LITERATURE SURVEY

1.DEVELOP A FOCUSED QUESTION:

Who can donate?

Generally, plasma donors must be 18 years of age and weigh at least 110 pounds (50kg). All individuals must pass two separate medical examinations, a medical history screening and testing for transmissible viruses, before their donated plasma can be used to manufacture plasma protein therapies.

How do I donate plasma?

There are more license and IQPP-certified plasma collection centers in the U.S., Canada, and Europe. Each company manages its operations differently within government regulatory guidelines. Locate a center near you, using our searchable directory. Call the center to find out hours of operation and to ask any other questions you may have.

Does it hurt?

Most people compare the feeling of the needle to a mild bee sting. You will also be required to submit to a finger stick test each time you donate so the collection center medical staff can evaluate your protein and hemoglobin levels.

Is donating plasma safe?

Yes. Plasma donation in IQPP certified collection centers is performed in a highly controlled, sterile environment by professionally trained medical staff. All plasma collection equipment is sterilized and any equipment that comes into contact with you is used only once to eliminate the possibility of transmitting viral infections.

What type of medical screening and testing is done?

You must have a pre-donation physical which includes answering medical history questions, tests for viruses such as HIV and Hepatitis and evaluating your protein and hemoglobin levels.

How do you get my plasma?

Donating plasma is similar to giving blood. A needle is placed into a vein in your arm. Plasma is collected through a process call plasmapheresis and is conducted in cycles that may take up to an hour. Whole blood is drawn. The plasma is separated from the red blood cells and other cellular components. These are returned to your body with sterile saline solution to help the body replace the plasma removed from the whole blood.

How long does it take?

Your first donation will take approximately 2 hours. Return visits on average take about 90 minutes.

What do you do with my plasma?

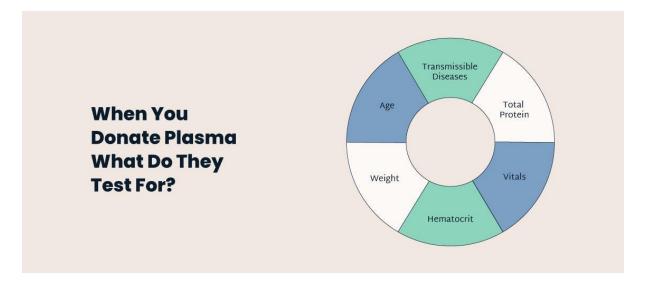
Nearly 500 different types of proteins have been found in human blood plasma. Approximately 150 of these may be used for diagnosing disease or manufacturing therapies.

How much will I be compensated?

Each company establishes its own compensation scale. Please contact the center nearest you for further information.

Health Questionnaire:

After you check in at your plasma donation center, you'll complete a questionnaire that will ask questions about your medical history, medications you're currently taking, recent surgeries or medical procedures, relevant travel history, recent tattoos and piercings, and assesses your risk for certain transmissible diseases. You'll complete this questionnaire each time you donate.



2.SCOPE OF LITERATURE:

The main role of plasma is to take nutrients, hormones, and proteins to the parts of the body that need it. Cells also put their waste products into the plasma. The plasma then helps remove this waste from the body. Blood plasma also carries all parts of the blood through your circulatory system.

3.REFINE AND EXPAND THE SEARCH:

REFERENCES LISTS:

- 1. Safe blood and blood products. Module 1: Safe blood donation. Geneva: World Health Organization; 2002. [17 August 2012]. http://www.who.int/bloodsafety/transfusion_services/bts_learningmaterials/en/index.html.
- 2. Blood donor selection. Guidelines on assessing donor suitability for blood donation. Annex 3. Geneva: World Health Organization; 2012. [17 August 2012]. http://www.who.int/bloodsafety/voluntary_donation/blood_donor_selection_counselling/en/ [PubMed]
- 3. Aide-mémoire. Blood safety. Geneva: World Health Organization; 2002. [17 August 2012]. http://www.who.int/bloodsafety/publications/who_bct_02_03/en/index.html.
- 4. WHO/IFRC. Towards 100% voluntary blood donation: A global framework for action. Geneva: World Health Organization; 2010. [17 August 2012]. http://www.who.int/bloodsafety/publications/9789241599696/en/ [PubMed]
- 5. The Melbourne Declaration on 100% voluntary non-remunerated donation of blood and blood components. Geneva: World Health Organization; 2009. [17 August 2012]. http://www.who.int/worldblooddonorday/Melbourne_Declaration_VNRBD_2009.pdf.
- 6. WHO/CDC/IFRC. Blood donor counselling: Implementation guidelines. Geneva: World Health Organization; 2012. [17 August 2012]. http://www.who.int/bloodsafety/voluntary_donation/blood_donor_selection_counselling/en/ [PubMed]
- 7. Screening donated blood for transfusion-transmissible infections. Geneva: World Health Organization; 2010. [17 August 2012]. http://www.who.int/bloodsafety/publications/bts_screendondbloodtransf/en/index.html. [PubMed]
- 8. Reiss RF. Blood donor well-being: a primary responsibility of blood collection agencies. Annals of Clinical & Laboratory Science. 2011;41(1):3–7. [PubMed]
- 9. Global Database on Blood Safety. Summary report 2011. Geneva: World Health Organization; 2011. [22 August 2012]. http://www.who.int/entity/bloodsafety/global_database/GDBS_Summary_Report_2011.pdf.
- 10.Boulton F. Evidence-based criteria for the care and selection of blood donors, with some comments on the relationship to blood supply and

emphasis on the management of donation-induced iron depletion. Transfusion Medicine. 2008;18:13–27. [PubMed]

As you develop a final, strategy for each database, save your strategies in a:

- Registration (Push the registration data into the database)
- Login (Fetch the data upon login)
- Dashboard (Display the stats of different blood groups)
- Plasma Request (Upon request, take the required blood group and return the details)
- Integrate Send grid and send emails using Send grid

4.LIMITS YOUR RESULTS:

How Often Can You Donate Plasma?

Whole blood, plasma, and platelet donations play an important role in fulfilling the need for blood and blood components at many hospitals and treatment facilities around the world. While the American Red Cross only allows individuals to donate plasma once every 28 days, private plasma donation companies may allow individuals to make donations multiple times a week.

How many times can I donate plasma?

Plasma donations through the American Red Cross can only be made once every 28 days, or up to 13 times each year. But most private plasma-donation companies allow people to donate plasma more frequently up to multiple times a week.

What's the most needed type of plasma?

Although people of all blood types can donate plasma, AB plasma donations are among the most important. This is because AB plasma is "universal," meaning that it can be administered to patients of all blood types. In addition, a type of plasma called convalescent plasma Trusted Source may be able to be donated by people who have recovered from a disease.

Are there side effects to donating plasma?

For most people, there are very few side effects associated with donating plasma. But potential side effects may include:

- Dehydration
- Fatigue
- Bruising
- Discomfort
- Infection
- Allergic reaction to citrate

5.DOWNLOAD CITATION:

Paperpile:

The citation style is built in and you can choose it in Setting > Citation Style or Paperpile > Citation Style in Google Docs.

EndNote:

Find the style here: output styles overview.

Mendeley, Zotero, Papers, and others:

The style is either built in or you can download a CSL file that is supported by most references management programs.

BibTeX:

BibTeX styles are usally part of a LaTeX template. Check the instructions to authors if the publishers offers a LaTeX template for this journal.

6.ABSTRACT AND ANALYZE:

Plasma transmission is one of the most effective treatments for critical diseases like Covid 19. Nowadays, voluntary blood donation has become the major source of blood supply. Several mobile applications are currently available to establish the initial communication between blood donors and receivers. Recommending the right potential donor during a blood search can save the life of a critical patient with an immediate response from the donor. However, the requirement of an advanced recommendation system has not been addressed by any of the existing mobile applications. In our research work, we have designed a real-time, intelligent, and rational recommendation system using sentiment analysis of the user's feedback, response rate of the donor, and the current geo-location information and finally develop a cross-platform application for blood collection and distribution system. To process and generate features from the user feedback,

we have designed a Bi-directional LSTM-based deep learning model. The quality of the recommendation of the potential donors has significantly improved. Moreover, we have conducted rigorous requirement analysis from real users and evaluated the performance of our application through both indoor and outdoor testing.

7.CREATE FLOW DIAGRAM:



8.SYNTHESIS AND RESULTS:

if you are eligible to donate.

- Plasma donors should be at least 18 years old.
- Plasma donors should weigh at least 110 pounds or 50 kilograms.
- Must pass a medical examination.
- > Complete an extensive medical history screening.
- > Test non-reactive for transmissible viruses including hepatitis and HIV.
- > Follow a recommended diet including 50 to 80 grams of daily protein.