

Open PHACTS

Milestone 1

Prioritised list of research questions

Prepared by UNIVIE

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Project title: An open, integrated and sustainable chemistry, biology and pharmacology knowledge resource for drug discovery

Instrument: IMI JU

Contract no: 115191

Start date: 01 March 2011

Duration: 3 years

Nature of the Deliverable	
Report	x
Prototype	
Other	
Dissemination level	
Public dissemination level	
For internal use only	x

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Definitions

- Partners of the Open PHACTS Consortium are referred to herein according to the following codes:

Pfizer – Pfizer limited – **Coordinator**

UNIVIE – Universität Wien – **Managing entity of IMI JU funding**

DTU – Technical University of Denmark – DTU

UHAM – University of Hamburg, Center for Bioinformatics

BIT – BioSloveIT GmbH

PSMAR – Consorci Mar Parc de Salut de Barcelona

LUMC – Leiden University Medical Centre

RSC – Royal Society of Chemistry

VUA – Vrije Universiteit Amsterdam

CNIO – Spanish National Cancer Research Centre

UNIMAN – University of Manchester

UM – University of Maastricht

ACK – ACKnowledge

USC – University of Santiago de Compostela

UBO – Rheinische Friedrich-Wilhelms-Universität Bonn

AZ – AstraZeneca

GSK – GlaxoSmithKline

Esteve – Laboratorios del Dr. Esteve, S.A.

Novartis – Novartis

ME – Merck Serono

HLU – H. Lundbeck A/S

E.Lilly – Eli Lilly

- Grant Agreement:** The agreement signed between the beneficiaries and the IMI JU for the undertaking of the Open PHACTS project.
- Project:** The sum of all activities carried out in the framework of the Grant Agreement.
- Work plan:** Schedule of tasks, deliverables, efforts, dates and responsibilities corresponding to the work to be carried, out as specified in the Grant Agreement.
- Consortium:** The Open PHACTS Consortium, composed of the above-mentioned legal entities.
- Project Agreement:** Agreement concluded amongst Open PHACTS participants for the implementation of the Grant Agreement. Such an agreement shall not affect the parties' obligations to the Community and/or to one another arising from the Grant Agreement.

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1. Introduction

The Open PHACTS project aims to develop an open access innovation platform, Open Pharmacological Space (OPS), utilizing a semantic web approach. The OPS system will support drug discovery projects by providing data, vocabularies and infrastructure open to the public domain. In order to guarantee broad applicability and acceptance by a wide user community, the Open PHACTS consortium chose a use case driven approach. Thus, the development of the OPS system is based on a list of research questions identified by the consortium as examples for current needs in drug discovery projects.

2. Milestone

The first milestone of the Open PHACTS project, due after month 1, comprises a list of prioritized research questions. As outlined above, this is the basis of further developments, as it defines also the major resources needed and the respective ontologies.

3. Verification

The milestone is linked to Deliverable D6.1, which has been approved on April 20. This deliverable includes the prioritized research questions developed by the Open PHACTS consortium. The top ranked research question (see below) is already used for defining the major data sources and ontologies and for building up the first lash-up of the OPS system. Besides all EFPIA companies involved in the project, also most of the academic partners contributed to the establishment of the list and the prioritisation process of the 83 questions derived.

Top ranked research question:

Give all oxidoreductase inhibitors with an activity < 100nM in both human and mouse

4. Next Steps

The top ranked research questions form the basis for the development of the first lash-up of the OPS system. They will drive the identification of the main data sources (D6.2), the entity mapping ((D4.1.1), as well as the development of the exemplar services ((D5.1.1, D52.1, D5.3.1). A summary the top ranked research questions will also be made available to the public and use for community engagement events.