

**Case Study:** Bone marrow aspirate concentrates produced with the EmCyte AbsoluteBMC™ system and the Marrow Cellution Bone Marrow Harvesting System.

**Objective:** To compare bone marrow concentrates produced with two commercial systems.

Date:	March 10, 2015
Client:	EmCyte Corporation
Physician:	Joe Purita, MD
Assays:	CD34+, CFU-F, TNC, PLT
Case I.D.:	Human Bone Marrow
Sample Type (harvest location):	Bone marrow aspirate. Iliac
Samples Received:	March 11, 2015
Device(s) Studied:	AbsoluteBMC™, Marrow Cellution Bone Marrow Harvesting System

### Baseline Description

Sample ID:	Date Collected	Volume	Harvesting Device	TNC X 10 <sup>6</sup> /ml	CD34+/mL	#CFU-F/mL	PLT x 10 <sup>6</sup> /ml
#1	3-10-15	60mL	Standard Ranfac BMA Needle	26.9	222,835	1030	106
#3	3-10-15	10mL	Marrow Cellution BMA Needle	24.0	221,480	1999	93

### Product Description

Sample ID:	Date Prepared	Volume	Processing Device	TNC X 10 <sup>6</sup> /ml	CD34+/mL	#CFU-F/mL	PLT x 10 <sup>6</sup> /ml
#1	3-10-15	12mL	AbsoluteBMC™	182.1	2,613,656	12,073	828
#3	3-10-15	10mL	Marrow Cellution BMA Needle	24.0	221,480	1999	93

### Total Cells Delivered

Sample ID:	Device	Volume	TNC X 10 <sup>6</sup> /ml	CD34+	#CFU-F	PLT x 10 <sup>6</sup> /ml
#1	AbsoluteBMC™	12mL	2,185	31,363,872	144,876	9,936
#3	Marrow Cellution BMA Needle	10mL	240	2,214,800	19,990	930

### Product Concentration x Baseline

Sample ID:	Device	Volume	Concentration x baseline			
			TNC	CD34+	#CFU-F	PLT
#1	AbsoluteBMC™	12mL	6.8 x	11.7 x	11.7 x	7.8 x
#3	Marrow Cellution BMA Needle	10mL	1 x	1 x	1 x	1 x

Reviewed by: R J Mandle

Robert Mandle, PhD

Date: 3-25-15