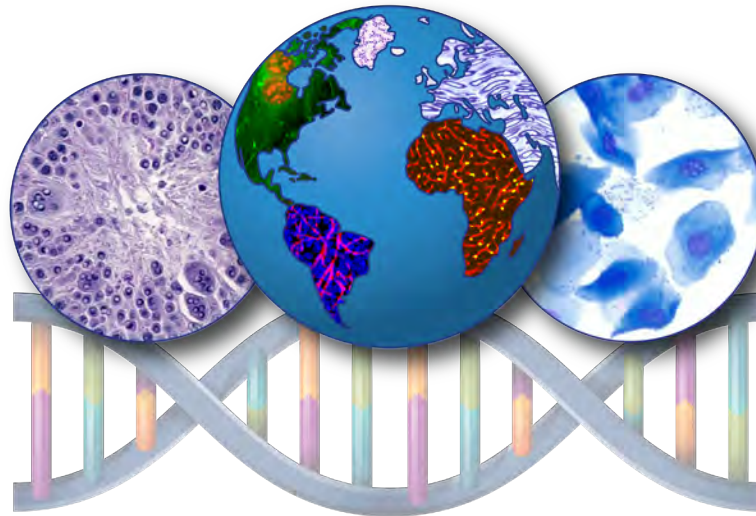




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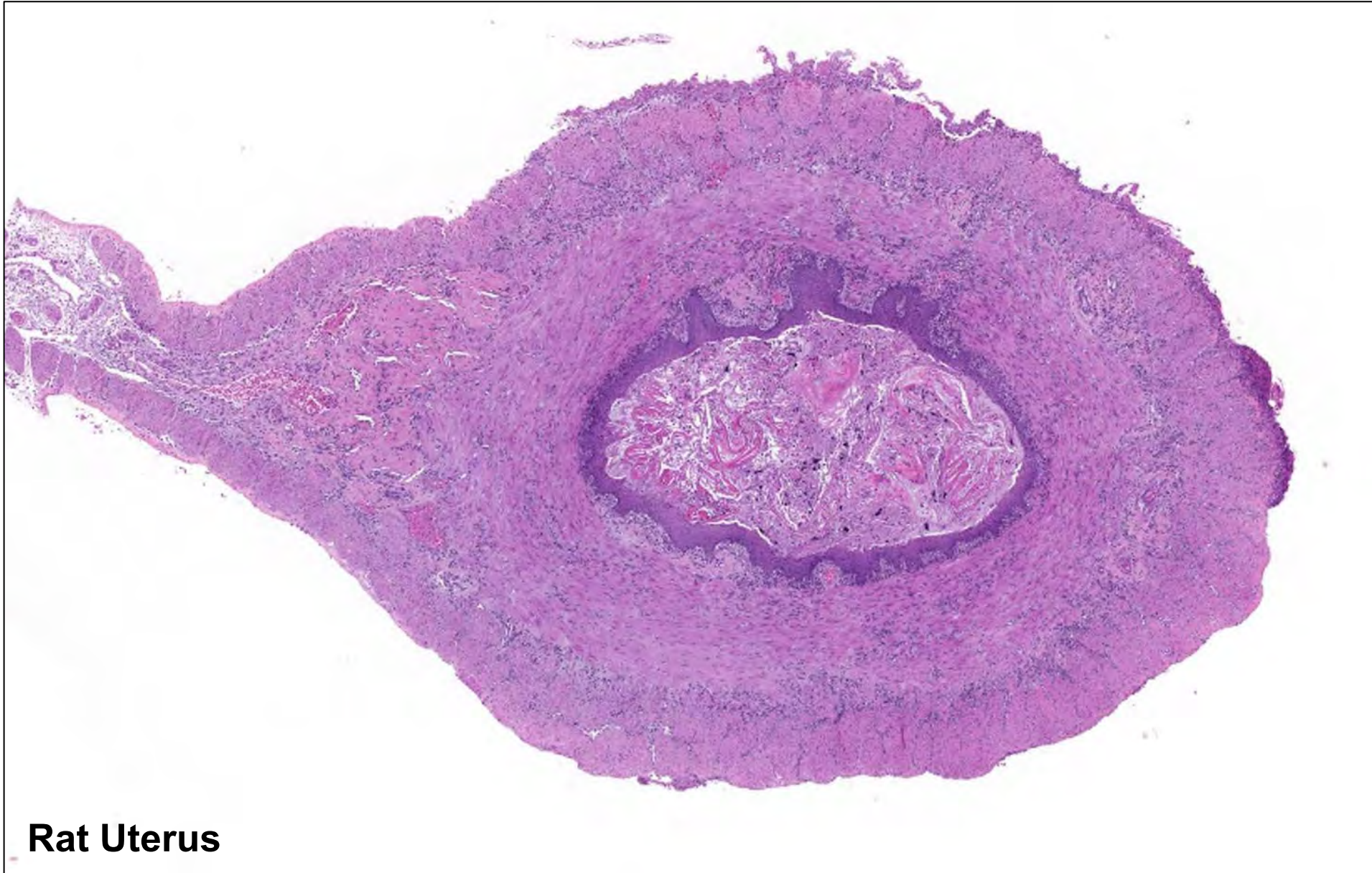
Nonproliferative and Proliferative Lesions Quiz in Rodent Uterus



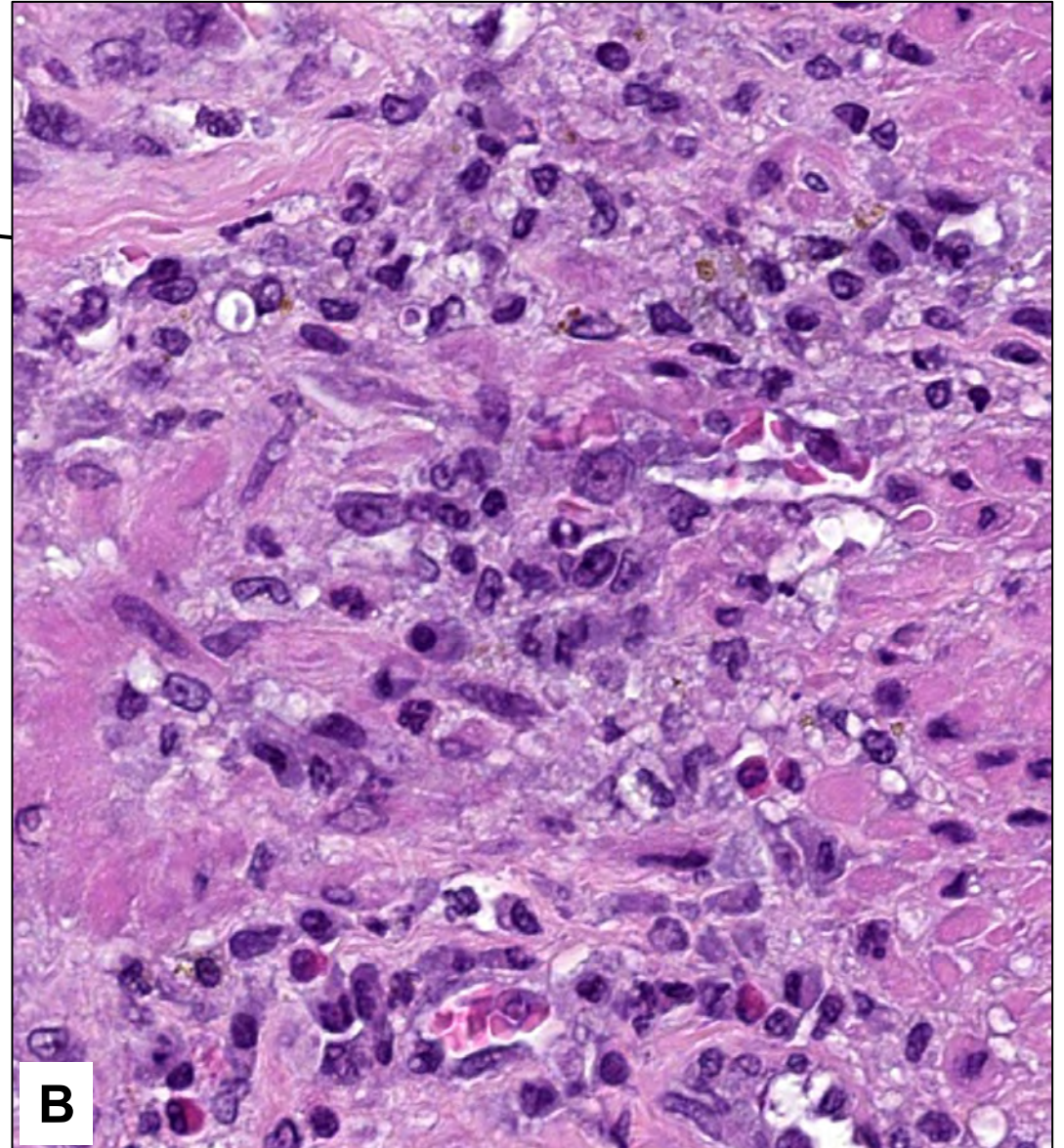
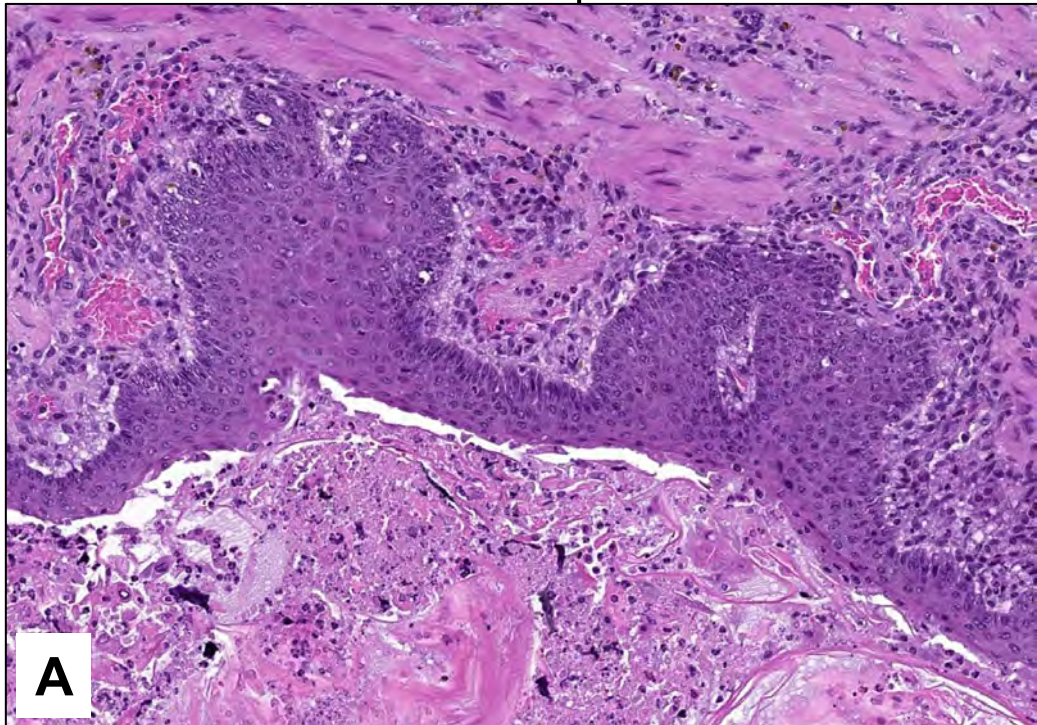
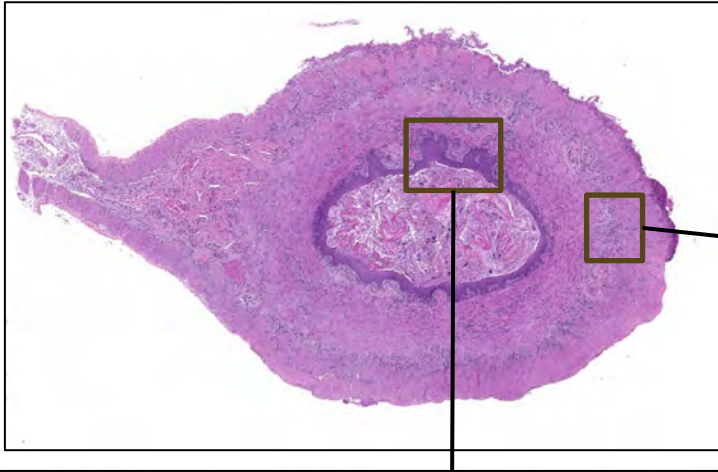
Division of Translational Toxicology Global Toxicologic Pathology Training Program

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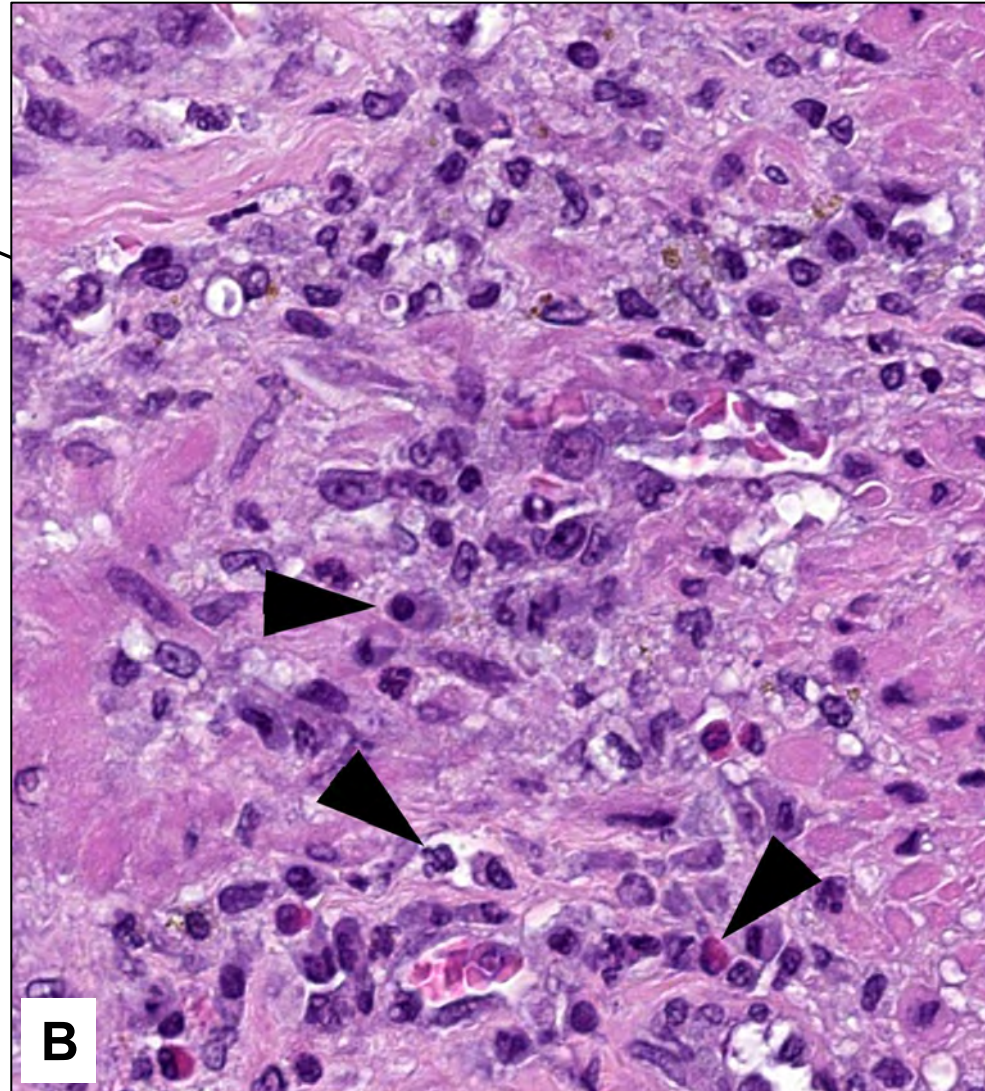
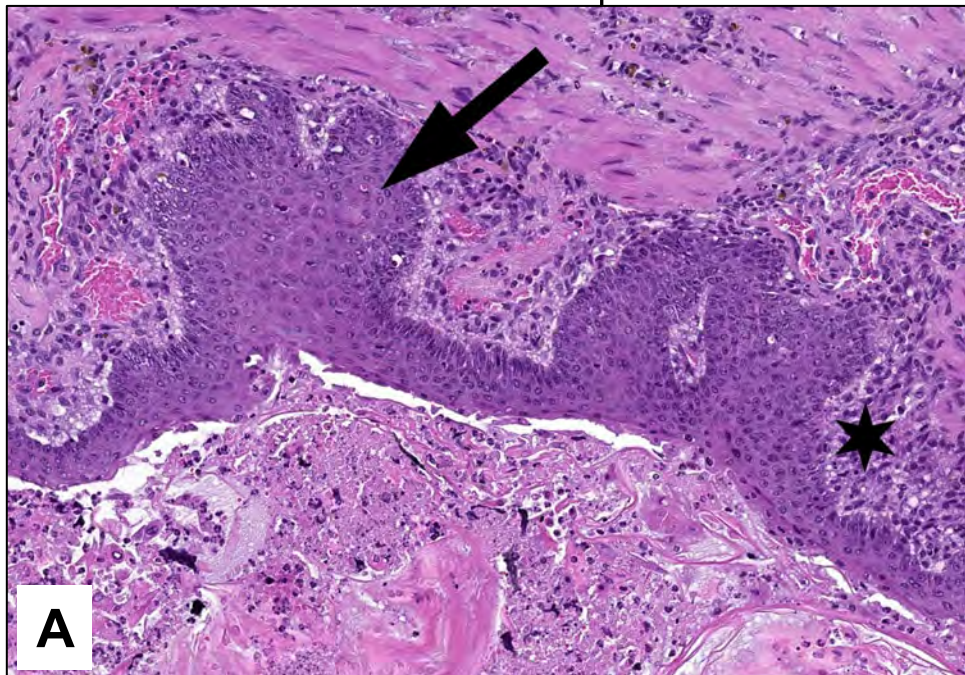
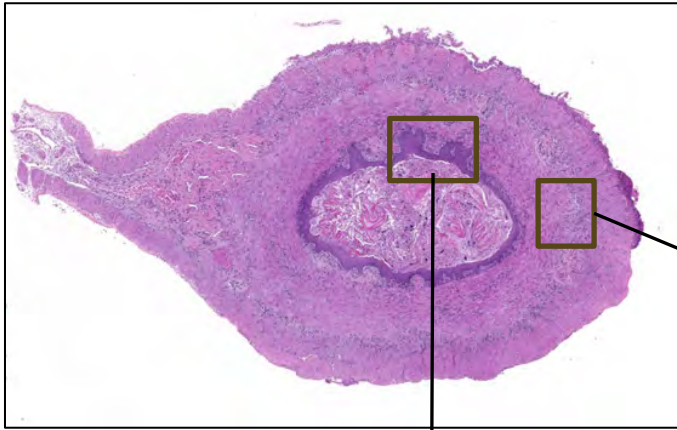
1. What are your diagnoses?



1. What are your diagnoses?



1. What are your diagnoses?



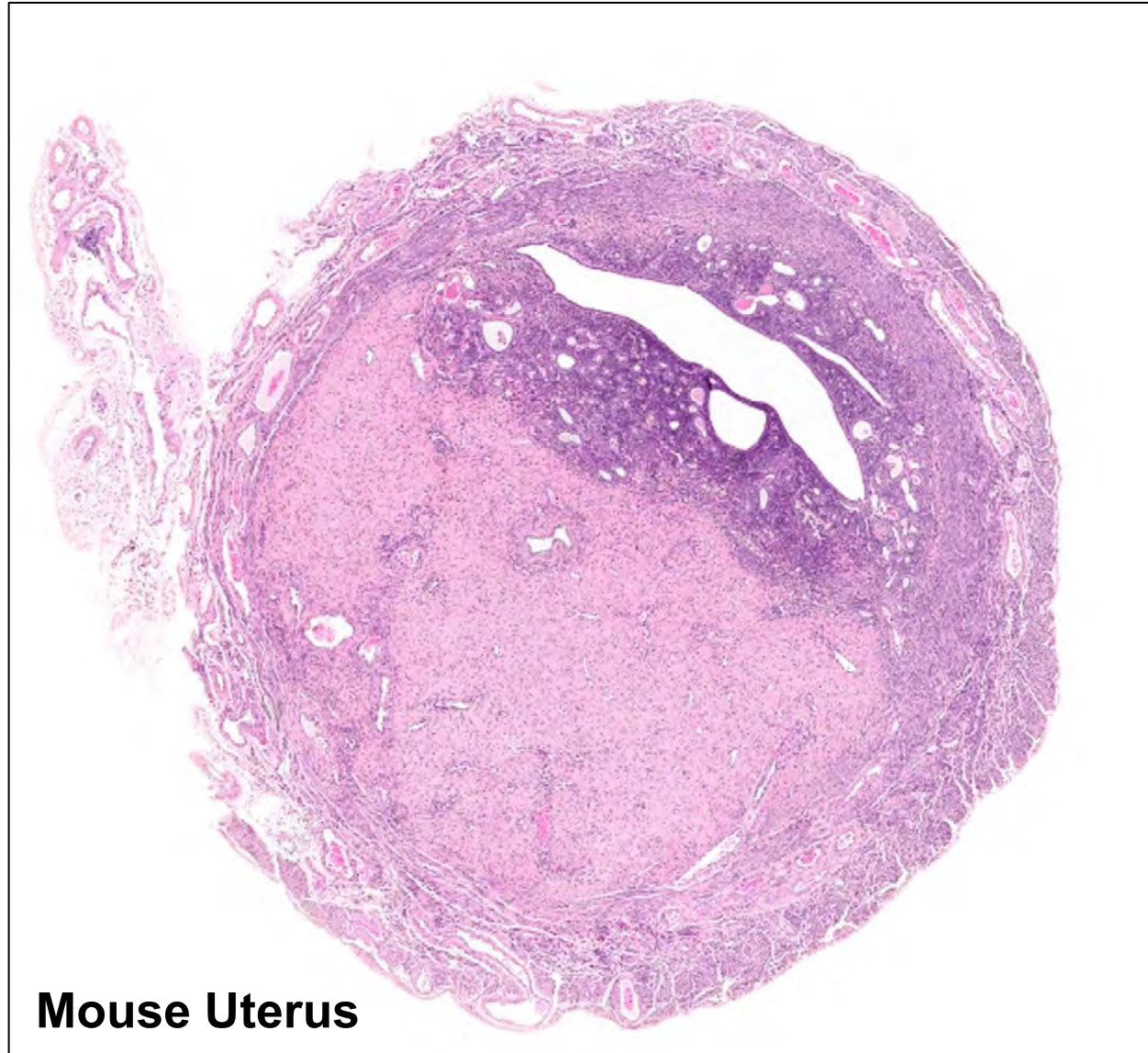
A. Metaplasia, Squamous Cell, Endometrium

The glandular epithelium is replaced by squamous epithelium (Figure A, arrow).

B. Inflammation, Mixed Cell

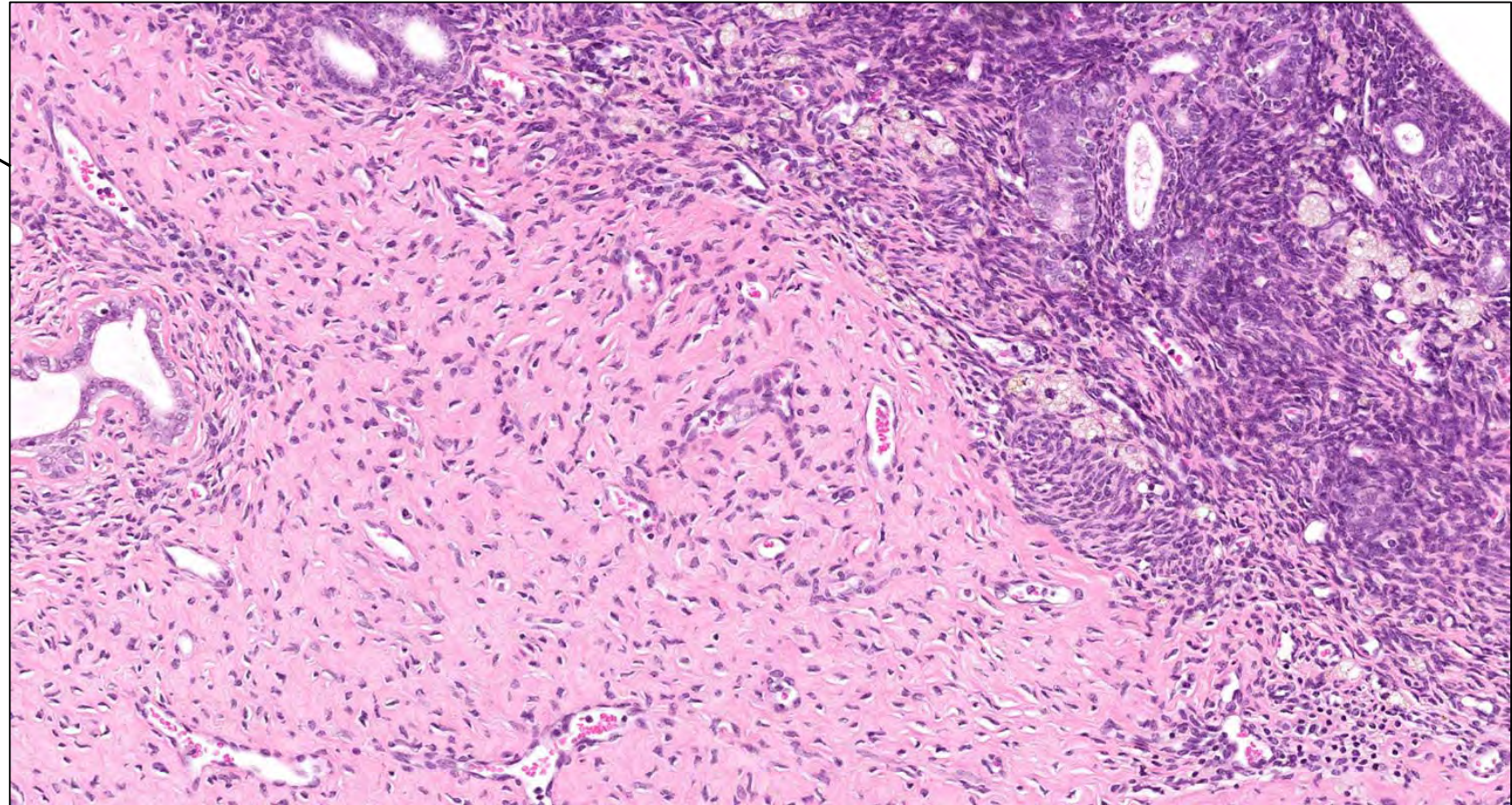
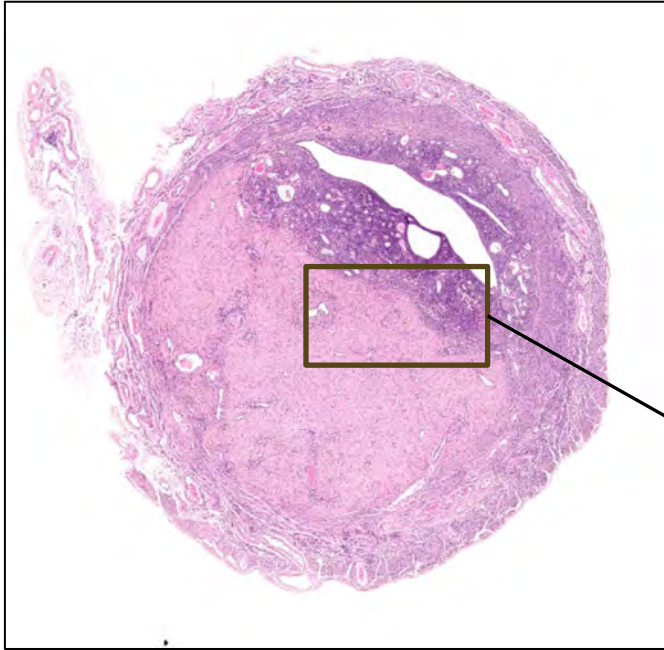
A mixed population of lymphocytes, plasma cells, macrophages and fewer neutrophils and eosinophils is present in the endometrium (Figure A, asterisk) and myometrium (Figure B, arrowheads).

2. What is your diagnosis?

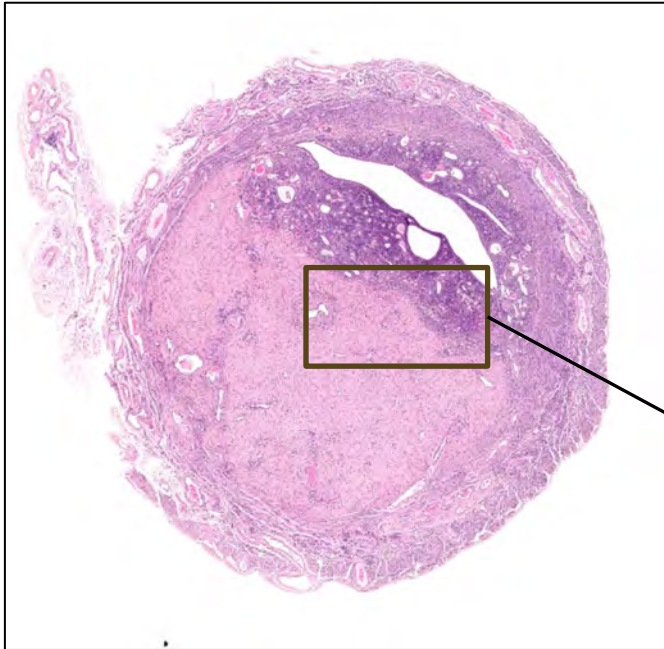


Mouse Uterus

2. What is your diagnosis?

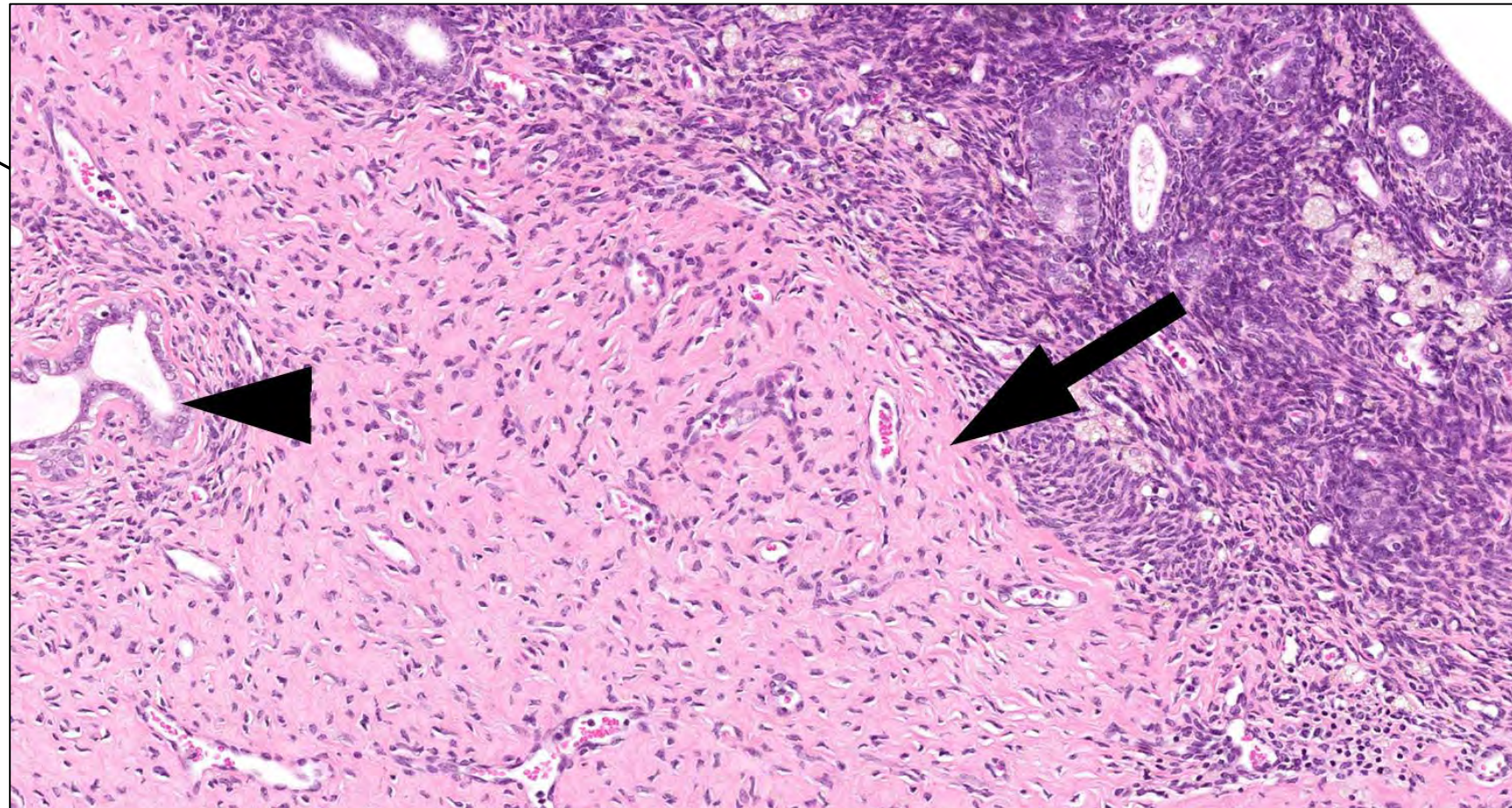


2. What is your diagnosis?

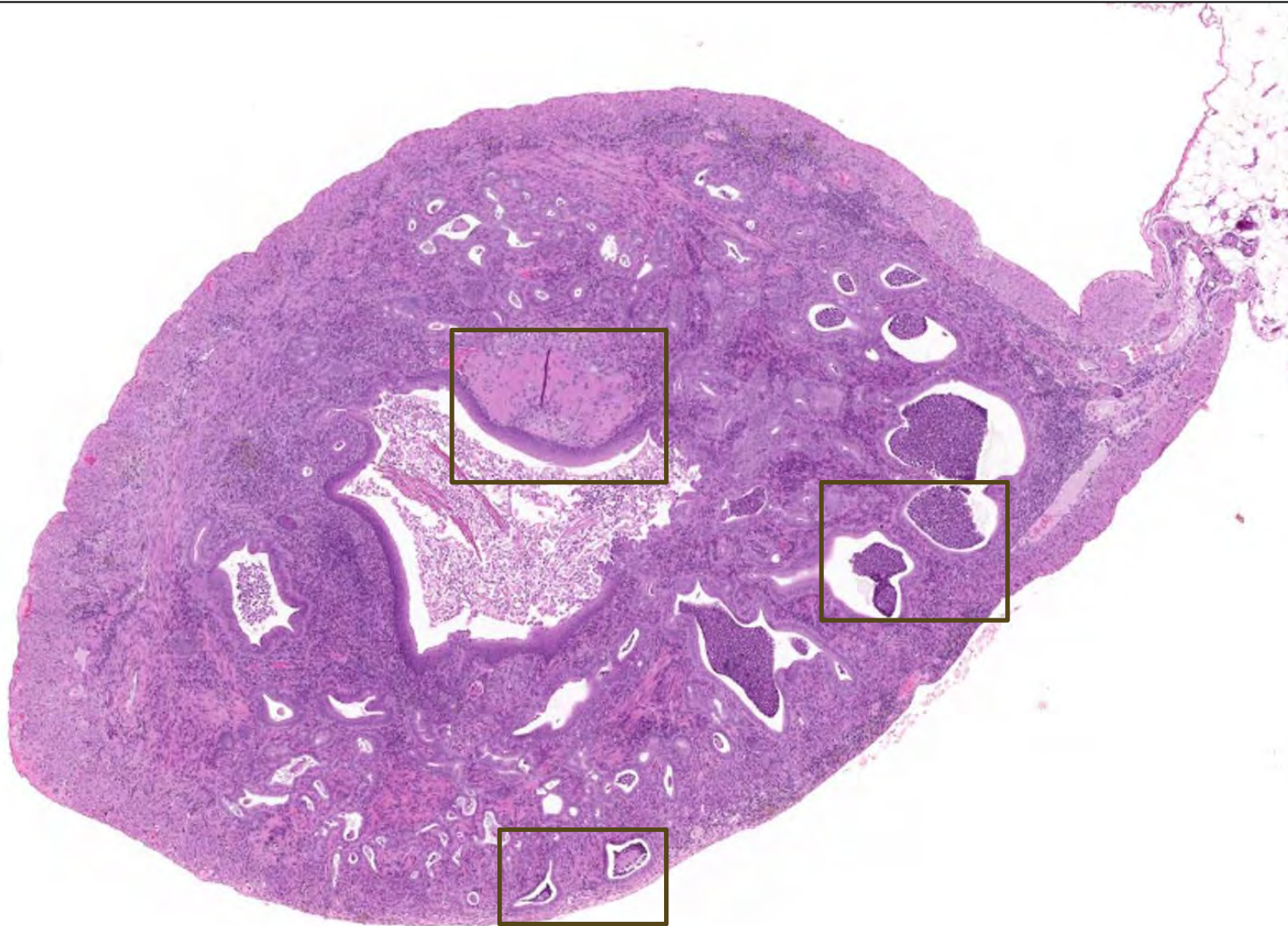


Uterus – Fibrosis, Stromal

Collagen fibers (arrow) with
interspersed fibrocytes.
Entrapped endometrial gland
(arrowhead).



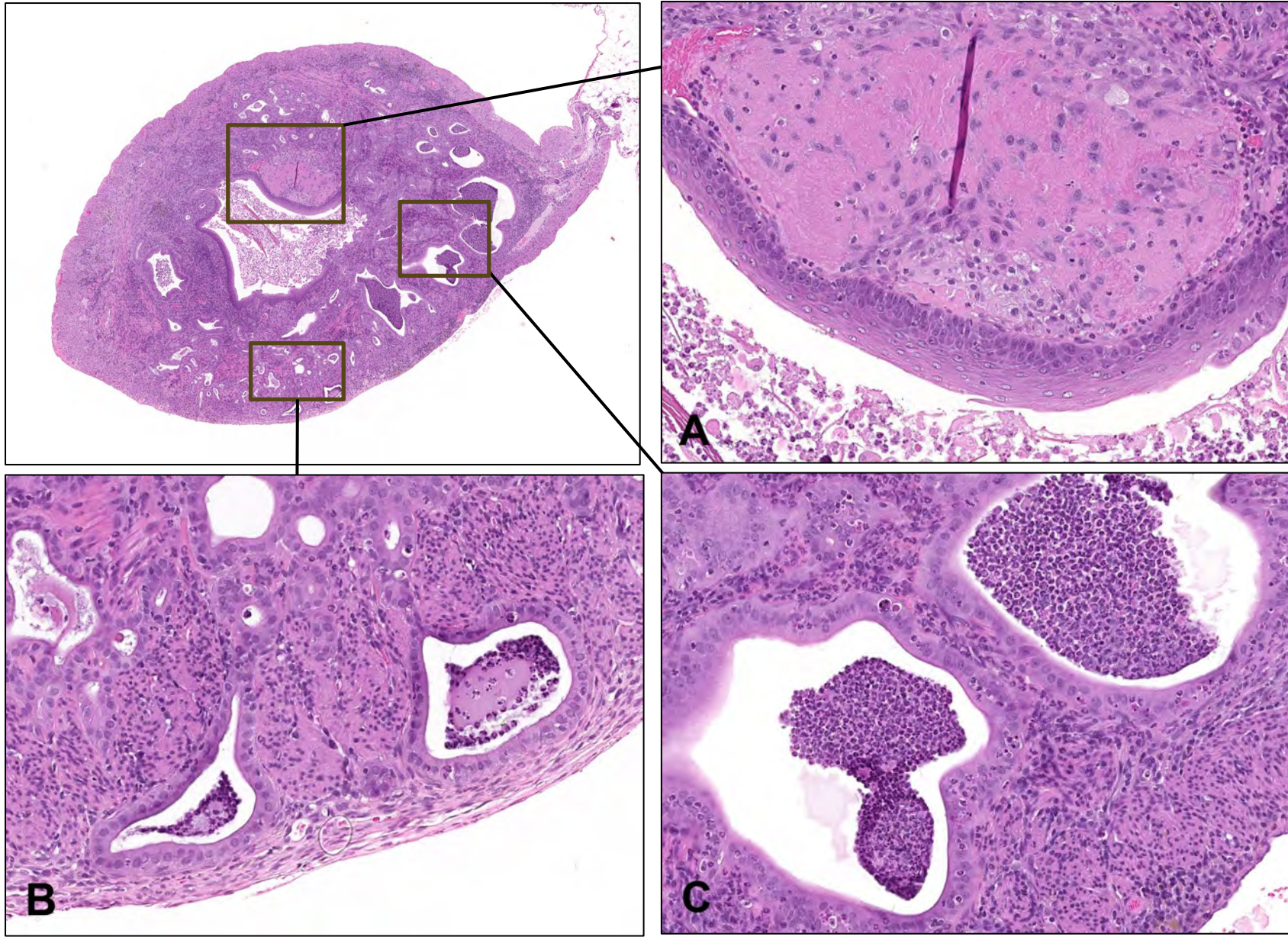
3. What are your diagnoses?



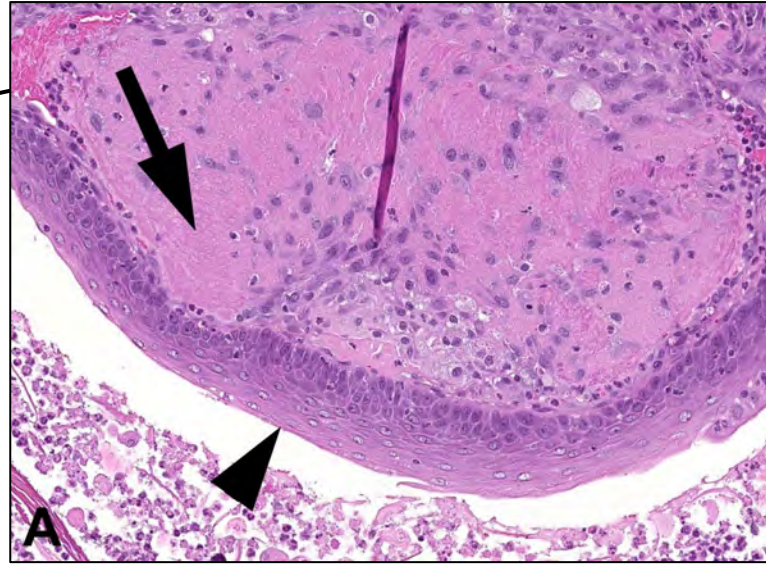
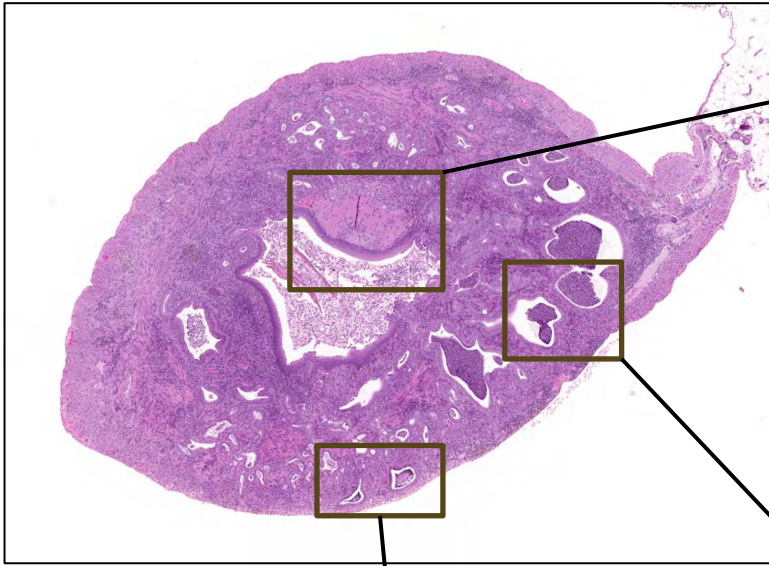
Three regions shown at higher magnification on following slide.

Rat Uterus

3. What are your diagnoses?

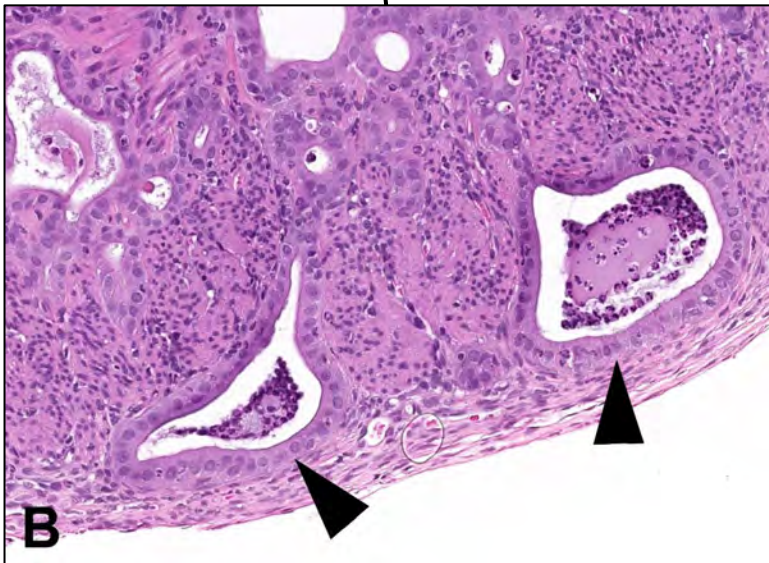


3. What are your diagnoses?

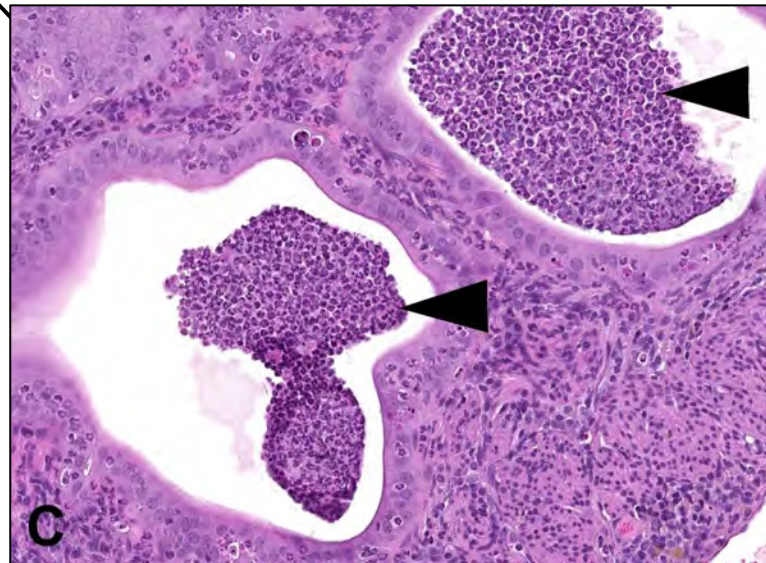


A. Metaplasia, Squamous Cell
The luminal epithelium is replaced by stratified squamous epithelium (arrowhead).

Fibrosis, Stromal
The underlying stroma is expanded by amorphous to fibrillar eosinophilic material (arrow).



B. Adenomyosis
Two endometrial glands are present within the myometrium (arrowheads).

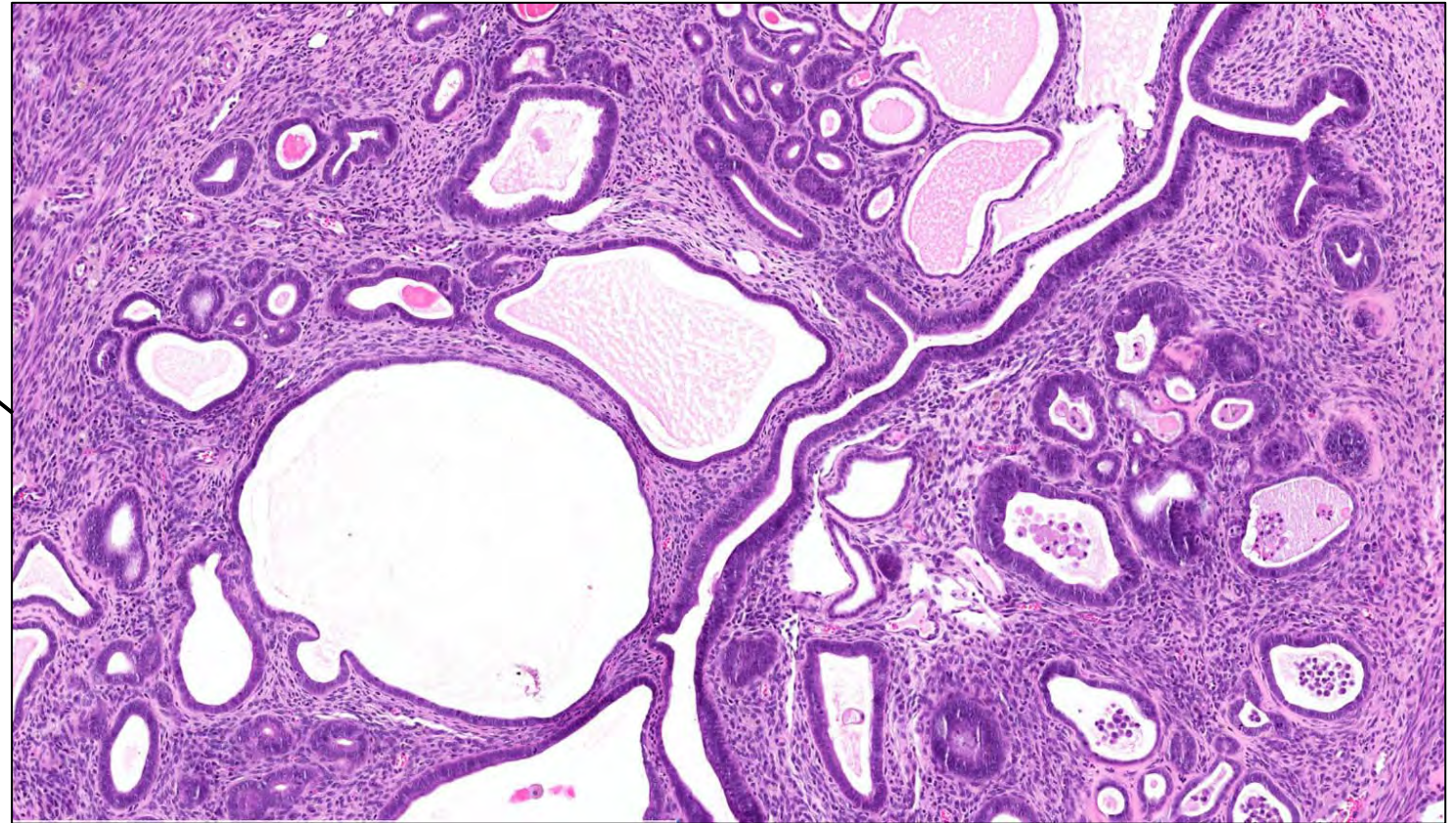
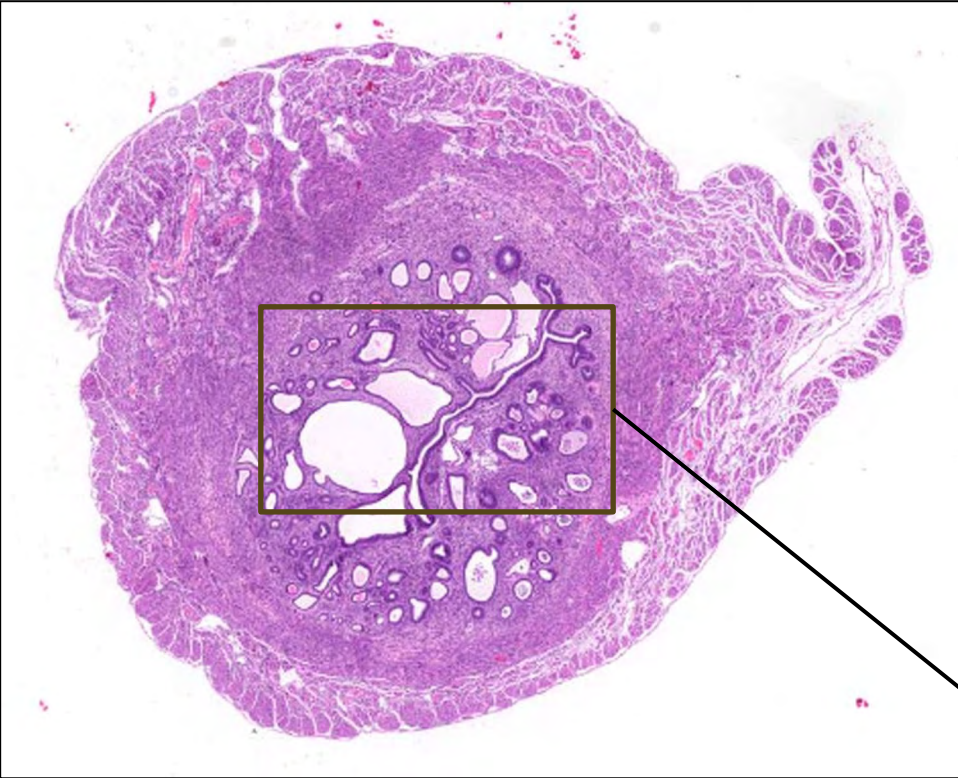


C. Inflammation, Neutrophilic, Endometrium
Most of the glands are filled with abundant neutrophils (arrowheads).

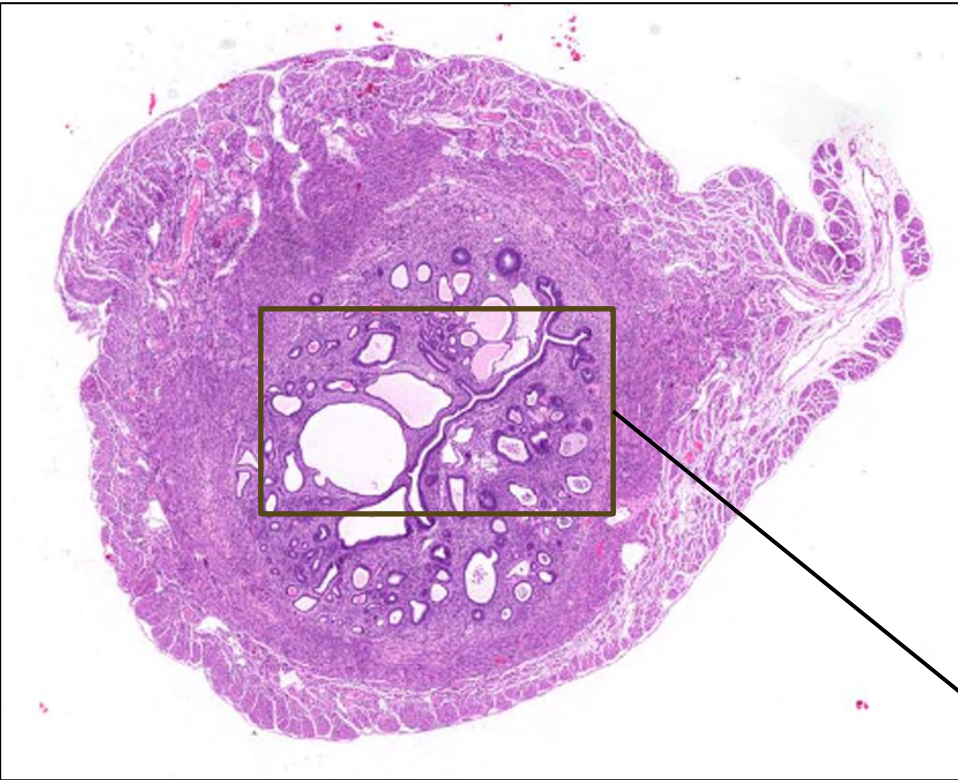
4. What is your diagnosis?



4. What is your diagnosis?

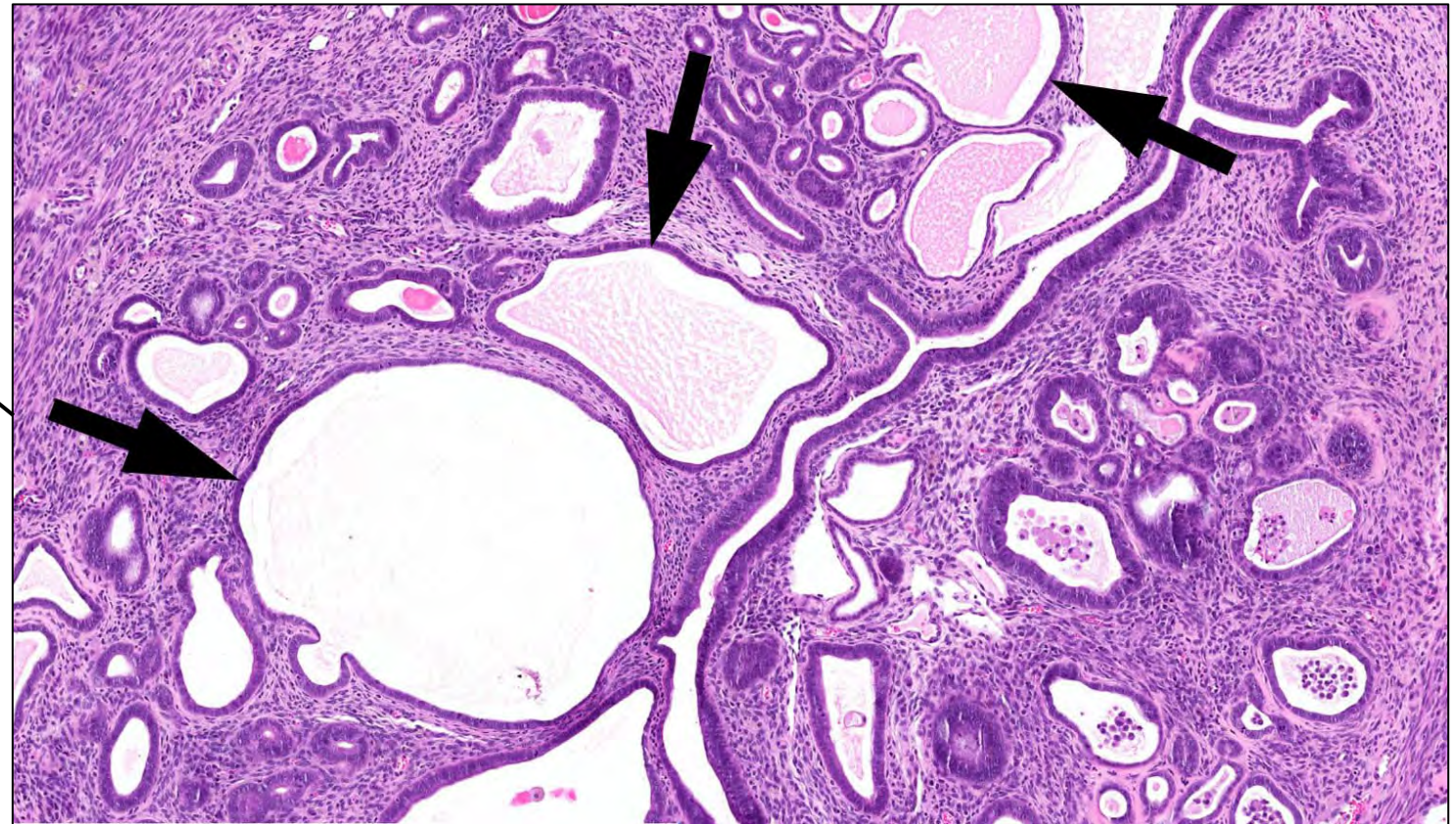


4. What is your diagnosis?

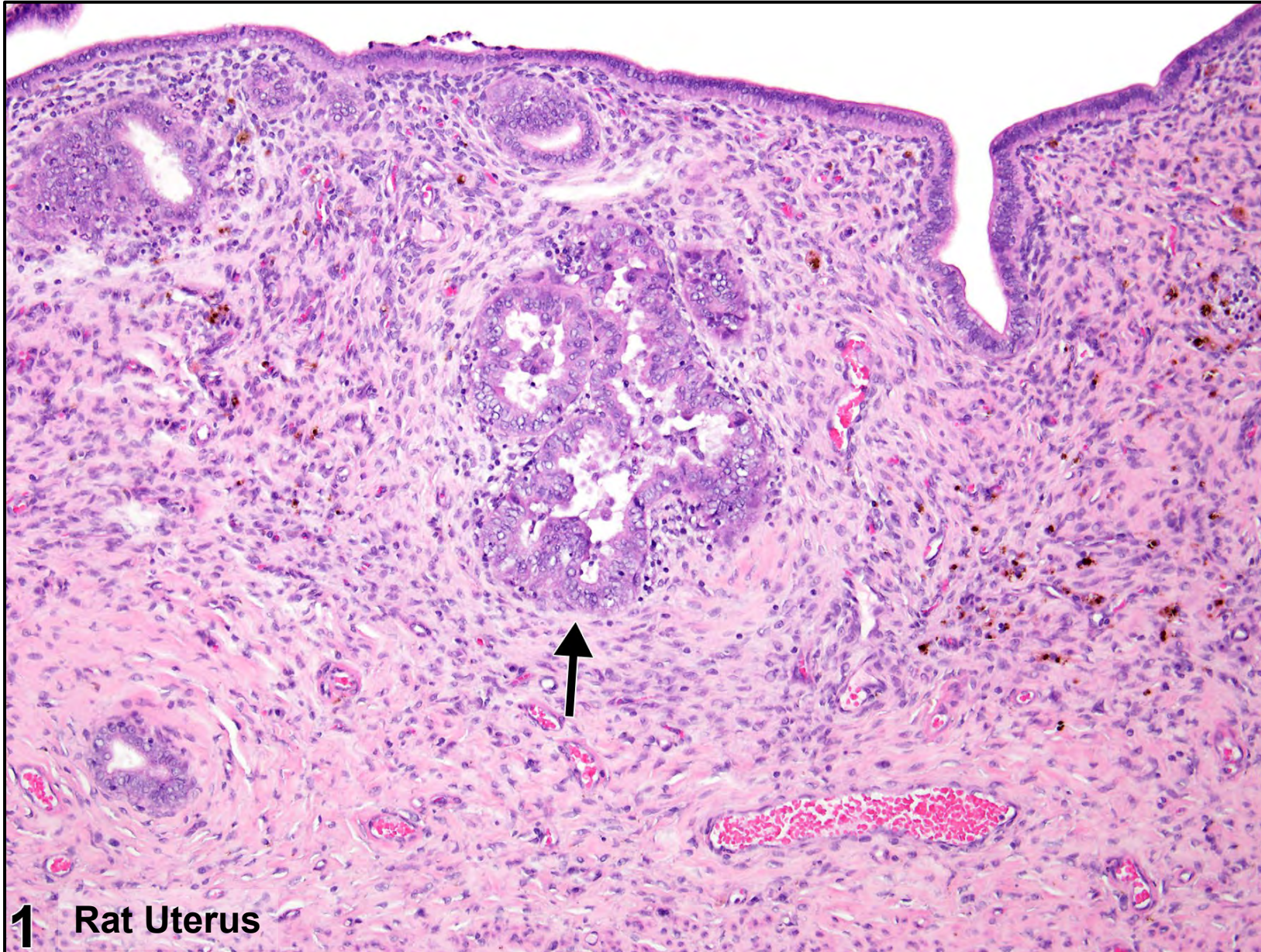


Uterus, Endometrium – Hyperplasia, Glandular, Cystic, mouse.

Many endometrial glands are dilated (arrows) and contain proteinaceous material or inflammatory cells.

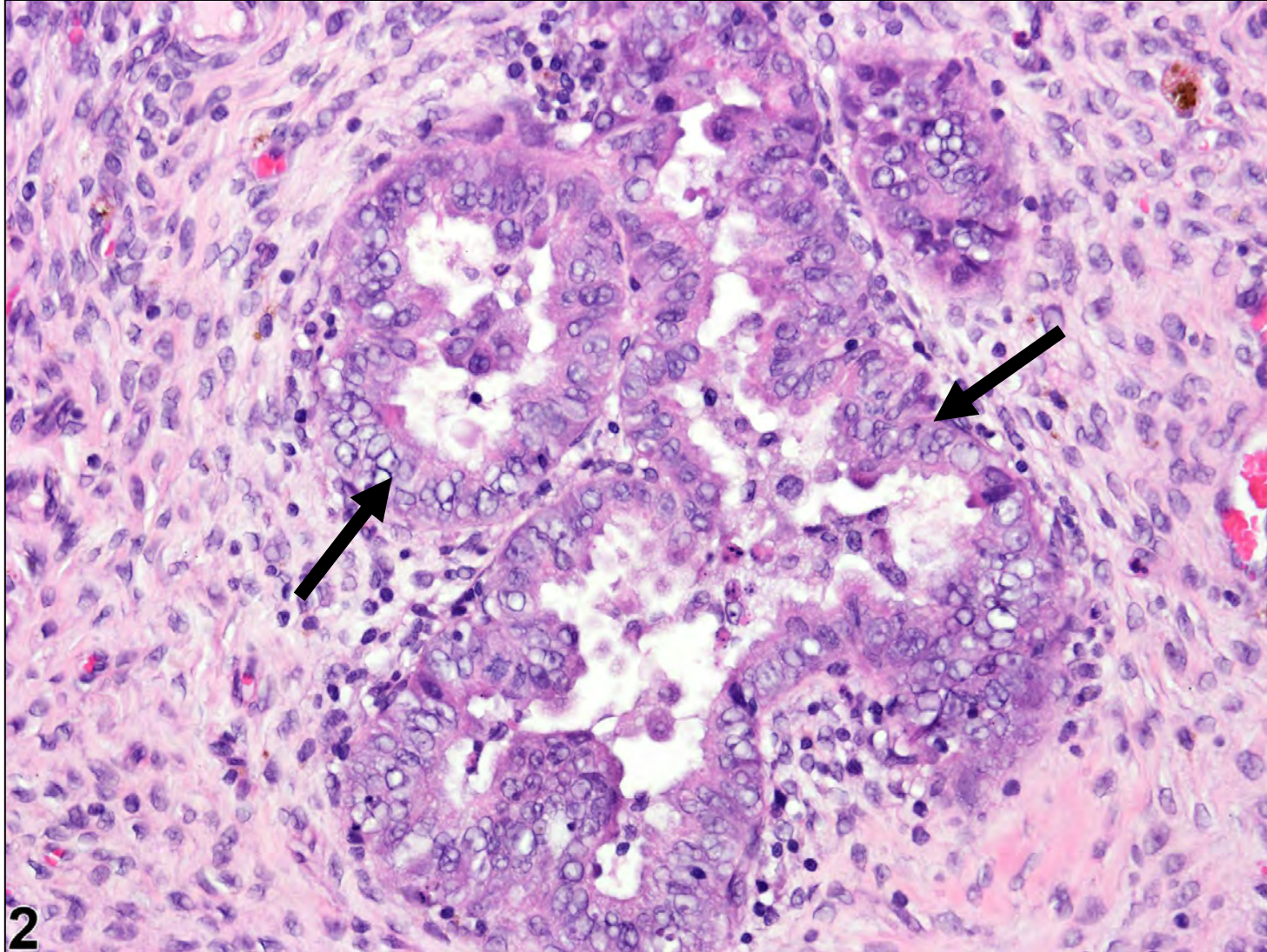


5. What is your diagnosis?



1 Rat Uterus

5. What is your diagnosis?

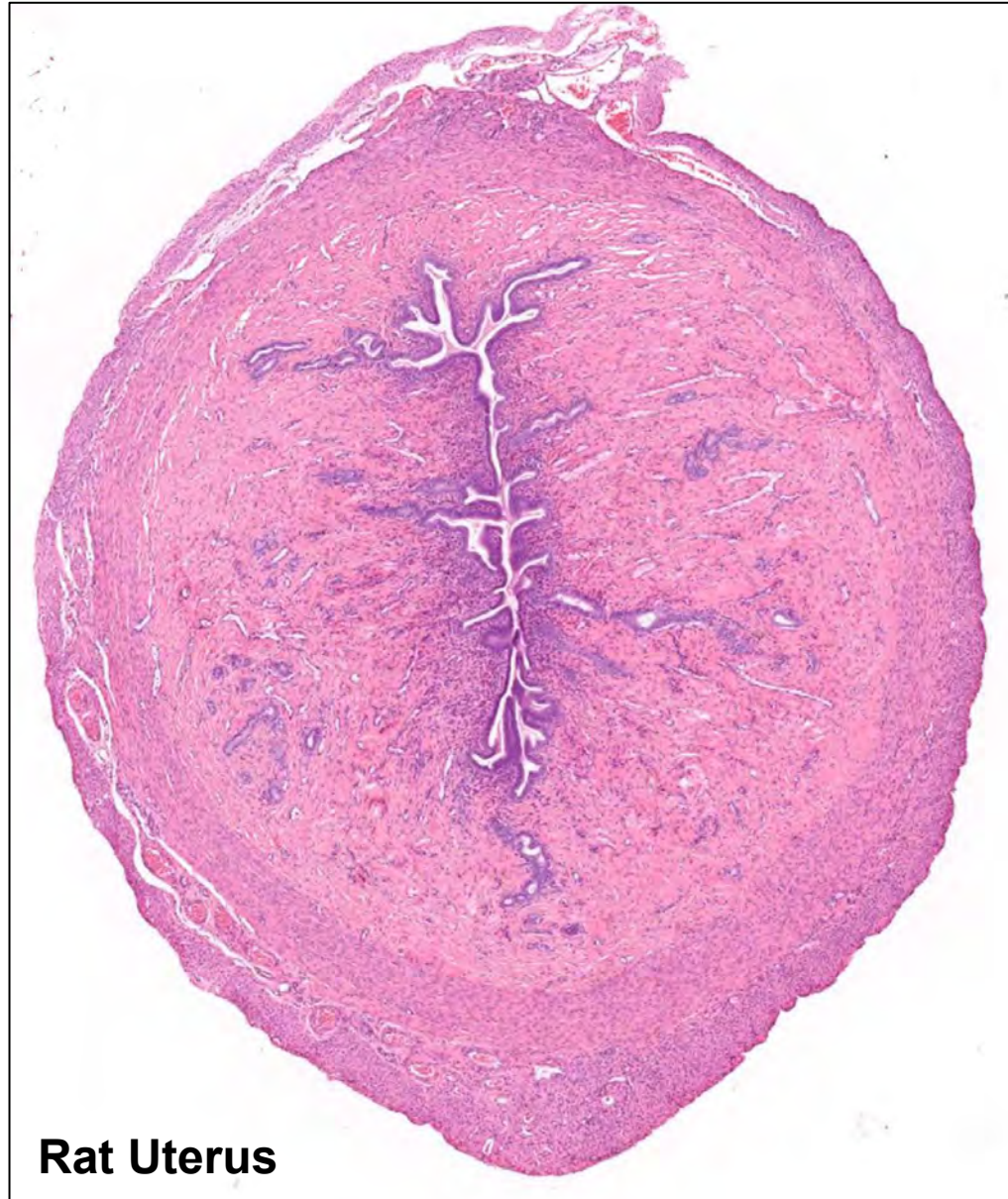


Uterus – Hyperplasia, Glandular, Focal, Atypical, rat.

A focal area of glands (arrows) is crowded (“back-to-back”) and lined by multiple layers of cells which demonstrate mild nuclear pleiomorphism.

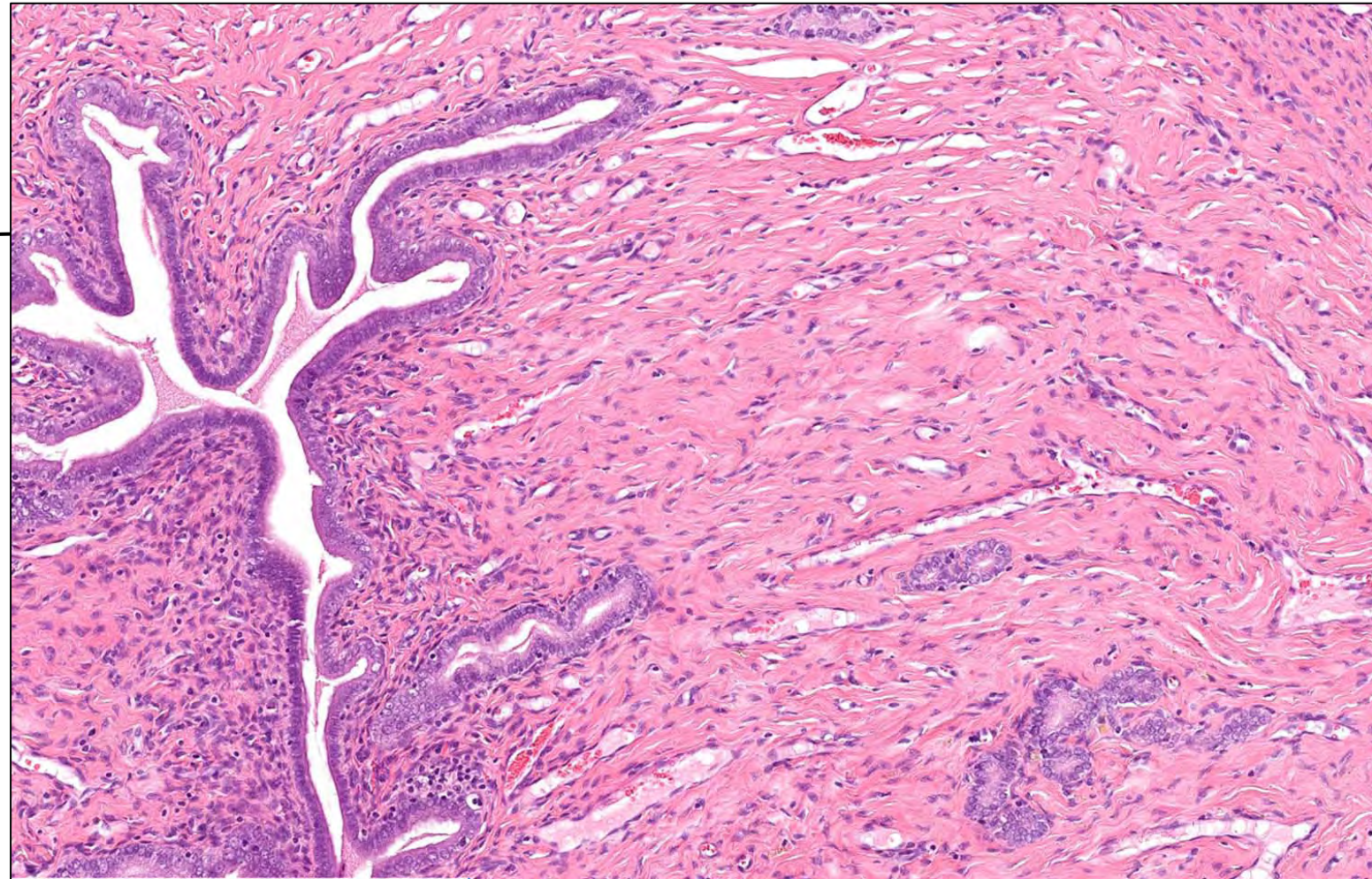
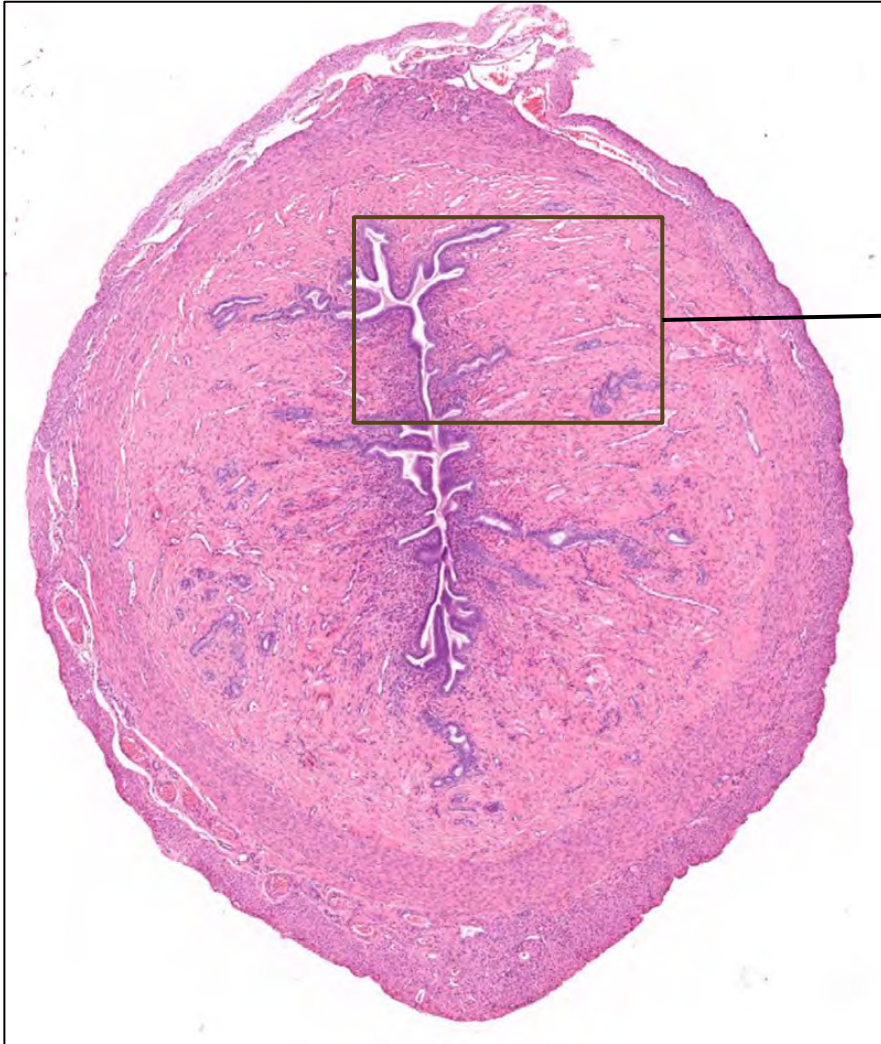
DTT nomenclature is **Uterus, Glands – Hyperplasia, Atypical.**

6. What is your diagnosis?

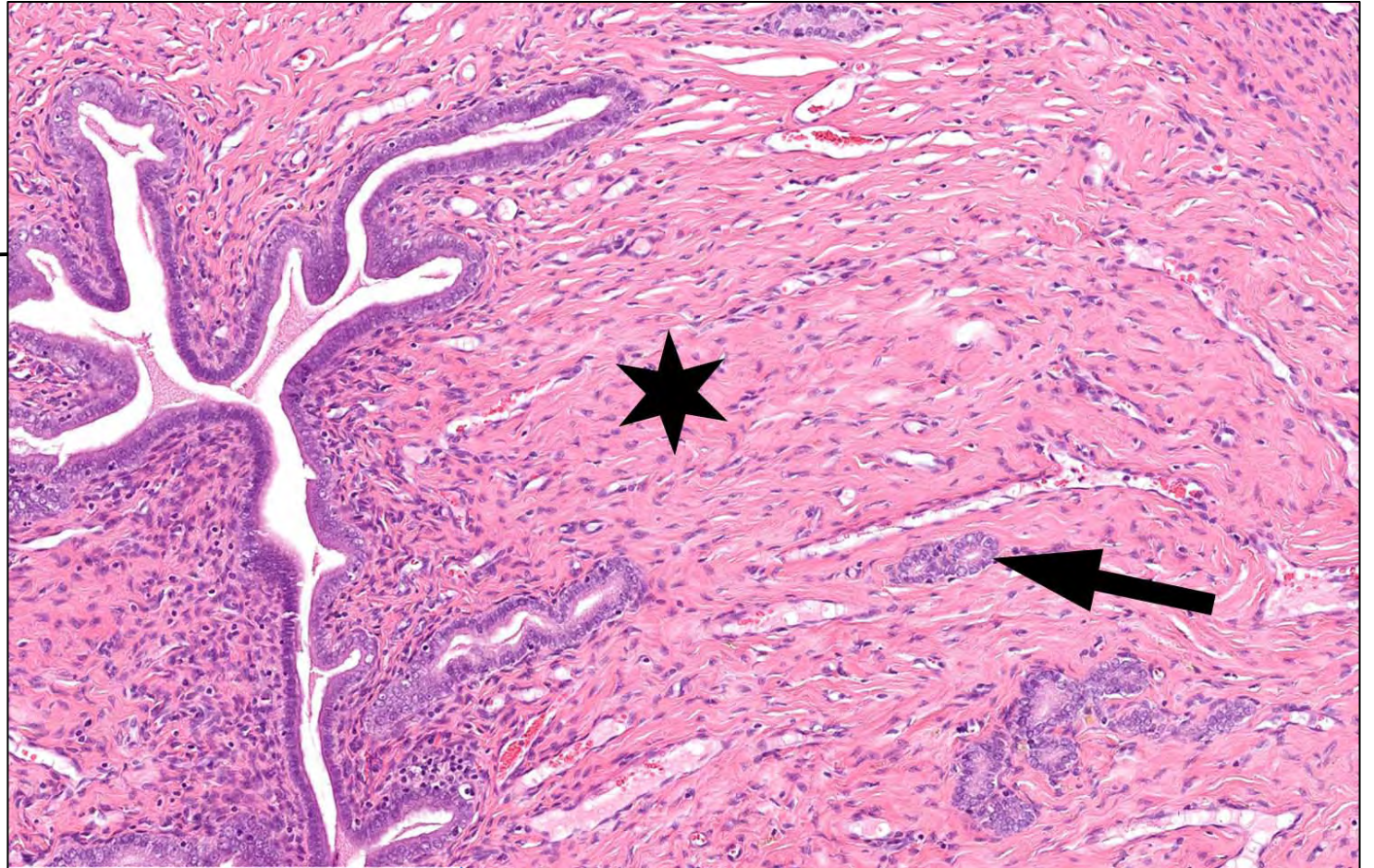
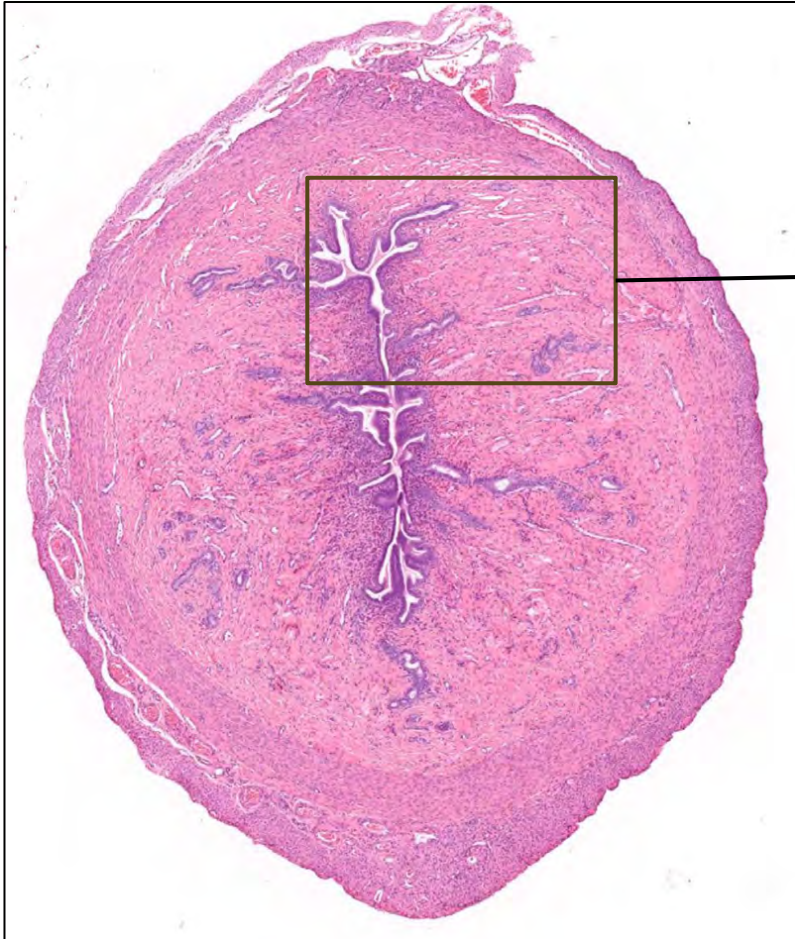


Rat Uterus

6. What is your diagnosis?



6. What is your diagnosis?



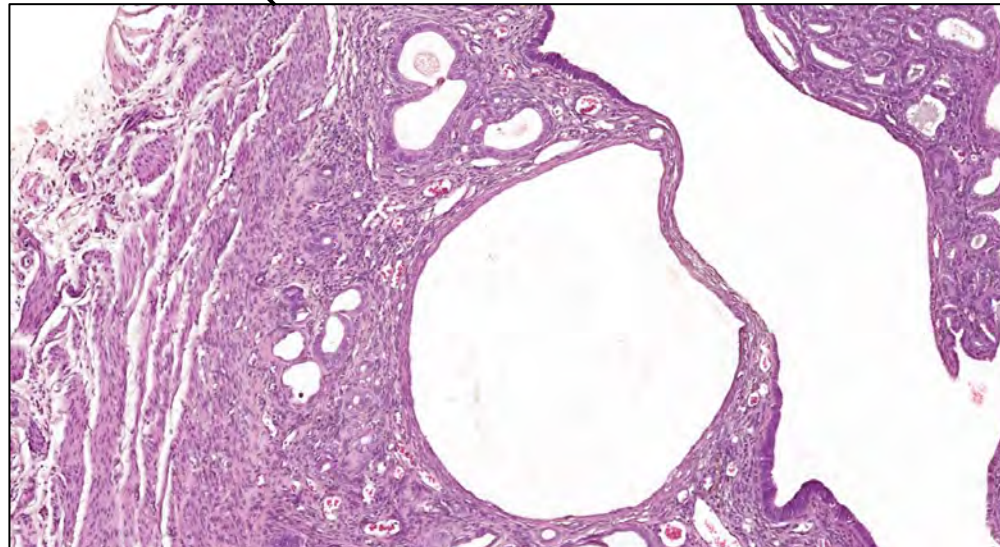
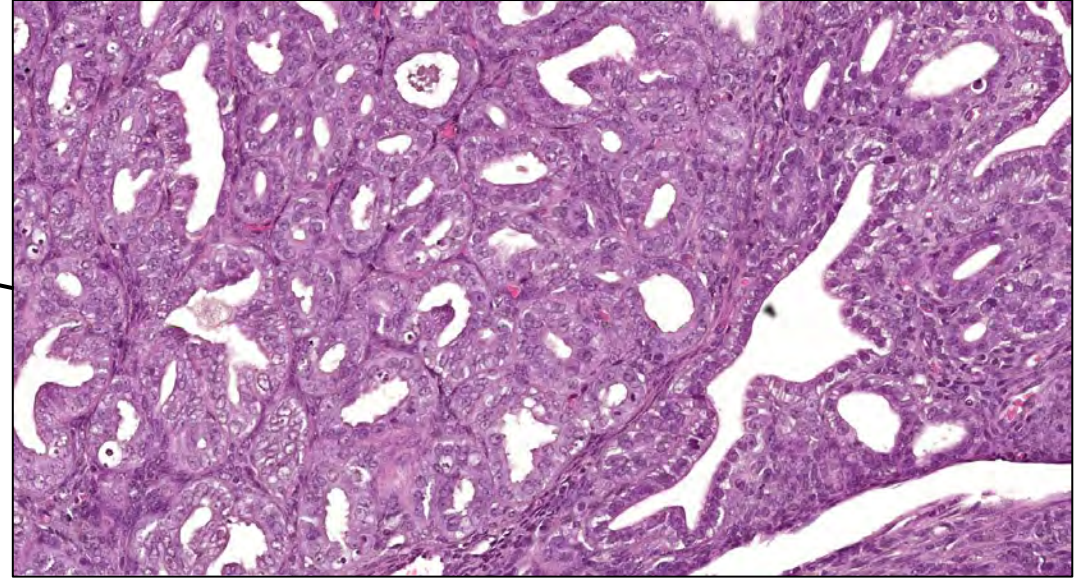
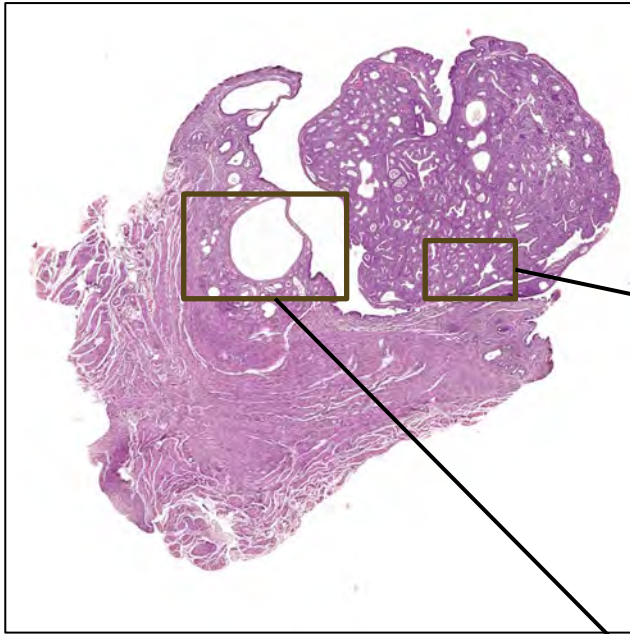
Uterus – Fibrosis, Stromal, rat.

Variable amounts of intercellular collagen (asterisk) is present in the endometrium. Endometrial glands are sparse (arrow) and/or absent.

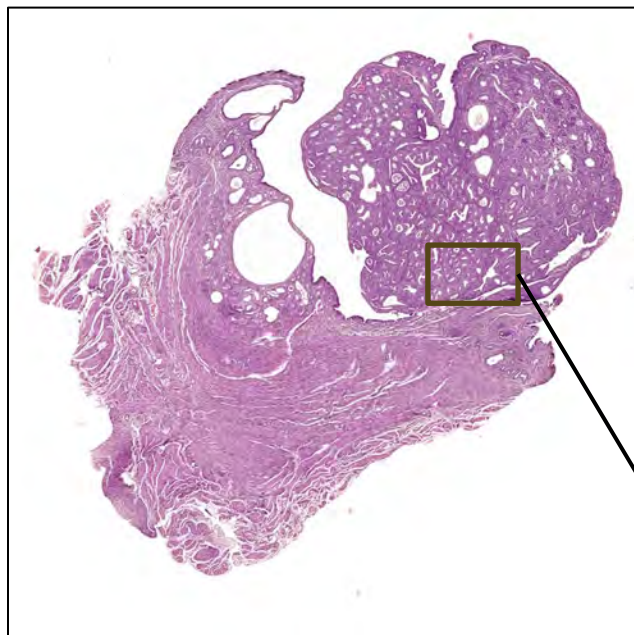
7. What are your diagnoses?



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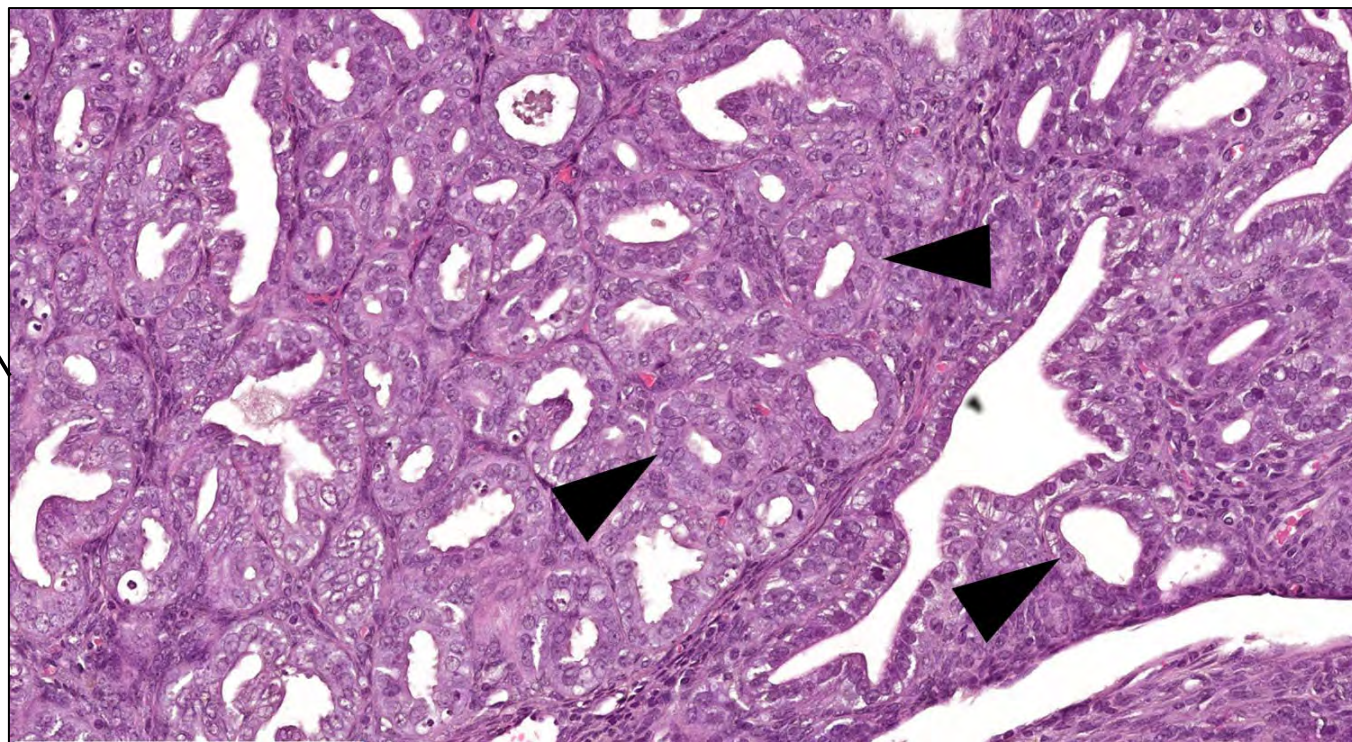


7. What are your diagnoses?

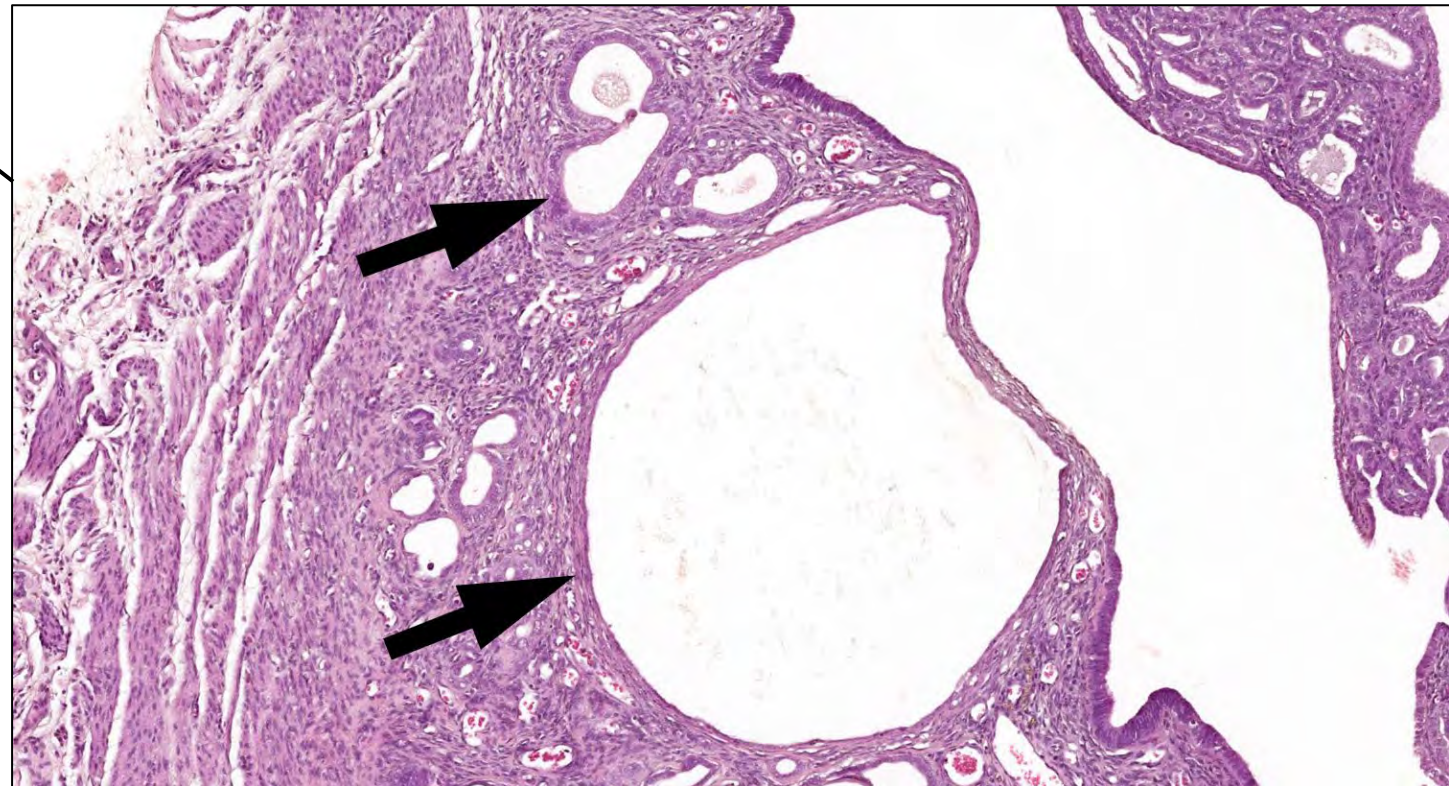
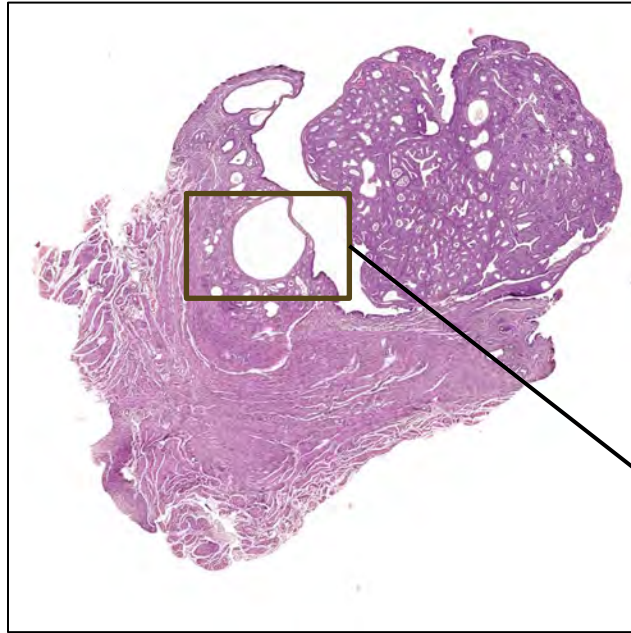


Uterus, Endometrium – Adenoma, mouse.

The mass arising in the endometrium is composed of densely arranged glands lined by single-layered epithelium with uniform nuclei and cell morphology (arrowheads) and has a well-demarcated lower border. There is no invasion of the myometrium.



7. What are your diagnoses?



**Uterus, Endometrium – Hyperplasia,
Glandular, Cystic, mouse.**

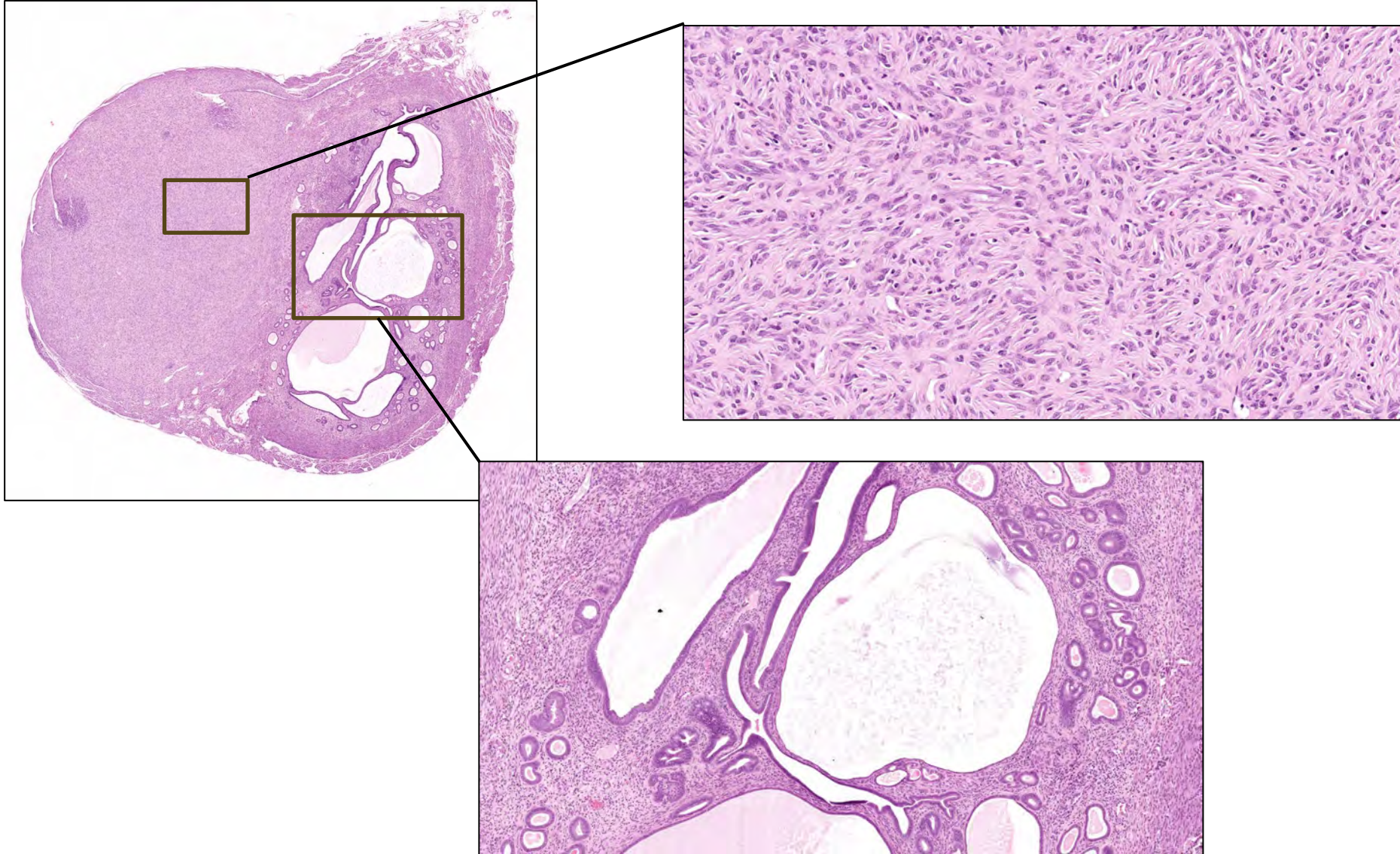
Glandular profiles are abundant (increased), and many are dilated (arrows) or even cystic and lined by attenuated epithelium.

8. What are your diagnoses?

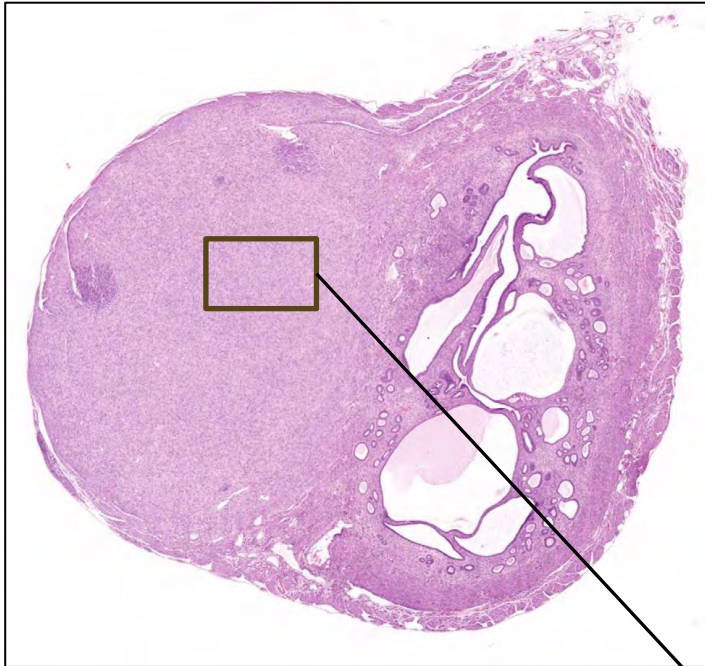


Mouse Uterus

8. What are your diagnoses?

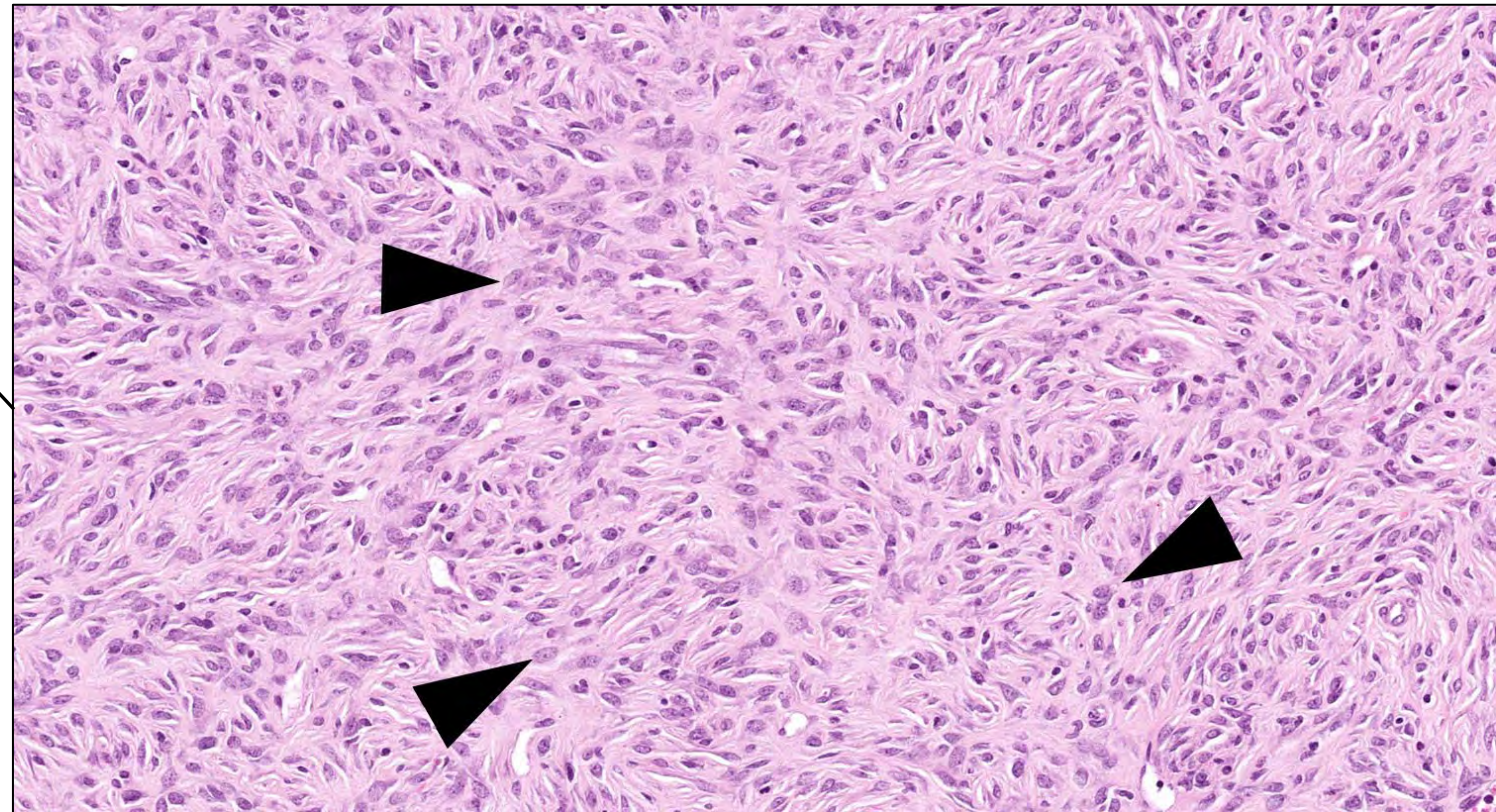


8. What are your diagnoses?

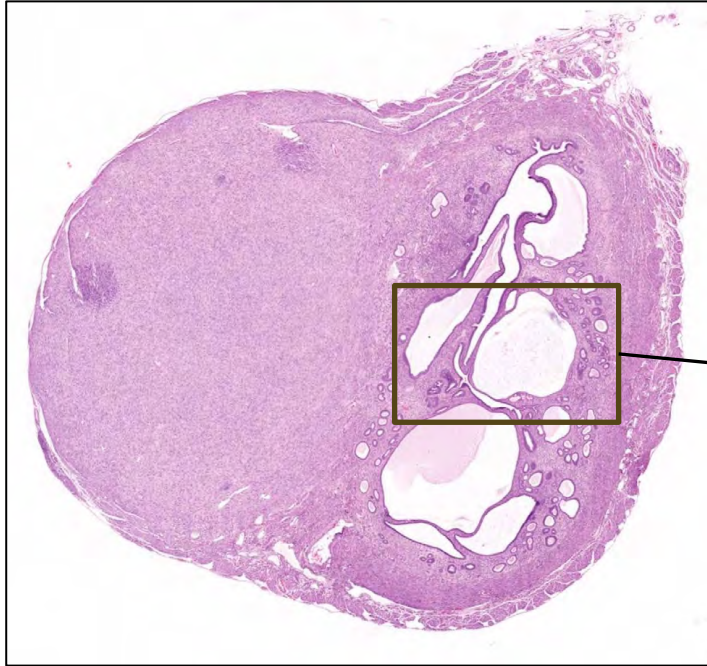


Uterus – Leiomyoma, mouse.

The expansile neoplasm (left side of uterus) consists of slightly disorganized bundles of mesenchymal cells with tapered cell borders, eosinophilic cytoplasm and elongate nuclei (arrowheads).

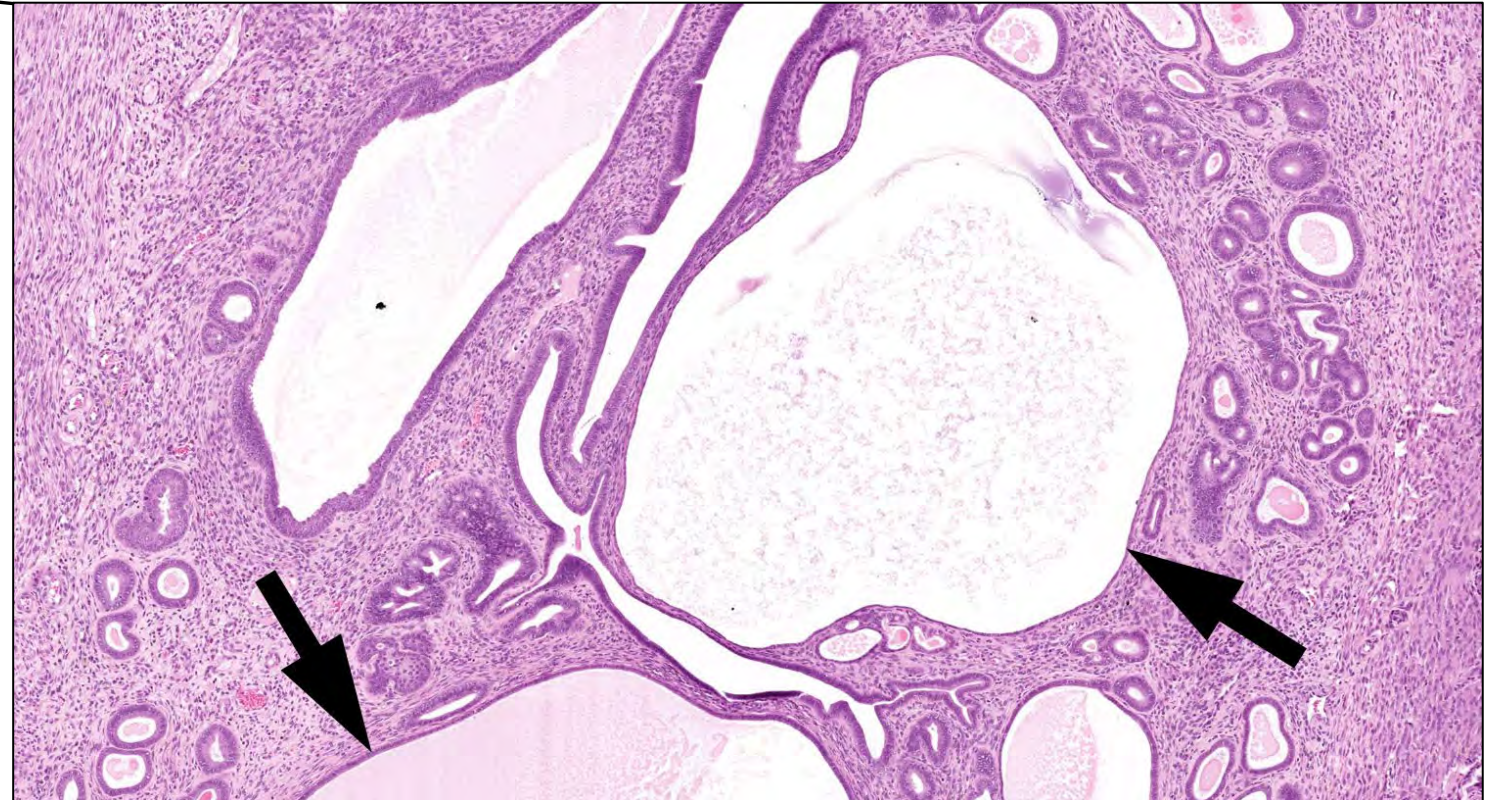


8. What are your diagnoses?



Uterus - Hyperplasia, Glandular, Cystic, mouse.

Similar to the uterus with the endometrial adenoma, there are abundant-dilated or cystic glands (arrows). This is one of the most common age-related changes in the rodent uterus.





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Authors

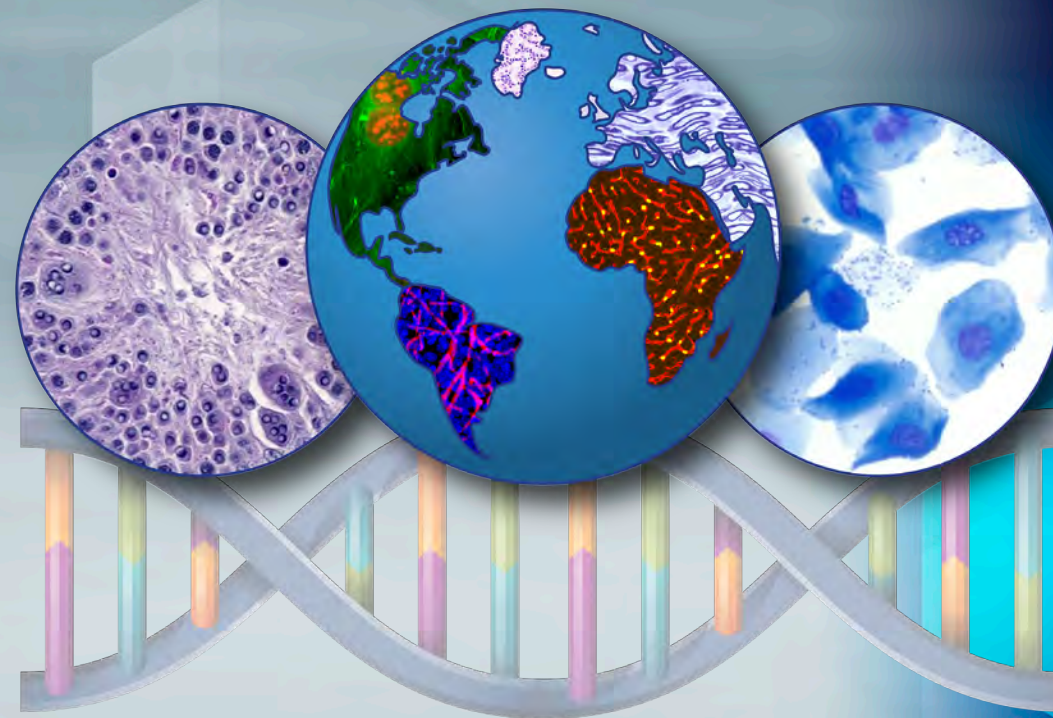
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