

# BiOINSPECT

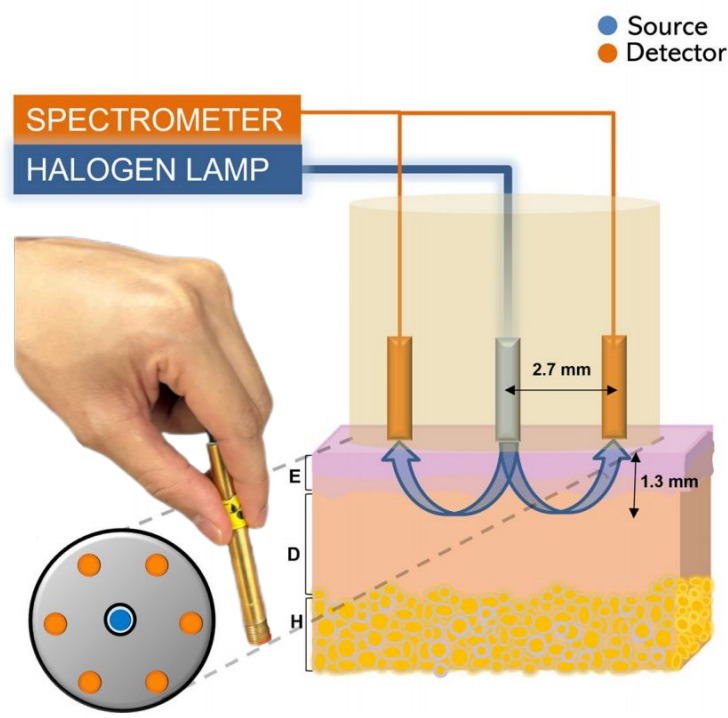


Institute for Engineering Leadership  
College of Design and Engineering



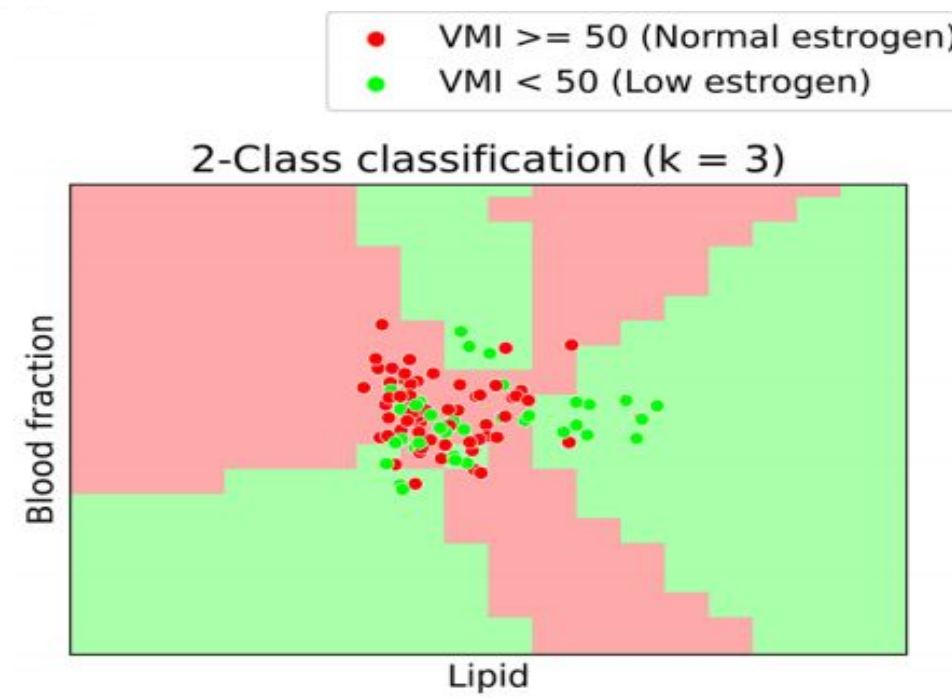
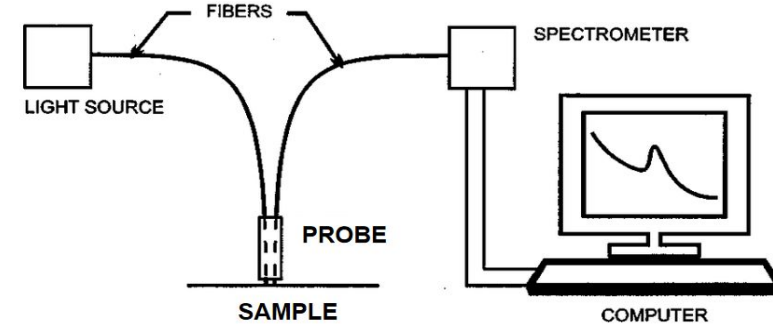
## Advanced Non-Invasive Diagnostic Technology

BioinSPECT is a cutting-edge tool that leverages light-scattering technology for fast, accurate, and non-invasive surface analysis. The first application is **pet skin condition diagnosis and treatment**. We seek partners to bring this innovation to wider markets.



Non-Invasive, analyzes surfaces up to 5mm. Delivers reliable results in 10 seconds. Identifies moisture, collagen, oxyhaemoglobin and other substances.

**Minimum Viable Product**



Tested in a previous study, our product achieved a detection accuracy of **approximately 90%** for human skin analysis in the lab, with a 78% GSM score and an 89% correlation with moisture meter readings for water content.



- Difficulty diagnosing
- Discomfort and anxiety
- Limited options
- Increased stress

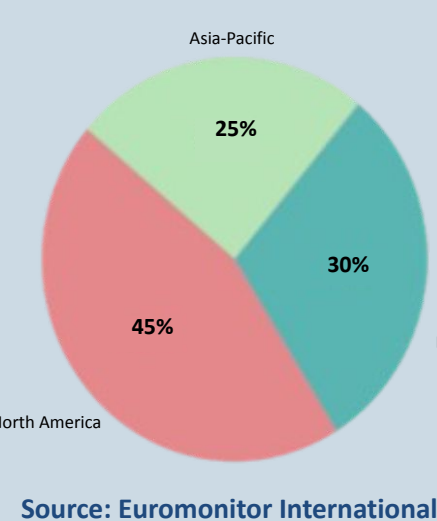


- Non-invasive, real-time lump identification
- Reduces invasive procedures
- Clearer diagnostics for vets
- Faster, safer, less stressful diagnoses

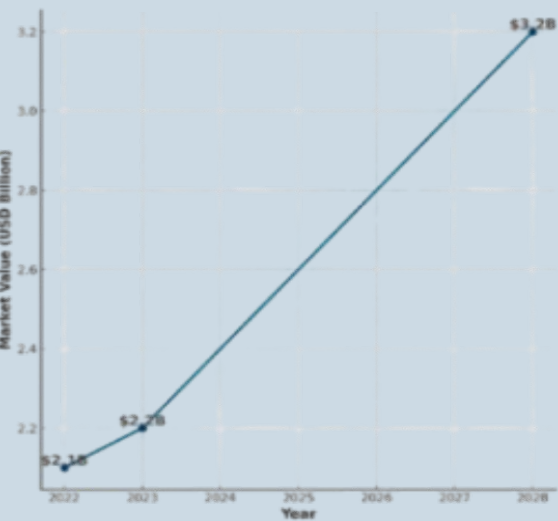


## Problem & Solution

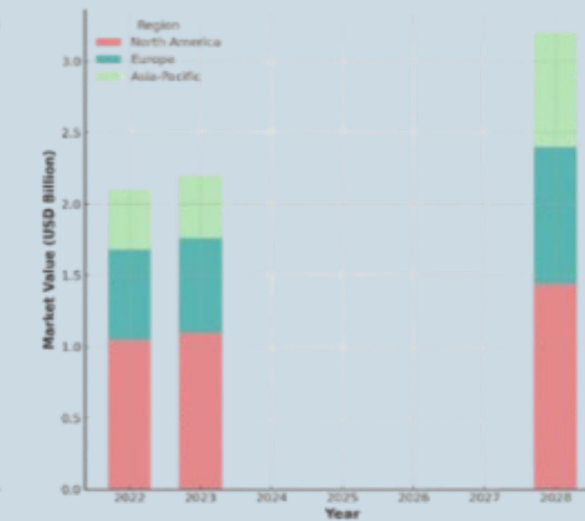
Regional Distribution (2028)



Market Growth (2022-2028)

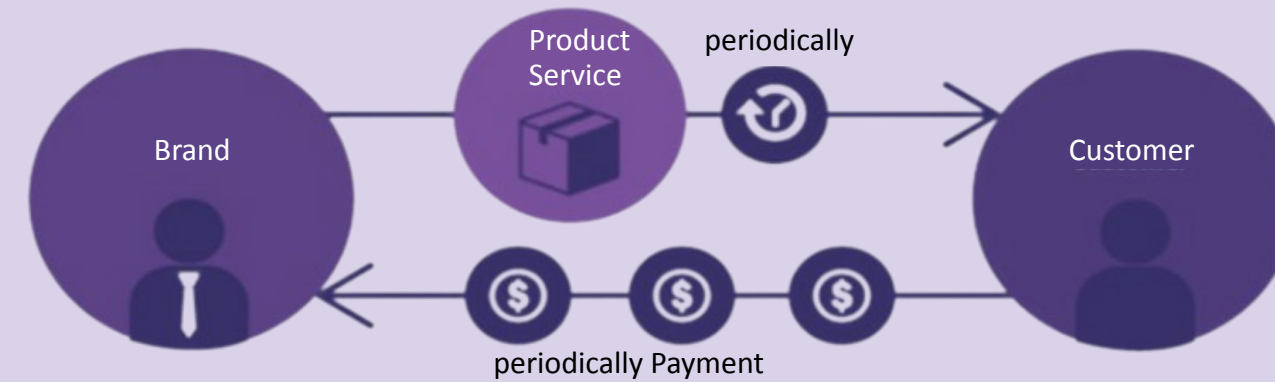
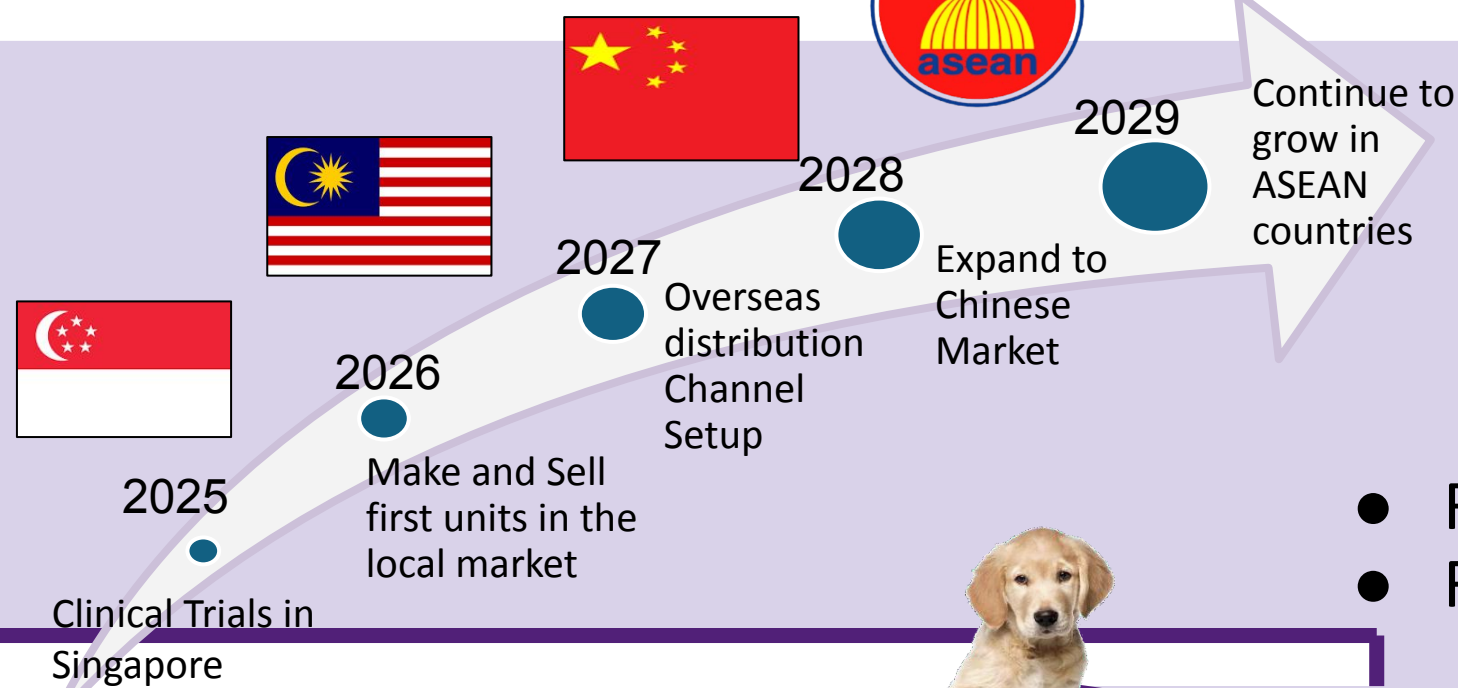


Market Size by Region (2022-2028)



- Pie Chart: Shows the regional distribution in 2028, including Asia-Pacific.
- Line Chart: Displays market growth from 2022 to 2028.
- Bar Chart: Illustrates the market size by region for 2022, 2023, and 2028. In 2023, the global in vitro diagnostics market will reach \$106.3 billion. The global in vitro diagnostics market will grow to \$128.9 billion by 2024.

## Market Size



- Recurring revenue from subscriptions
- Focus on long-term customer partnerships

## Business Plan



**Direct Competitor:**  
Veriskin, Vivascope...

**Indirect Competitor:**  
Blood test, Biopsy...

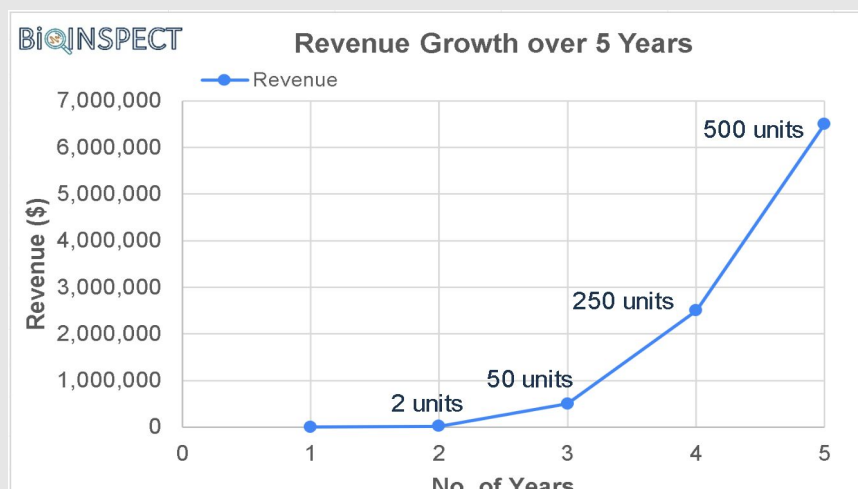


### How to Reach Customers

- Direct Sales
- Work with vet clinics for joint projects
- Attend industry events
- Online Marketing

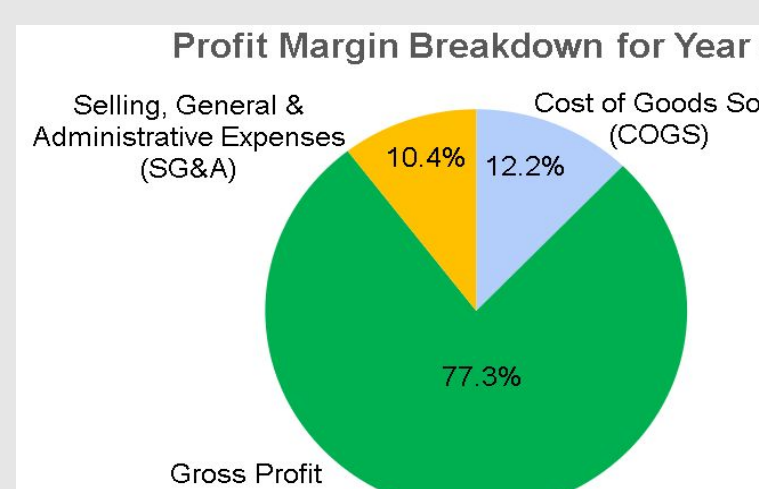


## Product Development



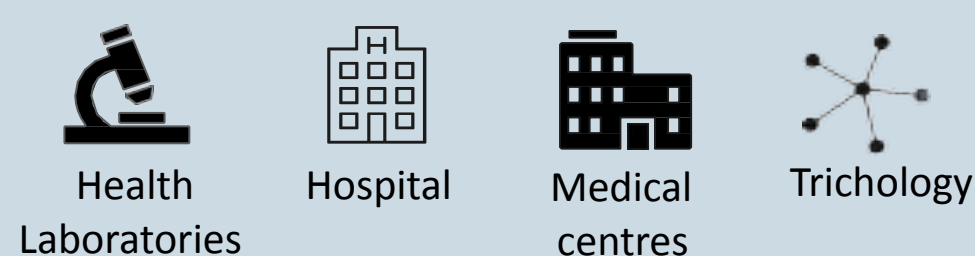
**Revenue Growth:** \$0 to \$6.5 million by Year 5  
**Gross Profit:** \$5.96 million,  
**Selling, General Expenses:** \$0.8 million,  
**Cost of Goods Sold:** \$942,000 (Pie Chart)

## Financials



Year	Units	Revenue(\$)	Unit Margin (%)	Cash flow(\$)
2025	0	NA	NA	(93,500)
2026	2	16,000	-18.93	(80,676)
2027	50	500,000	4.86	302,778
2028	250	2,500,000	37.74	1,841,627
2029	500	6,500,000	52.10	5,154,654

## Future applications



Collaboration with A\*STAR Skin Research Lab  
Potential for development in human skin

## Team and Stakeholders

bioinspect0@gmail.com  
Tech Leads: Keertana, Randall  
Advisor: Dinish

Clinical collaborator  
VET PRACTICE, Dr. Ng Boon Jun  
Hengda Veterinary Clinic, Gong Xiaowei  
Arjita, Miranda, Si Min, Benny, Anthony

