

## **Although administration of chemotherapy prior to autologous stem cell transplantation in the outpatient setting has been reported as safe and cost-effective, many limitations exist with previously reported methods of transitioning out of the hospital ward” Clemmons and Anderegg (2016).**

### Abstract:

BACKGROUND: Although administration of chemotherapy prior to autologous stem cell transplantation in the outpatient setting has been reported as safe and cost-effective, many limitations exist with previously reported methods of transitioning out of the hospital ward. Specifically, lack of a caregiver and distance from treatment facility are key factors particularly in rural settings. Given these limitations, not all institutions have transitioned the transplant process, or even portions of it, to the outpatient setting despite the known benefits.

ReTweet if useful... Mixed outpatient-inpatient autologous stem cell transplant  
[@ivteam #ivteam](http://ctt.ec/d4wdf+)

Click To Tweet

METHODS: To achieve financial benefit without compromising safety, a novel mixed outpatient-inpatient model was adopted at our institution. Eligible patients receive melphalan in the clinic the day prior to being admitted for peripheral blood stem cell re-infusion where they remain until recovery of myelosuppression.

RESULTS: In the year since implementation, nineteen total patients received high-dose melphalan prior to autologous stem cell transplantation. Eighteen of these patients successfully received melphalan in the outpatient clinic with admission to the hospital on day zero for infusion of stem cells. No patient experienced any adverse event on the day or evening of chemotherapy or required early admission. The average estimated total reduction in cost per patient to the institution was over US\$2,000. When comparing the cost of the chemotherapy drug, melphalan, from the year before and the year after implementation of the mixed model the total annual cost saving was approximately

US\$90,00 or 53% of the previous year's expenditure.

**CONCLUSIONS:** The implementation of this mixed outpatient-inpatient model was safe, feasible, and cost-effective.

Reference:

Clemmons, A.B. and Anderegg, S. (2016) Mixed outpatient-inpatient autologous stem cell transplant for multiple myeloma: A cost-saving initiative in a resource constrained environment. *Journal of Oncology Pharmacy Practice*. March 21st. .

**Thank you to our partners for supporting IVTEAM**