ROSWELL PARK
COMPREHENSIVE CANCER CENTER

Partners In Practice
medical information for physicians by physicians

AUTOLOGOUS STEM CELL TRANSPLANT FOR MULTIPLE SCLEROSIS



70 to 80% of patients have **no evidence of disease activity** 5 years post-transplant

Stem cell transplant can eliminate the immune cells that drive disease activity, restoring immune tolerance, and providing long-term suppression of the inflammatory attacks that damage the central nervous system.

Potential benefits

This one-time intensive treatment can offer:

- Prolonged period with no new inflammatory MS activity
- Fewer relapses or new MRI lesions
- Possible improvement in neurologic disability
- Improved health-related quality of life

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How it Works

RESETS THE IMMUNE SYSTEM.

High-dose chemotherapy wipes out the destructive, self-attacking immune cells.

REBUILDS A HEALTHY IMMUNE SYSTEM.

The patient's own harvested blood stem cells are infused to build a new immune system that doesn't attack myelin.

REDUCES RELAPSES.

Inflammatory relapses and new brain or spinal cord lesions are drastically reduced or halted.

Who is eligible?

Patients with

- ✓ Relapsing-remitting multiple sclerosis
- ✓ Early secondary progressive multiple sclerosis

with the following criteria:

- **Continued inflammatory activity** (relapses or MRI lesion activity)
- **EDSS score 2.0 to 6.0** (inclusive) at time of evaluation
- **Age 18 to 55** (case-by-case review for patients age 56-60)
- **Failure of at least two approved disease-modifying therapies (DMTs),** including at least one high-efficacy DMT
  - High-efficacy DMTs include natalizumab, ocrelizumab, rituximab, alemtuzumab, or cladribine
  - Failure defined as: ≥1 confirmed relapse, ≥2 new T2/Gd+ MRI lesions, or confirmed EDSS worsening ≥0.5 points at 6 months, during or after adequate treatment duration
- **Adequate organ function:** LVEF ≥45%, FVC ≥50% predicted, DLCO ≥50% predicted, creatinine clearance ≥60 mL/min (Some exceptions possible on case-by-case basis.)
- **No active infection, active malignancy, or uncontrolled comorbidity**



Refer a Patient

Call to discuss a case, or refer a patient for evaluation

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