

Editorial

Special issue devoted to the 6th IAPC Meeting: joint events comprising 6th World conference on physico-chemical methods in drug discovery and development and 3rd World conference on ADMET and DMPK

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The present issue of *ADMET and DMPK* is dedicated to the **6th IAPC Meeting** which was organized as a joint event consisting of **6th World Conference on Physico-Chemical Methods in Drug Discovery and Development (PCMDDD-6)** and **3rd World Conference on ADMET and DMPK (ADMET-3)**. The meeting took place in Hotel Westin, Zagreb, Croatia, September 04-07, 2017. IAPC meetings are organized as annual events in alternating European and East Asia locations. The topics covered the broad range of methods used in successful drug candidate identification and development. Determination of ADME/Tox properties through the *in vitro* and *in vivo* assays was discussed. The particular attention was paid to the evaluation and improvement of critical drug parameters which determine the fate of the drug, from its administration over its remedial action to its excretion. Roughly, six sessions were organized: Drug Development, Solid State, Pharmaceutical Cocrystals, PhysChem and Permeability, ADMET and DMPK and Drug Discovery. Special evening session “Pharmaceutical Cocrystals – Physicochemical Properties and Formulations” was organized and moderated by Alex Avdeef. The session highlighted issues related to the measurement of physicochemical properties, particularly dissolution and solubility as a function of pH, in support of formulation development of oral drug products with improved bioavailability.

Almost 150 delegates actively participated at the IAPC-6 Meeting. Most of them presented their work either orally or through poster communication resulting in a diverse but well-balanced four-day programme. A small selection of papers giving a typical cross section of the conference workings was published in the present issue as well as in two previous issues (Vol. 5, Nos. 3 & 4) and will also be published in the next issue (Vol. 6, No. 2).

Mario Jug et al [1] contributed with the review about *in vitro* dissolution methods for the mucosal delivery systems, while Adriana Isvoran et al. [2] used a few computational tools for predicting absorption, distribution, metabolism, excretion and toxicity, pharmacokinetics profiles, toxic/adverse effects, carcinogenicity, cardiotoxicity and endocrine disruption of some of low molecular weight water soluble derivatives of chitosan that are used in wound healing. Ioannis Nikolakakis et al [3] investigated the release of microencapsulated oregano essential oil by spectroscopy. Solubility-pH profiles of sibutramine and was

published as an extended abstract [4].

The present issue consists of a review paper about the role of pharmacology in anticancer drug development two original scientific articles and three short communications. Peters et al. [5] evaluated in front of the European Organization for Research and Treatment of Cancer (EORTC) the process of selection of European potential anti-cancer compounds to be tested in National Cancer Institute on the existing cell lines representative of nine major tumour types.

Two very interesting original articles deal with the pharma industry view on *in silico* ADME in drug design and the use of the low-field NMR for the characterization of gels and biological issues. In particular, Winiwarter et al [6] concentrated on the pharmacokinetic properties of the compounds and suggested using *in silico* ADME models to predict what potency would be required for a specific compound to enable coverage during the whole dosing interval.

Two short communications come from the Clara Rafols and her group, one deals with the biomolecular interactions using molecular fluorescence and another compares the dissolution rates of ciprofloxacin and its cocrystal with resorcinol. One short communication deals with the potential utilization of microemulsion electrokinetic chromatography for the determination of octanol/water distribution coefficients.

From the four outstanding papers which are going to be published in the next issue of the journal two were presented in the special cocrystal session at the conference. One is the review paper “Pharmaceutical cocrystals – Physicochemical Properties and Formulations” in which all speakers from the special session contributed. Another cocrystal paper comes from Abu Serajuddin group.

We wish to thank all the authors of this and the following special issue for their high-quality papers. We would also like to thank the referees who critically evaluated the papers at short notice. Finally, we hope readers will enjoy the articles and find them interesting, useful and beneficial for their work.



Figure 1. The opening ceremony of IAPC-6 Meeting, Zagreb, Croatia.

References

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