NEXALTA® THE DATA SECURITY PLATFORM FOR A HEALTHIER WORLD.

Supporting Goal #3 of the United Nations' Sustainable Development





UNLOCKING THE POWER OF DATA TO ACCELERATE DISEASES' DIAGNOSTICS AND THERAPIES

> Currently just 15% of healthcare facilities globally are suitably equipped to make quick data-driven decisions.

Today, approximately 30% of the world's data volume is being generated by the healthcare industry.

According to recent reports, the US healthcare system alone generates a skyrocketing amount of data that might reach the zettabyte scale or even the yottabyte level within a few years. On a wider scale, the COVID-19 pandemic has shown the critical importance of reliable data exchange between healthcare facilities and countries all over the world.

Now, it's not surprising that the healthcare industry generates such a huge amount of data. Scientists believe that massive quantities of collected data could efficiently help them in making important clinical decisions, ease disease surveillance, and frame policies related to the population's health management.

In healthcare domains, these "big data" refer to all electronic health data, which are so complex and large that they cannot be managed or processed using traditional software or hardware systems. Even if the exchange of data during COVID-19 has accelerated the process of using global data for providing healthcare solutions, currently just about 15% of healthcare facilities globally are suitably equipped to make quick data-driven decisions.

Key barriers to digital transformation of healthcare are still the scarcity of properly integrated infrastructures, information silos, incompatible data systems, lack of adequate funding, strong concerns about data security, and inadequately skilled operators for too complicated data collecting and data mining tools.

A single patient produces 80+ megabytes of medical data every year



NEW ADVANCED TECHNOLOGIES ARE DISRUPTING THE GLOBAL HEALTHCARE.

An answer to the big data problems in the healthcare sector comes now from a new "smart healthcare". This is not just a simple technological advancement, but an all-round, multi-level change, involving human and non-human participants worldwide – doctors, patients, hospitals, labs and research institutes.

This transformation will move us away from diseasecentred care and toward a more patient-centred approach. There will also be a shift away from a focus on treatment to a focus on preventative care.

HERE IS WHERE NEXALTA PLAYS THE GAME.

WHAT WE ARE HERE FOR.

As a team of digital experts, biologists, lawyers, and medical researchers we operate with the purpose of making the world healthier by using the leveraging power of Artificial Intelligence (AI), the Internet of Things (IoT), the Medical Internet of Things (MIOT), cloud computing, big data and blockchain technology for the early detection and early treatment of diseases.

With our Al-driven, decentralized, open-sourced, data security platform we connect patients with doctors, researchers, medical labs, healthcare providers and pharmaceutical companies in a highest secure, anonymized and bi-directional way, enabling them to share health-related data to boost the medical scientific research, while totally protecting their data privacy (zero-trust principle). WE STRONGLY BELIEVE IN THE TRANSFORMATIVE POWER OF COLLECTIVE INTELLIGENCE.

THE FOUNDER TEAM

More information about our founding team is available online:





FRANCESCO BONAFE

Chief Executive Officer



OLEG NAGAITSEV

Chief Technical Officer



DORIANE LE BOURSE



ELY SILABAN
Chief Compliance Officer



ANNA NAUMENKO Head of PM -Managing Director



AMIR ESMAILZADEH
Chief Research Officer



LUCA FELICE Chief Marketing Officer







LARA GITTO Scientific Advisor



EASY, AFFORDABLE, SECURE ACCESS TO MEDICAL INFORMATION AND RESEARCH KNOWLEDGE HAS BECOME A GLOBAL ISSUE.

DATA SECURITY

It is estimated that only 4% of the collected healthcare data is used to generate medical research insights on a large scale. 96% of

our healthcare data keep being locally stored and locally used (silos).

Being shared increases the risks of data leaks, but even unshared data are not safe at all.

Healthcare institutions as well as startups are currently centrally storing personally identifiable information, both in the cloud and on-premises, exposing patients to the high risk of data leaks, happening worldwide on a monthly basis.

Healthcare enterprises and governmental organizations, as well as healthcare professionals struggle with data leaks, breaches, ransomware, disrupting operations and mining the patients' trust.

DATA SILOS

Since a couple of years, the healthcare community has started considering social media data as valuable patient behavioral data to be used for predictions of disease outbreaks. The reason why is a simple one. During infectious disease outbreaks, official data from health organizations and reporting structures might be unavailable for weeks, hindering timely epidemiologic assessment.

The problem with social networks is that the large amount of this patient-generated data (PGD) is not intended to be shared, and the identity of the users and the integrity of the data is not guaranteed.

Hence, we have huge data silos, not connected with other data and seldom accessible to researchers. Furthermore, the communication is in one-direction, with no possibility for patients to interact back.

SLOW & EXPENSIVE DIAGNOSTICS

From a patient's point of view:

Even if we are living in the age of data and shared knowledge, today 33% of the world's population still has no access to basic healthcare. By 2030, we will have a deficit of 14 million health workers worldwide, making knowledge accessibility to a true problem to be solved.

From a researcher's point of view:

As a result of data issues, both researchers on a macro level and medical professionals on a micro level struggle at understanding the symptoms of lesser-known and more complex chronic diseases of their patients. (like autoimmune diseases or cancer).

THE HEALTH DATA SECURITY SOLUTION

NEXALTA IS THE FIRST DATA SECURITY SOLUTION ABLE TO INTERCONNECT ALL PLAYERS IN THE HEALTHCARE SYSTEM -FROM PATIENTS UP TO RESEARCHERS AND DOCTORS AND THE OTHER WAY AROUND. Nexalta is a highest secure software platform (SaaS) leveraging an inhouse developed hardware in form of a plug-and-play appliance which replaces general-purpose firewalls and file servers, and is equipped with encryption chips and optionally Al accelerators.

NEXALTA NETWORKS ENABLE DECENTRALIZED, ANONYMIZED, TOKENIZED STORAGE AND SHARING OF HEALTHCARE BIG DATA

For doctors, researchers and healthcare providers working in diagnostics, Nexalta is a valuable dashboard to get relevant and reliable data anytime, anywhere all over the world.

For patients is a secure, easy and free accessible app on their smartphone or laptop to get and stay in dialogue with doctors, researchers and healthcare providers all over the world, becoming faster diagnostics and reliable therapies and solutions.

For digital healthcare companies and startups, Nexalta is a "black box" that enables to hide the complexity of ensuring data protection, by concentrating on your own core business.

REVOLUTIONING DATA STORAGE BY USING SPARE COMPUTING RESOURCES ON AI EDGE DEVICES.

Studies report that millions of communication devices all over the world are not operating on average 20% of their time, while waiting for the next tasks.

This problem will be exacerbated as companies acquire AI edge devices, which will often be unused.

Nexalta Networks enable general-purpose communication devices (like broadband routers, wifi access points, embedded computers) as well as AI-Edge devices to automatically use their excess computing resources to collect, anonymize, store, and analyse large amounts of data generated by patients, while guaranteeing end-to-end encryption.

PATENTED HARDWARE AND SELF-DEVELOPED SOFTWARE.

Most market players focus on software development (SaaS), needing then additional cloud solutions and third party's hardware. In this way they expose users to the risks of exfiltration and ransomware.

At Nexalta we follow the zero-trust principle and provide a highest secure combination of patented hardware and own developed software (FOSS).

Patients have full and granular usage control over their data and can see at every time where their data are stored and who is accessing them. This generates trust and increases their willingness to share.

Doctors get an appliance that encrypts and stores all sensitive data, with no need for additional cloud solutions.

Non-healthcare-related businesses can join the network in order to maximize their ROI on Al edge hardware.

HEALTH DATA PROCESSING BECOMES SUSTAINABLE, ACCESSIBLE, SECURE AND AFFORDABLE.

HOW THE NEXALTA NETWORKS WORK.



Nexalta's edge communication and storage appliance can be installed as a start at the doctors', researchers' and digital health providers' locations. Each appliance is able to identify its owner.

Patients access the platform using the Nexalta app on their smartphone, laptop or tablet. Healthy persons can use the app for general interaction with doctors or for disease's early detection. When registering on the platform, a patient personal identification and the validation of symptoms are done by either a doctor or healthcare provider.

The patient's data are then anonymized.

Transactions between stakeholders on the network are supported by a token.



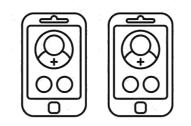
Each appliance collects and stores health data received from the doctors' patients (in case of doctors) or from the subscribing patients (in case of diagnostics labs and researchers).

Researchers do not know the personal identity of the patients that are connecting to them. Strong end-to-end encryption is applied. Encrypted data are stored locally, with remote distributed backup, without relying on public clouds. Healthcare IT security and privacy standards are fully met:

- ✓ ISO 13485:2016
- ✓ IEC 62304

 \checkmark

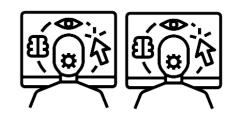
- ISO 81001-5-1
- ✓ HIPAA compliance
- ✓ GDPR compliance



Patients can fill in forms, describing their symptoms, upload and download health records, describe therapies they are testing, moreover wearables (as smart watches and smart rings) can be safely integrated and collect biometric data.

Data are encrypted, both during the transmission and when stored, are protected from ransomware, appliance theft or unauthorized duplication.

Al algorithms are running on dedicated Al processors (NPU, neural processing unit) in order to extract patterns from the locally saved big data. Should the appliance find correlations, it notifies its owner.



Researchers and developers of digital health solutions can reach a closed, certified audience with almost a perfect match to their research needs. They can ask questions and make suggestions to patients, without disclosing their ideas or hypothesis to the general public, thus protecting themselves and their patients from possible leaks. Their work is ongoing supported and accelerated by AI.

Thanks to strict usage control policies, data processing and data visualization can be safely separated.

Enterprises with excess AI/ML resources can join the network, share their resources and capitalize on their infrastructure investments while advancing health care.

A CLEAR POSITIONING AGAINST DATA GENERALISTS.

We're not another IT solution for healthcare professionals. We are not a patient-led social media community. We don't collect health data for the sake of selling data.

We aim to become the global market leader platform for health data security to help accelerating innovation and achieve early detection and development of new solutions and treatments for complex diseases.

Whenever new therapies need to be tested, Nexalta Networks offers the ideal digital support for clinical studies and for randomized double blind controlled clinical trials, dramatically lowering their costs.

FOR PATIENTS

- \checkmark Share health data with just the people they want to.
- ✓ Hide personal identity to everyone except their doctor.
- \checkmark Know who is accessing their data and where exactly it is stored.
- ✓ Get feedback from researchers studying your symptoms.
- \checkmark Help accelerating research, thanks to an AI model trained by their health data.
- ✓ Benefit from improved care through shared decisions and cumulative knowledge.

FOR DOCTORS AND HEALTHCARE PROVIDERS

- ✓ Get assisted by AI and distributed knowledge in diagnosing complex diseases, by getting a "copilot" pre-interpreting the data, while always being in control of the medical decisions that they shall make.
- Enable digital interactions with patients, while being compliant to the strictest privacy and cybersecurity regulations.
- Enable shared decisions-making processes with the patients for better care and outcomes.

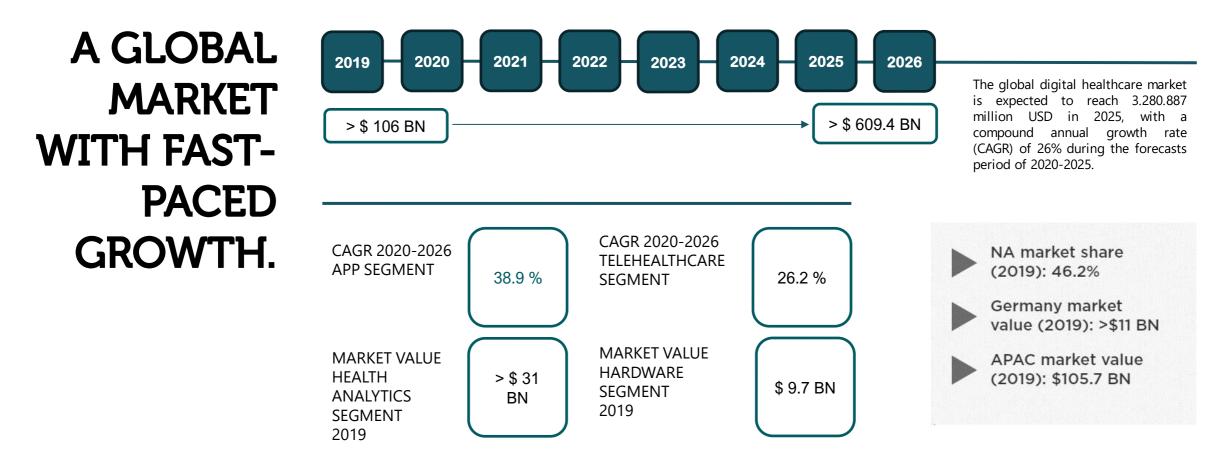
FOR RESEARCHERS

- \checkmark Harness reliable and robust data from the patients' community.
- ✓ Enable a two-way interactions with them.
- ✓ Protect researcher's ideas from competitors.
- ✓ Gain access to a digital marketplace, where scientific research is tokenized and your efforts are rewarded.

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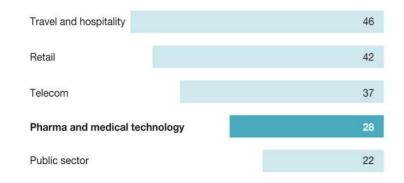
COMPOUND ANNUAL GROWTH RATE (CAGR) 2020-2026 = +*28.5%*



DIGITAL HEALTHCARE ACTORS.

Pharmaceutical and medical-device companies lag other industries in their digitization efforts.

Digital Quotient scores by industry,¹ global, points (out of 100)



¹McKinsey's Digital Quotient assessment measures organizations' digital maturity and capabilities against benchmark companies in various industries and geographies. The tool considers companies' digital business strategies, culture, organization, and capabilities in determining scores.

McKinsey&Company

KEY PLAYERS

Prognoshealth Ada Health GmbH

Kahun Ltd.

1up.health

Veradigm

Apple Health

AthenaHealth

Curbside

Siemens Healthineers

Omron Healthcare

GE Healthcare

PHILIPS Healthcare

Temedica GmbH

CompuGroup Medical

LynxCare Inc.

Medrio Inc.

Palantir Technologies Inc.

Google for Healthcare



- data security concerns

- data silos

BLINDSTUDIE NOCH NICHT ABGESCHLOSSEN

Roche: Tiragolumab-Studiendaten durch Datenleck veröffentlicht

APOTHEKE ADHOC/ dpa, 23.08.2023 09:43 Uhr

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Der Pharmariese Roche meldet eine unbeabsichtigte Veröffentlichung von Studiendaten durch ein Datenleck. Foto: Marlon Trottmann/shutterstock.com

Basel - Roche meldet ein Datenleck bei einem Forschungsprogramm. Der Konzern sei auf eine unbeabsichtigte Veröffentlichung der zweiten Zwischenanalyse einer Studie mit seinem Krebs-Therapeutikums Tiragolumab aufmerksam gemacht worden, teilte der Konzern am Mittwoch mit.

TECH GIANTS HAVE TRUST AND SKILLS PROBLEMS.

IBM Watson Health

Samsung Health

Google's cloud analytics platform uses Al and machine learning to process patient data and deliver potential best practices for care and cost savings.

Google Health



Amazon, Apple, Microsoft and other tech giants have also entered the healthcare arena, either with applications that enable access to patient electronic healthca re records

, or with their own in-house healthcare programs.

Earlier this year, pharmacy giant CVS and its healthcare insurance subsidiary, Aetna, released an app that lets members opt-in to sharing their EMRS with Apple's health service; in turn, Apple will offer Apple Watch wearers personalized fitness and health goals.

In 2015, IBM launched its Watson Health global anal vtics cloud

to enable healthcare providers and researchers to upload and analyze patient data for greater insights into trends and to "improve individual and overall patient outcomes How Amazon, JPMorgan, Berkshire could transform American health care

NATHAN BOMEY | USA TODAY



"By their own admission, the three companies are stepping up to the plate without much experience playing the game, which could easily translate into a swift strikeout"

Yes, Google's using your healthcare data – and it's not alone

There's a multi-billion dollar industry built around collecting healthcare data and anonymizing it so it can be used for research; it's perfectly legal.

Google is working with one of the largest healthcare systems in the U.S. to <u>collect patient data on millions of Americans</u> in 21 states and across 2,600 hospitals or clinics in order to analyze it and come up with advice for better patient care and cost cutting measures. The program, dubbed "Project Nightingale," involved Ascension – the largest Catholic health system in the world – and up to 50 million private medical records from healthcare providers.

In September 2019, <u>controversy around patient privacy</u> erupted when <u>Google acquired the health division of London-based Al firm DeepMind</u>, which built <u>a healthcare app</u> used to give clinicians at National Health Service [NHS] hospitals easy access to medical records. DeepMind's Streams app was already controversial after a UK privacy watchdog found the NHS had illegally handed 1.6 million patient records to DeepMind as part of a trial.





THE WAY WE WENT.

Chronic diseases prevalence has been constantly rising and has now reached epidemic proportions, affecting between 35% and 50% of the world's population (depending on the criteria). In the U.S.A. 86% of health care costs are already attributable to chronic diseases.

Taking this into account, during an exploration phase we have listened for some years to patients and to researchers from all over the world, expressing their wishes and fears.

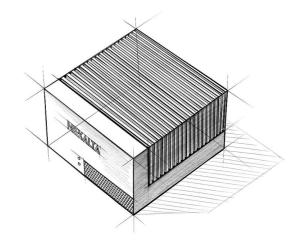
2021-2023: Exploration, Design & Planning. Lean Development. Team Building.



December 2023: Hardware development completed. Software development Part1 completed.

2021- now - Planning Nexalta, we first realized that Web3 edge computing would be the solution - a decentralized architecture of appliances, enabling decentralized storage and end-to-end encrypted exchange of medical data between stakeholders, with data security and privacy protection "by design".

After this step, we had to recognize that the hardware enabling this solution is not already on the market. So, we started developing **nexRouter**, our own hardware appliance, and at the same time, the software overlay with end-to-end encryption running on it.



WHAT'S AHEAD.

2024: LAUNCHING MVP#3.

We aim to go to market and launch our Smart Gateway appliance and our Platform Subscriptions in 2024, first addressing patients, medical doctors and pathologists. Then healthcare providers. Then researchers. 2025: MARKETING THE FULL SOLUTION. We plan to get Software Part 2 ready developed, launching the full version on the German speaking market first.

2024-2025: Go To Market and Growth.

2024												
	Jan.	Feb	Mar	<u>Ap</u> r	<u>Ma</u> y	Jun.	Jul	<u>Aug</u>	Sep	<u>Oc</u> t	Nov	Dec
2025	Jan.	Feb	Mar	Apr	May	Jun.	Jul	Aug	Sep	Oct	Nov	Dec

- MVP#1 DONE: Edge appliances for decentralized storage
- MVP#2 DONE: Edge-powered safe cloud infrastructure
- MVP#3 IN DEVELOPMENT: The go-to-market solution:
 - 1. Enabling doctors to safely manage the daily interactions with patients, including basic tasks as appointments' management.
 - 2. Enabling researchers to access qualitative big data related to long-term medical conditions, and to communicate with patients.
 - 3. Offering doctors and researchers an AI-powered platform as a "copilot" to facilitate the recognition of patterns in big data and support clinical trials to speed up the testing of new treatments

GROWTH STRATEGY

Market potential

There are approx. 400.000 medical doctors in Germany and approx. 1,2 millions cumulated in Germany, Italy, France, UK, Spain. The whole European market has a potential of approx. 1,75 millions doctors.

Consumer's need potential

Taking patients with long-term diseases and just considering the ones with autoimmune diseases, they cover 7% of the world population.

On average, more than 1/3 of the population aged 16+ has a long-standing disease or complex health problem.

Milestones

We have completed the development of core software and components. We will be able to manufacture our first appliance in June 2024.

We have recruited the first 25 users (early adopters) testing the prototypes. We have LOIs with Corporations and Research Institutions, most notably FORTISS and HUAWEI. Expected revenue from signed LOIs in 2025: \notin 4.0 millions.

2024-2025

Launching the full version in the German speaking region (first in Germany, followed by Austria and Switzerland).

2026-2027

Expanding in BENELUX countries, Italy, Portugal, Spain as well as France.

2027-2028

Expanding in the English-speaking countries: UK, Ireland, Australia, USA, Canada and India.

<u>INVESTING</u>

OUR BUSINESS MODEL.



Patients and people interested in taking part to medical studies just need to install our app on their devices. We offer then a freemium model to keep entry barriers low and accelerate the aggregation of valid data pools.

DIGITAL HEALTHCARE PROVIDERS



We enable providers of digital healthcare solutions to adopt our platform as outsourced "whitelabel" data security solution, to guarantee safety and privacy to their users (via our hardware and API). Pharma companies can use our platform as tool for accelerating clinical trials and cutting time-to-market.

DOCTORS & HEALTHCARE PROFESSIONALS



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Provisioning and activation of the appliance («Smart Gateway») locally against an onlyonce activation fee. The fee is paid back by returning the appliance within the first 6 months (trial period). According to the patient data needed, we offer doctors and healthcare providers (hospitals, med labs, clinical trial companies) different subscription tariffs.

RESEARCHERS & MED UNIVERSITIES



To enhance the medical research, we offer a freemium model to researchers, universities and educational institutions (subscriptions available in future as option, to unlock premium features).

Our data security platform is built to be as open as possible for data science. It acts as a high performance distributed computing cluster scalable to millions of TOPS.

ESTIMATION 1 - MARKET ENTRY GERMANY

ΙΝΟΟΜΕ	END 2025	END 2026	END 2027	COSTS	END 2025	END 2026	END 2027			
USERS				Marketing and Sale	2.715.200€	7.203.200€	15.846.400 €	20%		
Patients*	50.000	300.000	1.200.000	Client Support / Hotline	678.800€	1.800.800€	3.961.600 €	5%		
Doctors*	12.000	30.000	60.000	Research, Development, Manufacturing, Certification	6.788.000€	16.207.200€	31.692.800€	50% > 40%		
Researchers	25	50	100	Operation, Administration	1.357.600 €	3.016.000€	7.923.200€	10%		
REVENUE				TOTAL COSTS	11.539.600 €	28.227.200 €	59.424.000€			
Patients	600.000 €	3.600.000€	14.400.000€	Facts & Figures						
Doctors	12.960.000€	32.400.000€	64.800.000€	Estimated appliance activation costs (once only): 540 €						
Researchers	16.000 €	16.000€	32.000€	Estimated average doctors' subscription: 90 €/month						
TOTAL INCOME	13.576.000€	36.016.000€	79.232.000 €	 Estimated freemium income each patient/month: 1 € 						

*Assumptions:

7% of population is suffering of chronic diseases.

Approx. 400.000 doctors are operating in Germany.

ESTIMATION 2 - MARKET ENTRY AUSTRIA & SWITZERLAND

ΙΝΟΟΜΕ	END 2026	END 2027	END 2028	COSTS	END 2026	END 2027	END 2028			
USERS				Marketing and Sale	1.169.808€	2.583.456€	4.119.984 €	20%		
Patients*	51.200	204.800	409.600	Client Support / Hotline	292.452€	645.864 €	1.029.996 €	5%		
Doctors*	4.838	9.676	14.514	Research, Development, Manufacturing, Certification	2.632.068 €	5.166.912€	7.209.972€	45%>35%		
Researchers	15	30	45	Operation, Administration	584.904 €	1.291.728€	2.059.992€	10%		
REVENUE				TOTAL COSTS	4.679.232€	9.687.961 €	14.419.944 €			
Patients	614.400€	2.457.600€	4.915.200 €	Facts & Figures						
Doctors	5.225.040 €	10.450.080 €	15.675.120€	Estimated appliance activation costs (once only): 540 €						
Researchers	9.600€	9.600€	9.600€	Estimated average doctors' subscription: 90 €/month						
TOTAL INCOME	5.849.040 €	12.917.280 €	20.599.920 €	 Estimated freemium income each patient/month: 1 € € 						

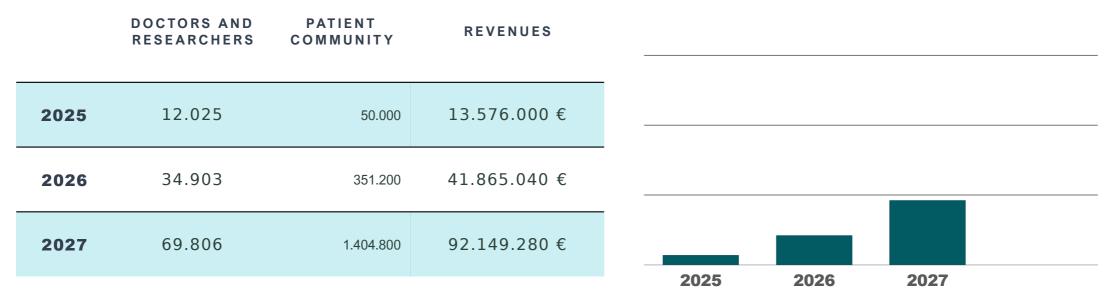
*Assumptions:

7% of population is suffering of chronic diseases.

Approx. 87.000 doctors are operating in Austria and Switzerland.

ESTIMATED TRACTION GERMAN SPEAKING REGION

Estimated 120 % YoY growth by expanding in the German speaking region.



Cumulated figures for Germany, Austria and Switzerland.

INVESTING IN NEXALTA

2021-2023 BOOTSTRAPPING

2024-2025 SEED VENTURE CAPITAL

To complete the technical development and launch the full solution in the German speaking region, we are looking for seed stage investors willing to take a stake of up to 10% for a total amount of 500.000 Euro.

130 000 €

500 000 €

2026-2027

To scale up in EMEA, NA, APAC and INDIA, we plan to offer a further stake up to 7% for growth capital for a total amount of 2 million Euro.

2 000 000 €

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