



NTP Nonneoplastic Lesion Atlas

Urinary bladder, Urothelium – Cytoplasmic granules

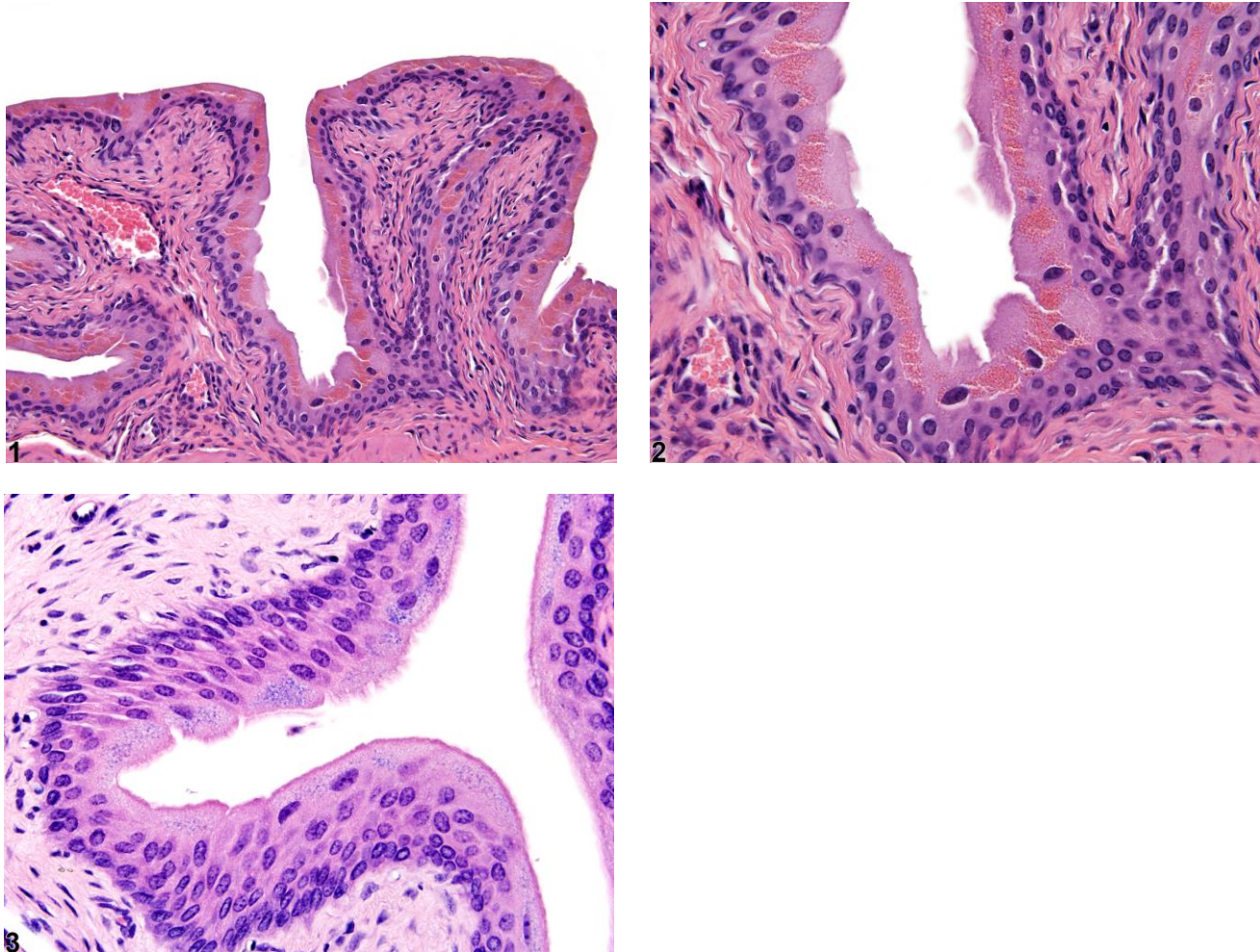
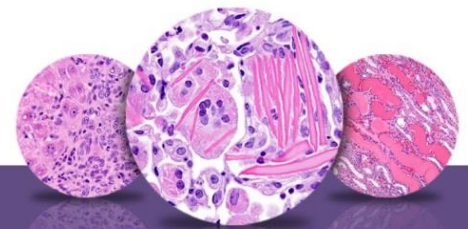


Figure Legend: **Figure 1** Fine, eosinophilic cytoplasmic granules in the superficial cells of the urothelium from a male B6C3F1 mouse in a subchronic study. **Figure 2** Eosinophilic cytoplasmic granules from a male B6C3F1 mouse in a subchronic study (higher magnification of Figure 1). **Figure 3** Cytoplasmic granules-basophilic granules present in the urothelium from a male B6C3F1 mouse in an acute study.

Comment: Cytoplasmic granules may be observed within the most superficial epithelial “umbrella” cells of the urothelium. They rarely occur in the intermediate or basal cells and typically are deeply eosinophilic. The granules may represent a number of reported constituents, such as degradation products, chemicals/metabolites, or mitochondria. The



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presence of cytoplasmic granules usually elicits no cell response and has not been associated with either preneoplasia or neoplasia.

Recommendation: Cytoplasmic granules should be diagnosed and given a severity grade. If treatment related, any unique characteristics of the granules should be described in the narrative report.

References:

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