

GVHD Places a Considerable Burden on Healthcare Systems



INCREASED HEALTHCARE RESOURCE UTILIZATION

USA



MEDIAN LENGTH OF HOSPITAL STAY^{1a}



with aGVHD

VS



without GVHD

($P < 0.01$)



HIGHER COSTS



HIGHER

TOTAL HOSPITAL COSTS

for patients with aGVHD vs patients without GVHD^{1a}

- Median total costs (\$173,144 vs \$98,982; $P < 0.01$)
- Median total readmission costs during the 100 days post HSCT (\$18,348 vs \$13,361; $P < 0.0001$)^{2b}

GERMANY



MEAN OVERNIGHT HOSPITALIZATIONS^{3c}



with aGVHD
SD=3.0

VS



without GVHD
SD=2.5

($P = 0.029$)



1.6x HIGHER TOTAL DIRECT COSTS AND TOTAL ALL-CAUSE COSTS

for patients with aGVHD vs patients without GVHD^{3c}

- Due to overnight inpatient care^d and drug costs
- Hospitalizations due to infection increased costs by €10,000 per patient-year

FRANCE



1.3x INCREASED RISK OF HOSPITALIZATION FOR SEVERE INFECTION

for patients with aGVHD vs patients without GVHD (RR, 1.3; 95% CI, 1.2-1.4)^{4e}



1.2x HIGHER TOTAL DIRECT COSTS

(range, €174,482-€332,557) for patients with aGVHD vs patients without GVHD ($P < 0.001$)^{4e}

UK



READMISSIONS^{5f}



with GVHD*
n=101/118

VS

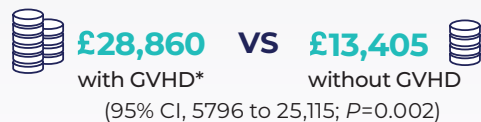


without GVHD
n=41/69

($P < 0.001$)



HIGHER MEAN COST OF READMISSION FOR PATIENTS WITH GVHD^{5f}



- Readmission costs per patient, including critical care costs, were higher in patients with more severe grades of aGVHD: £40,012 for Grade III/IV (n=28) vs £24,560 for Grade I/II (n=60); (95% CI, -30,026 to -877; $P = 0.038$)^{5f}

*The cohort consisted of 47% (88/187) of patients who had aGVHD and 31% (58/187) who had cGVHD.⁵

aGVHD poses a significant healthcare resource utilization and economic burden in patients who undergo allo-HSCT, underscoring the need for effective prophylaxis and treatment options for GVHD³⁻⁵

aGVHD=acute GVHD; allo=allogeneic; cGVHD=chronic GVHD; GVHD=graft-versus-host disease; HSCT=hematopoietic stem cell transplantation; SD=standard deviation; UK=United Kingdom; USA=United States of America.



^aA retrospective analysis of discharge records indicating allo-HSCT from the National Inpatient Sample database, from January 2009 through December 2013, to examine mortality, length of stay, and costs associated with aGVHD during hospitalization of adult and pediatric patients.¹

^bA retrospective analysis of data from the Premier Healthcare Database (PHD) of 906 adult patients who were discharged for their first allo-HSCT procedure, between January 2011 and June 2016, to examine inpatient healthcare resource utilization, costs, and mortality.²

^cA retrospective cohort study using administrative claims from the German statutory health insurance database, from January 2008 through December 2018, to examine the clinical and economic burden associated with aGVHD in 555 adult patients who underwent allo-HSCT.³

^dIncluding initial allo-HSCT hospitalization and subsequent hospitalizations.³

^eA retrospective, nationwide cohort study using administrative claims from the French national health data system, Système National des Données de Santé (SNDS), from January 2011 through December 2019, to examine the clinical and economic burden associated with GVHD in 6385 adult patients who underwent allo-HSCT.⁴

^fA retrospective review of 187 consecutive pediatric and adult patients who underwent allo-HSCT, from January 2006 through April 2009, at the Royal Marsden National Health Service (NHS) Foundation Trust (RMH) UK, to examine economic burden and patient outcomes associated with readmission.⁵

References: **1.** Yu J, et al. *Curr Med Res Opin.* 2019;35(6):983-988. **2.** Yu J, et al. *Biol Blood Marrow Transplant.* 2020;26(3):600-605. **3.** Holtick U, et al. *Transplant Proc.* 2024;56(1):191-200. **4.** Michonneau D, et al. *Bone Marrow Transplant.* 2023;58(5):514-525. **5.** Dignan FL, et al. *Clin Transplant.* 2013;27(1):E56-E63.