Abstract:

Antiplatelet therapy has a key role in preventing atherothrombotic events in patients with coronary artery disease, particularly in those undergoing revascularisation procedures. However, this may occur at the expense of an increase risk of bleeding. Therefore, the balance between thrombotic and bleeding events is critical in order to achieve optimal outcomes. Since there is a broad variability in individual response profiles to antiplatelet therapy, these outcomes (thrombosis vs. bleeding) may depend on the level of platelet inhibition achieved in a given subject. Platelet function assays have emerged as a useful tool for its potential to determine patients at a higher risk of ischaemic and bleeding complications. The present manuscript will review the available evidence associating platelet function testing with adverse clinical outcomes, in particular bleeding, and their potential applications in lieu of novel and more potent antithrombotic agents that will be introduced into clinical practice in the nearfuture.