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Letter to the Editor

Predictors of strut coverage of drug eluting stent in diabetic patients – Is only on-clopidogrel platelet reactivity enough?

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Editors,

We read with great interest the paper by Briguori et al. exploring whether uncovered strut rate in diabetic patients receiving drug eluting stent implantation could be predicted with on-clopidogrel platelet reactivity (OPR) and/or circulating endothelial progenitor cells (EPC), among which only the former and complex lesions were shown to be the independent predictors [1].

Nonetheless, we highlight a few important considerations about this study. First, only 36% participants' HbA_1c was less than 7%, which indicated the majority of the enrolled patients were far from meeting glycemic targets [2]. While better glycemic control was shown to be associated with elevated EPC numbers [3]. And in diabetic pathological conditions, the circulating EPCs might be in apoptotic and/or dysfunctional status, which could not be simply evaluated by EPC levels. Second, circulating EPCs, a heterogenous population of cells characterized by the expression of several surface antigens, include hematopoietic and non-hematopoietic ones [4]. The latter of which could differentiate into adherent endothelial cells and express different surface antigen patterns. So combination of CD34 and CD309 might lead to biased estimates of bona fide circulating EPC levels.

The results of the current study pointed out OPR as a predictor for uncovered strut rate in high-risk patients receiving DES implementation, while the potential role of putative EPCs especially their status and activity might be neglected, which demands furthermore research.

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Declaration of personal interests

None.

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