

Method and device for oxidative stress analysis



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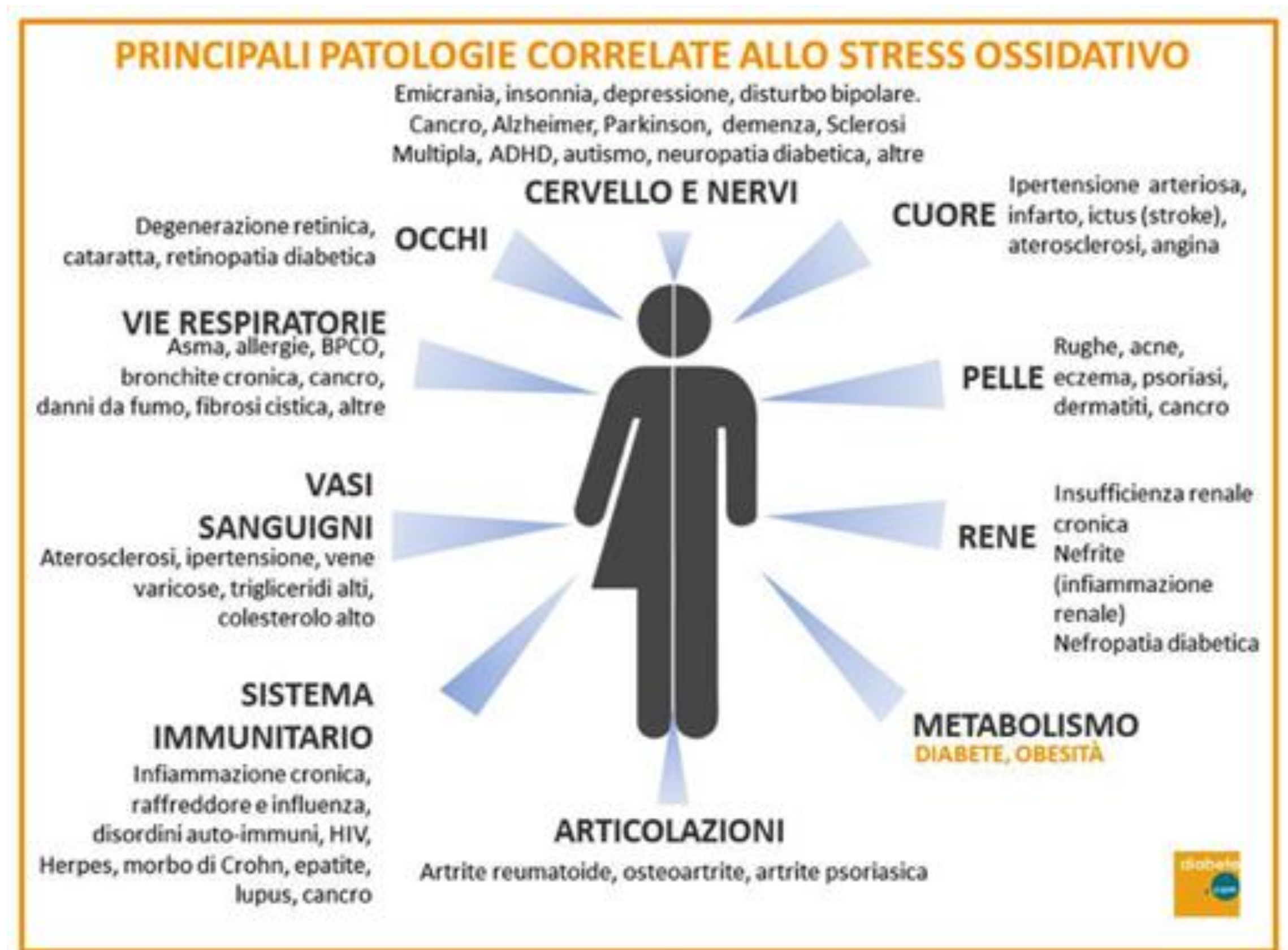
The invention



The invention is in the field of medical methodologies and devices that enable biomedical analysis and consists of a new method of analyzing oxidative stress of biological samples and the device to carry out this method. The condition termed "Oxidative Stress" consists of the loss of balance between antioxidant molecules and pro-oxidant chemical species in the body. It is frequently associated with multiple pathophysiological conditions such as aging, exercise, dietary imbalances, and numerous chronic and acute diseases (neurodegenerative, cardiovascular, autoimmune diseases diabetes, cancer).

Current popular oxidative stress assessment methodologies and techniques offer results of limited value and tend not to be quantitative. In contrast, the patented method and device enable oxidative stress analysis in quantitative terms, quickly and at extremely low cost, ensuring accurate and reliable results.

Images



Industrial application



The patented technology is designed for the following applications, among others:

1. Analysis of the degree of oxidative stress in biological samples;
2. Prevention of diseases associated with oxidative stress;
3. Monitoring during specific dietary regimens;
4. Evaluation/Monitoring of exercise response (professional and non-professional athletes);
5. Assessment of antioxidant vitamin food intake for possible supplementation and/or supplementation.

The advantages of the patented technology consist in the possibility of quantitative measurement of oxidative stress in the face of reduced cost and analysis time, due to the minimization of the instrumentation required for this purpose.

Possible developments



The patent is available for outright assignment, as well as for exclusive and non-exclusive licensing. Licenses are available for the remaining term of the patent titles.

The Research Group is available for new collaborative and third-party research activities, in-depth technical investigations, scientific advice, also aimed at raising the TRL of the technology.

The TRL of the invention is 3.

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