

National Institute for Health and Care Excellence backs blood test for liver disease

- **Organization recommends simple blood test for diagnosing liver fibrosis in people with Non Alcoholic Fatty Liver Disease (NAFLD)**
- **An estimated 14 to 27 percent of the general population in the industrialized world has NAFLD¹, which is often caused by obesity**
- **The ADVIA Centaur Enhanced Liver Fibrosis (ELF) Test* is an easy, accurate, minimally-invasive blood test that is a direct measure of liver damage, also known as fibrosis**
- **The ELF test is convenient to request compared to biopsy and/or scan, since it requires only a routine blood sample with test results available in about an hour**

The National Institute for Health and Care Excellence (NICE) has just issued evidence-based guidelines recommending the use of a minimally-invasive blood test to test for and monitor advanced liver fibrosis in people diagnosed with NAFLD, one of the most common types of liver disease.² The National Health Service (NHS) and other local authorities use these guidelines to inform healthcare-related decisions.

The advanced, yet simple-to-conduct test is the Enhanced Liver Fibrosis (ELF) Test by Siemens Healthineers. This patient-friendly diagnostic option uses a rapid, cost-effective and minimally-invasive blood test to assess the degree of liver damage, or liver fibrosis, providing valuable clinical information. Use of the ELF Test has been established in NAFLD, as well as viral hepatitis and alcoholic patient groups.³⁻⁷

NAFLD is a significant risk factor in the development of liver fibrosis, which can result in cirrhosis of the liver, with often catastrophic consequences for the patient. Symptoms of cirrhosis can take between 10 to 30 years to develop, with patients

often only being diagnosed at the point of end-stage cirrhosis or advanced liver cancer. Early diagnosis is key to initiating treatment to prevent the need for expensive interventions, such as liver transplants.

The current method of detecting liver damage is an invasive liver biopsy. This surgical procedure, which samples a tiny portion of the liver, can lead to misdiagnosis in 20% - 40% of patients⁸, and also carries the risk of pain and bleeding complications. Using a blood sample and mathematical algorithm, the ELF score assesses the extent of liver damage, allowing appropriate action to be taken to help prevent further damage.

William Rosenberg, Professor of Hepatology at UCL and the Royal Free Hospital, London, one of the primary investigators of the test states, "Liver fibrosis is asymptomatic until the late stages of cirrhosis. The major challenge for clinicians managing NAFLD is trying to detect which patients have significant liver fibrosis amongst the large numbers who do not. The ELF Test enables us to do this reliably with a simple blood test that can be included amongst routine blood tests. The ELF test can help us assess a patient, determine prognosis, and plan and monitor treatment. NICE's endorsement of the ELF test is extremely helpful in bringing the test to the clinic and to the benefit of patients."

The NICE guidelines recommend physicians "consider using the enhanced liver fibrosis (ELF) test in people who have been diagnosed with NAFLD to test for advanced liver fibrosis", "offer retesting for advanced liver fibrosis for people with an ELF score less than 10.51 every 3 years to adults and every 2 years to children and young people," and "consider using ELF for retesting people with advanced liver fibrosis."

Franz Walt, President of Laboratory Diagnostics at Siemens Healthineers stated, "Risk factors for NAFLD have reached epidemic proportions; a percentage of at-risk individuals develop significant liver disease, and identification of this group is a primary care challenge. The ELF Test addresses the unmet need for an accurate, cost-effective diagnostic solution for liver fibrosis in primary care, and with these guidelines physicians can now better assess their patients."

Siemens Healthineers is one of the world's largest suppliers of technology to the healthcare industry and a leader in laboratory diagnostics, medical imaging, and healthcare IT. All supported by a comprehensive portfolio of clinical consulting, training, and services available across the globe and tailored to customers' needs. In fiscal 2015, Siemens Healthineers had around 44,000 employees worldwide. Further information is available on the Internet at <http://www.healthcare.siemens.com/>

More information about the ELF Test is available at:

<http://www.healthcare.siemens.com/clinical-specialities/liver-disease/elf-test-now-avail>

*Not available for sale in the U.S. Product availability may vary from country to country and is subject to varying regulatory requirements

1. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4101528/>
2. National Institution for Health and Care Excellence. National Clinical Guideline Centre. Non-alcoholic fatty liver disease. Assessment and management of non-alcoholic fatty liver disease (NAFLD) in adults, children and young people. December 2015.
3. Rosenberg et al., (2004) "Serum Markers Detect the Presence of Liver Fibrosis: A Cohort Study" *Gastroenterology* 127:1704–1713.
4. Parkes et al., (2010) "Enhanced Liver Fibrosis (ELF) Test Accurately Identifies Liver Fibrosis in Patients with Chronic Hepatitis C," *Journal of Viral Hepatitis* 2011 Jan;18(1):23–31.
5. Cobbold et al., (2010) "Optimal Combinations of Ultrasound-based and Serum Markers of Disease Severity in Patients with Chronic Hepatitis C," *Journal of Viral Hepatitis* 17:537–545.
6. Guha et al., (2008) "Non-invasive Markers of Fibrosis in Nonalcoholic Fatty Liver Disease: Validating the European Liver Fibrosis Panel and Exploring Simple Markers," *Hepatology* 47:455–460.
7. Nobili et al., (2009) "Performance of ELF Serum Markers in Predicting Fibrosis Stage in Pediatric Non-Alcoholic Fatty Liver Disease," *Gastroenterology* 136:160–167.
8. <https://publichealthmatters.blog.gov.uk/2014/09/29/liver-disease-a-preventable-killer-of-young-adults/>

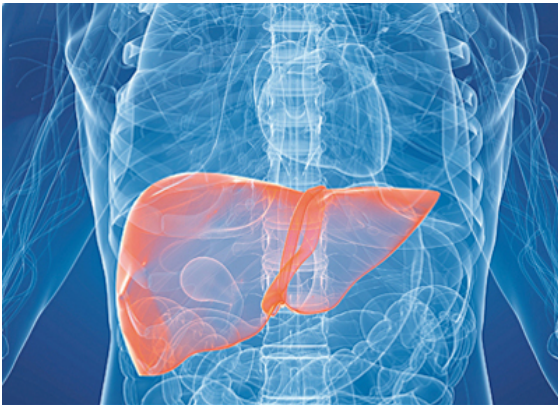
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Picture caption: A blood test that can diagnose and monitor one of the most common types of liver disease has been recommended for use by National Institute for Health and Care Excellence (NICE).



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