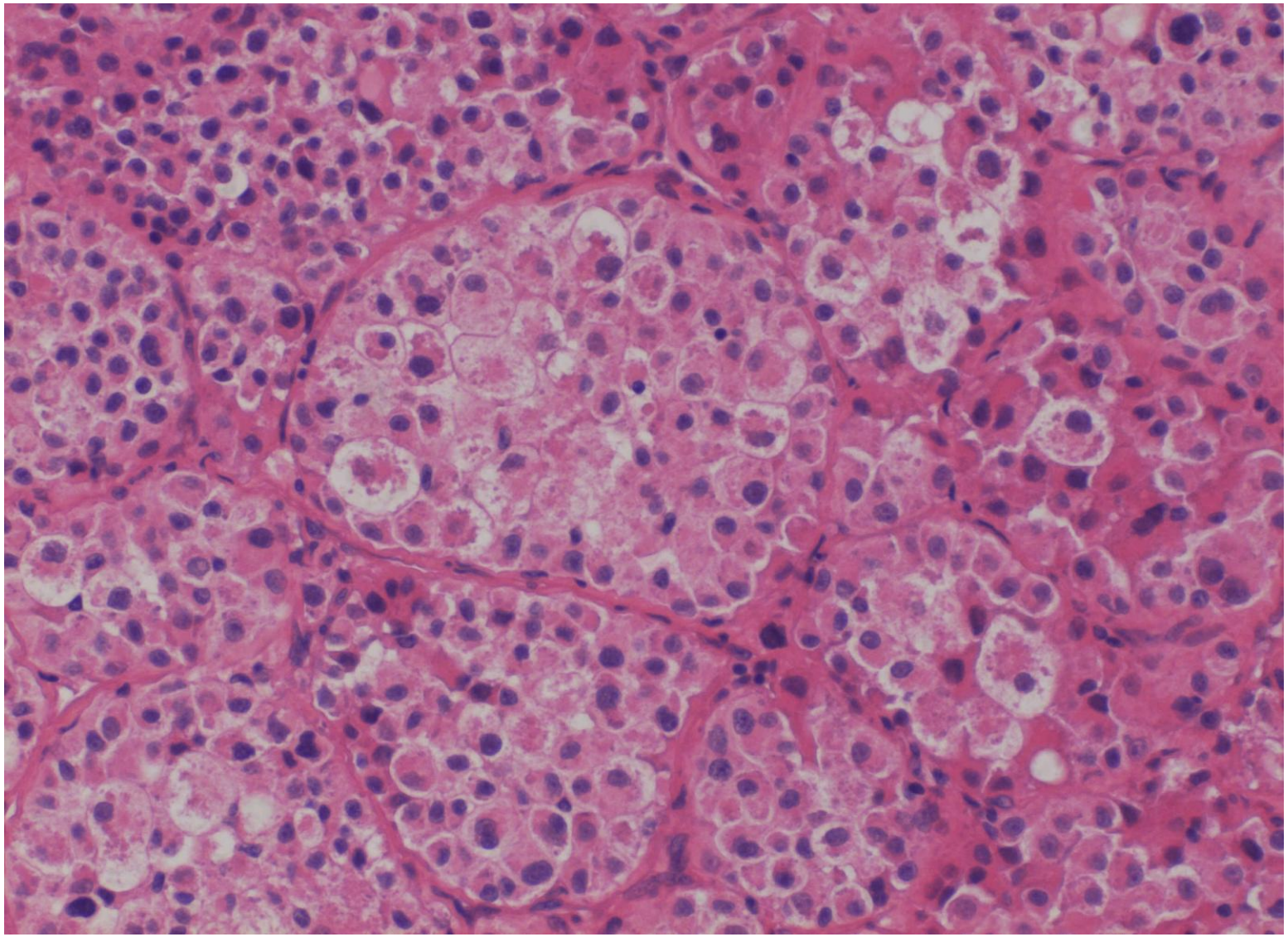
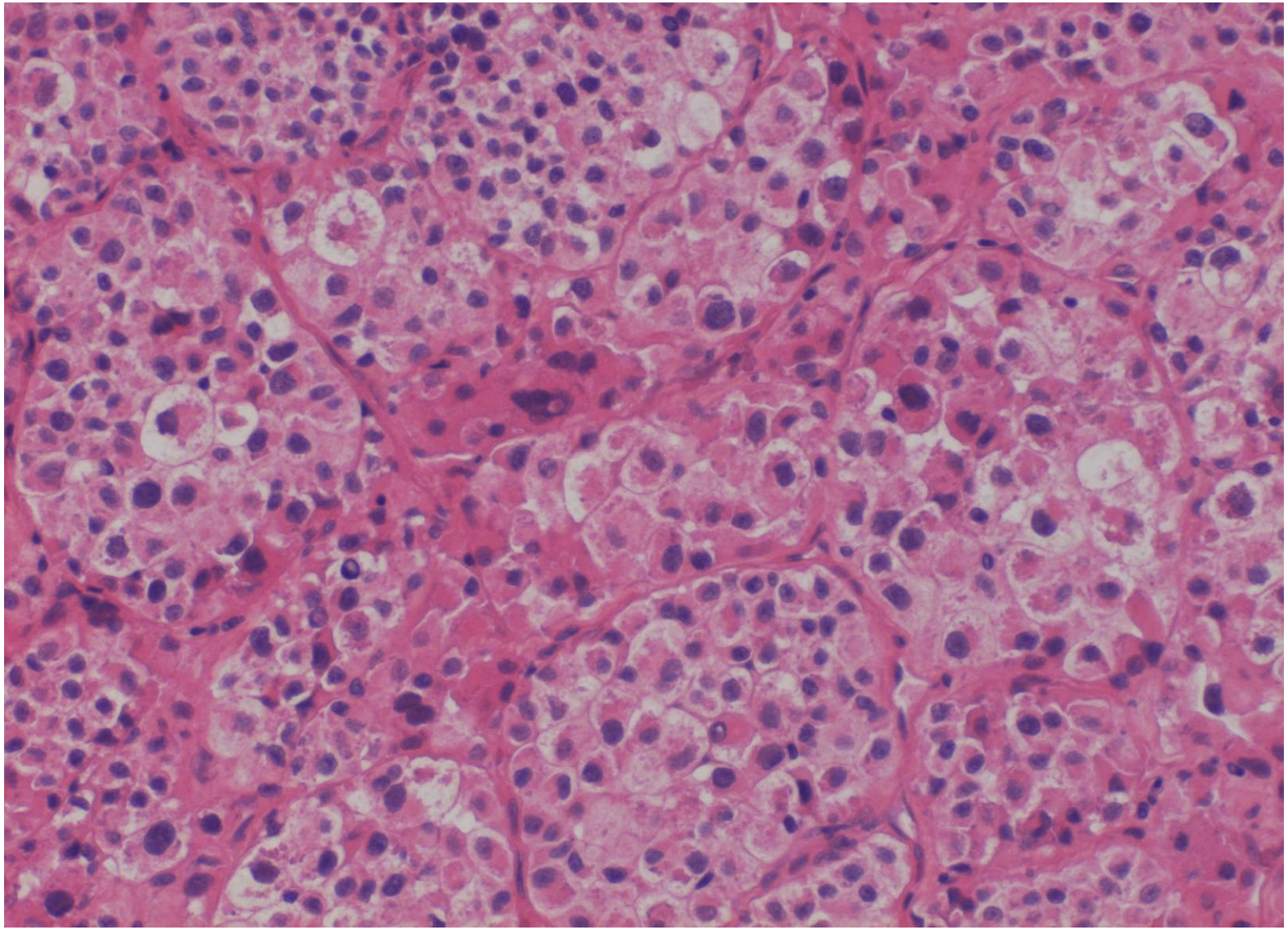
Alveolar soft part sarcoma

Alveolar soft part sarcoma, a malignant mesenchymal neoplasm of uncertain histogenesis, is monomorphously composed of large, polygonal cells with abundant eosinophilic granular cytoplasm, forming a nested or pseudoalveolar growth pattern. The tumor cells may show intracytoplasmic rod-like or rhomboid crystalline structures. A specific chromosomal translocation, der(17)t(X;17)(p11.2;q25) results in ASPSCR1-TFE3 gene fusion. It predominantly affects the deep soft tissue of the extremities (thigh and buttock) in young adults and head and neck region (tongue and orbit) in children. Metastases may occur >10 years after diagnosis.

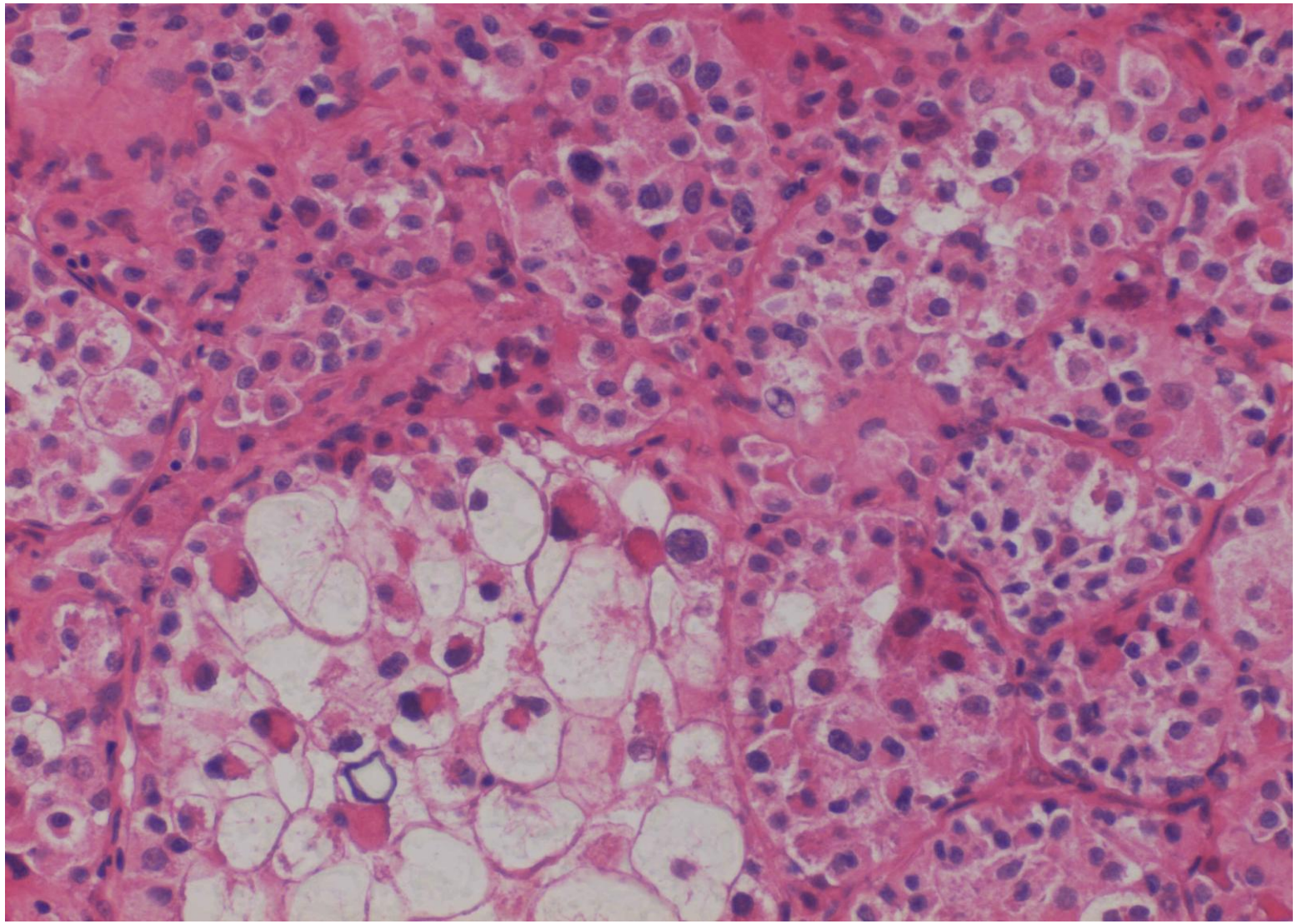
Ref.: Rekhi B, et al. Alveolar soft part sarcoma 'revisited': clinicopathological review of 47 cases from a tertiary cancer referral centre, including immunohistochemical expression of TFE3 in 22 cases and 21 other tumours. Pathology 2012; 44(1): 11-17. doi: 10.1097/PAT.0b013e32834d7ba4



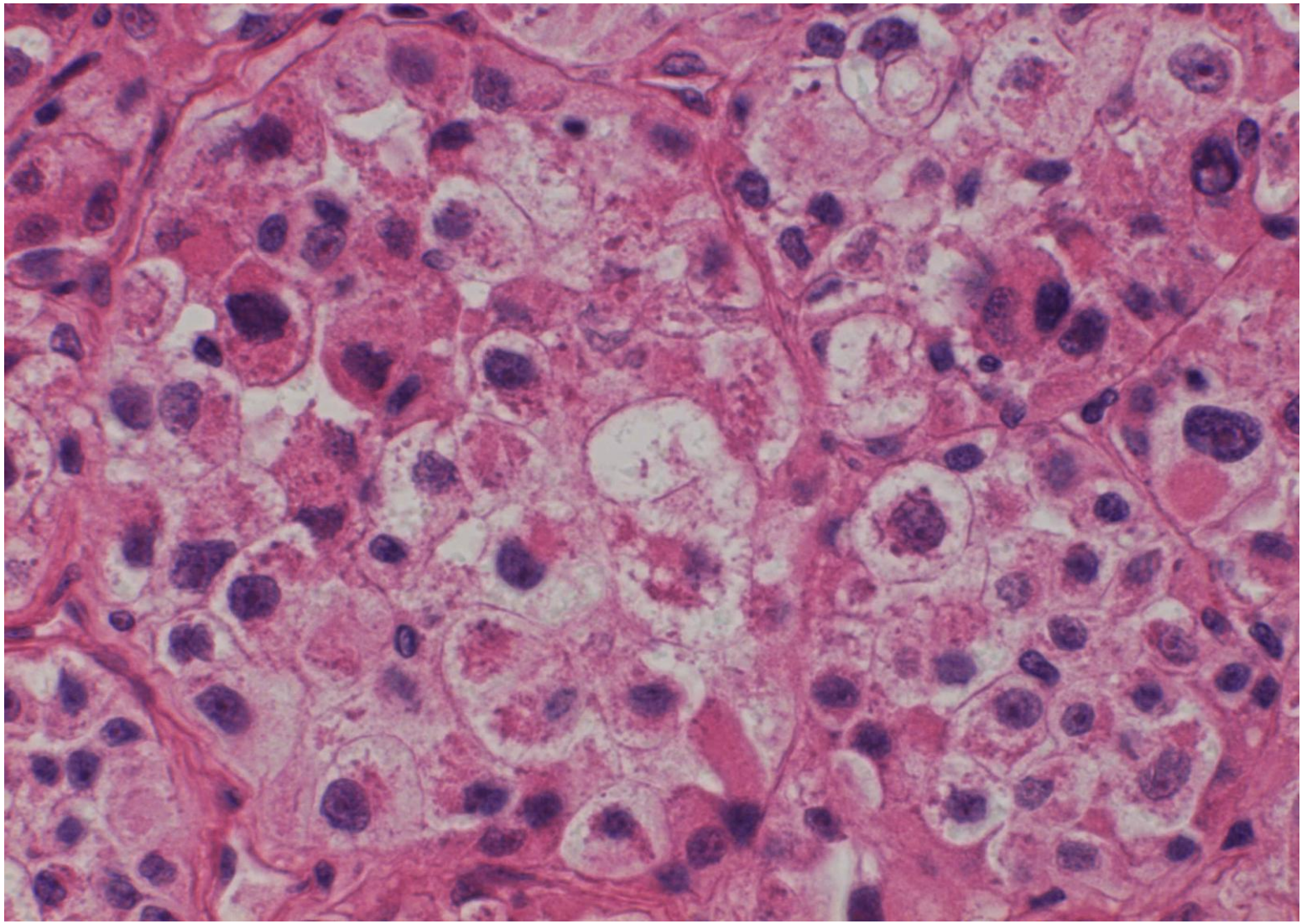
A soft tissue tumor in the lower leg of a 43-year-old male patient shows a distinct alveolar arrangement of monomorphous tumor cells with eosinophilic granular cytoplasm. H&E-1



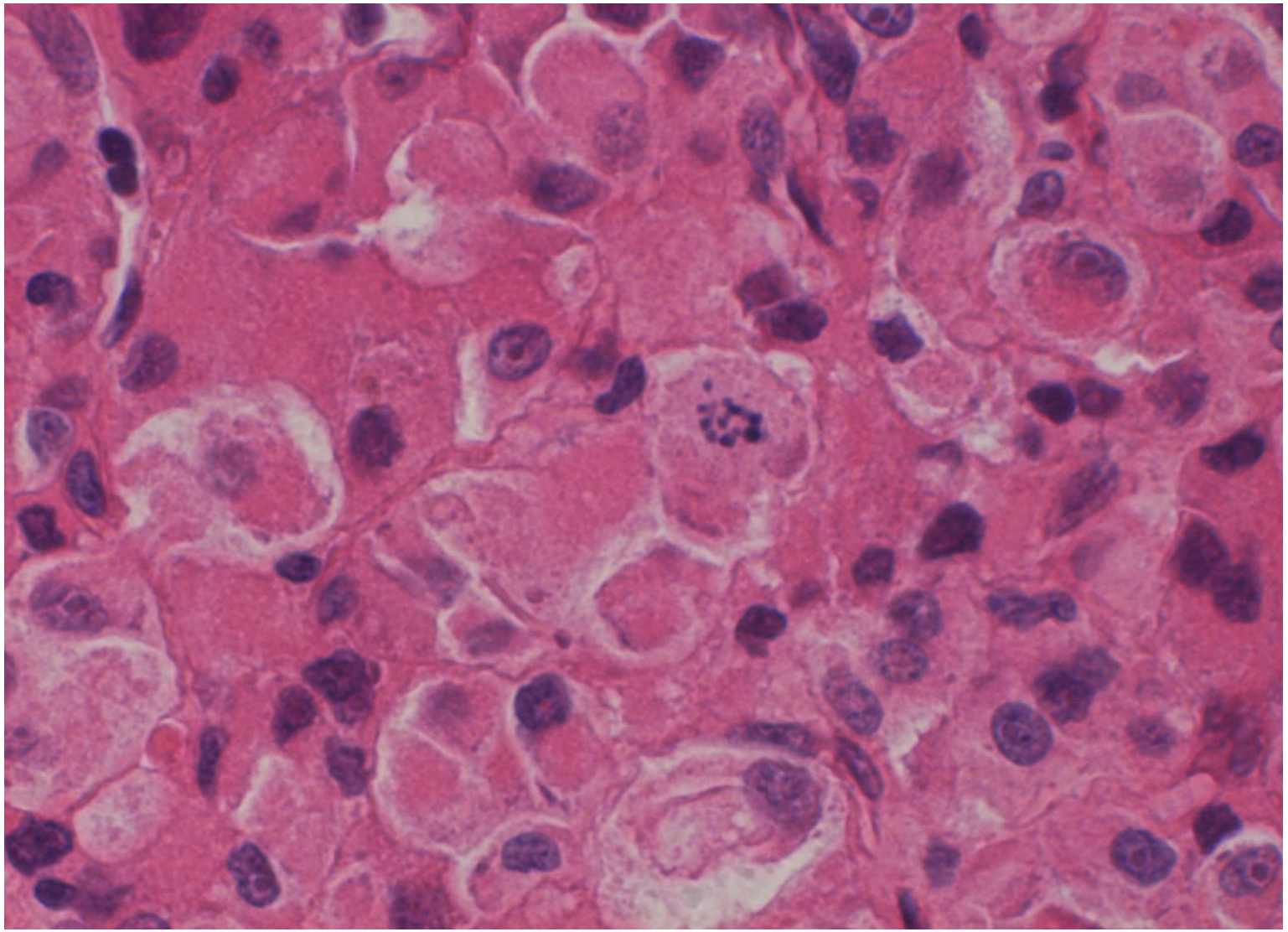
A soft tissue tumor in the lower leg of a 43-year-old male patient shows a distinct alveolar arrangement of monomorphous tumor cells with eosinophilic granular cytoplasm. H&E-2



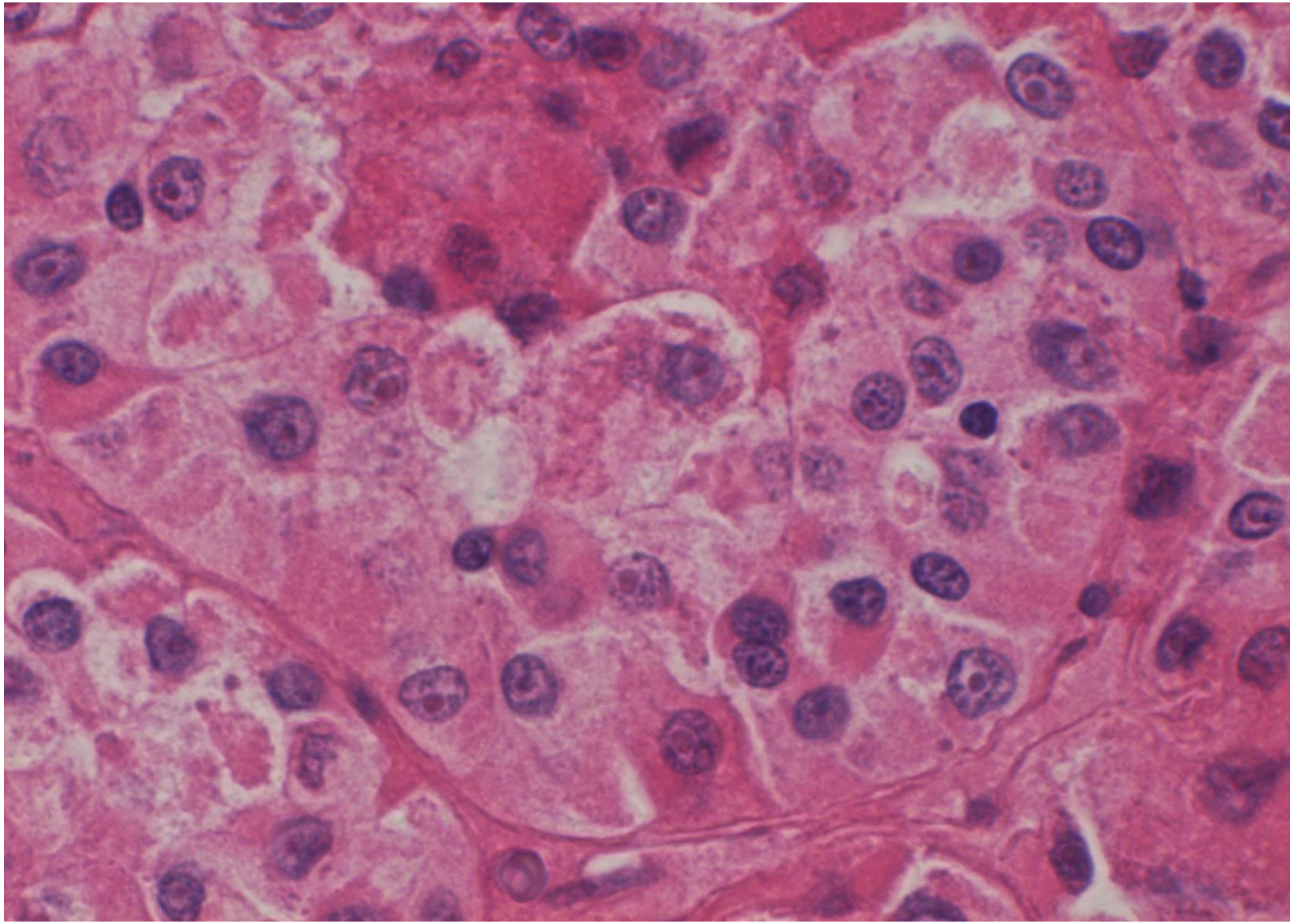
A soft tissue tumor in the lower leg of a 43-year-old male patient shows a distinct alveolar arrangement of monomorphous tumor cells with eosinophilic granular cytoplasm. Vacuolated cells are focally clustered. H&E-3



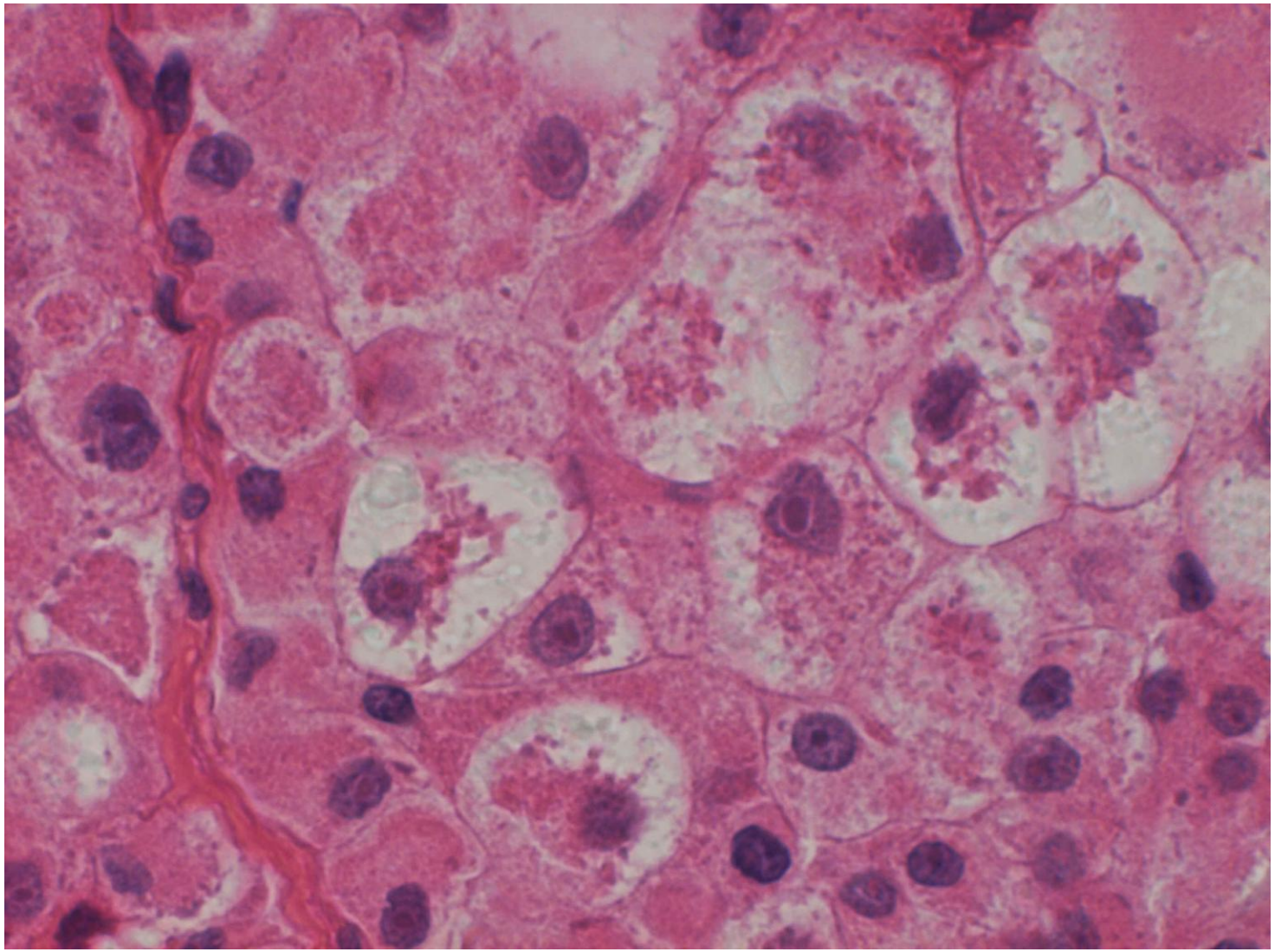
A soft tissue tumor in the lower leg of a 43-year-old male patient shows a distinct alveolar arrangement of monomorphous tumor cells with eosinophilic granular cytoplasm. H&E-4



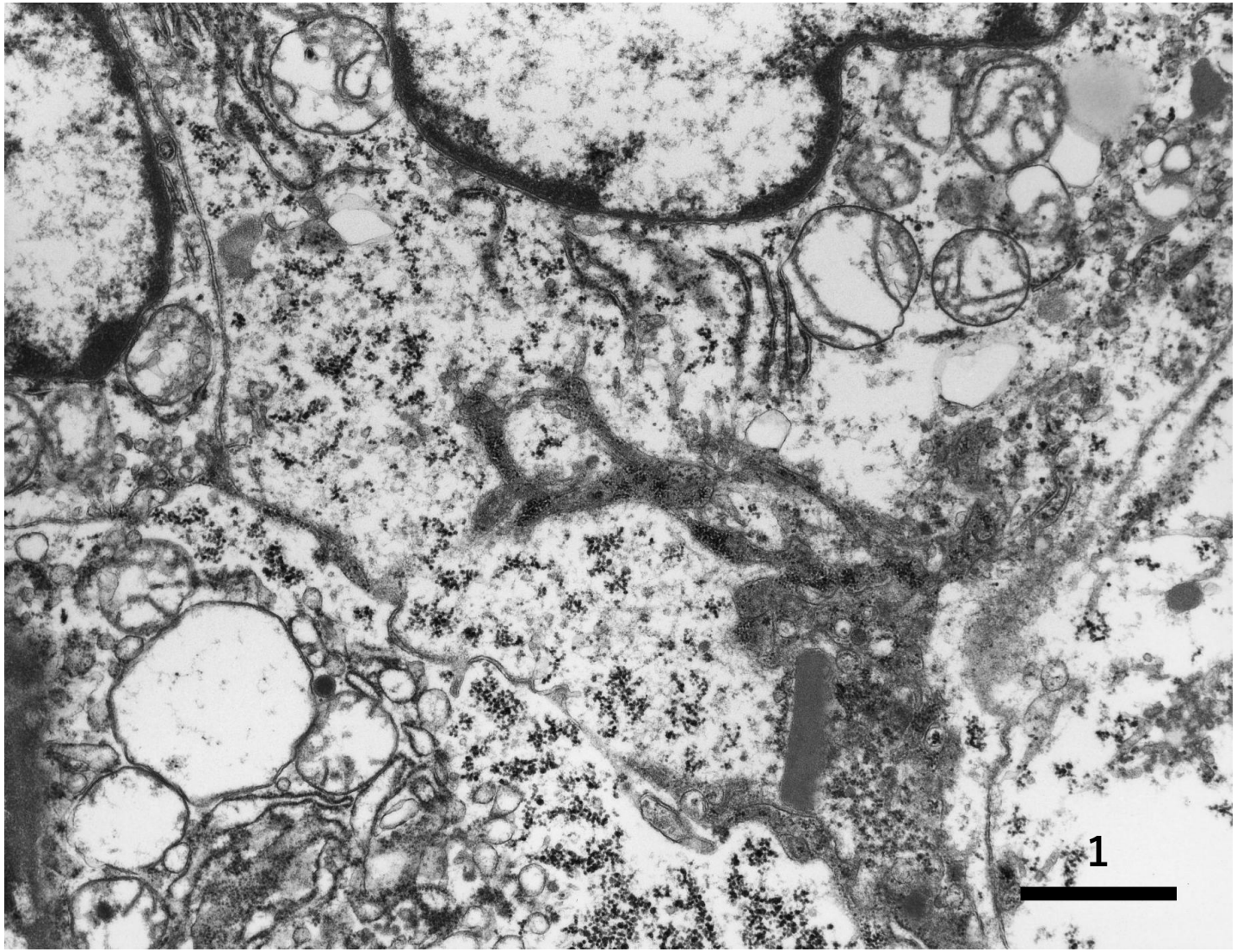
A soft tissue tumor in the lower leg of a 43-year-old male patient shows a distinct alveolar arrangement of monomorphous tumor cells with eosinophilic granular cytoplasm. Mitosis is focally seen. H&E-5



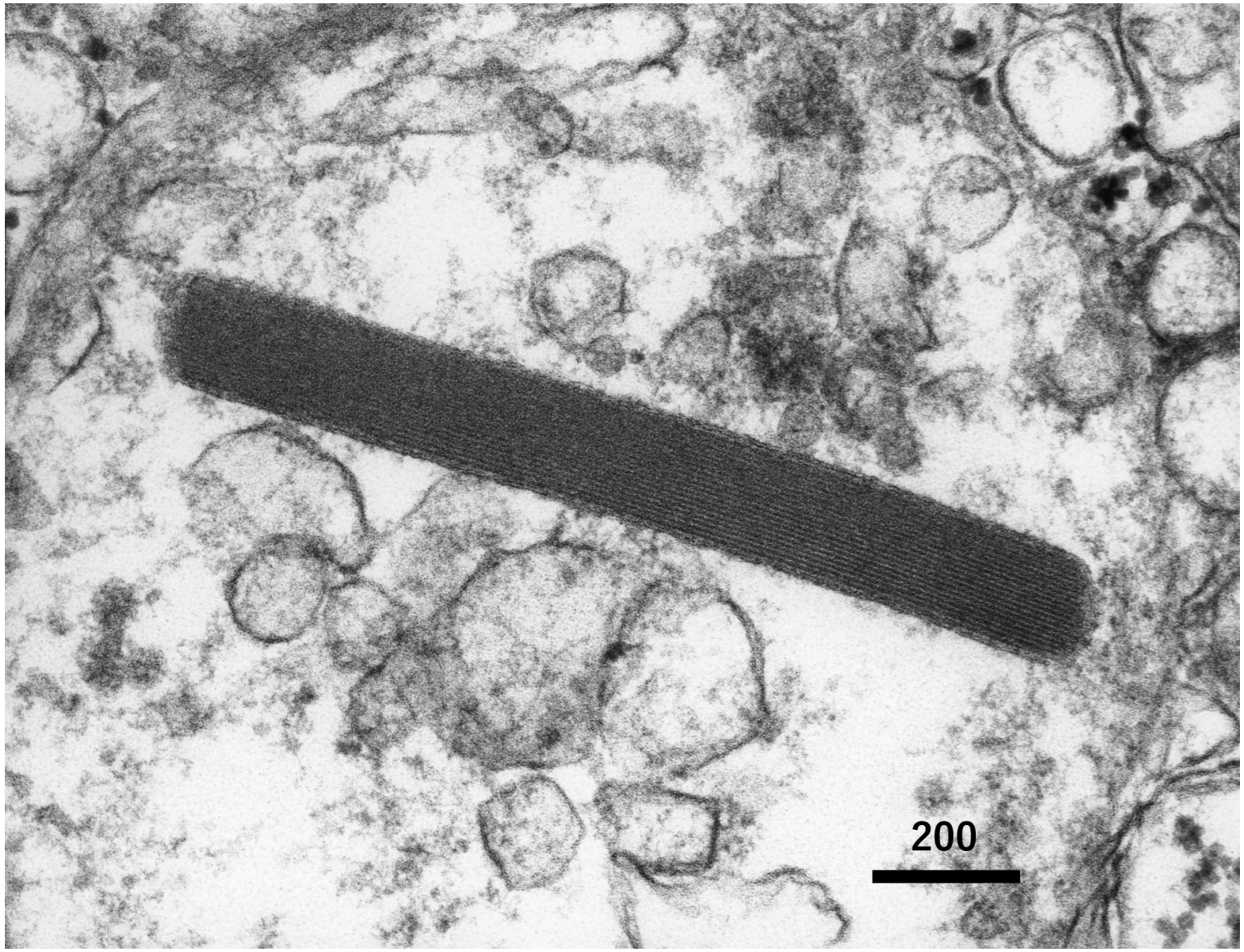
A soft tissue tumor in the lower leg of a 43-year-old male patient shows a distinct alveolar arrangement of monomorphous tumor cells with eosinophilic granular cytoplasm. H&E-6



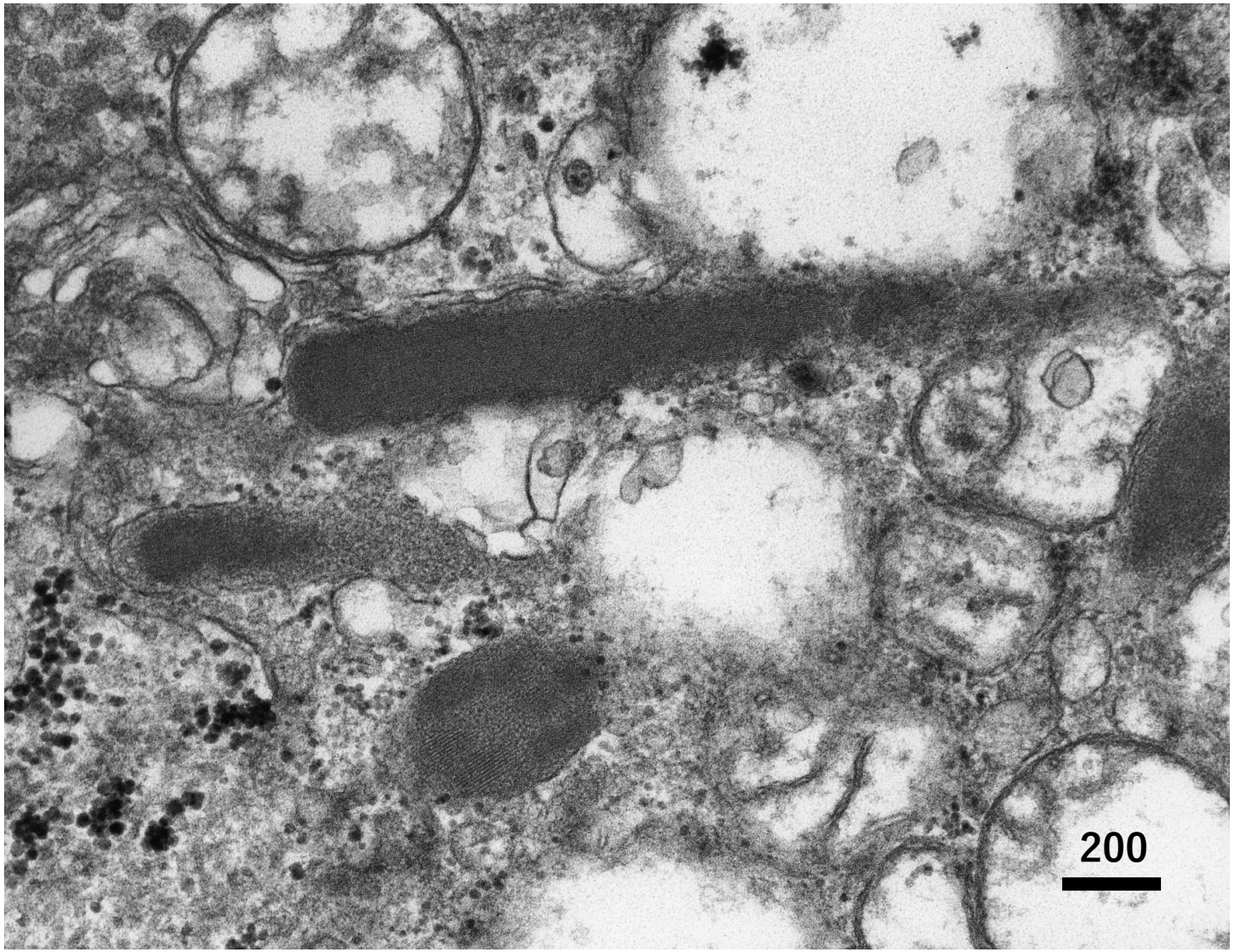
A soft tissue tumor in the lower leg of a 43-year-old male patient shows a distinct alveolar arrangement of monomorphous tumor cells with eosinophilic granular cytoplasm. Small crystalline inclusions are clustered in some tumor cells. H&E-7



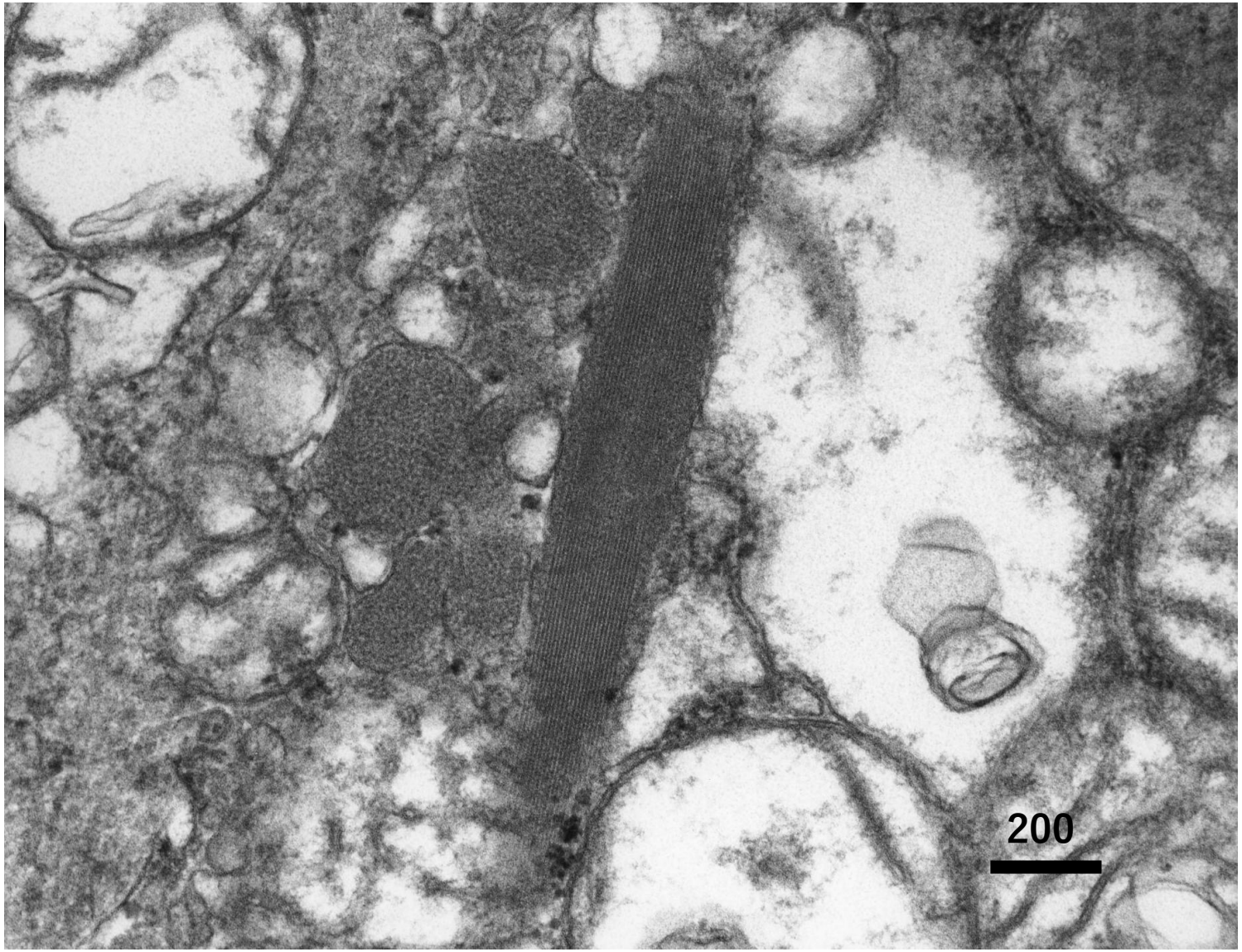
Ultrastructure of alveolar soft part sarcoma shows a crystalline inclusion at the periphery of the cytoplasm. Mitochondria, rough ER and vesicles are scattered. EM-1



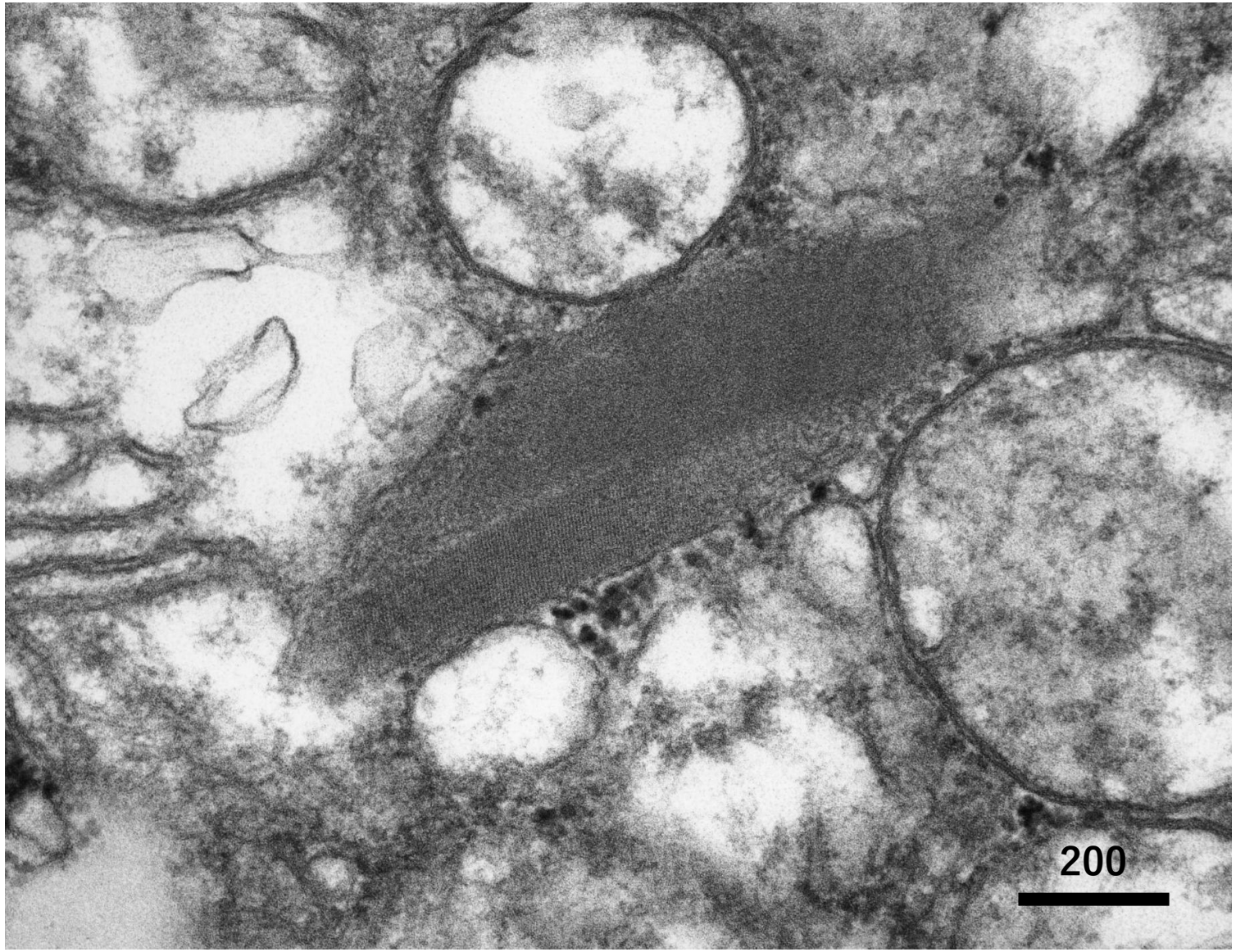
Ultrastructure of alveolar soft part sarcoma shows a rod-shaped crystalline inclusion with a lattice-like pattern in the cytoplasm. This represents an actin aggregate. EM-2



Ultrastructure of alveolar soft part sarcoma shows membrane-bound crystalline inclusions with a lattice-like pattern in the cytoplasm. This represents an actin aggregate. EM-3



Ultrastructure of alveolar soft part sarcoma shows membrane-bound crystalline inclusions with a lattice-like pattern in the cytoplasm. This represents an actin aggregate. EM-4



Ultrastructure of alveolar soft part sarcoma shows a membrane-bound crystalline inclusion with a lattice-like pattern in the cytoplasm. This represents an actin aggregate. EM-5