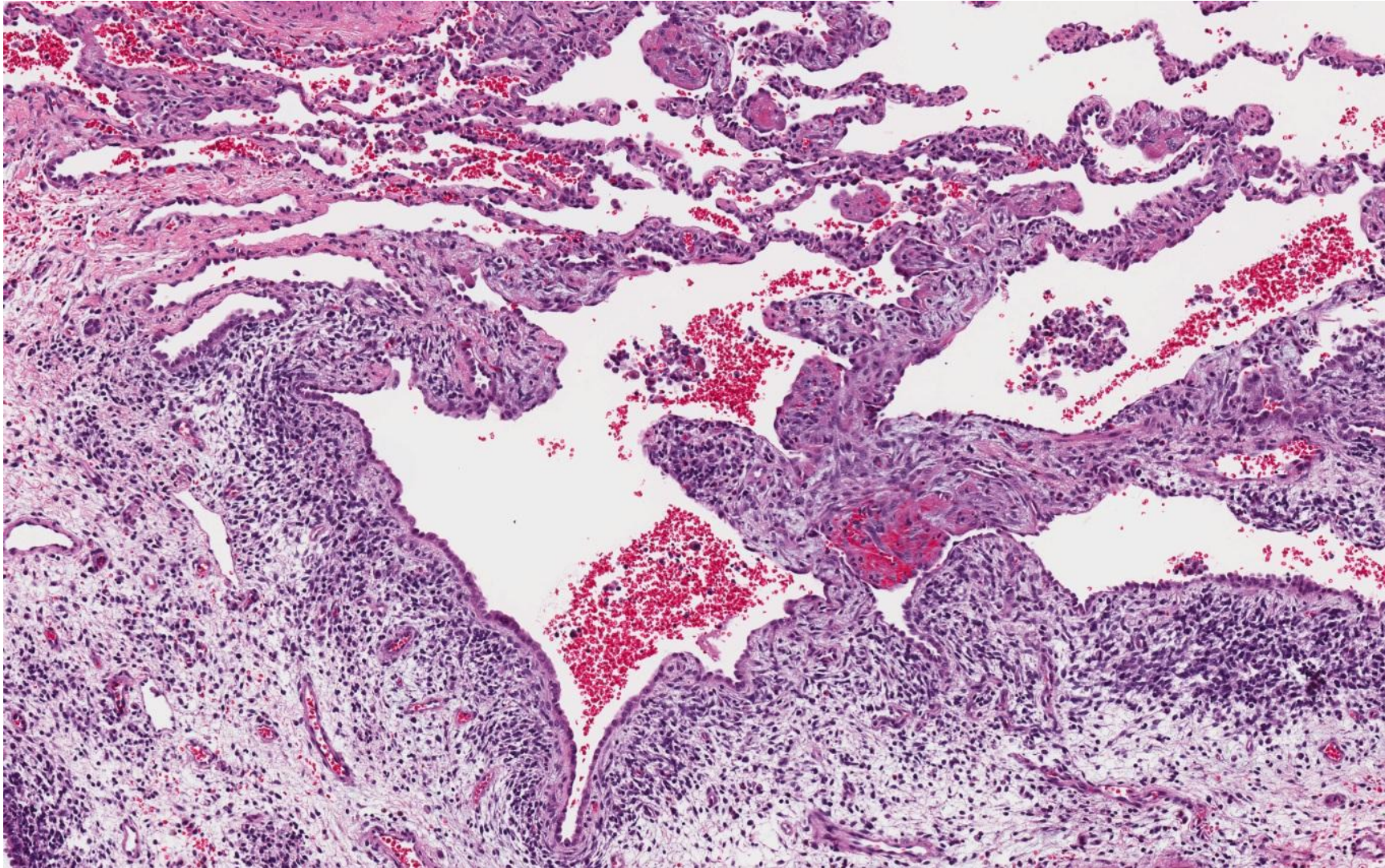


Pleuropulmonary blastoma, type I

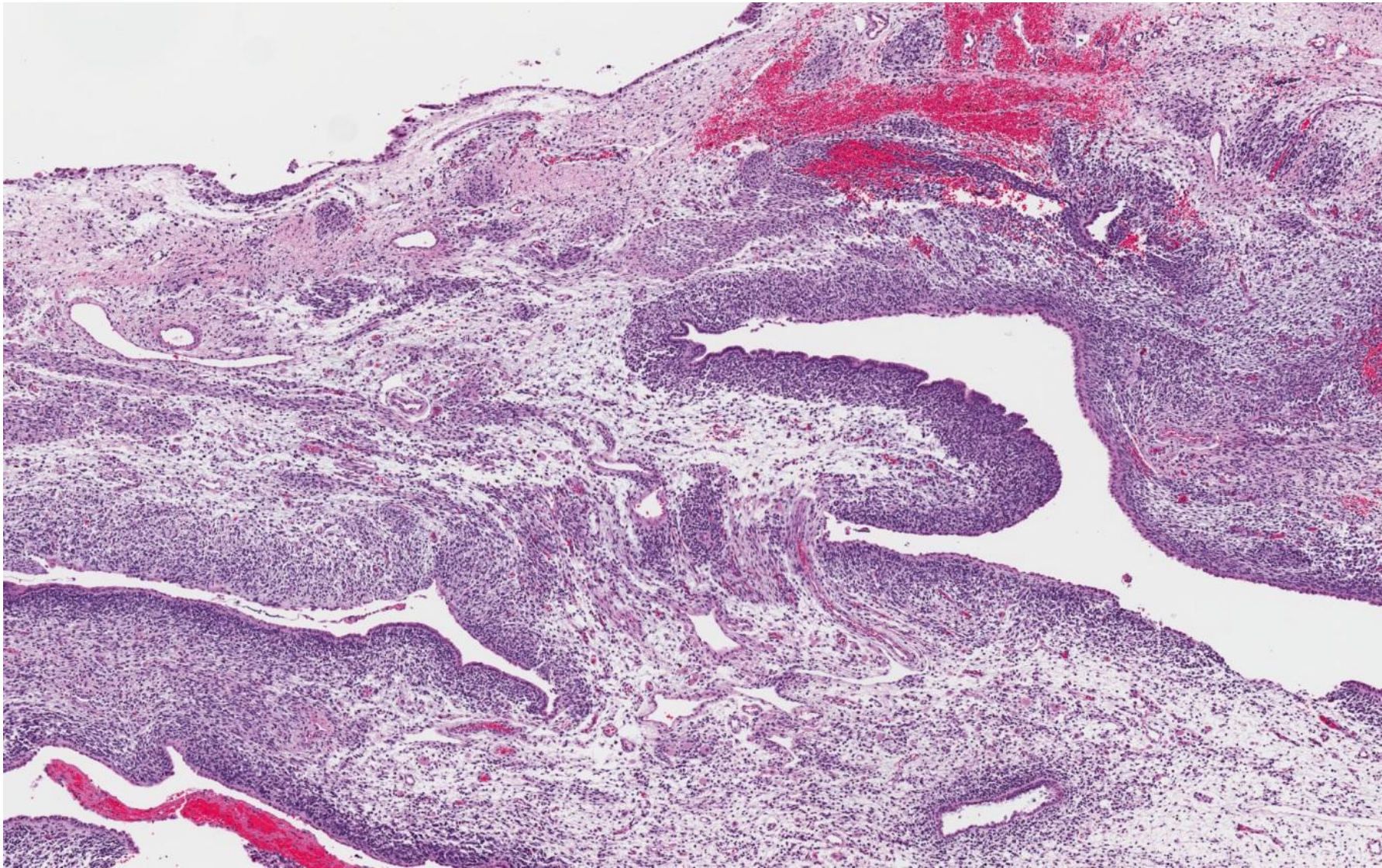
Pleuropulmonary blastoma, a malignant tumor of the lung and pleural cavity, predominantly occurs in infants and young children. Serum AFP may be elevated. In contrast, biphasic pulmonary blastoma is seen in adult lungs. Pleuropulmonary blastoma is classified into 3 types: type I (multicystic), type II (mixed cystic and solid: nodules in cystic lesions) and type III (predominantly solid). Types II and III are highly aggressive, while type I is a low-grade malignant. Type 1 pleuropulmonary blastoma with a multicystic lesion in a 1-year-old infant is presented. The tumor is located in the peripheral lung. The cysts are thin-walled, and lined by bland cuboidal or columnar cells. In the myxoid stroma, primitive blastema-like small cells with hyperchromatic nuclei are clustered particularly beneath the cyst-lining cells. Both epithelial and blastemal components express intranuclear β -catenin. The lesion is also called as mesenchymal cystic hamartoma. It arises from a primitive mesenchymal stem cell.

Ref.-1: Messinger YH, et al. Pleuropulmonary blastoma: a report on 350 central pathology-confirmed pleuropulmonary blastoma cases by the International Pleuropulmonary Blastoma Registry. Cancer 2015; 121(2): 276-285. doi: 10.1002/cncr.29032

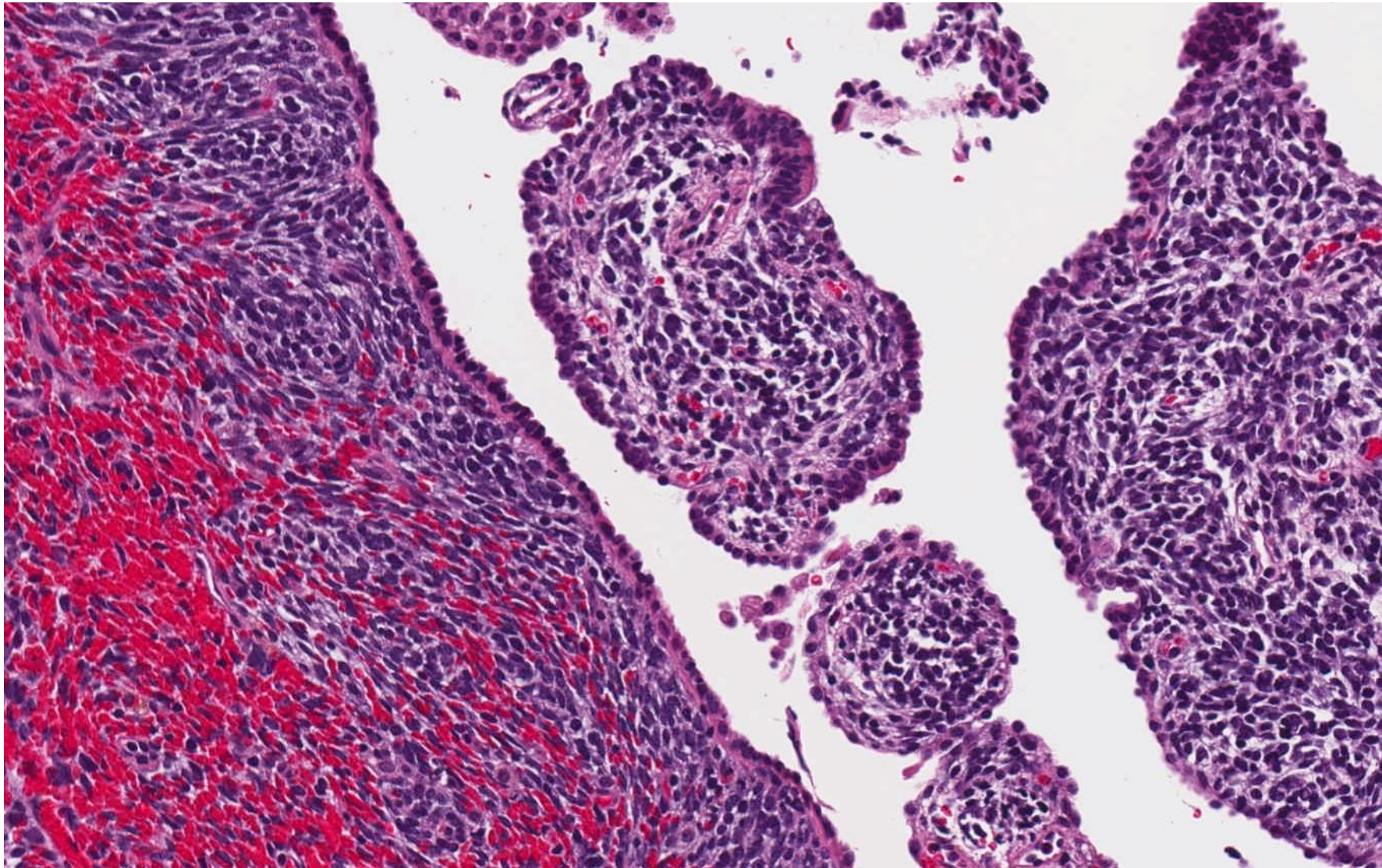
Ref.-2: Madaan PK, et al. Pleuropulmonary blastoma: a report of three cases and review of literature. Radiol Case Rep 2021; 16(10): 2862-2868. doi: 10.1016/j.radcr.2021.06.046



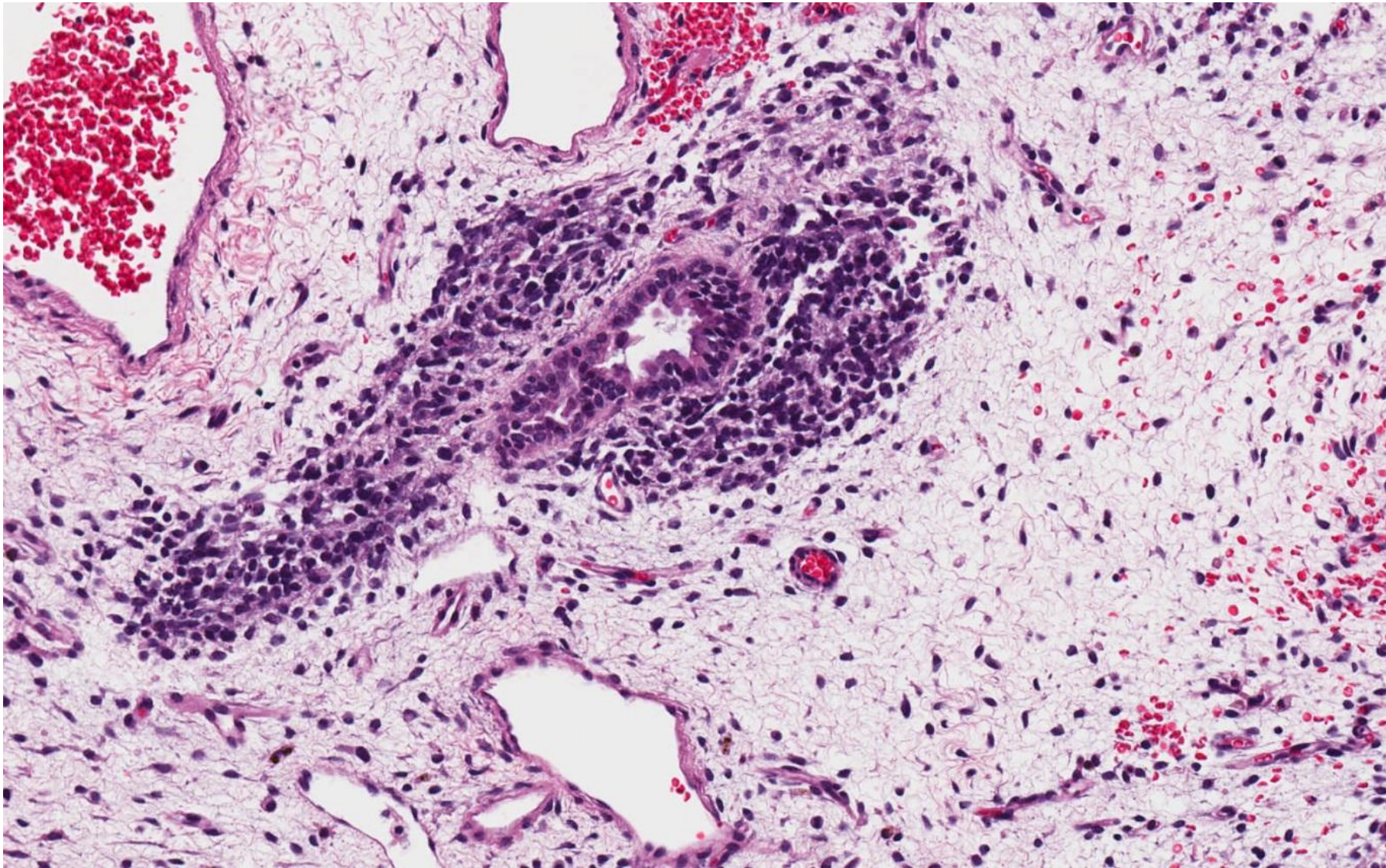
Pleuropulmonary blastoma, type I reveals formation of multilocular cysts lined by cuboidal or columnar epithelial cells. The stroma is myxoid with increased stromal cellularity beneath the epithelial layer. H&E-1



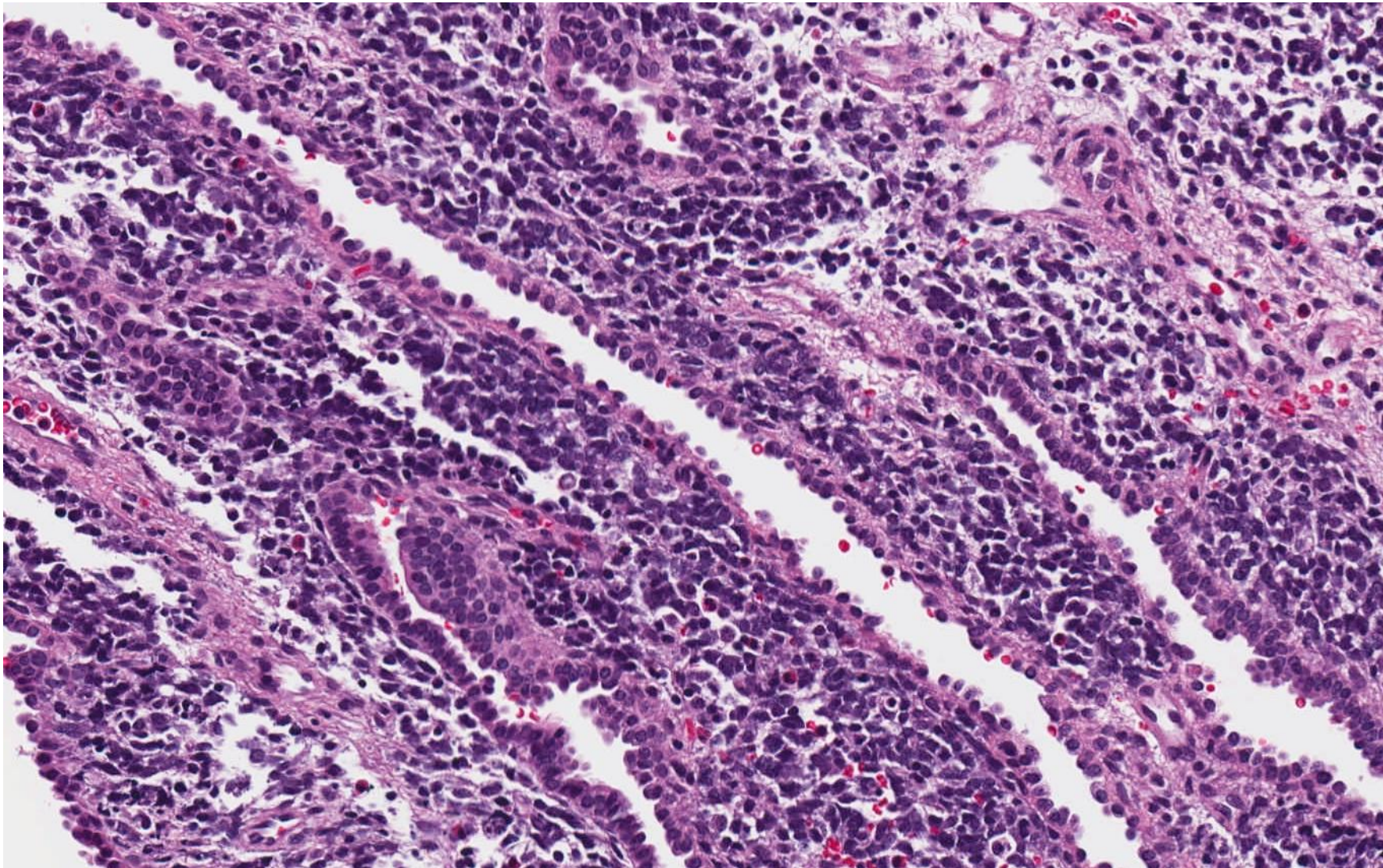
Pleuropulmonary blastoma, type I reveals formation of multilocular cysts lined by cuboidal or columnar epithelial cells. The stroma is myxoid with increased stromal cellularity beneath the epithelial layer. H&E-2



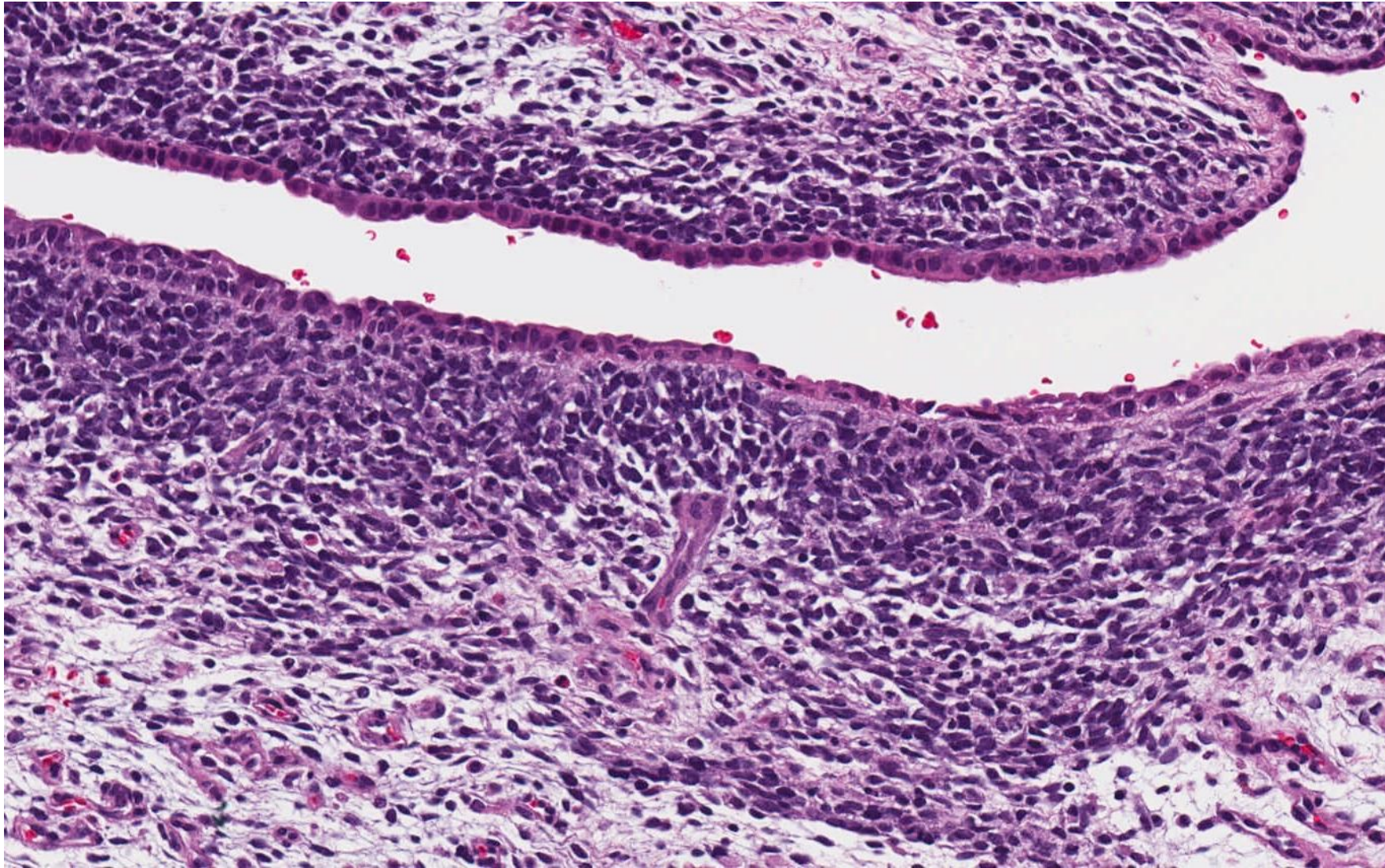
Pleuropulmonary blastoma, type I reveals formation of multilocular cysts lined by cuboidal or columnar epithelial cells. Papillary projections are associated. In the myxoid stroma, small-sized blastemal cells are clustered beneath the epithelial layer. H&E-3



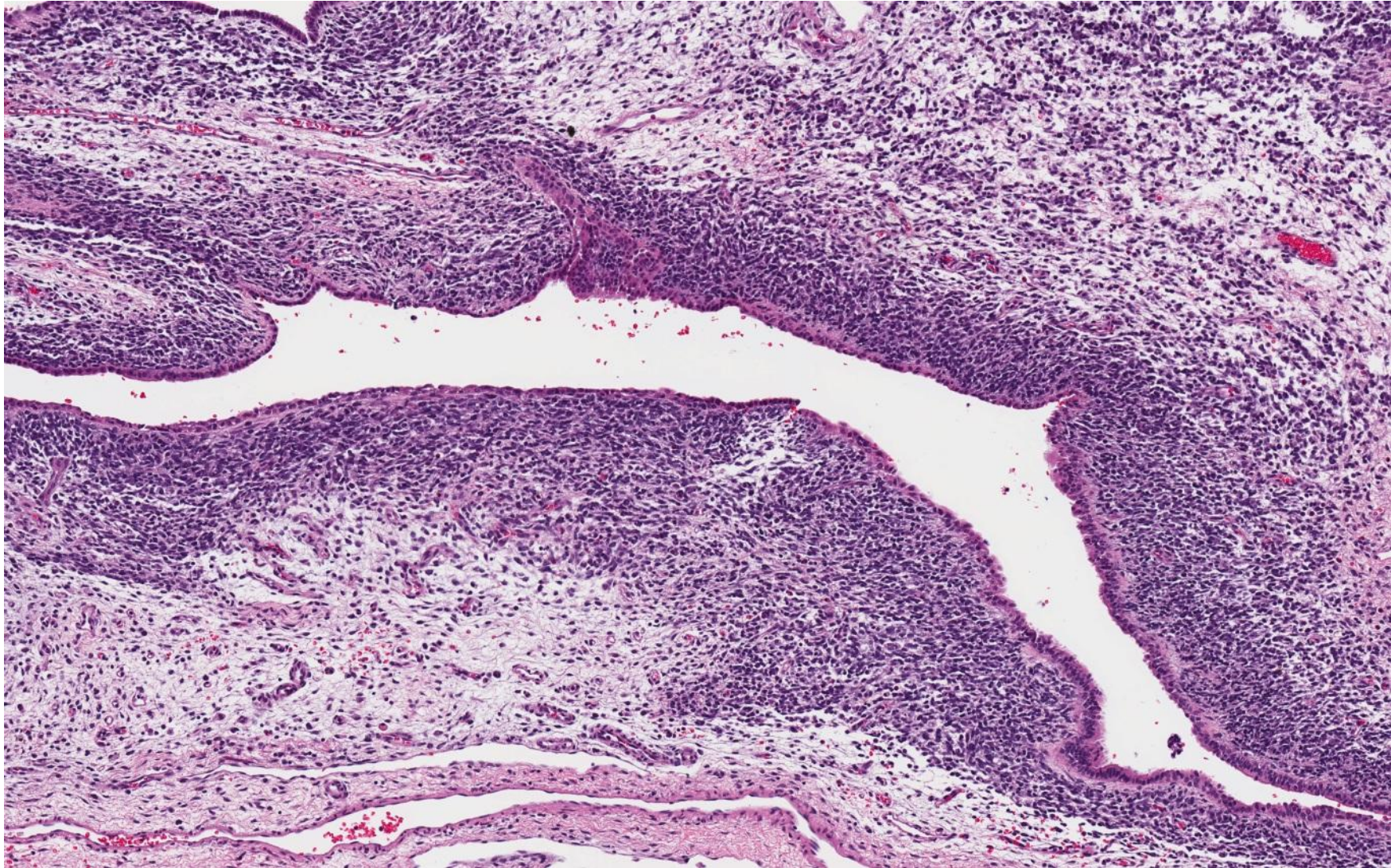
Pleuropulmonary blastoma, type I consists of gland-forming columnar epithelial cells and myxoid stroma. The small-sized blastemal cells are clustered around the epithelial layer. H&E-4



Pleuropulmonary blastoma, type I consists of gland-forming columnar epithelial cells and small-sized blastemal cells clustered around the epithelial layer. H&E-5



Pleuropulmonary blastoma, type I consists of gland-forming columnar epithelial cells and small-sized blastemal cells clustered around the epithelial layer. H&E-6



Pleuropulmonary blastoma, type I consists of gland-forming columnar epithelial cells and small-sized blastemal cells clustered around the epithelial layer. H&E-7