

SUPPLEMENTAL TABLES**Supplemental Table 1: List of clinical outcomes of interest (in alphabetical order)**

Fatigue
Gastrointestinal
Gynecological
Hematological
Lymphedema
Neurological
Neuromuscular
Pain
Psychological
Quality of life
Renal
Skin
Sleep
Vasomotor symptoms

Supplemental Table 2: Summary of randomized controlled trials of A and B grade integrative therapies for anxiety

Modality/ Therapy	Author, Year	Population, Sample Size	Intervention and Control Groups	Study Conclusions and Limitations
Meditation (A grade)	Carlson, 2013 ⁶⁸	Stage I-III; N=271	INTERVENTION: A mindfulness intervention patterned after Jon Kabat Zinn's MBSR program consisted of 8 weekly 90-minute group sessions and a 6-hour workshop. INTERVENTION: Supportive Expressive Therapy of 12 weekly 90-minute group sessions aiming to facilitate family support, enhance emotional expression, integrate a changed body image into the new view of the self, improve coping skills and doctor patient relationships, and detoxify feelings around death CONTROL: 6-hour didactic seminar on stress management	Greater decrease in stress levels in MBSR intervention compared to control
	Crane-Okada, 2012 ⁶⁹	50+ yo post-treatment; N=49	INTERVENTION: A Mindful Movement Program of 12 weekly 2-hour sessions led by a trained instructor included mindful walking/moving, group discussion, exploration of body parts, specific and deliberate movements, moving with intentional effort, active energetic movement, and partner work consisted CONTROL: SC	No group differences in anxiety symptoms
	Kim, 2013 ⁷⁰	Post-surgery receiving RT; N=102	INTERVENTION: Brain Wave Vibration meditation of two 60-minute sessions per week for 6 weeks included simple, rhythmic movements with music, action, and positive messages CONTROL: SC	Greater decrease in anxiety in intervention compared to control from implementation of meditation program following surgery
	Lengacher, 2009 ⁷¹	Within 18 months post-treatment transitioning back to daily life; N=84	INTERVENTION: Led by a trained psychologist, MBSR included sitting and walking meditation, body scan, yoga, and home practice for 2-hour sessions weekly for 6 weeks CONTROL: SC	Compared to control, greater improvements in anxiety in intervention group, and in trait anxiety and perceived stress in those who engaged in more hours of body scan and sitting meditation, suggesting those as more beneficial practices
	Würtzen, 2013 ⁷²	Stage I-III, 3-18 months post-surgery; N=336	INTERVENTION: Led by a trained clinical psychologist, a MBSR program of 8 weekly 2-hour group sessions and a 5-hour silent retreat included guided meditation, yoga, psycho-educational advice, group discussion, and home practice CONTROL: SC	Greater decrease in anxiety in intervention compared to control after 12 months from implementation of meditation program following surgery
Music Therapy (B grade)	Binns-Turner, 2011 ¹⁰⁴	Undergoing surgery; N=30	INTERVENTION: Passive music therapy where participants chose a music genres (classical, easy listening, inspirational, and new age), and listened with earphones and an iPod in a carrying case that covered the display to 4 hours of non-repeating continuous music immediately after sedation CONTROL: SC; iPod and earphones that stored no music	Greater decrease in anxiety in intervention compared to control from implementation of passive music therapy following sedation for surgery

	Bulfone, 2009 ¹⁰⁵	Stage I-II, 40-60 yo post-surgery entering hospital for scheduled CT; N=60	INTERVENTION: Passive music therapy where participants chose a music genre (new age, nature melodies, film soundtrack, Celtic melodies, and classical music) and listened for 15 minutes on a Walkman with earphones. CONTROL: SC; in the waiting room with no music	Greater decrease in anxiety in intervention compared to control from implementation of passive music therapy while waiting for CT
	Hanser, 2006 ¹⁰⁶	Stage IV; N=70	INTERVENTION: Led by a certified music therapist during treatment or in a consultation room, participants created live music through improvisation, song writing, and playing simple percussion instruments for three 45-minute sessions CONTROL: SC	Significant immediate effects of music therapy were observed on relaxation, but not on anxiety
	Li, 2012 ¹⁰⁷	Post-surgery; N=120	INTERVENTION: Passive music therapy where participants chose volume and a music genre (Chinese classical folk music, famous world music, music recommended by the American Association of Music Therapy, and Chinese relaxation music), and listened on earphones and an MP3 player twice a day for 30 minutes per session following surgery, and during the second and third time of hospital admission for CT CONTROL: SC; routine nursing care	Greater decrease in anxiety in intervention compared to control from implementation of passive music therapy at all three time points, following surgery and waiting for CT
	Zhou, 2015 ¹⁰⁸	Post-surgery; N=170	INTERVENTION: Within 48 hours after surgery, researchers trained in music therapy and PMR taught patients to do PMR and listen to music on MP3 players using headphones, twice a day in the early morning and late evening for 30-minute sessions; music was delivered through MP3 players with 230 songs in Chinese relaxation music, classical folk music, religious music, and music recommended by the American Association of Music Therapy. CONTROL: SC	While anxiety symptoms decreased over time for both groups, a larger and faster decrease in anxiety was seen in the music therapy and PMR training group compared to control.
Stress Management (B grade)	Aguado Loi, 2012 ¹¹⁴	Newly diagnosed, pre-CT; N=220; 59.5% BC patients	INTERVENTION: Patients received instructions on PMR, guided imagery, abdominal breathing and coping skills training CONTROL: SC	No significant improvements in either group on anxiety, although patients presented with lower stress scores at the outset than in previous studies
	Garssen, 2013 ¹¹²	Stage I-III post-surgery; N=85	INTERVENTION: Four 45-60 minute sessions on days 1 and 5 pre-surgery and 2 and 30 post-surgery included guided imagery techniques, relaxation, meditative exercises and counseling CONTROL: SC	Anxiety similarly decreased in both groups. Patients were very satisfied with the meetings with the clinical psychologist and gave high-perceived value to the information delivered
	Jacobsen, 2013 ¹¹³	With treatment plan including CT; N=460; 33% BC patients	INTERVENTION: Self-directed stress management training singly and in combination with exercise CONTROL: SC	Greater decrease in anxiety in intervention with combined stress management and exercise compared to either alone and control
	Phillips, 2008 ¹¹⁵	Recently diagnosed; N=128	INTERVENTION: Led by 2 trained female facilitators, 10 2-hour weekly sessions consisted of cognitive restructuring, social support, assertiveness, anger management, meditation, coping skills training, abdominal breathing, guided imagery and PMR CONTROL: A 6-hour psychoeducational group seminar of a condensed demonstration of several of the above techniques	Greater increases in ability to relax and reduced cortisol levels in cognitive-behavioral stress management intervention compared to controls across time

Yoga (B grade)	Banerjee, 2007 ¹¹⁷	Post-surgery with treatment plan of RT or RT/CT; N=68	INTERVENTION: Led by expert yoga teachers, a custom, intensive, integrated yoga program of 90-minute sessions over 6-weeks included slow stretching and loosening exercises, various postures (asanas), guided imagery specific to cancer, positive thought provocation, chanting exercises, various breathing exercises (Pranayama), and soothing sound vibrations and guided imagery (yoga nidra) CONTROL: Brief weekly supportive counseling and advised to engage in light exercise	Decrease in perceived stress and anxiety in yoga group after 6 weeks, and no change in control. Unclear if yoga intervention was weekly or daily, or if it was individual or in groups
	Bower, 2012 ¹²¹	Stage 0-II, 40-65 yo post-treatment with fatigue; N=31	INTERVENTION: Led by a trained instructor, a 90-minute twice a week for 12 weeks Iyengar and Hatha yoga in small group classes CONTROL: A 120-minute health education class facilitated by a psychologist, held once a week for 12 weeks	Perceived stress decreased over the assessment period in both groups
	Chandwani, 2010 ¹²⁴	Stage 0-III scheduled for RT; N=61	INTERVENTION: A trained yoga instructor provided two 60-minute yoga classes per week for 6-weeks based on Patanjali's Yoga Sutras during RT treatment with up to two participants, and included home practice. CONTROL: WLC	No changes in anxiety in either group
	Dhruva, 2012 ¹²²	Receiving CT; N=16	INTERVENTION: Pranayama or yogic breathing consisted of a weekly 60-minute class with 4 breathing practices with an instructor and 1-2 participants during 2 consecutive CT cycles, and included home practice CONTROL: SC during cycle 1 of CT and intervention during cycle 2	Anxiety decreased more in yoga group; greater improvements with more practice of pranayama
	Pruthi, 2012 ³⁷⁵	Receiving treatment; N=30	INTERVENTION: Led by a registered yoga instructor, 60-minute weekly individual therapeutic gentle hatha yoga sessions for 8 weeks focused on breathing techniques (pranayama) and included home practice CONTROL: SC	Perceived stress improved similarly in both groups
	Raghavendra, 2007 ¹¹⁹	Stage II or III receiving CT; N=62	INTERVENTION: Individual 30-minute bedside sessions prior to receiving each CT injection of yogic relaxation, meditation using breath awareness or chanting a mantra from a Vedic text, and included home practice CONTROL: Individual 60-minute coping preparation and psychodynamic supportive-expressive therapy sessions was given at the bedside prior to first CT cycle	Greater improvements in state and trait anxiety in yoga group than control
	Rao, 2009 ¹²⁰	Stage II-III RT with or without CT; N=98	INTERVENTION: Facilitated by 2 instructors, yoga program included asanas (postures), breathing exercises, pranayama (voluntarily regulated nostril breathing), meditation, yogic relaxation techniques with imagery, and home practice for 4 individual sessions during the pre-post-operative period and 3 individual sessions per week for 6 weeks during RT and CT CONTROL: Brief 15-minute supportive therapy sessions with individual counseling by a trained social worker once every 10 days, during hospital visits over 24-weeks	Decrease in both state and trait anxiety in yoga group compared to controls

	Taso, 2014 ⁷⁵	Stage I-III, nonmetastatic, undergoing CT; N=60	INTERVENTION: Yoga exercise program facilitated by an experienced instructor twice a week for 60 minute classes over an eight week period (16 sessions) during chemotherapy treatment CONTROL: SC	No improvement of anxiety following intervention
	Vadiraja, 2009 ¹¹⁸	Stage II and III post-surgery receiving RT; N=88	INTERVENTION: Same as Banerjee et al. 2007 program for a minimum of 3 60-minute sessions per week over a period of 6 weeks during RT CONTROL: Brief weekly supportive counseling and advised to engage in light exercise	Greater decreases in anxiety in the yoga compared with control groups

Abbreviations: BC, Breast Cancer; CBT, Cognitive Behavioral Therapy; CT, Chemotherapy; MBSR, Mindfulness-Based Stress Reduction; PMR, Progressive Muscle Relaxation; RT, Radiation Therapy; SC, Standard Care; WLC, Wait List Control; yo, years old

Supplemental Table 3: Summary of randomized controlled trials of A and B grade integrative therapies for mood disturbances/depression

Modality/Therapy	Author, Year	Population, Sample Size	Intervention and Control Groups	Study Conclusions and Limitations
Meditation (A grade)	Crane-Okada, 2012 ⁶⁹	50+ yo post-treatment; N=49	INTERVENTION: A Mindful Movement Program that included mindful walking/moving, group discussion, exploration of body parts, specific and deliberate movements, moving with intentional effort, active energetic movement, and partner work consisted of 12 weekly 2-hour sessions led by a trained instructor CONTROL: SC	No group differences on depression symptoms
	Carlson, 2013 ⁶⁸	Stage I-III; N=271	INTERVENTION: A mindfulness intervention patterned after Jon Kabat Zinn's MBSR program consisted of 8 weekly group sessions of 90 minutes and a 6 hour workshop. INTERVENTION: Supportive Expressive Therapy of 12 weekly group sessions of 90 minutes that aims to facilitate mutual and family support, enhance emotional openness and expression, integrate a changed body image into the new view of the self, improve coping skills and doctor patient relationships and detoxify feelings around death CONTROL: 6-hour didactic seminar on stress management	Women in MBSR improved more over time in mood
	Dodds, 2015 ¹⁶³	Survivors; N=33	INTERVENTION: The Cognitively-Based Compassion Training was delivered in eight weekly, 2-hour group classes and one booster session 4 weeks later by a certified instructor. The program is a secular adaptation of traditional Tibetan Buddhist methods for cultivating compassion (<i>lojong</i>). The classes included developing meditative concentration (<i>shamatha</i>) and mindfulness, and incorporated a series of contemplative exercises. CONTROL: WLC	CBCT group showed improvements in depression scores
	Henderson, 2013 ¹⁶²	Stage I or II receiving RT; N=172	INTERVENTION: Facilitated by trained graduate-level instructor, MBSR included an introductory and 8 weekly 2.5-3.5 hour larger group sessions, a 7.5-hour retreat, and 3 2-hour sessions facilitated by a psychiatrist at monthly intervals following the conclusion of the MBSR intervention. CONTROL: Nutrition education program (NEP) led by a registered dietician and matched the MBSR intervention for contact time and homework assignments CONTROL: SC	At 4 months, depression scores decreased more in MBSR than nutrition control and SC but this did not persist over follow-up
	Hoffman, 2012 ¹⁶⁰	Stage 0-III post-surgery post-treatment 2 months - 2 years prior; N=229	INTERVENTION: Administered by a trained instructor, MBSR consisted of 8 weekly 2-hour classes, plus a 6-hour retreat and included body scan and sitting meditation, gentle lying and standing yoga-based stretches, group discussion, didactic teaching, and home practice CONTROL: SC, WLC	MBSR improved mood and well-being more than SC, which persisted at three months

	Kim, 2013 ⁷⁰	Post-surgery receiving RT; N=102	INTERVENTION: Brain Wave Vibration meditation combines simple, rhythmic movements with music, action, and positive messages and consisted of two 60-minute sessions per week for 6 weeks CONTROL: SC	No group differences on depression symptoms
	Lengacher, 2009 ⁷¹	Within 18 months post-treatment; N=84	INTERVENTION: Led by a trained psychologist, MBSR included sitting and walking meditation, body scan, yoga, and home practice for 2-hour sessions weekly for 6 weeks CONTROL: SC	MBSR had significantly lower levels of depression at 6 weeks
	Milbury, 2013 ¹⁵⁹	Stage I-III post-treatment; N=47	INTERVENTION: Tibetan sound meditation includes breathing, awareness, concentration, visualization and sound exercises, and composed of 2 weekly instructor led 60-minute classes for 6 weeks, and included home practice CONTROL: WLC	Improved depression symptoms at end of treatment in meditation over control but not one month later
	Nidich, 2009 ¹⁶¹	Stage II-IV over 55 yo; N=130	INTERVENTION: Transcendental Meditation in a 7-session course led by a qualified instructor and included home practice for the duration of the study (32 months) CONTROL: SC; provided with basic educational materials	Significant improvements in the intervention group compared with controls in emotional well-being and overall mental health
	Würtzen, 2013 ⁷²	Stage I-III 3-18 months post-surgery; N=336	INTERVENTION: Led by a trained clinical psychologist, a MBSR program including guided meditation, yoga, psycho-educational advice, group discussion, and home practice composed of 8 weekly 2-hour group sessions and a 5-hour silent retreat CONTROL: SC	After 12 months MBSR had clinically meaningful improvements on depression symptoms compared to control
Relaxation (A grade)	Gudenkauf, 2015 ¹⁷⁹	Stage 0-III; N=183	INTERVENTION: two groups, relaxation training (RT) and cognitive-behavioral training (CBT) RT: In-session experiential training including abdominal breathing, guided imagery, meditation, and PMR, and out-of-session information and assignments for home practice administered over 5-weeks CBT: structured group cognitive-behavioral sessions that included awareness of stressors, coping skills, skills for social support, and anger management administered over 5-weeks CONTROL: Health Education control	Both CBT and RT groups reported reduced depressive affect compared to control. No differences between CBT and RT groups for depressive affect were found.
	Hidderley, 2004 ¹⁴¹	Early stage post-surgery receiving RT; N=31	INTERVENTION: Autogenic training or Western meditation that is meant to induce heaviness and warmth of limbs; calming of the heart and breathing; abdominal warmth; and cooling of the forehead; timing was not clearly reported but appears to have occurred weekly following lumpectomy and during RT over a 2-month period CONTROL: Home visit	Significant reductions in depression symptoms compared to control
	Molassiotis, 2002 ¹⁴⁴	Recently diagnosed scheduled to receive CT; N=71	INTERVENTION: PMR followed by imagery limited to the hour prior to and for five days after the first CT round ever. CONTROL: SC	Mood disturbance score decreased in intervention group, while it increased significantly in the control
	Nunes, 2007 ¹⁴⁵	Stage I or II receiving RT; N=34	INTERVENTION: Relaxation and visualization therapy for 24 days total CONTROL: SC	Significant reductions in depression symptoms compared to control

	Yoo, 2005 ¹⁷⁷	Stage II-III post-surgery within 2 months; N=60	INTERVENTION: PMR and guided imagery applied the hour before 6 CT administrations, and included home practice CONTROL: SC	Significant reductions in depression symptoms compared to control
	Walker, 1999 ¹⁷⁸	Newly diagnosed; N=96	INTERVENTION: PMR and imagery daily across 6 cycles of CT CONTROL: SC	Slight improvement in mood in intervention compared to control
Yoga (B grade)	Banerjee, 2007 ¹¹⁷	Post-surgery with treatment plan of RT or RT/CT; N=68	INTERVENTION: Led by expert yoga teachers, a custom, intensive, integrated yoga program of 90-minute sessions over 6-weeks included slow stretching and loosening exercises, various postures (asanas), guided imagery specific to cancer, positive thought provocation, chanting exercises, various breathing exercises (Pranayama), and soothing sound vibrations and guided imagery (yoga nidra) CONTROL: Brief weekly supportive counseling and advised to engage in light exercise	Greater decrease in depression symptoms in yoga group
	Bower, 2012 ¹²¹	Stage 0-II 40-65 yo post-treatment; N=31	INTERVENTION: Led by a trained instructor, a 90-minute twice a week for 12 weeks Iyengar and Hatha yoga in small group classes CONTROL: A 120-minute health education class facilitated by a psychologist, held once a week for 12 weeks	Both groups had reduced depressive symptoms from baseline to post-treatment, with a greater decline in the yoga group. No group differences at 3-month follow-up
	Chandwani, 2014 ⁷³	Stage 0-III scheduled for RT; N=178	INTERVENTION: A trained yoga instructor provided up to three 60-minute yoga classes based on Patanjali's Yoga Sutras each week during 6-week RT treatment including up to two participants at a time, with the majority of sessions being one-on-one, and included home practice CONTROL: A 60-minute stretching program was provided up to three times a week during 6-week RT treatment by physiotherapists. Stretches were introduced in a stepped approach and approximated the gross movements of the yoga intervention CONTROL: WLC	No group differences on depression scales
	Chandwani, 2010 ⁷³	Stage 0-III scheduled for RT; N=61	INTERVENTION: A trained yoga instructor provided up to 2 60-minute yoga classes based on Patanjali's Yoga Sutras each week during 6-week RT treatment including up to two participants at a time, with the majority of sessions being one-on-one, and included home practice CONTROL: WLC	No group differences on depression symptoms
	Culos-Reed, 2006 ¹⁵⁰	Post-treatment; N=38	INTERVENTION: Led by a certified yoga instructor, weekly 75-minute small group classes over a 7-week period consisted of gentle Hatha yoga including breathing, stretching, strengthening exercises, and relaxation CONTROL: WLC	Yoga group showed trend to reduced depression
	Danhauer, 2009 ¹⁵²	Post-surgery; N=44	INTERVENTION: Led by a registered yoga instructor, 10 weekly 75-minute group yoga classes incorporated physical postures, breathing exercises, and deep relaxation, with no requirement for home practice CONTROL: WLC	Yoga group improved more on mental health, depression, positive affect scores than control; benefits were greater for those with greater psychological morbidity at baseline

Dhruva, 2012 ¹²²	Receiving CT; N=16	INTERVENTION: Pranayama or yogic breathing consisted of a weekly 60-minute class with 4 breathing practices with an instructor and 1-2 participants during 2 consecutive CT cycles, and included home practice CONTROL: SC during cycle 1 of CT and intervention during cycle 2	No group differences on depression symptoms
Kiecolt-Glaser, 2014 ⁷⁴	Stage 0-IIIa post-treatment; N=200	INTERVENTION: Certified instructors facilitated two 90-minute group hatha yoga classes per week for 12 weeks. The classes consisted of 4 to 20 women. Home practice was encouraged. CONTROL: WLC	No group differences on depression
Moadel, 2007 ¹⁵¹	Ethnically diverse, recently diagnosed; N=128	INTERVENTION: 12 weekly 1.5-hour group classes based on Hatha yoga including physical stretches and poses, breathing exercises, meditation, and home practice, all completed in a seated or reclined position CONTROL: WLC	Among patients not receiving chemotherapy, yoga improved emotional well-being and mood
Pruthi, 2012 ³⁷⁵	Receiving treatment; N=30	INTERVENTION: Led by a registered yoga instructor, 60-minute weekly individual therapeutic gentle hatha yoga sessions for 8 weeks focused on breathing techniques (pranayama) and included home practice CONTROL: SC	Mood improved equally in both groups
Rao, 2015 ⁷⁶	Stage II and III undergoing surgery followed by adjuvant RT and/or CT; N=98	INTERVENTION: Individual integrated yoga program provided during hospital visits and at-home practice on remaining days. Yoga practices consisted of a set of asanas, breathing exercises, voluntarily regulated nostril breathing (pranayama), meditation, and relaxation with imagery. CONTROL: Individual, unstructured supportive-expressive therapy with an education component provided during hospital visits and extended over the course of RT and CT cycles (i.e., once in 10 days for 30 minute sessions)	Improvements in depression symptoms in yoga compared to control, though both groups improved in time.
Raghavendra, 2007 ¹¹⁹	Stage II or III receiving CT; N=62	INTERVENTION: Individual 30-minute bedside sessions prior to receiving each CT injection of yogic relaxation, meditation using breath awareness, or chanting a mantra from a Vedic text and included home practice CONTROL: Individual 60-minute coping preparation and psychodynamic supportive-expressive therapy sessions was given at the bedside prior to first CT cycle	Improvements in depression symptoms in yoga compared to control.
Taso, 2014 ⁷⁵	Stage I-III, nonmetastatic, undergoing CT; N=60	INTERVENTION: Yoga exercise program facilitated by an experienced instructor twice a week for 60 minute classes over an eight week period (16 sessions) during chemotherapy treatment CONTROL: SC	No improvement of mood disturbance following intervention
Vadiraja, 2009 ^{118, 153}	Stage II and III post-surgery receiving RT; N=88	INTERVENTION: Same as Banerjee et al. 2007 program for a minimum of three 60-minute sessions per week over a period of 6 weeks during RT CONTROL: Brief weekly supportive counseling and advised to engage in light exercise	Significant decreases in depression and improvement in positive affect in yoga compared to control

Massage (B grade)	Fernandez-Lao, 2012 ¹⁶⁹	Stage I-IIIa with fatigue between 25 and 65 yo post-treatment; N=20	INTERVENTION: Led by a trained physical therapist with BC survivors, a 40-minute myofascial intervention focused on the neck–shoulder area, longitudinal stroke, J stroke, sub-occipital sustained pressure, frontalis bone spread and ear pull techniques CONTROL: SC plus special attention to the patient for 40 minutes consisting of a clinician speaking about nutrition, physical activity, and relaxation techniques for improving quality of life after BC	Massage improved overall mood and subscales or tension–anxiety, depression–dejection and anger–hostility more than control
	Hernandez-Reif, 2004 ¹³⁸	Stage I or II post-surgery; N=34	INTERVENTION: Classic massage with acupressure and Trager®, which uses hundreds of small, rocking and elongating movements that release muscle tension, was provided by a registered massage therapist for three 30-minute massages each week for 5 weeks CONTROL: SC	Immediate massage therapy effects included reduced depression
	Krohn, 2011 ¹⁶⁷	Early Stage post-treatment; N=34	INTERVENTION: Classic massage therapy by licensed, female massage therapists in a quiet and private room CONTROL: SC	Massage significantly decreased depression
	Listing, 2009 ¹⁶⁸	Stage 0-II post-treatment; N=86	INTERVENTION: Classic massage therapy by licensed, female massage therapists in a quiet and private room CONTROL: SC and informed that they would receive PMR after the completion of the study	Classical massage improved short-term mood disturbance though study suffered from unbalanced study arms reducing power of the study
	Listing, 2010 ¹³⁹	Post-treatment; N=34	INTERVENTION: Classic massage therapy by the same licensed, female massage therapist for each session in a quiet and private room CONTROL: WLC	Massage improved mood compared to control
	Wilkinson, 2007 ¹⁴⁰	Diagnosed with clinical depression and/or anxiety; N=288; 55% BC	INTERVENTION: Standard supportive care and a 1-hour individually tailored massage provided weekly for 4 weeks CONTROL: SC	Greater improvement in self report depression at week 6 in intervention; both groups improved in depression at week 10, but no group differences
Music Therapy (B grade)	Burns, 2001 ¹⁴⁶	Completed RT and CT, under 65 yo; N=8	INTERVENTION: Led by a board-certified music therapist who implemented the Bonny Method of Guided Imagery and Music and played compact discs from the collection “Music for the Imagination”, music genres included Western art music and classical music for 10 weekly 90-110-minute sessions. CONTROL: WLC	More improvement in mood in music group than WLC.
	Hanser, 2006 ¹⁰⁶	Stage IV; N=70	INTERVENTION: Led by a certified music therapist during treatment or in a consultation room, participants created live music through improvisation, song writing, and playing simple percussion instruments for 3 45-minute sessions CONTROL: SC	Significant immediate effects of active music therapy for happiness, but no significant differences between conditions over time on depression.
	Zhou, 2015 ¹⁰⁸	Post-surgery; N=170	INTERVENTION: Within 48 hours after surgery, researchers trained in music therapy and PMR taught patients to do PMR and listen to music on MP3 players using headphones, twice a day in the early morning and late evening for 30-minute sessions; music was delivered through MP3 players with 230 songs in Chinese relaxation music, classical folk music, religious music, and music recommended by the American Association of Music Therapy.	While depression symptoms decreased over time for both groups, a larger and faster decrease in depression was seen in the music therapy and PMR training group compared to control.

			CONTROL: SC	
	Zhou, 2011 ¹⁴⁷	Post-surgery under 65 yo; N=120	INTERVENTION: Passive music therapy where participants chose volume and a music genre (Chinese classical folk music, famous world music, music recommended by the American Association of Music Therapy, and Chinese relaxation music), and listened on earphones and an MP3 player twice a day for 30 minutes per session following surgery, and during the second and third time of hospital admission for CT CONTROL: SC; routine nursing care	Music therapy group had lower depression scores than control at all post-tests (2 months)

Abbreviations: BC, Breast Cancer; CBT, Cognitive Behavioral Therapy; CT, Chemotherapy; MBSR, Mindfulness-Based Stress Reduction; NS, Not Specified; PMR, Progressive Muscle Relaxation; RT, Radiation Therapy; SC, Standard Care; UC, Usual Care; WLC, Wait List Control; yo, years old

Supplemental Table 4: Summary of randomized controlled trials of A and B grade integrative therapies to improve quality of life and physical function

Modality/Therapy	Author, Year	Population, Sample Size	Intervention and Control Groups	Study Conclusions and Limitations
Meditation (A grade)	Crane-Okada, 2012 ⁶⁹	50+ yo post-treatment; N=49	INTERVENTION: A Mindful Movement Program that included mindful walking/moving, group discussion, exploration of body parts, specific and deliberate movements, moving with intentional effort, active energetic movement, and partner work consisted of 12 weekly 2-hour sessions led by a trained instructor CONTROL: SC	Mindful Movement Program better than SC
	Henderson, 2012 ²¹⁶	Stage I-II; N=172	INTERVENTION: Facilitated by a trained graduate-level instructor, MBSR included an introductory and 8 weekly 2.5-3.5 hour larger group sessions, a 7.5-hour retreat, and 3 2-hour sessions facilitated by a psychiatrist at monthly intervals following the conclusion of the MBSR intervention. CONTROL: Nutrition education program (NEP) led by a registered dietician and matched the MBSR intervention for contact time and homework assignments CONTROL: SC	Stress management better than nutrition control and SC
	Henderson, 2013 ¹⁶²	Stage I or II receiving RT; N=110	Same as Henderson, 2012 above	MBSR better than control groups
	Hoffman, 2012 ¹⁶⁰	Stage 0-III post-surgery post-treatment 2 months - 2 years prior; N=229	INTERVENTION: MBSR administered by a trained instructor, followed the traditional program design, with women attending 8 weekly 2-hour classes, plus a 6-hour retreat; formal mindfulness practices included: body scan meditation, gentle lying and standing yoga-based stretches, sitting meditation, group discussion, didactic teaching, and home practice; participants were provided with four 45-minute guided meditation CDs and a manual to facilitate the recommended 40-45 minute daily at home practice (6 or 7 days per week). CONTROL: SC, WLC	MBSR better than WLC
	Kim, 2013 ⁷⁰	Post-surgery receiving RT; N=102	INTERVENTION: Brain Wave Vibration meditation combines simple, rhythmic movements with music, action, and positive messages and consisted of two 60-minute sessions per week for 6 weeks CONTROL: SC	Meditation better than SC
	Lengacher, 2009 ⁷¹	Within 18 months post-treatment; N=84	INTERVENTION: Led by a trained psychologist, MBSR included sitting and walking meditation, body scan, yoga, and home practice for 2-hour sessions weekly for 6 weeks CONTROL: SC	MBSR better than SC
	Nidich, 2009 ¹⁶¹	Stage II-IV over 55 yo; N=130	INTERVENTION: Transcendental Meditation in a 7-session course led by a qualified instructor and included home practice for the duration of the study (32 months)	Meditation better than SC

			CONTROL: SC; provided with basic educational materials	
Yoga (B grade)	Banasik, 2011 ³²⁷	Stage II-IV, at least 2 months post-treatment; N=18	INTERVENTION: An 8-week traditional Iyengar yoga class was delivered in 90-minute sessions, two times per week. CONTROL: WLC	Yoga better than WLC
	Chandwani, 2010 ¹²⁴	Stage 0-III scheduled for RT; N=61	INTERVENTION: A trained yoga instructor provided up to 2 60-minute yoga classes based on Patanjali's Yoga Sutras each week during 6-week RT treatment including up to two participants at a time, with the majority of sessions being one-on-one, and included home practice CONTROL: WLC	Yoga better than WLC and SC
	Cramer, 2015 ⁷⁸	Stage I-III post-treatment; N=40	INTERVENTION: A 12-week traditional Hatha yoga and meditation intervention was facilitated weekly by certified a instructor in 90-minute sessions. Classes focused on guided relaxation, breathing techniques, yoga postures, and meditation practices. Participants were encouraged to practice at home. CONTROL: WLC	Yoga better than WLC
	Culos-Reed, 2006 ¹⁵⁰	Post-treatment; N=38	INTERVENTION: Led by a certified yoga instructor, weekly 75-minute small group classes over a 7-week period consisted of gentle Hatha yoga including breathing, stretching, strengthening exercises, and relaxation CONTROL: WLC	Yoga better than WLC
	Danhauer, 2009 ¹⁵²	Post-surgery; N=44	INTERVENTION: Led by a registered yoga instructor, 10 weekly 75-minute group yoga classes incorporated physical postures, breathing exercises, and deep relaxation, with no requirement for home practice CONTROL: WLC	Yoga better than WLC
	Dhruva, 2012 ¹²²	Receiving CT; N=16	INTERVENTION: Pranayama or yogic breathing consisted of a weekly 60-minute class with 4 breathing practices with an instructor and 1-2 participants during 2 consecutive CT cycles, and included home practice CONTROL: SC during cycle 1 of CT and intervention during cycle 2	Yoga better than SC
	Littman, 2012 ²⁰⁹	Stage 0-III post-treatment with BMI ≥ 24 kg/m ² ; N=63	INTERVENTION: –Intervention was based on viniyoga, a Hatha style of yoga that involves physical stretches and poses, breath control, and meditation. Adapted for use with overweight or obese BC survivors without yoga experience. Practiced five times per week, including at least one 75-minute facility-based class. CONTROL: WLC	Yoga better than WLC
	Moadel, 2007 ¹⁵¹	Recently diagnosed; N=128	INTERVENTION: 12 weekly 1.5-hour group classes based on Hatha yoga including physical stretches and poses, breathing exercises, meditation, and home practice, all completed in a seated or reclined position CONTROL: WLC	Yoga better than SC
	Pruthi, 2012 ²²⁰	Receiving treatment; N=15	INTERVENTION: Led by a registered yoga instructor, 60-minute weekly individual therapeutic gentle hatha yoga sessions for 8 weeks focused on breathing techniques (pranayama) and included home practice CONTROL: SC	Yoga better than SC

	Raghavendra, 2007 ¹⁵⁴	Stage II or III receiving CT; N=62	INTERVENTION: Individual 30-minute bedside sessions prior to receiving each CT injection of yogic relaxation, meditation using breath awareness, or chanting a mantra from a Vedic text and included home practice CONTROL: Individual 60-minute coping preparation and psychodynamic supportive-expressive therapy sessions was given at the bedside prior to first CT cycle	Yoga better than SC
	Siedentopf, 2013 ⁷⁷	Post-surgery; N=93	INTERVENTION: 75-minute classes facilitated by certified instructors were provided at the gym in the hospital twice a week for five weeks. The program focused on yoga poses (asanas), breathing exercises, eye exercises, and concentration exercises. CONTROL: WLC 5 weeks after surgery	Yoga better than WLC
	Vadiraja, 2009 ²²¹	Stage II and III post-surgery receiving RT; N=88	INTERVENTION: Same as Banerjee et al. 2007 program for a minimum of 3 60-minute sessions per week over a period of 6 weeks during RT CONTROL: Brief weekly supportive counseling and advised to engage in light exercise	Yoga better than control group

Abbreviations: BC, Breast Cancer; CT, Chemotherapy; MBSR, Mindfulness-Based Stress Reduction; RT, Radiation Therapy; SC, Standard Care; WLC, Wait List Control; yo, years old;

Supplemental Table 5: Summary of randomized controlled trials of A- and B-graded integrative therapies in breast cancer patients with chemotherapy, nausea and vomiting outcomes

Modality/ Therapy	Author, Year	Population, Sample Size	Intervention and Control Groups	Study Conclusions and Limitations
Acupressure (B grade)	Dibble, 2000 ²⁴⁰	Receiving CT; N=17	INTERVENTION: Self-applied acupressure immediately prior to CT session during one cycle of CT. CONTROL: SC	Acupressure better than SC
	Dibble, 2007 ²⁴¹	Receiving CT; N=160	INTERVENTION: Daily self-treatment with verum acupressure to the P6 acupressure point CONTROL: Daily self-treatment with placebo acupressure to the SI3 acupressure point CONTROL: SC	Acupressure better than sham and SC to decrease incidence of delayed nausea and vomiting; Acupressure no different than sham or SC for acute nausea and vomiting

	Molassiotis, 2007 ²⁴²	Stage I-III receiving CT; N=54	INTERVENTION: Acupressure was applied using Sea-Band™ wristbands worn bilaterally with the stud pressing on the P6 acupressure point that they wore for the 5 days following CT administration CONTROL: WLC; participants received antiemetics and were told that they would receive the acupressure instructions and be given the wristbands to use starting in their next cycle of CT	Sea-bands better than SC
Acupuncture (B grade)	Beith, 2012 ²⁴⁹	Early stage receiving CT; N=32	INTERVENTION: Electroacupuncture for 20 minutes at least 2 hours prior to CT on the first two days of the first two cycles using acupoints PC-6, LI-4, and ST-36 where prior to electrical stimulation, manual needling techniques were performed to induce the de qi sensation CONTROL: Sham electroacupuncture receiving identical treatment using placebo needles and non-functioning electrodes.	Electroacupuncture no better than sham likely due to the fact that the study was underpowered, only evaluating feasibility with minimal electroacupuncture intervention, and without a no-acupuncture arm
	Shen, 2000 ²⁵⁰	BC patients; N=104	INTERVENTION: Bilateral stimulation at PC-6 and ST-36 for 20 minutes once daily over 5 days where prior to electrical stimulation, manual needling techniques were performed to induce the de qi sensation CONTROL: Minimal needling with mock stimulation plus SC CONTROL: SC	Electroacupuncture better than minimal needling and SC

Abbreviations: BC, Breast Cancer; CINV, Chemotherapy-Induced Nausea Vomiting; CT, Chemotherapy; RT, Radiation Therapy; SC, Standard Care; WLC, Wait List Control; yo, years old