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### Early detection of metabolic-dysfunction associated steatotic liver disease using FIB-4

Chronic diseases continue to plague populations around the globe, with obesity and metabolic diseases no exception. These public health threats cannot be understated, and can lead to significant morbidity and mortality, including decreased quality of life, cardiovascular disease, diabetes, osteoarthritis, cancer and liver disease. Metabolic dysfunction-associated steatotic liver disease (MASLD), steatotic liver disease caused by factors other than excessive alcohol use, occurs most often in the presence of metabolic disorders such as obesity and diabetes, and is the most common chronic liver disease, affecting more than 30% of the global population.

Despite significant global prevalence, MASLD is considered a silent epidemic, as signs and symptoms typically do not manifest until the disease progresses to non-alcoholic steatohepatitis (NASH), cirrhosis, hepatocellular carcinoma (HCC), and/or end-stage liver disease (ESLD). Consequently, early identification through targeted



*Pictured from left to right: Leslie Charles Lai Chin Loy, Mun Yee Evonne Kong, Hareeff Muhammed, Yoke Lee Low.*

screening of high-risk individuals can minimize morbidity and mortality. In recent years, the Fibrosis-4 scoring system has emerged as an accessible and useful tool for screening programs, in part because it is non-invasive compared to biopsies, accessible in resource constrained environments and valuable in primary care. FIB-4 grades liver fibrosis using age, ALT, AST and platelet count to help direct next steps, if needed.

Appreciating the value of FIB-4 and the increased levels of diabetes and obesity in Malaysia, Premier Integrated Labs Sdn Bhd implemented FIB-4 screening in July 2022 to help enable early liver disease identification in primary care, enable appropriate triage and intervention, and reduce overall disease burden. Since implementation >39,000 patients have been screened, enabling identification of 5,662 patients with

‘moderate or high risk’ of MASLD. These patients can now receive early treatment to help minimize disease. Conversely, 33,358 patients were classified as ‘low risk’ and as such, did not require further referral, thus saving resources. Ultimately, FIB-4-guided early follow-up and intervention, patient outcomes have improved, including increased patient wellness, mitigated hospital stays and reduced absenteeism. Impressively, FIB-4 has also enhanced clinical decisionmaking, reaching 74% utilization amongst primary care physicians.

This impressive initiative and important outcomes have not only improved care and outcomes but saved precious healthcare budget. For their important role in this integrated clinical care initiative, Yoke Lee Low, *Biochemist, Department of Pathology, Premier Integrated Labs*, Hareeff Muhammed, *Chief Executive Officer, Premier Integrated Labs*, Leslie Charles Lai Chin Loy, *Consultant, Chemical Pathologist, and Metabolic Medicine Specialist, Premier Integrated Labs*, Mun Yee, *Evonne Kong, Senior Manager, Medical Affairs and Quality, Premier Integrated Labs* have received Top Recognition associated with the 2024 UNIVANTS of Healthcare Excellence award program. Congratulations!

To learn more about this initiative, the UNIVANTS programs and/or to apply, please visit [www.UnivantsHCE.com](http://www.UnivantsHCE.com)