The external jugular vein is formed by the union of the posterior division of the retromandibular and posterior auricular veins. It arises near the angle of the mandible, below the parotid gland and descends vertically across the sternocleidomastoid muscle. It is often joined by the internal jugular vein at the level of the parotid gland and occasionally, the occipital vein joins in as well. It passes deep to platysma and crosses the transverse cervical nerve and pierces the deep fascia to drain into the subclavian vein, anterior (or lateral) to scalenus anterior. It has valves above the opening into the subclavian vein.

It receives the posterior external jugular, transverse cervical, suprascapular and anterior jugular veins, draining the scalp and face.