

A group of five women of different ages are standing in a yoga studio, holding hands and performing a balancing pose. They are all smiling and looking towards the camera. The background is a light-colored wooden wall, and the floor is dark wood. A semi-transparent white banner is overlaid across the middle of the image, containing the text "Certified Teachers Meet Up" and "November 2024".

Certified Teachers Meet Up

November 2024

yoga4cancer

Agenda

1. Welcome
2. Neuropathy – the Basics
3. Oncology Yoga Impact on CIPN
4. The Research on Yoga's Impact on CIPN
5. Discussion
6. Other updates
7. AOB

Chemotherapy Induced Neuropathy (CIPN) – The Basics

Chemotherapy-Induced Peripheral Neuropathy: a side effect of certain chemotherapies that cause damage to the peripheral nerves. CIPN presents as weakness,, pain, cramping, coldness, a numbness (loss of sensation) tingling or a “pins and needles” sensation.

- “Chemo feet” and “chemo hands” are common terms.
- May present only in feet or only in hands.
- 30% to 50% of patients who receive chemotherapy are affected
- Other or pre-existing conditions cause neuropathy.

Chemotherapy Induced Neuropathy (CIPN) – The Basics

- Common side effects or symptoms of CIPN:
 - balance
 - impacts to gait
 - increased cramping
 - pain
 - sleep quality
 - increases risk to fall
 - anxiety
 - daily functioning
- Limited treatments exist - Anticonvulsants and antidepressant medications are prescribed (e.g off-label) and sometimes ineffective.
- ASCO recommends exercise therapy and acupuncture
- CIPN symptoms may improve with time, however, some patients report symptoms 10+ years post-treatment.



Oncology Yoga's can have an impact on Neuropathy (CIPN) in various ways

- Joint movement of hands and feet to improves synovial fluid and circulation to extremities
- Improve range of motion in fingers, hands, and feet
- Promotes proprioception and interoception
- Strengthening muscles that support balance
- Enhanced focus on alignment
- Activate the relaxation response (PNS)
- Improve quality of life (QOL)
- Support daily functioning
- Create community



Contraindications for CIPN

Poses to use with caution:

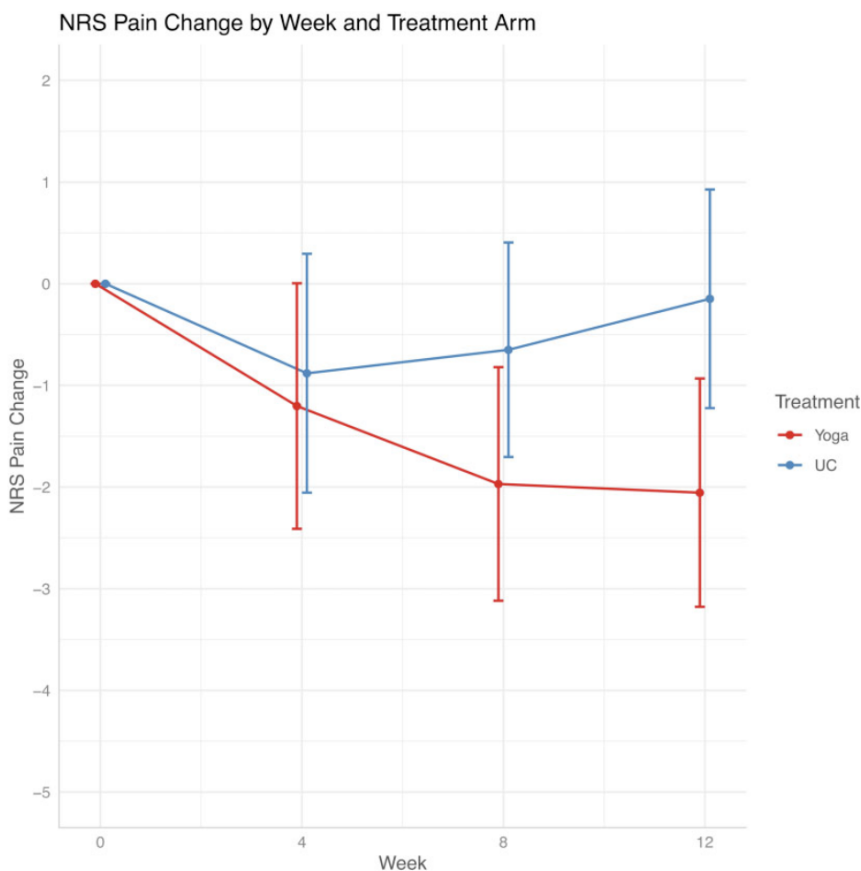
- Legs up the wall
- Standing balances without adequate support
- Holding standing postures for too long
- Weight-bearing on hands
- Tucking of toes or plantar flexion
- Mudras
- Long breath retention (Dizziness)
- Kapalabati (Dizziness)



Other things to keep in mind:

- Students might need or insist to keep shoes on for the practice (due to pain, discomfort or access)
- Give permission for students to rest
- Easy access to a chair or wall
- Encourage students to stay hydrated and drink lots of water
- Other side effects and symptoms may have an impact.

EXAMPLE: Research on Yoga's Impact on CIPN



Memorial Sloan Kettering Study NCCCIH funded Pilot Study

Background: Chemotherapy-induced peripheral neuropathy (CIPN) is a common, debilitating side effect that worsens quality of life and increases the risk of falls in cancer survivors. Evidence of yoga's safety and efficacy in treating CIPN is lacking.

Intervention: single arm study conducted on 21 survivors of great and gynecological cancers. Yoga intervention 60 minutes twice a week at the cancer center for 8 weeks taught by certified yoga teachers. Home practice video provided along with home practice diary.

Outcome Measurement and Results:

- At week 8, HADS anxiety scores decreased -1.61
- At week 12, HADS anxiety scores decreased -1.42
- NRS pain decreased by 1.95 points

Conclusion: Among breast and gynecological cancer survivors with moderate-to-severe CIPN, yoga was safe and showed promising efficacy in improving CIPN symptoms.

Link in Chat:

<https://academic.oup.com/jncics/article/4/6/pkaa048/5851440>

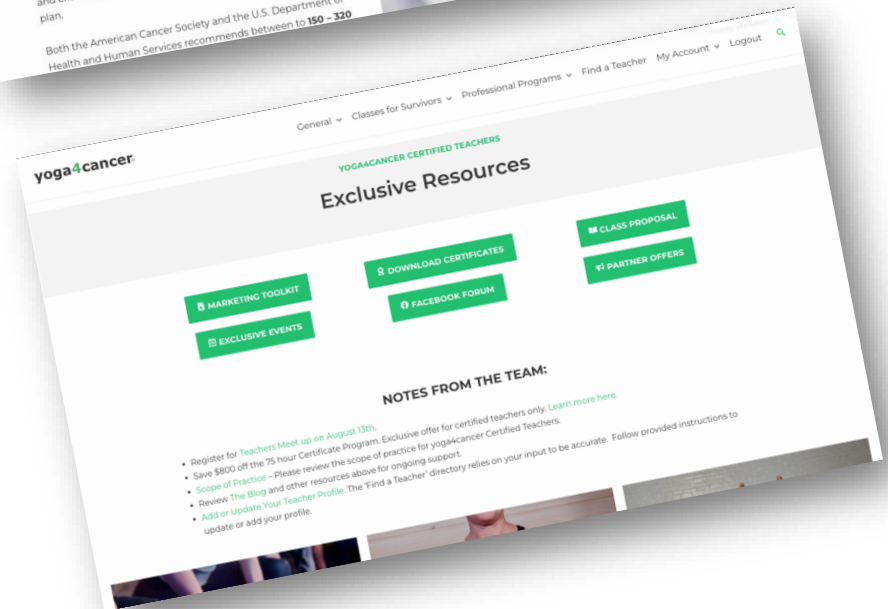
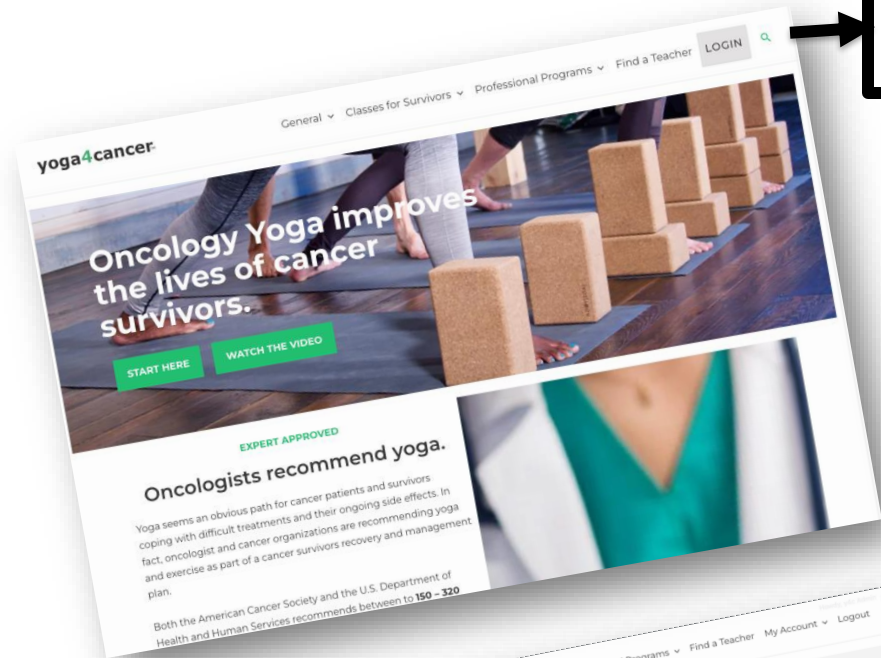
Getting Involved in Research

- Terms to be familiar with
 - Principal Investigator (PI), usually an Oncologist
 - Institutional Review Board (IRB), responsible for oversight and approval of the study.
 - Adverse Event, a negative response to the intervention ranked from Grade 1 to 5.
- Human Subjects Protection (HSP) and Good Clinical Practices (GCP) training
- Data capture
- Fidelity to protocol – must be willing to teach the same sequence for each intervention delivery (class) of the study.
 - Modifications may be made based on pre-existing conditions and injuries; however, this will depend on the PI.
- Some examples of tests used to measure outcomes:
 - Sit and Reach (SR)
 - Functional Reach (FR)
 - Timed Up and Go (TUG)
 - Hospital Anxiety and Depression Scale (HADS)
 - Pain Numeric Scale Rating (NRS)

Discussion

List of Resources:

- 'Search' Function
- Find a Teacher
- Exclusive Resources
- The Blog / FAQ
- YouTube
- The Forum
- Class for Survivors
- Research Section
- yoga4cancer Shop



75 Hour Certificate Program

- 75-hour program over 6 months
- Offered annually. Starts in Jan 2025.
- Delivery is online and interactive, via videos, assignments, live webinars, workshops, and practices, discussions homework and more.
- Self-paced, flexible curriculum with +20 hours of live events. All events available on replay.
- Extensive 260-page manual
- Mentorship by senior yoga4cancer Teachers



Full tuition:
\$1,099

(Regular = \$1,899)

Offer ends December 15th.

REGISTER & SAVE \$800

Payment Plan:
\$1,199

\$399 deposit with \$100 for 6 months

(Regular = \$1,899)

MONTHLY PAYMENT PLAN

Links & References

- <https://www.mskcc.org/news/answers-faq-about-chemotherapy-induced-peripheral-neuropathy-cipn>
- https://journals.sagepub.com/doi/10.1177/1534735419850627?url_ver=Z39.88-2003&rft_id=ori:rid:crossref.org&rft_dat=cr_pub%20%20pubmed
- <https://academic.oup.com/jncics/article/4/6/pkaa048/5851440>
- <https://pubmed.ncbi.nlm.nih.gov/34213086/member>

- Galantino, M. L., Tiger, R., Brooks, J., Jang, S., & Wilson, K. (2019). Impact of Somatic Yoga and Meditation on Fall Risk, Function, and Quality of Life for Chemotherapy-Induced Peripheral Neuropathy Syndrome in Cancer Survivors. *Integrative cancer therapies*, 18, 1534735419850627. <https://doi.org/10.1177/1534735419850627>

- Loprinzi, C. L., Lacchetti, C., Bleeker, J., Cavaletti, G., Chauhan, C., Hertz, D. L., ... & Hershman, D. L. (2020). Prevention and management of chemotherapy-induced peripheral neuropathy in survivors of adult cancers: ASCO guideline update. *Journal of Clinical Oncology*, 38(28), 3325-3348.

- Zhi, W. I., Baser, R. E., Zhi, L. M., Talukder, D., Li, Q. S., Paul, T., Patterson, C., Piulson, L., Seluzicki, C., Galantino, M. L., & Bao, T. (2021). Yoga for cancer survivors with chemotherapy-induced peripheral neuropathy: Health-related quality of life outcomes. *Cancer medicine*, 10(16), 5456–5465. <https://doi.org/10.1002/cam4.4098>