

„Innovation of Intelligent Therapeutic Device - SOMA.S1“, Project registration number  
CZ.01.1.02/0.0/0.0/20\_358/0024831

## **Innovation of intelligent therapeutic device - SOMA.S1**

Ministry of Industry and Trade based on the application for the provision of subsidies received on 8.1.2021 within the Call for Innovation Vouchers - VI. Call (hereinafter referred to as the “Call”) and Priority Axis 1 “Development of research and development for innovation”, decided in the Ministry of Industry and Trade 93023/21/61200/42 provide a subsidy for a project entitled “Innovation of an intelligent therapeutic device - SOMA. S1 “, registration number CZ.01.1.02 / 0.0 / 0.0 / 20\_358 / 0024831

(Project of a fundamental innovation of the intelligent therapeutic device  
Somavedic Medic Uran at the level of technical documentation for the production  
of the SOMA.S1 prototype)

**Project solver and supplier:**



**Contract research customer:**

**Somavedic Technologies s.r.o.,  
Smetanova 1246/22, 410 02 Lovosice,  
DIČ CZ24689173, email: [info@somavedic.cz](mailto:info@somavedic.cz)  
[www.somavedic.cz](http://www.somavedic.cz)**



Ing. František Och, research project leader

Ing. Tomáš Kejdana, MBA  
MUDr. Lubomír Mankovecký, CSc  
MUDr. Martina Závorková  
MUDr. Pavel Zubina  
Ing. Miloš Janů  
Bc. Dita Plíhalová

Mšené-lázně, July 2021

Ing. František Och, director

„Innovation of Intelligent Therapeutic Device - SOMA.S1“, Project registration number  
CZ.01.1.02/0.0/0.0/20\_358/0024831

## Annotation

The biophysical principles of the SOMA.S1 device are used to influence the working or environment of biosystems using weak and ultrafine electromagnetic waves and thus electromagnetic fields at the biomolecular level. This is an extremely complex multidisciplinary issue, where a part of the functions necessarily corresponds to the level of initial scientific knowledge supported by systematic research, especially in the field of medical use of photoelectrodynamics. The interpretation of surveys and measurements performed on the devices of the previous generic series was positive in favor of the influence on the physical and mental state of the user. This knowledge is the basis for a fundamental innovation of the device. **The basic functions of SOMA.S1** mainly generate weak electromagnetic waves in two variants, namely in wavelengths around 400 (high-energy) or 660 nm (low-energy). Both versions thus use radiation near the boundaries of the visible spectrum, affecting the circadian rhythm and activating, resp. calming effect. The positive effect of such an environment on the production of serotonin resp. melatonin is assessed by preclinical analysis of appropriate biomarkers. This radiation is technically harmonized by the refracted LED light in the environment of cut rock crystal. Its polarization and intensity can be well measured as standard. It is also possible to appropriately epidemiologically evaluate the created work or personal environment. The environment is also measurably affected by the ion field generated. The influence of such an environment on the production of serotonin resp. melatonin can be assessed by preclinical analysis of suitable biomarkers. In addition, the device produces ultrafine electromagnetic waves emitted by a waveguide with embedded SiO<sub>2</sub> minerals. This ultrafine radiation also has a concomitant positive effect on changes in the state of the water, which has partial manifestations of the manifesting liquid crystals, accompanied, for example, by a reduced quantum of free radicals in the urine. In the current investigation of these ultrafine phenomena, belonging to the above-mentioned field of photoelectrodynamics, we have not yet been able to explain and interpret the results sufficiently objectively. In this part of other functions of the innovated device, we can find a positive effect not only on the environment but directly on the organism, eg in the part of changes in bound water. But we cannot reliably explain why and how such an effect occurs, even after systematic research. Nevertheless, we believe that the above **basic functions** are sufficient reason to take full advantage of the SOMA.S1. We assume that the documentation for the production of the prototype will be implemented in both versions of the SOMA.S1 device without undue delay. This should be followed by validation technical and preclinical tests to design the product documentation for series production, as well as subsequent preclinical analyzes and epidemiological studies.

*The full text of the study is stored at the manufacturer.*