

meet in italy
FOR LIFE SCIENCES



MIT4LS SUB2022

MEET IN ITALY FOR LIFE SCIENCES
StartUp Breeding

**MEET IN ITALY FOR
LIFE SCIENCES**

STARTUP BREEDING 2022

**Atlantis Pitching Arena
Milan, 19th October**



Meet in Italy for Life Sciences Startup Breeding 2022

Atlantis Pitching Arena 19th October 2022, Milan- Italy

Meet in Italy for Life Sciences – MIT4LS – the leading international partnering event in the life sciences sector in Italy – shows a special attention for startups, with over 660 startups participating in the networking sessions along seven editions.

MIT4LS is an initiative of the **ALISEI - the National Technological Cluster for Life Sciences** - it involves all main organisations working for the promotion and growth of the life science sector in Italy. At international level, it is supported by **Enterprise Europe Network - EEN** (EEN promotes the internationalisation of European SMEs), that supports the event since its first edition, with several of its 600 members.

Since 2016, specific initiatives to train and support international startups and business ideas, have become a key component of MIT4LS. In the last seven editions, more than 330 applications have been collected, 110 startups attended the training and final sessions, more than 140 investors and corporate representatives have been involved in the final pitch presentations event.

Within the framework of 2022 edition activities, **MIT4LS StartUpBreeding - MIT4LS SUB2022** is the initiative dedicated to startups and business proposals.

The goal is to provide them with the expertise, tools and connections to boost and fully exploit their business potential, thanks to the support of a wide network of startup mentors, coaches, experts and several investors.

At the end of the training, the selected finalists will pitch their proposals at the **Atlantis Pitching Arena 2022** in front of potential corporate partners and international investors, on the **19th of October 2022 in Milan, at Le Village by Crédit Agricole.**

A jury of experts will assign the title of MIT4LS2022 most innovative startup award and the several special awards, offered by the **SUB2022 partners.**

Investors and corporates are invited to participate in the Atlantis Pitching Arena 2022 on the 19th of October and dive into its life science innovation showcase, exploring unique opportunities of investments and joining the several investment funds and life science organisations already supporting MIT4LS SUB2022.

Atlantis Pitching Arena is a free, hybrid event, the pitch presentations will be broadcasted in streaming.

Connection details will be shared with registered participants only few days before the event.

Registration form here: <https://forms.gle/NKxXFvVxopfmWFne9>

For information, please contact: f.mazzini@scienzedellavita.it.



MIT4LS SUB2022 Awards Partners



MIT4LS SUB2022 Supporters Network





Atlantis Pitching Arena 2022 finalists overview



Alma THERAPEUTICS

Next-generation oral
biologics delivery
platform

By 2026, biologics will account for more than half the 100 top selling medicines in the world. However, they are administered almost exclusively by infusions or injections. Alma Therapeutics is developing a next-generation oral biologics delivery platform which will disrupt the way complex and biologic medicines are administered and transform patient care.

[Discover more](#)



FamilyHelp.AI

Digital care solution
for caregivers

It is an AI-powered digital care solution with dashboards and a set of tools and services that helps families organize in-home caregiving quickly and easily, allowing them to focus on their greatest priority: providing the best possible care to their loved ones. FamilyHelp.ai is based on the "Circle Care" methodology for caregivers' welfare.

[Discover more](#)



FIDELIO

Screening program for
iron deficiency and
anemia

1 in 3 people suffers from anaemia and iron deficiency. Catching the problem on time is crucial for treating it well and immediately, avoiding a cascade of health problems and an increase in otherwise preventable direct costs as a result of complications. Fidelio Medical develops new sensor-based point of care and digital diagnostic solutions.

[Discover more](#)



Hero Health Monitoring

Vital signs and
emotions contactless
detection

It is an innovative framework based on AI (computer vision and machine learning), that allows to detect vital signs (pressure, respiratory rate, heart rate, oximetry) and emotions through video acquisition in a contactless and continuous way only using a video camera.

[Discover more](#)



IMoBra

Innovative modular
Brace

By Me.DI.Cal, IMoBra is a new concept of orthopedic brace with a unique design and a specially conceived mechanism, that can be adapted to any size of wrist and arm. The modular basic components are rings and rods. Thanks to its very high modularity, comfort and ease of installation, IMoBra represents a revolutionary approach to the problem of fracture trauma.

[Discover more](#)



Atlantis Pitching Arena 2022 finalists overview



IMPVID
Repair • Protect • Regenerate

IMPVID
Repair, protect,
regenerate the heart

A bio-artificial patch to be applied to the heart during bypass surgery (CABG) following a heart attack. The patch has three important functions: repairing the infrastructural damage, protecting the heart from the damage caused by reperfusion and/or fibrosis, and regenerating the heart by stimulating the growth of new cells.

[Discover more](#)

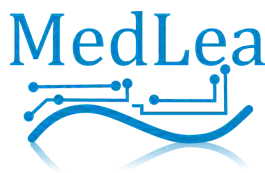
KATAKEM

KATAKEM

The robot chef for
chemists

An OnePot Katakem's robotic chemical reactor:
– in R&D it makes experiments 100% reproducible;
– between R&D and production it creates recipes volume-independent;
– in production the reactor can be reconverted to a different production in a day.

[Discover more](#)



MedLea

Predictive cardio-
respiratory
physiopathology
digital twin

Digital platform bringing the diagnosis and prognosis of cardiorespiratory disorders to the next level of personalized medicine. Based on the digital twin approach, the platform fulfills the demand for quantitative information about the subject in physio-pathological conditions and in response to therapies.

[Discover more](#)



P.I.S.A. Biotech

Antibody gene
therapy against post-
translationally
modified targets

Anti-post-translational modification (PTM) intracellular antibodies as a new class of drugs to be delivered by gene therapy. PTMs are involved in a number of pathologies: P.I.S.A. current focus is on developing antibodies directed against neurodegenerative diseases (in particular Alzheimer's disease).

[Discover more](#)



PhiCube by R4R

Motion, cognition,
emotion: the cubic
rehabilitation
dimensions

Hardware and software solutions for the promotion of neuromotor recovery, supporting home-based out-of-the-hospital neurorehabilitation therapy. It is a friendly plug&play robotic device for bilateral upper-limb rehabilitation which facilitates personalized training in telerehabilitation settings with the support of engaging software interactive applications.

[Discover more](#)

Atlantis Pitching Arena 2022 finalists overview

POLHYRNATECH

POLHYRNATECH

**Polymer hybrid
nanocarriers for RNA
therapy**

Customizable polymer hybrid nanocarriers and kits for RNA therapy, provided with higher efficiency and stability and produced by easier manufacturing processes than competing delivery systems. These nanocarriers can be surface functionalized with specific molecules for targeted delivery and they constitute a versatile platform which can be used for a wide variety of applications.

[Discover more](#)

RECORNEA
securing your vision

Recornea

Securing your vision

A med-tech company developing therapeutic solutions for treating eye diseases. Its first product is GROSSO® Implant, a nitinol corneal implant restoring the physiological curvature of the cornea in people with keratoconus in a single, simple and minimally-invasive surgical procedure and with predictable visual outcomes, pain point of current solutions.

[Discover more](#)

u-care
medical

U-Care Medical

**Saving life
transforming kidney
care through medical
grade AI technology**

The first digital platform for data-driven and personalized management of kidney health within the Intensive Care. Its proprietary AI-power clinical decision support platform will empower clinicians to make personalized and faster decisions, facilitate proactive kidney care & saves lives. The first product is AKIRA for the prediction of moderate and severe Acute Kidney Injury (AKI).

[Discover more](#)

VCD
MEDICAL

VCD Medical

Vein closure device

Novel minimally invasive device for the treatment of varicose veins. The company's goal is to provide a simple and easy-to-use device to physicians, for the selective closure of superficial veins through percutaneous access under ultrasound guidance. VCD Medical device can be used as a standalone or combined with other therapies.

[Discover more](#)

VoiceMed

VoiceMed

**Monitor respiratory
health using your
voice**

New generation of medical-grade fully digital screening exploiting vocal biomarkers in respiratory diseases. The core tech involves voice analysis and deep learning. VoiceMed is developing a smartphone app for people with asthma (300 M people with asthma in the world), for improving their breathing control through personalized programs.

[Discover more](#)

Atlantis Pitching Arena 2022 finalists deepening



Alma THERAPEUTICS

Next-generation oral biologics delivery platform

BASED IN: Kfar Saba - Israel
INCORPORATION YEAR: 2017
STAGE OF DEVELOPMENT: preclinical trials in large animals in progress
IP: 4 patents granted, others in process
FUNDING NEED: 8 M euro round A

By 2026, biologics will account for more than half the 100 top selling medicines in the world. However, they are administered almost exclusively by infusions or injections. These are costly, painful, inconvenient, and affect patient adherence to treatment, compliance, and quality of life. Alma Therapeutics is developing a next-generation oral biologics delivery platform which will disrupt the way complex and biologic medicines are administered and transform patient care.

Context

In recent years, treatment with therapeutic proteins has grown dramatically and proves a therapeutic breakthrough for millions of patients around the world in a variety of indications such as: inflammatory diseases, autoimmune diseases, diabetes, cancer and more. Leading drugs include monoclonal antibodies for the treatment of inflammatory autoimmune diseases, GLP1 analogues for the treatment of diabetes, growth hormones and others. However, currently the biologic medicines are administered almost exclusively by infusions or injections. These are costly, painful, inconvenient, and affect patient adherence to treatment, compliance, and quality of life. The development of an alternative method of administering therapeutic proteins is a vital need and oral delivery is considered the "Holy Grail" in the field of drug delivery.

Value Proposition

Alma Therapeutics is developing a novel oral delivery platform for delivery of complex macromolecules such as proteins, peptides, antibodies, and oligonucleotides, using a highly efficient and versatile approach, microneedles loaded on a flexible patch and encapsulated into a smart capsule that can be swallowed orally. The capsule is directed to be opened at the upper intestinal where the patch is released and deployed. Following the exposure to the intestinal fluids, an internal chemical "motor" is activated providing the force for patch attachment and microneedles penetration through the intestinal wall, where the drug is released from the biodegradable microneedles directly into the circulation, bypassing the GI barriers for oral delivery of biologics. Following drug release the patch deflates and it is de-attached from the intestine wall and discarded with the GI tract liquids. The platform is expected to revolutionize the field, increase compliance, prevent unnecessary complications, and significantly improve patients' quality of life.

Market Overview

The global market for oral biologics is projected to grow from \$3.1B in 2019 to \$23.6B by 2030 (The business research company oral biologics and biosimilars global market report). Alma's first two pipeline candidates are oral versions of a peptide and a monoclonal antibody, addressing >\$15 billion and >\$40 billion markets respectively.

The Team



Oral drug delivery

Drug-device combination

Biologics

Microneedles

Pharma



<https://www.almatherapeutics.com/about>

Atlantis Pitching Arena 2022 finalists deepening



FamilyHelp.AI

Digital care solution for caregivers

BASED IN: Fidenza - Italy
INCORPORATION YEAR: 2021
STAGE OF DEVELOPMENT: prototype ready for validation
IP: EU Trademark; patent strategy under assessment
FUNDING NEED: 400 K euro up to market

FamilyHelp.AI is an AI-powered digitalcare solution and support service with the purpose of help family caregiver to organize in-home caregiving quickly and easily, allowing them to focus on their greatest priority: providing the best possible care to their loved ones without neglecting themselves.

It includes a custom voice assistant working on consumer devices to change the way we interact with seniors.

Context

The most common challenge for family caregivers is to assist parents or older relatives. Caregiving is a marathon activity, and it is important to think of the caregiver's health because the caregiver's mental/physical condition affects the quality of care. Seniors aged 65 and older are a growing percentage of the population, with at least two chronic diseases associated with treatment plans to follow and the need for health status monitoring. It has been reported that 65% of family caregivers had been in an emergency in the management of a parent, 44% are anxious about their health and 55% had difficulties reconciling work, life, and assistance. The results are that seniors are sometimes under-assisted, they forgot to keep track of medication intake, measure blood pressure, glycemia, and other physiological parameters specific to the patient.

Value Proposition

FamilyHelp.ai is a caregiver-oriented solution with online consulting services that wants to answer to caregivers' needs only by consumer devices like mobile devices and smart speakers, using technology and voice assistants to make the lives of caregivers simpler and reconciling them with work, life, and assistance, enabling taking care of their loved ones, and preventing or delaying hospitalization in nursing facilities. It's also a one-stop place for family members and relatives to receive support and formation by specialists in the "Circle Care" methodology.

FamilyHelp.AI also uses an artificial intelligence-driven app to coordinate and manage needs, care and health in the elderly person or patient's life and identify potential problems before they happen. The senior interacts with a custom voice assistant to keep track of measurements, ask about medicines, register notes about health status or simply about its house needs, enhancing their independence and life quality.

Market Overview

In the world 1 Bn of people requires digital care and assistive technologies, and are expected to grow to 2 Bn by 2050. The total addressable market of family caregivers is: 7.3 M in Italy, 11.4 M in France, 8.2 M in Germany, 34.2 M in US.

The Team



Digital care

Assistive technology

Voice assistant

Silver economy



<https://familyhelp.ai/>

Atlantis Pitching Arena 2022 finalists deepening

FIDELIO

BASED IN: Torino - Italy
INCORPORATION YEAR: 2022
STAGE OF DEVELOPMENT: lab validation completed, industrial development and final validation ongoing
IP: 2 patents pending, 1 IT granted
FUNDING NEED: 2 M euro up to CE mark

Fidelio

Screening program for iron deficiency and anemia

FIDELIO MEDICAL is developing a complete screening and monitoring program, to help women to catch early and properly treat iron deficiency and anemia. One in three women suffers from this problem and over half get a diagnosis too late. Catching the problem on time is crucial for avoiding a cascade of health problems and an increase in otherwise preventable direct costs as a result of complications. Its uniqueness is to ensure easier access to affordable and high-quality tests with online expert consulting and data analytics. Fidelio is addressing the growing market of anemia diagnostics that is currently valued at \$ 4 Bn. It is looking for € 2 M and strategic partners to help achieving the CE mark and complete the first pilot market test.

Context

Fidelio Medical develops digital diagnostic solutions to provide an extensive screening and monitoring program for anaemia and iron deficiency. Iron deficiency anemia is widespread (2 Bn people worldwide) and it is expected to rise. It is common among women, children under 5 years, people with cardiac and renal diseases, seniors. Catching the problem in time is critical to treat it right and immediately and avoid a cascade of health problems. Neglecting iron deficiency anemia leads to cascade health problems up to severe complications, resulting in poor quality of life, hospitalizations, disabilities with a corresponding increase in direct costs for the healthcare system up to \$ 20.000/year/patient. Current point-of-care tests for iron deficiency are focused on partial tests, and provide evidence to be confirmed by laboratory tests; in most cases, extensive consultation with high-quality experts is not undertaken.

Value Proposition

Fidelio is providing millions of women with access to the high-quality, affordable iron deficiency and anemia care they deserve and stopping the progression and severe complications.

The Fidelio platform combines a breakthrough point-of-care testing technology, available at pharmacy, doctor's offices, and at home, along with digital tools and data analytics to provide personalized diagnosis and expert clinical guidance. The core technology (Fidelio Tech) is based on electrochemical sensors, which can be assembled in a modular way to enable multi-marker detection. The modular will allow an extensive, personalized and reliable screening in all cases. The test is combined with a digital platform (Fidelio Digital). The goal of the platform is to provide an algorithm-based guide for healthcare providers and an expert clinical guidance for end-users, especially women at risk of iron deficiency. The Fidelio platform technology and services enable a convenient access to iron deficiency screening and monitoring, and provide a modular and comprehensive tool with indisputable advantages over competitors.

Market Overview

FemTech market, including a broad spectrum of technologies dedicated to improving the women's health and well-being has a global value around € 40 Bn, CAGR about 13.3% by 2025. Point-of-care testing market is estimated to rise by 10-12% every year, with a market value exceeding € 20 Bn, CAGR 7.3% in 2022-2026. Global iron deficiency and anemia diagnostics market exceeds \$ 3 Bn, but is significantly under-represented, and is expected to grow at a CAGR around 7% by 2025.

The Team



Medical devices

Iron deficiency anemia

Digital health

Point of care



<https://www.fideliomed.com>

Atlantis Pitching Arena 2022 finalists deepening



HERO HEALTH MONITORING

BASED IN: Taranto - Roma - Italy
INCORPORATION YEAR: 2016
STAGE OF DEVELOPMENT: close to start clinical trial validation for medical device certification
IP: 1 patent
FUNDING NEED: 600 K euro

Hero Health Monitoring

Vital signs and emotions contactless detection

Hero is a software development company based on artificial intelligence (AI) specialized in digital health. Hero developed an innovative framework based on AI (computer vision and machine learning), Hero Health Monitoring (HHM), that allows to detect vital signs (pressure, respiratory rate, heart rate, oximetry) and emotions through video acquisition in a contactless and continuous way. It does not need a specific acquisition device, only a video camera. The system allows overload reduction for healthcare professionals and it facilitates health status monitoring at home.

Context

There is a growing demand for home healthcare, driven by the aging population (just in Europe over 65 years population is projected to increase by 16 M by 2030, with a 18% rise), healthcare systems sustainability, digital technologies availability, not to mention the recent pandemic. In Italy, there are among 3 M not-self-sufficient persons, and those receiving home care services are just under 140,000, with a considerable stress for hospital facilities, professionals, and home caregivers in monitoring the health status of the patients. Heart and respiratory rate, blood pressure and oxygenation level are key vital parameters usually monitored in a considerable number of patients categories and several fragile people. Currently, those parameters are acquired by different devices, often at specific times, not simultaneously, requiring time from healthcare professionals to monitor and record the data.

Value Proposition

Hero developed Hero Health Monitoring (HHM) to respond to the need to expedite care and to reduce overload for healthcare professionals and caregivers, and facilitate access to home care for an increasingly elderly population. HHM is a computer-vision-based solution that allows to detect vital signs (pressure, respiratory rate, heart rate, oximetry) and emotions (6 basic emotions + neutral + pain) through video devices in a contactless and continuous way, providing a more comprehensive analysis of the patient's mental and physical condition. Nowadays, the measurement of vital parameters is done through multiple devices and at specific times, almost all of which are wearable. Compared to other contactless vital signs monitoring solutions, HHM measures many vital parameters and allows emotion detection, a feature that none of its competitors have. The system does not require any specific hardware, only a common video camera.

The system was tested in lab achieving 94% to 99% reliability. A clinical trial will start in Q3 2022 to validate the system to obtain the CE mark as a medical device.

Market Overview

The patient monitoring market is valued as much as \$ 37 Bn in 2021, and is expected to have a CAGR of 9% up to 2027. Target customers are hospitals and nursing homes. Only focusing on the Italian market, there are 1,000 hospital facilities with 212,000 beds and 7372 nursing homes with 290,000 beds.

The solution



Medical devices

Vital signs monitoring

Contactless

AI

Computer vision



<https://www.herovision.it/products/hhm/>

Atlantis Pitching Arena 2022 finalists deepening

IMoBra

by **M3DiCal**
INNOVATIVE DEVICES

BASED IN: Cosenza - Italy
INCORPORATION YEAR: 2019
STAGE OF DEVELOPMENT: prototype ready for validation
IP: 3 patents
FUNDING NEED: 400 K euro up to CE mark

IMoBra by Me.DI.Cal

Innovative modular Brace

Me.DI.Cal (MDC) was born from the synergy between engineering and physiotherapy to solve concrete problems in the field of rehabilitation. MDC develops solutions for postural analysis, rehabilitation exercise support, orthopedic brace. In that regard, IMoBra, Innovative Modular Brace, is a new concept of orthopedic brace which, with a unique design and a specially conceived mechanism, allows it to be adapted to any size of wrist and arm. The modular basic components of the proposed brace are rings and rods, which when assembled will constitute the brace itself. Thanks to its very high modularity, comfort and ease of installation, IMoBra represents a revolutionary approach to the problem of fracture trauma.

Context

Distal radius fractures (DRFs) are one of the most common types of fractures in emergency units (20-25% of all fractures, incidence 100-300 per 100k person-year; 1.2 M cases in Italy per year), with a bimodal distribution with peaks in the adolescent and elderly populations and an increasing incidence over the last years. Common DRF treatment is plaster cast, easy to install but with a number of possible problems (muscle weakness, thrombosis, joint stiffness, inability to return to previous activity levels, dry skin, dermatitis, persistent itching, pressure sores). 3D printed cast are recent innovative solutions but not yet commonly used as they are expensive in respect to plaster cast, have long waiting time for their application and they require CAD-CAM knowledge for data acquisition for 3D cast printing.

Value Proposition

Me.DI.Cal is developing IMoBra, Innovative Modular Brace as a new concept of orthopedic brace. Its unique design and a specially conceived mechanism allow it to be adapted to any size of wrist and arm. The modular basic components of the proposed brace are rings and rods, which when assembled will constitute the brace itself, with no waiting time for its application, no need of CAM-CAD knowledge in respect to 3D printed cast. Moreover, it can be reused after disinfection, being environmentally sustainable, with reduced material waste and overall costs competitive with plaster cast. In that regard, plaster casts generates 1.200 tons of waste with a disposal costs worth approximately € 1.5 M / year. The system can include biometric sensors. Thanks to its very high modularity, comfort and ease of installation, it represents an innovative solution to the problem of fracture trauma. Clinical trial is under definition to get the CE mark.

Market Overview

The global casting and splinting market is forecasted to increase with CAGR of 6.1% from \$ 2.5 Bn in 2019 to reach \$ 4 Bn by 2027, driven by the trend of increasing fractures in the last decade (in particular orthopaedic disorders associated with ageing).

The solution



Medical devices

Fracture treatment

Customizable cast

Reusable cast



<https://medicalinnovative.it/en/en-home/>

Atlantis Pitching Arena 2022 finalists deepening



BASED IN: Torino - Italy
PLANNED INCORPORATION YEAR : 2023
STAGE OF DEVELOPMENT: preclinical on animal models
IP: 2 patents
FUNDING NEED: 3 M euro for preclinical validation, go-to-market strategy and further implementations (155 K euro for de-risking phase)

IMPAVID

Repair, protect, regenerate the heart

IMPAVID is developing a bio-artificial patch to be applied to the heart during bypass surgery (CABG) following a heart attack. The patch has three important functions, repairing the infrastructural damage, protecting the heart from the damage caused by reperfusion and/or fibrosis, and regenerating the heart by stimulating the growth of new cells. The patch is made of bio-artificial material slowly absorbed into the heart, having a unique microstructure that mimics the architecture of the heart and stimulates the cell growth, allowing also a quick and sustained release of cardio-protective and cardio-regenerative agents.

Context

Myocardial infarction (MI) occurs after prolonged ischemia due to coronary artery occlusion. A large number of patients surviving myocardial infarction develops cardiac remodelling and heart failure, chronic conditions such as high blood pressure, high cholesterol, diabetes. In several cases a heart transplant is required. Quality of life for people who survive a heart attack is often poor, needing ongoing treatment and more time off work. Per patient, the annual cost of a heart attack is on average € 50.000 in terms of the treatment required, and the loss of productivity associated with time off work for the patient and their primary caregiver. It has been estimated that the annual cost of treating heart disease in France, Germany, Italy, Spain, Sweden and the UK is more than € 100 Bn.

Value Proposition

IMPAVID is developing a patented bioartificial microfabricated polymeric patch mimicking the anisotropic structure and mechanical properties of the myocardium. The construct is biocompatible and cardio-inductive. As a patch, it repairs the heart being applied in the damaged area of the heart during bypass surgery, working as a 'band-aid', reinforcing the heart's wall. The patch has drug-eluting properties, protecting the heart releasing cardio-protectant molecules that strengthens the delicate heart cells. Moreover, the patch has a unique bio-artificial microstructure mimicking the architecture of the heart, slowly absorbing and stimulating cell growth as the blood flows back into the heart, allowing regeneration of the myocardium environment. Biomimetic capability and drug-eluting features are key competitive advantages with respect to other cardiac patches. The patch will reduce healthcare costs and improve quality of life of patients undergoing coronary artery bypass graft (CABG).

Market Overview

CABG surgeries in Europe are 160 k a year, with an economic impact estimated to worth € 400 M. The global cardiovascular and soft tissue repair patches market size was estimated at \$ 3.8 Bn in 2021 and is expected to expand at a CAGR of 8.4% from 2022 to 2030, with cardiac repair market accounting about 25% of that market.

The Team



Medical devices

Myocardial infarction

Myocardial patch

Drug-eluting patch

Atlantis Pitching Arena 2022 finalists deepening

KATAKEM

KATAKEM

The robot chef for chemists

BASED IN: Catanzaro - Italy
INCORPORATION YEAR: 2019
STAGE OF DEVELOPMENT: prototype
under potential customer validation
IP: 2 patent - 4 brands
FUNDING NEED: € 2 M

Chemists use OnePot - Katakem's robotic chemical reactor - for three reasons:

- in R&D: they make their experiments 100% reproducible by delegating their manual work;
- between R&D and Production: recipes created on OnePot are volume-independent and it takes days instead of years to start producing a new molecule;
- in Production: the reactor can be reconverted to a different production in a day.

Reactor sizes are 1 L, 5 L (both ready), and 100 L (under finalization).

Context

In R&D, reproducibility and repeatability of experiments are issues that slow research down: a research chemist is not able to repeat their own experiment 6 times out of 10 and to reproduce someone else's experiment 9 times out of 10. More than 75% of a research chemist working time is wasted on manual and repetitive tasks. When a new molecule is discovered, scaling its production up from the lab volume to the industrial one takes years and millions of €. Then, when a plant is built to manufacture that molecule, that plant can usually produce just that given molecule. If the plant has to be reconverted to manufacture another product, this process usually takes years (or the plant ends up being abandoned).

Value Proposition

Katakem developed a robotic chemical reactor that automates the non-value-added, prone-to-error tasks now performed by research chemists by hand (weighing, loading, heating, mixing, etc.) to make their experiments 100% reproducible. Through IoT, AI, and Big Data, Katakem automates the chemist's manual tasks to speed up their research and make their chemistry volume-independent, thanks to a patented technology that discretises the volume in a matrix and manipulates each point individually. Scaling-up time can be substantially improved and researchers can have much more time to dedicate to experiments. The reactor can be reconverted to a different production in a day and it works in a closed loop, curbing GHG emissions down to zero. Multiple OnePots can work in parallel allowing manufacturing companies to be more flexible while decreasing their costs.

Market Overview

Markets targets are pharma, cosmetics and nutraceuticals. The R&D market is worth € 30 Bn and the chemical manufacturing plant market is over € 3,000 Bn, completely not covered by flexible, automatic systems for manufacturing.

The Solution



Pharma

Chemical manufacturing

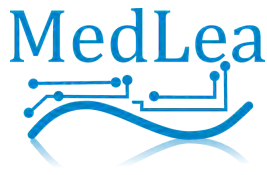
Scale-up

Robotic process
automation



<https://www.katakem.com/>

Atlantis Pitching Arena 2022 finalists deepening



BASED IN: Roma, Italy
PLANNED INCORPORATION YEAR: 2019
STAGE OF DEVELOPMENT: prototype ready for validation
IP: 1 patent
FUNDING NEED: 400 K euro up to CE mark

MedLea

Predictive cardio-respiratory physiopathology digital twin

MedLea is developing a digital platform bringing the diagnosis and prognosis of cardiorespiratory disorders to the next level of personalized medicine. Based on the digital twin approach, the platform fulfills the demand for quantitative information about the subject in physio-pathological conditions and in response to therapies. WeResp is the first product of the MedLea platform, close to release, that delivers the organic three-dimensional diagnosis of the respiratory organ providing regional morphological and ventilatory data, is already in use by research institutions, allowing for the prediction of breathing quality over time from mild to severe conditions.

Context

Respiratory disorders have large incidence, caused by multiple reasons spanning from high levels of pollution, Covid pandemics and bad habits. Oncopathological and widespread degenerative disorders, such as COPD, asthma and fibrosis require early diagnosis, prognosis and personalized treatments. In that regard, there is a clear need from healthcare professionals, CROs and the pharmaceutical industry operating in the cardiorespiratory field to be enabled to assess stable to critical conditions during the patient journey, such as improved diagnostic capabilities, predicting disease progression, responses to therapies (e.g. drug, aerosol delivery and oxygen therapy), in one a word, the complete respiratory picture.

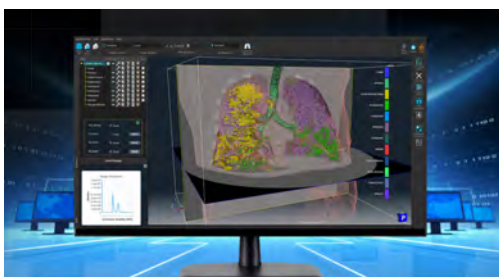
Value Proposition

MedLea is developing a digital, patient-specific, predictive cardiorespiratory physiopathology platform based on its proprietary digital twin technology. A first competitive advantage is to transform all available clinical and radiological data into functional diagnostics, reducing medical response time and enabling predictive simulation of personalized treatments. Secondly, the platform will include four MedLea products, two already in alpha stage, WeResp and DigiScan, and two roadmapped, RespCare and HemoTac, and open to hosting third party solutions for diagnosing other organs. Our applications target diagnostic/prognostic clinical and personalized scenarios, mechanical ventilation optimization in personalized conditions, drug treatment optimization (drug and aerosol delivery), patient data virtualization to predict efficacy (also of interest to CROs to reduce cost in clinical trials) and simulation of respiratory therapies and responses. WeResp is the first product to be released that delivers a 360-degree, three-dimensional morphological and functional content with metrics, delivering detection and classification of oncological and non-oncological lesions, and the complete regional ventilatory state in the airways and in the tissues.

Market Overview

Healthcare/medical simulation market is projected to reach \$ 3.4 B by 2026 from \$ 1.7 Bn in 2021, at a CAGR of 15%. Target users are radiologists, pneumologists, anaesthesiologists, pharma researchers, CRO professionals.

The Solution



Digital health

Cardio-respiratory

Diagnostics

Ventilation

Digital twin



<https://medlea-tech.com/>

Atlantis Pitching Arena 2022 finalists deepening



BASED IN: Pisa - Italy
PLANNED INCORPORATION YEAR: 2023
STAGE OF DEVELOPMENT: close to start preclinical studies
IP: 1 patent
FUNDING NEED: € 3 M first round to complete preclinical trial

P.I.S.A. Biotech

Antibody gene therapy against post-translationally modified targets

P.I.S.A. (Post-translational Intracellular Silencing Antibodies) Biotech develops anti-post-translational modification (PTM) intracellular antibodies as a new class of biopharmaceutical drugs to be delivered by gene therapy. PTMs are involved in several pathologies, P.I.S.A. current focus is developing antibodies directed against neurodegenerative diseases (in particular, Alzheimer's disease). P.I.S.A. patented technology allows the identification and development of intrabodies targeting and neutralizing their antigens in the intracellular environment, with the possibility to address the early phase of neurodegeneration, and a cost reduction vs classical monoclonal antibodies treatment.

Context

There are several pathologies originating from single post-translational modifications (PTMs) of proteins (in particular, intracellular ones) which cannot be treated with current available drug classes. The very same protein can display different functions due to different PTMs, with some PTMs responsible for pathological conditions. Currently, targeting selectively the single PTM variant to prevent the disease is not possible using the available technologies (DNA-based technologies, classical antibody technologies, small chemical drugs), with the consequence that no drug approved so far is directed against a specific PTM of the corresponding target protein.

Value Proposition

P.I.S.A. (Post-translational Intracellular Silencing Antibodies) Biotech (PB) patented technology platform is designed to target PTMs, allowing the development of a new generation of biotherapeutics, intracellular antibodies recognizing conformational variants of intracellular proteins and PTM proteins. Those antibodies are administered as gene therapy products and can discriminate between the PTM target and the unmodified native protein, targeting the precise subcellular compartment where the pathological PTM variant arises. P.I.S.A. Biotech products are based on three pillars:

- 1) the PTM-specific antibody moiety (providing extreme molecular specificity),
- 2) a subcellular localization signal (providing subcellular precision and allowing subcellular pharmacology),
- 3) an effector/actuator moiety fused to the antibody (providing exquisite neutralization activity, e.g., targeted degradation).

As for the first therapeutic target, P.I.S.A. Biotech is presently focused on neurodegeneration, in particular Alzheimer's disease with identified candidates under development. Other selection campaigns are in progress related to other pathologies connected to single PTM.

Market Overview

There is a compelling need for therapies to treat Alzheimer's disease (AD), with a worldwide prevalence of AD dementia expected to triple from current 50 M to 150 M by 2050. The global therapeutic market is expected to grow at a CAGR of 12.8% from 2020 to 2027 to reach a global value of US\$ 5.7 Bn by 2027.

The Team



Pharma

Post-translational
modification

Neurodegenerative
diseases

Intracellular antibodies

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BASED IN: Lecco - Italy
INCORPORATION YEAR: Late 2022
STAGE OF DEVELOPMENT: prototype available; acceptability test ongoing
IP: 1 patent
FUNDING NEED: € 1 M up to CE mark

PhiCube by R4R - Robotics for Rehabilitation

Motion, cognition, emotion: the cubic rehabilitation dimensions

R4R - Robotics for Rehabilitation develops hardware and software solutions for the promotion of neuromotor recovery, supporting home-based out-of-the-hospital neurorehabilitation therapy. R4R first product is PhiCube, a friendly plug&play robotic device for bilateral upper-limb rehabilitation. The device is composed of an actuated central body characterized by a flexible configuration which expands the range of trainable joint movements, allowing a wide range of bilateral gestures. The portability and adaptability offered by PhiCube facilitate personalized training in telerehabilitation settings with the support of engaging software interactive applications.

Context

Neurological diseases represent a worldwide problem, which heavily affects society and its economy (2 babies of 1000 in EU with cerebral palsy, 1 adult of 100 in EU with stroke). In fact, the need for neurorehabilitation treatment is partially unmet due to the lack of professional personnel, expensive and lengthy medical programs and the inaccessibility of the clinics. However, neuromotor rehabilitation plays a fundamental role in the promotion of motor and cognitive recovery, for instance in all post-stroke and cerebral palsy cases. A low-intensity treatment or a limited engagement of the patient can negatively affect the outcome of the therapy. In order to maximize the effectiveness of neurorehabilitation therapy, robotic solutions can support both the patients and the therapists in and out of hospitals. Healthcare reports and forecasts emphasize how telerehabilitation solutions will have an ever-growing impact, to maximize the intensity of treatments during rehabilitation, also in domestic environments.

Value Proposition

R4R - Robotics for Rehabilitation develops hardware and software solutions for the promotion of neuromotor recovery. Its first product is PhiCube, a friendly plug&play robotic device for bilateral upper-limb rehabilitation. It is composed of an actuated central body characterized by a flexible configuration which expands the range of trainable joint movements. A dedicated assist-as-needed control algorithm has been developed to provide the necessary support at different stages of the treatment by adapting to the current state of the patient. The device features a software application that offers easy tuning of the device, a series of interactive applications that render the training of functional movements enjoyable and entertaining and a tool for the production of usage and performance reports. The compactness and intuitiveness of the solution makes PhiCube suitable both for clinics and telerehabilitation applications. Other different solutions are available on the market but either they are expensive and bulky or limited in their functionality. PhiCube patent pending technology promises to fill this market gap, allowing effective training anywhere, anytime. At a later stage, the core concept of PhiCube, currently optimized for upper-limb rehabilitation, will be exploited to develop a robotic device dedicated to lower-limb rehabilitation.

Market Overview

In EU, about 130k children are affected by cerebral palsy, 50% of which are in rehab, and adults with stroke account for 9.6 M, 65% of which in rehab. The global rehabilitation robots market size is projected to reach \$ 2.6 Bn exhibiting a CAGR of 22.1% by 2026.

The Team



Medical devices

Robotic rehabilitation

Telerehabilitation

Bilateral upper-limb

Neuromotor rehabilitation



<https://www.phicube.it/>

Atlantis Pitching Arena 2022 finalists deepening

POLHYRNATECH

POLHYRNATECH

Polymer hybrid nanocarriers for RNA therapy

BASED IN: Torino, Italy
PLANNED INCORPORATION YEAR: 2023
STAGE OF DEVELOPMENT: proof-of-concept
IP: 1 patent
FUNDING NEED: € 2 M to complete preclinical trial (partly secured by grant funds)

RNAs are new frontier drugs able to correct aberrant gene expression or to reprogram cells to treat or prevent diseases. There is a growing demand for safe and efficient nanocarriers for RNA therapy maximizing therapeutic benefits. POLHYRNATECH offers customizable polymer hybrid nanocarriers and kits for their preparation, provided with higher efficiency and stability and produced by easier manufacturing processes than competing delivery systems. POLHYRNATECH nanocarriers can be surface functionalized with specific molecules (e.g., antibodies, peptides or aptamers) for precision RNA delivery to target cells. They constitute a versatile platform, which can be tailored for a wide variety of clinical and research uses.

Context

Drugs based on nucleic acids (e.g. mRNA, microRNA and siRNA) are of great interest as therapeutic agents for a wide range of possible applications. However, therapeutic exploitation of RNA molecules in vivo is hindered by their rapid degradation in contact with biological fluids, poor accumulation in the target tissues and inefficient intracellular release respect to drugs based on small molecules. Currently, ionizable lipid nanoparticles are the mostly used vectors for RNA therapy thanks to their biocompatibility. However, they suffer from poor stability in vivo and in vitro during storage, and an unspecific payload release. Hence, there is the need for efficient and versatile biocompatible nanocarriers for the precision release of nucleic acid drugs to target cells, to address the therapeutic needs of a plethora of still uncured diseases, including age-related disorders, rare genetic diseases and viral and bacterial infections.

Value Proposition

Deriving from research results of an ERC project (BIORECAR, grant agreement 772168), POLHYRNATECH develops customizable polymer hybrid nanocarriers loaded with nucleic acids and customizable kits for their preparation, employing a novel easy, rapid, efficient and versatile method. Nanocarriers can be surface functionalized with specific molecules (e.g., antibodies, peptides or aptamers) for precision delivery to target cells. On demand, they can co-encapsulate other drugs. Lab tests have shown high drug loading efficiency. Manufacturing process is easy, contributing to reduce production costs and times. A key feature is storage stability, as POLHYRNATECH nanocarriers can be delivered in suspension at 4°C for short-term use (up to 1 month) or as freeze-dried powder to be reconstituted before use. POLHYRNATECH nanocarriers are versatile and can be tailored to address various therapeutic needs benefiting from RNA therapies in regenerative medicine, and in the treatment of cancer and bacterial and viral infections. Target customers are researchers from academia and industry, pharmaceutical industries and private and public hospitals.

Market Overview

The global market of RNA based therapeutics is projected to grow from \$ 5 Bn in 2021 to \$ 25 Bn by 2030 while that of nanoparticles in biotechnology, drug development and delivery will raise from \$ 83 Bn in 2020 to \$124 Bn by 2025. Evotek and Precision Nanosystems are the main possible competitors developing hybrid polymeric nanocarriers for RNA therapy.

The Team



Pharma

Polymer hybrid
nanocarriers

RNA therapy

Regenerative medicine

Atlantis Pitching Arena 2022 finalists deepening

RECORNEA

securing your vision

Recornea srl

Securing your vision

BASED IN: Udine - Italy
INCORPORATION YEAR: 2020
STAGE OF DEVELOPMENT: ready for clinical validation
IP: 3 patents, trade mark
FUNDING NEED: € 1.2 M second round (partly already secured)

Recornea is a med-tech company developing therapeutic solutions for treating eye diseases. Its first product is GROSSO® Implant, a nitinol corneal implant restoring the physiological curvature of the cornea in people with keratoconus in a single, simple and minimally-invasive surgical procedure and with predictable visual outcomes, pain point of current solutions. Keratoconus is a disease causing thinning and bulging of the cornea, affecting 218 M+ eyes worldwide (2M+ new eyes worldwide every year).

Context

Keratoconus (KC) is a disorder of the eye resulting in progressive thinning of the cornea affecting usually both eyes with progressive worsening of the vision and leading to poor quality-of-life. Currently patients with keratoconus early-mid stage KC patients undergo crosslinking treatment, that only limits the progression, while more severe conditions require two surgical procedures implanting intra-corneal ring segments to improve vision and stop progression of the disease. More than half of those procedures do not solve KC, potentially leading to expensive and poorly accessible corneal transplant.

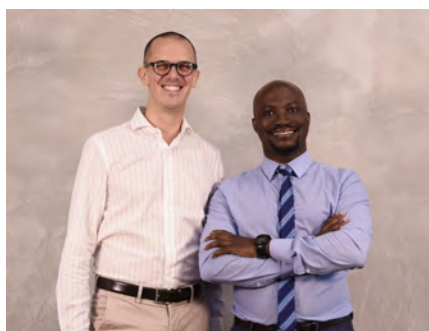
Value Proposition

To treat KC, Recornea developed a ground-breaking solution, as a new corneal implant called the GROSSO® implant, to be implanted in a single, simple and minimally-invasive surgical procedure to treat KC progressive eye disease. The implant is the world's first metal corneal implant to restore the physiological curvature of the cornea with predictable clinical outcomes, overcoming the efficiency issues of the intra-corneal ring segments. The shape memory alloy nitinol used in the GROSSO® Implant regains its original shape after having been deformed during implantation, thus imparting the physiological cornea own curvature and improving vision. The use of nitinol allows a much less invasive implantation procedure, minimising the incision, facilitating correct device placement and the predictability of the procedure in restoring or improving vision. This improved predictability and ease of use broadens the number of surgeons who can successfully and predictably use the device that can be used in all stages of disease due to its thinness (50 µm) as opposed to competitors (200 µm), that cannot be used in the later stages of disease. The device has already been tested on explanted pig eyes and human corneas rejected for corneal transplant.

Market Overview

Recornea targets the 218M+ eyes worldwide affected by KC, a total market size of \$ 1 B, with 2 M new eyes to be treated every year, with a first recurring market of \$ 400 M every year in EU and US alone. Competitors are companies manufacturing intra-corneal ring segments the standard devices used in the treatment of keratoconus. (e.g. AJL Ophthalmic, Mediphacos in Brazil).

The Team



Medical devices

Ophthalmology

Keratoconus

Corneal implants



<https://www.recornea.com/>

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BASED IN: Torino - Italy
INCORPORATION YEAR: 2021
STAGE OF DEVELOPMENT: close to CE mark process completion
IP: 1 patent, ICU patients proprietary database
FUNDING NEED: € 1.5 M second round (partly already secured)

U-Care Medical

Saving lives transforming kidney care through medical-grade AI technology

U-Care Medical vision is to create the first digital platform for data-driven and personalized management of several disease in the intensive care setting (Renal, Cardiovascular, Pulmonary, Gastro-intestinal,...). Its proprietary AI-power clinical decision support platform will empower clinicians to make personalized and faster decisions, facilitating proactive care & saving lives. The first product is AKIRA: a platform module powered by clinical-grade machine learning algorithm for the prediction of moderate and severe Acute Kidney Injury (AKI) episodes in critical patients, allowing early treatment and saving lives.

Context

Acute Kidney Injury (AKI) is a syndrome attacking kidneys causing a rapid decline in their functional capabilities. In a situation of patients critical medical status, the lack of kidney activity worsen its clinical condition, causing a 10-fold increase in mortality rate. AKI impacts more than 50% of patients hospitalized in cardiology and cardiac surgery departments and more than 25% patients within the intensive care unit (ICU). Every year there are 13.3 M AKI cases globally, leading to 1.7 M deaths. AKI leads to an expenditure of € 2.8 Bn for the European healthcare system, caused by dialysis and pharmacological treatments, longer stay in the hospital and kidney transplant procedures. The gradual loss of renal function, eventually leading to AKI, is not clinically observable by monitoring physiological parameters or from clinical examinations results. The current AKI risk-assessment is the "Wait-&-See" strategy, with a late AKI treatment.

Value Proposition

U-Care Medical (UCM) developed a digital-based, clinical-grade AI algorithms suite, based on training from thousands of European and American patients data, learning the temporal patterns and non-linear correlations of clinical data prior to the development of AKI. AKIRA is the first product of the suite, able to predict AKI episodes 18-24 hours early with high sensitivity and specificity. Compared to solutions on the market, such as chemical biomarkers, AKIRA predictions are more accurate and fast, e.g. AKIRA: 92%, Nephrocheck (biomarker): 50%, ral time vs 1 day for biomarker. To achieve these results, a multi-centric and multi-national proprietary dataset of more than 250.000 patients has been aggregated by UCM by partnering with prestigious clinical centers in Europe and US, leading to a total dataset size of highly-curated, bias-free +50.000 patients. This enabled the training and extensive internal and external validation of AKIRA, overcoming the performances of rule-based state-of-the-art approaches or chemical biomarkers, while maintaining explainability and generalizability characteristics. UCM is in the process of getting the CE mark for its first product, AKIRA, as medical device, and signed an agreement with medical device distributor present in EU ICU market.

Market Overview

The global healthcare predictive analytics market size was valued at \$ 23.51 Bn in 2020, and is projected to reach \$ 67.25 Bn by 2030, growing at a CAGR of 24.5% from 2021 to 2030, according to a report by Grand View Research. The target market is Intensive Care Units (ICUs), where there is the highest incidence of AKI (15-25%). The number of beds in the ICUs is globally estimated ~410k units, with a CAGR of 4.9% expected between 2020-27.

The Team



Intensive care unit

Acute kidney injury

Medical devices

Artificial intelligence



<https://u-caremedical.com/>

Atlantis Pitching Arena 2022 finalists deepening



BASED IN: Brescia - Italy
INCORPORATION YEAR: 2021
STAGE OF DEVELOPMENT: close to in-vivo preclinical on animal models
IP: 1 patent
FUNDING NEED: € 1 M up to FDA submission

VCD Medical

Vein closure device

VCD Medical develops a novel minimally invasive device for the treatment of varicose veins. The company's goal is to provide a simple and easy-to-use device to physicians, for the selective closure of superficial veins through percutaneous access under ultrasound guidance. VCD Medical device can be used as a standalone or combined with other therapies in treating varicose veins, overcoming their limitations, minimizing risk of later vein recanalization and maximizing the treatment efficacy, with significant advantages in respect to traditional surgery in terms of hospitalization and recovery times, and with less invasive aesthetic impact if compared to the scars left by traditional surgery or surgical ligation.

Context

Chronic venous insufficiency is one of the most common disorders of the vascular system, affecting approximately 50% of adults. If left untreated it can lead to several complications, including venous ulceration and venous thrombosis, and varicose veins are one of its manifestations. Surgical therapy (e.g. stripping) is highly invasive and has a significant risk of complications, pushing towards less invasive, more effective and with reduction of economic and social costs procedures. Among the alternatives to surgery, ablation with thermal (laser; radiofrequency) or non-thermal techniques (sclerosing foams; mechanochemical ablation; cyanoacrylate glues) have established recently. Despite good treatment results, thermal and non-thermal ablation technologies have shown sub-optimal success rate, especially for medium-big veins, and a risk of complications that can lead to serious harms, like embolization and thrombosis in case of ablative non-thermal therapies.

Value Proposition

Several studies reported that surgical ligation of varicose vein combined with ablative therapies minimizes embolization and thrombosis risks, maximizing therapy efficacy. VCD Medical device performs a percutaneous selective closure of the superficial vein through a needle releasing two resorbable clips under ultrasound guidance that are absorbed within months from the procedure. Through this minimally invasive approach, the procedure can be completed using the device either as a stand alone or in combination with ablation therapies, minimizing risk of later vein recanalization and maximizing treatment efficacy, with significant advantages respect to traditional surgery or surgical ligation in terms of hospitalization, recovery times, aesthetic invasiveness. The use of the device in combination of existing therapies (e.g., glues or sclerosant foam), would not significantly impact the burden of such procedures thanks to its limited cost and simplicity, with a significant impact on procedure efficacy also for medium-big veins and on procedure safety profile. The device can also be used as a stand-alone device, in a more conservative varicose vein disease management approach. The only alternatives to the VCD Medical device are represented by surgical ligation, or by clip appliers used in open surgery.

Market Overview

The global varicose veins treatment market is estimated to account for \$ 1 Bn by the end of 2027, constantly growing at a CAGR of 6.4% worldwide. The addressable market represents 2.3 M procedures/year in EU and US, with a market value of about € 450 M. Multinational companies hold over 80% of the market.

The Solution



Medical devices

Vein closure

Minimally invasive

Varicose veins

US guided percutaneous access



<https://www.vcd-medical.com/>

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BASED IN: Luxembourg
INCORPORATION YEAR: 2020
STAGE OF DEVELOPMENT: first app
beta version in release
IP: 1 patent
FUNDING NEED: € 1 M

VoiceMed

Monitor respiratory health using your voice

VoiceMed is developing a new generation of medical-grade screening tests that are fully digital, exploiting vocal biomarkers in respiratory diseases. The core tech involves voice analysis and deep learning. VoiceMed is developing a smartphone app for people with asthma (300 M people with asthma in the world), for improving their breathing control through a personalized breathing programs and feedback, along with triggers and symptoms diary to support identification of what causes the attacks and how to avoid them. The goal is to decrease unscheduled healthcare visits and hospitalization, and improving health and quality of life of people with asthma, empowering them to know and manage their wellbeing.

Context

There are 300 M people with asthma in the world (30 M in the EU and 5 M in the UK). The current standard defined to manage asthma is to visit the doctor periodically, perform tests such as spirometry or peak expiratory flow and follow autonomously all instructions to reduce the risk of attack (asthma action plan), such as instructions on non pharmacological interventions that improve their symptoms and reduce attacks (breathing exercises). Unfortunately, only 1 out of 6 asthmatic people follow all these instructions leading to crisis or severe outcomes. This impacts health providers with unscheduled healthcare visits and hospitalization from patients with preventable asthma attacks. Just considering the UK landscape, 10 seconds someone has an asthma attack, and 2/3 of asthma deaths could be preventable with a strict adherence to the action plan at all the stages of asthma.

Value Proposition

VoiceMed wants to be a partner for people with asthma, not just an app but a digital coach that supports improving their symptoms with personalized breathing programs and feedback, establish a routine with engaging techniques for managing their asthma, and a digital space to map symptoms and triggers. Two main benefits for the people are: improve the breathing control for increased activities; support in trigger identification to understand what causes the attacks and how to prevent them. The main benefits for the healthcare system are decreased unscheduled healthcare visits and hospitalization. VoiceMed aim is to digitalize the process of interaction between the doctor and the user and to incorporate breathing exercise and respiratory measurement into a healthy daily or weekly routine on our phone. Its solution will add value to the person, while collecting breath data for exploiting the vocal biomarkers and develop a breathing score that will be close to a digital spirometry. It is available as an app for all the mobile devices with internet connection. The tech involves voice analysis for the first solutions and vocal biomarkers analysis and deep learning for the advanced solution.

Market Overview

300M people have asthma in the world (30 M in the EU and 5 M in the UK). The global intelligent asthma monitoring devices market size was valued at \$ 180 M in 2020, and is projected to reach \$ 1.7 Bn by 2030, registering a CAGR of 25% from 2021 to 2030.

The Team



Vocal biomarker

Breathing control

Digital health

Asthma



<https://www.voicemed.io/>



<https://www.linkedin.com/company/voicemed/>



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