

# A serum miRNAs signature as potential biomarker for MSA



-supported study

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# MSA Test - A diagnostic Need!

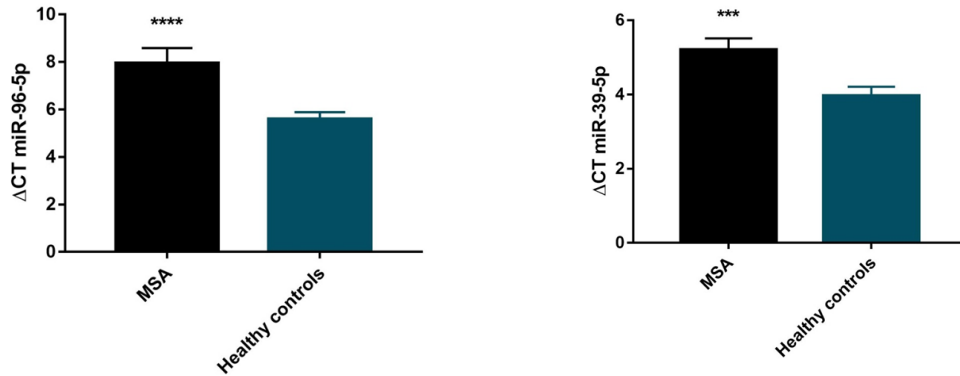
- Diagnosis of MSA is based only on clinical evaluation and no reliable biomarker currently exists for the diagnosis and prognosis of MSA.
- Many times MSA is misdiagnosed as Parkinson's disease due to the overlapping clinical symptoms. In other situations MSA can be confused with other parkinsonian syndromes.

# Study Design and Scope

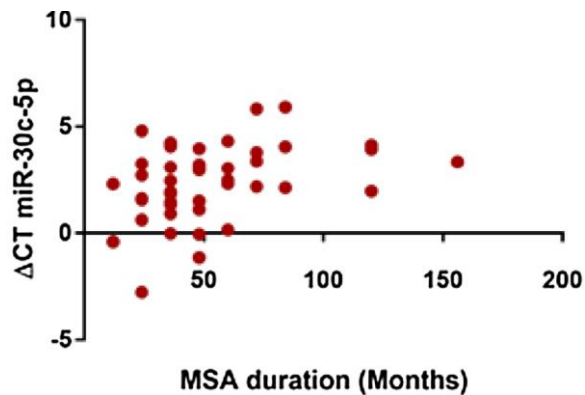
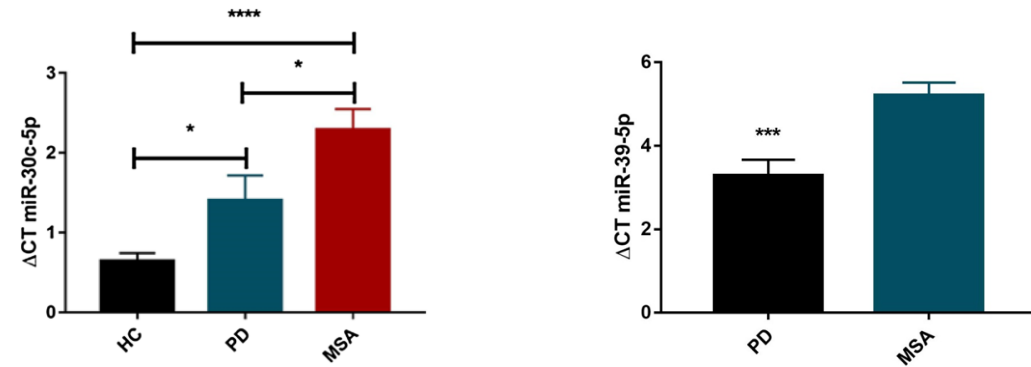
- This study used serum samples from three groups: 60 healthy persons (age-matched), 66 patients with Parkinson's, and 70 patients with MSA from the Center for Neurodegenerative Diseases at the University of Salerno, Italy and at the Department of Neurology, Expert Centre for PD and French Reference Centre for MSA.
- The researchers isolated from the serum molecules called miRNAs that are a class of small RNA molecules which has been recently studied in several neurodegenerative diseases
- They measured a panel of miRNAs and compared the levels in the three groups.

# Key Findings

They confirm that a subset of miRNAs distinguished correctly between MSA and healthy individuals with high accuracy.



They identified a subset of miRNAs to distinguish MSA from Parkinsonian patients.



They observed serum miR-30c correlate with disease duration in MSA patients.

# Future Directions

- The usefulness of those miRNA panels for the early diagnosis of MSA need to be validated in larger cohorts.
- The researchers are working on improving the accuracy of the test to distinguish MSA from Parkinsonian patients.
- **The validation of this miRNA panel could be a first step to develop a new test for early diagnosis of MSA based on blood miRNAs.**

# Thanks!

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Support - Education - Research - Advocacy

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A travel grant in 2018 to Dr. Annamaria Vallelunga to present the results at 6th International MSA Congress.