

NEUNEXUS HEALTH INTELLIGENCE

Clinical AI Concept & Validation Roadmap.

A decorative graphic in the top right corner consisting of three concentric circles. The innermost circle is white, the middle one is green, and the outermost one is blue. There are three dots: a blue dot on the white circle, a green dot on the green circle, and a white dot on the blue circle.

Executive Concept

Building responsible predictive healthcare intelligence.

INITIAL USE CASE

RENALIX

AI-assisted kidney intelligence for professional review and care coordination

From fragmented data to earlier clinical insight

A focused starting point: kidney intelligence

THE OPPORTUNITY

NeuNexus Health Intelligence is developing a secure clinical intelligence concept designed to help healthcare professionals recognize risk earlier, connect fragmented information and coordinate care more effectively.

CLINICAL NEED

Important renal changes may be distributed across laboratory, medical and nursing systems.

FIRST SOLUTION

RENALIX brings selected kidney-related information into one professional view.

CURRENT STAGE

Concept and pre-validation. No clinical certification or routine deployment.

THE IMMEDIATE OBJECTIVE

Build a non-clinical MVP, validate the need with healthcare professionals and prepare a responsible research and regulatory pathway.

RENALIX supports professional assessment. It does not replace clinical judgment.

The information exists. The connection is missing.

Renal deterioration can develop gradually across care settings.

1

Laboratory

Creatinine, eGFR, UACR and other renal indicators

2

Medical record

Diagnoses, comorbidities and clinical plans

3

Nursing record

Hydration, edema, pain, nausea and urine output

4

Medication

Therapies requiring professional renal context

5

Transitions

Hospital, rehabilitation, Pflege and home care

CORE PROBLEM

Relevant clinical information is not always connected, interpreted and presented at the right moment.

One kidney-intelligence platform. Two professional environments.

The first product of NeuNexus Health Intelligence

RENALIX creates a structured view of kidney-related information for authorized professional review.

RENALIX PRO

For hospitals, clinics, nephrology teams and authorized professionals.

- Renal laboratory trends
- Structured patient timeline
- Professional alerts
- Clinical review documentation
- Role-based access and audit history

RENALIX CARE

For nursing, palliative and authorized home-care environments.

- Hydration observations
- Edema, pain and nausea tracking
- Urine-output observations
- Escalation to responsible professionals
- Care coordination timeline

CLINICAL BOUNDARY

RENALIX does not independently diagnose, prescribe medication or determine treatment.

Four connected layers

Secure data flow from source to professional action

01

CLINICAL DATA

Laboratory, nursing, medication and patient information

02

SECURE INTEGRATION

Validation, interoperability, identity, access and traceability

03

INTELLIGENCE CORE

Trends, clinical rules and future validated predictive models

04

CLINICAL APPLICATIONS

RENALIX Pro, RENALIX Care and role-specific dashboards

BSGOTECH may support the future software and digital layer. Clinical logic must be developed and validated with qualified healthcare and research professionals.

A controlled seven-stage lifecycle

Evidence before expansion



ONE PROBLEM > ONE PROTOTYPE > ONE STUDY > MEASURABLE EVIDENCE

Responsible expansion follows validation, not presentation.

Human control, privacy and regulatory preparation

Safety is part of the product architecture.

HUMAN CONTROL

Professionals retain responsibility for diagnosis, treatment, medication, escalation and final decisions.

DATA PROTECTION

Privacy by design, data minimization, access control, encryption, auditability and governed data use.

REGULATORY PATH

The final intended purpose determines whether MDR and AI Act requirements apply.

OPERATING PRINCIPLE

The system may organize information, identify patterns and highlight a need for review. It must not silently replace professional judgment or initiate safety-critical clinical action without authorized control.

PREPARATION AREAS

GDPR

Lawful purpose and data governance

MDR

Software qualification and clinical evidence

AI ACT

Risk classification and trustworthy AI

CYBERSECURITY

Secure development and incident response

Formal classification requires qualified clinical, legal and regulatory assessment.

Validation requires a multidisciplinary network

Proposed categories - not confirmed partnerships

HOSPITALS & CLINICS

Clinical requirements, workflows and controlled validation

PFLEGE ORGANIZATIONS

Nursing observations, escalation and usability

UNIVERSITIES

Study design, research and statistical evaluation

TECHNOLOGY PROVIDERS

Software, cloud, cybersecurity and integration

REGULATORY SPECIALISTS

MDR, AI Act, risk and conformity strategy

No organization should be presented as a confirmed partner without written agreement.

From clinical discovery to controlled market entry

A phased investment and evidence model

01

DISCOVERY

Define the renal problem, users and intended purpose

02

MVP

Build dashboard, timeline, observations and audit functions

03

EVALUATION

Test usability and clinical relevance with professionals

04

RESEARCH

Conduct retrospective and prospective validation

05

REGULATORY

Establish classification, risk and conformity pathway

06

ENTRY

Launch one validated application before expansion

FIRST MILESTONE

A non-clinical RENALIX MVP ready for structured professional evaluation.

Start with RENALIX. Expand through evidence.

Future modules remain development concepts.

LONG-TERM PORTFOLIO

RENALIX AI

Kidney intelligence

NURSING AI

Care orchestration

ICU INTELLIGENCE

Critical-care research

PHARMACY AI

Medication intelligence

PATIENT DIGITAL TWIN

Longitudinal research concept

HEALTHVERSE

Controlled module environment

IMMEDIATE NEXT STEP

Establish a small clinical advisory group, define the precise intended purpose and prepare the non-clinical MVP for professional evaluation.

COLLABORATION REQUEST

- Clinical guidance
- Research cooperation
- MVP development
- Regulatory expertise
- Pilot validation
- Future funding

NEUNEXUS HEALTH INTELLIGENCE

Responsible AI. Human Control. Better Clinical Insight.

Cleiton Barreto dos Santos

Founder & Project Developer

Hannover Region, Germany

admin@bsgotech.com

Concept stage - not clinically validated or certified for routine use.