

## The Problem

#### **Issues with Labor Shortage**

- For every 1,000 cows, 1 full-time employee is needed to give shots
- Employees administer 15k 18k shots per 1,000 cows annually
- Labor cost of \$62,000\* can be saved per employee per year

#### **Issues with Compliance for Animal Health Standards**

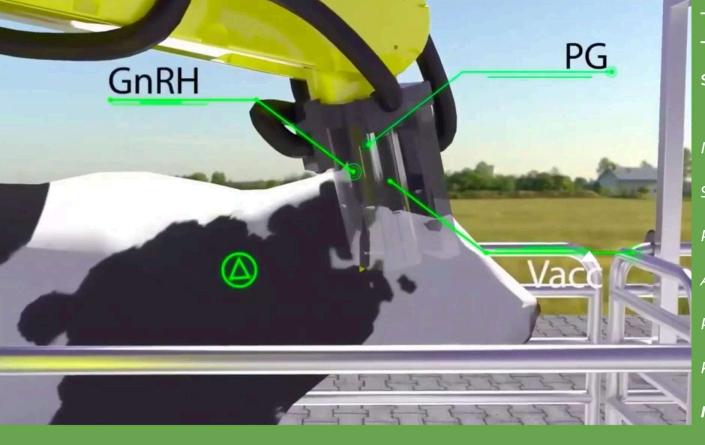
- Even with RFIDs, employees cannot properly locate cows
- 5% inaccuracy per shot in a protocol causes a significant loss in pregnancy rates
- Avg. loss of \$75,000 per 1,000 cows per year due to inaccurate shot protocols
- Potential avg. gain of \$15 per cow for every 1% increase in preg rate

#### The Bottom Line

- Increased herd health, pregnancy rates, herd size, and milk yields
- Opportunity to increase animal health standards
- Dairy farmers are missing out on significant revenue potential and cost savings







This is **Sureshot,**The robotic injection system for dairy cows.

Identifies individual cows

99.9% shot accuracy

Real-time data management

Automatic needle disposal

Robot built for environment

Keeps up with cow flow

No labor required

Agriculture is a **\$2.4T** industry that will require precision based technologies to feed the world's population by 2050



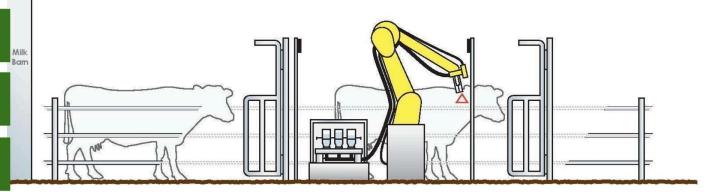
# SURESHOT™

Increased Health & Less
Cow Stress

Decreased Labor & Training Costs

Increased Herd Production & Milk Quality

Increased Accuracy for Injections





# **Value Proposition**



- Save up to \$85/cow/year on labor costs
- Gain up to \$200/cow/year
   from increased health
   standards
- In total, up to **\$285/cow/year** could be achieved with Sureshot



## The Farmer's ROI with SureShot

|                     | Customer ROI<br>(1.5 - 3 years) | Labor Savings<br>(\$62k per employee) | Additional Revenue (Increased Health Standards) | Total Potentia<br>(Per Year) |  |  |
|---------------------|---------------------------------|---------------------------------------|-------------------------------------------------|------------------------------|--|--|
| 600+ Cow Dairies    | 3 years                         | 1-2 full-time<br>employees            | \$110,000                                       | \$234,000                    |  |  |
| 3,000+ Cow Dairies  | 2.25 years                      | 3 full-time employee                  | \$520,000                                       | \$706,000                    |  |  |
| 15,000+ Cow Dairies | 1.5 years                       | 4-5 full-time<br>employees            | \$3,200,000                                     | \$3,510,000                  |  |  |

The agriculture robotics market is valued at **\$4.6B** and is expected to increase to **\$20.3B** by 2025

These are forward looking projections and are not guaranteed.



# The Ultimate Impact



- To increase the profitability of the dairy farmer
- To increase the health standards of the cows by utilizing our system
- To increase environmental standards by using renewable energy sources





# Where is the Industry Heading?

- Rising cost of labor in the US
- Shortage of skilled employees
- Competitive food market
- US dairies are growing in herd sizes on average
- Increased robotics usage amongst dairies in the US
- Opportunities to expand into emerging markets

Traceability of pharmaceuticals for the very first in a market that cares about where their food came from.



# **Target Market**

6,000,000 of the 9,000,000 dairy cows in the U.S.

Expand to large dairies in Asia, Europe, and Middle East

The 50,000,000 beef cows in the U.S.

USA **34,187** Dairy Farms in 2019



Initially target dairy states such as California, Wisconsin, Idaho, New York, and Texas

- Large dairy operations
- Utilize artificial insemination
- Spend significantly on labor
- Operations with robotics

Target international countries with the such as India, Brazil, China, Ethiopia, and Pakistan.





# Market Landscape

Indirect competitors:
DeLaval and Lely robotic milking
systems

Barrier to entry:
High cost to produce units and new
AgTech sector

Patent status:

Expected to be granted in early 2021

PHARM ROBOTICS

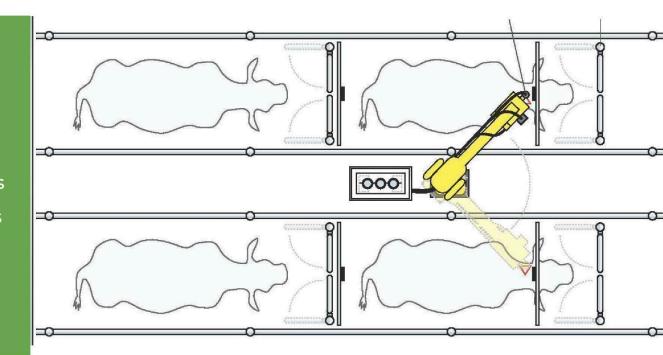
## **Initial Revenue Generators**

### One time

- Sureshot Sales
- Installation Fees

## Recurring

- Pharmaceutical Sales
- Yearly Licensing Fees
- Yearly Software Fees
- Data Monetization\*

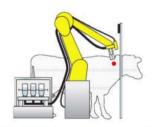


<sup>\*</sup>Data monetization will begin in FY 4



<sup>\*</sup>If no systems are sold, we will still receive roughly \$11,000/unit in recurring revenue

## **Projected SureShot Sales**



\$300,000 base price plus gate system and installation fees



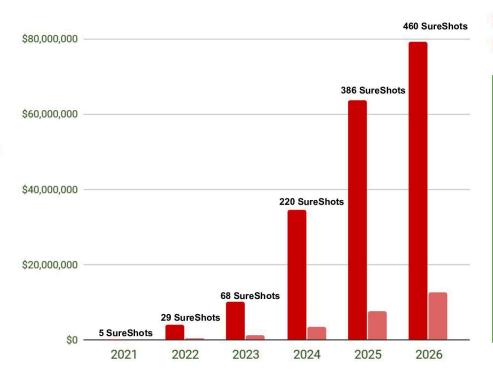
**Pharmaceutical Sales** 



**Yearly Licensing Fee** 



**Yearly Software Fee** 



Total Net Income

Recurring Revenue

\$200K upfront

\$10K / mo. until paid

1 robot / dairy

\$12.3M

Revenue Potential from 41 signed Letters of Intent

\*LOIs allow for future discussions with farmers on Purchase Agreements

## The Moo-vers of Pharm Robotics



Marinus Dijkstra CEO & Co-Founder

20+ years of dairy management experience Partner/operator of 2 large dairies Reputable CDI member with over 3,000 cows CMAB board member



Alexander Chuck CFO & Co-Founder

5+ years of dairy operations experience AgGrad 30 under 30 winner Previous financial analyst Previous operations manager B.S. in Business w/ Finance Emphasis B.S in Accounting



Connor Broughton Head of Business Development & Marketing

M.B.A. Graduate
B.S. in Business w/ Finance Emphasis
B.S. in Accounting
Previous experience in
business/finance strategy

## Partnerships and Collaborations



Thomas Hintz Partner

20+ years of renewable energy experience
Managing Partner of Seahold LLC
B.A. in Economics
Assisting in business development and business strategy



Joe Trujillo & Jason Swart Partners

30+ years of dairy equipment experience
Owners of Specialized Dairy Services,
Assisting in equipment installations and sales in Western US



Chris van den Berg Partner

10+ years of SaaS and management experience CEO of FarmTrace M.Sc. in General Management Assisting in financial strategy and

Also featured on:

HOARDS PAIRYMAN

PROGRESSIVE

DAIRY













## **Unrivaled Potential**



Attended DFA accelerator program from April - June 2018



Non-provisional utility patent (pending)



Manufacturing, software, market research, and installation channel partners established



40 LOIs (Representing roughly 350,000 cows) & 4 large dairies committed for beta-phase



Accepted partnerships with Siemens and Valley Agriculture Software (VAS)



Continuing to work with the integrators on some initial RFID and visualization technology



Developing roadmap with VAS to build the add-on onto their existing herd management program



Sponsor project at CSU, Chico has begun the design process for our gate system/bumper restraint



Working on business relationships with global robotics and pharmaceutical companies



## **Appendix**

### What will each existing Partner contribute towards when the timing is right?

**Jason Swart** & **Joe Trujillo** will utilize their resources with SDS to serve as our primary team for installations as well as expanding our market share by assisting with sales by utilizing their existing customer base of 40 large dairy farms in the western US. They previously invested \$10k each in which we were able to stay afloat for 2 years with the capital they invested and went towards marketing, legal, patent, and trade show expenses.

**Thomas Hintz** will continue to advise on various topics related to business development such as finding ways to reduce the cost to produce future units, analyzing our business model to make better decisions and increase margins, and provide access to resources to have all systems ran on renewable energy sources. There is also a potential to receive economic returns on environmental factors such as selling credits for energy. Tom will also assist by utilizing his network to find investors for future capital raises.

Chris van den Berg will assist in helping us build the centralized AI platform that integrates with various dairy herd management programs such as DairyComp 305, BoviSync, etc. as well as providing guidance on how to monetize the data we aggregate. Our goal with Chris is to find various ways to continue expanding our software, data analysis, and data monetization capabilities. Once significant data analysis has been performed, there is a potential to collaborate with pharmaceutical companies to test new products on controlled groups to determine optimal outcomes for animals. Chris will also assist by providing advice on financial strategy for future capital raises.

## **Appendix**

### Do we have plans for a future maintenance contracts for customers?

Yes, once the prototype has been developed we plan to outsource an industrial automation firm to create an easy to read, multilingual manual for customers and will begin advertising maintenance contracts. The details of the maintenance contract are to be determined but our plan is to price the maintenance contract against the percentage of failure of Sureshot to come out on top, financially.

#### LinkedIn for Team

Marinus: https://www.linkedin.com/in/marinus-dijkstra-642527129/ Alexander (Alika): https://www.linkedin.com/in/alexanderchuck/

Connor: https://www.linkedin.com/in/connorbroughton/

Jason & Joe: None

Thomas: https://www.linkedin.com/in/thomas-hintz-87519918/

Chris: https://www.linkedin.com/in/chris-van-den-berg-/



# Appendix

### **Financial Statement Model for Pharm Robotics**

| INCOME STATEMENT                               |                 |                 |                  |                  |                  |                  |
|------------------------------------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| Fiscal year                                    | 2021P           | 2022P           | 2023P            | 2024P            | 2025P            | 2026P            |
| Fiscal year end date                           | 12/31/21        | 12/31/22        | 12/31/23         | 12/31/24         | 12/31/25         | 12/31/26         |
| Revenue                                        | 2,250,000       | 13,050,000      | 30,600,000       | 99,000,000       | 173,700,000      | 207,000,000      |
| Cost of sales (enter as -)                     | (1,500,000)     | (8,700,000)     | (20,400,000)     | (66,000,000)     | (115,800,000)    | (138,000,000)    |
| Gross Profit                                   | \$<br>750,000   | \$<br>4,350,000 | \$<br>10,200,000 | \$<br>33,000,000 | \$<br>57,900,000 | \$<br>69,000,000 |
| Research & development (enter as -)            | (648,000)       | (100,000)       | (180,000)        | (825,000)        | (725,000)        | (625,000)        |
| Selling, general & administrative (enter as -) | (158,222)       | (345,000)       | (985,000)        | (1,390,000)      | (2,100,000)      | (2,875,000)      |
| Inventory                                      | (360,000)       | (360,000)       | (360,000)        | (360,000)        | (360,000)        | (360,000)        |
| Operating profit (EBIT)                        | \$<br>(416,222) | \$<br>3,545,000 | \$<br>8,675,000  | \$<br>30,425,000 | \$<br>54,715,000 | \$<br>65,140,000 |
| Other Income- Installation Fees                | 15,000          | 87,000          | 204,000          | 660,000          | 1,158,000        | 1,380,000        |
| Pretax profit                                  | \$<br>(401,222) | \$<br>3,632,000 | \$<br>8,879,000  | \$<br>31,085,000 | \$<br>55,873,000 | \$<br>66,520,000 |
| Taxes                                          | (1,400)         | (1,400)         | (1,400)          | (1,400)          | (1,400)          | (1,400)          |
| Net income                                     | \$<br>(402,622) | \$<br>3,630,600 | \$<br>8,877,600  | \$<br>31,083,600 | \$<br>55,871,600 | \$<br>66,518,600 |
| Free Cash Flow from Reccuring Income           | \$<br>54,500    | \$<br>370,600   | \$<br>1,111,800  | \$<br>3,509,800  | \$<br>7,717,200  | \$<br>12,731,200 |
| Total Net Income                               | \$<br>(348,122) | \$<br>4,001,200 | \$<br>9,989,400  | \$<br>34,593,400 | \$<br>63,588,800 | \$<br>79,249,800 |
| Units                                          | 5               | 29              | 68               | 220              | 386              | 460              |
| % Growth                                       |                 | 480.0%          | 134.5%           | 223.5%           | 75.5%            | 19.2%            |

