RegenerAge System: Therapeutic effects of combinatorial biologics (mRNA and allogenic MSCs) with a spinal cord stimulation system on a patient with spinal cord section.

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Bioquantine® a mRNA extract from Xenopus laevis frog oocytes (purified from intra- and extra-oocyte liquid phases of electroporated oocytes), showed potential as a treatment for a wide range of conditions in animal models, including Spinal Cord Injury (SCI) and Traumatic Brain Injuries (TBI) among others. The current study observed beneficial changes with Bioquantine® administration in a patient with a severe SCI. Pluripotent stem cells have therapeutic and regenerative potential in clinical situations CNS disorders. One method of reprogramming somatic cells into pluripotent stem cells is to expose them to extracts prepared from *Xenopus laevis* oocytes. Due to ethical reasons and legal restrictions we selected a No Option patient, deciding to include in our protocol the RestoreSensor SureScan to complete it. Based on the electrical stimulation for rehabilitation and regeneration after spinal cord injury published by Hamid and MacEwan, we designed an improved delivery method for the *in-situ* application of MSCs and Bioquantine® in combination with the RestoreSensor® SureScan®.

To the present day the patient who suffered a complete section of spinal cord at T12-L1 shows an improvement in sensitivity, strength in striated muscle and smooth muscle connection, 14 months after the first Bioquantine® and MSCs treatment and 9 months after the placement of RestoreSensor® at the level of the lesion, showing an evident improvement on his therapy of physical rehabilitation (legs movement) on crawling forward and backwards and standing on his feet for the first time and showing a progressively important functionality on both limbs.

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Dr. Dr. Osorio is an innovative businessman with a distinct entrepreneurial mindset concentrated adding value on areas of Biotechnology (mRNA), Reprogramming & Regenerative Medicine for translational use in humans and a variety of clinical applications aimed for both the private and the public health sectors. Dr. Osorio is the Founder, President, and CEO of RegenerAge Clinic and RegenerAge Beauty initiatives for transnational implementations. Vice President and International Clinical Developer for Bioquark, Inc. Executive Vice President: Chairman of the WAMS Americas Division, member of the WAMS Executive Council (WAMS Executive Board), a member of the WAMS Education & Training Board (ETB), a member of the WAMS Editorial Board, an Honorary Member of the Academy Faculty FWAMS, an Honorary Fellow of the Academy & is also a Senior Partner at WAMS, The World Academy of Medical Sciences.
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