Welcome to the 3rd issue of the Journal of Medicines Development Sciences. Like previous issues it contains articles covering the entire process of drug development from target identification to drug registration.

The development of new medicinal products is characterized by a high rate of attrition at various stages, often due to safety problems. The use of efficient toxicological tests allowing early identification of safety issues is an appealing strategy to improve the efficiency of drug development. This new concept of predictive toxicology is explained in a comprehensive way by Atienzar et al. and illustrated by many examples.

P2Y receptors are a family of G protein-coupled receptors responsive to nucleotides released from cells in response to various stimuli. The P2Y12 receptor is so far the only member of that family that constitutes the target of medicinal products: inhibitors of platelet aggregation used as antithrombotic agents (clopidogrel, prasugrel…) [1]. In the 2nd issue of the journal, it was shown that the company CERENIS has developed agonists of the P2Y13 receptor that could stimulate HDL uptake by hepatocytes and thereby increase the Reverse Cholesterol Transport [2]. In the present issue, Robaye et al. present another possible therapeutic application: the use of P2Y6 agonists as vaccination adjuvants, based on their action on antigen-presenting dendritic cells.

One way to foster the development of new medicinal products is to boost the efficiency of clinical research. In the 1st issue Silva et al. have described the ACRES initiative to build up a global system for clinical research excellence [3]. In the present issue Elyse Summers describes another initiative: the AAHRPP accreditation of clinical research centers.

Following previous articles on Africa [4] and Korea [5], two articles in this issue analyze trends in drug development in the Asia-Pacific region and Brazil respectively. Interestingly it appears that in both China and Brazil, long delays in the review and approval of clinical trials and new drug applications have been a frustration for biopharmaceutical companies. Both countries have now issued new guidances intended to accelerate the process and thereby increase their attractiveness to biopharmaceutical companies.

References