



MORPHOGRAM

PRO

POWERED BY NUBENTECH

**A NEW STANDARD FOR
MONITORING AND
MANAGING OBESITY**

The Challenge

The **assessment of body composition** (lean mass and fat mass) is an essential part of the nutritional status evaluation and is currently carried out through medical devices such as bioelectrical impedance analysis (BIA), plicometry, DEXA or 3D scan.

All these **expensive medical devices** require a patient and nutrition professional to be standing in the same room **making it impossible to perform a reliable body composition analysis remotely**.



BIA



Plicometry



DEXA scan



3D scan

The Challenge



3 Billion¹

Overweight and Obese people
(1 out of 3 adults in the developed countries)



Non-scalable business

Limited equipment, fragmented
and local impact only



High Costs

Purchase and maintenance of
hardware tools



Presence

Depends on visits in a clinic, no
remote assessment available

In the last few years, the adoption of telehealth for **remote management** of patients has created new needs and market opportunities for digital health tools.

1) <https://data.worldobesity.org>

The Solution: Morphogram PRO

Morphogram PRO is a professional SaaS (Software as a Service) tool for **nutrition** and **fitness professionals** to perform a complete nutritional status assessment in person or **online**.

Our goal, with **Morphogram PRO**, is to become the market leaders for tools to **evaluate body composition** and **metabolic health status**.



www.morphogram.com

The Solution: Morphogram PRO

No expensive tools are required.

Just a **body weight scale** and a **measuring tape**.

Morphogram is a methodology that our research and development team designed over the last five years based on anthropometry, the science that studies body dimensions and their relationship and its predictive power to assess metabolic health status.

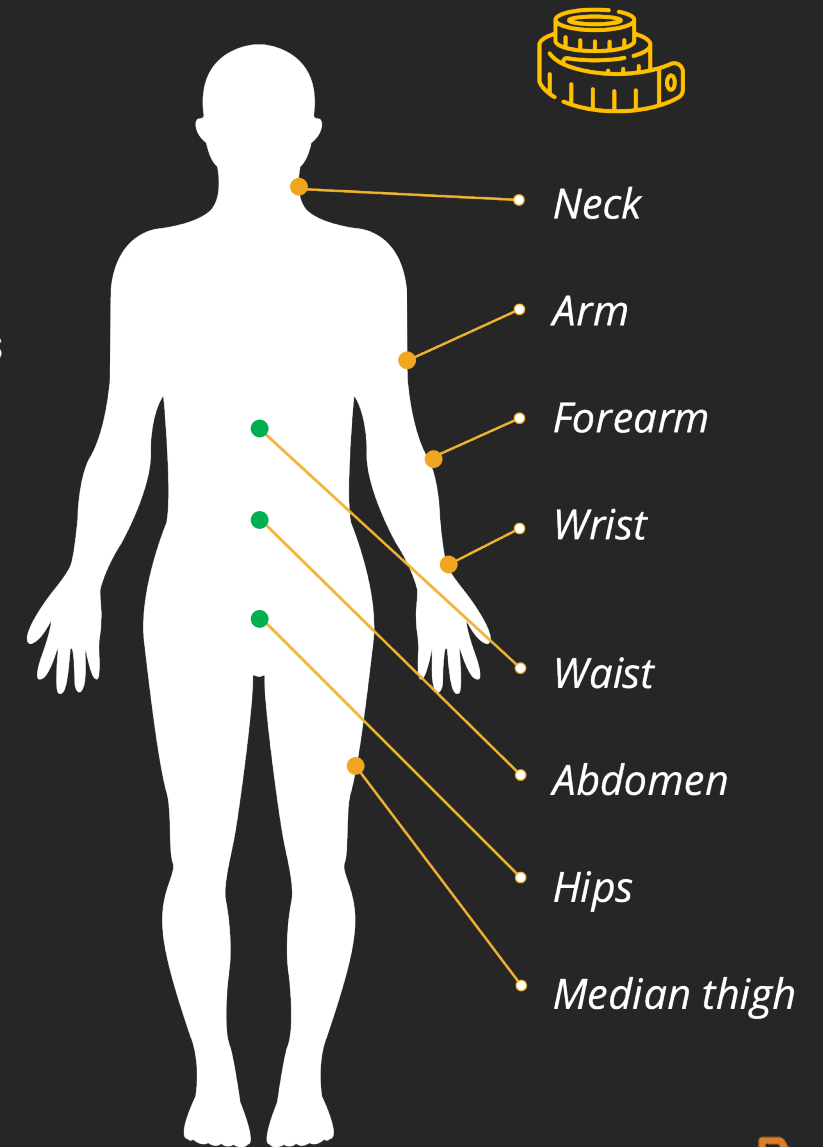


How Does it Work?

To perform the online assessment we ask a **series of questions** on habits and activities carried out during the day and **personal information** such as age, gender, height, weight and specific body circumferences measured at standard points.

We developed two type of analyses:

- **FULL Analysis:** is the evaluation of 8 body circumferences;
- **SMART Analysis:** is the evaluation of 3 body circumferences.



The Outcome

Reliable and professional analyses, **even remotely**, that provide the information below:

Body composition:

- Body Mass Index
- Fat Mass Index
- Fat Free Mass Index
- Percentage Fat mass
- Fat Free Mass
- Abdominal Volume Excess
- Fat distribution
- Body type

Nutritional status:

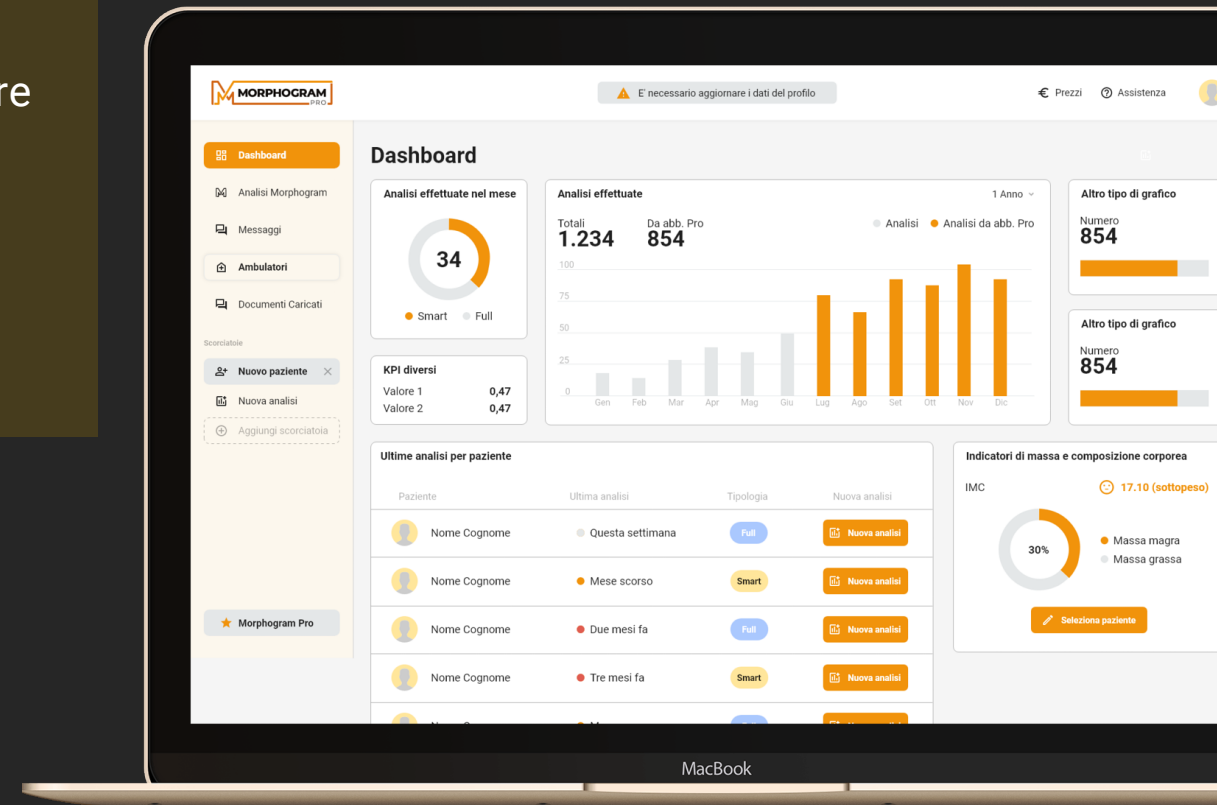
- Basal metabolism
- Daily energy expenditure
- Protein intake

Lifestyle:

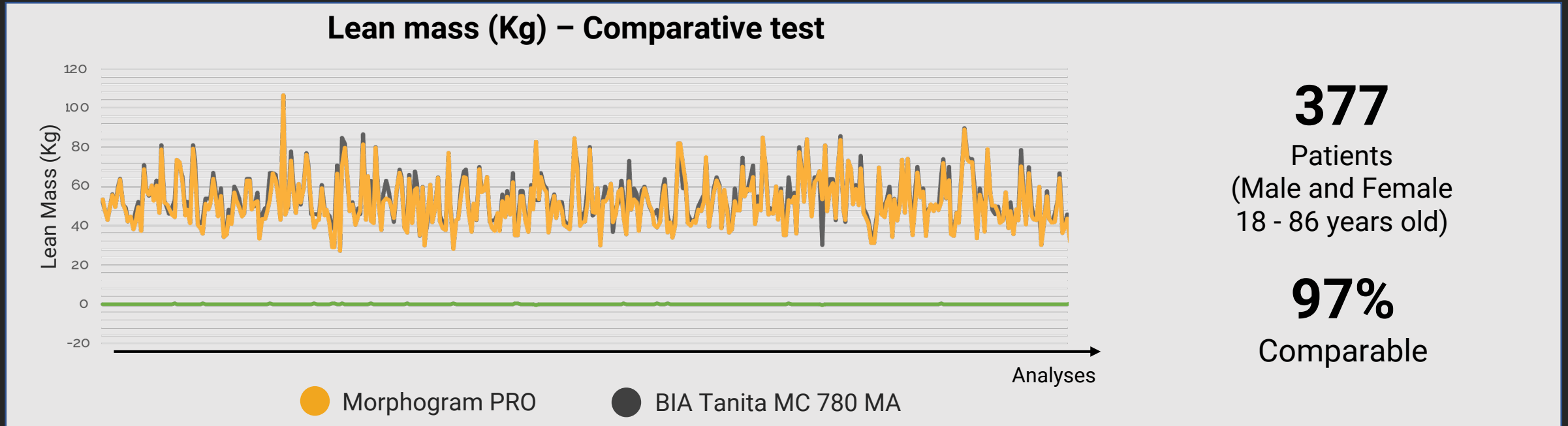
- Physical Activity Level

Health risk factors:

- Metabolic syndrome
- Cardiovascular diseases
- Sleep apnea
- Sarcopenia



Morphogram PRO vs BIA



We compared the results of analyses performed using the Morphogram PRO and one of the best bioelectrical impedance analysis (BIA) on the market (cost of the device: €7500).

The analyses for each patient were performed on the same day with the same conditions.

BIA is the most common professional tool used to evaluate body composition.

Morphogram PRO: Fields of Application

Telemedicine: Remote Patient Monitoring

Research and Clinical Trials: evaluate large populations through the remote analysis, reducing cost and time

Nutrition and Fitness Professionals evaluation tool: scale the business and remotely manage the patients through the online consultations

HomeCare: monitoring tool for self-assessment of the body composition and prevention of cardio-metabolic-inflammatory disease

Health insurance: evaluation tool to engage, reward and create tailored health insurance policies to new and old customers

Education (Nutrition, Fitness & Wellbeing): Education tool in order to create awareness about the importance of a correct nutritional status assessment, healthy nutritional habit and prevention of nutrition related health diseases (Metabolic Syndrome, Obesity, Diabetes, Sleep Apnea)

Global Market

TAM

Global Preventive Healthcare Market ¹

Expected to reach **\$287 Billion** by 2027
CAGR 9.7% 2021-2027

SAM

Remote Patient Monitoring Market ²

Expected to reach **\$117.1 Billion** by 2025
CAGR 38.2% 2020-2025

SOM

Body Composition Analyser Market ³

Expected to reach **\$2.6 Billion** by 2026
CAGR 8.13% 2021-2026

Body Composition Analyser Companies



Buyers of Body Composition Analyser



Physician, Nutrition Professionals and Fitness Professionals



Healthcare Facilities, Fitness Centers, Nutrition Research Centers, Sport/Fitness Companies

6.4M*

buyers in our target countries (Europe, USA, Canada, Australia)

Drivers

- Rising number of geriatric population;
- Rising obesity;
- Government initiatives;
- Increasing diseases due changing lifestyle.

Opportunities

- Growing fitness and weight loss industry;
- Remote management of the patients.

1) <https://www.ihealthcareanalyst.com/government-initiatives-public-awareness-propel-preventive-health-care-technologies-services-market>

2) https://www.reportlinker.com/p05982888/Remote-Patient-Monitoring-Market-by-Product-End-User-Global-Forecast-to.html?utm_source=GNW

3) <https://www.openpr.com/news/1958778/body-composition-analyzers-market-to-witness-high-demand-due>

* From different sources

Technology/Competitor Matrix

	Plicometry	BIA	DEXA	Morphogram PRO	Bodimage
Software/Hardware	Hardware	Hardware	Hardware	Software	Software
Market Share	24%	49%	21%	-	-
Marketing	Retail/Direct	Direct	Direct	Direct/Online	Online
Remote analysis	No	No	No	Yes	Yes
Lifestyle Analysis	No	No	No	Yes	No
Body composition Analysis	Yes	Yes	Yes	Yes	Yes
Nutritional Status Analysis	No	No	No	Yes	No
Hydration Analysis	No	Yes	No	No	No
Risk factors Analysis	No	No	No	Yes	No
Reliability	Mid	Mid	High	High	Low
% User error	High	Low	Low	Low	Mid
Medical device	Yes	Yes	Yes	No	No
Average Price €	350.00	5,000.00	150,000.00	800.00/year	650.00/year

Our Competitive Advantage

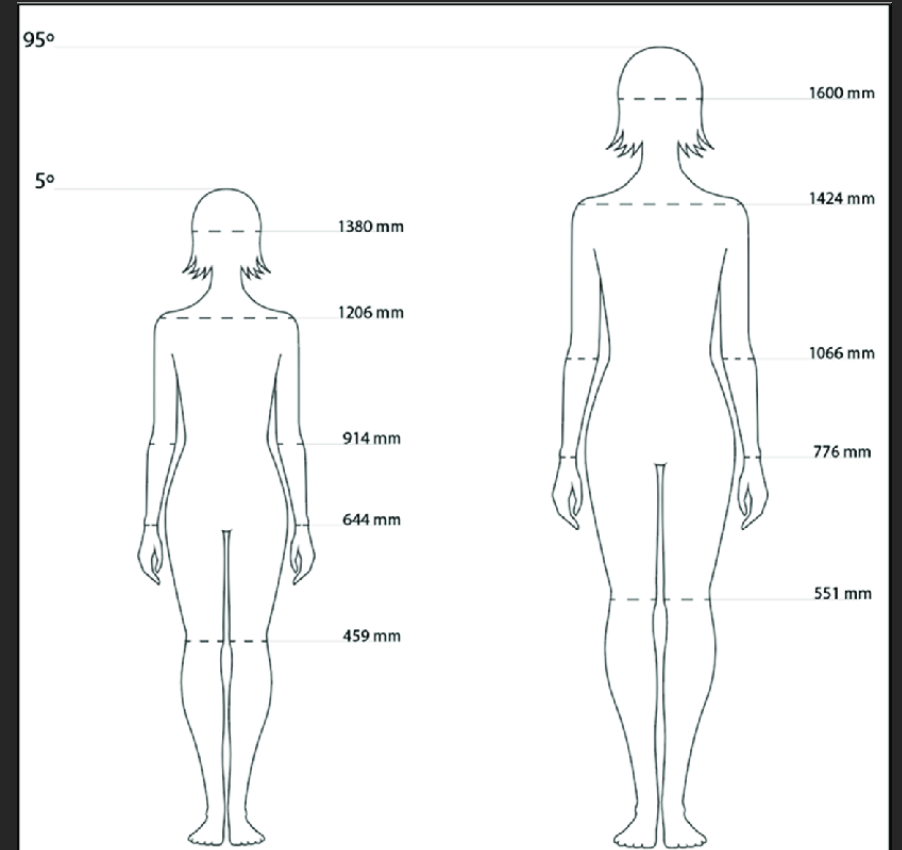
We developed our **proprietary algorithms**.

Unlike the equations present in scientific literature valid **only on specific populations**, our algorithms overcome this limit, obtaining accurate and reproducible results on the whole population starting from 18 years of age.

This is our main competitive advantage.

The Morphogram method is patent pending in the USA.

U.S. Provisional Patent Application Serial No. 63/257,902,
filed October 20, 2021



Go to market strategy

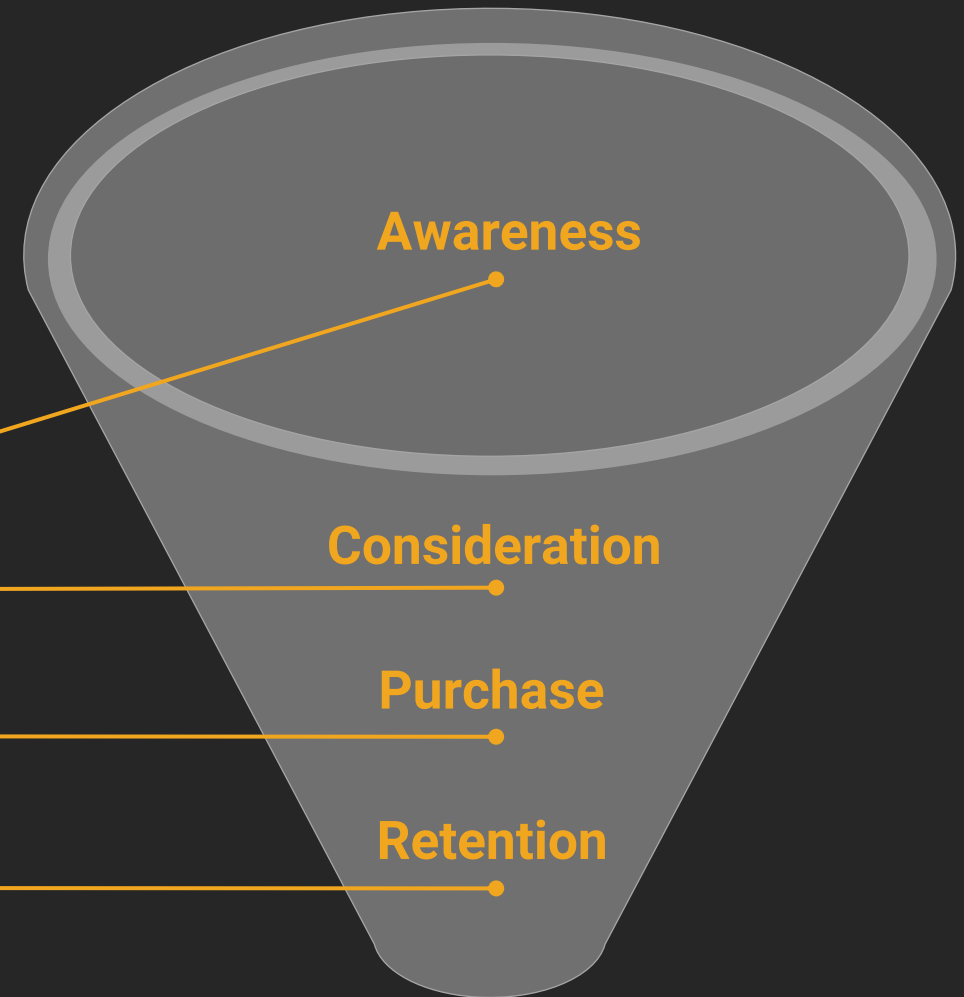
OFFLINE: Trade Shows, conferences, community events, cold calls, university lectures, scientific publications, co-host nutrition and fitness events, exhibitions, PR activities, networking.

ONLINE: digital marketing, SEO, webinars, free online courses, cold emails, community building, influencer marketing, referrals.

Free trial, tutorials, demo requests, product demonstrations, tenders.

Website subscription page, custom offer.

New features, software updates, workshops, professional development courses, perks.



Business Model



B2B - SaaS

Nutrition professionals
Fitness professionals
Healthcare provider
Gym and fitness center
Research center



B2B - API INTEGRATION

Healthcare Facilities
Fitness and Diet App
Research Centers
Pharma companies
Health Insurance Providers

Morphogram PRO Subscription Plans

Easy (15 analyses)	€24/Month
Basic (40 analyses)	€42/Month
Professional (100 analyses)	€98/Month
Platinum (250 analyses)	€170/Month
Business (Custom Service, White Label)	Custom Offer

Morphogram PRO API

API access and integration	Custom Offer
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Integration of our algorithms into services or applications (i.e. **Body Composition Calculator**)

Traction 2021

MARKET	REVENUE*	MRR
ITALY	€14,500.00	€1,380.00

FREE TRIAL	NEW PAYING USERS	CHURN
396	36	7

MARKETING EXPENSES	CAC
€6,200.00	€173

TOTAL ANALYSIS	PATIENTS EVALUATED
14783	7258

*Revenue 2022: €14,800.00 (updated April 2022)

We won the challenge “**Hacking Obesity Europe**” hosted by the pharma company Novo Nordisk (Nov. 2021). We are discussing a pilot with them in order to integrate our API into one of their online services.

The pilot will start in Q2 2022.



What We Learnt

Pilot 2020 15 professionals | Free pilot | 9 become paying users

2021 396 Free Trial Subscribers | 36 New Paying Users | 4 are Healthcare Facilities | Net Promoter Score: +88

Morphogram PRO currently is sold to Italian nutritionist and dietician professionals as a fitness application, **not as a medical device.**

Why they didn't purchase Morphogram PRO yet

They prefer to purchase if classified as a medical device rather than a fitness application

Don't currently consult online but would like to in the future

Never heard about Us before, want more opinion from others

Lack of scientific papers or other activities where Morphogram PRO is involved

Next Steps (within 1yr from the investment)

More clinical validation
and scientific papers

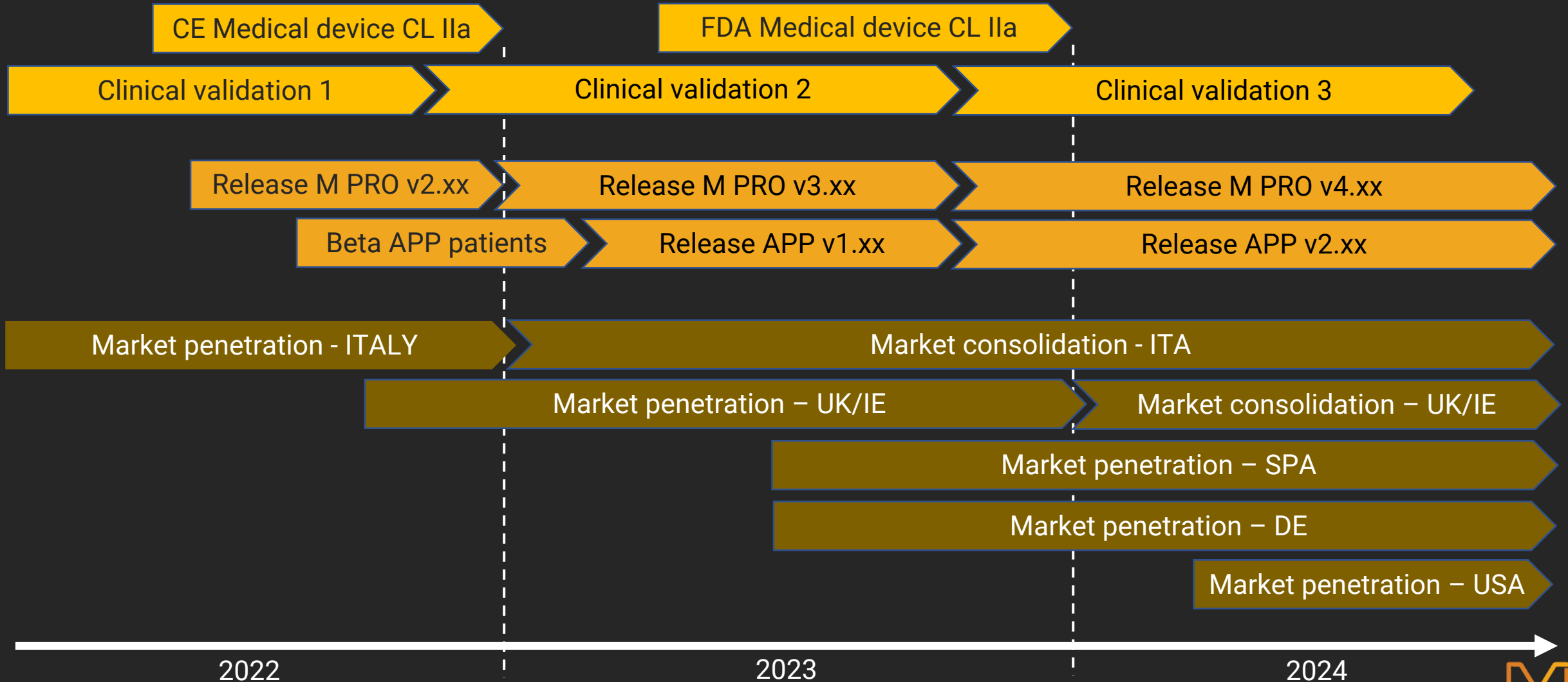
Medical Device Class IIa
certification

Grow our customer base
to 700 paying users

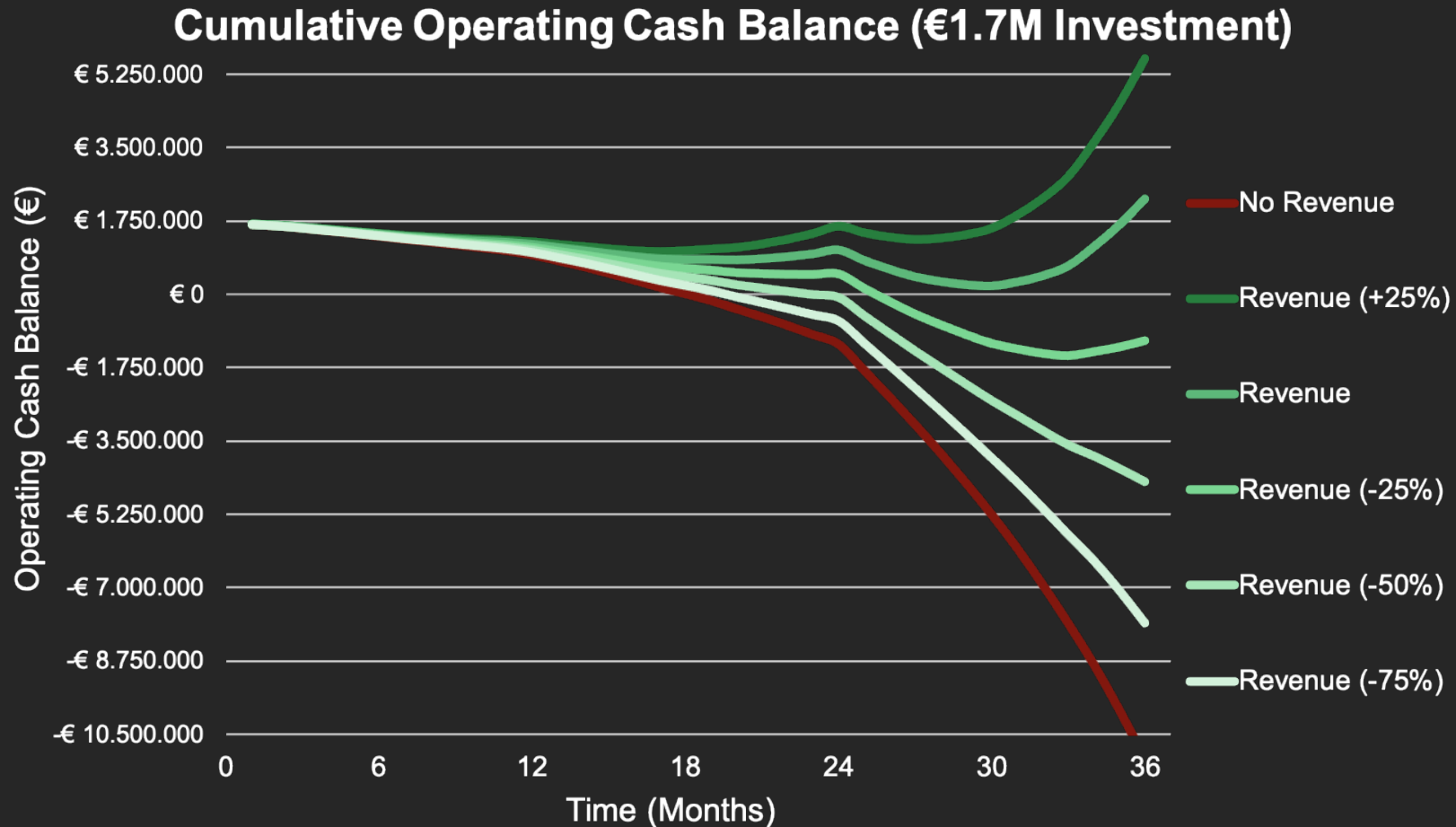
Medical Device Class IIa and more scientific validation will strengthen our market positioning:

- Morphogram PRO price increase;
- better market penetration;
- more competitiveness;
- new market opportunities (Public health, Private Health Institutions, Pharma Industry).

Roadmap 2022 – 2024



Funding needs: €1.7m



18 months runway (worst case scenario with no revenue)

Funding needs: €1.7m

Within 6 months from the investment

Team: from 4 to 11

Certification: CE medical device class IIa

Clinical trial: completed pilot in Italy

New markets: approaching the UK and Irish market

Within 12 months from the investment

Team: from 11 to 13

Clinical trial: Ongoing pilot in USA

New markets: approaching the Spanish market

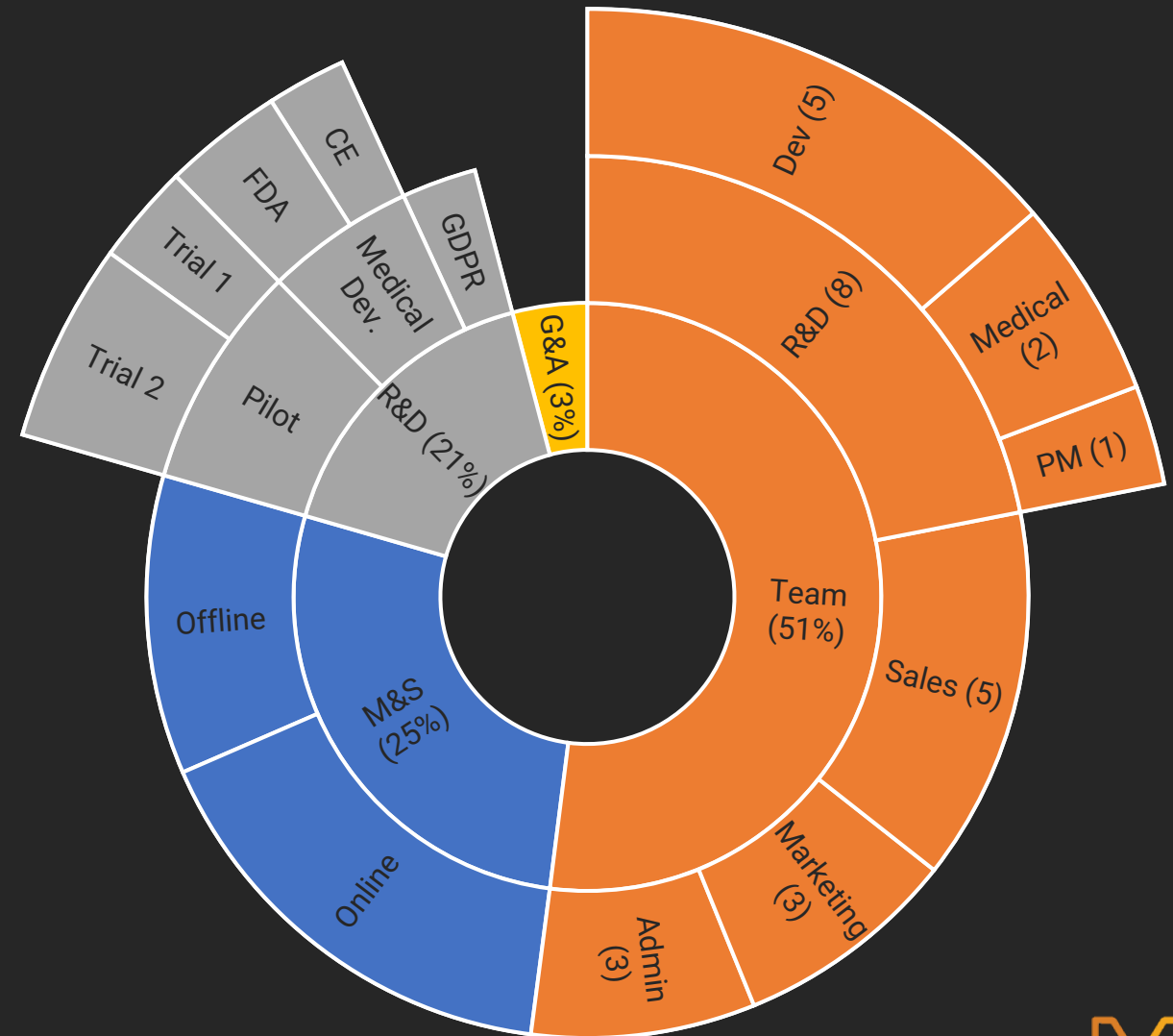
Within 18 months from the investment

Team: from 13 to 19

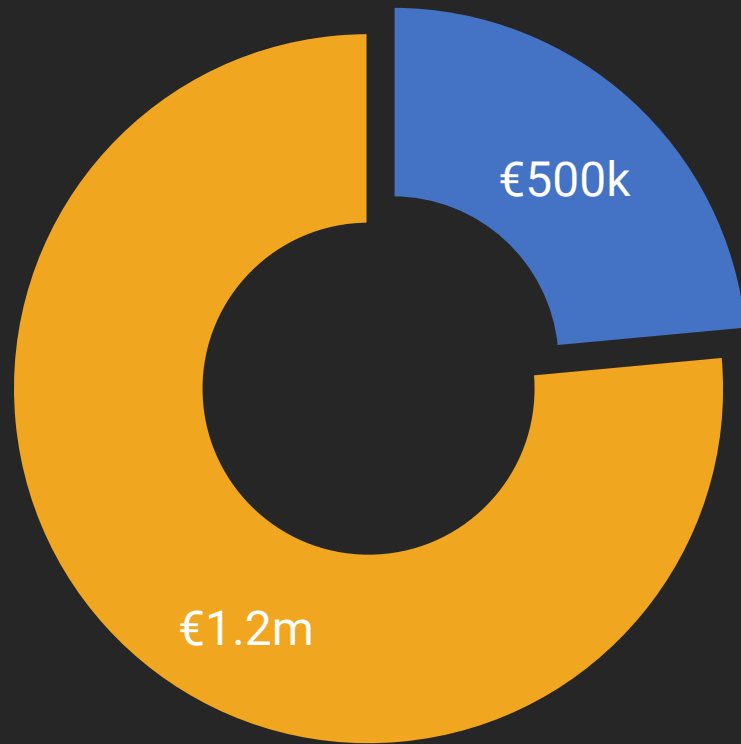
Certification: FDA medical device class IIa

Clinical trial: completed pilot in USA

New markets: approaching the German market



Fundraising: €500k investment



■ Business Angels

Business angels:

- €500k
- Convertible note (preferable)
- To raise ASAP

3 Year Forecast*

	Year 1	Year 2	Year 3
Number of markets	Italy, UK, Ireland	Germany, Spain, Portugal	USA
Total Paying users	697	3,412	15,544
Average Monthly Revenue Per User	€62.50	€87.00	€106.25
Average CAC	€208,00	€228,00	€240,00
Life Time Value	€915,28	€1,453.27	€1,970.76
REVENUE	€ 240,845.00	€ 2,003,775.00	€ 11,228,910.00
Variable COGS	€ 18,106.00	€ 128,157.00	€ 703,293.00
Gross Margin	€ 222,739.00 (88%)	€ 1,875,618.00 (92%)	€ 10,525,617.00 (93%)
OPEX	€ 759,262.00	€ 2,133,770.00	€ 9,908,408.00
EBITDA	-€ 536,523.00	-€ 258,152.00	€ 617,209.00
EBIT	-€ 572,669.00	-€ 339,736.00	€ 198,875.00
Income taxes (24%)			€ 47,730.00
NET PROFITS	-€ 572,669.00	-€ 339,736.00	€ 151,145.00

*Based on the marketing activities and results in 2021

Team



Andrea De Cristofaro CEO
Sales & Marketing Specialist
10 years of experience in Marketing & Sales of nutritional products & services



Paolo De Cristofaro R&D
Endocrinologist & Nutritionist
Specialist in treatment and management of patients with eating disorders



Cristian Currò PM
Biomedical Engineer
10 years of experience in the digital health startups sector and project management



Giuseppe Mallamaci CTO
Full stack developer
Over 20 years of experience in web platform development



Emiliano Tramonte
UX-UI designer advisor



Prof. Nino Carlo Battistini
Scientific Advisor
Professor of Nutrition, scientific advisor of many BIA manufacturer companies

Paolo De Cristofaro is an internationally recognised expert in the field of anthropometry, working in this field for over 30 years. We all working together since 2019.

Scan the QR Code and Try!

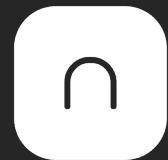
Thank you!

ANDREA DE CRISTOFARO

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providing health through innovation

