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Diagnosis of Parkinson's; an Insubria study published in Nature

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This is another important step towards **diagnosing Parkinson's disease** with a blood test, thanks to the commitment of the team of researchers of **Prof. Mauro Fasano, of Insubria University, in Busto Arsizio**. Today (Tuesday), the prestigious scientific magazine, *Scientific Reports* (which is part of the Nature Group, and which reports the most important discoveries in the field of nature sciences) has published the results of the all-Italian research carried out by Prof. Fasano's team, together with **Dr. Tiziana Alberio** (Insubria University, Busto Arsizio), in collaboration with the team of **Prof. Leonardo Lopiano**, of Turin University, and other collaborators from the University of East Piedmont and Verona University.

Thanks to **proteomics**, the science that studies how the proteins in tissues change, the researchers have found some markers in blood cells, in T lymphocytes, in particular, that, when combined in different ways, allow scoring the compatibility with the disease. "We're still a long way from a blood test, but this discovery opens the way to a completely new approach. If our data is confirmed in a much larger case study, neurologists will have one more tool to help them decide whether to carry out more expensive and complicated analyses, which are usually reserved for patients that have already manifested symptoms of this disease," explained the biochemist, Mauro Fasano.

We currently do not have any treatment that slows down the course of the disease, because the symptoms manifest too late, when the degeneration of certain neurons is too advanced to be able to intervene. This discovery would allow clinical studies to be carried out on new medicines that can act on the progression of the Parkinson's, which currently cannot be done.

"We are working to create a network of Parkinson disease centres, to take the discovery from the laboratory to the clinics," the neurologist, Leonardo Lopiano, added. "We hope to recruit a large number of people, to confirm that the test is indeed effective, as would appear from our studies. This process is quite expensive, and we are working hard to find the funds."

The neurobiologist, Tiziana Alberio, also explained that, "A lot of biomarkers that seemed to be promising, failed to go beyond the discovery stage. Producing a diagnostic test requires a considerable economic commitment, and a lot of companies don't feel like taking the risk." This is the so-called Death Valley, where investors do not want to venture. But the three scientists have good reasons to believe that their method has great advantages, as is confirmed by the fact the magazine has agreed to publish the study, after an in-depth review.

Two years ago, we interviewed Prof. Fasano during the protest by researchers against the Gelmini reform. His testimony, which was gathered before this discovery, illustrated the difficult conditions that the researchers in Busto Arsizio were (and, indeed, still are) under, without adequate funding for their important work.

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