Technodinamika's development confirmed effectiveness in COVID-19 complications

MOSCOW, RUSSIA, September 30, 2021 /EINPresswire.com/ -- Technodinamika Holding of Rostec State Corporation received the test results of the Ranet DMV-20 physiotherapeutic electromagnetic device, produced by Samara Electromechanical Plant, used in the treatment of patients with COVID-19 in moderate to severe form. According to specialist feedback, the device had a positive effect on COVID-19 patients and also proved to be a good preventive measure against tissue fibrosis.

Ranet DMV-20 is used to treat various inflammatory, traumatic and other conditions through exposure to an electromagnetic field. The device has been tested for more than a year at leading medical institutions of the Samara region: in clinics of the Samara State Medical University, Samara Regional Clinical Hospital of War Veterans, Federal State Institution "35 separate medical detachment (airmobile) of airborne troops" of the Russian Ministry of Defense.

"This device is unique partly due to innovative cavitary radiators with a ceramic filling that are safe to use. Decimeter therapy is a method of high-frequency electrotherapy based on the use of ultra-high-frequency

electromagnetic oscillations of the decimeter range, or decimeter waves. Decimeter waves have a length of 1 m to 10 cm, which corresponds to an oscillation frequency of 300 to 3,000 MHz. Ranet is also unique in terms of an output power of 25 W, which grants an optimal ratio of penetration depth and radiation intensity for the treatment of internal organs. We have acquired a patent for this invention," said Igor Nasenkov, CEO of Technodinamika Holding.

The device effectively treats pulmonary tissue, improves blood flow, and restores collateral circulation, helping to avoid vascular thrombosis. As a result of treatment, additional blood circulation develops in the affected area of the human body, providing the organs with enough oxygen to recover from the disturbed function of external respiration, providing an anti-edematous, analgesic, and anti-inflammatory effect. In Samara Medical University, for example, such results were achieved during rehabilitation of patients after only ten sessions of the Ranet application.

"This medical device is used by physiotherapists in both outpatient and inpatient settings. It is distinguished by its good clinical efficacy, ease of use and safety. During clinical practice, a positive physiotherapeutic effect of the Ranet device was noted in patients with post-coronavirus syndrome during the rehabilitation stage," noted Rector of Samara State Medical University, Professor of RAS, Dr. Alexander Kolsanov.

Moreover, Ranet has also proven itself as a preventive measure for the development of tissue fibrosis, a frequent complication of infectious and inflammatory diseases, including COVID-19.

For example, the Federal State Institution "35 separate medical detachment (airmobile) of airborne troops" of the Russian Ministry of Defense has been effectively using Ranet to prevent tissue fibrosis during rehabilitation of servicemen who suffered from pneumonia, including the new coronavirus infection, since 2020. The SEMS product is also effective in restoring damaged muscles, tendons, bones and joints, which is a topical issue in airborne troops. The institution's specialists also note high clinical efficacy, ease of use, and safety.

A promising area of the device application is rehabilitation of patients who have undergone surgical interventions such as endoprosthetics of large joints, skin and tendon and myoplasty, various types of osteotomies and chondroplasty, limb reconstruction using different types of implants and metal constructions.

Samara Electromechanical Plant is the only manufacturer of the Ranet physiotherapeutic device that has the appropriate quality certificates and licenses. As of today, marketing research for the modernized device is being conducted in the Russian market, as well as the market of neighboring countries.

Rostec State Corporation is one of the largest industrial companies in Russia. It unites more than 800 scientific and industrial organizations in 60 regions of the country. Its key areas of activity are aircraft engineering, radioelectronics, medical technologies, innovative materials, etc. The

corporation’s portfolio includes such well-known brands as AvtoVAZ, KAMAZ, UAC, Russian Helicopters, UEC, Uralvagonzavod, Shvabe, Kalashnikov, etc. Rostec is active in the implementation of all 12 national projects. The company is a key provider of Smart City technology, it is engaged in the digitalization of public administration, industry and social sectors, and it is developing plans for the development of 5G wireless technologies, an Industrial Internet of Things, big data and blockchain systems. Rostec partners with leading world manufacturers such as Boeing, Airbus, Daimler, Pirelli and Renault. The corporation’s products are delivered to more than 100 countries worldwide. Almost a third of the company's revenue comes from the export of high-tech products.

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