Guide to the New CPT® Codes for Hematopoietic Stem Cell Transplant and Apheresis


The new codes replaced the previous limited number of codes that over the years had become outdated and too vague to adequately define BMT procedures. The new codes and their relative values are based on complexity of the procedure, the amount of physician involvement, time required, intellectual effort needed, health risk to the patient and potential liability.

Disclaimer

Note that reimbursement claims should always be based on the patient's medical record. Interpretations of codes can change, and ultimately those interpretations rest with the private payer or the Centers for Medicare and Medicaid Services (CMS).

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The Former Codes

First, let’s take a look at the former codes that are familiar to many BMT clinicians and administrators:

- 38220 Bone marrow aspiration
- 38221 Bone marrow biopsy, needle or trocar
- 38230 Bone marrow harvesting for transplantation
- 38231 Blood-derived peripheral stem cell harvesting for transplantation, per collection
- 38240 Bone marrow or blood-derived peripheral stem cell transplantation; allogeneic
- 38241 Bone marrow or blood-derived peripheral stem cell transplantation; autologous

The six codes, above, were among the limited number of codes available for describing hematopoietic stem cell transplantation services, prior to January 1, 2003.

To compensate, BMT clinicians and administrators have frequently used codes intended for other purposes to describe BMT services – such as 86915 in the Transfusion Medicine section of the CPT Codes. The new codes for BMT eliminate the need to use 86915.
A NEW CODE

38204 Management of recipient hematopoietic progenitor cell donor search and cell acquisition

The new 38204 code is for physician supervision of the donor search for allogeneic transplants. This can include supervision of the coordinator who is conducting the search for an unrelated donor, as well as communication with the donor center medical director and the harvesting physician on the appropriate cell dose collection.

This is a one-time charge. If a second transplant needs to be done, a second charge can be billed under this code. (As explained later, there is a new code for donor lymphocyte infusion, so it is not necessary to re-use this code again for DLI as a supplement to the original graft.)

Previously there hasn’t been a CPT Code for finding an unrelated donor and collecting stem cells.

The code can encompasses a wide range of services for donor search and acquisition including submission of data to registries, evaluation of registry reports, requests for further typing of multiple candidates, communication with the donor center on type and number of cells to be collected and the best cryopreservation method, assessment of any T-cell contamination or ABO mismatching that might place the recipient at greater risk for graft-versus-host disease, and surveillance for bacterial or fungal contamination that could compromise the transplant and injure the patient.

The Relative Value Unit (RVU) for this new code is 2.0.

Code 38204 is not to be used for billing for the routine services for orders from NMDP, such as DR typing, confirmatory typing or infectious disease sampling. These services should be billed with either a generic CPT code or no code at all. Efforts are underway to establish HCPCS Level II Service codes for these services so that they may be submitted electronically with minimal risk of redlining by third-party payers.
AN ELIMINATED CODE

38231  Blood-derived peripheral stem cell harvesting for transplantation, per collection

Code 38231 has been deleted because it didn’t even describe whether the harvesting was performed on the patient or a donor – whether it was for autologous and allogeneic transplantation which require widely different types of care and supervision. One type may be performed on a presumably health donor while the other may be on a very ill patient.

Replacing 38231 are two codes:

38205  Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; allogeneic

38206  Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; autologous

Both of these codes have a Relative Value Unit (RVU) of 1.5. The codes are for supervision of the donor on the apheresis machine.

These two codes should not be used for H&P assessment or post-apheresis assessment, which should be billed under standard E&M codes.

Note that this is a per diem charge, so if there are multiple collections on multiple days, this service code may be billed on multiple days. The physician needs to document a patient examination during the time of the apheresis and document supervision of the technician managing the equipment and the patient. If the physician actually performs the apheresis procedure, a modifier should be attached.
**ANOTHER DELETED CODE**

86915  Blood-marrow or peripheral stem cell harvest, modification or treatment to eliminate cell type(s) (e.g., T-cells, metastatic carcinoma)

Code 86915, found in the Transfusion Medicine section of the CPT Codes, has been very confusing, especially when there has been more than one type of manipulation to be performed.

This code has now been replaced by six new codes that are more specific as to the different kinds and techniques of cell processing prior to transplantation.
THREE NEW CODES

38207  Transplant preparation of hematopoietic progenitor cells; cryopreservation and storage

38208  Thawing of previously frozen harvest

38209  Washing of harvest

These codes are for cryopreservation and storage of stem cells, a procedure that has been difficult to code in the past. Frequently centers have tried to use therapeutic codes listed with in the Transfusion Medicine and Cytogenetic Studies sections of the CPT Code, but these have not adequately described the process of preparing and freezing cells obtained from hematopoietic cell harvest.

The codes replace 86915, and for each (except 38213) there is an RVU for physician assessment and quality assurance of the hematopoietic cellular product.

For the facility fees, factors include the technician time, supply time, machine usage and machine depreciation. In all of these codes there can be 10-year amortization of the construction costs as indirect expenses of the GMP lab.

For physician supervision there clearly needs to be a physician note. Flow cytometry done for quality assessment is part of these CPT codes and cannot be billed independently. The cost of flow cytometry must be billed within the context of these CPT codes.
OTHER NEW CODES FOR CELL PROCESSING

38210   T-cell depletion
38211   Tumor cell depletion
38212   Red blood cell removal
38213   Platelet depletion
38214   Plasma (volume) depletion
38215   Cell concentration in plasma, mononuclear, or buffy coat layer

Note that:

38210 . . . is for the professional fee for assessing the T-cell depletion, the mononuclear cell preparation and the flow cytometry for quality assurance if all are included within the facility fee. If cryopreservation is done on the T-cell depleted product, this may be billed separately.

38211 . . . is for autologous transplantation. Since cryopreservation will always be done, cryopreservation should be included in this CPT code and should not be billed separately on that day.

38212 . . . is for a fresh allogeneic harvest for removal of red cells in preparation for the transplant. In place of ABO compatibility, all of the above date for cytometry, cell counts and quality assurance are included.

38213 . . . is for a harvest that has a platelet soft spin to return platelets to an allogeneic donor when multiple days of apheresis occur. There is no professional component for this service.

38214 . . . is for a fresh harvest for infusion primarily of a primary bone marrow harvest. This would be performed on the day of service. All of the quality assurance parameters should be checked.

38215 . . . is primarily for mononuclear cell preparation. Mononuclear cell preparation for T-cell depletion or for tumor purging is part of the CPT codes and should not be billed separately.
No Change for These Two Codes

38220  Bone marrow; aspiration only
38221  Biopsy, needle or trocar

There are no changes for codes 38220 and 38221 – codes that are used most often in the diagnostic, staging and re-staging process.
**ALSO No CHANGE FOR THESE CODES**

38240  Bone marrow or blood-derived peripheral stem cell transplantation; allogeneic

38241  Bone marrow or blood-derived peripheral stem cell transplantation; autologous

Although there are no changes for these codes, they are to be used only to describe the infusion of cells and are not to be associated with a laboratory process.

The codes are for describing the care and supervision of the patient while the stem cells are being infused. Previously many coders have tried to include cell collection and processing within these codes.
A NEW CODE

38242  Allogeneic donor lymphocyte infusions

This new code is for a procedure previously not recognized by the CPT Codes, which made it very difficult to code. In the past, coders have sometimes used 38240 for DLI procedures, which led to confusion among payers who believed that the patients had undergone another transplant.

The RVU is 1.71. Documentation should be similar to that which has been used for 38240.
NEW APHERESIS CODES

36511 Therapeutic apheresis; for white blood cells
36512 Therapeutic apheresis; for red blood cells
36513 Therapeutic apheresis; for platelets
36514 Therapeutic apheresis; for plasma apheresis
36515 Therapeutic apheresis; with extracorporeal immuno-
adsorption and plasma reinfusion
36516 Therapeutic apheresis; for extracorporeal selected adsorption or
selected filtration and plasma reinfusion

The RVU for these procedures is 1.74. All of these codes are billed as facility based – which is advantageous because if they were non-facility based it would be necessary to return periodically to the AMA’s practice expense committee to request adjustments for practice expenses increases – such as for photopheresis supplies. As facility based expenses, however, any expense increases can be immediately passed on to payers.

Included in the work effort for physician supervision under these codes is the evaluation and management of the patient. To bill for these services with the professional component, the physician must actually see and examine the patient and put a note in the medical chart. For a facility-based service, “immediately available to the patient” means being in the hospital and close to the apheresis unit but not necessarily in the apheresis unit.

The most important aspect in determining the apheresis code is that there are separately priced disposables for various types of apheresis. The purpose of differentiating apheresis services is so that the appropriate technical component can be billed. Additionally, time for performing a white cell exchange or a plasma exchange is usually greater than a red cell exchange or a platelet exchange.

In determining the costs for these services, the direct expenses such as machine depreciation, disposables, nurse technician time and servicing of machines are all included. Also included are practice liability insurance expenses, overhead costs where the apheresis is used such as for electricity, fluid storage, construction and renovation. For professional fee billing, however, a history and physical exam to determine the appropriateness of apheresis may be billed prior to the apheresis by the same physician supervising the apheresis. Post-apheresis evaluations of the patient should be billed with standard outpatient or inpatient E&M codes. These matters did not change with the new codes.
# Comparison of New and Former CPT Codes for Hematopoietic Stem Cell Transplant and Apheresis

*Effective: January 1, 2003*

**Key:**
- Completely new codes
- Revised codes

## Apheresis

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<th>New Codes</th>
<th>RVU</th>
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</thead>
<tbody>
<tr>
<td>None</td>
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<td>36513 Therapeutic apheresis; for platelets</td>
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<td></td>
<td>36514 Therapeutic apheresis; for plasma pheresis</td>
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<tr>
<td></td>
<td>36515 Therapeutic apheresis; with extracorporeal immuno-adsorption and plasma reinfusion</td>
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<tr>
<td></td>
<td>36516 Therapeutic apheresis; for extracorporeal selected adsorption or selected filtration and plasma reinfusion</td>
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## Donor Search and Transplant Product Acquisition

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## STEM CELL COLLECTION

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<tr>
<td>Blood-derived peripheral stem cell harvesting for transplantation, per collection</td>
<td>Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; allogeneic</td>
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<tr>
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<tr>
<td>Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection; autologous</td>
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## CELL PROCESSING

<table>
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<td>38211</td>
<td>Tumor cell depletion</td>
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<td>38214</td>
<td>Plasma (volume) depletion</td>
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<td>38240</td>
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<td>38241</td>
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<td>Bone marrow or blood-derived peripheral stem cell transplantation; autologous</td>
<td>Bone marrow or blood-derived peripheral stem cell transplantation; autologous</td>
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<tr>
<td>38242</td>
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<td>1.71</td>
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<tr>
<td>Allogeneic donor lymphocyte infusions</td>
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</tbody>
</table>
On the next page is an *Instant Reference Guide* to the new CPT Codes that you can print out and save

Remember that even though the procedures code changes are officially effective January 1, 2003, not all payers will immediately accept these codes. Certain payers such as Medicare and Medicaid intermediaries and private plans may require additional time to update their computer systems and recognize these coding changes and additions.
Instant Reference to CPT Codes
for Hematopoietic Stem Cell Transplant and Apheresis

38220 Bone marrow; aspiration only
38221 Bone marrow; biopsy, needle or trocar

New codes include:
36511 Therapeutic apheresis; for white blood cells
36512 Therapeutic apheresis; for red blood cells
36513 Therapeutic apheresis; for platelets
36514 Therapeutic apheresis; for plasma perhesis
36515 Therapeutic apheresis; with extracorporeal immuno-adsorption and plasma reinfusion
36516 Therapeutic apheresis; for extracorporeal selected adsorption or selected filtration and plasma reinfusion
38204 Management of recipient hematopoietic progenitor cell donor search and cell acquisition
38205 Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection – allogeneic
38206 Blood-derived hematopoietic progenitor cell harvesting for transplantation, per collection – Autologous
38207 Transplantation preparation of hematopoietic progenitor cells; cryopreservation and storage
  (For diagnostic cryopreservation and storage, see 88240)
38208 Transplant preparation of hematopoietic progenitor cells; thawing of previously frozen harvest
  (For diagnostic cryopreservation and storage, see 88241)
38209 Transplant preparation of hematopoietic progenitor cells; washing the harvest
38210 Transplant preparation of hematopoietic progenitor cells; specific cell depletion within the harvest, T-cell depletion
38211 Transplant preparation of hematopoietic progenitor cells; tumor cell depletion
38212 Transplant preparation of hematopoietic progenitor cells; red blood cell removal
38213 Transplant preparation of hematopoietic progenitor cells; platelet depletion
38214 Transplant preparation of hematopoietic progenitor cells; plasma (volume) depletion
38215 Transplant preparation of hematopoietic progenitor cells; cell concentration in plasma, mononuclear, or buffy coat layer
38240 Bone marrow or blood-derived peripheral stem cell transplantation; allogeneic
38241 Bone marrow or blood-derived peripheral stem cell transplantation; autologous
38243 Bone marrow or blood-derived peripheral stem cell transplantation; allogeneic donor lymphocyte infusions

A deleted code in this section is 38231 (blood-derived peripheral stem cell harvesting for transplantation, per collection), and the coder is redirected to 38205 or 38206 to report this service.