The blood and marrow transplant field has 15 dedicated CPT codes. These CPT codes can be categorized into three groups:

1. Collection Codes
2. Cell Processing Codes
3. Cell Infusion Codes

**Collection Codes**

Collection codes are:

- 38205: peripheral blood stem cell allogeneic
- 38206: peripheral blood stem cell collections autologous
- 38230: bone marrow harvest allogeneic
- 38232: bone marrow harvest autologous.

The ASBMT has spent a great deal of effort to get these codes defined. They are listed as a single day service and can be billed once every day of collection so that if there are two to three apheresis for collection on consecutive days, one would bill 38205 or 38206 on each day of collection. Unfortunately, we were not able to get a timing of code for prolonged apheresis services. Additionally, if there are complications to apheresis, there is no additional payment methodology.

The bone marrow harvest codes were moved (with effort) two years ago from ten day global surgeries to zero day globals where they are billed solely on the day of harvest. The pre-operative and post-operative care is all done by routine evaluation management services. This was vital because many of our members and our compliance officers were unaware that these codes were ten day globals. Billing systems were not in place in BMT clinics to bundle the pre-op history and physical and outpatient post-op visits. We have resisted pressure to rebundle such services.

CD34 testing, when done during apheresis/bone marrow harvest or when done prior to apheresis/bone marrow collection, is billable for Medicare/Medicaid beneficiaries separately. However, if done after product leaves the apheresis machine, then it becomes part of the patient specific cell processing determination and hence is bundled into the appropriate cell processing code.

CPT code 38230 is allogeneic bone marrow harvest. This code is no longer a ten day global but is a zero day global. It is for the harvesting of bone marrow for an allogeneic recipient. This service is for the procedure. Pre-operative assessment and post-operative assessment is done by traditional evaluation and management code services.
ASBMT members may wish to advise institutional managed care contracting services to define collection on the hospital side as billing for services on days these codes are used for billing of services. Contracting has often had contractual confusion over donor collection services, as specificity never included issues of growth factors or chemo mobilization with case rate collection definitions as these definitions used the solid organ example where there were no donor services other than harvesting on the day of collection.

All of these bone marrow harvesting codes are intended for use solely with the field of hematopoietic cellular transplantation particular to the allogeneic and autologous harvesting codes. They were designed or valued to be used as part of orthopedic fracture repair.

**Cell Processing Services**

Cell processing codes are:

- 38207: cryopreservation of the hematopoietic progenitor cells
- 38208: thawing of previously cryopreserved hematopoietic progenetoric cells per donor without wash
- 38209: thawing of previously cryopreserved hematopoietic progenitor cells with wash per donor.
- 38210: T cell depletion of an allogeneic product for transplantation.
- 38211: autologous tumor cell depletion as they collected hematopoietic stem cell product.
- 38212: red cell removal.
- 38213: for those patients or donors having multiple day apheresis where platelets fall to unsafe levels.
- 38214: plasma depletion of a product.
- 38215: cell concentration of mononuclear cell.

For CPT 38209, the “per donor” for the thawing was placed in because umbilical cord blood with the multiple cord blood infusions on a given day. We did not need a “per donor” for cryopreservation because, at the time umbilical cord blood is collected, no intended recipients are identified and this cryopreservation cannot be billed to the recipient. When there are several days of autologous collection or even allogeneic collection that are to be cryopreserved, then 38207 can be billed each day.

CPT code 38211 is for autologous tumor cell depletion as they collected hematopoietic stem cell product. Because tumor cell depletion is always done for autologous transplantation and hence the cells must be cryopreserved, when using 38210, 38207 should not be billed independently.
CPT Code 38212 is for red cell removal. This is generally for an allogeneic bone marrow harvest where there is ABO blood type differences between donor and recipient. This code is for the necessary removal of red cells from the bone marrow harvest product to avoid an acute transfusion reaction with infusion. This would be in the circumstances of A or B positive product into a type O recipient.

CPT code 38213 is for those patients or donors having multiple day apheresis where platelets fall to unsafe levels. This code is to obtain platelets from the harvested donor apheresis cell product to be given back to the person donating stem cells.

CPT code 38214 is plasma depletion of a product. This is primarily when volume or ABO mismatching dictates a plasma removal from the product but that does not necessarily need a red cell removal. This is primarily for a bone marrow harvest with ABO incompatibility and for products from adult donors given to pediatric recipients where there is large size disparity. This would be done when a blood type O product with high anti A or B titer is being given to a blood type A or B recipient.

CPT code 38215 is cell concentration of mononuclear cell. This is for the circumstances of a marrow harvest in which donor is blood type A going into blood type B recipient where there needs to be no RBC removal and a plasma removal to create pure mononuclear cell product. If a pure mononuclear cell product is needed prior to T cell depletion for tumor cell purging, then this code may also be used.

Cell Processing Services are similar to collection services in that they are what are described as zero day globals. The cell processing codes were developed by the CPT and RVU Update Committee at a time when there was pressure to bundle services. Bundled in these services are flow cytometry services that are essential to measuring the recipient specific needs of the product with its intended use. Thus would also include measuring cellular components of the cells depleted in using codes 38210 and 38211, where more extensive flow cytometry is done for quality outcomes measure beyond simply CD3 and 34 testing.

While the Society has repeatedly advised CMS there should be pro fees paid for supervision of these services, CMS has felt that its policies did not allow payment for such supervision. It is doubtful that this CMS policy can ever be reversed.

Just as with cell collection, these definitions are useful for managed care contracting definition of services as these services are different than the norm from solid organ transplants where such preparation is not needed and there are not as stringent FDA product requirement.
Cell infusion codes

Cell infusion codes are:

- 38240: allogeneic infusion.
- 38241: autologous transplant
- 38242: allogeneic donor lymphocyte infusion
- 38243: allogeneic hematopoietic cellular transplant boost

The infusion CPT code 38240 is the allogeneic infusion code. This code is also per donor for the circumstances where multiple cord bloods are infused on the same day. This code is to be billed for every allogeneic initial infusion from a unique donor. If there are severe complications and reactions with the donation and the infusion is stopped if those complications are life threatening and involve more than thirty minutes of physician bedside time, then consider using critical care management in addition to this infusion CPT code - Critical Care CPT code 99291. If an evaluation and management service is billed on the same day as an infusion code the focus of the note should be for management of problems other than the disease being transplanted such as management of hydration status, correction of electrolytes, management of immunosuppression drugs, management of infections or immunodeficiency placing patients at increased risk of infection.

CPT code 38241 is for autologous transplant and is for every infusion when there is autologous transplant cells administered.

These codes need to be used thoughtfully as the purpose of the 38240 or 38241 codes convert a chemotherapy hospitalization to a transplant hospitalization for DRG. Bone marrow transplant is unique in that our CPT codes have implications for hospital billing and once billed they redefine a hospitalization.

There have been a lot of inquiries for why, for subsequent autologous transplant, one uses the same code but uses different codes in the context of allogeneic transplant. CPT has this definition that a new code requires a different amount of work effort or a different amount of risk. Every infusion of autologous transplant product has about the same amount of physician work and the same amount of risk, whereas additional allogeneic infusions from the same donor have different work effort than the original work.

There are two codes for subsequent allogeneic infusions, 38242, which is an allogeneic donor lymphocyte infusion and 38243, which is an allogeneic hematopoietic cellular transplant boost. The splitting of these two services was mandated by CPT and not sought by ASBMT. The 38242 is the
allogeneic lymphocyte when the principle use of the product is the T cells in the donor product which are
to be used for immunologic outcome when the immunologic outcome is to treat disease relapse or to treat
an infection that requires a T cell or B cell lymphocyte boost. Allogeneic hematopoietic cell boost code
should be utilized only when a subsequent allogeneic product is being given by the same donor for the
purposes of correcting low cell counts when the blood cells are of donor origin and the purpose of infusion
is to boost the allogeneic donor counts in the recipient. The circumstance where this code may be
utilized is a patient with CMV infection with severe pancytopenia from ganciclovir that is not recovering.
This code is used when additional cells from the original donor is used to boost the graft. If cells are
given to treat relapse or treat infection with donor derived t cells, then 38242 should be used. ASBMT
realizes that clinical circumstances make this very hard to distinguish. As stated, this is not a code that
ASBMT sought but one mandated by CPT.

**Donor Search Services**

There is one final code that has never been recognized by CMS, which is 38204. This is management of
the recipient of hematopoietic regenerous cell donor search and cell acquisition. This code was
developed by the ASBMT and passed by CPT and the RVU update committee to cover the work effort of
the physician with donor selection and the negotiation that occurs with the unrelated donor collection
center over cell dose and the amount of product to be collected. Because this code is for non face-to-face
physician services and CMS has historically not recognized those services as billable and payable by
federal statute, this code was never valued by CMS. This code although not recognized remains in CPT
and may be useful for certain censors for covering some components of the unrelated donor search for
private payers. One needs to be cautious about every attached a fixed price to this code however on
charge master as donor search services are highly variable.

**Recap**

In summary, one needs to understand that CPT and RVU updates and CPT codes were for use for
Medicare beneficiaries and Medicaid beneficiaries for description of physician services and procedures
done to patients. The private sector has chosen to use the CMS description of services and fee
schedules rather than create their own. This has unfortunately meant that codes designed primarily for a
Medicare population are being used for non-Medicare patients. This has created concerns and confusion
particularly in our field where the majority of patients we transplant are not Medicare beneficiaries. The
codes may be used for descriptive services to describe a research infusion but not to bill for the service.
It is not allowed to bill a non-FDA approved product that is part of a research IND. The BMT related
codes are reviewed in 2 CPT assistant articles under the auspices of the ASBMT and NMDP-CPT.
assistant dated July 03:9, June 09:3 and October 13:3. CPT assistants are the reference materials used by compliance officers. There is a dated ASBMT article in *Biology of Blood and Marrow Transplant* 2005 Nov; 11(11):871-80. There are plans to update this article in the coming year.