Real World Handling of Protein Drugs - Exploration, Evaluation and Education

Fact Sheet

Project Information

RealHOPE
Grant agreement ID: 101007939

Funded under
H2020-EU.3.1.
H2020-EU.3.1.7.

Start date
1 July 2021

End date
30 June 2025

Overall budget
€ 7 098 983,75

EU contribution
€ 3 139 983,75

Coordinated by
LUNDS UNIVERSITET
Sweden

Project description

Learning about real-life handling of protein drugs

Innovative protein drugs, genetically engineered versions of human proteins, have the capacity to cure previously incurable diseases. However, they are sensitive due to their complex structure. For instance, they react to shaky transportation or being left beside a sunny window by patients. The EU-funded RealHOPE project will measure real-life events during drug handling by applying smart tag technologies. It will also conduct focus interviews with personnel in hospital pharmacies, clinics and with patients and caregivers to understand current handling practice and what the desired handling instructions and limitations are. These insights will be used to design in use mimicking stability protocols for protein drugs and ultra scaled-down devices for stability assessment.
Objective

RealHOPE will create an understanding of the real-life handling of protein drugs in hospital pharmacy, clinics and in the hands of patients by applying smart tag technologies. Different parameters will be logged and combined with protein characterisation at different stages, as well as with information from EFPIA partners on their drugs in use. Statistical evaluation of the data will be used to identify patterns in handling that are linked to protein destabilisation occurrence and type of protein degradation. Focus interviews with personnel in hospital pharmacies, clinics and with patients/care givers will be used to understand current handling practice and what the desired handling instructions and limitations are. These insights will be used to design in-use mimicking stability protocols for the protein drugs in the project. Ultra-scaled-down devices for stability assessment will be designed to be used in early phase for efficient development cost effective and safe future protein therapies. Protocols and devices will be validated towards the collected handling data base. Interventions in hospital pharmacies using e.g. compounding robots will be investigated. Techniques to assess e.g. aggregate formation in the final drug preparation situation will be evaluated together with SMEs producing analytical tools and hospital pharmacists. The collected data and interviews will form the base of development of teaching materials directed towards different target groups: hospital pharmacists, nurses and patients/care givers. App developers will be active in this part to design attractive and efficient apps for teaching and collecting therapy performance data.

Fields of science

›››
››››

Programme(s)

Topic(s)

Call for proposal

H2020-JTI-IMI2-2020-20-two-stage

Funding Scheme
## Coordinator

**LUNDS UNIVERSITET**

**Address**
Paradisgatan 5C  
22100 Lund  
Sweden

**Activity type**
Higher or Secondary Education Establishments

**EU contribution**
€ 560 472,50

**Website**
[Contact the organisation](#)

## Participants (23)

### Centre for Process Innovation Limited

**United Kingdom**

**EU contribution**
€ 456 035,25

**Address**
Wilton Centre Wilton  
TS10 4RF Redcar Cleveland

**Activity type**
Research Organisations

**Website**
[Contact the organisation](#)

### RISE RESEARCH INSTITUTES OF SWEDEN AB

**Sweden**

**EU contribution**
€ 618 203,50

**Address**
Brinellgatan 4  
501 15 Boras

**Activity type**
Research Organisations

**Website**
[Contact the organisation](#)

### University of Dundee

**United Kingdom**

**EU contribution**
€ 514 968,75

**Address**
Nethergate  
DD1 4HN Dundee

**Activity type**
Higher or Secondary Education Establishments

**Website**
[Contact the organisation](#)
UNIVERSITY COLLEGE LONDON
United Kingdom
EU contribution
€ 325 348,75
Address
Gower Street
WC1E 6BT London
Website
Contact the organisation

UNIVERSITA DEGLI STUDI DI PADOVA
Italy
EU contribution
€ 272 500
Address
Via 8 Febbraio 2
35122 Padova
Website
Contact the organisation

UPPSALA LANSDTING
Sweden
EU contribution
€ 130 445
Address
Slottsgrand 2A
751 25 Uppsala
Website
Contact the organisation

FUNDACIO PRIVADA CLINIC PER A LA RECERCA BIOMEDICA
Spain
EU contribution
€ 40 000
Address
Carrer Rossello 149-153
08029 Barcelona
Website
Contact the organisation
AZIENDA OSPEDALIERA UNIVERSITARIA INTEGRATA 'ISTITUTI OSPITALIERI DI VERONA

Italy

EU contribution

€ 15,285

Address

Piazzale Aristide Stefani 1
37126 Verona

Activity type

Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

SOCIETA ITALIANA DI FARMACIA CLINICA E TERAPIA

Italy

EU contribution

€ 17,250

Address

Via Carlo Farini 81
20159 Milano

Activity type

Other

Contact the organisation

REUMATIKERFORBUNDET

Sweden

EU contribution

€ 12,500

Address

Halsingegatan 43, 10Tr
113 31 Stockholm

Activity type

Other

Contact the organisation

PROBATION LABS SWEDEN AB

Sweden

EU contribution

€ 41,347.50

Address

Vikbogatan 8
212 32 Malmo

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation
ELSA SCIENCE AB
Sweden
EU contribution
€ 104 500
Address
Vastmannagatan 4
111 24 Stockholm
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

AZIENDA ULSS N3 SERENISSIMA
Italy
EU contribution
€ 16 250
Address
Via Don Tosatto 147
30174 Venezia Mestre
Activity type
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

PLURIMA SPA
Italy
EU contribution
€ 14 877.50
Address
Piazza Santo Stefano 6
20122 Milano
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

AbbVie Inc.
United States
EU contribution
€ 0
Address
<table>
<thead>
<tr>
<th>Organisation</th>
<th>Country</th>
<th>EU Contribution</th>
<th>Address</th>
<th>Activity Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>AstraZeneca AB</td>
<td>Sweden</td>
<td>€ 0</td>
<td>151 85 Södertälje</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>BOEHRINGER INGELHEIM INTERNATIONAL GmbH</td>
<td>Germany</td>
<td>€ 0</td>
<td>Binger Strasse 55216 Ingelheim Am Rhein</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>LONZA AG</td>
<td>Switzerland</td>
<td>€ 0</td>
<td>Muenchensteinerstrasse 38 4002 Basel</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>Merck KGaA</td>
<td>Germany</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisation</td>
<td>Country</td>
<td>EU Contribution</td>
<td>Address</td>
<td>Activity Type</td>
</tr>
<tr>
<td>--------------</td>
<td>---------</td>
<td>-----------------</td>
<td>---------</td>
<td>---------------</td>
</tr>
<tr>
<td>Pfizer Limited</td>
<td>United Kingdom</td>
<td>€ 0</td>
<td>Ramsgate Road, CT13 9NG Sandwich, Kent</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>F. Hoffmann-La Roche Ltd</td>
<td>Switzerland</td>
<td>€ 0</td>
<td>Grenzacherstrasse CH-4070 Basel</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>SANOFI-AVENTIS DEUTSCHLAND GMBH</td>
<td>Germany</td>
<td>€ 0</td>
<td>Industriepark Hoechst 65926 Frankfurt/Main</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
</tbody>
</table>
TEVA PHARMACEUTICAL INDUSTRIES LIMITED

Israel

EU contribution

€ 0

Address

5 Basel St
49131 Petach Tivka

Activity type

Private for-profit entities
(excluding Higher or
Secondary Education
Establishments)

Last update: 12 January 2022
Record number: 236677

Permalink: https://cordis.europa.eu/project/id/101007939

© European Union, 2022