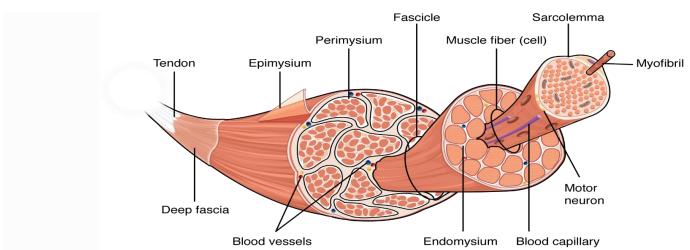
Neuromuscular Reeducation

According to Wikipedia, loss of muscle mass can be caused by immobility, aging, malnutrition, medications, injuries, or diseases that affect the musculoskeletal or nervous system. Muscle atrophy and muscle spams lead to muscle weakness and can cause disability. Muscle atrophy is defined by changes in the muscles consisting in shrinkage of myofibrils, changes in the types of fiber and myosin isoforms, and a net loss of cytoplasm, organelles, and an overall loss of protein. Muscle tissue is a highly specialized type of tissue called muscle fibers or myofibers because of the elongated shape they have and are made up of cells that have as their fundamental properties' excitability and contractility. Myofibers are responsible for the force that the muscles generate, and muscle movement is based on the ability of muscle fibers to use the chemical energy obtained in metabolic processes.

Neuromuscular reeducation deals with retraining the brain and spinal cord in voluntary and reflex motor activities. The strength of contraction of a given muscle is determined by the following factors: anatomic and physiological status of the muscle fibers at the time of contraction; number and synchrony of the contracting fibers; number and frequency of nerve impulses reaching the muscle fibers; functional status of the neuromuscular junctions; and structural and functional condition of the tissues surrounding the muscle fibers, such as blood vessels and connective tissue.



STRUCTURE OF SKELETAL MUSCLE

The RST-SANEXAS neoGEN[®] devices can assist by stimulating and signaling effective and long-lasting effects on nerves and muscle cells. Treating your patients with Electric cell Signaling Treatments (EcST) is a potent tool when used for muscle strength training, endurance training, reducing muscle spasticity, increase circulation, and motor reeducation. Any pain associated with muscle atrophy can be relieved during the treatments, offering added clinical benefits to your patient's recovery time and quality of life.

RST-SANEXAS neoGEN® FDA Clinical Indications for Use

- Relaxation of muscle spams
- Neuromuscular reeducation
- Prevention or retardation of disuse atrophy
- Maintaining and increasing range of motion
- Increasing local circulation
- Management and symptomatic relief of chronic (long-term) intractable pain
- Adjunctive treatment of post-traumatic pain syndromes
- Adjunctive treatment in the management of post-surgical pain conditions
- Immediate post-surgical stimulation of calf muscle to prevent phlebothrombosis

Rehabilitation Clinics

Not only does the **RST-SANEXAS neoGEN® PT** device help in pain management, but the Electric cell-Signaling Treatment (EcST) can help reeducate muscles, prevent or retard muscle atrophy due to disuse, improve muscle spasms, and range of motion. Physical therapists can help speed a patient's recovery from surgery/accidents and longterm neurological disabilities by managing pain and improving their mobility with the goal of helping them regain their independence and live a better quality of life at home.

- Intuitive touchscreen was easy treatment setup
- More than 20 custom programs for optimum varied indication results
- Hospital-grade modality cart for portability and transport
- Vasopneumatic vacuum electrode, carbon, or adhesive electrodes
- 4 separate channels of EcST energy
- Ultra-high-definition digital frequency signal generation (UHdfg)

RST-SANEXAS neoGEN[®] PT

The **RST-SANEXAS neoGEN® Basic** can be used for acute and post-traumatic pain, muscular reeducation, relieve muscle spasms, and target for quicker rehabilitation where treatment of a single body part, one treatment at a time is recommended. The device delivers the same Electric cell-Signaling AM and FM frequencies to assist in neuromuscular reeducation as safe, effective, non-invasive, and non-pharmaceutical treatments.

- 20 custom programs with 1 monitor screen
- 2 separate channels of EcST energy
- Carbon electrodes provided
- Optional features available to add on to the unit include the vasopneumatic vacuum electrodes and cart for portability and transport
- Provides the same complex treatment functions as the neoGEN[®] but designed as a smaller unit



RST-SANEXAS neoGEN[®] BASIC

Because it can be used to help patients in a variety of setting for many different conditions, the RST-SANEXAS neoGEN[®]-Series devices are available by contacting <u>www.rstsanexas.com</u>. Find out more about how this innovative device can benefit your patients and how you can obtain one for use in your practice. Your patients will thank you.

