

Short overview of EpiPGX

Genome-based biomarkers for patient stratification and pharmacogenomic strategies

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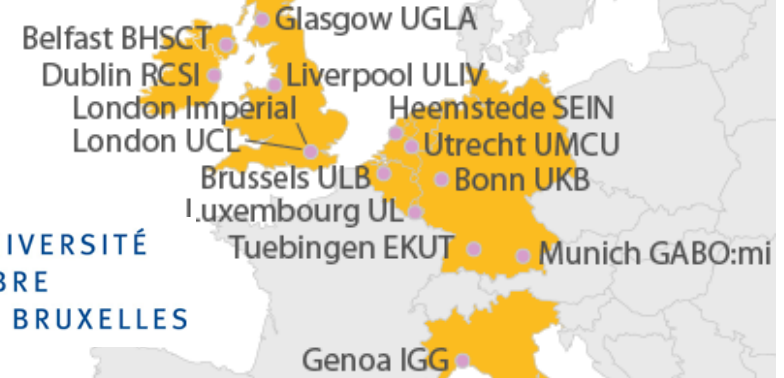


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Who is EpiPGX?

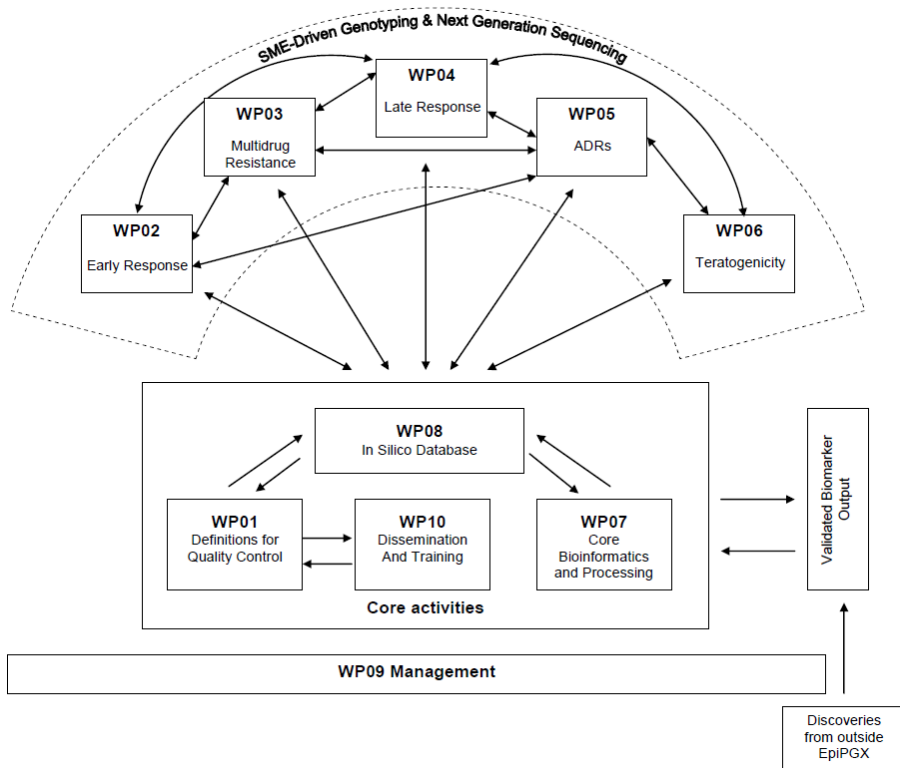


15 partners



important contributor to ILAE2 and other global initiatives

Who is EpiPGX?



- Goal is to identify (BEST glossary) :
 - Prognostic biomarkers
 - Predictive biomarkers
 - Safety Biomarkers
 - Susceptibility/Risk biomarkers
- Biobanked data from >10,000 people with epilepsy, across 14 sites, with data on over >40,000 individual drug trials and outcomes
- Funded 2011-2015, still very active

Centralised data ecosystem



Phenotype

New ADR >> *ADR started - date Age at start *ADR ended - date Adverse Drug Reaction selected

S_1000045_D_10002 dd/mm/yyyy Unk ? dd/mm/yyyy Unk ? ERROR - click to read! **Cutaneous adr** ✖

E_100058 ? %y%r% ? This ADR is attributed to Carbamazepine

Behav/Cogn/Hepa... Hypo/Neuro/Psych... **Cut. adv. react.** Speech/Tremor/Visual... Weight... Miscellaneous NOTE

7 Cutaneous ADR Conf. by lymphocyte transform. test 1 Yes 2 No 999 NK Conf. by dermatologist 1 Yes 2 No 999 NK

Type of cut. ADR:

<input type="checkbox"/> 1 Hypersensitivity syndr. >>	<input type="checkbox"/> 1 Internal organ involvement	<input type="checkbox"/> 1 Liver	<input type="checkbox"/> 1 Heart
<input checked="" type="checkbox"/> 1 Maculopap. exanthema	<input type="checkbox"/> 1 Fever	<input type="checkbox"/> 1 GI	<input type="checkbox"/> 1 Muscle
<input type="checkbox"/> 1 Stevens-Johnson syndr.	<input type="checkbox"/> 1 Prolonged recovery phase (despite AED withdrawal)	<input type="checkbox"/> 1 Kidney	<input type="checkbox"/> 1 Thyroid
<input type="checkbox"/> 1 Toxic epiderm. necrolysis		<input type="checkbox"/> 1 Lung	<input type="checkbox"/> 1 Haematol.
		<input type="checkbox"/> 1 CNS	<input type="checkbox"/> 1 Lymph.s.

(specify) (specify)

Behav/Cogn/Hepa... Hypo/Neuro/Psych... **Cut. adv. react.** Speech/Tremor/Visual... Weight... Miscellaneous NOTE

AED dosing at time of ADR reaction (mg/d) _____ (mg/d)

* Can ADR be reasonably attributed to AED 1 Yes 2 No 999 Unknown

* Did ADR lead to dose reduction 1 Yes 2 No 999 Unknown

* Did ADR lead to AED withdrawal 1 Yes 2 No 999 Unknown

Genotype (GWAS & exomes)



HPC @ Uni.lu

High Performance Computing in Luxembourg

