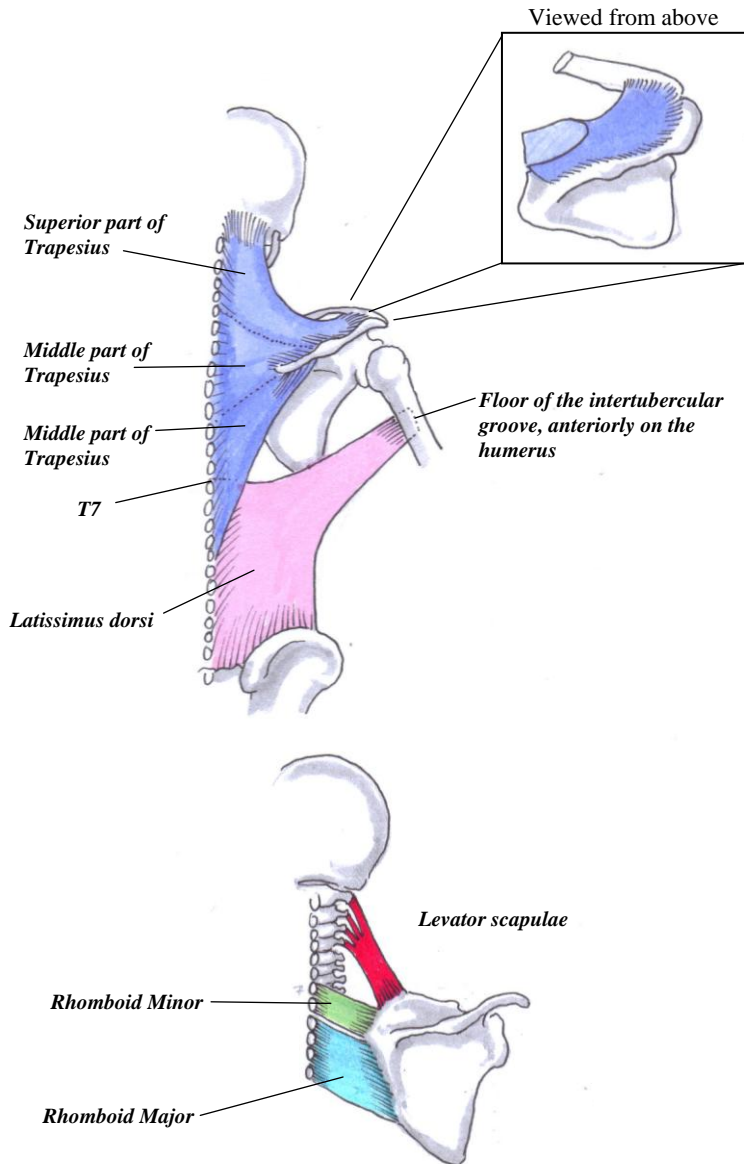


## Posterior Axioappendicular Muscles of the Shoulder: the Extrinsic Group

There are 2 layers, the superficial and the deep.

The superficial group is trapezius and latissimus dorsi

The deep group is the levator scapulae and the rhomboids



## Posterior Axioappendicular Extrinsic Muscles

Also supplied by confusingly different nerves.

### Trapezius ← spinal accessory nerve

- Originates from
  - The external occipital protuberance
  - Nuchal ligament
  - Medial third of superior nuchal line
  - Spinous processes of C spine and T-spine
  - The medial half of the anterior clavicle
- Inserts into :
  - Lateral third of the clavicle
  - Acromion of scapula
  - Spine of scapula
- Has 3 distinct parts:
  - SUPERIOR (descending) part which elevates the scapula
  - MIDDLE part which retracts the scapula
  - INFERIOR (ascending) part which depresses the scapula

All the parts together act to rotate the scapula superiorly, so the glenoid fossa faces up.

### Latissimus dorsi ← Thoracodorsal nerve

- Originates from
  - Inferior 6 thoracic vertebrae
  - Thoracolumbar fascia
  - Iliac crest
  - Inferior 3 or 4 ribs
- Inserts into the ANTERIOR surface of the humerus, at the floor of the intertubercular groove
- Extends, adducts, medially rotates the humerus
- Lifts the body up too the arms when climbing

### Levator scapulae ← dorsal scapular and cervical nerves

- Originates at the posterior tubercles of the spinous processes of the C1, 2, 3 and 4 vertebrae
- Inserts into the medial border of scapula, superior to the spine
- Elevates that corner of the scapula, rotating it so the glenoid cavity faces down
- Extends the neck (when acting bilaterally) or flexes it laterally (when acting unilaterally)

### Rhomboid Minor ← dorsal scapular nerve

- Originates from the nuchal ligament and the spinous processes of C7 and T1
- Inserts into the medial border of the scapula, at the root of the scapular spine
- Retracts the scapula
- Rotates the scapula so the glenoid cavity faces down
- Fixes the scapula to the thoracic wall

### Rhomboid Major ← dorsal scapular nerve

- Originates from the spinous processes of T2,3 4 and 5
- Inserts into the medial border of the scapula, from the root of spine down.
- Retracts the scapula
- Rotates the scapula so the glenoid cavity faces down
- Fixes the scapula to the thoracic wall

### Innervation

Dorsal scapular nerve:

Off the roots of C5

Rhomboid major and minor  
Levator scapulae

Thoracodorsal Nerve:  
Off the posterior cord

Latissimus dorsi

