

stage, treatment, and baseline psychosocial measures. **RESULTS:** One hundred and fifteen women were randomized to PTC and 89 to UC. 82% returned for T2 and 75% completed all three time points. At baseline, 65% of participants reported depression and anxiety T-scores above 50 while 26% reported levels greater than 60 (>1 SD above the mean). Participation in PTC was a significant predictor of lower depression at T2 in both linear and logistic regression models independent of baseline and disease characteristics. Variables significantly associated with higher levels of depression at T2 include higher depression and anxiety at T1, lower scores on the FACT Trial Outcome Index, increased gynecologic problems and higher maladaptive coping. Only depression level at T1 and lower social support predicted higher depression at T3. **CONCLUSIONS:** Despite absence of disease and extended time from treatment, a sizeable proportion of cervical cancer survivors report profound quality of life disruptions and substantial emotional distress. Supportive care interventions designed to ameliorate or reduce these symptoms can effectively reduce depression and anxiety in cancer survivors. **CLINICAL/RESEARCH IMPLICATIONS:** Efforts to target especially vulnerable populations such as those identified herein may be warranted. **FUNDING:** Funding Source: NCI R01 CA118136-01.

11-3

Group Cohesion in Advanced Cancer...When a Group Works

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PURPOSE: While there is much evidence to support group psychotherapy as an effective intervention for cancer patients, process variables such as group cohesion have rarely been examined in psychotherapy outcome research in cancer (Schnur & Montgomery, 2010). Group cohesion is considered an essential component of group therapy (Yalom & Leszcz, 2005). Conducting groups with advanced cancer patients has unique challenges and further study of the impact of group dynamics will provide insight into how to maximize therapeutic benefits. **METHODS:** As part of a larger NIH R01 funded intervention trial, 125 participants diagnosed with advanced cancer (stage III/IV solid tumors) completed an 8-week psychotherapy group. A total of 27 groups were completed. Patients were randomly assigned to Meaning Centered Group Psychotherapy (MCGP, $n = 67$), a structured existential based treatment, or Supportive Group Psychotherapy (SPG, $n = 58$), focusing

on coping, support, and expression of feelings. Participants completed the Group Cohesion Scale (Treadwell et al., 2001), a 17-item scale measuring perceived group cohesion as part of a larger post intervention assessment battery. Differences between groups in overall cohesiveness and individual items were analyzed using One-way ANOVAS. **RESULTS:** In the 27 completed groups, there were significant differences in Group Cohesion $F(124,26) = 1.99, p = 0.009$. Overall, Group Cohesion was significantly higher $F(124,1) = 4.65, p = 0.033$ in MCGP groups ($m = 70.2, SD = 8.3$) than SPG Groups ($m = 66.8, SD = 9.4$). Smaller groups had higher group cohesion. Individual groups differed significantly in their endorsement of items such as the openness and supportiveness of the group. Qualitative data revealed that similar diagnoses, stage, and prognosis, skilled group leaders, and the openness of members, facilitated a sense of group cohesion while disruptive or monopolizing members inhibited it. **CONCLUSIONS:** These results demonstrate that there is significant variability in perceived group cohesion in short-term advanced cancer groups. Given the challenges of treating advanced cancer patients, a more structured approach may facilitate cohesion and may minimize disruptions to group process. Focusing existential themes may foster a common ground for patients with diverse diagnoses and illness trajectories. Further analyses will examine factors that facilitate group cohesion and its impact on specific therapeutic outcomes. **CLINICAL/RESEARCH IMPLICATIONS:** There has been little research on group process variables in advanced cancer populations. This study provides a greater understanding into the impact of group cohesion and ways to enhance it. This information can be utilized for both clinical and research purposes. **FUNDING:** This work was supported by the National Cancer Institute- Grant # 5R01CA128187-05.

11-4

WiLLOW: An Acceptance and Commitment Therapy Intervention for Breast Cancer Survivors to Address Anxiety, Worry and Fear of Cancer Recurrence

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PURPOSE: Fear of cancer recurrence (FCR) can lead to emotional distress, increased vigilance toward somatic symptoms and reduced quality of life in cancer survivors. Mindfulness and values-based living approaches, such as Acceptance and Commitment Therapy (ACT), have shown promise

in improving emotional functioning in cancer survivors. The purpose of this study was to adapt an ACT-based intervention to address FCR in early stage breast cancer survivors and to pilot test the intervention in an initial sample of breast cancer survivors to determine its feasibility and acceptability. **METHODS:** Patients were recruited through a breast clinic at the UCSF Helen Diller Family Comprehensive Cancer Center. Inclusion criteria were (a) diagnosis of stage 0-III breast cancer within the past 42 months; (b) completion of active treatment within the past 36 months; and (c) at least moderate levels of FCR on a validated screening questionnaire. An initial ACT intervention manual was developed, in consultation with experts in ACT/mindfulness therapies and breast cancer survivorship. Women were randomized into an intervention group or a control (treatment as usual) condition. The 7-session intervention consisted of weekly group meetings for 6 weeks, with one follow-up meeting 3 weeks later. Each 90-minute meeting was facilitated by a psychologist. We assessed hypothesized outcomes at four timepoints (baseline, week 6, week 10, and week 30) via validated questionnaires, including the Fear of Cancer Recurrence Inventory (FCRI), administered via an online survey portal. Both qualitative and quantitative data on feasibility, acceptability, and adherence were obtained. **RESULTS:** Among the 28 participants ($n = 13$ assigned to intervention; $n = 15$ to control), the mean age was 52.2 years (± 9.5 ; range 35.1–69.0); 15 participants were married/partnered; 13 were working full-time; 16 had annual incomes of $> \$50,000$; and 12 had graduate degrees. Time since end of active treatment at study entry averaged 11.4 months (± 8.3 ; range 2.1–32.7). Four participants had been diagnosed with stage 0 breast cancer, ten with stage I, ten with stage II, and four with stage III. Most ($n = 24$) participants completed all assessment timepoints. Eleven of the 13 women randomized to the intervention group attended the majority of the intervention sessions. Intervention group participants reported that they would recommend the intervention to others, that they found the intervention helpful, and that they utilized skills learned in the group. Although paired comparisons showed no significant difference for fear of recurrence and anxiety between pre- and post-data points for intervention participants versus controls, medium effect sizes were returned on a measure of fear of recurrence severity (a subscale of the FCRI). There was also trend toward improved psychological flexibility and adoption of mindfulness skills in the intervention group compared to controls. No adverse study-related events occurred. **CONCLUSIONS:** Recruitment, attendance and survey completion demonstrated both feasibility and acceptability of the intervention. Women who attended the intervention reported more effectively managing their day to day life and qualitatively

reported fewer struggles with FCR. Limitations of the study design (e.g. small sample size, heterogeneous stage of disease, broad inclusion criteria) prevent definitive conclusions from being drawn. Further research addressing these limitations is needed to examine the usefulness of ACT and related interventions for cancer survivors dealing with this pervasive and distressing symptom. **CLINICAL/RESEARCH IMPLICATIONS:** Clinical care of cancer survivors should include addressing FCR. This pilot study highlights the feasibility, acceptability, and tolerability of psychological intervention research, including interventions utilizing ACT, that specifically target FCR. **FUNDING:** UCSF School of Medicine and the UCSF Osher Center for Integrative Medicine provided funding for this study.

11-5

Moving From Observation to Intervention: Development of a Psychoeducational Intervention to Increase Uptake of BRCA Genetic Counseling Among Recently Diagnosed Breast Cancer Patients

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PURPOSE: High-risk breast cancer (BC) patients may benefit from BRCA genetic counseling (GC) to manage their future cancer risk; however, uptake remains low. The purpose of this abstract is to describe a psychoeducational intervention (PEI) to increase uptake of GC targeted to high-risk BC patients. **METHODS:** Using a mixed method approach framed by the Health Belief Model and principles of Learner Verification, our team developed PEI content from a previous pilot study, scientific literature and review of cancer education websites. Then, we assessed the initial acceptability of two booklets of identical content but a different design, by presenting the two booklets to attendees of the National Facing Our Risk of Cancer Empowered conference who had a personal or family history of BC. Attendees completed a quantitative survey of demographic information and booklet preferences. Finally, the chosen booklet was further refined through focus groups and individual interviews. **RESULTS:** Key constructs were identified for inclusion in the PEI. Two versions of the PEI were developed and presented to women attending a patient conference on hereditary cancer. Based on results of a brief survey completed by attendees ($n = 58$); one booklet was viewed more favorably by the target audience. This booklet was subsequently presented to two focus groups of 10 BC patients who did not attend GC. Finally, individual interviews were conducted with cancer genetics health care providers ($n = 10$). Overall, participants found the booklet visually appealing,