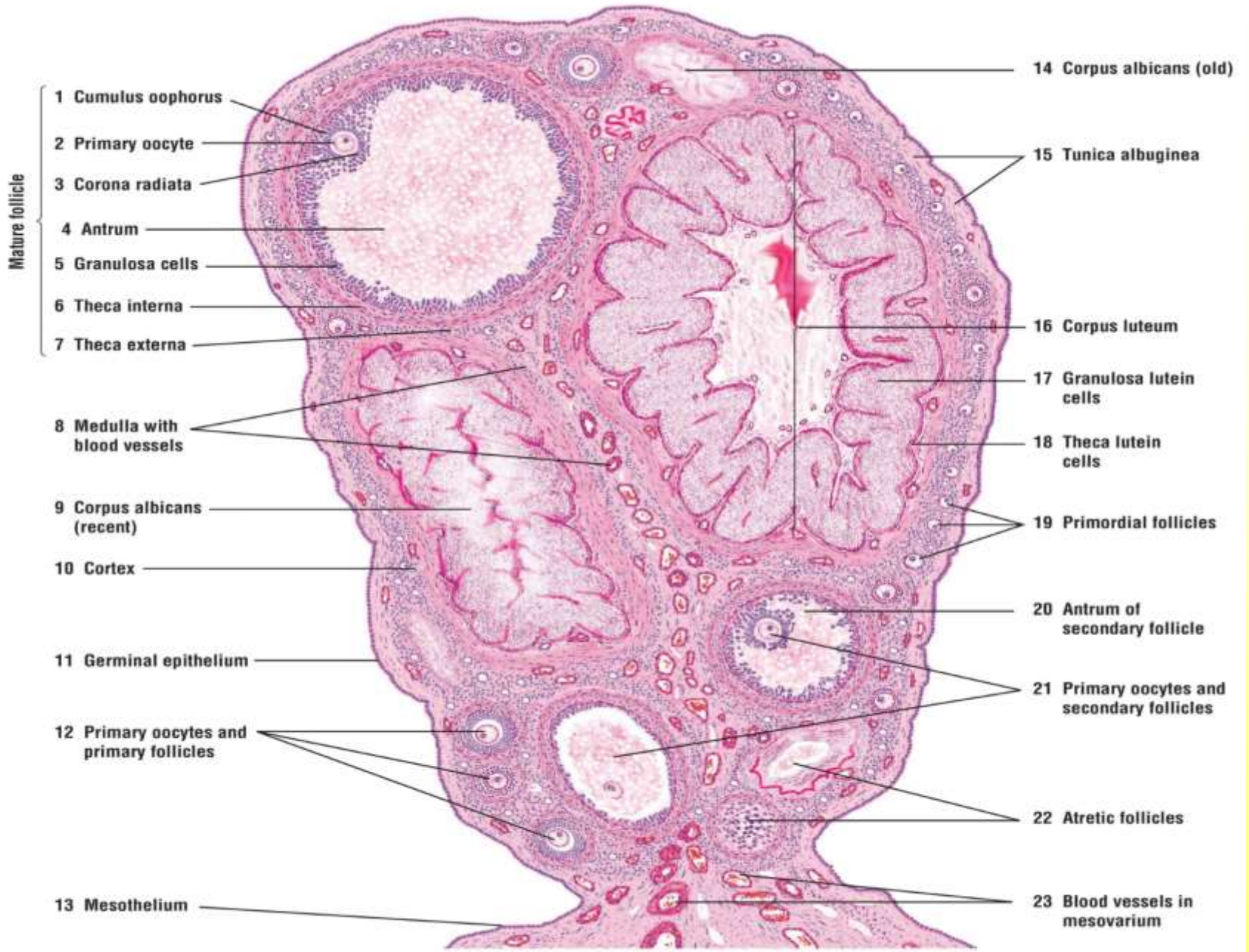


# *Female reproductive system*

## *Practical*

*Dr. Nassam Emad Daim*

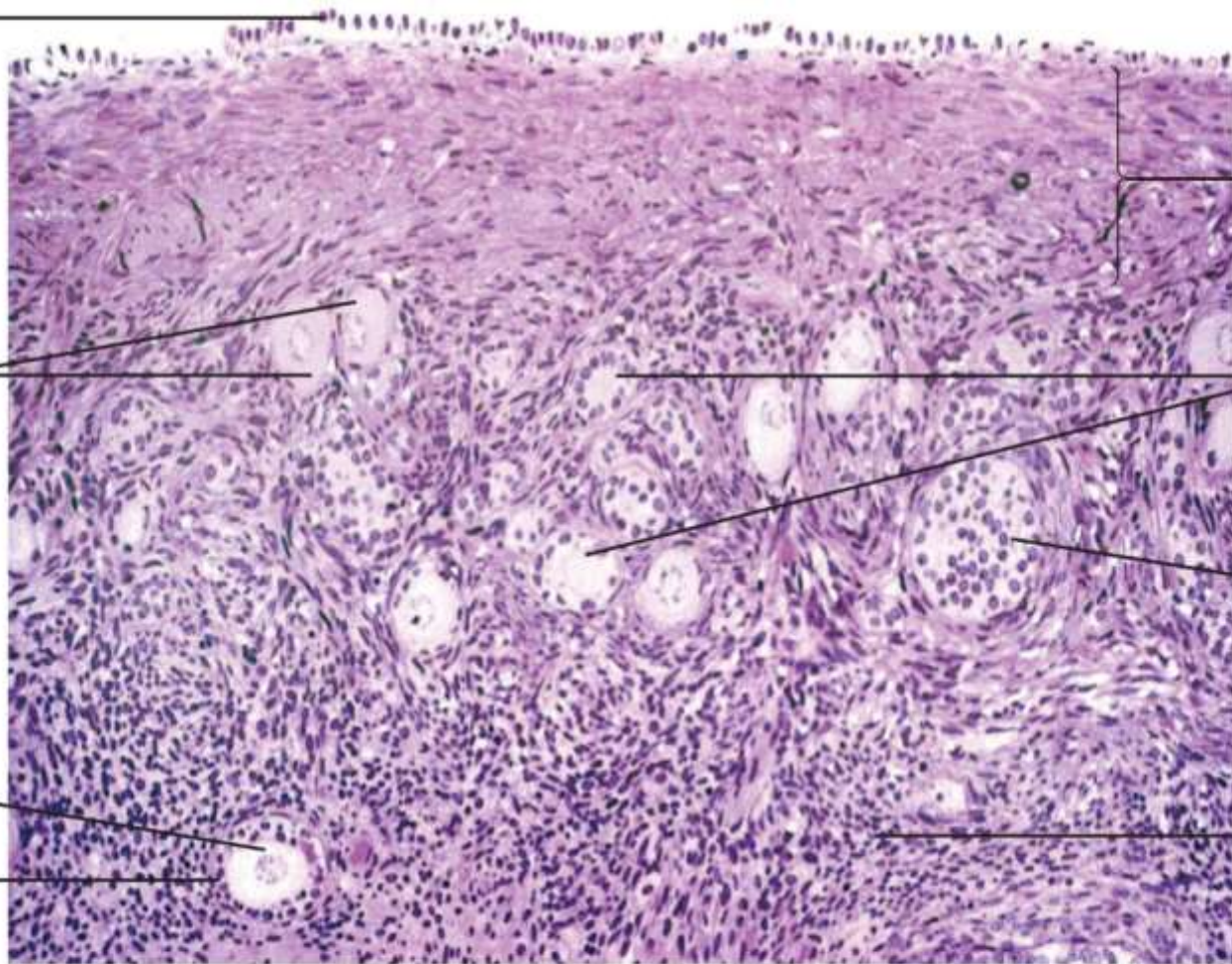


**FIGURE 21.1** ■ Ovary: different stages of follicular development (panoramic view). Stain: hematoxylin and eosin. Low magnification.



**FIGURE 21.2** ■ Ovary: longitudinal section of a feline (cat) ovary showing numerous follicles and corpora lutea. Stain: Mallory-Azan.  $\times 6.5$ .

1 Germinal epithelium



5 Tunica albuginea

2 Primordial follicles

6 Primary follicles

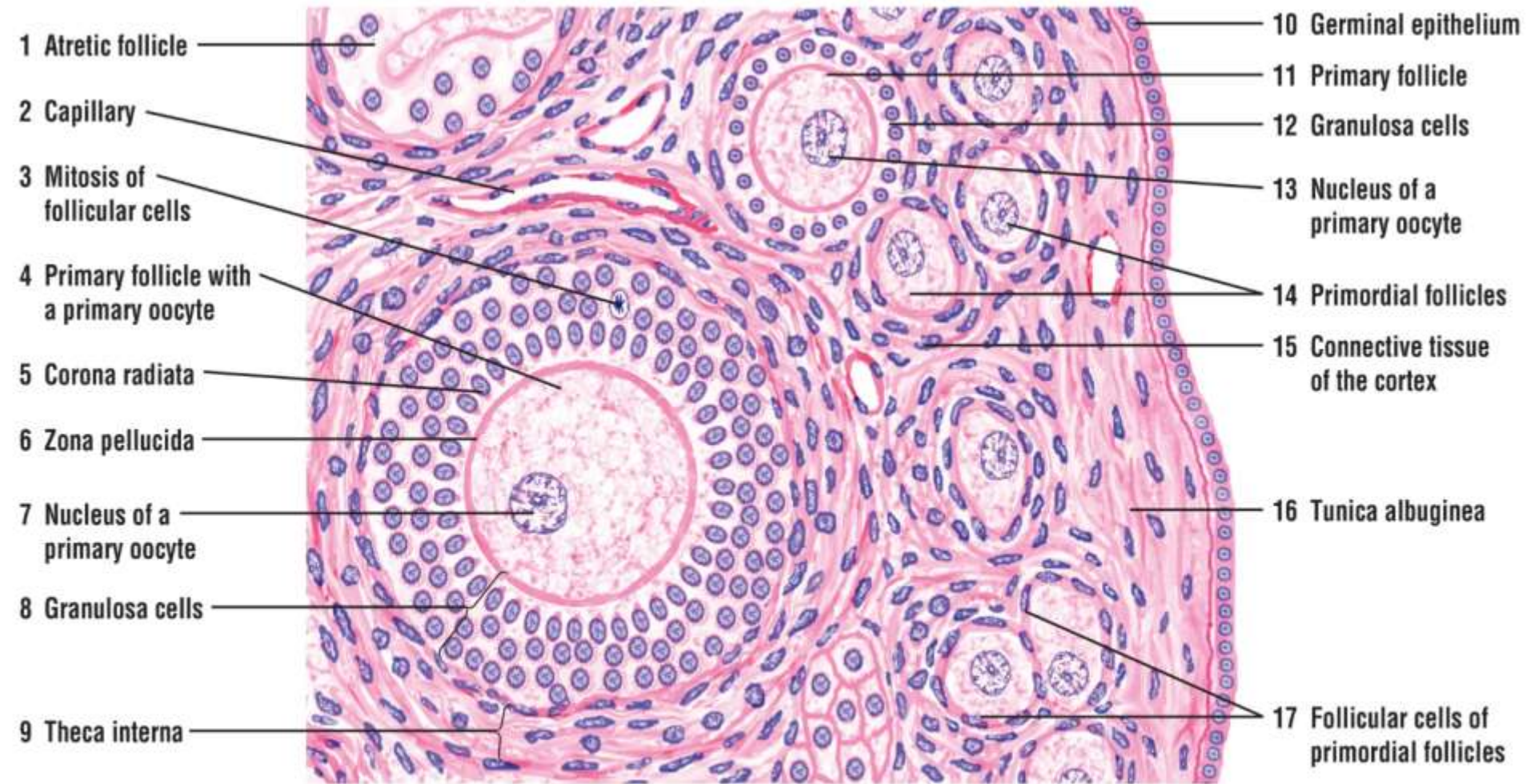
3 Primary oocyte

7 Atretic follicle

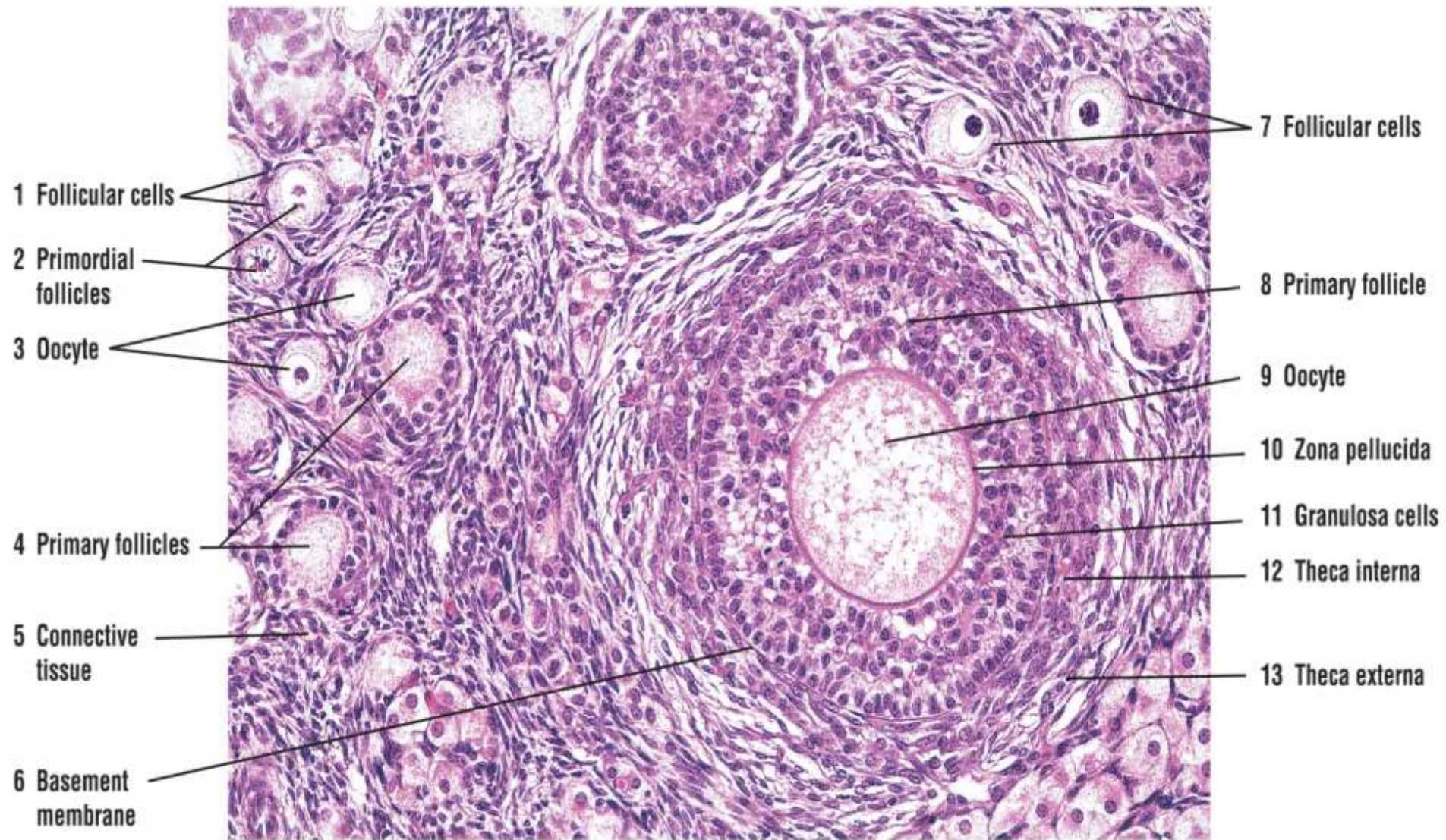
4 Primary follicle

8 Cortex

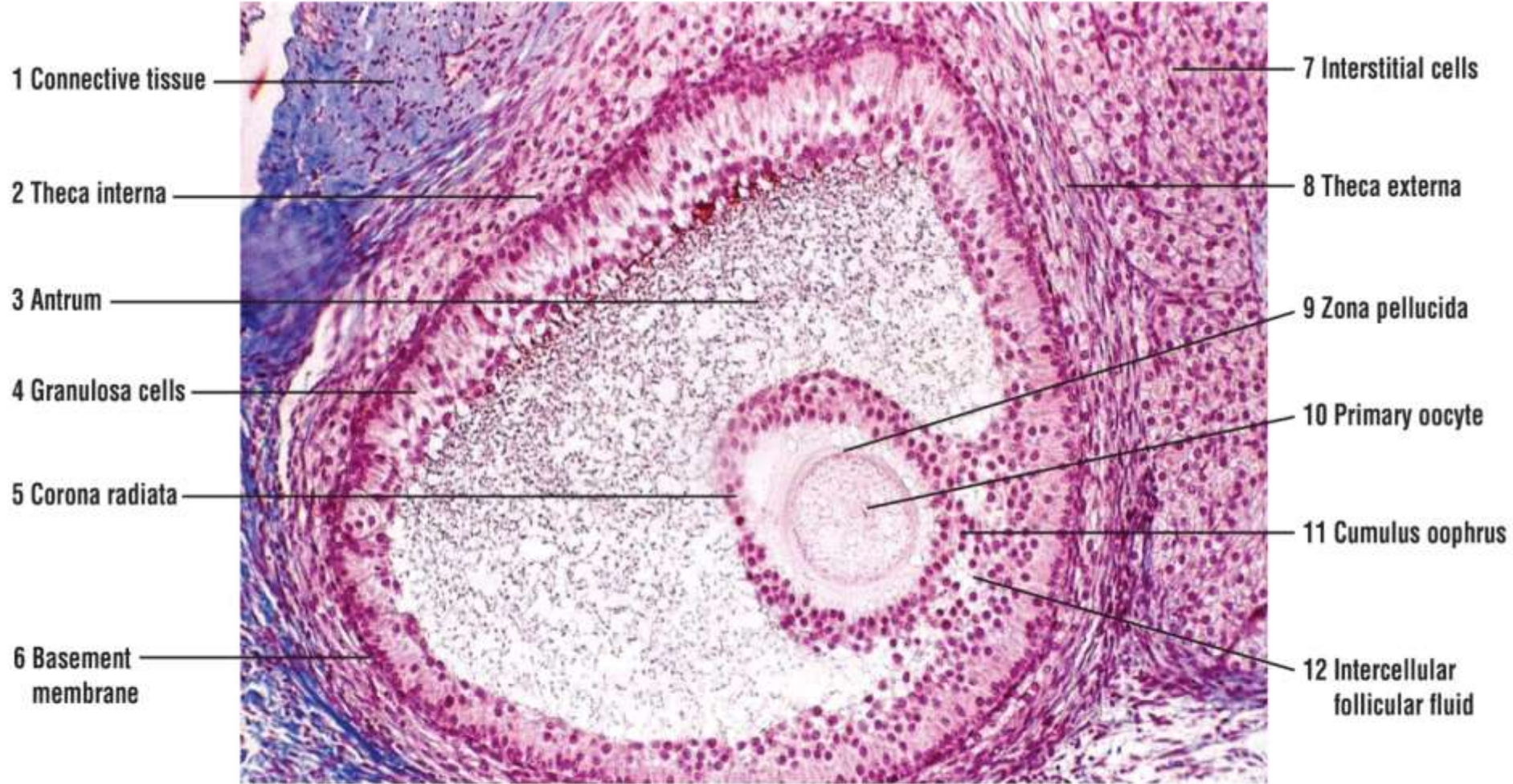
**FIGURE 21.3** ■ Ovary: a section of ovarian cortex and developing follicles. Stain: hematoxylin and eosin.  $\times 64$ .



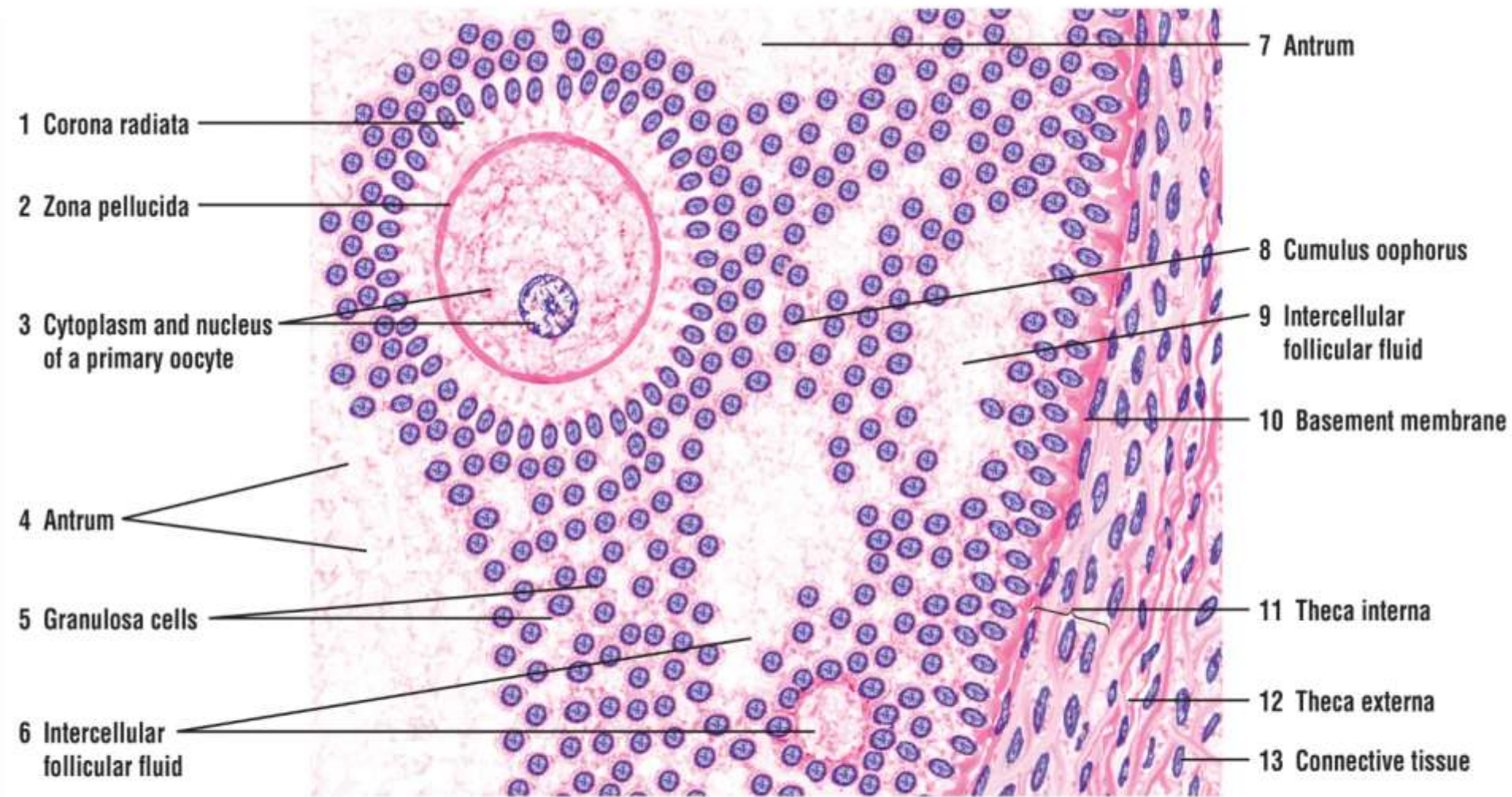
**FIGURE 21.4** ■ Ovary: ovarian cortex and primordial and primary follicles. Stain: hematoxylin and eosin. Low magnification.



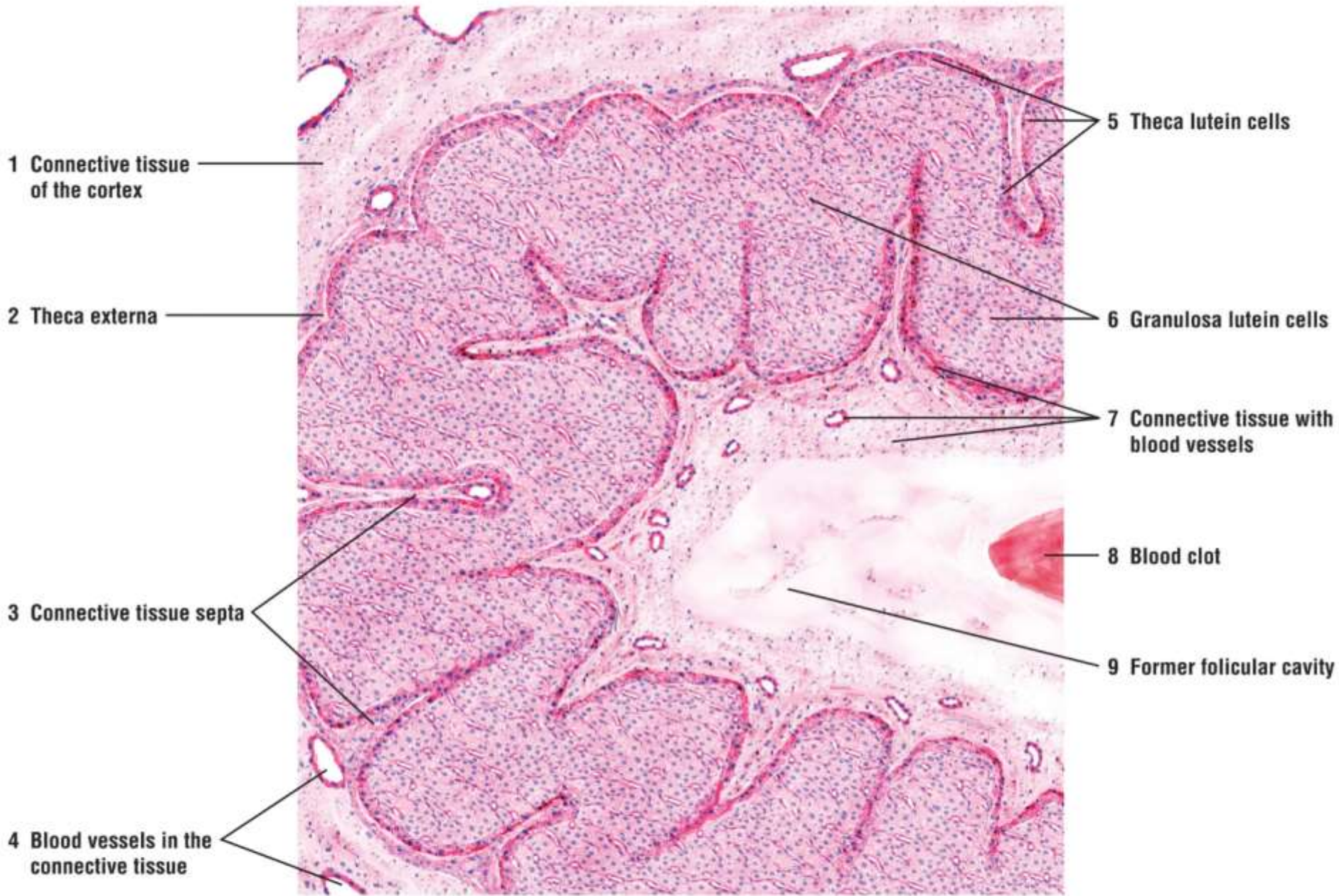
**FIGURE 21.5** ■ Ovary: primordial and primary follicles. Stain: hematoxylin and eosin.  $\times 64$ .



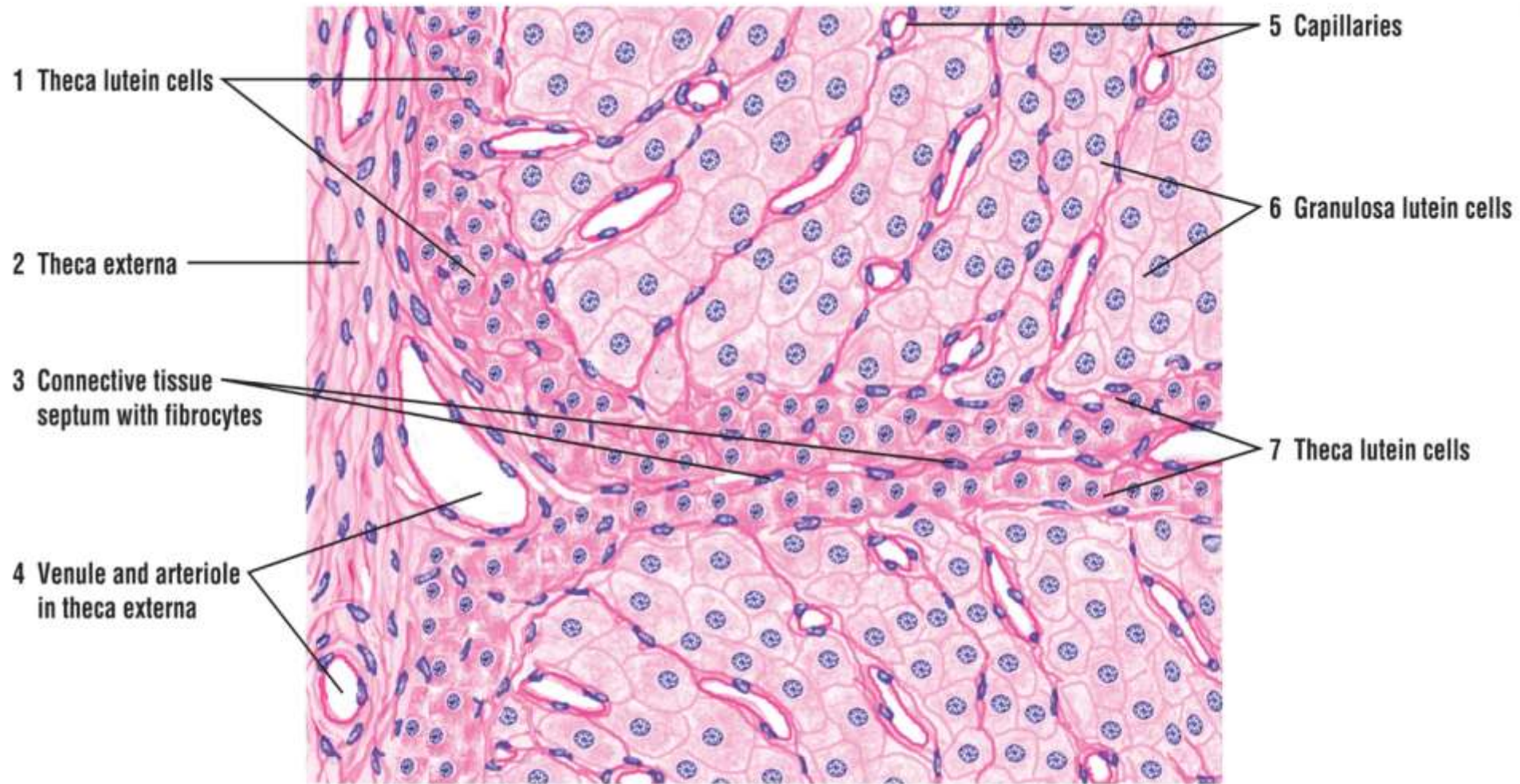
**FIGURE 21.6** ■ Ovary: maturing ovarian follicle in feline (cat) ovary. Stain: Mallory-Azan. x45.



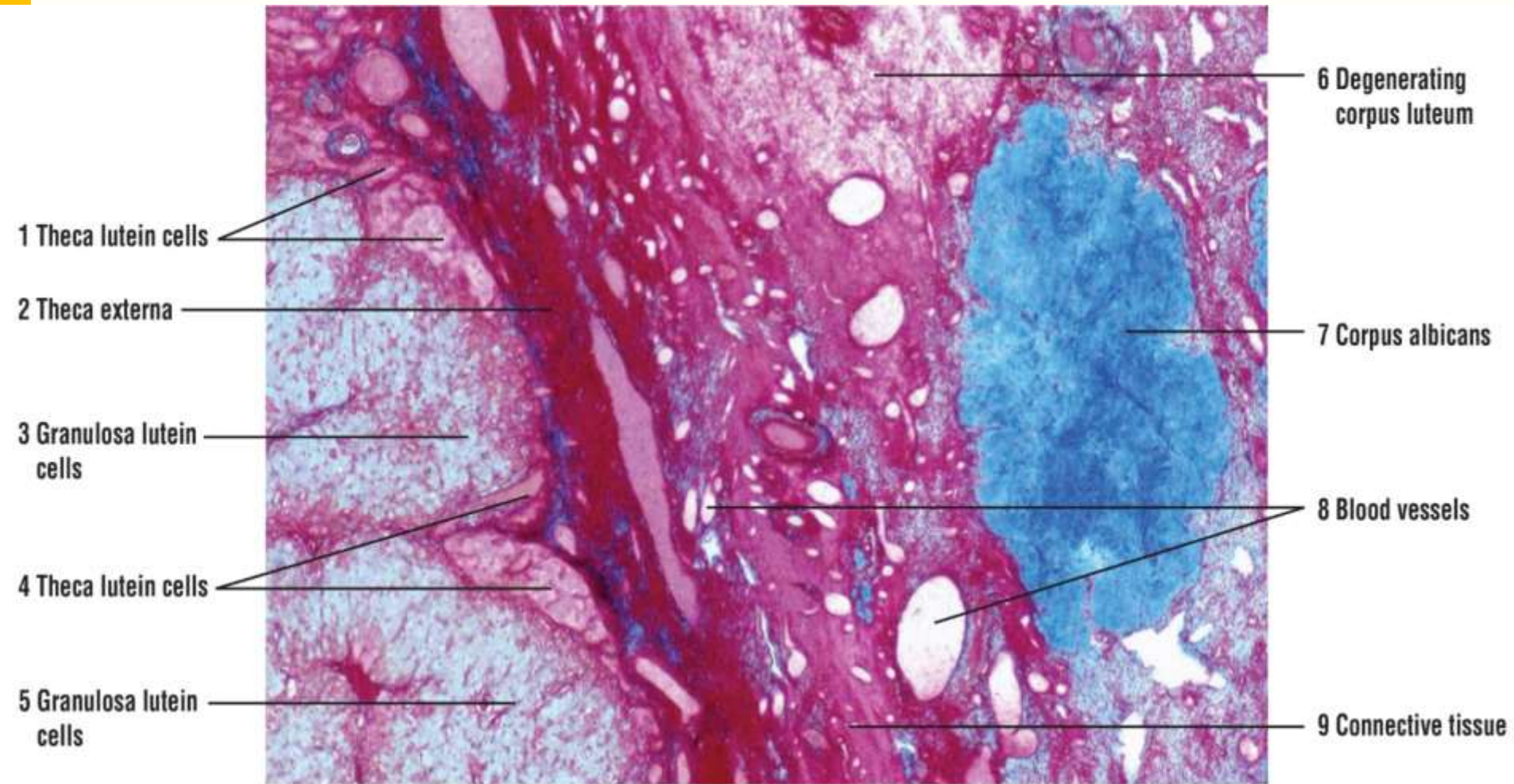
**FIGURE 21.7** ■ Ovary: primary oocyte and wall of a mature follicle. Stain: hematoxylin and eosin. High magnification.



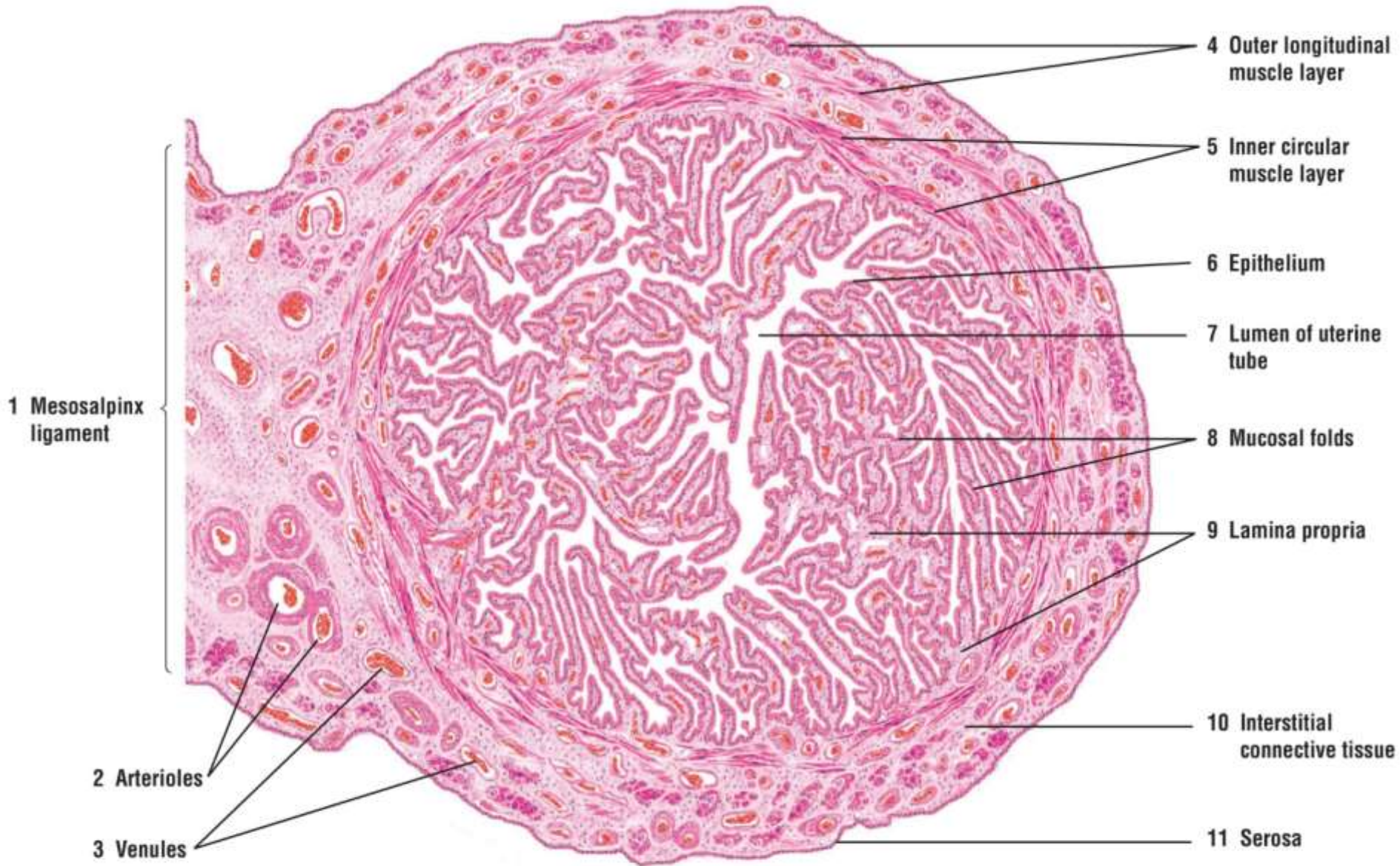
**FIGURE 21.8** ■ Corpus luteum (panoramic view). Stain: hematoxylin and eosin. Low magnification.



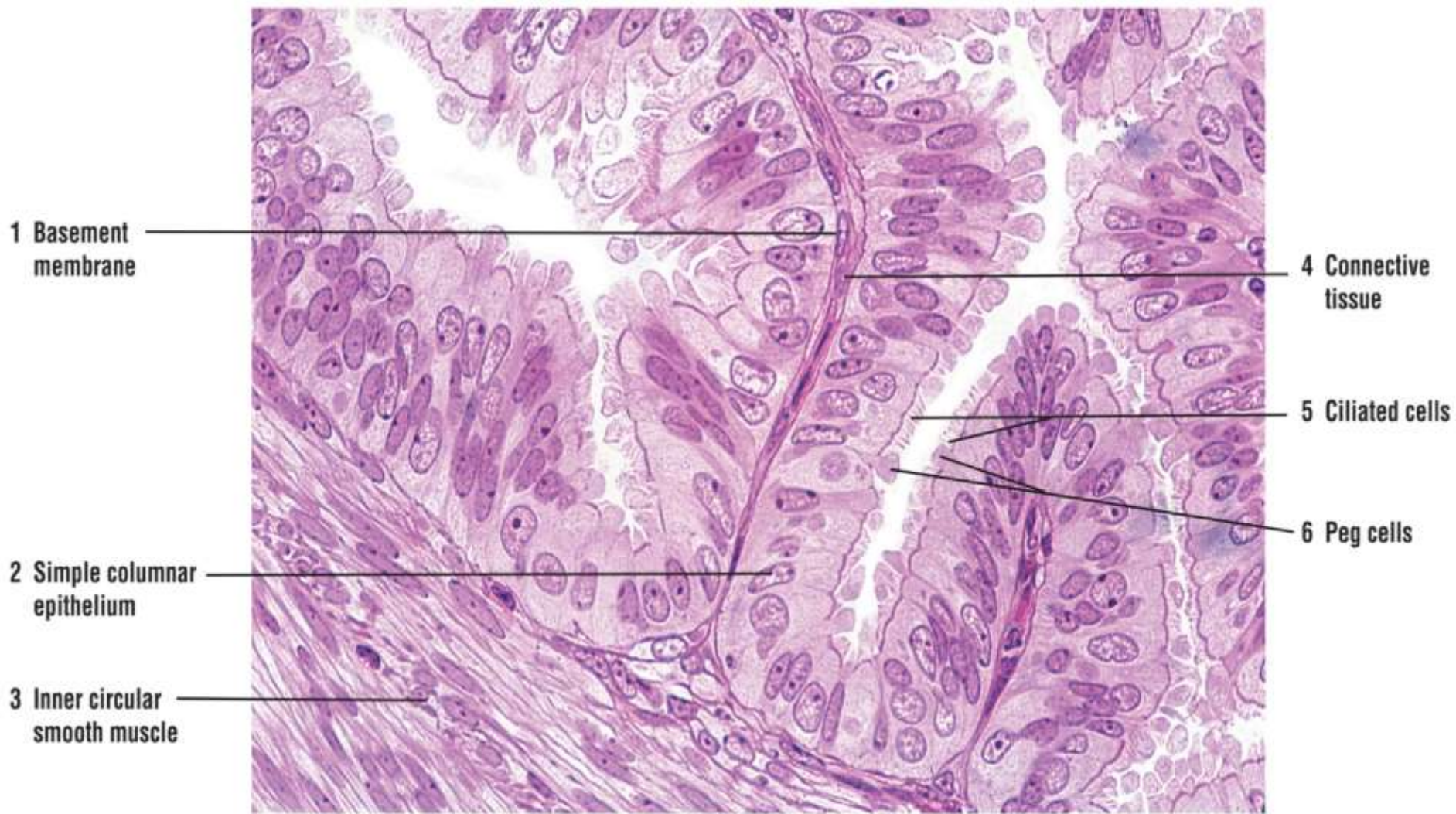
**FIGURE 21.9** ■ Corpus luteum: theca lutein cells and granulosa lutein cells. Stain: hematoxylin and eosin.



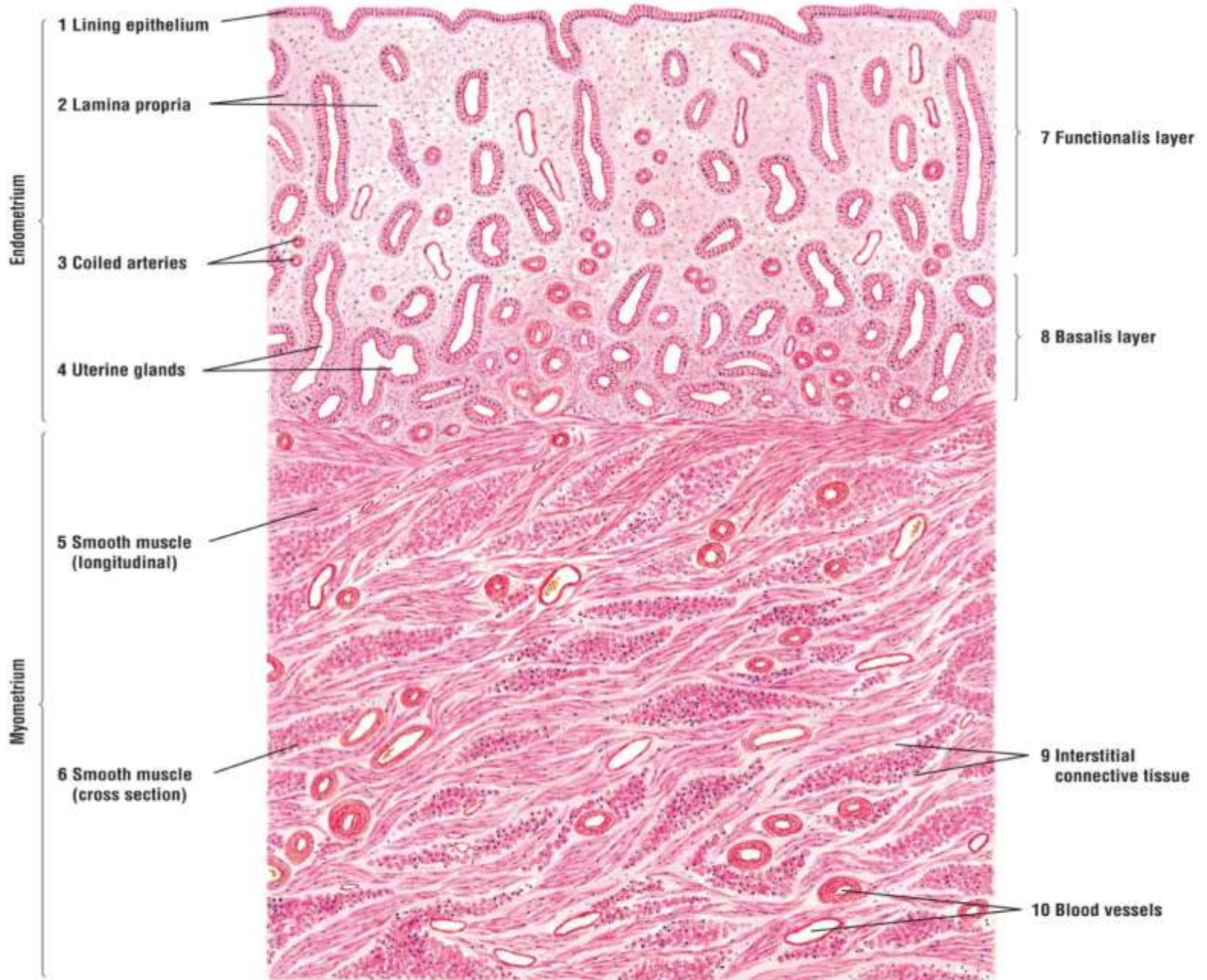
**FIGURE 21.10** ■ Human ovary: a section of corpus luteum and corpus albicans. Stain: Mallory-Azan.  $\times 10.5$ .



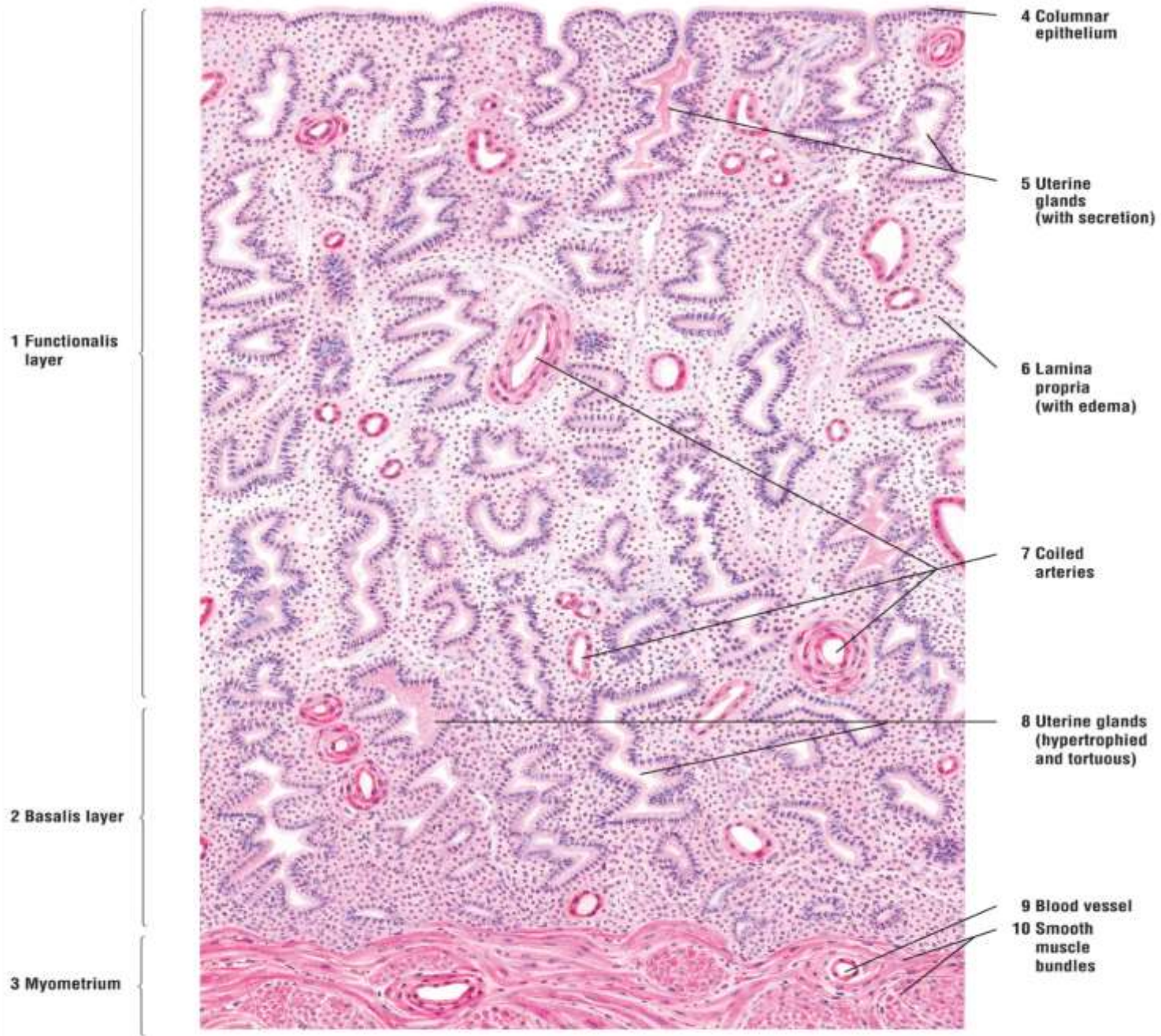
**FIGURE 21.11** ■ Uterine tube: ampulla with mesosalpinx ligament (panoramic view, transverse section). Stain: hematoxylin and eosin. Low magnification.



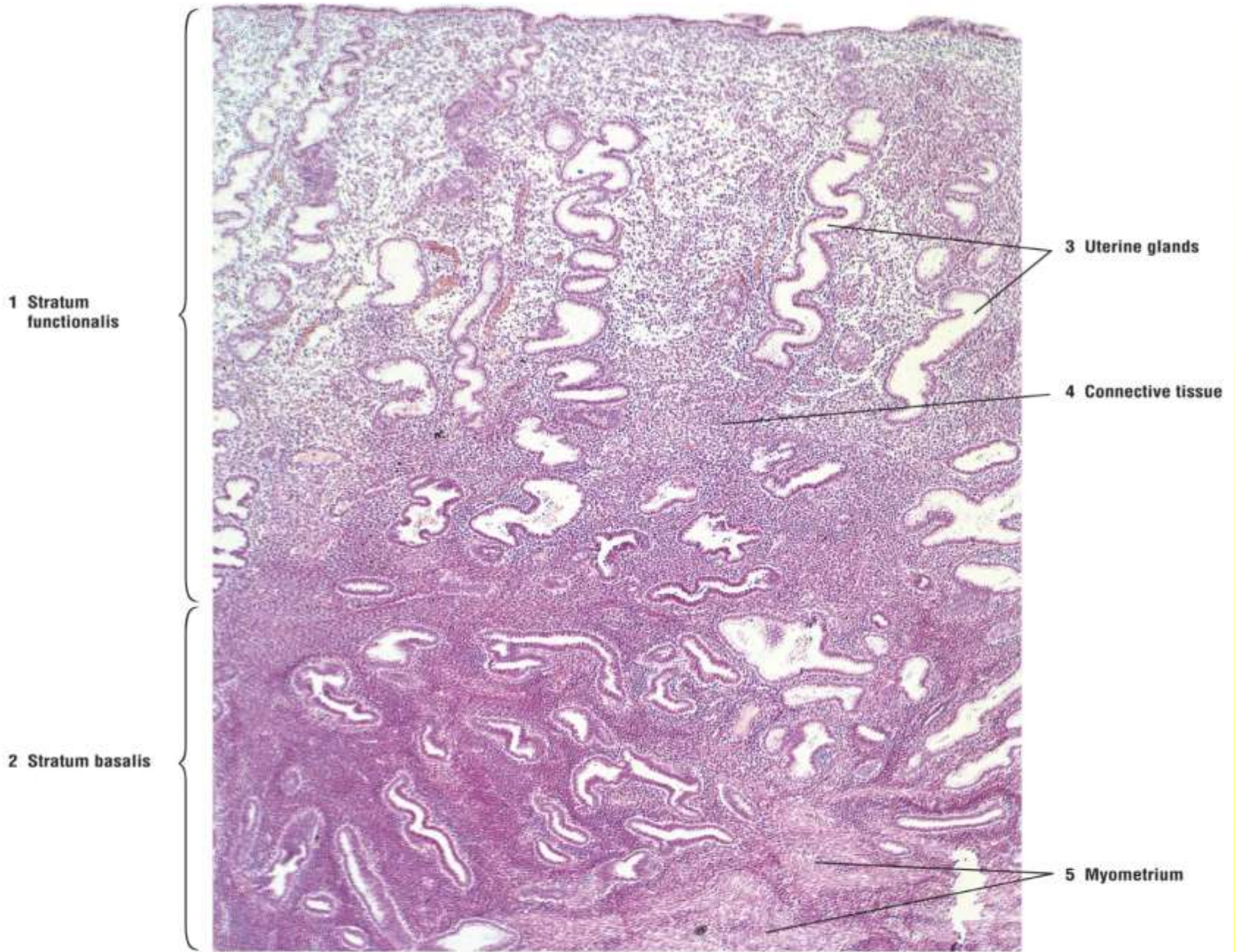
**FIGURE 21.13** ■ Uterine tube: lining epithelium. Stain: hematoxylin and eosin (plastic section).  $\times 130$ .



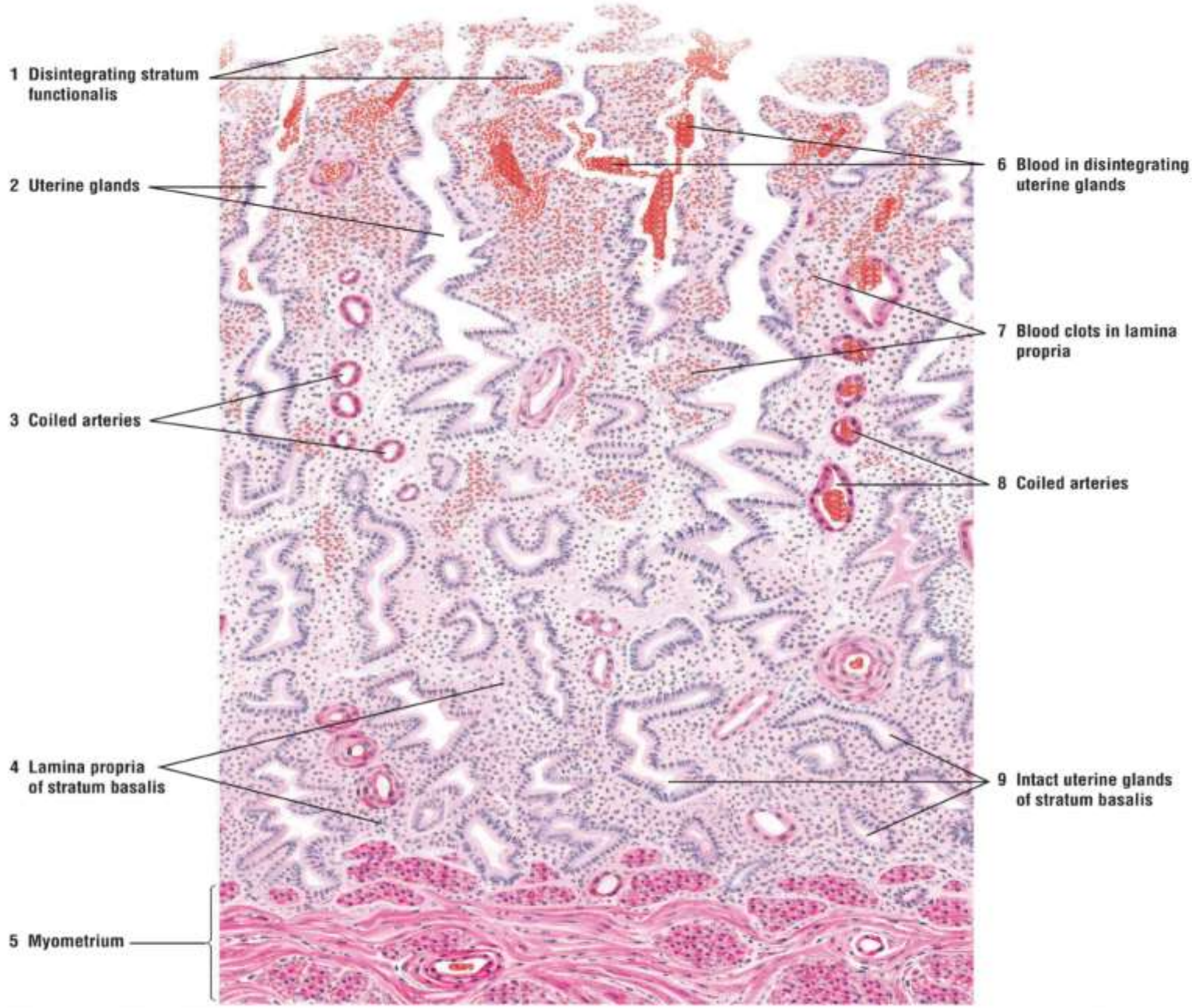
**FIGURE 21.14** ■ Uterus: proliferative (follicular) phase. Stain: hematoxylin and eosin. Low magnification.



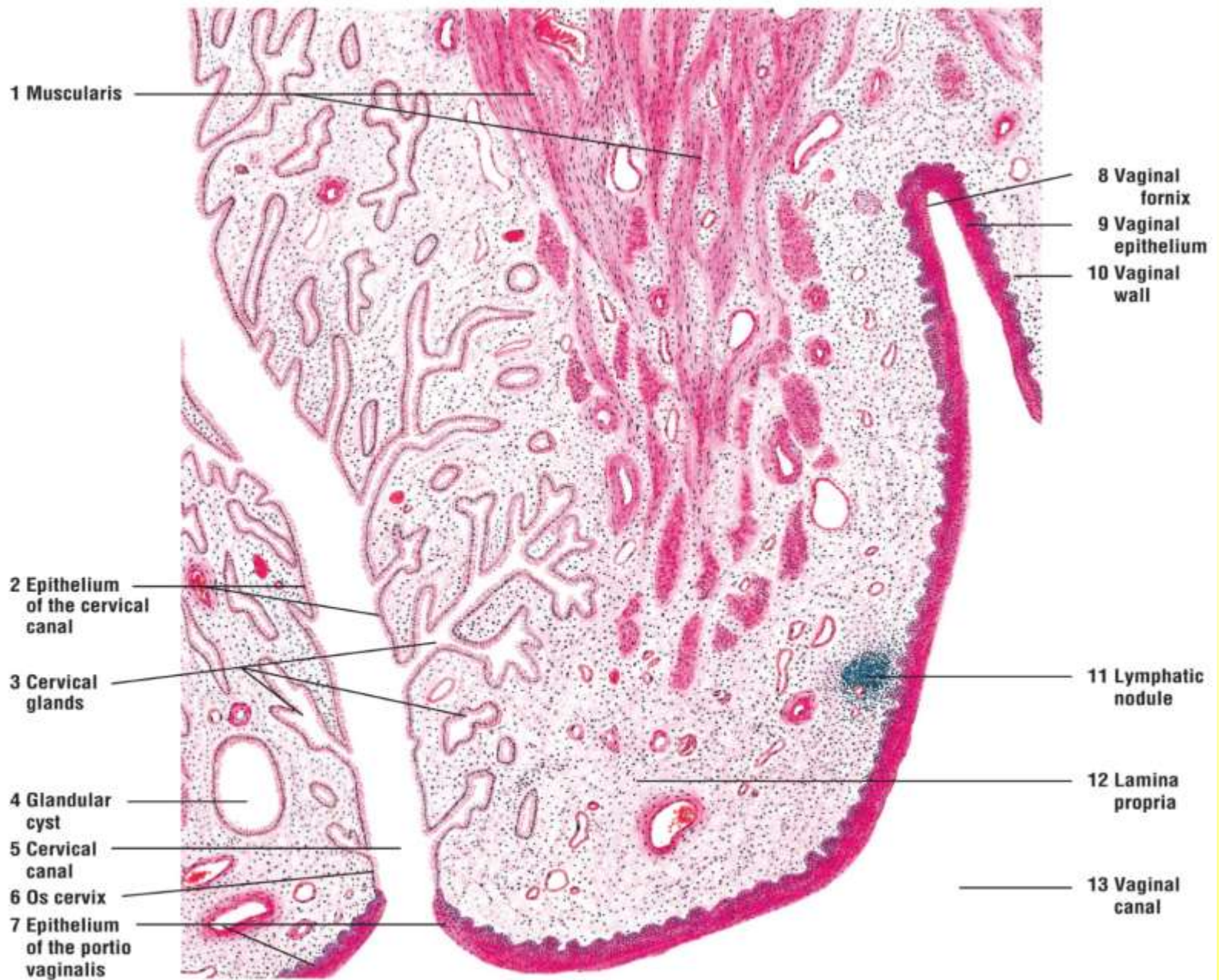
**FIGURE 21.15** ■ Uterus: secretory (luteal) phase. Stain: hematoxylin and eosin. Low magnification.



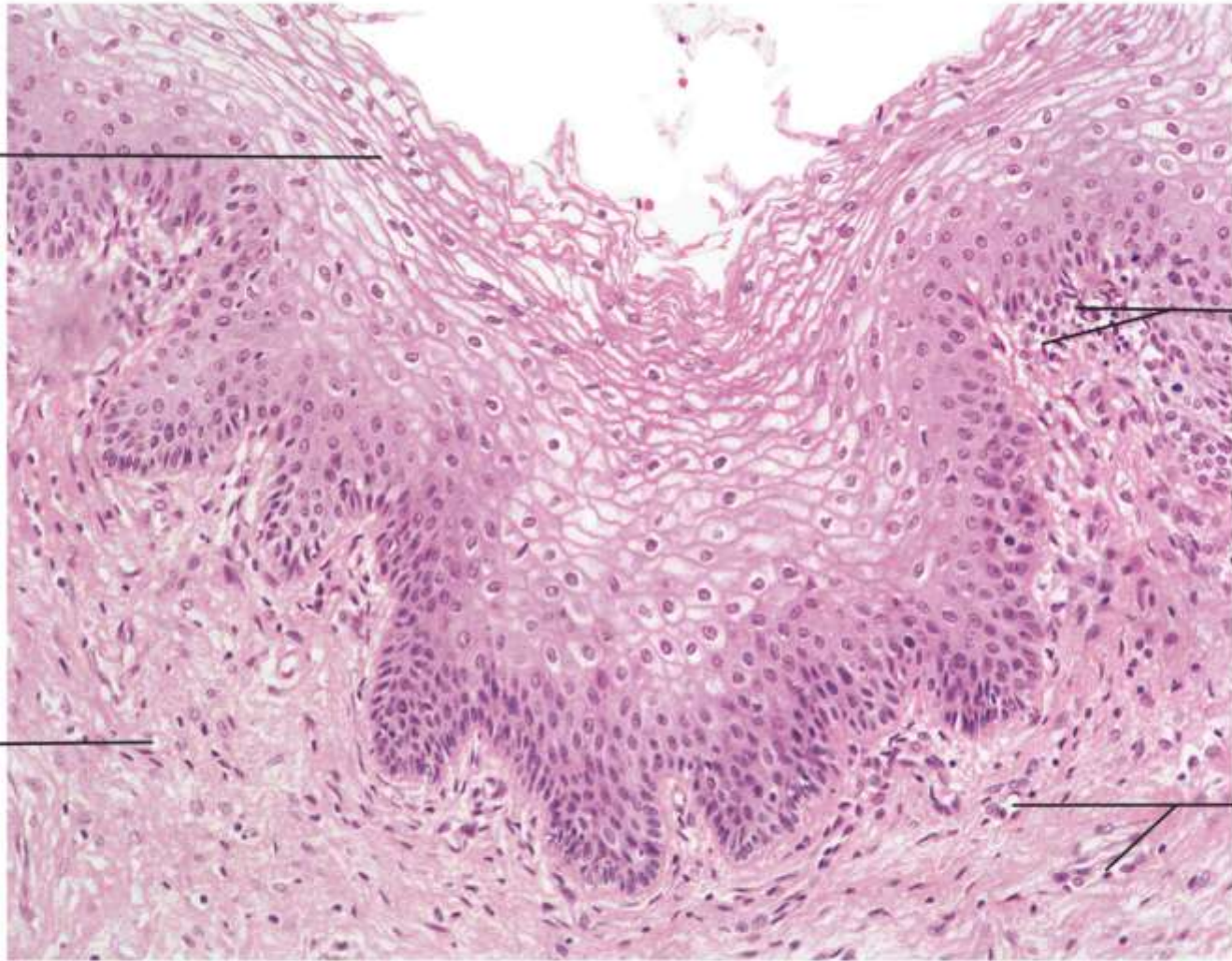
**FIGURE 21.16** ■ Uterine wall (endometrium): secretory (luteal) phase. Stain: hematoxylin and eosin.  $\times 10$ .



**FIGURE 21.17** ■ Uterine wall: menstrual phase. Stain: hematoxylin and eosin. Low magnification.



**FIGURE 21.18** ■ Cervix, cervical canal, and vaginal fornix (longitudinal section). Stain: hematoxylin and eosin. Low magnification.



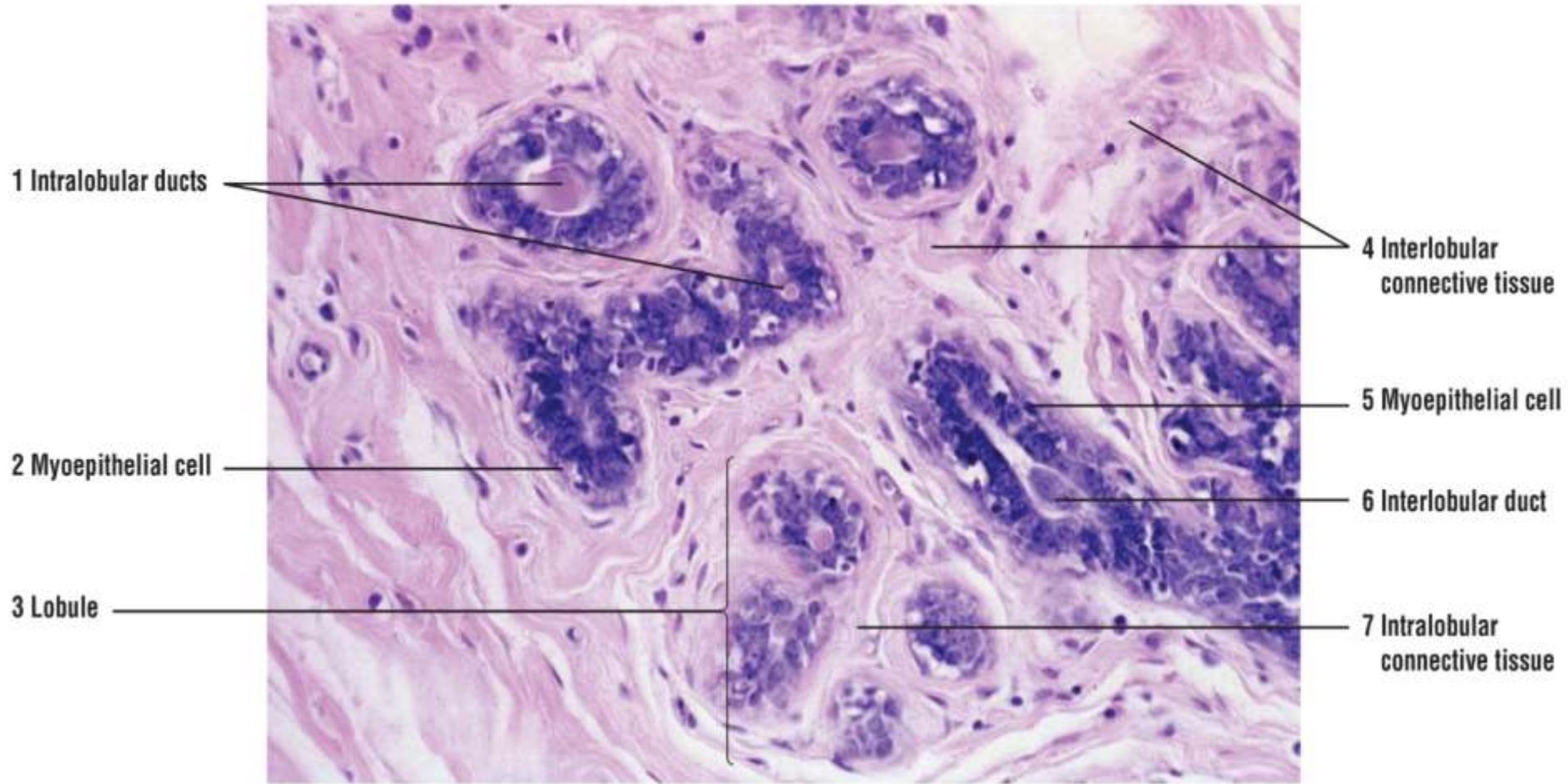
1 Stratified squamous nonkeratinized epithelium

2 Lamina propria

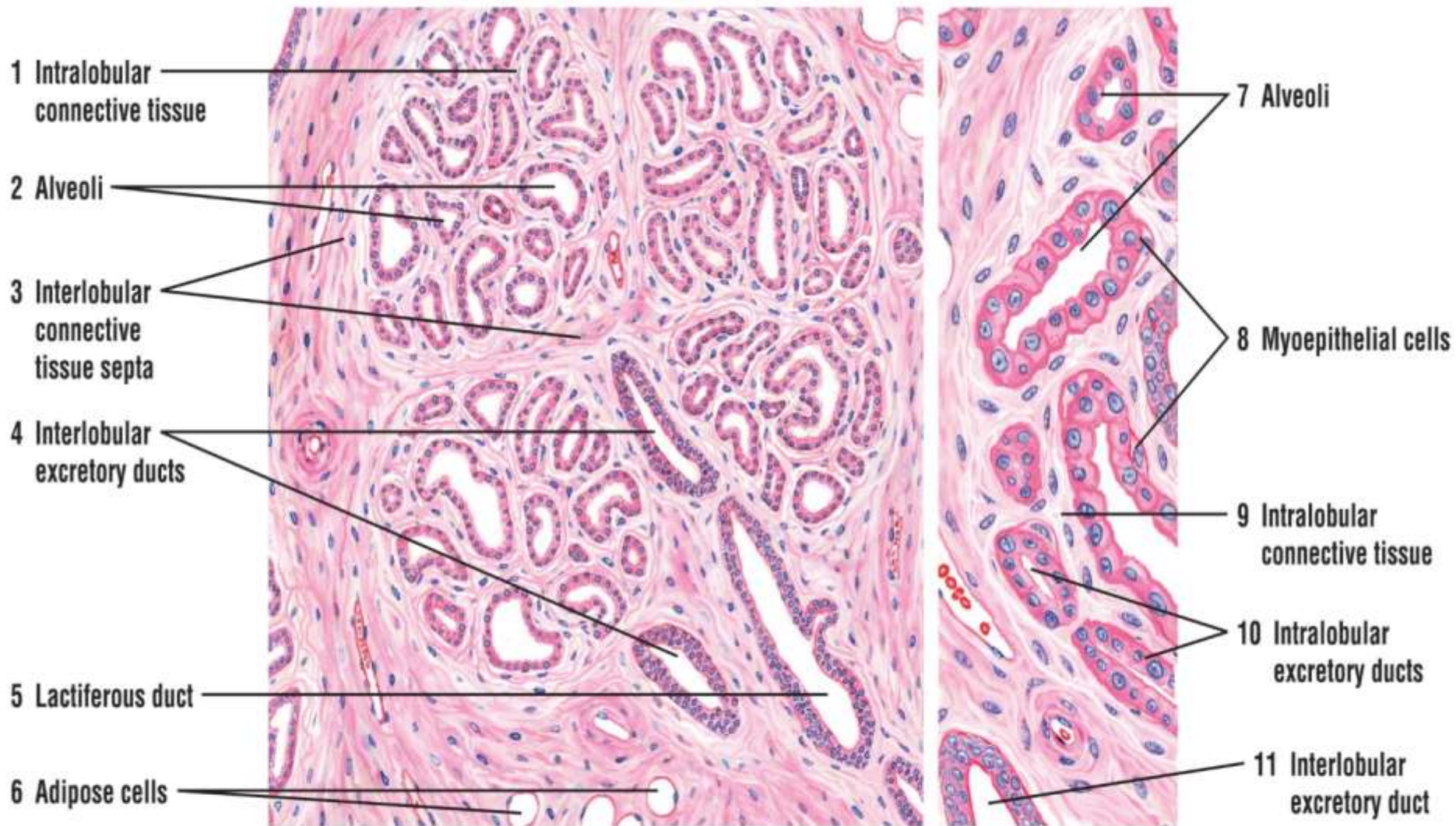
3 Lymphocytes

4 Blood vessels

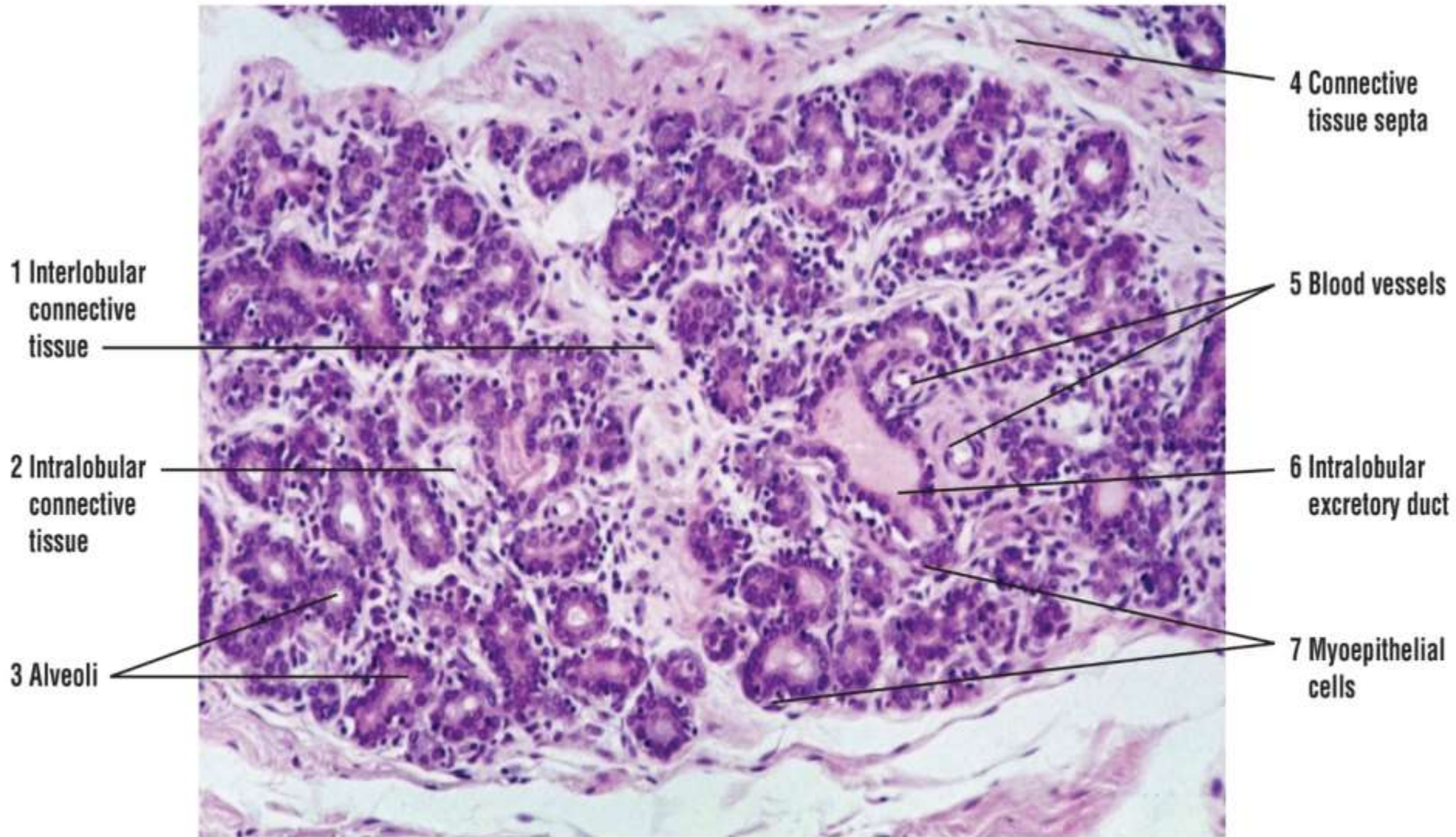
**FIGURE 21.22** ■ Vagina: surface epithelium. Stain: hematoxylin and eosin. x50.



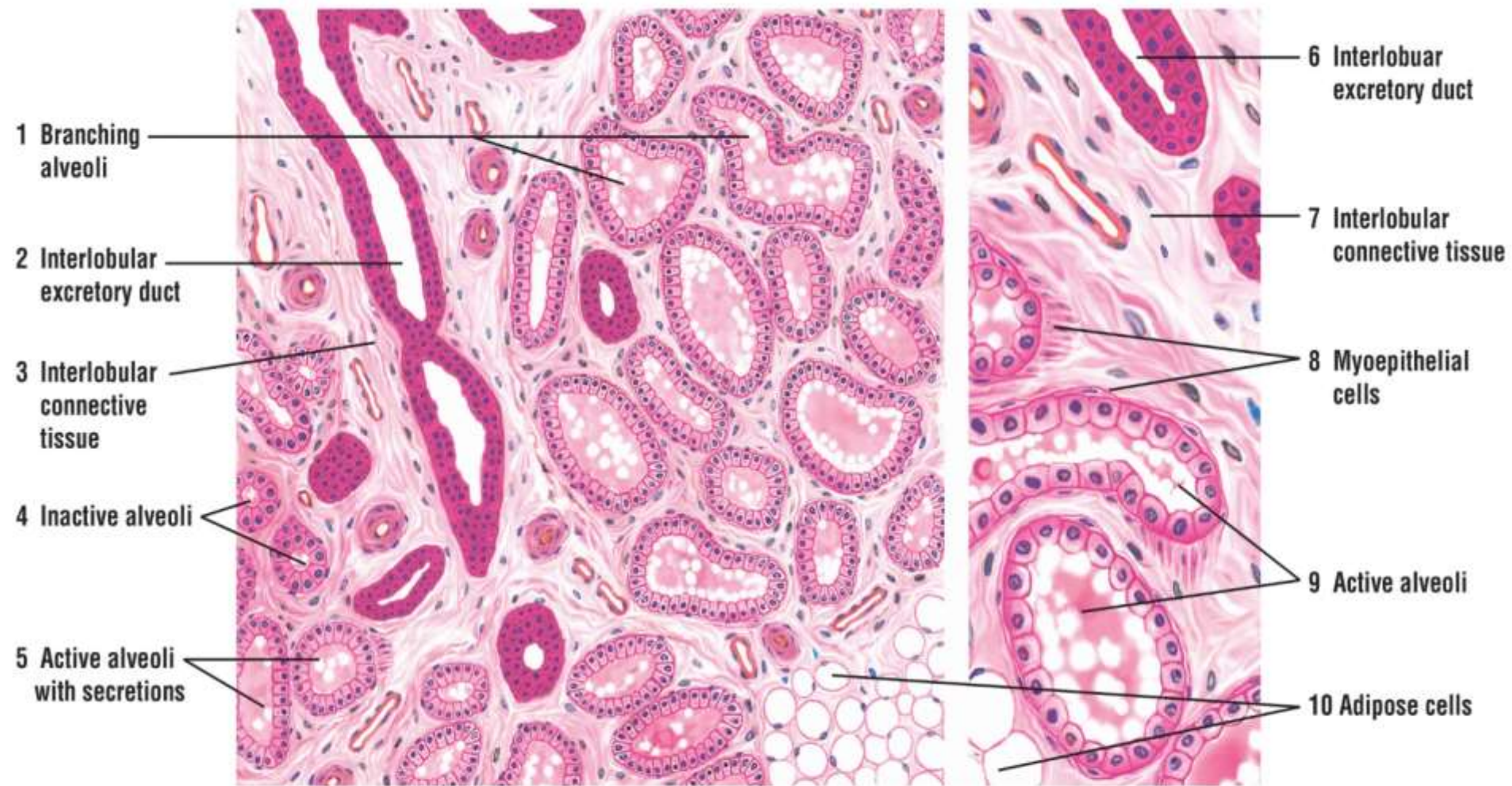
**FIGURE 21.27** ■ Mammary gland: micrograph of inactive mammary gland. Stain: hematoxylin and eosin.  $\times 102$ .



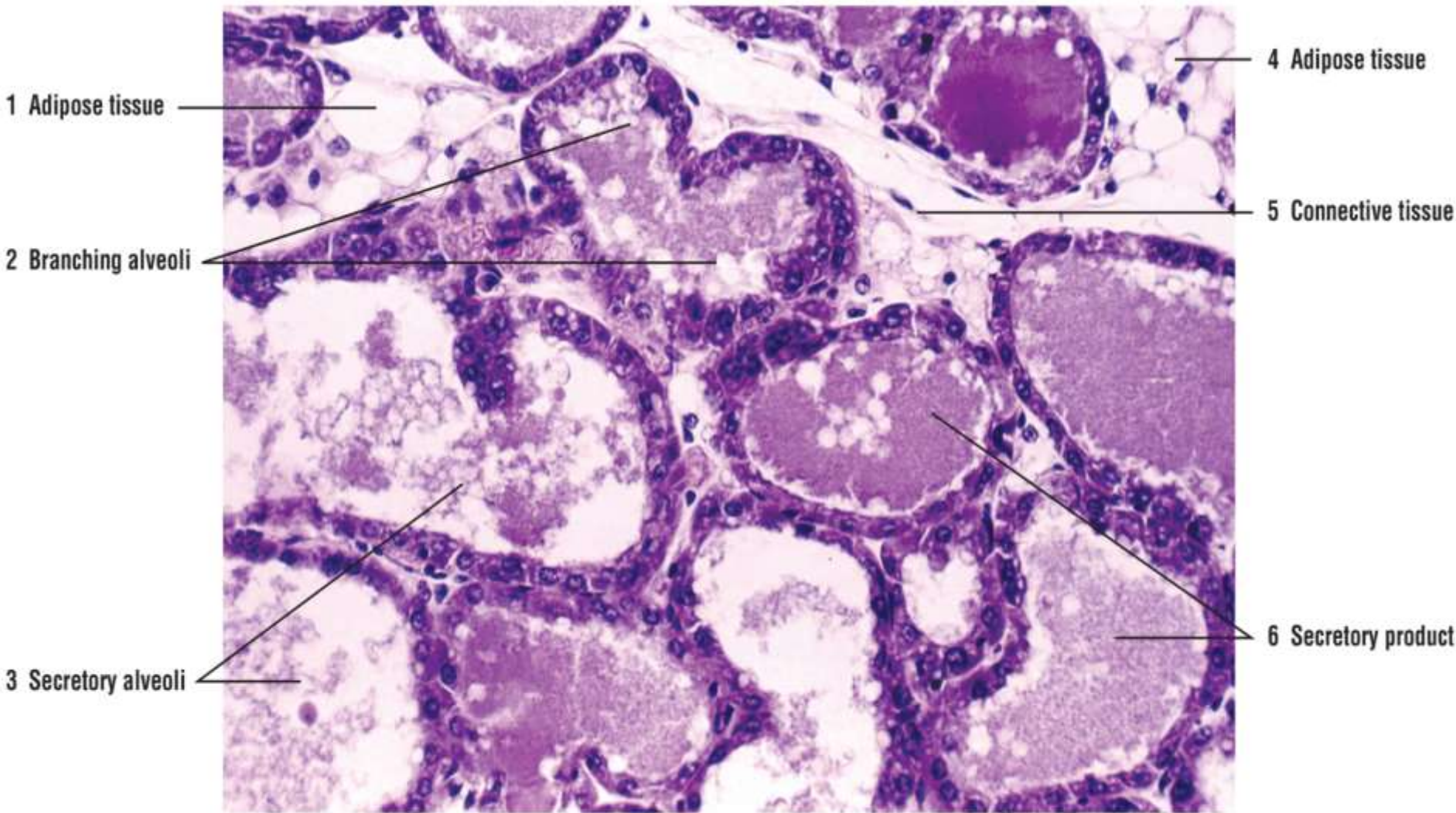
**FIGURE 21.28** ■ Mammary gland during proliferation and early pregnancy. Stain: hematoxylin and eosin. Left side, medium magnification; right side, high magnification.



**FIGURE 21.29** ■ Mammary gland during activation and early development. Stain: hematoxylin and eosin.  $\times 85$ .



**FIGURE 21.31** ■ Mammary gland during lactation. Stain: hematoxylin and eosin. Left side, medium magnification; right side, high magnification.



**FIGURE 21.32** ■ Lactating mammary gland. Stain: hematoxylin and eosin.  $\times 75$ .