



A Single Test Combining Blood Markers and Elastography is More Accurate Than Other Fibrosis Tests in the Main Causes of Chronic Liver Diseases.

Submitted by Beatrice Guillaumat on Tue, 02/05/2019 - 16:34

Titre	A Single Test Combining Blood Markers and Elastography is More Accurate Than Other Fibrosis Tests in the Main Causes of Chronic Liver Diseases.
Type de publication	Article de revue
Auteur	Ducancelle, Alexandra [1], Leroy, Vincent [2], Vergniol, Julien [3], Sturm, Nathalie [4], Le Bail, Brigitte [5], Zarski, Jean-Pierre [6], Khac, Eric Nguyen [7], Salmon-Céron, Dominique [8], de Ledinghen, Victor [9], Calès, Paul [10]
Editeur	Lippincott, Williams & Wilkins
Type	Article scientifique dans une revue à comité de lecture
Année	2017
Langue	Anglais
Date	2017 Aug
Pagination	639-649
Volume	51
Titre de la revue	J Clin Gastroenterol
ISSN	1539-2031
Mots-clés	Adult [11], Aspartate Aminotransferases [12], Biomarkers [13], Elasticity Imaging Techniques [14], End Stage Liver Disease [15], Female [16], Humans [17], Liver [18], Liver Cirrhosis [19], Liver Diseases [20], Male [21], Middle Aged [22], Platelet Count [23], Prospective Studies [24], Retrospective Studies [25], ROC Curve [26], Severity of Illness Index [27]

BACKGROUND AND GOAL: International guidelines suggest combining a blood test and liver stiffness measurement (LSM) to stage liver fibrosis in chronic hepatitis C (CHC) and non-alcoholic fatty liver disease (NAFLD). Therefore, we compared the accuracies of these tests between the main etiologies of chronic liver diseases.

STUDY: Overall, 1968 patients were included in 5 etiologies: CHC: 698, chronic hepatitis B: 152, human immunodeficiency virus/CHC: 628, NAFLD: 225, and alcoholic liver disease (ALD): 265. Sixteen tests [13 blood tests, LSM (Fibroscan), 2 combined: FibroMeters] were evaluated. References were Metavir staging and CHC etiology. Accuracy was evaluated mainly with the Obuchowski index (OI) and accessorially with area under the receiver operating characteristics ($F \geq 2$, $F \geq 3$, cirrhosis).

RESULTS: OIs in CHC were: FibroMeters: 0.812, FibroMeters: 0.785 to 0.797, Fibrotest: 0.762, CirrhoMeters: 0.756 to 0.771, LSM: 0.754, Hepascore: 0.752, FibroMeter: 0.750, aspartate aminotransferase platelet ratio index: 0.742, Fib-4: 0.741. In other etiologies, most tests had nonsignificant changes in OIs. In NAFLD, CHC-specific tests were more accurate than NAFLD-specific tests. The combined FibroMeters had significantly higher accuracy than their 2 constitutive tests (FibroMeters and LSM) in at least 1 diagnostic target in all etiologies, except in ALD where LSM had the highest OI, and in 3 diagnostic targets (OIs and 2 area under the receiver operating characteristics) in CHC and NAFLD.

CONCLUSIONS: Some tests developed in CHC outperformed other tests in their specific etiologies. Tests combining blood markers and LSM outperformed single tests, validating recent guidelines and extending them to main etiologies.

Noninvasive fibrosis evaluation can thus be simplified in the main etiologies by using a unique test: either LSM alone, especially in ALD, or preferably combined to blood markers.

Résumé en anglais

URL de la notice

<http://okina.univ-angers.fr/publications/ua18788> [28]

DOI

10.1097/MCG.0000000000000788 [29]

Autre titre

J. Clin. Gastroenterol.

Identifiant (ID) PubMed

28692443 [30]

Liens

- [1] <http://okina.univ-angers.fr/a.ducancelle/publications>
- [2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=5013>
- [3] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=5041>
- [4] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=4994>
- [5] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=7177>
- [6] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=4993>
- [7] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=33635>
- [8] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=5101>
- [9] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=5014>
- [10] <http://okina.univ-angers.fr/p.cales/publications>
- [11] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=1002>
- [12] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=7590>
- [13] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=22421>
- [14] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=7613>
- [15] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=27081>
- [16] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=1075>
- [17] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=991>
- [18] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=1235>

- [19] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=5940>
- [20] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=10433>
- [21] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=968>
- [22] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=5941>
- [23] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=8574>
- [24] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=6044>
- [25] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=6125>
- [26] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=12914>
- [27] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=6085>
- [28] <http://okina.univ-angers.fr/publications/ua18788>
- [29] <http://dx.doi.org/10.1097/MCG.0000000000000788>
- [30] <http://www.ncbi.nlm.nih.gov/pubmed/28692443?dopt=Abstract>

Publié sur *Okina* (<http://okina.univ-angers.fr>)