

Editorial

Ursula Amstutz, Vid Mlakar, Patricia Huez-Diaz Curtis, Caroline Samer, Pierre Baumann, Roland P. Bühlmann, Peter Meier-Abt, Urs A. Meyer, Ron H.N. van Schaik and Marc Ansari*, on behalf of the Swiss group of Pharmacogenomics and Personalised Therapy

Creation of the Swiss group of Pharmacogenomics and personalised Therapy (SPT)

<https://doi.org/10.1515/dmpt-2017-0033>



In memory of Prof. Gérard Siest († April 9th, 2016) and in honour of his contribution to the creation of SPT

With the development of modern drugs, it quickly became apparent that not all individuals respond equally to drug therapy. Outcomes can be multiple, ranging from a good response to non-efficacy or to the development of adverse drug reactions. Differences in response are partly attributed to various environmental factors and to an individual's genetic predisposition as well [1]. The progress of molecular sciences has enabled both an improved understanding of drug mechanism, and of underlying molecular differences between individuals that influence the pharmacokinetics and pharmacodynamics of drugs. In turn, this provides an opportunity to identify individuals who will react differently to a given drug based on their genetic characteristics. The study of how individuals respond to drugs due to their genetic background has been termed “pharmacogenetics” or “pharmacogenomics” [1]. Bringing together clinicians and scientists in various fields, such as pharmacology, genetics, molecular biology and laboratory medicine, pharmacogenomics is a multidisciplinary science with great potential to translate findings to benefit patients by individualising therapy and providing new targets for drug development [1].

Combining multiple scientific disciplines and research approaches entails the need for a platform that is broad enough to be able to address challenges and further advance individualised medicine. For this reason, the European Society of Pharmacogenomics and

Personalised Therapy (ESPT; President: Professor Ron HN van Schaik, Erasmus University Medical Center Rotterdam, The Netherlands) was established to offer the opportunity to exchange information and share ideas over a broad spectrum of scientific disciplines [2]. The aim of the ESPT is to promote “leadership and innovation in science and education to enhance the scientific basis and quality of diagnosis and therapy for patients throughout the world.” The ESPT welcomes experts from various fields of basic molecular and biochemical sciences, to clinically oriented sciences, along with practitioners, such as hospital clinicians, pharmacologists and pharmacists. The society emphasizes an informal structure that allows for personal initiative. For this reason, the creation of national pharmacogenomics societies was a key vision of the late president of ESPT, Prof. Gérard Siest. Today, the ESPT is present throughout most of Europe through national societies that serve to organize and promote pharmacogenomics research. To add to this growing number of national efforts, on February 3rd 2016, a constitution meeting of the Swiss Group of Pharmacogenomics and personalised Therapy (SPT) was held in Bern, Switzerland. The SPT was created by researchers who are active in the field of pharmacogenomics as a section within the Swiss Society of Clinical Pharmacology and Toxicology (SSCPT, then President: Dr. Hugo Kupferschmidt, Tox Info Suisse, Zurich, Switzerland; current President: Professor Thierry Buclin, Lausanne University Hospital CHUV, Switzerland) and will serve as a Swiss national point for the ESPT. As a country investing one of the highest percentages of its BDP in science and development, Switzerland has a strong commitment to fostering innovation in medical and pharmaceutical sciences. In addition, there exists a longstanding university-industry partnership culture that is underpinned by a strong base in the pharmaceutical and biotechnology industry. Indeed, as a society encouraging dynamic national and international activity, ESPT has warmly welcomed the creation of the SPT.

Author contributions: All the authors have accepted responsibility for the entire content of this submitted manuscript and approved its submission.

Research funding: None declared.

Employment or leadership: None declared.

Honorarium: None declared.

References

1. Wang L. Pharmacogenomics: a systems approach. *Wiley Interdiscip Rev Syst Biol Med* 2010;2:3–22.
2. An update from The European Society of Pharmacogenomics and Theranostics. *Pharmacogenomics* 2012;13:133–5.

***Corresponding author: Marc Ansari**, Geneva University Hospital, Pediatric Department, Onco-Hematology Unit, Rue Willy-Donzé 6, 1205 Geneva, Switzerland, E-mail: Marc.Ansari@hcuge.ch; and

CANSEARCH Research Laboratory, Geneva University Medical School, Geneva, Switzerland

Ursula Amstutz: University Institute of Clinical Chemistry, Inselspital Bern University Hospital, University of Bern, Bern, Switzerland

Vid Mlakar and Patricia Huezo-Diaz Curtis: CANSEARCH Research Laboratory, Geneva University Medical School, Geneva, Switzerland

Caroline Samer: Clinical Pharmacology and Toxicology, Geneva University Hospitals, Geneva, Switzerland

Pierre Baumann: Department of Psychiatry (DP-CHUV), University of Lausanne, Prilly, Switzerland

Roland P. Bühlmann: Bühlmann Laboratories AG, Schönenbuch, Switzerland

Peter Meier-Abt: Swiss Academy of Medical Sciences, Bern, Switzerland

Urs A. Meyer: Biozentrum, University of Basel, Basel, Switzerland

Ron H.N. van Schaik: Erasmus University Medical Center Rotterdam, Rotterdam, The Netherlands