

# BLOOD LINE

THE VOLUNTARY BLOOD DONATION JOURNAL | ISSUE 58 | 2020

## Blood Stem cell transplant providing second chances at life

Blood Cancer clock is ticking- Every 5 minutes someone in India is diagnosed with blood cancer or a blood disorder such as Thalassemia or Aplastic Anemia.

Blood cancer affects over 1 lakh Indians every year and about 10,000 children are born with Thalassemia. Despite this huge cancer burden, In India, only 0.03% of the total population is registered as a potential blood stem cell donor. While blood cancer is life-threatening, a set of healthy blood stem cells from a matching donor can be life-saving. The demand and supply gap is increasing as there aren't enough registered potential blood stem cell donors due to a lack of awareness.

Blood cancer refers to defects in the blood-forming system, which cause cancer cells to enter the bloodstream and multiply uncontrollably, crowding out the healthy cells and prevent it from fighting infections. According to experts, blood cancer which was once considered a cumbersome disease has seen a shift in treatment options leading to precise care. One such option is a blood stem cell transplant.

Blood cancer accounts for 8% of all new cases of cancer diagnosed in India. For many blood cancer patients the only chance of recovery is a blood stem cell transplant. Only about 30% of the patients in need of a blood stem cell transplant can find a sibling match. The rest 70% depend on finding a matching unrelated donor.

### How Blood Stem Cell Transplant can help a patient?

Many patients suffering from blood cancer and other blood disorders need a blood stem cell transplant to survive. For a successful blood stem cell transplant, blood stem cells from an unrelated donor are required. When blood stem cells are collected from a donor, they are infused into the patient through a transplant process. The infused cells travel through the bloodstream and settle in the bone marrow. These new blood stem cells begin to increase in numbers and produce healthy red blood cells, white blood cells and platelets, resulting in the replacement of the patient's diseased cells.

Know if you fit the criteria to register as a potential blood stem cell donor

- A healthy adult and a citizen of India
- 18 to 50 years of age
- Not already registered with a blood stem cell registry

If you meet the above requirement, you can register as a potential lifesaver! All you need to do is complete a consent form given to you by a stem cell registry and swab the inside of your cheeks to collect your tissue cells. When there is a patient in need of a transplant, a search is then carried out to find an unrelated match.

Currently, the DKMS-BMST registry has over 42,000 registered potential blood stem cell donors and has given second chances at life to 28 patients. The goal is to increase this number considerably so that there is a matching donor available for every patient in need of a stem cell transplant.

However, the lack of understanding and many misconceptions existing about the process, impacts the cause and the willingness of people to sign up. People often mistake a blood stem cell transplant as a painful procedure. The blood stem cell donors need not undergo any surgical procedure as the stem cells are collected from the donor's blood. The process followed is similar to donating blood platelets. It is high time that we all overcome these misconceptions and commit to being a life saver.

### Role of DKMS-BMST:

- Raising awareness and educating the general public about the importance of blood stem cell donation.
- Encouraging people of diverse ethnicities to register as a potential blood stem cell donor, which is done through various registration drives at different colleges, corporates, associations and through online portal.

To know more, please logon to: [dkms-bmst.org](https://dkms-bmst.org)  
For drive requests,  
please write to: [drive@dkms-bmst.org](mailto:drive@dkms-bmst.org)



**Patrick Paul**

CEO

DKMS BMST Foundation, Bengaluru

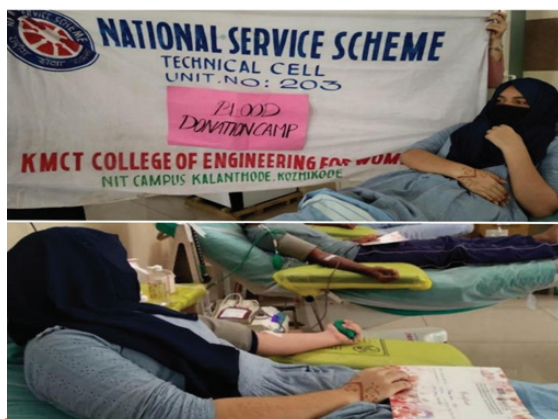
## World AIDS Day

In association with Terumo Penpol Private Limited , APJ Abdul kalam technological university and TKM Institute of Technology.



In accordance with World AIDS Day - 2020 on 1st of December, APJAKTU NSS Cell and Terumo Penpol Private Limited organized a state level programme hosted by the NSS Units 544 & 700 of TKM Institute of Technology, Ezhukone, Kollam under Rudhirasena (NSS Blood Cell). As part of this, to invoke state-wide awareness about Aids, the team organised a state-wide Blood Donation Camp Challenge in which 11 colleges participated from across Kerala.

An overview of every Blood Donation Camps conducted are given below.



Name of college	KMCT College of Engineering for women, kozhikode
Venue	Calicut government college hospital, kozhikode
District	Kozhikode
Association with	BDK kozhikode
Date	12/12/2020
No of blood donations	40



Name of colleges	College of Engineering trivandrum, John cox college, PRS engineering college
Venue	John cox college of engineering
District	Trivandrum
Association with	Sri Chitra Thirunal medical college
Date	22/12/2020
No of blood donations	31



Name of colleges	TKM institute of technology, college of engineering- paripally
Venue	SN college, kollam
District	Kollam
Association with	Paripally medical college
Date	18/12/2020
No of blood donations	15





Name of colleges	Vidya Academy of Science & Technology, Government Engineering College Thrissur, Malabar college of engineering, IES college of Engineering, Thejus Engineering College and Royal college of Engineering
Venue	IES college campus, IMA and Govt. Medical College, Thrissur
District	Thrissur
Association with	blood banks of IMA & Gvt. MC, Thrissur
Date	19-20/12/2020
No of blood donations	80



Name of college	College of Engineering, Aranmula
District	Pathanamthitta
Camp date	16/12/2020
Venue	College of Engineering, Aranmula
No of blood donations	20



Name of college	HEERA college of engineering and technology, thiruvanthapuram
Venue	HEERA college of engineering and technology, Thiruvanthapuram
District	Thiruvanthapuram
Association with	Sree Chitra Thirunal institute of medical science and technology.
Date	10/12/2020
No of blood donations	34



Name of college	KMEA Engineering college, GOVT Model Engineering College
Venue	KMEA Engineering college
District	ERNAKULAM
Association with	BKD Ernakulam and Aluva Government Blood bank
Date	19/12/2020
No of blood donations	53



Name of college	College of Engineering, Adoor
Venue	College of Engineering, Adoor
District	Pathanamthitta
Association with	General Hospital, pathanamthitta
Date	21/12/2020
No of blood donations	25



Name of colleges	College of Engineering pathanapuram, college of engineering kottarakara, Baslios Mathew II college of engineering.
Venue	Kottarakara taluk hospital.
District	Kollam
Association with	Kottarakara taluk hospital
Date	21/12/2020
No of blood donations	20



Name of college	NS college of engineering, Sreepathi Institute of management and technology and Government Engineering College sreekrishnapuram
Venue	Gov. District hospital palakkad
District	Palakkad
Association with	Gov. District hospital palakkad
Date	19/12/2020 – 21/12/2020
No of blood donations	16



Name of college	Sree Buddha College Of Engineering
Venue	Sree Buddha College of Engineering
District	Pathanamthitta
Association with	BKD Pathanamthitta
Date	18/12/2020
No of blood donations	44





# Pre donation information and Education talks for promoting Voluntary Blood Donation

We need channels of communication that can be used for educating and motivating the public about the need for blood donation. Potential donors will rarely come to you. In most cases, you will have to go to them to begin the process of educating and motivating them to donate blood and to become regular donors. Pre donation talks to individuals or groups are an effective method of communication. Unlike educational materials, which often depend for their effectiveness on the reader's literacy level, they provide an opportunity for people to ask questions and for you to check whether they have understood what you are saying. One of the most important functions of public talks is to educate potential donors about any reasons why they should not give blood, particularly because of poor health or risk behaviour which may expose them to transfusion-transmissible infections such as HIV, hepatitis B or syphilis. This serves the purpose of educating people about how to avoid infection, encourages unsafe donors to self-exclude and reinforces public confidence in the safety of the blood supply. Educational talks and discussions can be held in a variety of places, such as

- **educational institutions, such as universities, colleges and high schools**
- **workplaces, such as government offices, factories and plantations community centres**
- **at meetings of religious organizations, women's groups, voluntary community groups**
- **at donor clinics, as part of the donor screening process.**

You can probably think of many additional places where talks can be given. For example, you could set up a blood donor recruitment stand near the entrance at a large public gathering, such as a sporting or musical event, and give leaflets to people as they come in. You could then talk informally to those who are interested in more information about becoming blood donors. Educational talks should be carefully planned beforehand so that they are concise, informative and stimulating and the audience do not lose interest. Whenever you see other people giving talks, observe what makes them a good or poor speaker and learn from this. If you are inexperienced in giving talks, you may be able to get help from your local health education officer who can teach you how to increase your confidence and improve your performance. You may find the following guidelines helpful.

1. Identify a suitable place to give an educational talk and make appropriate arrangements to publicize the event well in advance.
2. Assess the likely knowledge and attitudes of the audience and the kind of information that you think they will need.
3. Plan your talk. You will probably find it helpful to write down what you want to say or at least to make brief notes about the key points. Include all the information that you think this audience will want and put it into a logical order. Remember to emphasize the need for safe blood donors and why certain donor behaviour presents a risk to donors themselves as well as to the recipients of their blood.
4. If you are nervous about giving the talk, practise it in privacy until you feel more confident.
5. Obtain any visual aids that you could use to illustrate your talk.
6. Ask a local community leader or another public figure, preferably one who is a blood donor, to join you in speaking to people about the importance of blood donation and about his or her experiences as a donor. Blood donors are often effective recruiters of other donors so ask if there are any donors in the audience who would also be willing to share their experiences.
7. Encourage feedback and questions and distribute any educational materials that you have been able to obtain.
8. After the talk, spend a few minutes assessing how well it was received and identify any ways in which you could improve your technique in the future.

Blood Donation Educational materials



Written educational materials such as leaflets and posters are a vital part of a public education programme, but they are expensive, and time consuming to produce and should preferably be developed by people who have experience in this area. Wherever possible, always use materials that are already available, unless they are unsuitable for some of the audiences that you want to reach. Even if you do not know of any suitable materials, it is worth spending time investigating whether any exist. As we have already suggested, the national blood transfusion service, the health education unit in the Ministry of Health or the Red Cross or Red Crescent Society may have produced some. If none are available, you may be able to persuade one of these organizations to develop some. You may decide, however, that you need to adapt some existing materials, perhaps by translating them into the language spoken in your area, or to produce some simple materials yourself, such as posters advertising a mobile donor clinic session. Always try to find someone who can help you to do this, such as the local health education officer. This is essential if you don't have any experience in developing materials.

An important part of the planning process is to think carefully about how your materials will be distributed and used. There is no point in producing thousands of copies of a poster if it will be displayed only in a small number of places. Printing can be very expensive so it is essential to find a cost-effective means of reproduction and to find out in advance how much it will cost and whether sufficient money is available. Remember that any educational materials you produce may need to be approved by the relevant authorities. When preparing leaflets, the information should be presented clearly in a logical sequence and in simple language with attractive illustrations, if possible. Leaflets should always be pretested, even if only with a small number of people. Choose a few people who know very little about blood donation and ask them whether the leaflet is clear and contains all the information they would need before deciding whether to give blood. Any changes required can then be made before the leaflet is finalized and distributed more widely. Wherever possible,

A simple follow-up study should be carried out through interviews or discussion to check how effective the material is in conveying the desired message. Posters are very useful because they are likely to be seen by a large number of people, particularly if they are displayed in popular public places or large offices, factories or colleges. They can be used to remind the public of the need for blood donors as well as to advertise the date, location and time of a public talk or blood collection session. As with leaflets and other educational materials, it is preferable to use existing posters rather than to make your own. Unless you are very experienced in communications, it is wise to leave it to the professionals. If you do decide to make a poster, make it as simple as possible since most people will not read detailed information in small print. It should, of course, be attractive and eye-catching with the important information appearing in large print.

**Source: WHO Blood Safety Transfusion Services**

# Blood Plasma Reduces Risk of Severe Covid-19 if Given Early

**Thousands of people received convalescent plasma as an experimental treatment for Covid. A new study shows that it works — but only when given within a few days of the onset of illness.**

A small but rigorous clinical trial in Argentina has found that blood plasma from recovered Covid-19 patients can keep older adults from getting seriously sick with the coronavirus — if they get the therapy within days of the onset of the illness.

The results, published Wednesday in the *New England Journal of Medicine*, are some of the first to conclusively point toward the oft-discussed treatment's beneficial effects. They arrive nearly five months after the Food and Drug Administration, under pressure from President Trump, issued the therapy an emergency green light for use in people hospitalized with Covid-19.

Thousands of patients have received infusions of plasma in the months since, while researchers waited for the data. The new study is one of the first well-designed clinical trials to show that the therapy has some benefit. "That's kind of what we have been looking for, in terms of really having evidence," said Dr. Boghuma Kabisen Titanji, an infectious disease physician at Emory University who wasn't involved in the research.

Convalescent plasma, the pale yellow liquid left over after blood is stripped of its red and white cells, teems with disease-fighting molecules called antibodies. Last summer, Mr. Trump hailed it as "a powerful therapy" made possible "by marshaling the full power of the federal government."

But the F.D.A.'s controversial stamp of approval, granted on Aug. 23, was met with widespread criticism from researchers and health care professionals, many of whom decried the decision as political and lacking in scientific support.

At the time of the emergency authorization, scant evidence pointed to the possibility that blood plasma might help people fight off the coronavirus. The treatment's benefits also seemed largely limited to patients who received their infusions within three days of diagnosis and hadn't yet experienced severe symptoms.

The new study, led by Dr. Fernando Polack, a pediatric infectious disease physician and the scientific director of the INFANT Foundation in Argentina, appears to clarify the circumstances under which plasma has its perks.

In 80 people, an infusion of plasma decreased the risk of developing a severe case of Covid by 48 percent, compared with another group of 80 who received a saline solution instead, the study found. But the study's parameters were strict: Everyone enrolled in the trial was at least 65 years old — a group known to be at higher risk of falling seriously ill. About half of the participants also had health conditions that made them more vulnerable to the virus. And the plasma therapy, which was screened to ensure it contained high levels of antibodies, was always given within three days of when the patients started to feel symptoms.

"We went as early as we could," Dr. Polack said. Administering the therapy too late in the course of disease, he said, is akin to allowing a burglar to ransack a home for hours before deciding to call the police. An early dose, on the other hand, has the potential to nip a blooming infection in the bud. "I think it's becoming clear now that the earlier you catch this infection, the more likely you are to stave off disease," said Dr. Taia Wang, an immunologist at Stanford University who wasn't involved in the study.

Other trials testing convalescent plasma's effects in sicker patients have flopped, finding that the therapy did little to hasten recovery or prevent death — contradicting the treatment's emergency authorization, which specifies use in hospitalized people.

Treatment guidelines published by the National Institutes of Health do not recommend for or against use of convalescent plasma, because of a paucity of data.

"I think this really validates a lot of what observational studies and clinical experience has been showing," said Dr. Liise-anne Pirofski, a physician and immunologist at the Albert Einstein College of Medicine and Montefiore Medical Center who has led trials studying convalescent plasma, but wasn't involved in the new study.



Other trials testing convalescent plasma's effects in sicker patients have flopped, finding that the therapy did little to hasten recovery or prevent death — contradicting the treatment's emergency authorization, which specifies use in hospitalized people.

Treatment guidelines published by the National Institutes of Health do not recommend for or against use of convalescent plasma, because of a paucity of data.

"I think this really validates a lot of what observational studies and clinical experience has been showing," said Dr. Liise-anne Pirofski, a physician and immunologist at the Albert Einstein College of Medicine and Montefiore Medical Center who has led trials studying convalescent plasma, but wasn't involved in the new study.

Some experts pointed out that the benefits of convalescent plasma may be difficult to study and capitalize on, since most people's illnesses are too far along by the time they seek medical care.

It will be difficult "to find and diagnose them within that vanishingly small window," said Dr. Ilan Schwartz, an infectious disease physician at the University of Alberta who wasn't involved in the study. "The study looks solid, but not necessarily practical in the real world."

Plasma has additional logistical hurdles, Dr. Titanji, of Emory University, said. The treatment is given as an intravenous infusion — a process that requires skilled hands — and patients need to be monitored afterward. That might be easier in long-term care facilities, but far tougher to accomplish for the general population, she said.

And plasma may not work as well as monoclonal antibody therapy — a synthetic concoction that's manufactured en masse in the lab, rather than drawn from people's blood, and focuses on just one or two types of antibodies at a time, instead of the entire slew produced naturally by the immune system. Two types of monoclonal antibody treatments have been authorized for emergency use in Covid patients.

But plasma does have some advantages over monoclonal antibody treatments, Dr. Polack pointed out.

Because monoclonal antibodies are synthetic and laborious to make, they carry a hefty price tag, sometimes costing thousands of dollars (although the U.S. government has paid for some doses upfront). The treatment's limited supply chain, as well as unexpectedly low demand, has kept it out of the reach of many patients in need in the United States and abroad.

In countries like Argentina, plasma might be one of the best treatment options available, Dr. Polack said. Plasma infusions in Buenos Aires, he said, cost less than \$200 a patient. "It's more accessible, more inexpensive, more universal," he said.

Even in the United States, plasma "is really the only game in town that's broadly available in terms of antibody therapies," Dr. Wang, of Stanford, said.

Rather than viewing monoclonal antibodies as an upgrade to convalescent plasma, "they each have a different place in the armamentarium," Dr. Pirofski said. "Anything that has the capacity to control this virus is really an unbelievable advantage at this point."



## Blood Donation Camp At Nazareth Hospital Blood Center, Shillong

The Nazareth hospital Blood Bank, Shillong organized a blood donation camp in association with Oriens Theological College, Shillong. The camps saw a decent gathering of around 30 donors despite the COVID scenario.

Hughbert Dkhar, Pathologist and I/C, Nazareth Hospital Blood Center stated that "All blood centers in the state along with the Meghalaya State AIDS Control Society and State Blood Transfusion Council, approached the State Government authority and apprised them about the problems faced. After obtaining necessary permission and with limited resources at our disposal, we contacted and motivated the regular voluntary donors, picked them up and dropped them back to their residence after blood donation. Safety of the donors, recipients and health workers were our primary concern and screening procedures as well as adherence to guidelines were strictly followed. This has helped us to tide over the crisis".



Dear Baby,

Thank you very much for regularly sending to us the Bloodline Journal. The Importance of Voluntary blood donation during COVID pandemic in the issue 57 2020 was very informative and educative. We too faced the same crisis during lock down. I would like to share with you some of our innovative approach during that time of crisis. All blood centers in the state along with the Meghalaya State AIDS Control Society and State Blood Transfusion Council, approached the State Government authority and apprised them about the problems faced. After obtaining necessary permission and with limited resources at our disposal, we contacted and motivated the regular voluntary donors, picked them up and dropped them back to their residence after blood donation. Safety of the donors, recipients and health workers were our primary concern and screening procedures as well as adherence to guidelines were strictly followed. This has helped us to tide over the crisis.

Thank you very much.

Best wishes and regards

**Dr. Hughbert Dkhar**  
Pathologist and I/C Nazareth Hospital Blood Center  
Laitumkhrah, Shillong.  
Meghalaya.



**LETTER TO THE EDITOR**



This journal is great. How often do you publish it? And is it distributed by email only, or do you print copies?

**Kurt Wolff**  
Corporate Communications Specialist  
Global Marketing and Communications



Thanks For big information and keeping us in touch. With warm personal regards

**Ravinder Dudeja**  
Founder Gen. Sect.  
Foundation Against Thalassaemia Regd.  
House No. 137 First Floor Sector 7A Faridabad 121006  
Haryana India

# Convalescent Plasma Therapy

Convalescent plasma (kon-vuh-LES-unt PLAZ-muh) therapy uses blood from people who've recovered from an illness to help others recover. The U.S. Food and Drug Administration (FDA) authorized convalescent plasma therapy for people with coronavirus disease 2019 (COVID-19). The FDA is allowing its use during the pandemic because there's no approved treatment for COVID-19.

Blood donated by people who've recovered from COVID-19 has antibodies to the virus that causes it. The donated blood is processed to remove blood cells, leaving behind liquid (plasma) and antibodies. These can be given to people with COVID-19 to boost

## Why it's done

Convalescent plasma therapy may be given to people who are hospitalized with COVID-19.

Convalescent plasma therapy may help people recover from COVID-19. It may lessen the severity or shorten the length of the disease.

## Risks

Blood has been used to treat many other conditions. It's usually very safe. The risk of getting COVID-19 from convalescent plasma hasn't been tested yet. But researchers believe that the risk is low because donors have fully recovered from the infection.

Convalescent plasma therapy has some risks, such as:

- Allergic reactions
- Lung damage and difficulty breathing
- Infections such as HIV and hepatitis B and C

The risk of such infections is low. Donated blood must be tested for safety. Some people may have mild complications or none at all. Other people may have severe or life-threatening complications.

## What you can expect

Your doctor may consider convalescent plasma therapy if you're in the hospital with COVID-19. If you have questions about convalescent plasma therapy, ask your doctor.

Your doctor will order convalescent plasma that is compatible with your blood type from your hospital's local blood supplier.

## Before the procedure

Before convalescent plasma therapy, your health care team prepares you for the procedure. A health care team member inserts a sterile single-use needle connected to a tube (intravenous, or IV, line) into a vein in one of your arms.



## During the procedure

When the plasma arrives, the sterile plasma bag is attached to the tube and the plasma drips out of the bag and into the tube. It takes about one to two hours to complete the procedure.

## After the procedure

You'll be closely monitored after you receive the convalescent plasma. Your doctor will record your response to the treatment. He or she also may record how long you need to stay in the hospital and if you need other therapies.

## Results

It's not yet known if convalescent plasma therapy will be an effective treatment for COVID-19. You might not experience any benefit. However, this therapy might help you recover from the disease.

Data from small clinical trials and a national access program suggest that convalescent plasma may lessen the severity or shorten the duration of COVID-19. However, more research is needed to determine if convalescent plasma therapy will be an effective treatment for COVID-19.

**Source: The New Indian Express**

Created By:



Advertising and branding Division  
**Insideout Productions**

Thiruvananthapuram

Contact: +91 96055 12241

Email: [Insideoutproductionsindia@gmail.com](mailto:Insideoutproductionsindia@gmail.com)

Web: [www.insideoutproductions.in](http://www.insideoutproductions.in)



Published By :

Public Relations Department

**Terumo Penpol Private Limited**

Registered Office: I-2, Jawahar Nagar,

Trivandrum 695003, Kerala, India

Tel Office: 0471-7195602

Email: [Baby.P.S@terumobct.com](mailto:Baby.P.S@terumobct.com)

[Govind.r@terumobct.com](mailto:Govind.r@terumobct.com)

**[WWW.TERUMOPENPOL.COM](http://WWW.TERUMOPENPOL.COM)**