

SKML rondzending PATHO 2014.5

Vakinhoudelijke bespreking

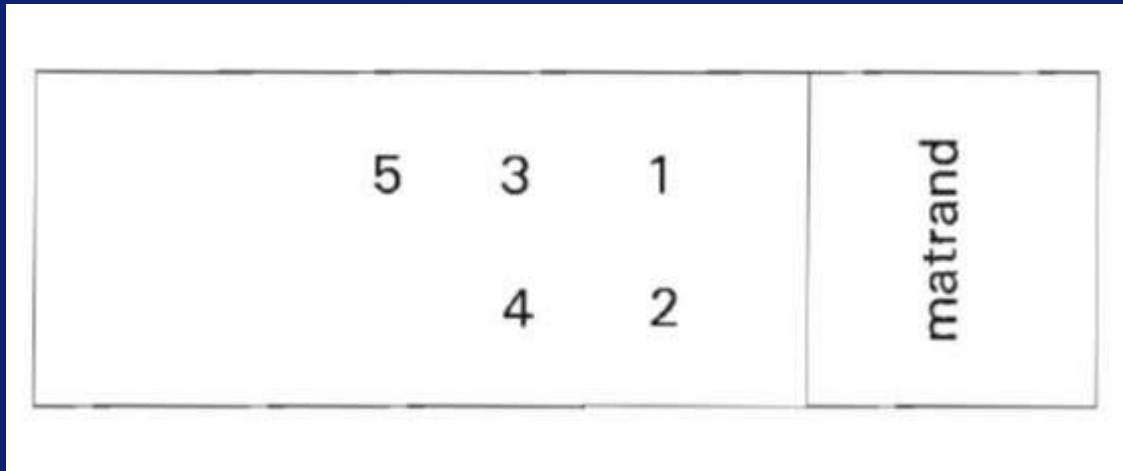
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Afd. Pathologie

Amersfoort, 16-06-2015

Indeling

- Rondgestuurd materiaal en kleuringen
- Resultaten
- Conclusies

Antilichamen: CD15, CD30, PAX-5, CD79a en CD20



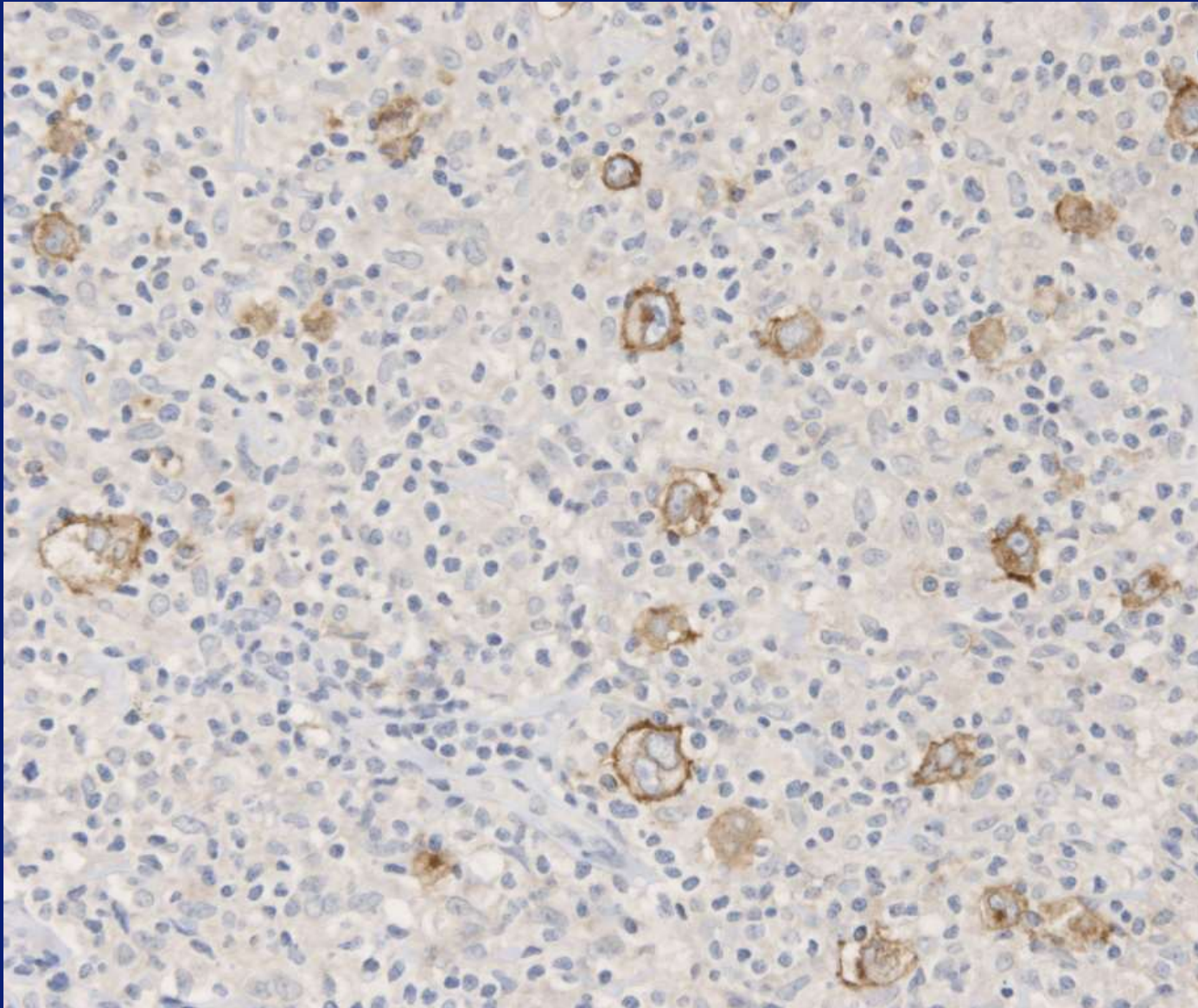
WEEFSEL waarop werd getest

1. Lever
2. Klassiek Hodgkin lymfoom
3. Klassiek Hodgkin lymfoom
4. NLPHL (niet-klassiek Hodgkin lymfoom)
5. Diffuus grootcellig B-cellymfoom

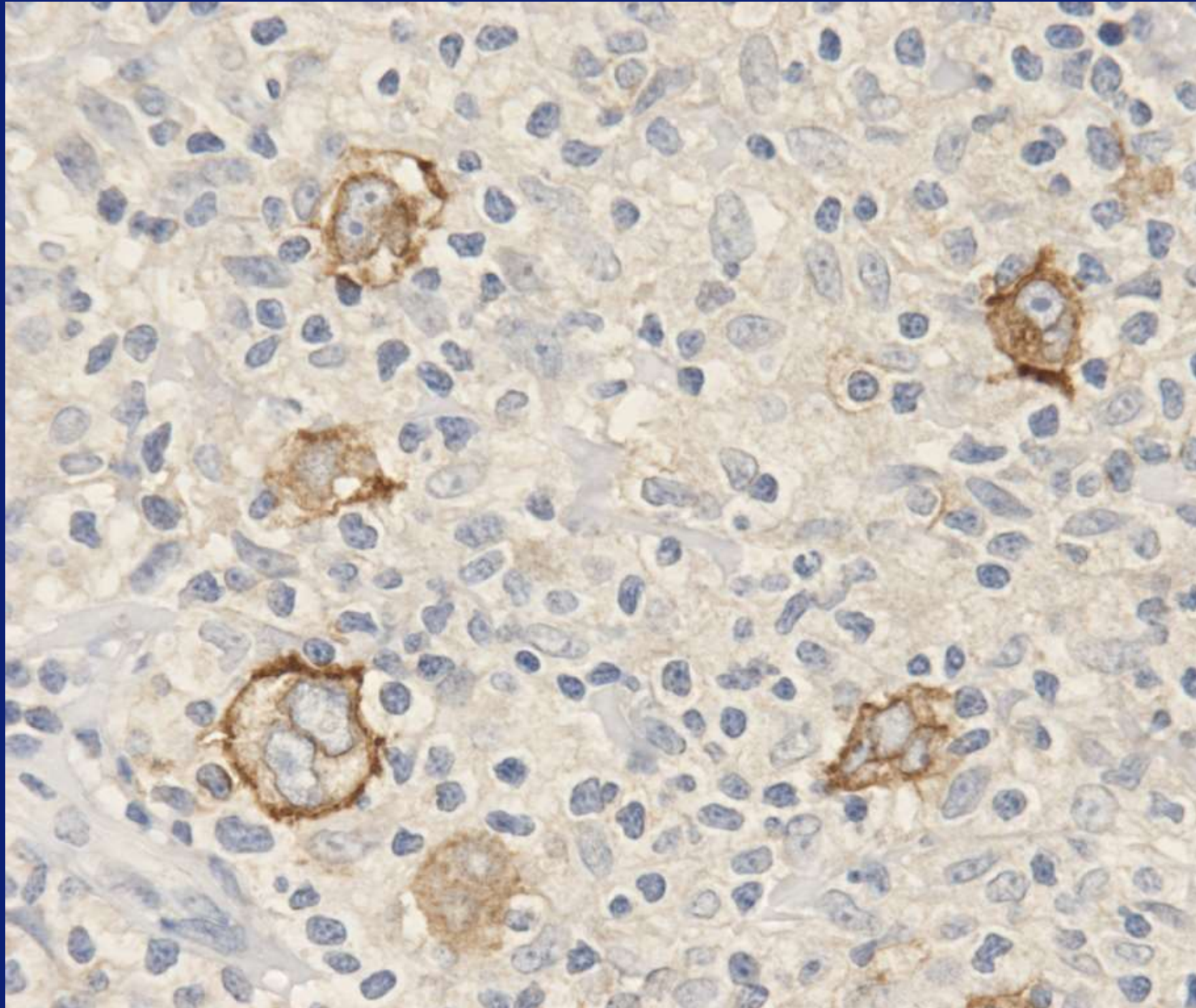
Resultaten CD30

- 1/3 had een mooie, sterke aankleuring
- 1/3 had een matig sterke aankleuring
- 1/3 van de deelnemers had een zwakke aankleuring
- 2 tot 3 deelnemers die een echt te zwakke aankleuring
- De sterke aankleuring zou eigenlijk de norm moeten zijn
- Aankleuring beide core 2 en 3 vergelijkbaar, mogelijk core 2 iets zwakker

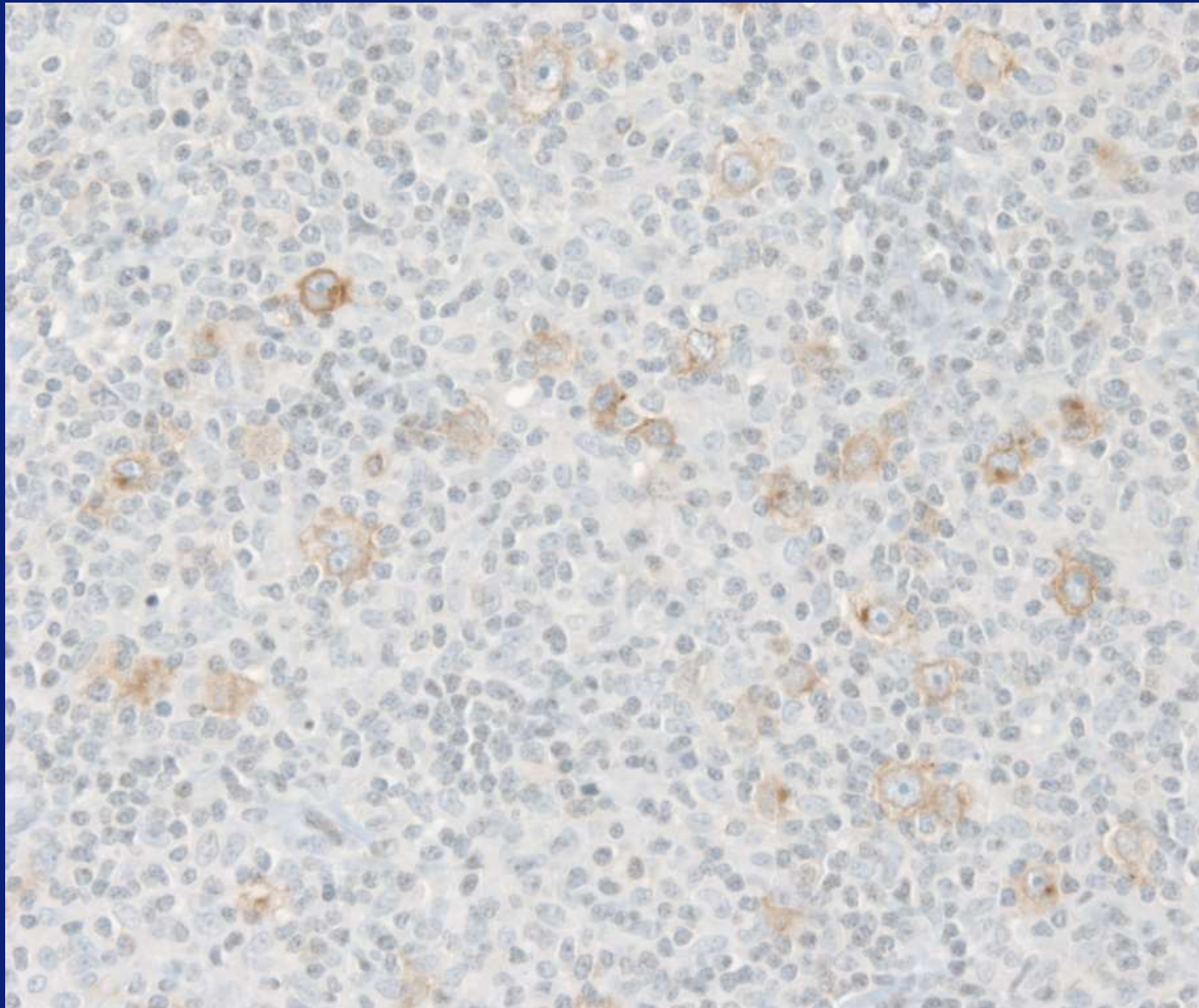
CD30 sterke aankleuring



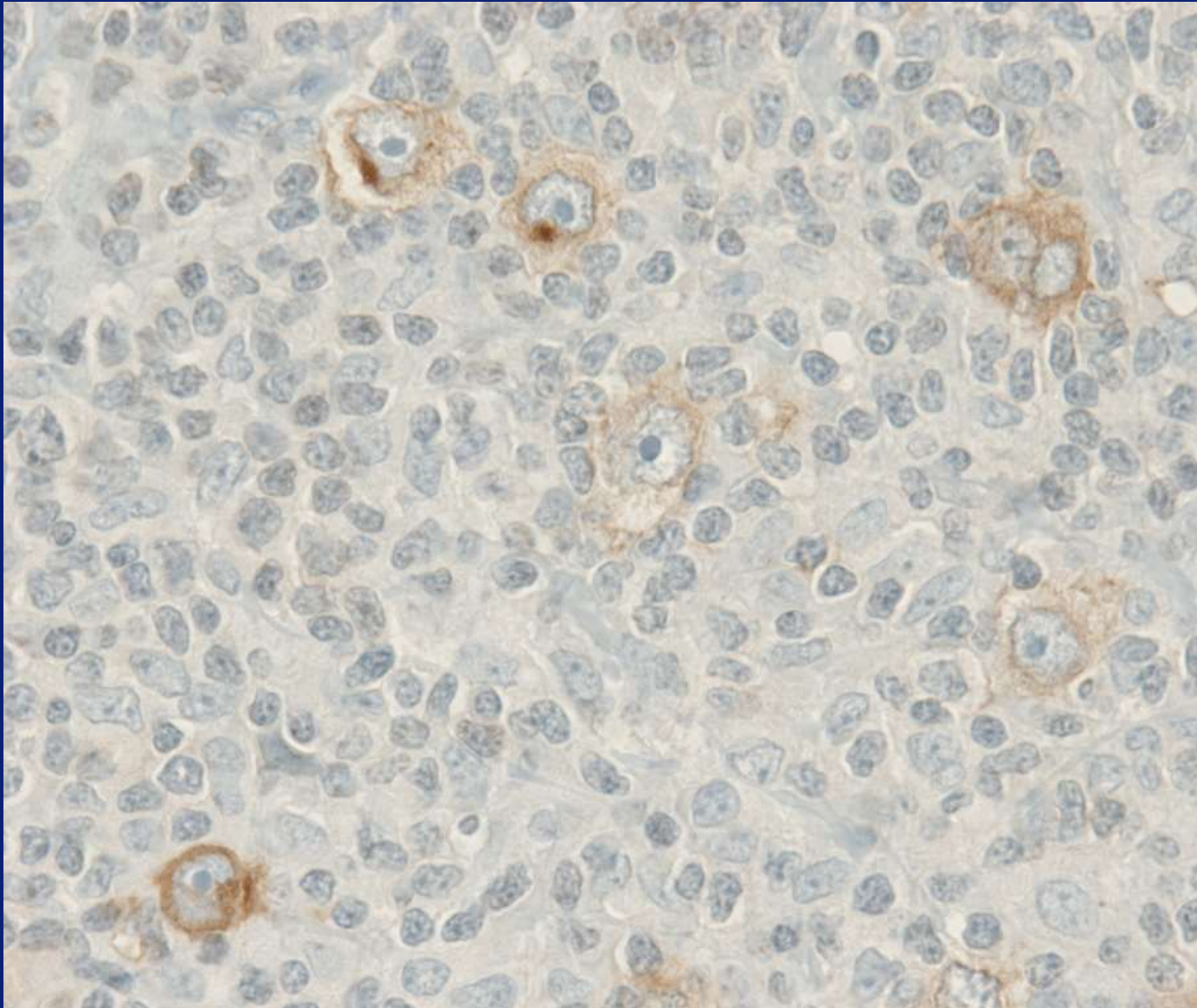
CD30 sterk, detail



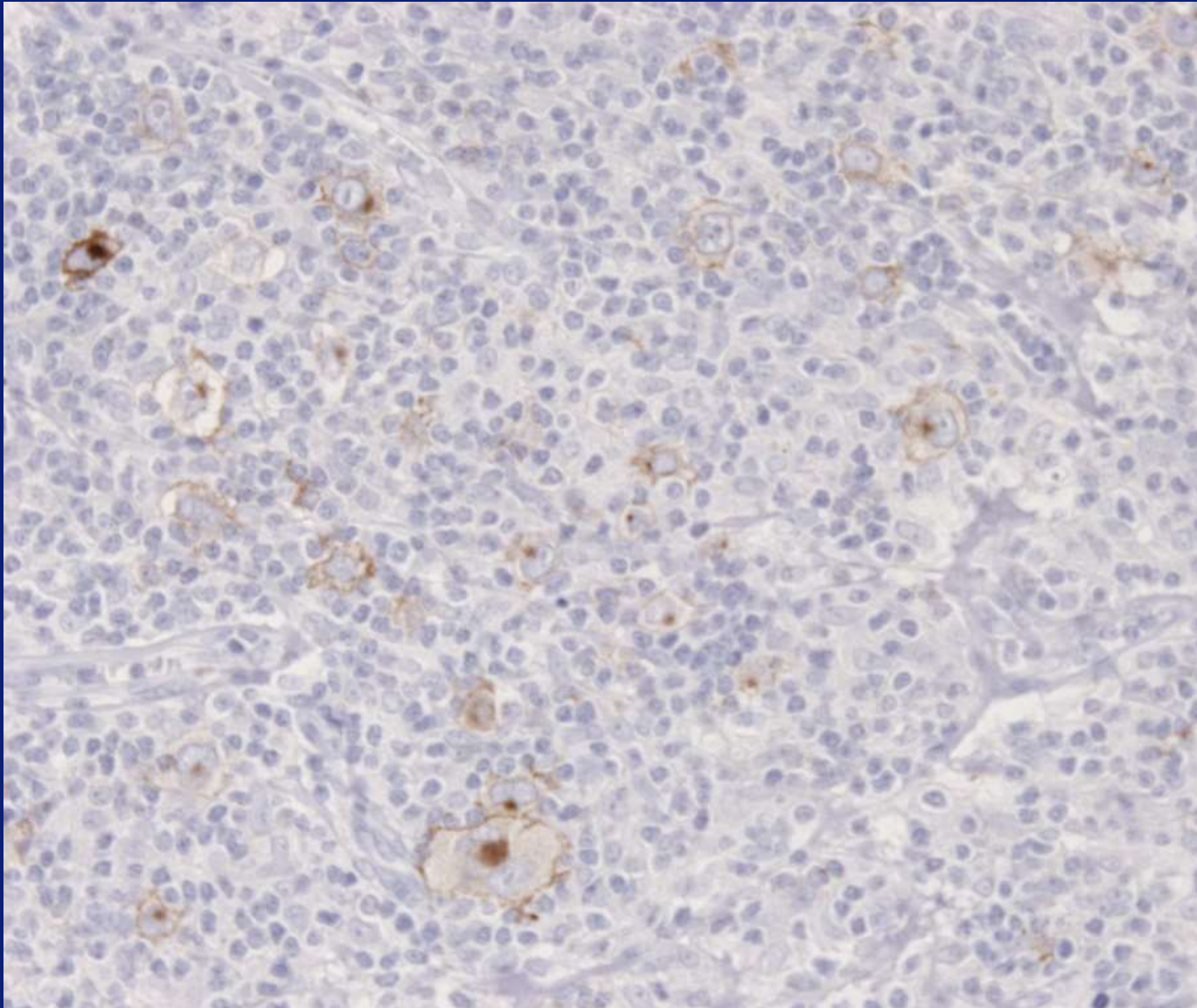
CD30 matige aankleuring



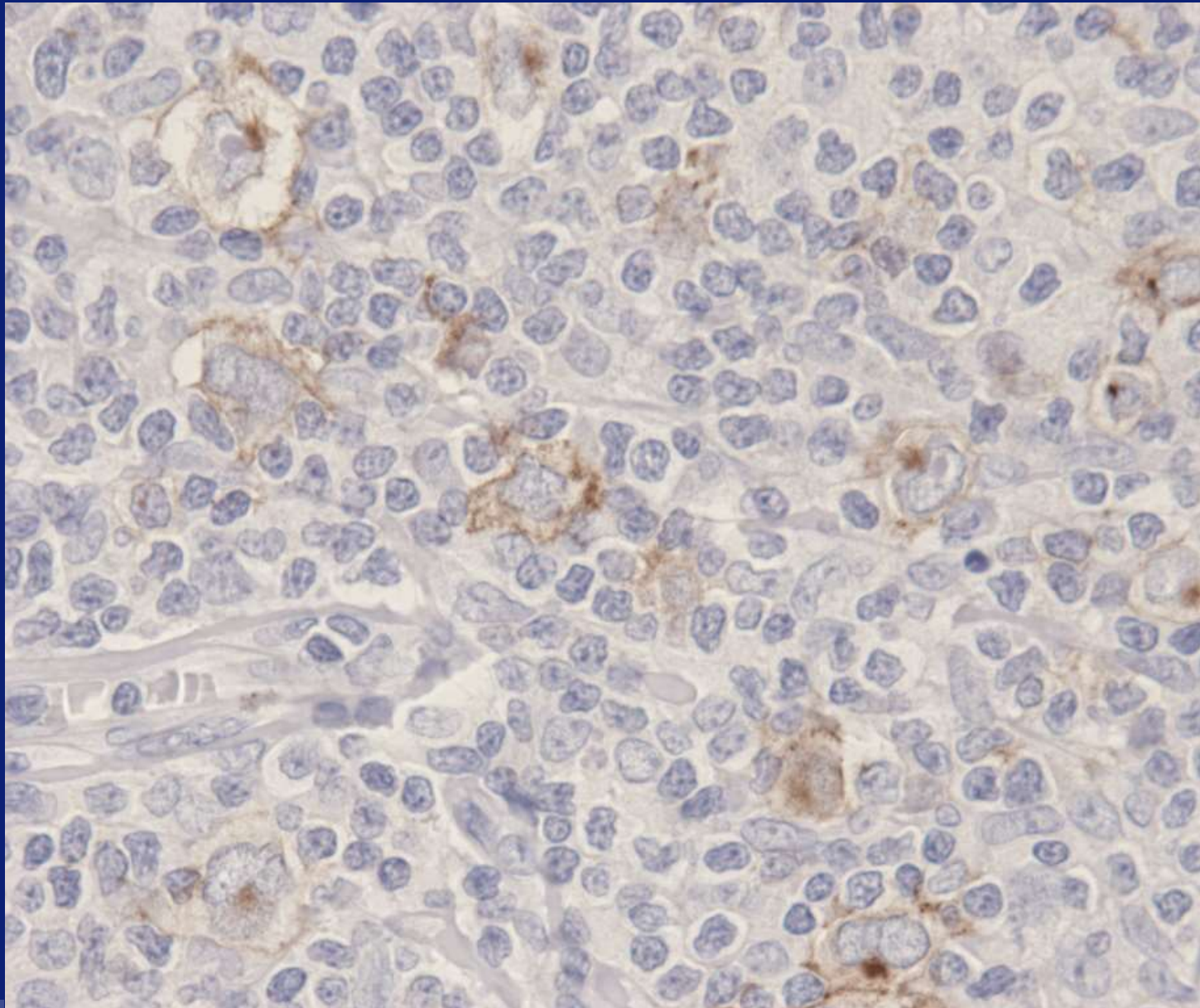
CD30 matig sterke aankleuring, detail



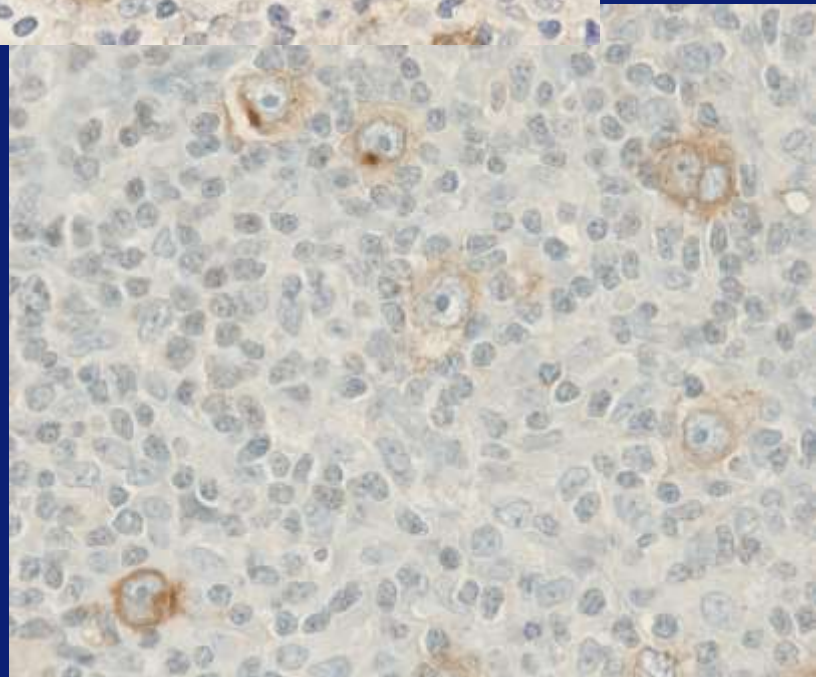
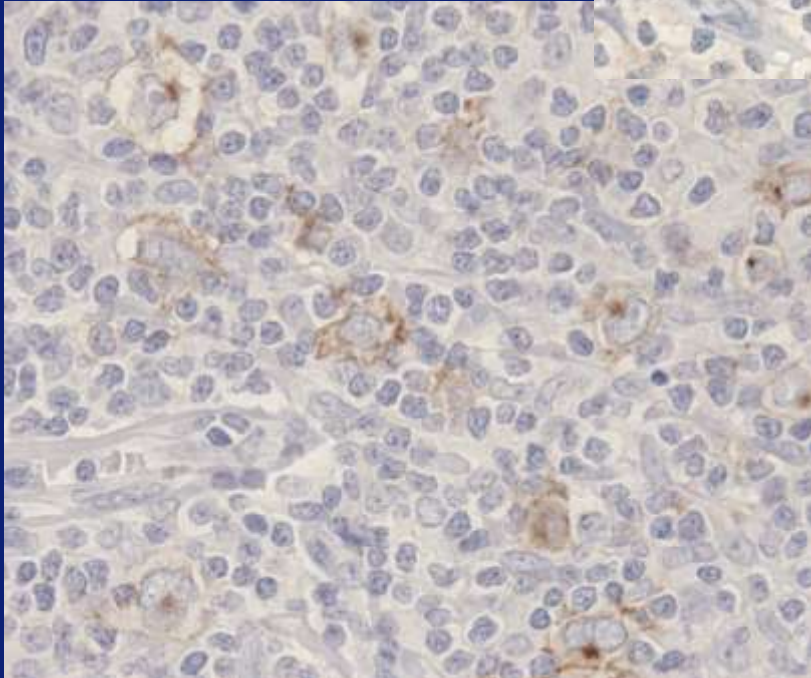
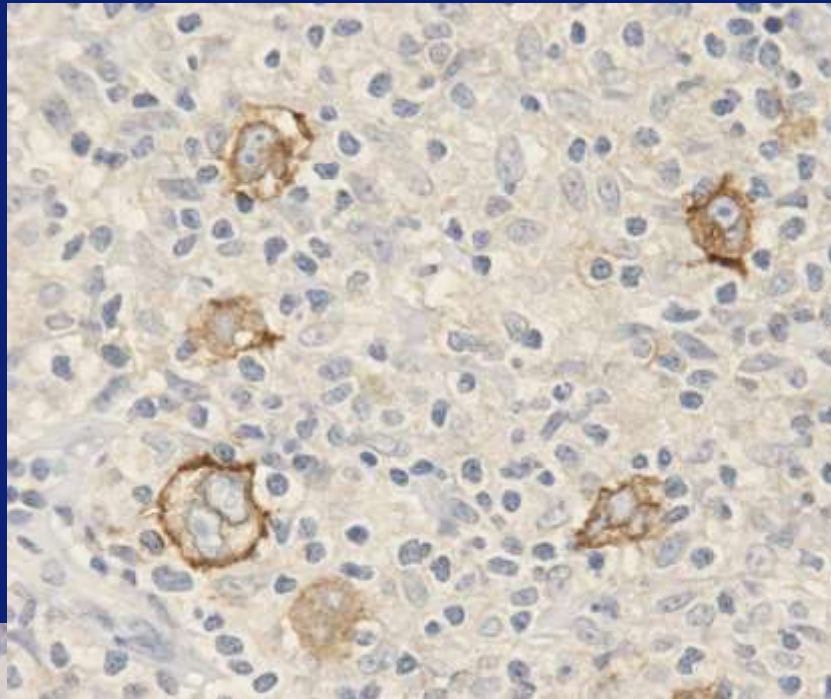
CD30 zwakke aankleuring



CD30 zwakke aankleuring, detail



CD30 op een rijtje



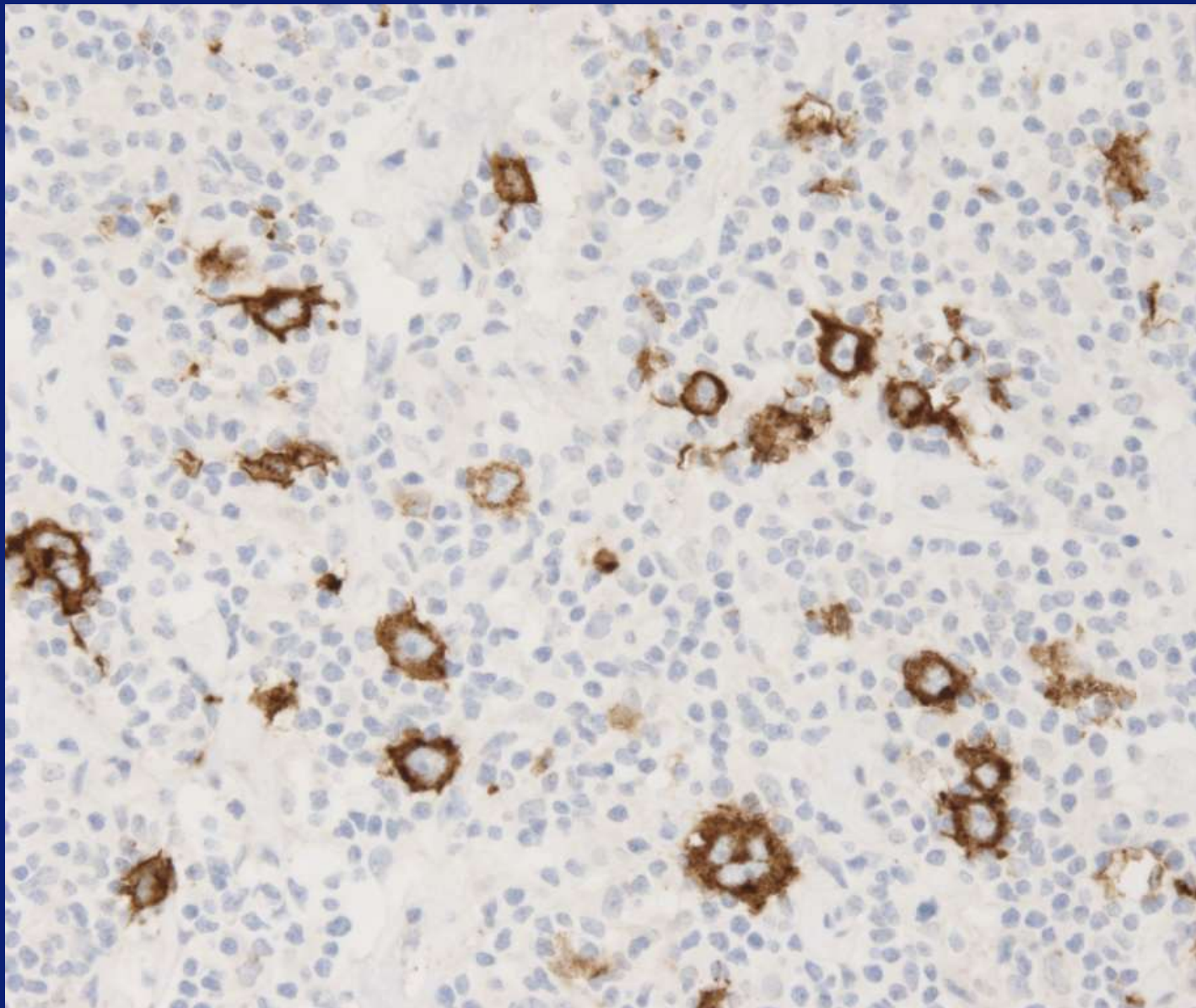
CD30: criteria for assessing the staining as optimal includes:

- An at least weak to moderate and distinct membranous staining reaction of interfollicular activated B- and T-cells and perifollicular germinal centre B-cells in the tonsil.
- A moderate to strong, predominantly membranous and dot-like (Golgi zone) cytoplasmic staining reaction of Hodgkin and Reed-Sternberg cells in the Hodgkin lymphoma (tissue core 2).
- An at least weak to moderate, predominantly membranous and dot-like (Golgi zone) cytoplasmic staining reaction of the majority of Hodgkin and Reed-Sternberg cells in the Hodgkin lymphoma (tissue core 3).
- A moderate to strong, predominantly membranous staining reaction of virtually all neoplastic cells in the embryonal carcinoma - a weak background staining due to necrosis was accepted.
- No or only a weak background staining. Cytoplasmic staining of the plasma cells was accepted.

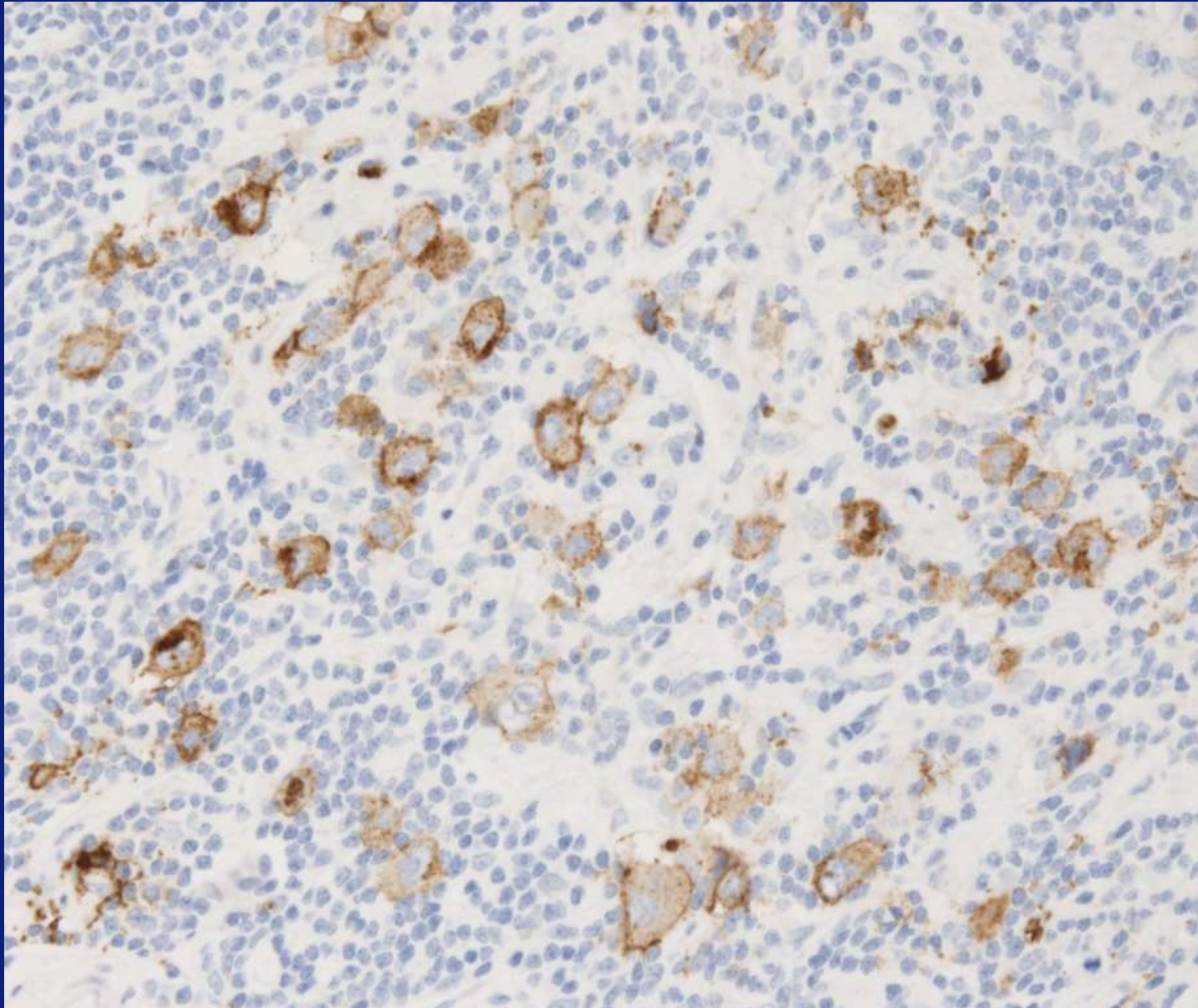
Resultaten CD15

- Bij ongeveer 60% valt niets op aan te merken
- Van de resterende 40% bereikte het overgrote deel een resultaat die voldoende was om de diagnosen te stellen.
- Bij 2 tot 3 deelnemers is de sterkte van de aankleuring onder de maat.
- Eén deelnemer voldeed niet, maar had dat zelf al geconcludeerd.

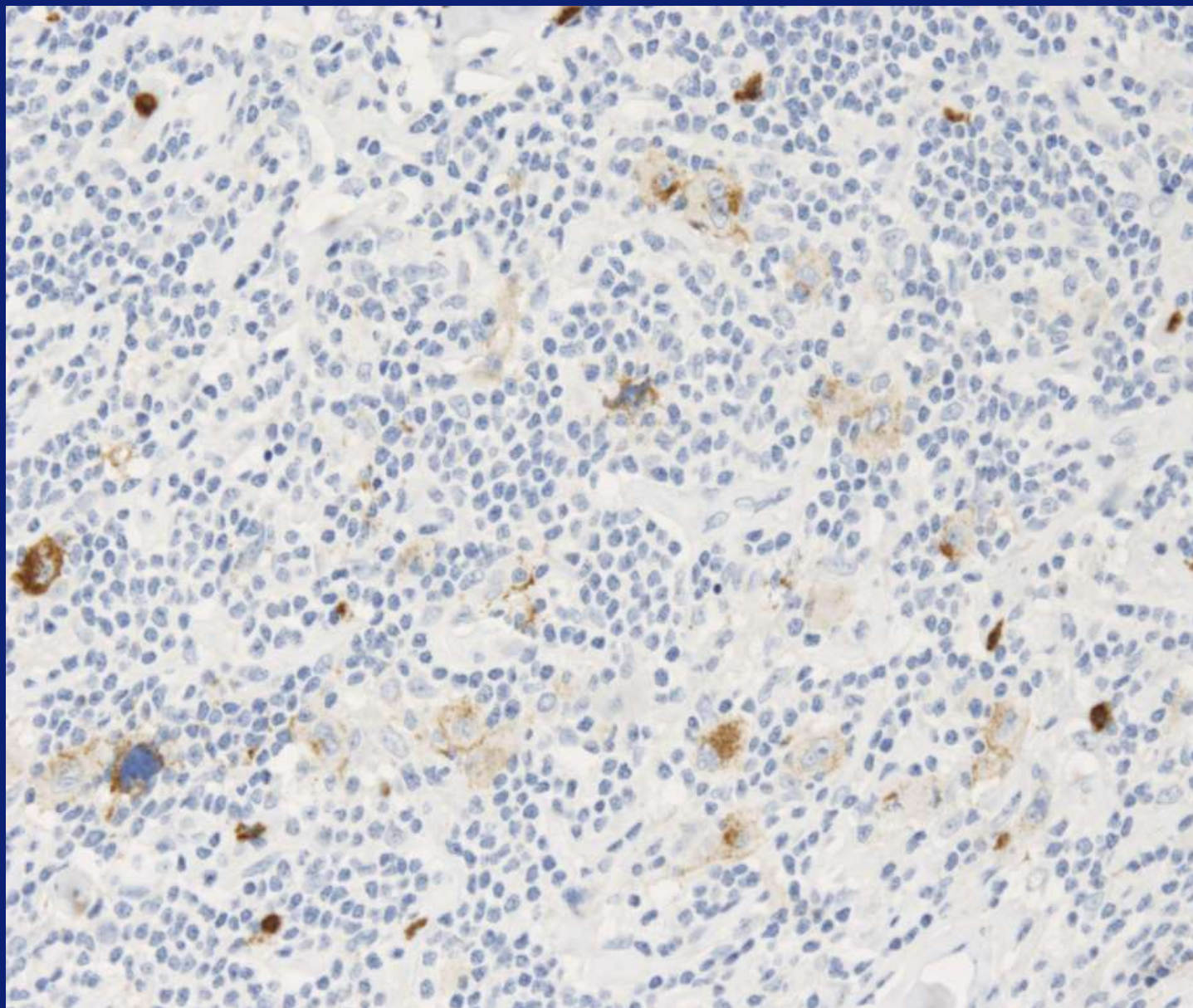
CD15 op core 3: meestal wel OK



CD15 op core 2, de scherprechter: goed



CD15 op core 2, de scherprechter: matig



CD15: criteria for assessing the staining as optimal includes:

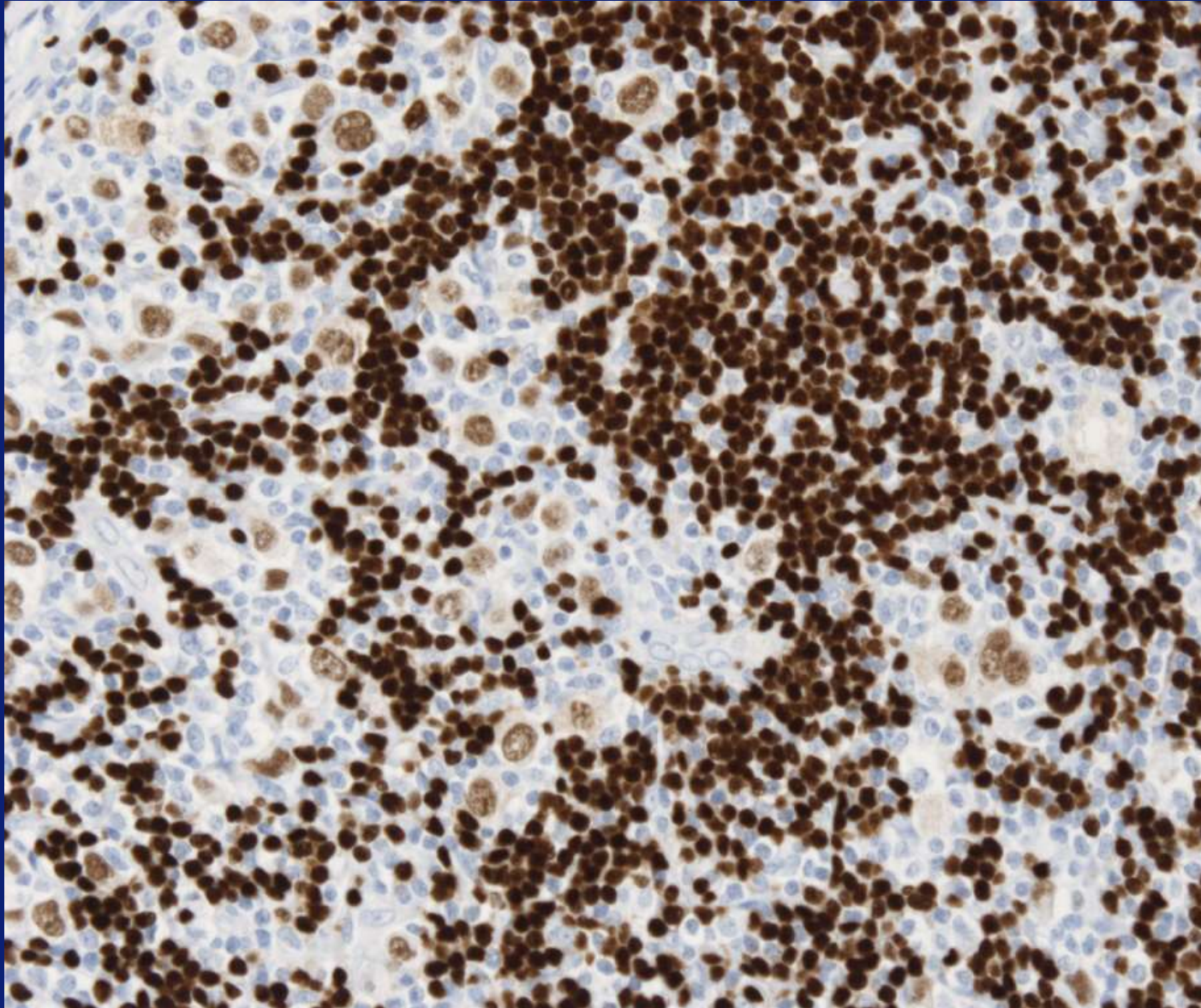
- An at least weak but distinct predominantly membranous staining reaction of follicular dendritic cells in the germinal centres of the tonsil.
- A moderate to strong predominantly membranous staining reaction of the epithelial cells lining the renal proximal tubules.
- A moderate to strong and distinct predominantly membranous staining reaction as well as dot-like (Golgi) staining reaction of the vast majority of Hodgkin and Reed-Sternberg cells in the two Hodgkin lymphomas.
- A strong cytoplasmic staining reaction of neutrophil granulocytes in all four specimens.
- No or only minimal background reaction

Ref. http://www.nordiqc.org/Run-42-B18-H6/Assessment/Run42_CD15.pdf

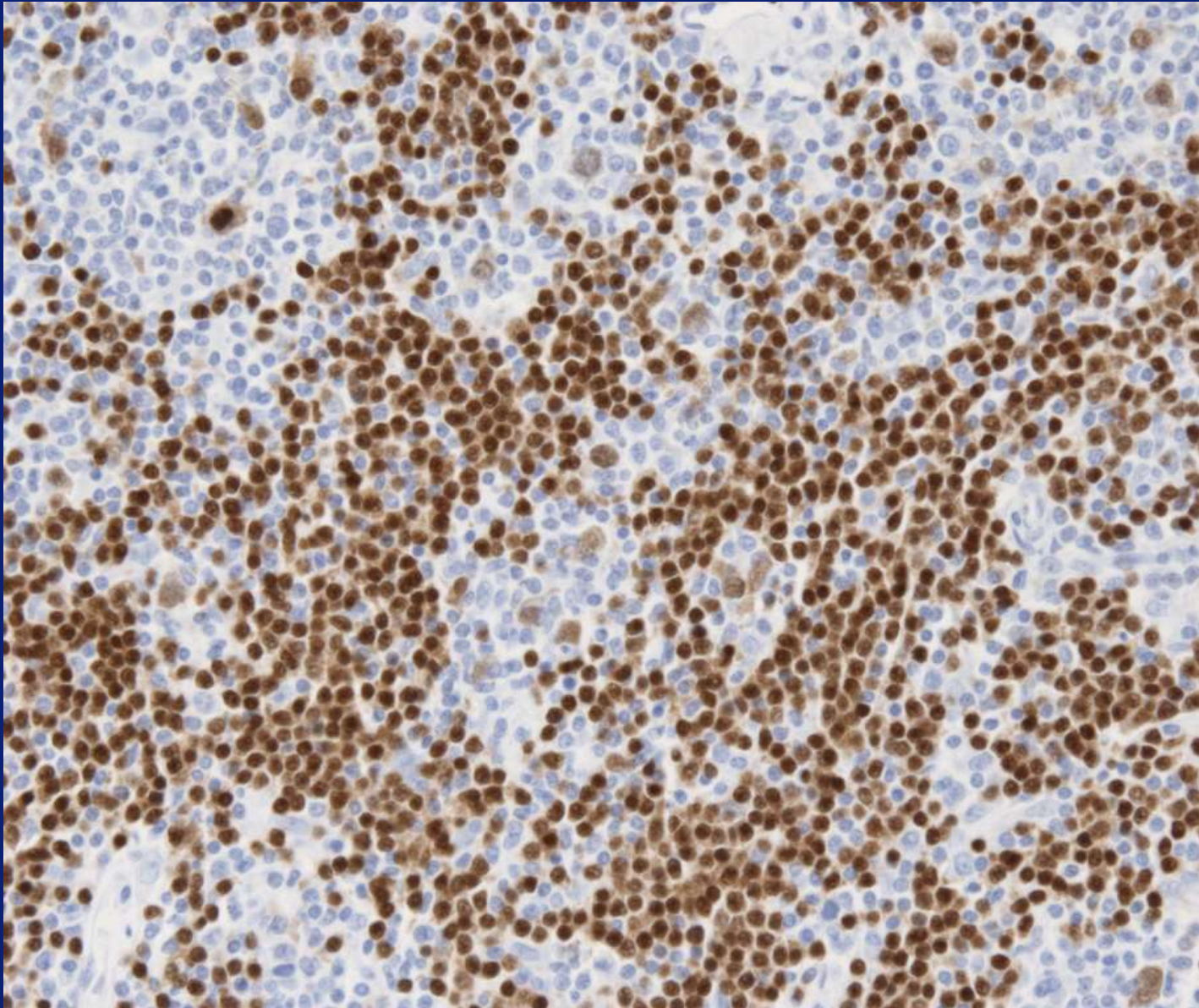
Resultaten PAX-5

- In ongeveer de helft van de laboratoria goed/optimaal uitgevoerd.
- In de andere helft in het algemeen een wat zwakke aankleuring waarbij diagnose nog wel mogelijk was.
- In twee laboratoria onder de maat. Dat had men in de desbetreffende laboratoria overigens zelf ook al geconcludeerd.

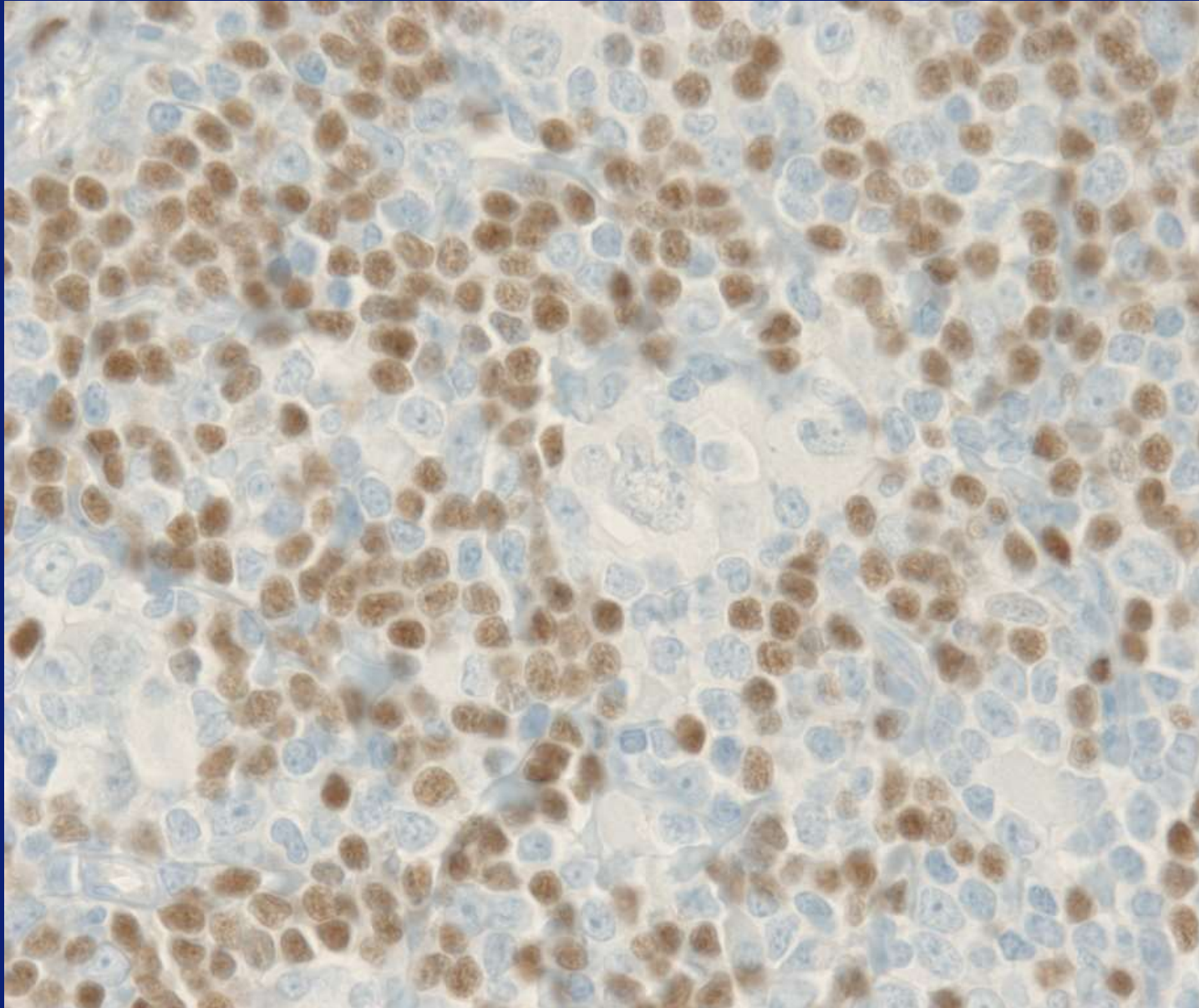
PAX-5: soms is de wereld echt ideaal..



PAX-5: de dagelijkse praktijk



PAX-5: actie!



PAX-5: criteria for assessing the staining as optimal includes:

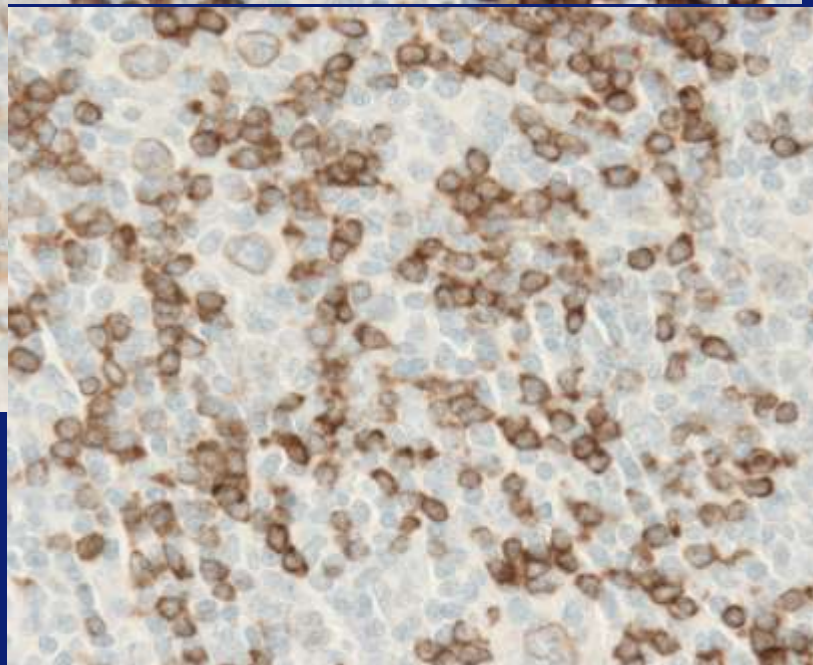
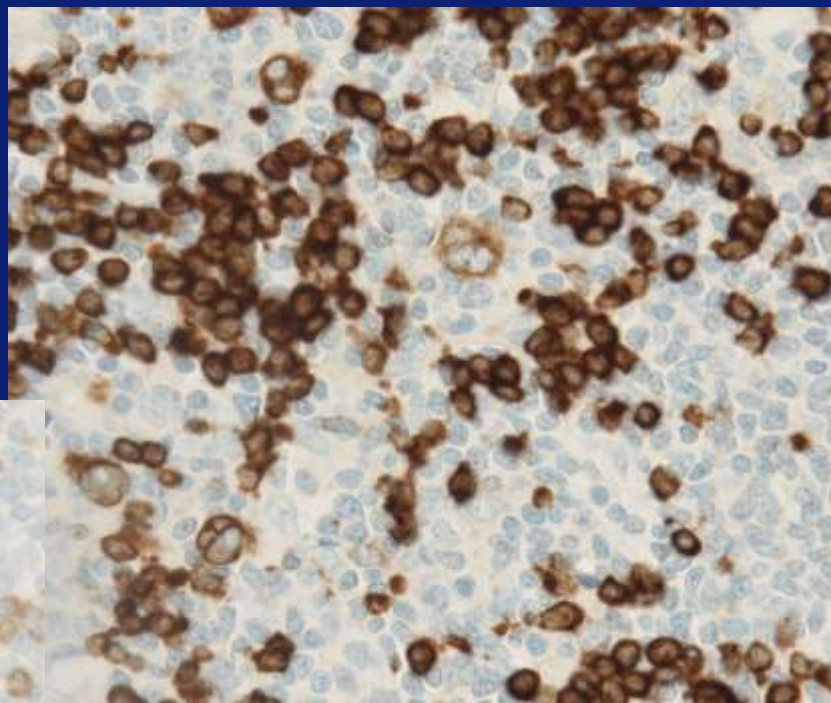
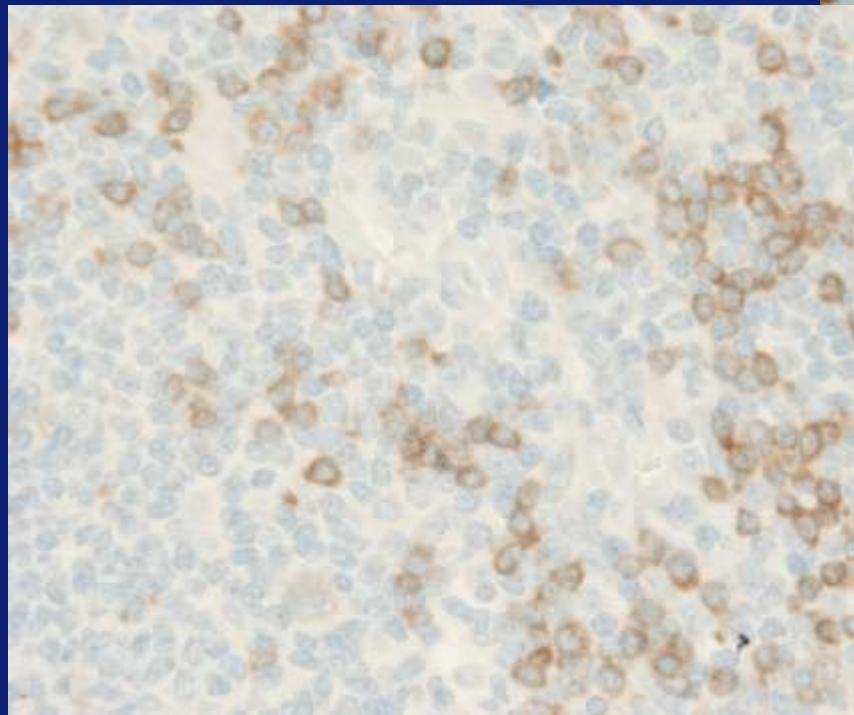
- A distinct moderate to strong nuclear staining reaction of virtually all mantle zone B-cells, germinal centre B-cells and interfollicular peripheral B-cells in the tonsils and appendix.
- A moderate to strong, nuclear staining reaction of virtually all neoplastic cells of the DLBCL.
- An at least weak but distinct nuclear staining reaction of the vast majority of Hodgkin and Reed-Sternberg cells in the Hodgkin lymphoma.
- No staining reaction of other cells, including T-cells, squamous epithelial cells of the tonsils and columnar epithelial cells of the appendix.
- A weak, cytoplasmic staining reaction in cells with a strong nuclear staining reaction was accepted

Ref. http://www.nordiqc.org/Run-41/Assessment/Run41_BSAP.pdf

Resultaten CD79a

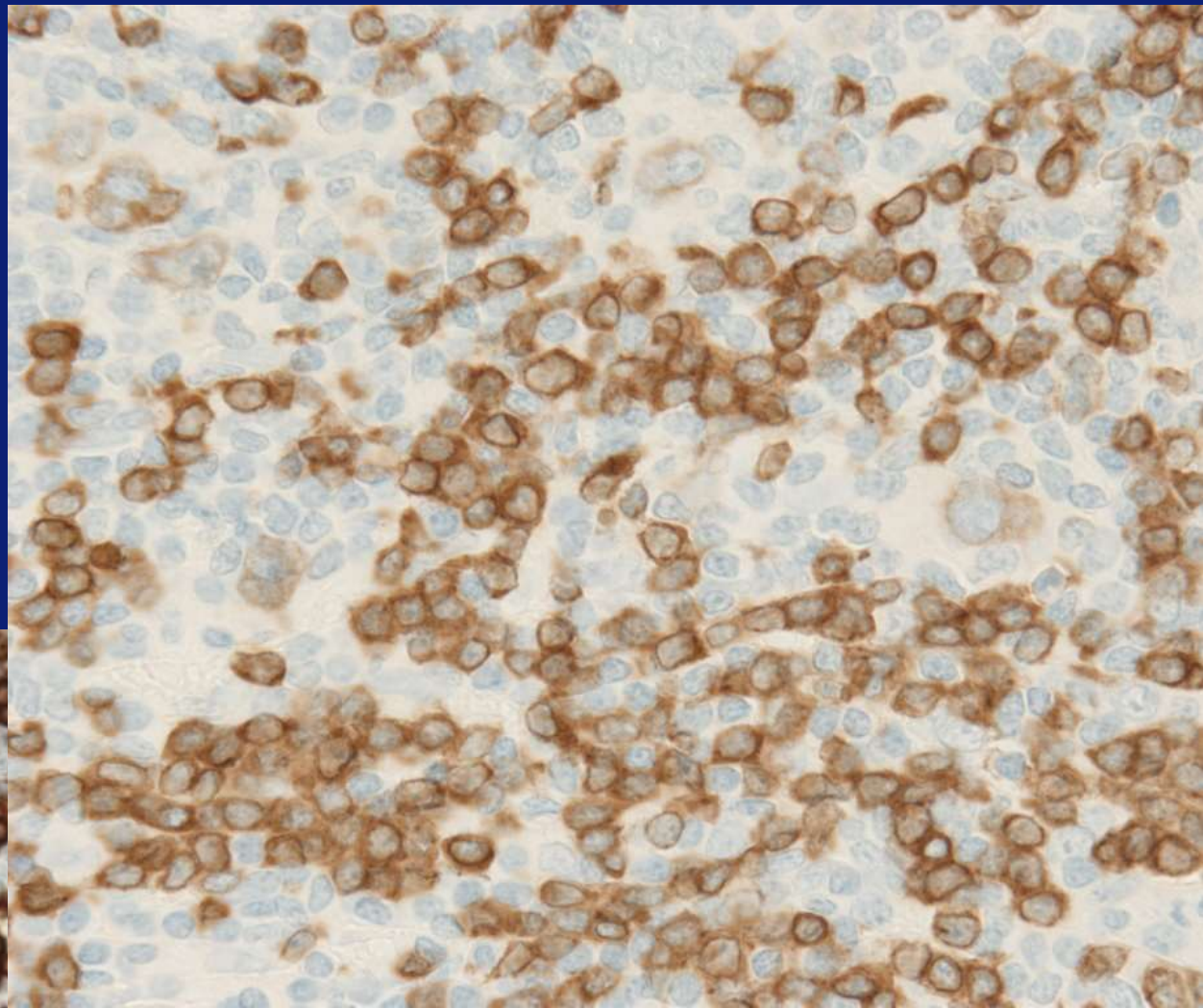
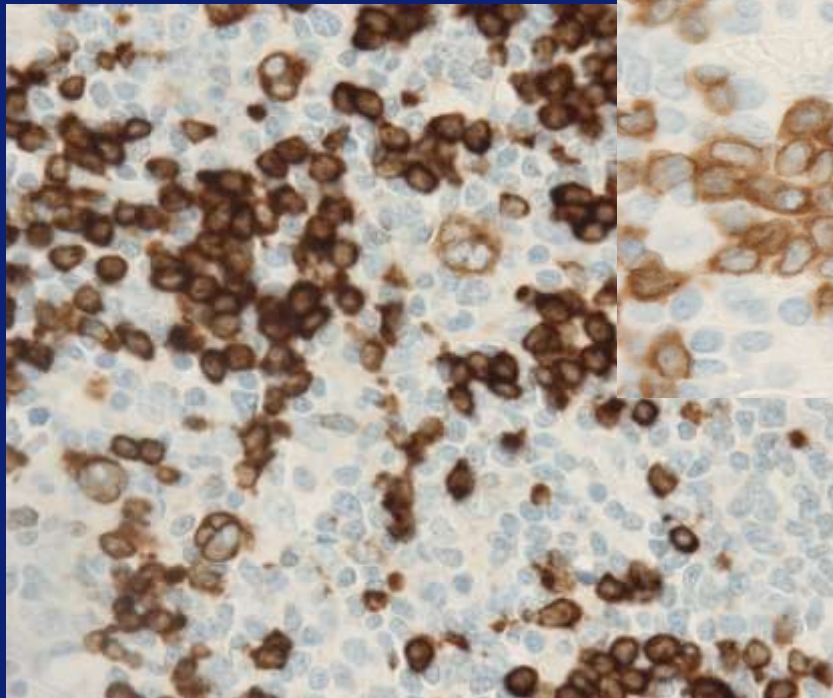
- Bij iets meer dan de helft van de deelnemers is de sterkte optimaal.
- Bij de rest is de aankleuring zwakker, maar voldoende.
- Bij iets minder dan een kwart van de deelnemers wordt een sterkere aankleuring toch wel sterk aanbevolen
- In veel gevallen wordt een geringe achtergrond aankleuring gezien. Toch teveel versterking?

CD79a



us MC
Zafar

CD79a:
het kan ook
zonder allerlei
versterking-
stappen..



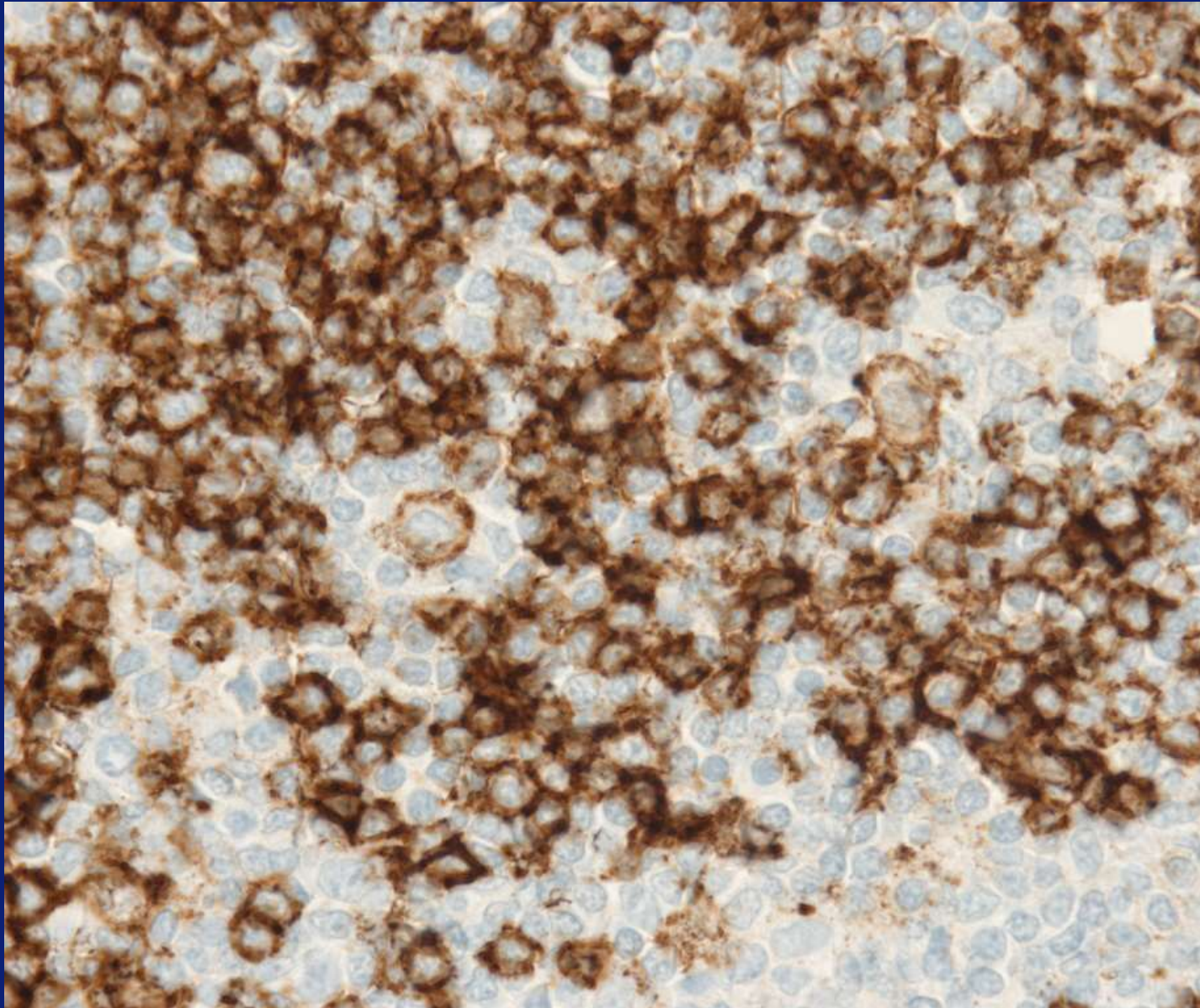
CD79a: criteria for assessing the staining as optimal includes:

- A strong, predominantly membranous staining reaction of the mantle zone B-cells and at least a moderate membranous staining reaction of the germinal centre B-cells in the secondary follicles of the tonsil and the appendix.
- A strong membranous staining reaction of virtually all the neoplastic cells of the DLBCL (toegevoegd).
- A strong, predominantly cytoplasmic staining reaction in the plasma cells and the late stage activated germinal centre B-cells of the tonsil and the appendix.
- A moderate to strong membranous staining reaction of virtually all the neoplastic cells in the B-CLL.
- At least a weak to moderate predominantly membranous staining reaction in the majority of the neoplastic cells in the Pre-B-ALL.
- At least a weak to moderate cytoplasmic staining reaction in the majority of the neoplastic cells in the plasmacytoma.
- No staining of any other cells.

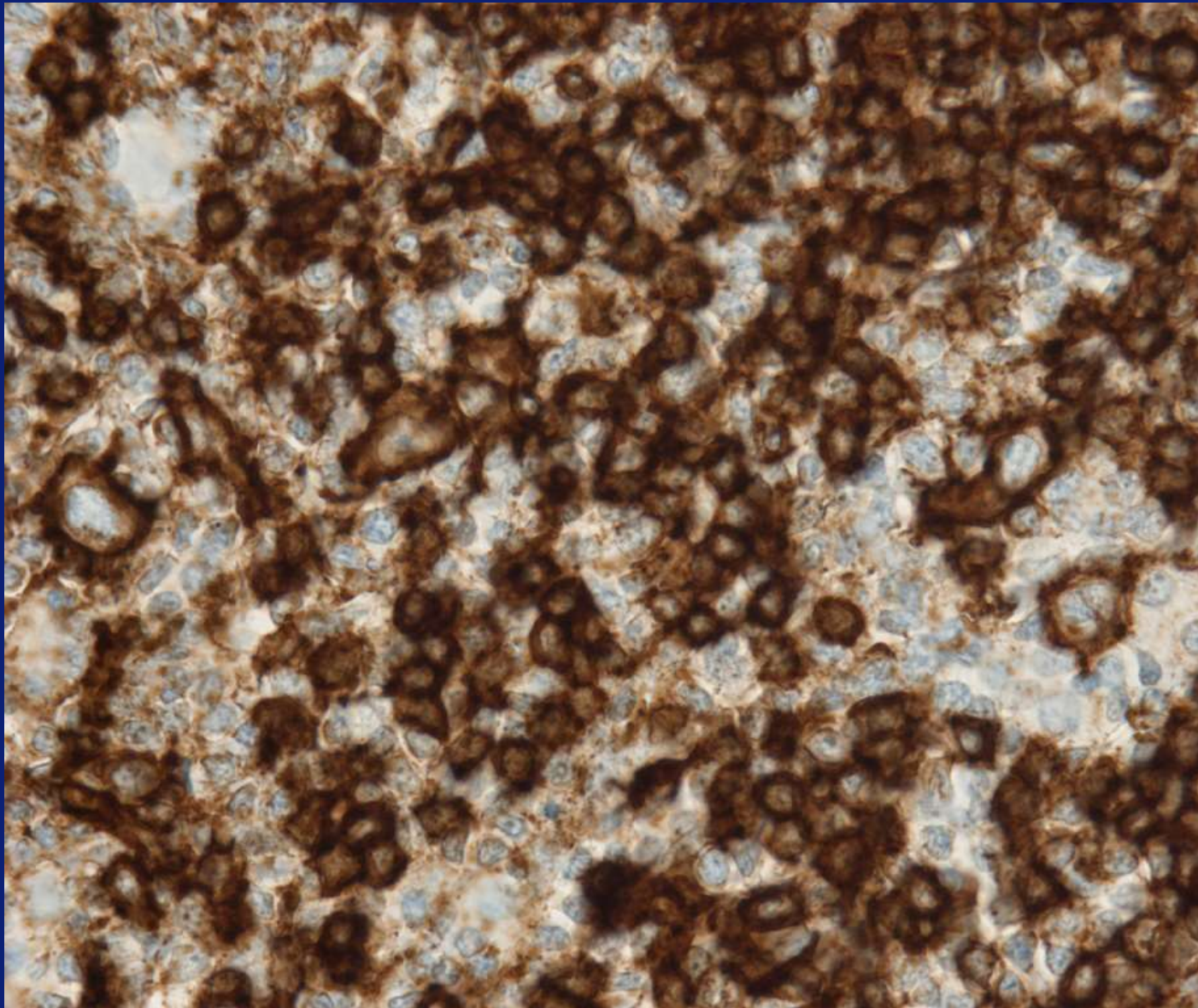
Resultaten CD20

- Bij 75% van de deelnemers een goede/optimale aankleuring.
- Bij een enkel laboratorium de neiging tot te sterke aankleuring gezien.
- Bij een enkel laboratorium zou de aankleuring iets sterker kunnen.
- Balans tussen sterke aankleuring en achtergrond soms lastig te vinden

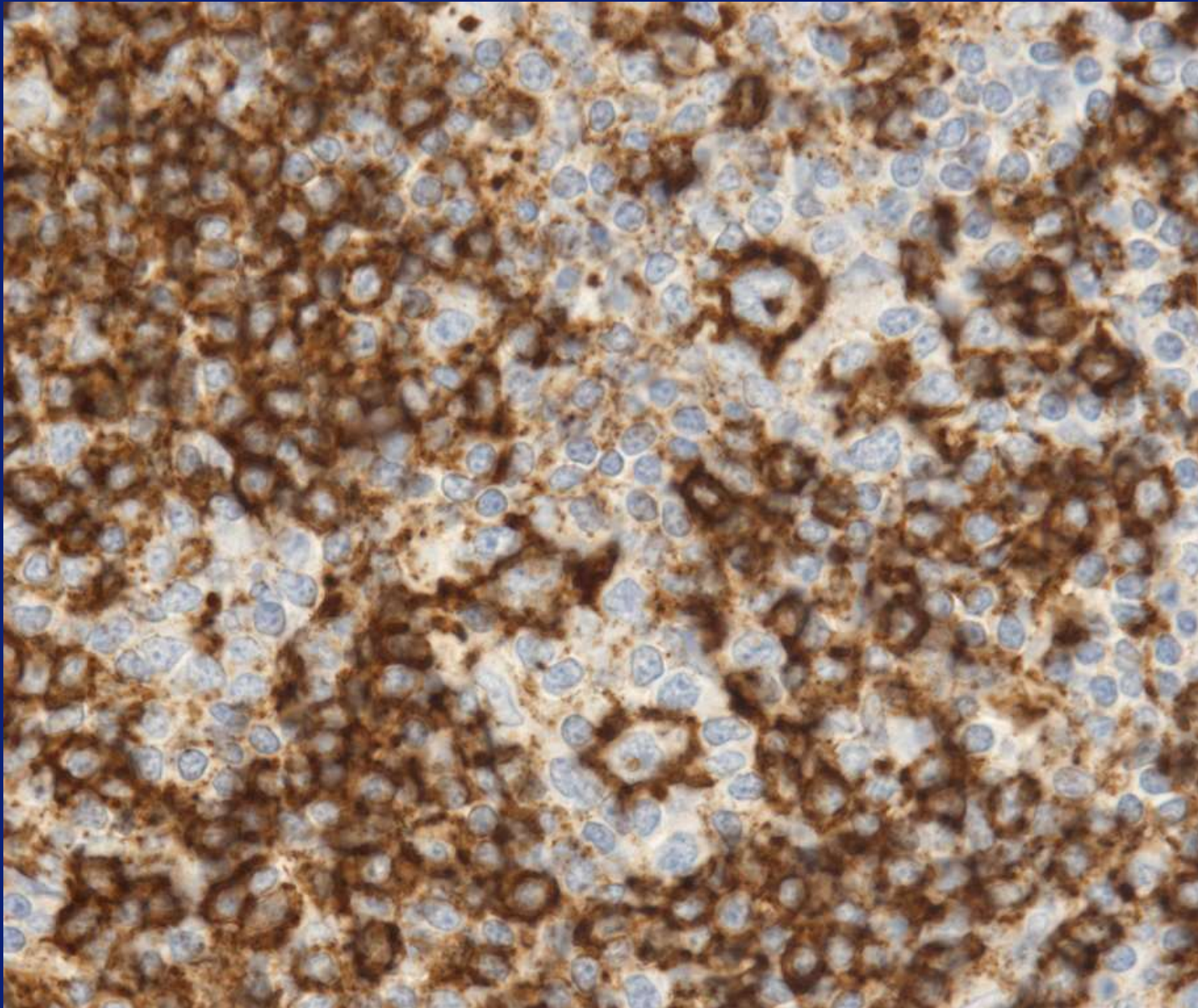
CD20: te zwak of toch niet?



CD20: deze is wel heel sterk



CD20: optimaal of toch nog te sterk?



CD20: criteria for assessing the staining as optimal includes:

A strong, predominantly membranous staining reaction of the mantle zone B-cells, the germinal centre B-cells and the interfollicular B-cells in the tonsil and the appendix.

A strong membranous staining reaction of virtually all the neoplastic cells of the DLBCL.

A moderate to strong membranous staining reaction of virtually all the neoplastic cells of the B-CLL.

No staining of the Pre-B-ALL (only scattered matured neoplastic cells and entrapped normal B-cells may be demonstrated).

No staining of the plasmacytoma (only residual normal B-cells should be demonstrated).

No staining of all other cell types.

Ref. <http://www.nordiqc.org/Run-35-B13-H1/Assessment/assessment-35-CD20.htm>

Algemene conclusies

- In de meeste gevallen voldeden de kleuringen en hebben tot een juiste diagnose geleid.
- Wel zou een vrij groot deel van de kleuringen wat sterker uitgevoerd kunnen worden (CD30 en CD15: +/- 33%; CD79a en PAX-5: +/- 50%).
- Overkleuring komt bijna niet voor (mgl. muv CD20).
- Veel dank aan Ilonka Stuij