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Update on current practice in laboratory medicine in respect of natriuretic peptide testing for heart failure diagnosis and management in Europe. The CARdiac MARKer guideline Uptake in Europe (CARMAGUE) study (2020) *Clinica Chimica Acta*, 511, pp. 59-66. Cited 2 times.

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^a Institute for Laboratory Medicine, County Hospital Aarau AG, Aarau, Switzerland

^b Department of Clinical Biochemistry, Cliniques Universitaires St-Luc and Université Catholique de Louvain, Brussels, Belgium

^c Center for Medical Biochemistry, Clinical Center of Serbia, Belgrade, Serbia

^d Departments of Cardiology, St George's University Hospitals NHS Foundation Trust and St. George's University of London, United Kingdom

^e Clinical Chemistry, HUS Diagnostic Center, Helsinki University and Helsinki University Hospital, Helsinki, Finland

^f Department of Clinical Biochemistry, University Hospitals of North Midlands NHS Trust, Stoke-on-Trent, United Kingdom

^g School of Primary, Community and Social Care, Keele University, Stoke-on-Trent, United Kingdom

^h Regionale Kliniken Holding RKH GmbH, Germany

ⁱ DIU Libertas International University, Zagreb, Croatia

^j Department of Medical Biochemistry and Pharmacology, Haukeland University Hospital, Bergen, Norway

^k Department of Clinical Science, University of Bergen, Bergen, Norway

^l Department of Laboratory Medicine, AZ St-Jan Hospital Bruges, and Ghent University, Ghent, Belgium

Abstract

Background: The European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) initiated the CARdiac MARKer Guidelines Uptake in Europe (CARMAGUE) Study to survey if current biomarker testing for heart failure (HF) in Europe is in accordance with up-dated guidelines. **Methods:** A web-based questionnaire was distributed to clinical laboratories via European biochemical societies in 2019. Questions covered the type of natriuretic peptide (NP) assays performed, decision limits for HF, and opinion concerning requirement of different thresholds in patients with renal failure or obesity. **Results:** There were 347 participating laboratories mostly from European countries with 266 offering NP testing. NP testing was increased from 67% to 77% between 2013 and 2019. NT-proBNP remained the preferred biomarker. Recommended decision limits were implemented for BNP (85%) and better focused for NT-proBNP (40%) than in the previous survey. The survey revealed that laboratorians are willing to support the translation of adjusted cut-off values for age, gender and for patients with conditions like renal insufficiency. **Conclusion:** Guidelines stimulate clinical laboratories to offer NP testing with high value for the diagnosis and management of HF, and to present adjusted medical decision limits. Future guidelines should encourage the use of personalized cut-offs for some confounding factors. © 2020 Elsevier B.V.

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