



# \*Case 3

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- \* 50 F, known to have lichen plano pilaris
- \* Monomorphic, painful papules and plaques on lower legs.
- \* Punch biopsy lower leg

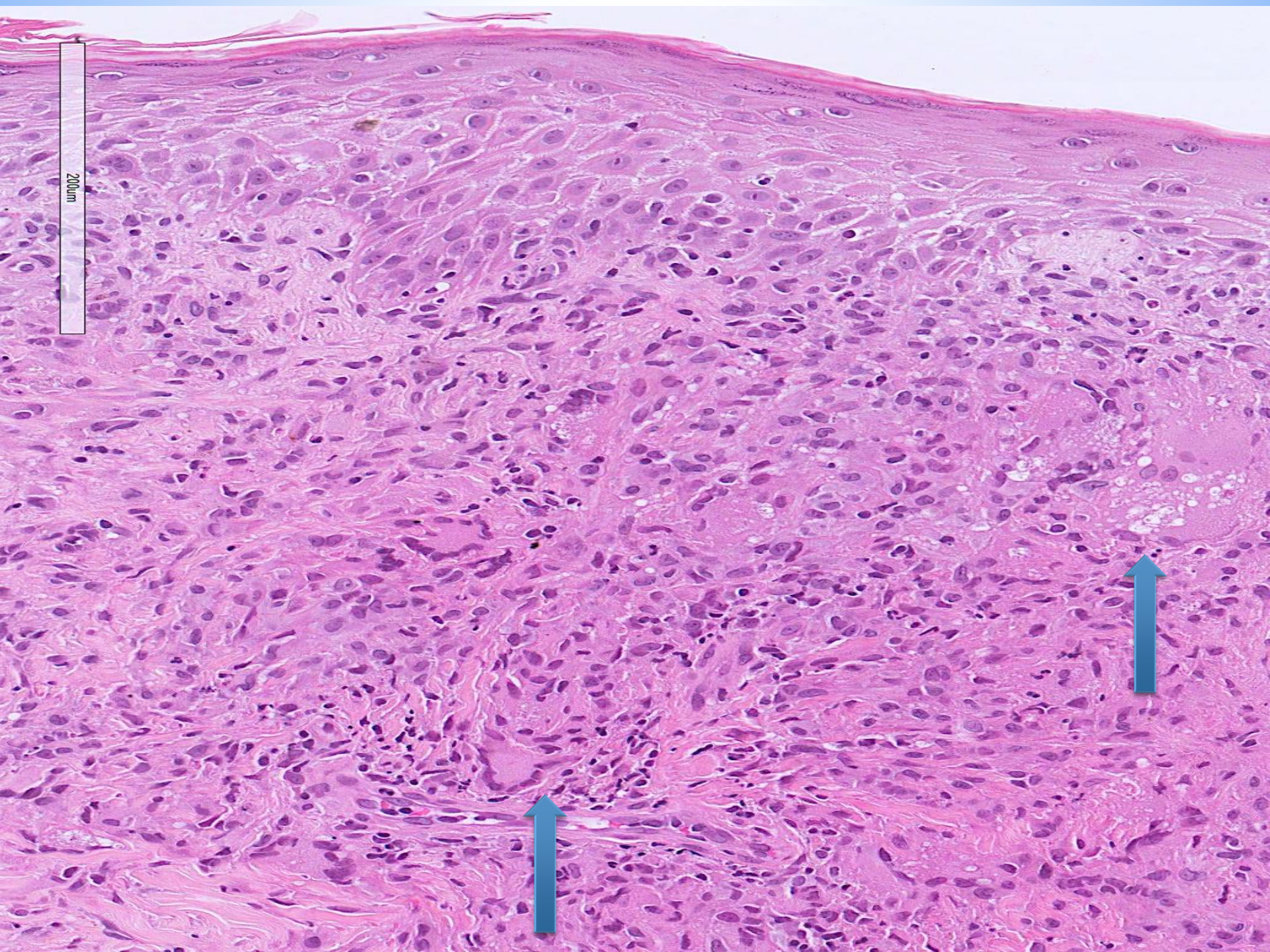




1<sup>st</sup> Biopsy

2mm





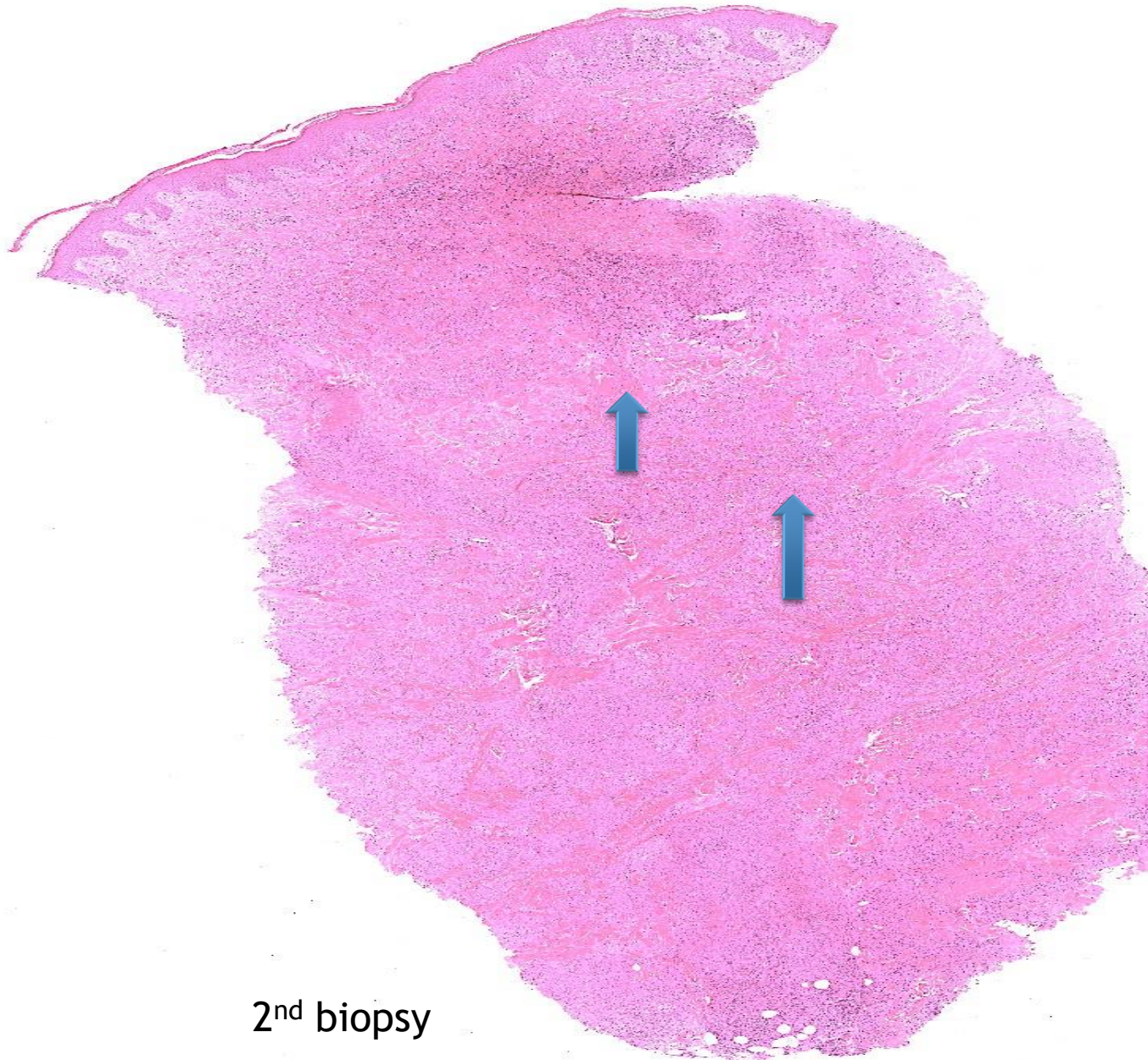


- \* Shallow punch biopsy
- \* Granulomatous infiltrate

\* JXG

\* Please repeat biopsy

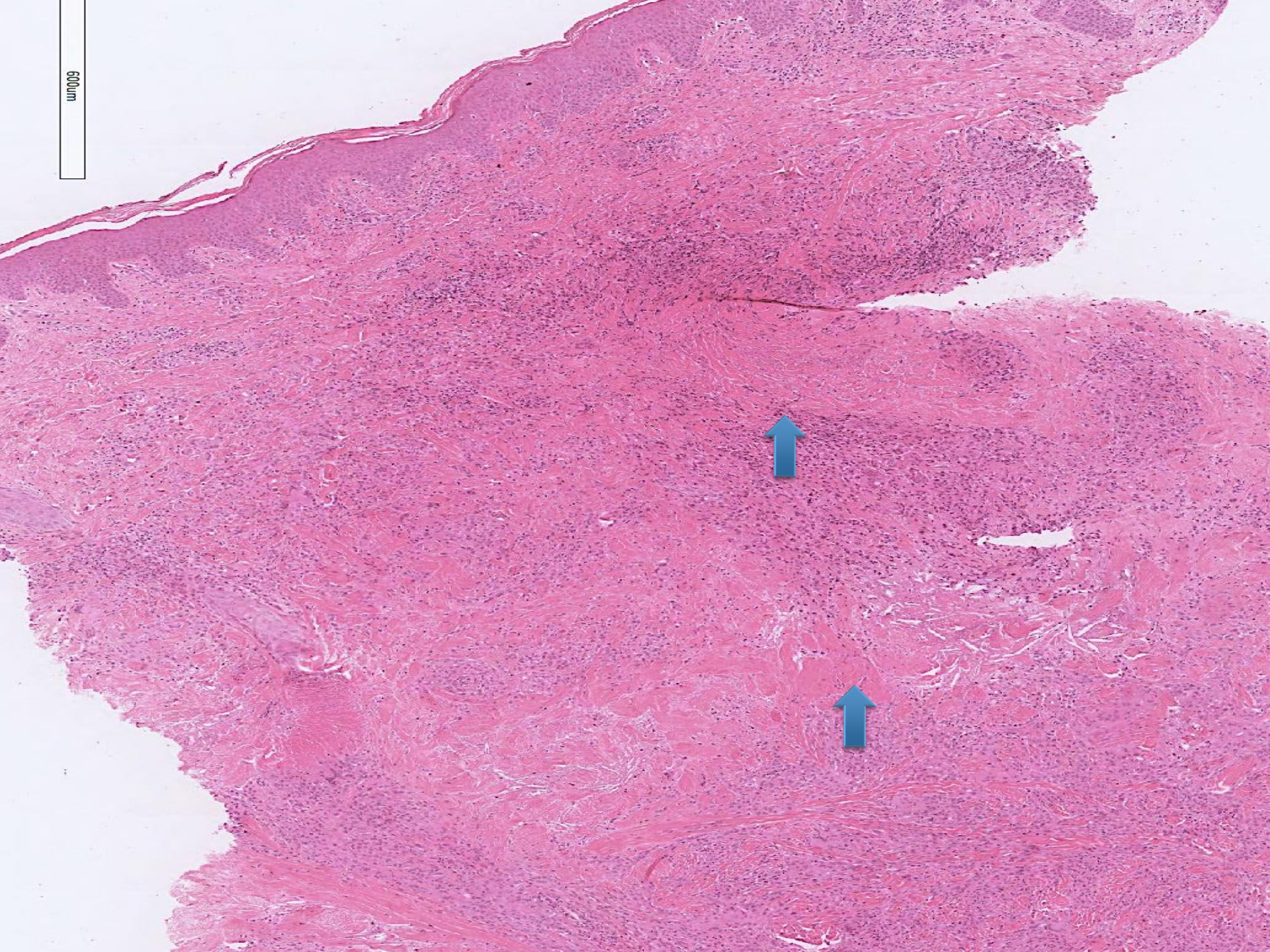
2mm



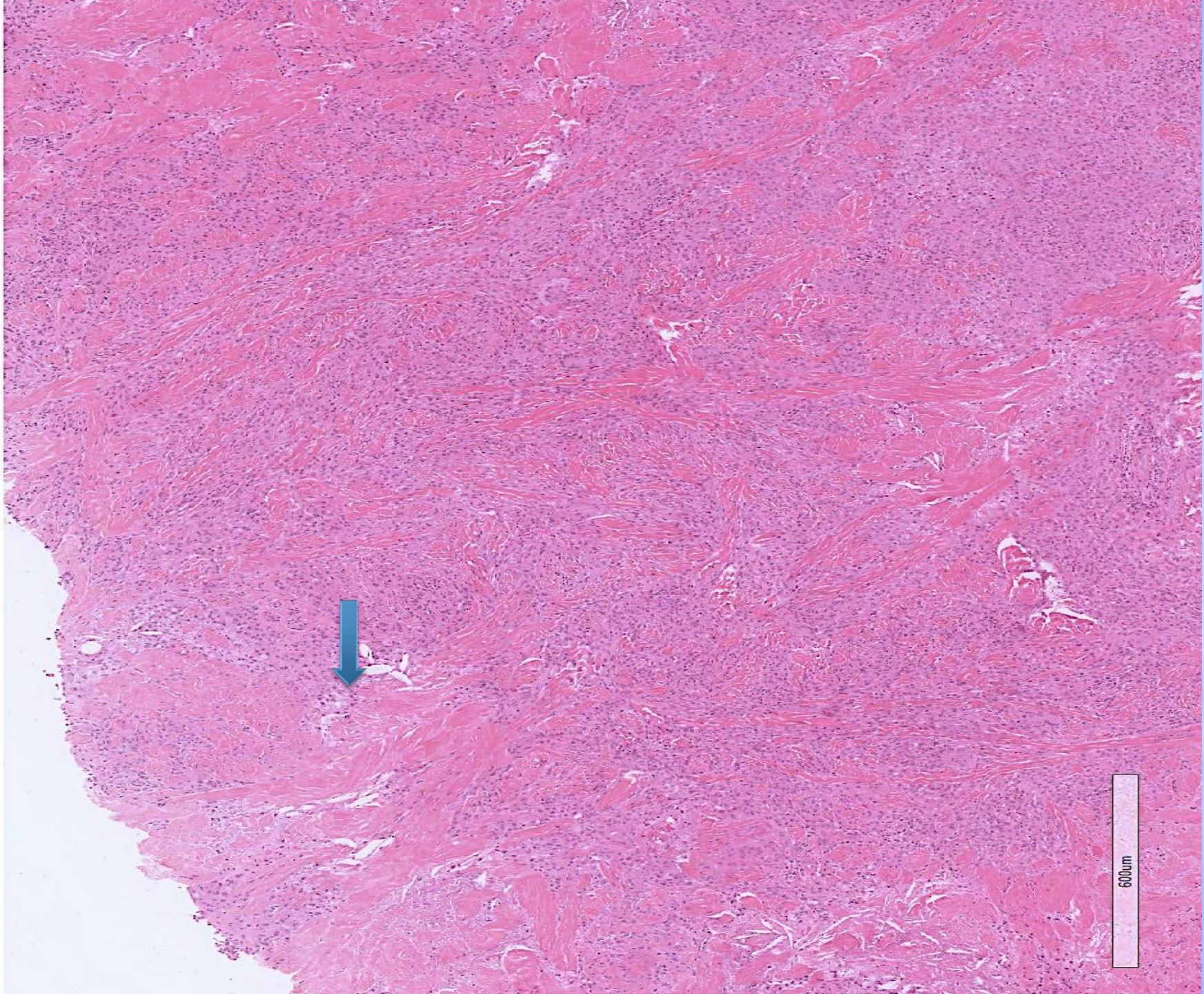
2<sup>nd</sup> biopsy



600um







600um

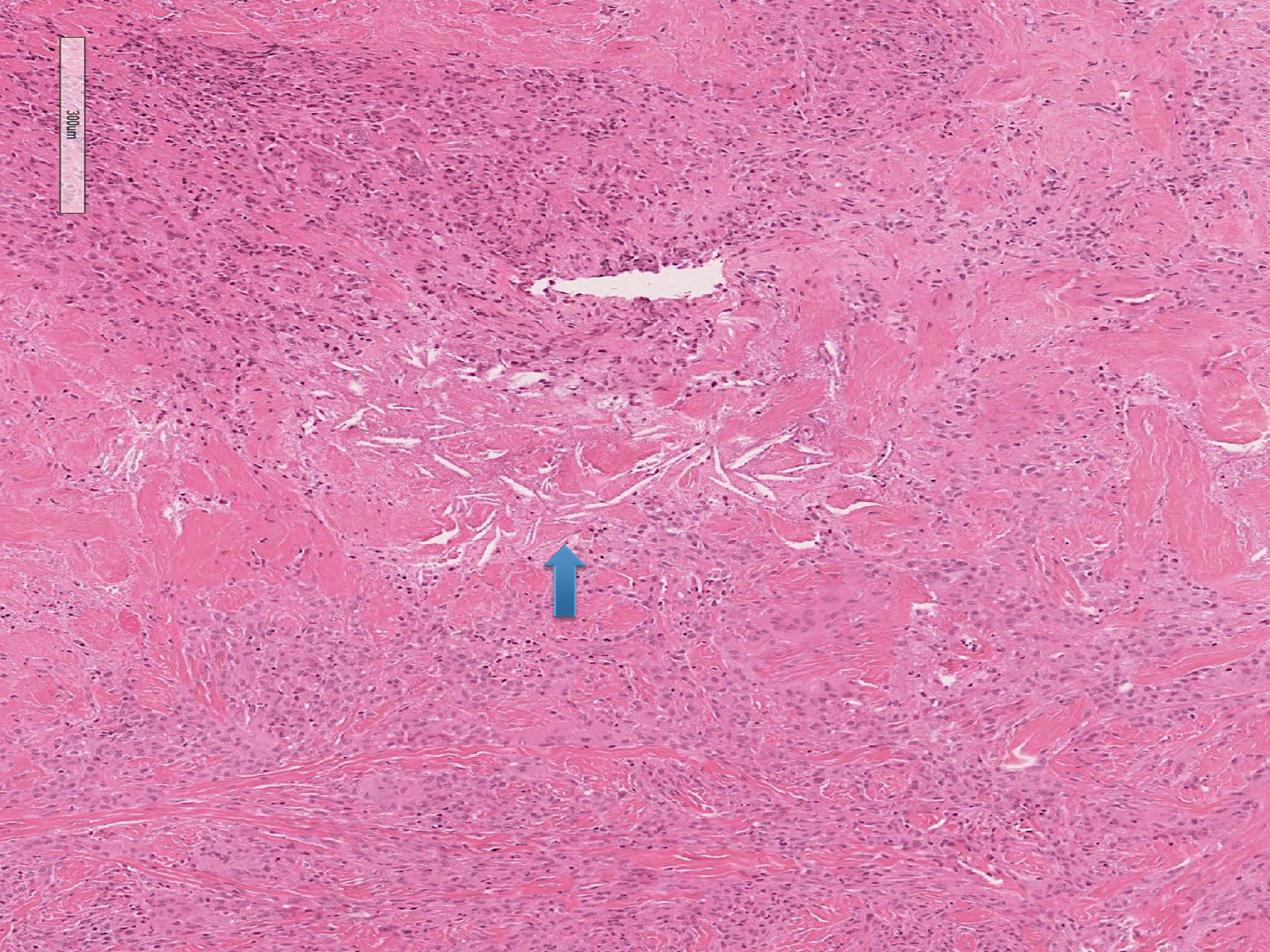


300µm

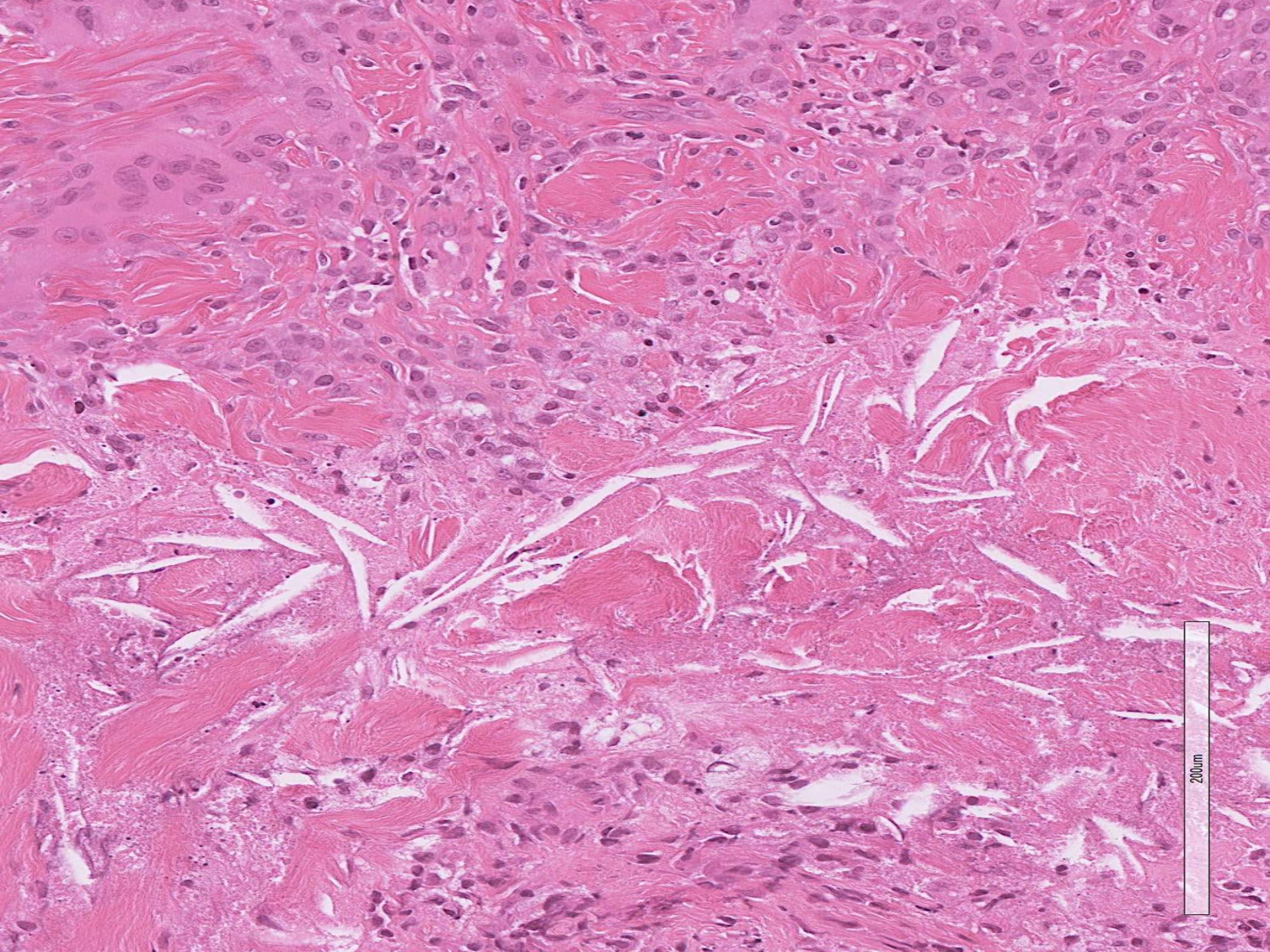




300µm

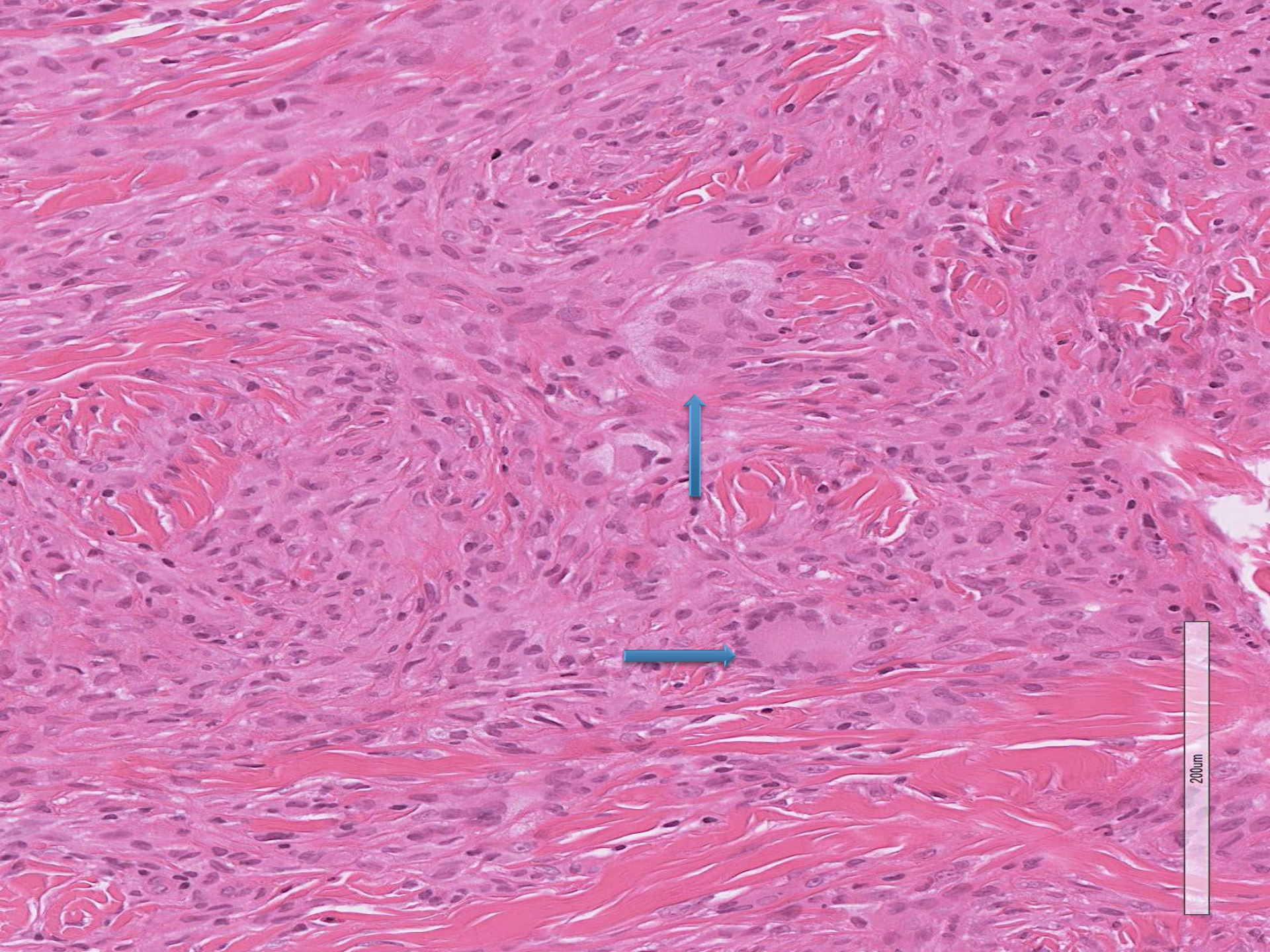






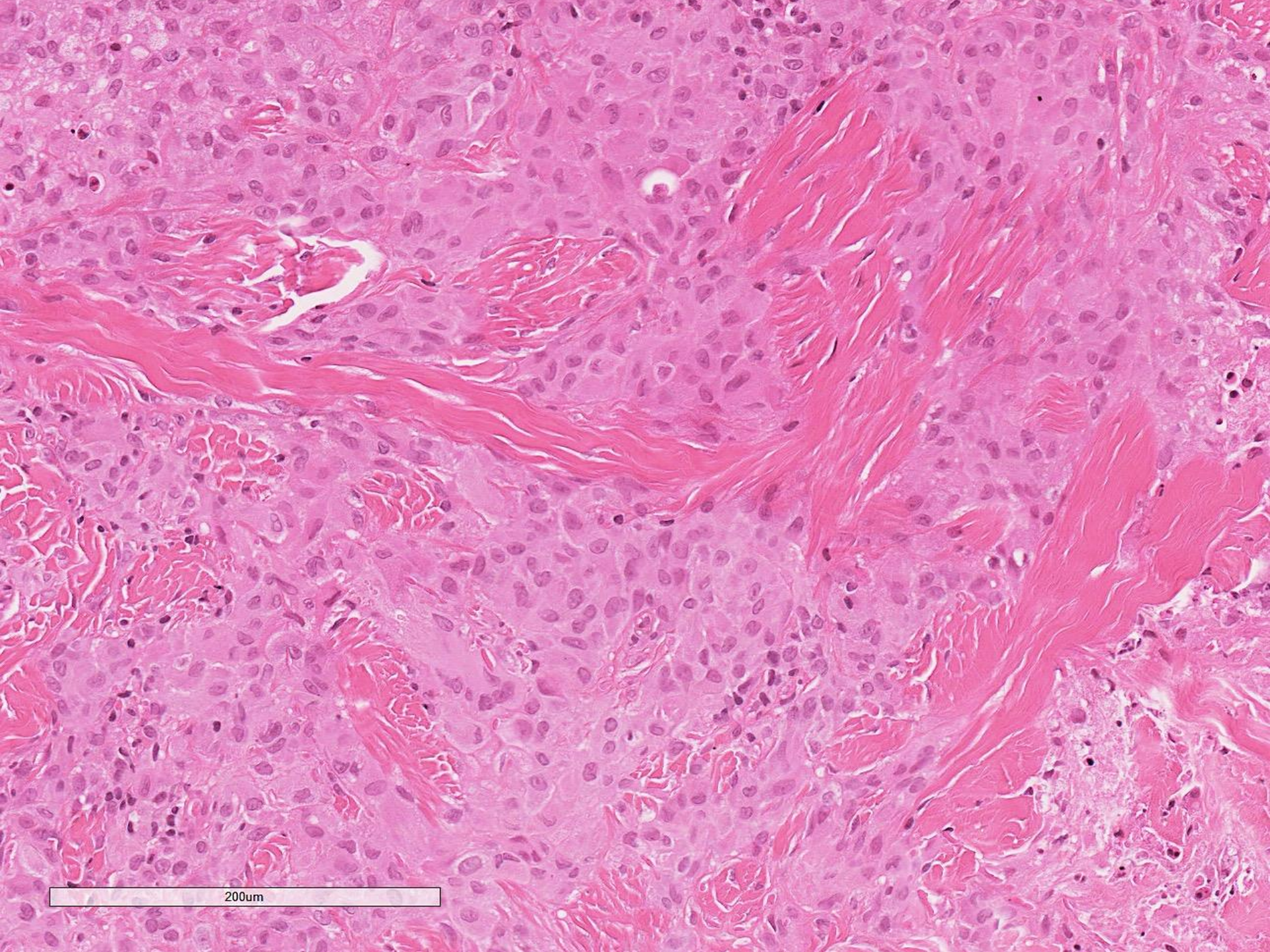
200um





200μm



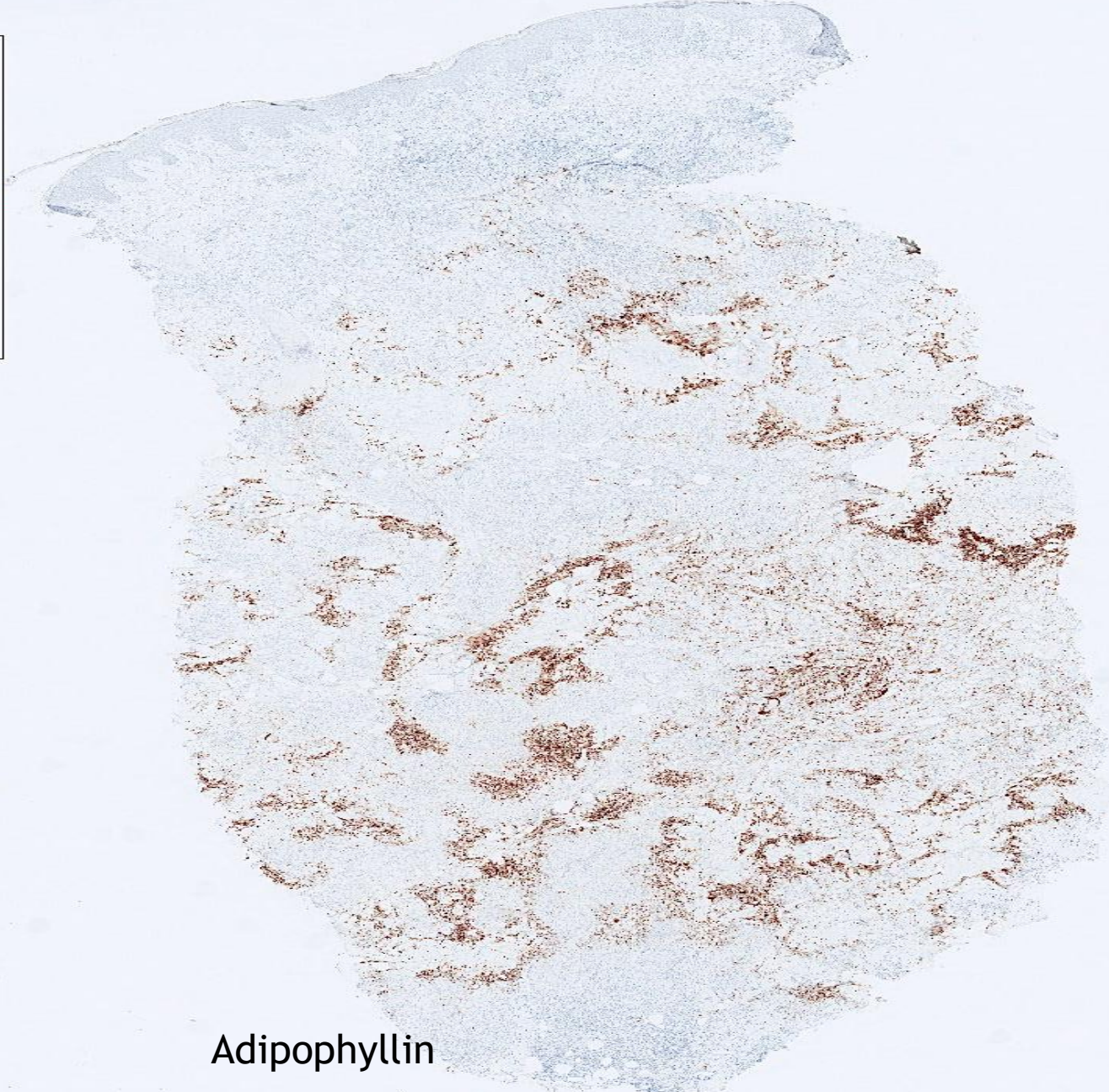


200um



2mm

Adipophyllin



- \* 1: Juvenile xanthogranuloma
- \* 2: Granuloma annulare
- \* 3: Necrobiosis lipoidica
- \* 4: Histiocytic sarcoma
- \* 5: Necrobiotic xanthogranuloma



- \* Most common in the first five years
- \* Multiple skin lesions much less common
- \* Mixed infiltrate including lymphocytes, eosinophils and plasma cells
- \* Necrobiosis and cholesterol clefts **XX**

# \* Juvenile Xanthogranuloma



- \* Generalised form- papular lesions, nodules can occur
- \* Necrobiosis is circumscribed/ill defined
- \* Lipid and giant cells are rare

## \* Granuloma annulare



- \* B/L , single-multiple, often symmetrical lesions on the lower extremities.
- \* Characteristic lesion is a sclerodermatous plaque, round/oval shape and an elevated rim.
- \* Papulonecrotic and ulcero-nodular lesions are rare.
- \* Cholesterol clefts are rare and only exceptionally prominent.

## \* Necrobiosis lipoidica



- \*Extremely rare

- \*Advanced stage, red-violaceous nodules

- \*Pleomorphic histiocytic cells with multiple and frequent mitoses.

\***Histiocytic sarcoma**



- \* Rare, non-Langerhans cell histiocytosis, first described by Kossard and Winkelmann in 1980.
- \* 100 cases, worldwide
- \* The most common site of involvement is the face especially periorbital areas. In some patients this feature is absent and lesions can be found restricted to extremities & trunk.

## \* Necrobiotic Xanthogranuloma



- \* NXG is now considered as a systemic disease. Internal organ involvement have been reported, in most cases asymptomatic and diagnosis established only at post-mortem.
- \* Haematological and lymphoproliferative malignancies are the most important associated systemic disorders.
- \* Develop approximately 2.4 years after onset of skin lesions.



- \* 80-90% of cases demonstrate monoclonal gammopathy (IgG kappa 60% > IgG lambda 26%)
- \* 10% cases develop multiple myeloma
- \* Clinical course, chronic, progressive and indolent.
- \* Patients should undergo long term surveillance for haematologic and other malignancies.



\* **Serum Free light chains:** Free Kappa 36.8 (3.3 - 19.4) Free Lamda 8.7 (5.7 - 26.3) Kappa:Lamda 4.23 (0.26 - 1.65)

\* **Bence Jones proteins:** Monoclonal Kappa detected

\* **Investigations**

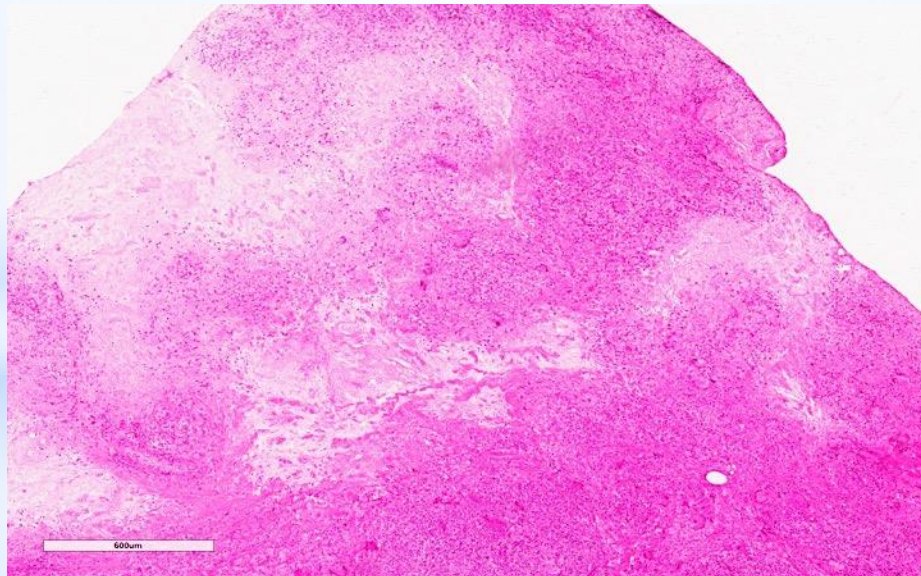


- \* Commenced on course of topical PUVA for symptom control
- \* Analgesia
- \* Discussed with Haematology:
  - \* BM biopsy performed; plasma cell myeloma with approx. 30-50 cellularity.
  - \* Reclassified as 'smouldering myeloma'
  - \* Discussed potential treatment with alkylating agent for both haematological and dermatological manifestations.

\* **Management:**



- \* A few months later patient developed orbital/peri-orbital plaques
- \* Histology showed features typical of NXG





- \* L Higgins. Necrobiotic Xanthogranuloma (NXG) associated with monoclonal gammopathies (MG): Clinical features and treatment outcomes. *Blood* 2015. 126: 1830
- \* A Wood, V Wagner & J Abbott. Necrobiotic Xanthogranuloma: A review of 17 cases with emphasis on clinical and pathologic correlation. *Arch Dermatol*. 2009. 145(3): 279-284
- \* A Saggini, C Cota & L Cerroni. Distinctive pattern of adipophilin expression in necrobiotic xanthogranuloma (letter to the editor). *American Journal of Dermatopathology* 2016. 38(6). 468-469
- \* S Inthasotti, R Wanitphakdeedecha & J Manonukul. A 7-year history of necrobiotic xanthogranuloma following asymptomatic multiple myeloma: A case report. *Dermatology Research and practice*. 2011(2011), Article ID 927852, 5 pages.

## \*References

\*Dr R Parslew, Consultant Dermatologist

\*Dr R Heath, Registrar Dermatology