



Applications for Community Oncology

Nurse Symposium

June 28, 2023



Managing Side Effects of Immunotherapy

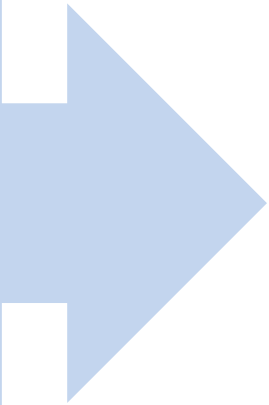
Maya Leiva



Current FDA Approved Immunotherapies

Immunotherapy is the use of substances to activate or inhibit the immune response to help the body fight cancer

- Atezolizumab (Tecentriq®)
- Avelumab (Bavencio®)
- Cemiplimab (Libtayo®)
- Dostarlimab-gxly (Jemperli®)
- Durvalumab (Imfinzi®)
- Ipilimumab (Yervoy®)
- Nivolumab (Opdivo®)
- Pembrolizumab (Keytruda®)



Non-Small Cell Lung Cancer
Small Cell Lung Cancer
Malignant Pleural Mesothelioma
Urothelial Carcinoma
Renal cell carcinoma
Colorectal Cancer
Esophageal Cancer
Biliary Tract Cancers
Hepatocellular Carcinoma
Gastroesophageal cancers
Endometrial Cancer
Melanoma
Cutaneous Squamous Cell Carcinoma
Basal Cell Carcinoma
Squamous Cell carcinoma of the Head and Neck
Classical Hodgkin Lymphoma
Primary Mediastinal Large B-Cell Lymphoma (PMBCL)
Microsatellite Instability-High or Mismatch Repair Deficient Cancer
Gastric Cancer
Cervical Cancer
Merkel Cell Carcinoma
Triple Negative Breast Cancer
Tumor Mutational Burden-High (TMB-H) Cancer

Common Toxicities with Immunotherapies

- ICIs enhance T-cell activation and expansion
- Immune cells have the ability to infiltrate most organs
- Can induce a spectrum of irAEs that can affect any organ system



Endocrine

- Hyperglycemia-related diabetic ketoacidosis (DKA)
- Asymptomatic/subclinical hypothyroidism
- Clinical (overt) primary hypothyroidism
- Thyrotoxicosis due to thyroiditis
- Hypophysitis
- Primary adrenal insufficiency

Renal

- Acute kidney injury (AKI)

Dermatologic

- Bullous dermatitis
- Maculopapular rash
- Pruritis
- Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN)
- Lichen planus
- Psoriasis and psoriasiform
- Oral mucosa inflammation
- Dry mouth (Sicca syndrome)
- Oral dysesthesia

Ocular

- Vision changes

Neurologic

- Aseptic meningitis
- Encephalitis
- Guillain-Barré syndrome (GBS)
- Myasthenia gravis
- Peripheral neuropathy
- Demyelinating disease

Cardiovascular

- Myocarditis

Pulmonary

- Pneumonitis

Gastrointestinal

- Colitis
- Transaminitis
- Pancreatitis

Musculoskeletal

- Inflammatory arthritis
- Myositis
- Polymyalgia rheumatica (PMR) and giant cell arteritis (GCA)



Immunotherapy Patient Education

Prior to initiating treatment, counsel patients and caregivers on the warning signs and symptoms of immune-related adverse events (irAEs)

Inform patients of existing educational resources:

- NCCN Guidelines for Patients¹
- Understanding Immunotherapy Side Effects²
- Oncology Nursing Society:
 - Immunotherapy Wallet Cards³



[1. immunotherapy.pdf \(nccn.org\)](#)

[2. immunotherapy_infographic.pdf \(nccn.org\)](#)

[3. IO Card 1-sided Vertical.pdf \(ons.org\)](#)

Checklist for Oncology Nurses

Communication between all HCPs will help ensure that the most appropriate care is received

Monitor and track any new signs or symptoms

Any new signs or symptoms developed should be reported to the oncology team

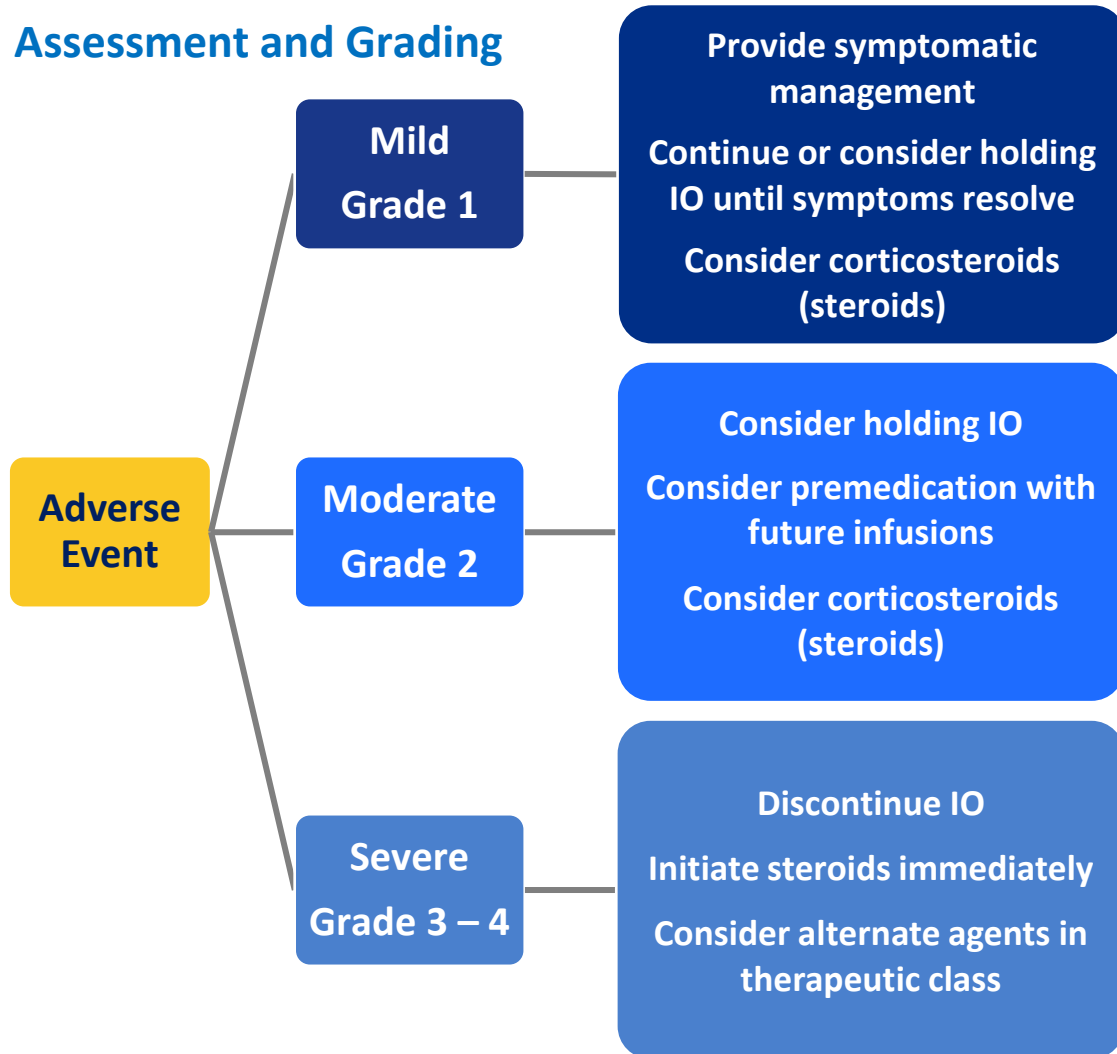
Prompt evaluation and management of symptoms are very important

Note that irAEs can occur at any time after the start of therapy

Most irAEs are mild to moderate in severity but are reversible if detected early and promptly addressed

General Recommendations

Assessment and Grading



NCCN Toxicity Management Recommendations (IMMUNO-B)

Mild to moderate AEs: Provide symptomatic management. Delay in immunotherapy may be recommended if unclear if irAE is developing or until AEs resolve to grade 1 or pre-treatment baseline. Steroids may be required if AE does not improve. If hormone replacement is required, it is usually for lifetime and may continue beyond the completion of therapy with ICIs

Severe AEs: Discontinue immunotherapy. Initiate steroid therapy immediately. IV methylprednisolone should be considered until there is evidence of improvement in toxicity. Additional immunosuppressant therapy may be required for steroid-refractory AEs. Inpatient care and additional supportive care may be required

Supportive care during immunosuppressant therapy may include the following: Monitoring of blood glucose levels; PPIs or H2 blockers to prevent gastritis; Antimicrobial and antifungal prophylaxis to prevent opportunistic infections; Vitamin D and calcium supplementation to prevent osteoporosis

Triple Negative Breast Cancer Patient Case Study

Katie Alexander





JC is a 70-year-old female diagnosed with invasive ductal carcinoma, Grade 2

PMH: OA, Osteoporosis, Hyperlipidemia, Anxiety; PSH: Parathyroid gland removed in 2016 with NKDA who presents for evaluation after abnormal screening mammogram showed a **3.4 cm irregular mass in right upper outer quad of right breast**. One (1) lymph node on US was abnormal; Bx showed invasive ductal carcinoma

Key information

Biomarkers

- ER/PR (-); Her2 (-); KI-67 of 20%.

Performance status

- ECOG PS 1

Imaging/MRI

- CT staging of the chest, abdomen and pelvis and bone scan shows no evidence of metastatic disease

Treatment selection

Regimen: pembrolizumab, carboplatin, paclitaxel every 21 days for 4 cycles* followed by pembrolizumab, doxorubicin and cyclophosphamide every 21 days for 4 cycles; followed by operative intervention

(*KEYNOTE 335 study; presented in July 2020 at San Antonio Breast; showed improved PFS, ORR, durable CR and duration of response for patients with locally recurrent, unresectable or mTNBC with tumors expressing PD-L1 and a CPS ≥ 10)



JC is a 70-year-old female diagnosed with invasive ductal carcinoma, Grade 2

Side effects:

Traditional chemotherapy side effects

- Common with Carbo/Taxol: N/V/D; fatigue
- Less common with Taxol: increased LFT's; rash
- Less common with Carbo: Central Neurotoxicity: dizziness; confusion; visual changes; tinnitus
- Common with Doxorubicin/Cytosan: N/V/D
- Less Common with Doxo: Urine appearing dark red, brown, orange, or pink
- Less common with Cytosan: Bladder irritation and bleeding (hemorrhagic cystitis)

What to ask when monitoring side effects?

- N/V:** are premedication's being used? How long are they effective for? Does the pt. need meds for acute versus delayed onset nausea?
- Diarrhea:** How many stools/24 hours period? Description of stools (Bristol Stool Chart). Dietary intake before/during/after diarrhea? Is this the pts baseline or different from their baseline (i.e., IBS/Celiacs pts)
- Central Neurotoxicity:** More common in pts >65 years: Onset of dizziness/visual changes? Did family notice a different on confusion/mentation? Any risk factors for UTI or underlying infection processes? Describe the tinnitus (ringing; high pitched; rumbling)
- Urine changes:** frank red blood vs dark red/brown or orange? Pain with urination? Foul smelling? UTI vs hemorrhagic cystitis?

Metastatic Melanoma Patient Case Study

Katie Alexander





LC is a 61-year-old male diagnosed with metastatic melanoma

PMH: melanoma to the arm; MI with stents placed and epilepsy; PSH of resection of melanoma, umbilical hernia repair; and hemorrhoidectomy. Pt with drug allergies to Ativan and Sulfa. Presents to the ER after a seizure. Pt had previously been seizure free and well controlled on his anti-neuroleptics. COVID test in the ER was positive. CT head showed left frontal brain mass. He underwent craniotomy with surgical resection

Key information

- **Performance Status:** ECOG PS 2
- Pathology showed metastatic melanoma; superficial spreading, thickness of 0.3 mm and mitosis less than 1/mm²
- Underwent 3 Cyberknife radiotherapy treatments approx. 2 months after surgery
- Underwent pre study enrollment MRI and was noted to have a new left occipital mass
- Underwent 4 Cyberknife radiotherapies to that area as well

Treatment selection

Regimen: OPDIVO (nivolumab) 1mg/kg IV; Yervoy 3mg/kg (ipilimumab) q 21d X 4 Cycles; then OPDIVO (nivolumab) 240mg q 14d x 20 Cycles

(*September 30, 2015, the U. S. Food and Drug Administration granted accelerated approval to nivolumab (OPDIVO Injection, Bristol-Myers Squibb Company) in combination with ipilimumab for the treatment of patients with BRAF V600 wild-type, unresectable or metastatic melanoma. The study demonstration of an increase in the objective response rate (ORR), prolonged response durations, and improvement in progression-free survival (PFS) in an international, multicenter, double-blind, randomized, two-arm, active-controlled trial in patients who were previously untreated for unresectable or metastatic, BRAF V600 wild-type melanoma.)



LC is a 61-year-old male diagnosed with metastatic melanoma

Side effects:

Common with ipilimumab/nivolumab:

- Fatigue
- Myalgias
- Decreased appetite

Less common with ipilimumab/nivolumab:

- N/V/D
- Fevers
- Abdominal pain

What to review with pts, look out for the “-itis’s” of immunotherapy?

- Hypophysitis:** fatigue and headache. The diagnosis is established by low levels of the hormones produced by the pituitary (adrenocorticotrophic hormone [ACTH], TSH, follicle-stimulating hormone [FSH], luteinizing hormone [LH], growth hormone [GH], prolactin)
- Thyroiditis:** most commonly present with fatigue; will have changes to their TSH, T4 high thyroid-stimulating hormone (TSH) with low free thyroxine (T4) indicates primary hypothyroidism while low TSH with low free T4 indicates secondary hypothyroidism and likely hypophysitis
- Pneumonitis:** shortness of breath; chest pain with breathing; dry cough
- Hepatitis:** usually asymptomatic but can present with fever, fatigue and jaundice (late sign). Increase in LFT's primarily AST/ALT
- Colitis:** diarrhea with associated cramping; urgency and rectal bleeding
- Skin rash:** nonspecific, maculopapular eruption and psoriasiform, eczematous, and lichenoid dermatoses

Hepatocellular Cancer Patient Case Study

Katie Alexander





GT is a 68-year-old male diagnosed with hepatocellular carcinoma

PMH: iron deficiency anemia; DM type 2; hyperlipidemia; HTN; BPH; hypothyroidism; ulcerative colitis s/p colectomy/ileostomy and chronic renal failure who presents to the ER for bleeding around his ostomy.

Key information

- **Performance Status:** ECOG PS 2
- CT C/A/P showed findings consistent with cirrhosis and portal hypertension, as well as a 4.7 cm mass within the right lobe of the liver concerning for hepatocellular carcinoma.
- CT also showed large varicosity extending from the mesentery to the ostomy site, the likely source of GIB.
- Abdominal MRI on 5/16 demonstrates 2 liver masses show peripheral enhancement, LIRADS category M, probably malignant.
- S/p 5/17 EGD without active bleeding.
- The patient underwent liver biopsy and transhepatic embolization of the parastomal varices on 5/18/23.
- Pathology: Well-differentiated hepatocellular carcinoma

Treatment selection

Regimen: durvalumab 1500 mg IV every 28 days; Imjudo (tremelimumab-actl) 300 mg IV C1 D1 only (one dose)

(*HIMALAYA Phase III trial. In this trial, patients treated with the combination of IMJUDO and IMFINZI experienced a 22% reduction in the risk of death versus sorafenib (based on a hazard ratio [HR] of 0.78, 95% confidence interval [CI] 0.66-0.92 p=0.0035).¹ Results were also published in the New England Journal of Medicine Evidence showing that an estimated 31% of patients treated with the combination were still alive after three years..)



GT is a 68-year-old male diagnosed with hepatocellular carcinoma

Side effects:

- **Common with Durvalumab:** fatigue; infection
- **Common with Imjudo:** rash, diarrhea, fatigue, pruritus, musculoskeletal pain, and abdominal pain.
- **Less common with Durvalumab:** “itis’s”
- **Less common with Imjudo:** hemorrhage, diarrhea, sepsis, pneumonia, rash, vomiting, acute kidney injury, and anemia

IMJUDO is a cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4) blocking antibody indicated in combination with durvalumab for the treatment of adult patients with unresectable hepatocellular carcinoma (uHCC).

Imjudo also carries an infusion reaction warning
Imjudo can cause severe or life-threatening infusion-related reactions. Monitor for signs and symptoms of infusion-related reactions. Interrupt, slow the rate of, or permanently discontinue IMFINZI and IMJUDO based on the severity.

----- WARNINGS AND PRECAUTIONS -----

- Immune-Mediated Adverse Reactions (5.1)
 - Immune-mediated adverse reactions, which may be severe or fatal, can occur in any organ system or tissue, including the following: immune-mediated pneumonitis, immune-mediated colitis, immune-mediated hepatitis, immune-mediated endocrinopathies, immune-mediated dermatologic adverse reactions, immune-mediated nephritis with renal dysfunction and immune-mediated pancreatitis.
 - Monitor for early identification and management. Evaluate liver enzymes, creatinine, adrenocorticotrophic hormone level and thyroid function at baseline and before each dose.
 - Withhold or permanently discontinue based on severity and type of reaction.
- **Infusion-Related Reactions: Interrupt, slow the rate of infusion, or permanently discontinue treatment based on the severity of the reaction.** (5.2)
- Embryo-Fetal Toxicity: Can cause fetal harm. Advise females of reproductive potential of the potential risk to a fetus and use of effective contraception. (5.3, 8.1, 8.3)

*IMJUDO Full Prescribing Information
(den8dhaj6zs0e.cloudfront.net)



wellCORNER™
A Cornerstone Specialty Network Company

Chelsea Brondeau, Director of Operations
Cornerstone Specialty Network

Maya Leiva, PharmD, BCOP, APP
BASS Medical Group





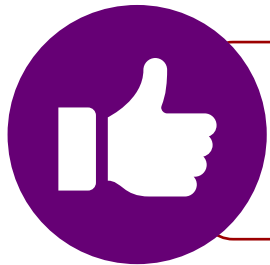
90%

believe patients' general interest in complementary and alternative medicine, nutrition, and general wellness over the last five years is increasing



60%

get asked by their patients about complementary medicines and wellness products at least multiple times per week

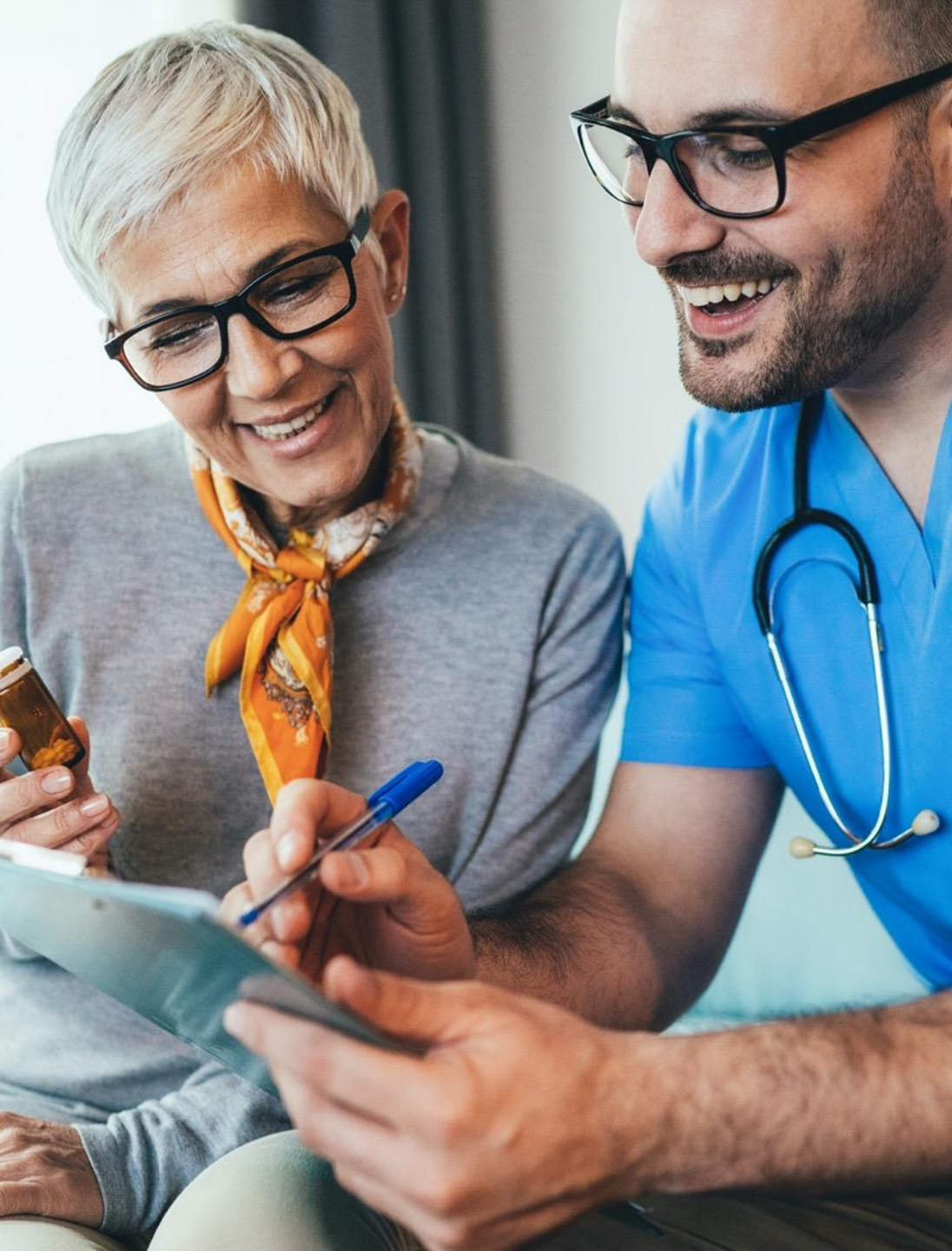


50%

indicated they are not comfortable discussing complementary medicines with their patients

HCPs believe that patients will seek wellness products on their own regardless; a trusted resource for patient education and product recommendations is preferred

Locating high-quality products on-line is tough...



wellCORNER's mission is to
wellCORNER provides a solution.
A world-class high-quality care delivered
that is specifically designed to help
HCPs help their patients and
their caregivers.



KEY BENEFITS for Patients

- ✓ Access to natural, high-quality products that are scientifically formulated for cancer patients
- ✓ Products available through WellCORNER offer patients a lower retail price
- ✓ Receive medically reviewed education about products and their purpose



KEY BENEFITS for Practices

Medically Reviewed Products and Education

- Aromatherapy
- Cold therapy
- Multivitamins
- Skincare
- Nausea Relief Bracelets

Provided to patients at point-of-care

- Website accessible via all mobile devices
- Marketing materials provided to oncology practices for distribution

Turn-key Solution for Practice

- Products shipped direct to patient, practice does not house inventory
- wellCORNER team connects with practice advocates

KEY BENEFITS for Patients

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- ✓ Products available through WellCORNER offer patients a lower retail price
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wellCORNER Product Offerings

Product Curation

- Selected through market research efforts with oncology healthcare professionals
- Thorough research and vetting is performed to select manufacturers/product partners
- Products offered through wellCORNER.com MUST:
 - Be reviewed by the wellCORNER Professional Advisory Board
 - Have science-based formulations or design
 - For ingestible products, be third-party tested for quality and purity
 - Support a cancer patient's overall wellness

Aromatherapy



What is it?

- Aromatherapy is the therapeutic use of essential oils derived from plants to improve physical and mental well-being
- Most essential oils have been classified as GRAS (generally recognized as safe), at specified concentration limits, by the FDA



How does it work?

- The effects of aromatherapy are theorized to result from the binding of chemical components in the essential oil to receptors in the olfactory bulb, impacting the limbic system



Clinical Study Landscape

- Clinical trials of aromatherapy have studied its use in the treatment of anxiety, nausea, vomiting, and other health related conditions in cancer patients
- Safety testing on essential oils shows very few side effects or risks when used as directed

Aromatherapy: Clinical Study Snapshot

Study / Article	Design	Date	Result
The Effects of Peppermint Oil on Nausea, Vomiting and Retching in Cancer Patients Undergoing Chemotherapy	<ul style="list-style-type: none"> Open Label, quasi-randomized: 90 patients assigned to Peppermint Oil and Control (no additional treatment) Measured using Index of Nausea, Vomiting, and Retching (INRV) and Visual Analog Scale for Nausea Severity 	2021	<ul style="list-style-type: none"> The incidence of nausea, vomiting, retching and accompanying feelings of distress were significantly lower among patients in the intervention group than in the control group. Participants also reported improved quality of life
Efe Ertürk N, Taşcı S. The Effects of Peppermint Oil on Nausea, Vomiting and Retching in Cancer Patients Undergoing Chemotherapy: An Open Label Quasi-Randomized Controlled Pilot Study. Complement Ther Med. 2021 Jan;56:102587. doi: 10.1016/j.ctim.2020.102587. Epub 2020 Oct 9. PMID: 33197662.			
The Effect of Lavender on Anxiety and Sleep Quality in Patients Treated With Chemotherapy	<ul style="list-style-type: none"> Controlled trial: 70 patients randomly assigned to Lavender oil, Tea tree oil, and Control (no oil) Anxiety and sleep quality were measured before and after chemo with state-trait anxiety inventory and PSQI 	April 2018	<ul style="list-style-type: none"> Comparison of trait anxiety values before and after chemo showed a significant difference in the lavender group A significant change in PSQI measurements before and after chemotherapy was also observed
Ozkaraman A, Dügüm Ö, Özen Yılmaz H, Usta Yesilbalkan Ö. Aromatherapy: The Effect of Lavender on Anxiety and Sleep Quality in Patients Treated With Chemotherapy. Clin J Oncol Nurs. 2018 Apr 1;22(2):203-210. doi: 10.1188/18.CJON.203-210. PMID: 29547610			

Cold Therapy



What is it?

- The process of cooling the body for therapeutic purposes. This can refer to localized cold therapy, such as the use of ice packs, or whole-body cryotherapy which is exposing the whole body to vapors that reach ultra-low temperatures.



How does it work?

- For localized cold therapy, the theory behind the effectiveness for neuropathy is that the application of cold causes vasoconstriction, or the restriction of blood vessels. When the small blood vessels in hands and feet, capillaries, are constricted, less chemotherapy is delivered to the nerve endings in the hands and feet, thereby decreasing the toxic effect these drugs have on nerve endings.



Clinical Study Landscape

- Studies have shown positive results for the use of cold therapy to prevent Chemo-Induced Peripheral Neuropathy (CIPN) with few to no side effects
- Studies acknowledge that more thorough trials are needed to validate its efficacy and determine the proper protocol

Cold Therapy: Clinical Study Snapshot

Study / Article	Design	Date	Result
Improving Quality of Life During Chemotherapy: Cannabinoids, Cryotherapy, and Scalp Cooling <i>DOI: 10.1200/EDBK_390428 American Society of Clinical Oncology Educational Book 43 (June 2, 2023)</i>	<ul style="list-style-type: none"> Article published in American Society of Clinical Oncology Educational Book 	June 2023	Cryotherapy, compression therapy, and cryocompression therapy may improve rates of PN in patients receiving chemotherapy via restricted blood flow to susceptible nerves
Effect of cryotherapy on paclitaxel-induced peripheral neuropathy of the hand in female breast cancer patients <i>Yang TT, Pai HC, Chen CY. Effect of cryotherapy on paclitaxel-induced peripheral neuropathy of the hand in female breast cancer patients: A prospective self-controlled study. Int J Nurs Pract. 2022 Aug 15:e13094. doi: 10.1111/ijn.13094. Epub ahead of print. PMID: 35971279.</i>	<ul style="list-style-type: none"> Study included 21 breast cancer patients; a quasi-experimental and prospective self-controlled study using frozen gloves and dominant vs non-dominant hands as study / control group 	Feb 2022	<ul style="list-style-type: none"> Based on the results of this study, cryotherapy was shown to effectively prevent paclitaxel-induced peripheral neuropathy of the hand Cryotherapy was well-tolerated, and no serious adverse effects have been reported
Cryotherapy for Prevention of Taxane-Induced Peripheral Neuropathy: A Meta-Analysis <i>Jia J, Guo Y, Sundar R, Bandla A, Hao Z. Cryotherapy for Prevention of Taxane-Induced Peripheral Neuropathy: A Meta-Analysis. Front Oncol. 2021 Nov 29;11:781812. doi: 10.3389/fonc.2021.781812. PMID: 34912720; PMCID: PMC8667340.</i>	<ul style="list-style-type: none"> Meta-analysis of 2250 patients across 9 trials The primary outcome was the incidence of TIPN 	Nov 2021	<ul style="list-style-type: none"> Prophylactic cryotherapy is likely to prevent TIPN in patients. However, no definite protocols for cryotherapy have been recommended for the intervention parameters and dosing such as the variety in temperature control measures of current studies
The Impact of Peripheral Cooling on CIPN: An Integrative Review <i>Sphar BG, Bowe C, Dains JE. The Impact of Peripheral Cooling on Chemotherapy-Induced Peripheral Neuropathy: An Integrative Review. J Adv Pract Oncol. 2020 Nov-Dec;11(8):845-857. doi: 10.6004/jadpro.2020.11.8.5. Epub 2020 Nov 1. PMID: 33489425; PMCID: PMC7810270.</i>	<ul style="list-style-type: none"> Analyzed 6 studies on effect of cooling on CIPN 	Nov 2020	<ul style="list-style-type: none"> Evidence of protective effects of peripheral cooling against CIPN is variable. Both direct application of cooling and use of compression to achieve fingertip cooling show potential benefit in reducing CIPN severity
Cryotherapy for the prevention of weekly paclitaxel-induced peripheral adverse events in breast cancer patients <i>Shigematsu H, Hirata T, Nishina M, Yasui D, Ozaki S. Cryotherapy for the prevention of weekly paclitaxel-induced peripheral adverse events in breast cancer patients. Support Care Cancer. 2020 Oct;28(10):5005-5011. doi: 10.1007/s00520-020-05345-9. Epub 2020 Feb 8. PMID: 32036471; PMCID: PMC7447649.</i>	<ul style="list-style-type: none"> Randomized phase II study; 44 patients Primary endpoint: percentage of patients with a marked decrease in the Functional Assessment of Cancer Therapy-Neurotoxicity (FACT-NTX) score 	Oct 2019	<ul style="list-style-type: none"> The percentage of patients with a marked decrease in FACT-NTX scores was significantly lower in the cryotherapy group than in the control group There were no serious side effects associated with cryotherapy.

Nutrition and use of Multi-vitamins



Why is it important?

- Good nutrition is especially important if you have cancer because both the illness and its treatments can change the way you eat. They can also affect the way your body tolerates certain foods and uses nutrients



How should it be addressed?

- The nutritional needs of people with cancer vary from person to person and patients should always speak with their healthcare provider
- If interested in taking a multi-vitamin, patients should consider appropriate vitamins while on treatment



Clinical Study Landscape

- Studies investigate the specific vitamins for which patients with cancer may be at risk of deficiency symptoms, noting Vitamin D deficiency and insufficiency being associated with mortality outcomes
- Studies have been conducted to understand vitamins that should be limited due to potentially negative outcomes and/or interactions with cancer treatments

Vitamins supplied by 4CancerWellness

SafeVite

Supplement Facts			SafeVite
Serving Size: 1 Caplet			
Servings Per Container: 90			
	Amount Per Serving	% Daily Value	
Vitamin D (as cholecalciferol)	25 mcg (1,000 IU)	125%	
Thiamin (as thiamin HCl)	0.75 mg	63%	
Riboflavin	3.4 mg	262%	
Niacin	30 mg	188%	
Vitamin B6 (as pyridoxine HCl)	8 mg	471%	
Vitamin B12 (as cyanocobalamin)	1,000 mcg	41,667%	
Biotin	60 mcg	200%	
Pantothenic acid (as D-calcium pantothenate)	10 mg	200%	
Magnesium (as magnesium oxide)	350 mg	83%	
Copper (as copper gluconate)	0.9 mg	100%	
Chromium (as chromium nicotinate glycinate chelate)	120 mcg	343%	
Molybdenum (as sodium molybdate)	45 mcg	100%	

OTHER INGREDIENTS: Microcrystalline cellulose, film coat (polyvinyl alcohol, titanium dioxide, polyethylene glycol, talc), croscarmellose sodium, magnesium stearate, silica and stearic acid.

As with any supplement consult your doctor before use.

CAUTION: Transient flushing and feeling of warmth might be associated with the ingestion of niacin-containing products.

FREE OF: egg, milk, peanut, tree nuts, shellfish, fish, soy, wheat or gluten.

4Bones

Supplement Facts			4 Bones
Serving Size: 2 Tablets			
Servings Per Container: 90			
	Amount Per Serving	% Daily Value	
Vitamin D (as cholecalciferol)	10 mcg (400 IU)	50%	
Calcium (as calcium carbonate)	500 mg	38%	
Magnesium (as magnesium oxide)	400 mg	95%	

OTHER INGREDIENTS: microcrystalline cellulose, stearic acid, coating (hypromellose, titanium dioxide, macrogol, hydroxypropyl cellulose), croscarmellose sodium, magnesium stearate, silica.

As with any supplement consult your doctor before use.

FREE OF: egg, milk, peanut, tree nuts, shellfish, fish, soy, wheat or gluten.

WARNING: If you are pregnant, nursing, taking any medications or have any medical condition, consult your doctor before use. Discontinue use and consult your doctor if any adverse reactions occur.

Multi-vitamin: Clinical Study Snapshot

Study / Article	Design	Date	Result
Real-world evidence for the effectiveness of vitamin D supplementation in reduction of total and cause-specific mortality	<ul style="list-style-type: none"> Assessed the association of vitamin D supplement use, vitamin D deficiency, and insufficiency, with all-cause and cause-specific mortality in 445,601 participants, aged 40–73 years, from the UK Biobank cohort 	2023	<ul style="list-style-type: none"> Suggests that in the real world, the efficacy of vitamin D supplements in reducing mortality may be at least as good as observed in RCTs Both vitamin D deficiency and insufficiency were strongly associated with all mortality outcomes
<i>Sha, Nguyen, T. M. N., Kuznia, S., Niedermaier, T., Zhu, A., Brenner, H., & Schöttker, B. (2023). Real-world evidence for the effectiveness of vitamin D supplementation in reduction of total and cause-specific mortality. Journal of Internal Medicine, 293(3), 384–397. https://doi.org/10.1111/joim.13578</i>			
<i>Nutritional supplements and cancer: potential benefits and proven harms</i>	<ul style="list-style-type: none"> American Society of Clinical Oncology Article 	May 2014	<ul style="list-style-type: none"> Nutritional supplements are widely used among patients with cancer who perceive them to be anticancer and antitoxicity agents Beta-carotene and vitamin E supplementation increase risk of lung, stomach, prostate cancer, and colorectal adenoma and overall mortality in the general population.
<i>Harvie M. Nutritional supplements and cancer: potential benefits and proven harms. Am Soc Clin Oncol Educ Book. 2014:e478-86. doi: 10.14694/EdBook_AM.2014.34.e478. PMID: 24857143.</i>			
The nutritional risk in oncology: a study of 1,453 cancer outpatients	<ul style="list-style-type: none"> Prospective screening of cancer patients Measured using NRS-2002 score which combines indicators of malnutrition and of severity of the disease (1-3 points, respectively). A score ≥ 3 indicates "nutritional risk" 	Aug 2012	<ul style="list-style-type: none"> Thirty-two percent of outpatients were at nutritional risk
<i>Bozzetti F, Mariani L, Lo Vullo S; SCRINIO Working Group; Amerio ML, Biffi R, Caccialanza G, Capuano G, Correja I, Cozzaglio L, Di Leo A, Di Cosmo L, Finocchiaro C, Gavazzi C, Giannoni A, Magnanini P, Mantovani G, Pellegrini M, Rovera L, Sandri G, Tinivella M, Vigevani E. The nutritional risk in oncology: a study of 1,453 cancer outpatients. Support Care Cancer. 2012 Aug;20(8):1919-28. doi: 10.1007/s00520-012-1387-x. Erratum in: Support Care Cancer. 2012 Aug;20(8):1929. Capuano, Giovanni [corrected to Capuano, Giorgio]. PMID: 22314972; PMCID: PMC3390688.</i>			

Acupressure for Nausea Relief



What is it?

- Acupressure is an ancient healing art that's based on the traditional Chinese medicine practice of acupuncture. With acupressure, you put pressure on specific places on your body. These places are called acupoints.



How does it work?

- Acupressure on the P6 (Nei-Kuan) point, located between the two central tendons below the wrist, may help some persons reduce nausea and vomiting, a common side effect of chemotherapy








Clinical Study Landscape

- Studies have shown promising results on the effectiveness of acupressure on chemotherapy-induced nausea and vomiting
- Few to no side effects were observed when using acupressure bands on the P6 point

Acupressure: Clinical Study Snapshot

Study	Design	Date	Result
The effectiveness and cost-effectiveness of acupressure for the control and management of chemotherapy-related acute and delayed nausea: Assessment of Nausea in Chemotherapy Research (ANCHoR), a randomised controlled trial	<ul style="list-style-type: none"> Randomised three-arm sham-controlled trial (Assessment of Nausea in Chemotherapy Research or ANCHoR) with an economic evaluation In total, 500 patients were randomised in the study arms (166 standard care, 166 sham acupressure and 168 acupressure) 	2021	<ul style="list-style-type: none"> No statistically significant differences between the three arms, although the median nausea experience in patients using wristbands (both real and sham ones) was somewhat lower than that in the antiemetics only group The qualitative data suggested that participants perceived the wristbands (both real and sham) as effective and helpful in managing their nausea during chemotherapy
<i>Molassiotis A, Russell W, Hughes J, Breckons M, Lloyd-Williams M, Richardson J, Hulme C, Brearley S, Campbell M, Garrow A, Ryder W. The effectiveness and cost-effectiveness of acupressure for the control and management of chemotherapy-related acute and delayed nausea: Assessment of Nausea in Chemotherapy Research (ANCHoR), a randomised controlled trial. Health Technol Assess. 2013 Jun;17(26):1-114. doi: 10.3310/hta17260. PMID: 23803562; PMCID: PMC4781256.</i>			
The effect of acupressure application on chemotherapy-induced nausea, vomiting, and anxiety in patients with breast cancer	<ul style="list-style-type: none"> Quasi-experimental model; Total of 64 patients split equally between the experimental and control groups A Patient Information Form, the Beck Anxiety Inventory, and the Index of Nausea, Vomiting and Retching were employed to collect the data 	Apr 2015	<ul style="list-style-type: none"> It was determined that the mean nausea, vomiting, and retching scores, the total (experience, occurrence, and distress) scores, and the mean anxiety scores for patients to whom acupressure was applied at the P6 acupuncture point were statistically significantly lower compared with the scores of patients in the control group
<i>Genç F, Tan M. The effect of acupressure application on chemotherapy-induced nausea, vomiting, and anxiety in patients with breast cancer. Palliat Support Care. 2015 Apr;13(2):275-84. doi: 10.1017/S1478951514000248. Epub 2014 Apr 30. PMID: 24787745.</i>			
Acupressure for chemotherapy-induced nausea and vomiting: a randomized clinical trial	<ul style="list-style-type: none"> A multicenter, longitudinal, randomized clinical trial throughout one cycle of chemotherapy with 160 women Randomized to one of three groups: acupressure to P6 point (active), acupressure to SI3 point (placebo), or usual care only 	2007	<ul style="list-style-type: none"> With delayed nausea and vomiting, the acupressure group had a statistically significant reduction in the amount of vomiting and the intensity of nausea over time when compared with the placebo and usual-care groups
<i>Dibble SL, Luce J, Cooper BA, Israel J, Cohen M, Nussey B, Rugo H. Acupressure for chemotherapy-induced nausea and vomiting: a randomized clinical trial. Oncol Nurs Forum. 2007 Jul;34(4):813-20. doi: 10.1188/07.ONF.xxx-xxx. PMID: 17723973.</i>			

Product Lines

<i>Product Line</i>	<i>Supplier</i>	<i>Products</i>	
Aromatherapy	<i>Wyndmere Naturals</i>	<ul style="list-style-type: none"> • Essential Oils • Inhalers • Patches • Diffusers 	
Cold Therapy	<i>ReliefGenius</i>	<ul style="list-style-type: none"> • Cold Glove Bundle • Cold Sock Bundle 	
Skincare	<i>LindiSkin</i>	<ul style="list-style-type: none"> • Lotions • Washers • Cooling wraps / rolls 	
Multi-vitamins	<i>4CancerWellness</i>	<ul style="list-style-type: none"> • SafeVite multi-vitamin • 4Bones 	
Nausea Relief Bracelets	<i>Blisslets</i>	<ul style="list-style-type: none"> • Stylish acupressure bracelets 	
CBD	<i>Patients are referred to Papa & Barkley's website for CBD products</i>		

What's Next

Products

- Therapeutic Art Products
- Meditation / Mindfulness Aides
- Compression Socks
- Port-friendly and post-surgical clothing

Content

- Nutrition guidance and recipes
- Exercise ideas
- Content for specific populations

wellCORNER Review

WHAT

A website for oncology patients that provides:

- Medically accurate information on wellness products
- Retail shop with products that are specifically curated for cancer patients
- Products offered at discount
- HCP-developed wellness survey to track symptoms over time

WHEN

Provided to patients at the point-of-care

- Materials provided to practices; additional resource to offer to your patients
- Reduces the time medical staff spends on patient education and inquiries
- Enables a feedback loop with patients and HCPs to help influence products and website offerings

HOW

Turn-key solution, enabled by technology, supported by practice advocates

- Secure, HIPAA compliant, just-in-time order entry
- Order fulfillment direct to patient