Safe and accurate fetal monitoring

Fact Sheet

Project Information

FETAL MONITORING
Grant agreement ID: 719500

Funded under
SOCIAL CHALLENGES - Health, demographic change and well-being

TOTAL COST
€ 4 054 000,00

EU CONTRIBUTION
€ 4 054 000,00

Closed project

Coordinated by
NEMO HEALTHCARE BV
Netherlands

Objective

During gestation and birth, problems are encountered in up to 15% of all births. Most problems are related to fetal hypoxia and preterm birth. It is estimated that every year over 30,000 babies in Europe suffer from birth asphyxia, despite the common use of monitoring. Recent Norwegian research (2013) revealed inadequate fetal monitoring is responsible for 50% of the cases where human error caused birth asphyxia (oxygen deficiency). It can be concluded that current monitoring technology does not
detect vital information on fetal wellbeing, causing unnecessary risks which can eventually lead to fetal mortality. There is thus a clear market need for fetal monitoring technology that is accurate, safe (non-invasive) and easy to use. Nemo Healthcare, a high-tech startup company, is responding to this market need through the development of an innovative electrode patch and hardware/software module that can simultaneously record uterine activity and fetal heart rate. The solution of Nemo is characterized by unique and smart algorithms that can accurately and real-time filter contractions and the fetal heart rate from unprocessed abdominal electrophysiological signals, successfully eliminating noise or interference. The solution will be able to transfer the recorded data wirelessly. The solution will create a breakthrough in the field of fetal monitoring: it will result in better diagnoses, improved quality of care, a reduced number of birth-related problems, increased user friendliness (for medical staff as well as the patient) and lower healthcare cost (through remote monitoring, reduced treatment and avoidance of unnecessary surgery).

**Fields of science**

natural sciences  >  computer and information sciences  >  software

social sciences  >  sociology  >  demography  >  mortality

medical and health sciences  >  clinical medicine  >  surgery

natural sciences  >  mathematics  >  pure mathematics  >  topology

engineering and technology  >  electrical engineering, electronic engineering, information engineering  >  electronic engineering  >  sensors

**Programme(s)**

H2020-EU.3.1. - SOCIETAL CHALLENGES - Health, demographic change and well-being

H2020-EU.2.1.3. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies - Advanced materials

H2020-EU.3.1.3. - Treating and managing disease

**Topic(s)**

PHC-12-2015 - Clinical research for the validation of biomarkers and/or diagnostic medical devices

**Call for proposal**

2 of 4
H2020-SMEInst-2014-2015

See other projects for this call

Sub call

H2020-SMEINST-2-2015

Funding Scheme

SME-2 - SME instrument phase 2

Coordinator

NEMO HEALTHCARE BV

Net EU contribution

€ 4 054 000,00

Address

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SME

Yes

Region

Zuid-Nederland > Noord-Brabant > Zuidoost-Noord-Brabant

Links

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

Other funding

€ 0,00

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