VALIDATING AI IN CLASSIFYING CANCER IN REAL-TIME SURGERY

Fact Sheet

Project Information

CLASSICA
Grant agreement ID: 101057321
DOI
10.3030/101057321
EC signature date
19 May 2022
Start date
1 May 2022
End date
30 April 2026

Funded under
Health

Total cost
€ 5 978 718,75
EU contribution
€ 5 978 716,00

Coordinated by
UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND, DUBLIN
Ireland

Project description

AI-assisted cancer analysis during surgery

Tumours and normal surrounding tissues have radically different blood perfusion patterns. Injection of the indocyanine green fluorophore enables the differences in perfusion to be captured on video. The digital analysis identifies cancer regions by tracking and comparing the perfusion pictures within the initial seconds after dye administration in the same endolaparoscopic field of view. The application of AI-assisted analysis in real time enables immediate individualised surgical decisions. The EU-funded CLASSICA project will develop the existing AI-solution research prototype into an operating room-standard tool to validate performance, reliability, and acceptance inside five leading European cancer centres. The validation will
address biopsy and tumour identification, optimisation of large rectal polyps resection, and other challenging areas of surgery.

**Fields of science**

- medical and health sciences > clinical medicine > surgery
- natural sciences > computer and information sciences > artificial intelligence > computer vision
- medical and health sciences > clinical medicine > oncology
- natural sciences > computer and information sciences > artificial intelligence > machine learning

**Keywords**

- Dynamic fluorescence video analysis
- artificial intelligence
- real-time AI surgical support

**Programme(s)**

- HORIZON.2.1 - Health MAIN PROGRAMME
- HORIZON.2.1.5 - Tools, Technologies and Digital Solutions for Health and Care, including personalised medicine

**Topic(s)**

- HORIZON-HLTH-2021-DISEASE-04-04 - Clinical validation of artificial intelligence (AI) solutions for treatment and care

**Call for proposal**

- HORIZON-HLTH-2021-DISEASE-04

See other projects for this call

**Funding Scheme**

- HORIZON-RIA - HORIZON Research and Innovation Actions
Coordinator

UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND, DUBLIN
Net EU contribution
€ 1 730 882,00
Address
Belfield
4 Dublin
Ireland
Region
Ireland > Eastern and Midland > Dublin
Activity type
Higher or Secondary Education Establishments
Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

Other funding
€ 1,75

Participants (10)

INSTITUT DE RECHERCHE CONTRE LES CANCERS DE L'APPAREIL DIGESTIF
France
Net EU contribution
€ 170 000,00
Address
Place de l'hôpital 1
67091 Strasbourg cedex
Region
Grand Est > Alsace > Bas-Rhin
Activity type
Research Organisations
Links
STICHTING E.A.E.S  
Netherlands  
Net EU contribution  
€ 309 375,00  
Address  
Beatrix de rijkweg 8  
5657 EG Eindhoven  
Region  
Zuid-Nederland > Noord-Brabant > Zuidoost-Noord-Brabant  
Activity type  
Other  
Links  
Contact the organisation  
Participation in EU R&I programmes  
HORIZON collaboration network  
Other funding  
€ 0,00

PINTAIL LTD  
Ireland  
Net EU contribution  
€ 400 000,00  
Address  
Springhill avenue 77  
A94 K542 Blackrock  
SME  
Yes  
Region
Ireland > Eastern and Midland > Dublin

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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KOBENHAVNS UNIVERSITET

Denmark
Net EU contribution
€ 513 357,00

Address
Norregade 10
1165 Kobenhavn

Region
Danmark > Hovedstaden > Byen København

Activity type
Higher or Secondary Education Establishments

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

Other funding
€ 0,50

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UNIVERSITA DEGLI STUDI DI TORINO

Italy
Net EU contribution
€ 410 625,00

Address
Via giuseppe verdi 8
10124 Torino

Region
Nord-Ovest > Piemonte > Torino

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

ZIEKENHUIS OOST-LIMBURG AUTONOME VERZORGINGSINSTELLING
Belgium
Net EU contribution
€ 310 000,00

Address
Synaps park 1
3600 Genk

Region
Vlaams Gewest > Prov. Limburg (BE) > Arr. Hasselt

Activity type
Research Organisations

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

Other funding
€ 0,00

ARCTUR RACUNALNISKI INZENIRING DOO
Slovenia
Net EU contribution
€ 1 008 500,00

Address
Industrijska cesta 1a
5000 Nova gorica

SME
Yes

Region
Slovenija > Zahodna Slovenija > Goriška

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

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

Other funding
€ 0,00

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STICHTING VUMC

Netherlands

Net EU contribution
€ 310 000,00

Address
De boelelaan 1117
1081 HV Amsterdam

Region
West-Nederland > Noord-Holland > Groot-Amsterdam

Activity type
Research Organisations

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

Other funding
€ 0,00
THE PENNSYLVANIA STATE UNIVERSITY

United States

Net EU contribution

€ 505 977,00

Address

Technology center building 110
16802 7000 University park pa

Activity type

Higher or Secondary Education Establishments

Links

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

Other funding

€ 0,50

KONVENT DER BARMHERZIGEN BRUDER GRAZ

Austria

Net EU contribution

€ 310 000,00

Address

Marschallgasse 12
8020 Graz

Region

Südösterreich > Steiermark > Graz

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

Last update: 28 July 2022

Permalink: https://cordis.europa.eu/project/id/101057321

European Union, 2023