evaluated inter-rater and intra-rater reliability of PPT measurement with algometer on epigastric area, and assessed validity (sensitivity and specificity) via ROC curve and optimal cut-off value.

**Results:** The results of inter-rater reliability test has shown very strong correlation with 0.82–0.91 in coefficient of correlation. The results of intra-rater reliability test also has shown more than average correlation with 0.58–0.70 of intraclass correlation coefficient. Optimal cut-off value of PPT on epigastric area has been calculated as 1.8 (kg/cm2) with 100% of sensitivity and 54.54% of specificity.

**Conclusion:** PPT measurement by algometer on epigastric area has shown high reliability and validity on AE of ED and EP, and may have its potential clinical utility as a new quantitative measurement in Korean medicine.

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#### P02.98

## Qualitative Analyses from a Prospective Clinical Study of a Whole Systems Ayurvedic Intervention for Breast Cancer Survivorship

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**Purpose:** The transition from cancer patient to survivor can be difficult because patients experience less medical contact but still suffer physically and psychologically. We developed a Whole Systems Ayurvedic intervention to address this problem and are testing it in a clinical study. We performed qualitative analysis to capture emergent effects of the intervention, inform the link between the intervention and study outcomes, and explore mechanisms.

**Methods:** Female breast cancer patients who had undergone chemotherapy and had completed primary curative treatment 1–12 months earlier were eligible for the four month individualized intervention that included diet, lifestyle, yoga, and marma (similar to acupressure). Every other participant was selected for semi-structured interviews at baseline and completion. Two investigators coded the data independently using qualitative thematic analysis. Discrepancies were discussed and resolved by refining codes and themes.

**Results:** Nine out of nine who were selected completed both interviews. We identified four major themes: (1) Participants reported a sense of empowerment from discovering a new awareness of their body cues leading to a deeper understanding of how to implement personalized self-care using natural methods. (2) A greater integration of mind-body led to a sense of strength and resilience, which was attributed to the intervention. (3) Participants appreciated that the intervention was aligned with their health beliefs. (4) Participants reported some challenges in adhering to the intervention.

**Conclusion:** The Whole Systems Ayurvedic intervention appeared to lead to an enhanced awareness of the body's innate healing mechanisms and a strong motivation to use them for self-care. The holistic nature of the intervention facilitated integration of mind-body resulting in a sense of increased vitality. These findings correlated with quantitative quality of life mea-

surements indicating improved global health. We hypothesize that the empowerment and sense of wholeness and integration instilled by the Ayurvedic intervention are important mechanistic steps leading to improved health outcomes.

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#### P02.99

## Reiki Improves Health of Oncology Patients: In and Out of the Hospital

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**Purpose:** The primary purpose of this study was to evaluate the effect of Reiki on perceived stress, happiness and pain for patients at an outpatient cancer center and for inpatient oncology patients.

**Methods:** This is a repeated measures longitudinal study. Subjects were recruited from the Patrick Dempsey Center for Cancer Hope & Healing (Dempsey Center) and the inpatient Oncology floor at Central Maine Medical Center (CMMC) in Lewiston, Maine between July 9, 2010 and December 31, 2013. The Institutional Review Board at CMMC approved the study. The Reiki Client Quality Monitoring Tool was given to patients before and after a Reiki session. The tool quantified a patient's experience regarding pain, stress an happiness using a likert scale from 0 to 10.

Results: Inpatient and outpatient oncology patients in Lewiston, Maine reported decreases in pain and stress, and increased happiness after Reiki. Investigators gathered data on subjects' self-perceptions of pain, stress, and happiness before and after Reiki sessions at an outpatient cancer center. Data were collected on over 600 sessions during 4 years (July 2009–July 2013). Perceived pain decreased 40%,stress decreased 60%, and 15% increase in happiness. Current data trends suggest a significant post-session decreases in pain and stress, and increased happiness for both inpatients and outpatients, yet the improvement is more dramatic for inpatients.

Conclusion: Subjects reported significantly decreased pain and stress, and increased happiness after their Reiki sessions. Our study identified similar results that other early pilots found, that Reiki decreases stress and pain for conventional oncology patients (Lee, Miles 2003; Olsen 2; Tsang, Carlson, & Olson, 2007). Reiki is relatively easy and inexpensive to perform, does not require special equipment, and is non-invasive. It offers an additional nonpharmacological method to improve pain for patients whether they are in the hospital or receiving treatment as an outpatient.

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### P02.100

## Comparative Effectiveness Research on Different Treatment Options for Rheumatoid Arthritis in Ayurveda

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**Purpose:** This study aims to compare the outcomes of systematic reviews, clinical trials and reports from actual point of care in real life situations with a view to identify the contradictions in

the findings from these varying sources with reference to Rheumatoid arthritis (RA). Additionally it aims to identify implications of the results for research and clinical practice of Ayurveda.

**Methods:** Four systematic reviews including one Cochrane review on efficacy of Ayurvedic interventions in management of Rheumatoid arthritis was (RA) reviewed to compare the findings. Rigorous clinical trials evaluating Ayurvedic interventions in RA published in high impact journals that were not included in the systematic reviews were analyzed independently. Outcomes of Ayurvedic treatments in real life clinical practice (20 doctors) were also carefully documented for comparison.

**Results:** There is a discrepancy between the conclusions of systematic reviews, independent clinical trials and reports from actual point of care. Systematic reviews unanimously agree that there is no evidence indicating efficacy of Ayurvedic treatments in RA. On the other hand, the independent high quality clinical trials, one of which won an award for excellence in methodology contradict one another with respect to the reported clinical outcomes. The findings from real life clinical practice indicate not only strikingly different outcomes, but also treatment methods that have not been adequately studied before.

Conclusion: There is a gap between research and clinical practice in Ayurveda, which is clearly demonstrated by this study on Rheumatoid arthritis. An over reliance on reductionistic methods of research leads to piece meal evaluation of Ayurveda ignoring its complex whole system approach in actual clinical practice. Variations in traditional diagnosis, the choice of treatments and the methodology of research are responsible for the contradictions in the research findings. Best clinical practices at the point of actual care should be identified and studied using appropriate research methodologies.

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# P02.101 Complementary and Alternative Medicine for Post-Traumatic Stress Disorder Symptoms: A Systematic Review

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Purpose: To characterize complementary and alternative medicine (CAM) studies for posttraumatic stress disorder (PTSD), evaluate the quality of these studies, and systematically grade the scientific evidence for individual CAM modalities for PTSD. Methods: Systematic Review. Data sources included MED-LINE, PsycINFO, CINAHL, Alt HealthWatch, Allied and Complementary Medicine Database, Cochrane Library, Database of Abstracts of Reviews of Effects, Health Technology Assessment Database. Methodological quality was assessed using the Reisch Quality Assessment Tool and Cochrane Risk of Bias. Selection criteria included any study design assessing PTSD outcomes and any CAM intervention. The body of evidence for each modality was assessed with the Natural Standard evidence-based, validated grading rationale.TM

**Results:** Thirty-two studies with 1289 participants were reviewed, 16 of which were randomized controlled trials. The mean Reisch quality score for all included studies was  $78 \pm 10$  (median 80, range 54–95) out of 100. Most studies used mind-

body therapies, including biofeedback (4 studies), hypnosis (3), meditation (9), relaxation (4), Emotional Freedom and Thought Field therapies (2), visualization (1), and yoga (1). Other modalities represented were repetitive transcranial magnetic stimulation (5), acupuncture (2), and Inositol (1), a natural product. Scientific evidence of benefit for PTSD was Strong for repetitive transcranial magnetic stimulation and Good for acupuncture, hypnotherapy, meditation, and visualization. Evidence was Unclear or Conflicting for biofeedback, relaxation, Emotional Freedom and Thought Field therapies, yoga, and inositol.

**Conclusion:** Several CAM modalities may be helpful for improving PTSD symptoms. TMS has the strongest evidence for benefit followed by acupuncture, hypnotherapy, meditation, and visualization. There is insufficient evidence to recommend biofeedback, Emotional Freedom and Thought Field Therapies, relaxation, yoga, and inositol at this time. Considerations for clinical applications and future research recommendations are discussed. Future research should include larger, properly randomized, controlled trials with appropriately selected control groups and rigorous methodology.

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### P02.102 Effects of Flower Essences in Individuals with Anxiety

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**Purpose:** Increasingly, anxiety comes in relation to psychosomatic diseases. The mechanisms of early identification and treatment for this behavior may be useful in the management of daily stress. Floral therapy is part of an emerging field of vibrational, non-invasive therapies. Floral essences, made from savage plants, flowers and field trees, treat personality disorders, instead of disorders in physical conditions. They intend to harmonize the ethereal, emotional and mental body. This study aimed to observe the effects of these flowers, Impatiens, Cherry Plum, White Chestnut and Beech in people with anxiety.

**Methods:** This was a randomized, triple blind study. Data were collected between May and August 2010 with 34 employees of the Center for Improvement in Health Sciences of the Zerbini Foundation, São Paulo - Brazil. Anxiety was assessed using the Inventory for Diagnosis of Anxiety Traits - performed on two different occasions, at the beginning and end of the intervention. **Results:** As a result of this study it could be observed that in both groups, anxiety increased, but the difference between the initial and the final mean State-STAI score corresponded to 16.2 in the experimental group and 3.2 in the control group. To ascertain the statistical significance of this difference, the t-test was applied, which indicated a significant difference (p=0.001).

**Conclusion:** After an intervention using floral essences and the analysis of the anxiety measurement instrument's results, a greater drop in anxiety scores was ascertained in the experimental group when compared with the control group, confirming that the Bach floral remedies chosen in this study positively affected the anxiety decrease. The statistical tests demonstrated a statistically significant difference between the two groups.

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