

# SGH CASE 10: 17RE118

- Clinical History:
  - 50+ years old. Female. Left inguinal lymphadenopathy.
- Specimen:
  - Left inguinal lymph node excision biopsy.

# SGH CASE 10: 17RE118 H&E



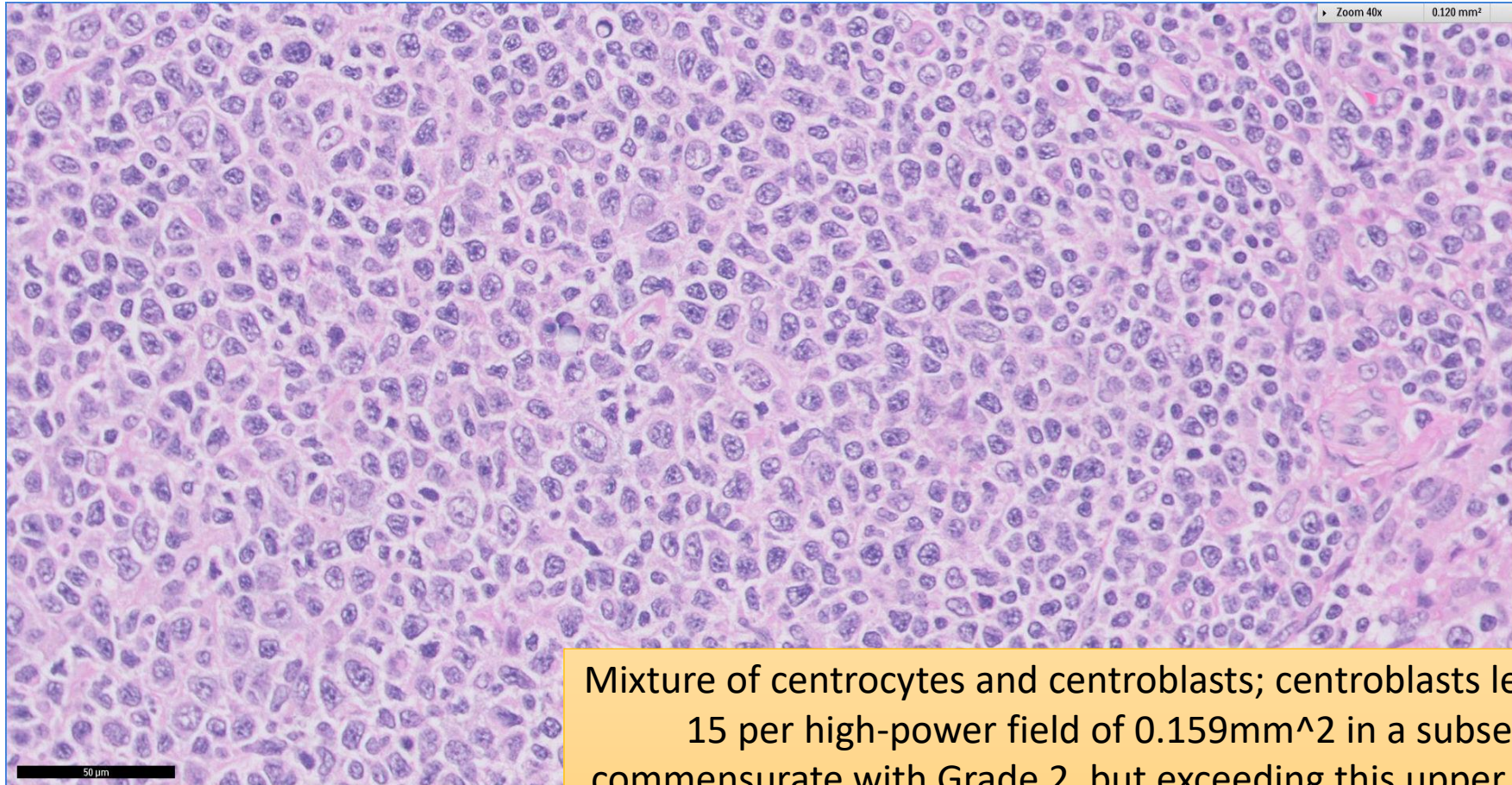
**Nodular architecture with numerous closely packed follicles.**

# SGH CASE 10: 17RE118 H&E



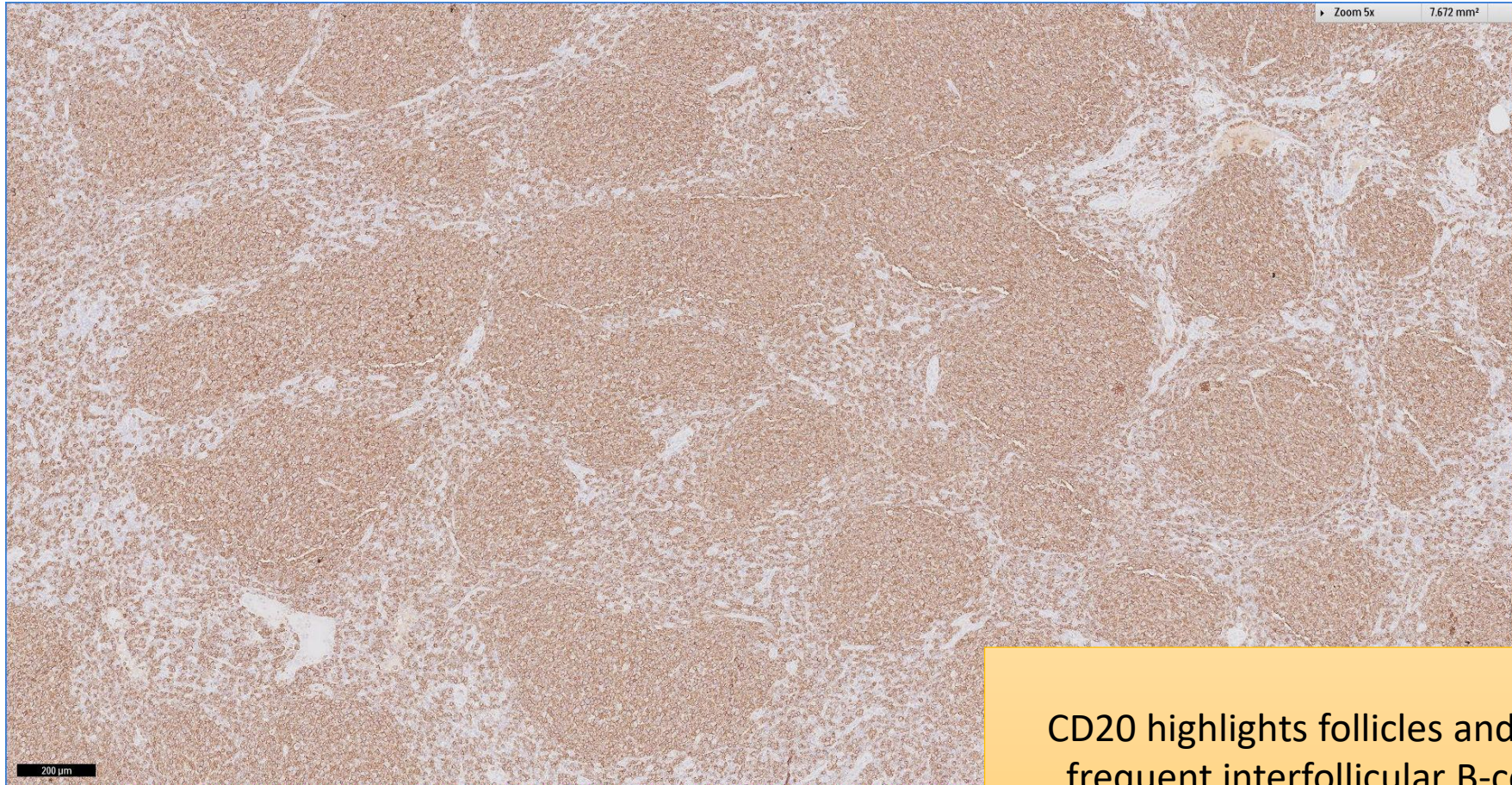
Follicles with markedly attenuated mantle zone.

# SGH CASE 10: 17RE118 H&E



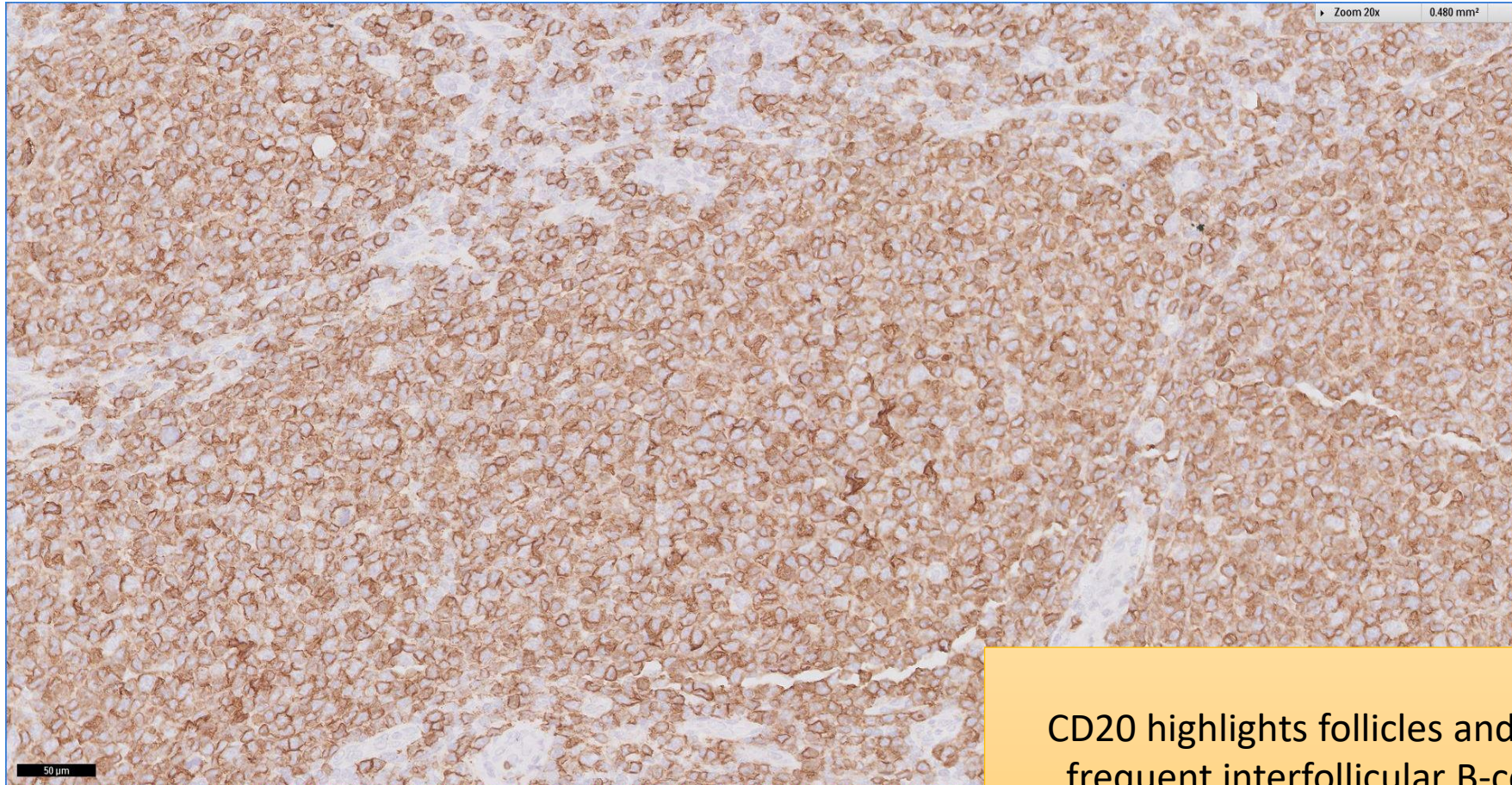
Mixture of centrocytes and centroblasts; centroblasts less than 15 per high-power field of 0.159mm<sup>2</sup> in a subset, commensurate with Grade 2, but exceeding this upper limit in others, amounting to Grade 3A

# SGH CASE 10: 17RE118 CD20



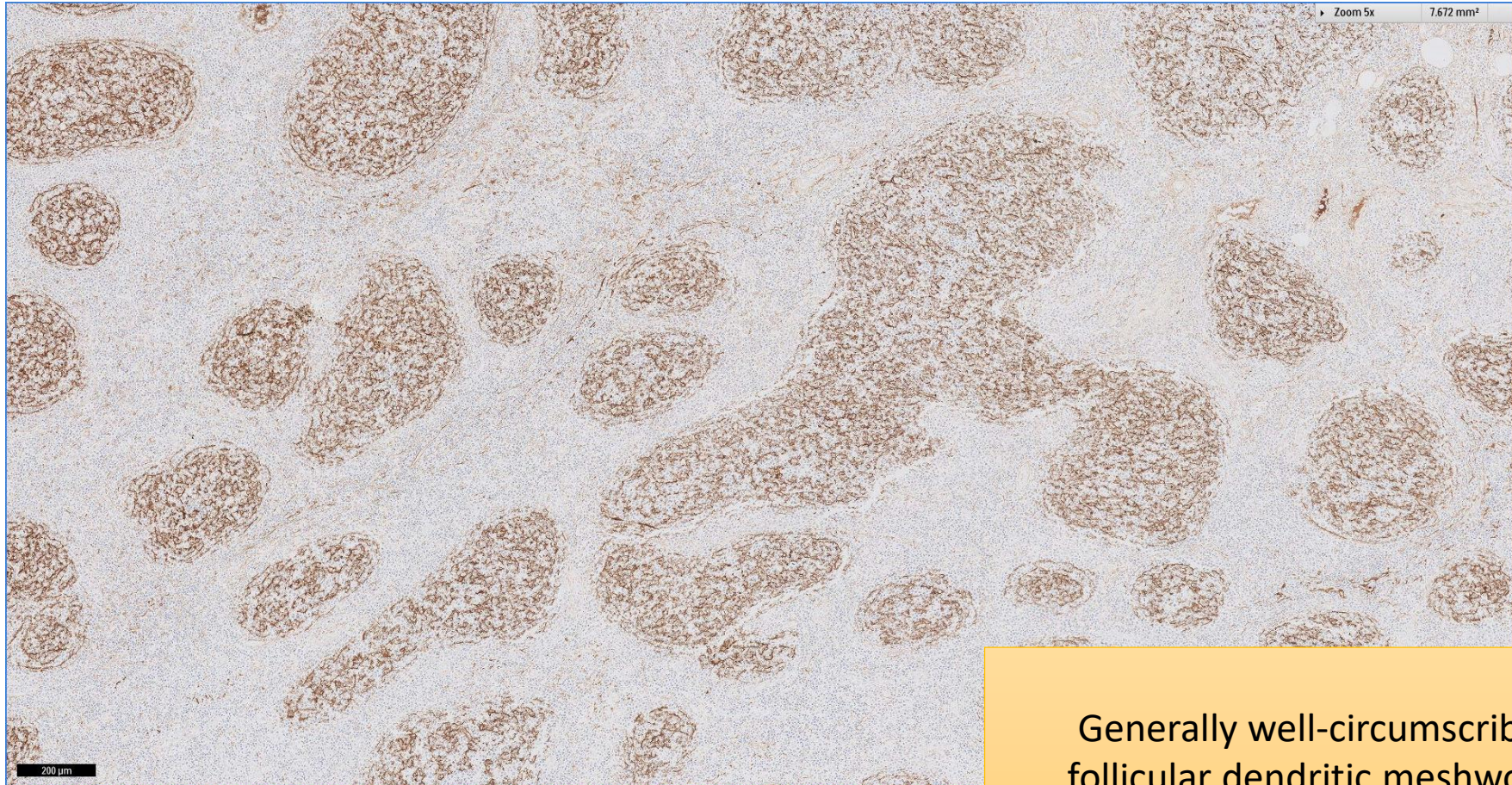
CD20 highlights follicles and also frequent interfollicular B-cells.

# SGH CASE 10: 17RE118 CD20



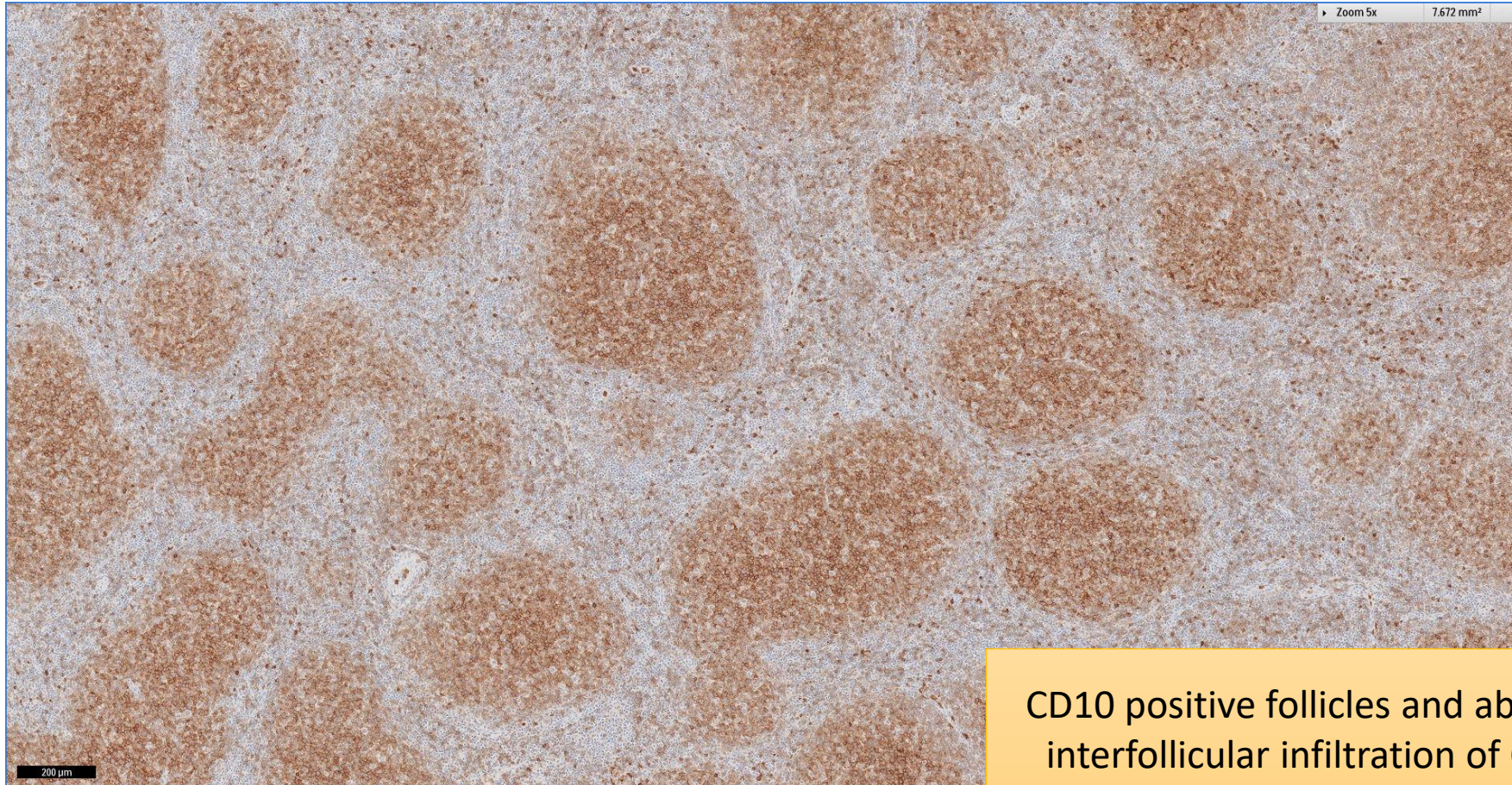
CD20 highlights follicles and also frequent interfollicular B-cells.

# SGH CASE 10: 17RE118 CD21



Generally well-circumscribed  
follicular dendritic meshworks

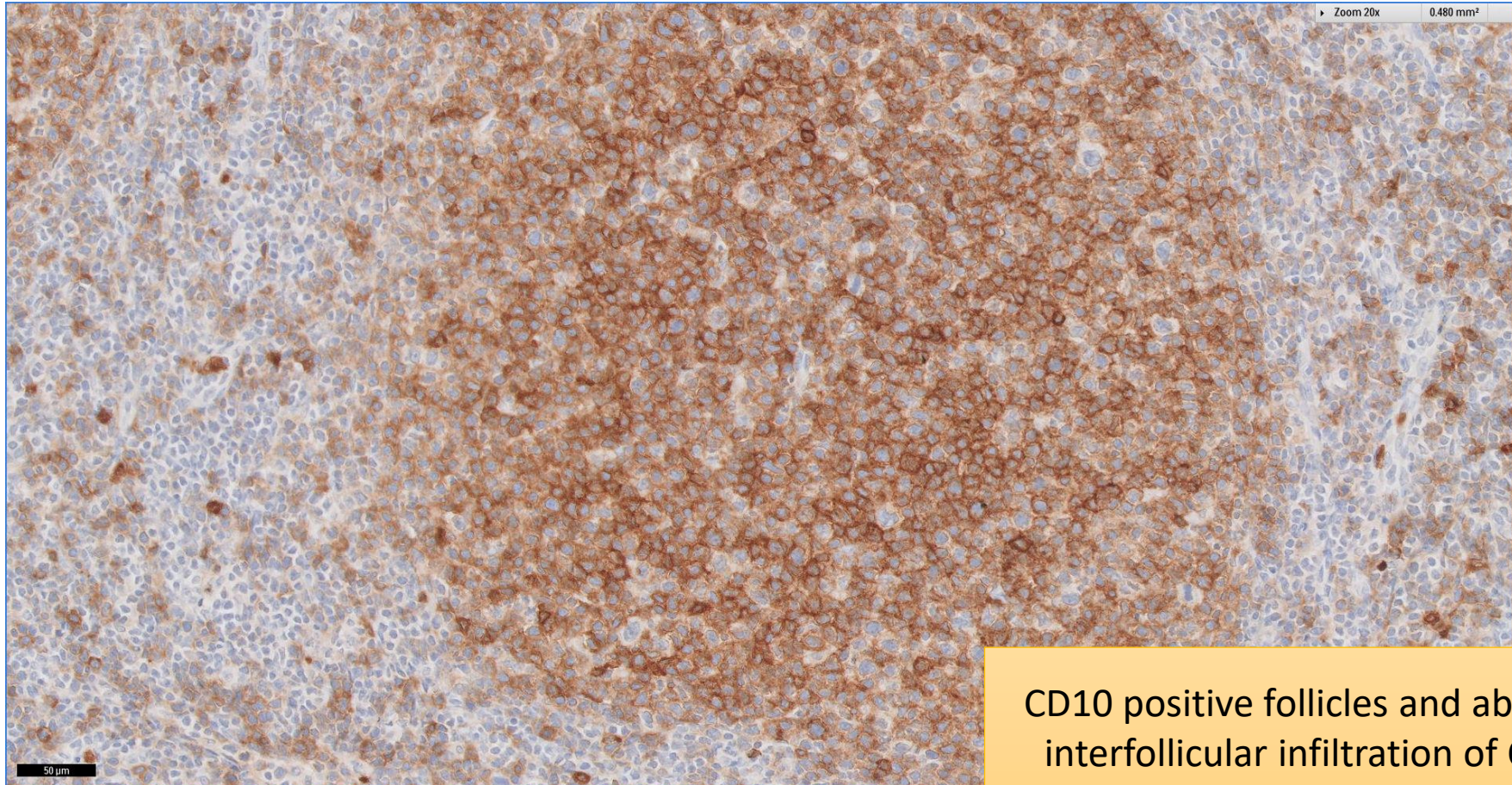
# SGH CASE 10: 17RE118 CD10



CD10 positive follicles and aberrant interfollicular infiltration of CD10 positive cells (though weaker)

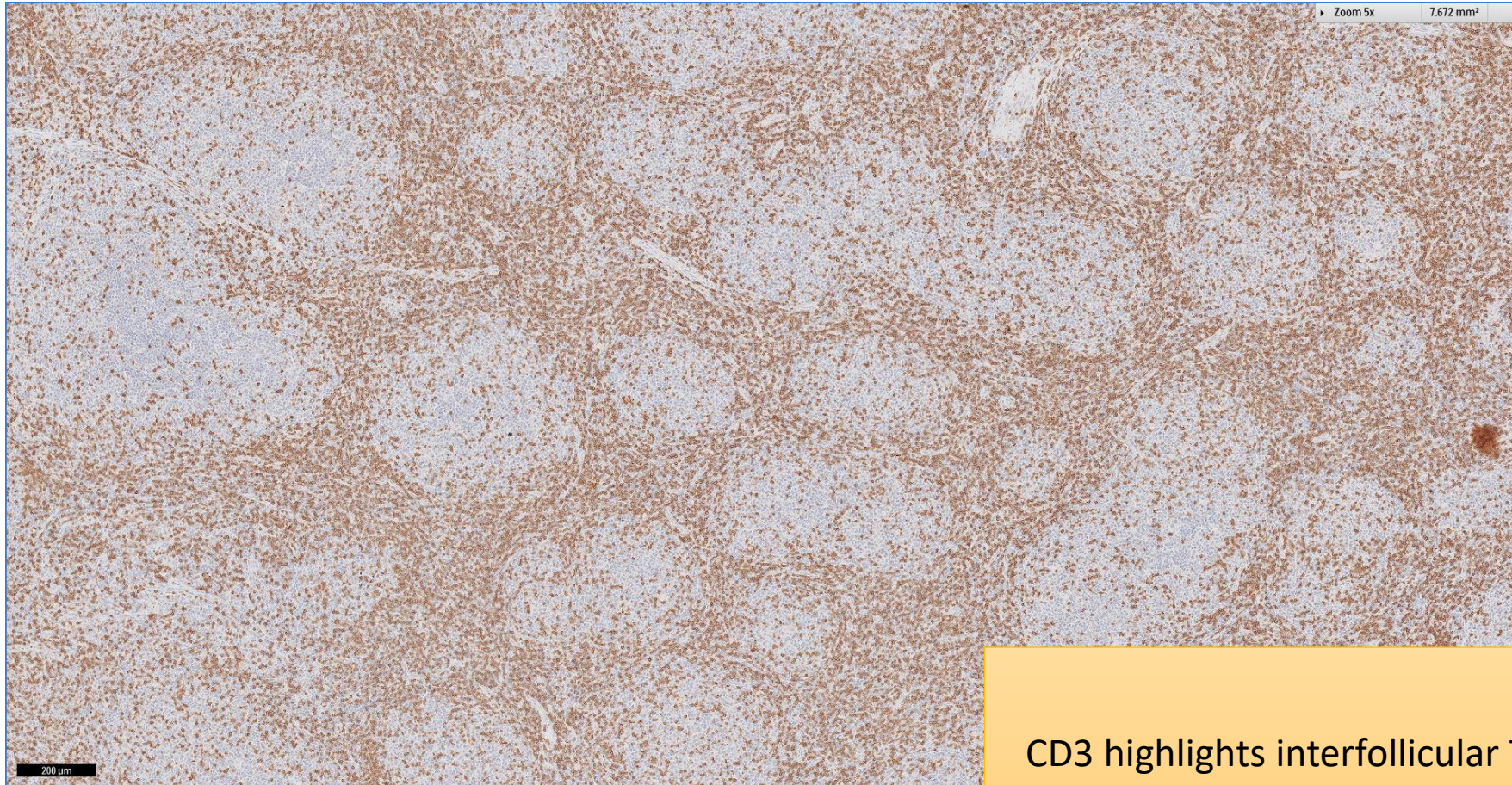


# SGH CASE 10: 17RE118 CD10



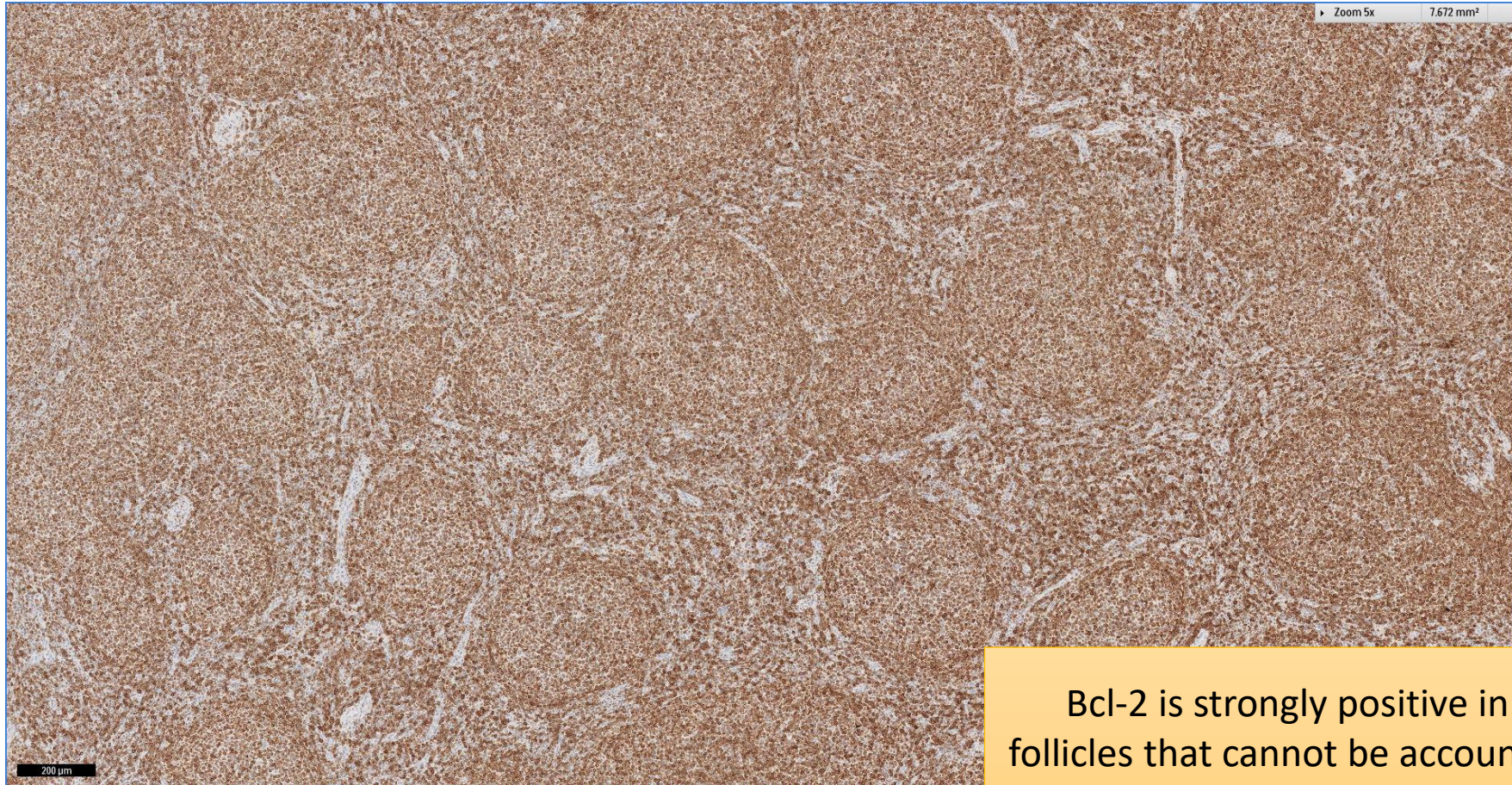
CD10 positive follicles and aberrant interfollicular infiltration of CD10 positive cells (though weaker)

# SGH CASE 10: 17RE118 CD3



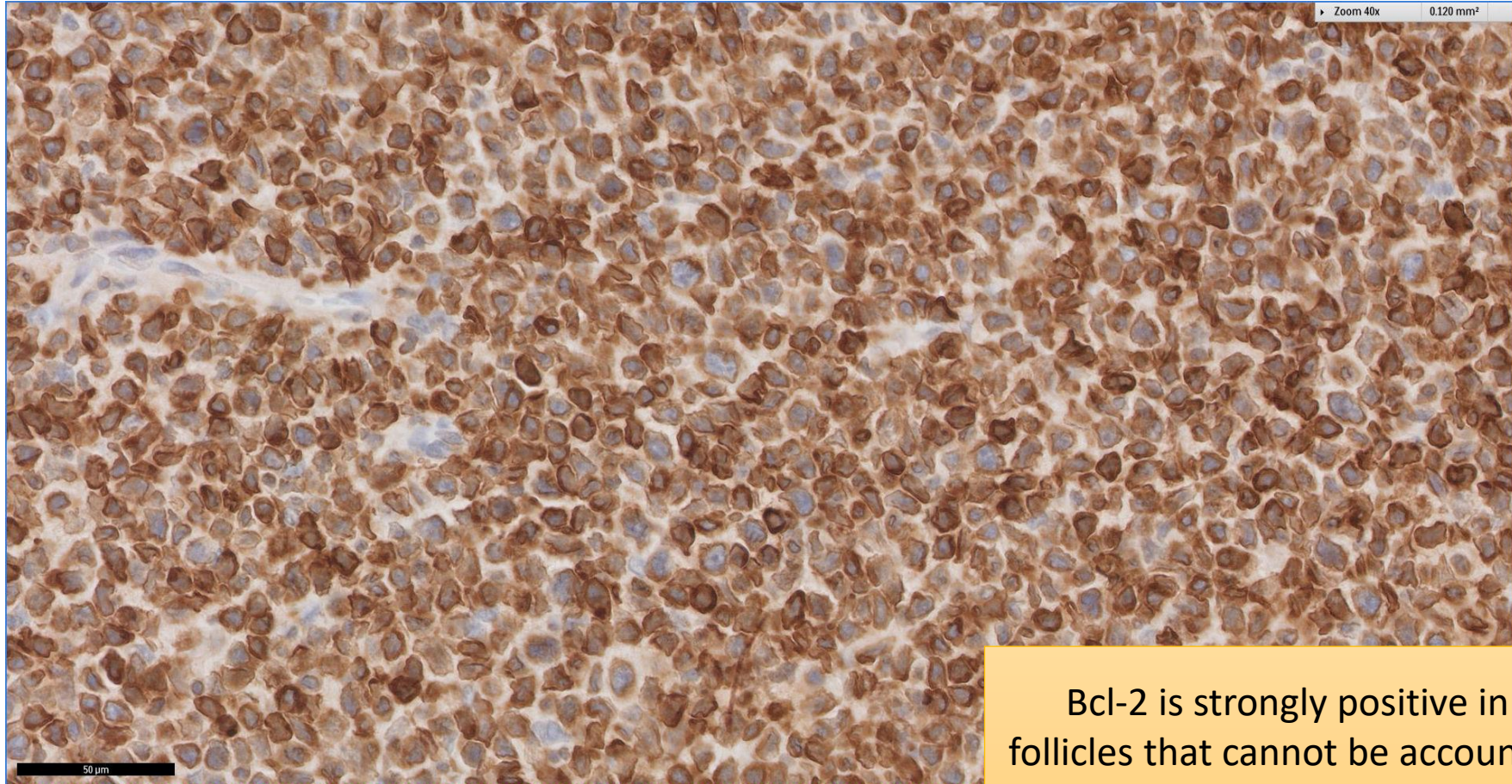
CD3 highlights interfollicular T-cells

# SGH CASE 10: 17RE118 BCL2



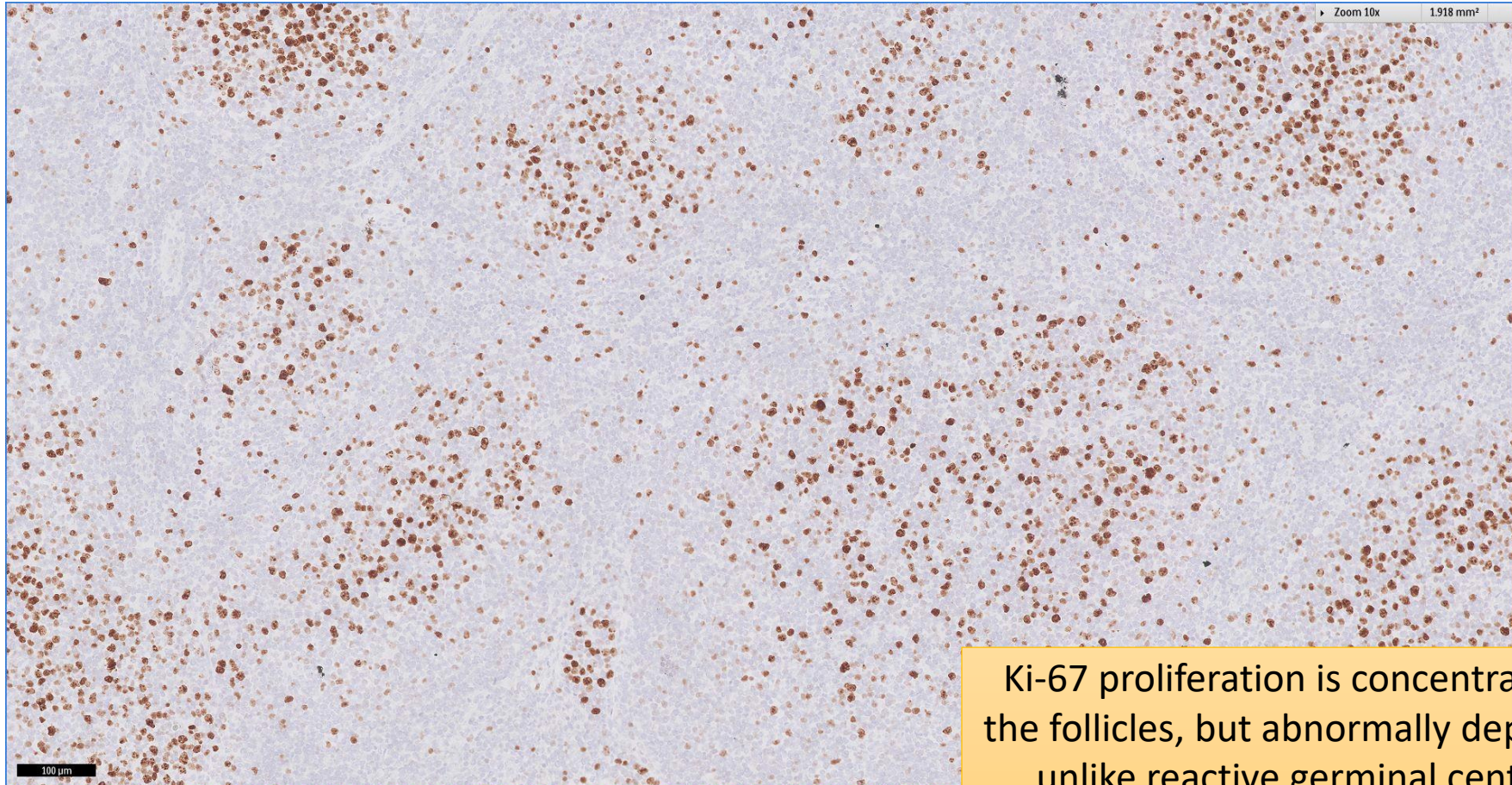
Bcl-2 is strongly positive in the follicles that cannot be accounted for by T-cells.

# SGH CASE 10: 17RE118 BCL2



Bcl-2 is strongly positive in the follicles that cannot be accounted for by T-cells.

# SGH CASE 10: 17RE118 KI67



Ki-67 proliferation is concentrated in the follicles, but abnormally depressed unlike reactive germinal centres.

Interfollicular Ki-67 low.

# SGH CASE 10: 17RE118 Discussion(1)

- Summary of features
  - Crowded, lymphomatous follicles with attenuated/absent mantle zones.
  - Mixture of centrocytes and centroblasts; centroblasts less than 15 per high-power field of  $0.159\text{mm}^2$  in a subset, commensurate with Grade 2, but exceeding this upper limit in others, amounting to Grade 3A
  - Immunophenotype:
    - CD20+/CD10+/bcl-2+ follicles with aberrant interfollicular infiltrate of CD10+ B-cells
    - Well-circumscribed CD21 immunoreactive follicular dendritic meshworks (FDM).
    - Ki-67 proliferation fraction discloses loss of normal cohesion and polarity, and is abnormally depressed compared to normal germinal centres
    - Cyclin D1 negative.

# SGH CASE 10: 17RE118 Discussion(2)

- Typical nodal based follicular lymphoma (FL).
- Other variants/related entities
  - In-situ follicular neoplasia
  - Duodenal-type FL
  - Testicular FL
  - Diffuse variant of FL
  - Primary cutaneous follicle centre lymphoma and paediatric-type FL classified separately
- Low grade (1-2) vs high grade (3A/3B)
  - Based on number of centroblasts per 40x high power field (hpf) (0.159mm<sup>2</sup>) in 10 neoplastic follicles.
  - Grade (1-2): 0-15 centroblasts per hpf; grade 3 is >15 centroblasts per hpf
  - Grade 3A: centroblasts present; grade 3B: solid sheets of centroblasts
- If areas present with grade 3A/3B cytology but is diffuse without FDM: qualify as DLBCL
- Grade and presence of DLBCL component may vary between areas and adequate sampling on excision biopsy specimen is advisable for FL. (not on FNA and caution to be exercised on core biopsy)

# SGH CASE 10: 17RE118 Discussion(3)

- Final diagnosis:
  - Follicular Lymphoma, Grades 2 and 3A.