A Simple Clinical Scoring System to Identify Patients at Risk of NASH Before the Development of NASH

¹Department of General and Digestive Surgery, Flinders Medical Centre, Adelaide, Australia ²Department of Digestive Surgery, Osaka Medical Centre for Cancer and Cardiovascular Diseases, Osaka, Japan Jacob A Chisholm¹, Yosuke Seki², James Toouli¹, Jurgen Stahl¹, Jane Collins¹, Lilian Kow¹

Background Nonalcoholic fatty liver disease (NAFLD) is common in the morbidly obese. It is a condition that can lead to progressive fibrosis and cirrhosis. A clinical scoring system to identify patients predisposed to fibrosis would assist in selecting patients for liver biopsy and further management. Methods Liver biopsies were taken from 370 consecutive patients who underwent laparoscopic bariatric surgery. Clinical and biochemical parameters were then assessed for correlation with histological features of non-alcoholic fatty liver disease. Results Sixty eight patients (18%) were found to have non-alcoholic steatohepatitis (NASH). Raised insulin resistance, ALT and total bilirubin were independently associated with NASH. The presence of at least 2 of the 3 provided the best combination of sensitivity (0.71) and specificity (0.71) for predicting NASH. Conclusion Raised insulin resistance, ALT and total bilirubin are clinical indicators for the presence of NASH prior to the development of fibrosis.