

### SIMPLIFIED DIAGNOSTIC CRITERIA FOR AUTOIMMUNE HEPATITIS

Elke M. Hennes, Medical Department I, Medical Center Hamburg Eppendorf, Hamburg, Germany; M Zeniya, Department of Internal Medicine 1, Jikei University School of Medicine, Tokyo, Japan; Albert J. Czaja, Division of Gastroenterology and Hepatology, Mayo Clinic, Rochester, MN; Albert Paré, Liver Unit, Hospital Clínic, Barcelona, Spain; Georgios Dalekos, University of Thessaly, Larissa, Athens; Edward Krawitt, University of Vermont College of Medicine, Burlington, VT; Paulo L. Bittencourt, Portuguese Hospital of Salvador, University of Sao Paulo, Sao Paulo, Brazil; Kirsten M. Boberg, Medical Department, Rikshospitalet, Oslo; Harald Hofer, Department of Internal Medicine IV, Medical University of Vienna, Vienna, Austria; F. B. Bianchi, Department of Internal Medicine, University of Bologna, Bologna, Italy; Anja Victor, IMBEI, Johannes-Gutenberg-University Mainz, Mainz, Germany; Hans P. Dienes, Institute for Pathology, University Medical Center, Köln, Köln, Germany; Barbara Eisenmann de Torres, First Department of Medicine, Johannes-Gutenberg-University, Mainz, Germany; Peter R. Galle, First Department of Medicine, Johannes-Gutenberg-University, Mainz, Germany; Ansgar W. Lohse, International Autoimmune Hepatitis Group, Medical Department I, Medical Center Hamburg Eppendorf, Hamburg

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**Introduction:** In the absence of a single pathognomic parameter the diagnosis of Autoimmune Hepatitis (AIH) is made using a complex diagnostic score designed for study purposes only. The aim of this study on behalf of the International Autoimmune Hepatitis Group was to define and validate simplified diagnostic criteria for the diagnosis of AIH for every day use.

**Patients and Methods:** Candidate criteria included autoantibodies (ANA, AMA, LKM, SLA/LP),  $\gamma$ -globulins, IgG, absence of viral hepatitis and liver histology. Data from four continents was collected from 238 patients with proven AIH according to the established diagnostic criteria and 192 controls (45 chronic viral hepatitis, 22 PSC, 125 PBC). For the formulation of predictive models univariate analysis was performed. Different scores were built from variables showing predictive ability in univariate analysis. The diagnostic value of each score was assessed by the area under the receiver operating characteristic (ROC) curve. The best score derived from the training set was then validated using data from 61 patients with AIH and 156 controls (34 PBC, 44 NASH, 78 chronic viral hepatitis).

**Results:** The optimal score derived from the training set included ANA- and SMA-titres, IgG, liver histology and the exclusion of viral hepatitis. The area under the curve for the prediction of AIH was 0.946 in the training set and 0.991 in the validation set. Based on the ROC curves two cut-off points were chosen. The score was found to have 86% sensitivity and 86% specificity at a cut-off point of  $\geq 6$  pts. and 96% sensitivity and 73% specificity at a cut-off point of  $\geq 5$  pts. in the training set. The respective values in the validation set were 97% sensitivity (95% (I: 89-100%)) and 97% specificity (95% (I: 93%-99%)) with a cut-off of  $\geq 5$ pts and 85% sensitivity (95% (I: 74-93%)) and 98% specificity (95% (I: 94-100%)) with a cut-off of  $\geq 6$  pts.

**Conclusion:** A reliable diagnosis of AIH can be made using a simplified diagnostic score. We propose the diagnosis of probable AIH at a cut-off point  $\geq 5$ pts and definite AIH  $\geq 6$ pts.

	> 1:40	1 pt
ANA or SMA	> 1:80	2 pts *
IgG or gamma-globulins	> upper normal limit	1 pt
	> 1,156 times upper normal limit**	2 pts
	compatible with AIH	1 pt
Liver histology	typical AIH	2 pts
Absence of viral hepatitis	yes	1 pt
	no	2 pts
		$\geq 5$ pts: probable AIH
		$\geq 6$ pts: definite AIH

\* addition of points achieved for ANA and SMA maximal 2 pts

\*\* 18.5g/l

#### Disclosures:

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