

Steps forward in the hunt for easily measurable biomarkers of autism

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Future Science Group (FSG) today announced the publication of a new article in *Future Science OA*, reporting data demonstrating the possibility of measuring 10 biomarkers relevant to autism spectrum disorder in adult saliva.

With more than 70 [biomarkers](#) shown to be of relevance to [autism](#), it is doubtful that a single biomarker will be of use in diagnosis and determination of severity. As such, it is important to develop a clinically relevant and measurable panel of biomarkers. Saliva presents an intriguing opportunity, as it is noninvasive and considered less stressful for patients than collection of urine or blood.

The study, by Helen V Ratajczak (Edmond Enterprises, CT, USA) and Robert B Sothorn (University of Minnesota, MN, USA), analyzed levels of 10 biomarkers previously noted to be pertinent to autism in [saliva](#) from 12 neurotypical, healthy adults. The utilized method was developed with simplicity in mind, with a view towards enabling future testing in autistic adults and, potentially, in children.

"This research is timely, as we desperately need biomarkers of [autism spectrum disorder](#)," commented Francesca Lake, Managing Editor. "The findings, while preliminary, bring us a step closer to our ultimate goal of being effectively able to diagnose and treat autism. We look forward to further studies in more patients, and in those affected by autism."

"Saliva was chosen because its collection causes the least stress (and the

least effect on biomarker concentration)," explained Ratajczak. "Similar results were obtained when 6 men and 6 women read instructions, and an hour later after having instructions given by the principal investigator. Therefore, saliva can be collected by literate individuals without added instruction. In addition, the elapse of an hour between collections did not significantly alter marker concentrations." The researchers hope to design future studies to further this research, looking to aid diagnosis of autism and determination of severity, and brings us closer to a subject-specific treatment.

More information: Helen V Ratajczak et al. Measurement in saliva from neurotypical adults of biomarkers pertinent to autism spectrum disorders, *Future Science OA* (2015). [DOI: 10.4155/fso.15.70](https://doi.org/10.4155/fso.15.70)

Provided by Future Science Group

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