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Letter to the Editor

Nardilysin: A potential biomarker for the early diagnosis of acute coronary syndrome

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Dear Editor,

The interesting finding reported in IJC by Po-Min Chen et al. [1] in regard to nardilysin as a potential early marker of acute coronary syndrome, is even more intriguing now keeping in mind the very recent report by Ito et al. [2]. The latter manuscript claims that *in vitro* platelet production from induced pluripotent stem cell (iPS) precursors is largely increased by applying turbulent forces in the *in vitro* system designed by the authors, scaling platelet yield and quality at a clinical meaningful level and paving the way for a realistic alternative to transfusion for platelet supply [2,3] for the first time. One of the six genes involved in turbulence driven platelet release is actually nardilysin [2], having a pivotal role in the shedding phase of platelet formation [2].

It is plausible that in the scenario of an ischaemic heart disease and/or in a situation of increased cardiovascular risk, modified flow mechanisms (turbulence) in the bone marrow microenvironment and nardilysin action on megakaryocytes favoring platelet release could have an important role on the pathogenesis and natural history of the coronary artery diseases (CAD), giving further credit to the findings by Po-Min Chen et al.

More studies are definitely needed to support a role of nardilysin as an early marker of acute coronary syndrome, as suggested [4,5], nevertheless the new discovery by Ito et al. sheds new light on the results of Po-Min Chen et al. and it could have relevant implications of the pathogenesis and diagnosis of CAD.

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