



**2011**

***CONSOLIDANDO PUENTES***

**ZARAGOZA**

**XXV Congreso de la Sociedad Española de Anatomía Patológica y División Española de la *International Academy of Pathology***

**XX Congreso de la Sociedad Española de Citología**

**I Congreso de la Sociedad Española de Patología Forense**

**Palacio de Congresos**

**Expo Aragón**

***18 a 21 de mayo de 2011***



# **Inmunocitoquímica de los derrames**

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# DERRAME

Lesión  
primaria

Lesión  
secundaria

Reactiva

Inflamatoria

Hiperplasia

Neoplásica

Metastasis

- Linfocítica
- Histiocítica

- Difusa
- Papilar

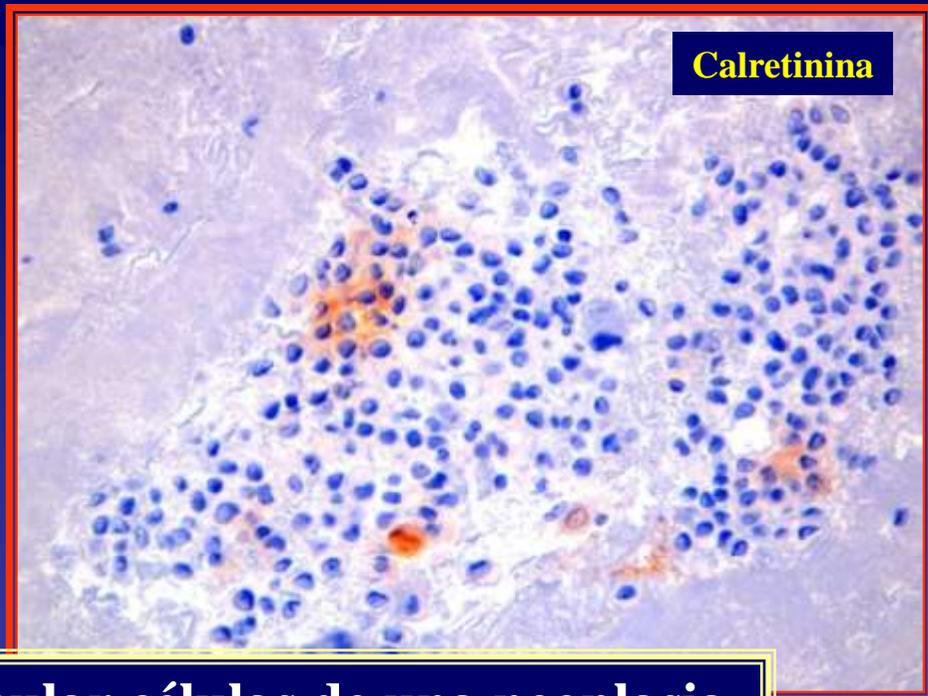
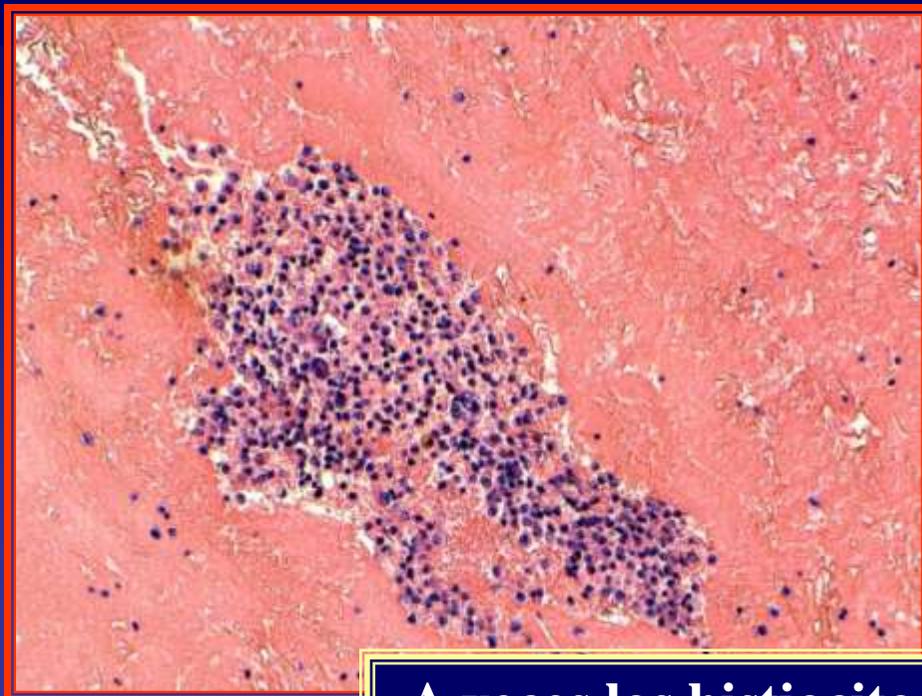
- Mesotelioma
- Linfoma

- Carcinoma
- Linfoma
- Sarcoma

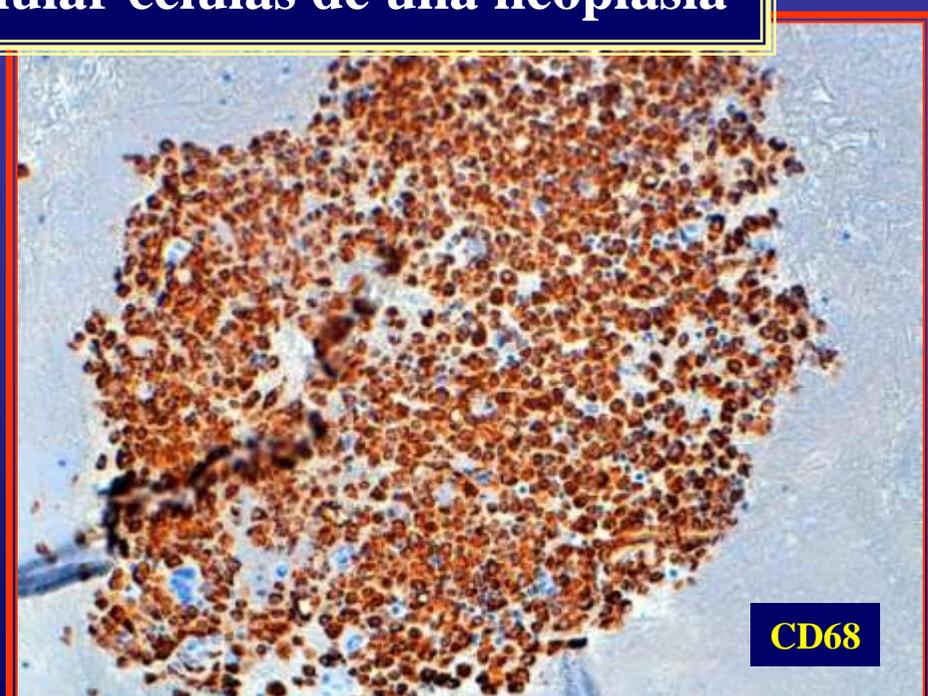
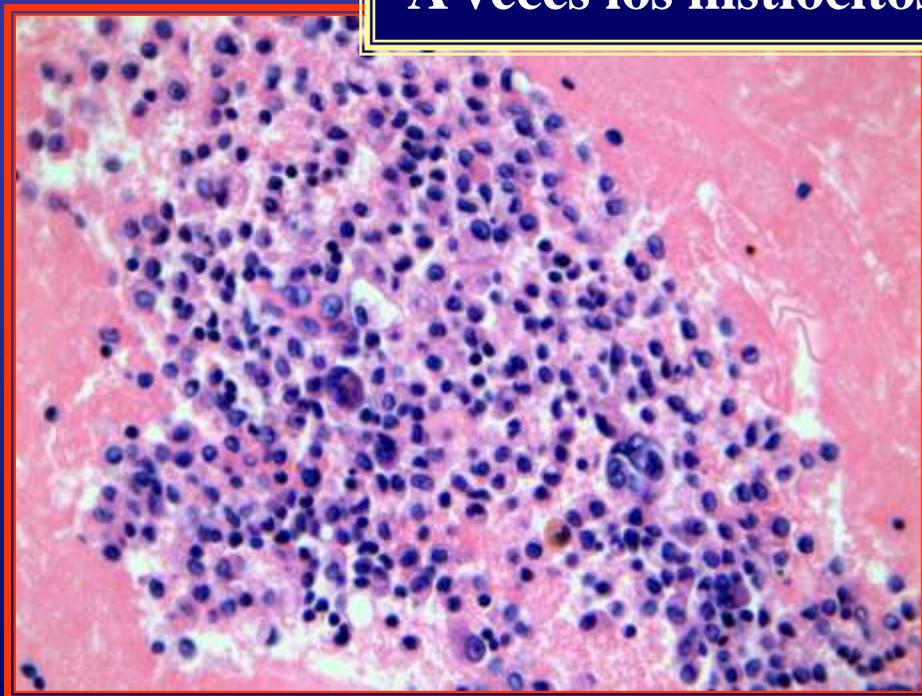
**Identificar la célula neoplásica en el derrame habitualmente es fácil cuando las células tumorales se muestran con las características generales citológicas de malignidad y por lo tanto es usualmente simple decir en citología convencional si una lesión es benigna o maligna, pero muchas veces precisar el tipo exacto de tumor puede ser más difícil, mientras la inmunocitoquímica nos permite llegar a un diagnóstico definitivo en la mayoría de los casos o resolver dudas entre varias hipótesis diagnósticas.**

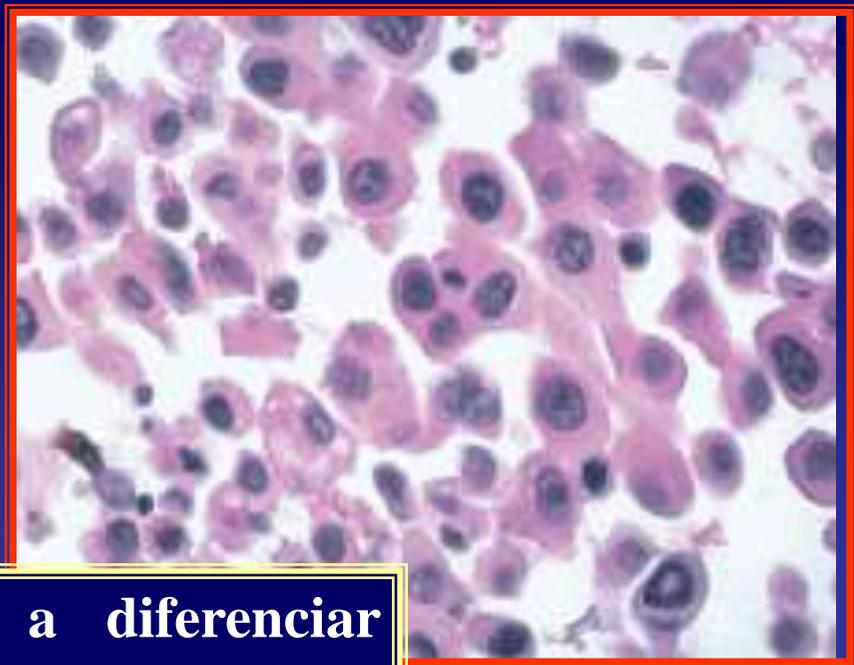
**La inmunocitoquímica (ICQ) puede utilizarse sobre varios tipos de especímenes (extendidos, monocapas, citocentrifugado, etc.).**

**En nuestro Centro se utilizan dos extendidos más el sistema del bloque celular para el diagnóstico de los derrames.**



**A veces los histiocitos pueden simular células de una neoplasia**

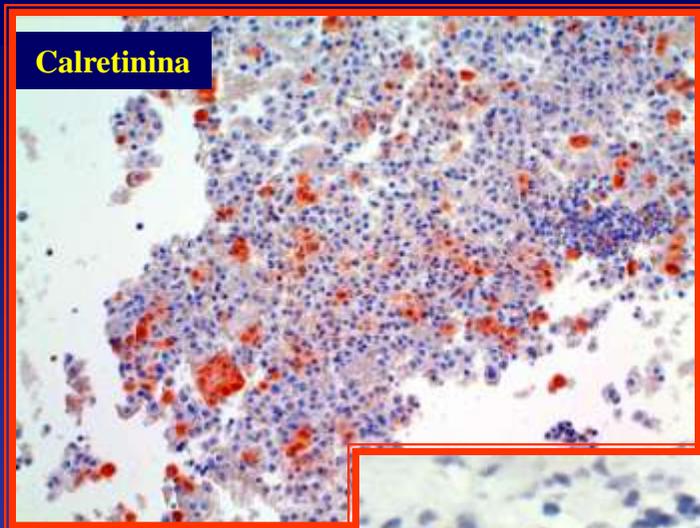




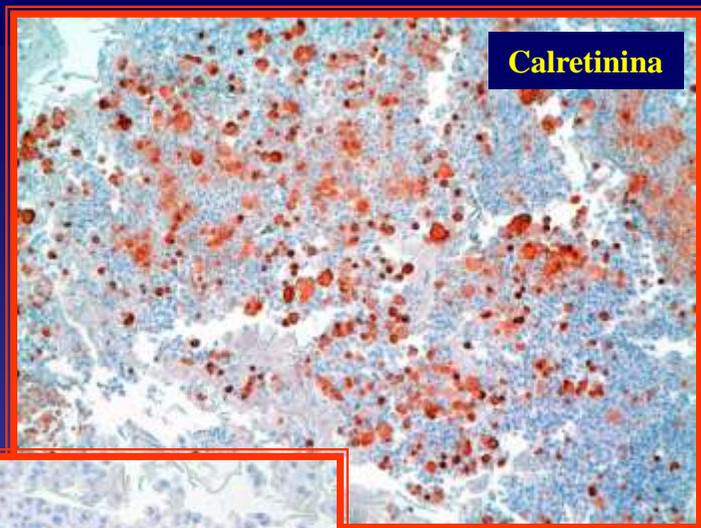
**Muchas veces hay dificultad a diferenciar morfológicamente entre células mesoteliales reactivas y células neoplásicas con moderadas atipias.**



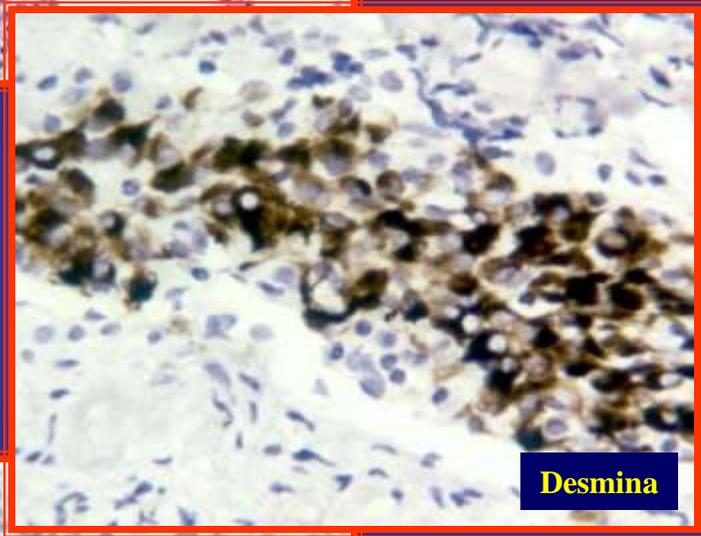
**Calretinina**



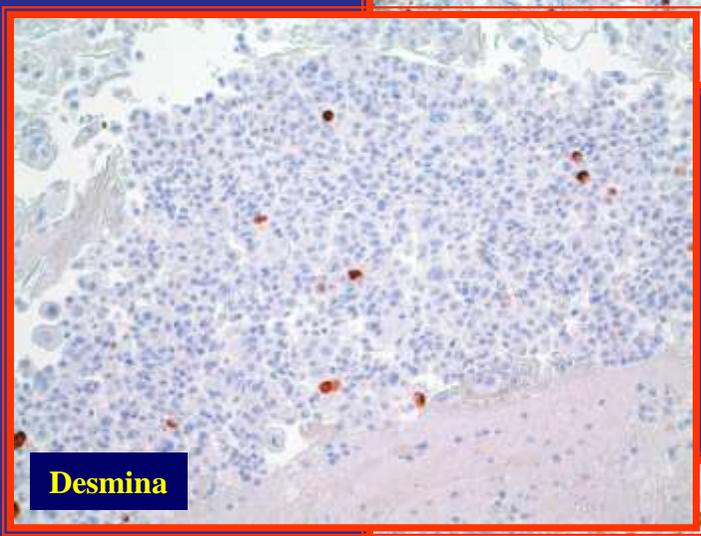
**Calretinina**



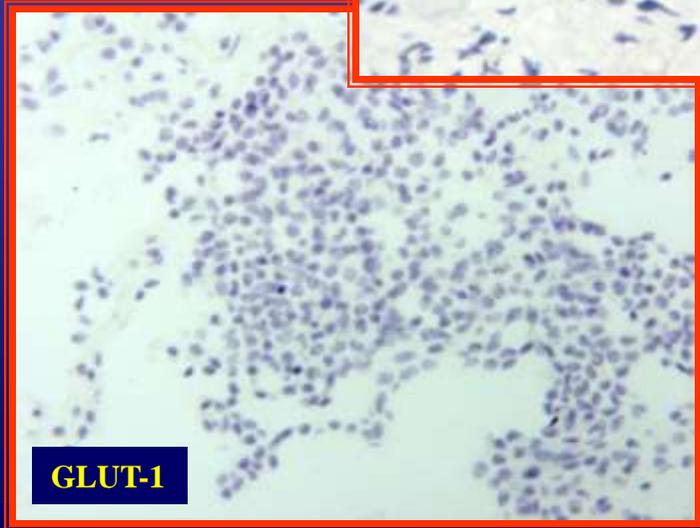
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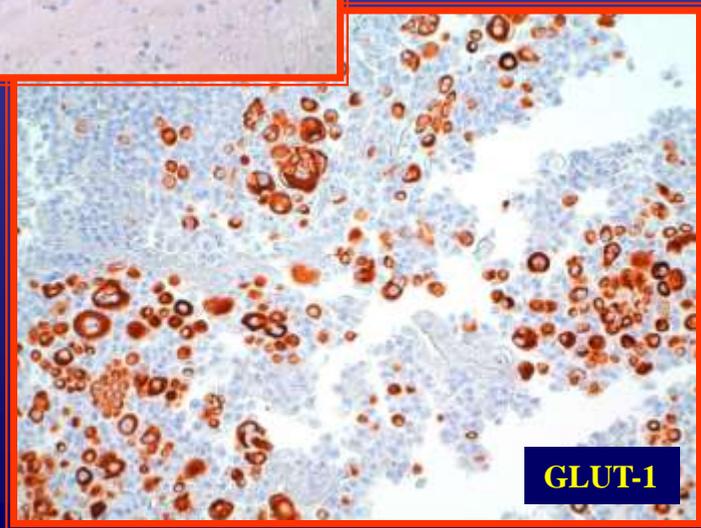
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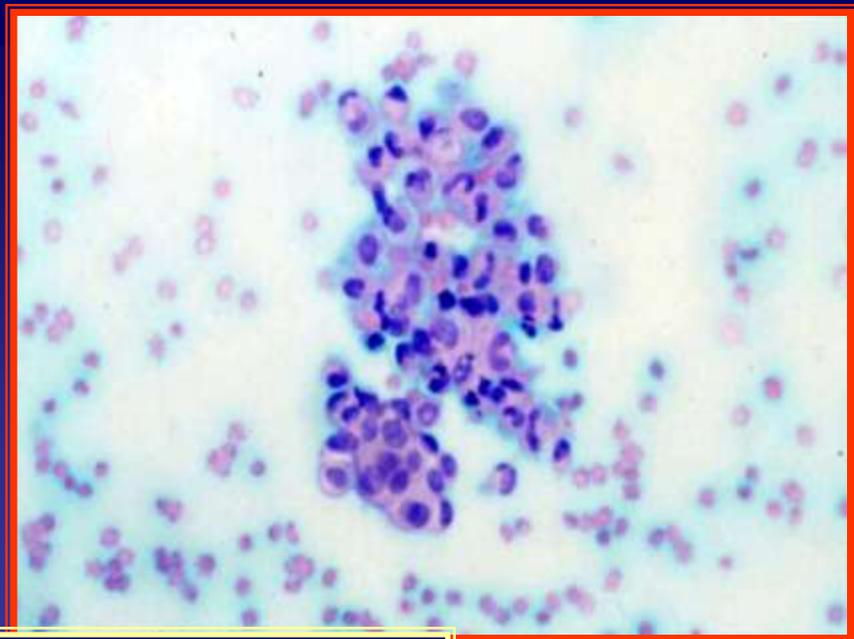
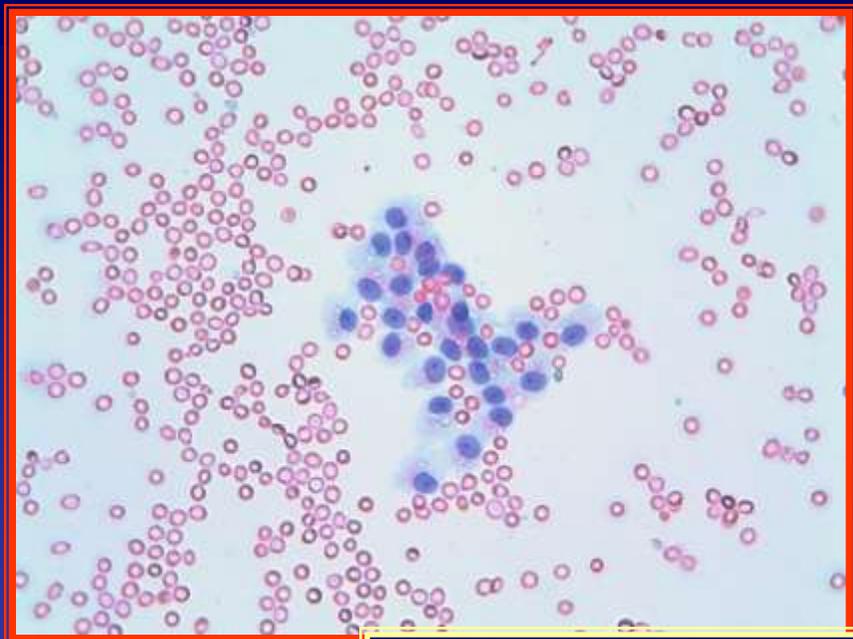


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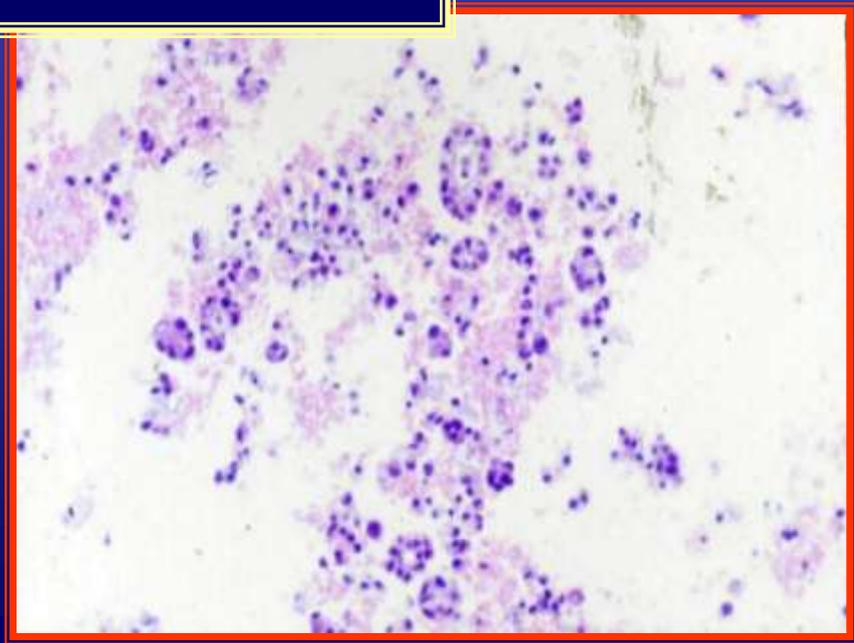
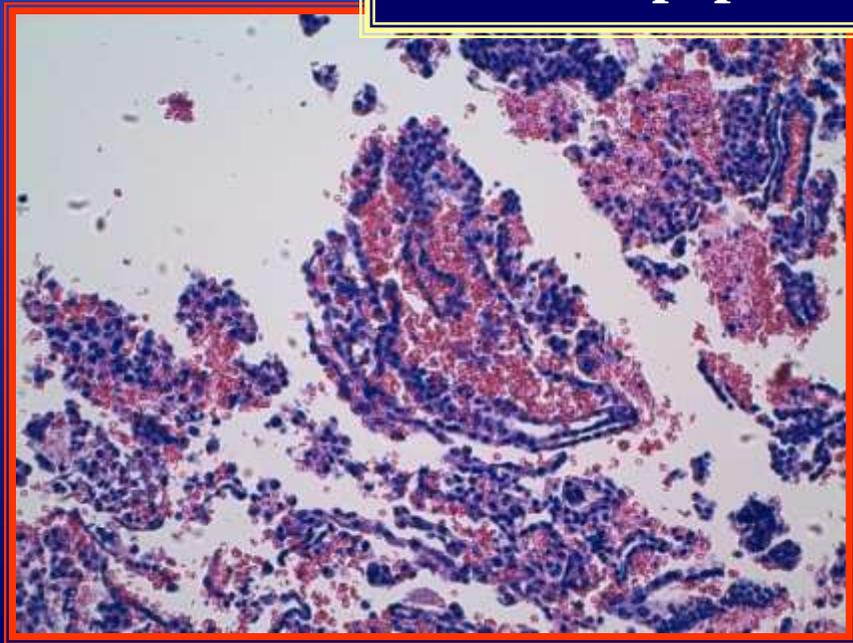


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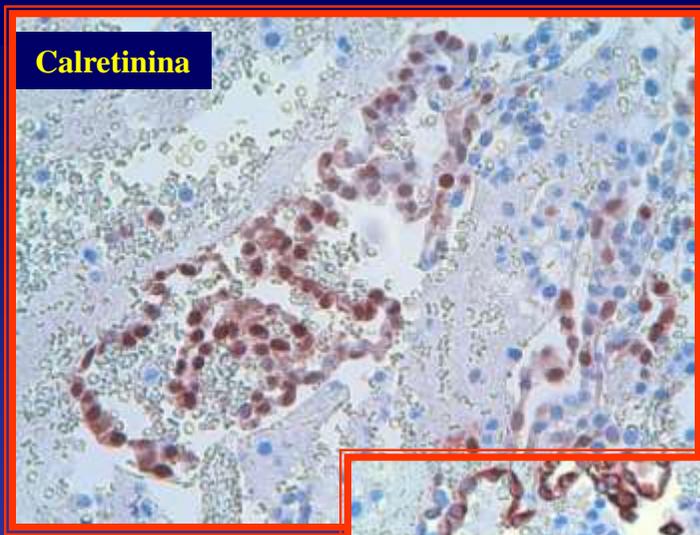




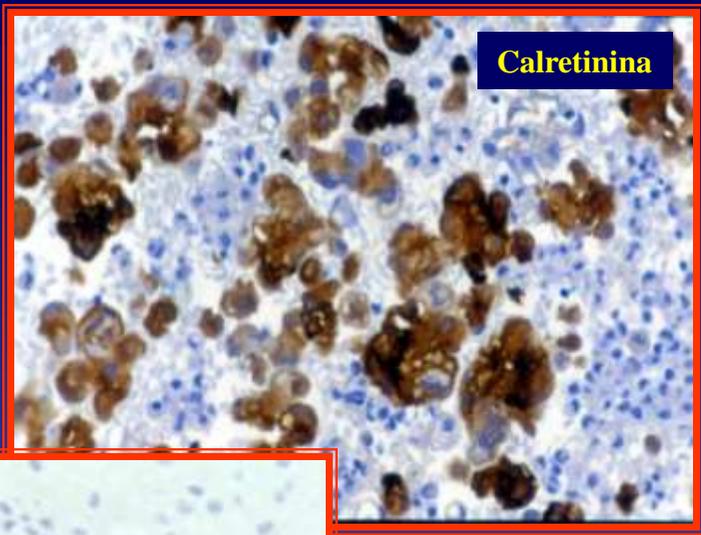
**Mas dificultad hay a diferenciar entre una lesión mesotelial papilar hiperplasica y un mesotelioma.**



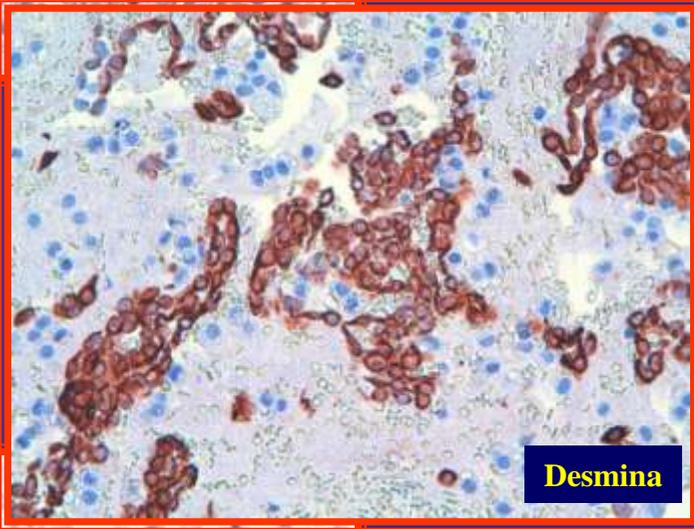
**Calretinina**



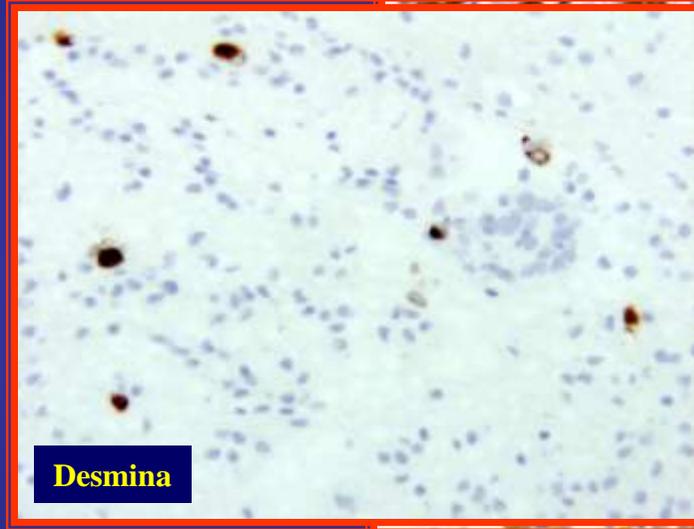
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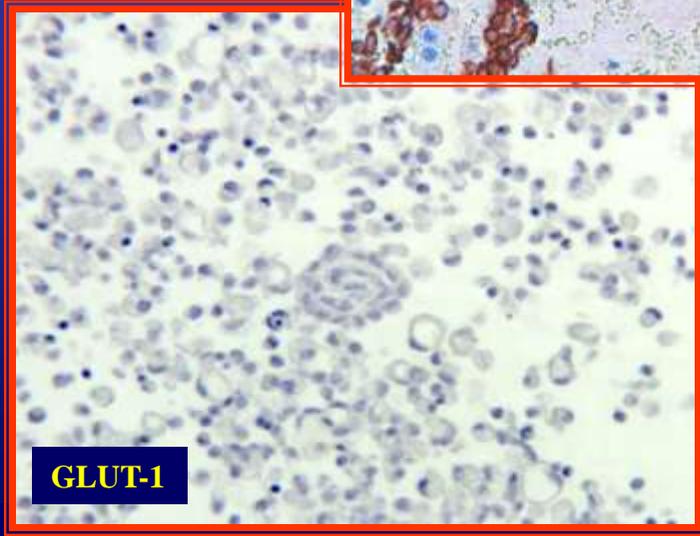
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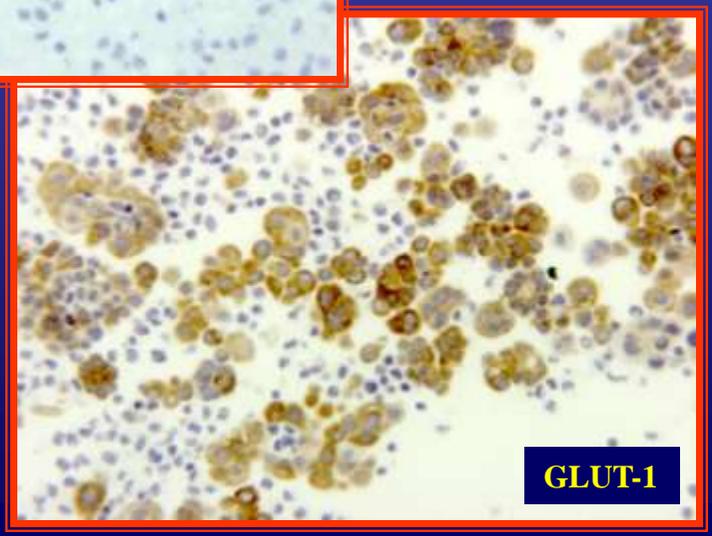
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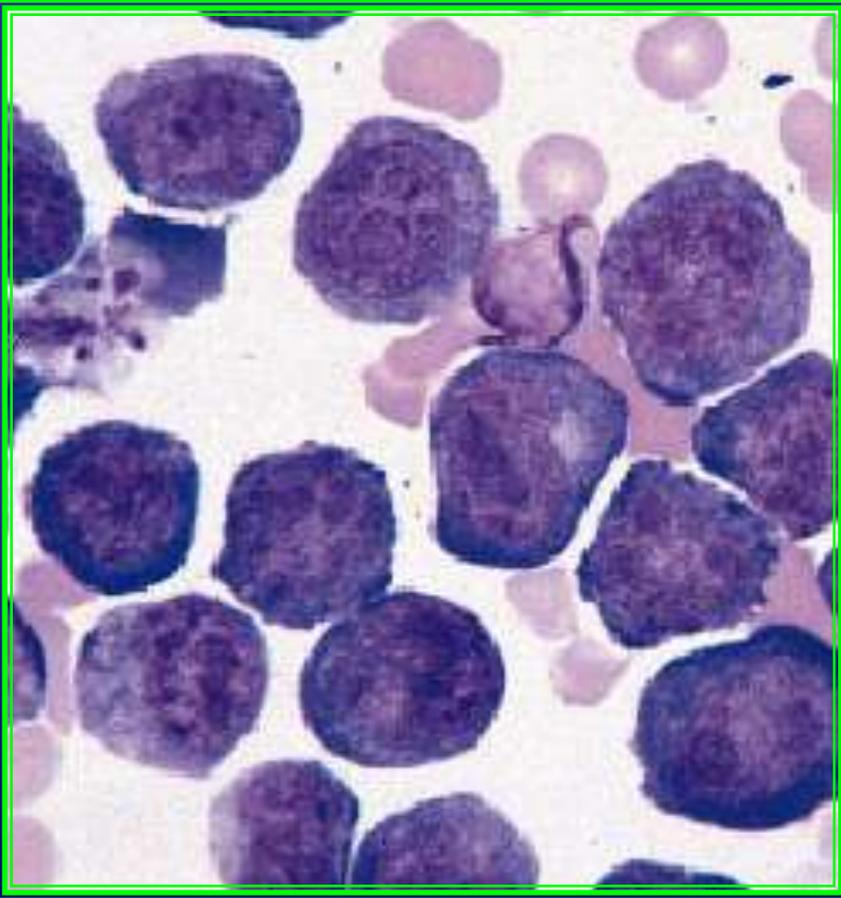
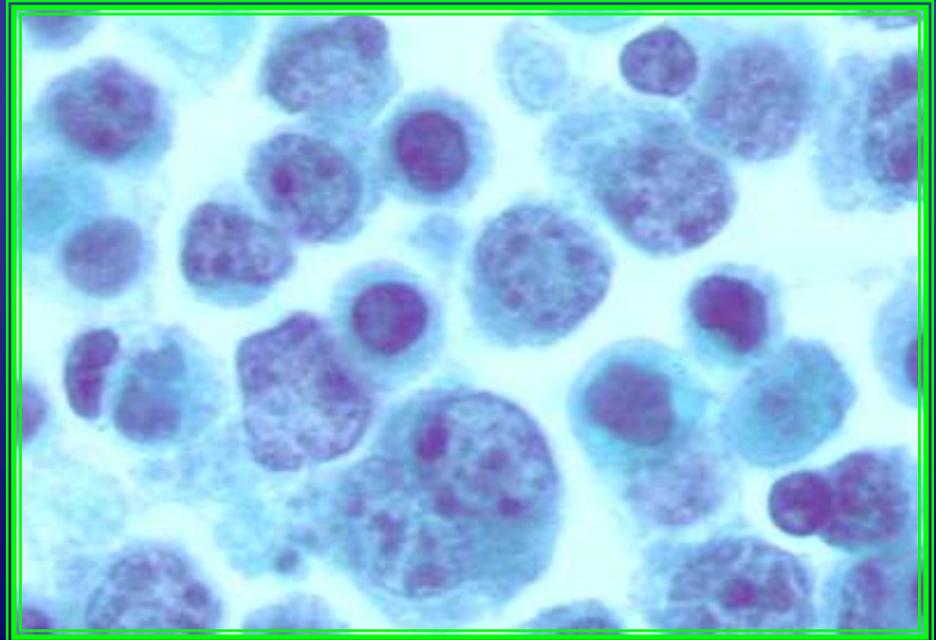
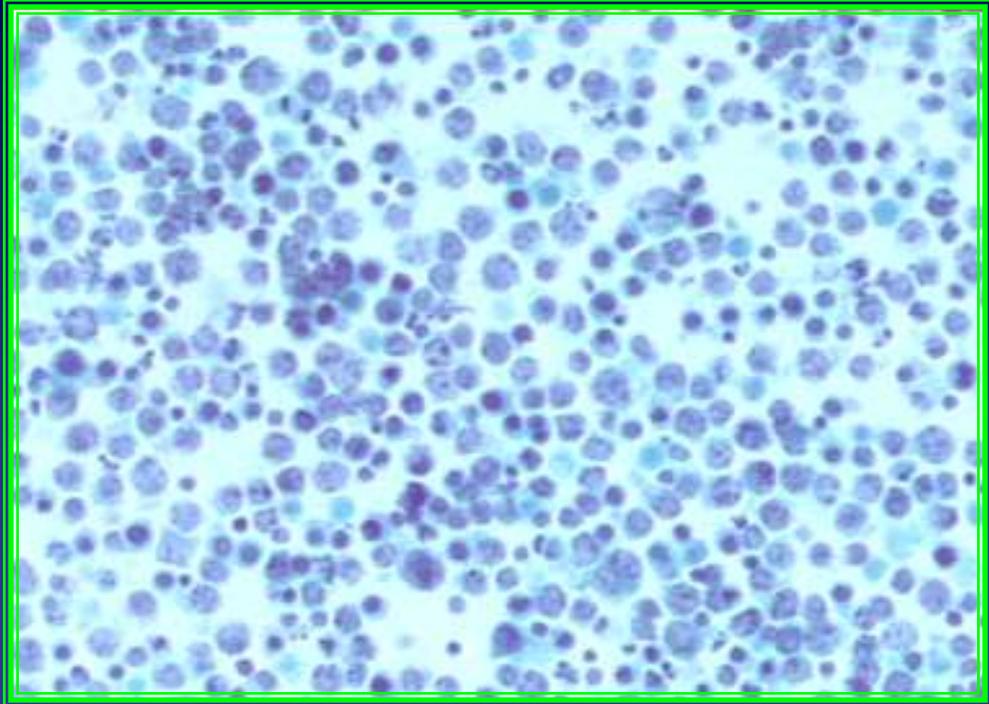
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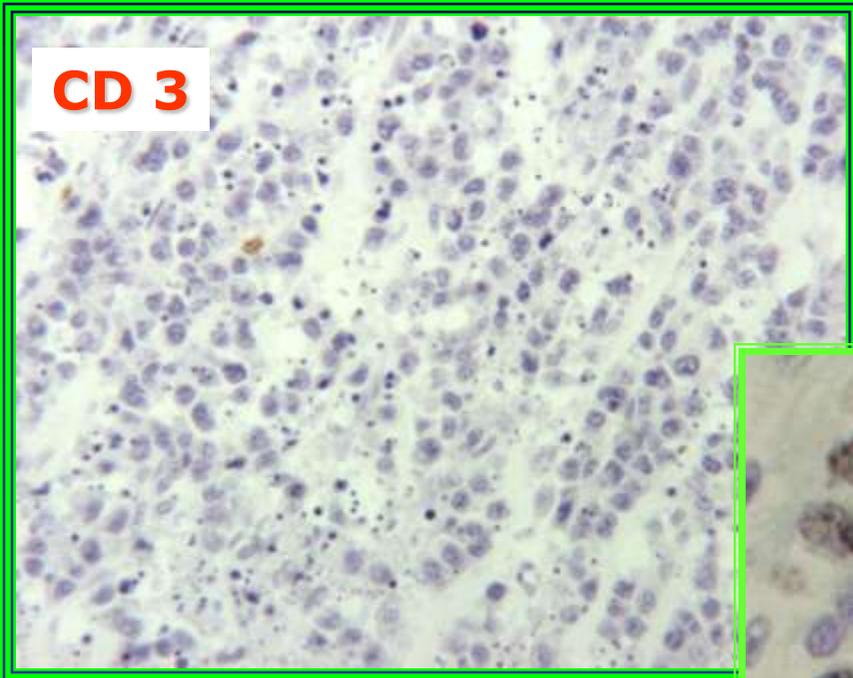
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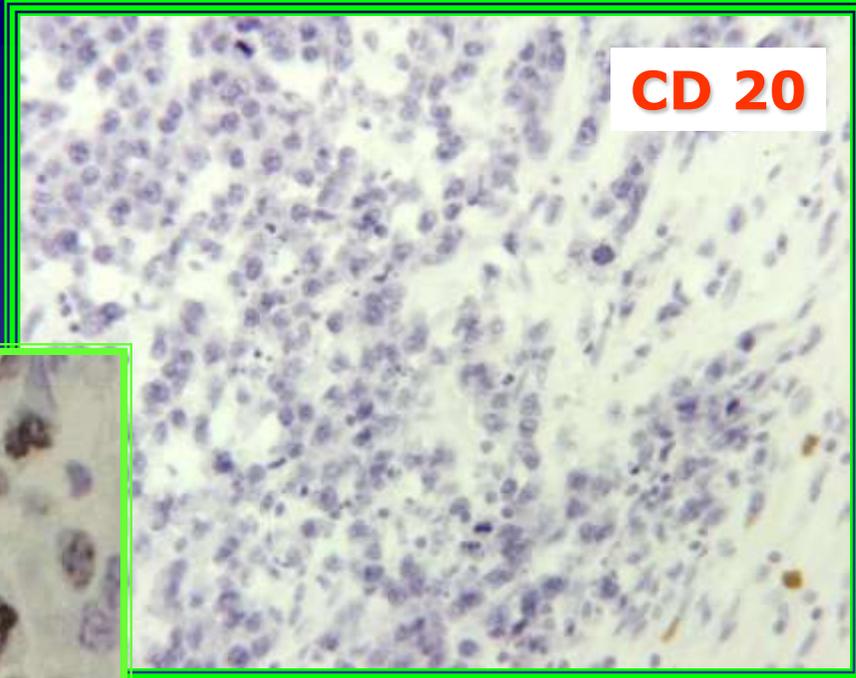
**Tal vez se necesita diagnosticar un linfoma primitivo de la cavidad corpórea.**



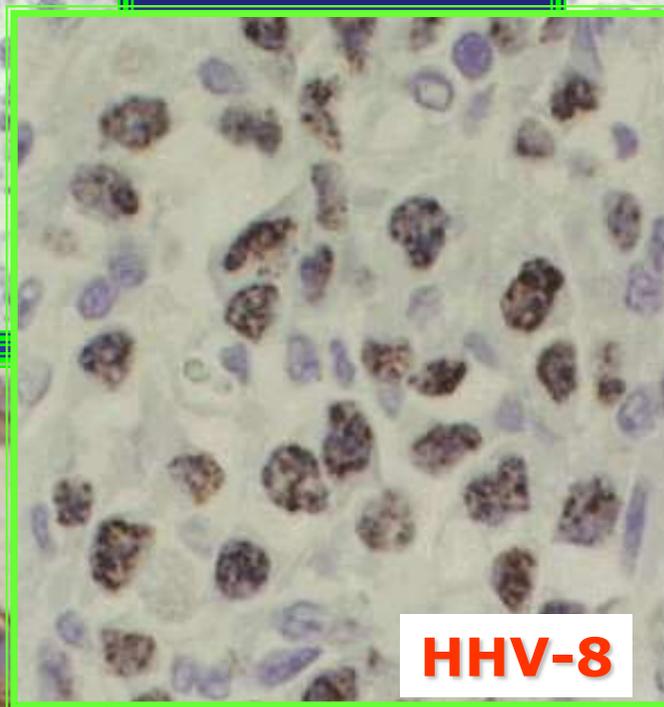
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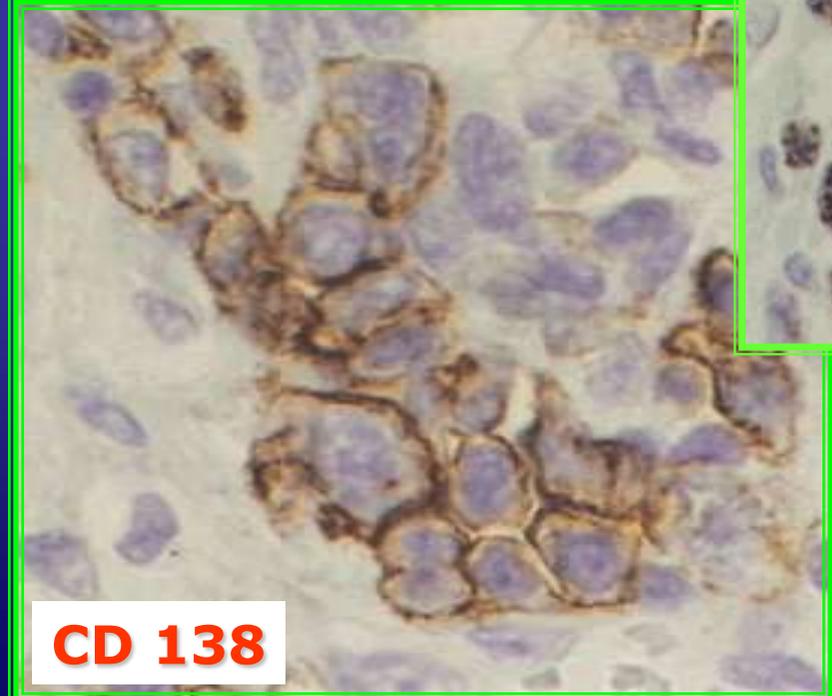
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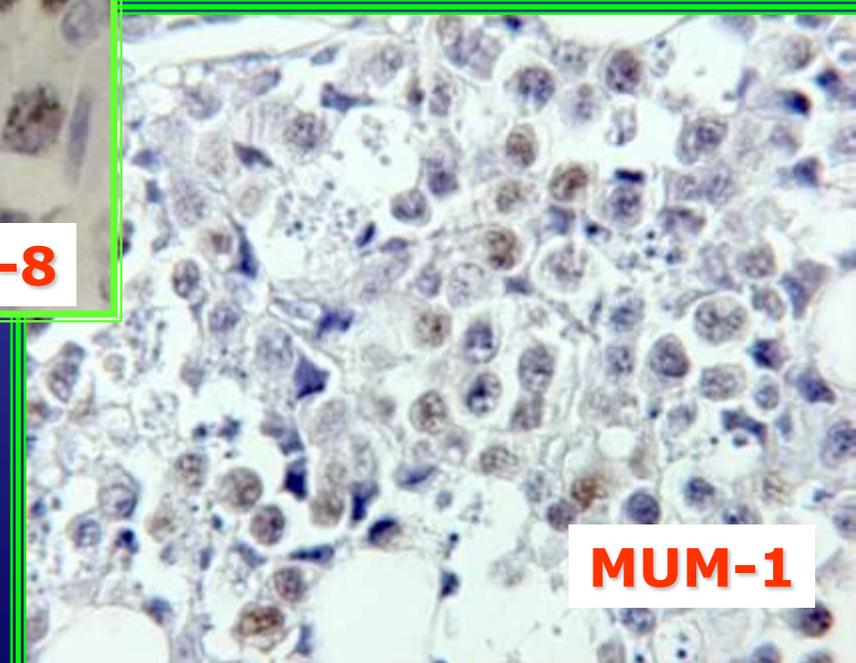
**HHV-8**



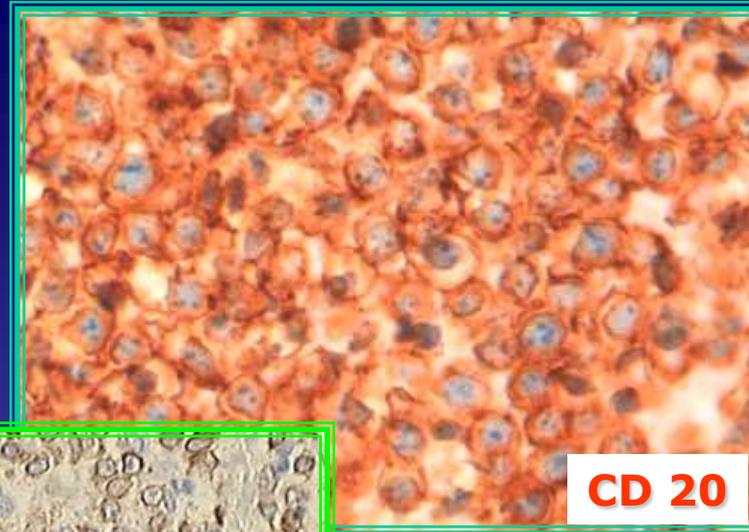
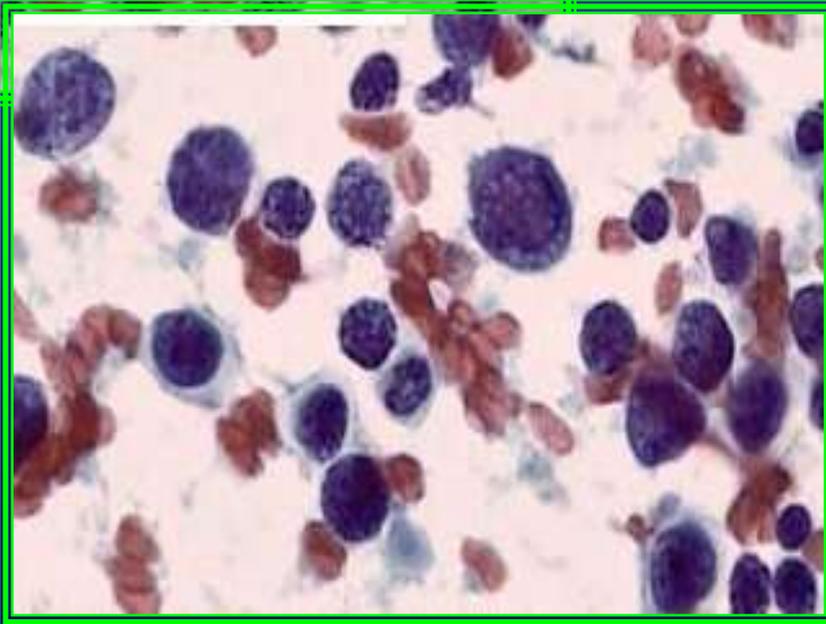
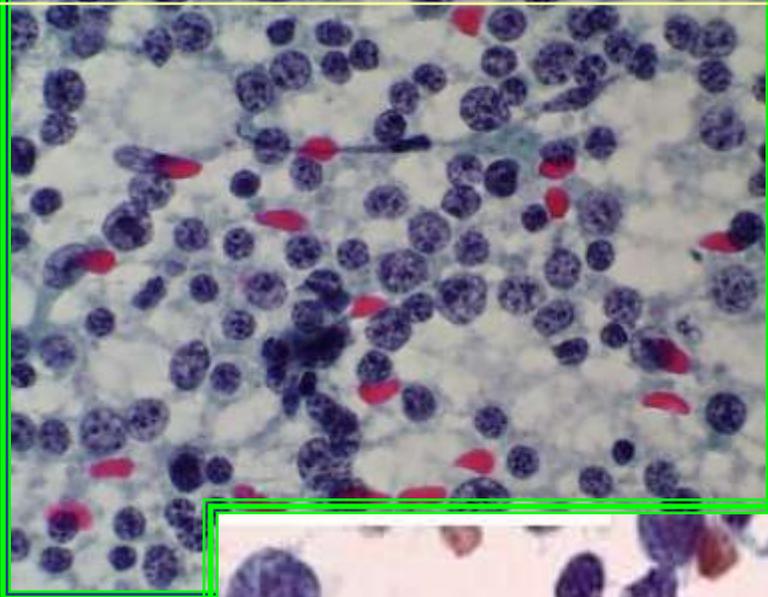
**CD 138**



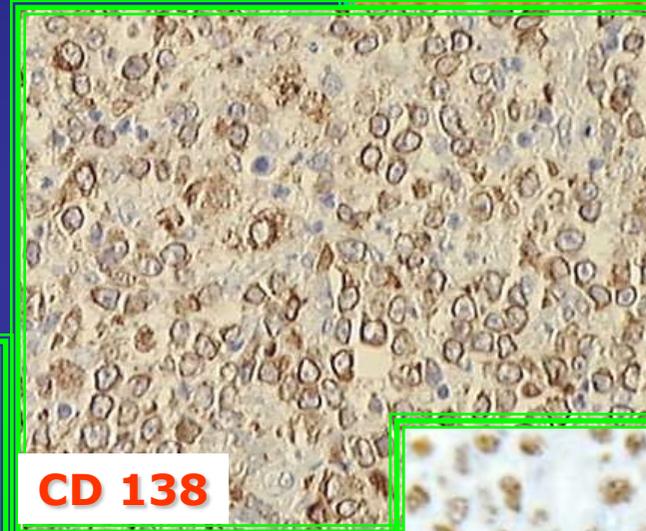
**MUM-1**



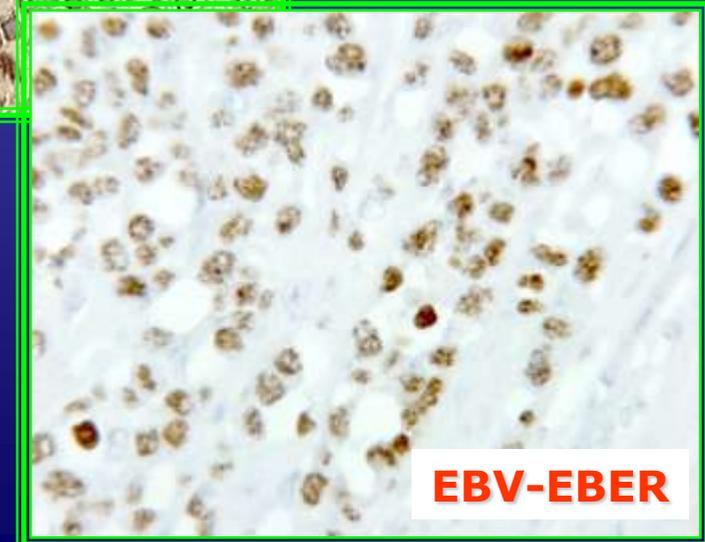
O diagnosticar otro tipo de linfoma primitivo en el derrame pleural (linfoma asociado con piotorax).



**CD 20**

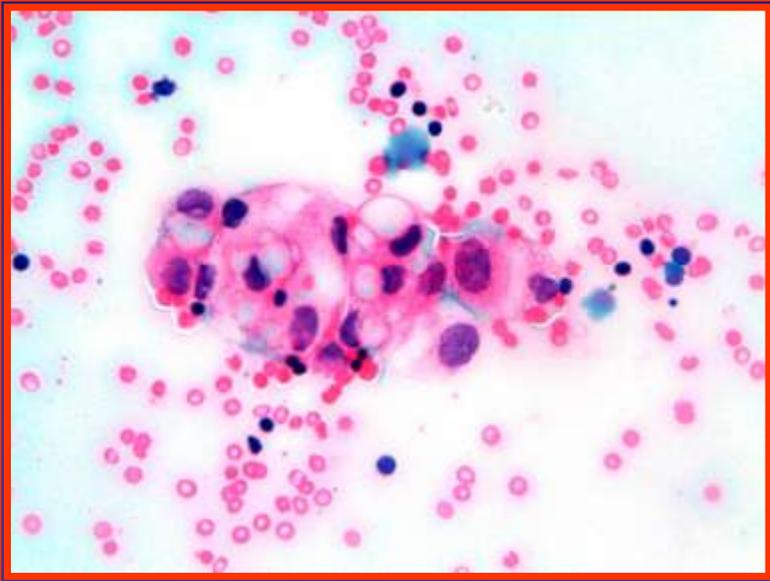


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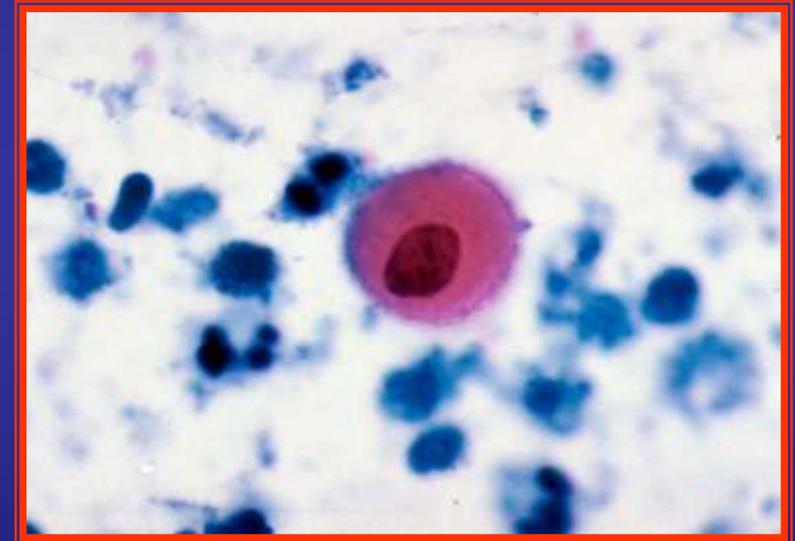
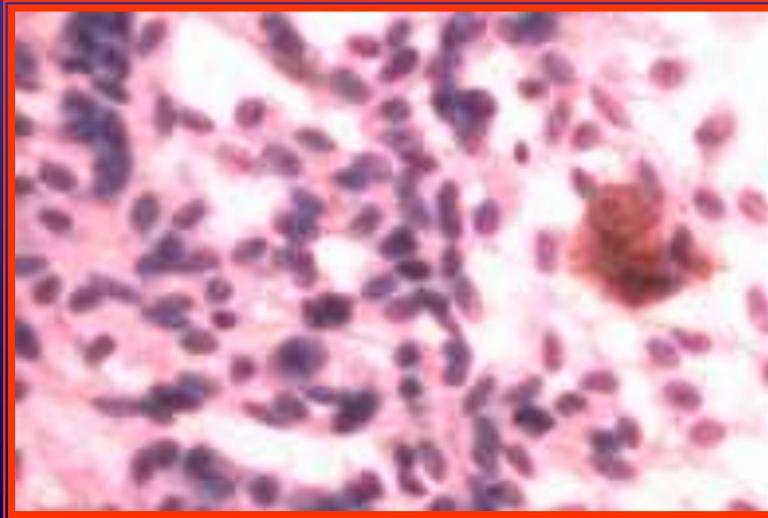
**EBV-EBER**

**El moco se observa en el adenocarcinoma**



**Identificar morfológicamente el origen primitivo de una neoplasia muchas veces es difícil. Cuando hay productos específicos citoplasmáticos, puede hipotizarse de donde son procedentes las células metastasicas.**

**La presencia de *melanina* nos ayuda en el diagnostico de melanoma.**



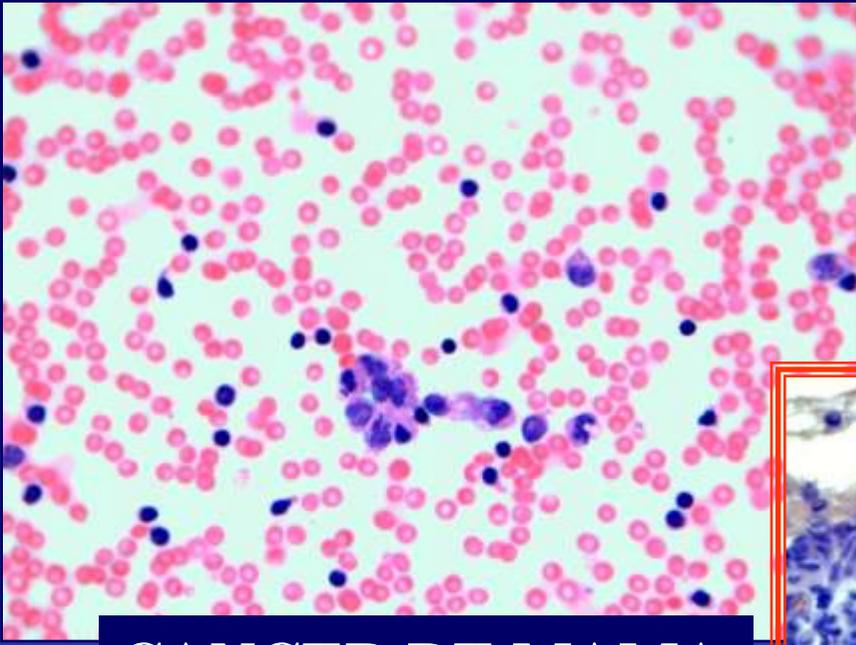
**La queratina nos permite diagnosticar un carcinoma escamoso.**

- Los datos anatómo-clínicos y radiológicos, a veces permiten el diagnóstico diferencial entre los diferentes tipos de tumores, indicando el sitio primario de la lesión.
- Las neoplasias metastásicas muestran una frecuencia de origen diferente en el sexo masculino respecto al femenino.
- Igualmente, en el caso de neoplasia secundaria, el tamaño de las células, la forma de agregarse y la distribución celular puede sugerirnos el diagnóstico.

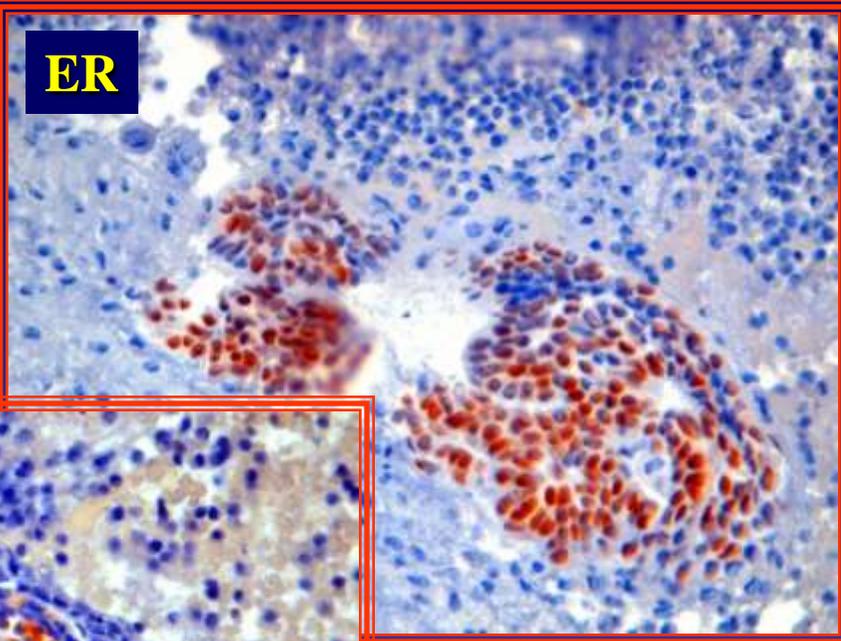
Además la inmunocitoquímica, nos permite llegar a un diagnóstico definitivo en muchos casos.

Los agregados de tipo esférico, bastante común en los mesoteliomas, se observan en los carcinomas de mama y seroso del ovario.

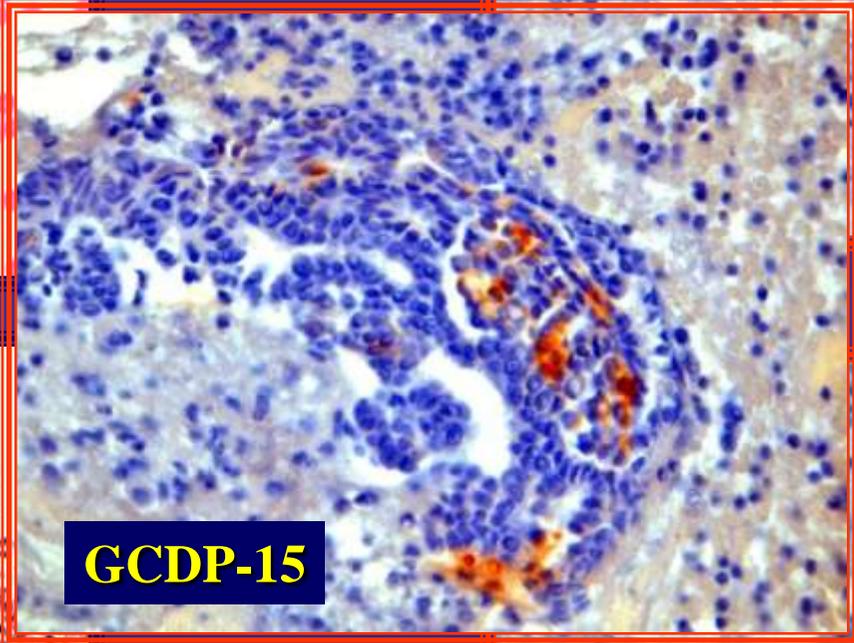
	<b>Calretinina D2-40</b>	<b>ER y PgR</b>	<b>GCDPF-15 Mamoglobina</b>	<b>WT-1</b>	<b>B72.3</b>	<b>CA ...</b>
<b>Mesotelioma</b>	+	-	-	+/-	-	-/+
<b>Cáncer de mama</b>	-	+/-	+	-	+ c	+
<b>Cáncer seroso de ovario</b>	-	+	-	+	+ m	+



**ER**

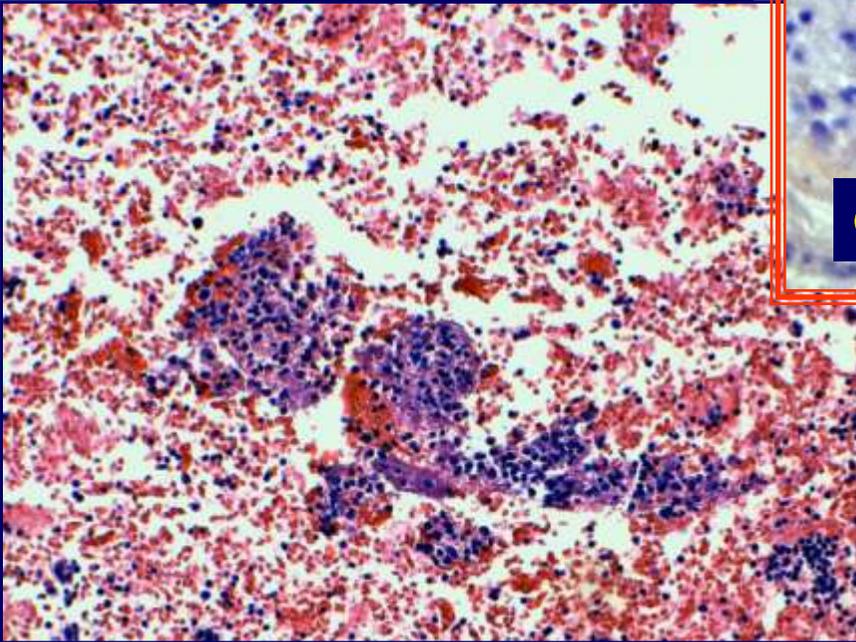
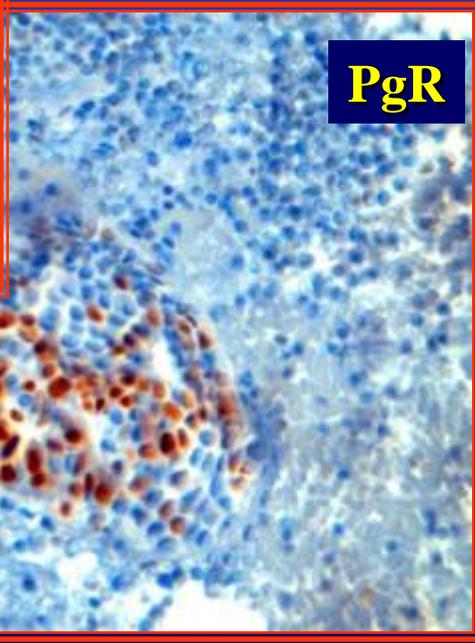


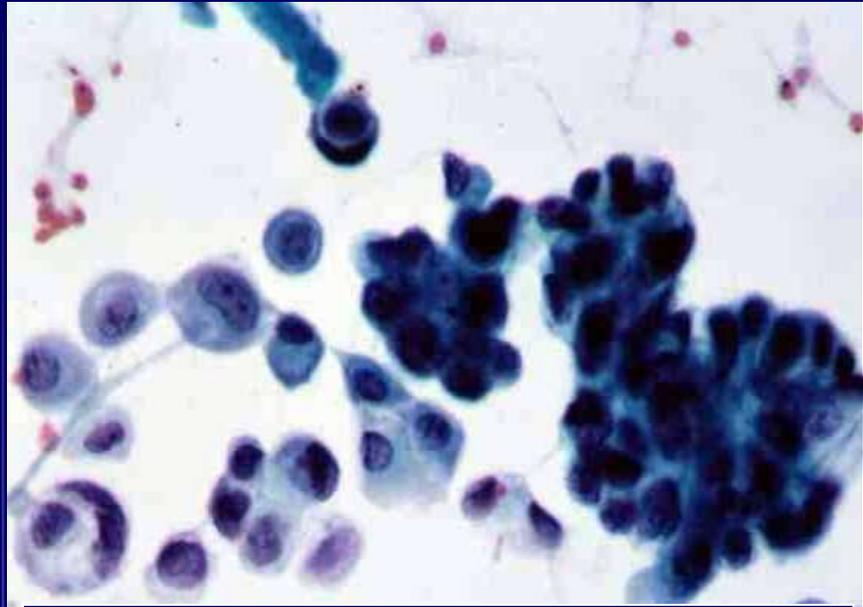
**CANCER DE MAMA**



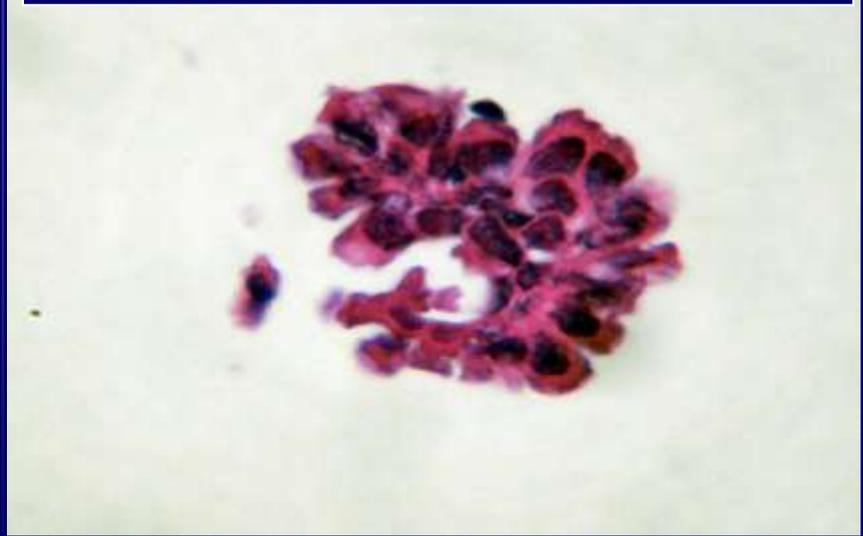
**GCDP-15**

**PgR**

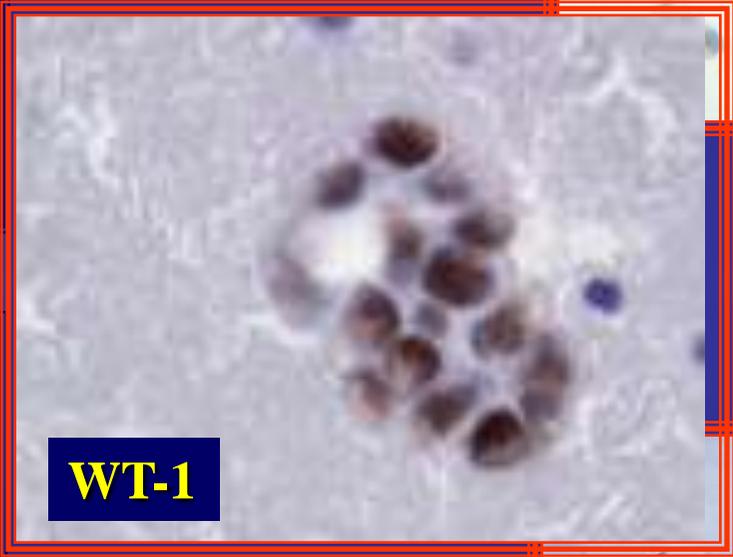




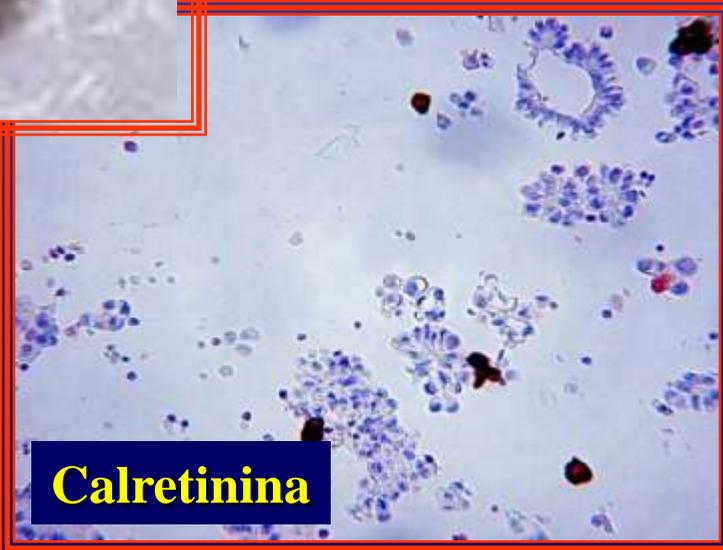
**Agregados de tipo esférico, se observan también en el carcinoma seroso de ovario.**



**TAG B72.3**



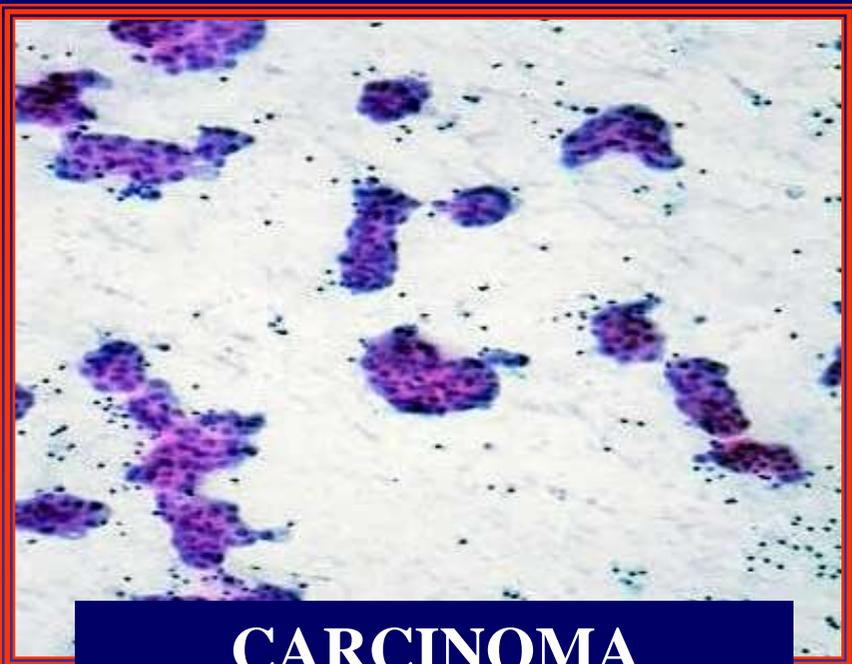
**WT-1**



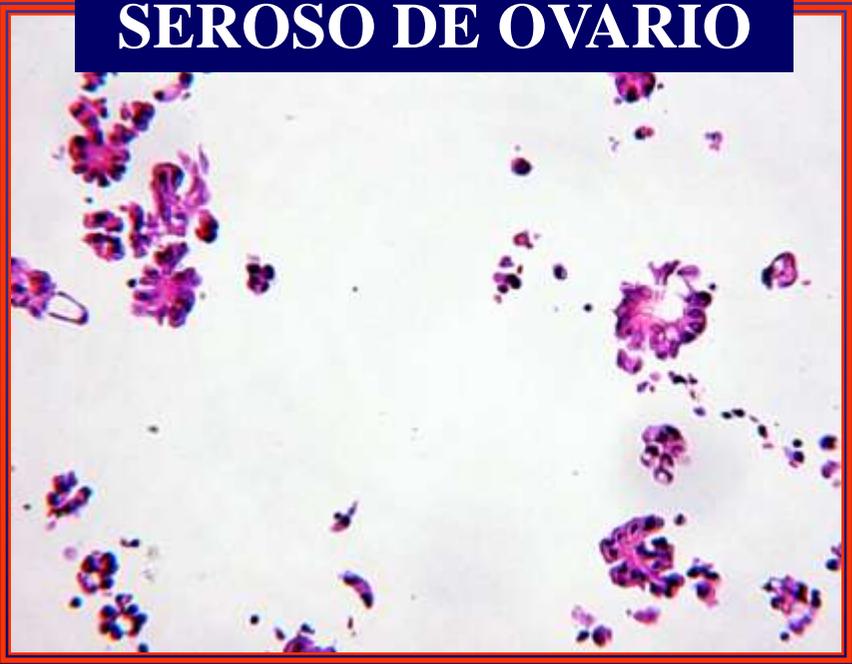
**Calretinina**

**Células neoplásicas reunidas en organizaciones papilares se encuentran:**

	<b>CK 7</b>	<b>CK 20</b>	<b>CDX-2</b>	<b>WT-1</b>	<b>TTF-1</b>	<b>Tg</b>	<b>B72.3</b>
<b>Cáncer seroso de ovario</b>	+	-	-	+	-	-	+ m
<b>Adenocarcinoma de pulmon</b>	+	-	-	-	+	-	+ c
<b>Cáncer de colon</b>	-	+	+	-	-	-	-/+ c
<b>Cáncer de tiroides</b>	+	-	-	-	+	+	-
<b>Cáncer urotelial</b>	+	+	-	-	-	-	-



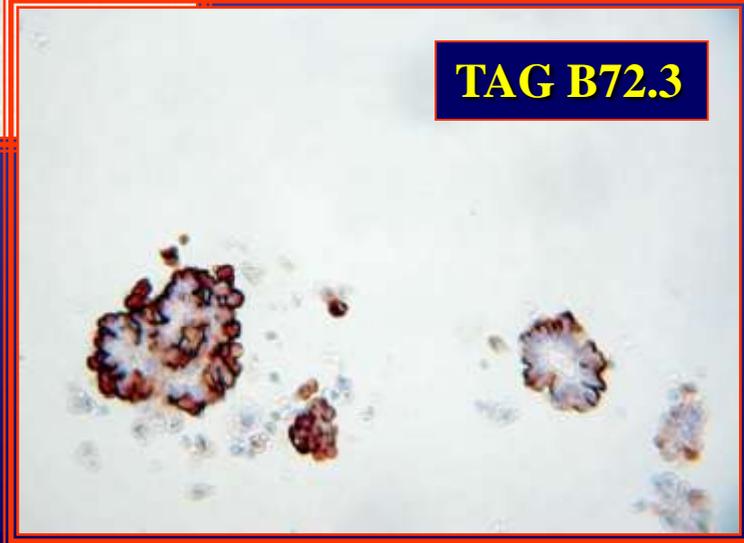
**CARCINOMA  
SEROSO DE OVARIO**



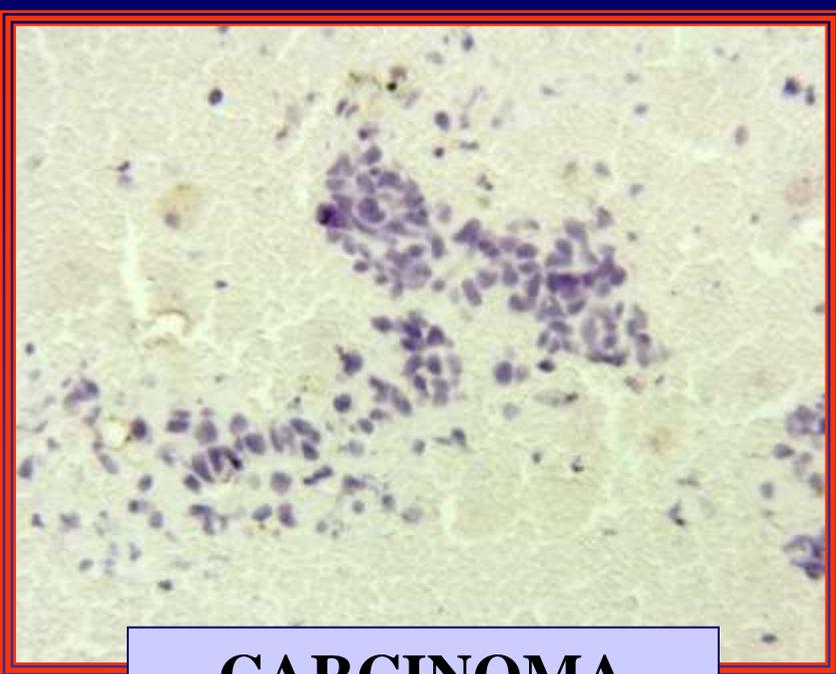
**CK7**



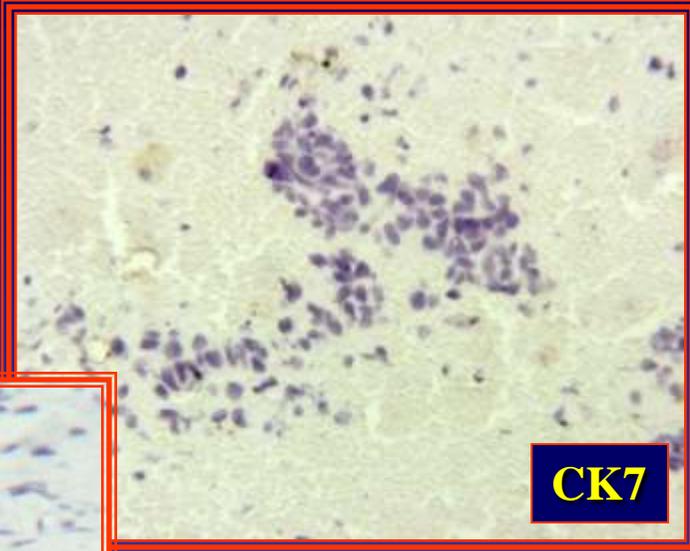
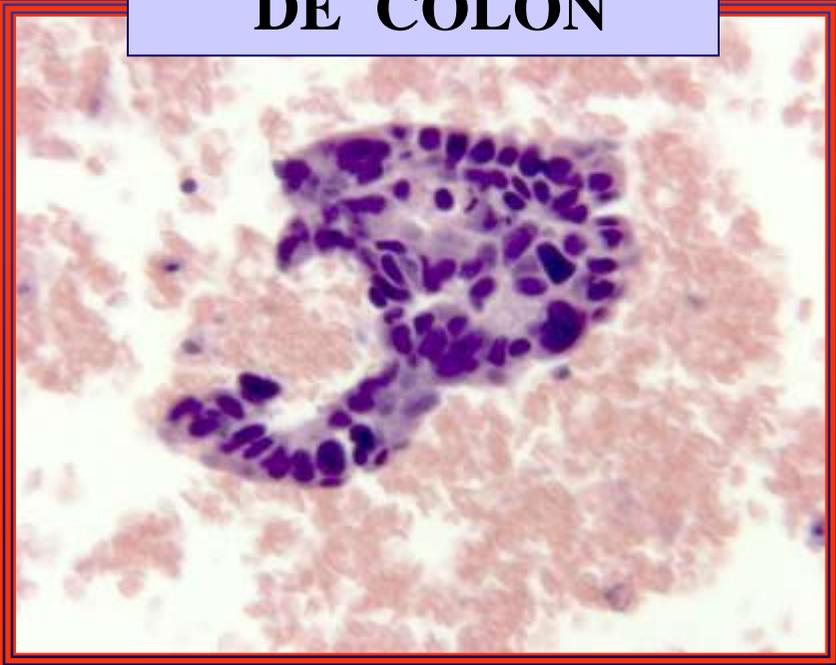
**CK20**



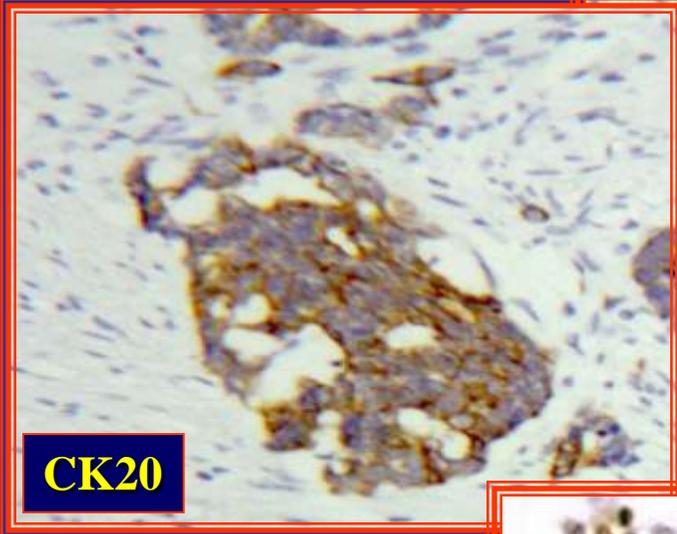
**TAG B72.3**



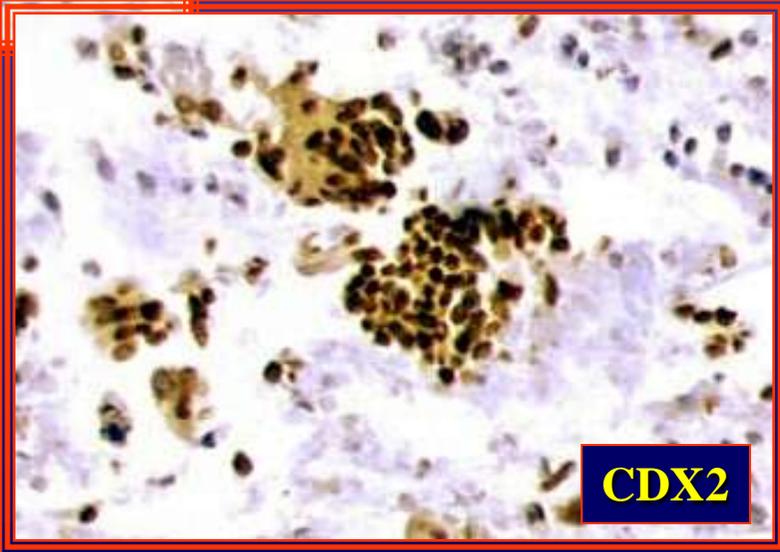
**CARCINOMA  
DE COLON**



**CK7**

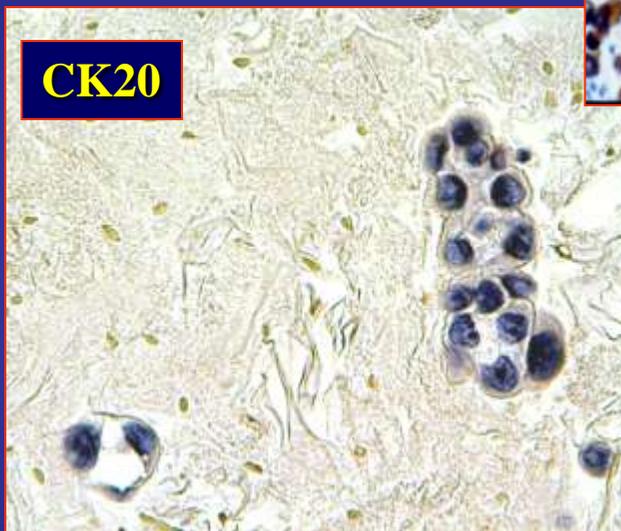
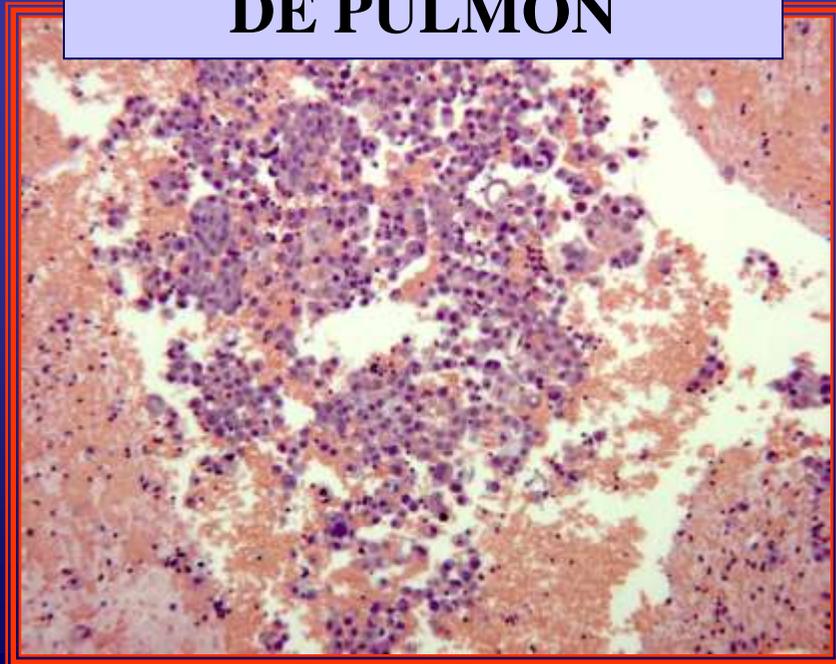
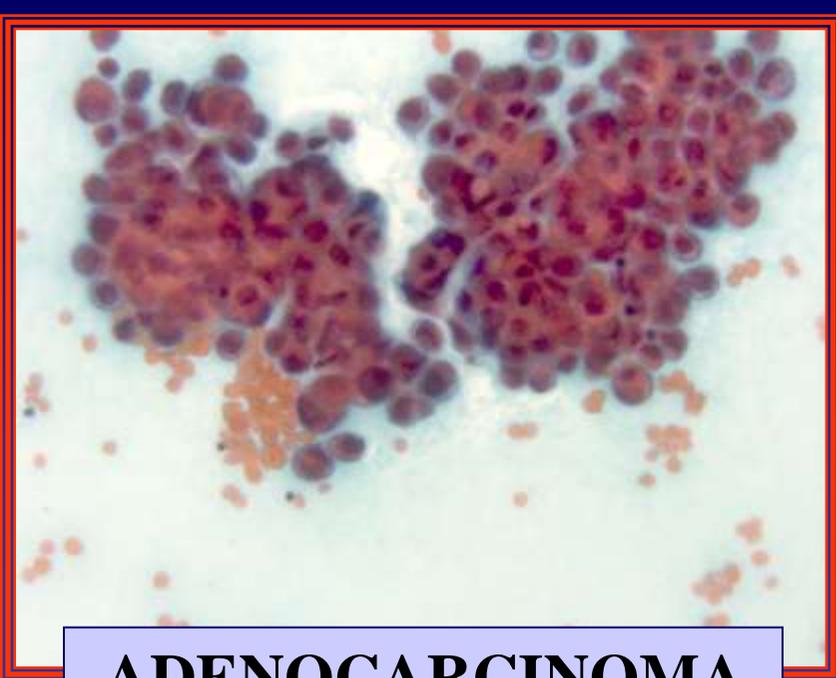


**CK20**

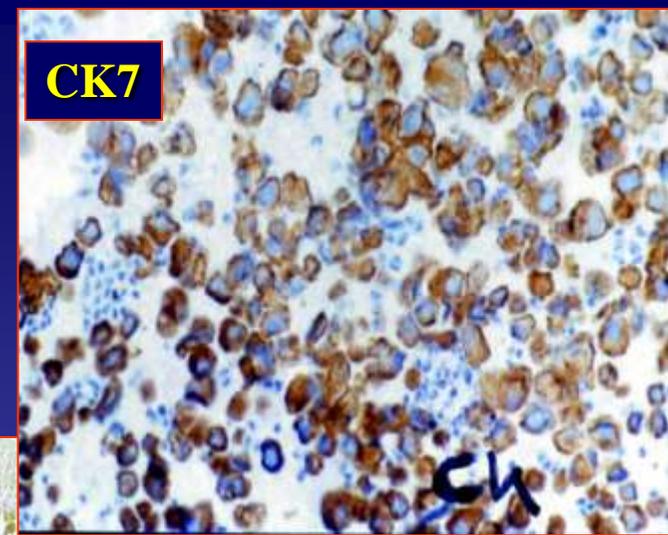


**CDX2**

**ADENOCARCINOMA  
DE PULMON**

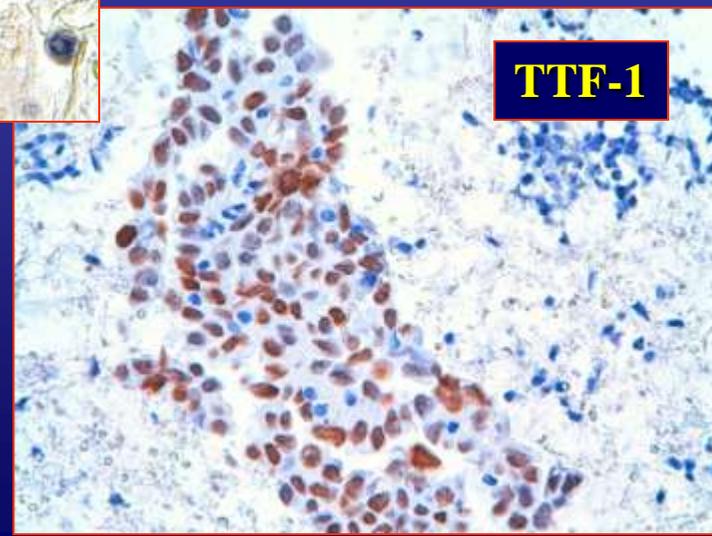


**CK20**

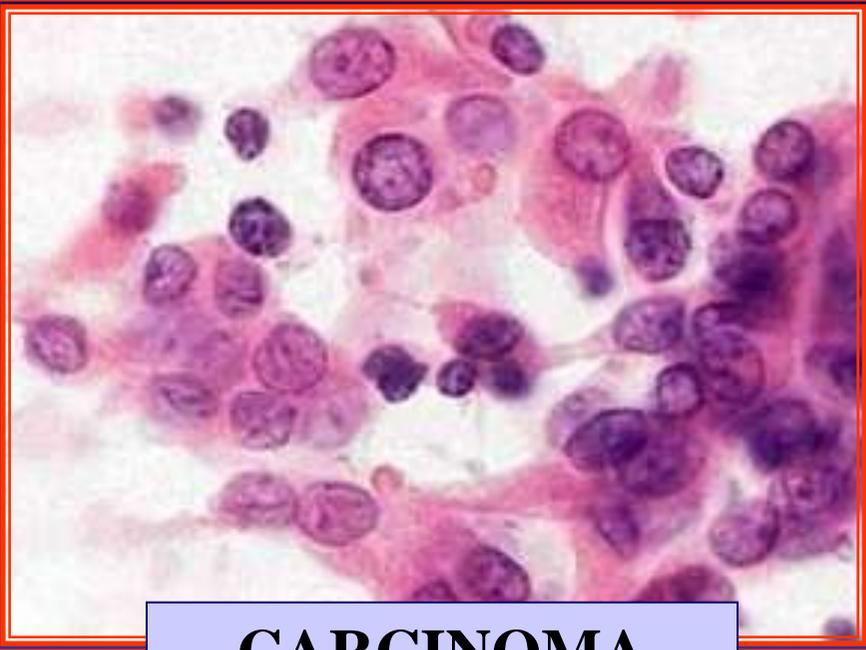


**CK7**

**CK**



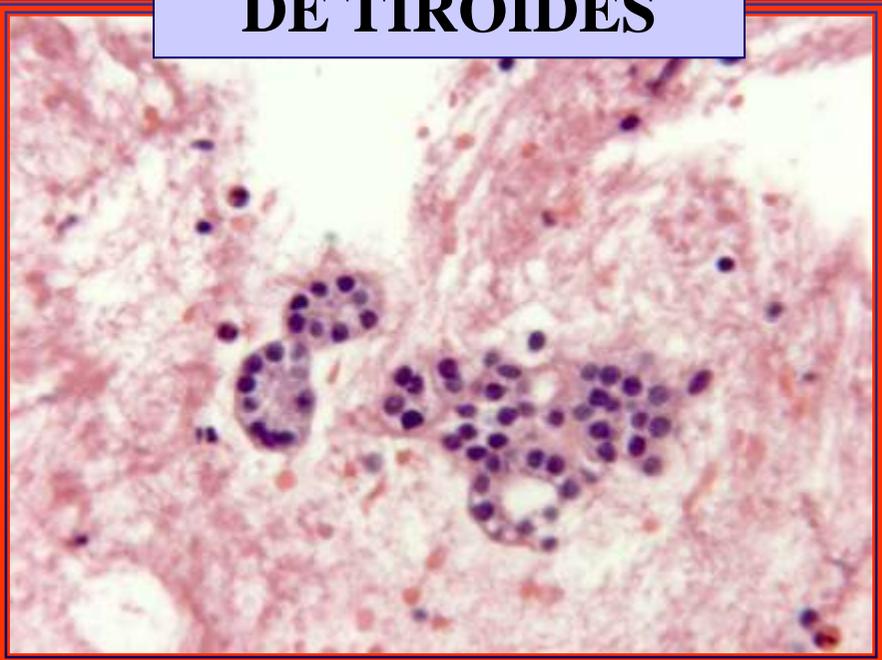
**TTF-1**



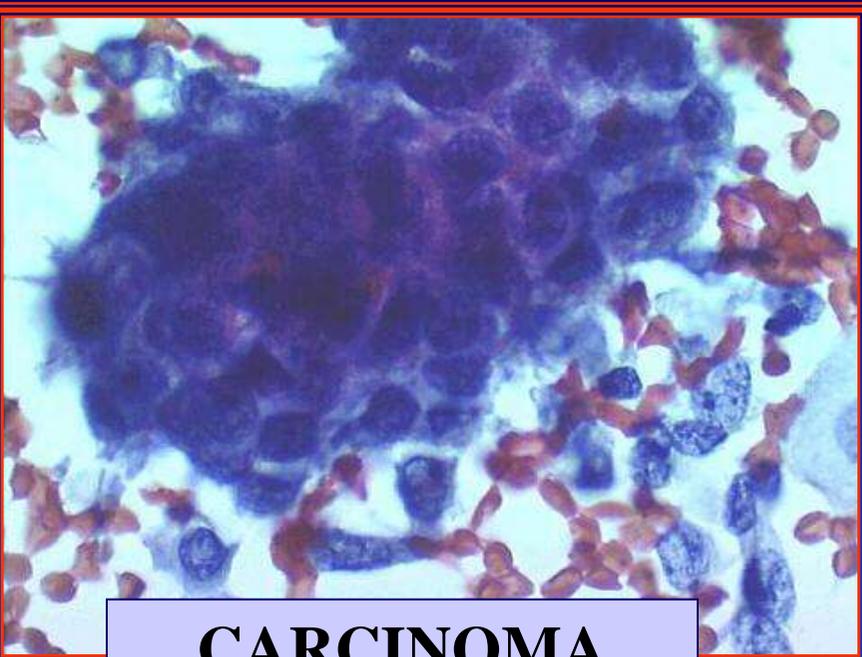
**CARCINOMA  
DE TIROIDES**



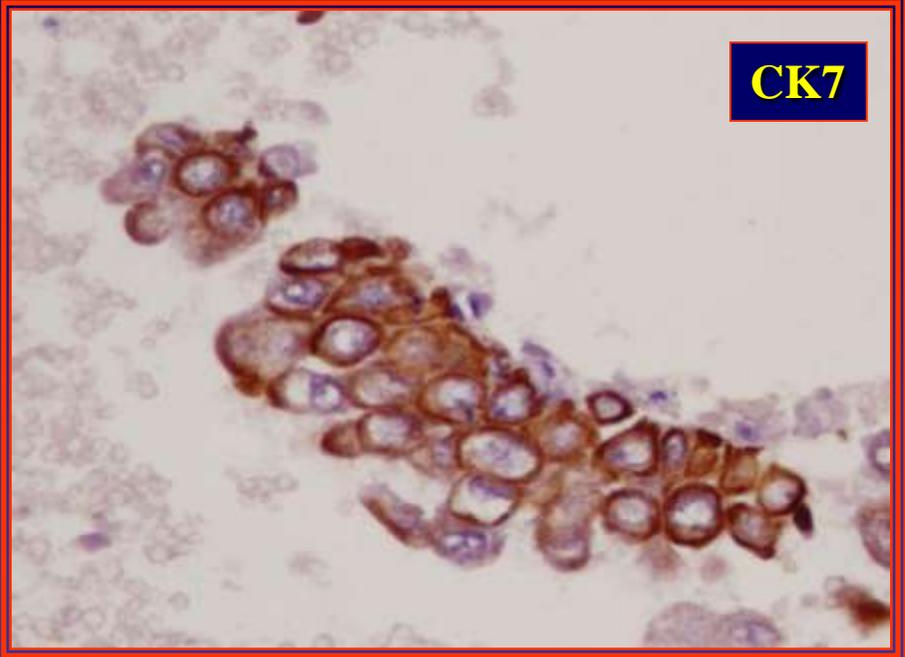
**CK7**



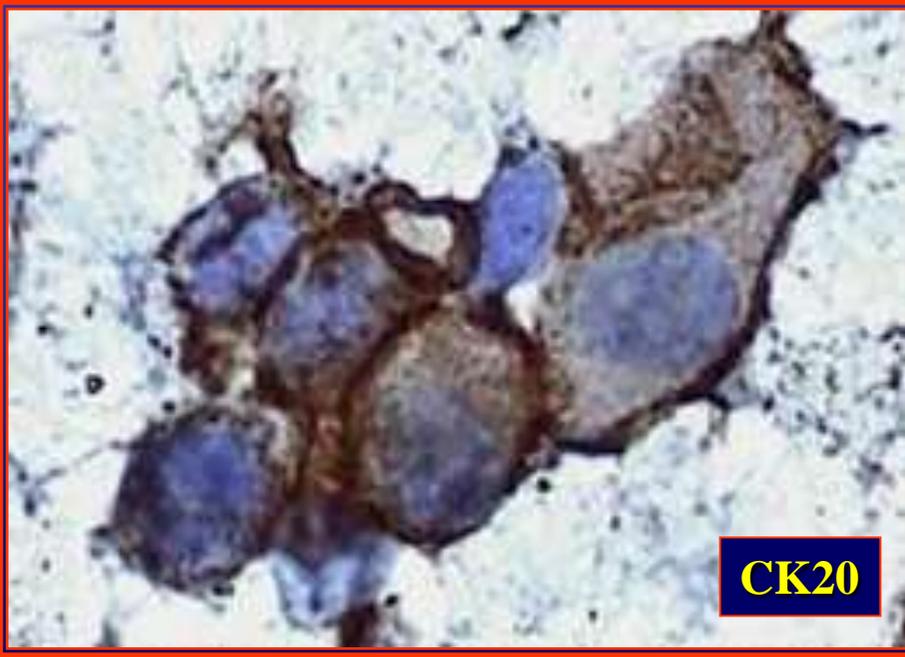
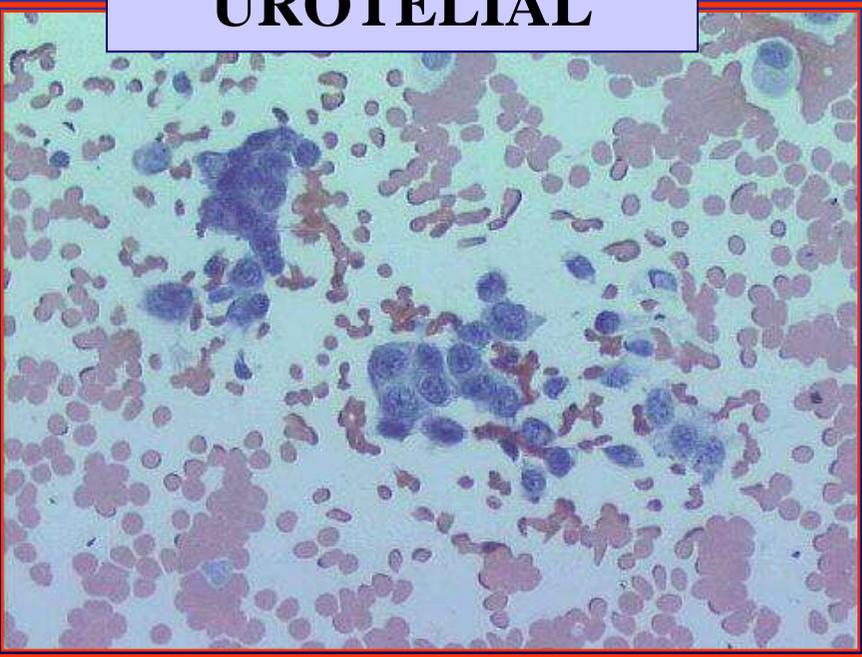
**Tiroglobulina**



**CARCINOMA  
UROTELIAL**



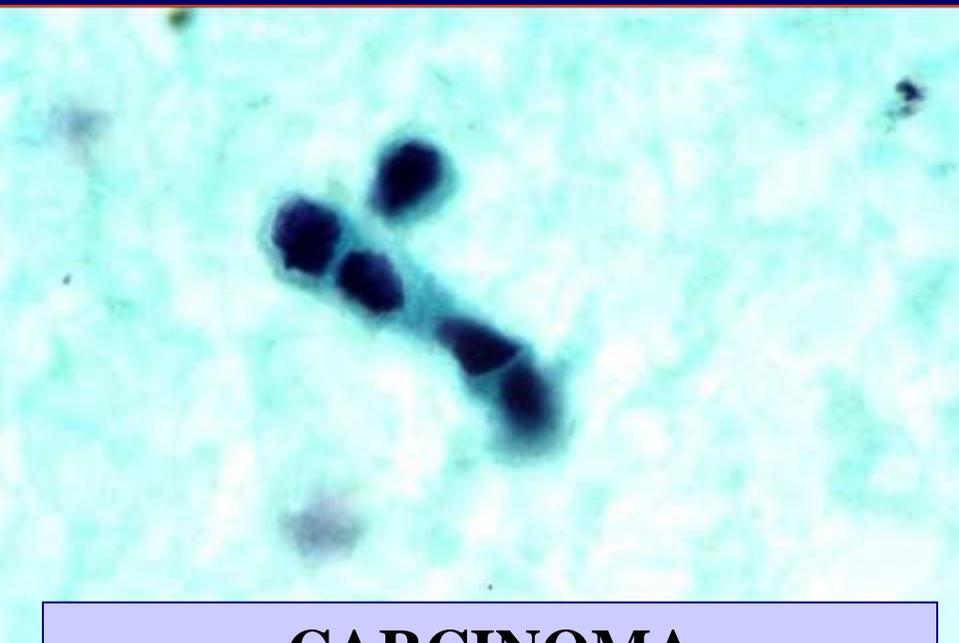
**CK7**



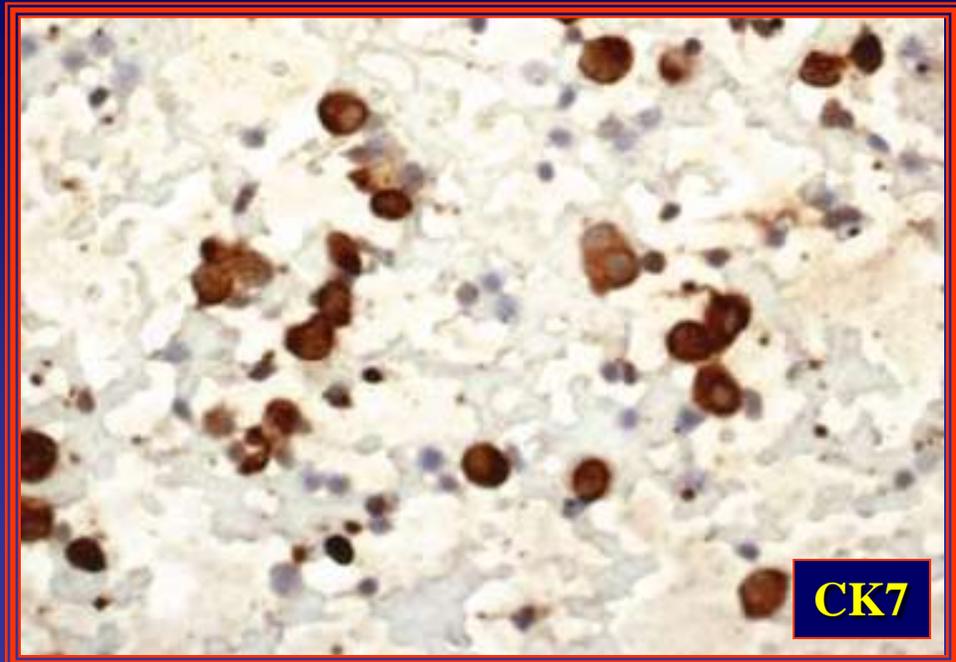
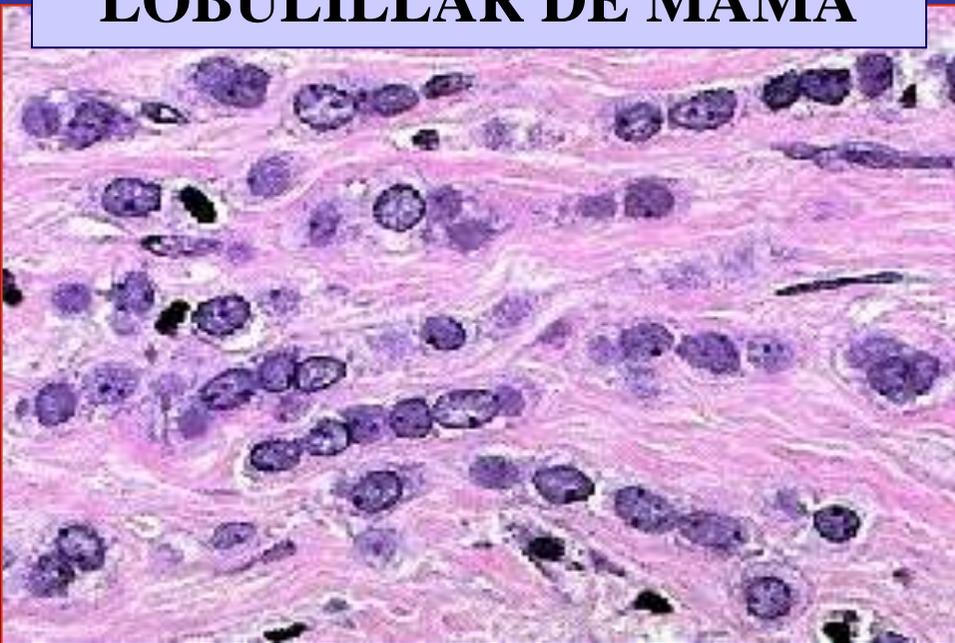
**CK20**

**La distribución en fila de indios se observa con frecuencia en el carcinoma:**

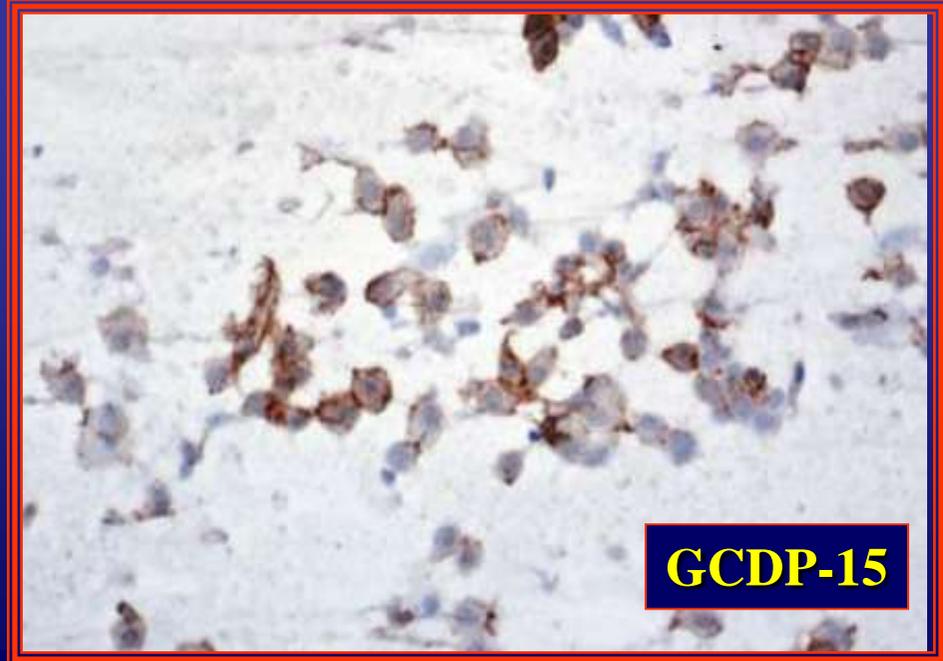
	<b>CK 7</b>	<b>CK 20</b>	<b>CK 17</b>	<b>TTF-1</b>
<b>Lobulillar de mama</b>	+	-	-	-
<b>Ductal de páncreas</b>	+	+	+	-
<b>Células pequeñas de pulmón</b>	-	-	-	+



**CARCINOMA  
LOBULILLAR DE MAMA**



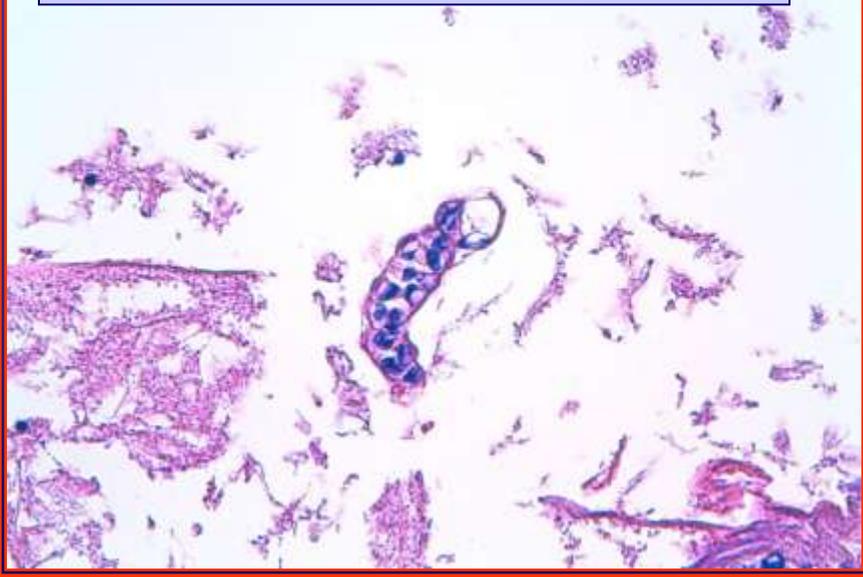
**CK7**



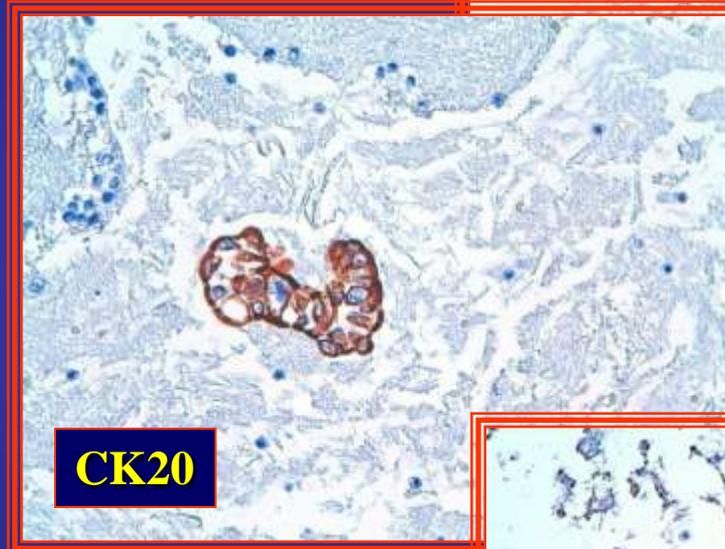
**GCDP-15**



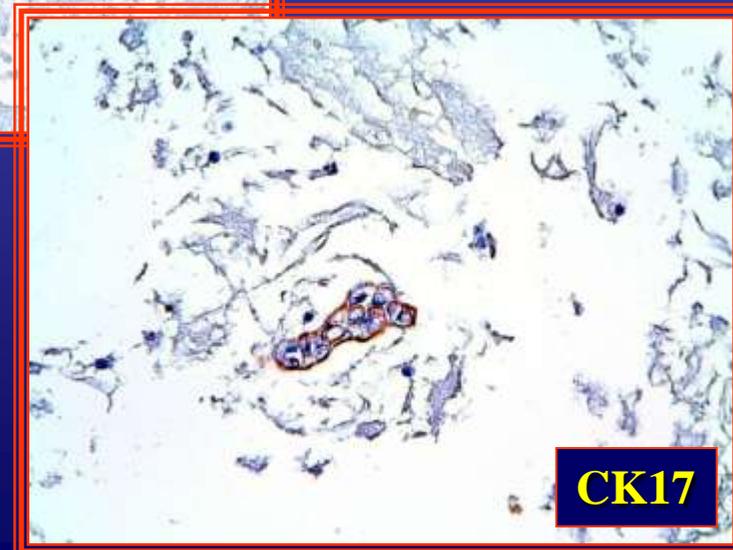
**CARCINOMA DUCTAL  
DE PANCREAS**



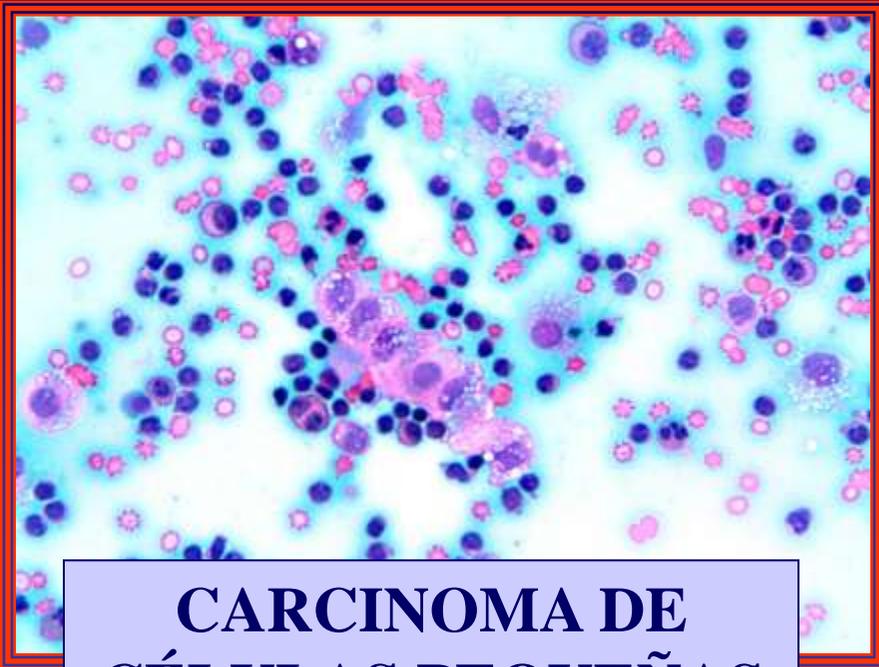
**CK7**



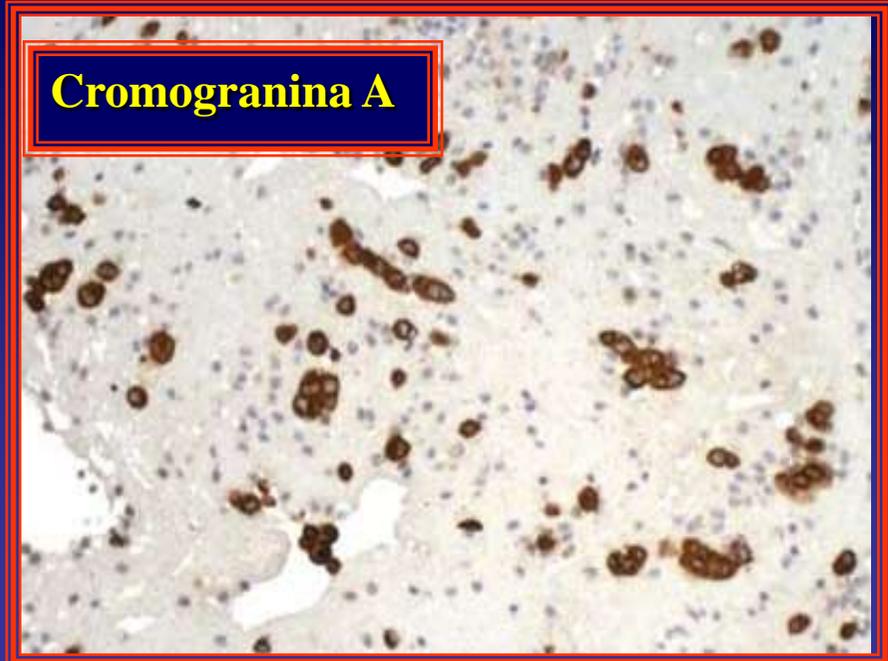
**CK20**



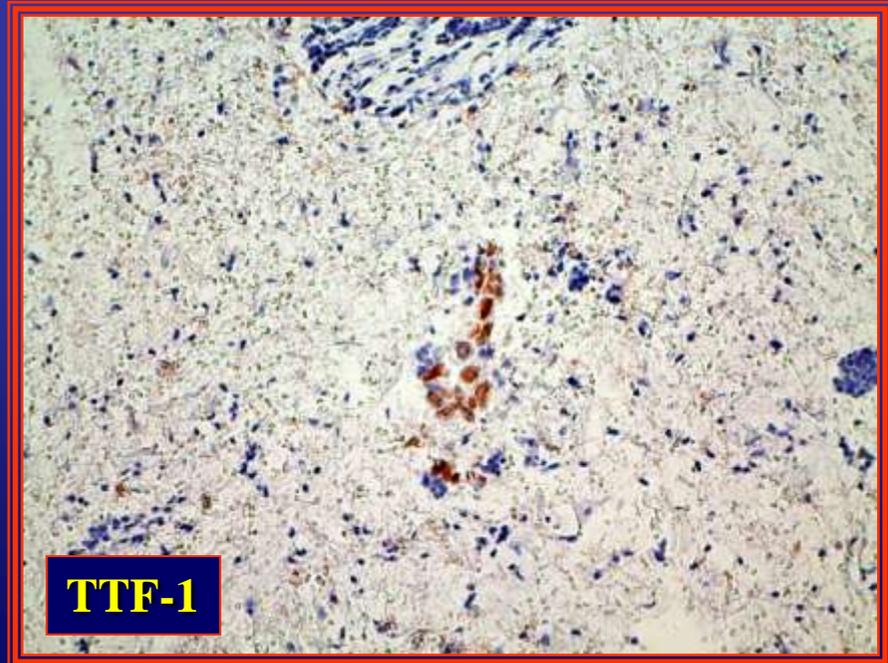
**CK17**



**CARCINOMA DE  
CÉLULAS PEQUEÑAS  
DE PULMÓN**



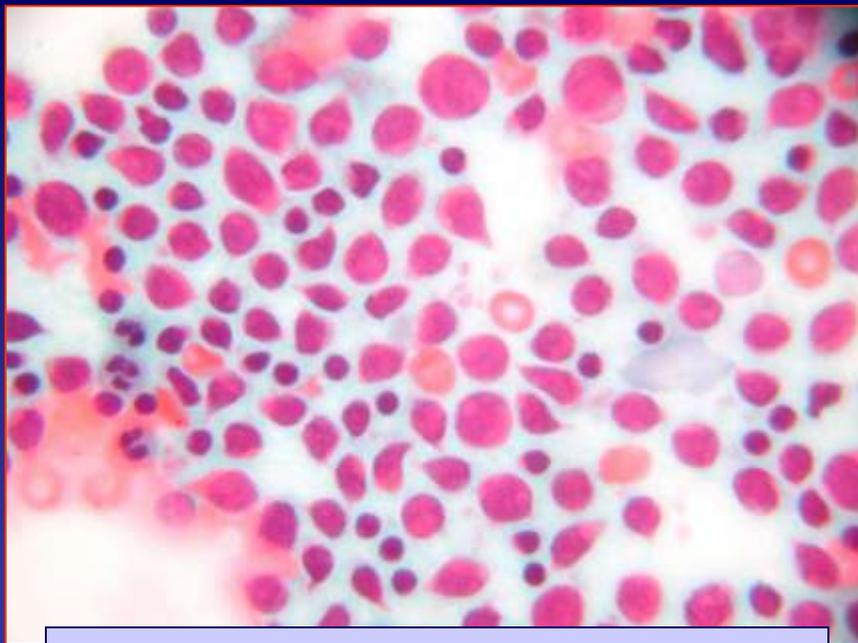
**Cromogranina A**



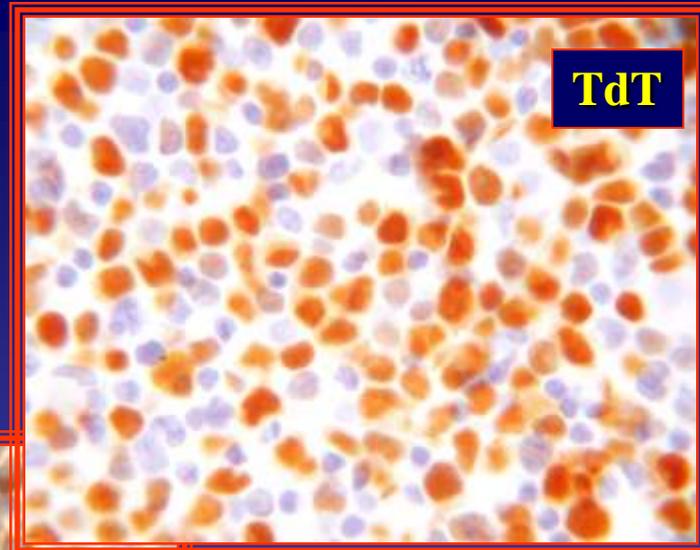
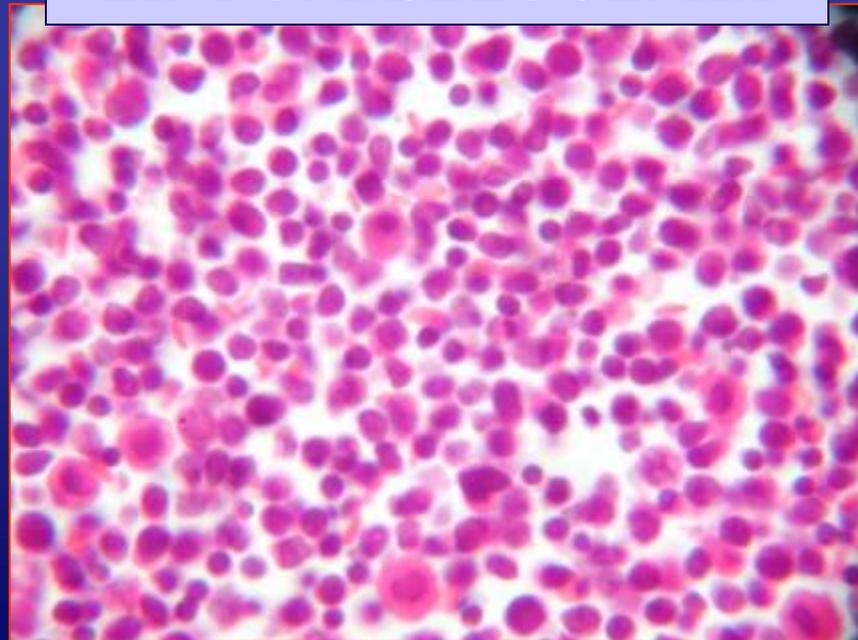
**TTF-1**

**Las células pequeñas no cohesivas sugieren la presencia de:**

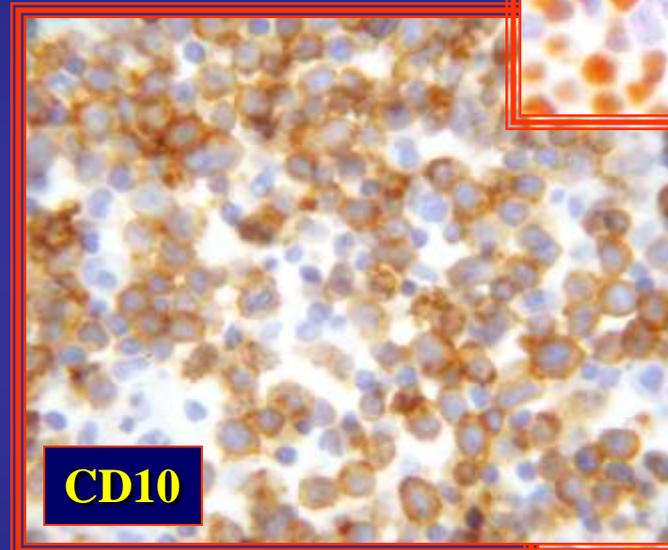
	<b>CD34 CD10</b>	<b>CD68 CD117</b>	<b>TTF-1</b>	<b>CK7</b>	<b>S100</b>	<b>Marcador mesenquimal</b>
<b>Leucemia/linfoma</b>	+	-	-	-	-	-
<b>Sarcoma mielogénico</b>	+/-	+	-	-	-	-
<b>Cáncer de células pequeñas de pulmón</b>	-	-	+	-	-	-
<b>Cáncer lobulillar de mama</b>	-	-	-	+	-	-
<b>Melanoma</b>	-	-	-	-	+	-
<b>Sarcoma de células pequeñas</b>	-	-	-	-	+/-	+



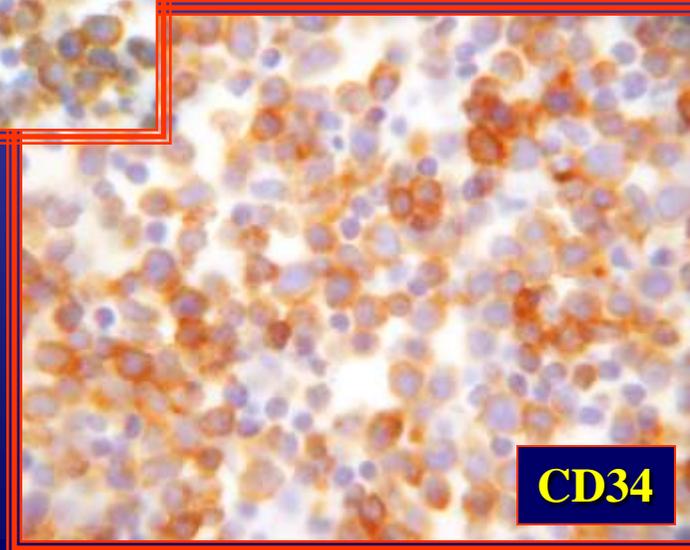
**LINFOMA/LEUCEMIA**



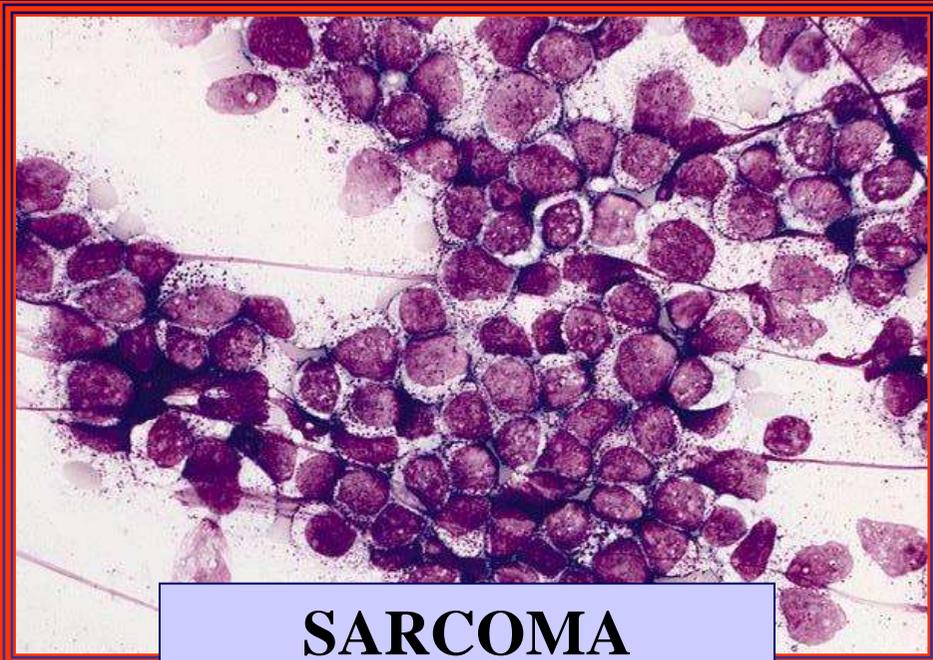
**TdT**



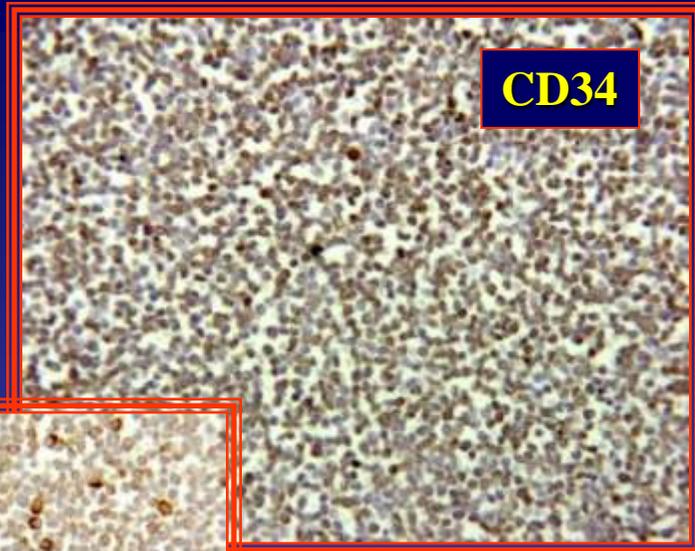
**CD10**



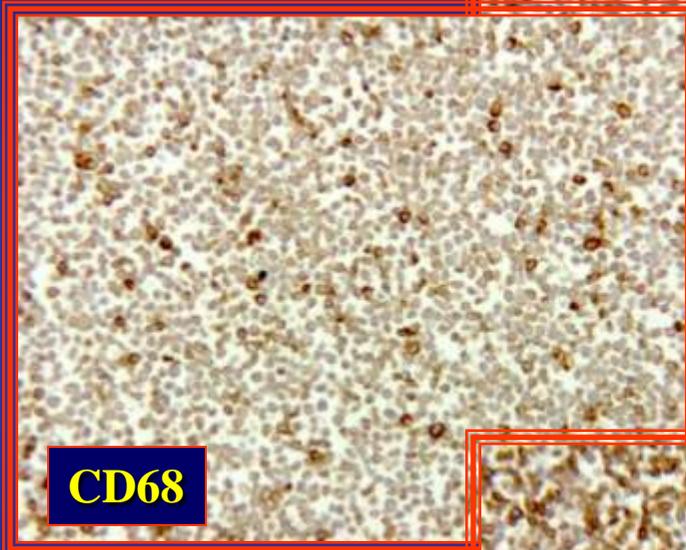
**CD34**



**SARCOMA  
MIELOGENICO**



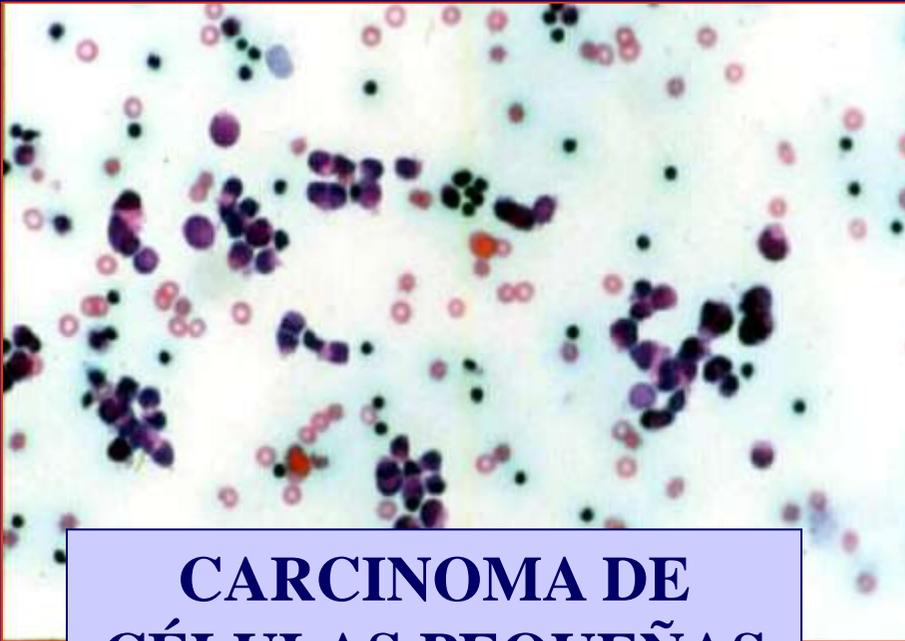
**CD34**



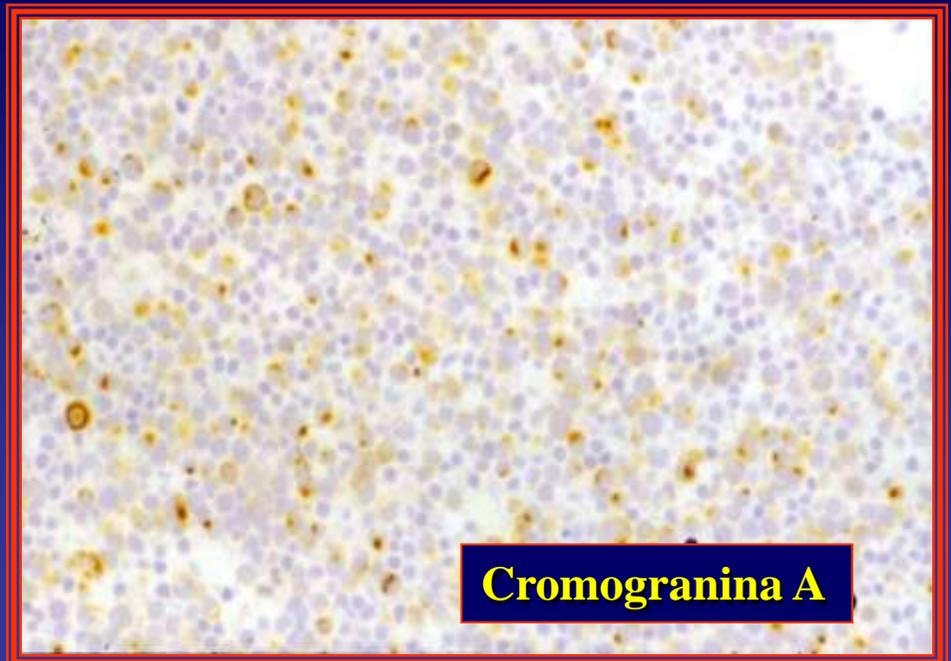
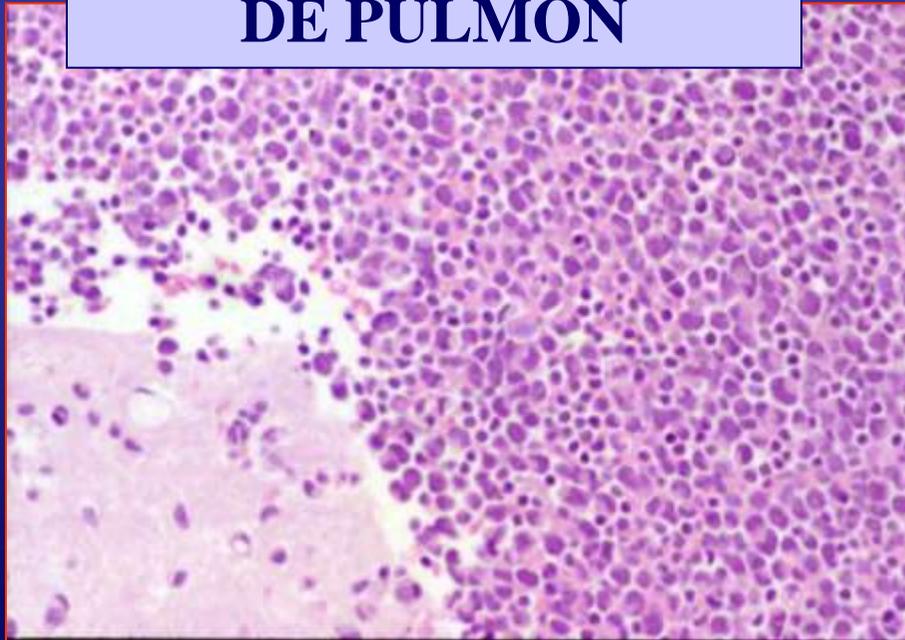
**CD68**



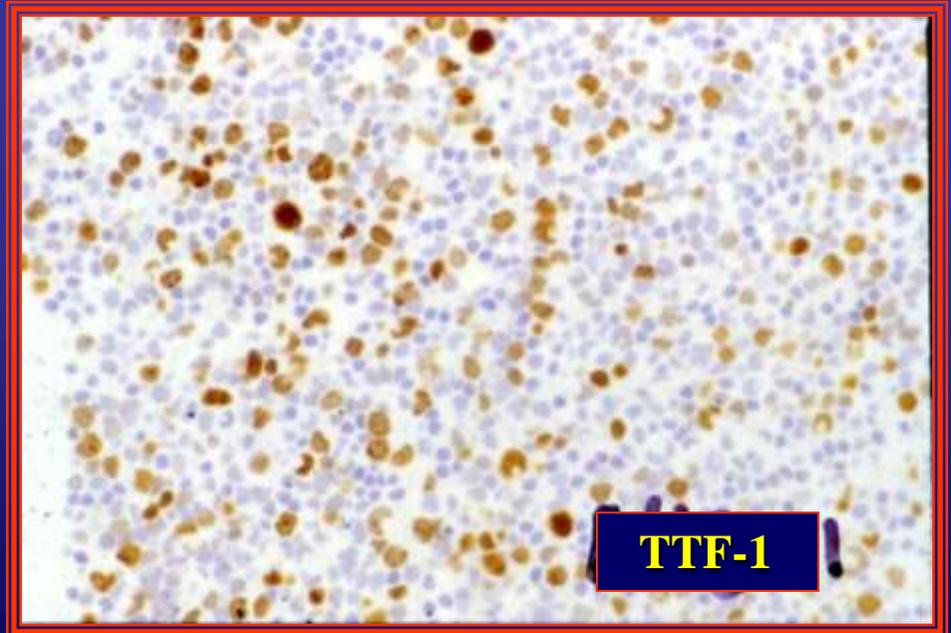
**CD117**



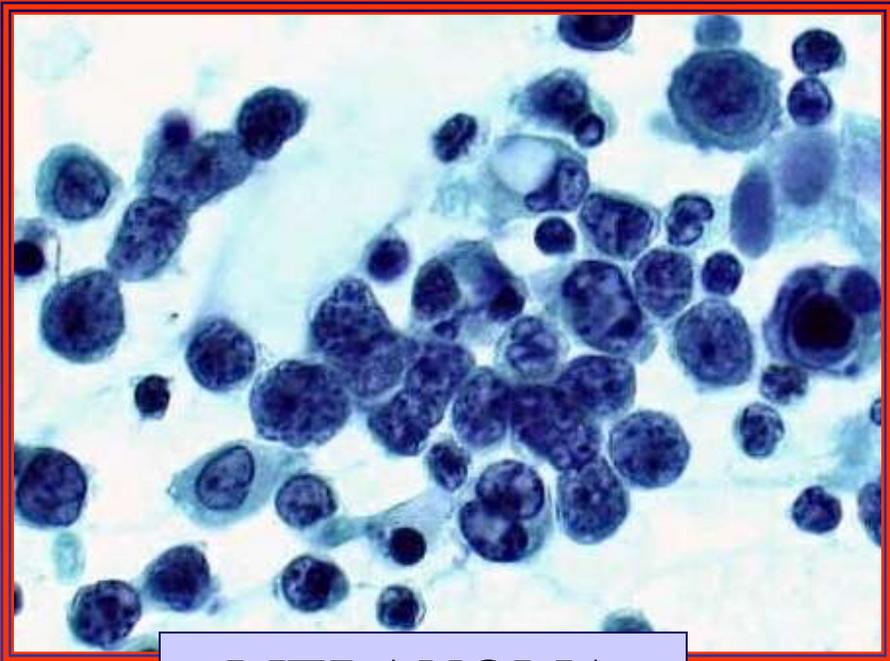
**CARCINOMA DE  
CÉLULAS PEQUEÑAS  
DE PULMÓN**



**Chromogranina A**



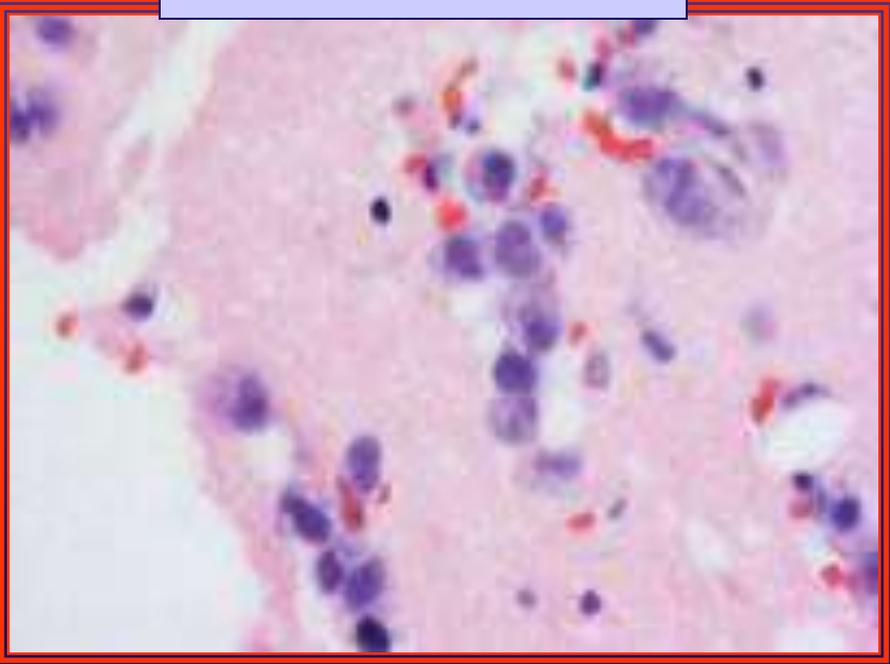
**TTF-1**



**MELANOMA**



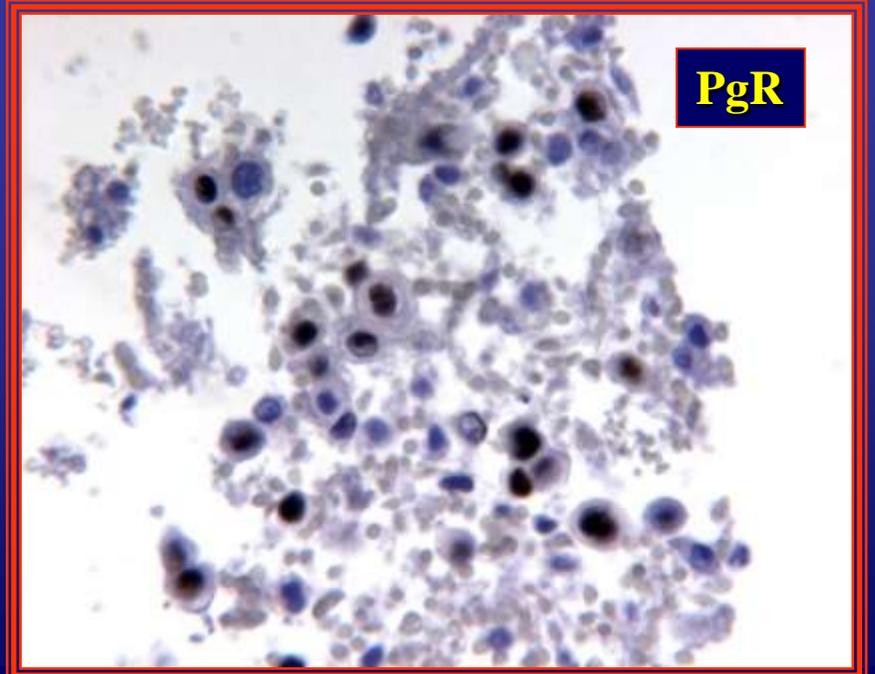
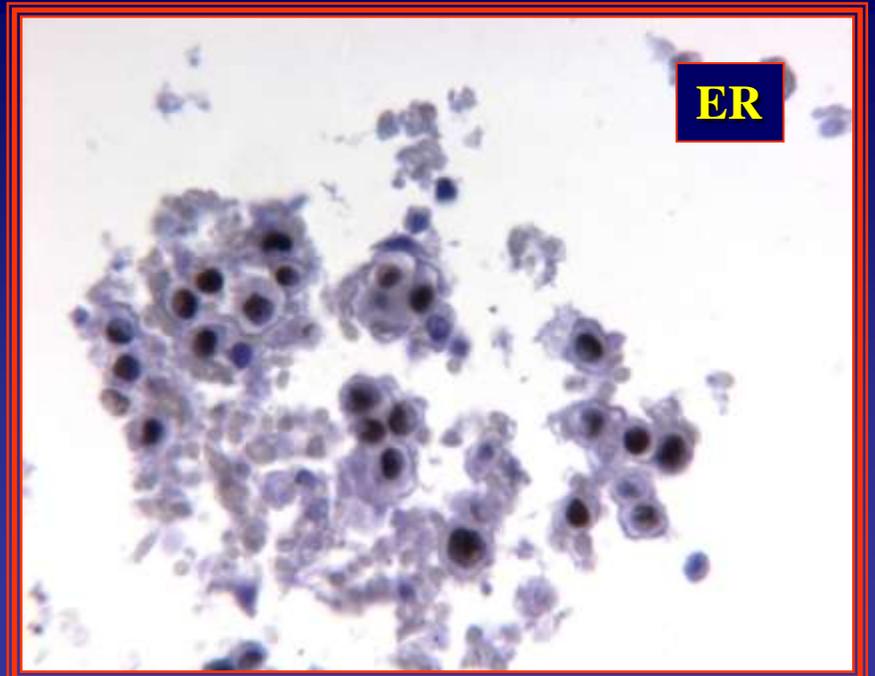
**S100**



**HMB-45**

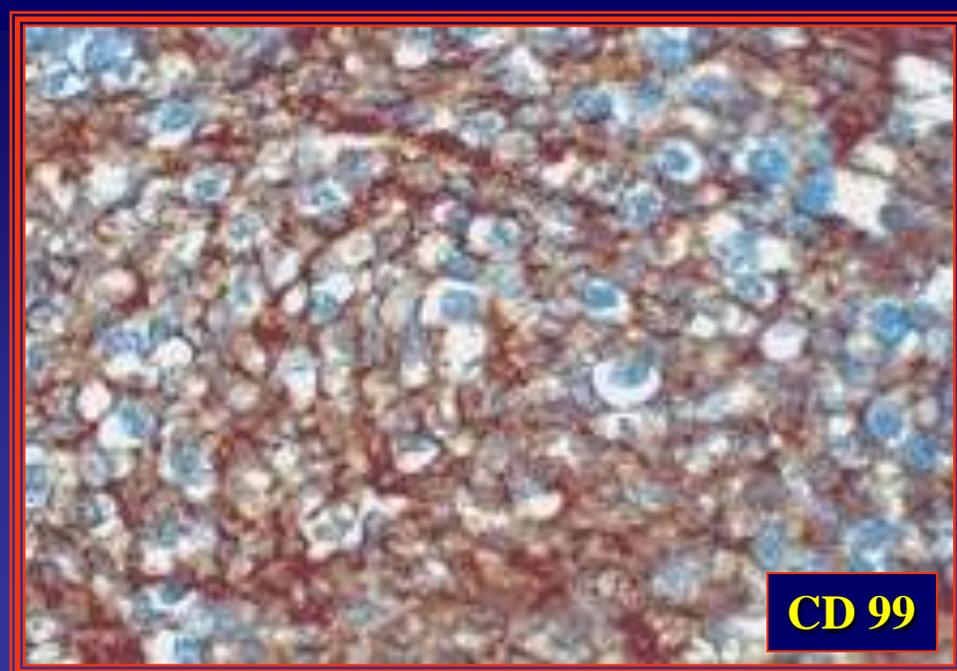
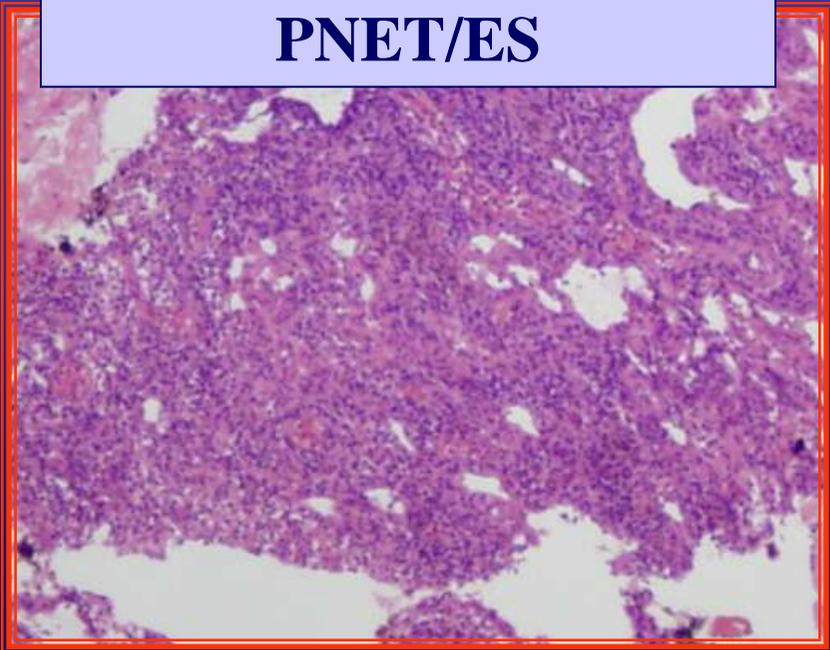


**CARCINOMA  
LOBULILLAR  
DE MAMMA**

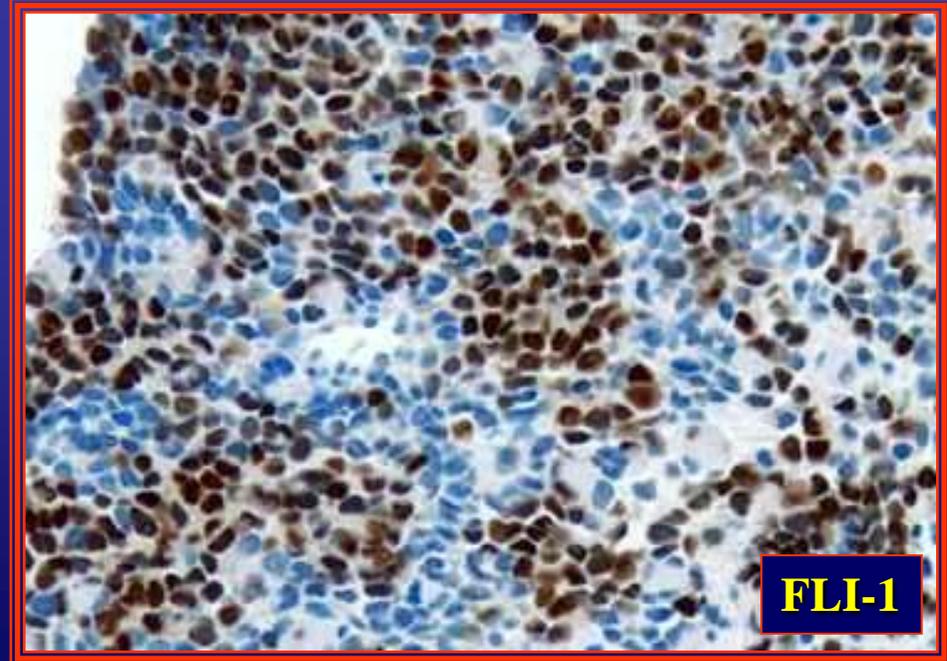




**SARCOMA DE  
CÉLULAS PEQUEÑAS  
PNET/ES**



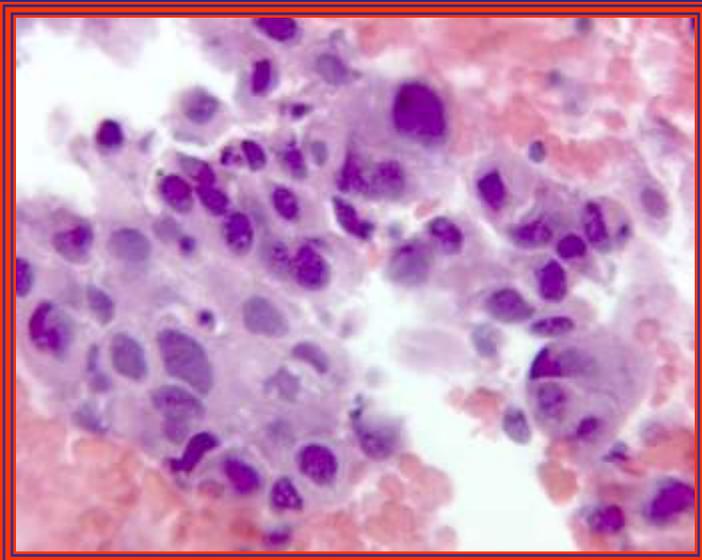
**CD 99**



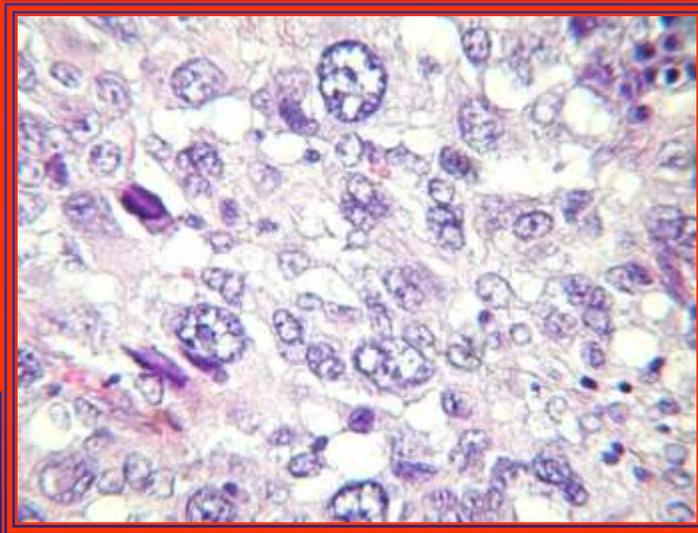
**FLI-1**

**Células neoplásicas grandes, aisladas y no cohesivas revelan:**

	<b>CK 5</b>	<b>CK 7</b>	<b>S100 HMB-45 CD 63</b>	<b>Marcadores linfocíticos</b>
<b>Carcinoma escamoso de pulmón</b>	+	-	-	-
<b>Adenocarcinoma de pulmón</b>	-	+	-	-
<b>Melanoma</b>	-	-	+	-
<b>Linfoma</b>	-	-	-	+



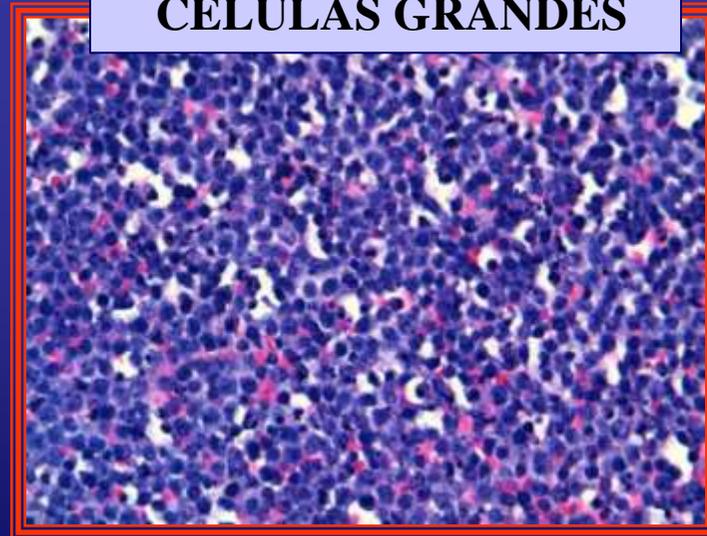
**CARCINOMA DE  
CELULAS GRANDES  
DE PULMON  
(adenocarcinoma)**



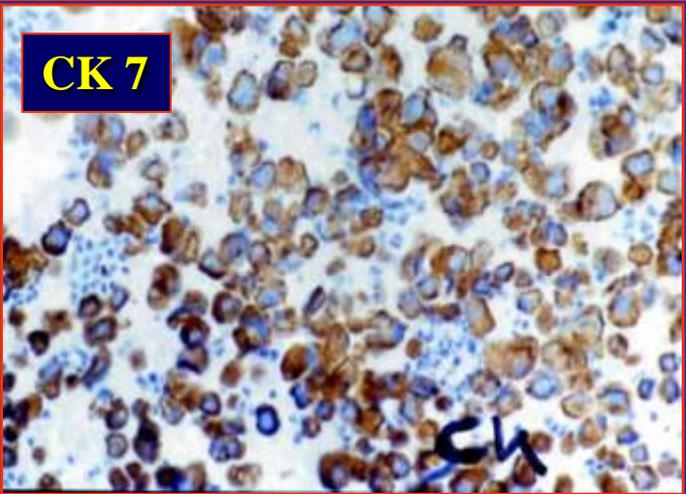
**MELANOMA**



**LINFOMA DE  
CELULAS GRANDES**

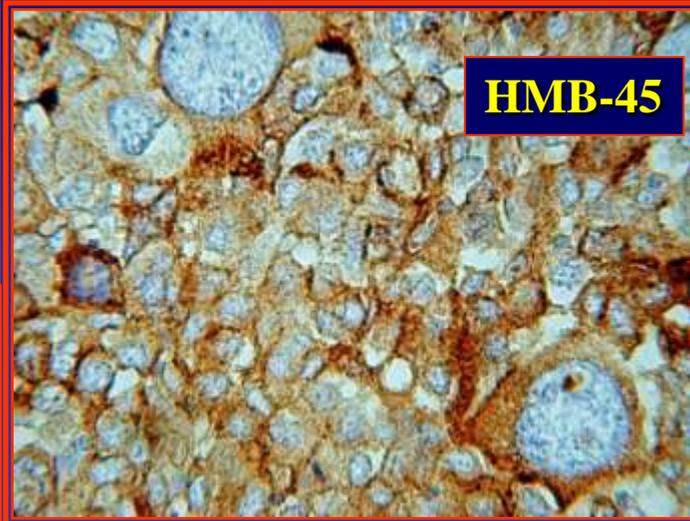


**CK 7**

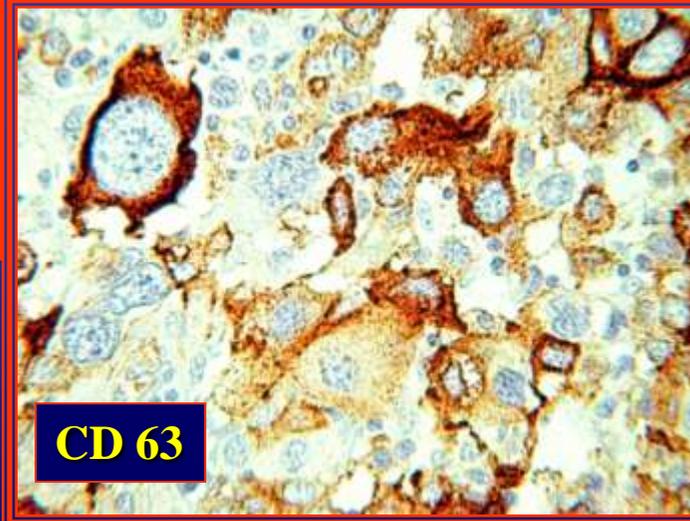


**CARCINOMA DE  
CELULAS GRANDES  
DE PULMON  
(adenocarcinoma)**

**HMB-45**

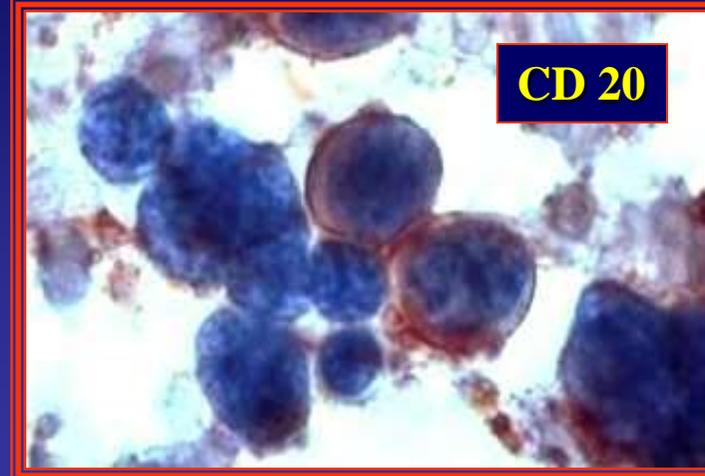


**CD 63**

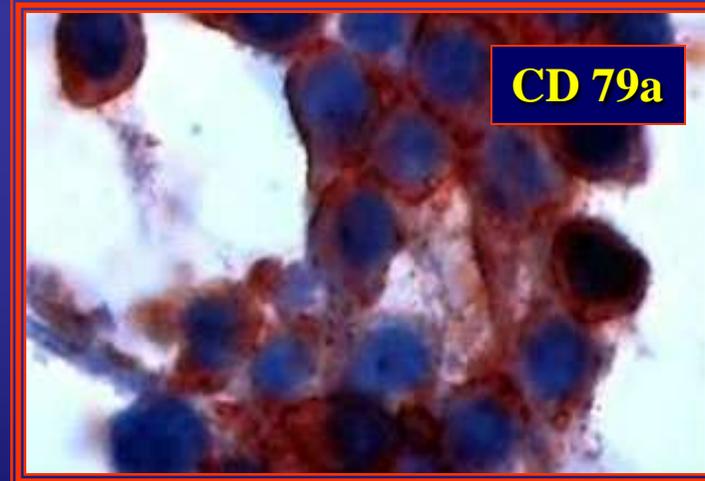


**MELANOMA**

**CD 20**



**CD 79a**



**LINFOMA DE  
CELULAS GRANDES**

**Muchas gracias por la atención**

