



## The 65th ASH Annual Meeting Abstracts

## POSTER ABSTRACTS

## 723.ALLOGENEIC TRANSPLANTATION: LONG-TERM FOLLOW-UP AND DISEASE RECURRENCE

**A Positive Psychology Intervention in Allogeneic Hematopoietic Stem Cell Transplantation Survivors (PATH) to Promote Well-Being: Randomized Controlled Feasibility and Preliminary Efficacy Trial**

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**Background:** Patients with hematologic malignancies who are allogeneic hematopoietic stem cell transplantation (HSCT) survivors experience tremendous psychological symptoms (e.g., anxiety and depression symptoms) and low levels of positive psychological well-being (e.g., flourishing, gratitude), which further undermine multiple health-related outcomes such as quality of life (QOL). However, supportive oncology interventions which specifically target positive psychological well-being may buffer against psychological distress and promote QOL. Thus, we developed and piloted a novel phone-delivered positive psychology intervention (PATH) to improve QOL and symptoms of anxiety and depression in HSCT survivors transplanted for hematologic malignancies.

**Methods:** We conducted a randomized controlled trial (NCT05147311) to assess feasibility, acceptability, and preliminary efficacy of the PATH intervention. From August 2021 to August 2022, 70 HSCT survivors who were 100-days post-HSCT were randomly assigned to either PATH or a usual care control group. The PATH group had 9 weekly 1:1 phone sessions of positive psychology exercises focused on gratitude, strengths, and meaning. The Usual care group had routine sessions with the transplant social worker. We defined feasibility as >60% of eligible participants enrolling in the study and >75% of intervention group participants completing at least 6 of the 9 positive psychology sessions. At baseline and 9 and 18 weeks after baseline, patients self-reported optimism (Life Orientation Test Revised), gratitude, (Gratitude Questionnaire-6), flourishing (Flourishing Scale), QOL (Functional Assessment of Cancer Therapy-Bone Marrow Transplant) and depression and anxiety (Hospital Anxiety and Depression Scale). We used mixed effects regression analyses to determine the potential impact of PATH on QOL and symptoms of anxiety and depression.

**Results:** The average age (standard deviation) of participants was 56.8 (13.7) years; 50% (N=35) were female. The majority of the participants identified as White (91.4%; N=64), married or living with a partner (71.4%; N=50), had at least a college education (67.2%; N=47) and were on disability or retired (87.1%; N=67). The majority had a diagnosis of leukemia (68.6%; N=48), underwent reduced intensity conditioning (62.9%; N=44), and did not have acute graft-versus-host disease (68.6%; N=48). For our feasibility metrics, we enrolled 68.6% (72/105) of eligible patients, two of which were not randomized due to worsening physical symptoms. Additionally, 94% (95% CI: 79%-99%) of those who started the PATH intervention completed all nine intervention sessions. For acceptability, participants in the intervention group reported positive psychology exercises as easy to complete (mean [95% CI] = 7.40 [6.87, 7.92] on a scale of 0-10) and useful (mean [95% CI] = 8.23 [7.83, 8.63]). Compared with usual care, participants in the intervention group reported less symptoms of anxiety ( $d=0.46$ ,  $p=0.027$ ), and demonstrated promising improvements in gratitude ( $d=0.26$ ) at 9 weeks. We did not observe significant differences in QOL and depression symptoms.

**Conclusions:** A positive psychology intervention, PATH, is feasible, acceptable, and has potential to improve outcomes in patients with hematologic malignancies who are allogeneic HSCT survivors. Larger trials are needed to examine the impact of PATH on psychological well-being and QOL in this population.

**Disclosures LeBlanc:** Agilix: Consultancy, Honoraria; Agios: Consultancy, Honoraria, Speakers Bureau; BlueNote: Consultancy, Honoraria; Astellas: Consultancy, Honoraria, Speakers Bureau; BMS/Celgene: Consultancy, Honoraria, Research Fund-

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