



Patient Engagement At Every Step

THE FIRST VIRTUAL ASSISTANT  
FOR PATIENTS IN CLINICAL TRIALS



# Problems with Clinical Trials

## Inefficiencies in Trials



~€350M

Additional costs  
per year



~€6M

Lost revenue opportunity  
per day of delay

Patient recruitment and retention account for **25%**  
of the **total trial costs** which range from **€15M** to **€30M**

# Problems with Clinical Trials

## Why?

**85%**

of Clinical Trials experience delays, with 94% being delayed by over a month.

### Some reasons cited:

**30%**

Patients drop out

**40%**

Therapy non-adherence

**70%**

Clinical trial complexity

# Problems with Clinical Trials

## Low Patient Engagement

**Patients**



- Reduced satisfaction
- Increased burden

**HCPs**



- Increased workload
- Increased complexity

**Sponsors**



- Increased time & costs
- Reduced data quality

# What we do



## Patch AI<sup>®</sup> at a Glance

We aim to **revolutionize** clinical trials data collection and analysis using AI, ML, and big data to engage patients via **empathetic automated chats** and build **ground-breaking insights**

### Welcome to: Co-PRO<sup>™</sup>

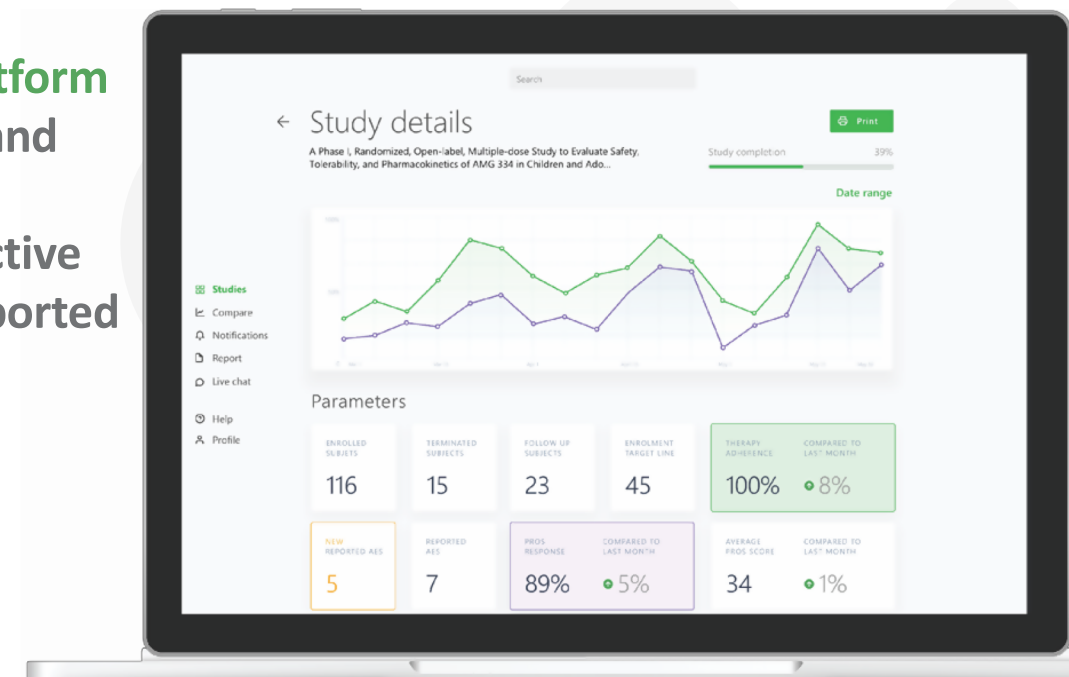
(Conversational Patient Reported Outcomes)



The First Cognitive Platform  
for conversational and  
empathetic data  
collection and predictive  
analysis of Patient-Reported  
Outcomes

### Real Time Clinical Dash

(for Sponsors and Investigators)



# Technology

## Cognitive Platform

### Proprietary ML algorithms for:

- Patient engagement scoring, prediction and enhancement
- Adverse Events & Symptom forecast
- Login with biometric data
- Integration with wearables

IN PROGRESS

### Hosted on



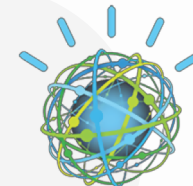
**IBM Cloud**



## Virtual Assistant

- NLP/NLU/NLG
- Personality insights
- Tone analyzer
- Behavioural adjustment

### Powered by



**IBM Watson**

## Regulatory Compliance

- Medical Devices, Class I
- GDPR
- 21 CFR part 11/Annex 11

IN PROGRESS

# Market size

+500%

Adoption of electronic PRO/COA in clinical trials in the last 5 years

50%

Of trials still use paper to collect PRO/COA

+300%

Sponsors & +100% CROs growth in the last 3 years

New Trials  
(Phase II-IV)  
per Year

21k

Total Available Market  
Studies adopting  
PRO/COA

7k

Total non-served  
market

3.4k

Total Addressable Market  
opportunity  
ePRO/eCOA

€1.15Bn

CAGR 15.3%  
2017-2025

Main therapeutic areas: Oncology,  
Chronic Pain, Respiratory  
Main geographical areas: US (40%)  
EU (33%) ROW (27%)

# Business and revenue model



## SETUP FEE

**€20-60k** per study

- ePRO strategy
- Project Management
- Platform and virtual assistant customization

3-5 Months required before study initiation

## LICENCE

**€40** per patient\*month

- ePRO and e-Diary
- Symptoms and AE reporting
- Personalised education
- Up to 2000 monthly interactions per patient

3-5 Months required before study initiation

## MAINTENANCE + SUPPORT

**€2k** per patient\*month

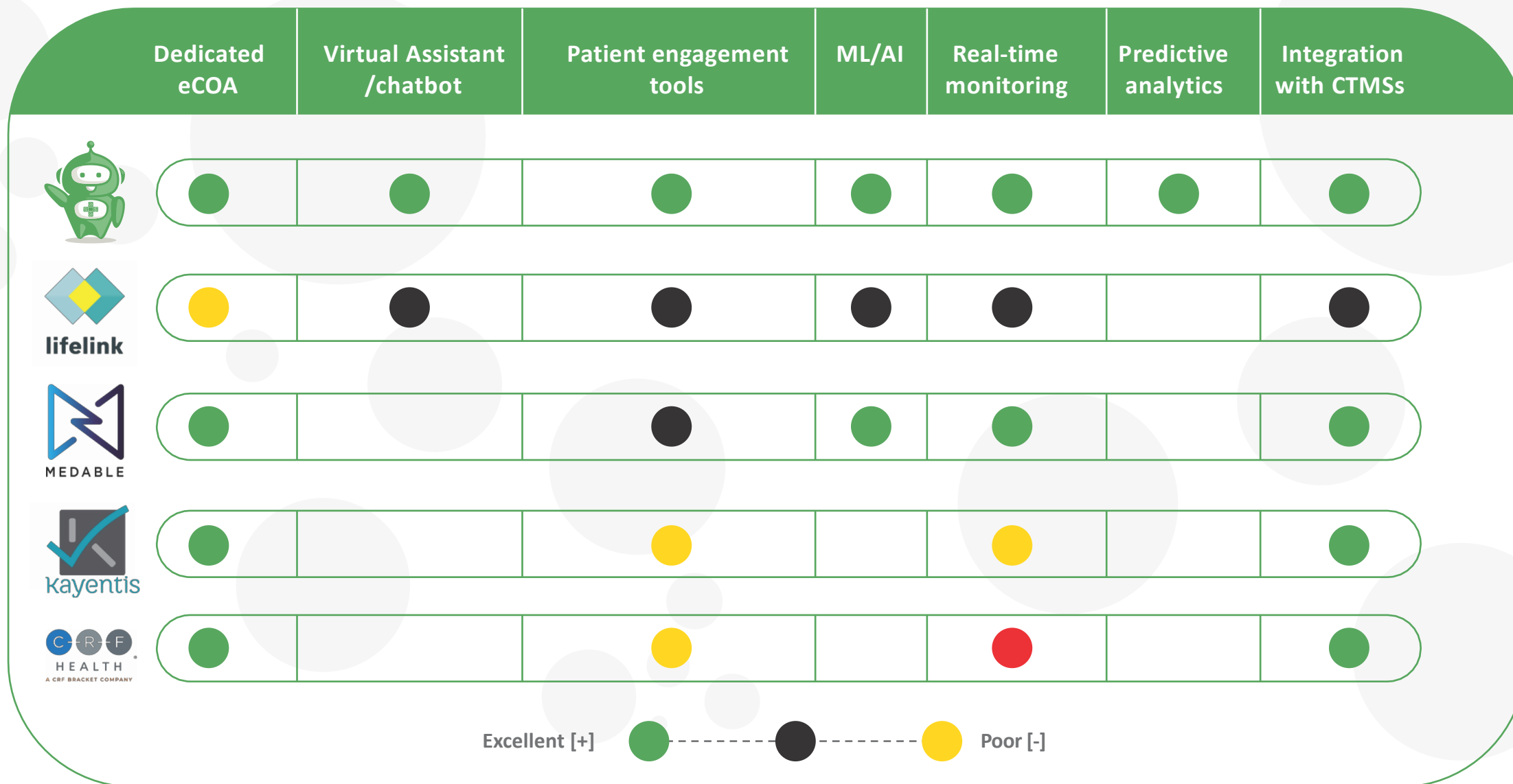
- Maintenance fees
- Site & Sponsor dashboard
- Site & Sponsor support
- Patient helpdesk

3-5 Months required before study initiation

MAIN CUSTOMER  
**Big Pharma**



# Competitive landscape



# Our Team



**Alessandro Monterosso**  
Clinical Research Nurse  
Chief Executive Officer



**Dr. Kumara Palanivel**  
Medical Doctor  
Clinical & Regulatory Lead



**Daniele Farro**  
Nurse Director  
Customer relations



**Milan Milosevic**  
Technical CTO



**Nemanja Milicevic**  
Data Scientist



**Milan Jovanovic**  
UX/UI Designer



**Filip Ivancic**  
Pharmacologist  
Chief Operations Officer



**Prof. Pierluigi Badon**  
Professor in Nursing and Bioethics  
ePRO & patient expert



**Igor Babovic**  
Senior iOS Engineer



**Jovana Tadic**  
Project Manager



**Ognjen Babović**  
Software Engineer



**Maja Kovacevic**  
Web App Developer



# Our Advisors

At Mosaic Software, we have established global collaborations with industry leaders and experts



**Oriana Ciani Ph.D**  
Associate Professor | SDA Bocconi  
**Clinical Trials & Digital Endpoints**



**Sergio Mascetti**  
Associate Professor | Uni Milano  
**System Architecture & Data M.**



**Giuseppe Venezia**  
GVA | Good Venture Advisors  
**Business Modeling & Fundraising**



**Gowtam Atthipalli**  
PwC Strategy &  
**Finance**



**Milan Jerkovic**  
Team Tech Lead  
**Chatbot Arch.**



**Alice Ravizza**  
USE-ME-D  
**Regulatory & Medical Device**

# Timeline

Q2 Incorporation  
Q2 Incubation  
Q3 Idea validation  
Q4 Product development

2018

Q1 Therapeutic area expansion  
Q2 Pilot studies  
Q1 Series A  
Q3 Full product release (NLP)

2020

2019

Q1 Awarded BioUpper – €180K  
Q1 pre-seed round €110K  
Q1 First Prototype - Testing  
Q1 First partnerships  
Q2 Awarded RGAX – €10K  
Q2 Awarded PYSU – €20K  
Q2 Closing €750K seed round  
Q3 CE mark class I  
Q3 MVP release  
Q4 1st client served

2021

Q1 Therapeutic Area Expansion  
Q2 Wearables integration  
Q3 Language Expansion  
Q4 ML protocol enhancement  
Q4 Digital endpoints generation  
Q4 AEs forecasting services



# Patch AI<sup>TM</sup> at a Glance

## Where We Are

PatchAI<sup>TM</sup> has attracted attention from major companies in the Pharmaceutical industry as well as investors and looks set to penetrate the ever growing Clinical Trials market by 2019, 12 months ahead of forecasts.

### TRACTION



PITCH

YOUR

STARTUP

POWERED BY FARVEST

BIG IDEAS COMPETITION

RGAX

crunchbase

### FIRST CLIENT



NOVARTIS

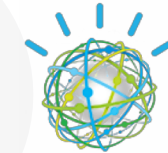
### INCUBATION BY



DIGITAL  
MAGICS

healthware<sup>®</sup>

### PARTNERS



IBM Watson<sup>TM</sup>



F.A.V.O.

Federazione Italiana delle  
Associazioni di Volontariato  
in Oncologia



aimac

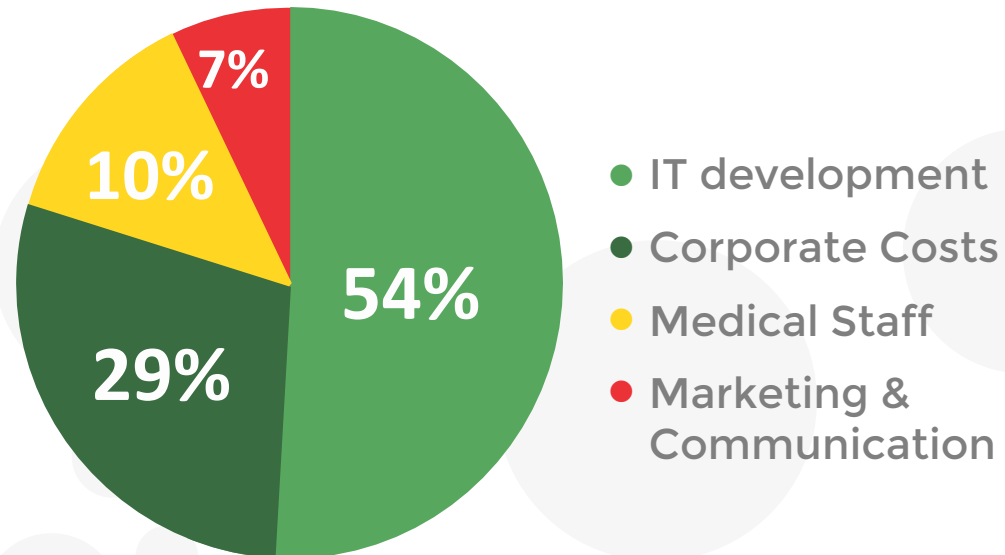
associazione italiana malati  
di cancro, parenti e amici

## What we are looking for

We strive to build an extensive network of partners, industry experts and KOLs.

## FUNDING NEEDS AND USE OF PROCEEDS

**€750,000**



# Press

# WIRED

“The ideal companion for patients taking part in clinical trials”



“Clinical Trials: the new digital revolution is called PatchAI™”

Il Sole **24 ORE**

**ANSA**

**Rai Radio 1**

**Libero** [Quotidiano.it](http://Quotidiano.it)

**CORRIERE DELLA SERA**

**LA STAMPA**

 **sanità**  
informazione

  
**StartupItalia**

  
**Class**  
CNBC

 **EconomyUp**

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Patch<sup>AI</sup>  
Patient Engagement At Every Step

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