MULTIPLE MYELOMA TREATMENT REGIMENS (Part 1 of 9)

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 healthcare 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 only provided to supplement the latest treatment strategies.

These Guidelines are a work in progress that may be refined as often as new significant data becomes available. The NCCN Guidelines® are expected to use independent medical judgment in the context of individual clinical circumstances to determine any patient’s care or treatment. The National Comprehensive Cancer Network 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.

General treatment note: Exposure to myelotoxic agents—including alkylating agents and nitrosoureas—should be limited to avoid compromising stem-cell reserve prior to stem-cell harvest in patients who may be candidates for transplant.

Primary Therapy for Transplant Candidates

Note: All recommendations are Category 2A unless otherwise indicated.

Preferred Regimens

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<thead>
<tr>
<th>REGIMEN</th>
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<tbody>
<tr>
<td>Bortezomib + dexamethasone (Category 1)</td>
<td>Days 1, 4, 8, and 11: Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC, plus Bortezomib 1.3mg/m² IV push or continuous IV infusion over 24 hours daily, plus Bortezomib 1.3mg/m² IV push or continuous IV infusion over 24 hours daily, plus Dexamethasone 40mg orally daily. OR Days 1–2, 4–5, 8–9, and 11–12: Dexamethasone 20mg orally daily. Repeat cycle every 3 weeks for 3–4 cycles.</td>
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<tr>
<td>Bortezomib + doxorubicin + dexamethasone (Category 1)</td>
<td>Days 1, 4, 8, and 11: Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC, plus Doxorubicin 9mg/m² IV push or continuous IV infusion over 24 hours daily, plus Doxorubicin 9mg/m² IV push or continuous IV infusion over 24 hours daily, plus Dexamethasone 40mg orally daily. OR Days 1–4, 9–12, and 17–20: Dexamethasone 40mg orally daily for cycle 1, followed by dexamethasone on days 1–4 for cycles 2–4. Repeat cycle every 3 weeks for 3–4 cycles.</td>
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<tr>
<td>Bortezomib + thalidomide + dexamethasone (Category 1)</td>
<td>Days 1, 4, 8, and 11: Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC, plus Thalidomide 50–200mg orally daily at bedtime, plus Thalidomide 50–200mg orally daily at bedtime, plus Dexamethasone 40mg orally daily. OR Days 1–4 and 9–12: Dexamethasone 40mg orally daily. OR Days 1–4 (all cycles) and 9–12 (cycles 1 and 2): Dexamethasone 40mg orally daily. Repeat cycle every 4 weeks for 3–4 cycles.</td>
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<tr>
<td>Bortezomib + lenalidomide + dexamethasone (RVD)</td>
<td>Days 1, 4, 8, and 11: Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC, plus Lenalidomide 25mg orally daily, plus Lenalidomide 25mg orally daily, plus Dexamethasone 40mg orally daily. OR Days 1, 4, 8, and 15: Dexamethasone 40mg orally daily. Repeat cycle every 3 weeks for 3–4 cycles.</td>
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<tr>
<td>Bortezomib + cyclophosphamide + dexamethasone (BCD)</td>
<td>Days 1, 4, 8, and 11: Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC, plus Cyclophosphamide 300mg/m²/day orally, plus Cyclophosphamide 300mg/m²/day orally, plus Dexamethasone 40mg orally daily. Repeat cycle every 4 weeks for 3–4 cycles. OR Days 1, 4, 8, and 11: Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC, plus Cyclophosphamide 900mg/m² IV over 80 minutes, plus Cyclophosphamide 900mg/m² IV over 80 minutes, plus Dexamethasone 40mg orally daily. Repeat cycle every 3 weeks for 3–4 cycles.</td>
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continued
### MULTIPLE MYELOMA TREATMENT REGIMENS (Part 2 of 9)

#### Primary Therapy for Transplant Candidates

**Other Regimens**

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| **Carfilzomib + Lenalidomide + dexamethasone (CRD)** | **Cycle 1:** | Days 1 and 2: Carfilzomib 20mg/m\(^2\) (maximum 44mg) IV over 2–10 minutes Days 8, 9, 15, and 16: Carfilzomib 27mg/m\(^2\) (maximum 59.4mg) IV over 2–10 minutes Days 1–21: Lenalidomide 25mg orally daily Days 1, 8, 15, and 22: Dexamethasone 40mg orally daily. **Cycles 2–7:** Days 1, 2, 8, 9, 15, and 16: Carfilzomib 27mg/m\(^2\) (maximum 59.4mg) IV over 2–10 minutes Days 1–21: Lenalidomide 25mg orally daily Days 1, 8, 15, and 22: Dexamethasone 40mg orally daily. **OR** **Cycle 1:** Days 1 and 2: Carfilzomib 20mg/m\(^2\) (maximum 44mg) IV over 2–10 minutes Days 8, 9, 15, and 16: Carfilzomib 36mg/m\(^2\) (maximum 79.2mg) IV over 30 minutes Days 1–21: Lenalidomide 25mg orally daily Days 1, 2, 8, 9, 15, 16, 22, and 23: Dexamethasone 20mg orally daily. **Cycles 2–7:** Days 1, 2, 8, 9, 15, and 16: Carfilzomib 36mg/m\(^2\) (maximum 79.2mg) IV over 30 minutes Days 1–21: Lenalidomide 25mg orally daily Days 1, 2, 8, 9, 15, 16, 22, and 23: Dexamethasone 20mg orally daily for cycles 2–4, followed by dexamethasone 10mg orally daily for cycles 5–8. Repeat cycle every 28 days. **OR** **Cycle 1:** Days 1 and 2: Carfilzomib 20mg/m\(^2\) (maximum 44mg) IV over 2–10 minutes Days 8, 9, 15, and 16: Carfilzomib 36mg/m\(^2\) (maximum 79.2mg) IV over 30 minutes Days 1–21: Lenalidomide 25mg orally daily Days 1, 2, 8, 9, 15, 16, 22, and 23: Dexamethasone 20mg orally daily for cycles 2–4, followed by dexamethasone 10mg orally daily for cycles 5–8. Repeat cycle every 28 days. **Thalidomide + dexamethasone (Category 2B)** Days 1–28: Thalidomide 50–200mg orally daily at bedtime, plus Days 1–4 (all cycles), 9–12, and 17–20 (cycles 1 and 3): Dexamethasone 40mg orally daily. **OR** Days 1–4, 9–12, and 17–20: Dexamethasone 40mg orally daily. Repeat cycle every 4 weeks for 3–4 cycles. **Dexamethasone (Category 2B)** Day 1–4, 9–12, 17–20: Dexamethasone 20mg/m\(^2\) or 40mg orally daily; may consider giving on days 1–4 only starting on cycle 5 and for subsequent cycles. Repeat cycle every 4–5 weeks for 3–4 cycles. **OR** Days 1–4 (all cycles), 9–12, and 17–20 (cycles 1–2): Dexamethasone 20mg/m\(^2\) or 40mg orally daily. Repeat cycle every 6 weeks for 2–3 cycles. **Liposomal doxorubicin + vincristine + dexamethasone (DVD) (Category 2B)** Day 1: Pegylated liposomal doxorubicin 40mg/m\(^2\) IV over 60 minutes + vincristine 1.4mg/m\(^2\) (maximum 2mg) IV over 5–10 minutes Days 1–4: Dexamethasone 40mg orally daily. Repeat cycle every 4 weeks for 3–4 cycles. **Preferred Regimens**

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| **Bortezomib + dexamethasone** | Days 1, 4, 8, and 11: Bortezomib 1.3mg/m\(^2\) IV push over 3–5 seconds or SC, plus Days 1–4 (all cycles) and 9–12 (cycles 1 and 2): Dexamethasone 40mg orally daily. **OR** Days 1–2, 4–5, 8–9, and 11–12: Dexamethasone 20mg orally daily. Repeat cycle every 3 weeks until maximal response, disease progression, or unacceptable toxicity. **Lenalidomide + low-dose dexamethasone (Category 1)** Days 1–21: Lenalidomide 25mg orally daily Days 1, 8, 15, and 22: Dexamethasone 40mg orally daily. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity. 

*continued*
### Primary Therapy for Non-Transplant Candidates

#### Preferred Regimens (continued)

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| **Melphalan + prednisone + bortezomib (MPB)**  
(Category 1) | Days 1–4: Melphalan 9mg/m² orally daily + prednisone 60mg/m² orally.  
**plus**  
Cycles 1–4:  
Days 1, 4, 8, 11, 22, 25, 29, and 32: Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC.  
**Subsequent Cycles:**  
Days 1, 8, 22, and 29: Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC.  
Repeat cycle every 6 weeks until maximal response, disease progression, or unacceptable toxicity. |
| **Melphalan + prednisone + lenalidomide (MPL)**  
(Category 1) | Days 1–4: Melphalan 0.18mg/kg orally daily + prednisone 2mg/kg orally daily  
Days 21–21: Lenalidomide 10mg orally daily.  
**OR**  
Days 1–4: Melphalan 5mg/m² orally daily + prednisone 60mg/m² orally daily  
Days 21–21: Lenalidomide 10mg orally daily.  
Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.  
**OR**  
Days 1–4: Melphalan 8–9mg/m² orally daily + prednisone 60mg/m² orally daily  
Days 21–21: Lenalidomide 10mg orally daily.  
Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity. |
| **Melphalan + prednisone + thalidomide (MPT)**  
(Category 1) | Days 1–4: Melphalan 0.2–0.25mg/kg orally daily + prednisone 2mg/kg or 100mg orally daily  
Days 42–42: Thalidomide 50–200mg orally daily at bedtime.  
Repeat cycle every 6 weeks until maximal response, disease progression, or unacceptable toxicity.  
**OR**  
Days 1–5: Melphalan 0.25mg/kg orally daily + prednisone 1mg/kg orally daily  
Days 1–28: Thalidomide 50–200mg orally daily at bedtime.  
Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.  
**OR**  
Days 1–7: Melphalan 4mg/m² orally daily + prednisone 40mg/m² orally daily  
Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity. |

#### Other Regimens

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| **Dexamethasone**  
(Category 2B) | Day 1, 4, 9–12, 17–20: Dexamethasone 20mg/m² or 40mg orally daily; may consider giving on days 1–4 only starting on cycle 5 and for subsequent cycles.  
Repeat cycle every 4–5 weeks until maximal response, disease progression, or unacceptable toxicity.  
**OR**  
Days 1–4 (all cycles), 9–12, and 17–20 (cycles 1–2): Dexamethasone 20mg/m² or 40mg orally daily.  
Repeat cycle every 6 weeks until maximal response, disease progression, or unacceptable toxicity. |
| **Liposomal doxorubicin + vincristine + dexamethasone**  
(DVD) (Category 2B) | Day 1: Pegylated liposomal doxorubicin 40mg/m² IV over 60 minutes + vincristine 1.4mg/m² (maximum 2mg) IV over 5–10 minutes  
Days 1–4: Dexamethasone 40mg orally daily.  
Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity. |
| **Melphalan + prednisone**  
(MP) | Days 1–7: Melphalan 4mg/m² orally + prednisone 40mg/m² orally daily.  
Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.  
**OR**  
Days 1–4: Melphalan 0.2–0.25mg/kg orally daily + prednisone 2mg/kg or 100mg orally daily.  
Repeat cycle every 4–6 weeks until maximal response, disease progression, or unacceptable toxicity.  
**OR**  
Days 1–4: Melphalan 8–9mg/m² orally daily + prednisone 60mg/m² orally daily.  
Repeat cycle every 4–6 weeks until maximal response, disease progression, or unacceptable toxicity. |
| **Thalidomide + dexamethasone**  
(Category 2B) | Days 1–28: Thalidomide 50–200mg orally daily at bedtime.  
**plus**  
Days 1–4, 9–12, and 17–20: Dexamethasone 40mg orally daily.  
**OR**  
Days 1–4 (all cycles), 9–12, and 17–20 (cycles 1–4): Dexamethasone 40mg orally daily.  
**OR**  
Days 1–4 (all cycles), 9–12, and 17–20 (odd cycles): Dexamethasone 40mg orally daily.  
Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity. |
PERIOD REGIMEN DOSING
Vincristine + doxorubicin + dexamethasone (VAD) (Category 2B)41

**Days 1–4:** Vincristine 0.4mg continuous IV infusion over 24 hours + doxorubicin 9mg/m² continuous IV infusion over 24 hours daily, plus **Odd Cycles:**
Days 1–4, 9–12, and 17–20: Dexamethasone 40mg orally daily. **Even Cycles:**
Days 1–4: Dexamethasone 40mg orally daily. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.

**OR**

**Days 1–4:** Vincristine 0.4mg IV over 5–10 minutes + doxorubicin 9mg/m² IV push, plus **Odd Cycles:**
Days 1–4, 9–12, and 17–20: Dexamethasone 40mg orally daily. **Even Cycles:**
Days 1–4: Dexamethasone 40mg orally daily. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.

**Other Regimens**

**Bortezomib**5,7,†

**Days 1, 4, 8, and 11:** Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC. Repeat cycle every 2 weeks for 2 years or until disease progression or unacceptable toxicity. **OR**

**Days 1, 8, 15, and 22:** Bortezomib 1.6mg/m² IV push over 3–5 seconds or SC. Repeat cycle every 5 weeks for 6 months or until disease progression or unacceptable toxicity.

**Lenalidomide (Category 1)30,42–44**

**Days 1–28:** Lenalidomide 10mg orally daily for 3 cycles, followed by 15mg for subsequent cycles. **OR**

**Days 1–21:** Lenalidomide 10mg orally daily. Repeat cycle every 4 weeks until disease progression or unacceptable toxicity.

**Thalidomide (Category 1)45,46**

**Days 1–28:** Thalidomide 50–200mg orally daily at bedtime. Repeat cycle every 4 weeks until disease progression or unacceptable toxicity.

**Other Regimens**

**Bortezomib + prednisone (Category 2B)47,5,†

**Days 1, 4, 8, and 11:** Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC. Days 1–90: Prednisone 50mg orally every other day. Repeat cycle every 3 months for 3 years or until disease progression or unacceptable toxicity.

**Bortezomib + thalidomide (Category 2B)48,5,†

**Days 1, 4, 8, and 11:** Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC. Days 1–90: Thalidomide 50–100mg orally daily at bedtime. Repeat cycle every 3 months for 3 years or until disease progression or unacceptable toxicity.

**Interferon alfa (Category 2B)49,50**

Interferon alfa-2b 2–5 million units or 2–5 million units/m² SC 3 times a week. Repeat cycle every 4 weeks until disease progression or unacceptable toxicity.

**Steroids (Category 2B)51,52**

**Days 1–4:** Dexamethasone 40mg orally daily. Repeat cycle every 28 days until disease progression or unacceptable toxicity. **OR**

**Days 1–28:** Prednisone 50mg orally every other day. Repeat cycle every 28 days until disease progression or unacceptable toxicity. Repeat cycle every 28 days until disease progression or unacceptable toxicity.

**Thalidomide + prednisone (Category 2B)53**

**Days 1–28:** Thalidomide 50–200mg orally daily at bedtime + prednisone 50mg orally every other day. Repeat cycle every 28 days until disease progression or unacceptable toxicity.

**Maintenance Therapy**2

**Preferred Regimens**

**Bortezomib**5,7,†

**Days 1, 4, 8, and 11:** Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC. Repeat cycle every 2 weeks for 2 years or until disease progression or unacceptable toxicity. **OR**

**Days 1, 8, 15, and 22:** Bortezomib 1.6mg/m² IV push over 3–5 seconds or SC. Repeat cycle every 5 weeks for 6 months or until disease progression or unacceptable toxicity.

**Lenalidomide (Category 1)30,42–44**

**Days 1–28:** Lenalidomide 10mg orally daily for 3 cycles, followed by 15mg for subsequent cycles. **OR**

**Days 1–21:** Lenalidomide 10mg orally daily. Repeat cycle every 4 weeks until disease progression or unacceptable toxicity.

**Thalidomide (Category 1)45,46**

**Days 1–28:** Thalidomide 50–200mg orally daily at bedtime. Repeat cycle every 4 weeks until disease progression or unacceptable toxicity.

**Other Regimens**

**Bortezomib + prednisone (Category 2B)47,5,†

**Days 1, 4, 8, and 11:** Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC. Days 1–90: Prednisone 50mg orally every other day. Repeat cycle every 3 months for 3 years or until disease progression or unacceptable toxicity.

**Bortezomib + thalidomide (Category 2B)48,5,†

**Days 1, 4, 8, and 11:** Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC. Days 1–90: Thalidomide 50–100mg orally daily at bedtime. Repeat cycle every 3 months for 3 years or until disease progression or unacceptable toxicity.

**Interferon alfa (Category 2B)49,50**

Interferon alfa-2b 2–5 million units or 2–5 million units/m² SC 3 times a week. Repeat cycle every 4 weeks until disease progression or unacceptable toxicity.

**Steroids (Category 2B)51,52**

**Days 1–4:** Dexamethasone 40mg orally daily. Repeat cycle every 28 days until disease progression or unacceptable toxicity. **OR**

**Days 1–28:** Prednisone 50mg orally every other day. Repeat cycle every 28 days until disease progression or unacceptable toxicity. Repeat cycle every 28 days until disease progression or unacceptable toxicity.

**Thalidomide + prednisone (Category 2B)53**

**Days 1–28:** Thalidomide 50–200mg orally daily at bedtime + prednisone 50mg orally every other day. Repeat cycle every 28 days until disease progression or unacceptable toxicity.

**Therapy for Previously Treated Multiple Myeloma**1

**Preferred Regimens**

Repeat induction therapy if relapse > 6 months.

**Bortezomib (Category 1)54–56**

**Days 1, 4, 8, and 11:** Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC. Days 1–90: Prednisone 50mg orally every other day. Repeat cycle every 3 months for 3 years or until disease progression or unacceptable toxicity.

**Bortezomib + dexamethasone3–5**

**Days 1, 4, 8, and 11:** Bortezomib 1.3mg/m² IV push over 3–5 seconds or SC. Days 1–90: Dexamethasone 40mg orally every other day. Repeat cycle every 3 months for 3 years or until disease progression or unacceptable toxicity.
### Therapy for Previously Treated Multiple Myeloma

#### Preferred Regimens (continued)

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<tr>
<td><strong>Bortezomib + lenalidomide + dexamethasone</strong>&lt;sup&gt;13-15&lt;/sup&gt;</td>
<td><strong>Cycles 1–8:</strong>&lt;br&gt;Days 1, 4, 8, and 11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; IV push over 3–5 seconds or SC&lt;br&gt;Days 1–14: Lenalidomide 25mg orally daily. <strong>plus</strong>&lt;br&gt;Days 1, 2, 4, 5, 8, 9, 11, and 12: Dexamethasone 40mg orally daily for cycles 1–4, followed by dexamethasone 20mg orally daily for cycles 5–8 <strong>OR</strong>&lt;br&gt;Days 1, 8, and 15: Dexamethasone 20–40mg orally daily&lt;br&gt;Repeat cycle every 3 weeks for 8 cycles. <strong>Subsequent Cycles:</strong>&lt;br&gt;Days 1 and 8: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; IV push over 3–5 seconds or SC&lt;br&gt;Days 1–14: Lenalidomide 15mg orally daily&lt;br&gt;Days 1, 2, 8, and 9: Dexamethasone 40mg orally daily. Repeat cycle every 3 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
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<td><strong>Bortezomib + liposomal doxorubicin (Category 1)</strong>&lt;sup&gt;57&lt;/sup&gt;</td>
<td><strong>Cycles 1–8:</strong>&lt;br&gt;Days 1, 4, 8, and 11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; IV push over 3–5 seconds or SC&lt;br&gt;Day 4: Pegylated liposomal doxorubicin 30mg/m&lt;sup&gt;2&lt;/sup&gt; IV over 60 minutes. Repeat cycle every 3 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
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<td><strong>Bortezomib + thalidomide + dexamethasone</strong>&lt;sup&gt;58&lt;/sup&gt;</td>
<td><strong>Cycles 1–8:</strong>&lt;br&gt;Days 1, 4, 8, and 11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; IV push over 3–5 seconds or SC&lt;br&gt;Days 1–21: Thalidomide 50–200mg orally daily at bedtime&lt;br&gt;Days 1–4: Dexamethasone 40mg orally daily. Repeat cycle every 3 weeks for 8 cycles. <strong>Subsequent Cycles:</strong>&lt;br&gt;Days 1, 8, 15, and 22: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; IV push over 3–5 seconds or SC&lt;br&gt;Days 1–42: Thalidomide 50–200mg orally daily at bedtime&lt;br&gt;Days 1–4: Dexamethasone 40mg orally daily. Repeat cycle every 6 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
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<tr>
<td><strong>Carfilzomib</strong>&lt;sup&gt;59&lt;/sup&gt;</td>
<td><strong>Cycle 1:</strong>&lt;br&gt;Days 1, 2, 8, 9, 15, and 16: Carfilzomib 20mg/m&lt;sup&gt;2&lt;/sup&gt; (maximum 44mg) IV over 2–10 minutes for cycle 1, followed by carfilzomib 27mg/m&lt;sup&gt;2&lt;/sup&gt; (maximum 59.4mg) IV over 2–10 minutes for subsequent cycles. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
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<tr>
<td><strong>Carfilzomib + lenalidomide + dexamethasone (Category 1)</strong>&lt;sup&gt;60&lt;/sup&gt;</td>
<td><strong>Cycles 2–12:</strong>&lt;br&gt;Days 1, 2, 8, 9, 15, and 16: Carfilzomib 27mg/m&lt;sup&gt;2&lt;/sup&gt; (maximum 59.4mg) IV over 2–10 minutes&lt;br&gt;Days 1, 8, 15, and 22: Dexamethasone 40mg PO or IV&lt;br&gt;Days 1–21: Lenalidomide 25mg PO daily. <strong>Subsequent Cycles:</strong>&lt;br&gt;Days 1, 8, 15, and 22: Dexamethasone 40mg PO or IV&lt;br&gt;Days 1–21: Lenalidomide 25mg PO daily. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
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<tr>
<td><strong>Bortezomib + cyclophosphamide + dexamethasone (BCD)</strong>&lt;sup&gt;61,62&lt;/sup&gt;</td>
<td><strong>Cycles 1–8:</strong>&lt;br&gt;Days 1, 4, 8, and 11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; IV push over 3–5 seconds or SC&lt;br&gt;Days 1, 8, and 15: Cyclophosphamide 500mg orally daily&lt;br&gt;Days 1, 2, 4, 5, 8, 9, 11, and 12: Dexamethasone 40mg orally daily. Repeat cycle every 3 weeks until maximal response, disease progression, or unacceptable toxicity. <strong>OR</strong>&lt;br&gt;Cycles 1–8:&lt;br&gt;Days 1, 4, 8, and 11: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; IV push over 3–5 seconds or SC&lt;br&gt;Days 1–21: Cyclophosphamide 50mg orally daily&lt;br&gt;Days 1, 2, 4, 5, 8, 9, 11, and 12: Dexamethasone 20mg orally daily. Repeat cycle every 3 weeks for 8 cycles. <strong>Subsequent Cycles:</strong>&lt;br&gt;Days 1, 8, 15, and 22: Bortezomib 1.3mg/m&lt;sup&gt;2&lt;/sup&gt; IV push over 3–5 seconds or SC&lt;br&gt;Days 1–35: Cyclophosphamide 50mg orally daily&lt;br&gt;Days 1, 2, 8, 9, 15, 16, 22, and 23: Dexamethasone 20mg orally daily. Repeat cycle every 5 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
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### Preferred Regimens (continued)

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<tbody>
<tr>
<td><strong>Cyclophosphamide + lenalidomide + dexamethasone (CRD)</strong></td>
<td><strong>Days 1, 8, 15, and 21:</strong> Cyclophosphamide 500mg orally daily Day 1—21: Lenalidomide 25mg orally daily Day 1—4 and 12—15: Dexamethasone 40mg orally daily. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
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<tr>
<td><strong>Dexamethasone + cyclophosphamide + etoposide + cisplatin (DCEP)</strong></td>
<td><strong>Days 1—4:</strong> Dexamethasone 40mg/m² orally daily. <strong>Days 1—4:</strong> Cyclophosphamide 400mg/m² continuous IV infusion over 24 hours daily + etoposide 40mg/m² continuous IV infusion over 24 hours daily + cisplatin 10mg/m² continuous IV infusion over 24 hours daily + doxorubicin 10mg/m² continuous IV infusion over 24 hours daily. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
</tr>
<tr>
<td><strong>Dexamethasone + thalidomide + cisplatin + doxorubicin + cyclophosphamide + etoposide (DT-PACE)</strong></td>
<td><strong>Days 1—4:</strong> Dexamethasone 40mg orally daily Day 1—28: Thalidomide 50—200mg orally daily at bedtime Days 1—4: Cyclophosphamide 400mg/m² continuous IV infusion over 24 hours daily + etoposide 40mg/m² continuous IV infusion over 24 hours daily + cisplatin 10mg/m² continuous IV infusion over 24 hours daily + doxorubicin 10mg/m² continuous IV infusion over 24 hours daily. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
</tr>
<tr>
<td><strong>Dexamethasone + thalidomide + cisplatin + doxorubicin + cyclophosphamide + etoposide + bortezomib (VTD-PACE)</strong></td>
<td><strong>Induction:</strong> Days 1, 4, 8, and 11: Bortezomib 1mg/m² IV push over 3—5 seconds or SC Day 4–7: Thalidomide 50—200mg orally daily at bedtime Days 4–7: Dexamethasone 40mg orally daily Days 4–7: Cyclophosphamide 400mg/m² continuous IV infusion over 24 hours daily + etoposide 40mg/m² continuous IV infusion over 24 hours daily + cisplatin 10mg/m² continuous IV infusion over 24 hours daily + doxorubicin 10mg/m² continuous IV infusion over 24 hours daily. <strong>Consolidation:</strong> Cycle 1: Beginning 6 weeks—4 months after last transplant: Days 1, 4, 8, and 11: Bortezomib 1mg/m² IV push over 3—5 seconds or SC Day 1—4: Thalidomide 50—200mg orally daily at bedtime Days 1—4: Dexamethasone 40mg orally daily Days 1—4: Cyclophosphamide 300mg/m² continuous IV infusion over 24 hours daily + etoposide 30mg/m² continuous IV infusion over 24 hours daily + cisplatin 7.5mg/m² continuous IV infusion over 24 hours daily + doxorubicin 7.5mg/m² continuous IV infusion over 24 hours daily. Cycle 2: Beginning 2—4 months after cycle 1: Days 1, 4, 8, and 11: Bortezomib 1mg/m² IV push over 3—5 seconds or SC Day 1—4: Thalidomide 50—200mg orally daily at bedtime Days 1—4: Dexamethasone 40mg orally daily Days 1—4: Cyclophosphamide 300mg/m² continuous IV infusion over 24 hours daily + etoposide 30mg/m² continuous IV infusion over 24 hours daily + cisplatin 7.5mg/m² continuous IV infusion over 24 hours daily + doxorubicin 7.5mg/m² continuous IV infusion over 24 hours daily.</td>
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**Therapy for Previously Treated Multiple Myeloma**

**Preferred Regimens**

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<th>REGIMEN</th>
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<td><strong>Thalidomide + dexamethasone</strong></td>
<td>Days 1–28: Thalidomide 50–200mg orally daily at bedtime, plus Days 1–4 (all cycles), 9–12, and 17–20 (cycle 1): Dexamethasone 20mg/m² or 40mg orally daily. OR Days 1–4: Dexamethasone 20mg/m² or 40mg orally daily. OR Days 1–5 (all cycles) and 15–19 (until response): Dexamethasone 20mg/m² or 40mg orally daily. Repeat cycle every 4 weeks until maximal response, disease progression, or unacceptable toxicity.</td>
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**Other Regimens**

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<th>Reference</th>
<th>Details</th>
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MULTIPLE MYELOMA TREATMENT REGIMENS (Part 9 of 9)

References (continued)


