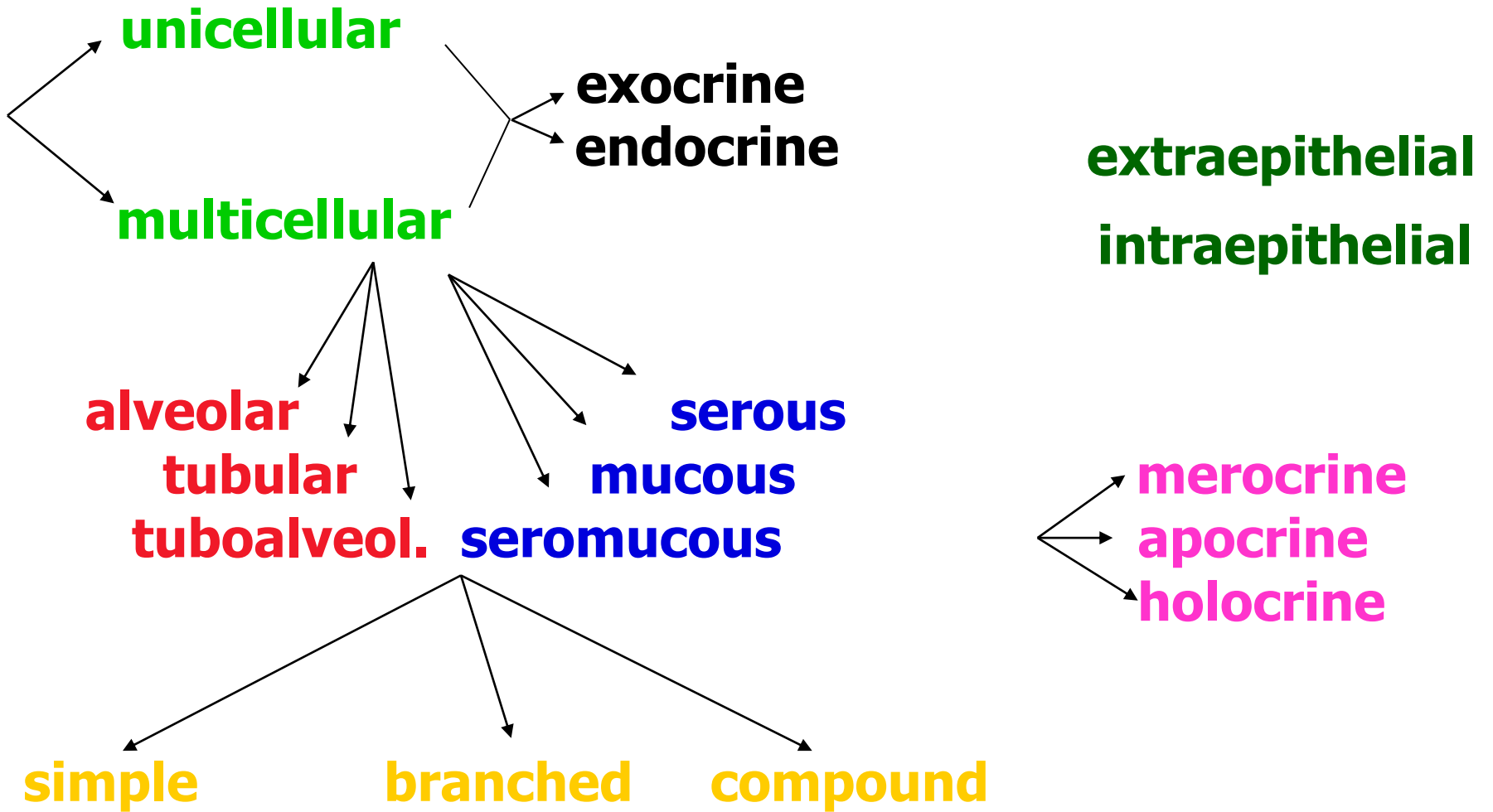


Glandular epithelium

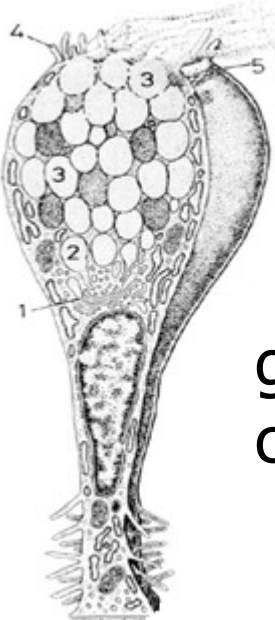
Unicellular

Multicellular

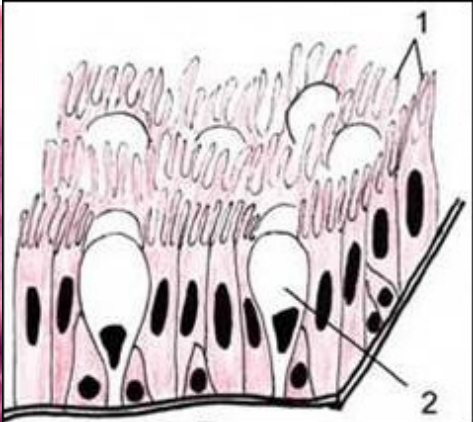
Classification of glands



Unicellular glands intraepithelial – goblet cells (respiratory tract)

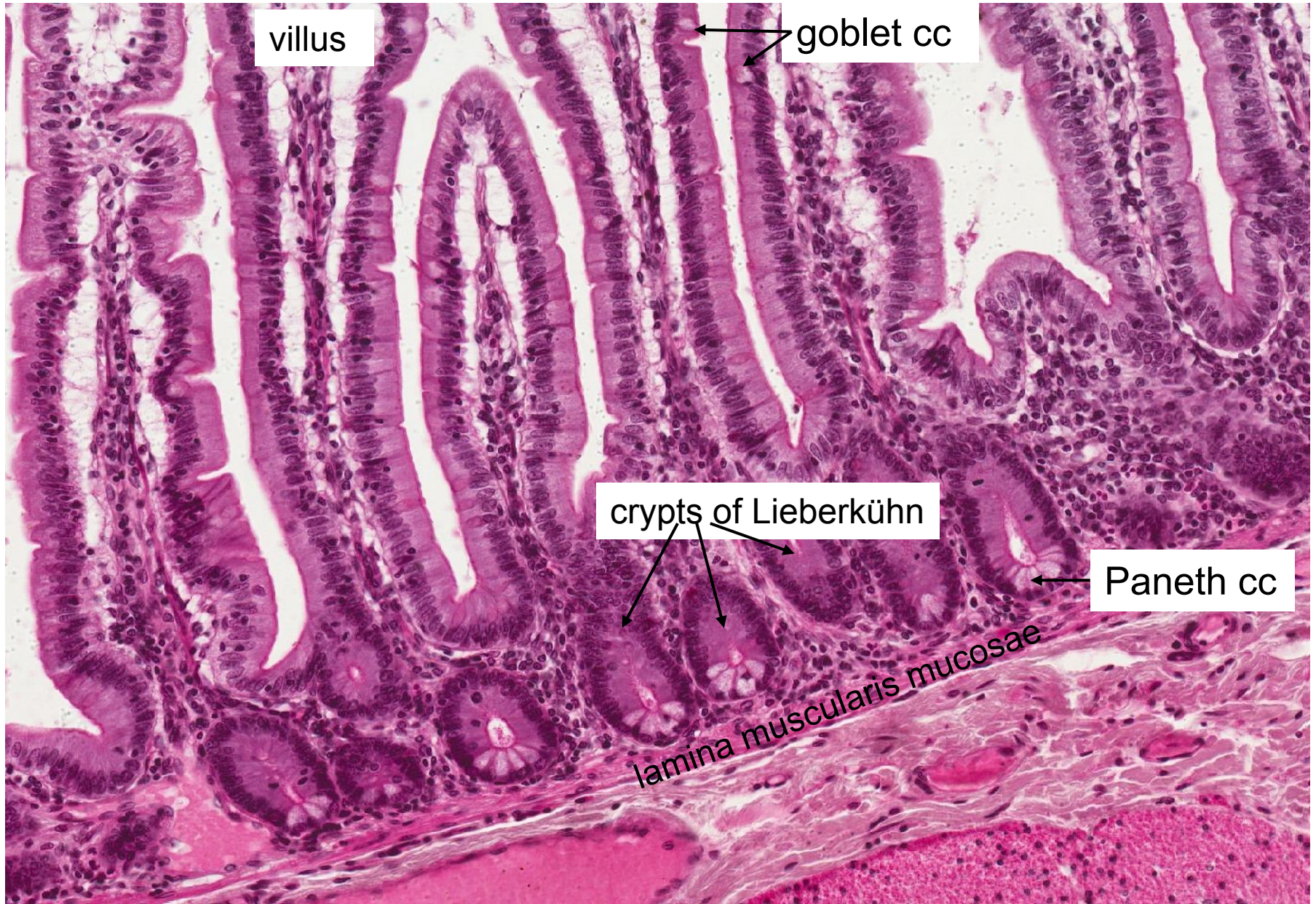


goblet cells



20 μm

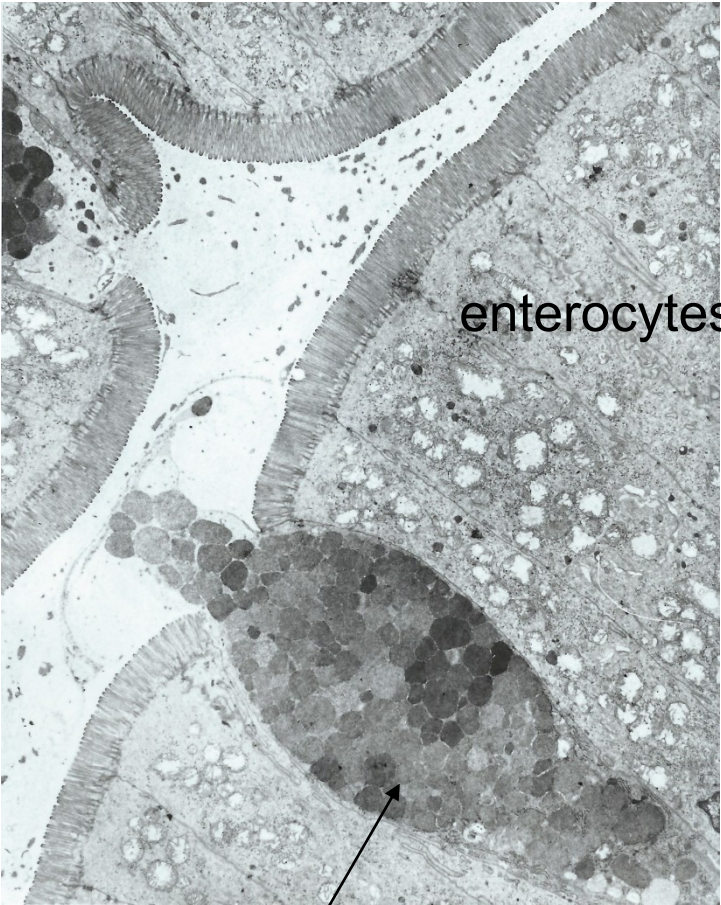
Unicellular glands intraepithelial (goblet cells and Paneth cells)
– *Intestinum tenue (jejunum)*



Unicellular glands intraepithelial (goblet cells and Paneth cells) – *Intestinum tenue* (ileum)

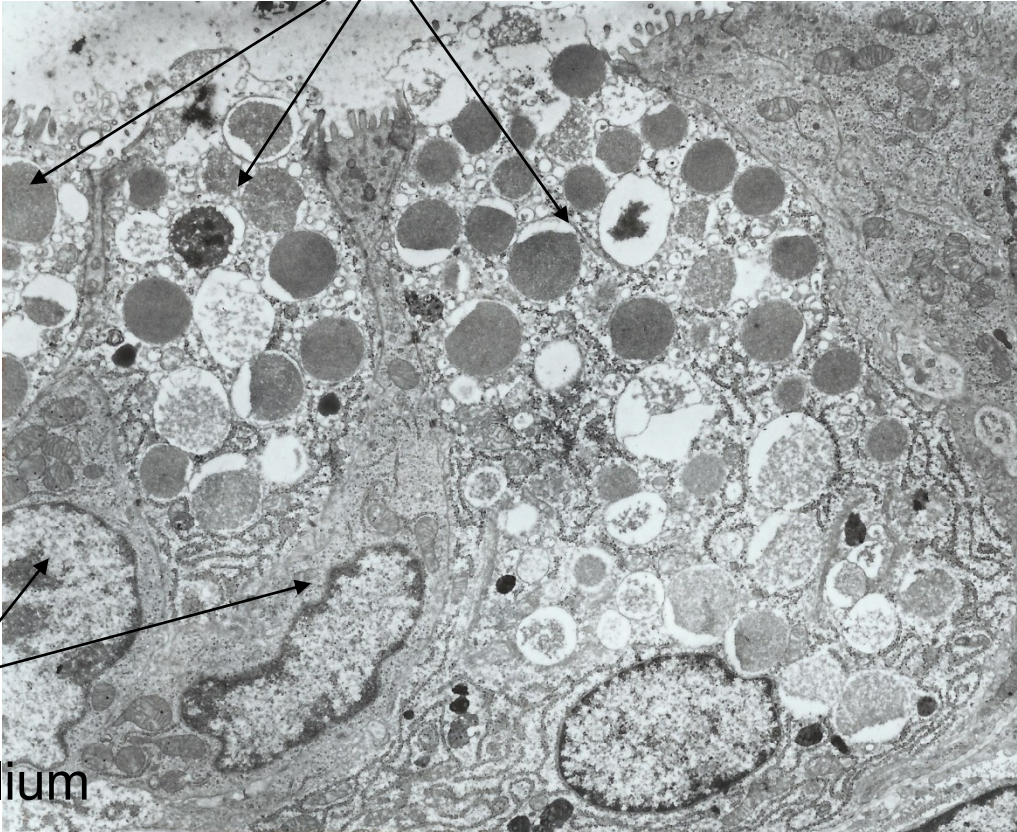


Goblet cells and Paneth cells - *Intestinum tenue* (TEM)



enterocytes


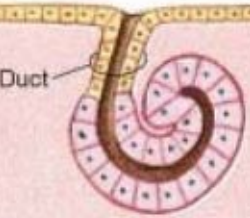



goblet cell



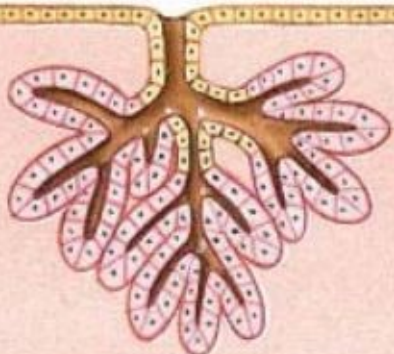
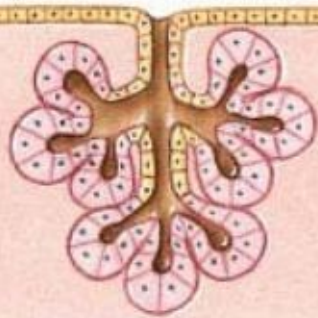
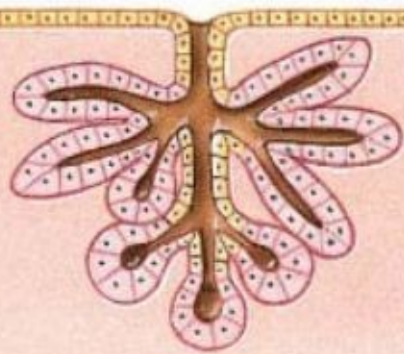
Paneth cells

stem cells of
intestinal epithelium

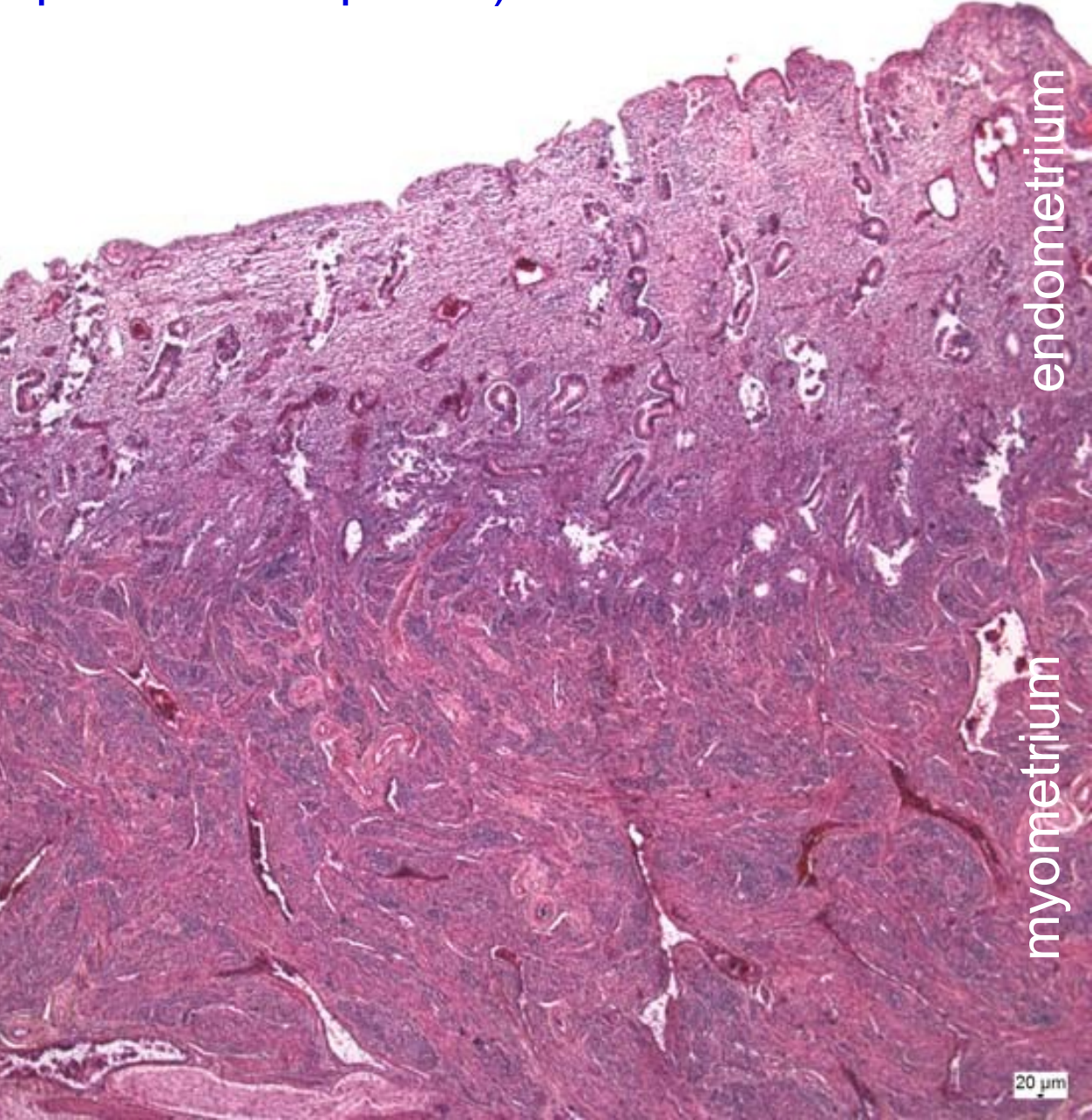
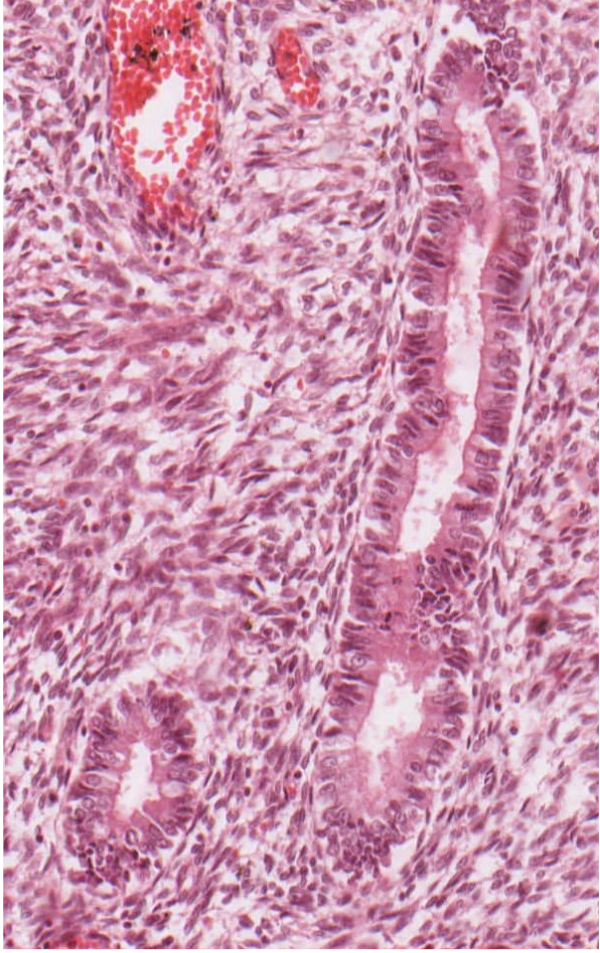
MULTICELLULAR SIMPLE GLANDS

	 <p>Duct</p>			
<p>Simple tubular</p> <p><i>Examples:</i> Intestinal glands (crypts of Lieberkühn)</p>	<p>Simple coiled tubular</p> <p><i>Examples:</i> Merocrine sweat glands</p>	<p>Simple branched tubular</p> <p><i>Examples:</i> Mucous glands of esophagus, tongue, duodenum</p>	<p>Simple alveolar (acinar)</p> <p><i>Examples:</i> Not found in adult; a stage in development of simple branched glands</p>	<p>Simple branched alveolar</p> <p><i>Examples:</i> Sebaceous (oil) glands</p>

MULTICELLULAR COMPOUND GLANDS

		
<p>Compound tubular</p> <p><i>Examples:</i> Mucous glands (in mouth) Gastric glands Bulbourethral glands (in male reproductive system) Testes (seminiferous tubules)</p>	<p>Compound alveolar (acinar)</p> <p><i>Examples:</i> Mammary glands</p>	<p>Compound tubuloalveolar (tubuloacinar)</p> <p><i>Examples:</i> Salivary glands Glands of respiratory passages Pancreas (excretory portion)</p>

Simple tubular glands - *gll. uterinae* (Endometrium – proliferative phase)

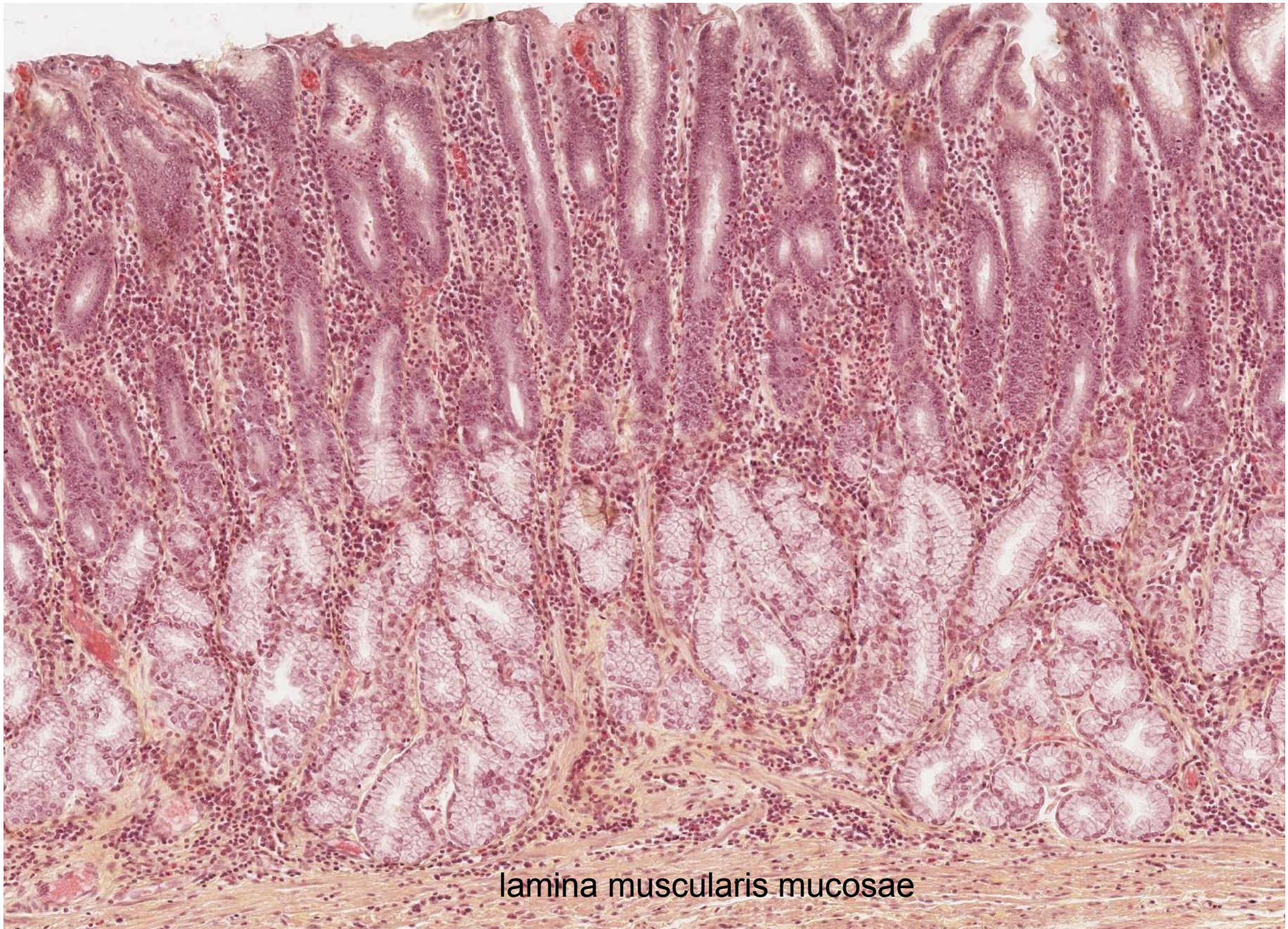


endometrium

myometrium

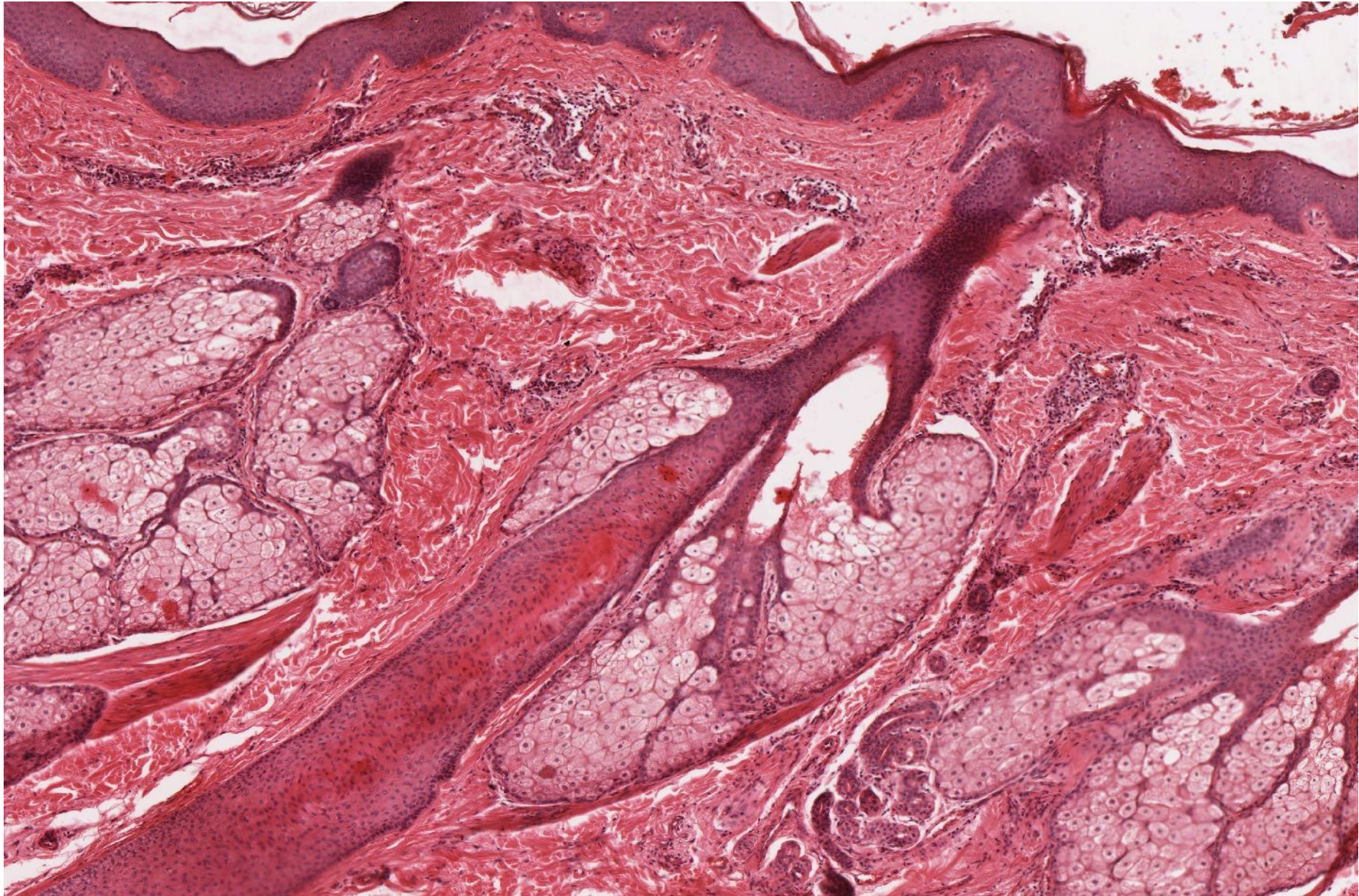
20 μ m

Branched tubular glands – *gll. pyloricae* (Pylorus, HES)

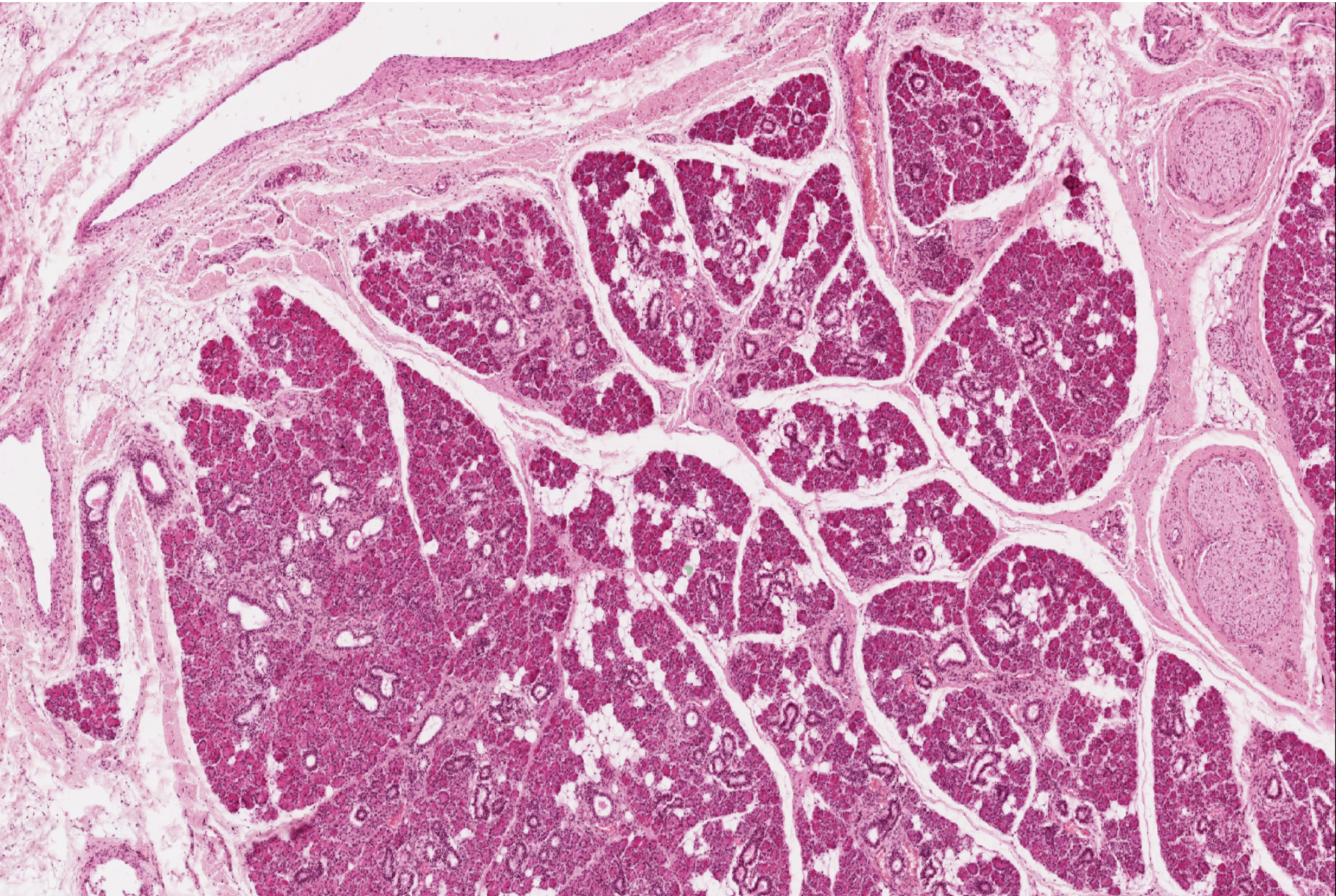


lamina muscularis mucosae

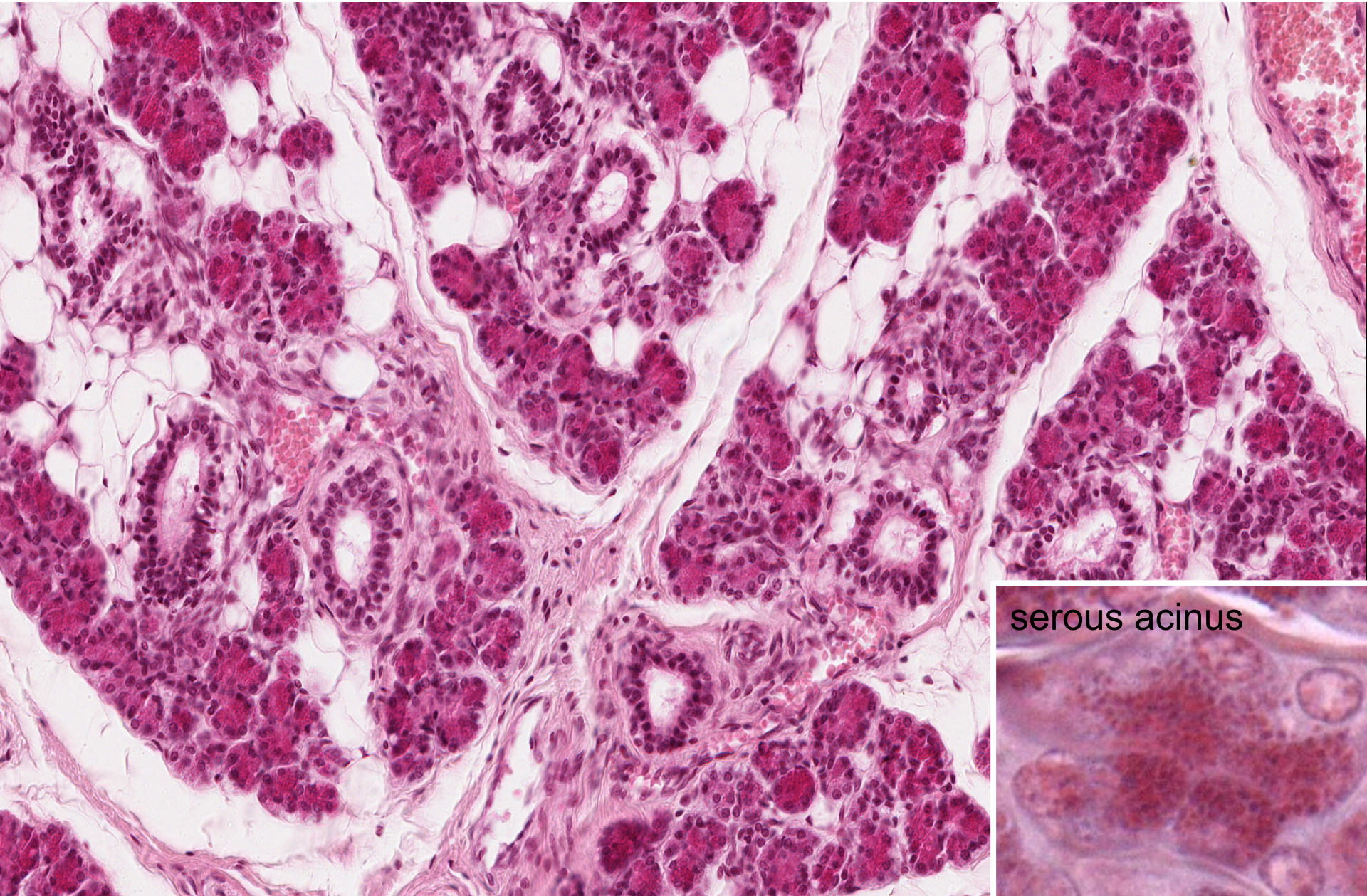
Branched alveolar (acinar) glands – *gll. sebaceae* (skin)



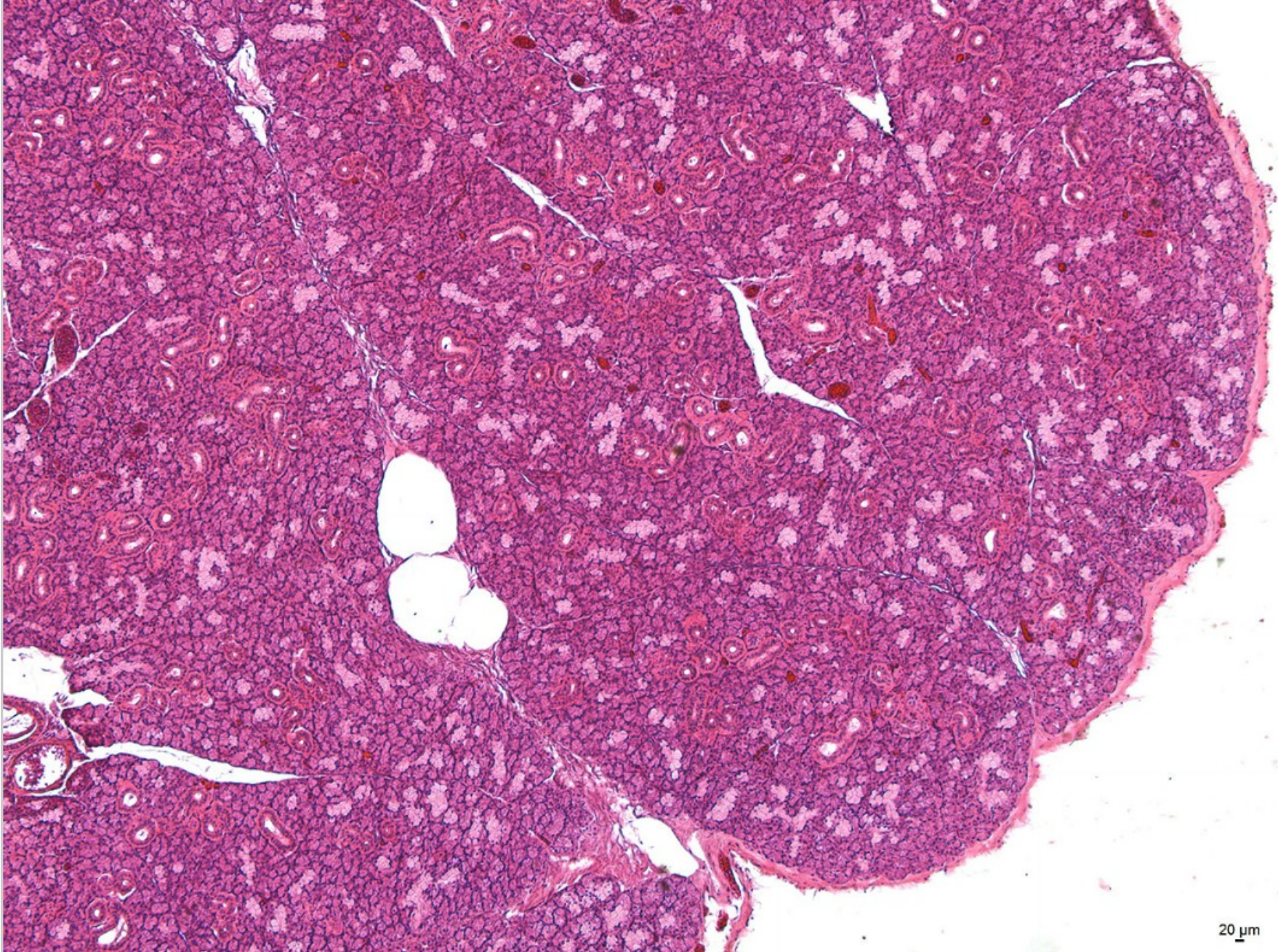
Compound alveolar (acinar) serous gland - *Glandula parotis*



Compound alveolar (acinar) serous gland - *Glandula parotis*

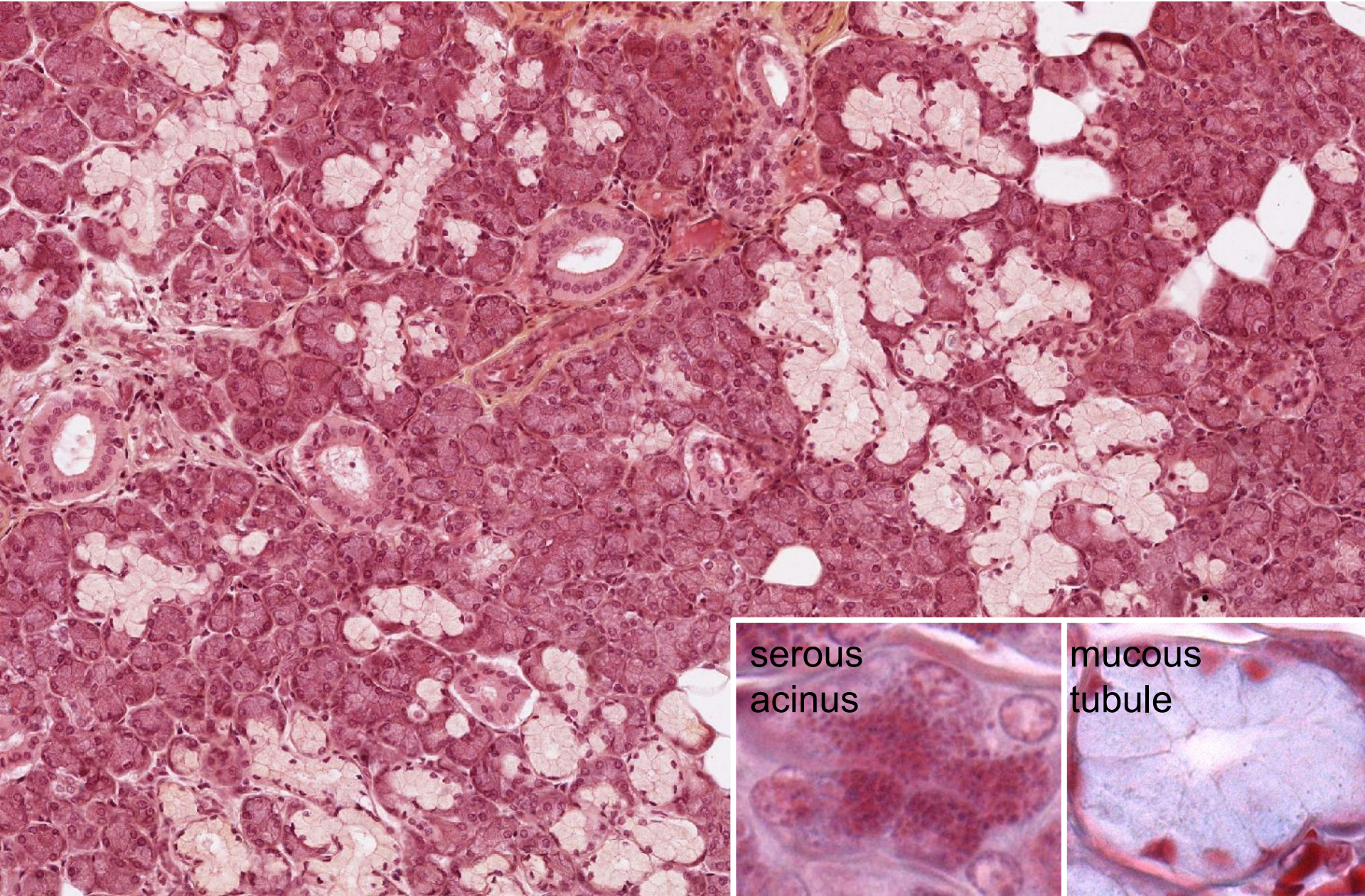


Compound tuboalveolar mixed gland - *Glandula submandibularis*



20 μ m

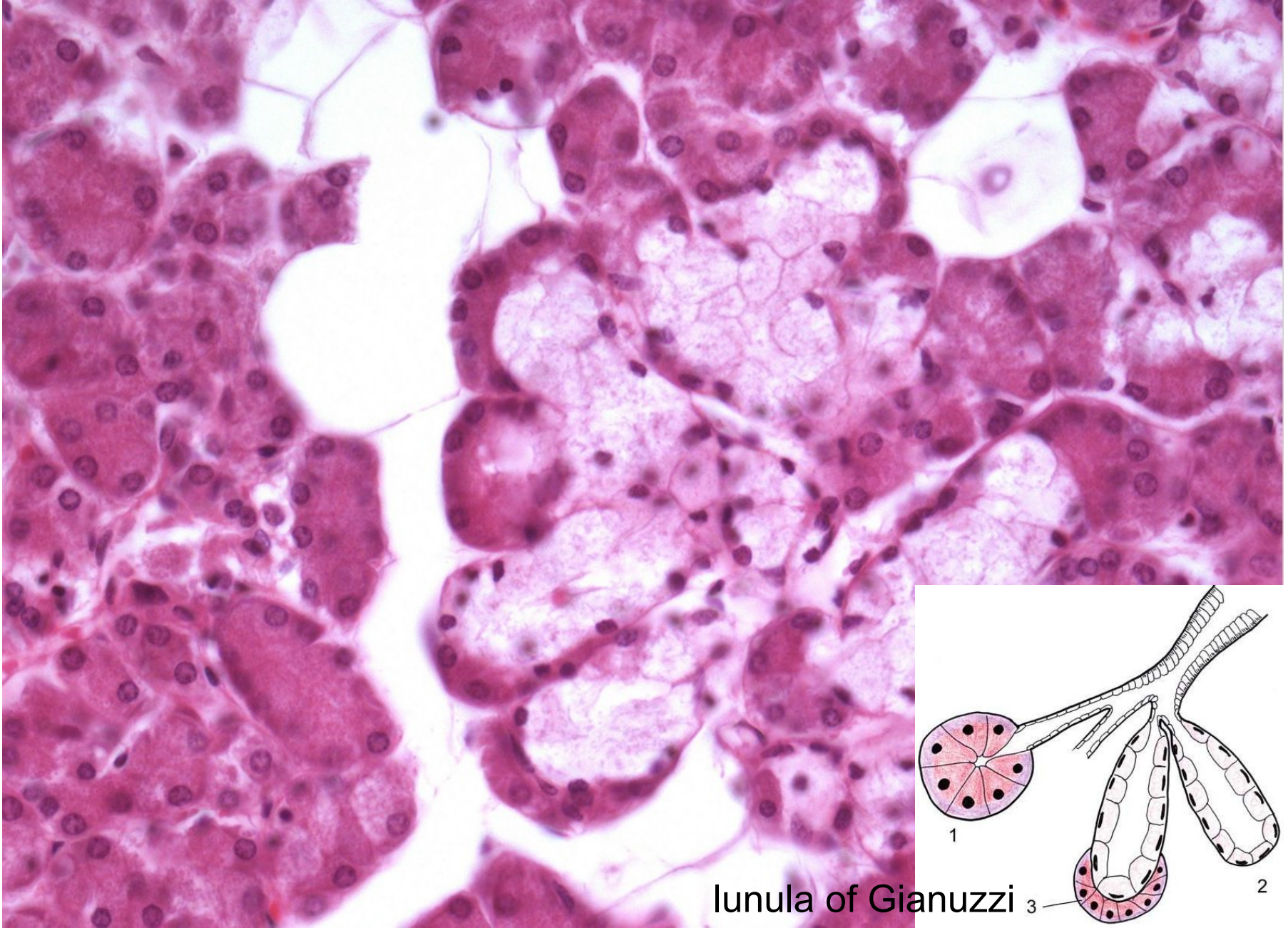
Compound tuboalveolar mixed gland - *Glandula submandibularis*



serous
acinus

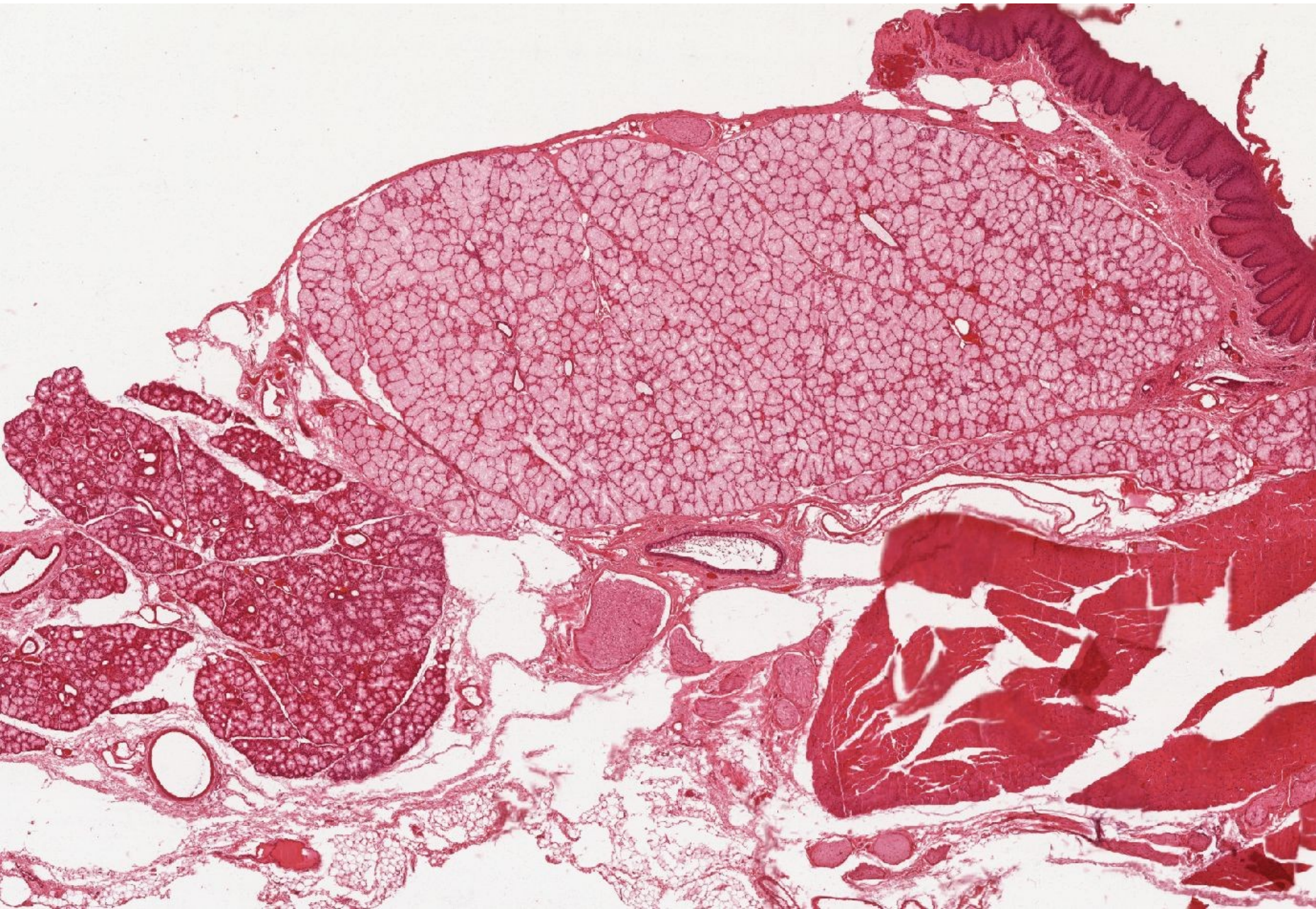
mucous
tubule

Compound tuboalveolar mixed gland - *Glandula submandibularis*



Lunula of Gianuzzi

Compound tubuloalveolar mixed gland - *Glandula sublingualis*



Glandular epithelium

Slides:

- Cells of Paneth and goblet cells (16. Intestinum tenue)
- Simple tubular glands (47. Uterus – proliferative phase)
- Branched tubular glands (14. Pylorus)
- Branched alveolar (acinar) glands – sebaceous glands (71. Skin with hair)
- Compound alveolar (acinar) serous gland (8. Glandula parotis)
- Compound tuboalveolar mixed gland (9. Glandula submandibularis)

Atlas EM:

- Glandular cell of the exocrine pancreas (10, 65)
- Endocrine cells of the pancreas (66)
- Goblet cell in the intestinal epithelium (62, 63)
- Paneth cell (64)