

Sensor array may detect de novo Parkinson's disease in breath

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(HealthDay)—A sensor array has the potential to identify de novo

Parkinson's disease (PD) patients with high sensitivity, specificity, and accuracy values, according to a research letter published online July 10 in *ACS Chemical Neuroscience*.

John P.M. Finberg, Ph.D., from the Israel Institute of Technology in Haifa, and colleagues describe a clinical trial that attempted to distinguish between de novo PD and [control](#) subjects using an electronic system for detection of volatile molecules in exhaled breath. The association with other common tests for PD diagnostics, including smell, ultrasound, and nonmotor symptoms, was also examined. Data were included for 29 PD patients after initial diagnosis and 19 control subjects.

The researchers found that for the sensor array, the sensitivity, specificity, and accuracy values were 79, 84, and 81 percent, respectively, for detection of PD from controls. This was compared with 93, 90, and 92 percent for midbrain ultrasound, and 62, 89, and 73 percent for smell detection.

"The results confirm previous data showing the potential of sensor arrays to detect PD," the authors write.

More information: [Abstract/Full Text \(subscription or payment may be required\)](#)

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