

Signed Informed Consent Form Statement

Despite our study was an original research, this work just used genome-wide association studies statistics from public available databases for Mendelian randomization analysis, and we did not collect any new human data. As this study did not involve any human studies, the informed consent form was not required for our research.

Sincerely,

Si-De Liu, MD, PhD, Guangdong Provincial Key Laboratory of Gastroenterology, Department of Gastroenterology, Nanfang Hospital, Southern Medical University, 1838 Guangzhou Avenue North, Guangzhou, 510515, Guangdong Province, China. E-mail: liuside2011@163.com.

Signature: *Side Liu*

Date: *7-November-2023*