CANCERNA

SHORT DESCRIPTION

Your AI assistant for early detection of lung cancer using CT scan data.

COMPANY CONTACTS

CEO *– Diana Bekeshova, diana.bekeshova@nu.edu.kz+774742887430*

CTO *– Abylaikhan Seraliyev, abylaikhan.seraliyev@nu.edu.kz, +77781221485*

CUSTOMER PROFILE

Target audience: Radiologists and oncologists from public and private hospitals; oncology clinics and diagnostic centers; medical researchers working with CT scans.

Customer profile: Analyze dozens of CT scans daily; work under high pressure and limited time; strive to improve diagnostic accuracy and reduce the risk of errors; seek digital tools that automate clinical decisions and reduce routine workload.

PROBLEM – SOLUTION - VALUE

Problem

Lung cancer is a leading cause of cancer-related deaths both in Kazakhstan and globally. Over 2.5 million people are diagnosed with lung cancer annually, with half detected at late stages.

Main disadvantages:

- Diagnosis is performed manually on CT scans, often at late stages.
- There's a shortage of specialists: one oncologist serves ~500 patients.
- Doctors are overworked and may miss small tumor lesions.
- There are no tools to assess progression and risk of metastases.
- Five-year survival rate for late-stage lung cancer is only 9%.

Solution

- 3D image analysis and metastasis prognosis
- Saves clinics over ₸30 million per year.
- Cancer and metastasis diagnosis in under 5 minutes.
- Detection accuracy over 95% (identifies tumors from 2–3 mm).
- Easy integration with clinic IT systems

Unique Value Proposition

Cancerna is an early lung cancer diagnosis system that performs CT analysis in 5 minutes, detects metastases, and generates a report. It reduces staff workload, accelerates diagnostics, and makes AI truly accessible in clinical practice.

BUSINESS MODEL

Sales through an annual B2B subscription model – 1,500,000 KZT per year, one-time diagnostic payment (Pay-Per-Scan) – 1,000 KZT, subscription to service packages: basic – 150,000 KZT per month, premium – 600,000 KZT per month.

MARKET OVERVIEW AND MARKET SHARE OF THE COMPANY

Global market – about 110,000 medical institutions with installed CT scanners.
Market volume – $395 million per year.
Kazakhstan market – 190 medical organizations provide CT services.
Potentially ready for AI integration – 133 institutions.
Market volume – ₸285 million per year.
Growth rate – 10–13% annually in the lung cancer diagnostics segment.
Overall cancer incidence growth – 6–7% per year.

TEAM

CMO - Temirlan Karatay

CPO - Aiziya Paizulla

COMPETITORS ANALYSIS

There are already strong players on the market – Qure.ai, Optellum, and Tempus Pixel Lung. Their solutions help detect cancer through CT scans, are used in large clinics, and are internationally certified. But they have significant limitations: they only provide basic diagnostics without prognosis, do not explain which areas to pay special attention to, and require complex integration into hospital systems.

Product Developer Lead - Rauan Muratuly

External Affairs Lead - Aidyn Onggar

Lead Programmer - Batyrkhan Sharipbay

Digital Marketing Manager - Assel Akhmetali

We are better because we **focus on prognosing** – we assess the risk of metastasis, highlight **high-risk areas** directly on the scan, and all this with **simple cloud integration**. This allows doctors to make faster and more confident decisions without overloading them with additional complexity.

GO-TO-MARKET STRATEGY

1. **In-person meetings** with potential clients and clinics. The deal cycle includes finding clinics, demo testing, and feedback from oncologists, leading to initial contracts and integration of the Cancerna system into clinics.
2. **Media presence** – public appearances and interviews.
3. **Participation in conferences** on oncology, radiology, and medical AI technologies.
4. **Partnerships with hospitals** – joint pilots, expert consultations.
5. **Publications** in scientific journals, **patent** registration, and obtaining a **license.**
6. Participation in government **B2G** programs – implementation as part of healthcare digitization, pilots in public institutions, participation in national projects.

TRACK RECORD AND NEXT STEPS

Showcased a demo version of Cancerna to 20 doctors and are currently improving the product.

Established partnerships with **KazIOR, NROC, and RDC**, and are in negotiations with several other clinics.

Our **dataset includes over 10,000** processed scans, and our **partners** have tested **1,500** scans, considering the population-specific features of Kazakhstani citizens.

Collaborating with ISSAI to increase AI accuracy using DGX servers.

Preparing for commercialization through a B2G model and are drafting a report to align the product with government institution requirements. **Expanded system functionality** and are adding features for future expansion — such as cancer metastasis prediction via PET scans.

Next, plan to file a product patent within 3 months. Additionally, plan to become part of the Hong Kong Startup Hub (under negotiation) to expand into the Asian market.