Improving understanding of lung immunity in tuberculosis to establish a diverse, innovative TB vaccine pipeline targeting mucosal immunity

Fact Sheet

Project Information

**TBVAC-HORIZON**
Grant agreement ID: 101080309

**DOI**
10.3030/101080309

**Funded under**
Health

**Total cost**
€ 7 110 650.00

**EU contribution**
€ 6 183 822.00

**Start date**
1 April 2023

**End date**
31 March 2027

**Coordinated by**
STICHTING TUBERCULOSIS VACCINE INITIATIVE
Netherlands

Objective

Tuberculosis (TB) remains one of the most devastating infectious diseases worldwide, killing over 4,000 people every day. Prevention of tuberculosis infection by novel vaccines would provide the most cost-effective approach to achieve the goals of the WHO End TB strategy and the Sustainable Development Goals of the United Nations.

While there are few promising TB vaccine candidates available, innovation by new platforms and strategies is needed to ensure that the most effective and affordable vaccines are developed.
TBVACHORIZON will innovate and diversify the global TB vaccine pipeline by pursuing four objectives:

1. Define the composition, spatial organisation and functioning of protective immune responses in the Mycobacterium tuberculosis-infected lung.
2. Evaluate whether mucosal re-vaccination with BCG and other live attenuated vaccines improves protective efficacy against tuberculosis infection in mice, non-human primates and humans.
3. Identify host immune response profiles and biomarkers of natural and vaccine-induced immune protection in the lung.
4. Support next generation TB vaccine development by standardised head-to-head testing of selected vaccine candidates in animals and the establishment of novel delivery systems, adjuvant formulations and GMP platforms for live attenuated vaccines.

TBVACHORIZON will increase our understanding and develop tools pertaining to immune protection in the lung, the major site of tuberculosis infection. This knowledge will be exploited to develop mucosal strategies for translating towards clinical evaluation and possible implementation. The interwoven activities will consolidate Europe’s leading role in TB vaccine research and innovation, with the ultimate goal of accelerated availability of affordable, accessible and more effective TB vaccines.

Keywords

- Tuberculosis
- Vaccines
- Novel approaches
- Platform technologies
- Immune protection

Programme(s)

- HORIZON.2.1 - Health  
  MAIN PROGRAMME
- HORIZON.2.1.4 - Infectious Diseases, including poverty-related and neglected diseases

Topic(s)

- HORIZON-HLTH-2022-DISEASE-06-03-two-stage - Vaccines 2.0 - developing the next generation of vaccines

Call for proposal
Funding Scheme

HORIZON-RIA -

Coordinator

STICHTING TUBERCULOSIS VACCINE INITIATIVE

Net EU contribution
€ 500 000,00

Address
Runderweg 6
8219 PK Lelystad
Netherlands

Region
Oost-Nederland > Flevoland > Flevoland

Activity type
Other

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 100 000,00

Participants (11)

STICHTING BIOMEDICAL PRIMATE RESEARCH CENTER

Netherlands

Net EU contribution
€ 900 000,00
CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS

Address
Rue michel ange 3
75794 Paris

Region
Ile-de-France > Ile-de-France > Paris

Activity type
Research Organisations

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 916,972,00

OTHER FUNDING

UNIVERSITE PAUL SABATIER TOULOUSE III

Address
Lange kleiweg 161
2288 GJ Rijswijk zh

Region
West-Nederland > Zuid-Holland > Agglomeratie ’s-Gravenhage

Activity type
Research Organisations

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 826,787,50

THIRD-PARTY

UNIVERSITE PAUL SABATIER TOULOUSE III

Address
Rue michel ange 3
75794 Paris

Region
Ile-de-France > Ile-de-France > Paris

Activity type
Research Organisations

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 0,50
**Net EU contribution**

€ 33 018.75

**Address**

Route de Narbonne 118  
31062 Toulouse cedex 9

**Region**

Occitanie > Midi-Pyrénées > Haute-Garonne

**Activity type**

Higher or Secondary Education Establishments

**Links**

[Contact the organisation](#)  [Website](#)  [Participation in EU R&I programmes](#)  [HORIZON collaboration network](#)

**Other funding**

€ 0.00

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**ISTITUTO NAZIONALE PER LE MALATTIE INFETTIVE LAZZARO SPALLANZANI-ISTITUTO DI RICOVERO E CURA A CARATTERE SCIENTIFICO**

Italy

**Net EU contribution**

€ 350 250.00

**Address**

Via Portuense, 292  
00149 Roma

**Region**

Centro (IT) > Lazio > Roma

**Activity type**

Research Organisations

**Links**

[Contact the organisation](#)  [Website](#)  [Participation in EU R&I programmes](#)  [HORIZON collaboration network](#)

**Other funding**

€ 0.00
INSTITUT PASTEUR

France

Net EU contribution

€ 497 500,00

Address

Rue du docteur roux 25-28
75724 Paris

Region

Ile-de-France > Ile-de-France > Paris

Activity type

Research Organisations

Links

Contact the organisation 🔗 Website 🔗 Participation in EU R&I programmes 🔗 HORIZON collaboration network 🔗

Other funding

€ 0,00

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INSTITUT PASTEUR DE LILLE FONDATION

France

Net EU contribution

€ 491 000,00

Address

Rue du professeur calmette 1
59019 Lille

Region

Hauts-de-France > Nord-Pas de Calais > Nord

Activity type

Research Organisations

Links

Contact the organisation 🔗 Website 🔗 Participation in EU R&I programmes 🔗 HORIZON collaboration network 🔗
ACADEMISCH ZIEKENHUIS LEIDEN
Netherlands
Net EU contribution
€ 497 581,25
Address
Albinusdreef 2
2333 ZA Leiden
Region
West-Nederland > Zuid-Holland > Agglomeratie Leiden en Bollenstreek
Activity type
Higher or Secondary Education Establishments
Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network
Other funding
€ 0,00

STATENS SERUM INSTITUT
Denmark
Net EU contribution
€ 500 000,00
Address
Artillerivej 5
2300 Kobenhavn s
Region
Danmark > Hovedstaden > Byen København
Activity type
Research Organisations
Links
8 of 13
Higher or Secondary Education Establishments

Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

Other funding
€ 0,00

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CZ VACCINES S.A.
Spain
Net EU contribution
€ 500 000,00

Address
La relva torneiros
36410 Porrino

Region
Noroeste > Galicia > Pontevedra

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

Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

Other funding
€ 0,00

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UNIVERSITAT BASEL
Switzerland
Net EU contribution
€ 0,00

Address
**Petersplatz 1**
4051 Basel

Region
Schweiz/Suisse/Svizzera > Nordwestschweiz > Basel-Stadt

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation[🔗]  Website[🔗]
Participation in EU R&I programmes[🔗]
HORIZON collaboration network[🔗]

Other funding
€ 0,00

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**VACCINE FORMULATION INSTITUTE(CH)LTD**

Switzerland

Net EU contribution
€ 0,00

Address
Rue du champ-blanchod 4
1228 Plan les ouates

Region
Schweiz/Suisse/Svizzera > Région lémanique > Genève

Activity type
Other

Links
Contact the organisation[🔗]  Participation in EU R&I programmes[🔗]
HORIZON collaboration network[🔗]

Other funding
€ 0,00

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**Department of Health**

United Kingdom

Net EU contribution

10 of 13
Quarry house, quarry hill  
LS2 7UE Leeds  
Region  
Yorkshire and the Humber > West Yorkshire > Leeds  
Activity type  
Research Organisations  
Links  
Contact the organisation  
Website  
Participation in EU R&I programmes  
HORIZON collaboration network  
Other funding  
€ 0,00

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE ROYAL CHARTER  
United Kingdom  
Net EU contribution  
€ 0,00  
Address  
Keppel street  
WC1E 7HT London  
Region  
London > Inner London — West > Camden and City of London  
Activity type  
Higher or Secondary Education Establishments  
Links  
Contact the organisation  
Website  
Participation in EU R&I programmes  
HORIZON collaboration network  
Other funding  
€ 0,00

MEDICINES AND HEALTHCARE PRODUCTS REGULATORY AGENCY
**United Kingdom**

**Net EU contribution**

€ 0,00

**Address**

10 south colonnade, canary wharf
E14 4PU London

**Region**

London > Inner London — East > Tower Hamlets

**Activity type**

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

**Links**

Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

**Other funding**

€ 0,00

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**UNIVERSITY OF LEICESTER**

**United Kingdom**

**Net EU contribution**

€ 0,00

**Address**

University road
LE1 7RH Leicester

**Region**

East Midlands (England) > Leicestershire, Rutland and Northamptonshire > Leicester

**Activity type**

Higher or Secondary Education Establishments

**Links**

Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

**Other funding**

€ 0,00
THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD

United Kingdom

Net EU contribution
€ 0,00

Address
Wellington square university offices
OX1 2JD Oxford

Region
South East (England) > Berkshire, Buckinghamshire and Oxfordshire > Oxfordshire

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 0,00

EC signature date 24 April 2023
Last update: 14 July 2023

Permalink: https://cordis.europa.eu/project/id/101080309

European Union, 2023