

Review of Menstrual Suppression Strategies and Outcomes in Women Undergoing Hematopoietic Cell Transplantation at Moffitt Cancer Center

Angelou Flores, Yousif Hikal, Kameron Middleton, Mega Patel, Connie Poon, Libby Pugh
Mentored by: Janelle Perkins, PharmD, BCOP
Moffitt Cancer Center, 12902 USF Magnolia Drive, Tampa, FL, 33612

Abstract

Premenopausal women undergoing hematopoietic cell transplantation (HCT) are at high risk for heavy menstrual bleeding due to thrombocytopenia, yet guidance on menstrual suppression is limited. This retrospective study reviews suppression practices, bleeding outcomes, and adverse effects among women undergoing HCT at Moffitt Cancer Center (2023–2024). Preliminary data (~44 patients) show substantial variability in agent selection and timing, which may influence bleeding during thrombocytopenia. Findings will support development of evidence-based management strategies.

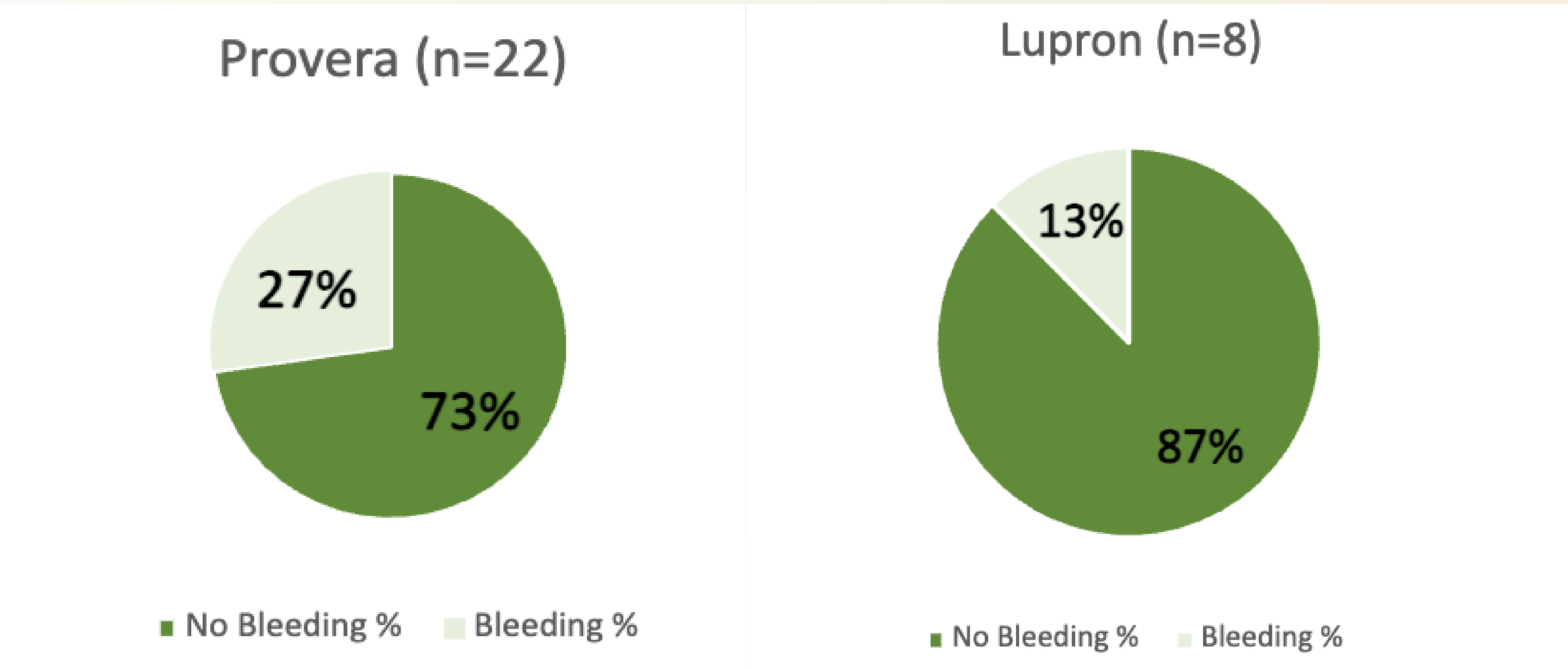
Introduction

Premenopausal women undergoing Hematopoietic Cell Transplantation (HCT) often experience severe thrombocytopenia, increasing the risk of heavy menstrual bleeding which can last 2-3 weeks requiring additional pharmacologic interventions, transfusion support and decreased quality of life. Limited data exist on menstrual suppression in this setting. This study reviews current practices at Moffitt Cancer Center to better understand medication use, bleeding outcomes, and reported side effects.

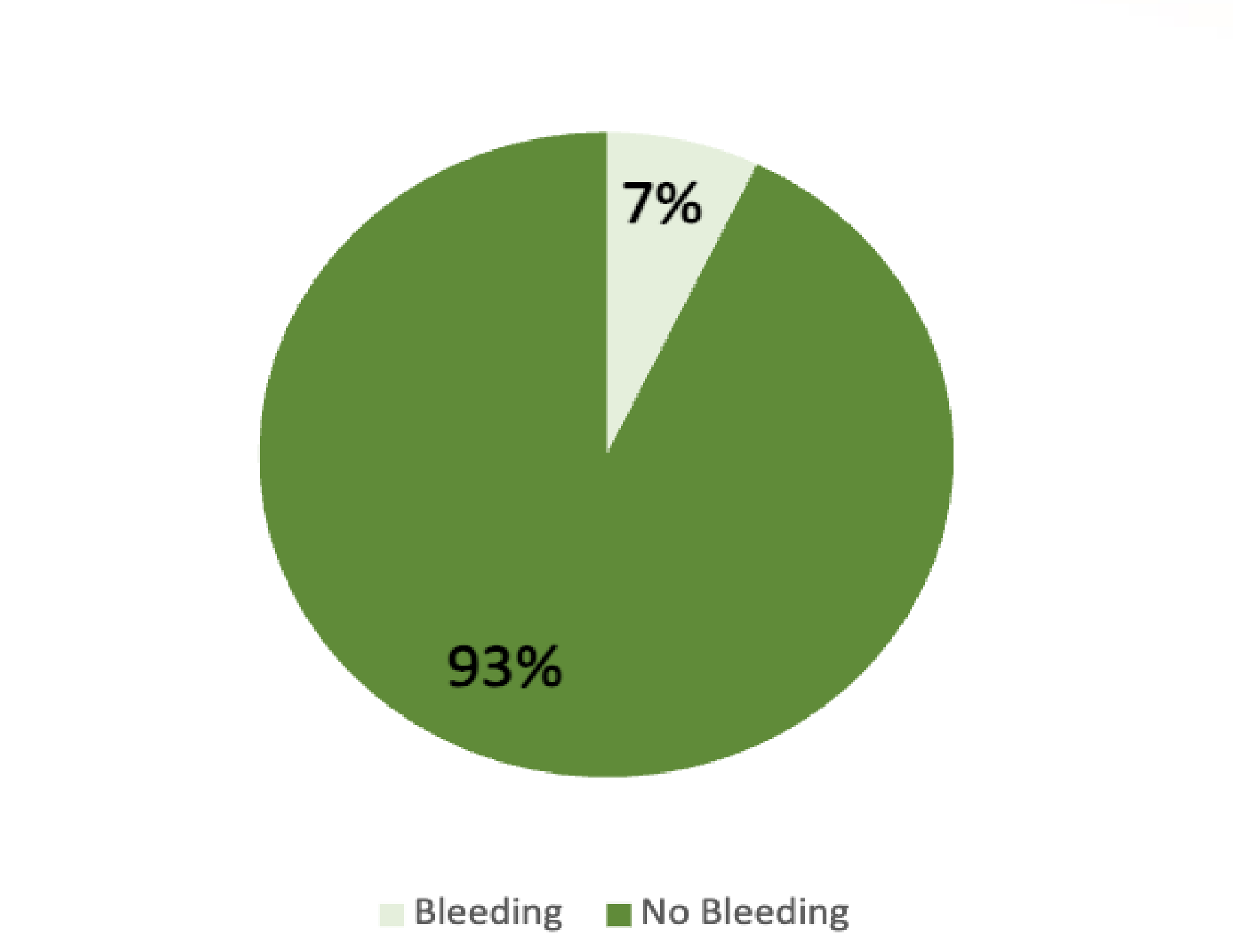
Results

Characteristic	Total (n = 44)
Age, y	
Mean (SD)	38.1 (9.8)
Median (IQR)	38.5 (30–47.25)
Race, n (%)	
White	30 (68.2%)
Black	7 (15.9%)
Other	7 (15.9%)
Ethnicity, n (%)	
Not Hispanic/Latino	29 (65.9%)
Hispanic/Latino	15 (34.1%)
Diagnosis, n (%)	
Lymphoma	11 (25.0%)
Multiple Myeloma	9 (20.5%)
AML	9 (20.5%)
ALL	8 (18.2%)
Aplastic Anemia	3 (6.8%)
Other	4 (9.0%)
Aplastic Anemia	3 (6.8%)
Donor Type, n (%)	
AUTO	17 (38.6%)
MUD	11 (25.0%)
MMRD	9 (20.5%)
Related	7 (15.9%)
Menses Suppression Agent, n (%)	
Provera	22 (50.0%)
Lupron	8 (18.2%)
None	14 (31.8%)

Bleeding Outcomes by Menses Suppression Medication During HCT



Bleeding Outcomes Without Menses Suppression Medication During HCT (n=14)



References

American College of Obstetricians andGynecologists. Options for prevention andmanagement of menstrual bleeding in patientsundergoing cancer treatment. ACOG PracticeBulletin. 2018;128

Arecco L, Ruelle T, Martelli V, et al. How to ProtectOvarian Function before and during Chemotherapy?.J Clin Med. 2021;10(18):4192. Published 2021 Sep16. doi:10.3390/jcm10184192

Chang K, Merideth MA, Stratton P. Hormone Use forTherapeutic Amenorrhea and Contraception DuringHematopoietic Cell Transplantation. Obstet Gynecol.2015;126(4):779-784.doi:10.1097/AOG.0000000000001031

Meirow D, Rabinovici J, Katz D, Or R, Shufaro Y, Ben-Yehuda D. Prevention of severe menorrhagia in oncology patients with treatment-induced thrombocytopenia by luteinizing hormone-releasing hormone agonist and depo-medroxyprogesterone acetate [published correction appears in Cancer. 2007 Aug 15;110(4):936. Shufaro, Yoel [added]]. Cancer. 2006;107(7):1634-1641. doi:10.1002/cncr.22199

Methods

This retrospective cohort study reviews EMRs for adult women undergoing HCT at Moffitt Cancer Center (2023–2024). Data includes transplant and regimen type, hormonal and menses suppression therapies, bleeding during thrombocytopenia, platelet counts, and adverse events, summarized using descriptive statistics by regimen and timing.

Discussion

Preliminary data from 44 patients show some variation in menstrual suppression strategies. Early trends suggest agent choice may affect bleeding during thrombocytopenia, with ongoing analysis to define bleeding rates, transfusion needs, and adverse effects.

