**Jonas Wolber**

PhD Student

Institute for Digitalization and General Medicine Aachen

jwolber@ukaachen.de

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To the Editorial Team of the Journal of Biomedical Informatics

Dear Editorial Team,

I am writing to submit my manuscript titled, *“Forecasting glucose levels using features generated by multimodal Large Language models”* for consideration in the *Special issue on biomedical multimodal large language models - novel approaches and applications*. This paper presents a novel method for blood glucose level forecasting in Type 1 Diabetes patients by utilizing multimodal Large Language Models (LLMs) to analyze meal images.

The study addresses the ongoing challenge of managing blood glucose levels in Type 1 Diabetes, which are highly variable and patient specific. By leveraging publicly available data from the D1namo dataset and usingLLMs to estimate macronutrient content from meal images, we developed a LightGBM model that demonstrated improved forecasting performance at 30, 45, and 60-minute prediction horizons.

Our results highlight the potential of incorporating LLM-generated meal features in enhancing prediction accuracy, particularly with models like GPT-4o and Sonnet 3.5, as well as investigating the impact of macronutrients in individual patients. Thereby, this study underscores the potential of mLLMs in utilizing diverse patient data, contributing to the broader application of multimodal LLMs in personalized medicine.

I believe this paper aligns well with the goals of the special issue and offers valuable insights into the application of multimodal LLMs in the biomedical domain. I appreciate your consideration of my manuscript and I look forward to the possibility of contributing to this important collection.

Thank you for your time and consideration.

Jonas Wolber