

Primary Multiple Myeloma Drug Categories

Note: the first name listed is the brand name for the medications, followed by the scientific name in parenthesis.

IMiDs (immunomodulatory drugs)

- **Revlimid®** (lenalidomide): Oral medication that is effective across the spectrum of myeloma disease.
- **Pomalyst®** (pomalidomide): Newer IMiD that is similar to Revlimid but is more potent. It is FDA approved for use in patients with relapsed/refractory myeloma and is being studied in other types of patients.
- **Thalomid®** (thalidomide): Older drug shown to be effective across the spectrum of myeloma disease; peripheral neuropathy (nerve problems) is a common side effect and can be irreversible. It is infrequently used in the US.

Proteasome inhibitors

- **Velcade®** (bortezomib): Medication used across the entire spectrum of myeloma disease. Given as an injection under the skin (subcutaneously) or intravenously. Patients who have the DNA alteration t(4;14) should receive a treatment regimen that includes a proteasome inhibitor.
- **Kyprolis®** (carfilzomib): Newer proteasome inhibitor given intravenously. It is FDA approved for use in patients with relapsed/refractory myeloma and is being studied in other types of patients.

Steroids (corticosteroids)

- **Dexamethasone (dex) and prednisone:** Drugs used for decades to treat myeloma throughout the spectrum of disease; used in combination with other myeloma drugs.

Chemotherapy

- **Doxil®** (doxorubicin HCl liposome injection): Drug given intravenously in patients with relapsed/refractory myeloma, usually in combination with Velcade. Side effects include mouth sores, swelling, blisters on the hands or feet, and possible heart problems. It is less frequently used.
- **Alkylator chemotherapy:** Other types of chemotherapy drugs that have been used for many years to treat myeloma. They may be used in combination with other types of myeloma drugs. Examples are melphalan and cyclophosphamide.

Bisphosphonates

These are used in the treatment of myeloma bone disease and are usually used in conjunction with other cancer therapy. Bone disease is common in multiple myeloma, with 85% of patients having bone problems. Common bisphosphonates used are Zometa and Aredia.

Bisphosphonates have been shown to:

- Help slow the advancement of bone disease
- Decrease bone pain
- Reduce fractures
- Improve overall survival (one large study)

Bisphosphonates are also used in the treatment of bone metastases and hypercalcemia of malignancy (increased calcium levels in the blood). They are also used in other cancers where the bone is affected (e.g. breast cancer, prostate cancer).