

A microscopic image of testis tissue, showing numerous seminiferous tubules. The tubules are arranged in a regular, honeycomb-like pattern. Each tubule is filled with developing sperm cells, which appear as small, dark, round structures. The tubules are separated by a thin layer of connective tissue. The overall color of the tissue is a light pinkish-purple, typical of H&E staining.

ANATCELL 3309: Lab 22

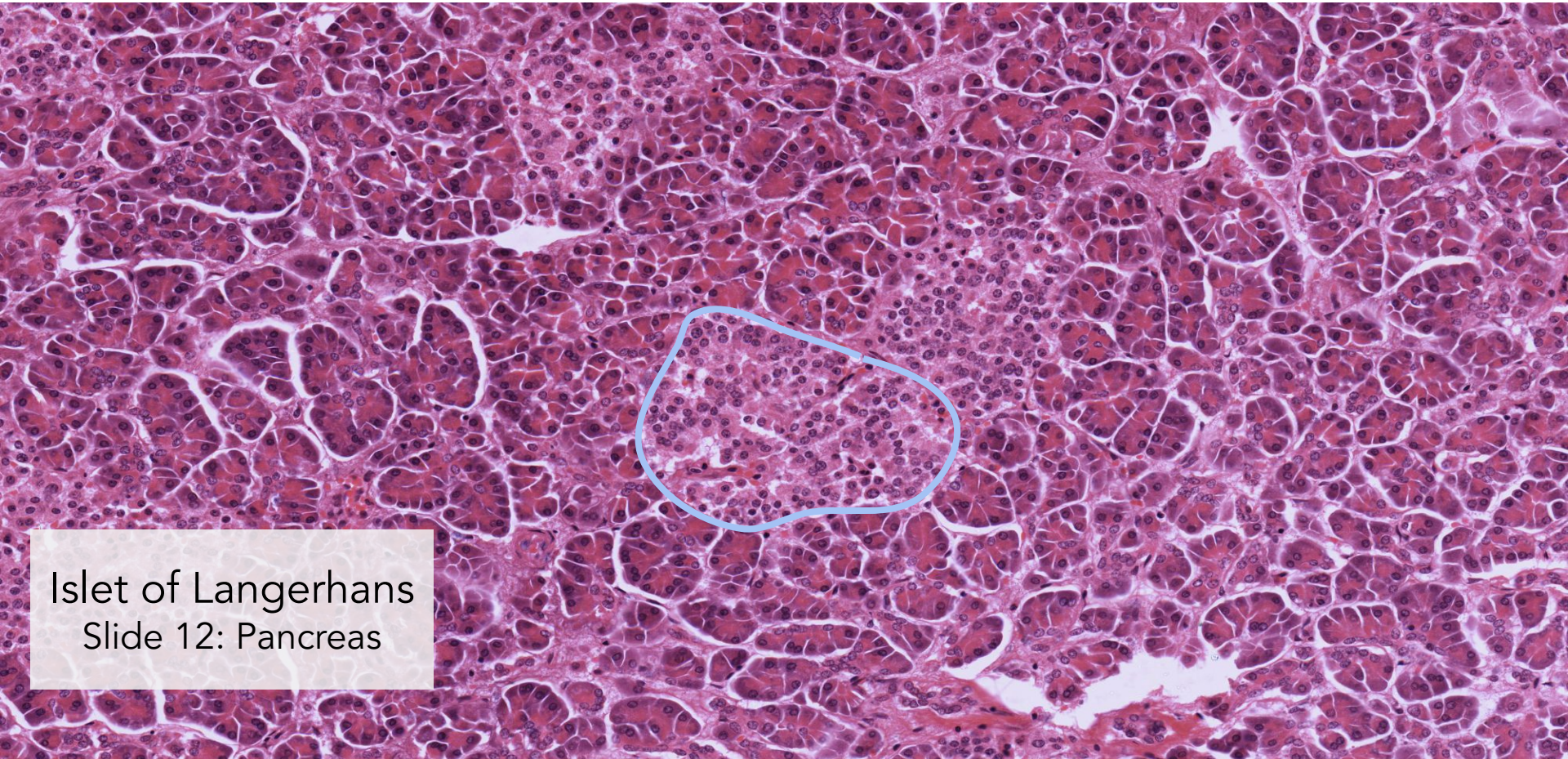
Male Reproductive System

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March 18th 2019



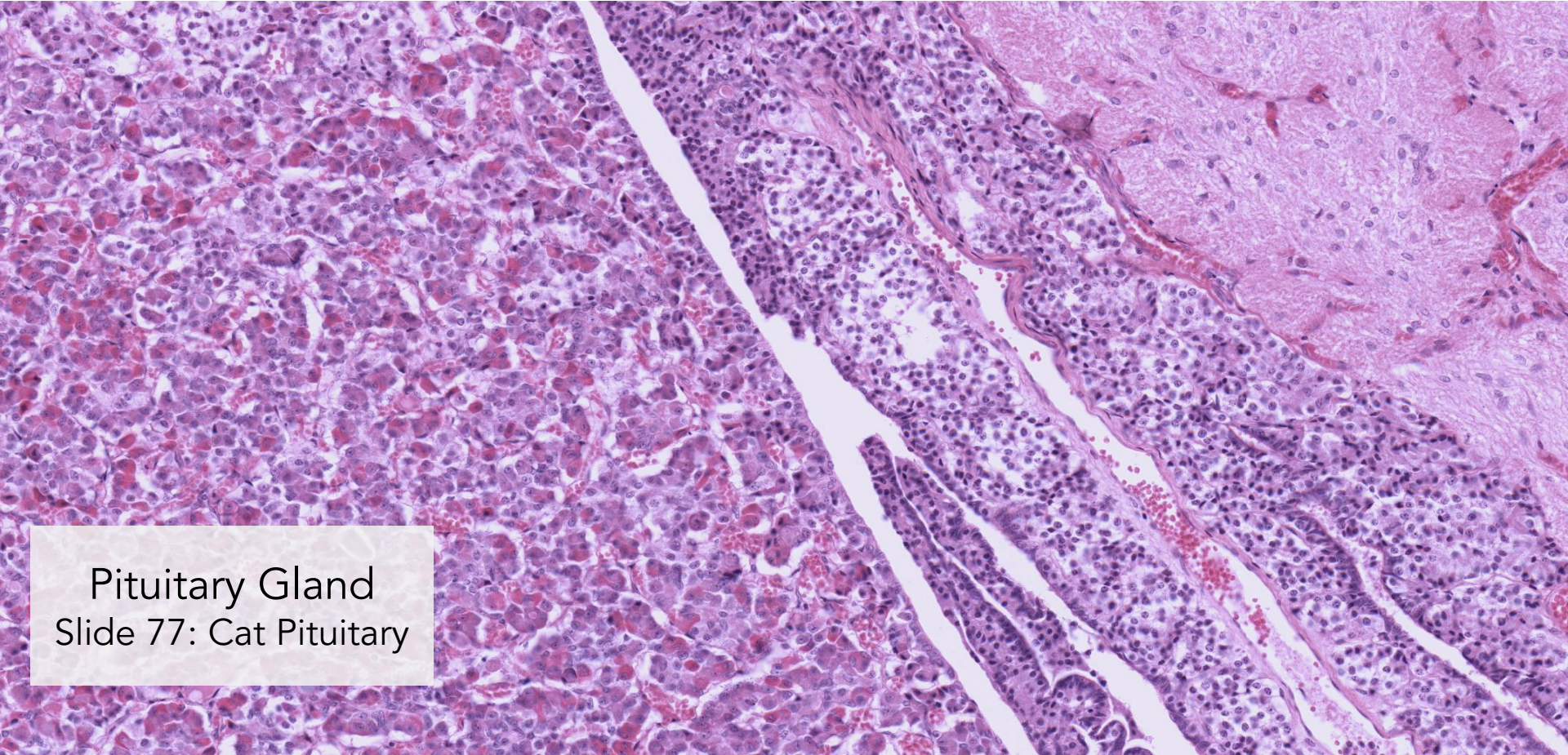
Identify the circled structure



Islet of Langerhans
Slide 12: Pancreas



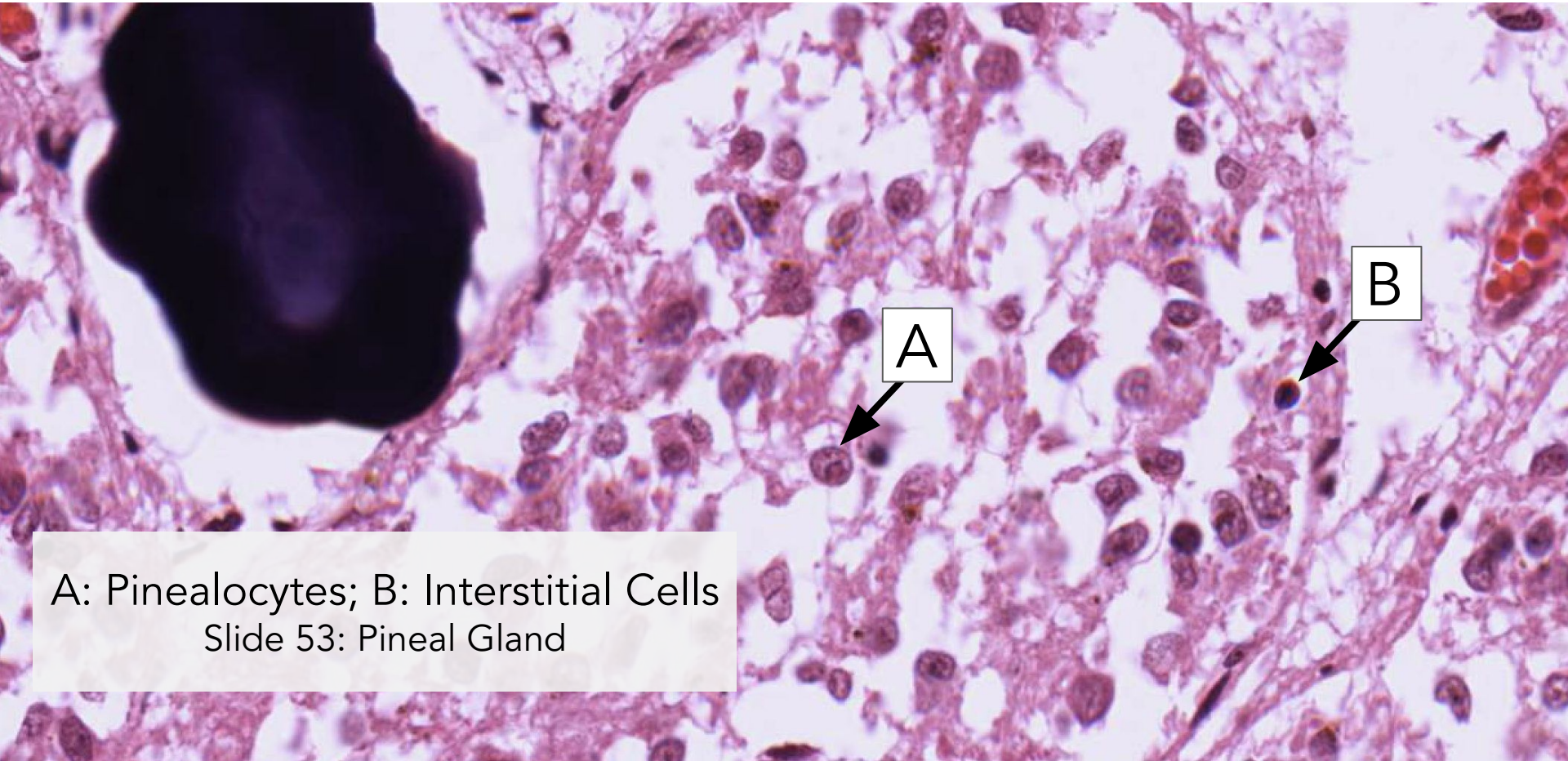
Identify the tissue



Pituitary Gland
Slide 77: Cat Pituitary



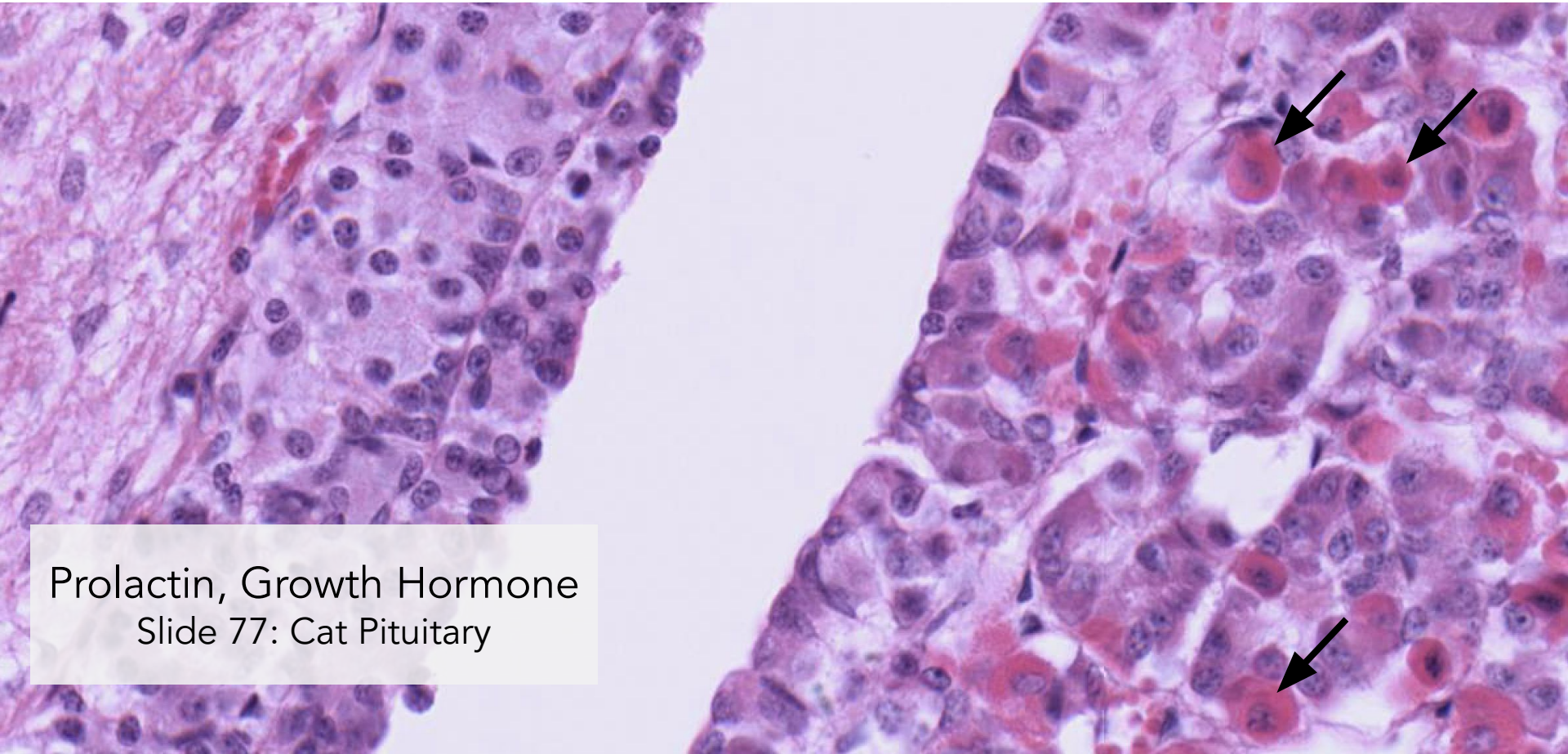
Identify the cell types indicated "A" and "B"



A: Pinealocytes; B: Interstitial Cells
Slide 53: Pineal Gland



Identify one product of the indicated cells



Prolactin, Growth Hormone
Slide 77: Cat Pituitary

Objectives

Testes

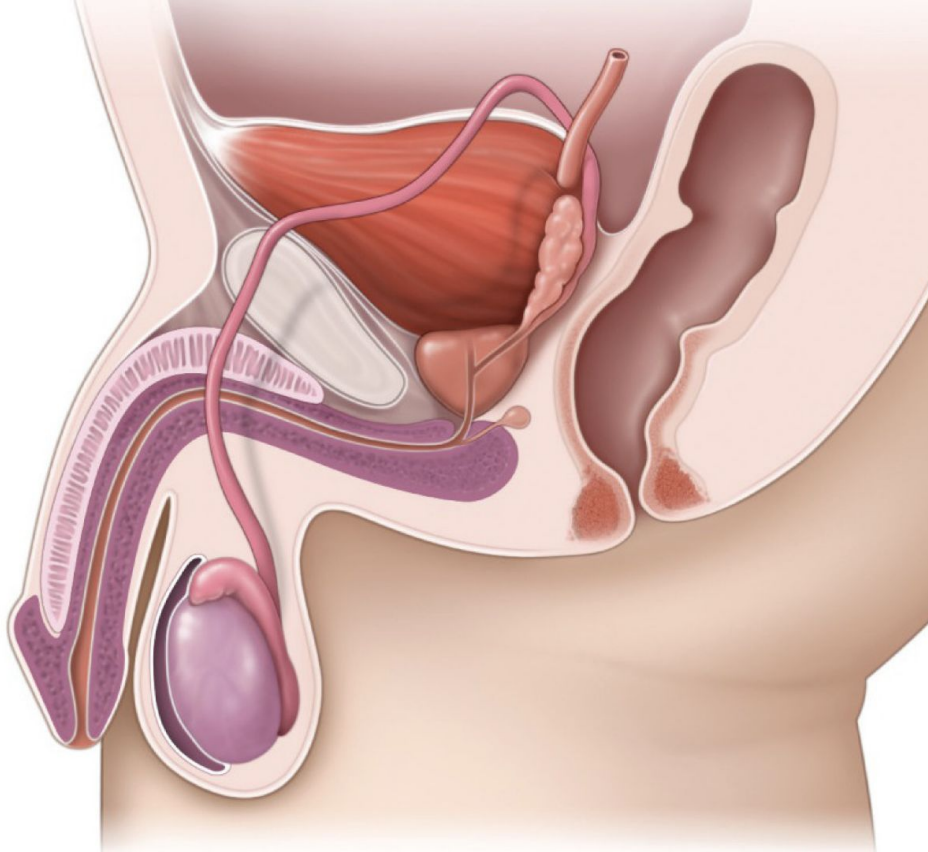
- Identify and describe the features of the **seminiferous tubules**
- Describe the process of **spermatogenesis**
identify the cell stages in section

Ducts & Glands

- Identify the main features of the **epididymis** them to function
- Distinguish the structure of the **vas deferens**



The Male Reproductive System



Testis

Tunica
Albuginea

Ductuli
Efferentes

Rete Testis

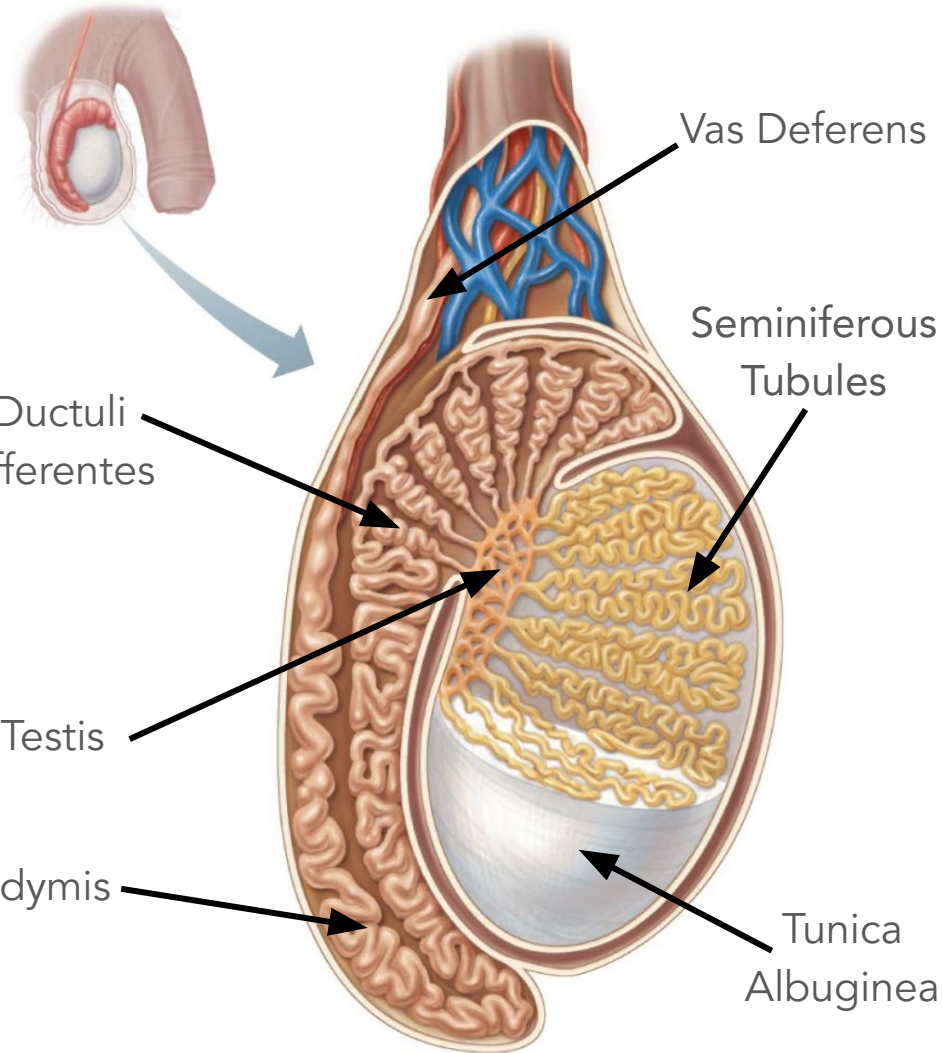
Epididymis

Vas Deferens

Seminiferous
Tubules

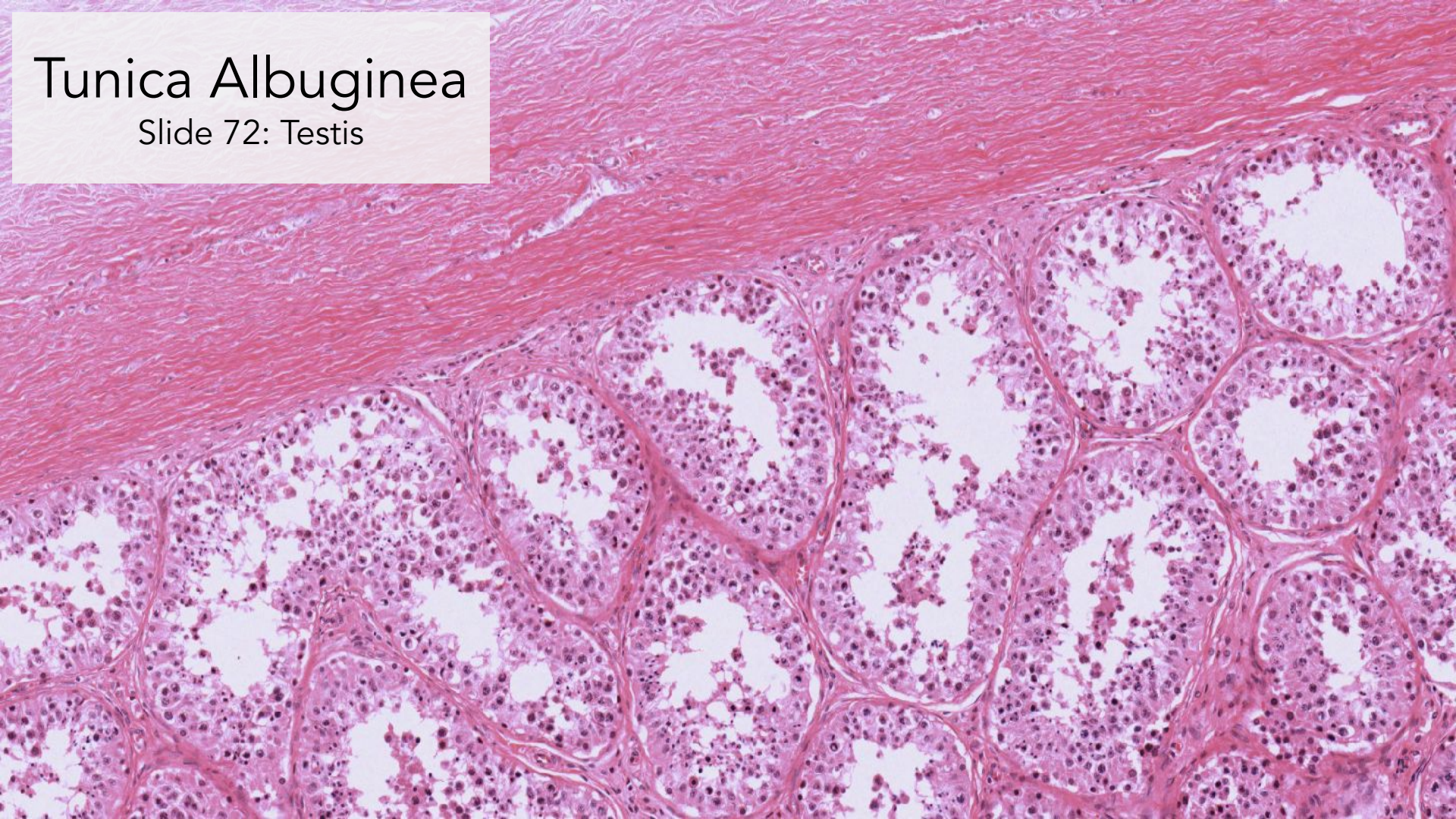
Tunica
Albuginea

Seminiferous
Tubules
(within lobules)



Tunica Albuginea

Slide 72: Testis

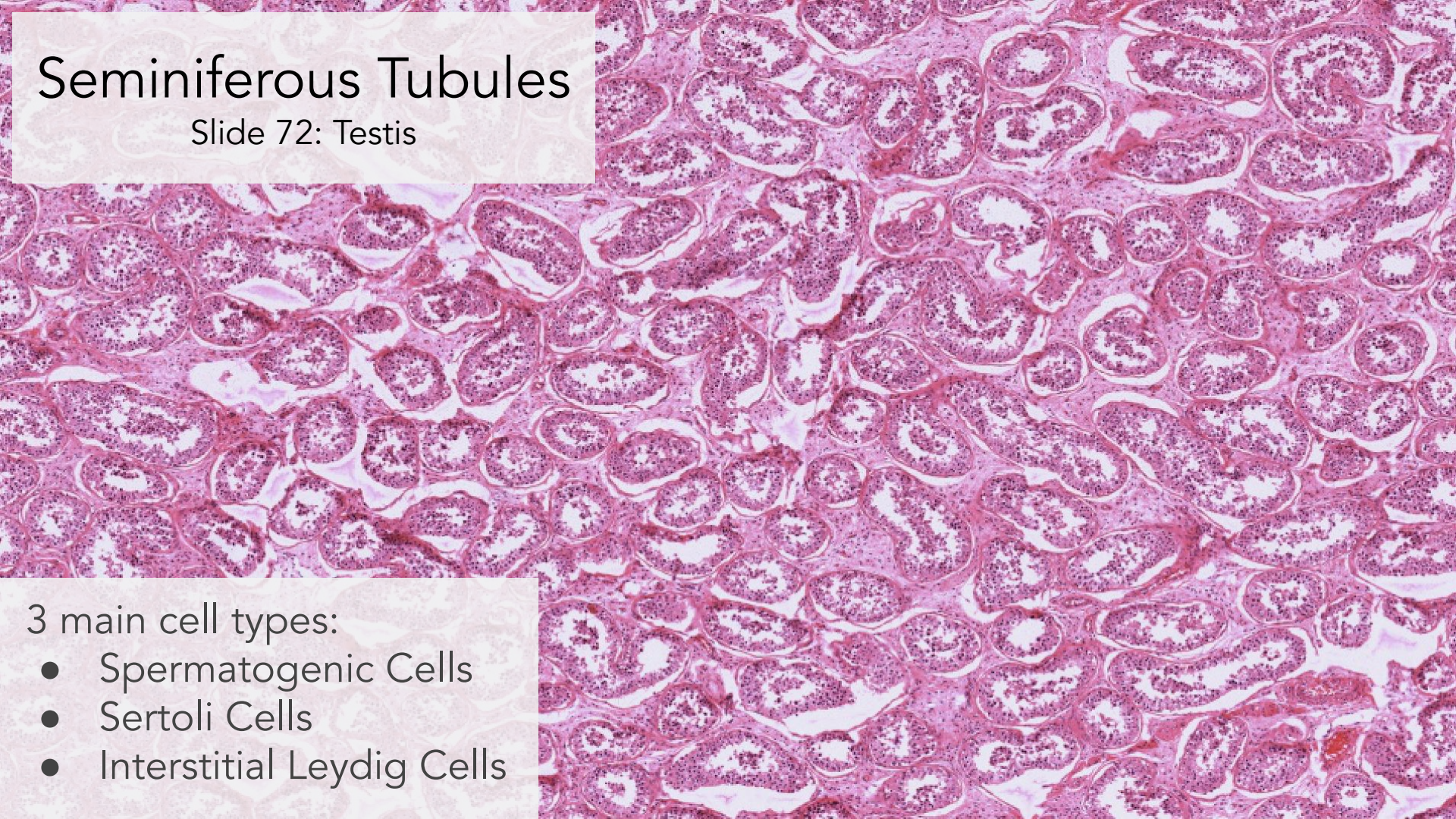


Seminiferous Tubules

Slide 72: Testis

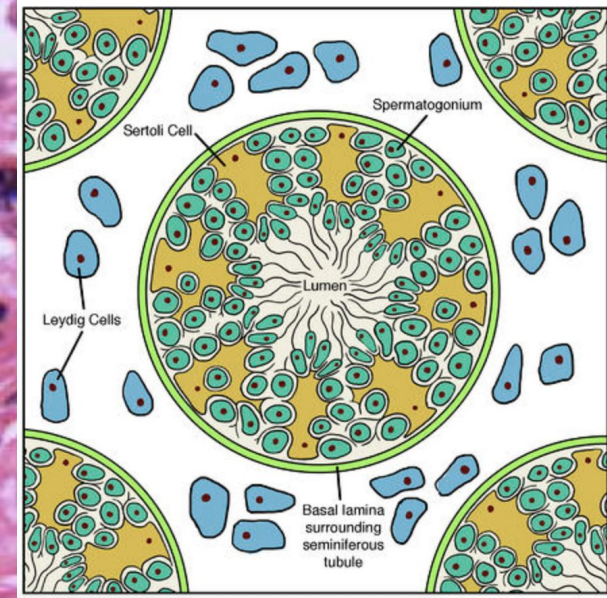
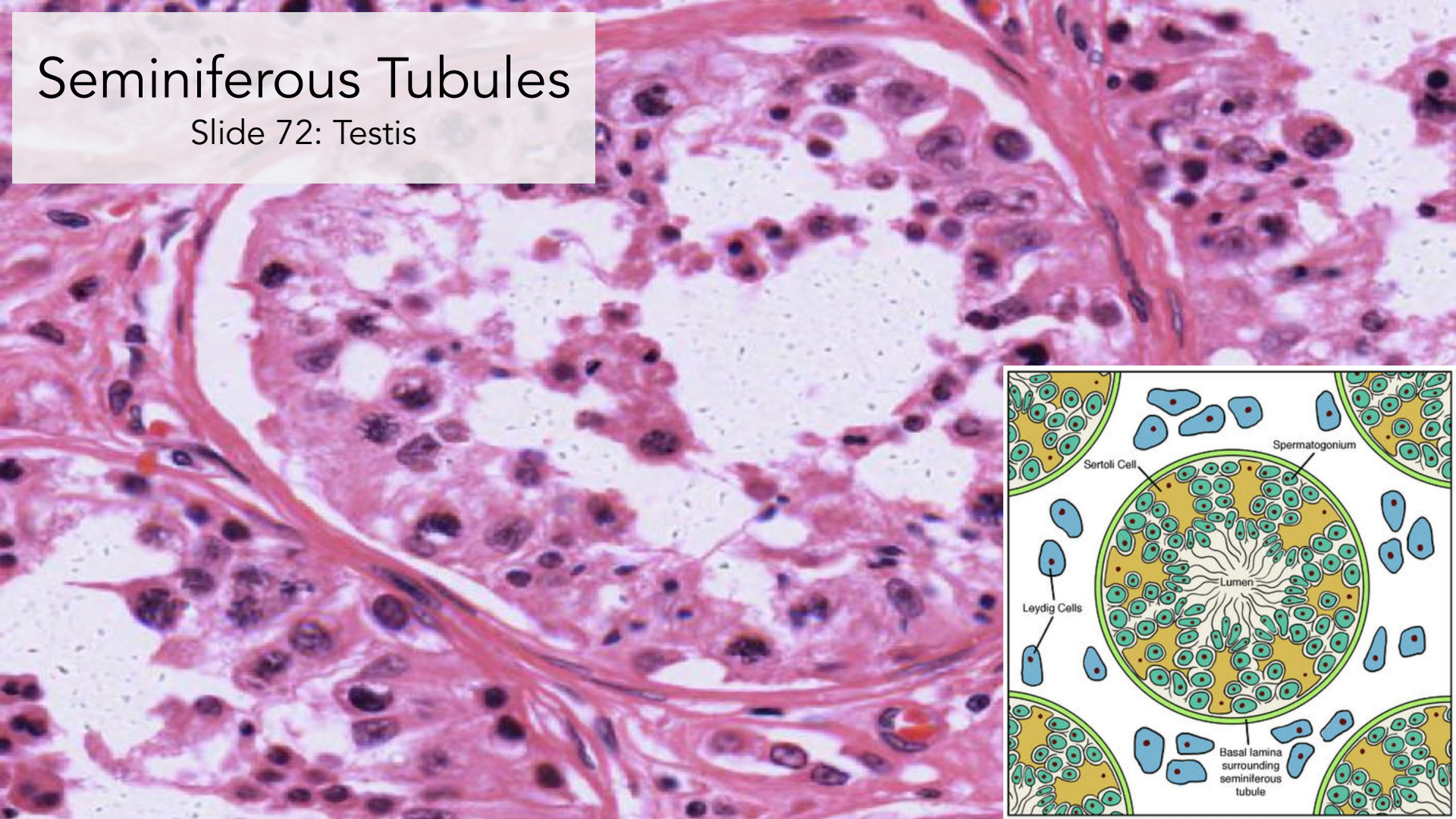
3 main cell types:

- Spermatogenic Cells
- Sertoli Cells
- Interstitial Leydig Cells

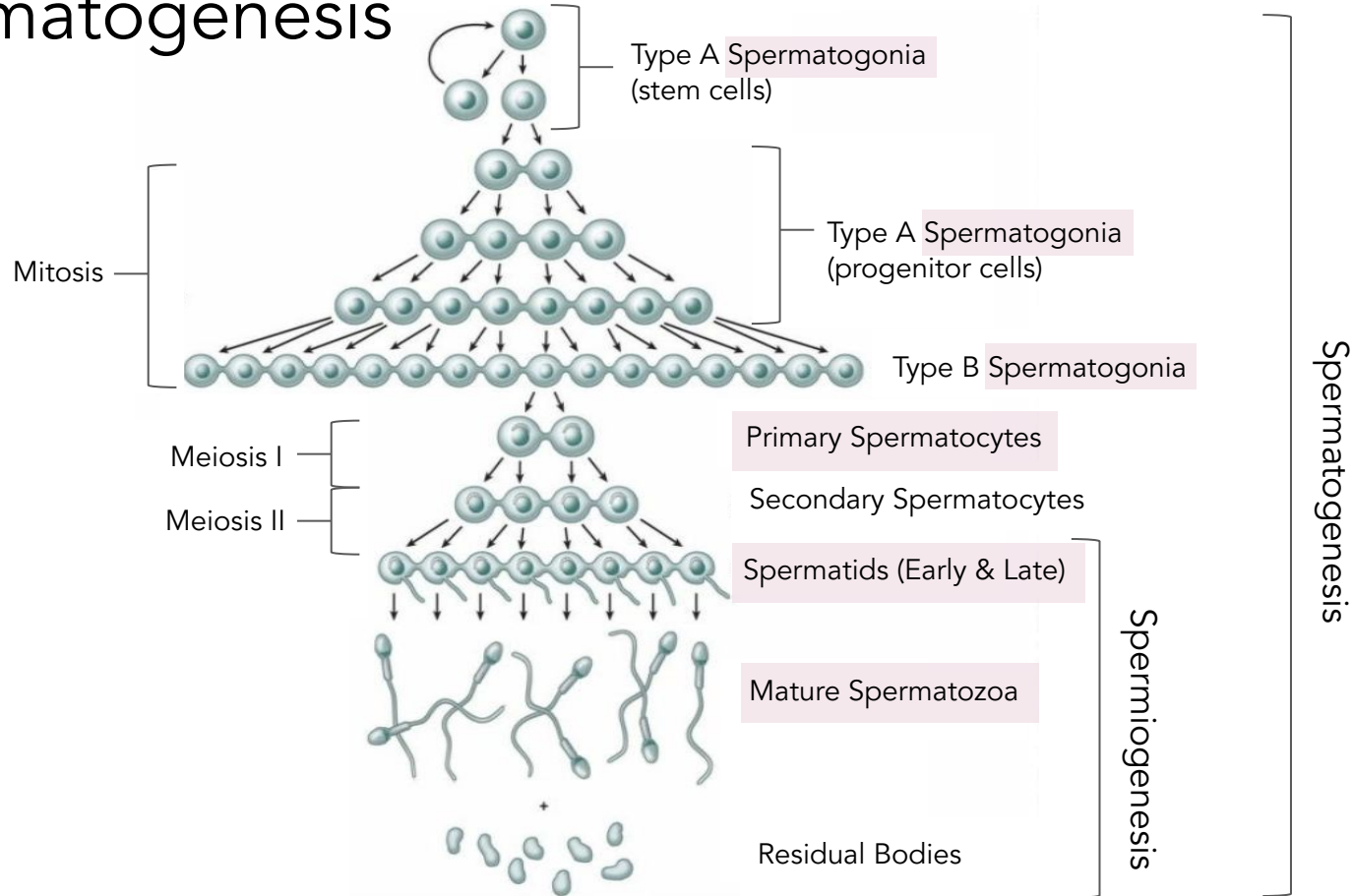


Seminiferous Tubules

Slide 72: Testis

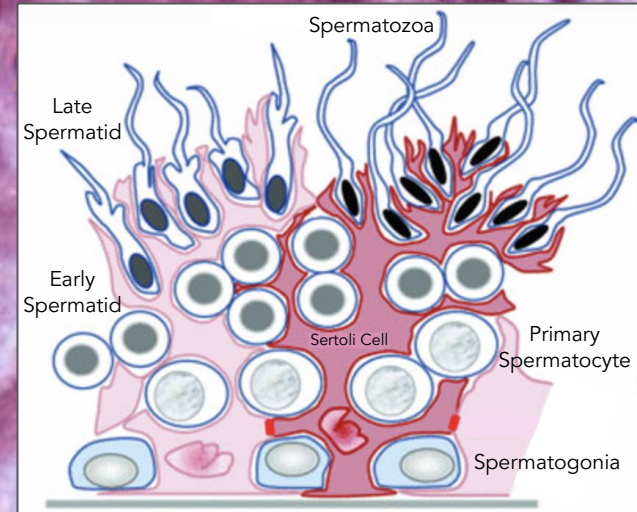
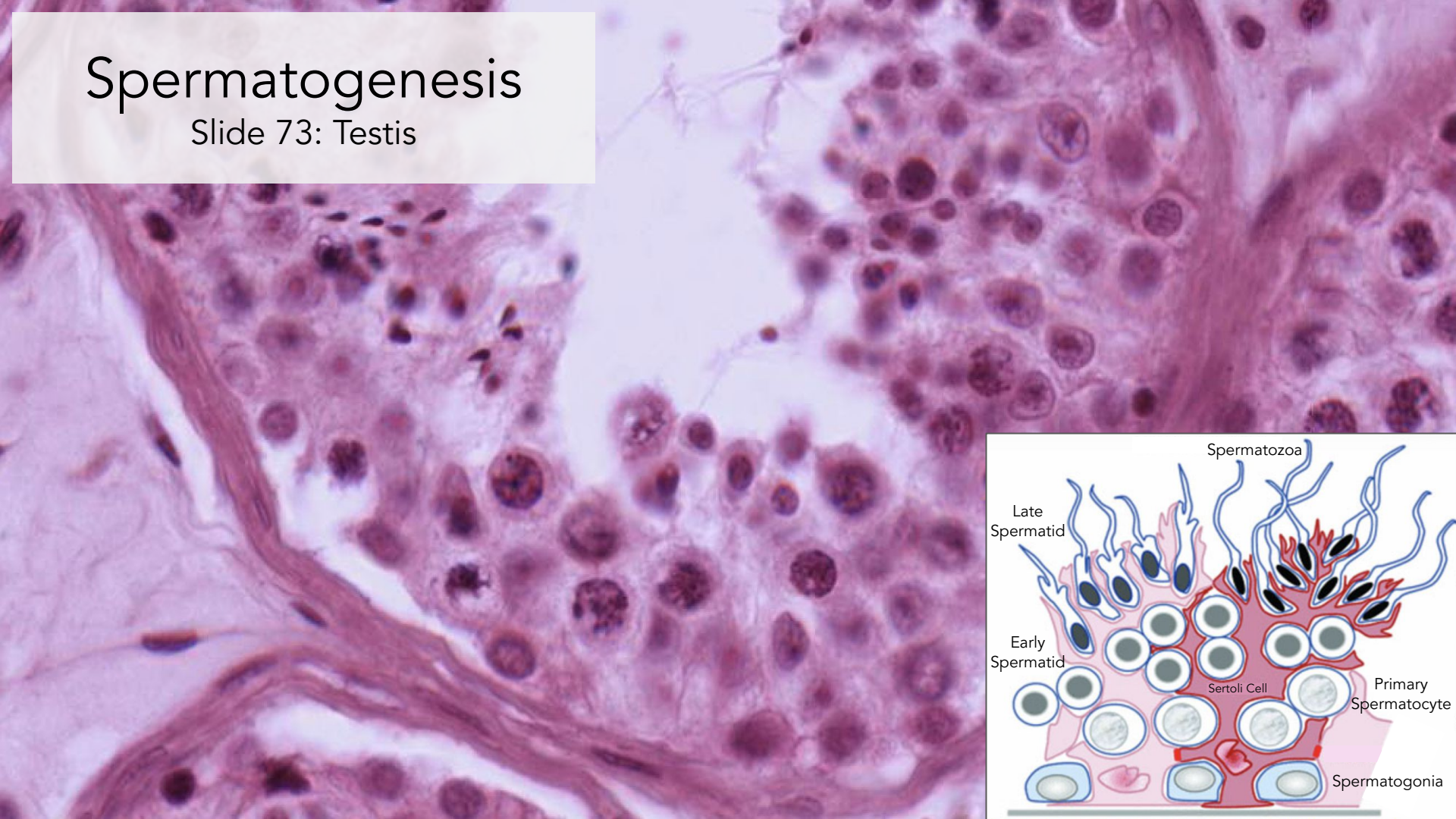


Spermatogenesis



Spermatogenesis

Slide 73: Testis



Epididymis

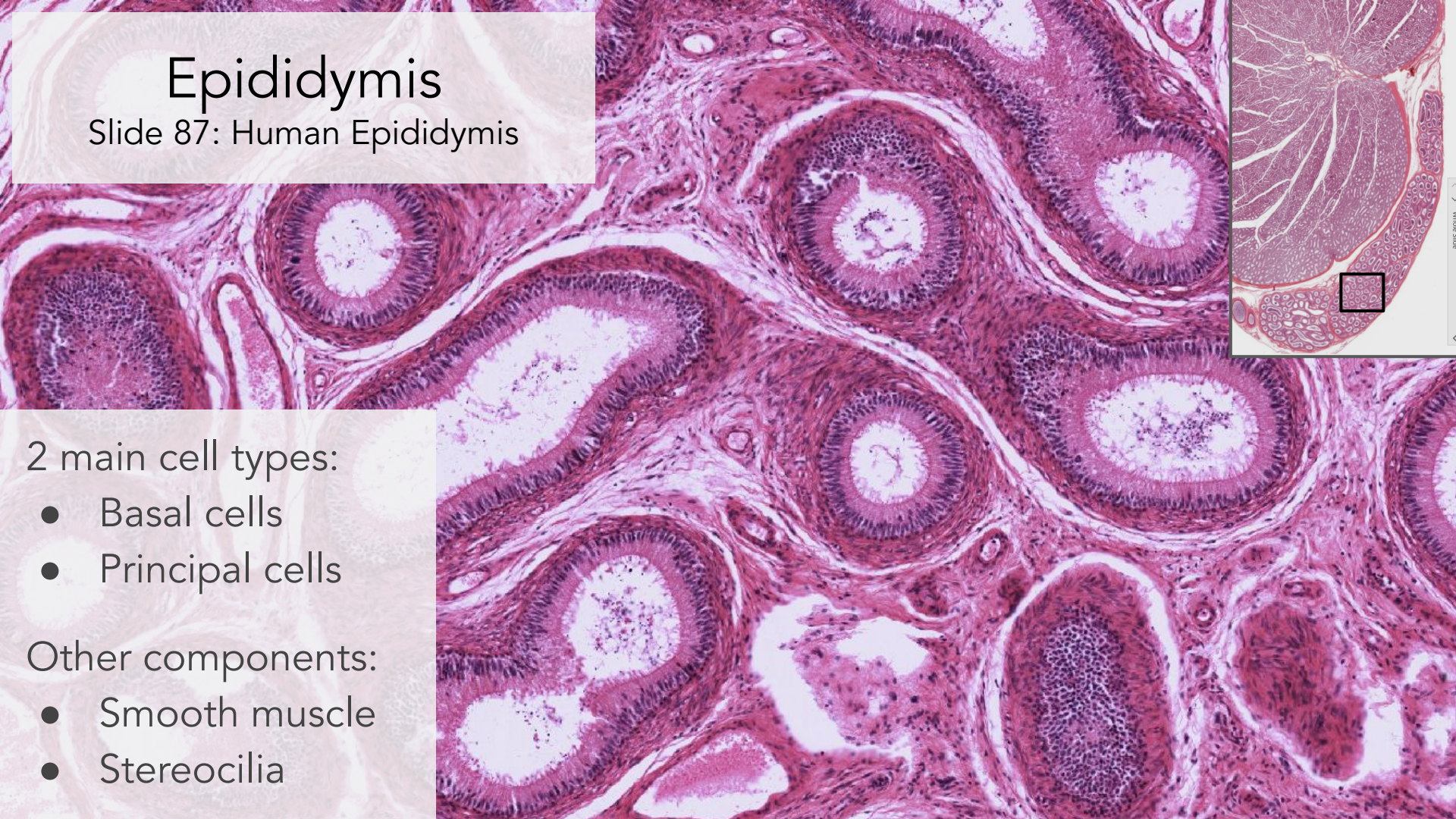
Slide 87: Human Epididymis

2 main cell types:

- Basal cells
- Principal cells

Other components:

- Smooth muscle
- Stereocilia



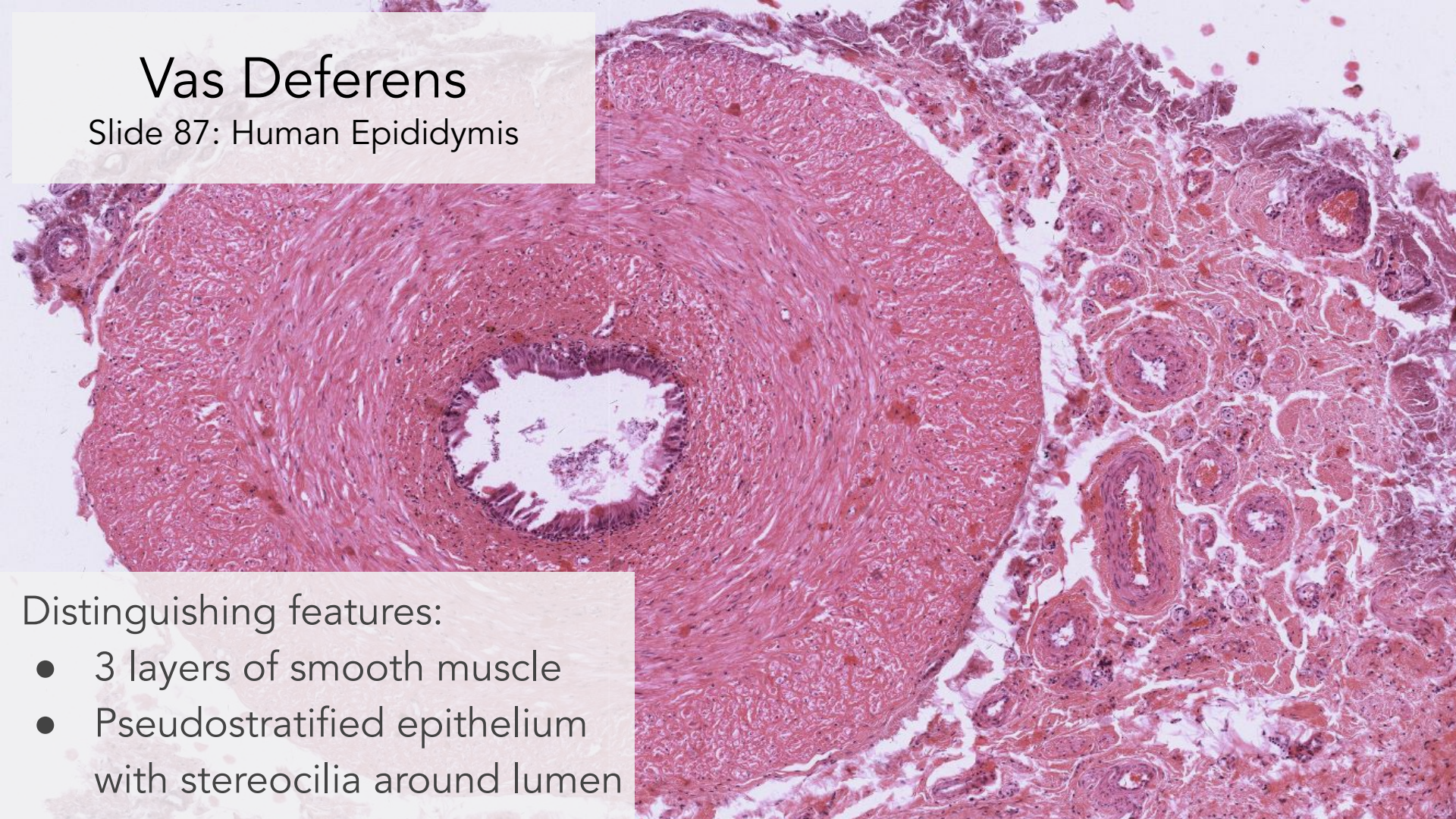
Epididymis

Slide 87: Human Epididymis



Vas Deferens

Slide 87: Human Epididymis

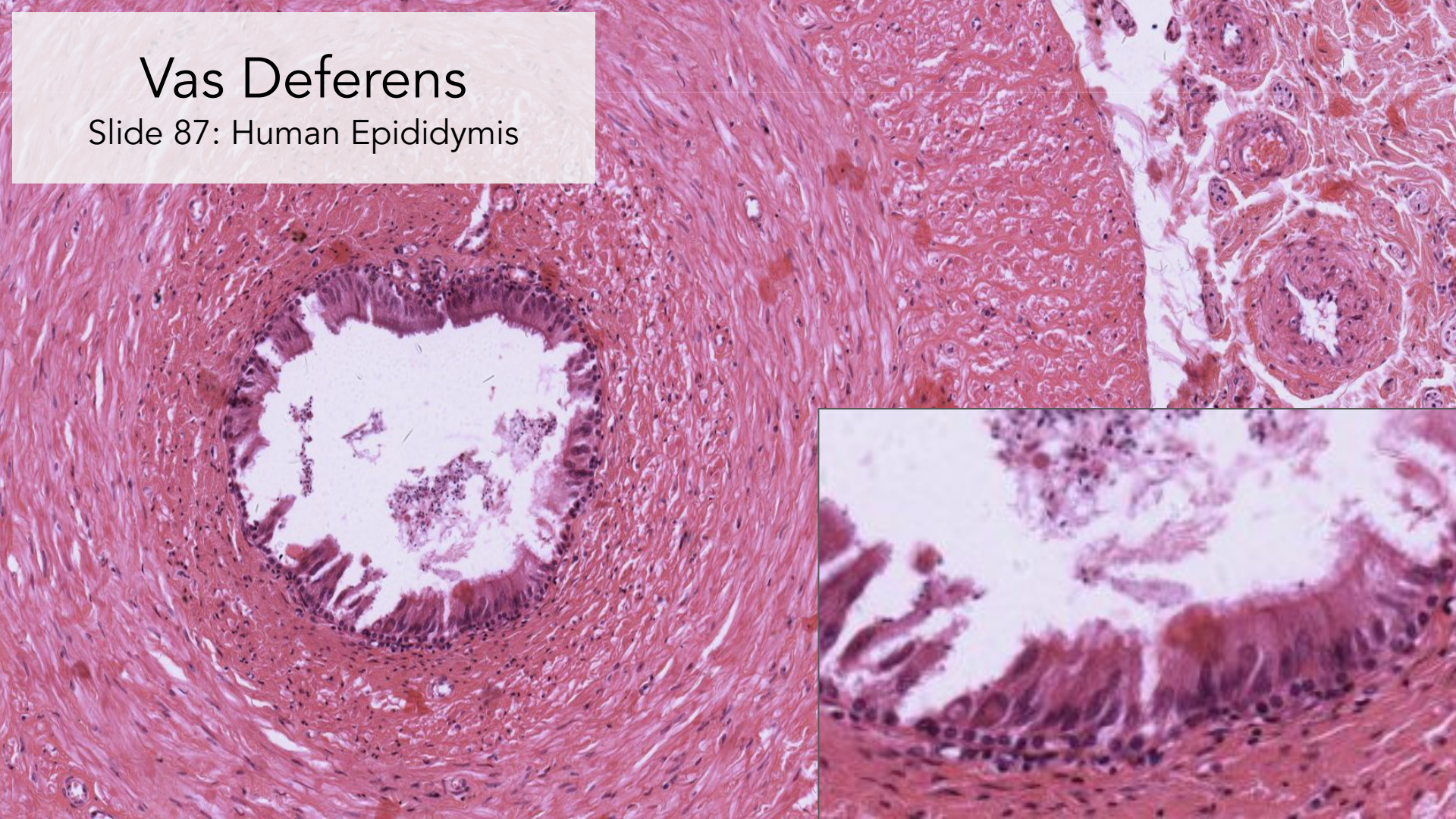


Distinguishing features:

- 3 layers of smooth muscle
- Pseudostratified epithelium with stereocilia around lumen

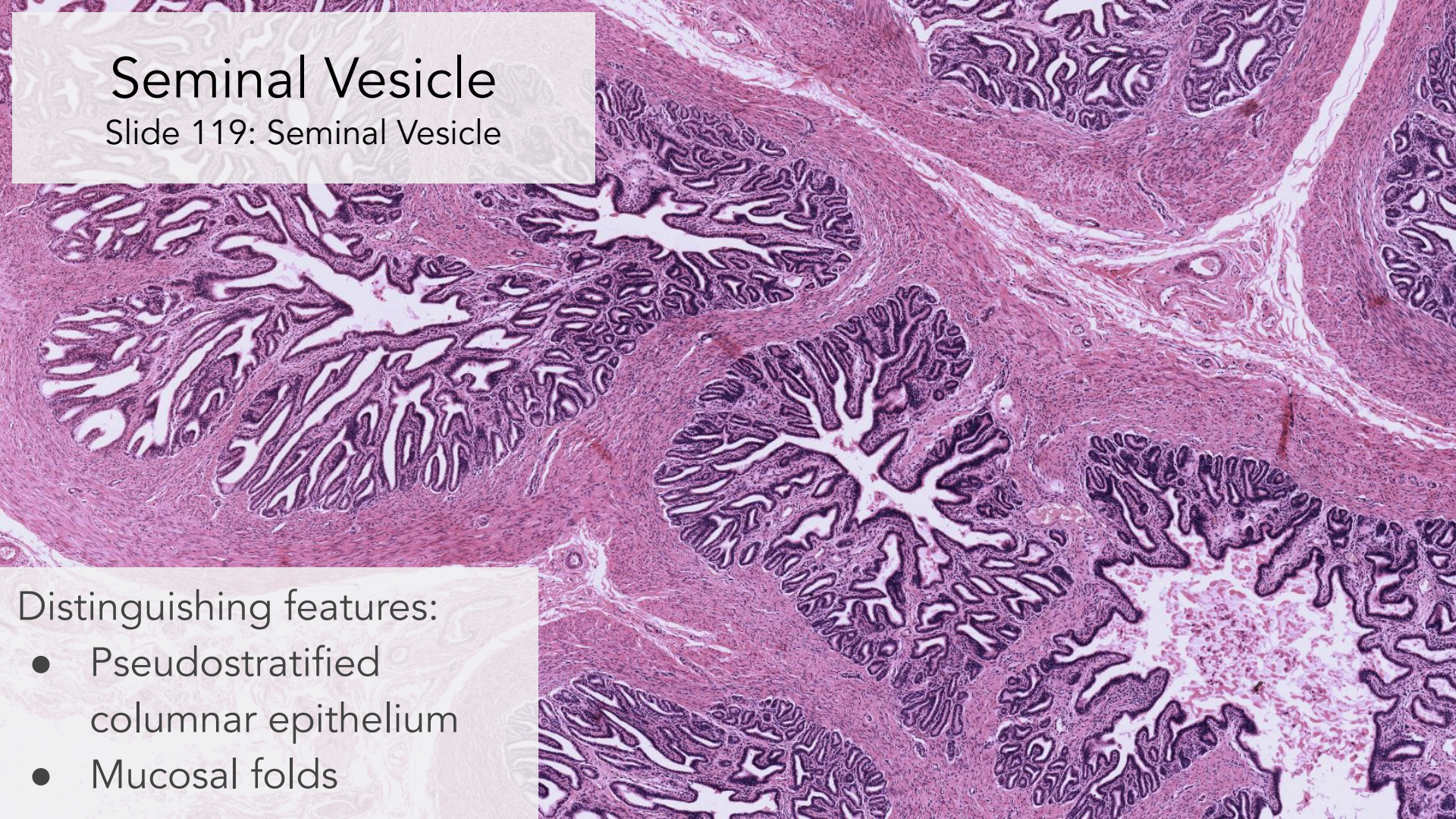
Vas Deferens

Slide 87: Human Epididymis



Seminal Vesicle

Slide 119: Seminal Vesicle

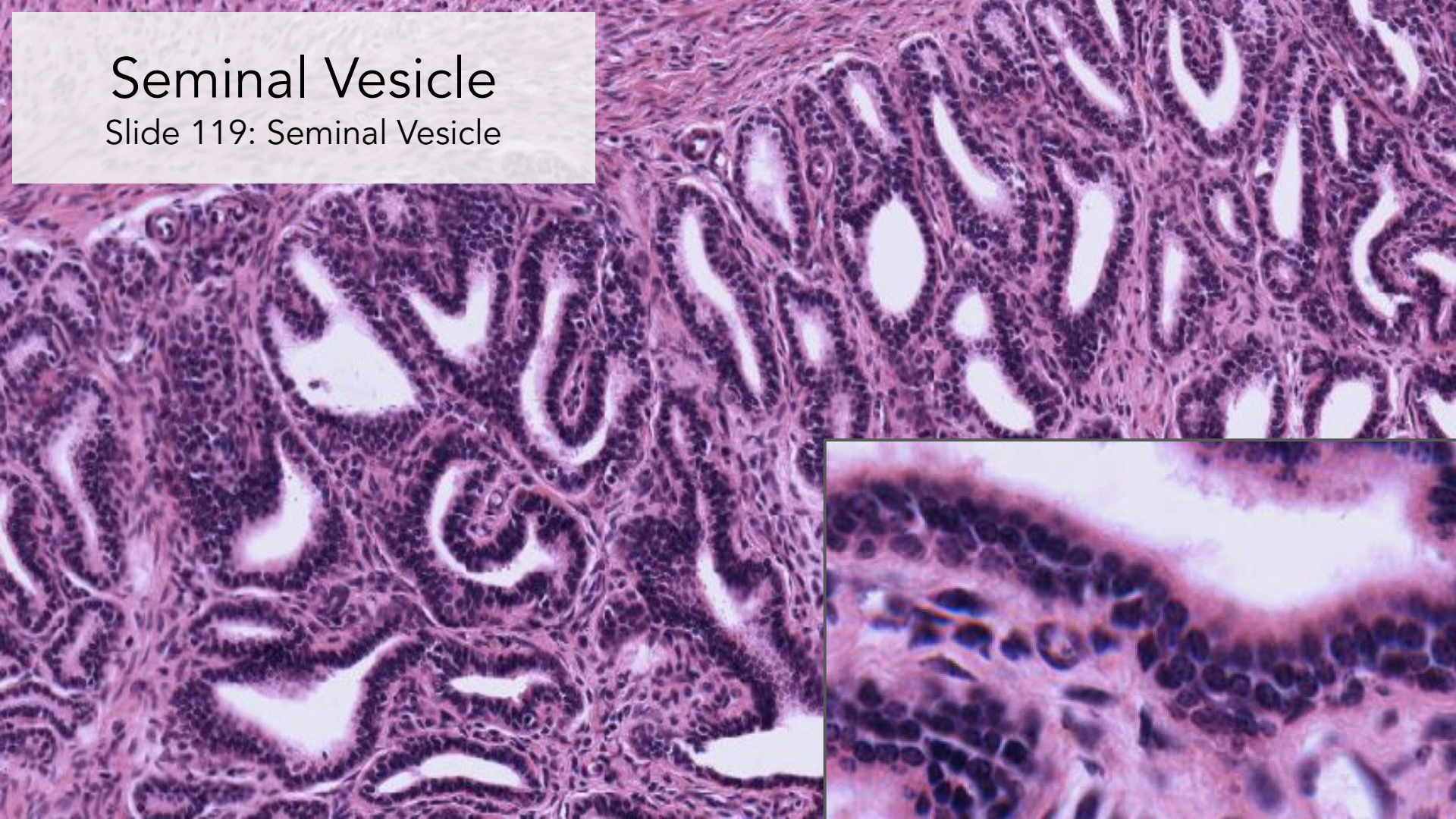


Distinguishing features:

- Pseudostratified columnar epithelium
- Mucosal folds

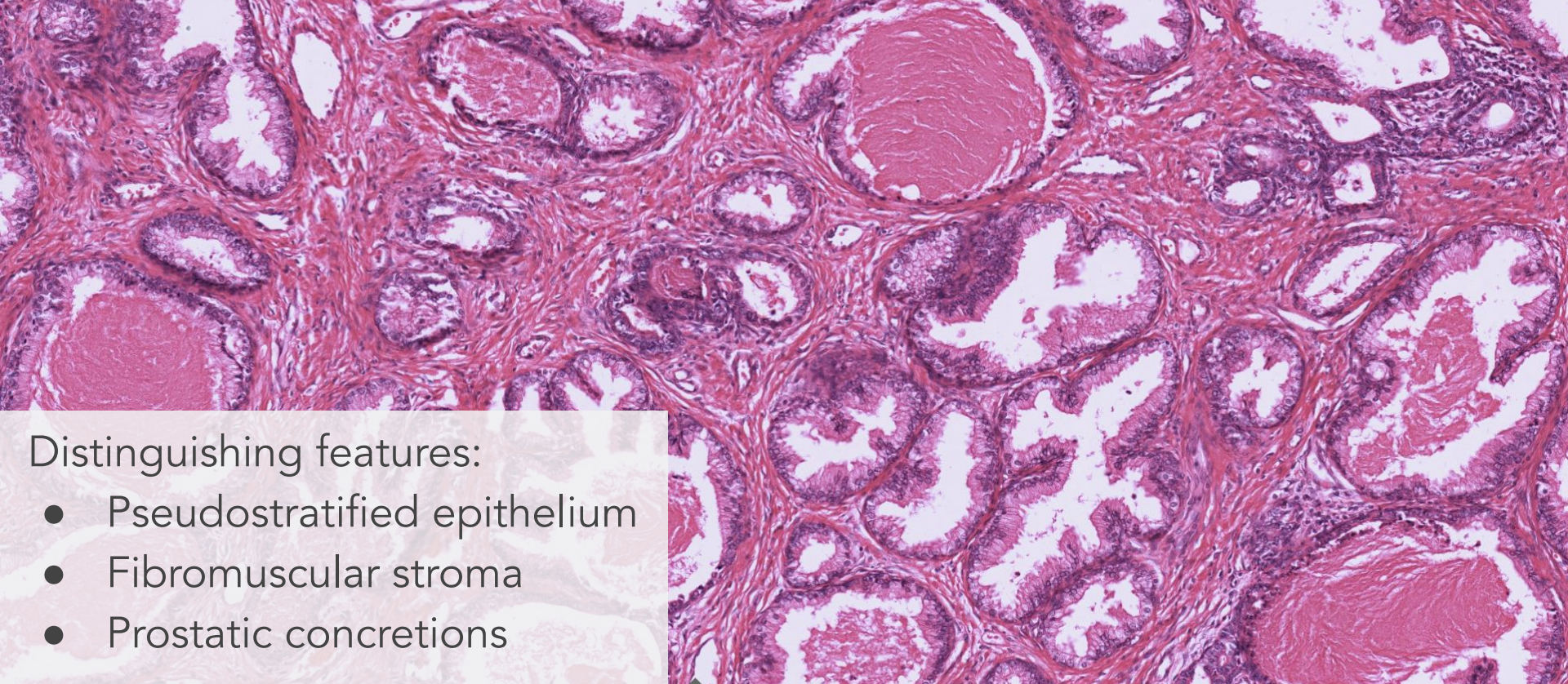
Seminal Vesicle

Slide 119: Seminal Vesicle



Prostate

Slide 139: Prostate

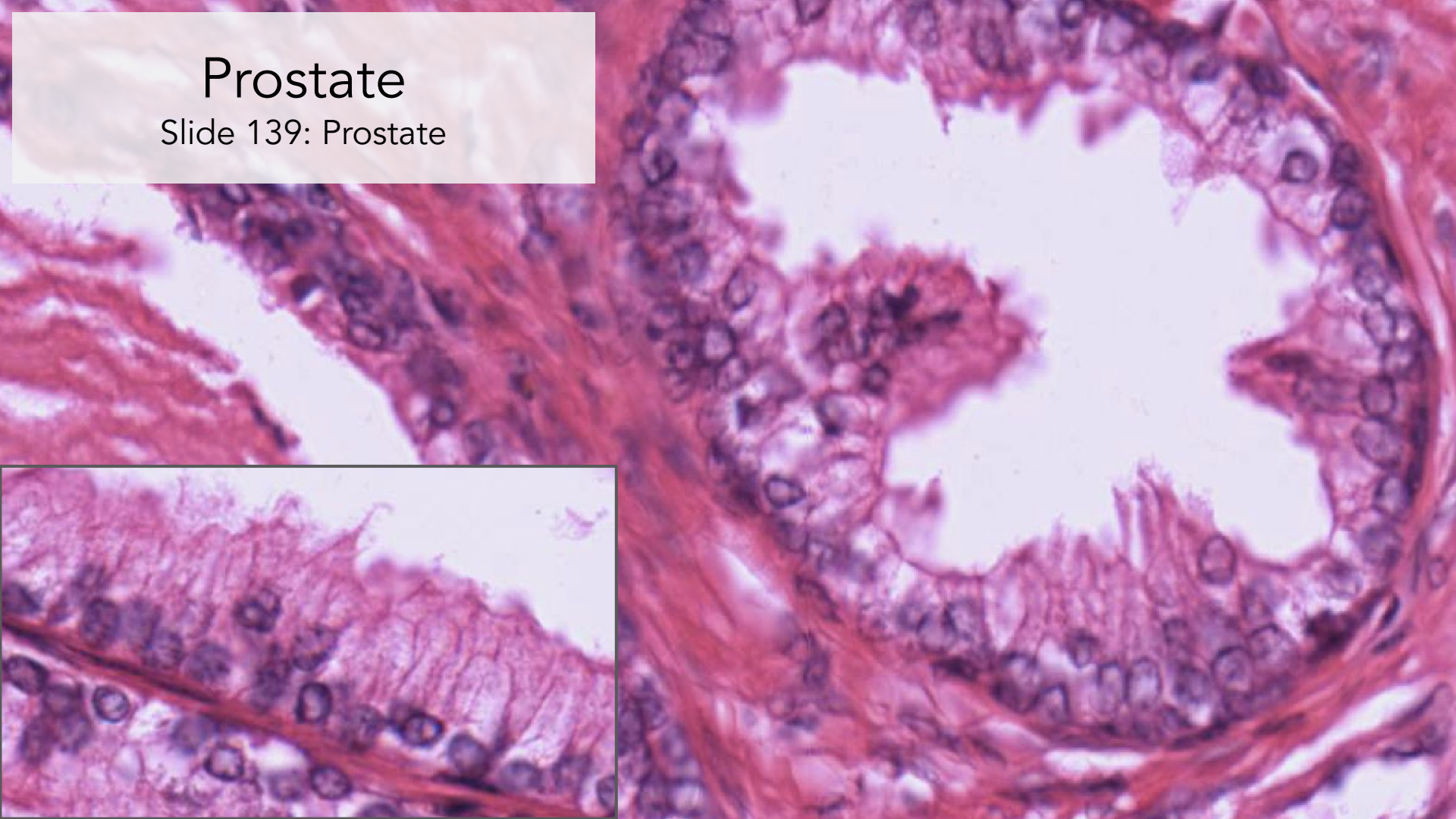


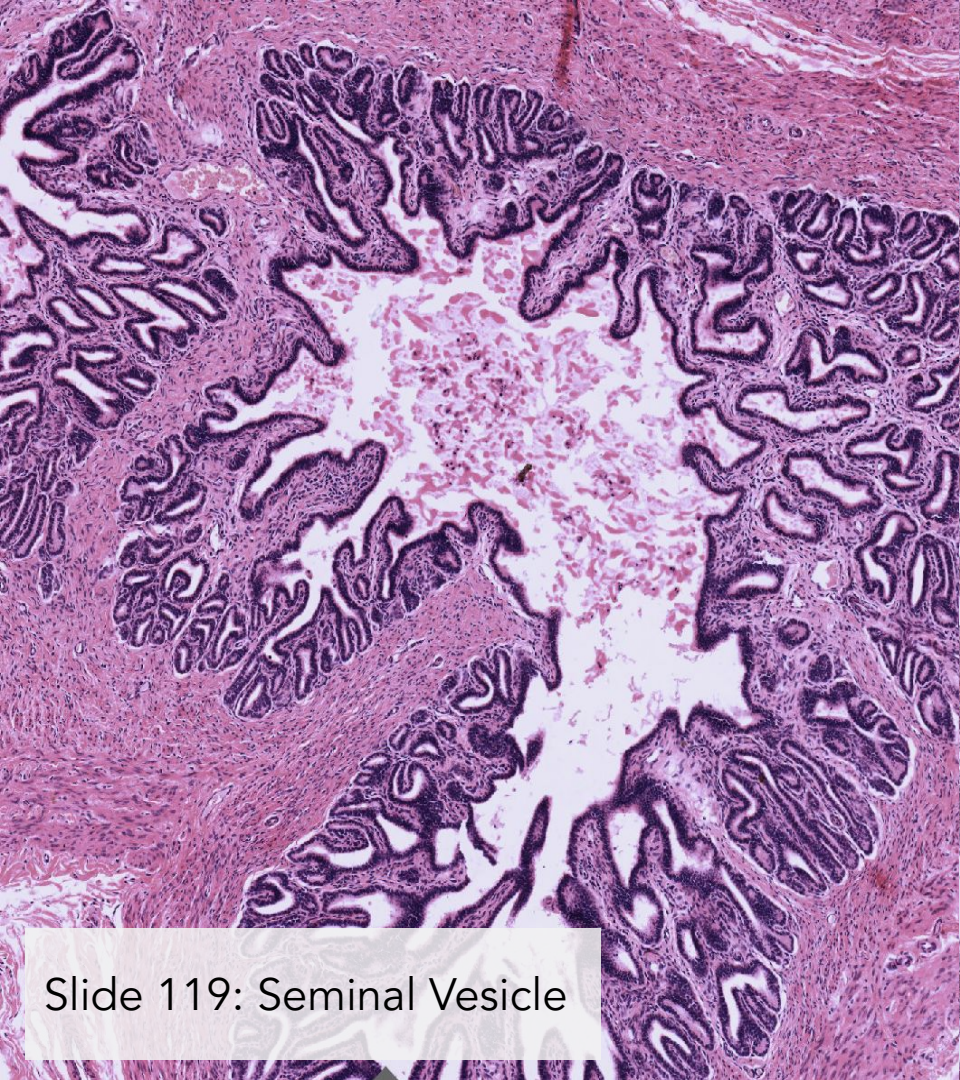
Distinguishing features:

- Pseudostratified epithelium
- Fibromuscular stroma
- Prostatic concretions

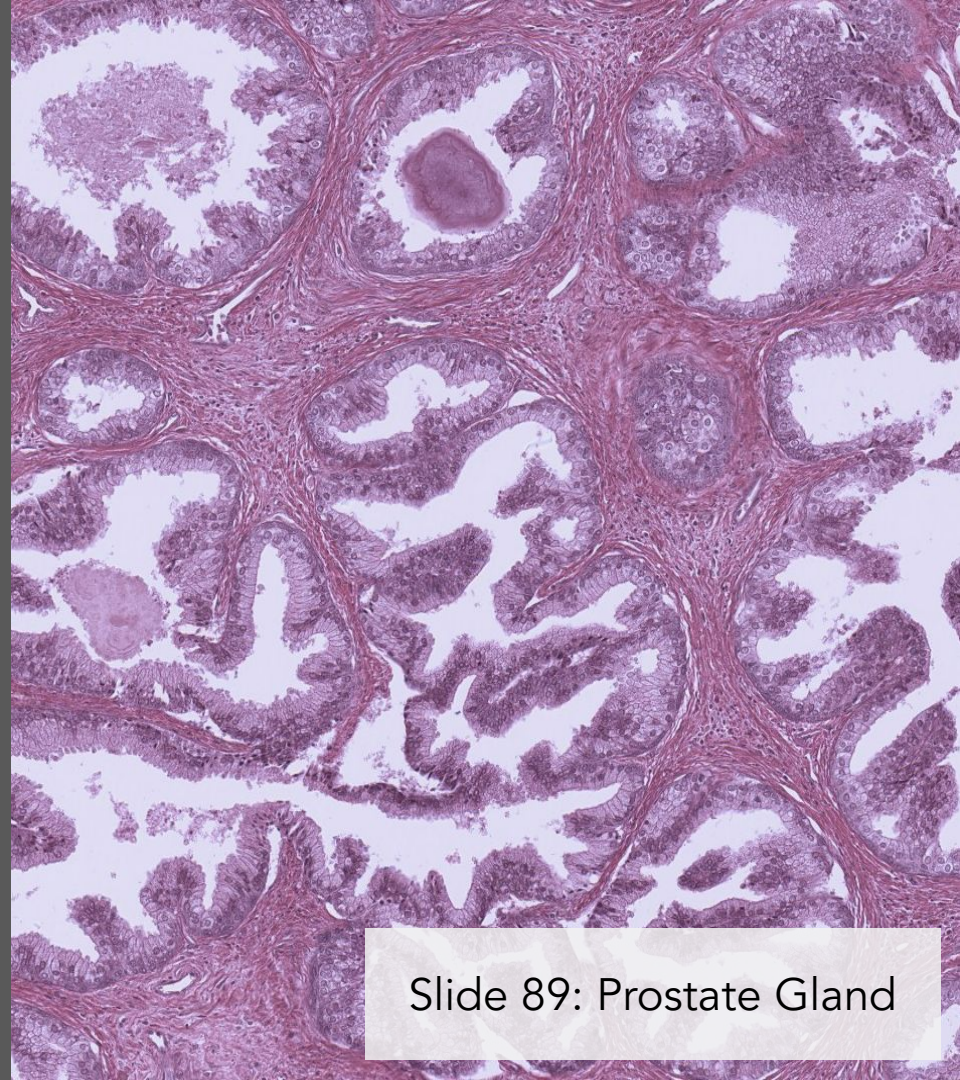
Prostate

Slide 139: Prostate





Slide 119: Seminal Vesicle



Slide 89: Prostate Gland

Spot the difference....



Cross Section of a Human Penis



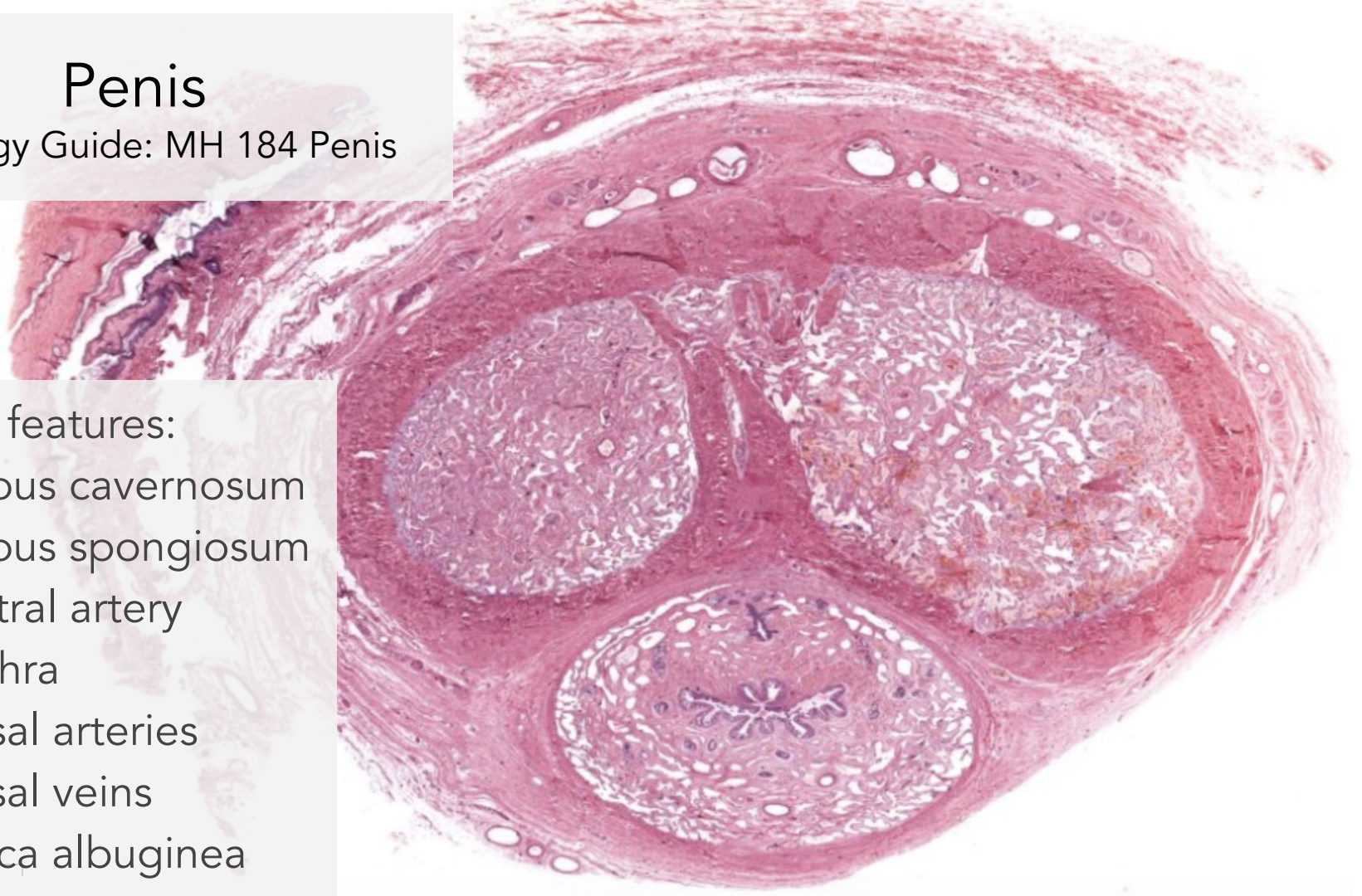
Kanye West

Penis

Histology Guide: MH 184 Penis

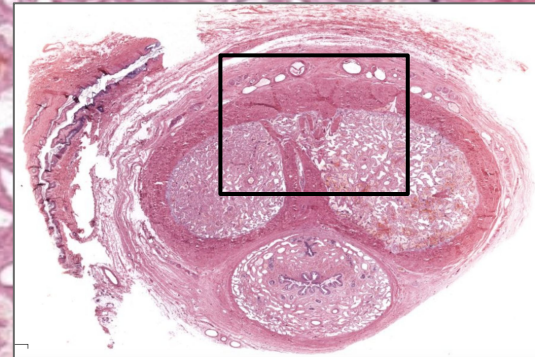
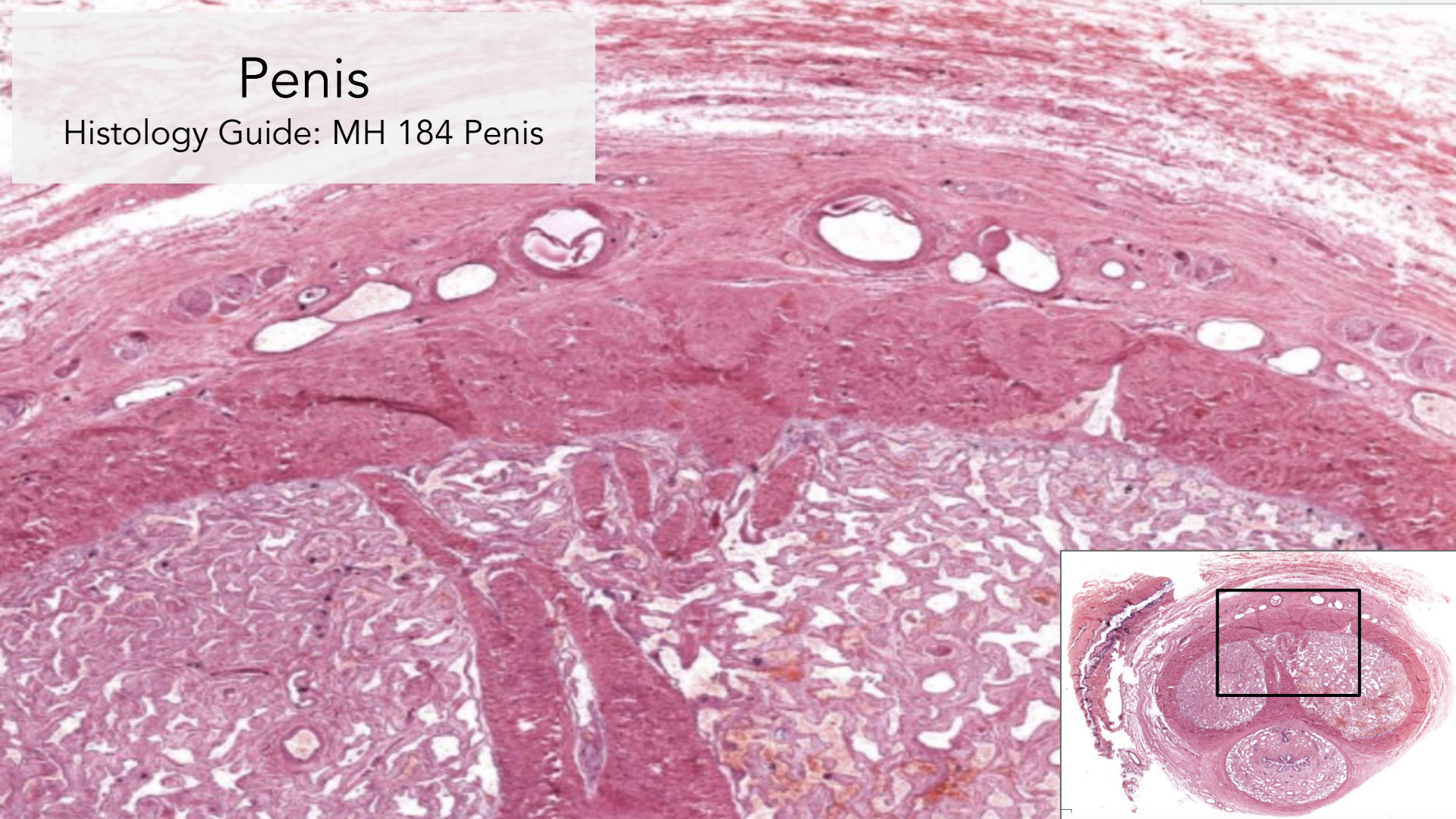
Notable features:

- Corpus cavernosum
- Corpus spongiosum
- Central artery
- Urethra
- Dorsal arteries
- Dorsal veins
- Tunica albuginea

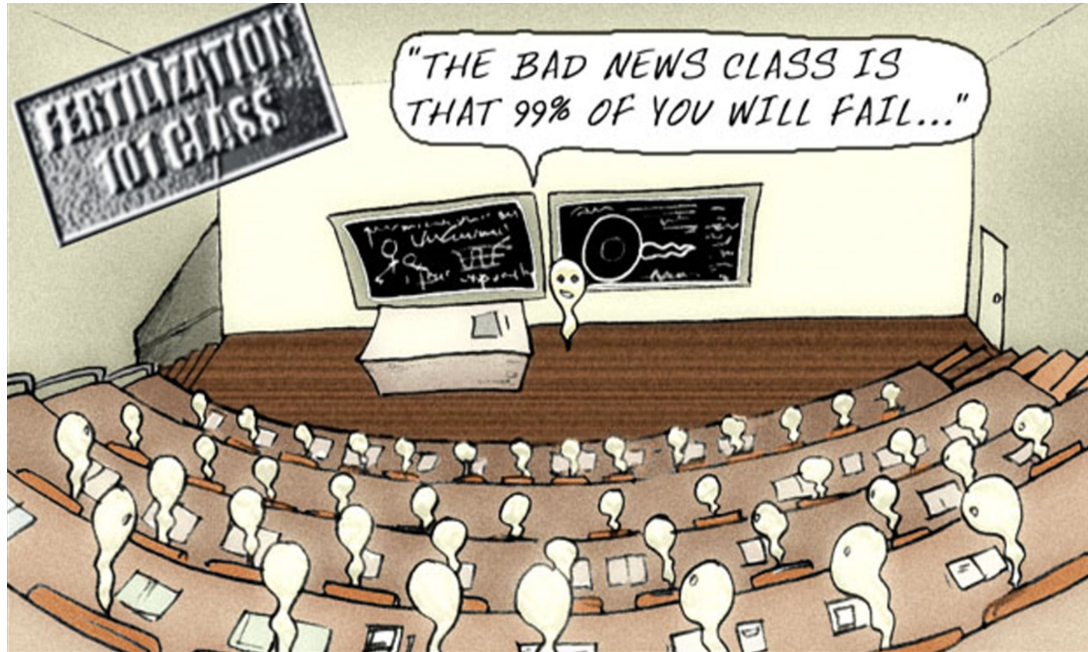


Penis

Histology Guide: MH 184 Penis

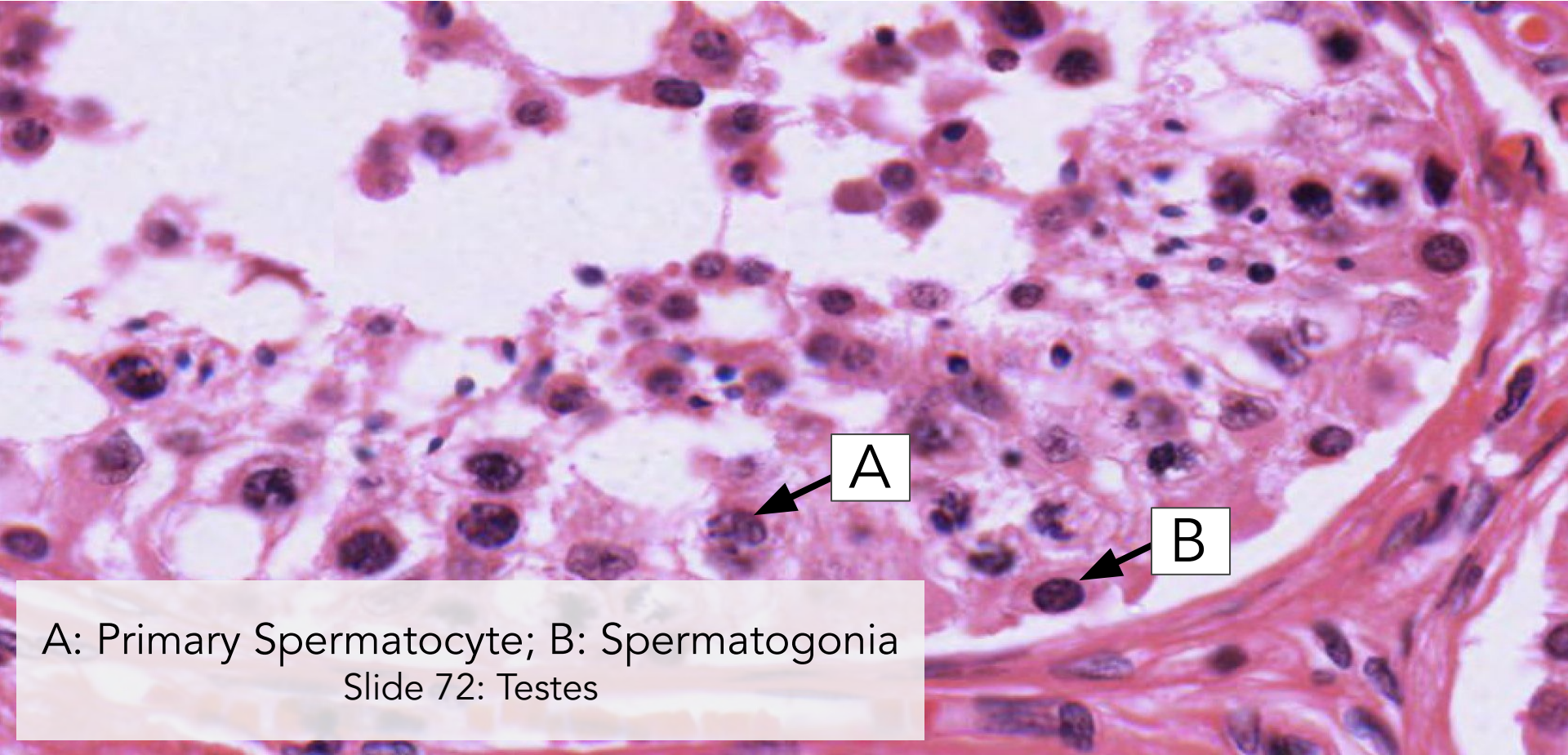


Check your understanding





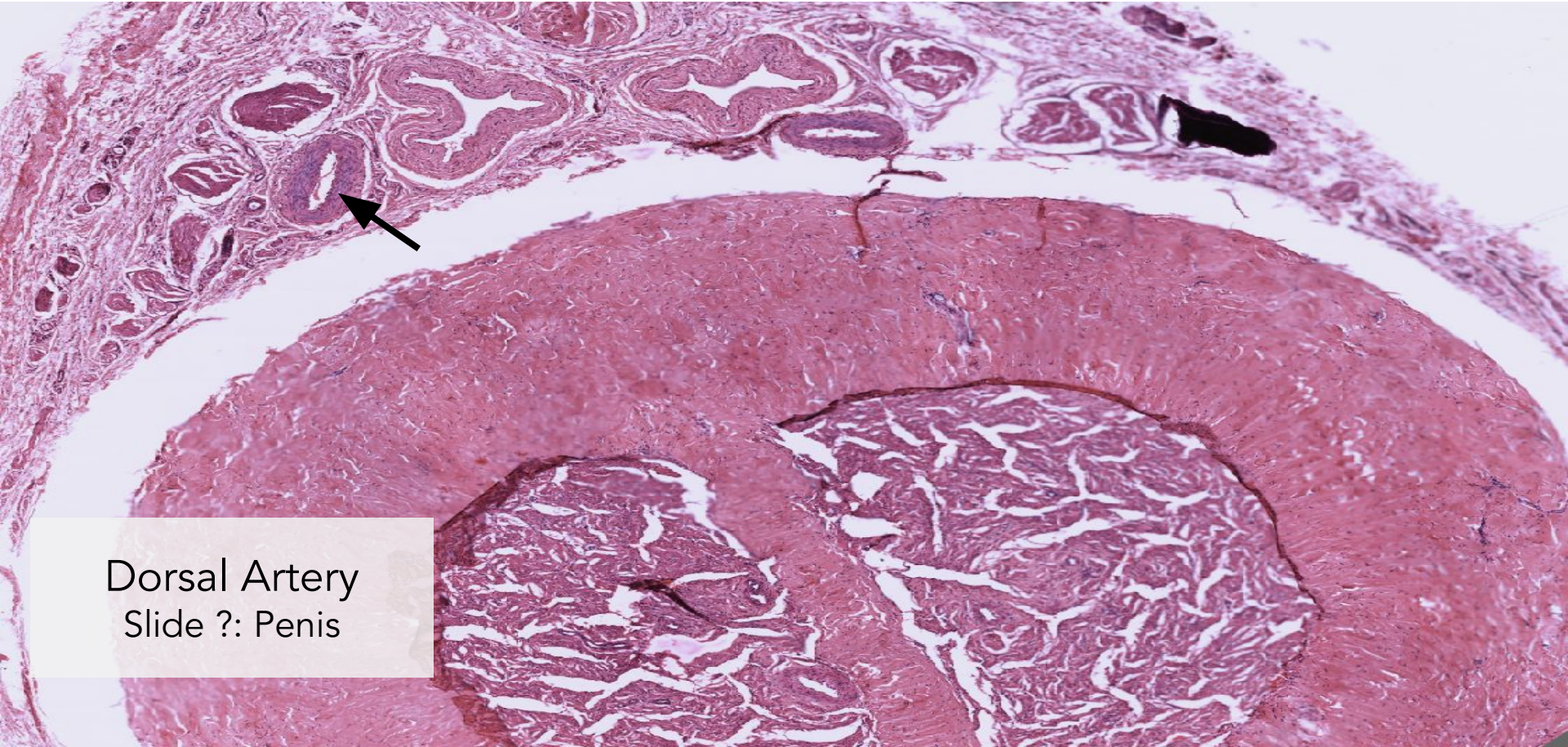
Identify the structures labeled "A" and "B"



A: Primary Spermatocyte; B: Spermatogonia
Slide 72: Testes



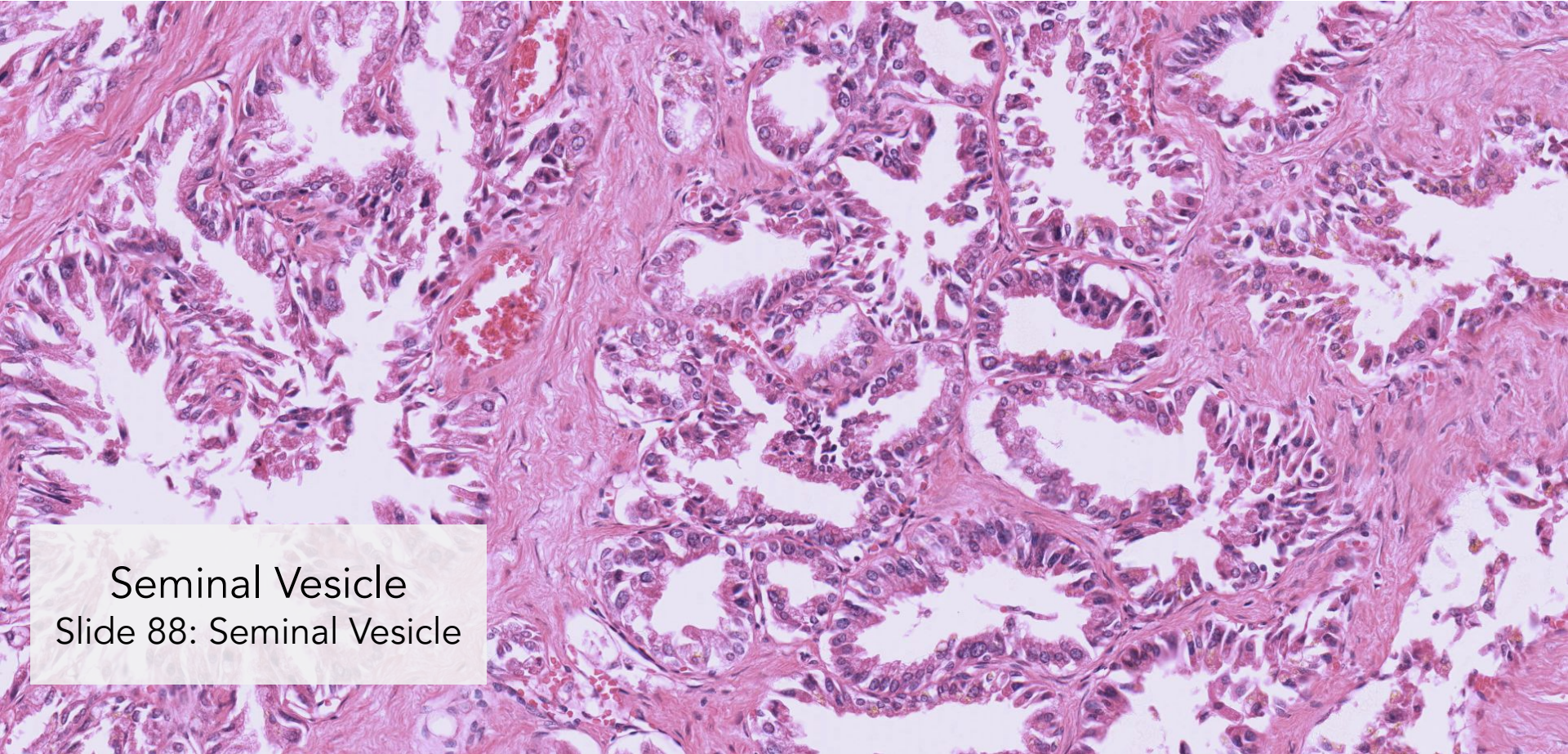
Identify the circled structure



Dorsal Artery
Slide ?: Penis



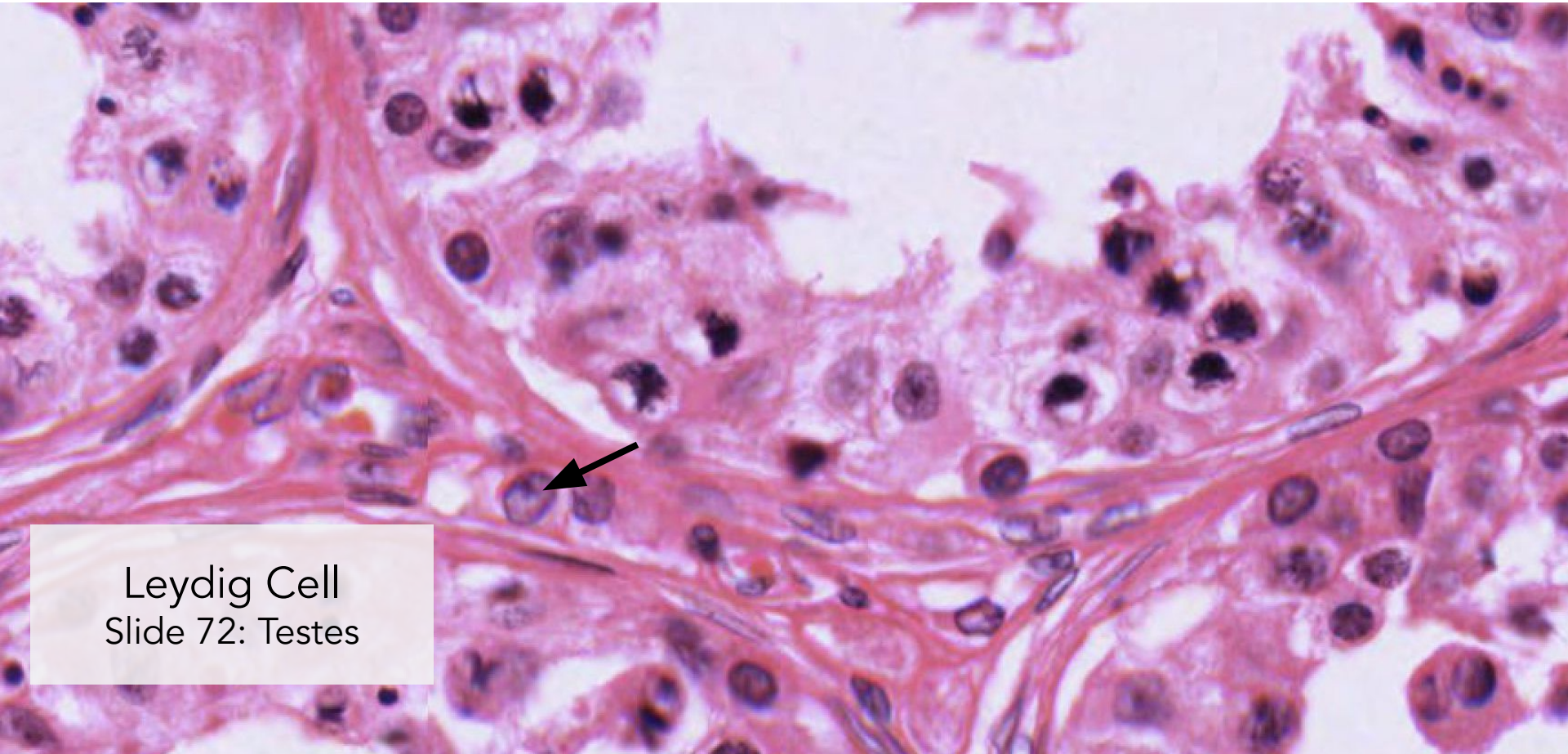
Identify the tissue



Seminal Vesicle
Slide 88: Seminal Vesicle



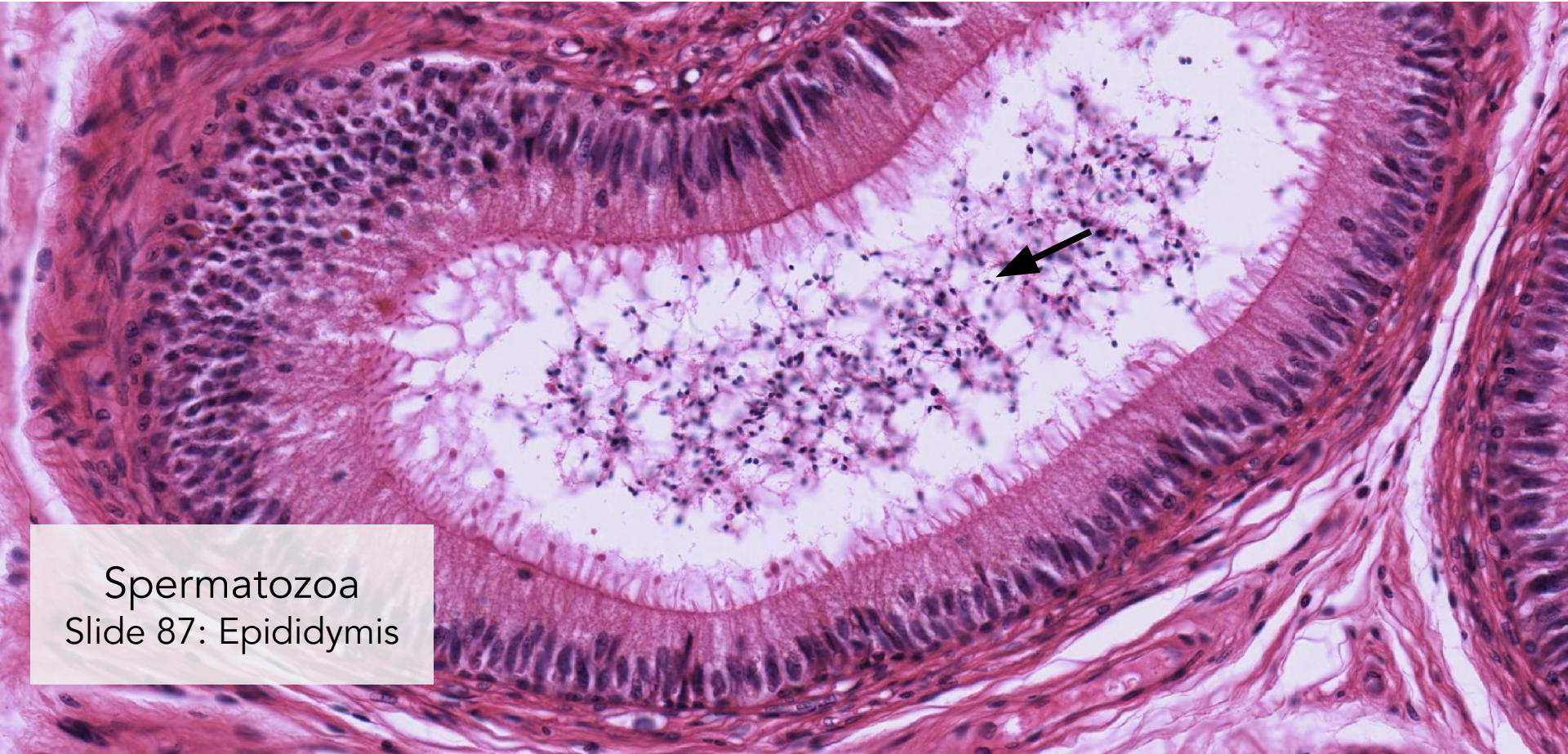
Identify the indicated structure



Leydig Cell
Slide 72: Testes



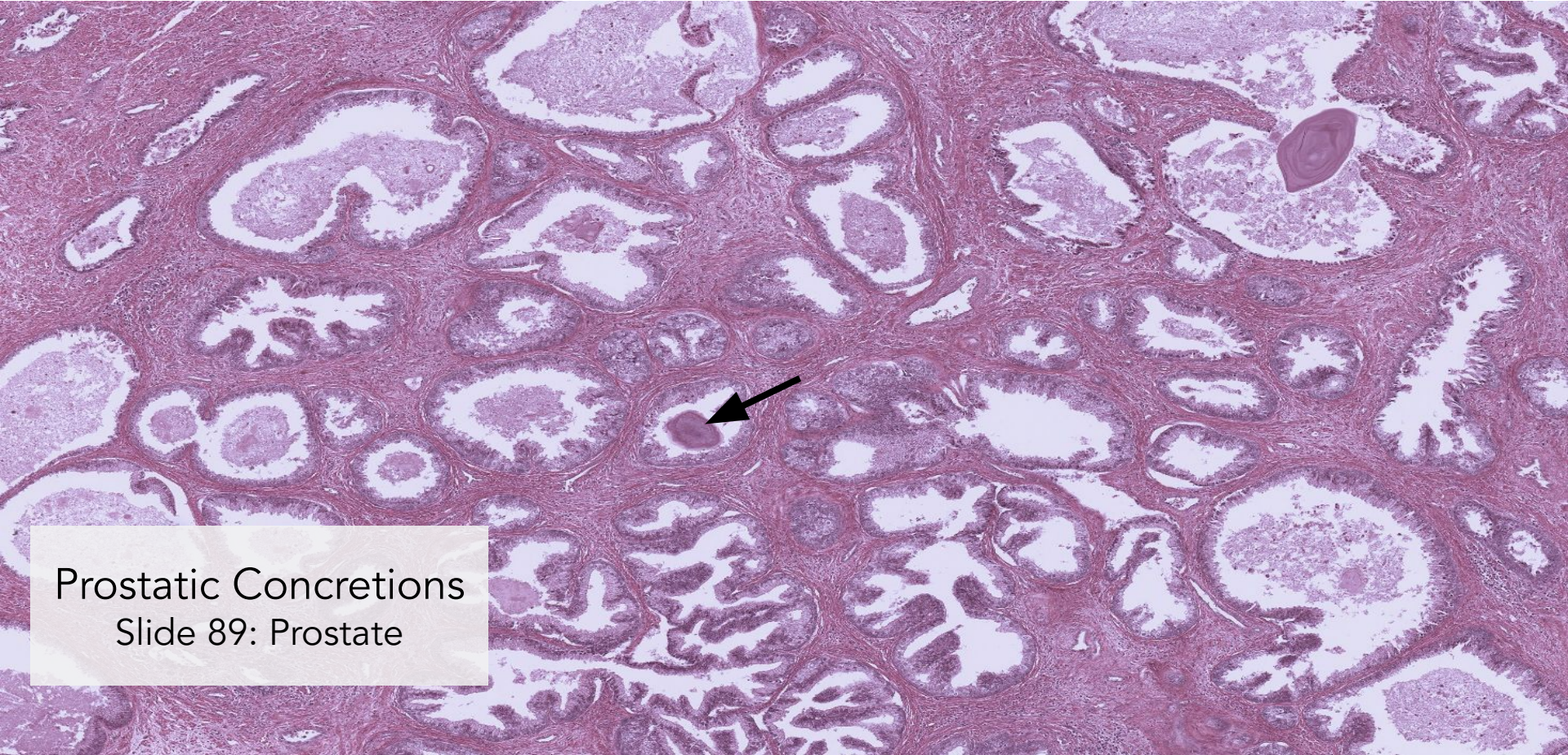
Identify the indicated structure



Spermatozoa
Slide 87: Epididymis



Identify the indicated structure



Prostatic Concretions
Slide 89: Prostate

Summary

Seminiferous Tubules

- Sertoli cells
- Leydig cells
- Spermatogenic cells

Epididymis

- Principal cells
- Basal cells
- Stereocilia
- Smooth muscle

Vas Deferens

- 3 muscular layers
- Pseudostratified epithelium with stereocilia

Seminal Vesicle

- Mucous folds
- Pseudostratified columnar epithelium

Prostate

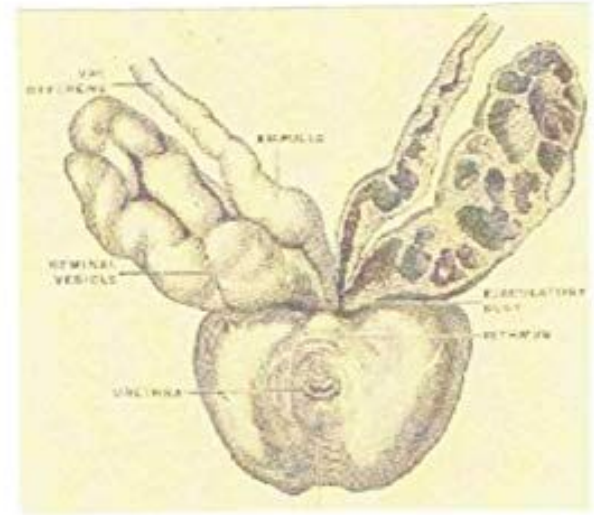
- Prostatic concretions
- Pseudostratified epithelium
- Fibromuscular stroma

Penis

- Tunica albuginea
- Corpus spongiosum
- Corpus cavernosum
- Central artery
- Urethra
- Dorsal artery/vein

Thank you!

Contact: lwolak@uwo.ca
Feedback: goo.gl/4n4B5w



You've made a
vas deferens
in my life.