



### 3. Definitions:

**Peripheral neuropathy** is a dysfunction of peripheral, motor, sensory, and autonomic neurons resulting in peripheral neuropathic signs and symptoms (Postma & Heimans, 2000). **Chemotherapy-induced peripheral neuropathy** is hypothesized to occur as the end result of neurotoxic chemotherapy and biotherapy agents directly damaging nerve fibers by inactivating the components required to maintain the metabolic needs of the axon. The longer and larger distal axons are affected first and result in interruptions of axonal transport and degeneration of myelinated nerve fibers and unmyelinated axons.

**Peripheral neuropathy** is the end result of primarily distal motor and sensory deficits. Motor neuron involvement appears as lower-extremity muscle wasting accompanied by sensations of weakness that typically begin in the distal lower extremities and spread in a proximal fashion. Visceral motor nerve cells of the autonomic nervous system that are responsible for the transmission of impulses to smooth muscle and glands also can be affected.

#### ICD-10 Criteria for Peripheral Neuropathy

Diagnostic criteria related to cancer and cancer treatment-induced peripheral neuropathy are lacking. Peripheral neuropathy is coded under ICD-10 *Diabetes Mellitus*.

ICD-9 357.6 Polyneuropathy due to drugs

#### Reference for Definitions:

Postma, T., & Heimans, J. (2000). Grading of chemotherapy-induced peripheral neuropathy. *Annals of Oncology*, 11, 509–513.