

Thus, EAT seems to be associated not only with atherosclerotic burden and risk of cardiovascular disease, but also with maladaptive changes in myocardial function that increase the risk of heart failure. It is our opinion that ectopic adipose tissue, with special emphasis on EAT, greatly contribute to metabolic homeostasis and modulate activation of inflammatory cascades, therefore being a key player in cardiovascular health and disease.

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Relaxin Concentrations in Acute Heart Failure Patients



Concentración de relaxina en pacientes con insuficiencia cardíaca aguda

To the Editor,

I have read the article entitled, “Relaxin Concentrations in Acute Heart Failure Patients: Kinetics and Clinical Determinants”, that appeared in *Revista Española de Cardiología*.¹ This article reports the measurement of serum relaxin in patients with acute heart failure.

I note that the authors used a commercial enzyme-linked immunoassay kit from Immundiagnostik, reporting that this is a validated assay for measuring serum relaxin. However, this assay has not been properly validated for serum relaxin, neither by the authors nor the manufacturer of the assay. No assurance has been given that serum samples dilute in parallel with authentic H2 standards. Specificity for H2 relaxin and cross-reactivity for possible interfering molecules has not been provided by the authors or the manufacturer. The sole exception is that the manufacturer reports that insulin does not interfere but no details are provided on the insulin doses tested. Although it is true that others have reported results using this assay, they also failed to report any assay validation. Because this assay relies on polyclonal antibodies, assay validation needs to be rigorous; however, it is completely absent. Thus, no valid conclusions can be drawn from the data presented in this article. The authors could have used a commercially available assay for serum relaxin that has been validated for clinical studies.^{2–4}

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Relaxin Concentrations in Acute Heart Failure Patients. Response



Concentración de relaxina en pacientes con insuficiencia cardíaca aguda. Respuesta

To the Editor,

We would like to thank Dr. Stewart for his constructive contribution to the discussion of our study findings with the suggestion that failure to find a clinical determinant for of circulating relaxin concentrations in patients with acute cardiac failure could be due to the commercial assay used (Immunodiagnostik; Bensheim, Germany).¹ Several points, however, suggest that this assay is appropriate. First, this is the most sensitive assay