

LiverMultiScan MRI imaging software for the diagnosis and characterisation of non-alcoholic fatty liver disease (provisional title)

LiverMultiScan is an imaging software for use with MRI to help clinicians to diagnose and stage liver disease. The software uses multiparametric MRI images to provide a quantitative assessment of liver fat, and quantitative biomarkers that correlate with liver iron concentration and fibro-inflammation. No contrast agent is needed.

Characterisation of liver tissue is necessary for diagnosis and staging of suspected or confirmed liver disease such as non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH). Currently used tests include blood tests (enhanced liver fibrosis test), transient elastography, liver ultrasound, acoustic radiation force impulse imaging, and liver biopsy. Early detection of liver disease is important to prevent progression to cirrhosis and liver cancer.

Use of the software could reduce the need for liver biopsy. It is also claimed to improve the speed, reliability and reproducibility of liver tissue assessment. The NICE diagnostics assessment programme will assess the clinical and cost-effectiveness of LiverMultiScan imaging software (and any other alternative technologies identified during scoping) for identifying and characterising of NAFLD and NASH in order to make recommendations on its use in the NHS.