Pace Technology Research Conducted at Cleveland Clinic Presented at the 2011 World Congress of Microsurgery

 Researchers Conclude that PACE Protects Against Ischemia and Inhibits Inflammation

ALPHARETTA, Ga.--SANUWAVE Health, Inc. (OTCBB: SNWV) (www.sanuwave.com), an emerging medical technology company focused on the development and commercialization of noninvasive, biological response activating devices in regenerative medicine, today announced the presentation of preclinical research conducted by Maria Siemionow, MD, PhD, DSc, at Cleveland Clinic investigating the biologic mechanisms of Pulsed Acoustic Cellular Expression (PACE®) technology as it applies to the treatment of ischemic tissues (tissues with inadequate blood supply).

“Pulsed Acoustic Cellular Expression as a Protective Therapy Against Ischemia-reperfusion Injury in a Cremaster Muscle Flap Model”

The presentation entitled, “Pulsed Acoustic Cellular Expression as a Protective Therapy Against Ischemia-reperfusion Injury in a Cremaster Muscle Flap Model,” was presented on July 1 at the 2011 World Congress of Microsurgery in Helsinki, Finland. The presentation described how a single PACE procedure has a positive impact on microcirculation in ischemic tissues by inducing angiogenesis and inhibiting inflammation.

The aim of the research was to evaluate influence and mode of action of a single PACE procedure on microcirculation in an ischemia-reperfusion injury. In the study, PACE was applied to a thin piece of rat muscle known as a cremaster flap either five hours prior to surgically-induced ischemia or five hours after. PACE treatment resulted in an immediate increase in arterial and venule diameters and the number of functional capillaries, which suggests an increase in blood perfusion that is known to benefit the healing of ischemic conditions. In the case of post-ischemia treatment, PACE increased proangiogenic expression of vascular endothelial growth factor (VEGF), a protein indicator of vessel growth and regeneration, by 180%, which correlates to new blood vessel formation. Most importantly, this expression is known to increase cellular proliferation and tissue regeneration, and ultimately influences tissue viability and healing. Pre- and postischemic PACE treatment also suppressed expression of numerous proinflammatory factors, which has been shown to positively influence the healing process.
Christopher M. Cashman, President and CEO of SANUWAVE, said, “The presentation of this important research at the World Congress of Microsurgery demonstrates the global scientific and clinical interest in the biologic mechanisms of PACE technology. In addition to demonstrating positive PACE effects on both the arterial and venous sides of the vascular system, the Cleveland Clinic researchers also showed that PACE quickly inhibits inflammation. While acute inflammation is an important part of the healing process, chronic inflammation will eventually lead to cellular destruction and compromised healing. It is well known that inflammation is an underlying contributor to many disease states, including chronic wounds, immune system disorders, atherosclerosis, ischemic heart disease, and even cancer. Therefore, this latest research from Cleveland Clinic lends further support to our belief that the biologic effects of PACE technology have broad reaching and significant clinical implications.”

Dr. Siemionow is a renowned plastic, reconstructive and microvascular surgeon who gained worldwide acclaim in December 2008 when she successfully performed the first human facial transplant in the United States. Dr. Siemionow is a paid consultant for SANUWAVE as a member of the Company’s Scientific Advisory Board.

About PACE

PACE, defined as Pulsed Acoustic Cellular Expression, delivers high-energy acoustic pressure waves in the shock wave spectrum to produce compressive and tensile stresses on cells and tissue structures to promote angiogenic and positive inflammatory responses, and quickly initiate the healing cascade. This results in revascularization and microcirculatory improvement, including the production of angiogenic growth factors, enhanced new blood vessel formation (angiogenesis), and the subsequent regeneration of tissue such as skin, musculoskeletal and vascular structures. PACE treatment triggers the initiation of an accelerated inflammatory response that speeds wounds into proliferation phases of healing and subsequently returns a chronic condition to an acute condition to help reinitiate the body’s own healing response.

About SANUWAVE Health, Inc.

SANUWAVE Health, Inc. (www.sanuwave.com) is an emerging regenerative medicine company focused on the development and commercialization of noninvasive, biological response activating devices for the repair and regeneration of tissue, musculoskeletal and vascular structures. SANUWAVE’s portfolio of products and product candidates activate biologic signaling and angiogenic responses, including new vascularization and microcirculatory improvement, helping to restore the body’s normal healing processes and regeneration. SANUWAVE intends to apply its PACE technology in wound healing, orthopedic/spine, plastic/cosmetic and cardiac conditions. Its lead product candidate for the global wound care market, dermaPACE®, is CE marked for treatment of the skin and subcutaneous soft tissue and recently completed its highly positive pivotal Phase III, Investigational Device Exemption (IDE) clinical trial in the U.S. for the treatment of diabetic foot ulcers. SANUWAVE researches, designs, manufactures, markets and services its
products worldwide, and believes it has demonstrated that this technology is safe and effective in stimulating healing in chronic conditions of the foot (plantar fasciitis) and the elbow (lateral epicondylitis) through its U.S. Class III PMA approved Ossatron® device, as well as stimulating bone and chronic tendonitis regeneration in the musculoskeletal environment through the utilization of its Ossatron, Evotron™ and orthoPACE® devices in Europe.

Forward-Looking Statements

This press release may contain “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, such as statements relating to financial results and plans for future business development activities, and are thus prospective. Forward-looking statements include all statements that are not statements of historical fact regarding intent, belief or current expectations of the Company, its directors or its officers. Investors are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, many of which are beyond the Company’s ability to control. Actual results may differ materially from those projected in the forward-looking statements. Among the key risks, assumptions and factors that may affect operating results, performance and financial condition are risks associated with the marketing of the Company’s product candidates and products, unproven pre-clinical and clinical development activities, regulatory oversight, the Company’s ability to manage its capital resource issues, competition, and the other factors discussed in detail in the Company’s periodic filings with the Securities and Exchange Commission. The Company undertakes no obligation to update any forward-looking statement.