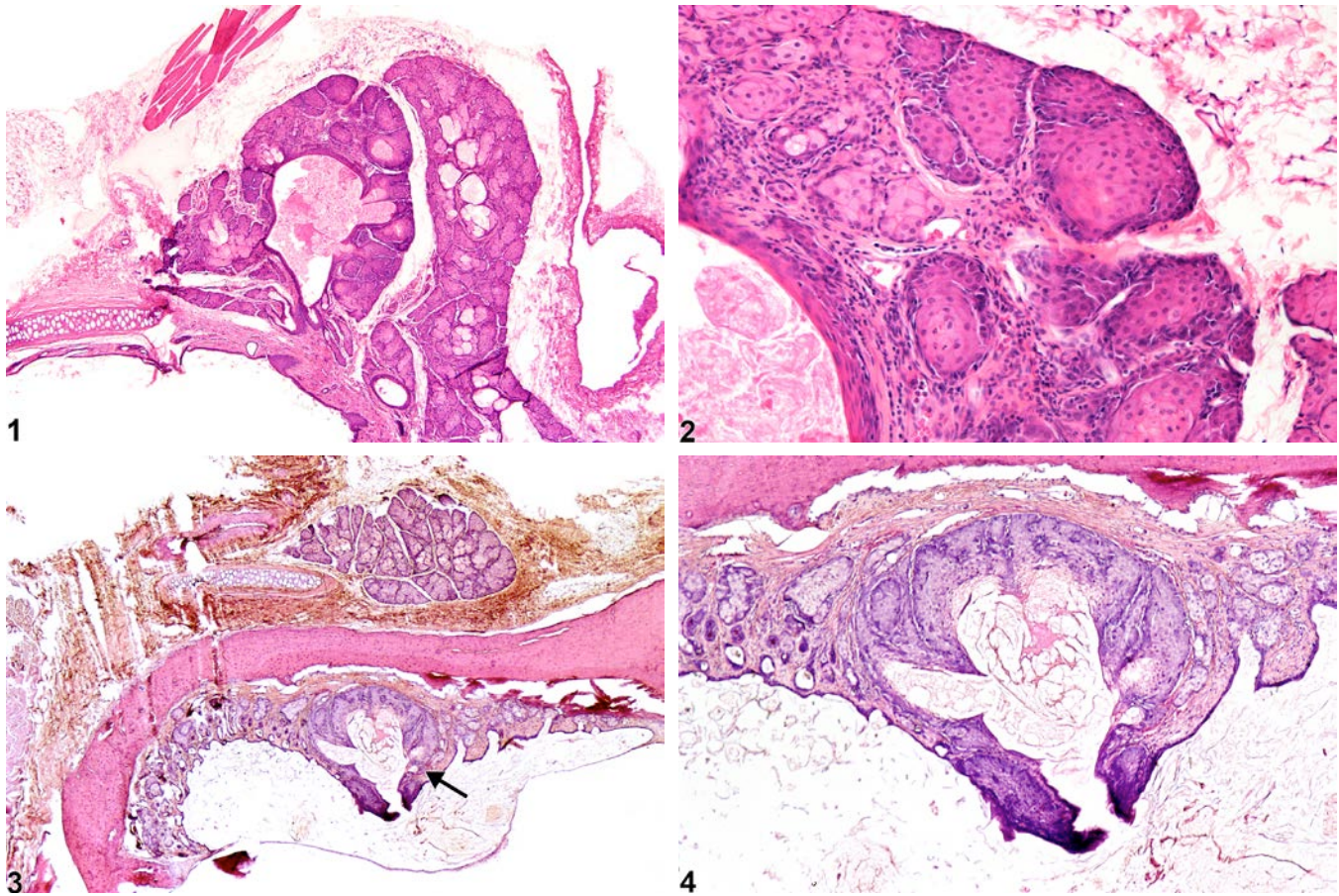
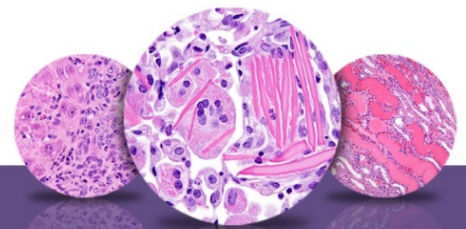


# NTP Nonneoplastic Lesion Atlas

## Zymbal's Gland – Hyperplasia



**Figure Legend:** **Figure 1** Zymbal's gland - Hyperplasia in a female F344/N rat from a chronic study. There is a focal increase in the number of sebaceous acini with slight lobular architectural distortion around a dilated duct. **Figure 2** Zymbal's gland - Hyperplasia in a female F344/N rat from a chronic study (higher magnification of Figure 1). Hyperplasia is characterized by a focal increase in the number of sebaceous acini and slight lobular architectural distortion. **Figure 3** Zymbal's gland - Hyperplasia in a male Fischer 344/N rat from a chronic study. There is an increase in the number of sebaceous acini with slight lobular architectural distortion and compression of adjacent tissue (arrow in the diffuse Zymbal's gland tissue in the external ear canal). **Figure 4** Zymbal's gland - Hyperplasia in a male Fischer 344/N rat from a chronic study (higher magnification of Figure 3). Hyperplasia (arrow) is characterized by a focal increase in the number of sebaceous acini with slight lobular architectural distortion and compression of adjacent tissue in the diffuse Zymbal's gland tissue, is present in the external ear canal.



# NTP Nonneoplastic Lesion Atlas

## Zymbal's Gland – Hyperplasia

**Comment:** Zymbal's gland hyperplasia (Figure 1, Figure 2, Figure 3, and Figure 4) is generally a focal change. Hyperplasia can occur in the compact Zymbal's gland (Figure 1 and Figure 2) or in the diffuse Zymbal's gland-type sebaceous tissue in the lamina propria of the external ear canal (Figure 3 and Figure 4).

Hyperplastic areas in the Zymbal's gland are characterized by a focal increase in the number and often the size of the sebaceous acini, often with slight distortion of the lobular architecture and slight compression of the adjacent tissue. They are composed of variably sized acini lined by relatively well-differentiated epithelial cells with enlarged nuclei and cytoplasm that is more basophilic and less foamy than in normal cells. The normal maturation sequence of the acinar cells may be obscured or absent. Hyperplasia lacks the pronounced cellular atypia, marked architectural distortion, and invasion of adjacent tissue, which are features of neoplastic lesions. Hyperplasia may be a reactive change secondary to inflammation or degeneration. Hyperplasia occurring in the absence of concurrent degeneration or inflammation is considered a preneoplastic lesion and an early-stage change in the morphologic continuum from hyperplasia to carcinoma.

**Recommendation:** If considered a primary change, Zymbal's gland hyperplasia should be diagnosed and assigned a severity grade. When secondary to inflammation or degeneration, Zymbal's gland hyperplasia should not be diagnosed separately (unless warranted by severity), but should be described in the pathology narrative.

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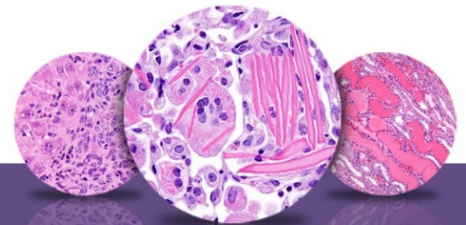
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# NTP Nonneoplastic Lesion Atlas

## *Zymbal's Gland – Hyperplasia*

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### Author:

Margarita M. Gruebbel, DVM, PhD, DACVP  
Senior Pathologist  
Experimental Pathology Laboratories, Inc.  
Research Triangle Park, NC