Anatomy & Physiology: Muscles—Longissimus, Thoracic Division.

STRUCTURE.

- Origin: transverse processes of L1-L5.
- Insertion: transverse process T1-T12; superior lumbar vertebrae ribs 9-10.

FUNCTION.

- Concentric action: spinal extension, rotation and lateral flexion.
- Eccentric action: spinal flexion, rotation, and lateral flexion.
- Isometric action: stabilization of the spine.
- Innervation: thoracic and lumbar spinal nerves.
- Arterial supply: dorsal branches of the posterior intercostal arteries.

CLINICAL SIGNIFICANCE.

References

Biel, A. (2015). Trail guide to the body: A hands-on guide to locating muscles, bones and more.

Cedars-Sinai. (2018). Vertebrae of the spine. Retrieved from https://www.cedars-sinai.org/health-library/diseases-and-conditions/v/vertebrae-of-the-spine.html

Clark, M., Lucett, S., Sutton, B. G., & National Academy of Sports Medicine. (2014). *NASM essentials of corrective exercise training*. Burlington, MA: Jones & Bartlett Learning.

Jenkins, G., & Tortora, G. J. (2012). *Anatomy and Physiology: From Science to Life, 3rd Edition International Stu*. John Wiley & Sons.

Muscolino, J. E. (2017). The muscular system manual: The skeletal muscles of the human body.