EyeControl: A Communication Solution for Ventilated ICU Patients and Locked-in Individuals

Fact Sheet

Project Information

Eyecontrol

Grant agreement ID: 961050

DOI
10.3030/961050

Funded under
INDUSTRIAL LEADERSHIP - Innovation In SMEs

Total cost
€ 3 049 512,50

EU contribution
€ 2 134 658,75

Coordinated by
EYEFREE ASSISTING COMMUNICATION LTD
Israel

Start date
1 August 2020

End date
31 July 2022

Closed project

Project description

Wearable eye tracking device for Covid-19 patients

The spread of the deadly Covid-19 pandemic across the globe has put a worrying strain on critical care resources. The spike seen in some countries in the number of patients requiring admission to intensive care units necessitates constant communication between doctors and patients and their families. The EU-funded Eyecontrol project will develop an immediate and efficient assistive technology: the first wearable and screenless assistive communication device that secures easy and safe communication between patients, medical and care staff and families. The device is based on eye-tracking technology driven by artificial intelligence; it enables
communication through eye movements, without requiring calibration or dependence on a screen or computer. The project will develop additional improvements to its technology, to facilitate entry into the medical facility market.

**Objective**

EyeFree Assisting Communication Ltd. developed the EyeControl, the first wearable, screenless assistive communication device. AI-powered eye-tracking technology enables communication between patients, medical staff and family, using only eye movements, without calibration or dependency on a screen or computer. EyeFree is changing reality, empowering autonomy among the Locked-in community by providing a round-the-clock communication solution that is operated independently by the user.

EyeFree is expanding the scope of the recently finalized SME Phase 2 grant with the aim of developing additional improvements to the EyeControl technology, which will expedite medical facility market entry strategy. Short-term demand in this segment is growing; where an unmet need for communication in the ICU already existed, it has been further exasperated by an influx of ventilation caused by the Coronavirus. There is no solution on the market; and, that places the EyeControl at the forefront, as an immediate and effective assistive technology, facilitating easy and safe communication between patients, medical staff, caregivers, and families and leading to better quality patient care. Once this niche market has been consolidated, we will boost the market entry be known as the global communication platform for both ventilated and Locked-in patients, with two main product lines: EyeControl Home and Facility.

**Fields of science**

medical and health sciences › health sciences › infectious diseases › RNA viruses › coronaviruses engineering and technology › medical engineering › wearable medical technology

**Programme(s)**

H2020-EU.2.3. - INDUSTRIAL LEADERSHIP - Innovation in SMEs  
H2020-EU.3. - PRIORITY 'Societal challenges  
H2020-EU.2.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

**Topic(s)**
Call for proposal

H2020-EIC-SMEInst-2018-2020

See other projects for this call

Sub call

H2020-EIC-SMEInst-2018-2020-3

Funding Scheme

SME-2b - SME Instrument (grant only and blended finance)

Coordinator

EYEFREE ASSISTING COMMUNICATION LTD

Net EU contribution

€ 2134 658,75

Address

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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

€ 914 853,75

EC signature date: 16 July 2020
Last update: 18 August 2022
Record number: 230437