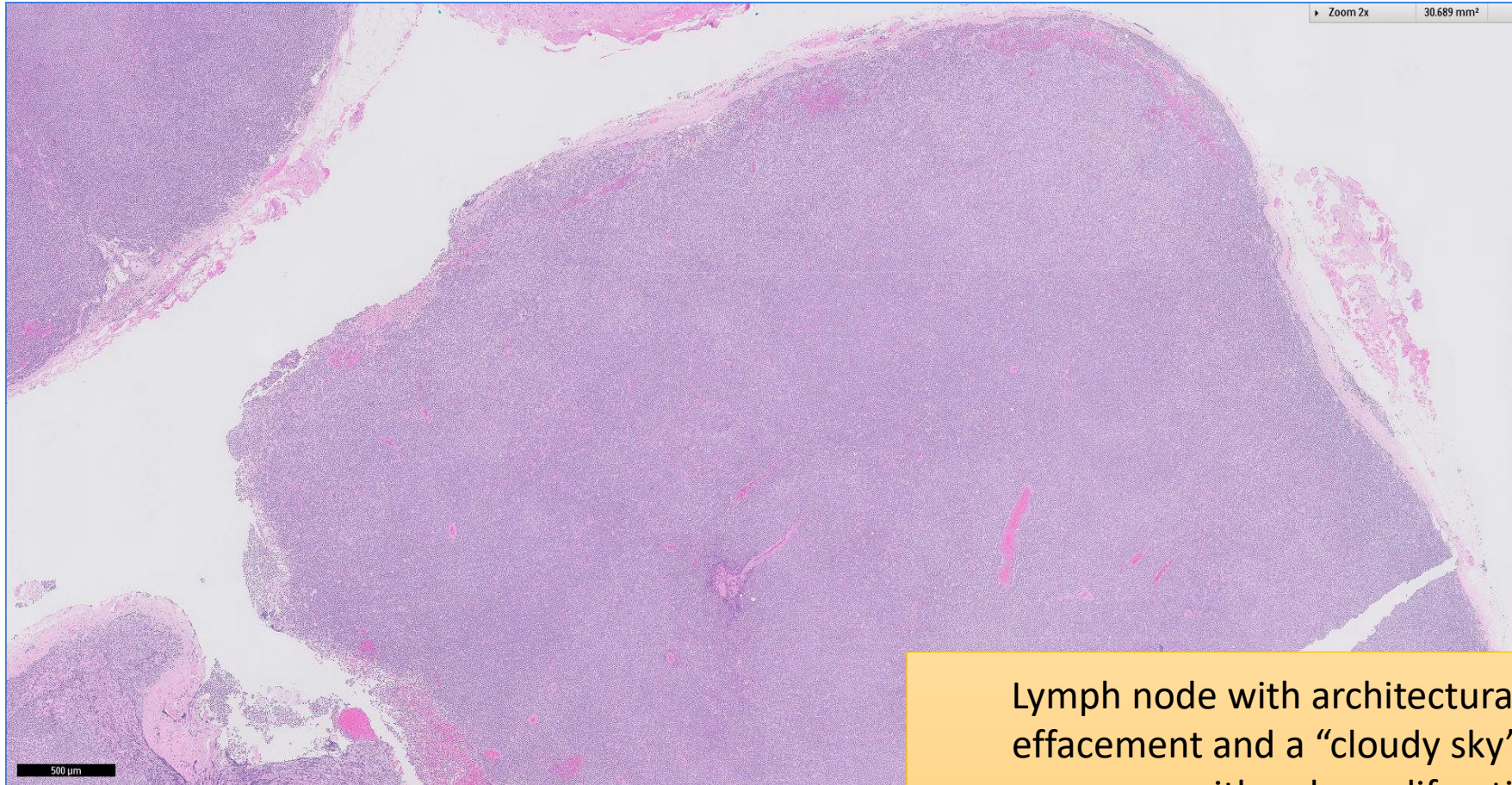


SGH CASE 22: 17RE134

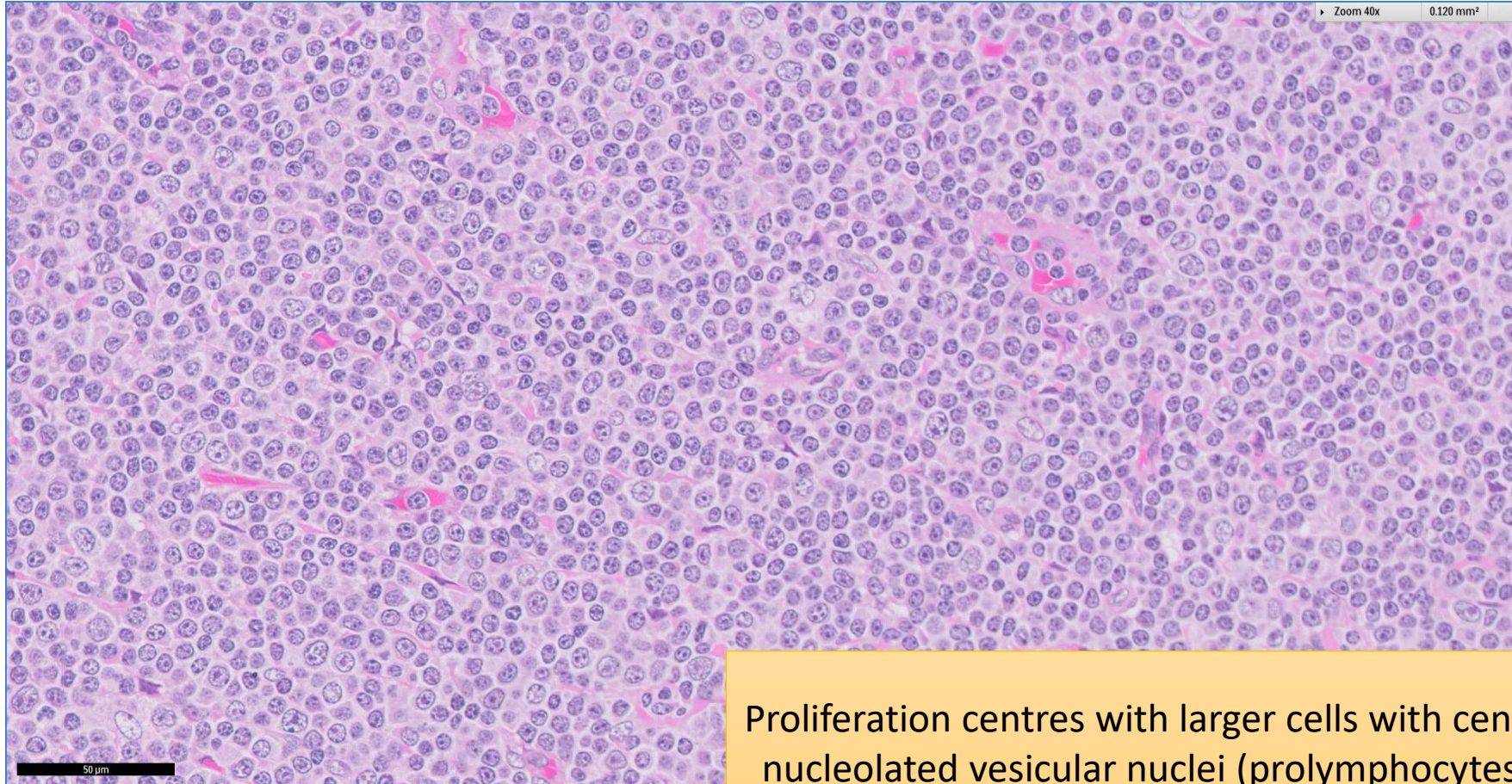
- Clinical History:
 - 60+ years old (late 60s). Female. Cervical lymphadenopathy and marked lymphocytosis ($32 \times 10^9/L$).
- Specimen:
 - Left cervical lymph node biopsy.

SGH CASE 22: 17RE134 H&E



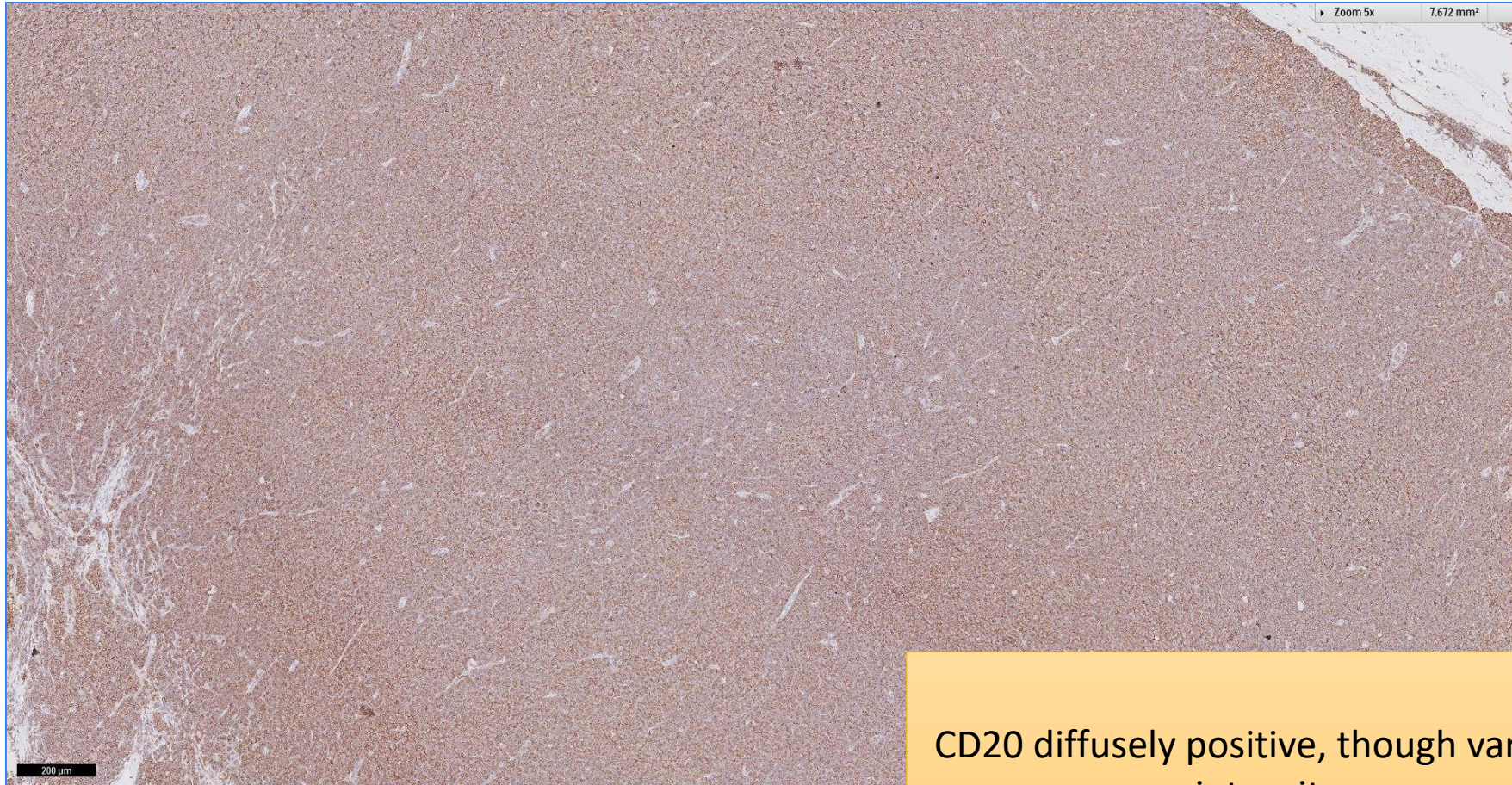
Lymph node with architectural effacement and a “cloudy sky” appearance with pale proliferation centres

SGH CASE 22: 17RE134 H&E



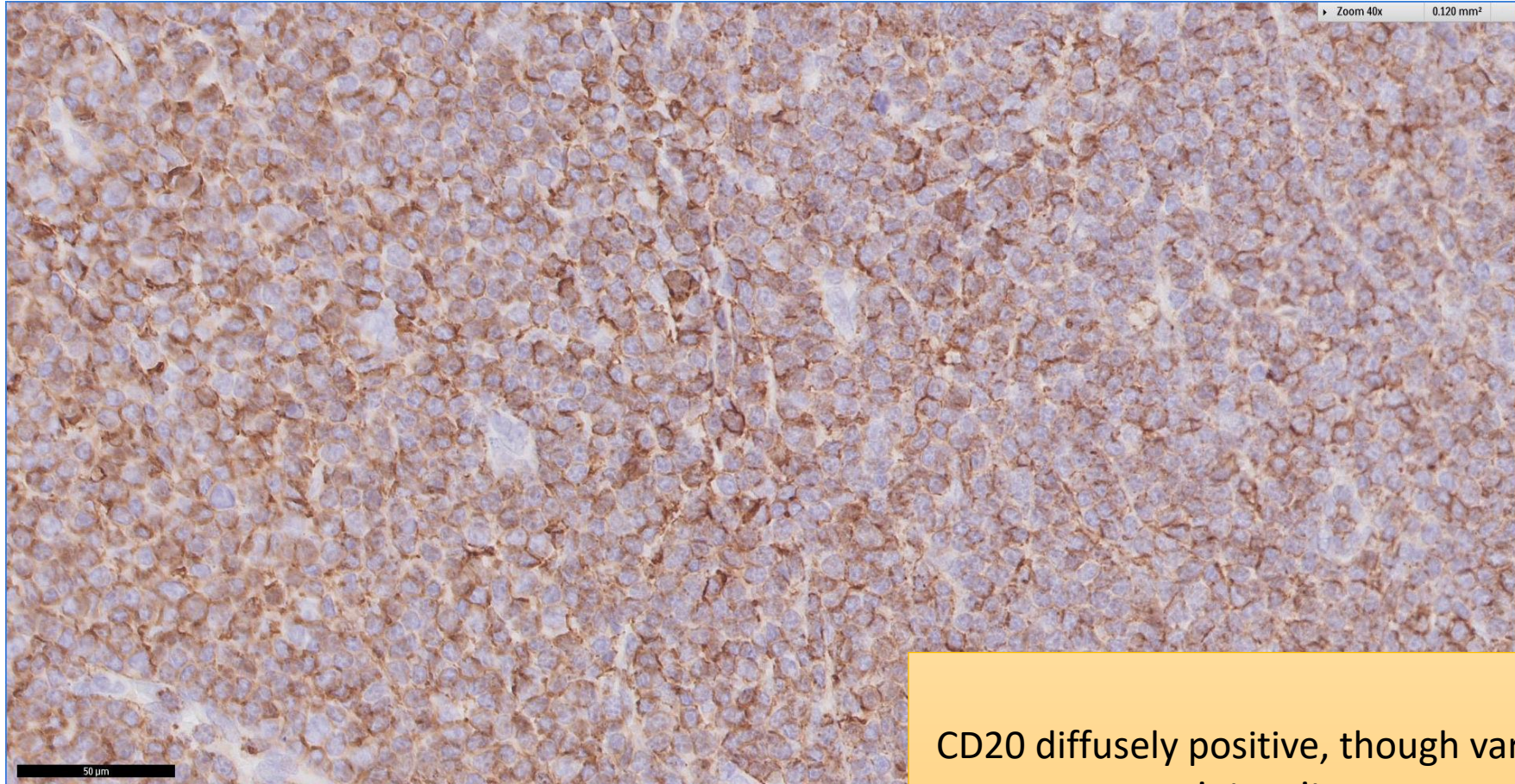
Proliferation centres with larger cells with centrally-nucleolated vesicular nuclei (prolymphocytes and paraimmunoblasts)

SGH CASE 22: 17RE134 CD20



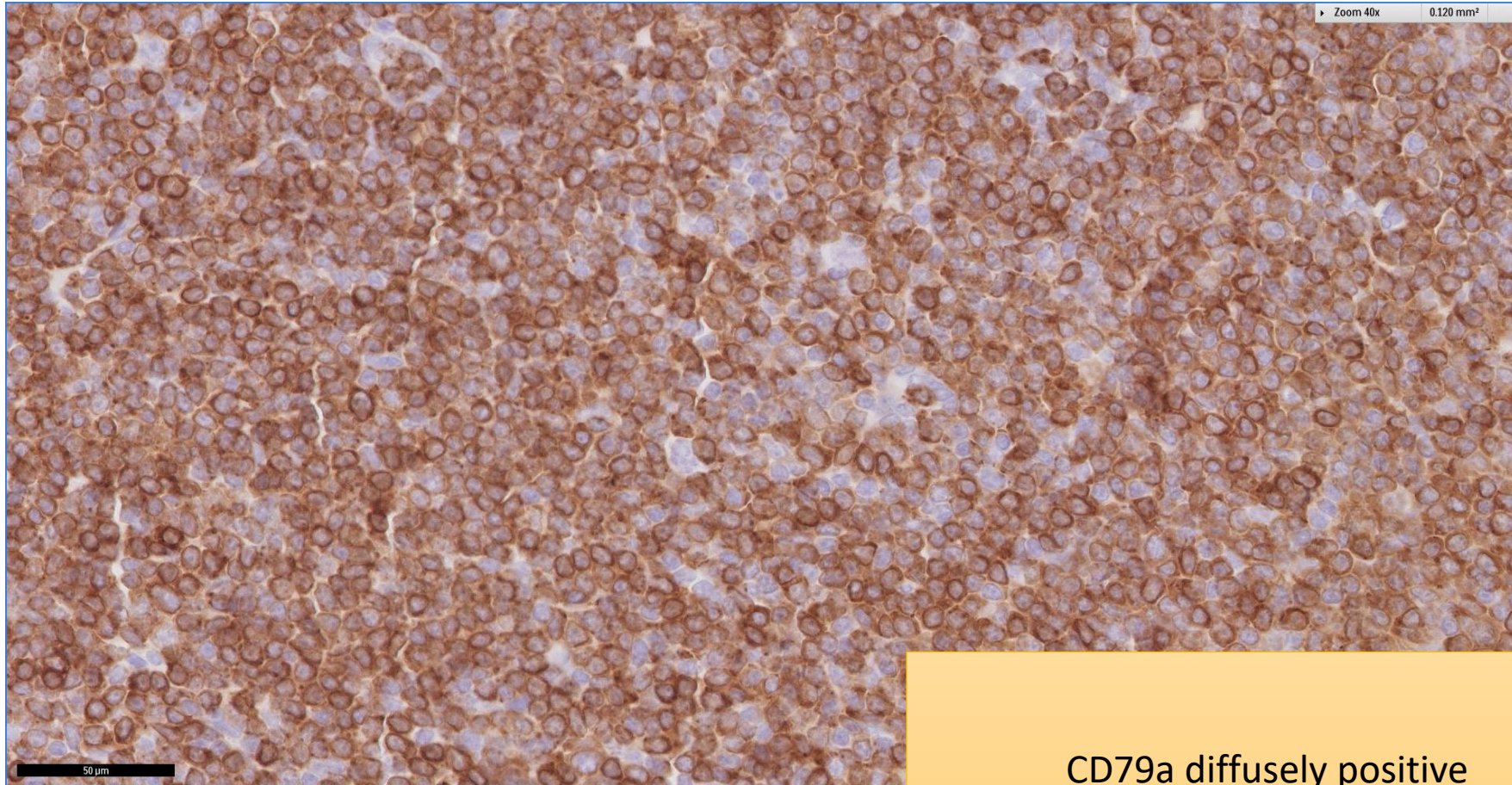
CD20 diffusely positive, though variable intensity

SGH CASE 22: 17RE134 CD20



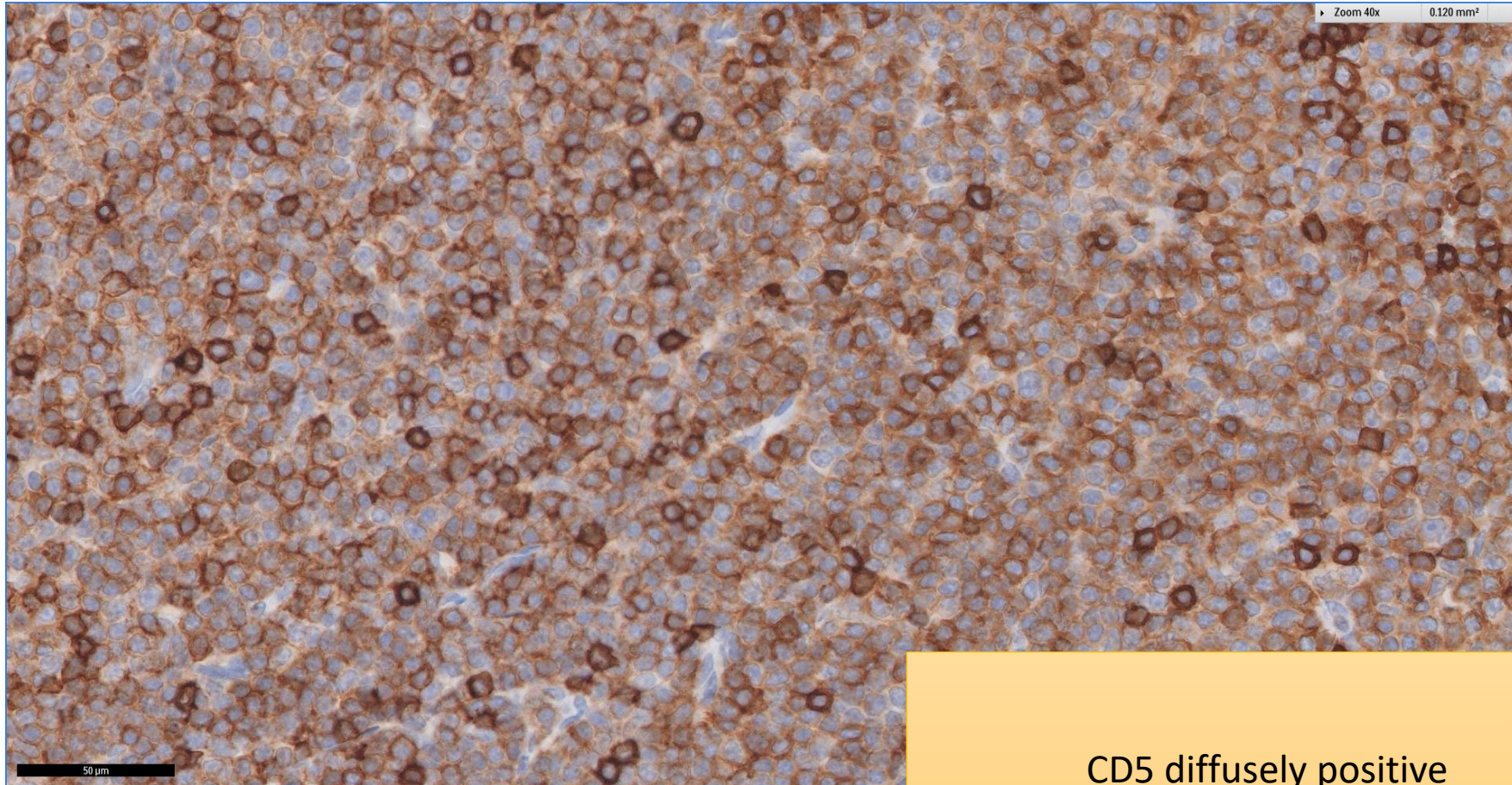
CD20 diffusely positive, though variable intensity

SGH CASE 22: 17RE134 CD79A



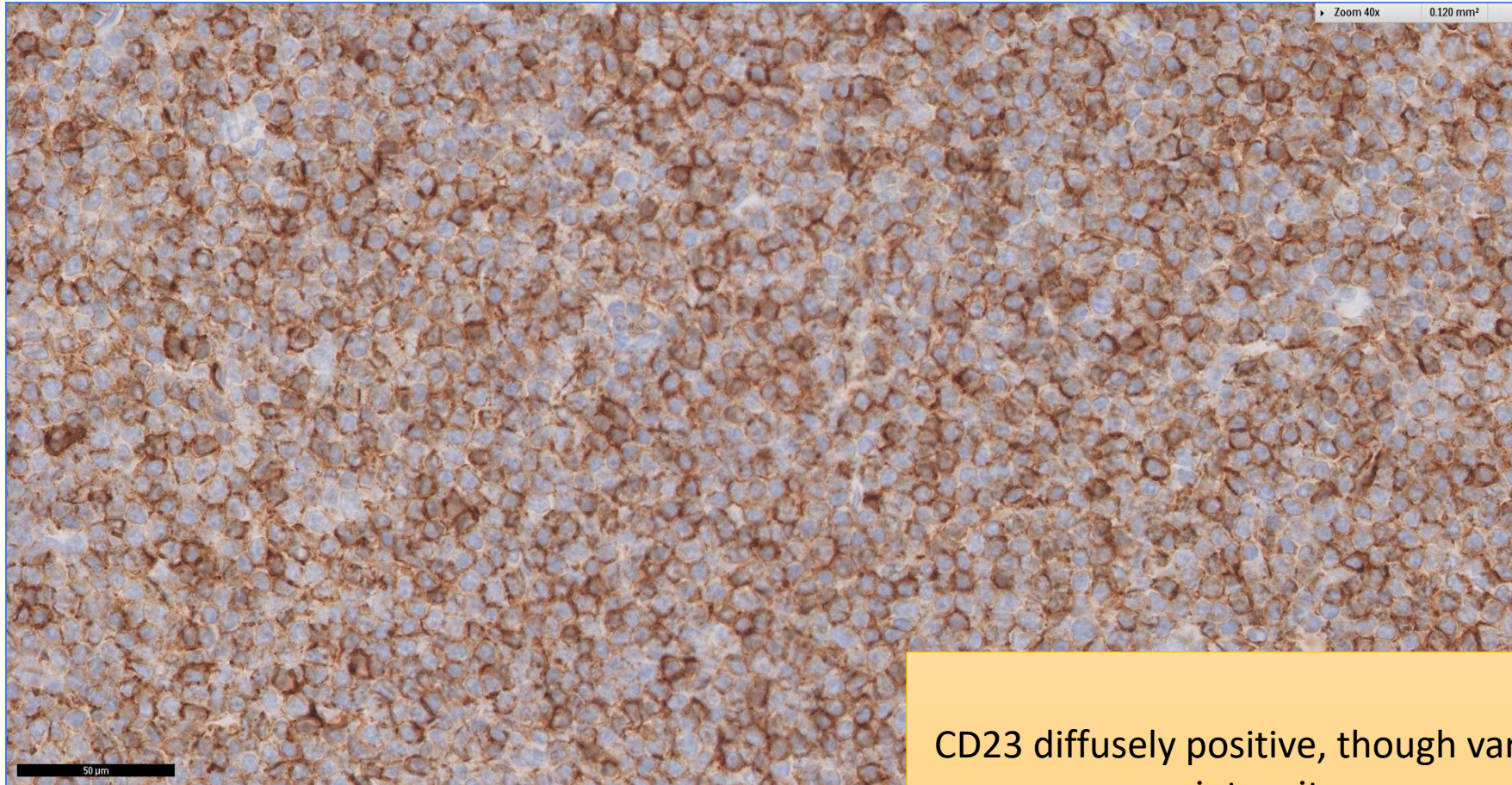
CD79a diffusely positive

SGH CASE 22: 17RE134 CD5



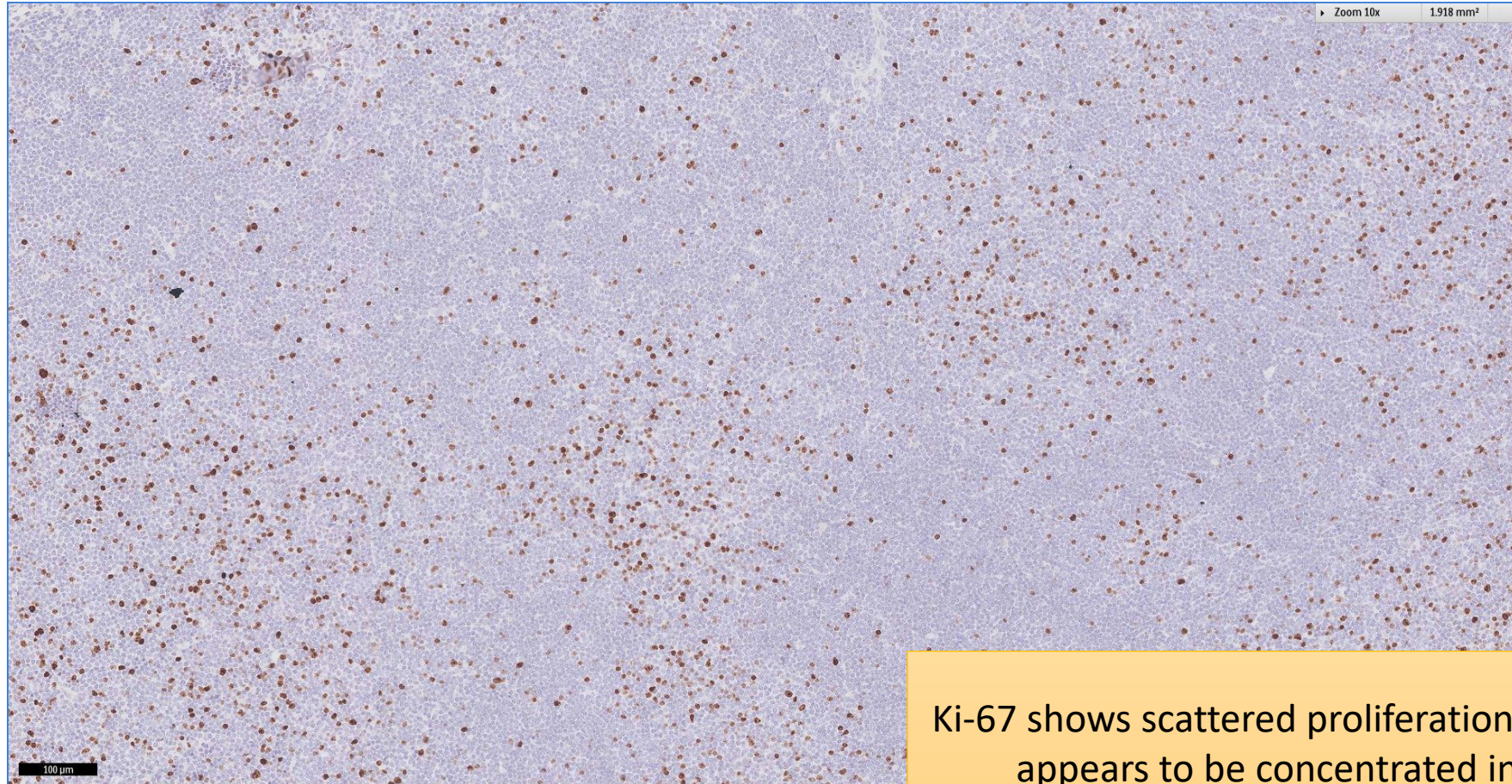
CD5 diffusely positive

SGH CASE 22: 17RE134 CD23



CD23 diffusely positive, though variable intensity

SGH CASE 22: 17RE134 KI67



Ki-67 shows scattered proliferation, that appears to be concentrated in proliferation centres

SGH CASE 22: 17RE134 Discussion (1)

- Patient has blood and bone marrow involvement by clonal B-lymphocytes with immunophenotype consistent with chronic lymphocytic leukaemia.
- Summary of features
 - Small lymphocytes with dark round to slightly irregular nuclei, accompanied by proliferation centres with larger cells displaying centrally-nucleolated vesicular nuclei (prolymphocytes and paraimmunoblasts)
 - No confluence of proliferation centres or confluent sheet-like infiltrate of large cells.
 - Immunophenotype:
 - CD20+, CD79a+, CD23+, CD5+
 - CD10 negative; only wisps of overrun CD21+ follicular dendritic meshworks
 - Ki-67 generally low, mainly concentrated in proliferation centres
 - Cyclin D1 negative; widespread p27 nuclear positivity

SGH CASE 22: 17RE134 Discussion (2)

- Differentiation between chronic lymphocytic leukaemia (CLL) and small lymphocytic lymphoma (SLL) is based on B-cell count (morphology and immunophenotyped of CLL) in the peripheral blood.
 - $\geq 5 \times 10^9/L$: CLL
 - $< 5 \times 10^9/L$: SLL
 - Otherwise histologically indistinguishable
- This case has high peripheral lymphocytosis with $\geq 5 \times 10^9/L$ B-cells in the peripheral blood.
- Final diagnosis:
 - Chronic lymphocytic leukaemia