Innovation and standardization of near-patient platelet function assays

Propositions belonging to the dissertation

Innovation and Standardization of Near-patient Platelet Function Assays

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1. For the identification of patients with platelet dysfunction, it is essential to establish appropriate reference intervals. *(This thesis - Chapter 2)*
2. Platelets and coagulation mutually influence each other and there are strong indications that, thanks to the interplay between platelets and coagulation, haemostasis is far more effective than the two processes separately. *(This thesis - Chapter 4)*
3. Many disease- and therapy-related thrombotic events are induced by damaged or affected blood cells rather than by changes in coagulation factors. *(This thesis - Chapter 4)*
4. The combined measurement of platelet number and platelet secretion capacity gives a more complete view on platelet phenotype than platelet number alone. *(This thesis - Chapter 5)*
5. Our standardized protocol pushes flow cytometry towards the diagnostic routine for patients with platelet function disorders. *(This thesis - Valorisation)*
6. Bleeding remains a major limitation of current therapeutic approaches, with the most intensive antithrombotic regimens associated with an increased risk of bleeding. *(James D. McFadyen, Nature reviews cardiology, 2018)*
7. Quantification of plasma concentrations of the DOACs is critical when assessing their potential contribution to serious bleeding, when making decisions about the timing of urgent surgery or interventions, or when determining whether patients with acute ischemic stroke can safely be given fibrinolytic therapy. *(Jeffrey I. Weitz, Circulation, 2016)*
8. If you know you are on the right track, if you have this inner knowledge, then nobody can turn you off... no matter what they say. *(Barbara McClintock)*
9. An expert is a person who has made all the mistakes that can be made in a very narrow field. *(Niels Bohr)*
10. An artisan must first sharpen his tools if he is to do his work well. (Confucius)

    -子曰：工欲善其事，必先利其器