ESPT creation & development

5th Santorini Conference October 2010: first plans

ESPT board - 2011
Gerard Siest (FRA) (president) Ron van Schaik (NL)
Janja Marc (SLO) (secretary) Vangelis Manolopoulos (GRE)
Adriano Henney (UK) (treasurer) Adrian Llerena (ESP)
Sophia Siest (FRA) George Patrinos (GRE)

Prof Dr Gerard Siest Peter Jacobs (BEL)
First ESPT President
(2011 – 2016)

“It was proposed that a scientific European organization be developed to realize independent studies and clinical trials and to participate in educational efforts”

ESPT creation & development

ESPT board - 2017
Ron van Schaik (NL) - president
Vangelis Manolopoulos (GRE) - VP
Sanja Stankovic (SER) - secretary
Ingolf Cascobi (GER) - treasurer
Sophia Siest (FRA)

Maurizio Simmaco (ITA)
Csilla Sipekey (FIN)
Adrian Llerena (ESP)
Janja Marc (SLO)
Marc Ansari (CH)
To extend knowledge and facilitate the clinical implementation of Pharmacogenomics and Personalised Medicine in Europe

- To improve understanding of clinicians and patients on use of PGx

- To promote, inform and offer an independent view of PGx and Personalised medicine to regulators.

- To be a partner for industry in strategical discussions related to the clinically implementation of Personalised Medicine

- To offer a platform for researchers on PGx for interaction, exchange of ideas, sharing research outcomes and facilitating formation of relevant research consortia and research proposals
<table>
<thead>
<tr>
<th>Country</th>
<th>Name of the Society</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>SIMeP – Italian Society of Personalised Medicine</td>
<td>Maurizio Simmaco</td>
</tr>
<tr>
<td>Turkey</td>
<td>Turkish Pharmacogenetics Society</td>
<td>Belgin Susleyici</td>
</tr>
<tr>
<td>Greece</td>
<td>Greek Pharmacogenomics and Personalised Society</td>
<td>Drakoulis / Haliassos</td>
</tr>
<tr>
<td>Hungary</td>
<td>Hungarian Society of Personalised Medicine</td>
<td>Gyorgy Németh</td>
</tr>
<tr>
<td>Spain</td>
<td>Spanish Society of Pharmacogenetics and Pharmacogenomics</td>
<td>Adrian LLerena</td>
</tr>
<tr>
<td>Serbia</td>
<td>Serbian Society of Pharmacogenomics and Theranostics</td>
<td>Sanja Stankovic</td>
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<tr>
<td>Israel</td>
<td>Israel Society of Clinical Pharmacology</td>
<td>Mati Berkovich</td>
</tr>
<tr>
<td>France</td>
<td>Personalised Therapy and Pharmacogenomics Group</td>
<td>Frederic Libert</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Dutch Clinical Pharmacogenetics Network</td>
<td>Ron van Schaik</td>
</tr>
<tr>
<td>Finland</td>
<td>Finnish Phamacogenetics Society</td>
<td>Mikko Niemi</td>
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<tr>
<td>Switzerland</td>
<td>Swiss Network Pharmacogenomics and Personalised Medicine</td>
<td>Marc Ansari</td>
</tr>
<tr>
<td>Denmark</td>
<td>Danish Network Pharmacogenomics and Personalised Medicine</td>
<td>Ivan Brandslund</td>
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</tbody>
</table>
ESPT Advisory Board

Philippe Beaune, France
Juergen Brockmöller, Germany
Roland Bühlmann, Switzerland
Pierre Chambon, France
Anne K.Daly, UK
Panos Deloukas, UK
Maurizio Ferrari, Italy
Paolo Fortina, USA
Magnus Ingelman Sundberg, Sweden
Federico Innocenti, USA
Klaus Lindpaintner, USA
Angela Brand, Netherlands

Paolo Marchetti, Italy
Peter Meier Abt, Switzerland
Urs Meyer, Switzerland
Michael Oellerich, Germany
Markus Paulmich, Austria
Munir Pirmohamed, UK
Mary V. Relling, USA
Wolfgang Sadee, USA
Julia Stingl, Germany
Giulio Superti Furga, Austria
Roland Wolf, UK
Ulrich Zanger, Germany
ESPT international activities

6 international congresses (200-350 participants)
3 international summerschools (80-120 participants)

2011:
1st ESPT conference in Bled – Slovenia

2012:
1st summerschool in Ljubljana - Slovenia (August)
1st ESPT/Santorini combined meeting Thira – Greece (Oct)

2013:
2nd ESPT conference in Lisbon – Portugal

2014:
2nd ESPT summerschool Rome – Italy (August)
2nd ESPT/Santorini combined meeting Thira – Greece (Oct)

2015:
3rd ESPT conference in Budapest - Hungary (Oct 7 – 10)

2016:
3rd ESPT Summerschool Belgrade – Serbia (Aug)
3rd ESPT/Santorini combined meeting Thira – Greece (Oct)
ESPT - Divisions

Clinical Implementation
Ron van Schaik (NL)

Scientific Research
Marc Ansari (CH)

Education
Janja Marc (SLO)
Vangelis Manolopoulos

Communications & External relations
Maurizio Simmaco (ITA)

Congress & Meetings
Sofia Siest (FRA)

Working groups:
Pediatric Oncology
Drug Transporters
Transcription Factors
Drug interactions
PGx for Generic drugs

www.eu-pic.net
HORIZON2020
www.eu-pic.net

European Pharmacogenetics Implementation Consortium

Mission

Events

News

Horizon2020

Our mission
To improve patient care in Europe by integrating Pharmacogenetic information in existing health care, personalising drug therapy.

More info

4th ESPT Conference
Catania, Italy
October 4-5-6-7 (2017)

More info

Eu-PIC: Bridging Borders

Eu-PIC successfully organized, together with Golden Helix Foundation, Erasmus MC Rotterdam and the CMBD/NVKC, the 17th Golden Helix Pharmacogenomics Day in Rotterdam, the Netherlands.

More info

Personalised medicine
has the potential to respond to, amongst others, the increasing burden of chronic disease and the complexity of co-morbidities and in doing so contribute to the sustainability of health and care systems. More info
EU quality control program: Ensuring high quality genotyping

EU Network for exchanging information

Reimbursement and Regulatory Aspects Working Group

Dissemination of knowledge through IFCC, ESPT and national PgX networks

Creating Pharmacogenetic testing facilities in 18 EU countries: integration of pre-emptive genotyping for Cardiology, Internal Medicine, Psychiatry and Oncology

Scientific Trials for identification of scientific gaps and design of new projects

Development of new genotyping/multiplex platforms for cheaper and faster analyses

Development of a Decision Support Tool and a safe IT environment for reliable and rapid translation of PGx results into the clinic

Evidence-based dosing recommendations, EU-wide, and up-to-date

Health Technology Assessment and Economical Evaluation For evaluation of cost/benefit
Challenges

Scientific evidence ➔ Pharmacologists (TDM) ➔ Health Insurers ➔ Regulators ➔ Ethics ➔ General Public ➔ Clinicians ➔ Test Accepted!

Pharmacogenomics: Can We Make It Happen?
 thereof. 

**CONCLUSIONS**

Among patients with an acute myocardial infarction who were receiving clopidogrel, those carrying CYP2C19 loss-of-function alleles had a higher rate of subsequent cardiovascular events than those who were not. This effect was particularly marked among the patients undergoing percutaneous coronary intervention. (ClinicalTrials.gov number, NCT00673036.)
Clopidogrel (Plavix): needs activation by **CYP2C19**

Caucasians: 3% PMs, 26% IMs; Asian: 30% PM, 50% IM

**Test for CYP2C19 variants:**
- **Negative** → clopidogrel (€)
- **Positive** → prasugrel/ticagrelor (€€€)

**CY2C19*2 carriers are at risk**
FDA Boxed Warning on Clopidogrel

Warning: Diminished Effectiveness in Poor Metabolizers

- Effectiveness of clopidogrel depends on activation of the metabolite by the cytochrome P450 (CYP) system, primarily CYP2C19.
- Poor metabolizers treated with clopidogrel at standard doses may exhibit higher cardiovascular event rates following acute coronary syndrome (ACS) or percutaneous coronary intervention compared to patients with normal CYP2C19 function.
- Tests are available to identify a patient's CYP2C19 status, which can be used as an aid in determining therapeutic dosing.
- Consider alternative treatment or treatment modifications for patients identified as CYP2C19 poor metabolizers.

2015 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation — Web Addenda

Task Force for the Management of Acute Coronary Syndromes in Patients Presenting without Persistent ST-Segment Elevation of the European Society of Cardiology (ESC)

Authors/Task Force Members: Marco Roffi (Chair), Carlo Patrono (Chair), Christian M. Kastrati (Chair), Håvard Storesund (Chair), and Juergen Mehli (Chair), Debabrata Mukherjee (USA), and Stephan Windecker (Chair), and Stephan Windecker (Chair), and Stephan Windecker (Chair), and Stephan Windecker (Chair), and Stephan Windecker (Chair), and Stephan Windecker (Chair).

Document Reviewers: Holger Baumgartner (CPG Review Coordinator) (Switzerland), Olivier Gavard (CPG Review Coordinator) (Switzerland), Stefano Adamo (Italy), Evaldas Radzevicius (Switzerland), Colin Bajema (UK), Héctor Barrio (Spain), Raffaella Bugiardini (Italy), Christian Carney (UK), John Rushworth (UK), and Stefan Windecker (Chair).

At present, genetic testing cannot be recommended in routine clinical practice due to insufficient prospective data. In contrast, the use of genotype-guided dosing strategies may be considered in selected patients.
“Here is my genotype...”

(The New Yorker (2000))

Dutch Pharmacogenetics Working Group (DPWG):

Evidence based guidelines for dosing on genotype for > 80 drugs

www.pharmgkb.org
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<tbody>
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<td>*1/*1</td>
<td>Normaal</td>
<td>45%</td>
<td>*1C, *1F, *1K</td>
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<td>80%</td>
<td>*2, 3, 17</td>
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<td>CYP2D6</td>
<td>*1/*2xN</td>
<td>Ultrasnel</td>
<td>3%</td>
<td>25 varianten (AmpliChip)</td>
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<td>*1B,1G,3-6,10,12,17,18,20,22</td>
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<td>CYP3A5</td>
<td>*3/*3</td>
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<td>Normaal</td>
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<td>A, K, F1, F2, H, J, Sc, Silent</td>
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<td>DPYD</td>
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<td>Intermediair</td>
<td>2%</td>
<td>*2A</td>
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<tr>
<td>VKORC1</td>
<td>AA</td>
<td>Gevoelig</td>
<td>20%</td>
<td>-1639G&gt;A</td>
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</table>

1 In blanke bevolking. Kan afwijken bij andere etniciteiten.
18 countries
37 institutes
106 participants
ESPT international activities
6 international congresses (200-350 participants)
3 international summerschools (80-120 participants)

www.2017ESPTcongress.eu

ESPT 2017
FOURTH CONFERENCE
OCTOBER 4-5-6-7
CATANIA, ITALY, Monastero dei Benedettini

Pharmacogenomics and Personalised Medicine: research progress and clinical implementation

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