

# Defining the new standard for Scent Recognition

## “NanoScent has developed a groundbreaking technology”

Prof. Dan Shechtman, Nobel Laureate in Chemistry

### About NanoScent

NanoScent Ltd was co-founded in 2017 by Oren Gavriely and Eran Rom, aimed at developing a scent recognition technology, capable of improving the safety and personal well-being of individuals, in addition to providing environmental protection and energy efficiency. NanoScent’s customers include Sumitomo Chemical, Continental and Kimberly-Clark, who are using the technology for leak detection, nutrition and wellness applications. The NanoScent reader is a new application of the technology which specifically detects VOC signatures in the expelled nasal air of people infected with SARS-CoV-2.



### Scent recognition technology

The patented NanoScent technology is based on proprietary nanosensors, coupled with machine learning algorithms that identify specific signatures within mixtures of volatile organic compounds (VOCs) in air samples. These are derived from the host’s inflammatory or microbiome response to the infection.

Media Links: [NY Times](#), [Standard](#), [Forbes](#), [Reuters](#).

### Scent Check Comparison with Other Diagnostics

Parameter	PCR/ Genomics	Serology	Scent Check
Results returned to individual tested	Hours to days	Hours to days	Two minutes
Machine learning (to improve performance over time)	No	No	Yes
Laboratory infrastructure required	Yes	Yes	No
Specimen	NP,OP or Saliva	NP or OP	Air

ScentCheck, patented technology from NanoScent, enables testing in controlled settings where visitors are screened prior to access. These include, but are not limited to, schools, airports, hospitals, and large gatherings like concerts or weddings. NanoScent is planning to conduct a large prospective feasibility study, to improve the predictive model and to reach an accuracy of at least 90%. Samples from both symptomatic and asymptomatic test subjects are being collected from four sites in Israel.

1 Lewis, J. M., Savage, R. S., Beeching, N. J., Beadsworth, M. B., Feasey, N., & Covington, J. A. (2017). Identifying volatile metabolite signatures for the diagnosis of bacterial respiratory tract infection using electronic nose technology: A pilot study. *PloS one*, 12(12).  
 2 Haoxuan Chen, Xiao Qi, Jianxin Ma, Chunyang Zhang, Huasong Feng, Maosheng Yao, Breath-borne VOC Biomarkers for COVID-19, doi: <https://doi.org/10.1101/2020.06.21.20136523>