

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 945153.



Department of Pediatrics





Press Release

Get strong to fight childhood cancer: Pixformance is a partner of the European research project FORTEe

Under the leadership of the University Medical Center Mainz, sixteen partner institutions from eight European countries, one of them is Pixformance Sports GmbH from Berlin, cooperate to form the joint research project FORTEe. The project with the motto "Get strong to fight childhood cancer" aims to investigate the effectiveness of exercise therapy and digital health technologies during cancer treatment in children and adolescents. As part of the renowned research and innovation program "Horizon 2020" FORTEe has received a funding by the European Union of approximately EUR 6.3 million over a period of 5.5 years.

Cancer is a leading cause of death for children and adolescents in Europe. The common side effects of cancer treatment in children and adolescents include physical inactivity, cancer-related fatigue and an impaired health-related quality of life. Adapted exercise programs for adult cancer patients are an increasingly recognized treatment. However, in childhood cancer patients, there is still a lack of sufficient scientific evidence for the effectiveness of this new form of treatment. FORTEe will research the experiences of children and adolescents aged between four and 21 years in a Europe-wide interventional clinical trial. The project further aims to investigate the effects of a personalized, standardized and age-appropriate exercise intervention on successful cancer treatment in children and adolescents.

Integration of digital technologies into cancer treatment

The exercise program will be supported by digital technologies enhancing the pioneering character of the study for the development of novel care concepts in pediatric and adolescent medicine. With the help of virtual and augmented reality-based devices and a newly developed exercise app, home-based, family-centered telemedical care will be integrated into cancer treatment.

"The international focus and the bundling of expertise on a European level helps to generate a considerable scientific evidence for innovative, personalized medicine and digital health concepts for children and adolescents. The FORTEe project further serves as an important step towards incorporating digital technologies into future patient care", explains Univ.-Prof. Dr. Ulrich Förstermann, Chief Scientific Officer and Dean of the University Medical Center Mainz.

Telemedical supported patient care

Univ.-Prof. Dr. Jörg Faber, the Principal Coordinating Investigator of the FORTEe project, elaborates further: "The FORTEe project represents an essential step towards implementing exercise therapy as an important, novel supportive cancer treatment and possibly increasing patients' health-related quality of life across the European Union and beyond. The research project serves as a model for preventive precision medicine in pediatrics by examining risk-adapted health interventions. Moreover, other disciplines and partners in the health care system will benefit from the project as the telehealth infrastructure may also be used by resident pediatricians or non-university inpatient hospitals."

The scientists involved in the FORTEe project expect that exercise therapy will be established as standard of care in the future and that the knowledge gained by the research project may be transferred to other areas of pediatric and adolescent medicine. FORTEe has received funding from the European Union's Horizon 2020 research and innovation program under the grant agreement No 945153.

Pixformance as a proud partner

Pixformance Sports GmbH from Berlin is one of the 16 partners in the EU project. As a provider of a fully connected therapy concept, the company has already been establishing a digital, innovative technology for particularly safe and effective training for almost ten years. At a digital training station, patients train with a virtual therapist who demonstrates the respective exercises. The station also recognizes the patient and precisely analyzes his movements thanks to patented software. The analysis is used to provide the patient with continuous personalized feedback and correction instructions during their workout. These are displayed in a visual and textual manner on the digital rehab device, ensuring safe exercise execution at all times. Pixformance already supports well-known customers in the field of physiotherapy and rehabilitation, such as Charité Berlin or Medical Park Rehabilitation Clinics. "As a partner of this great project, we are very proud to be able to support such an important issue as cancer treatment for children and fully endorse the project slogan: Let's get strong against childhood cancer!", says Valerie Bures-Bönström, founder of Pixformance Sports GmbH.

Further information:

www.fortee-project.eu www.pixformance.com

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Background information on this press relase:

(1) The University Medical Center of the Johannes Gutenberg University Mainz

The University Medical Center of the Johannes Gutenberg University Mainz is the only medical institution of supra-maximum supply in the German state of Rhineland-Palatinate and an internationally recognized science location. Medical and scientific specialists at 60 clinics, institutes and departments work interdisciplinarily to treat more than 350.000 patients per year. Highly specialized patient care, research and teaching are inseparably intertwined. Around 3.400 medicine and dentistry students as well as more than 600 future medical, commercial and technical professionals are trained in Mainz. With a workforce of approximately 8.500 colleagues the University Medical Center Mainz is one of the largest employers in the region and an important driver of growth and innovation. Find more information online at www.unimedizin-mainz.de.

(2) For further information about Pixformance Sports GmbH please refer to the press kit.

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