The anterior intertransverse muscles are small muscles and are best developed in the cervical and lumbar regions.

In the cervical region, they pass between adjacent costal lamellae anterior to the foramen transversarium from C1 (atlas) to T1. In this region they are separated from the posterior intertransverse muscles by the ventral rami of the spinal nerves. In the thoracic region, the anterior and posterior muscles blend and pass between adjacent transverse processes from T10 to L1. In the lumbar region, they pass between adjacent transverse from L1 to L5.