Anatomy

The Male Reproductive System

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The Reproductive system includes the following:

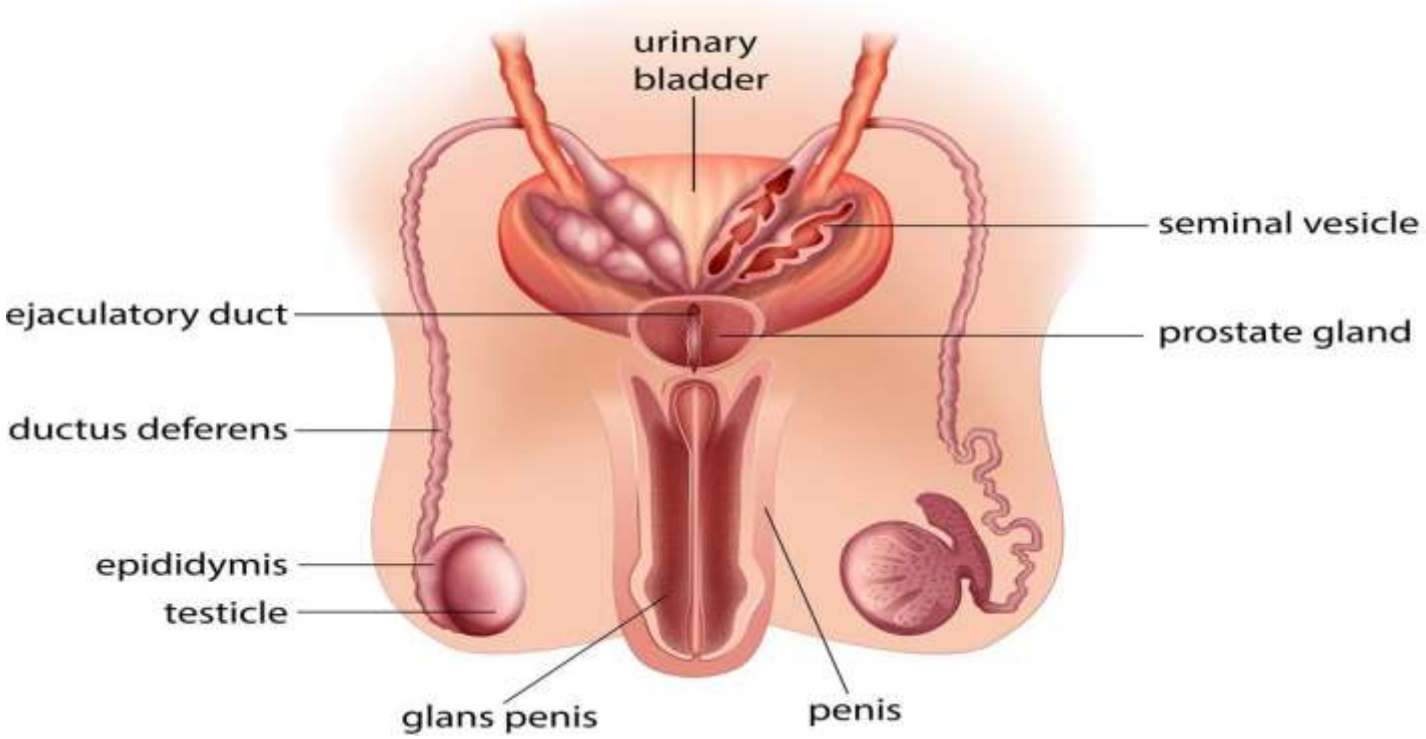
- **Gonads: or reproductive organs that produce gametes & hormones.**
- **Ducts: that receive and transport the gametes.**
- **Accessory glands & organs that secrete fluids (into the same glands or other excretory ducts).**
- **External genitalia.**

- The male and female reproductive systems are functionally different:
  - *in an adult male, the testes or male gonads secrete sex hormones called androgens (**testosterone**) & produce ½ **billion sperm each day.**
  - *in an adult female the ovaries or female gonads, typically release **only one immature gamete** (called oocyte) **per month**.

Male Reproductive System

The male reproductive system performs the following **functions:**
Produces, maintains and transports sperm (the male reproductive cells)
and protective fluid (semen).

Produces and secretes male sex hormones responsible for maintaining the male reproductive



Organs of the Male Reproductive System

- Two testes
- Two epididymides
- Two different ducts (vas deference)
- Two spermatic cords
- Two seminal vesicles
- Two ejaculatory duct
- A prostate gland
- A penis

The **Male Reproductive System** consisting of the **male gonads**: testes

reproductive ducts– epididymis, ductus deferens, ejaculatory ducts, and urethra,

accessory sex glands– seminal vesicles, prostate & bulbourethral glands

and **The external genitalia** the **scrotum & penis.**

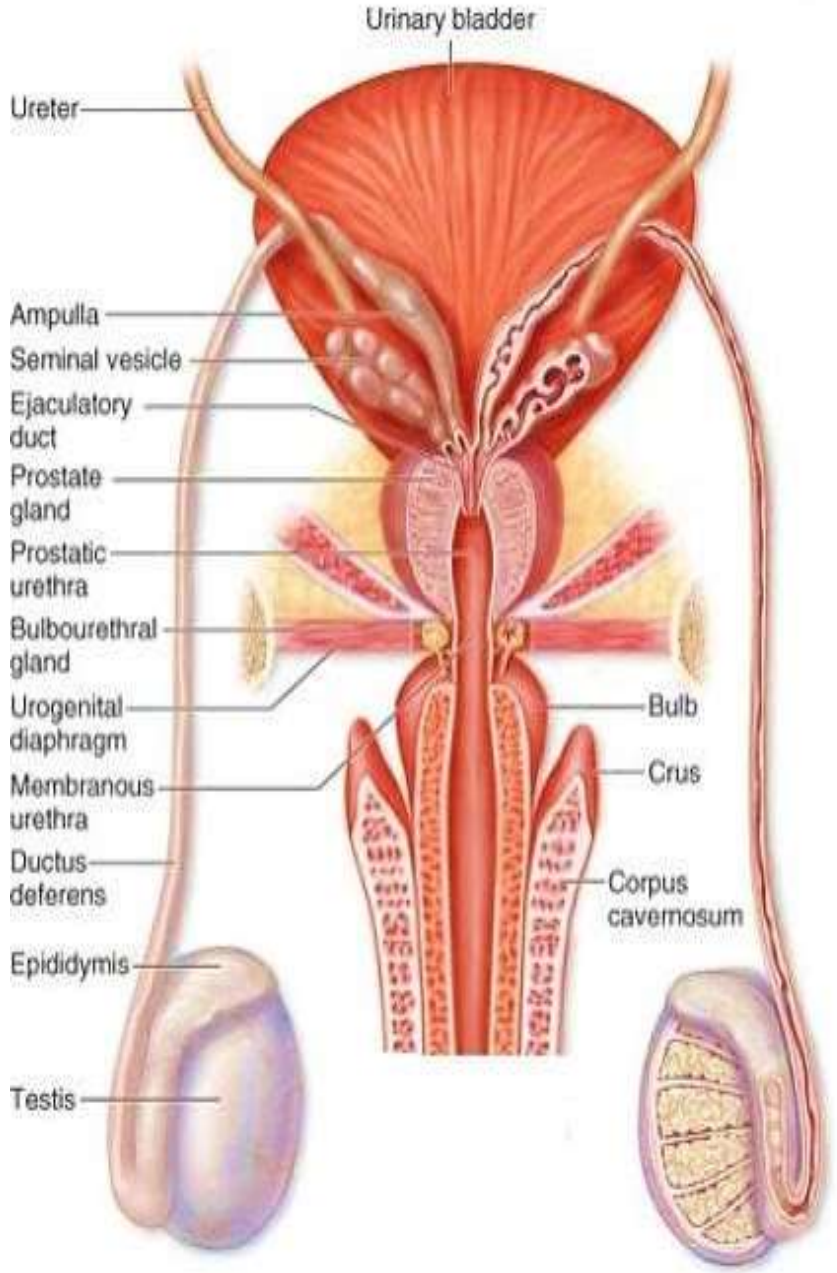
The testes (male gonads) produce sperms, the reproductive ducts transport, store & mature the sperms, scrotum supports the testes .

The Male reproductive system:

- In the **testes** the sperm cells or spermatozoa, travel within **the epididymis →the ductus deferens or vas deferens →the ejaculatory duct→ &the urethra.**

Accessory organs: **the seminal vesicles, the prostate gland & the bulbourethral glands** secrete into the **ejaculatory ducts & urethra.**

The external genitalia consist of **the scrotum** (which encloses the testes) & **the penis.**

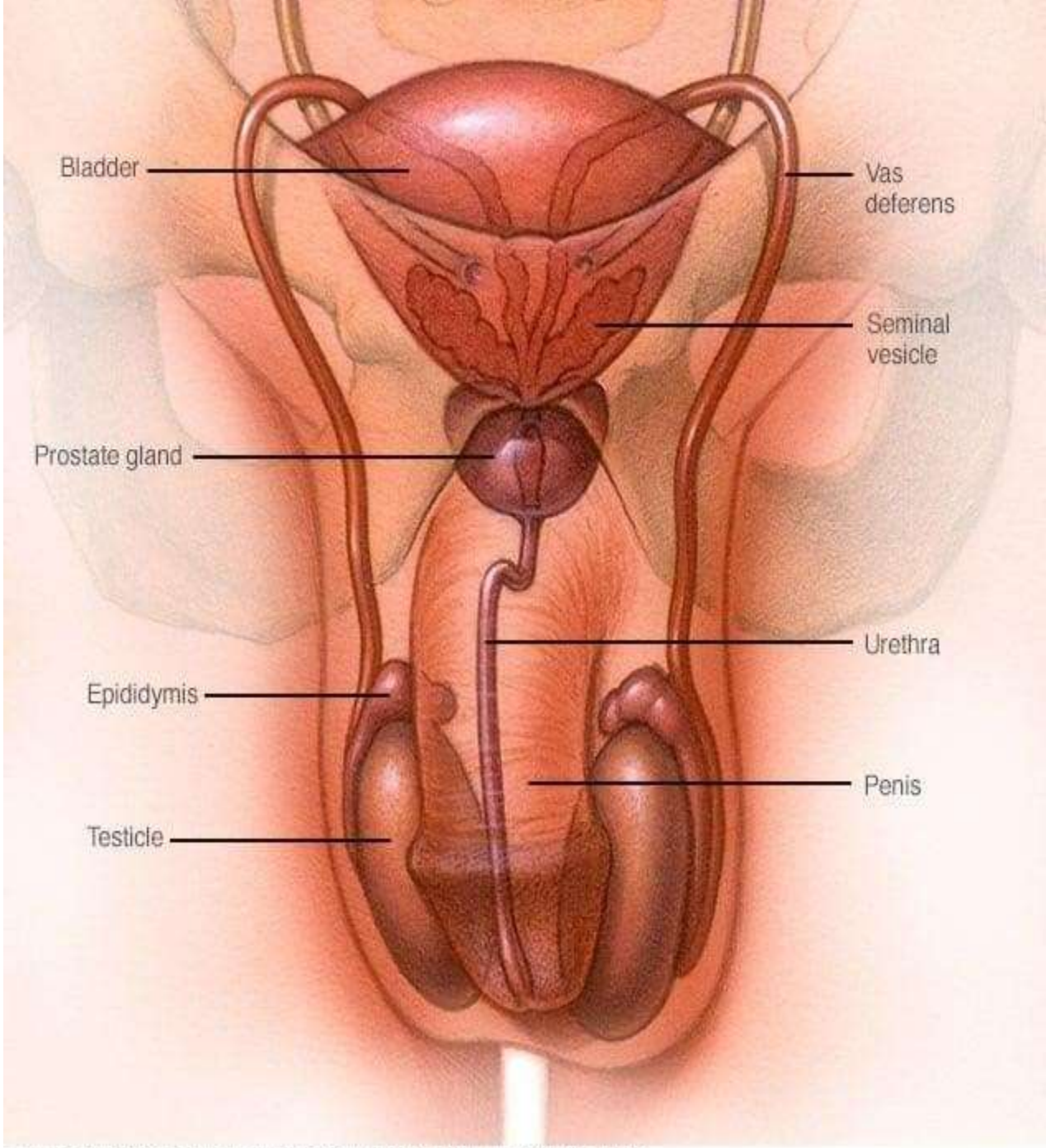


Unlike in the female reproductive system, most male reproductive organs are not located internally. They include:

Penis: The penis is made up of two parts, the shaft and the head. The urethral opening at the tip of the penis.

Scrotum: The scrotum is the sac-like organ hanging behind and below the penis. It contains the testicles (also called testes), as well as many nerves and blood vessels.

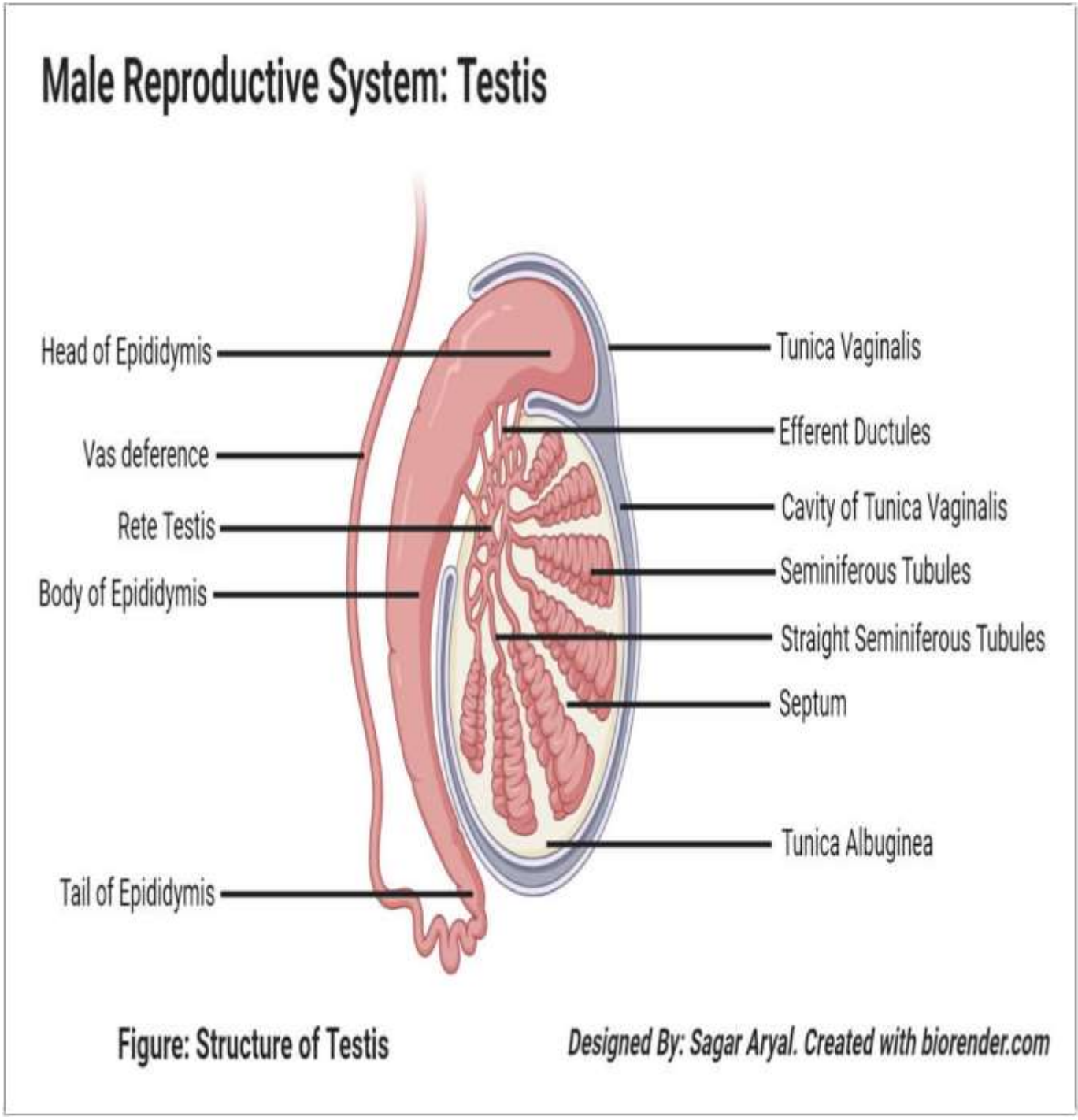
Testicles (testes): The testes (oval organs that lie in the scrotum) are the primary male reproductive organ.



•**The testes** are the male reproductive glands that are about 4.5 cm long, 2.5 cm wide and 3 cm thick and surrounded by three layers of tissues namely, tunica vaginalis, tunica albuginea, and tunica vasculosa.

•A testis is composed up to 900 coiled **seminiferous tubules** in which the sperms are formed. Between these tubules are **interstitial cells** or **Leydig cells** which produce the hormone testosterone after puberty.

•**The seminiferous tubules** are folded and tightly packed to form the **epididymis** which comes out of the scrotum in the form of vas deference.



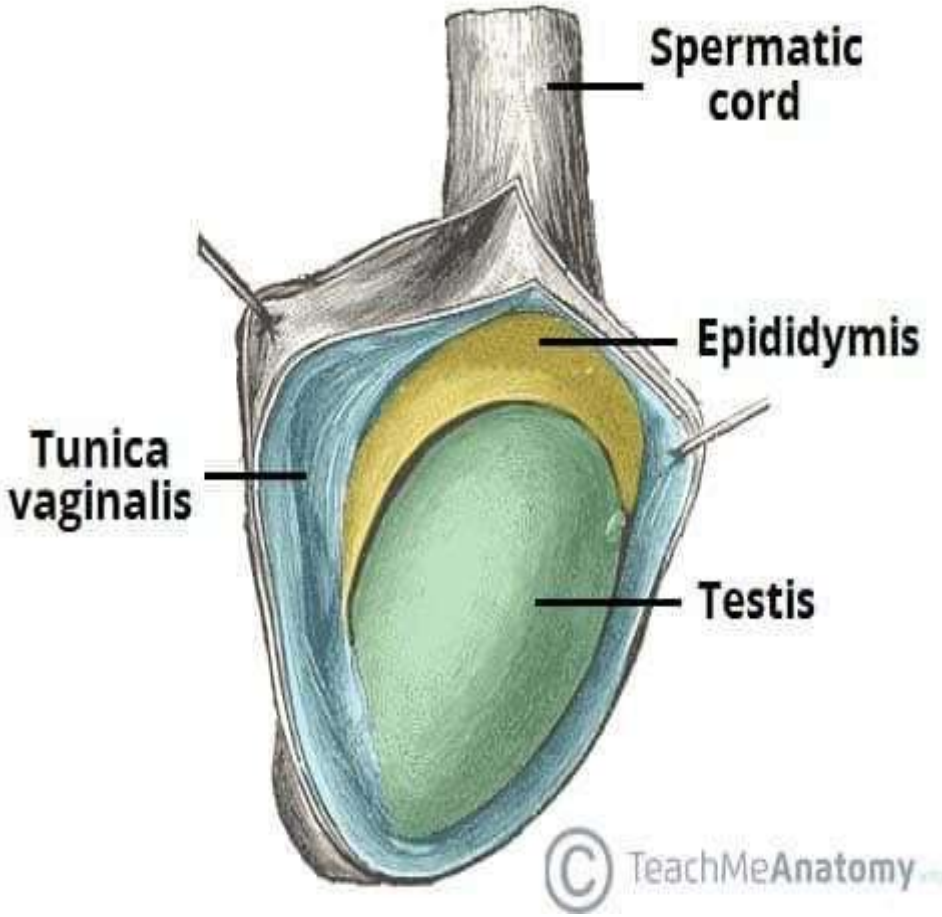
The testes and epididymis are paired structures, located within the scrotum. **The testes** are the site of sperm production and hormone synthesis, while the **epididymis** has a role in the storage of sperm. The testes are located within the scrotum, with the epididymis situated on the posterolateral aspect of each testicle. They are suspended from the abdomen by the spermatic cord – collection of vessels, nerves and ducts that supply the testes.

Spermatic Cords

This cord is composed of a **testicular artery, testicular veins, lymphatics, and testicular nerves, and the vas deferens (ductus deferens).**

Spermatic cords are covered by a layer of connective tissues and smooth muscles.

The **arterial supply** to the testes and epididymis is via the paired testicular arteries, which arise directly from the abdominal aorta.



Vas Deferens: conveys sperm from the **epididymis** to the **ejaculatory duct** (formed by the convergence of the vas deferens and seminal vesicle duct). From the ejaculatory duct, sperm can pass through to the prostatic urethra.

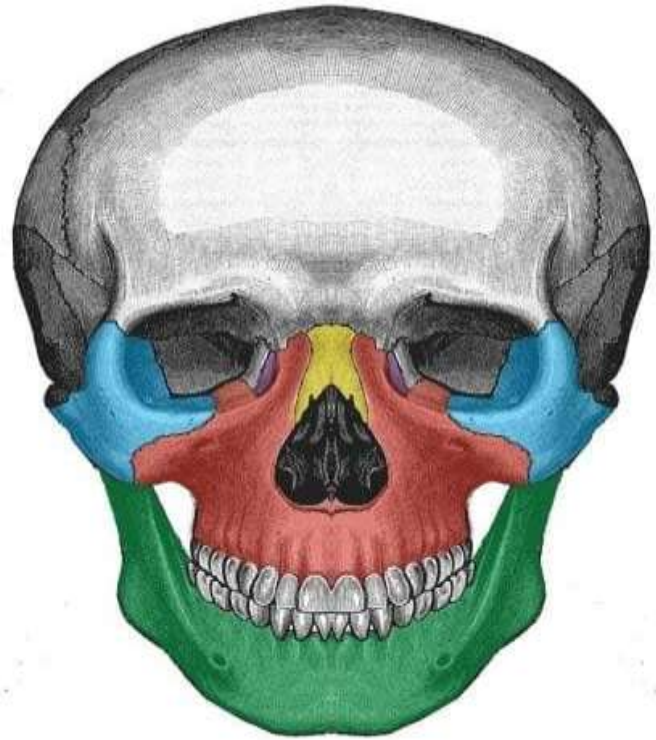
Accessory Sex Glands

The prostate gland sits inferiorly to the bladder. It secretes enzymes into the semen which enters the **prostatic urethra** via the **prostatic ducts**.

The bulbourethral glands, or Cowper's glands, are located posterolaterally to the membranous urethra..

The seminal vesicles sit superiorly to the prostate, and drain into the prostatic urethra

THANK YOU!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