

Geneo Medical

Bloodless Diabetic Management

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Executive Summary

Non-invasive, continuous monitoring of blood glucose level and its role towards predictive and personalized diagnosis is emerging as a real need in healthcare. This proposal summarizes development cycle of a non-invasive wearable blood glucose sensor based on multi-wavelength absorption spectroscopy.

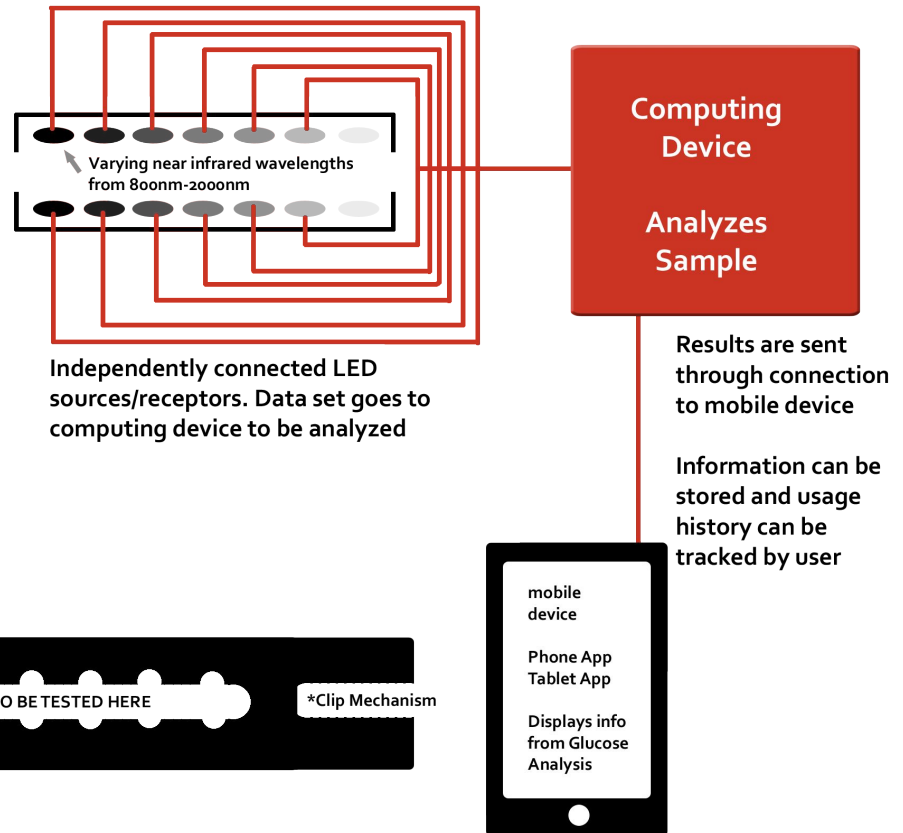
NJIT to develop the measurement algorithm based on Monte Carlo simulations with the hardware development including prototyping, design, qualification and production launch. The development is proposed in five stages: Concept, Feasibility and Demonstration, Development, Qualification and Product Launch.

The estimated project schedule is 2 years with a total development cost of \$2,000,000; \$1,000,000 from SBIR and \$1,000,000 from investors.

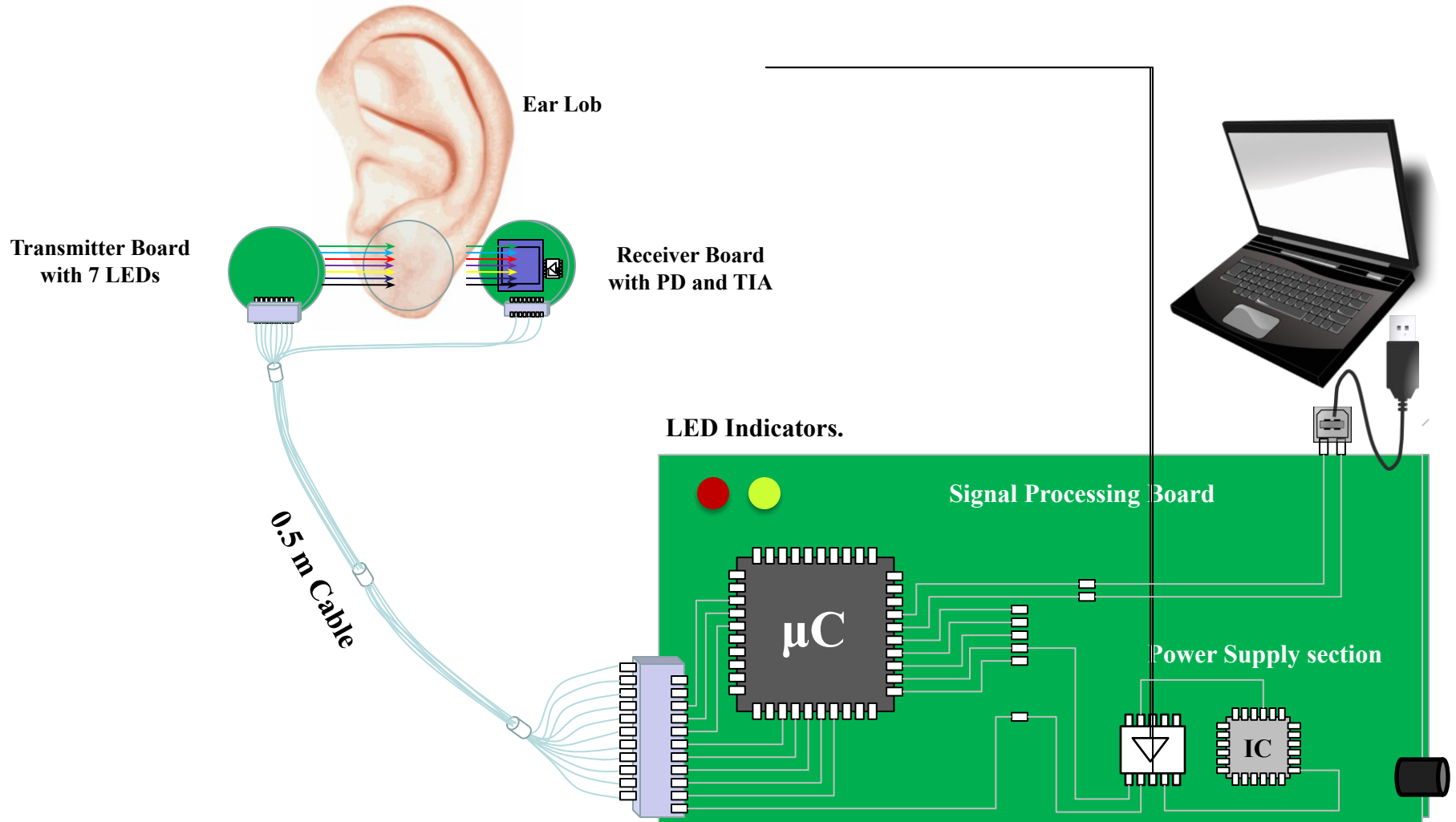
Significance

- 285 million people worldwide currently have type II diabetes, reaching 438 million by the year 2030
- Globally, diabetes account for
 - 12% of the health expenditures in 2010
 - \$376 billion in 2010 -- \$490 billion in 2030.
- Self-monitoring crucial to proper diabetes management, but low adherence
- Current solution not working, enter Geneo

The Product: Visual



Proposed System Overview



The Product: Offering Description

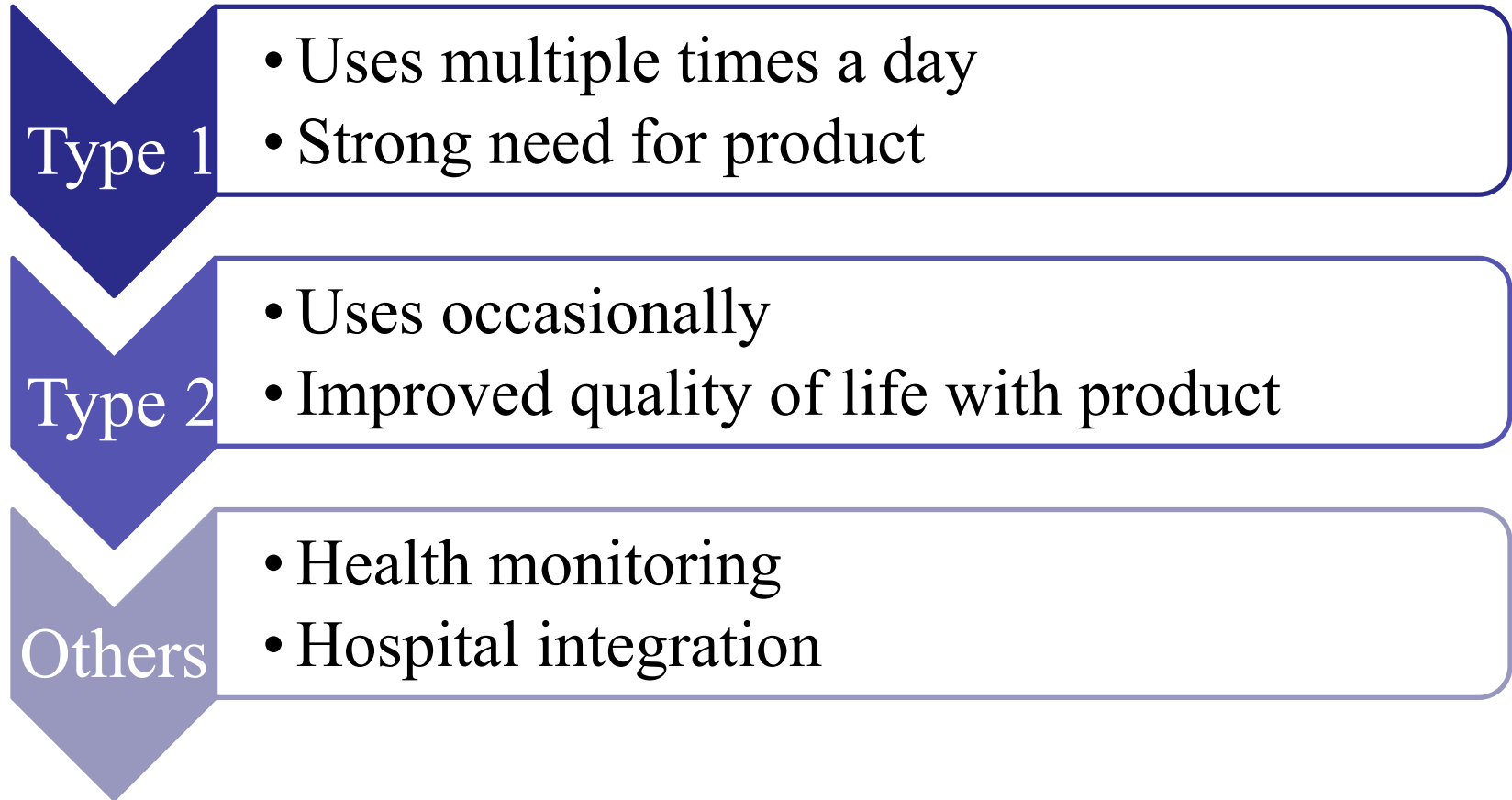
Painless and non-invasive method to measure blood glucose levels

- Multispectral imaging
 - Noninvasive
 - Painless

Accurate readings constantly without increasing Healthcare costs

- No supplementary product needed for device
- Increased data for Physician to work with
- Lower diabetes related ER costs

Target Market - Diabetics



Value Proposition

Geneo Medical

Market survey to gauge engagement and potential first adopters / initial market

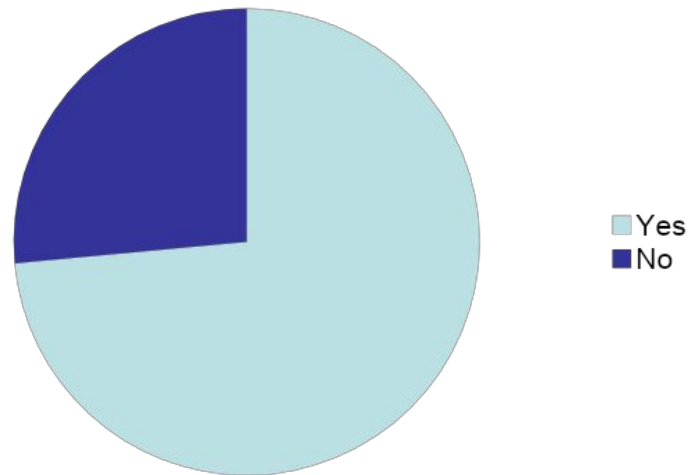
- **Purpose:** To study the potential consumer market through engagement metrics of a survey targeted at determining the product features, core consumer base demographic, and consumer interest.

	# of people	Total Conversion Rate
Views	395	
Clicks	139	35 %
Survey Completion	54	38.8 %
Subscriptions	11	20 %

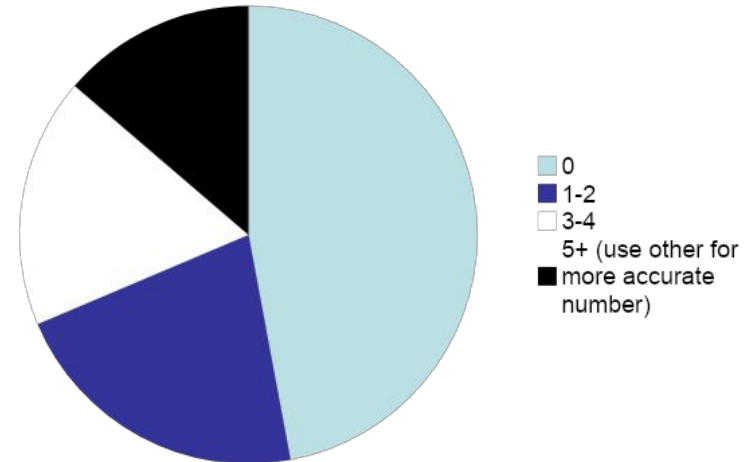
Value Proposition

54 People
Surveyed over 1 week

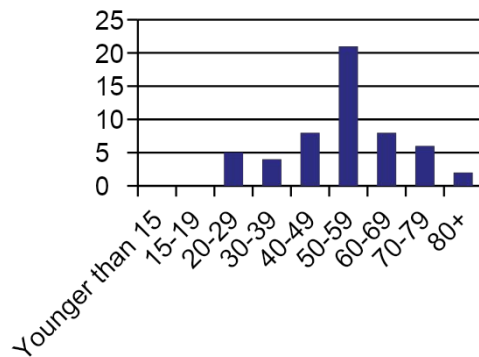
Continuous monitoring important?



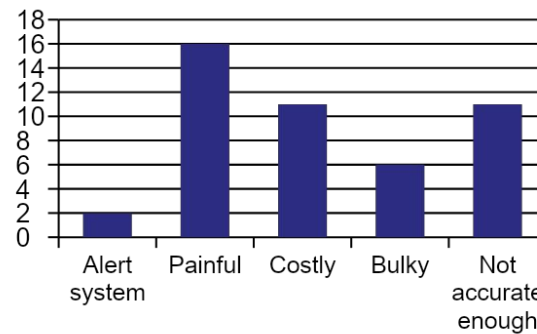
of uses a day



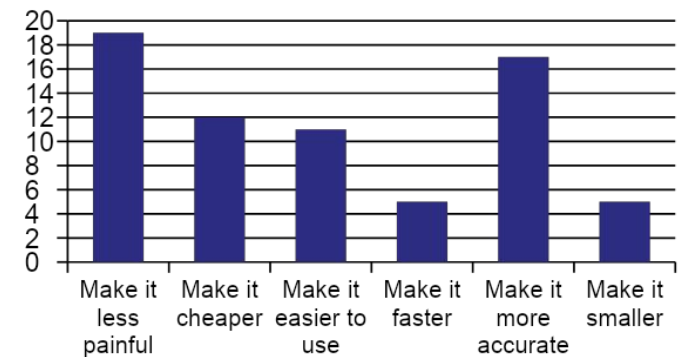
Age



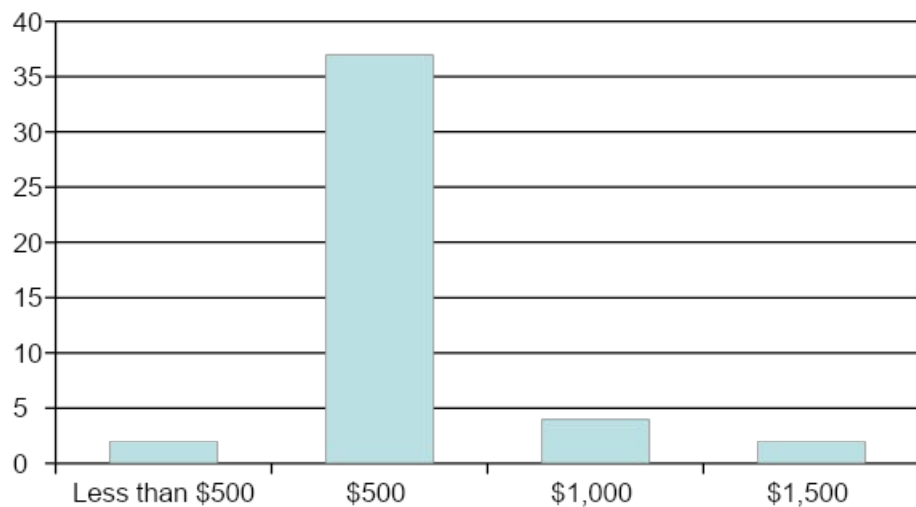
Problems



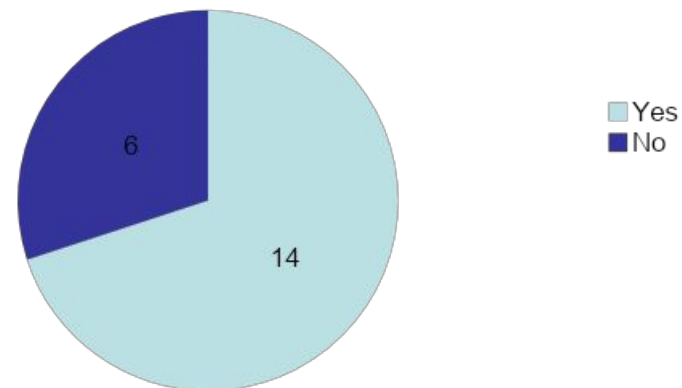
Solutions



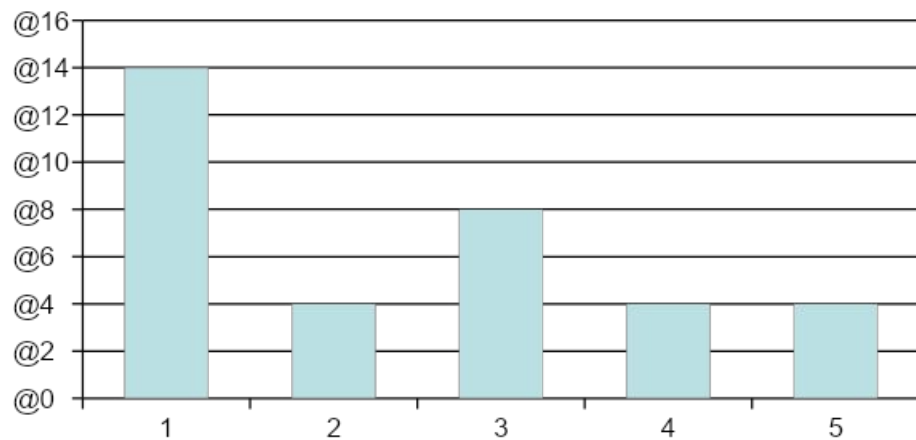
Would pay



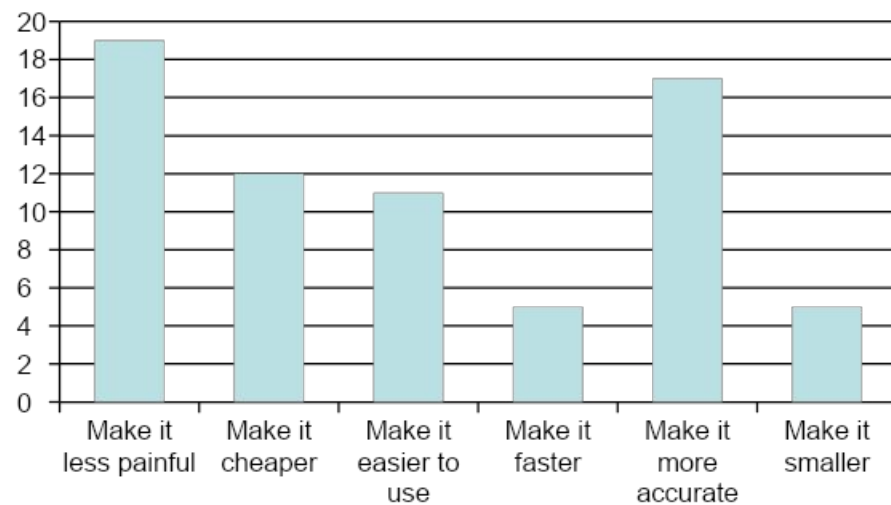
Using invasive monitor regularly



Cost of current monitor



Solutions



Competitive Advantage

Geneo: The High Value, Noninvasive Niche



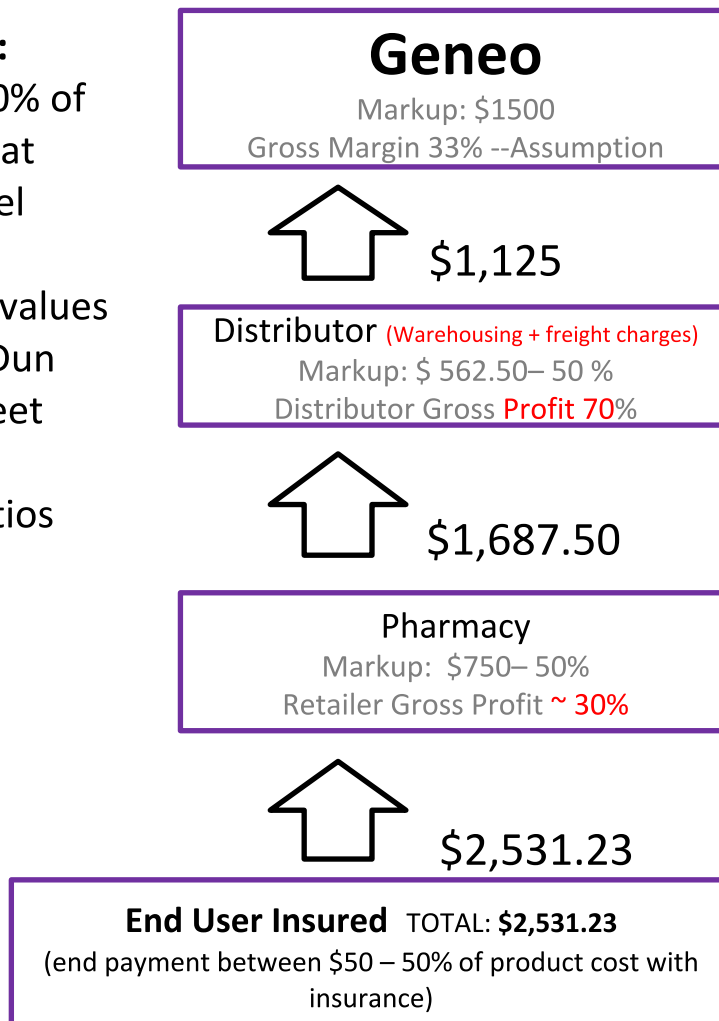
- Low cost
- High quality of life
- Slower to market
- Smaller market share at start

Business Model

Assumption:

Markup is 50% of selling price at previous level

Gross profit values come from Dun and Bradstreet Industrial Financial Ratios 2011



Manufacturing costs:
\$500 (build up method)

Device will only be sold with a prescription in order for consumers to take advantage of insurance coverage

Current invasive glucometers are sold OTC, but a prescription is required to get insurance coverage for the purchase of the strips

Government & Insurance

Comparison across continuous glucose monitors

Companies	Guardian REAL-Time Continuous Glucose Monitoring System	Dexcom SEVEN Plus	MiniMed Paradigm® REAL-Time System	Geneo Medical
Monitor	\$1339 for monitor	\$1248	\$999	\$2,531.23
Sensor	\$35 per 3 day sensor	\$399 per 4 7-day sensors	\$35 per 3 day sensor	
Yearly cost	\$1339 + 120 days * \$35 sensors \$5,539	\$6,335	\$5,199	\$2,531

Financial Assessment

- Breakeven: Nov Y3 (late second year of sales)
- Investment assumptions:
 - SBIR Phase 1: \$150,000 – Y1, Phase 2: \$1,000,000 – Y2
 - VC - \$1,000,000 over Y3-Y5
 - ROI: 38x in first 3 years

