

This document certifies that the manuscript

**Acute cholangitis: does malignant biliary obstruction vs. choledocholithiasis etiology change the clinical presentation and outcomes?**

prepared by the authors

**Yung-Kuan Tsou, Yi-Tse Su, Cheng-Hui Lin, Nai-Jen Liu**

was edited for proper English language, grammar, punctuation, spelling, and overall style by one or more of the highly qualified native English speaking editors at AJE.

This certificate was issued on **August 31, 2023** and may be verified on the [AJE website](#) using the verification code **784D-A8A0-5C17-8444-OF9A**.



Neither the research content nor the authors' intentions were altered in any way during the editing process. Documents receiving this certification should be English-ready for publication; however, the author has the ability to accept or reject our suggestions and changes. To verify the final AJE edited version, please visit our verification page at [aje.com/certificate](#). If you have any questions or concerns about this edited document, please contact AJE at [support@aje.com](mailto:support@aje.com).