Multiple Myeloma Treatment Regimens

**Clinical Trials:** The NCCN recommends cancer patient participation in clinical trials as the gold standard for treatment.

Cancer therapy selection, dosing, administration, and the management of related adverse events can be a complex process that should be handled by an experienced health care team. Clinicians must choose and verify treatment options based on the individual patient; drug dose modifications and supportive care interventions should be administered accordingly. The cancer treatment regimens below may include both U.S. Food and Drug Administration-approved and unapproved indications/regimens. These regimens are provided only to supplement the latest treatment strategies.

These Guidelines are a work in progress that may be refined as often as new significant data become available. The NCCN Guidelines® are a consensus statement of its authors regarding their views of currently accepted approaches to treatment. Any clinician seeking to apply or consult any NCCN Guidelines® is expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient's care or treatment. The NCCN makes no warranties of any kind whatsoever regarding their content, use, or application and disclaims any responsibility for their application or use in any way.

**Note:** All recommendations are category 2A unless otherwise indicated.

### Primary Therapy for Transplant Candidates

<table>
<thead>
<tr>
<th>REGIMEN</th>
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<tbody>
<tr>
<td><strong>Preferred Regimens</strong></td>
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<tr>
<td>Bortezomib + Cyclophosphamide + Dexamethasone</td>
<td>Days 1,4,8,11: Bortezomib 1.3mg/m² subcutaneous Days 1,4,9,12,17-20: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks for 3-4 cycles. OR Days 1,4,8,11: Bortezomib 1.3mg/m² subcutaneous Days 1,8,15: Cyclophosphamide 300mg/m² orally once daily Days 1,8,15: Dexamethasone 40mg orally once daily. Repeat cycle every 3 weeks for 3-4 cycles. OR Days 1,8,15,22: Bortezomib 1.5mg/m² subcutaneous Days 1,8,15,22: Cyclophosphamide 300mg/m² orally once daily Days 1-4,9,12,17-20 (Cycles 1-2): Dexamethasone 40mg orally once daily followed by: Day 1,8,15,22 (Cycles 3 and 4): Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks for 3-4 cycles.</td>
</tr>
<tr>
<td>Bortezomib + Lenalidomide + Dexamethasone (Category 1)</td>
<td>Days 1,4,8,11: Bortezomib 1.3mg/m² subcutaneous Days 1-14: Lenalidomide 25mg orally once daily Days 1,8,15,22: Dexamethasone 40mg orally or IV daily. Administer for one 4-week cycle (Cycle 1), followed by: Days 1,8,15,22 (Cycles 2-4): Dexamethasone 40mg orally or IV daily followed by: Days 1,8,15,22 (Cycles 5-8): Dexamethasone 20mg orally or IV daily. Repeat cycle every 4 weeks for 7 cycles beginning with Cycle 2. OR Days 1-2: Carfilzomib 20mg/m² (max 44mg) IV over 10-30 minutes daily, followed by: Days 8-9,15-16: Carfilzomib 36mg/m² (max 79.2mg) IV over 10-30 minutes Days 1-21: Lenalidomide 25mg orally once daily Days 1,8,15,22: Dexamethasone 40mg orally or IV daily. Administer for one 4-week cycle (Cycle 1), followed by: Days 1,8,15,22 (Cycles 2-4): Dexamethasone 40mg orally or IV daily followed by: Days 1,8,15,22 (Cycles 5-8): Dexamethasone 20mg orally or IV daily. Repeat cycle every 4 weeks for 7 cycles beginning with cycle 7.</td>
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### Other Recommended Regimens

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<td>Days 1-2: Carfilzomib 20mg/m² (max 44mg) IV over 10-30 minutes daily, followed by: Days 8-9,15-16: Carfilzomib 36mg/m² (max 79.2mg) IV over 10-30 minutes Days 1-21: Lenalidomide 25mg orally once daily Days 1,8,15,22: Dexamethasone 40mg orally or IV daily. Administer for one 4-week cycle (Cycle 1), followed by: Days 1,8,15,22 (Cycles 2-4): Dexamethasone 40mg orally or IV daily followed by: Days 1,8,15,22 (Cycles 5-8): Dexamethasone 20mg orally or IV daily. Repeat cycle every 4 weeks for 7 cycles beginning with Cycle 2. OR Days 1-2: Carfilzomib 20mg/m² (max 44mg) IV over 10-30 minutes daily, followed by: Days 8-9,15-16: Carfilzomib 36mg/m² (max 79.2mg) IV over 10-30 minutes Days 1-2: Lenalidomide 25mg orally once daily Days 1,8,15,22: Dexamethasone 40mg orally or IV daily. Administer for one 4-week cycle (Cycle 1), followed by: Days 1,8,15,22 (Cycles 2-4): Dexamethasone 40mg orally or IV daily followed by: Days 1,8,15,22 (Cycles 5-8): Dexamethasone 20mg orally or IV daily. Repeat cycle every 4 weeks for 7 cycles beginning with cycle 7.</td>
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## Multiple Myeloma Treatment Regimens

### Primary Therapy for Transplant Candidates\(^1\) (continued)

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| **Daratumumab + Lenalidomide + Bortezomib + Dexamethasone\(^{2,6,12,13,4}\)** | **Days 1,4,8,11:** Bortezomib 1.3mg/m\(^2\) subcutaneous  
**Days 1-14:** Lenalidomide 25mg orally once daily  
**Days 1-2,8-9,15-16:** Dexamethasone 20mg orally once daily  
**Days 1,8,15:** Daratumumab 16mg/kg IV.  
Repeat cycle every 3 weeks for 4 cycles (Cycles 1-4), **followed by:**  
**Days 1,4,8,11:** Bortezomib 1.3mg/m\(^2\) subcutaneous  
**Days 1-14:** Lenalidomide 25mg orally once daily  
**Days 1-2-8-9,15-16:** Dexamethasone 20mg orally once daily  
**Day 1:** Daratumumab 16mg/kg IV.  
Repeat cycle every 3 weeks for 2 cycles (Cycles 5-6), **followed by maintenance therapy with:**  
**Days 1-21 (Cycles 7-9):** Lenalidomide 10mg orally once daily. **followed by:**  
**Days 1-21 (Cycle 10):** Lenalidomide 15mg orally once daily  
**Day 1:** Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks beginning with cycle 7. **OR**  
**Days 1-21 (Cycle 10 and beyond):** Lenalidomide 15mg orally once daily.  
Repeat cycle every 4 weeks (beginning with Cycle 7). |
| **Ixazomib + Lenalidomide + Dexamethasone (Category 2B)\(^{3,4-6}\)** | **Days 1,8,15:** Ixazomib 4mg orally once daily  
**Days 1-21:** Lenalidomide 25mg orally once daily  
**Days 1,8,11,22:** Dexamethasone 40mg orally once daily.  
Repeat cycle every 4 weeks for 3-4 cycles. |

### Useful in Certain Circumstances

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| **Bortezomib + Doxorubicin + Dexamethasone\(^{2,17,23}\)** | **Days 1,4,8,11:** Bortezomib 1.3mg/m\(^2\) subcutaneous  
**Days 1-4:** Doxorubicin 9mg/m\(^2\) IV push **OR** **Days 1-4:** Doxorubicin 9mg/m\(^2\) continuous infusion over 24 hours  
**Days 1-4:** Dexamethasone 40mg orally once daily (beginning with Cycle 2). Repeat cycle every 3 weeks for 3-4 cycles. **OR**  
**Days 1,4,8,11:** Bortezomib 1.3mg/m\(^2\) subcutaneous  
**Days 1-4:** Doxorubicin 9mg/m\(^2\) IV push **OR** **Days 1-4:** Doxorubicin 9mg/m\(^2\) IV continuous infusion over 24 hours  
**Days 1-4,9,12,17-20:** Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks for 3-4 cycles. |
| **Bortezomib + Thalidomide + Dexamethasone (Category 1)\(^{2,19-23}\)** | **Days 1,4,8,11:** Bortezomib 1.3mg/m\(^2\) subcutaneous  
**Days 1-21:** Thalidomide 50-200mg (usual dose range) orally once daily at bedtime  
**Days 1,2-4,5,8-9,11-12:** Dexamethasone 40mg orally once daily **OR** **Days 1-4,9-12:** Dexamethasone 40mg orally once daily. Repeat cycle every 3 weeks for 3-4 cycles. |
| **Carfilzomib + Cyclophosphamide + Dexamethasone\(^{3,24,24}\)** | **Days 1-2:** Carfilzomib 20mg/m\(^2\) (max 44mg) IV over 10 minutes, **followed by:**  
**Days 8-9,15-16:** Carfilzomib 56mg/m\(^2\) (max 123.2mg) IV over 30 minutes  
**Days 1,8,15:** Cyclophosphamide 300mg/m\(^2\) orally once daily  
**Days 1,8,15,22:** Dexamethasone 40mg orally or IV once daily. Administer for one 4-week cycle, **followed by:**  
**Days 1-2-8,9,15-16:** Carfilzomib 56mg/m\(^2\) (max 123.2mg) IV over 30 minutes daily  
**Days 1,8,15:** Cyclophosphamide 300mg/m\(^2\) orally once daily  
**Days 1,8,15,22:** Dexamethasone 40mg orally once daily.  
Repeat cycle every 4 weeks for 7 cycles (Cycles 2-8), **followed by maintenance therapy with:**  
**Days 1,2-15-16:** Carfilzomib 56mg/m\(^2\) (max 123.2mg) IV over 30 minutes.  
Repeat cycle every 4 weeks (beginning with Cycle 9). |
| **Cyclophosphamide + Lenalidomide + Dexamethasone\(^{3,6,24,25}\)** | **Days 1,8,15:** Cyclophosphamide 300mg/m\(^2\) orally once daily  
**Days 1-21:** Lenalidomide 25mg orally once daily  
**Days 1,8,15,22:** Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks until decision to pursue HCT. |

\(^{1}\) CancerTherapyAdvisor.com
# Multiple Myeloma Treatment Regimens

## Primary Therapy for Transplant Candidates (continued)

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| **Daratumumab + Bortezomib + Thalidomide + Dexamethasone**<sup>2,12,19,25,d</sup> | Days 1,4,8,11: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous  
Days 1-28: Thalidomide 100mg orally once daily  
Days 1-2,8,15,16,22-23: Dexamethasone 40mg orally or IV daily  
Days 1,8,15,22: Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks for 2 cycles (Cycles 1-2, induction pre-transplant), followed by:  
Days 1,4,8,11: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous  
Days 1-28: Thalidomide 100mg orally once daily  
Days 1-2: Dexamethasone 40mg orally or IV daily, followed by:  
Days 8-9,15-16: Dexamethasone 20mg orally or IV daily  
Days 1,15: 16mg/kg IV.  
Repeat cycle every 4 weeks for 2 cycles (Cycles 3-4, induction, pre-transplant), followed by:  
Days 1,4,8,11: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous  
Days 1-28: Thalidomide 100mg orally once daily  
Days 1-2: Dexamethasone 20mg orally or IV daily, followed by:  
Days 8-9,15-16: Dexamethasone 20mg orally or IV daily  
Days 1,15: Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks for 2 cycles (Cycles 5-6, consolidation, post-transplant). |
| **Daratumumab + Cyclophosphamide + Bortezomib + Dexamethasone**<sup>2,12,28,d</sup> | Days 1,8,15,22: Bortezomib 1.5mg/m<sup>2</sup> subcutaneous  
Days 1,8,15,22: Cyclophosphamide 300mg/m<sup>2</sup> orally daily  
Days 1-2: Dexamethasone 20mg IV daily, followed by:  
Days 8,15,22: Dexamethasone 40mg IV daily  
Days 1-2: Daratumumab 8mg/kg IV daily, followed by:  
Days 8,15,22: Daratumumab 16mg/kg IV daily.  
Administer for one 4-week cycle (Cycle 1), followed by:  
Days 1,8,15,22: Bortezomib 1.5mg/m<sup>2</sup> subcutaneous  
Days 1,8,15,22: Cyclophosphamide 300mg/m<sup>2</sup> orally daily  
Days 1,8,15,22: Dexamethasone 40mg IV or orally daily  
Days 1,8,15,22: Daratumumab 16mg/kg IV.  
Administer for one 4-week cycle (Cycle 2), followed by:  
Days 1,8,15,22: Bortezomib 1.5mg/m<sup>2</sup> subcutaneous  
Days 1,8,15,22: Cyclophosphamide 300mg/m<sup>2</sup> orally daily  
Days 1,8,15,22: Dexamethasone 40mg IV or orally daily  
Days 1,15: Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks for 4 cycles (Cycles 3-6), followed by:  
Days 1,8,15,22: Bortezomib 1.5mg/m<sup>2</sup> subcutaneous  
Days 1,8,15,22: Cyclophosphamide 300mg/m<sup>2</sup> orally daily  
Days 1,8,15,22: Dexamethasone 40mg IV or orally daily  
Day 1: Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks for 2 cycles (Cycles 7-8), followed by maintenance therapy (beginning approximately 90 days post-transplant) with:  
Day 1: Dexamethasone 12mg IV or orally daily  
Day 1: Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks for a maximum of 12 cycles. |
| **Dexamethasone + Thalidomide + Cisplatin + Doxorubicin + Cyclophosphamide + Etoposide + Bortezomib (VTD-PACE)**<sup>1,10,19,29,31,a</sup> | Days 1,4,8,11: Bortezomib 1mg/m<sup>2</sup> subcutaneous  
Days 1-4: Thalidomide 100-200mg orally once daily at bedtime, followed by:  
Day 5 and beyond: Thalidomide 50-100mg orally once daily at bedtime  
Days 1-4: Dexamethasone 40mg orally once daily  
Days 1-4: Cisplatin 10mg/m<sup>2</sup> IV continuous infusion over 24 hours daily  
Days 1-4: Doxorubicin 10mg/m<sup>2</sup> IV continuous infusion over 24 hours daily  
Days 1-4: Cyclophosphamide 400mg/m<sup>2</sup> IV continuous infusion over 24 hours daily  
Days 1-4: Etoposide 40mg/m<sup>2</sup> IV continuous infusion over 24 hours daily  
Repeat cycle every 4- to 6-weeks for 4 cycles. |
| **Ixazomib + Cyclophosphamide + Dexamethasone**<sup>9,32,33,a</sup> | Days 1,8,15,22: Cyclophosphamide 300mg/m<sup>2</sup> orally once daily  
Days 1,8,15: Ixazomib 4mg orally once daily  
Days 1,8,15,22: Dexamethasone 40mg orally once daily.  
Repeat cycle every 4 weeks. |
## Multiple Myeloma Treatment Regimens

### Maintenance Therapy for Transplant Candidates

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<tr>
<td>Lenalidomide (Category 1)³⁴-³⁶</td>
<td>Days 1-28 (Cycles 1-3): Lenalidomide 10mg orally once daily, followed by: Days 1-28 (Cycle 4 and beyond): Lenalidomide 15mg orally once daily. Repeat cycle every 4 weeks. OR Days 1-21: Lenalidomide 10mg orally once daily. Repeat cycle every 4 weeks.</td>
</tr>
<tr>
<td><strong>Other Recommended Regimens</strong></td>
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<tr>
<td>Bortezomib</td>
<td>Day 1: Bortezomib 1.3mg/m² subcutaneous. Repeat cycle every 2 weeks for up to 2 years. OR Days 1,8,15,22: Bortezomib 1.6mg/m² subcutaneous. Repeat cycle every 5 weeks for up to 6 months.</td>
</tr>
<tr>
<td>Ixazomib (Category 1)¹⁴-⁴⁰</td>
<td>Days 1,8,15 (Cycles 1-4): Ixazomib 3mg orally once daily. Repeat cycle every 4 weeks for 4 cycles. followed by: Days 1,8,15 (Cycle 5 and beyond): Ixazomib 4mg orally once daily. Repeat cycle every 4 weeks for a maximum of 2 years.</td>
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<tr>
<td><strong>Useful in Certain Circumstances</strong></td>
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<tr>
<td>Bortezomib + Lenalidomide</td>
<td>Days 1,8,15,22: Bortezomib 1.3mg/m² subcutaneous Days 1-21: Lenalidomide 10mg orally once daily. Repeat cycle every 4 weeks, followed by: Days 1-28: Lenalidomide 10mg orally once daily. Repeat cycle every 4 weeks.</td>
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### Primary Therapy for Non-Transplant Candidates

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<td>Bortezomib + Cyclophosphamide + Dexamethasone</td>
<td>Days 1,4,8,11: Bortezomib 1.3mg/m² subcutaneous Days 1,8,15,22: Cyclophosphamide 300mg/m² orally once daily Days 1-4,9-12,17-20: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks. OR Days 1,4,8,11: Bortezomib 1.3mg/m² subcutaneous Days 1,8,15: Cyclophosphamide 500mg/m² orally once daily Days 1,8,15: Dexamethasone 40mg orally once daily. Repeat cycle every 3 weeks. OR Days 1,8,15,22: Bortezomib 1.5mg/m² subcutaneous Days 1,8,15,22: Cyclophosphamide 300mg/m² orally once daily Days 1-4,9-12,17-20 (Cycles 1-2): Dexamethasone 40mg orally once daily followed by: Day 1,8,15,22 (Cycle 3 and beyond): Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks.</td>
</tr>
<tr>
<td>Bortezomib + Lenalidomide + Dexamethasone (Category 1)¹²-⁵⁸</td>
<td>Days 1,4,8,11: Bortezomib 1.3mg/m² subcutaneous Days 1-14: Lenalidomide 25mg orally once daily Days 1-2,4-5,8-9,11-12: Dexamethasone 20mg orally once daily OR Days 1,8,15: Dexamethasone 40mg orally once daily. Repeat cycle every 3 weeks.</td>
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### Multiple Myeloma Treatment Regimens

**Primary Therapy for Non-Transplant Candidates**

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| Daratumumab + Lenalidomide + Dexamethasone (Category 1) | Days 1-21: Lenalidomide 25mg orally once daily  
Days 1-2,8-9,15-16,22-23: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR  
Days 1.8,15,22: Dexamethasone (age >75 years) 20mg IV or orally once daily  
Days 1.8,15,22: Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks for 2 cycles (Cycles 1-2), **followed by:**  
Days 1-21: Lenalidomide 25mg orally once daily  
Days 1.2,15-16: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR  
Days 8,22: Dexamethasone (age ≤75 years) 40mg orally OR  
Days 1.8,15,22: Dexamethasone (age >75 years) 20mg IV or orally once daily  
Days 1.15: Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks for 4 cycles (Cycles 3-6), **followed by:**  
Days 1-21: Lenalidomide 25mg orally once daily  
Days 1-2: Dexamethasone (age ≤75 years) 20mg IV or orally once daily  
Days 8,22: Dexamethasone (age >75 years) 20mg orally once daily OR  
Days 1.8,15,22: Dexamethasone (age >75 years) 20mg IV or orally once daily.  
Repeat cycle every 4 weeks (Cycle 7 and beyond). |
| Lenalidomide + Low-Dose Dexamethasone (Category 1) | Days 1-21: Lenalidomide 25mg orally once daily  
Days 1.8,15,22: Dexamethasone 40mg orally once daily.  
Repeat cycle every 4 weeks. |
| **Other Recommended Regimens**                                          |                                                                                                                                         |
| Carfilzomib + Lenalidomide + Dexamethasone                           | Days 1-2: Carfilzomib 20mg/m² (max 44mg) IV over 10-30 minutes daily, **followed by:**  
Days 8-9,15-16: Carfilzomib 36mg/m² (max 79.2mg) IV over 10-30 minutes  
Days 1-21: Lenalidomide 25mg orally once daily  
Days 1.8,15,22: Dexamethasone 40mg orally or IV daily.  
Administer for one 4-week cycle (Cycle 1), **followed by:**  
Days 1-2,8-9,15-16: Carfilzomib 36mg/m² (max 79.2mg) IV over 10-30 minutes daily  
Days 1-21: Lenalidomide 25mg orally once daily  
Days 1.8,15,22 (Cycles 2-4): Dexamethasone 40mg orally or IV daily **followed by:**  
Days 1.8,15,22 (Cycles 5-8): Dexamethasone 20mg orally or IV daily.  
Repeat cycle every 4 weeks for 7 cycles beginning with Cycle 2.  
**OR**  
Days 1-2: Carfilzomib 20mg/m² (max 44mg) IV over 10-30 minutes daily, **followed by:**  
Days 8-9,15-16: Carfilzomib 36mg/m² (max 79.2mg) IV over 10-30 minutes daily  
Days 1-2: Lenalidomide 25mg orally once daily  
Days 1-2,8-9,15-16,22-23: Dexamethasone 20mg orally or IV once daily.  
Administer for one 4-week cycle (Cycle 1), **followed by:**  
Days 1-2,8-9,15-16: Carfilzomib 36mg/m² (max 79.2mg) IV over 10-30 minutes daily  
Days 1-21: Lenalidomide 25mg orally once daily  
Days 1-2,8-9,15-16,22-23 (Cycles 2-4): Dexamethasone 20mg orally or IV once daily. **followed by:**  
Days 1-2,8-9,15-16,22-23 (Cycles 5-8): Dexamethasone 10mg orally or IV once daily.  
Repeat cycle every 4 weeks for 7 cycles beginning with cycle 7. |
| Daratumumab + Bortezomib + Melphalan + Prednisone (Category 1)    | Days 1.4,8,11,22,25,29,32: Bortezomib 1.3mg/m² subcutaneous  
Days 8-4: Melphalan 9mg/m² orally once daily  
Days 1-2,4: Prednisone 60mg/m² orally once daily  
Days 1.8,15,22,29,36: Daratumumab 16mg/kg IV.  
Administer for one 6-week cycle (Cycle 1), **followed by:**  
Days 1.8,22,29: Bortezomib 1.3mg/m² subcutaneous  
Days 1-4: Melphalan 9mg/m² orally once daily  
Days 2-4: Prednisone 60mg/m² orally  
Days 1.8,22: Daratumumab 16mg/kg IV.  
Repeat cycle every 6 weeks for 8 cycles (Cycles 2-9). **followed by:**  
Day 1: Daratumumab 16mg/kg IV.  
Repeat cycle every 4 weeks (Cycle 10 and beyond). |
# Multiple Myeloma Treatment Regimens

## Primary Therapy for Non-Transplant Candidates

### Other Recommended Regimens

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| **Daratumumab + Cyclophosphamide + Bortezomib + Dexamethasone**<sup>1,2,28,a,d</sup> | Days 1,8,15: Bortezomib 1.5mg/m<sup>2</sup> subcutaneous
Days 1,8,15,22: Cyclophosphamide 300mg/m<sup>2</sup> orally daily
Days 1-2: Dexamethasone 20mg IV daily, followed by:
Days 8,15,22: Dexamethasone 40mg IV daily
Days 1-2: Daratumumab 8mg/kg IV daily, followed by:
Days 8,15,22: Daratumumab 16mg/kg IV daily.
Administer for one 4-week cycle (Cycle 1), followed by:
Days 1,8,15,22: Bortezomib 1.5mg/m<sup>2</sup> subcutaneous
Days 1,8,15,22: Cyclophosphamide 300mg/m<sup>2</sup> orally daily
Days 1,8,15,22: Dexamethasone 40mg IV or orally daily
Days 1,8,15,22: Daratumumab 16mg/kg IV.
Repeat cycle every 4 weeks for 12 cycles. |

| **Ixazomib + Lenalidomide + Dexamethasone**<sup>6,14-16</sup> | Days 1,8,15: Ixazomib 4mg orally once daily
Days 1-21: Lenalidomide 25mg orally once daily
Days 1,8,15,22: Dexamethasone 40mg orally once daily.
Repeat cycle every 4 weeks. |

### Useful in Certain Circumstances

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| **Bortezomib + Dexamethasone**<sup>2,39</sup> | Days 1,4,8,11: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous
Days 1-2-4-5,8-9,11-12 (Cycles 1-4): Dexamethasone 20mg orally daily. followed by:
Days 1-2-4-5 (Cycles 5 and beyond): Dexamethasone 40mg orally daily.
Repeat cycle every 4 weeks for a maximum of 12 cycles. |

| **Carfilzomib + Cyclophosphamide + Dexamethasone**<sup>5,26,a,c</sup> | Days 1-2: Carfilzomib 20mg/m<sup>2</sup> (max 44mg) IV over 10 minutes, followed by:
Days 8-9,15-16: Carfilzomib 56mg/m<sup>2</sup> (max 123.2mg) IV over 30 minutes
Days 1,8,15: Cyclophosphamide 300mg/m<sup>2</sup> orally once daily
Days 1,8,15,22: Dexamethasone 40mg orally or IV once daily.
Administer for one 4-week cycle, followed by:
Days 1-2-8-9,15-16: Carfilzomib 56mg/m<sup>2</sup> (max 123.2mg) IV over 30 minutes daily
Days 1,8,15: Cyclophosphamide 300mg/m<sup>2</sup> orally once daily
Days 1,8,15,22: Dexamethasone 40mg orally once daily.
Repeat cycle every 4 weeks for 7 cycles (Cycles 2-8), followed by maintenance therapy with:
Days 1,2-15-16: Carfilzomib 56mg/m<sup>2</sup> (max 123.2mg) IV over 30 minutes.
Repeat cycle every 4 weeks (beginning with Cycle 9). |

| **Cyclophosphamide + Lenalidomide + Dexamethasone**<sup>6,25,47</sup> | Days 1,8,15 (Cycles 1-12 only): Cyclophosphamide 300mg/m<sup>2</sup> orally once daily
Days 1-21: Lenalidomide 25mg orally once daily
Days 1,8,15,22: Dexamethasone 40mg orally once daily.
Repeat cycle every 4 weeks. |

### Maintenance Therapy for Non-Transplant Candidates

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| **Lenalidomide (Category 1)**<sup>3,34-37</sup> | Days 1-28 (Cycles 1-3): Lenalidomide 10mg orally once daily, followed by:
Days 1-28 (Cycle 4 and beyond): Lenalidomide 15mg orally once daily.
Repeat cycle every 4 weeks.
OR
Days 1-21: Lenalidomide 10mg orally once daily.
Repeat cycle every 4 weeks. |
## Multiple Myeloma Treatment Regimens

### Maintenance Therapy for Non-Transplant Candidates

<table>
<thead>
<tr>
<th>REGIMEN</th>
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<tbody>
<tr>
<td><strong>Other Recommended Regimens</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Bortezomib</strong>&lt;sup&gt;2,38,39&lt;/sup&gt;</td>
<td><strong>Day 1:</strong> Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous. Repeat cycle every 2 weeks for up to 2 years. OR <strong>Days 1,8,15,22:</strong> Bortezomib 1.6mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous. Repeat cycle every 5 weeks for up to 6 months.</td>
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### Useful in Certain Circumstances

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<thead>
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<th>REGIMEN</th>
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<tr>
<td><strong>Bortezomib + Lenalidomide</strong>&lt;sup&gt;2,6,41&lt;/sup&gt;</td>
<td><strong>Days 1,8,15,22:</strong> Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous <strong>Days 1-21:</strong> Lenalidomide 10mg orally once daily. Repeat cycle every 4 weeks for 3 years, followed by: <strong>Days 1-28:</strong> Lenalidomide 10mg orally once daily. Repeat cycle every 4 weeks.</td>
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### Therapy for Previously Treated Multiple Myeloma

<table>
<thead>
<tr>
<th>REGIMEN</th>
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<tbody>
<tr>
<td><strong>Preferred Regimens</strong></td>
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<tr>
<td><strong>Bortezomib + Lenalidomide + Dexamethasone</strong>&lt;sup&gt;2,4,48,49&lt;/sup&gt;</td>
<td><strong>Days 1,4,8,11:</strong> Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous <strong>Days 1-14:</strong> Lenalidomide 15-25mg orally once daily <strong>Days 1-2,4-5,8-9,11-12:</strong> Dexamethasone 40 mg orally once daily (Cycles 1-4), followed by: <strong>Days 1,8:</strong> Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous <strong>Days 1-14:</strong> Lenalidomide 15mg orally once daily <strong>Days 1-2,8-9:</strong> Dexamethasone 10mg orally once daily. Repeat cycle every 3 weeks (Cycle 9 and beyond).</td>
</tr>
<tr>
<td><strong>Carfilzomib + Lenalidomide + Dexamethasone (Category 1)</strong>&lt;sup&gt;6,9,50,b,c,l&lt;/sup&gt;</td>
<td><strong>Days 1-2:</strong> Carfilzomib 20mg/m&lt;sup&gt;2&lt;/sup&gt; (max 44mg) IV over 10 minutes, followed by: <strong>Days 8-9,15-16:</strong> Carfilzomib 27mg/m&lt;sup&gt;2&lt;/sup&gt; (max 59.4mg) IV over 10 minutes <strong>Days 1-21:</strong> Lenalidomide 25mg orally once daily <strong>Days 1,8,15,22:</strong> Dexamethasone 40mg orally once daily. Administer for one 28-day cycle (Cycle 1), followed by: <strong>Days 1-2,8-9,15-16:</strong> Carfilzomib 27mg/m&lt;sup&gt;2&lt;/sup&gt; (max 59.4mg) IV over 10 minutes <strong>Days 1-21:</strong> Lenalidomide 25mg orally daily <strong>Days 1,8,15,22:</strong> Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks for 11 cycles (Cycles 2-12), followed by: <strong>Days 1-2,15-16:</strong> Carfilzomib 27mg/m&lt;sup&gt;2&lt;/sup&gt; (max 59.4mg) IV over 10 minutes <strong>Days 1-21:</strong> Lenalidomide 25mg orally daily <strong>Days 1-8,15,22:</strong> Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks for 6 cycles (Cycles 13-18), followed by: <strong>Days 1-21:</strong> Lenalidomide 25mg orally once daily <strong>Days 1,8,15,22:</strong> Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks (Cycles 19 and beyond).</td>
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<tr>
<td><strong>Daratumumab + Bortezomib + Dexamethasone (Category 1)</strong>&lt;sup&gt;12,51,d,f&lt;/sup&gt;</td>
<td><strong>Days 1,4,8,11:</strong> Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous <strong>Days 1-2,4-5,8-9,11-12:</strong> Dexamethasone (age &lt;75 years) 20mg IV or orally once daily OR <strong>Days 1,4,8,11:</strong> Dexamethasone (age &gt;75 years) 20mg IV or orally once daily <strong>Days 1,8,15:</strong> 16mg/kg IV. Repeat cycle every 3 weeks for 3 cycles (Cycles 1-3), followed by: <strong>Days 1,4,8,11:</strong> Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous <strong>Days 1-2,4-5,8-9,11-12:</strong> Dexamethasone (age &lt;75 years) 20mg IV or orally once daily OR <strong>Days 1,4,8,11:</strong> Dexamethasone (age &gt;75 years) 20mg IV or orally once daily. Repeat cycle every 3 weeks for 5 cycles (Cycles 4-8), followed by: <strong>Day 1:</strong> Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks (Cycle 9 and beyond).</td>
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Multiple Myeloma Treatment Regimens

**Therapy for Previously Treated Multiple Myeloma**

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<tr>
<td><strong>Preferred Regimens (continued)</strong></td>
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<tr>
<td><strong>Daratumumab + Carfilzomib + Dexamethasone (Category 1)</strong></td>
<td>Day 1: Carfilzomib 20mg/m² (max 44mg) IV over 30 minutes, followed by: Days 1,8,15: Carfilzomib 70mg/m² (max 154mg) IV over 30 minutes Days 1,2,8,9,15-16,22-23: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg IV or orally once daily Days 1,8,15,22: Daratumumab 16mg/kg IV. Administer for one 4-week cycle (Cycle 1), followed by: Days 1,2,8,9,15-16,22-23: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg IV or orally once daily Days 1,8,15,22: Daratumumab 16mg/kg IV. Administer for one 4-week cycle (Cycle 2), followed by: Days 1,2,8,9,15-16,22-23: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg IV or orally once daily Days 1,8,15,22: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks for 4 cycles (Cycles 3-6), followed by: Days 1,8,15,22: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg IV or orally once daily Days 1,8,15,22: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks (Cycle 7 and beyond).</td>
</tr>
<tr>
<td><strong>Daratumumab + Lenalidomide + Dexamethasone (Category 1)</strong></td>
<td>Days 1-21: Lenalidomide 25mg orally once daily Days 1,2-15-16,22-23: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg IV or orally once daily Days 1,8,15,22: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks for 2 cycles (Cycles 1-2), followed by: Days 1-21: Lenalidomide 25mg orally once daily Days 1,2-15-16,22-23: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg IV or orally once daily Days 1,8,15,22: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks for 4 cycles (Cycles 3-6), followed by: Days 1-21: Lenalidomide 25mg orally once daily Days 1,2-15-16,22-23: Dexamethasone (age ≤75 years) 20mg IV or orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg IV or orally once daily Days 1,8,15,22: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks (Cycle 7 and beyond).</td>
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<tr>
<td><strong>Isatuximab-irfc + Pomalidomide + Dexamethasone (Category 1)</strong></td>
<td>Days 1-21: Pomalidomide 4mg orally once daily Days 1,8,15,22: Dexamethasone (age ≤75 years) 40mg orally once daily or IV OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg orally once daily OR Days 1,8,15,22: Isatuximab-irfc 10mg/kg IV. Administer for one 4-week cycle (Cycle 1), followed by: Days 1-21: Pomalidomide 4mg orally once daily Days 1,8,15,22: Dexamethasone (age ≤75 years) 40mg orally once daily or IV OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg orally once daily OR Days 1,15: Isatuximab-irfc 10mg/kg IV. Repeat cycle every 4 weeks (Cycle 2 and beyond).</td>
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<tr>
<td><strong>Ixazomib + Lenalidomide + Dexamethasone (Category 1)</strong></td>
<td>Days 1,8,15,22: Ixazomib 4mg orally once daily Days 1-21: Lenalidomide 25mg orally once daily Days 1,8,15,22: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks.</td>
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<tr>
<td><strong>Ixazomib + Pomalidomide + Dexamethasone</strong></td>
<td>Days 1,8,15,22: Ixazomib 4mg orally once daily Days 1-21: Pomalidomide 4mg orally once daily Days 1,8,15,22: Dexamethasone (age ≤75 years) 40 mg orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20 mg orally once daily Repeat cycle every 4 weeks.</td>
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continued
Multiple Myeloma Treatment Regimens

**Therapy for Previously Treated Multiple Myeloma**

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<th>REGIMEN</th>
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<tr>
<td><strong>Preferred Regimens</strong>&lt;sup&gt;(continued)&lt;/sup&gt;</td>
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<tr>
<td>Pomalidomide + Bortezomib + Dexamethasone (Category 1)&lt;sup&gt;44,59,60&lt;/sup&gt;</td>
<td>Days 1,4,8,11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous&lt;br&gt;Days 1-14: Pomalidomide 4mg orally once daily&lt;br&gt;Days 1-2,4-5,8-11,12: Dexamethasone (age ≤75 years) 20mg orally once daily OR&lt;br&gt;Days 1-2,4-5,8-11,12: Dexamethasone (age &gt;75 years) 10mg orally once daily. Repeat cycle every 3 weeks for 8 cycles (Cycles 1-8), <strong>followed by:</strong>&lt;br&gt;Days 1,8: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous&lt;br&gt;Days 1-14: Pomalidomide 4mg orally once daily&lt;br&gt;Days 1-2,8-9: Dexamethasone (age ≤75 years) 20mg orally once daily OR&lt;br&gt;Days 1-2,8-9: Dexamethasone (age &gt;75 years) 10mg orally once daily. Repeat cycle every 3 weeks (Cycle 9 and beyond).</td>
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| Other Recommended Regimens | |
| Belantamab Mafodotin-blmf<sup>61,62</sup> | Day 1: Belantamab Mafodetin-blmf 2.5mg/kg IV over 30 minutes. Repeat cycle every 3 weeks. |
| Bendamustine + Bortezomib + Dexamethasone<sup>2,63,64</sup> | Days 1,4,8,11: Bendamustine 70mg/m<sup>2</sup> IV over 10-60 minutes<br>Days 1,4,8,11: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous<br>Days 1,4,8,11: Dexamethasone 20mg orally once daily. Repeat cycle every 4 weeks for 8 cycles or until disease progression. |
| Bendamustine + Lenalidomide + Dexamethasone<sup>65</sup> | Days 1-2: Bendamustine 75mg/m<sup>2</sup> IV over 10-60 minutes<br>Days 1-21: Lenalidomide 10mg orally once daily<br>Days 1,8,15,22: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks. |
| Bortezomib + Cyclophosphamide + Dexamethasone<sup>2,66,67</sup> | Days 1,4,8,11: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous<br>Days 1-2,4-5,8-9,11-12: Dexamethasone 40mg orally once daily<br>Days 1,8,15: Cyclophosphamide 500mg orally once daily. Repeat cycle every 3 weeks. OR<br>Days 1,4,8,11: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous<br>Days 1-2,4-5,8-9,11-12: Dexamethasone 40mg orally once daily<br>Days 1,8,15: Cyclophosphamide 500mg orally once daily. Repeat cycle every 3 weeks for 8 cycles.<br>Days 1,8,15,22: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous<br>Days 1-2,8-9,15-16,22-23: Dexamethasone 20mg orally once daily<br>Days 1-35: Cyclophosphamide 50mg orally once daily. Repeat cycle every 5 weeks. |
| Bortezomib + Liposomal Doxorubicin + Dexamethasone (Category 1)<sup>2,68</sup> | Days 1,4,8,11: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous<br>Days 4: Liposomal Doxorubicin 30mg/m<sup>2</sup> IV<br>Days 1-4: Dexamethasone 40mg orally once daily. Repeat cycle every 3 weeks for 8 cycles.<br>Days 1,8,15,22: Bortezomib 1.3mg/m<sup>2</sup> subcutaneous<br>Days 1-4: Dexamethasone 40mg orally once daily. Repeat cycle every 5 weeks. |
| Carfilzomib + Cyclophosphamide + Dexamethasone<sup>69,70</sup> | Days 1-2: Carfilzomib 20mg/m<sup>2</sup> (max 44mg) IV over 10 minutes, **followed by:**<br>Days 8: Carfilzomib 36mg/m<sup>2</sup> (max 79.2mg) IV over 30 minutes<br>Days 1,8,15,22: Cyclophosphamide 300mg/m<sup>2</sup> orally once daily<br>Days 1,8,15,22: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks for 8 cycles (Cycles 2-9), **followed by maintenance therapy with:**<br>Days 1-2: Carfilzomib 36mg/m<sup>2</sup> (max 79.2mg) IV over 30 minutes<br>Days 1,8,15,22: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks. |

<sup>1</sup>CancerTherapyAdvisor.com
## Multiple Myeloma Treatment Regimens

**Therapy for Previously Treated Multiple Myeloma**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Other Recommended Regimens (continued)</strong></td>
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<tr>
<td>Carfilzomib (twice weekly) + Dexamethasone (Category 1)</td>
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<tr>
<td>Cyclophosphamide + Lenalidomide + Dexamethasone</td>
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<tr>
<td>Daratumumab + Cyclophosphamide + Bortezomib + Dexamethasone</td>
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<tr>
<td>Daratumumab + Pomalidomide + Dexamethasone</td>
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## Multiple Myeloma Treatment Regimens

### Therapy for Previously Treated Multiple Myeloma

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<tr>
<td>Elotuzumab + Bortezomib + Dexamethasone&lt;sup&gt;6,74,75&lt;/sup&gt;</td>
<td>Days 1,4,8,11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous&lt;br&gt;Days 1,8,15: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous&lt;br&gt;Days 1,8,15: Elotuzumab 10mg/kg IV&lt;br&gt;Repeat cycle every 3 weeks for 2 cycles (Cycles 1-2). <strong>followed by:</strong>&lt;br&gt;Days 1,4,8,11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous&lt;br&gt;Days 1,8,15: Dexamethasone 8mg orally once daily AND 8mg IV prior to Elotuzumab&lt;br&gt;Days 4,8: Dexamethasone 20mg orally once daily&lt;br&gt;Days 1,11: Elotuzumab 10mg/kg IV. <strong>followed by:</strong>&lt;br&gt;Days 1,8,15: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous&lt;br&gt;Days 1,11: Dexamethasone 8mg orally once daily&lt;br&gt;Day 8: Dexamethasone 40mg orally once daily&lt;br&gt;Days 1,15: Elotuzumab 10mg/kg IV. Repeat cycle every 4 weeks (Cycle 3 and beyond).</td>
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<tr>
<td>Elotuzumab + Lenalidomide + Dexamethasone (Category 1)&lt;sup&gt;14,34,72&lt;/sup&gt;</td>
<td>Days 1-21: Lenalidomide 25mg orally once daily&lt;br&gt;Days 1,8,15,22: Dexamethasone 28mg orally AND 8mg IV prior to Elotuzumab&lt;br&gt;Days 1,8,15,22: Elotuzumab 10mg/kg IV. Repeat cycle every 4 weeks (Cycle 3 and beyond).</td>
</tr>
<tr>
<td>Elotuzumab + Pomalidomide + Dexamethasone&lt;sup&gt;54,74,78,p&lt;/sup&gt;</td>
<td>Days 1-21: Pomalidomide 4mg orally once daily&lt;br&gt;Days 1,8,15,22: Dexamethasone (age &lt;75 years) 40mg orally once daily OR&lt;br&gt;Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg orally once daily&lt;br&gt;Days 1,8,15,22: Elotuzumab 10mg/kg IV. Repeat cycle every 4 weeks (Cycle 3 and beyond).</td>
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<tr>
<td>Idecabtagene Vicleucel&lt;sup&gt;79,o&lt;/sup&gt;</td>
<td>See NCCN Multiple Myeloma Guidelines&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Isatuximab-ifrc + Carfilzolimib + Dexamethasone&lt;sup&gt;61,62&lt;/sup&gt;</td>
<td>See NCCN Multiple Myeloma Guidelines&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Ixazomib + Cyclophosphamide + Dexamethasone&lt;sup&gt;46,32,33&lt;/sup&gt;</td>
<td>Days 1,8,15,22: Dexamethasone (age &lt;75 years) 40mg orally once daily&lt;br&gt;Days 1,8,15,22: Ixazomib 4mg orally once daily&lt;br&gt;Days 1,8,15,22: Elotuzumab 10mg/kg IV. Repeat cycle every 4 weeks (Cycle 3 and beyond).</td>
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<tr>
<td>Melphalan Flufenamide + Dexamethasone&lt;sup&gt;80-83,q&lt;/sup&gt;</td>
<td>Day 1: Melphalan Flufenamide 40mg IV over 30 minutes&lt;br&gt;Days 1,8,15,22: Dexamethasone (age &lt;75 years) 40mg orally once daily OR&lt;br&gt;Days 1,8,15,22: Dexamethasone (age ≥75 years) 20mg orally once daily. Repeat cycle every 4 weeks.</td>
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<tr>
<td>Panobinostat + Bortezomib + Dexamethasone (Category 1)&lt;sup&gt;2,84,85&lt;/sup&gt;</td>
<td>Day 1,4,8,11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous&lt;br&gt;Days 1,3,5,8,10,12: Panobinostat 20mg orally once daily&lt;br&gt;Days 1,2,4,5,8,9,11-12: Dexamethasone 20mg orally once daily. Repeat cycle every 3 weeks for 8 cycles (Cycles 1-8). <strong>followed by:</strong>&lt;br&gt;Days 1,2,8,22,29: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; subcutaneous&lt;br&gt;Days 1,3,5,8,10,12,22,24,26,29,31,33: Panobinostat 20mg orally once daily&lt;br&gt;Days 1-2,8,9,22,23,29,30: Dexamethasone 20mg orally once daily. Repeat cycle every 6 weeks (Cycle 9 and beyond).</td>
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<tr>
<td>Pomalidomide&lt;sup&gt;4&lt;/sup&gt; + Cyclophosphamide + Dexamethasone&lt;sup&gt;84,86&lt;/sup&gt;</td>
<td>Days 1,8,15: Cyclophosphamide 400mg orally once daily&lt;br&gt;Days 1-21: Pomalidomide 4mg orally once daily&lt;br&gt;Days 1,8,15,22: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks.</td>
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Multiple Myeloma Treatment Regimens

**Therapy for Previously Treated Multiple Myeloma**1,3,8 (continued)

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<td><strong>Other Recommended Regimens (continued)</strong></td>
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<tr>
<td>Pomalidomide + Carfilzomib + Dexamethasone8,54,87,88,b,c</td>
<td>Days 1-2: Pomalidomide 20mg/m² (max 44mg) IV over 10 minutes, followed by: Days 8-9,15-16: Pomalidomide 27mg/m² (max 59.4mg) IV over 10 minutes Days 1-21: Pomalidomide 4mg orally once daily Days 1,8,15,22: Dexamethasone 40mg IV or orally once daily. Administer for one 4-week cycle (Cycle 1), followed by: Days 1-2,8-9,15-16: Carfilzomib 27mg/m² IV over 10 minutes Days 1-21: Pomalidomide 4mg orally once daily Days 1,8,15,22: Dexamethasone 40mg IV or orally once daily. Repeat cycle every 4 weeks for 5 cycles (Cycles 2-6), followed by: Days 1-2,15-16: Carfilzomib 27mg/m² IV over 10 minutes Days 1-21: Pomalidomide 4mg IV or orally once daily Days 1,15: Dexamethasone 40mg IV or orally once daily. Repeat cycle every 4 weeks (Cycle 7 and beyond).</td>
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<tr>
<td>Selinexor + Bortezomib + Dexamethasone (once weekly) (Category 1)2,89,90</td>
<td>Days 1,8,15,22: Bortezomib 1.3mg/m² subcutaneous Days 1-2,8-9,15-16,22-23,29-30: Dexamethasone 20mg orally once daily Days 1,8,15,22-29: Selinexor 100mg orally once daily. Repeat cycle every 5 weeks.</td>
</tr>
<tr>
<td><strong>Useful in Certain Circumstances</strong></td>
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<tr>
<td>Bendamustine91,92</td>
<td>Days 1-2: Bendamustine 80-150mg/m² IV over 10-60 minutes (based on dose and product selection). Repeat cycle every 4 weeks.</td>
</tr>
<tr>
<td>Bortezomib + Dexamethasone (Category 1)2,93-95</td>
<td>Days 1,4,8,11: Bortezomib 1.3mg/m² subcutaneous Days 1-2,4-5,8-9,11-12: Dexamethasone 20mg orally once daily. Repeat cycle every 3 weeks.</td>
</tr>
<tr>
<td>Carfilzomib + Cyclophosphamide + Thalidomide + Dexamethasone8,9,36,37,b,c</td>
<td>Days 1-2: Carfilzomib 20mg/m² (max 44mg) IV over 30 minutes, followed by: Days 8-9,15-16: Carfilzomib 36mg/m² (max 79.2mg) IV over 30 minutes Days 1,8,15,22: Cyclophosphamide 300mg/m² orally once daily Days 1,8,15,22: Thalidomide 100mg orally once daily Days 1-28: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks (Cycle 2 and beyond). OR Day 1: Carfilzomib 20mg/m² (max 44mg) IV over 30 minutes, followed by: Days 8,15: Carfilzomib 70mg/m² (max 154mg) IV over 30 minutes Days 8-15: Thalidomide 100mg orally once daily Days 1-28: Dexamethasone 40mg orally once daily. Administer for one 4-week cycle (Cycle 1), followed by: Days 1,8,15,22: Carfilzomib 70mg/m² (max 154mg) IV over 30 minutes Days 1,8,15,22: Thalidomide 100mg orally once daily Days 1,8,15,22: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks (Cycle 2 and beyond).</td>
</tr>
<tr>
<td>Carfilzomib (weekly) + Dexamethasone9,98,99,b,c</td>
<td>Day 1: Carfilzomib 20mg/m² (max 44mg) IV over 30 minutes, followed by: Days 8,15: Carfilzomib 70mg/m² (max 154mg) IV over 30 minutes Days 1,8,15,22: Dexamethasone 40mg IV or orally once daily. Administer for one 4-week cycle (Cycle 1), followed by: Days 1,8,15,22: Carfilzomib 70mg/m² (max 154mg) IV over 30 minutes Days 1,8,15,22: Thalidomide 100mg orally once daily Days 1,8,15,22: Dexamethasone 40mg IV or orally once daily. Repeat cycle every 4 weeks for 7 cycles (Cycles 2-8), followed by: Days 1,8,15,22: Carfilzomib 70mg/m² (max 154mg) IV over 30 minutes Days 1,8,15,22: Dexamethasone 40mg IV or orally once daily. Repeat cycle every 4 weeks (beginning with Cycle 9).</td>
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**continued**
# Multiple Myeloma Treatment Regimens

**Therapy for Previously Treated Multiple Myeloma** (continued)

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<th>REGIMEN</th>
<th>DOSSING</th>
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<tbody>
<tr>
<td><strong>Useful in Certain Circumstances</strong> (continued)</td>
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<tr>
<td>Daratumumab&lt;sup&gt;12,100,111&lt;/sup&gt;</td>
<td>Days 1,8,15,22: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks for 2 cycles (Cycles 1 and 2). <strong>followed by:</strong> Days 1,15: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks for 4 cycles (Cycles 3-6). <strong>followed by:</strong> Day 1: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks (Cycle 7 and beyond).</td>
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<tr>
<td>Dexamethasone + Cyclophosphamide + Etoposide + Cisplatin (DCEP)&lt;sup&gt;101,102,f,g&lt;/sup&gt;</td>
<td>Days 1-4: Dexamethasone 40mg orally once daily Days 1-4: Cyclophosphamide 400mg/m² IV continuous infusion over 24 hours Days 1-4: Etoposide 40mg/m² IV continuous infusion over 24 hours Days 1-4: Cisplatin 10-15mg/m² IV continuous infusion over 24 hours. Repeat cycle every 4 weeks.</td>
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<tr>
<td>Dexamethasone + Thalidomide + Cyclophosphamide + Etoposide + Bortezomib (VT-PACE)&lt;sup&gt;116,103-105,f,g&lt;/sup&gt;</td>
<td>Days 1,4,8,11: Bortezomib 1mg/m² subcutaneous Days 1-4: Dexamethasone 40mg orally once daily Days 1-4: Thalidomide 50-200mg orally once daily at bedtime Days 1-4: Cyclophosphamide 10mg/m² IV continuous infusion over 24 hours Days 1-4: Etoposide 40mg/m² IV continuous infusion over 24 hours. Repeat cycle every 4 weeks.</td>
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<tr>
<td>High-Dose Cyclophosphamide&lt;sup&gt;106&lt;/sup&gt;</td>
<td>Days 1-4: Cyclophosphamide 600mg/m² IV over 60 minutes. Repeat cycle every 4 weeks for 2 cycles. <strong>followed by</strong> every 3-month cycle.</td>
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<td>Ixazomib + Dexamethasone&lt;sup&gt;14,107&lt;/sup&gt;</td>
<td>Days 1,8,15: Ixazomib 4mg orally once daily Days 1,2,8,9,15-16: Dexamethasone 20mg orally once daily. Repeat cycle every 4 weeks.</td>
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<tr>
<td>Lenalidomide + Dexamethasone (Category 1)&lt;sup&gt;52,108,109,r&lt;/sup&gt;</td>
<td>Days 1-21: Lenalidomide 25mg orally once daily Days 1-4,9-12,17-20: Dexamethasone 40mg orally once daily (Cycles 1-4), <strong>followed by:</strong> Days 1-4: Dexamethasone 40mg orally once daily (Cycle 5 and beyond). Repeat cycle every 4 weeks.</td>
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<tr>
<td>Panobinostat&lt;sup&gt;9&lt;/sup&gt; + Carfilzomib&lt;sup&gt;5,102,b,c&lt;/sup&gt;</td>
<td>Days 1-2: Carfilzomib 20mg/m² (max 44mg) IV over 10-30 minutes. <strong>followed by:</strong> Days 8-9,15-16: Carfilzomib 45mg/m² (max 99mg) IV over 10-30 minutes. Days 1,3,5,15,17,19: Panobinostat 20mg orally once daily. Days 1,2,8-9,15-16: Carfilzomib 45mg/m² (max 99mg) IV over 10-30 minutes Days 1,3,5,15,17,19: Panobinostat 20mg orally once daily. Repeat cycle every 4 weeks (Cycle 2 and beyond).</td>
</tr>
<tr>
<td>Panobinostat&lt;sup&gt;9&lt;/sup&gt; + Lenalidomide + Dexamethasone&lt;sup&gt;6,111&lt;/sup&gt;</td>
<td>Days 1-21: Lenalidomide 25mg orally once daily Days 1,3,5,15,17,19: Panobinostat 20mg orally once daily Days 1,8,15: Dexamethasone 40mg orally once daily. Repeat cycle every 4 weeks.</td>
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<tr>
<td>Pomalidomide&lt;sup&gt;9&lt;/sup&gt; + Dexamethasone (Category 1)&lt;sup&gt;52,102,114,r&lt;/sup&gt;</td>
<td>Days 1-21: Pomalidomide 4mg orally once daily Days 1,8,15,22: Dexamethasone (age ≤75 years) 40mg orally once daily OR Days 1,8,15,22: Dexamethasone (age &gt;75 years) 20mg orally once daily. Repeat cycle every 4 weeks.</td>
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**Multiple Myeloma Treatment Regimens**

### Therapy for Previously Treated Multiple Myeloma\(^{1,1,2}\) (continued)

<table>
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<td><strong>Useful in Certain Circumstances (continued)</strong></td>
<td><strong>Useful in Certain Circumstances (continued)</strong></td>
</tr>
<tr>
<td>Selinexor + Daratumumab(^{8,9,10}) + Dexamethasone</td>
<td>Days 1,8,15,22: Selinexor 100mg orally once daily&lt;br&gt;Days 1,8,15,22: Dexamethasone 40mg orally once daily or IV OR&lt;br&gt;Days 1-28: Dexamethasone 20mg orally once daily or IV&lt;br&gt;Days 1,8,15,22: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks for 2 cycles (Cycles 1-2), followed by:&lt;br&gt;Days 1,8,15,22: Selinexor 100mg orally once daily&lt;br&gt;Days 1,8,15,22: Dexamethasone 40mg orally once daily or IV OR&lt;br&gt;Days 1-28: Dexamethasone 20mg orally once daily or IV&lt;br&gt;Days 1,15: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks for 4 cycles (Cycles 3-6), followed by:&lt;br&gt;Days 1,8,15,22: Selinexor 100mg orally once daily&lt;br&gt;Days 1,8,15,22: Dexamethasone 40mg orally once daily or IV OR&lt;br&gt;Days 1-28: Dexamethasone 20mg orally once daily or IV&lt;br&gt;Days 1: Daratumumab 16mg/kg IV. Repeat cycle every 4 weeks (Cycle 7 and beyond).</td>
</tr>
<tr>
<td>Selinexor + Dexamethasone(^{8,10,11})</td>
<td>Days 1,3,8,10,15,17,22,24: Selinexor 80mg orally once daily&lt;br&gt;Days 1,3,8,10,15,17,22,24: Dexamethasone 20mg orally once daily. Repeat cycle every 4 weeks.</td>
</tr>
<tr>
<td>Selinexor + Pomalidomide(^{8,11}) + Dexamethasone</td>
<td>Days 1: Pomalidomide 4mg orally once daily&lt;br&gt;Days 1,8,15,22: Selinexor 60mg orally once daily&lt;br&gt;Days 1,8,15,22: Dexamethasone 40mg orally once daily or IV OR&lt;br&gt;Days 1-28: Dexamethasone 20mg orally once daily or IV. Repeat cycle every 4 weeks.</td>
</tr>
<tr>
<td>Venetoclax + Dexamethasone (only for t(11;14) patients)(^{8,10,12})</td>
<td>Days 1: Venetoclax 800mg orally once daily&lt;br&gt;Days 1,8,15: Dexamethasone (age &lt;75 years) 40mg orally once daily OR&lt;br&gt;Days 1,8,15: Dexamethasone (age ≥75 years) 20mg orally once daily. Repeat cycle every 3 weeks.</td>
</tr>
</tbody>
</table>

\(^{a}\) Preferred primarily as initial treatment in patients with acute renal insufficiency or those who have no access to bortezomib/lenalidomide/dexamethasone. Consider switching to bortezomib/lenalidomide/dexamethasone after renal function improved.

\(^{b}\) Hydration is recommended pre-and post-administration of carfilzomib.

\(^{c}\) Carfilzomib can potentially cause cardiac and pulmonary toxicity, especially in elderly patients.

\(^{d}\) Includes both daratumumab for intravenous infusion and daratumumab and hyaluronidase-fihj for subcutaneous injection. Daratumumab and hyaluronidase-fihj for subcutaneous injection have different dosing and administration instructions compared to daratumumab for intravenous infusion.

\(^{e}\) Treatment option for patients with renal insufficiency and/or peripheral neuropathy.

\(^{f}\) Hydration is required with supplemental electrolytes pre- and post-administration of Cisplatin.

\(^{g}\) Generally reserved for the treatment of aggressive multiple myeloma.

\(^{h}\) There appears to be an increased risk for secondary cancers, especially with lenalidomide maintenance following transplant. The risks and benefits of maintenance therapy vs. secondary cancers should be discussed with patients.


\(^{j}\) Consideration for appropriate regimen is based on the context of clinical relapse.

\(^{k}\) If a regimen in this section was used as a primary induction therapy and relapse is >6 mo, the same regimen may be repeated.

\(^{l}\) Clinical trials with these regimens primarily included patients who were lenalidomide-naive or with lenalidomide-sensitive multiple myeloma.

\(^{m}\) Indicated for patients who have received at least two prior therapies, including lenalidomide and a proteasome inhibitor.

\(^{n}\) Indicated for the treatment of patients who have received at least two prior therapies including an immunomodulatory agent and a proteasome inhibitor and who have demonstrated disease progression within 60 days of completion of the last therapy.

\(^{o}\) Indicated for patients who have received at least four prior therapies, including an anti-CD38 monoclonal antibody, a proteasome inhibitor, and an immunomodulatory agent.

\(^{p}\) Indicated for the treatment of patients who have received at least two prior therapies including an immunomodulatory agent and a proteasome inhibitor.\(^{1}\)

\(^{q}\) Indicated for those who have received at least four prior lines of therapy and whose disease is refractory to at least one proteasome inhibitor, one immunomodulatory agent, and one CD38-directed monoclonal antibody.

\(^{r}\) Consider single-agent lenalidomide or pomalidomide for patients with steroid intolerance.

\(^{s}\) Indicated for the treatment of patients who have received at least two prior therapies, including bortezomib and an immunomodulatory agent.

\(^{t}\) Indicated for the treatment of patients who have received at least three prior therapies, including a proteasome inhibitor and an immunomodulatory agent or who are double refractory to a proteasome inhibitor and an immunomodulatory agent.

\(^{u}\) Indicated for patients who have received at least four prior therapies and whose disease is refractory to at least two proteasome inhibitors, at least two immunomodulatory agents, and an anti-CD38 monoclonal antibody.
Multiple Myeloma Treatment Regimens

References


Multiple Myeloma Treatment Regimens

References (continued)


Multiple Myeloma Treatment Regimens

References (continued)


