



Centry LLC.  
Charlotte, NC  
<https://github.com/Jonwil20/BINF-6399-Centry-LLC>

## **Centry LLC Agenda**

Meeting 03

May 4, 2021

**HOST:** Mariana Perez

**ATTENDEES:** Thao My Nguyen, Jonathan Richards

<b>Time (PDT)</b>	<b>Topic</b>	<b>Presenter</b>
4:00	Welcome	CEO
4:01 - 4:25	Presentation	CEO/CTO/CFO
4:25 - 4:30	Round Table Discussion	ALL
4:30	Adjournment	CEO



## Pre-Read

### BACKGROUND

Platelet-rich plasma therapy is an effective and simple method of treatment for a wide variety of medical issues. The first concept of PRP injections arose in the 1970s, for blood transfusions. After 2009, nearly a dozen clinical research trials took place within just a few years of each other and showed promising results for PRP therapy. As there is an advancement in our understanding of the human immune system, the use of PRP therapy has widely expanded.

PRP injections have now been shown valuable in not only medical treatments but also cosmetic procedures allowing them to gain popularity with the public. In 2017 there was a "Vampire Facial" trend that exploded on social media due to a celebrity that promoted the treatment. The injections are now used for a variety of procedures such as previously mentioned facials and to treat hair loss and now possibly to help individuals regain a sense of smell.

PRP is produced from the patients' blood, therefore, reducing the risk of infection. It is composed of a higher concentration of platelets which circulate through the blood and are critical for blood clotting. The platelets are separated from other blood cells and their concentration is increased during centrifugation. Platelets are on the front line of the immune response and play a significant role by delivering growth factors that can influence tissue repair in a variety of different cell types.

### PROBLEM AND SOLUTION

The rise in demand is beneficial for providers who offer the therapy but there are barriers that various providers and patients experience due to insurance not willing to cover most PRP treatments.



The high out-of-pocket cost for PRP treatments has discouraged many potential patients from undergoing the treatment even when it is for a medical problem. Individuals with lower income may not even consider PRP treatments despite the benefits and minimal risk. That is what leads the team to create Centry LLC. Our goal is to provide PRP injection kits with increased effectiveness but at a lower cost to allow a diverse range of patients to gain access to the treatment.

PRP therapy requires follow-up appointments to reinject the treated area every three to six months depending on area size and quantity of injections. Centry will offer PRP injection kits with anticoagulants which will increase the effectiveness of growth factors found in the plasma. The improved effectiveness of the PRP injection not only will reduce the quantity of blood that needs to be drawn but also will decrease the number of sessions the patient needs to show up for which will reduce the cost for the patient.

Platelet- Rich Plasma (PRP) Therapy treatment is an effective and safe treatment for a range of medical issues. The primary problem is the excessive cost per session of the treatment. The cost alone limits availability to a segment of the population that can afford to seek this effective treatment. The high out-of-pocket cost for PRP treatments has discouraged many potential patients from undergoing the treatment even when it is for a medical issue.

Centry is proposing PRP injection kits with increased effectiveness but at a lower cost to allow a diverse range of patients to gain access to the treatment. For example, unlike the competition, Centry will offer an anticoagulant with the PRP injection kit.



## TEAM

Centry is comprised of three individuals with a passion for helping people regain their confidence. The team believes that everyone should have fair access to treatments which is why the main focus is on reducing the cost of each treatment. The team's CEO is Mariana Perez, she is prepared to contribute knowledge from her biological background and previous roles in operations management to the role of CEO for Centry LLC. The team's CFO is Thao, she is a current student in the Masters in Bioinformatics program. She hopes through her biological knowledge and learning experiences aspect can contribute to Centry, LLC. The team's CTO is Jonathan Richards, he is a graduate student as well, Masters in Bioinformatics. He has a background in statistics and data analysis and uses those skills to help analyze the effectiveness of Centry's PRP technology. He hopes his prior experience in customer service and as a QA will serve both the team and the public appropriately.

The team decided to make Centry an LLC because it has a business structure that can combine the pass-through taxation of a partnership or sole proprietorship with the limited liability of a corporation.

## PRODUCT DETAIL

Our product would include the materials necessary for the best PRP experience. We will offer a PRP injection kit which we are calling the CKit and the compatible centrifuge models. By supplying the kit and centrifuge we have full control over tube design to maximize platelet retention. The kit is what we expect will set us apart from other PRP kit companies such as Anthrex Angel or Eclipse PRP. Centry will provide an anticoagulant which will allow recovery of 90% of a patient's platelets. For PRP therapy to be effective the higher the platelet concentration in the injection the greater the impact. Some



highlights that are specific to our CKit are materials that are certified as biocompatible, a double cap to ensure protection for contamination during the separation process, and a one-year reinfection period, which means fewer overall treatments than the other PRP kits that are currently on the market.

## CUSTOMER DISCOVERY

To develop Centry, feedback from potential customers is crucial to address concerns early on. By administering a series of diverse surveys, we can adjust to the ideal business model for Centry. Our customer discovery plan will consider the provider as well as the patient. The surveys will be modified for the person that we interview but we intend to reduce the cost for the provider to overcome hesitancy and to find what the best price point is for the customer.

One issue we run into when narrowing the patient population for a survey sample is that the range of uses for PRP is vast. Centry plans to keep in mind the various uses of PRP, but we also believe it is important to focus on a specific use to gain a deeper understanding of the expectations for those providers and patients. The use Centry will primarily focus on is for hair loss. Since the customer base for such treatments is promising and diverse. Centry plans to partner with dermatologists and individuals experiencing hair loss to provide the most reliable and effective PRP kit.

Since the initial board meeting held by Centry, our goal has been to expand our customer discovery data with either a series of online surveys or direct interactions with people that we know or come across. The survey questions were created to gather enough data to determine our main competition when it comes to the hair loss treatment industry, as well as a price point that the patients would be willing to pay per session and to explore the patient sector.

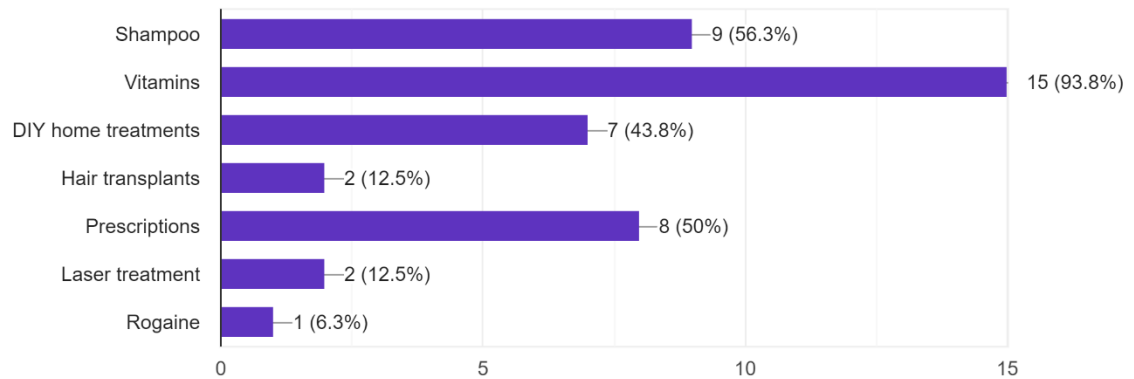
The individuals surveyed were asked what other products they use to alleviate hair loss problems if any which is illustrated in Figure 1. The results of the data show that individuals seek at-



home treatments like shampoo, vitamins, over prescriptions, hair transplants, and laser treatments. A follow-up question revealed that this approach to home solutions was in many cases due to cost.

If yes to previous answer, what kind?

16 responses

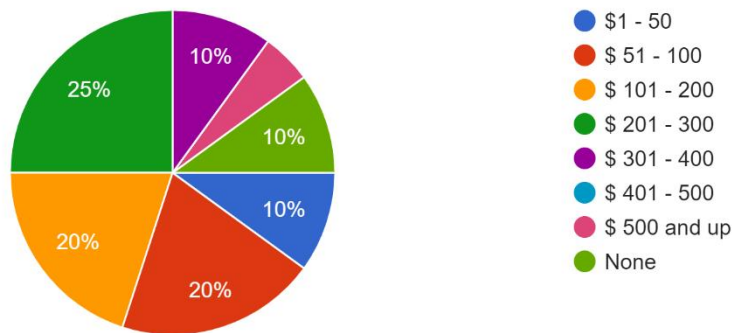


Another data point of interest when conducting customer discovery surveys was the average yearly cost of hair loss treatments that they already spend. That is crucial data to analyze what an individual is willing to pay for a cosmetic procedure. In Figure 2, the data from the customer discovery conducted thus far is displayed. According to the feedback we received there is still a limited amount of data to determine the most popular choice but there seems to be a preference for ranges between \$50 to \$300.



## How much do you spend on hairloss treatments every year?

20 responses



## Customer Archetypes

Customer Archetypes	Customer 1	Customer 2	Customer 3
Description	Cosmetologist (30-65)	Dermatologist (30-65)	Phlebotomist(30-65)
Jobs	Checking stock, anticipating needs, placing orders	Help to revitalize the appearance of the skin, hair, and nails	Collection of blood samples from patients' collection and transportation of laboratory specimens.
Pains	High load of work and long periods of time spent on their feet	Deliverer of bad news, tend to be more expensive	Lower than wage than other medical professionals, high stress, competitive personality
Gains	Interest in Subscription Services, innovative, thorough	Strong communication skills, accessibility, caring	High understanding of both anatomy and venipuncture techniques

The customers we identified while conducting customer discovery were the medical professionals that would be administering our PRP treatment: Cosmetologists, Dermatologists, and Phlebotomists. Our main customer was determined to be Dermatologists, customer 2 in the figure above. They are the most equipped for the administration of PRP injections and the most receptive to our innovative approach to hair-loss treatment.



The common response among these three archetypes is that they view us as a viable alternative to their more established brands in PRP therapy because of our affordability and effectiveness.

#### (TAM/SAM/SOM)

Total Available Market (TAM) refers to the combined revenues (or unit sales) of all the companies in a specific market on an annualized basis. In the case of Centry, the market the team must analyze and take into account is the healthcare and life sciences industry. The global platelet-rich plasma market size was estimated at USD 476.1 million in 2020 and is expected to grow 12.1% annually from 2020 to 2027. Pure platelet-rich plasma dominated the market and accounted for the largest revenue share of 53.0% in 2019.

Served Available Market (SAM) refers to the share of Total Available Market that the companies providing a specific solution can fulfill. Centry's CKit can be offered as a lower-cost alternative when compared to other PRP kits. Currently, PRP kits are sold to a variety of healthcare providers given that it is a treatment tool for a wide range of medical issues. The pure platelet-rich plasma kits segment is slated to touch a value of \$90 million in 2022.

Share of Market (SOM) refers to what a particular company is planning to achieve over the next five years in terms of sales. Centry's goal is to provide an updated cheaper alternative to drive out competition offering more expensive kits to healthcare providers. In five years Centry is striving for 15% of the market share of PRP kits. So, for example, in the year 2022, that would equal 13.5 million. And for 2025, we expect that figure to be \$19.03 million.





## REVENUE MODEL/BUSINESS MODEL

Our target customers are both men and women of all ages, especially customers who suffering hair loss due to alopecia areata, stress, hormone imbalance, and other diseases. Our plasma-rich platelet will help the patient regain their confidence back both personally and professionally with high quality of luxurious hair and astounding results after just 3 months by using the patient's plasma at an affordable price when compared to other PRP injection kits.

Centry will sell PRP kits to hospitals and clinics, our first focus will be for cosmetic use therefore will require a partnership with dermatologists. Centry's business plan will focus on perfecting the PRP kit since it will become the most profitable item. Patients who initiate PRP therapy will return every year to continue to see the benefits of the therapy. Depending on the issue. The centrifuge we will offer will only be a one-time purchase until we decide to upgrade our technology therefore the stream of revenue, we are expecting to be mostly comprised of the CKit.

## OBSTACLES

There is a wide range of side effects (infection, scar tissue, possible negative reactions to anesthetics, etc.) associated with PRP treatment, making it a moderate risk to the public. Also, the high costs, as well as insurance plans usually not covering PRP treatment, make it too expensive for many individuals. We would need to have our technology cleared as class II medical devices for PRP preparation.

Since our initial Board meeting, there have been various adjustments to Centry's business plan due to obstacles faced. One obstacle that we found that would affect the company structure was



creating our very own Centryfuge. The logistics of producing a centrifuge to meet standards and work with a unique test tube design was not feasible for a company at our stage. The level of expertise needed along with testing was out of our scope, therefore our company has redirected to offering the CKit it centrifuges purchased from Eppendorf. The goal of Centry is to allow more clinics the ability to offer PRP treatments at a lower cost therefore by focusing funds on increased effectiveness of the kit instead of centrifuge, it allows us to lower the cost.

## PRODUCT/TECH DEVELOPMENT

Centry's product of plasma-rich platelet (PRP) kit would require components of a blood collection kit with necessary tools for blood extraction. The blood collection kit would include syringes, anticoagulants, needles, tourniquet, and butterfly needles. The CKit produced would go on the market at a retail price of \$100 including the anticoagulant.

For technology development, Centry will work on developing and pursuing a patent for a unique PRP tube design and compatible centrifuge. The CKit PRP tube would be made from biocompatible certified materials. The design would include a double cap to ensure protection from contamination during separation as well as providing a high concentration of platelet counts with a single spin.

Also, we provide the service of PRP process at our facilities deliver directly to the customers, so they can get the series of treatments and consultation at our site on the same day without going to medical facilities providers which can be a prolonged process due to the waitlist.



## TIMELINES/ MILESTONES

Centry's timeline is to begin to focus on hair loss applications to obtain a reliable reputation and validation from medical professionals. The goal is to expand into intensive predicaments, such as loss of smell, and chronic tendon injuries. There is potential for PRP therapy in the sports medicine sector.

- **Product Development**

- Conduct customer discovery to find out the crucial components and the best serums to include in the CKit. **(2021)**
- Search for manufacturers to produce our product. **(2021)**
- Submit 510(k) application. **(2022)**
- Test our final prototype before full production. **(2022)**
- Perform quality tests once products are created. **(2022)**
- Continue to perform routine customer discovery to plan expansion outside of cosmetic use. **(2022-2025)**
- Product Launch! **(2023)**

## Company Structure

- Establish headquarters and bring onboard professionals from different fields. **(2022)**
- Negotiate contracts with manufacturers to keep our production costs low. **(2022)**
- Set up customer service teams. **(2022)**
- Continue expansion onto sports medicine. **(2025)**
- Seek partnerships with sports teams. **(2025)**



## Financial

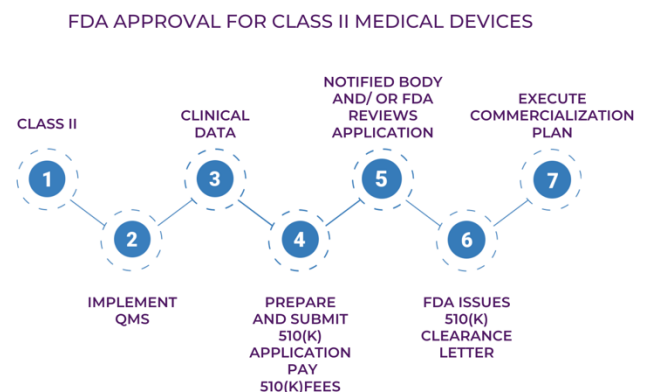
- Begin marketing campaign to raise awareness of product offered. Manage production and ensure quality. **(2023)**
- Obtain 15% of market share on PRP kit market. **(2025)**
- Seek funding from investors.
- Submit SBIR application. **(2021)**

## REGULATORY

To sell our Ckit we must first seek FDA approval from FDA's Center for Devices and Radiological Health specifically, by the Office of Device Evaluation (ODE). The FDA's Center for Devices and Radiological Health is responsible for regulating firms who manufacture, repackage, relabel, and/or import medical devices sold in the United States. FDA regulations require medical devices to be properly labeled, manufactured according to specific standards, obtain pre-clearance before being imported, and to be manufactured in registered facilities.

Medical devices are classified into Class I, II, and III. Regulatory control increases from Class I to Class III. The Ckit is classified as a Class II Medical device therefore it needs to be cleared by the FDA with a 510(k) application. Before any marketing campaign is initiated Centry must first obtain the premarket 510(k) approval.

In Figure is the process illustrated for a Class II device. As shown in the Figure before the 510(k)-





application submitted there must be a Quality Management System that meets FDA Quality System Regulation as found in 21 CFR Part 820. Once the application is submitted and the fees are paid the applicant will be notified with a 510(K) Clearance letter allowing the applicant to continue with commercialization.

## BUDGET

For Centry to make the idea into a real solution for patients the correct amount of funding is crucial to provide the best PRP kit and centrifuge to the market. Our investment goal is to receive funds at an estimated amount of 5 million to invest in the production cost of PRP kits, further research and development, and other expenses. In exchange, our investor(s) will receive 20% of our yearly net margin profit. The profile of our prospective investor is as such: We want to target investors who are active private equity investors in the healthcare and life science industry. Upon our research, we discovered that these firms specialize in growth-stage, buyout, and platform funding transactions. As a company, we are in the growth-stage category. The primary initial venue in which we will be using the funds we obtain from investors will go towards the manufacturing of compatible centrifuge technology for our PRP kits and the production of the kits as class II medical devices.

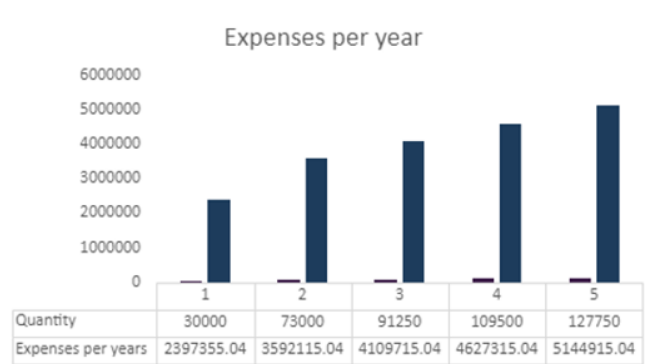
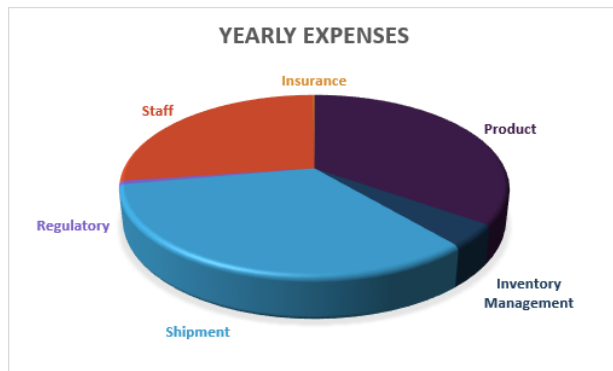
Moving on to our operational costs, components of the PRP kit will be a substantial portion of those expenses. This would include a blood collection kit with the necessary tools for blood extraction. Some items for blood extraction will include syringes, needles, tourniquet, and butterfly needles. We plan to buy centrifuge baskets from a third-party vendor, which will factor in as part of our operational costs. The cost per centrifuge can either be \$353 (the SCL 402) or \$457 (the SCL 412) per



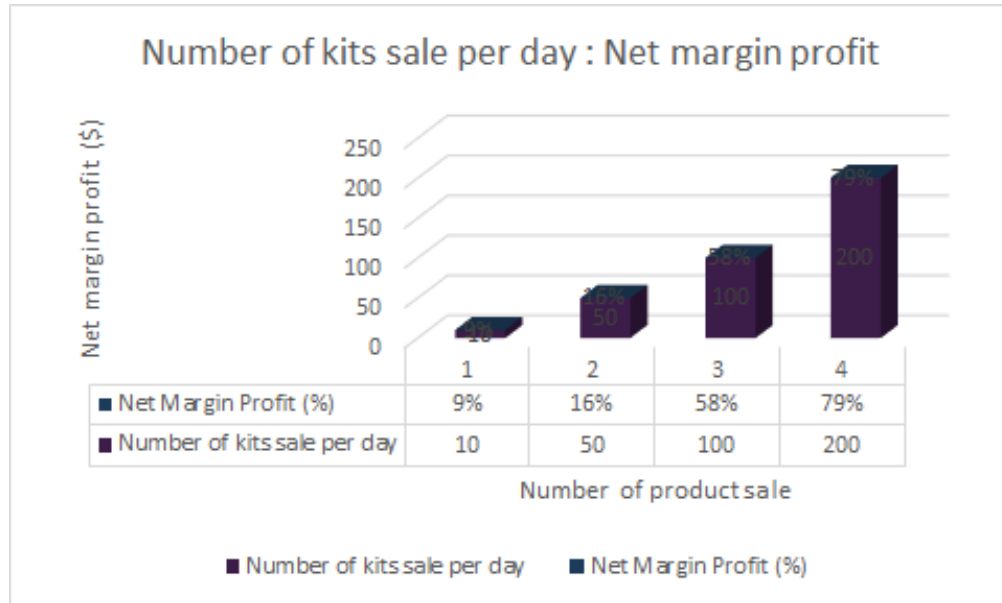
centrifuge, depending on the centrifuge type we want to use from a specific vendor. Depending on which third-party vendor, the cost per centrifuge basket will vary.

## FINANCIAL

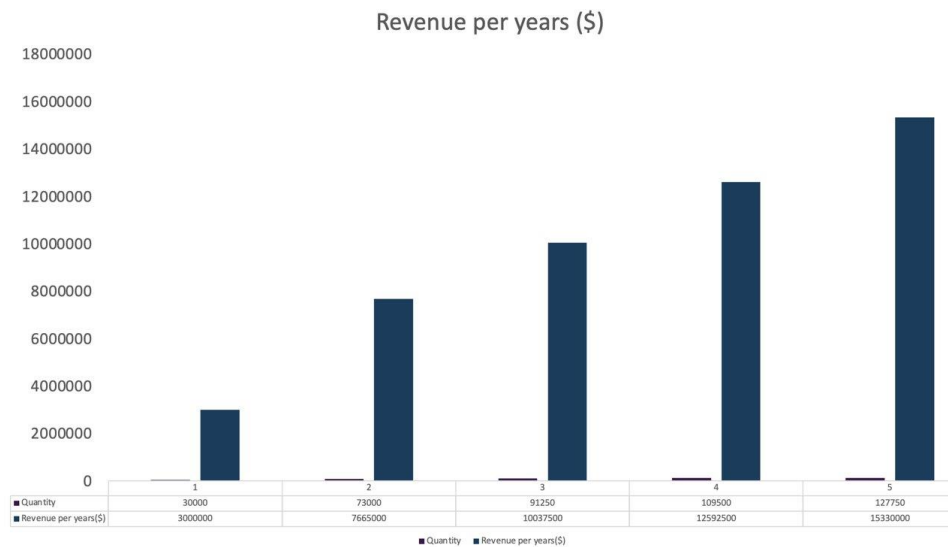
Centry's financial goals will be focused on obtaining partnerships with Med Spas, Clinics, and potentially hospitals to provide a subscription service. We will focus on restocking the medical facilities throughout the year with our disposable CKit.



Based on the pie chart, our yearly expenses have the majority cost of structure focusing on employee cost and shipping cost. The bar graph on the right shows the yearly expenses for over 5 years with total expenses up to \$19,871,415.2.

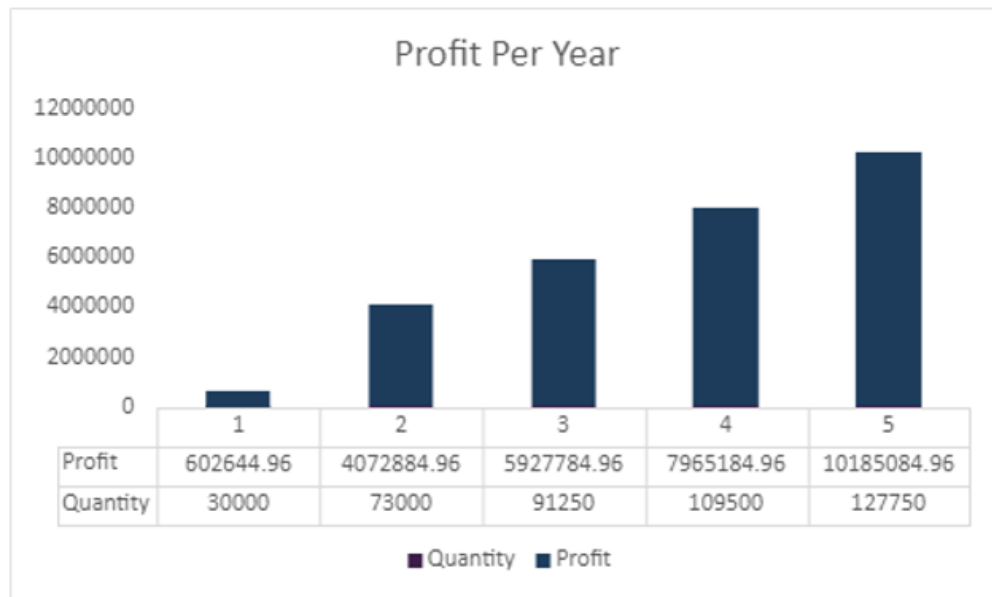


The net margin profit will break even with 50 sales of PRP (platelet-rich plasma) in a day over 1 year. The trend of profit will increase with an increase in the number of PRP kits sold after 51 products to 100 products sold per day in a year. Our company goal is to sell 30,000 kits per year which would require 30 partnerships to remain active every year.





For the revenue per year over 5 years based on the PRP kit sale, the profit trend increases over the years with total profit at the end of the first year is 3 million. The total revenue for five years will go up to \$48,625,000.



As for the profit per year over the 5 years' timeline forecast, this exponential graph shows the profit for the 1<sup>st</sup> year is about \$602,644 and by the end of 5 years the profit will go up to \$10,185,084. This profit trend after 5 years is 16 times increase in profit over the years. Each shark will receive a 20% share of our profit and we believe if the sharks invest in us, they will keep continuing to see this remarkable exponential graph, and of course, their shares will increase as well.

## HIGHLIGHTS

From the initial pitch presentation to the last our team has gained a vast amount of knowledge in the PRP Kit market due to research conducted. Although the project was worked on during a pandemic making it difficult to collaborate with another our team found ways to put ideas together and create Centry. One of the most difficult obstacles to overcome was the collection of customer discovery





data for several reasons. It was difficult to reach out to a randomized population sample during a pandemic when we all had to remain socially distant. A highlight for the team was to overcome that obstacle in creative ways.

Another overall highlight for the team is the improvement from pitch one to pitch three due to feedback provided. The team was able to improve the presentation and simplify the business plan due to constructive criticism from the sharks.