

UNDERSTANDING MULTIPLE MYELOMA TREATMENT OPTIONS & GUIDELINES

WITH NO CURATIVE THERAPIES, TREATMENTS ARE DESIGNED TO¹:

Relieve & manage symptoms

Slow disease progression

Prolong remissions

There is no single set treatment and most treatment plans include a combination of therapies².

Candidate for stem cell transplant¹?

Patients with active disease are first assessed as candidates for stem cell transplantation.

No

Age or co-morbidities may mean risks outweigh the benefits³.

Yes

Indicated for patients with adequate organ function^{1,4}.

First-line therapy

Similar whether transplant candidate or not, patients are treated with various combinations of proteasome inhibitors, immunomodulatory drugs and corticosteroids. May also include chemotherapy agents^{2,5}.

Patient responds to first-line therapy?

Yes

Patient sometimes given longer-term "maintenance" treatment, if appropriate⁶.

No

(Inadequate response)

The patient experiences no response or a relapse (when the cancer returns)¹.

Most people eventually experience a relapse. Some also become refractory, which means they stop responding to treatment and still have myeloma cells in their bone marrow¹.

Patients begin second-line therapy.

If > 6 months of stable response, may consider repeating first-line therapy

If < 6 months of stable response, different drugs or combination prescribed

Such therapies may include immunomodulatory or proteasome inhibitor-based treatment regimens, combined in some cases with chemotherapy, corticosteroids or other agents^{2,7}.

Throughout the multiple myeloma journey, a treatment team continues to monitor and introduces different therapy combinations to address treatment resistance and/or disease progression.

CLASS OF DRUGS	DEFINITIONS ^{5,7,8}
Chemotherapy	Destroys rapidly dividing myeloma cells
Corticosteroids	Have anti-tumor properties; trigger the death of myeloma cells
Immunomodulatory Drugs	Prompt a patient's immune system to destroy myeloma cells
Targeted Therapies	Address specific abnormalities within cancer cells that contribute to cancer growth

1. The Leukemia and Lymphoma Society. *Myeloma*. 2013;1:14. 2. Multiple Myeloma Treatment Overview. Multiple Myeloma Research Foundation. <http://www.themmr.org/assets/living-with-multiple-myeloma/brochure/treatment-brochure.pdf>. Accessed September 2014. 3. Gertz MA and Dingli D. How We Manage Autologous Stem Cell Transplantation for Patients with Multiple Myeloma. *Blood*. 2014; 124(6): 882-90. 4. Mohty, M and Harousseau, JL. Treatment of Autologous Stem Cell Transplant-Eligible Multiple Myeloma Patients: Ten Questions and Answers. *Haematologica*. 2014; 99(3):408-416. 5. National Cancer Institute. What You Need to Know About Multiple Myeloma. <http://www.cancer.gov/cancertopics/wyntk/myeloma>. Accessed November 2013. 6. American Cancer Society. Treatment Options for Multiple Myeloma, by Stage. <http://www.cancer.org/cancer/multiplemyeloma/detailedguide/multiple-myeloma-treating-by-stage>. Accessed September 2014. 7. National Cancer Institute. Targeted Therapies for Multiple Myeloma Tutorial. http://www.cancer.gov/cancertopics/understandingcancer/targetedtherapies/multiplemyeloma_htmlcourse/page4. Accessed September 2014. 8. Maes K, et al. Epigenetic Modulating Agents as a New Therapeutic Approach in Multiple Myeloma. *Cancers*. 2013; 5:430-461.