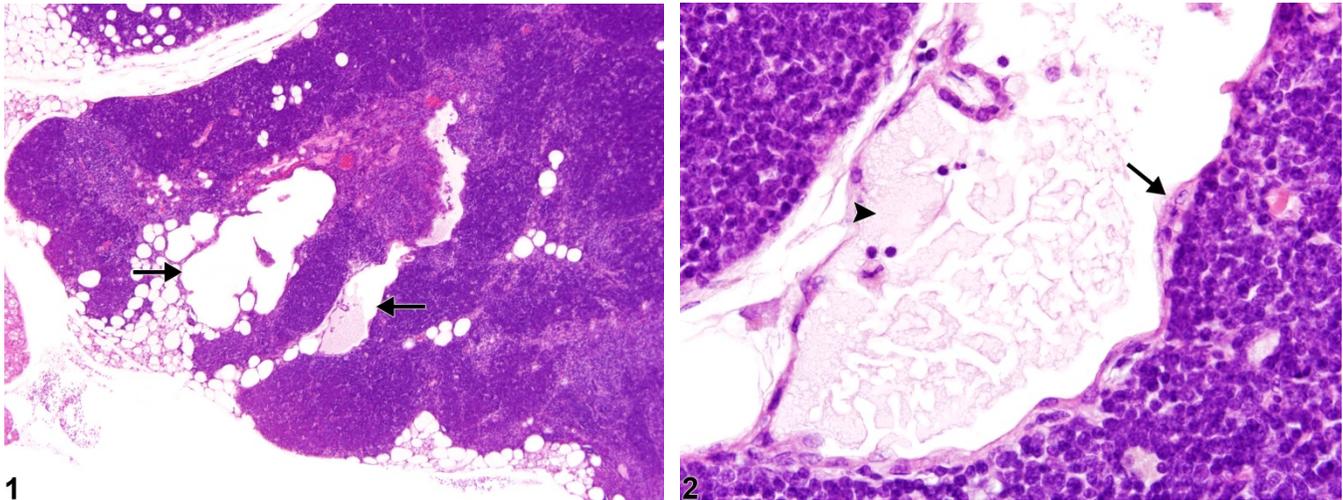


NTP Nonneoplastic Lesion Atlas

Thymus – Cyst



1
Figure Legend: **Figure 1** Thymus - Cyst, Multiple in a female F344/N rat from a chronic study. Multiple cysts (arrows) are present within the thymus. **Figure 2** Thymus - Cyst, Multiple in a female F344/N rat from a chronic study (higher magnification of Figure 1). Thymic cyst is lined by cuboidal to squamous epithelium (arrow) and contains homogeneous eosinophilic material (arrowhead).

Comment: Thymic cysts (Figure 1, arrows) in the rodent represent either a dilatation of thymic tubular structures or remnants of the thymopharyngeal duct. They are common findings in the involuted and/or atrophied thymus glands of rats and mice. Thymic cysts are typically lined by cuboidal to squamous epithelial cells (Figure 2, arrow), which may be ciliated and contain variable amounts of homogeneous eosinophilic material (Figure 2, arrowhead). Thymic cyst formation becomes more prominent with age and is associated with involution. Formation of cysts may occur more commonly in 2-year-old female rats than in age-matched males.

Recommendation: For routine studies, cysts should be diagnosed only when indicative of a treatment-related change. The preferred diagnostic term is “Thymus - Cyst.” Cysts are not routinely graded in NTP studies, but they may be graded if the pathologist feels it is necessary to fully characterize the response to the chemical. If more than one cyst is present, the modifier “multiple” may be added to the diagnosis. Thymic cysts should also be described in the pathology narrative (e.g., appearance of lining endothelium, location, number). Cysts associated with another lesion (e.g., secondary to thymic atrophy) should not be diagnosed separately, but should be described in the pathology narrative.



NTP Nonneoplastic Lesion Atlas

Thymus – Cyst

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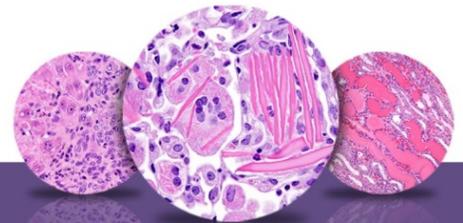
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Thymus – Cyst

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