

CHARM predicts who may need extra care after transplant

Tool helps adults 60 and older who need blood or marrow transplant



A new study shows that the CHARM score predicts people's quality of life and function after transplant.

Blood or marrow transplant (BMT) can cure many blood cancers. But BMT also can have serious effects.

This study included about 1,100 adults aged 60 and older, who got BMT. To calculate a patient's CHARM score before BMT, doctors consider:

- Age
- Medical conditions
- Two simple blood tests
- Memory test
- Weight loss in the last year
- Overall health, rated by the patient

This study compared patients' CHARM score *before* transplant to how well they did 1 year *after* transplant:

- In patients with **healthy** CHARM scores, **50%** (2 out of 4 patients) were alive without disabilities or being frail.
- In patients with **less** healthy CHARM scores, **27%** (around 1 out of 4) were alive without disabilities or being frail.

Regardless of CHARM score, other studies have shown that most older adults who get BMT are much more likely to be cured of their blood disease than those who don't get BMT. This study shows that patients with a healthy CHARM score had lower chances of problems after BMT. This information helps patients feel comfortable about getting BMT.

Patients with lower CHARM scores might experience more problems after BMT. Doctors are looking for ways to make their BMT experience better.

After BMT, patients with unhealthy CHARM scores had more problems:

- Frailty (unwanted weight loss and weakness)
- Trouble doing daily tasks
- Lower quality of life
- Depression
- Organ damage
- Harder time to recover after graft-versus-host disease
- Problems with thinking and memory

Keep in mind that not all patients had problems; talk with your doctor.

Learn more about

- [Clinical trials for adults 60 and older](#) at CTsearchsupport.org
- [CHARM Risk calculator](#) at CIBMTR.org
- More [study summaries](#) at CIBMTR.org

Source

Artz AS, Logan BR, Saber W, Geller N, et al. [CHARM is Prognostic of Geriatric Morbidity and Toxicity after Allogeneic Transplant for Older Adults: BMT CTN 1704 Study](#). Blood Advances. 2025. Epub 2025 Nov 21. doi: 10.1182/bloodadvances.2025018340. PMID: 41269781.

Clinical Trial IDs: BMT CTN 1704; ClinicalTrials.gov NCT03992352

Sponsor: Blood and Marrow Transplant Clinical Trials Network® (BMT CTN®) BMT CTN, funded by the National Heart, Lung, and Blood Institute and by the National Cancer Institute, is a collaborative effort of 19 core transplant centers/Consortia, the Center for International Blood and Marrow Transplant Research (CIBMTR), The Medical College of Wisconsin, NMDP, and The Emmes Company. You may contact CIBMTR, MCW, 8701 Watertown Plank Road, Suite N1400, Milwaukee, WI 53226; or call (414) 955-3700.

Learn more at [BMTCTN.net](#)

This plain-language summary was written by Jennifer Motl at Medical College of Wisconsin and reviewed by authors. © 2025 by CIBMTR, license [CC BY-SA 4.0](#).