NEWLY DIAGNOSED MULTIPLE MYELOMA:
Family Risk and Screening

If a patient has multiple myeloma, should his or her family be tested for it?
Family history is a risk factor for multiple myeloma. People who have a first-degree relative (that is, parents, siblings, or children) with multiple myeloma have a 2- to 4-times higher risk of developing multiple myeloma. Parents, siblings, and adult children of someone with multiple myeloma should make their primary care team aware so that they can better assess the risk.

A free national screening study is available for some people with close relatives who have multiple myeloma. This study—the PROMISE study—tests for early warning signs of multiple myeloma using a simple blood test. To learn more, visit https://www.enroll.promisestudy.org/

Maintenance Therapy

How long should a multiple myeloma patient be on maintenance therapy after a transplant?
Treatment guidelines state that standard maintenance therapy should continue until a patient’s disease progresses, an unacceptable side effect occurs, or a patient asks to stop. If a patient is having difficulty tolerating maintenance therapy, his or her doctor may adjust the dose. If the patient continues to be unable to tolerate it—or otherwise wants to stop maintenance treatment—doctors will encourage the patient to stay on maintenance therapy a minimum of 2 years. This duration may differ in other countries.

Is there a risk of developing secondary cancers if Revlimid is used multiple times—for example, after initial diagnosis, as maintenance therapy, and again later for relapsed or refractory disease?
Revlimid—and other immunomodulatory drugs—have been linked to reports of new secondary cancers (also called second primary malignancies or SPMs) in a small number of multiple myeloma patients who received Revlimid therapy in clinical studies. In these studies, Revlimid was used in combination with melphalan chemotherapy. The types of secondary cancers that were seen in these studies include myelodysplastic syndromes (a form of blood cancer) and acute myelogenous leukemia. There have been very few SPMs in other studies with Revlimid where melphalan was not part of the treatment.

The information available to date indicates that therapy with Revlimid significantly decreases the risk of myeloma disease progression. Hence, some doctors believe that the benefits of Revlimid therapy outweigh any potential risk of SPMs. Be sure to discuss your concerns with your doctor.
**Minimal Residual Disease Assessment**

How is minimal residual disease (MRD) testing incorporated into the monitoring plan?

MRD describes the number of multiple myeloma cells or DNA sequences still present in bone marrow after treatment, and it is a way to gauge whether a treatment has been effective in eliminating myeloma. Typically, MRD testing is conducted after a patient has completed his or her initial therapy. MRD test results can be used to predict how likely myeloma is to recur.

When someone is described as being MRD negative, it means that no multiple myeloma cells or DNA sequences can be detected in the bone marrow—even when the most sensitive tests currently available are used. Patients who are MRD negative following treatment have been shown to live longer than those who remain MRD positive.

MRD testing does not help doctors make decisions regarding treatment (for example, stopping or changing treatment), but some doctors may use it as part of their overall strategy to monitor a patient’s treatment response.

What is “sustained MRD negativity” and what is its importance?

Sustained MRD negativity means that a patient has had at least two MRD tests and was found to be MRD negative in each. Testing for MRD at different points after treatment may be more helpful in assessing the sustainability of treatment response than just testing once. Researchers are currently investigating whether there is a link between sustained MRD negativity and survival.

**Autologous Stem Cell Transplant**

How often are anti-CD38 monoclonal antibodies like Darzalex and Sarclisa used in patients with newly diagnosed multiple myeloma, and do these treatments affect stem cell collection?

Only Darzalex is approved for use in patients with newly diagnosed multiple myeloma.

Sarclisa is approved for use in patients with relapsed or refractory multiple myeloma; clinical trials are currently investigating its use in patients with newly diagnosed multiple myeloma.

Treatment guidelines suggest that stem cell collection—for patients considering an autologous stem cell transplant (ASCT)—should occur before treatment with Darzalex.

How many cells are needed for a successful stem cell transplant, how long can they be stored, and can stem cells be harvested more than once?

Typically, 2 million stem cells are needed for a stem cell transplant. It sounds like a lot, but that is usually easily accomplished through the stem cell collection process. Often, transplant centers will attempt to collect enough stem cells for two transplants, freezing the second batch for possible future use. If stored...
properly, stem cells may be stored for decades. Stem cells can be harvested again if enough cells for two transplants could not be collected initially.

**What health findings may exclude someone as a candidate for an ASCT?**
Myeloma patients may not be eligible for an ASCT if they have major health problems, such as heart, lung, liver, or kidney disease. It is important that patients have all recommended screenings (for example, colonoscopy, Pap smear, or mammogram) to rule out any issues that might exclude them from a transplant.

**Is age a limit to stem cell transplant or is it more overall health?**
Regarding eligibility for an ASCT, fitness and overall health are more important than age. Eligibility for an ASCT is something that patients need to discuss with their health care team.