

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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## REFERENCES

1. Ladeiras-Lopes R, Sampaio F, Bettencourt N, et al. The Ratio Between Visceral and Subcutaneous Abdominal Fat Assessed by Computed Tomography Is an Independent Predictor of Mortality and Cardiac Events. *Rev Esp Cardiol.* 2017;70:331–337.
2. Sacks HS, Fain JN. Human epicardial adipose tissue: a review. *Am Heart J.* 2007;153:907–917.
3. Bettencourt N, Toschke AM, Leite D, et al. Epicardial adipose tissue is an independent predictor of coronary atherosclerotic burden. *Int J Cardiol.* 2012;158:26–32.
4. Fontes-Carvalho R, Fontes-Oliveira M, Sampaio F, et al. Influence of epicardial and visceral fat on left ventricular diastolic and systolic functions in patients after myocardial infarction. *Am J Cardiol.* 2014;114:1663–1669.

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## REFERENCES

1. Martínez Solano J, Santos Mateo JJ, Sánchez-Más J, Sánchez J, Asensio López MC, Pascual Figal D. Relaxin Concentrations in Acute Heart Failure Patients: Kinetics and Clinical Determinants. *Rev Esp Cardiol.* 2016;69:1230–1232.
2. Kobalava Z, Villevaude S, Kotovskaya Y, et al. Pharmacokinetics of serelaxin in patients with hepatic impairment: A single-dose, open-label, parallel-group study. *Br J Clin Pharmacol.* 2014;79:937–945.
3. Dahlke M, Halabi A, Canadi J, Tsubouchi C, Machineni S, Pang Y. Pharmacokinetics of serelaxin in patients with severe renal impairment or end-stage renal disease requiring hemodialysis: A single-dose, open-label, parallel-group study. *J Clin Pharmacol.* 2016;56:474–483.
4. Dahlke M, Ng D, Yamaguchi M, et al. Safety and tolerability of serelaxin, a recombinant human relaxin-2 in development for the treatment of acute heart failure, in healthy Japanese volunteers and a comparison of pharmacokinetics and pharmacodynamics in healthy Japanese and Caucasian populations. *J Clin Pharmacol.* 2015;55:415–422.

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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 circulating relaxin concentrations in patients with acute cardiac failure could be due to the commercial assay used (Inmunodiagnóstik; Bensheim, Germany).<sup>1</sup> Several points, however, suggest that this assay is appropriate. First, this is the most sensitive assay

Relaxin Concentrations in Acute Heart Failure Patients. Response



Concentración de relaxina en pacientes con insuficiencia cardiaca aguda. Respuesta

To the Editor,