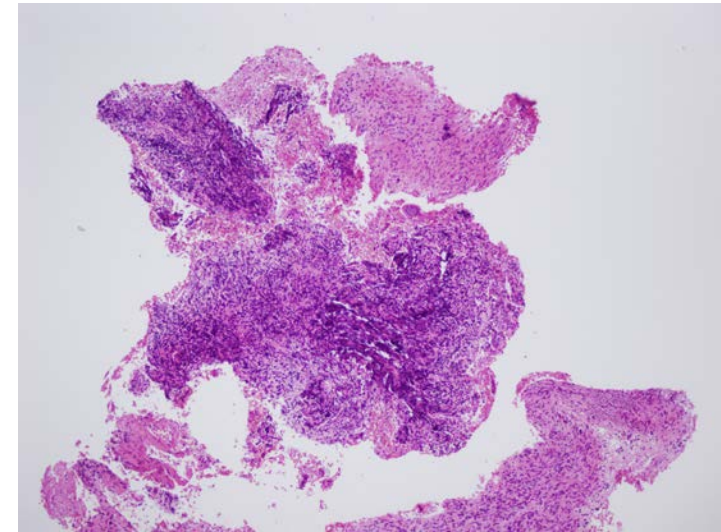
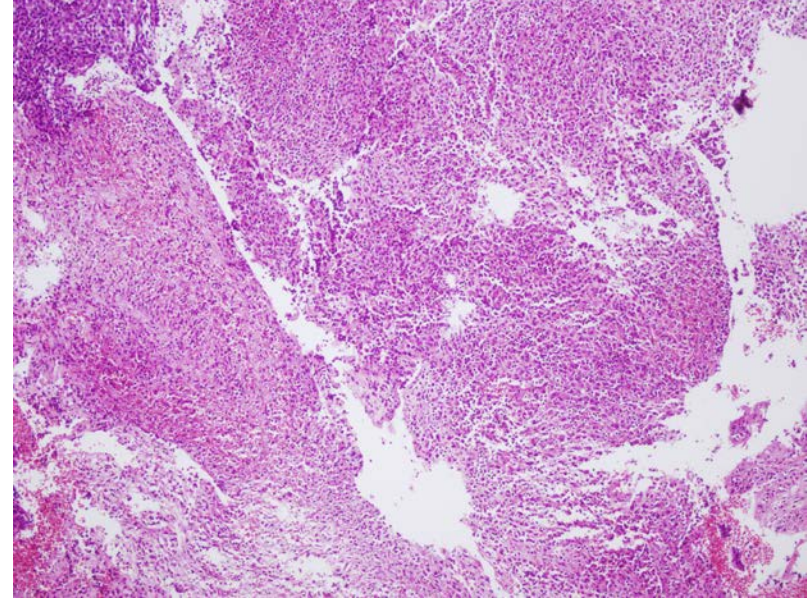
- ESN/LG-ESS ayrımı
 - Genellikle yapılamaz
 - “Endometrial stromal tümör” tanısı verilmeli
- Non-neoplastik stromadan ayırım
 - Endometrial polip
 - Atrofik endometrial stroma

Küretajda endometrial stromal tm tanısında sorunlar

Nelere dikkat edelim?

- Multipl fragman
- Ekspansil görünüm
- Fragman boyutu >5 mm
- Fibrin içeren kompakt stroma
- Kalın duvarlı damarlar

Klinik bulgular ile birlikte değerlendirme

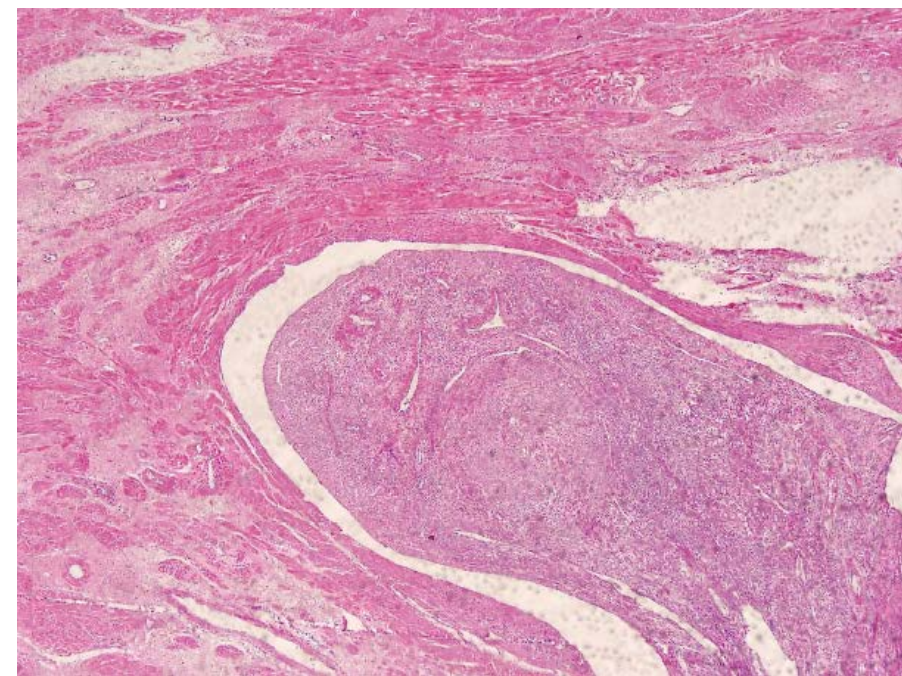
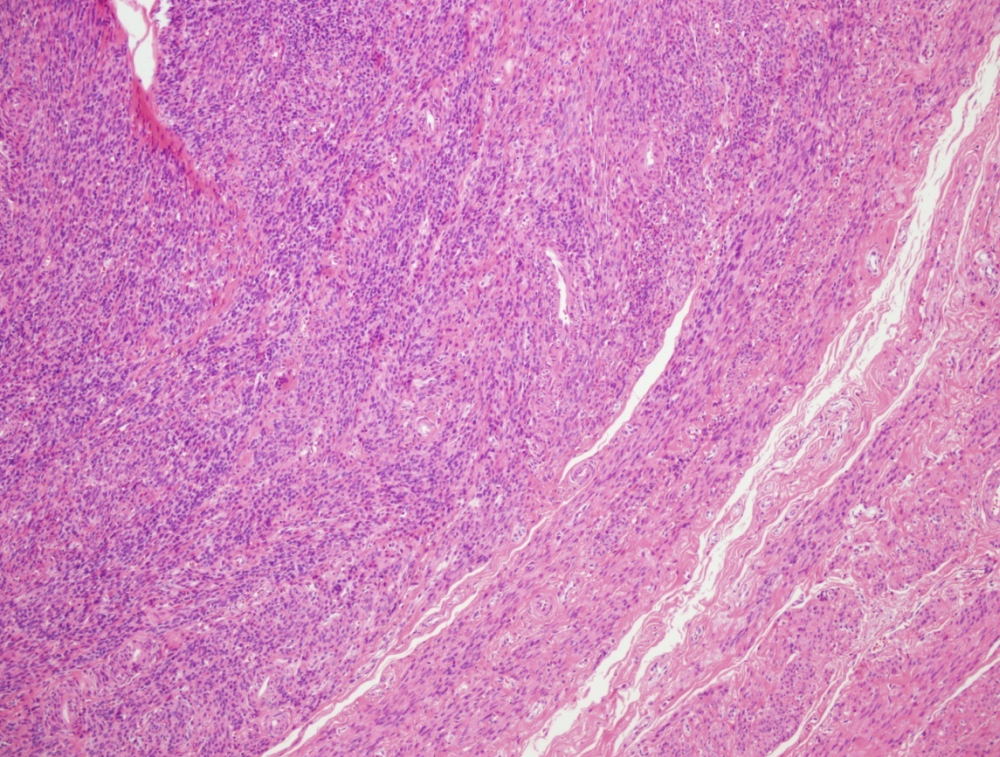
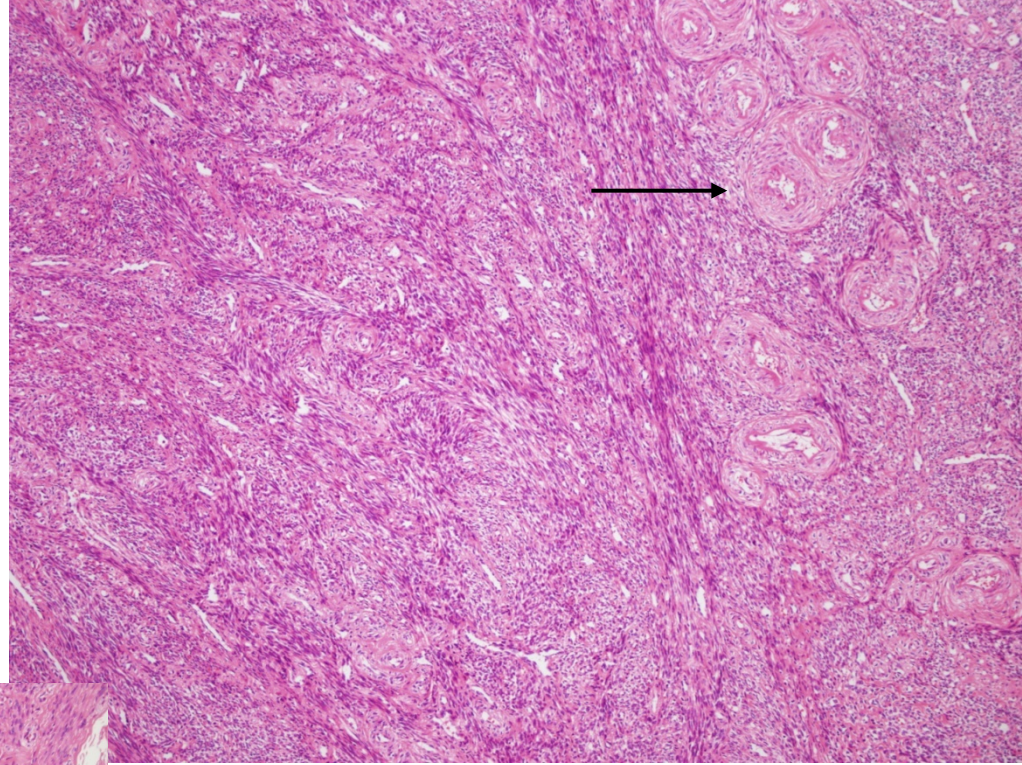


Ayırıcı tanı

- **ESN**
 - Sellüler leiomyom
- **LG-ESS**
 - İnvaziv leiomyomatosis
- **HG-ESS**
 - Epiteloid LMS
 - İndiferansiyel Ca
 - PEComa
 - GIST
- **İUS**
 - Leiomyosarkom
 - Adenosarkom, MMMT
 - M melanom
 - Lenfoma

Sellüler LM İV leiomyomatozis

- Kalın duv dm
- Fasiküler patern
- İnce yarıklar



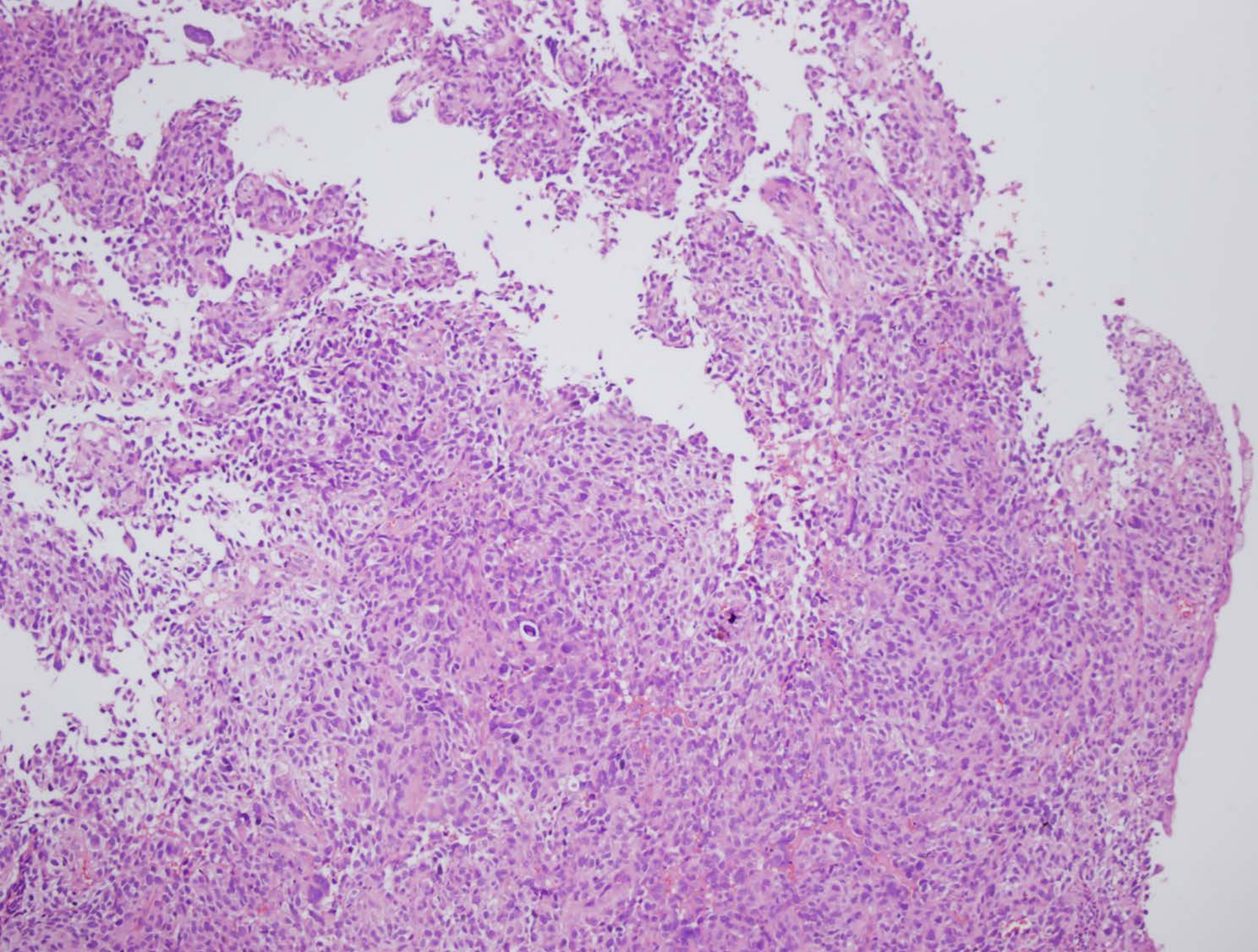
Endometrial stromal tümör ve düz kas tümörlerinin ayırıcı tanısı

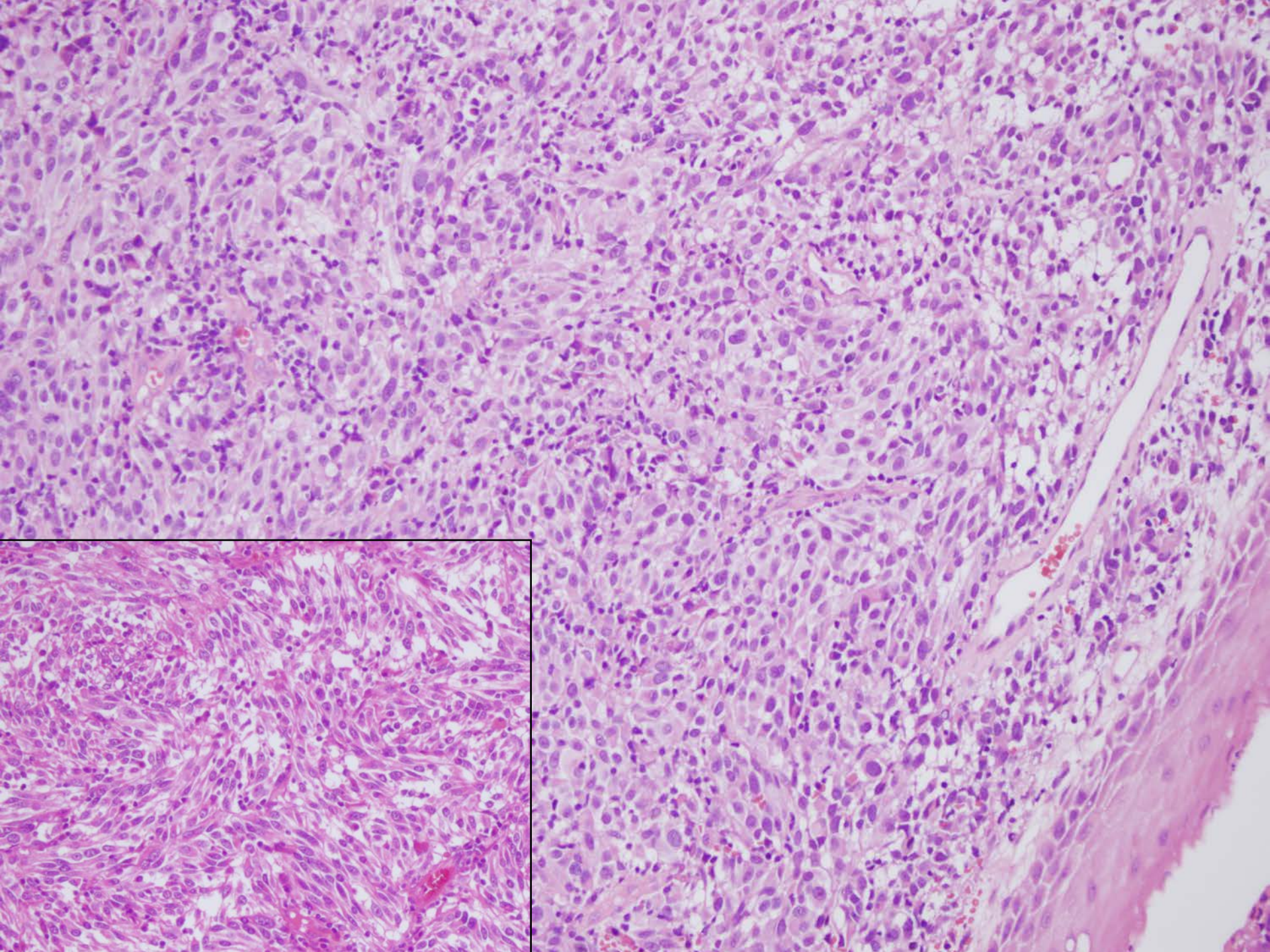
- Spesifik belirteç yok
- Boyanma yoğunluk ve yaygınlığı da dikkate alınmalıdır
- Ayırıcı tanıda morfoloji esastır

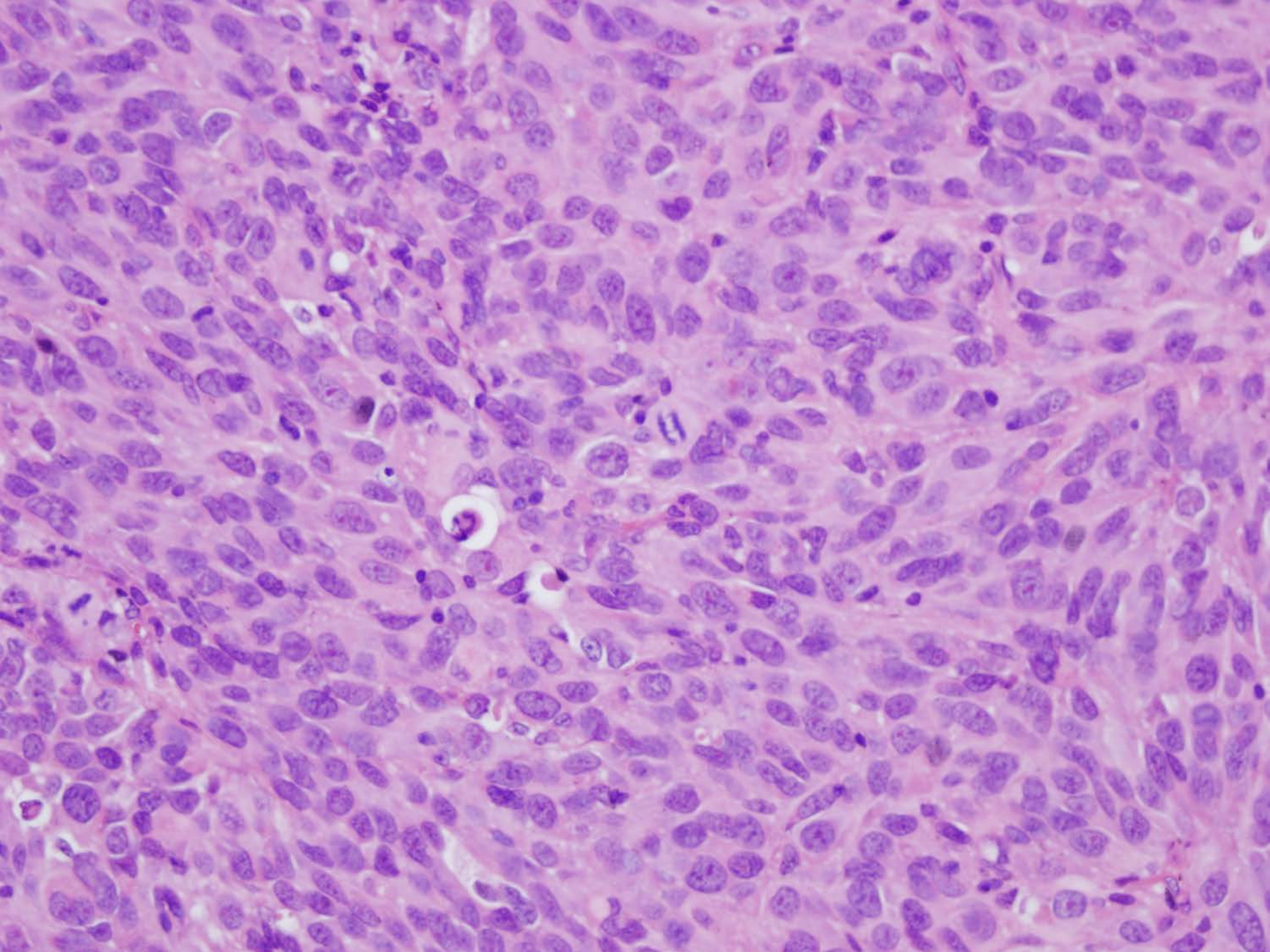
	Endometr str tm	Düz kas tm
SMA	-/+	+
Desmin	-/+	+
Caldesmon	- /fokal zayıf	+
CD10	+	-/+

Olgu

- 45 yaş
- Vajinal kanama
- Uterus korpus ve serviksi tutan kitle
- Serviksten protrude olmuş







- Pozitif

- Vimentin

İndiferansiye uterin sarkom
MMMT

Adenosarkom (sarkomatöz overgrowth)

Leiomyosarkom

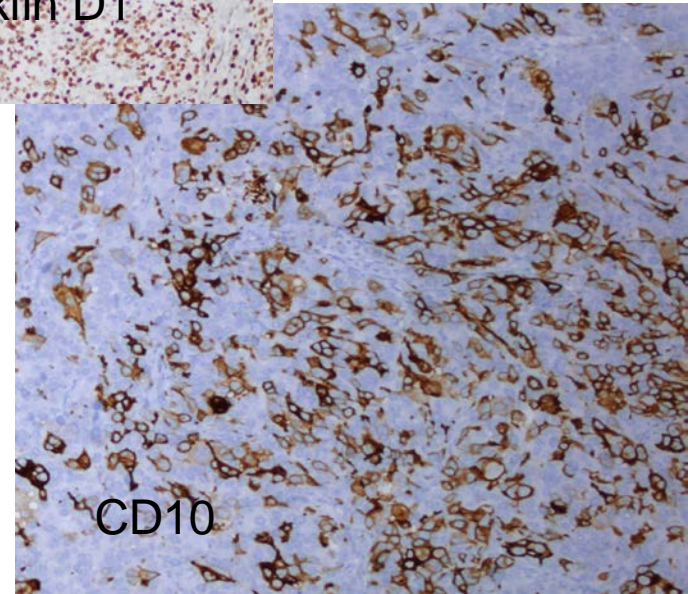
- Negatif

- Sma

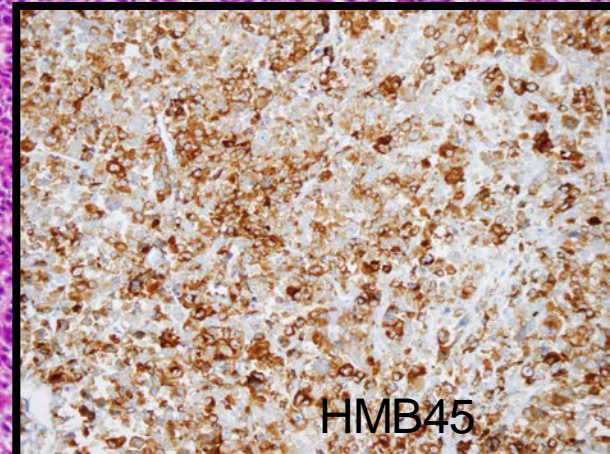
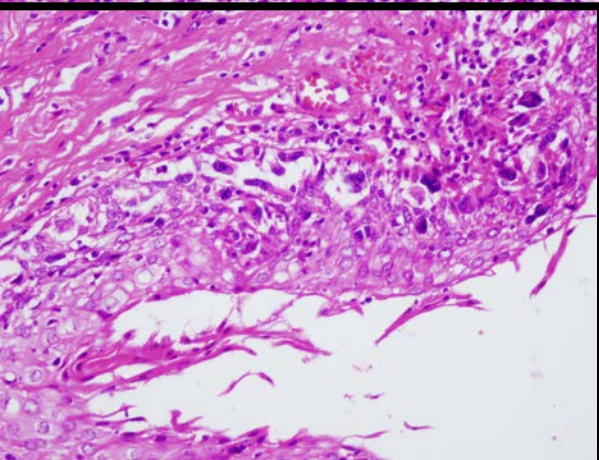
- Desmin

- Kaldesmon

- Pankeratin



Malign melanom



Önemli noktalar

LGESS

HGESS

İUS

Genetik

YWHAE-NUTM2

JAZF1-SUZ12
JAZF1-PHF1

Kompleks
karyotip

Prognoz

İyi

Orta

Kötü

Tedavi

Anti-östrojen

Adjuvan
KT/RT

Etkili ted yok

Önemli noktalar

- Hücre morfolojisi, damar çatısı, invazyon paterni
- Mitoz ve nekroz tek başına kriter değil
- Spesifik immun belirteç yok
- İHK boyaların değerlendirilmesinde;
 - Morfoloji (boyanma nerede?)
 - Yaygınlık
 - Yoğunluk
- Küretajda ESN/LG-ESS ayırıcı tanısı yapılamaz
- İUS dışlama tanısıdır

Dünyanın en büyük barış sembolü



Teşekkür ederim

Mudanya/BURSA 30 Ağustos 2015