Pulsed Signal Therapy® (PST™)
A Non-Invasive Treatment for Osteoarthritis and other Musculoskeletal Disorders
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Introduction
Pulsed Signal Therapy® (PST™) is a non-invasive, non-thermal, non-ionizing electromagnetic technology (frequency range 1-30 Hz). It is based on the principle of extracellular cartilage matrix (ECM) “streaming potentials” (SIP). PST™ is equal to the therapeutic potential of in vitro and in vivo mechanical and pharmacological stimulations of extracellular growth and differentiation factors, including BMP, IGF, H+ (pH stimulation), TNF, IL-1, IL-6, COX-2. PST™ is a spon-taneous physical process in which the cell membrane becomes a source of extracellular electric field, which interacts with its membrane receptors and intracellular transducers. This results in cell membrane potential changes and subsequent signal transduction (intracellular calcium mobilization, cAMP and cGMP production, etc.)

Mechanism of Action

General Medical Applications

Discussion

References