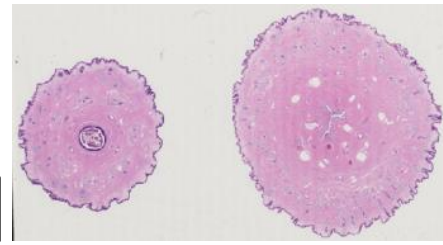


LABORATORY EXERCISES FOR FEMALE REPRODUCTIVE SYSTEM



DEMO SLIDE BOX 194 – (380) Ovary, cat

Cells of the corpus luteum: oocyte, follicular epithelium, **THECA LUTEIN CELLS** of a different ovary, cumulus oophorus, granulos lutein cells, theca interna, theca externa, tunica albuginea, primordial follicles, theca interna, theca externa, secondary follicles, tertiary (vesicular) follicles, macula, corpus.

THE CELLS OF THE CORPUS LUTEUM ARE LUTEIN CELLS AND MOST OF THEM ARE FORMED FROM THE GRANULOSA (FOLLICULAR) CELLS THAT REMAIN AFTER OVULATION. THE THECA INTERNA CELLS ALSO FORM SOME OF THE LUTEIN CELLS (THEY FORM THE SMALLER LUTEIN CELLS, CALLED THECA LUTEIN CELLS).

DEMO SLIDE BOX 196 (889)– Ovary, uterine tube, and uterus, cat.

Slide #185 (PG-1-31). Vagina, sow.

DEMO SLIDE BOX 198 (868)–Uterus, dog.

the blood in the endometrial stroma; visible hemorrhage is considered normal during the PROESTRUS phase of the estrous cycle in this species.

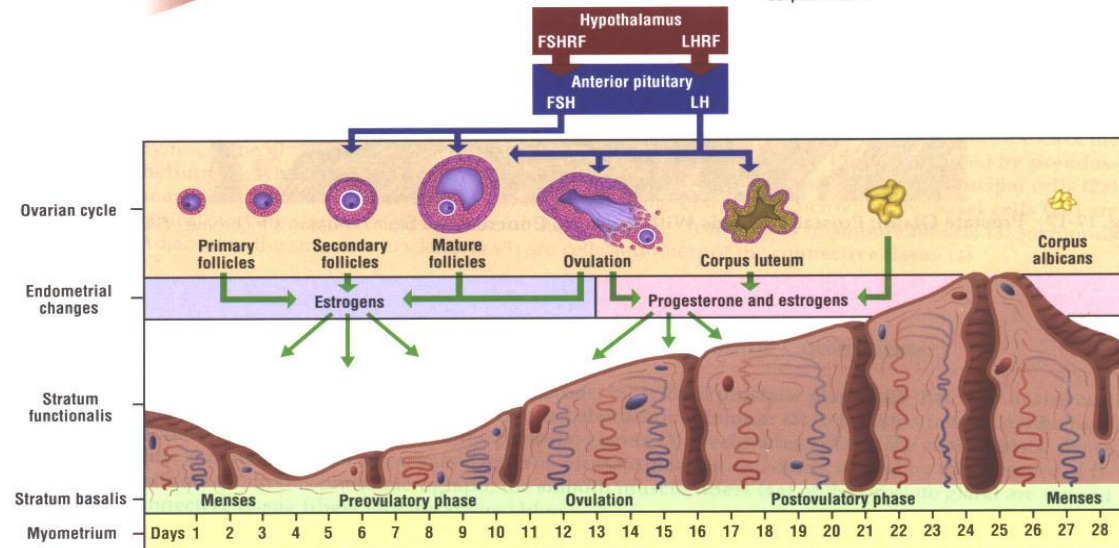
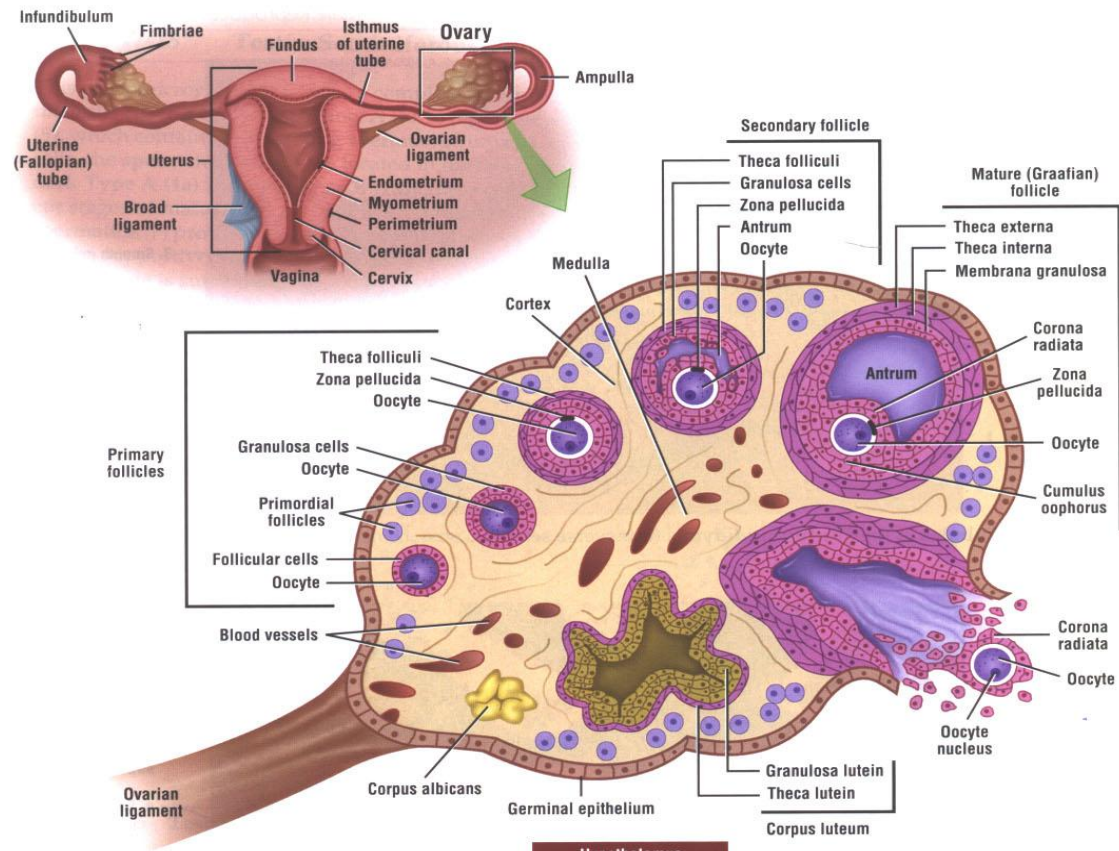
blood in the endometrial stroma; epithelium

DEMO SLIDE BOX #203 (1085)– Cervix, cow.

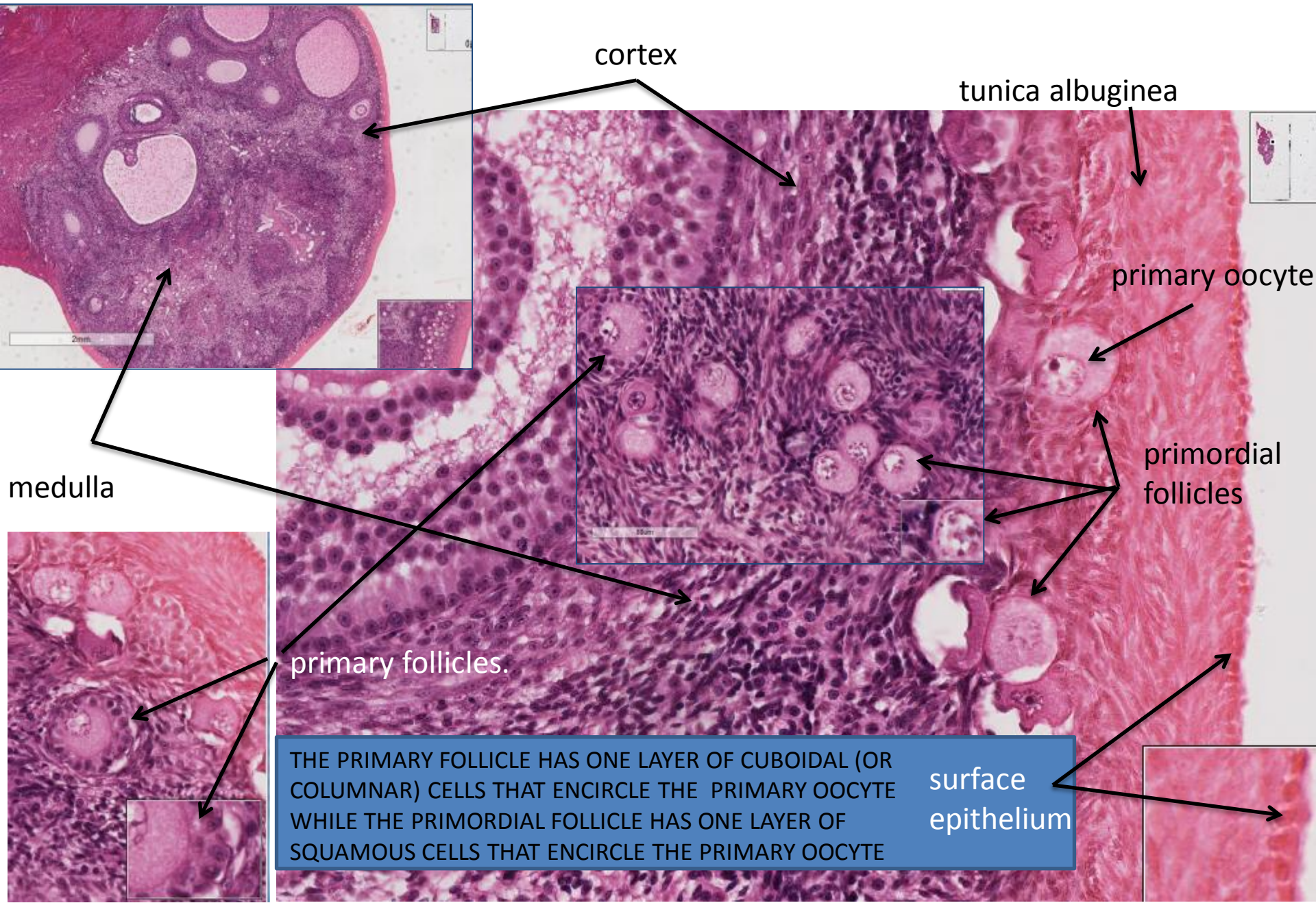
simple columnar epithelium, tunica muscularis, both transverse and longitudinal folds are present in the bovine cervix, mucus

DEMO SLIDE BOX 202 (PG-1-84)–Mammary gland, cow.

alveoli, simple cuboidal or simple columnar epithelium, lactiferous duct, simple columnar or stratified cuboidal epithelium, myoepithelial cells, intralobar ducts, intralobular ducts, simple columnar or cuboidal epithelium



DEMO SLIDE BOX 194– (380) Ovary, cat.



cortex

tunica albuginea

primary oocyte

primordial follicles

medulla

primary follicles.

surface epithelium

THE PRIMARY FOLLICLE HAS ONE LAYER OF CUBOIDAL (OR COLUMNAR) CELLS THAT ENCIRCLE THE PRIMARY OOCYTE WHILE THE PRIMORDIAL FOLLICLE HAS ONE LAYER OF SQUAMOUS CELLS THAT ENCIRCLE THE PRIMARY OOCYTE

DEMO SLIDE BOX 194 – (380) Ovary, cat.

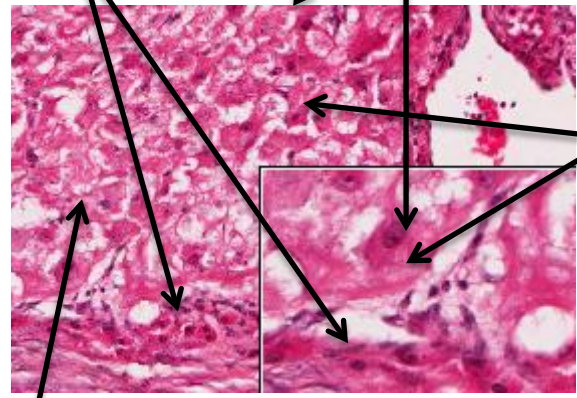
Cells of the corpus luteum

oocyte

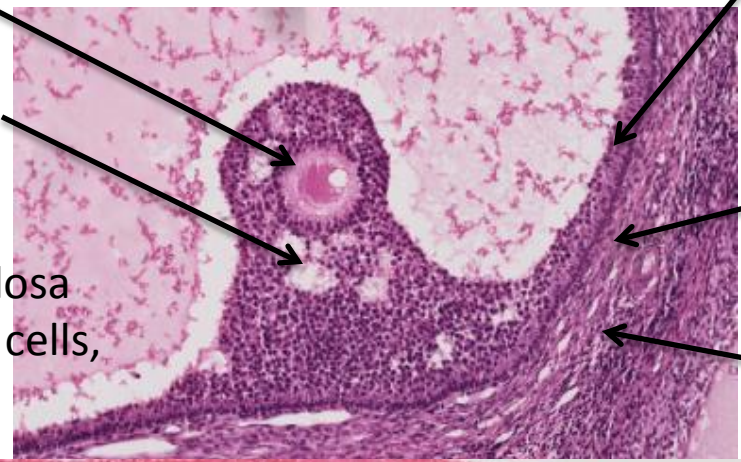
follicular epithelium

THECA LUTEIN CELLS of a different ovary

cumulus oophorus.



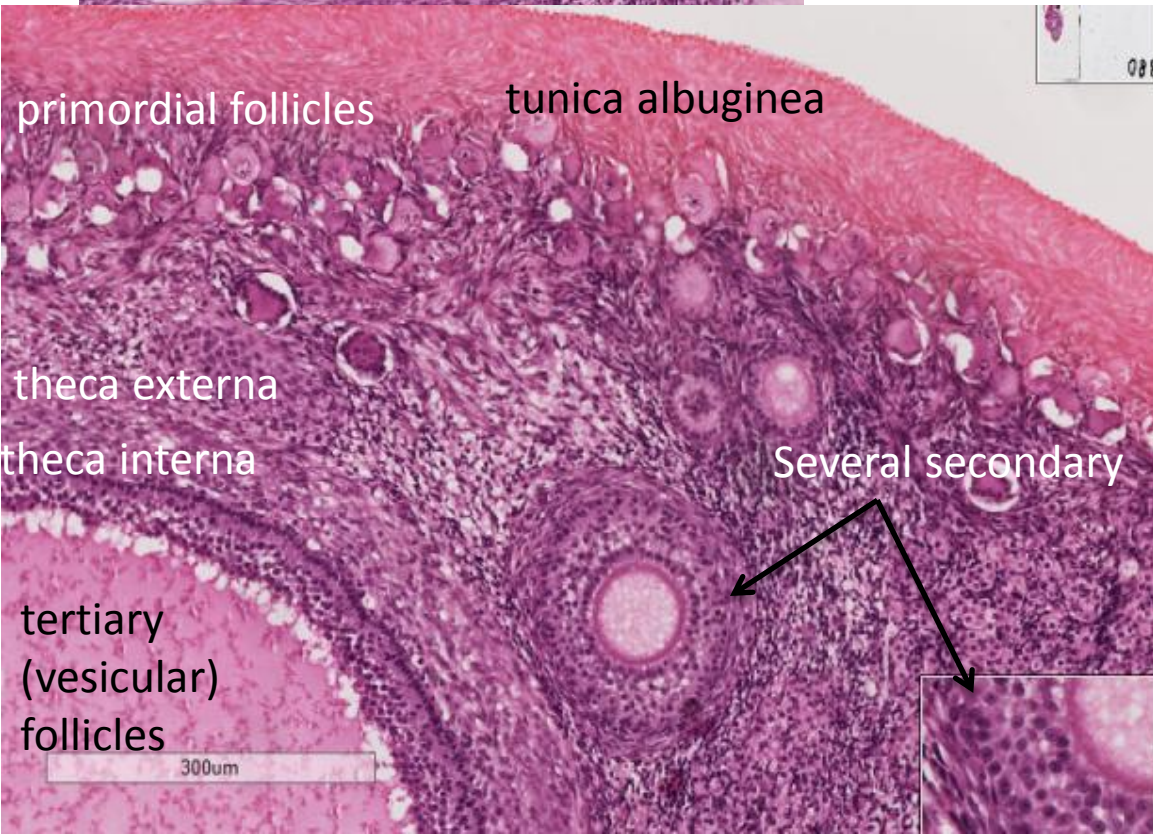
granulosa lutein cells,



theca interna

theca interna

THE CELLS OF THE CORPUS LUTEUM ARE LUTEIN CELLS AND MOST OF THEM ARE FORMED FROM THE GRANULOSA (FOLLICULAR) CELLS THAT REMAIN AFTER OVULATION. THE THECA INTERNA CELLS ALSO FORM SOME OF THE LUTEIN CELLS (THEY FORM THE SMALLER LUTEIN CELLS, CALLE THECA LUTEIN CELLS)



primordial follicles

tunica albuginea

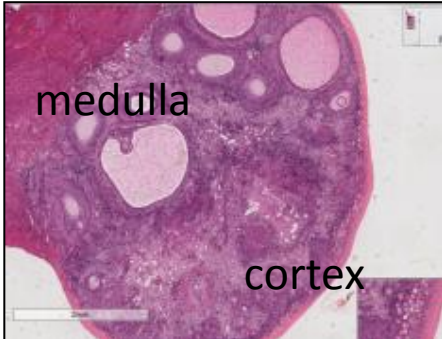
theca externa

theca interna

Several secondary

tertiary (vesicular) follicles

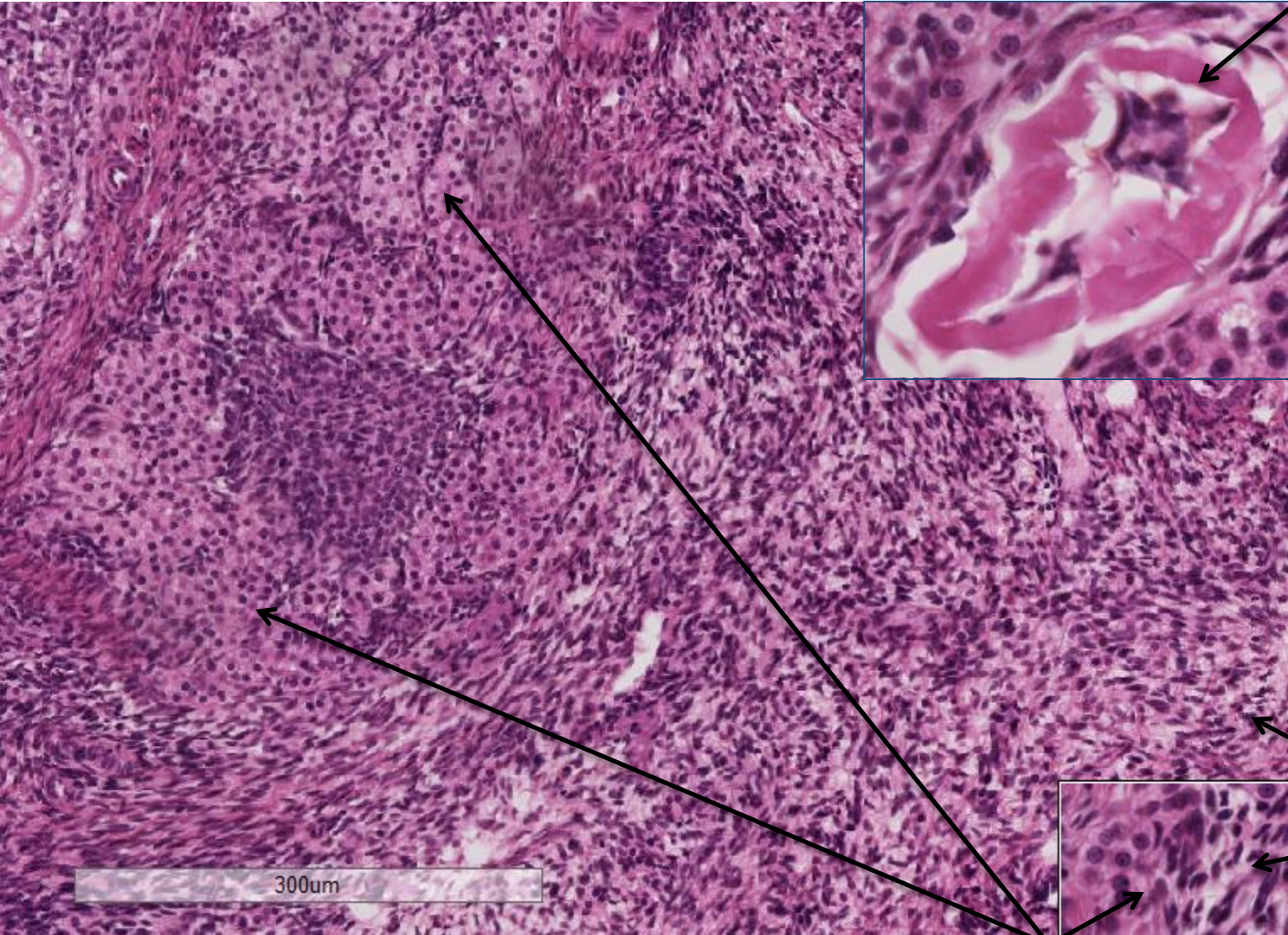
300um



medulla

cortex

DEMO SLIDE BOX 194– (380) Ovary, cat



atretic follicles

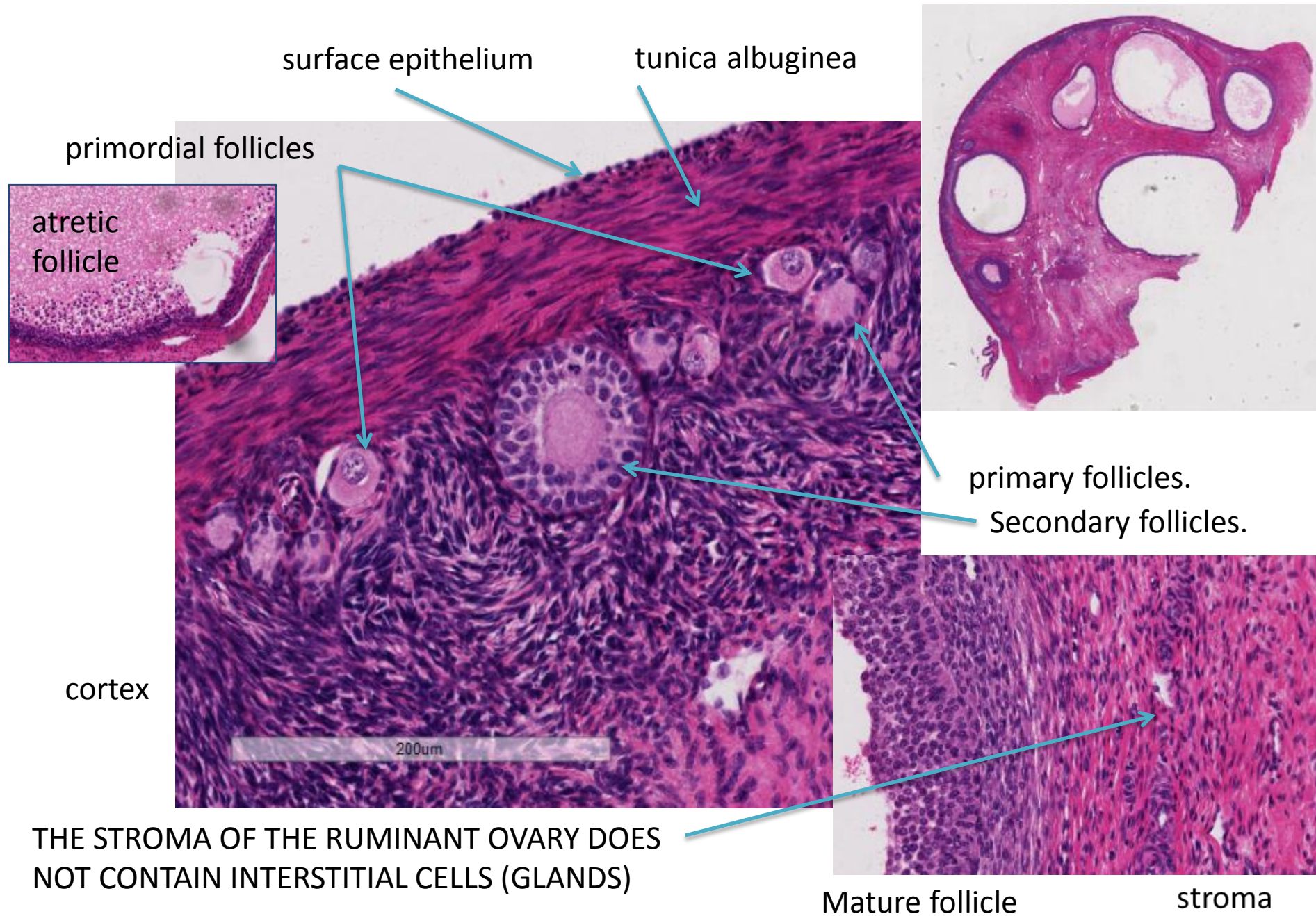
COLLAPSED OR IRREGULAR ZONA PELLUCIDA; LOSS OF OR DEGENERATING PRIMARY OOCYTE; PYKNOTIC GRANULOSA (FOLLICULAR) CELLS; GRANULOSA (FOLLICULAR) CELLS FLOATING IN THE ANTRUM OF TERTIARY FOLLICLES – THESE CELLS ARE TYPICALLY PYCNOTIC AS WELL

fibroblasts.

stroma

palely stained cells of interstitial cells (glands)

Slide #138 (SP-1-95). Ovary, ewe.



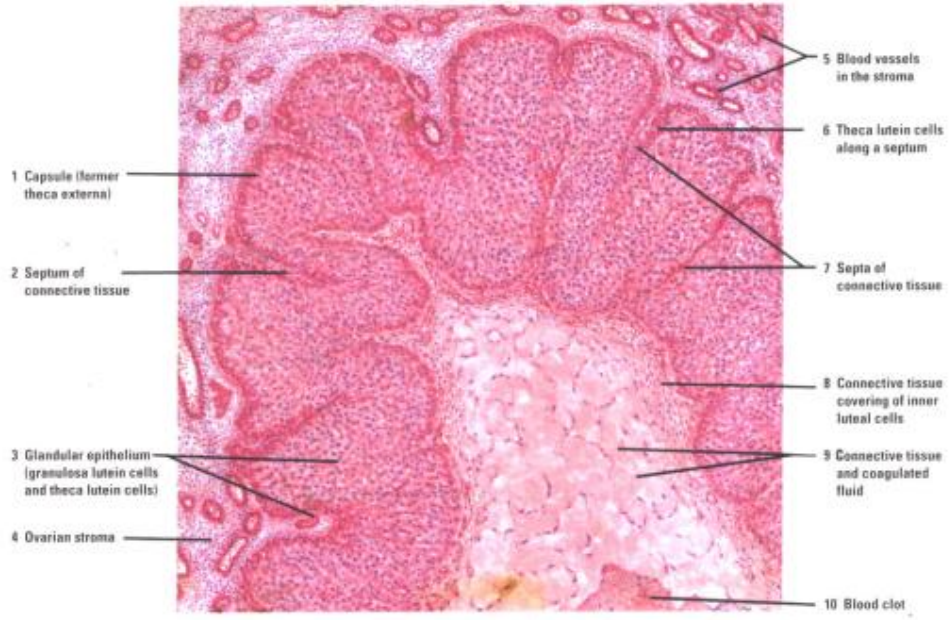


Fig. 18-5 Corpus Luteum (panoramic view). Stain: hematoxyline-eosin. Medium magnification.

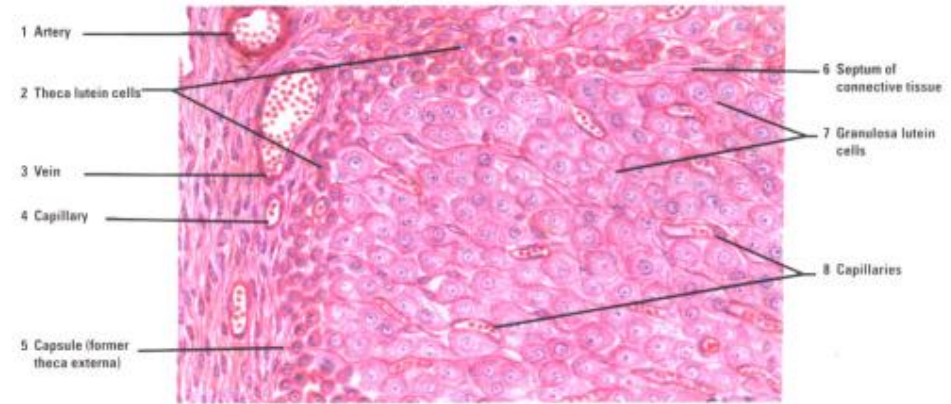
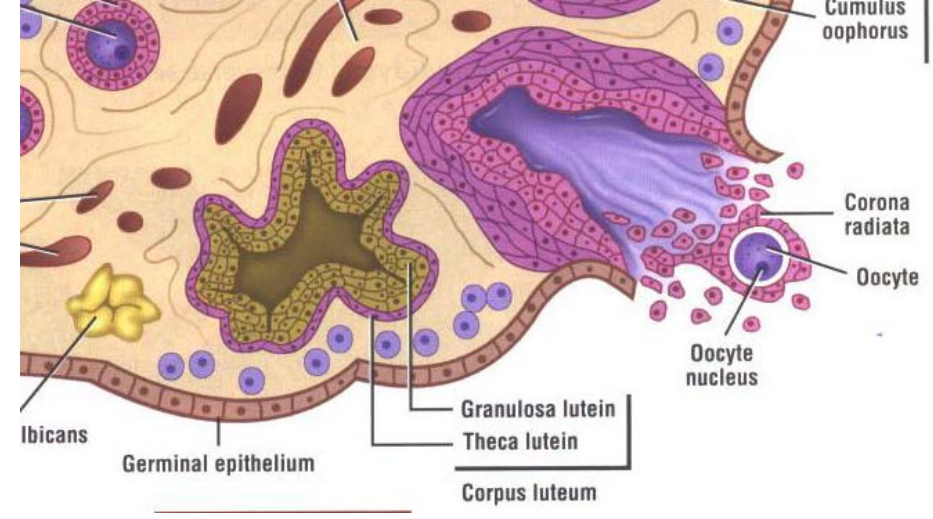
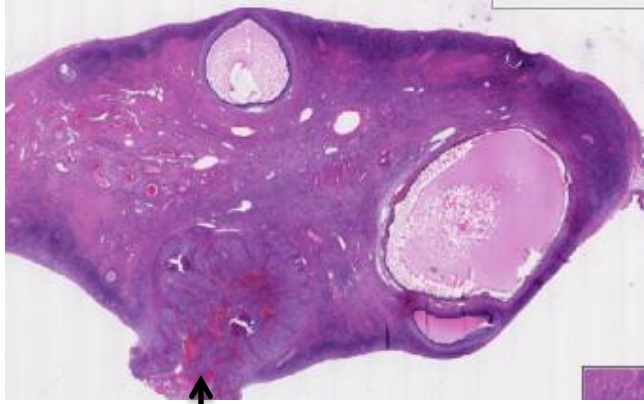
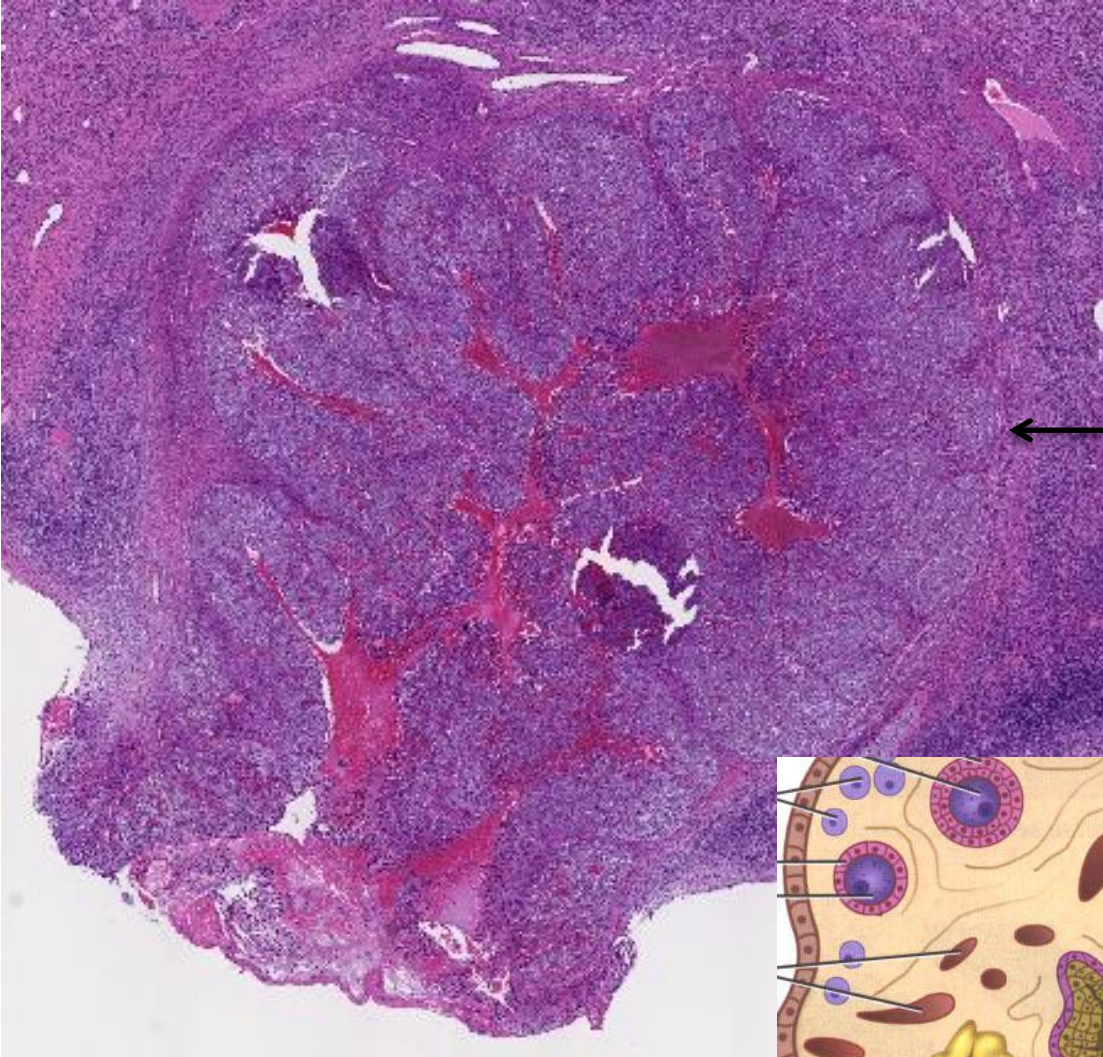


Fig. 18-6 Corpus Luteum: Peripheral Wall. Stain: hematoxylin-eosin. High magnification.

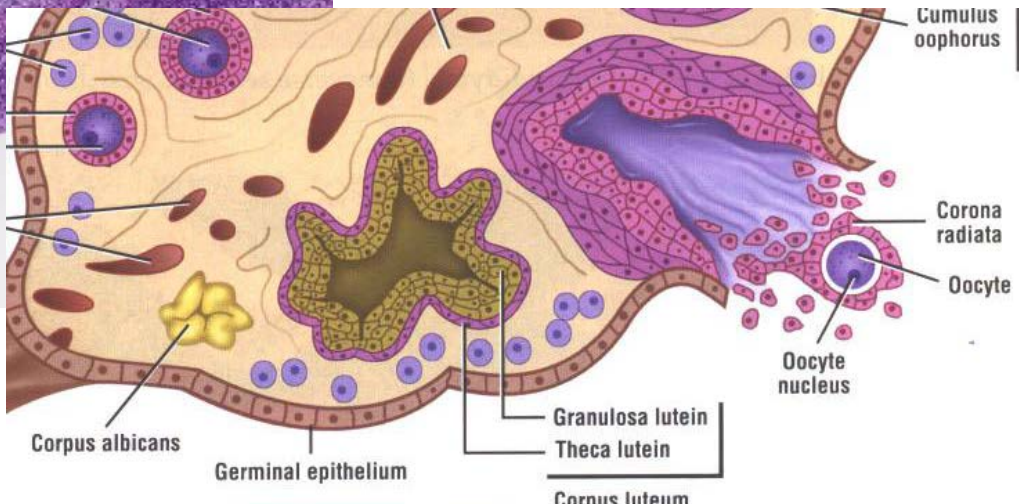


- Ovary, corpus luteum
1. Granulosa lutein
 2. Theca lutein
 3. Central clot

DEMO SLIDE BOX 195 (958)–Ovary, ewe.

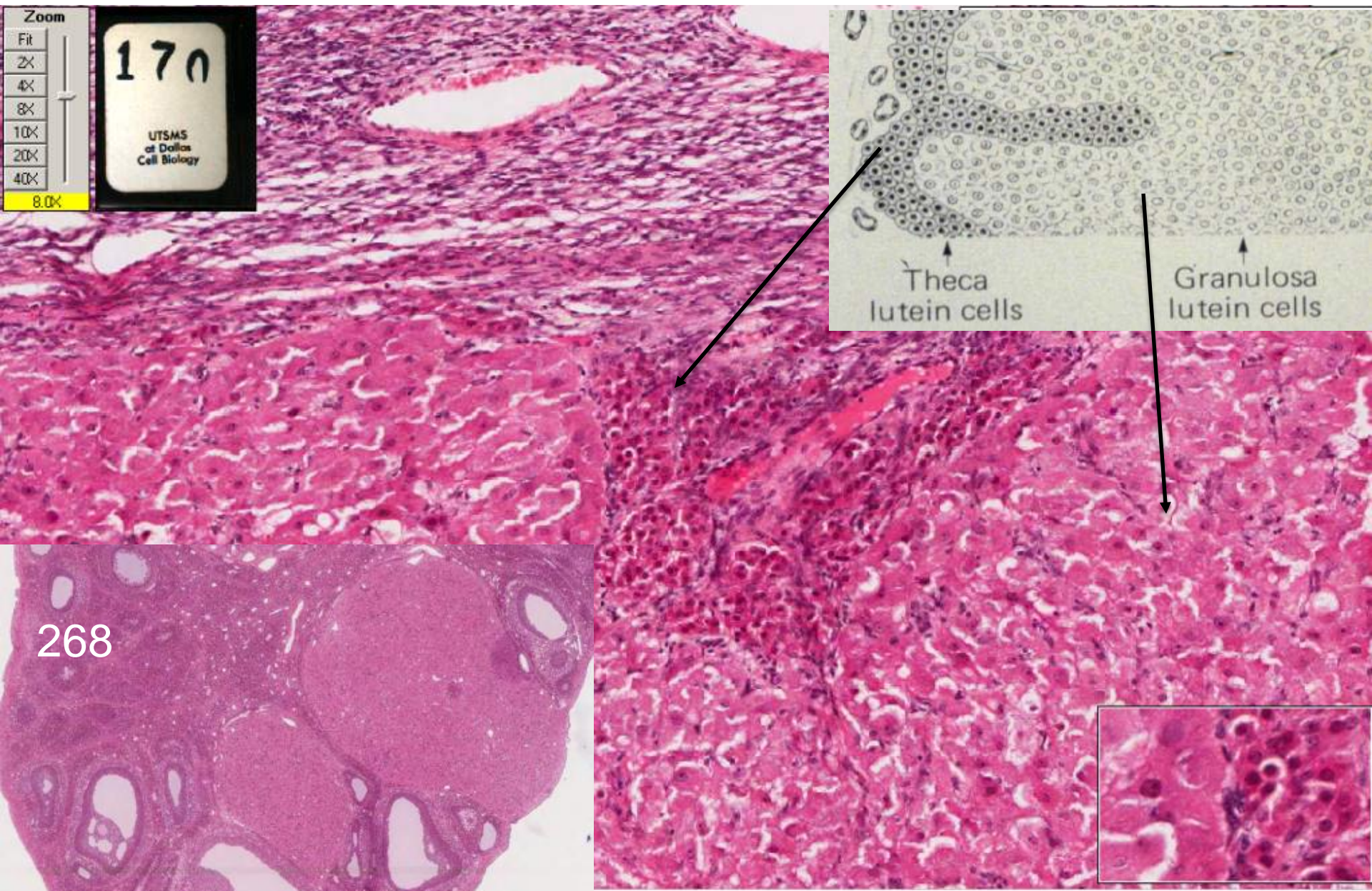


CORPUS HEMORRHAGICUM



170

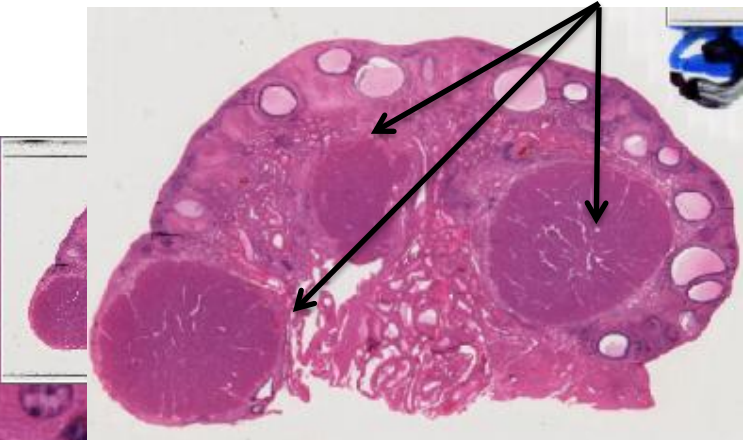
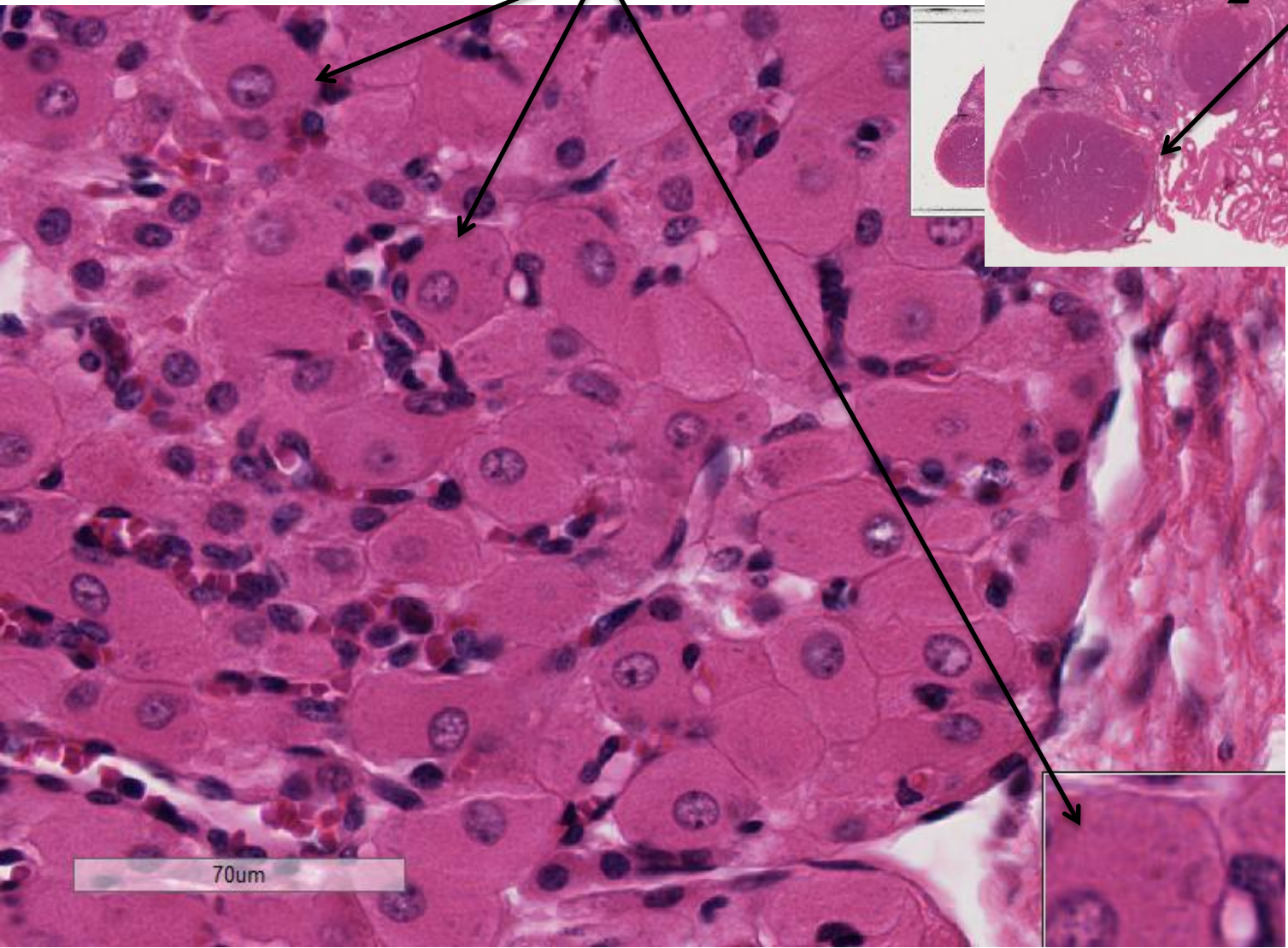
Corpus luteum of ovary



DEMO SLIDE BOX 86 - Ovary, sow.

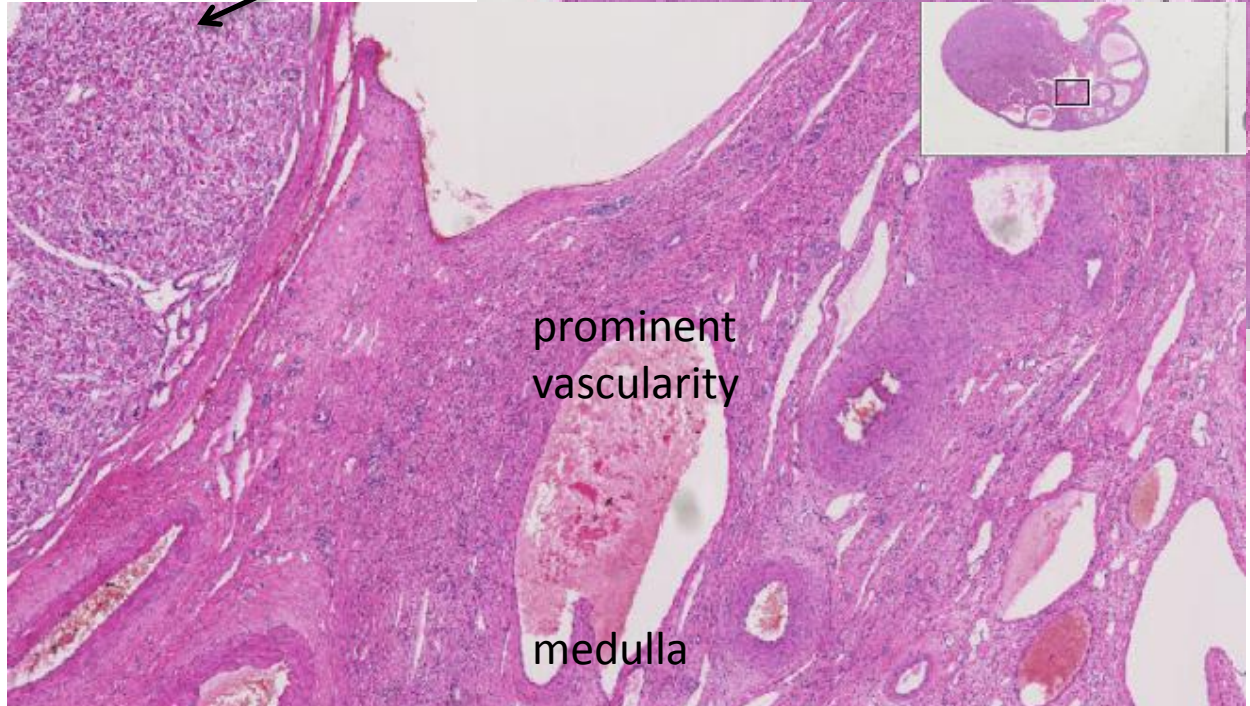
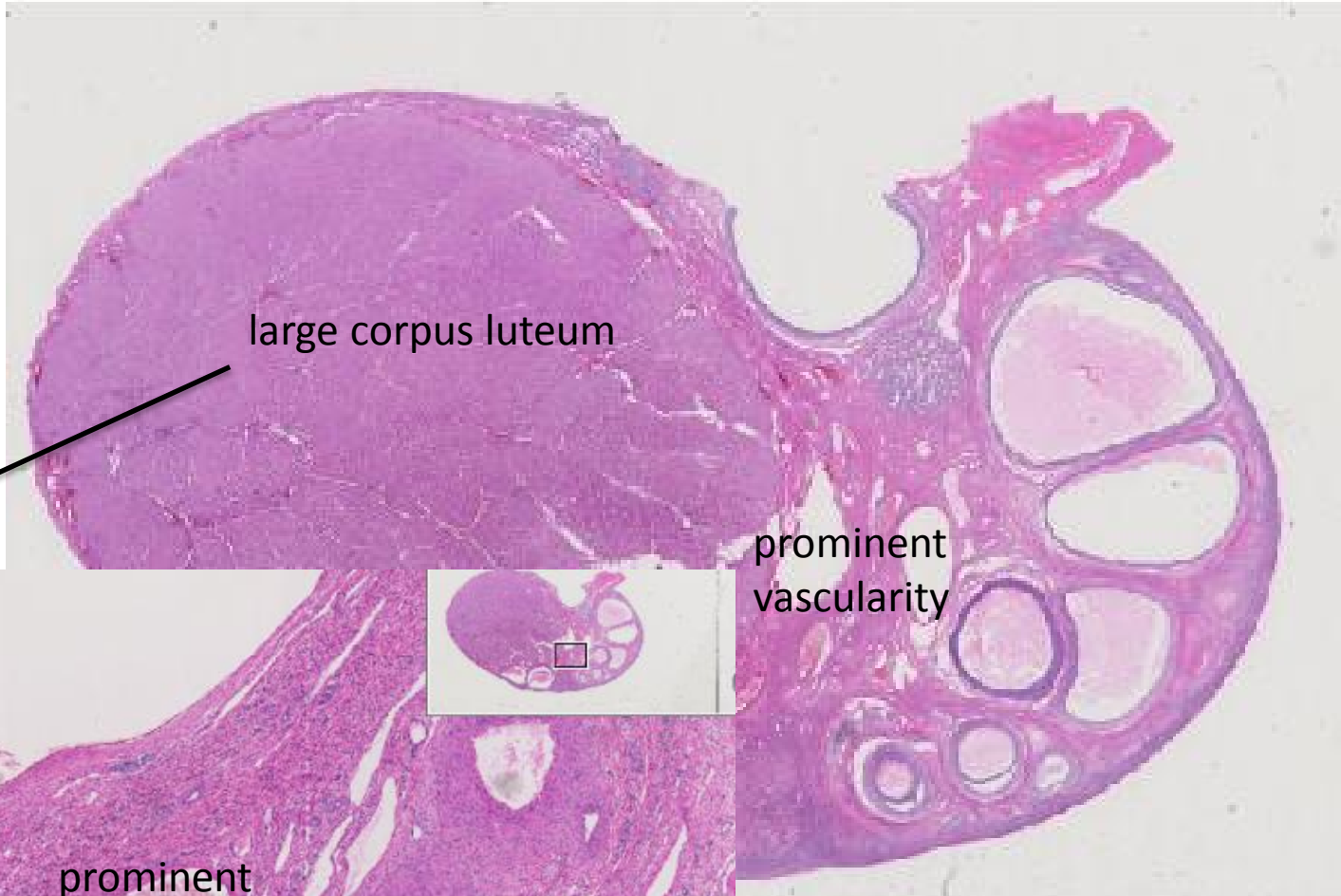
corpora lutea

granulosa lutein cells



primary hormone produced by this structure is **PROGESTERONE**

Slide #150 (BV-1-96A). Ovary, cow.

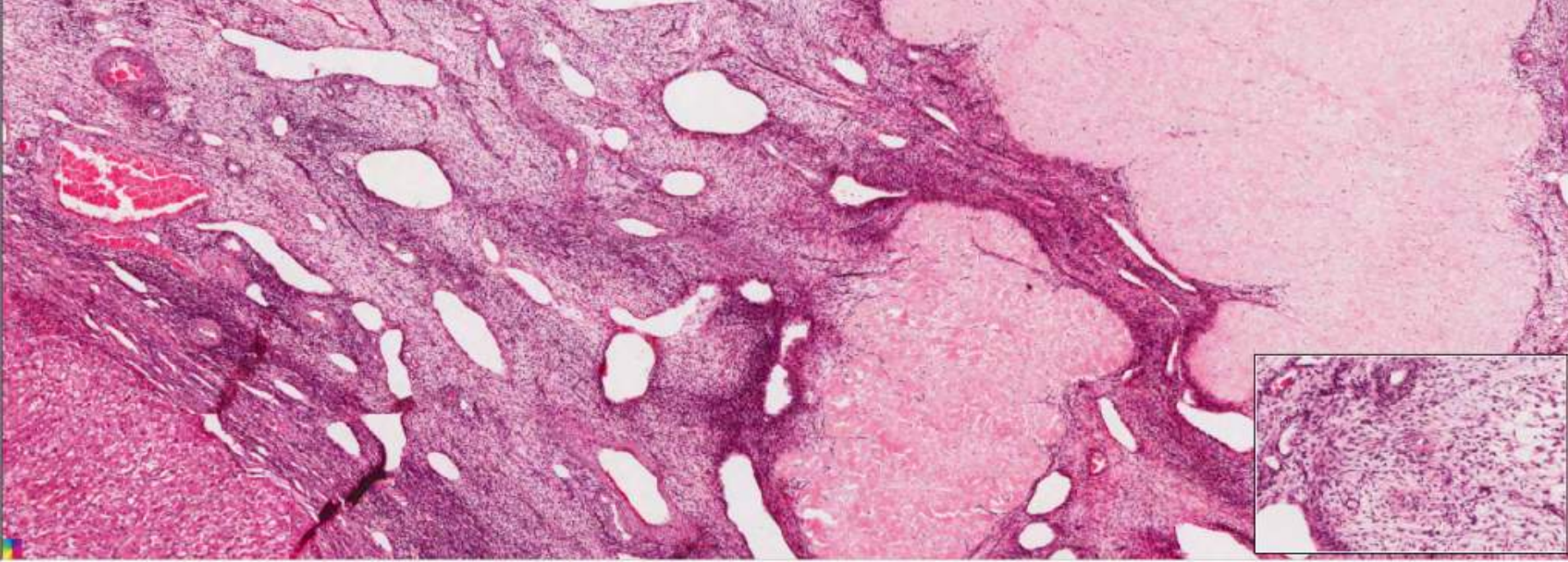
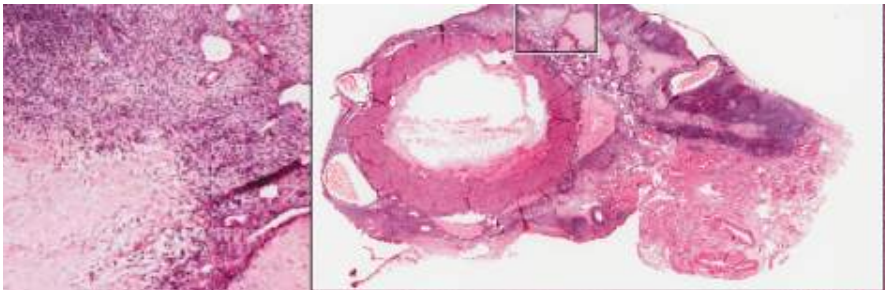
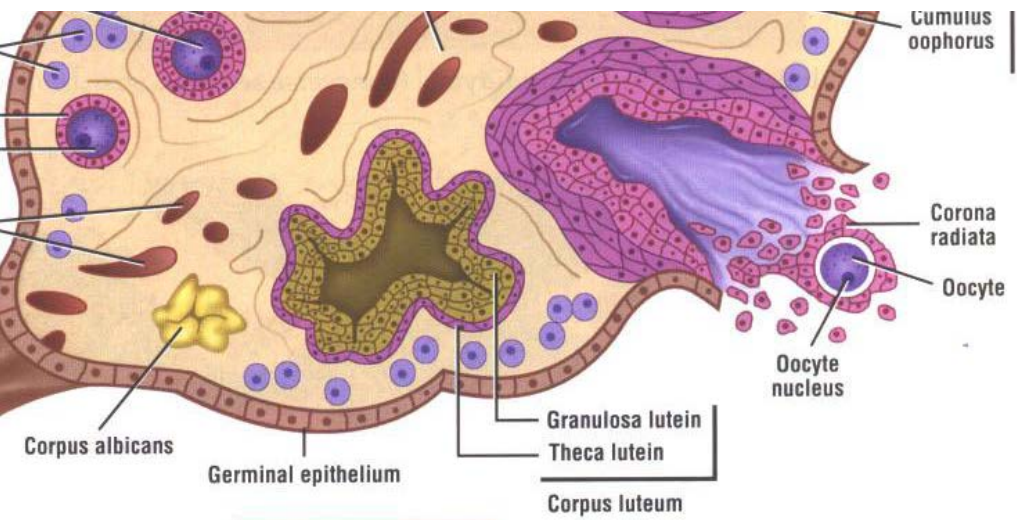


DEMO SLIDE BOX 87 – Demo slide 87. Ovary, cat.

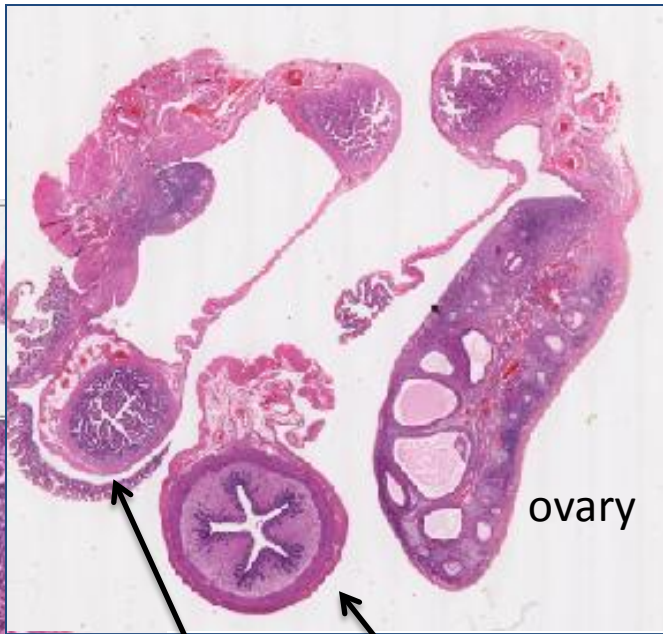
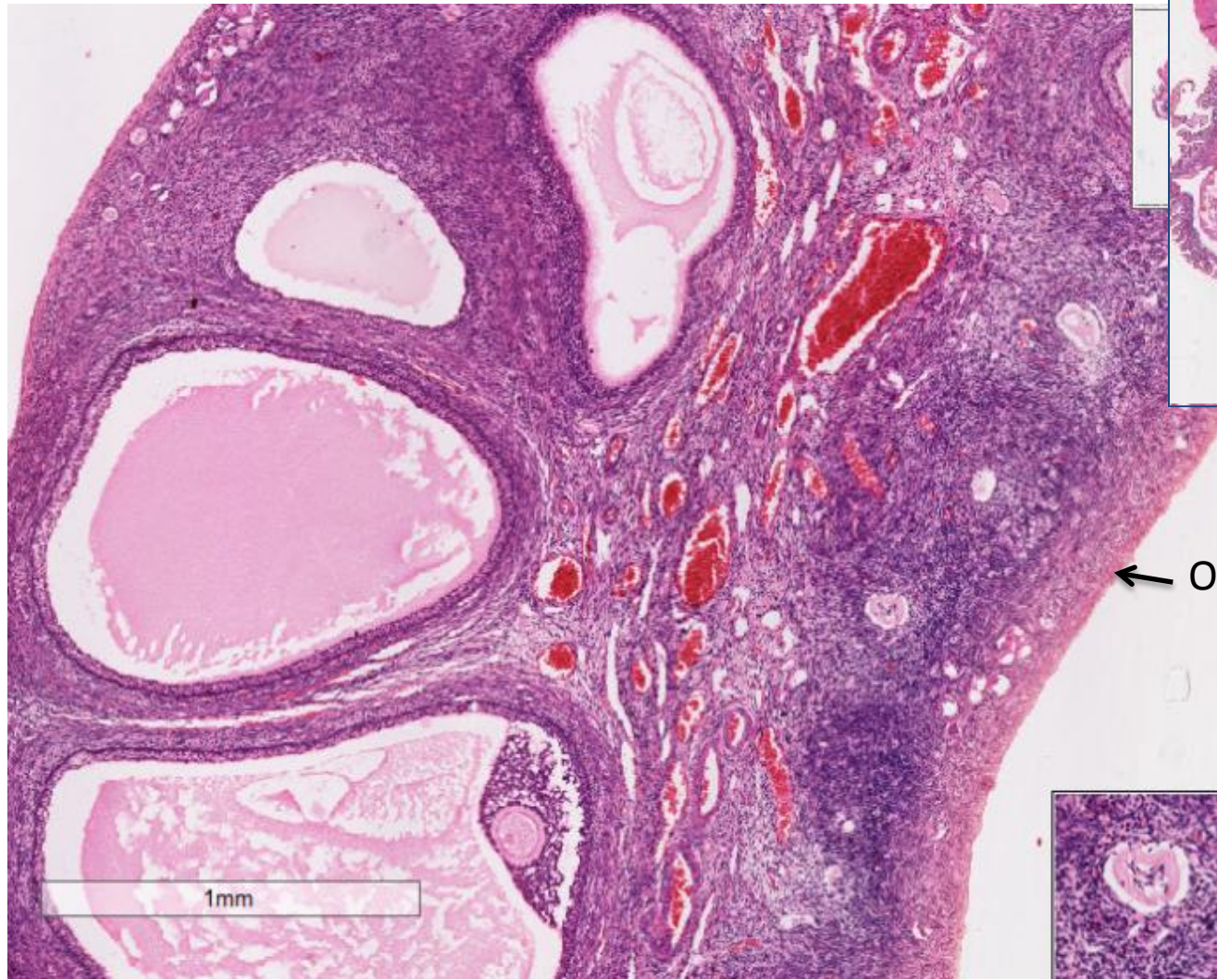


large corpus luteum

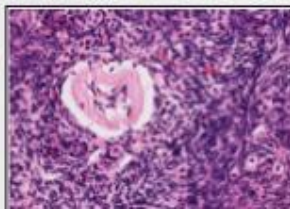
Corpus luteum and corpus albicans of ovary



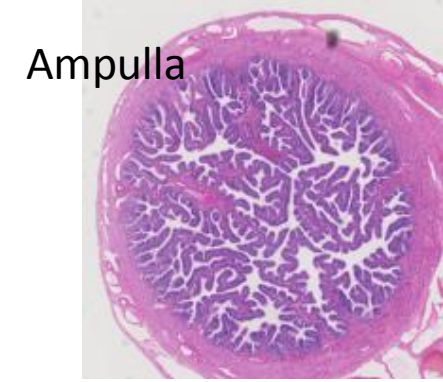
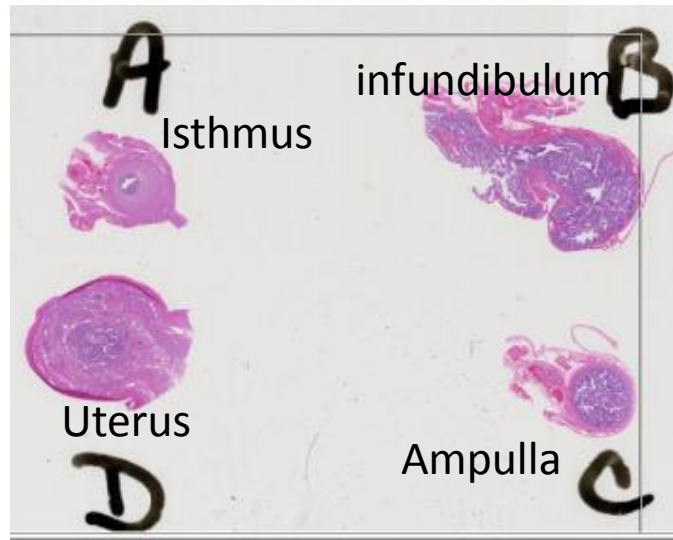
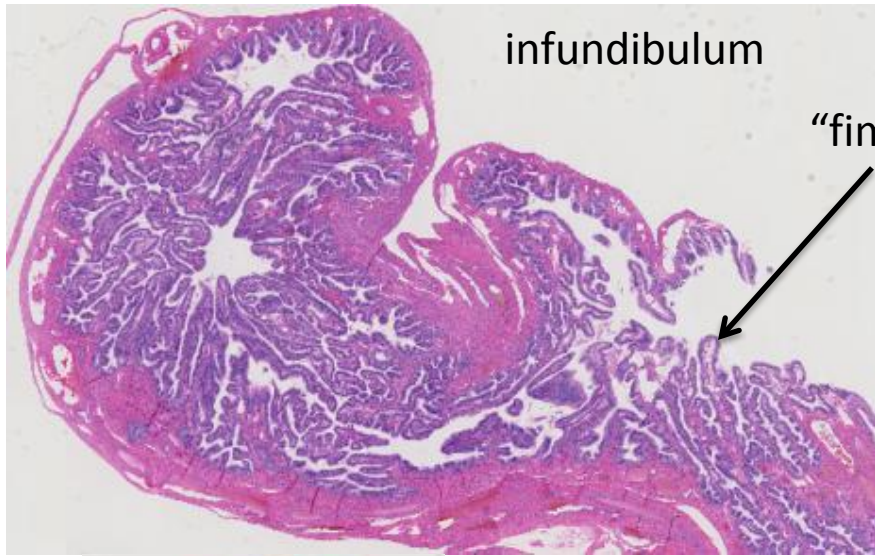
DEMO SLIDE BOX 196 -- Ovary, uterine tube, and uterus, cat. (889).



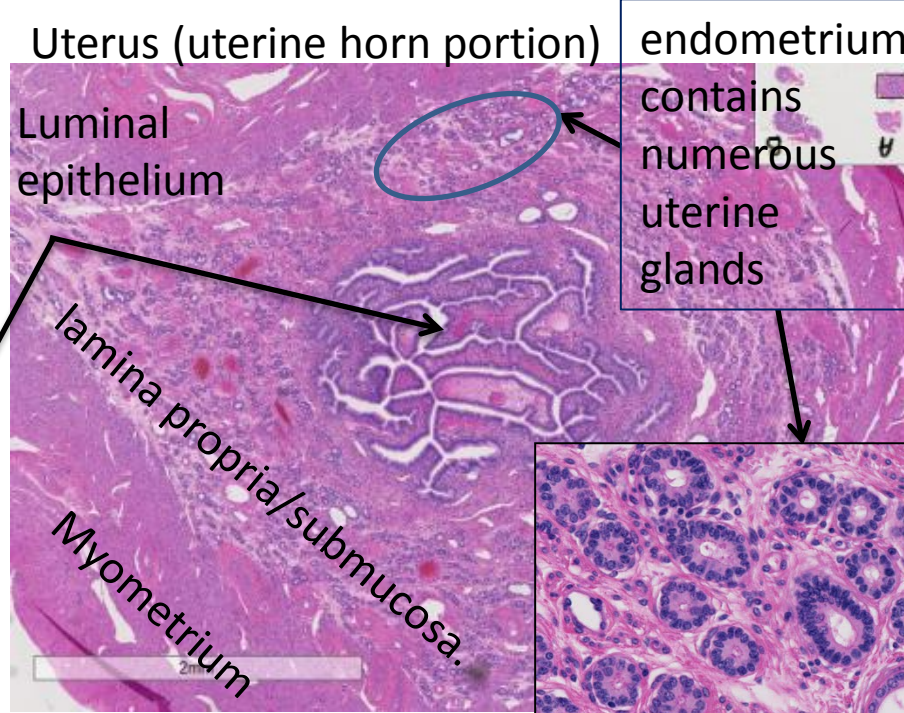
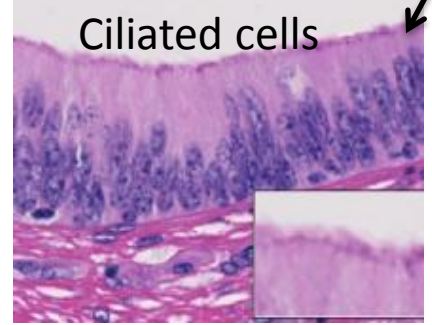
← Ovary, uterine tube, and uterus



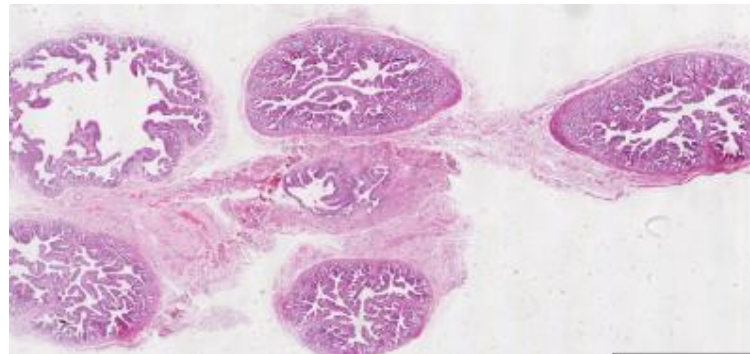
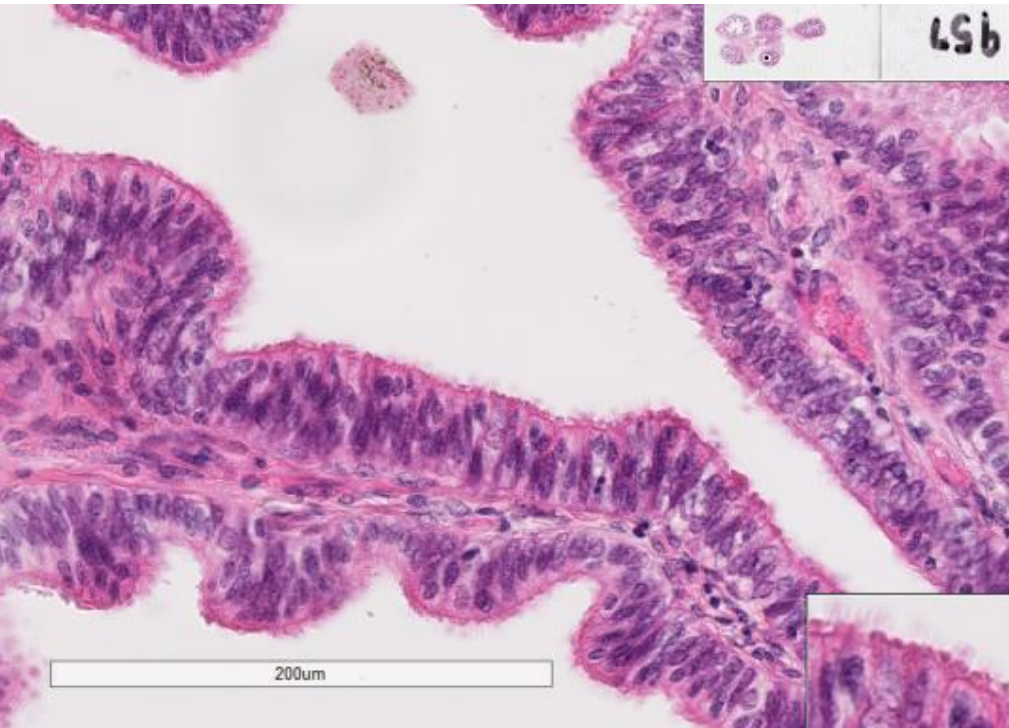
Slide #178 (Pf7-131 b&c). Uterine tube, uterus, pig.



usual site of fertilization.
mucosa is highly folded, and no fimbriae



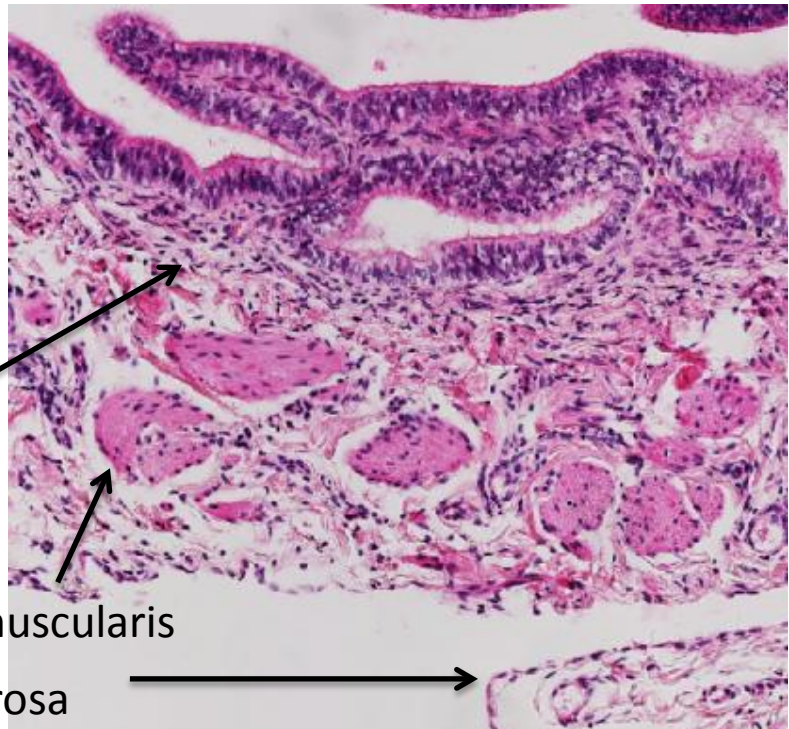
Slide #155 (957). Uterine tube, ewe.



PSEUDOSTRATIFIED COLUMNAR [EPITHELIUM]
WITH CILIA

lamina propria/submucosa—aglandular,

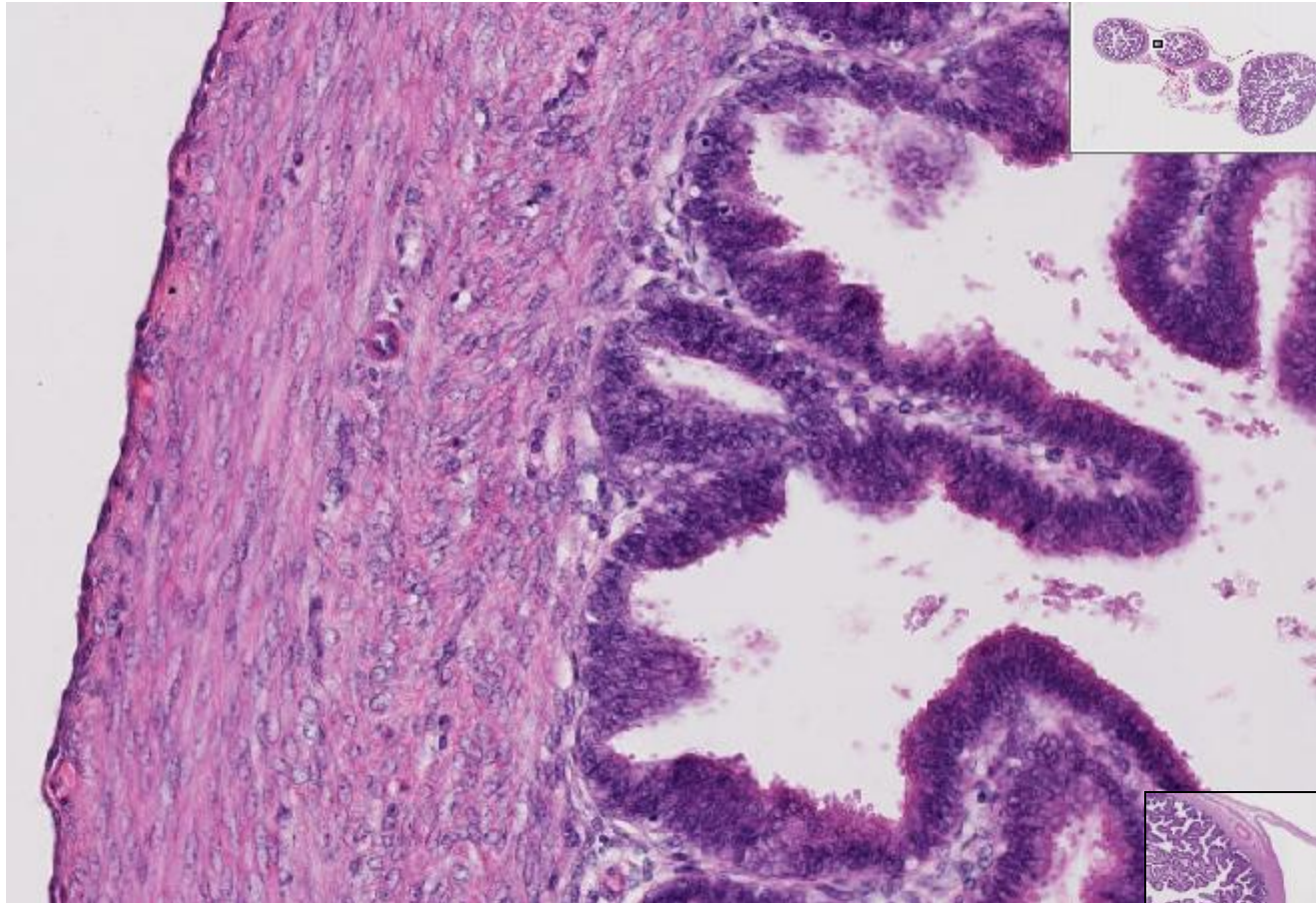
THE ISTHMUS HAS A MUCH THICKER TUNICA
MUSCULARIS AND THE MUCOSA IS MUCH LESS
FOLDED OR COMPLEX, WHILE THE AMPULLA HAS A
THINNER TUNICA MUSCULARIS AND A MUCH MORE
COMPLEX OR FOLDED MUCOSA



tunica muscularis

serosa

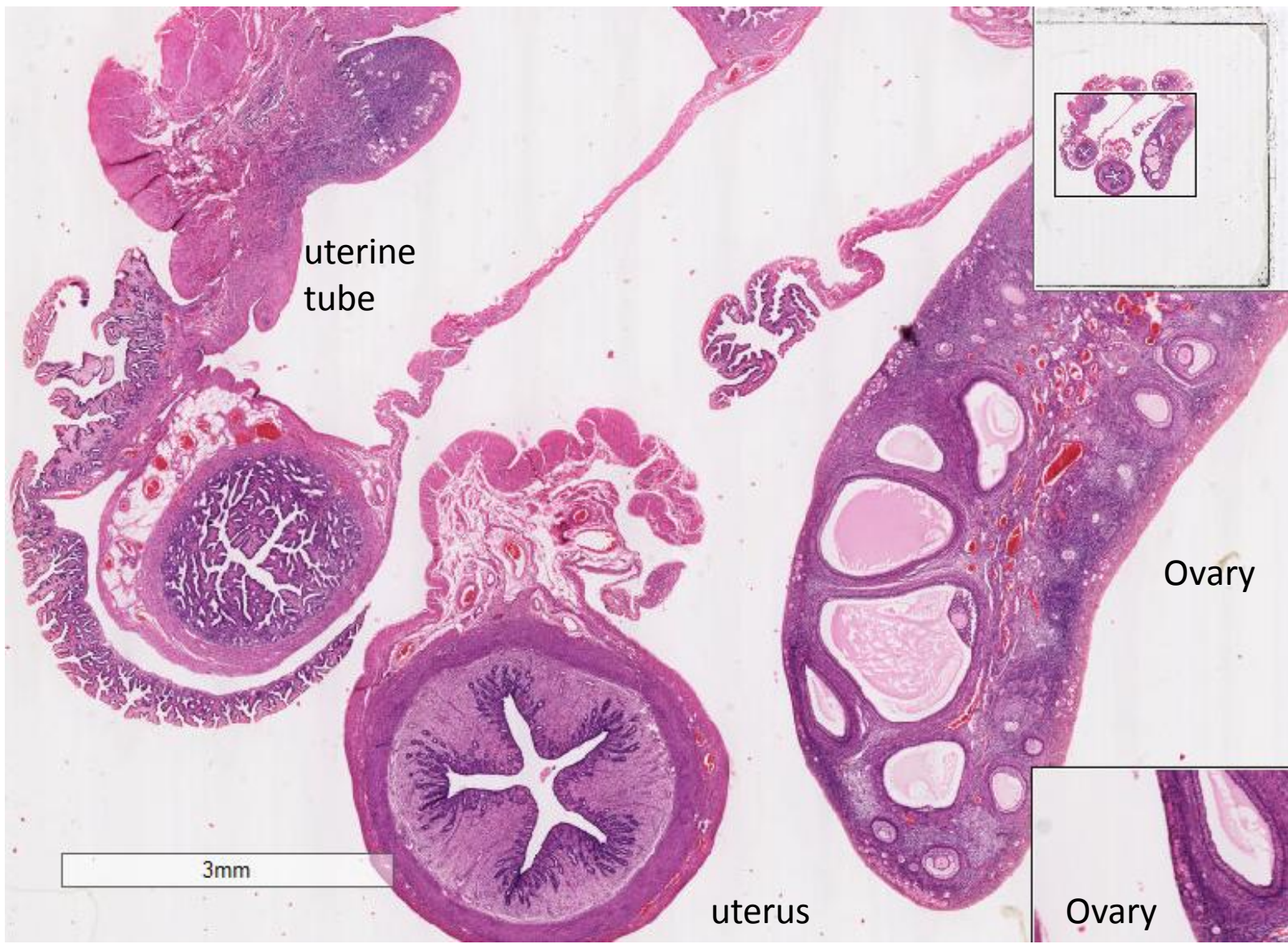
DEMO SLIDE BOX 197 (972) –Uterine tube, sow.



What is the name of the portion of the broad ligament that suspends the uterine tube?

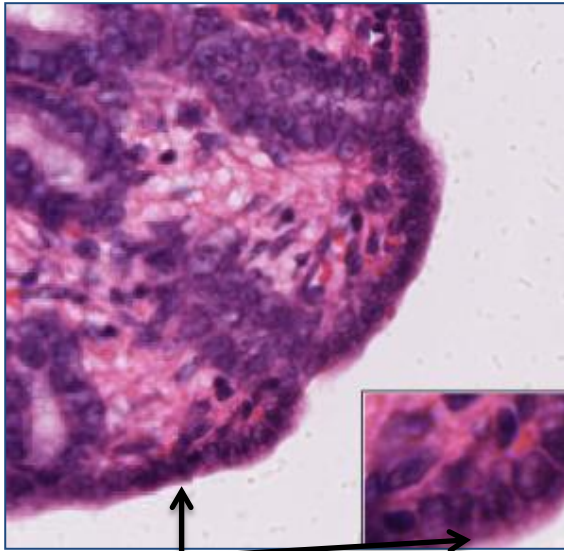
MESOSALPINX

DEMO SLIDE BOX 196 (889)– Ovary, uterine tube, and uterus, cat.



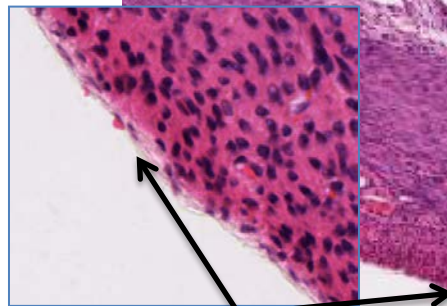
DEMO SLIDE BOX 196 (889)– Ovary, uterine tube, and uterus, cat.

THIS ANIMAL WAS NOT IN ESTRUS

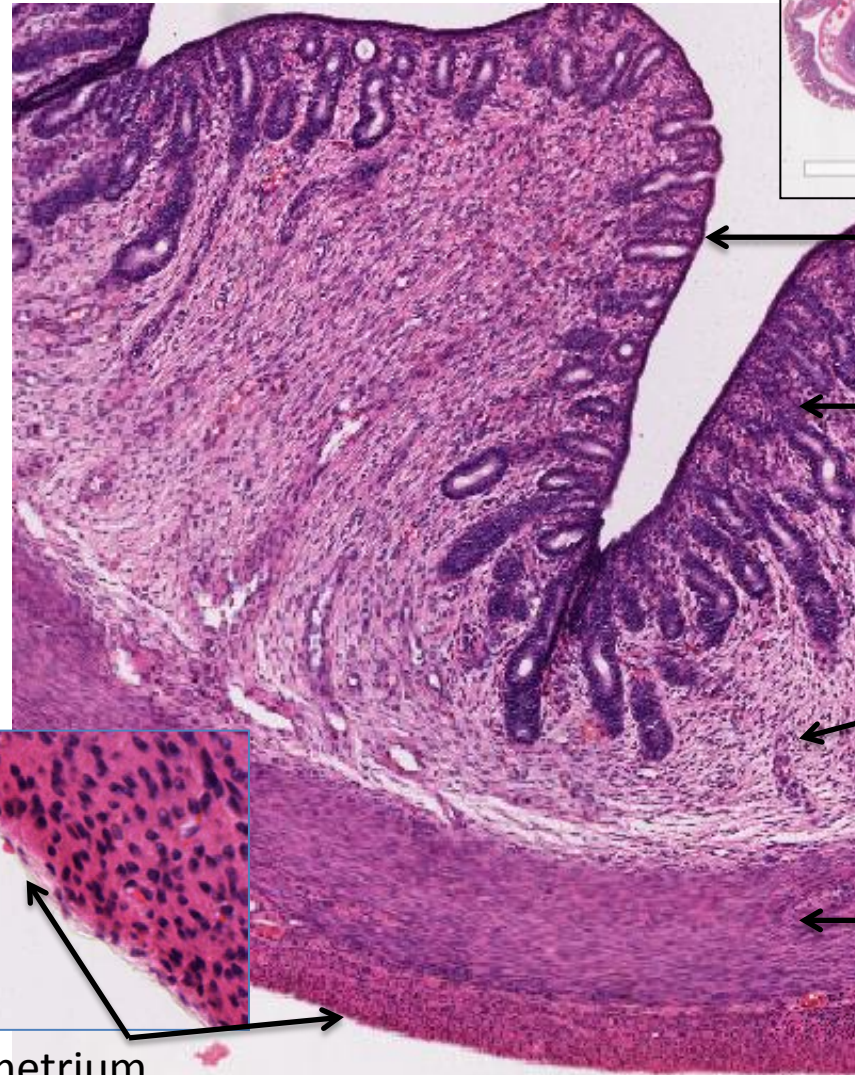


Epithelium is not active

THE UTERINE GLANDS HAD NOT YET BECOME HIGHLY PROLIFERATED



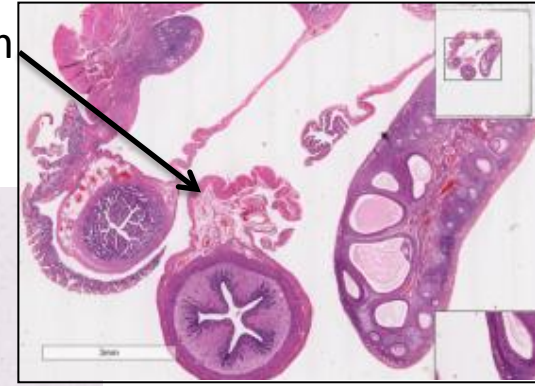
perimetrium



700um

mesometrium

uterus



epithelium

endometrium

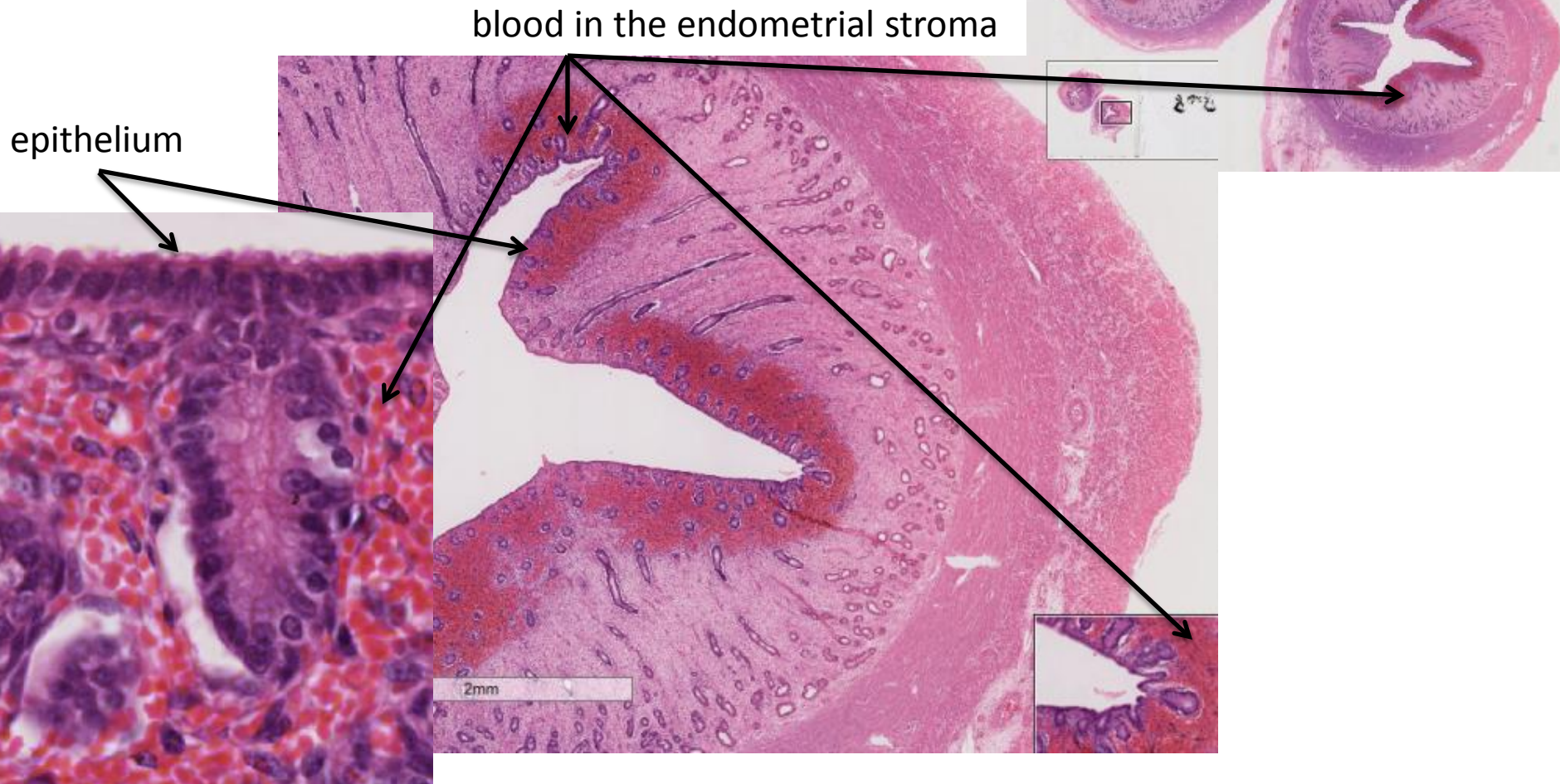
uterine glands.

stroma,

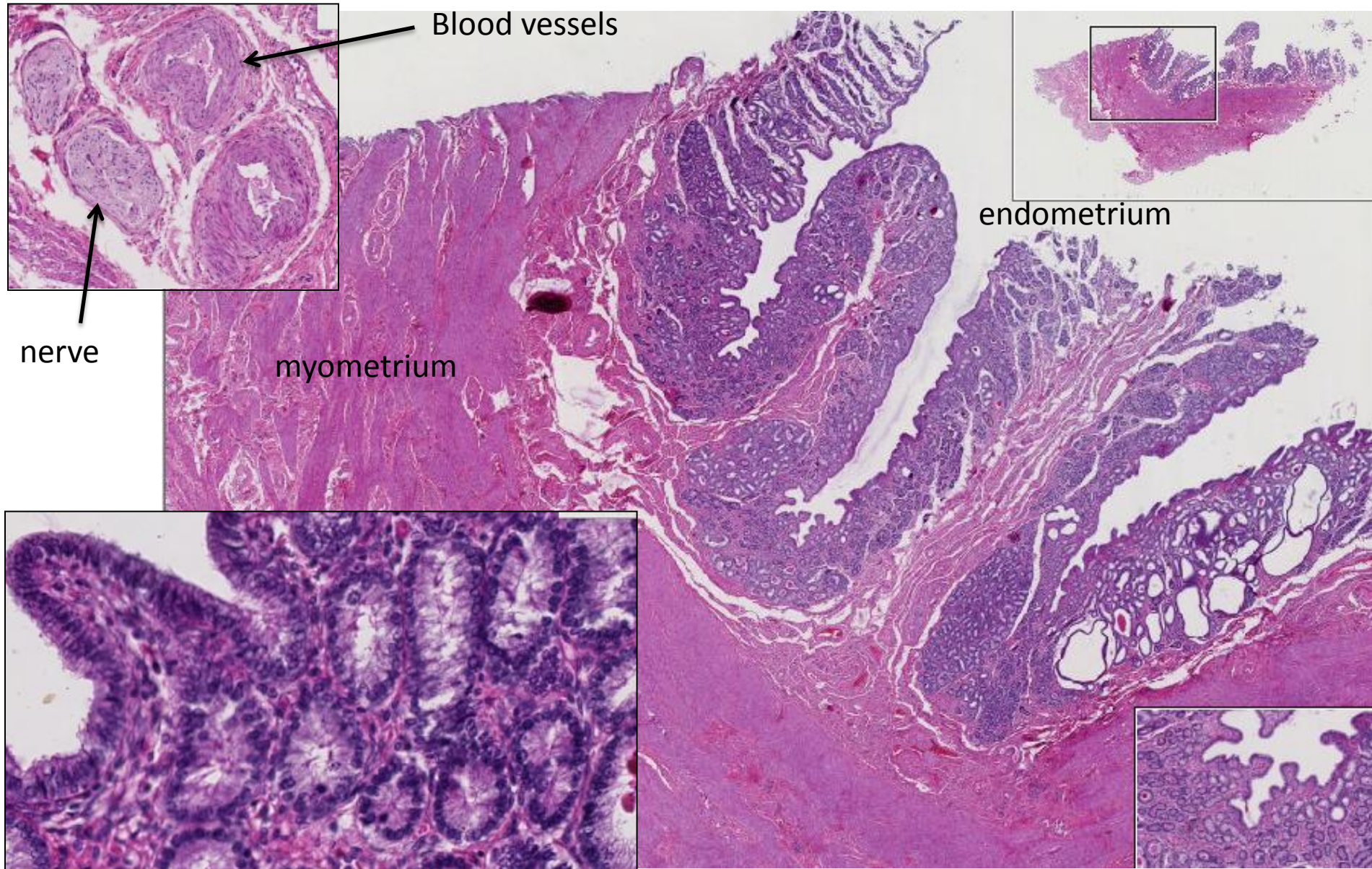
Myometrium has inner circular and outer longitudinal layers of smooth muscle.

DEMO SLIDE BOX 198 (868)–Uterus, dog.

the blood in the endometrial stroma; visible hemorrhage is considered normal during the PROESTRUS phase of the estrous cycle in this species.



Slide #166 (941). Uterus, mare.



Blood vessels

nerve

myometrium

endometrium

endometrium has a large number of uterine glands

Slide #147 (Ff132). Uterus, cat

outer region of the uterus is the PERIMETRIUM (OR SEROSA OR VISCERAL PERITONEUM)

Myometrium

vasculature within the mesometrium

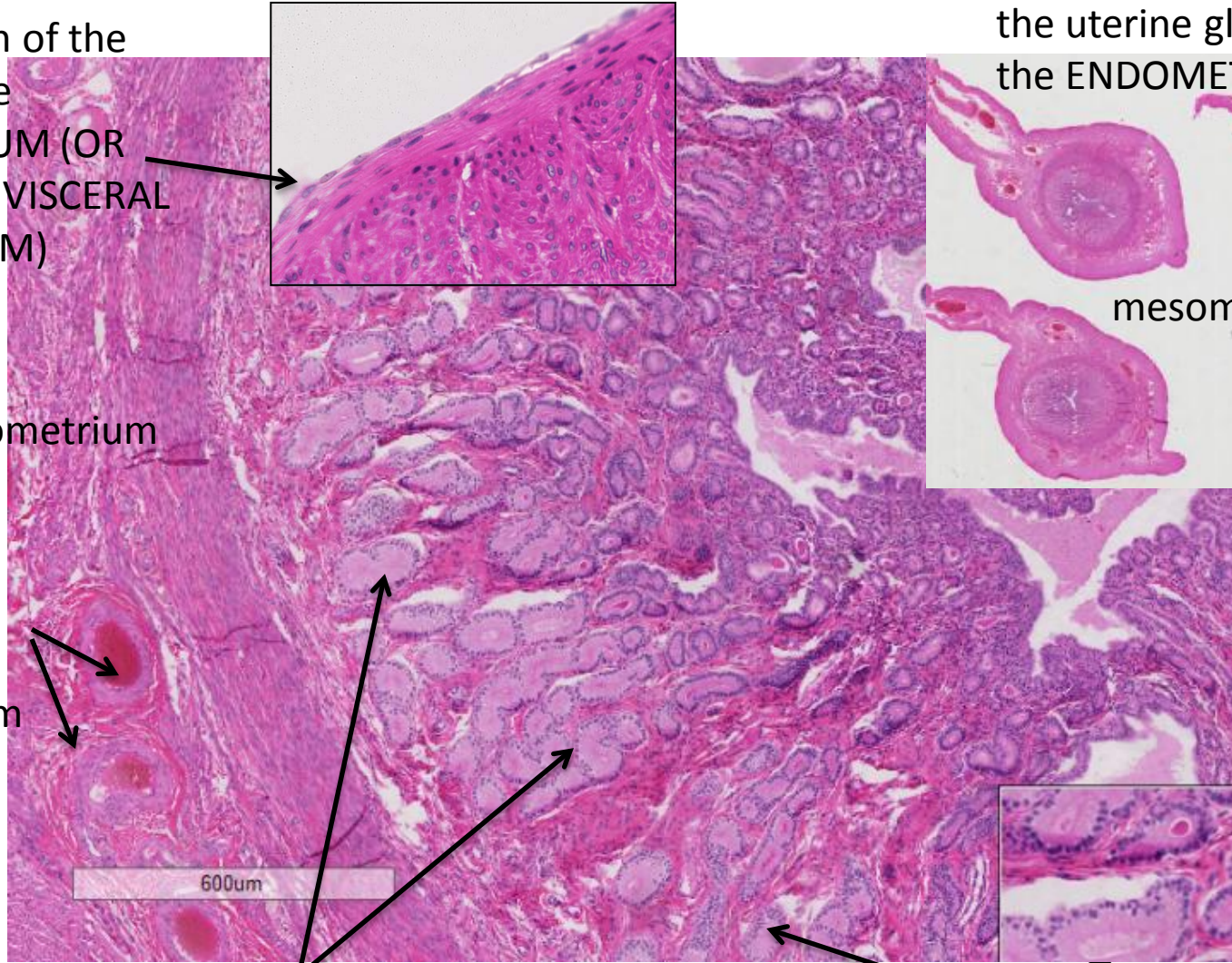
600um

luminal epithelium and underlying CCT containing the uterine glands is called the ENDOMETRIUM

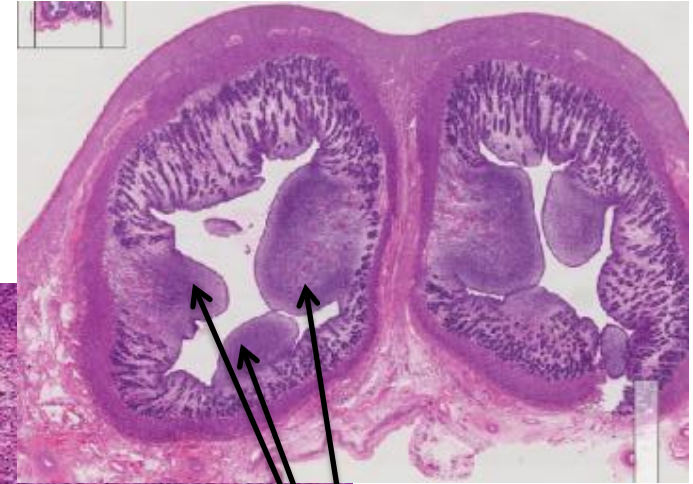
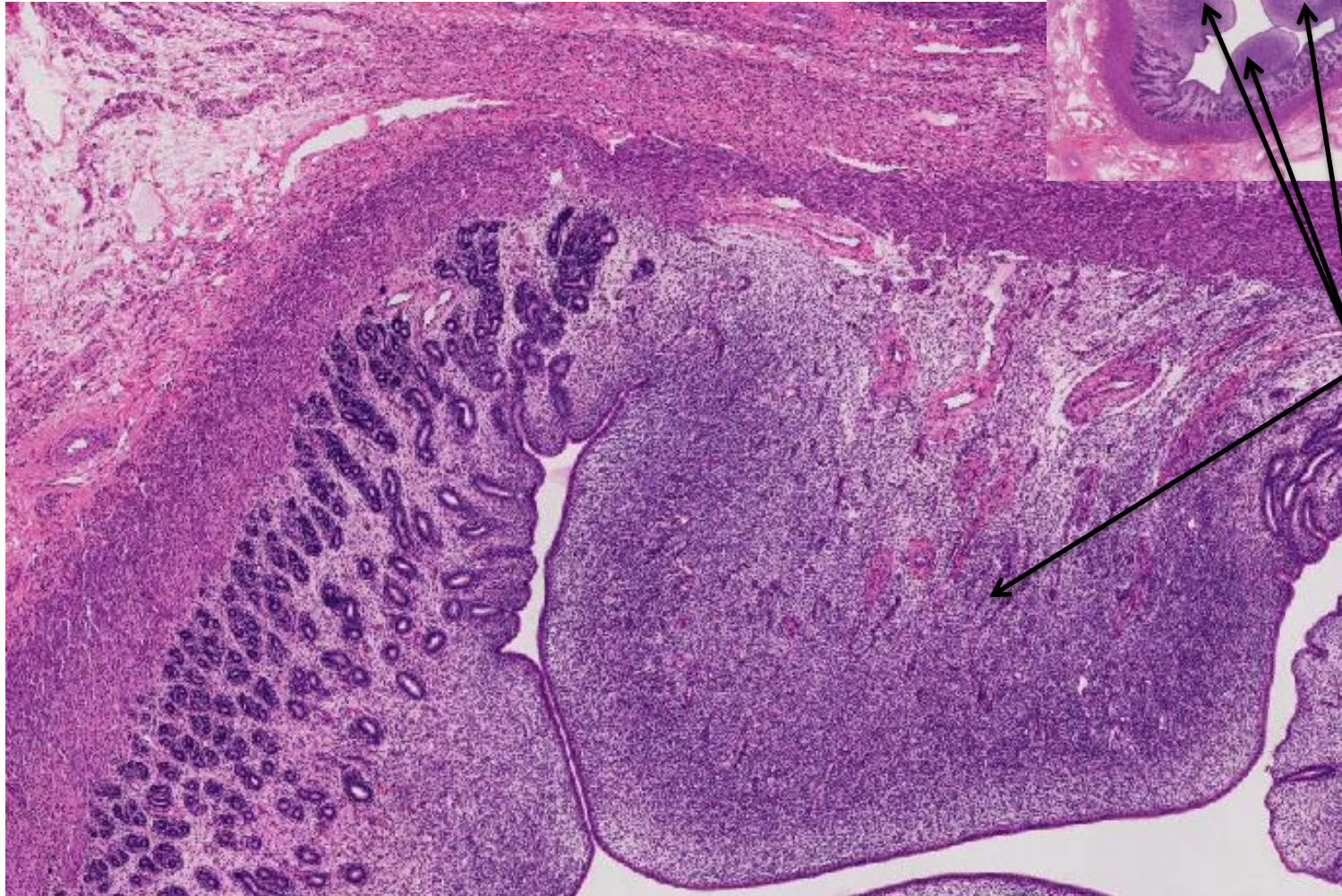
mesometrium

Based on the large numbers of the endometrial glands, this queen is in estrus

secretions from the glands are staining a pale pink



Slide #168 (SP-1-163). Uterus, ewe.



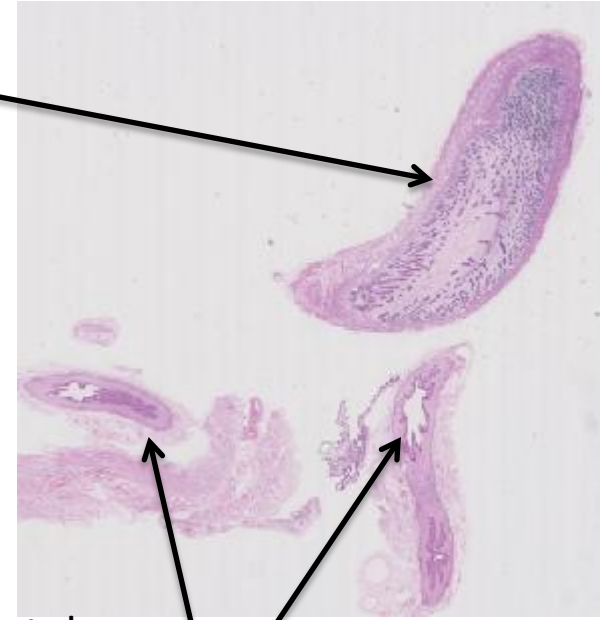
Caruncles are
aglandular
projections of
the mucous
membrane

Slide # 129. Uterine tube and uterine horn, sow.

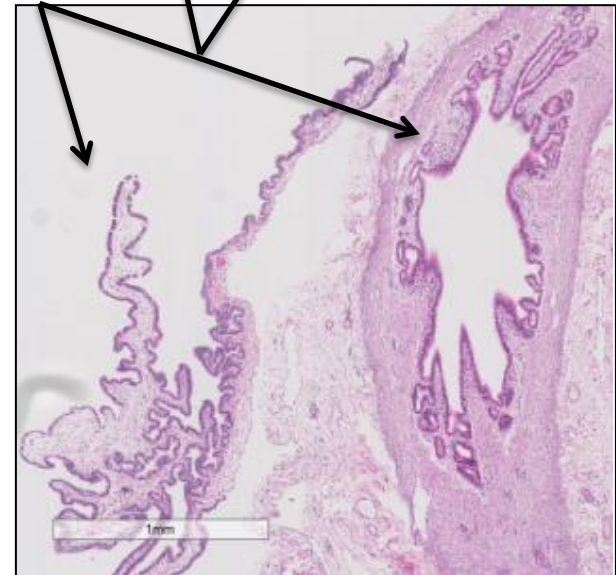


uterine horn

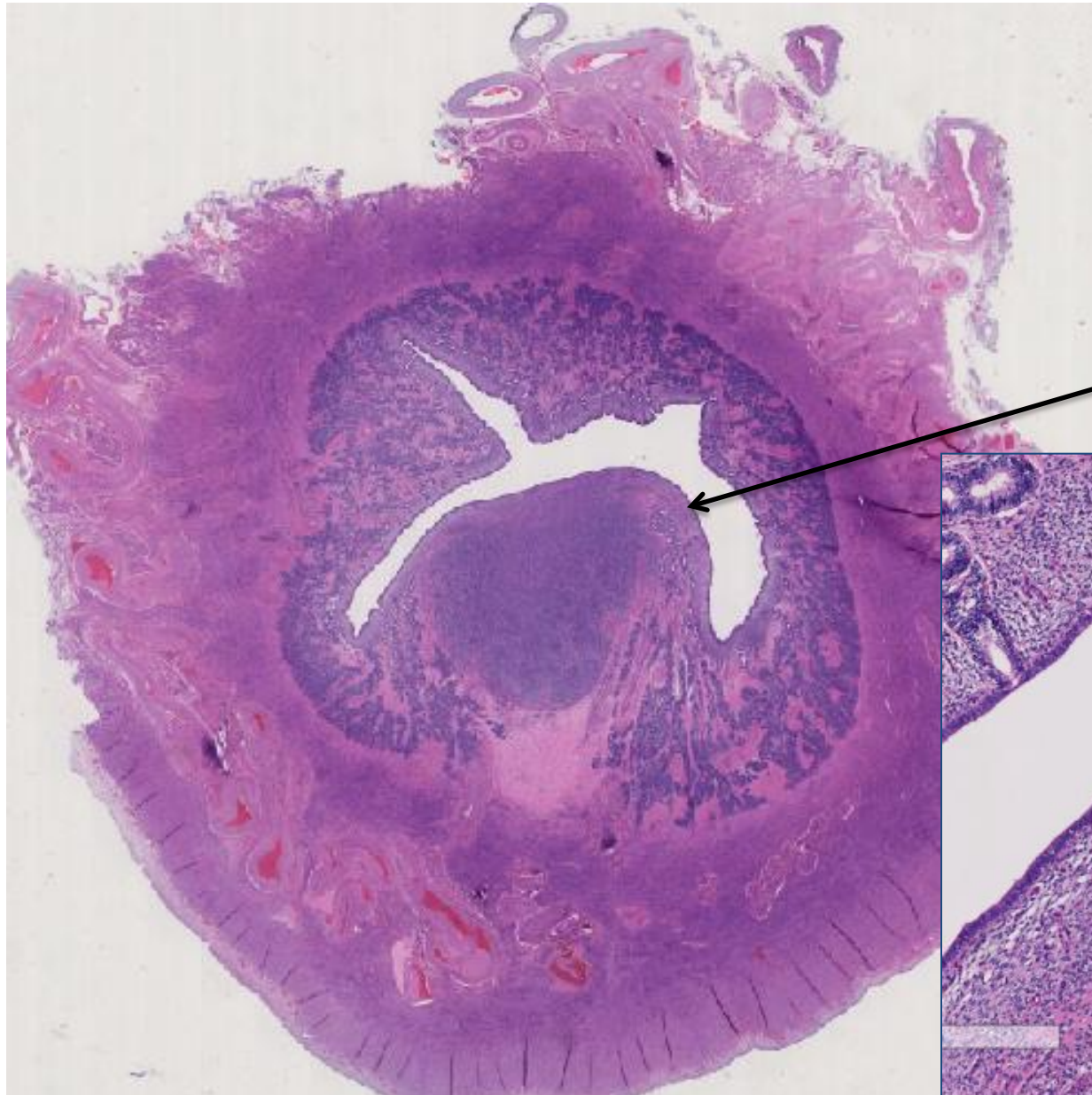
uterus



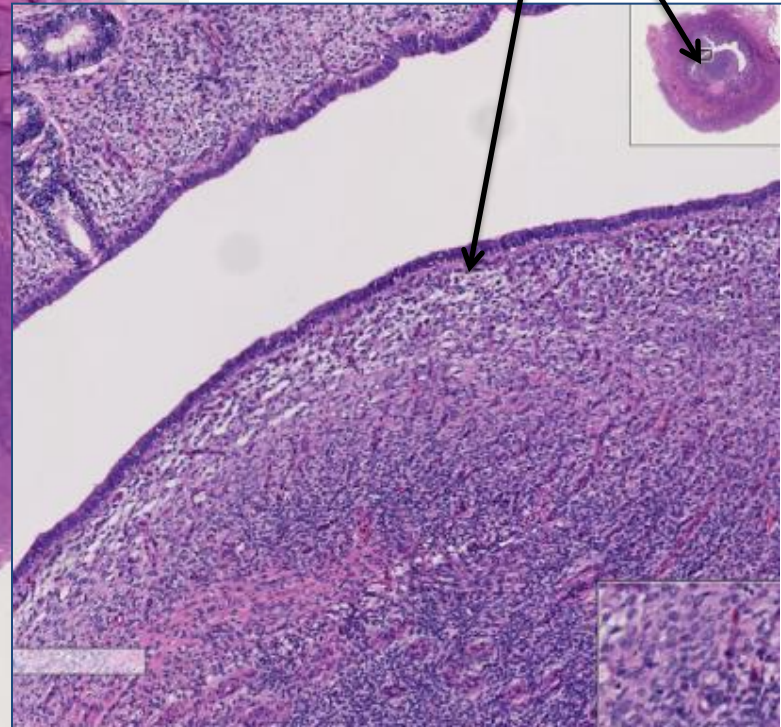
Uterine tube



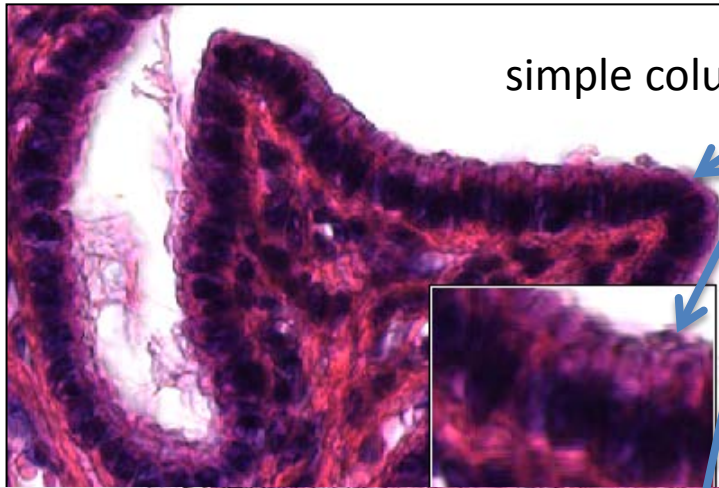
DEMO SLIDE BOX #214 – Uterus, ruminant



prominent, aglandular
projections of the mucous
membrane are caruncles

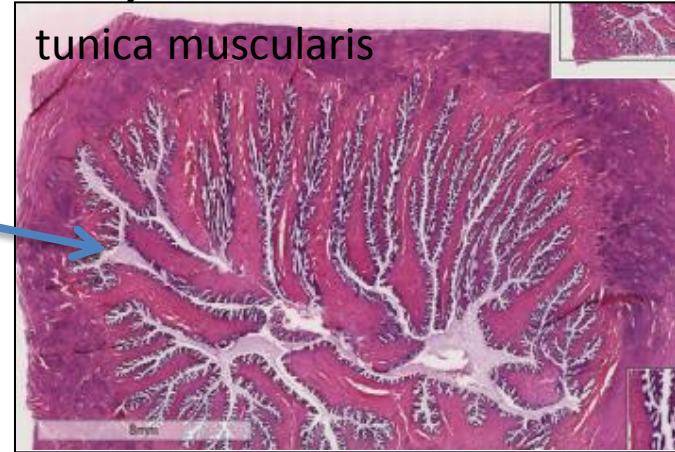


DEMO SLIDE BOX #203 (1085)– Cervix, cow.

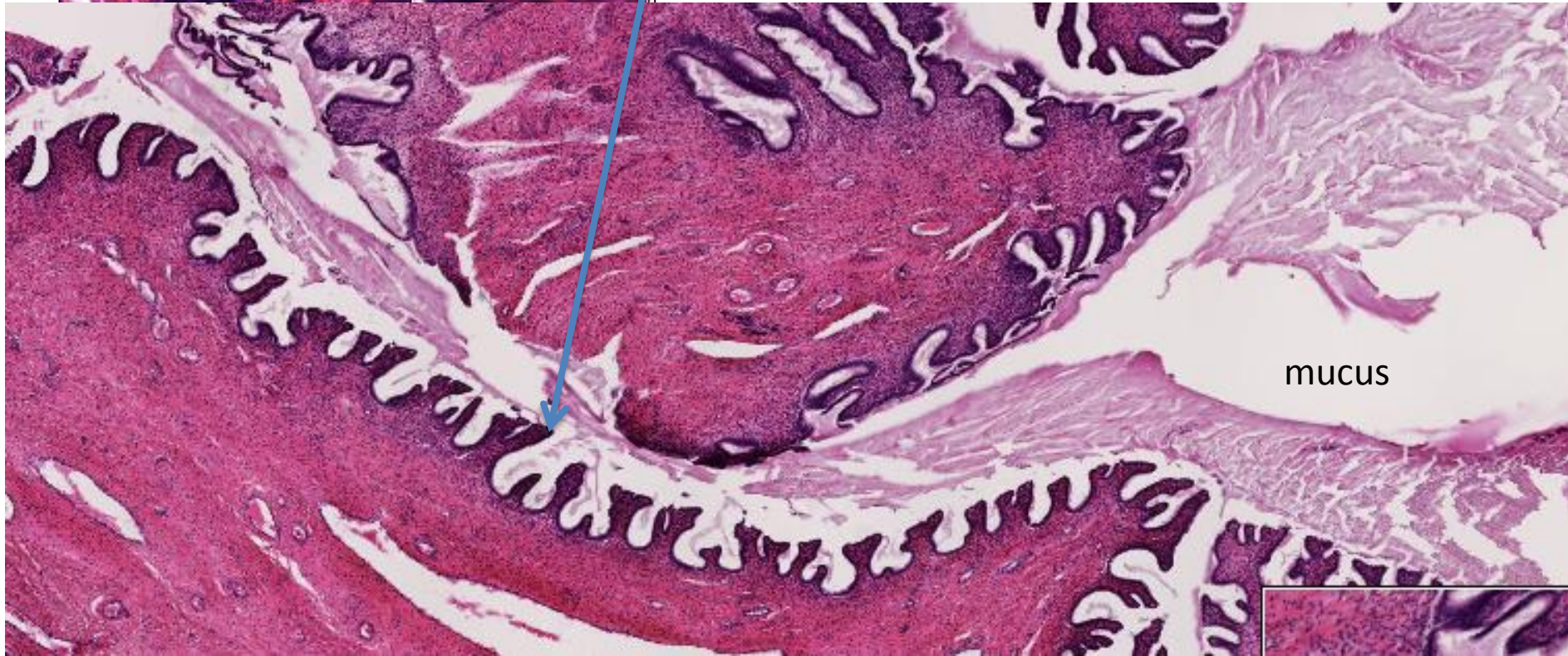


simple columnar epithelium

both transverse and longitudinal folds are present in the bovine cervix

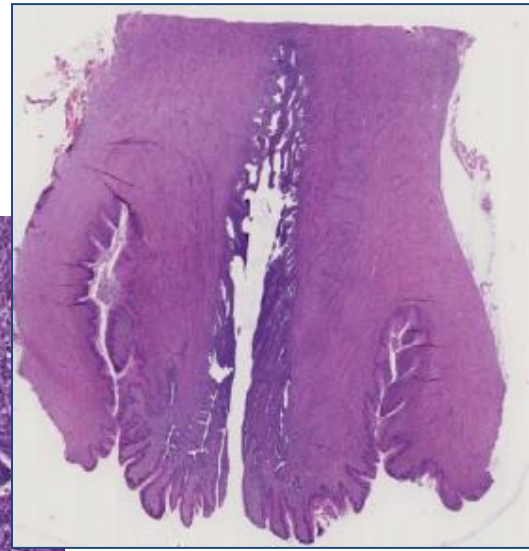
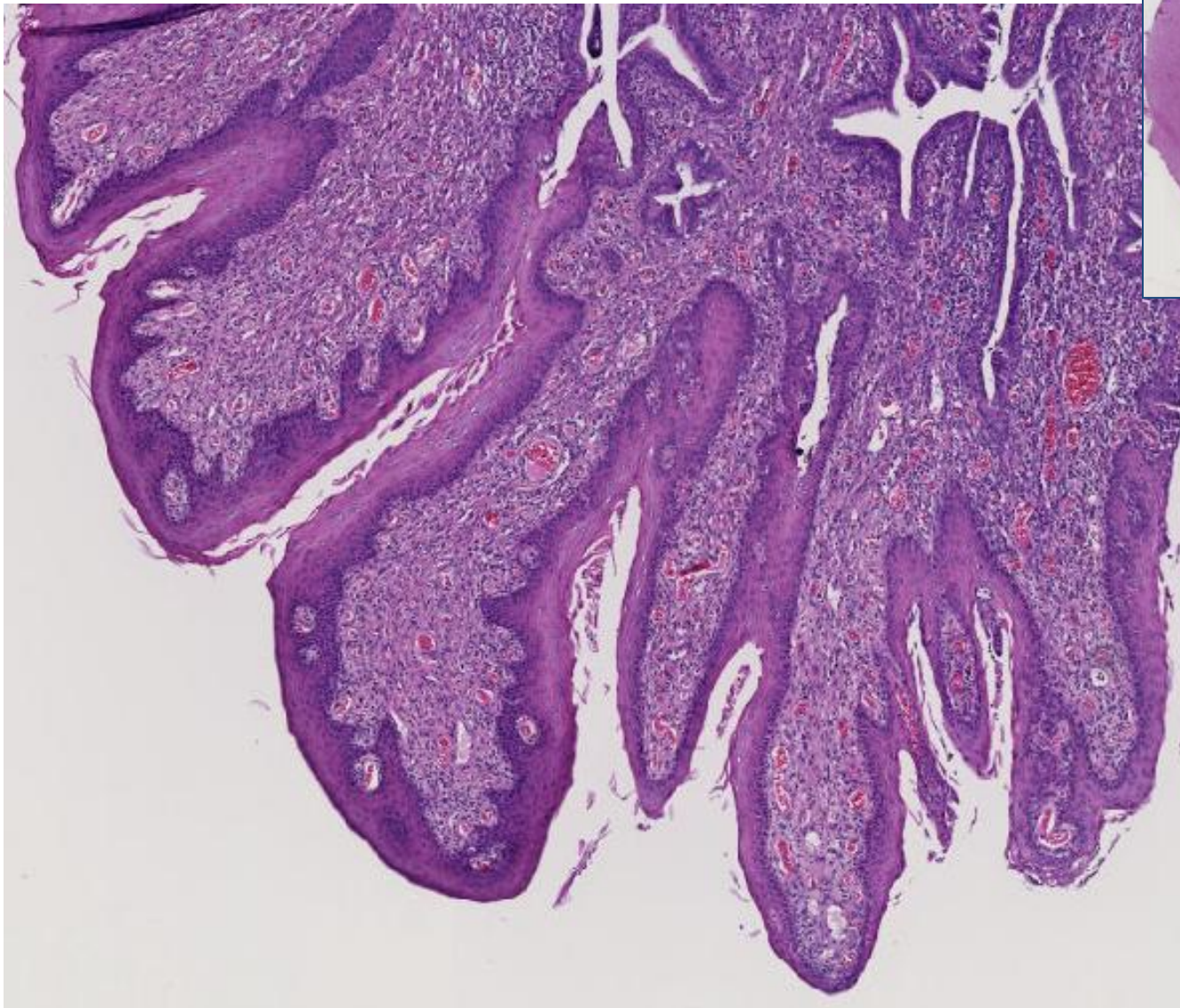


tunica muscularis



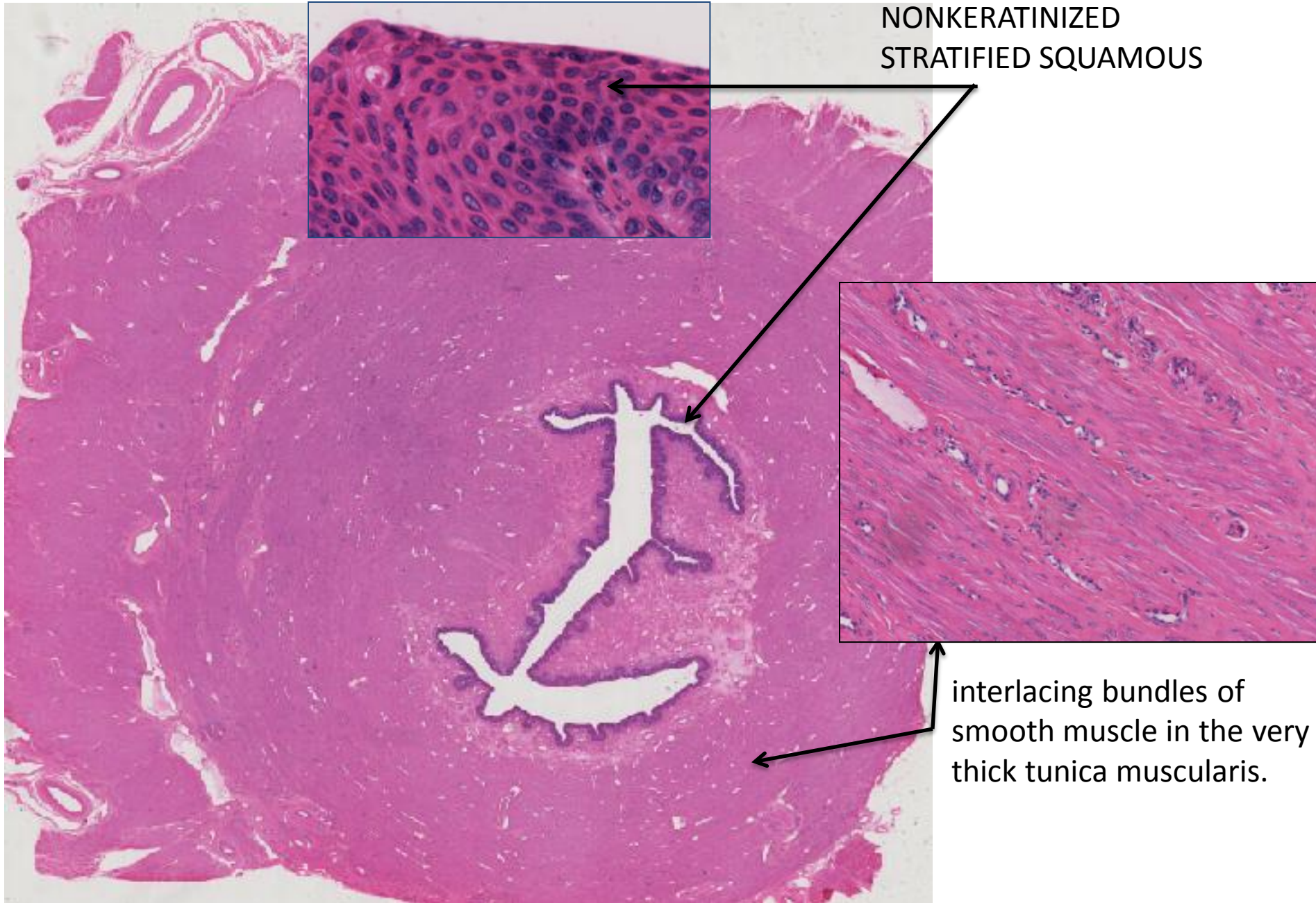
mucus

DEMO SLIDE BOX #208 – Cervix, sow.

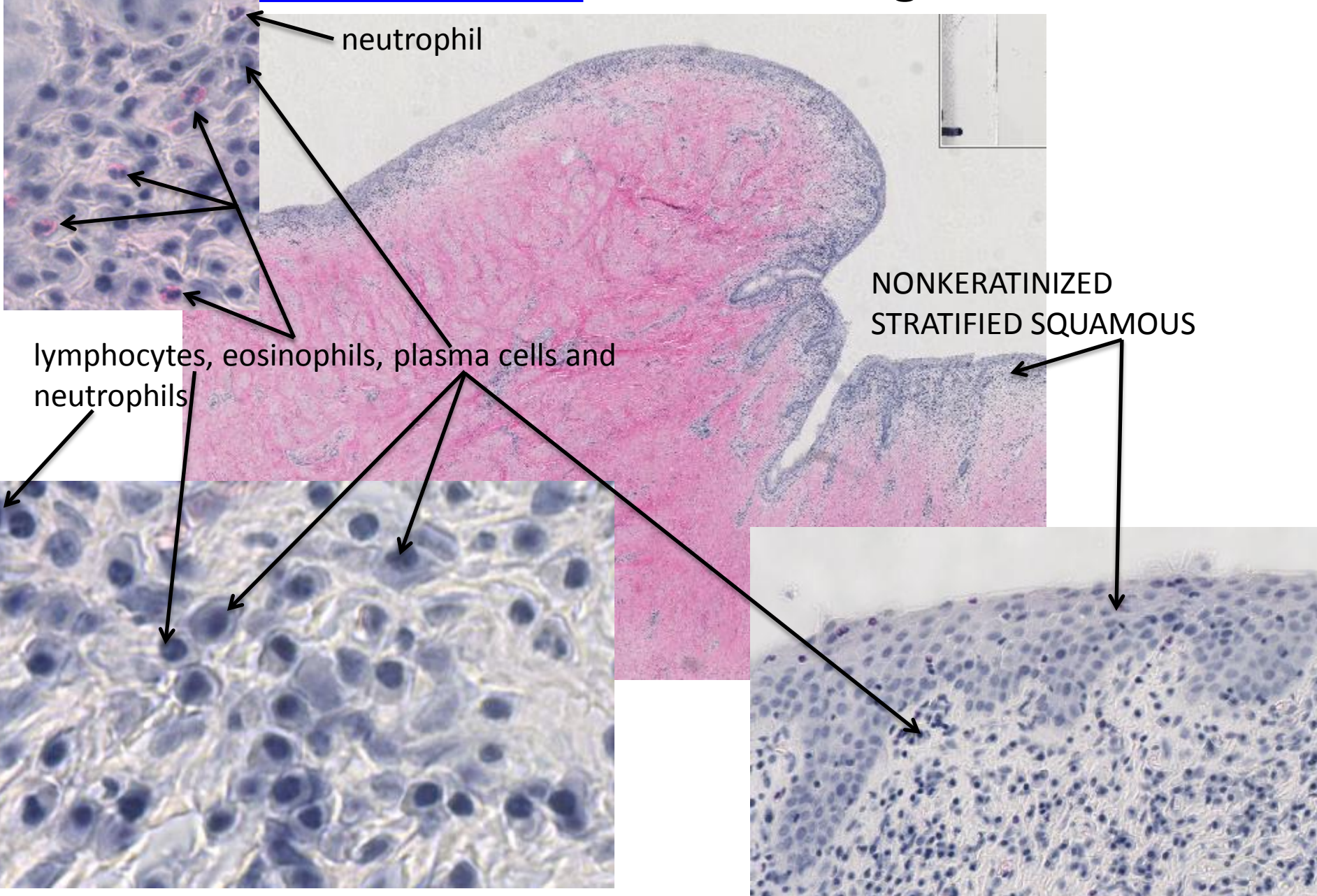


complex folds of the luminal surface of the cervix.

Slide #185 (PG-1-31). Vagina, sow.

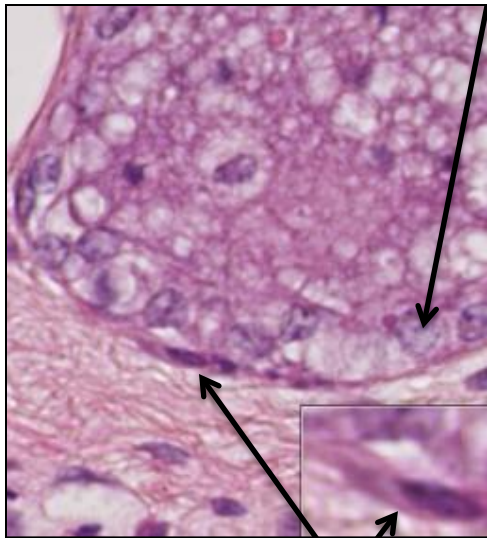


DEMO SLIDE BOX #154 – Proximal vagina, sow.



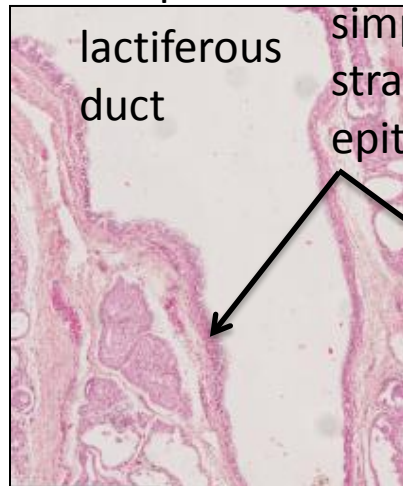
DEMO SLIDE BOX 202 (PG-1-84)–Mammary gland, cow.

alveoli



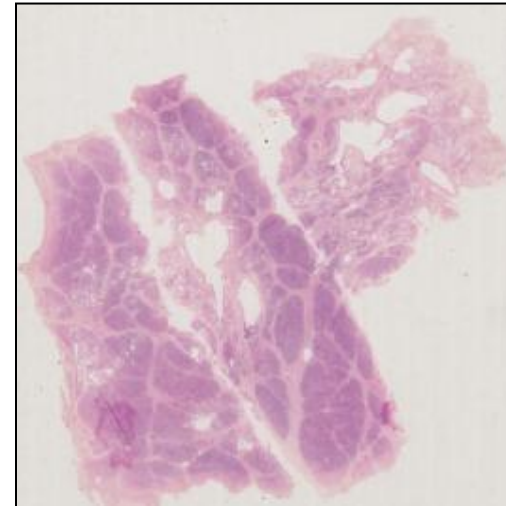
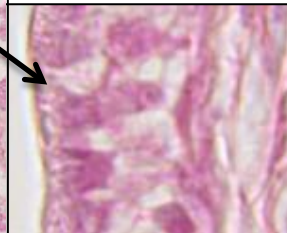
myoepithelial cells

simple cuboidal or simple columnar epithelium



lactiferous duct

simple columnar or stratified cuboidal epithelium

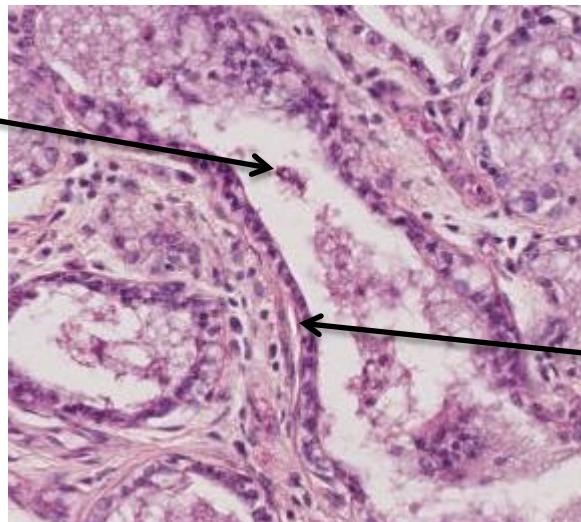


intralobar ducts

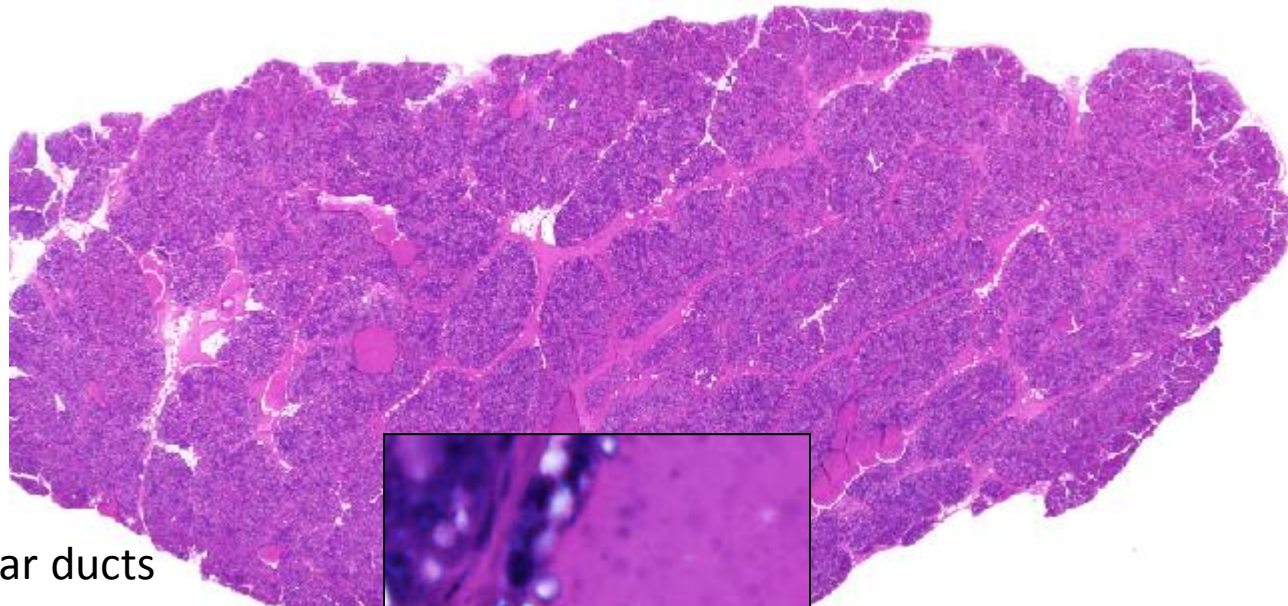
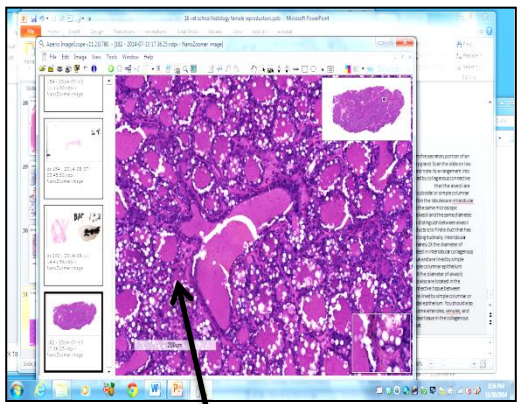


simple columnar or cuboidal epithelium

intralobular ducts

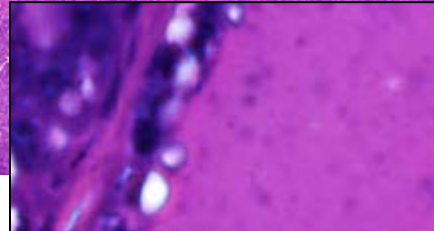
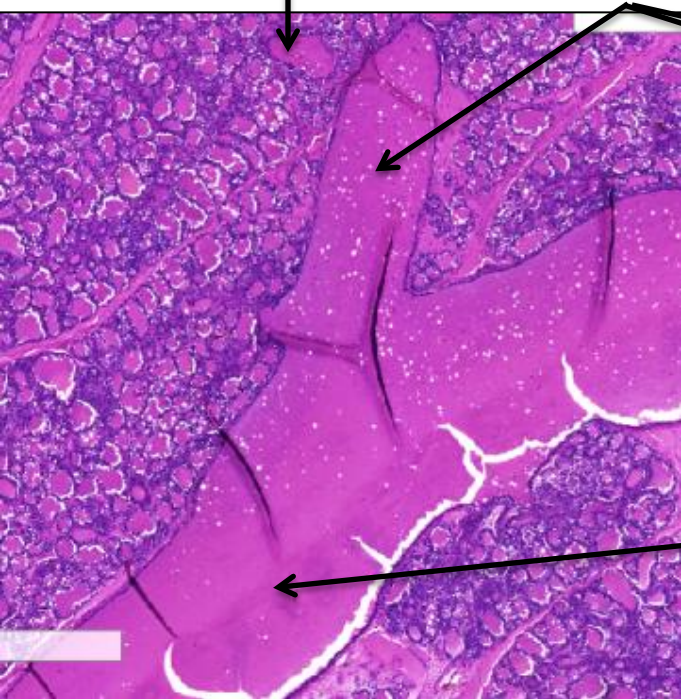


Slide #182 (126B G). Mammary gland, goat.

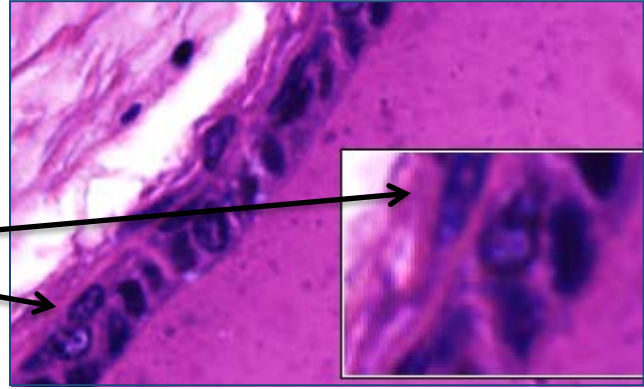


intralobular ducts

intralobar ducts

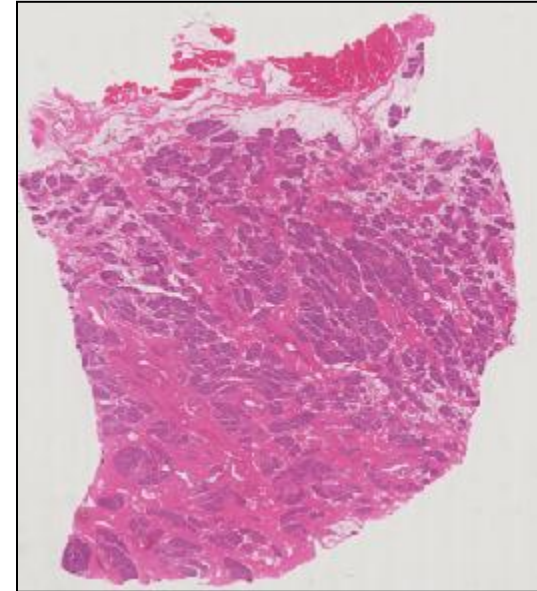
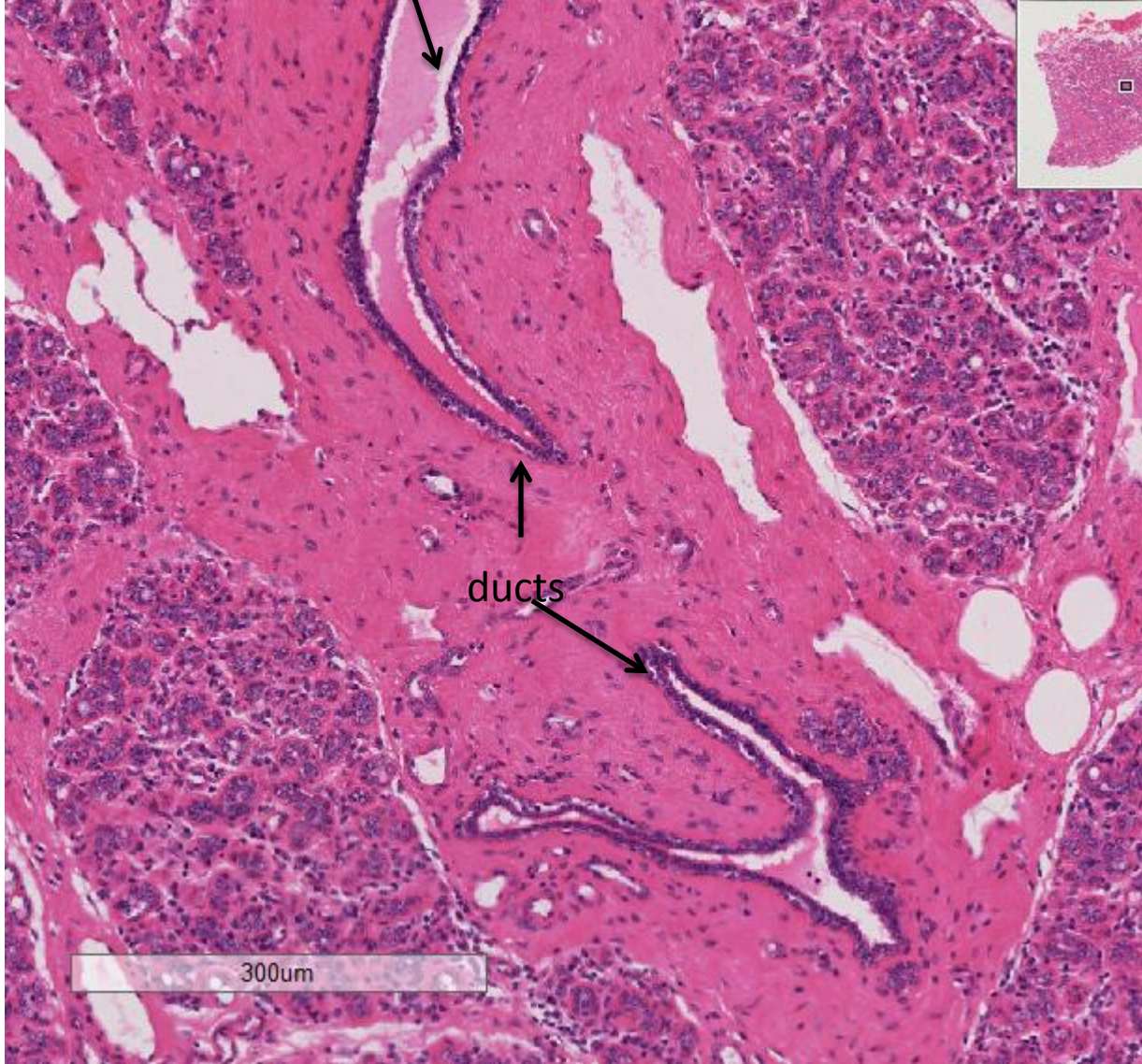


lactiferous duct



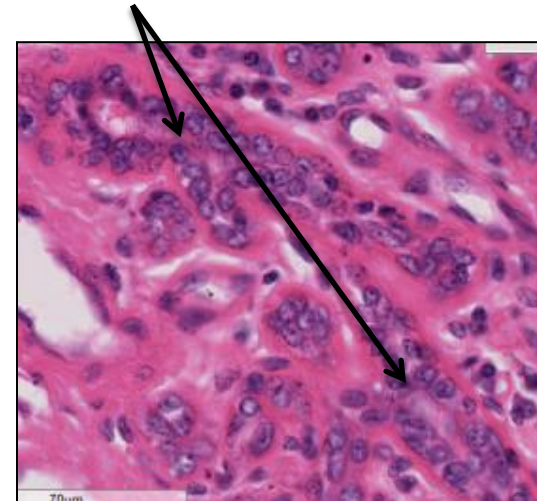
Slide #183 (PG-1-84). Mammary gland, sow.

lactiferous duct

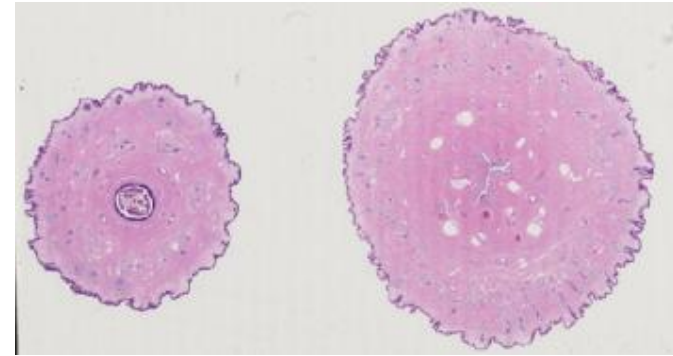
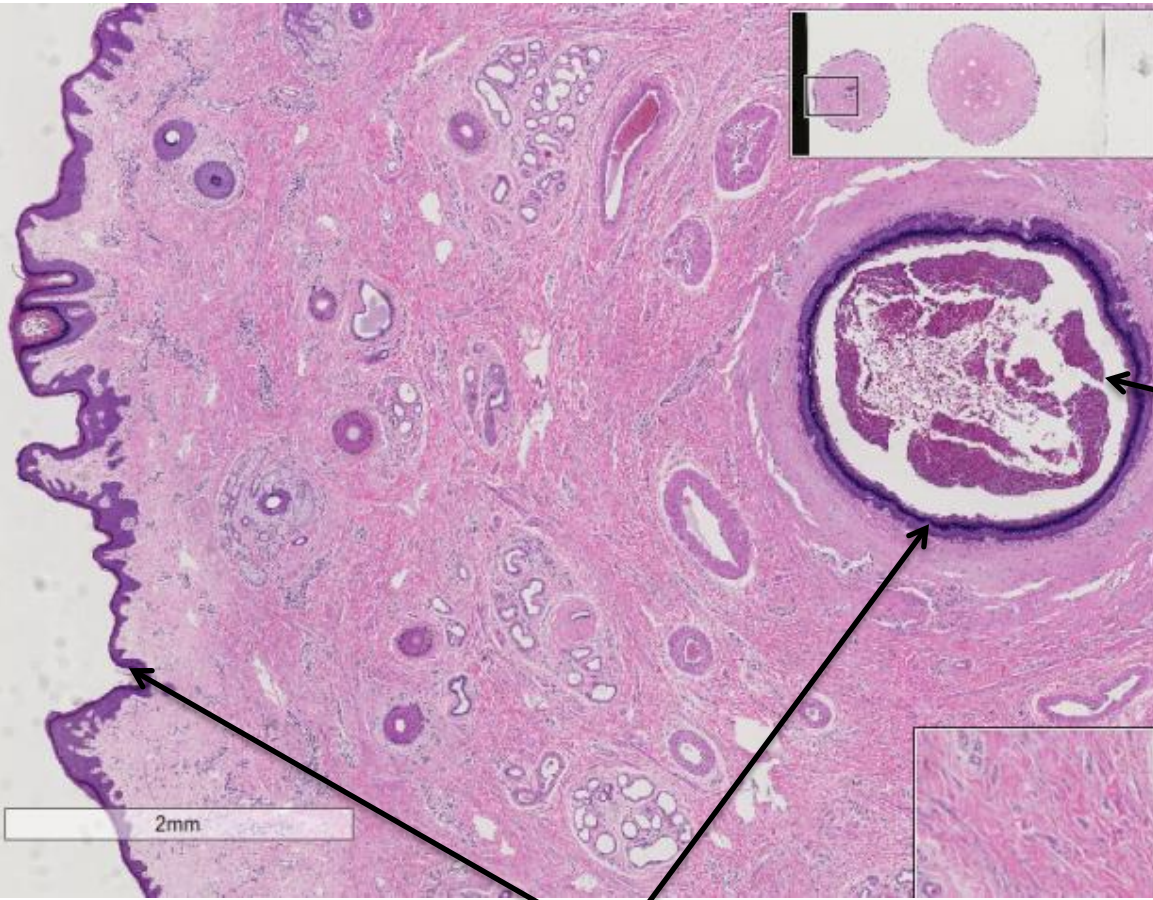


inactive mammary gland

intralobular ducts

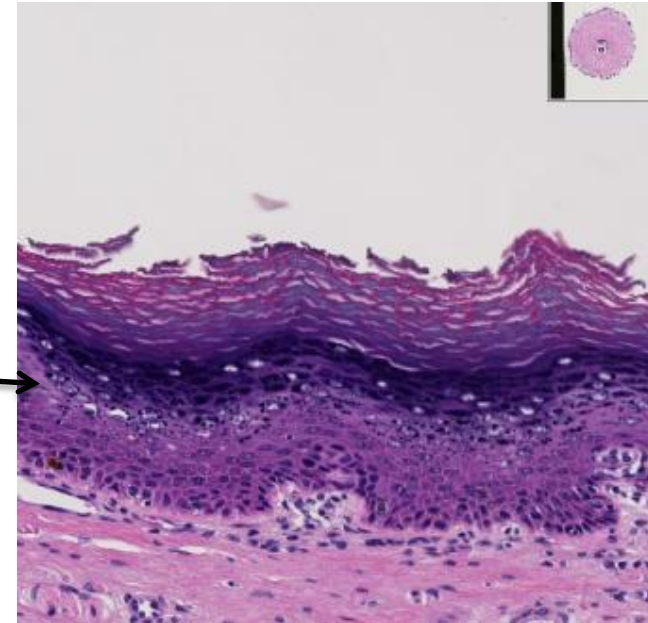


Slide #188 (Sp 905 teat CD). Teat, sheep.



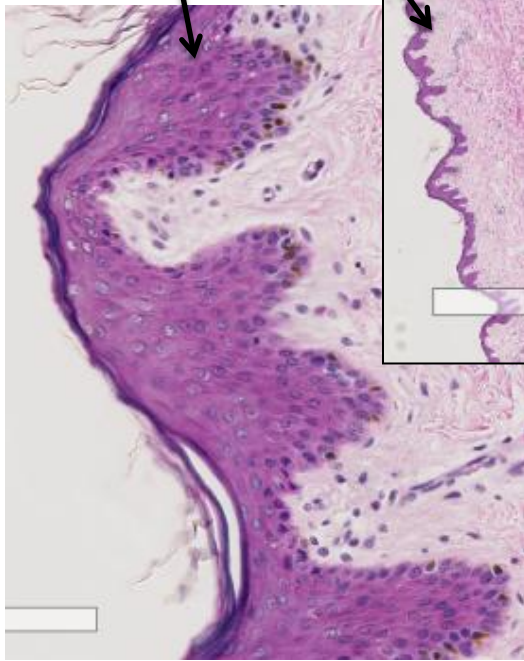
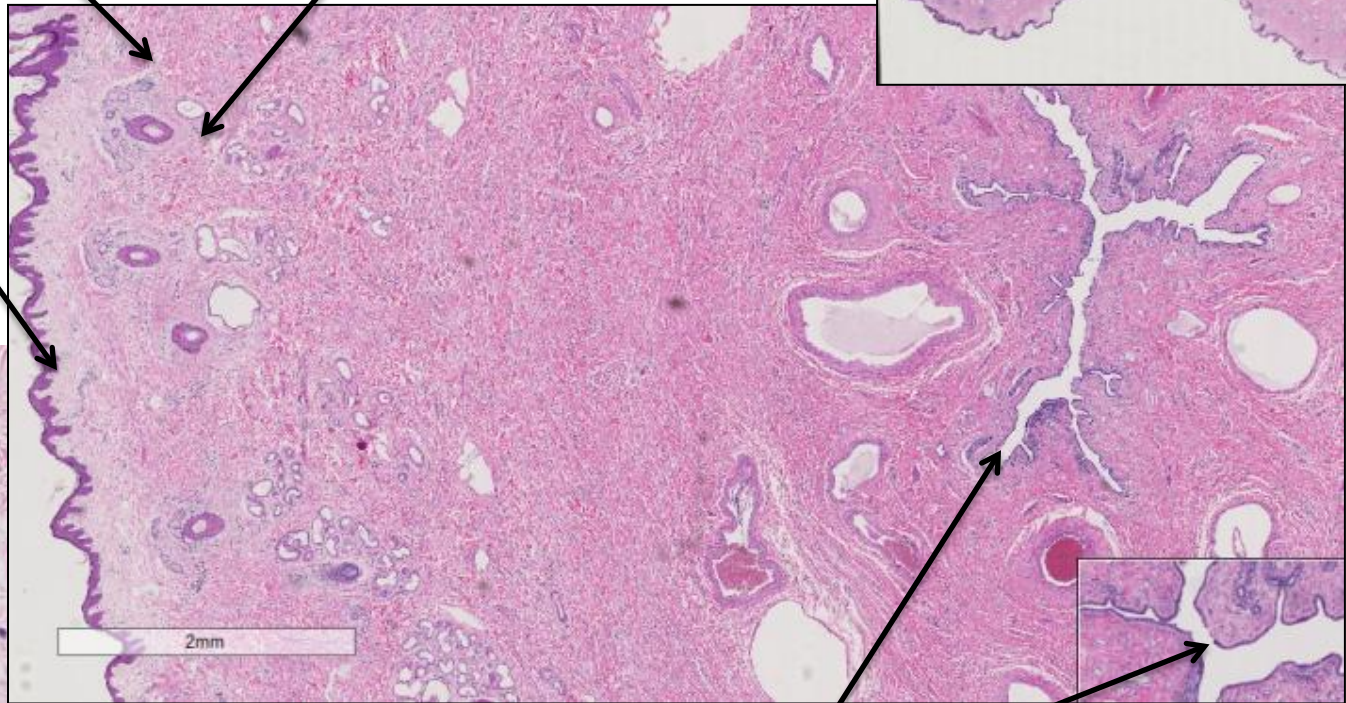
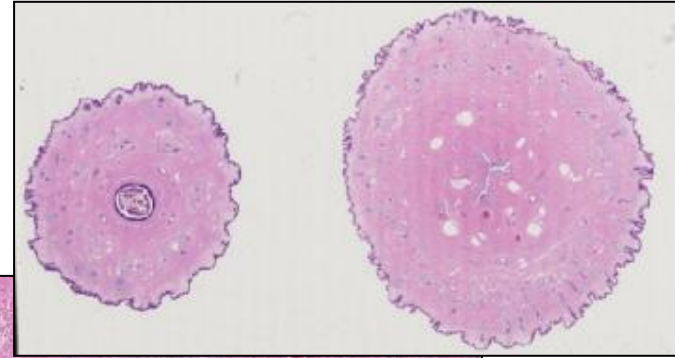
teat canal

keratinized stratified squamous epithelium.



Slide #188(Sp 905 teat CD). Teat, sheep.

keratinized stratified squamous epithelium
with underlying CCT with some adnexa



teat sinus, the opening connecting the elaborate mammary duct system with the teat canal

GENERAL STRUCTURE

PERIMETRIUM

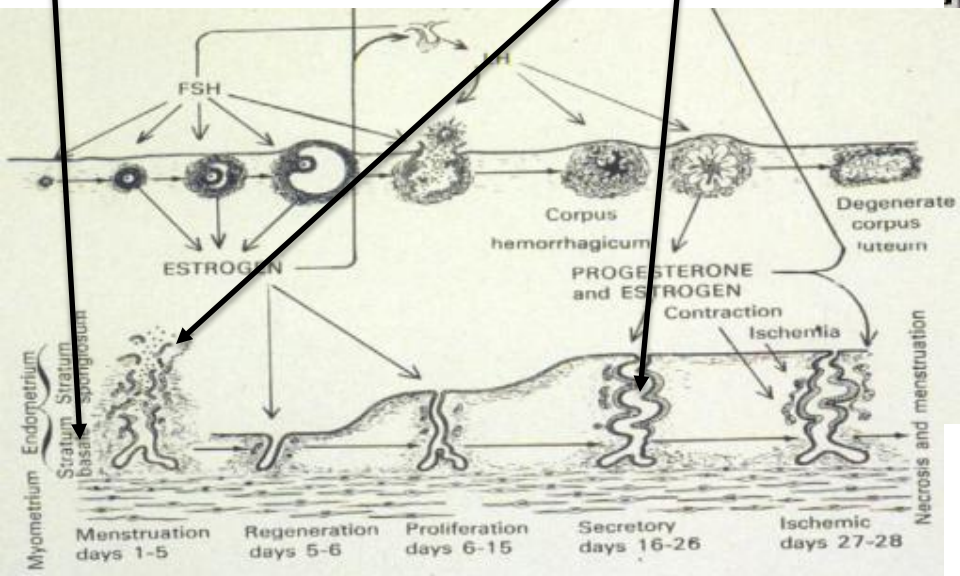
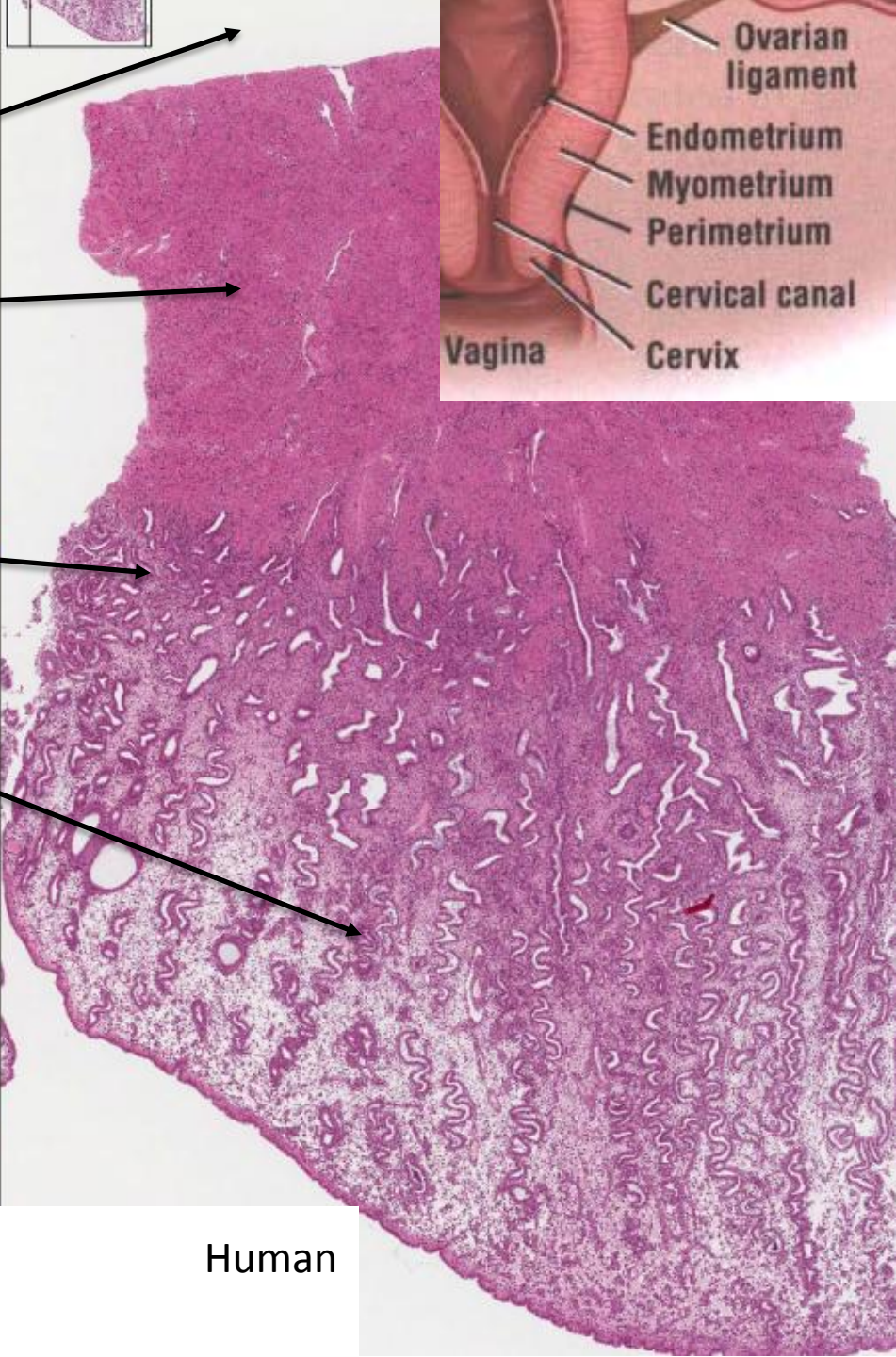
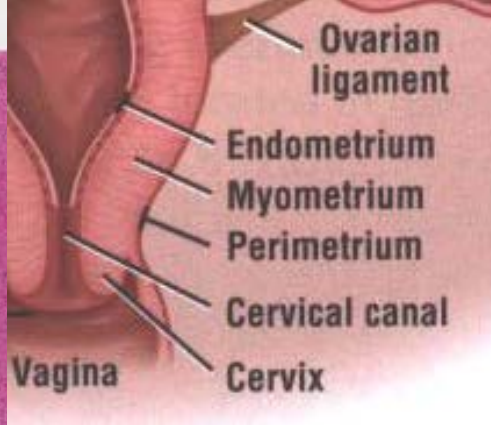
MYOMETRIUM

ENDOMETRIUM

ZONA BASALIS

ZONA

FUNCTIONALIS



Umbilical cord



129

