



CleanSens Bio Detection Systems Ltd.

About: CleanSens has developed SHM-1 Smart Hygiene Monitor - an innovative solution for monitoring of surface-borne pathogens in healthcare and food facilities.

Industry: ATP bioluminescence meters for monitoring of surface hygienic conditions after cleaning at hospitals and food processing companies.

Stage: Proof of concept and testing in a certified microbiological laboratory, in a big food processing company and at a well-known hospital.

Market Size: \$5.7B (2018)

Competitive Landscape: There are about 20 companies that sell ATP monitoring systems worldwide. Out of them, 3M, Hygiena, Thermo Fisher Scientific, Charm Sciences (all USA), Neogen (UK) Kikkoman (Japan) stand out as market leaders with a strong brand name.



Employees: 3

Patents: Provisional patent application

Required Funding: \$500,000

Use of Proceeds:

- Building and preliminary testing of a fully functional industrial prototype (6 months);
- Validation of the industrial prototype (3 months);
- Go to market via selling exclusive rights to commercialize the proposed product to a global company specializing in marketing ATP monitors worldwide (3-5 months).

Market Need

Monitoring of hygienic conditions is **crucial for hospitals** and food processing companies. Even when very thorough cleaning has been performed, pathogens may still survive on a wide range of surfaces. In the U.S. alone, hospital-acquired infections (HAIs) affect approximately 1.7 million people each year, resulting in the deaths of nearly 100,000 people annually. Today, ATP bioluminescence meters are widely applied for surface hygiene monitoring. However, the ATP meters cannot be relied upon to evaluate the surface disinfection, since they have serious limitations. ATP monitoring systems can detect bacteria at a low sensitivity level and are costly to use. Besides, the cleaning chemistry residues have a very adverse impact on ATP readings, which can once again lead to increased false confidence. The SHM-1 rapid surface contamination detection solution is expected to replace currently used ATP technology.

Proposed Product and Core Advantages

The proposed SHM-1 Smart Hygiene Monitor is at least 20-100 times more sensitive over the ATP solution and can be applied at a much lower cost. Besides, the proposed monitor is the only hygiene meter that can objectively detect surface-borne pathogens after surface cleaning, as the surface residues of cleaning materials do not interfere with the SHM-1 readings.

Roadmap to market

CleanSens plans on building and preliminary testing of a fully functional industrial prototype. The Company will then engage in rigorous validation of its product and will be ready to go to market in 12-14 months since the start of the prototype building activities.

Management Team

Josef More, economist (CEO)

30+ years of experience in serving as CEO and CFO with several hi-tech companies in Israel and the U.S.

Alex Keenan, electronics engineer (CTO)

35+ years of experience in new product development, testing and small-batch production, as well as successfully bringing to market products based on the technology similar to the SHM-1 solution.

Simon Berkovich, MBA (Business Development)

25+ years of experience in business development and strategy formulation for technology startups, including bringing new products to market and facilitating exits via strategic partnerships.