



YOUR MATCH,

**THEIR  
TOMORROW!**



A guide to marrow donation

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## MEDICAL EXCLUSION

Inform your coordinator if you have the following medical conditions as they may affect your eligibility to donate.

- Ankylosing Spondylitis
- Cancer\*
- Inflammatory arthritis
- Scleroderma
- Sickle Cell Anaemia<sup>#</sup>
- Thalassemia<sup>#</sup>
- Monoclonal gammopathy of undetermined significance
- Myalgic encephalomyelitis
- Fibromyalgia

\*excluding cured basal cell carcinoma or carcinoma in situ

<sup>#</sup>excluding carriers



# DONOR'S ROADMAP

1

## Information Session & Blood Draw

Schedule an Info Session with your coordinator

✓ Sign donor consent and medical declaration form

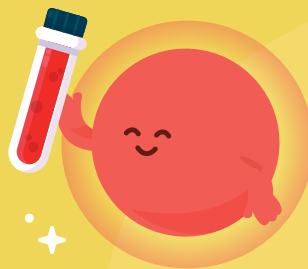
🕒 30 – 45 mins



Blood Draw @ Clinic

🕒 30 mins

📅 Waiting period of 1 – 4 months



2

## Workup

Full Medical Checkup

✓ Doctor consultation, X-Ray, ECG, Blood test

🕒 Up to 4 hours



3

Within 30 days from Workup

## Donation

Donation @ Hospital

🩸 Peripheral Blood Stem Cell (PBSC) Collection

OR

🦴 Bone Marrow (BM) Harvest

🕒 1 – 3 Days (depends on method of donation)



4

## Post-donation Care

Doctor Consultation

✓ 2 medical follow-ups within 1 year post-donation

✓ BMDP check-in for up to 10 years



There will be no out-of-pocket costs for you! MCs and HL will be provided as appropriate for medical appointments. Your company can choose to give volunteer leave, and if needed, we can provide a letter for your employer or school explaining the process.



## FACES BEHIND THE FIGHT

### Bravery, Resilience, and a Second Chance at Life

When Wen Qing was diagnosed with **Fanconi Anaemia** shortly after birth, her family was saddened but determined to face the journey together, knowing a **bone marrow (also known as marrow) transplant would one day be necessary**. That moment came sooner than expected when her bone marrow began to fail at just **four years old**, prompting a swift decision to proceed with the transplant at NUH. The following months were challenging, but Wen



Qing showed **remarkable strength** through painful procedures and chemotherapy. Her family stayed focused on helping her recover and hold onto the belief that even in the hardest moments, **there is always hope**.

### Choosing Courage in the Face of Leukemia

When **Mr Ting**, a frequent traveller and risk-taking businessman, was diagnosed with **leukemia**, he faced it with unwavering resolve — starting chemotherapy within hours and agreeing to a high-risk bone marrow transplant despite his age. The treatment was grueling, with weeks of **isolation, nausea, and loss of appetite**, but he **found strength in the encouragement** of his medical team, the prayers of his family and church friends, and the daily visits from his daughter during the Covid19 Omicron period. Grateful for the donor who gave him a **second chance at life**, he pushed through months of low immunity, home-bound recovery, and even new health challenges including chronic skin GvHD<sup>1</sup>, prostate cancer, and pneumonia. Today, as he slowly begins walking again, he holds onto hope and shares a message for young patients facing transplant: **“If I could do it, you can do even better.”**



## CHAMPIONS OF LIFE

### Engineer Lim Wee Kiat's Unforgettable Journey as a Marrow Donor

When 32-year-old engineer Lim Wee Kiat signed up as a marrow donor in university, it was a lighthearted attempt to impress his then-crush — who later became his wife. Years after registering, he received the **unexpected call** that he was a match for a patient in need. **While his family had common misconceptions about the procedure, he learned that his donation would be through peripheral blood stem cells, a process similar to blood donation**. Aside from a brief moment of fear when the needle went in, the experienced nurses put him at ease, and he recovered within two days, an experience that shifted his outlook on **appreciating life's everyday moments**.



On September 2024, Wee Kiat met the young girl, Wen Qing, whose life he helped save — now nine years old after battling **Aplastic Anaemia** as a child. Their first meeting at BMDP's Donor-Recipient Meet was a meaningful reminder of how a **simple act of generosity can create a lasting impact**.

“I am glad that someone had a **chance at treatment** by being a close enough match, simply because I joined the registry almost 20 years ago. I would hope to meet the recipient, and find out that they are doing well. That would be awesome, to know I've **really made a difference**. I believe it's a good cause, and that the **benefits to someone else far outweigh the small potential risks to me**.”

Kalpana Vijakumar, Marrow Donor

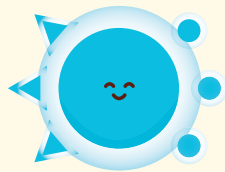
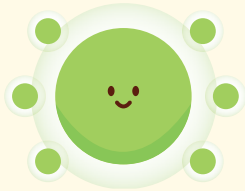


# WHY HLA MATCH MATTERS



Remember that cheek swab you gave during registration? It wasn't just a simple test — it was the beginning of something incredible. That swab revealed your HLA (Human Leukocyte Antigen) profile, a unique genetic fingerprint. It's a set of markers on your DNA that help your body recognize what's 'self' and what's 'foreign'. HLA markers are special, and that's what makes them so important.

HLA helps doctors find the best match for a patient. And now, your profile matches a patient in need — a potential life-saving connection that offers a new chance in life.



**YOUR LIFE SAVING JOURNEY BEGINS HERE!**



# THE DONATION PROCESS

## STEP ONE

Information Session

🕒 30 – 45 minutes



Your friendly coordinators will guide you through the donation journey and obtain your consent for donation. So, feel free to ask any questions you might have along the way!

We encourage you to **invite your friends and family** to join in and show their support. Parents or legal guardian is required to attend the session together, if you are a minor (under 21).

Blood Draw

🕒 30 minutes

We'll take a small blood sample to **verify your HLA and blood type**, and to screen for infectious diseases such as **HIV\***, **Hepatitis B**, **Hepatitis C**, **CMV\***, and **Syphilis**.

**! Your commitment is important!**

Once you're confirmed as a match, your commitment is important. If you change your decision, it could be potentially life-threatening. Please continue only if you're truly ready and able to help.



\*Human immunodeficiency virus, Cytomegalovirus

## STEP TWO: WORKUP

- ! Steps 2 and 3 to be completed within 30 days
- 🕒 Up to 4 hours total

### Stage 1: Doctor Consultation & Donor Consent



The doctor will check your **health and family medical history**. If you're **under 21**, a **parent or guardian must be present** to give consent. You'll **sign a form** confirming you **understand the process and its risks**.

### Stage 2: Physical Examination



You'll go through a **full medical examination** to make sure donating is **safe** for both you and the patient, since some conditions can be passed on. This includes checks like **X-ray, ECG, height and weight, blood pressure, pregnancy test (for females), and various blood tests** (full blood count, kidney and liver profiles, and infectious diseases).

The period after your workup to donation is crucial. Take care of your health and try to avoid crowded places to reduce the risk of infection.

## YOUR PRE-DONATION CHECKLIST

What To Do	What To Avoid
✓ Stay healthy!	✗ Any blood/needle activities such as:
✓ Go to work and school as per normal	Blood donation, acupuncture, vaccination, tattoo and piercings, botox
✓ Speak to your family, friends or employers for support	✗ Pregnancy (for female donors)

## STEP THREE: DONATION

Once you're cleared from the medical check, you'll donate either through **Peripheral Blood Stem Cell (PBSC) Collection** or **Bone Marrow (BM) Harvest**.

### PBSC Donation

PBSC donation is a **non-surgical procedure**, used around 90% of the time. It's similar to a **blood donation**, except that instead of whole blood, **stem cells** are collected **directly from your bloodstream**.



## Preparation before Donation

### 1. Vein Assessment

PBSC donation requires **good arm veins**. During your workup appointment, a nurse will **assess your veins** to ensure they are suitable. If they aren't, you can still donate using a **central line** placed elsewhere on your body.

### 2. Granulocyte Colony Stimulating Factor (G-CSF) injections

To **boost the number of stem cells** in your bloodstream, you'll get **daily G-CSF injections** for **5 days**, including the donation day. The first injection is done at the collection centre, where nurses will guide you and observe you for up to an hour. For the remaining days, you can self-administer or have a **family member/companion** or your **GP** do it for you.



### 3. Pre-donation tests

You'll need to take a **COVID-19 test** (subjected to MOH regulations) and a **pregnancy test** (for females) before the donation.

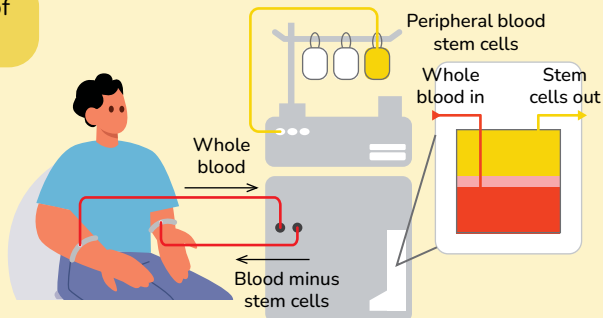
## Donation process

Your blood is drawn from **one arm** and passed through an apheresis machine, which **separates out the stem cells**. The rest of your blood is then **returned** to you through the **other arm**. The entire process takes about **5-8 hours**. The medical team will take all necessary precautions to keep the procedure **safe and as comfortable** as possible.

**Day 1 - 4**  
- Daily G-CSF Injection

**Day 5**  
- Final G-CSF injection  
- Collection

5-8 hours of  
Apheresis



Most collections meet the cell target in one day. You may be asked to stay for a **second day donation** if the target is not met.

In rare cases, if there still aren't enough cells after two days, you may be asked to donate through a bone marrow harvest instead.



## POTENTIAL SIDE-EFFECTS

### Before Donation



Headaches, body aches, fever, or soreness at the G-CSF injection sites can occur but usually go away after the donation.

### During Donation



Dizzy, nauseous, cold, or get numb/tingly lips, nose, or fingers.

### After Donation



Your arms may bruise or cramp, and you may feel fatigued, but this should improve within a few hours or days.

Most people are back to their usual routine, work or school, in the next few days!

## Bone Marrow Donation

Donating bone marrow is a **quick, low-risk surgical procedure** of approximately **40 mins to 1 hour**, done at the hospital while you are **under general anaesthesia (GA)**.

### Preparation before Donation

#### 1. Pre-donation tests

You'll need to take a **COVID-19 test** (subjected to MOH regulations) and a **pregnancy test** (for females) before the donation.

#### 2. Fasting

Depending on the hospital, you may be **admitted** either the **night before** or **early in the morning (around 6am)**. In both cases, you'll need to **fast for 8–10 hours** before the procedure.

### Donation process



During the procedure, you'll be put under **general anaesthesia**. The doctor will collect **liquid marrow** from your **pelvic bone** using a needle while you lie on your side or stomach.

When it's done, you'll stay in the hospital **overnight** for **observation** and **go home the next day!**

## POTENTIAL SIDE-EFFECTS



Drowsiness, hunger, nausea, sore throat and potentially vomiting can occur, but they'll usually go away after some good rest!



Soreness and stiffness in your lower back for 1-4 weeks (depending on your age and health), so avoid any intense physical activity that could slow down your recovery!

We recommend having a friend or family member take you home after the donation. It's not a good idea to drive or ride solo.

## STEP FOUR

### Post-donation Care

After your donation, your coordinator will arrange a **follow-up** to check in on you. Typically, your cells will be **fully replenished** within **4-6 weeks**. If you **feel unwell** at any point, don't hesitate to **reach out to us**, we will make sure you get all the care you need!

	MODE OF CARE	TIMEPOINT (POST-DONATION)
Short-term care	BMDP follow-up	1 week
	1st Medical check	< 1 month
	2nd Medical check	6-12 months
Long-term care	BMDP follow-up	Up to 10 years



## Subsequent donation

After donating, you'll be **reserved** for the **same patient for two years**. If they require another round of cells — whether a **Bone Marrow Harvest, PBSC donation**, or a **Lymphocyte Collection** — we'll contact you to check if you're able to help again.

A Lymphocyte Collection **works similarly** to **PBSC**, but **without G-CSF injections**. It's a simple **apheresis procedure** that collects **white blood cells** to support the patient's **immunity**.

## Communicating with your recipient

After your donation, you can **exchange cards or letters** with the patient, but **personal details** like your name, age, and nationality will **stay private**. All messages go through BMDP, and if your patient is **overseas**, their local registry may be involved with the link-up to ensure your letters are delivered to the recipient.



After 2 years, if both parties want to connect, BMDP can help **share contact details**. Just note that some countries **don't allow direct contact**, so it may not always be possible. And don't worry, it's **completely fine** if you prefer not to connect!

## Release from reservation

After **2 years**, you will be **released from the reservation** and if you are willing, you'll return to the donor register until the age of 60 to **help more patients!**



## IMPACT OF SAVING LIVES



Ria and parents

When 26-year-old student care teacher Nur Siti Zubaidah signed up as a marrow donor at a community event, it was simply out of curiosity and a desire to help. Years later, she was surprised to learn she was a **match for eight-year-old Ria Nadira**, who was **battling Thalassemia** and **enduring frequent blood transfusions**. Guided by the medical team, Zubaidah proceeded with peripheral blood stem cell donation, finding the process manageable and supported by caring nurses who kept her at ease. She recovered quickly and returned to her routine with a renewed sense of purpose.

For Ria, the **transplant became a turning point**, freeing her from **constant transfusions** and giving her a **healthier, fuller life**. Having since met Ria, Zubaidah feels deeply grateful to have played a part in her recovery — a simple decision that became a lifelong impact.



Ria (left) and Zubaidah (right) at Donor Recipient Meet 2024

# PRIVACY AND CONFIDENTIALITY

At BMDP, we take privacy seriously to protect both you and the patient from unwanted attention.

With social media making it easy to share everything, we recommend you avoid sharing:

- The patient's gender, disease, or age group
- Exact dates or locations of your appointments and donation
- Photos of the stem cell bag with labels/information
- Any anonymous letters or cards from the patient

## STILL HAVE QUESTIONS?

We got you covered. Scan the QR code below to check out our FAQ or email us at [donorcentre@bmdp.org](mailto:donorcentre@bmdp.org)



## WANT THE DEETS?

Doctor voices, information, socials, it's all here. Scan to connect with us!



**YOUR DECISION  
TODAY**



**COULD REWRITE  
THEIR TOMORROW!**



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