Lab Dept: Anatomic Pathology

Test Name: DNA MARKER, PRE BMT ENGRAFTMENT, RECIPIENT

**General Information**

Lab Order Codes: DNAM

Synonyms: Bone Marrow Transplant DNA Marker; DNA Polymorphism (RFLP) Molecular; Pre-Transplant Chimerism Study; DNA Marker Pre-Bone Marrow Transplant Engraftment

CPT Codes: 81265 – Comparative analysis using Short Tandem Repeat (STR) markers; patient and comparative specimen

Test Includes: Bone Marrow Transplant DNA processing, DNA pre-BMT (Bone Marrow Transplant) polymorphism

**Logistics**

Test Indications: Evaluation for identification of informative polymorphic markers which are used to determine engraftment status subsequent to bone marrow transplantation. An informative marker is defined as one that demonstrates unique identity for recipient and donor DNA.

Lab Testing Sections: Anatomic Pathology – Sendouts

Referred to: Fairview University Medical Center (Fairview/Atlas code: RCENFT)

Phone Numbers:
- MIN Lab: 612-813-6280
- STP Lab: 651-220-6550

Test Availability: Monday – Friday (Friday specimens will be accepted until 1200 and must be received at Fairview by 1400). Specimens must arrive within 24 hours.

Turnaround Time: 1 –2 weeks

Special Instructions: Record the transplant recipient’s name on the request form when sending donor specimen. (Donor specimen is requested for engraftment testing.)

**Specimen**

Specimen Type: Bone marrow or blood
Container: Preferred: Yellow top (ACD-Solution A) tube
Alternate: Lavender top (EDTA) tube

Draw Volume: Bone Marrow: 5 mL (Minimum: 2 mL)
            Blood: 10 mL (Minimum: 5 mL)

Processed Volume: Same as draw volume

Collection: Bone marrow aspiration or venipuncture
            Note: Peripheral blood is ideal, unless patient has received a bone marrow transplant recently

Special Processing: Do Not centrifuge. Store bone marrow or blood in original collection container at room temperature. Contact Fairview University prior to sending specimen. Must arrive within 24 hours of collection.

Patient Preparation: None

Sample Rejection: Clotted specimen; incorrect storage temperature; unlabeled specimen or mislabeled specimen; incorrect anticoagulant

Interpretive

Reference Range: Results are reported as "Found" to indicate that there is a polymorphism identified that will allow the lab to follow the DNA engraftment of the patient post-bone marrow transplant or "None" to indicate that there is not a polymorphism and the DNA engraftment of the patient cannot be followed post bone marrow transplant. The name of the donor is included to assure that the correct donor is linked to the recipient.

Critical Values: N/A

Limitations: N/A

Methodology: PCR amplification of DNA and electrophoresis

References: Fairview University Laboratory Web Page September 2013

Updates: 1/18/2006: CPT 2006 updates
         9/29/2008: CPT and price updates
         2/5/2013: CPT update