Learning more about your disease and treatment options can help you make informed medical decisions. Be The Match® can help you understand how transplant may be used to treat multiple myeloma.

READ ON TO LEARN ABOUT:
- How transplant can treat multiple myeloma
- If transplant is right for you
- How a transplant doctor helps you decide if transplant is right for you
- Questions to ask your doctor
- Transplant outcomes for multiple myeloma
- Making treatment decisions

ABOUT MULTIPLE MYELOMA
Multiple myeloma (MM) is a cancer of the plasma cells. Plasma cells are a part of the immune system. Normal plasma cells make antibodies, or proteins, that protect us from infections. In MM, some plasma cells become cancerous and grow quickly. This limits the body’s ability to make normal blood cells in the bone marrow. These cancerous plasma cells can also make antibodies that don’t work properly. These antibodies can damage the kidneys and fail to fight infection properly.

More than 22,000 people in the U.S. are diagnosed with MM each year.1 Most people who have the disease are age 65 or older. Causes of the disease are mostly unknown.

HOW TRANSPLANT CAN TREAT MM
In the past few years, the number of treatment options for MM has grown quickly. Initial treatment options include chemotherapy and targeted therapy. Chemotherapy works by killing or slowing down the growth of cancerous cells. Targeted therapy works by blocking the growth and spread of cancer cells by disrupting specific parts of the cells. If the disease is controlled with initial treatment and the patient is healthy enough, many patients will then have an autologous transplant.

Autologous transplant
In an autologous transplant, blood-forming cells are collected from the patient’s bloodstream and frozen. This collection process is called apheresis. Later, the patient gets a very high dose of chemotherapy. This chemotherapy is called a conditioning regimen or preparative regimen. The goal of the preparative regimen is to kill as many cancerous cells in the body as possible.

The preparative regimen also destroys most of the normal cells in the patient’s bone marrow. To restore the marrow, the patient’s frozen blood-forming cells are thawed and infused into...
the bloodstream. From there, the cells find their way into the bone marrow where they start making healthy white blood cells (including plasma cells), red blood cells and platelets.

Although an autologous transplant can get rid of many of the cancerous plasma cells, the disease will almost always return. When the disease returns it is called a relapse. Some patients may keep getting treatment after an autologous transplant called maintenance treatment. Maintenance treatment is given to slow down relapse. Many patients who have received an autologous transplant can have a good quality of life for many years.

For some people, after the first autologous transplant, no more transplants are planned until the disease relapses. For others, depending on a variety of factors, the transplant doctor may recommend another transplant before the disease relapses. The second transplant may be another autologous transplant or an allogeneic transplant. When a patient has 2 transplants planned within 1 year, it is called a tandem transplant.

**Allogeneic transplant**

An allogeneic transplant also begins with chemotherapy (preparative regimen). This type of transplant uses healthy blood-forming cells from another source. This source can be a family member, an unrelated donor or an umbilical cord blood unit, which is collected after a baby is born.

After the preparative regimen is given, the blood-forming cells from the donor are infused into the patient’s blood stream. From there, the cells find their way into the bone marrow, where they start making healthy white blood cells, red blood cells and platelets.

**Key points:**

- Both autologous and allogeneic transplants are used to treat MM
- Most transplants for MM are autologous
- An autologous transplant followed by a second transplant is sometimes used to treat MM

**UNDERSTANDING IF TRANSPLANT WOULD HELP YOUR MM**

Whether an autologous or allogeneic transplant is right for you depends on several things, such as your age, overall health, stage of the disease and how fast the disease is growing. A transplant doctor will discuss the risks and benefits of each type of transplant with you.

There are medical guidelines for when someone should be referred for a transplant consultation, whether or not you need a transplant at that time. Talking to a transplant doctor is recommended:

- After starting therapy (soon after you get a first treatment)
- At the first sign the disease is getting worse

**Key points:**

- Ask for a referral to a transplant doctor to find out if transplant is right for you
- Ask your doctor about your risk factors and what type of transplant is right for you
HOW A TRANSPLANT DOCTOR HELPS YOU DECIDE IF TRANSPLANT IS THE RIGHT TREATMENT

To find out if transplant is right for you, you will need a physical check-up by a transplant doctor. During the check-up, your lungs, heart, liver, kidneys and central nervous system will be checked. The transplant doctor will also review your health history and current status of your disease.

You will also meet with other members of the health care team. A social worker or other professional will meet with you to talk about your concerns related to transplant (for example: emotional, financial, travel, lodging, work and/or school). The social worker can help you find resources to support you and your family during your transplant journey.

The entire transplant process, from the start of chemotherapy, until hospital discharge, can last weeks to months, followed by many months of recovery at home. For this reason, most transplant centers (hospitals that do transplants) also require you to have a dedicated caregiver to help you through the transplant and the recovery process.

Key points:
• A transplant doctor will weigh the risks and benefits of transplant before recommending a transplant
• A transplant social worker is available to help you and your family with emotional and practical support

QUESTIONS TO ASK YOUR DOCTOR

It is important to ask questions so you are comfortable with the treatments that your doctors recommend so you can make decisions about your treatment. Questions you may want to ask your doctor include:
• What are the risks of waiting or trying other treatments before a transplant?
• Do I have any risk factors that might affect the outcome of a transplant?
• How much does my age influence my risk?
• What are the possible side effects of transplant? How can they be reduced?
• What can you tell me about my quality of life if I get a transplant? If I don’t?
• How might my quality of life change over time with or without a transplant?

Key point:
• Don’t be afraid to ask questions so you understand which treatments are right for you

TRANSPLANT OUTCOMES FOR MM

Outcomes data (information on how patients have done after their transplant) are used to estimate transplant results. Outcomes data only show how other patients have done as a group. This information can’t tell how you will do for sure. It can only give you an idea of how other patients have done with a similar disease and treatment.

No 2 people are exactly the same, and you may respond differently to a transplant than someone else. Talk to your transplant doctor about how outcomes data may apply to your specific situation. Fortunately, transplant outcomes continue to get better over time.

Key point:
• Transplant outcomes data overall are useful, but only your transplant team can tell you what your chances are of doing well
MAKING TREATMENT DECISIONS
It is important to know your treatment options so you can make the best decision for yourself. Soon after your diagnosis, ask your doctor if a consultation with a transplant doctor is right for you. When you meet with a transplant doctor, there are 2 main decisions to make. The first decision is whether to have a transplant, and if so, which kind of transplant. A transplant doctor can help you understand the risks and benefits of transplant for your specific situation.

If a transplant is the best treatment option, the second decision is when to have a transplant. Getting a transplant at the right time in the course of your disease may offer the best chance for long-term control of your disease or even cure. The transplant doctor will work with you to decide what timing for the transplant is best for you.

OTHER RESOURCES
TO HELP YOU LEARN MORE
Be The Match has a variety of free resources to help you learn about transplant. Visit BeTheMatch.org/patient-learn and choose the resources that best meet your needs. Here are just a few that you might find helpful:

- Webcast: An Introduction to Marrow and Cord Blood Transplant
- Booklet: Transplant Basics
- Brochure: Discussing Transplant Outcomes

REFERENCES
2 Recommended Timing for Transplant Consultation. Guidelines developed jointly by National Marrow Donor Program/Be The Match and the American Society for Blood and Marrow Transplantation (ASBMT). Available at: BeTheMatchClinical.org/guidelines

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AT EVERY STEP, WE’RE HERE TO HELP
As you journey through transplant, you’re not alone. Be The Match® is ready to help.
We offer many free programs and resources to support you, your caregivers and family members before, during and after transplant. Connect with us in the way that works best for you.

LEARN: BeTheMatch.org/patient
ORDER: BeTheMatch.org/request
EMAIL: patientinfo@nmdp.org
CALL: 1 (888) 999-6743

Our programs and resources offer support in 11 languages, including Spanish bilingual staff, and translation is available in more than 100 languages.

VISIT: BeTheMatch.org/translations

Every individual’s medical situation, transplant experience and recovery is unique. You should always consult with your own transplant team or family doctor regarding your situation. This information is not intended to replace, and should not replace, a doctor’s medical judgment or advice.