

Infection Diagnosis

for use anywhere with anyone in minutes



Business Summary

Aksense is an early-stage MedTech company, has developed a portable biosensor to diagnose healthcare-associated infections in one minute to provide doctors to give the efficient treatment quickly and save patients' lives. We have a proof of concept with >90% accuracy. Now, we are working to scale up the prototype into a product.

Customer Problem

Current long diagnostic process causes death and suffering to the patient in hospitals, also result in using unnecessary antibiotic, longer hospitalization, and antimicrobial resistance. With a rapid and easy diagnosis, we want to resolve this.

Our Solution

Aksense has developed a new quick blood assay to diagnose healthcare-associated infections in one minute with a bedside electrochemical biosensor. It can be used by any trained medical staff to get an infection result in minute allowing efficient and quick treatment near the patient, reducing unnecessary use of antibiotics and hospitalization and preventing infection progression. We aim to reduce the hospitalization at least three days with our diagnostic.

Target market

Every year 8.9M cases of healthcare-associated infections occur with around one in 15 patients (6.6%) in acute care hospitals and one in 24 residents (4.1%) in long-term care facilities having at least one infection on any given day in EU. The global healthcare-associated infection market is expected to reach \$36.16B in 2022 a 7.3% CAGR growth.

Competitors

The culture method, gold standard, is widely used for healthcare associated infection diagnosis, but takes around three days to provide the infection results in a lab space with experts. The molecular diagnostic methods which are not used in clinic because they do not work properly for bacterial infections and are too expensive.

Competitive Advantage

We have a novel patent-pending method. Our diagnostic does not need a lab or an expert to use. Our sample is the blood which makes the usage much easier. It's portable. And it is much faster.

- Diagnosis in one minute, Portable, Easy to use
- Blood based test (no need for specific tissue or operation)

Customers & Partners

Healthcare providers, hospitals, doctors and telehealth companies

Revenue Model

We aim to sell the product to hospitals and healthcare providers by distributors and also the collaboration with healthcare insurance and telehealth companies. We will give the device and sell the sensors, the price will be dynamized depend on the patient's size and the region. The estimated price will be \$50 for each test with seven sensors.

Exit Strategy

Our exit strategy is likely to be acquired by a mainstream diagnostics company.

Financials

	2022	2023	2024
Revenue	\$4.5M	\$12.8M	\$20M
Closing Cash Balance	\$2M	\$8.25M	\$13.8M

Management

Bill Liao is a venture partner with SOSV and he is the first investor of Aksense.

Prof. Dr. Yalım Dikmen is an Anesthesiology and Reanimation Specialist. He is leading the clinical trials at Aksense.

Dr. Asiye Karakullukcu is the CEO of Aksense. She is leading the financial issues at Aksense.

Achievements

\$130K Pre-seed investment from SOSV VC.

\$250K Government Grants

Completed pre-clinical study with over 400 patients.

General information

Sector: Healthcare

Stage: Seed

Year established: 2017

Number of staff: 5

Projected breakeven date: 4Q/2022

Shareholders and %: Asiye Karakullukcu, 80%

ESOP: 10%

Mürsel Baydemir 10%

Country of origin



Turkey

Contact

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