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### **ACCEPTED MANUSCRIPT**

## Monitoring of autonomic response to sociocognitive tasks during treatment in children with Autism Spectrum Disorders by wearable technologies: a feasibility study

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#### Abstract

### Background

Autism Spectrum Disorders (ASD) represent a heterogeneous set of neurodevelopmental disorders characterized by impairments in social domain, where the autonomic nervous system (ANS) plays an important role. Several researchers have studied the ANS in ASD, during specific cognitive or sensory stimuli while few studies have examined response during social interactions. Wearable

<sup>&</sup>lt;sup>1</sup> The members of the MICHELANGELO Study Group are listed in Appendix A.

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