

Open PHACTS

Deliverable 6.21

Release of Version 3 of the service application to the community

Prepared by Lee Harland, Anika Robl
Approved by GSK, Janssen, PSMAR, AZ

September 2014
Version 1.0

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: 60 months

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

Open PHACTS	Deliverable: Release of Version 3 of the service application to the community	Deliverable: 6.21	
IMI - 115191	Author: Lee Harland, Anika Robl	Version: 1.0	2 / 4

Definitions

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

- 1 - **GSK** – GlaxoSmithKline – **Coordinator**
- 2 - **UNIVIE** – Universität Wien – **Managing Entity of IMI JU funding**
- 3 - **DTU** – Technical University of Denmark
- 4 - **UHAM** – University of Hamburg, Center for Bioinformatics
- 5 - **BIT** – BioSolveIT GmbH
- 6 - **PSMAR** – Consorci Mar Parc de Salut de Barcelona
- 601 - **FIMIM** – Fundacio Institut Mar d'Investigacions Mediques
- 602 - **UPF** – Universitat Pompeu Fabra
- 7 - **LUMC** – Leiden University Medical Centre
- 8 - **RSC** – Royal Society of Chemistry
- 801 - **RSCWW** – RSC World Wide Ltd
- 9 - **VUA** – Stichting VU-VUMC
- 10 - **CNIO** – Centro Nacional de Investigaciones Oncológicas
- 11 - **UNIMAN** – University of Manchester
- 12 - **UM** – Universiteit Maastricht
- 13 - **ACK** – ACKnowledge
- 14 - **USC** – Universidade de Santiago de Compostela
- 15 - **UBO** – Rheinische Friedrich-Wilhelms-Universität Bonn
- 16 - **AZ** – AstraZeneca AB
- 17 - **Pfizer** – Pfizer Limited
- 18 - **Esteve** – Laboratorios del Dr. Esteve, S.A.
- 19 - **Novartis** – Novartis Pharma AG
- 20 - **ME** – Merck
- 21 - **HLU** – H. Lundbeck A/S
- 22 - **Lilly** – Eli Lilly and Company Limited
- 23 - **NBIC** – Stichting Netherlands Bioinformatics Centre
- 24 - **SIB** – Swiss Institute of Bioinformatics
- 25 - **CD** – ConnectedDiscovery
- 26 - **EMBL-EBI** – European Molecular Biology Laboratory
- 27 - **Janssen** – Janssen Pharmaceutica NV
- 28 - **OGI** – OpenLink Group Ltd
- 29 - **OPF** – The Open PHACTS Foundation
- 30 - **ALM** – Laboratorios Almirall S.A.
- 31 - **SciBite** – SciBite Limited

Open PHACTS	Deliverable: Release of Version 3 of the service application to the community	Deliverable: 6.21	
IMI - 115191	Author: Lee Harland, Anika Robl	Version: 1.0	3 / 4

1 Introduction

Version 3 (internal name v1.4) of the Open PHACTS Discovery Platform was officially released to the community on 26 August 2014 by announcements on our project website, on the website of the Open PHACTS Foundation and via Twitter. Furthermore, our Associated Partners were personally invited by email to try out the new version. We have prepared a full technical and user-focused release documentation on our support portal (<http://support.openphacts.org/support/solutions/articles/4000020797-1-4>).

The Open PHACTS Discovery Platform is now running 24/7 and is used by Academia as well as EFPIA. The new version can be tried out at <https://dev.openphacts.org>.

2 New in the 1.4 API release

2.1 2 new data sets and their corresponding API calls (shown below)

1) DisGeNet target-disease associations

These API calls use URIs inputs that correspond to either diseases or targets (proteins or genes). The disease identifiers correspond to UMLS CUIs, Mesh ids or ConceptWiki and can use several namespaces, e.g. <http://linkedlifedata.com/resource/umls/id/C0004238>, <http://purl.bioontology.org/ontology/MSH/D001281>, or <http://www.conceptwiki.org/concept/index/095cb66f-76ef-41b5-a8ae-c39352e6007e>

2) neXtProt nanopublications for tissue expression (PREVIEW mode)

These API calls use URIs that correspond to either tissues or targets. The tissue identifiers correspond to the Caloha tissue ontology from neXtProt. These identifiers can use either the namespace from the neXtProt database (e.g. <http://www.nextprot.org/db/term/TS-0564>, will be operational next week) or the Caloha ontology (ftp://ftp.nextprot.org/pub/current_release/controlled_vocabularies/caloha.obo#TS-0564, operational now).

The 'Tissues for protein' and 'Proteins for tissue' calls can be filtered by the neXtProt "gold" or "silver" evidence flag.

2.2 New results in Compound Information call

Compound Information: Previously the Compound Information called returned results only when a compound had data in the ConceptWiki, Chemical Registry System, and ChEMBL. This requirement for data to be present in all 3 resources has been relaxed to remove the requirement for ConceptWiki data which will allow data from the Chemical Registry System to be returned (e.g. SMILES) when the compound is not found in other data sources.

Open PHACTS	Deliverable: Release of Version 3 of the service application to the community	Deliverable: 6.21	
IMI - 115191	Author: Lee Harland, Anika Robl	Version: 1.0	4 / 4

2.3 New batch methods for Information calls

Compound Information, Target Information, Disease Information, and [Preview] Tissue Information calls are now available with a "batch" method. Many URIs can be submitted in one query if separated by a '|'.

Diseases for Target: Count	<code>/disease/byTarget/count</code> GET
Diseases for Target: List	<code>/disease/byTarget</code> GET
Targets for Disease: Count	<code>/disease/getTargets/count</code> GET
Targets for Disease: List	<code>/disease/getTargets</code> GET
Associations for Target: Count	<code>/disease/assoc/byTarget/count</code> GET
Associations for Target: List	<code>/disease/assoc/byTarget</code> GET
Associations for Disease: Count	<code>/disease/assoc/byDisease/count</code> GET
Associations for Disease: List	<code>/disease/assoc/byDisease</code> GET
Disease Information	<code>/disease</code> GET
Disease Information: Batch	<code>/disease/batch</code> GET
[PREVIEW] Tissue Information	<code>/tissue</code> GET
[PREVIEW] Tissue Information: Batch	<code>/tissue/batch</code> GET
[PREVIEW] Tissues for Protein: Count	<code>/tissue/byProtein/count</code> GET
[PREVIEW] Tissues for Protein: List	<code>/tissue/byProtein</code> GET
[PREVIEW] Proteins for Tissue: Count	<code>/tissue/getProteins/count</code> GET
[PREVIEW] Proteins for Tissue: List	<code>/tissue/getProteins</code> GET

Further information can be found in the [Milestone 6](#) document (Long term funding implemented with permanent beta developer team Open PHACTS Discovery Platform hosted and running secure access implemented).