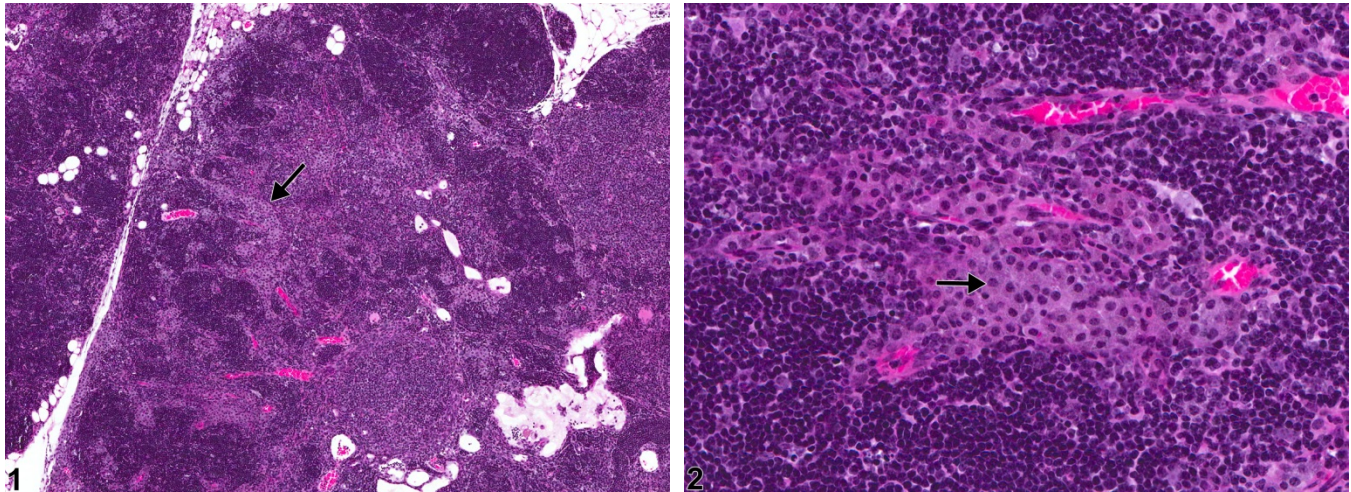


# NTP Nonneoplastic Lesion Atlas

## *Lymph Node – Hyperplasia, Mast Cell*



**Figure Legend:** **Figure 1** Lymph node - Hyperplasia, Mast cell in a female B6C3F1/N mouse from a chronic study. Mast cells are increased within the lymph node parenchyma (arrow). **Figure 2** Lymph node - Hyperplasia, Mast cell in a female B6C3F1/N mouse from a chronic study (higher magnification of Figure 1). Normal mast cells aggregate around lymph node blood vessels (arrow).

**Comment:** Mast cell hyperplasia is an increase in the number of mast cells above that normally found in lymph nodes (i.e., concurrent controls). Mast cells may accumulate in lymph nodes as individual and/or clusters of cells within the nodal sinuses and parenchyma (Figure 1 and Figure 2, arrows). Mast cells contribute to the induction of the primary immune response by activation and migration from the site of antigen encounter to draining lymph nodes, where they express chemokines that regulate T-cell recruitment. Giemsa or toluidine blue can specifically identify the metachromatic mast cell granules.

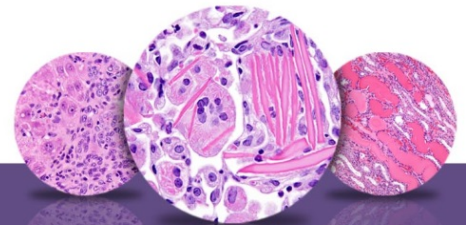
**Recommendation:** Mast cell hyperplasia should be diagnosed and graded whenever present.

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### Authors:

Kristen Hobbie, DVM, PhD  
Principal Pathologist  
Huntingdon Life Sciences  
Peterborough, UK

Susan A. Elmore, MS, DVM, DACVP, DABT, FIATP  
Staff Scientist, NTP Pathologist  
NTP Pathology Group  
National Toxicology Program  
National Institute of Environmental Health Sciences  
Research Triangle Park, NC

Holly M. Kolenda-Roberts, DVM, PhD, DACVP  
Veterinary Pathologist  
SNBL USA  
Everett, WA