

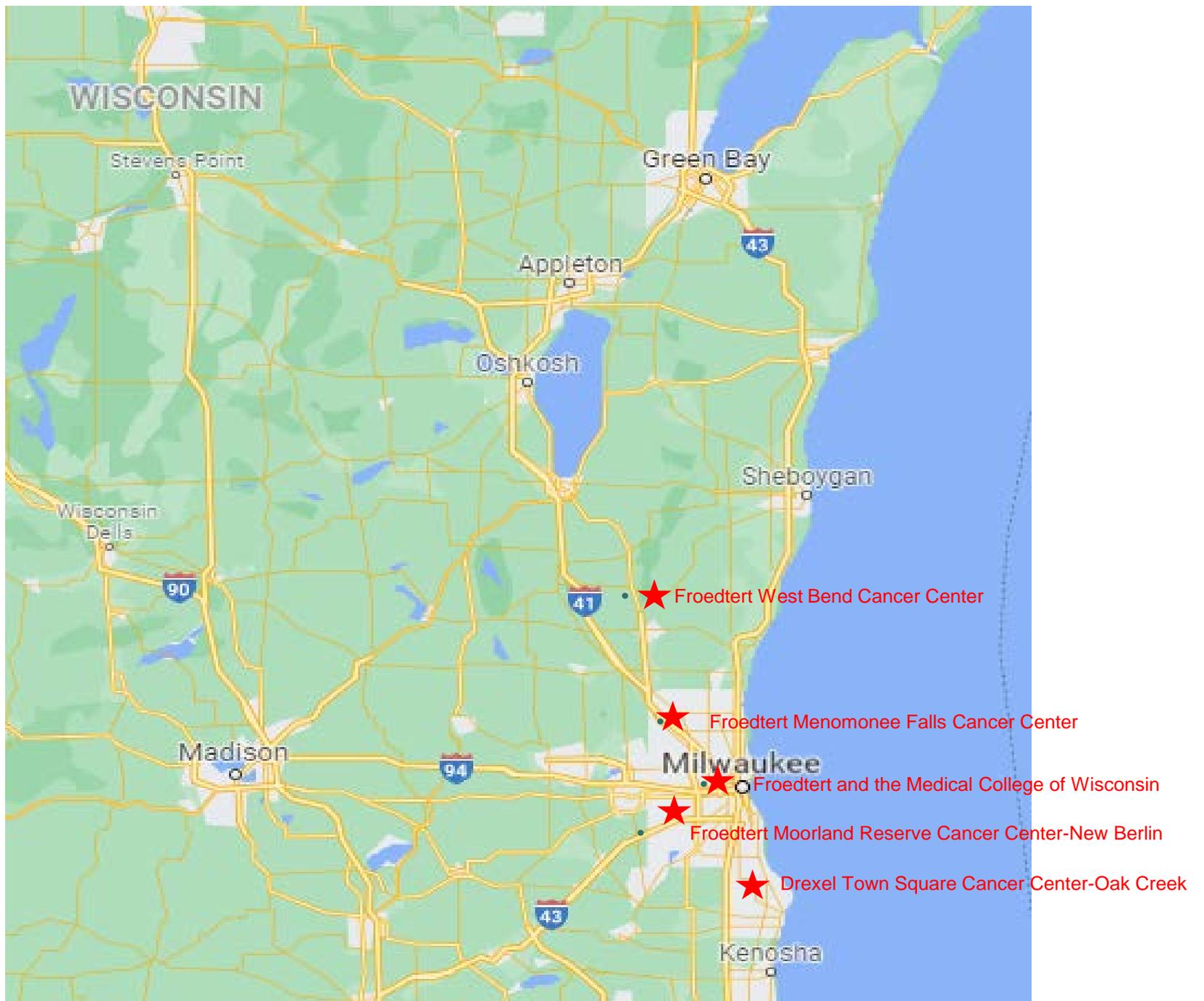
# Implementing Scalp Cooling for Chemotherapy Induced Alopecia at a Community Based Cancer Center

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# Disclosures

Nothing to Disclose

# Objectives

- Describe scalp cooling efficacy, safety, tolerability of scalp cooling for chemotherapy induced alopecia
- Discuss the process and strategies used to implement scalp cooling at Froedtert West Bend Cancer Center
- Share our accomplishments and future opportunities

# Background and Significance

## Chemotherapy-induced alopecia

- Well known side effect of many cancer chemotherapy treatments
- One of the most feared side effects in >75% of patients

## Scalp Cooling

- A simple treatment that can prevent hair loss caused by certain chemotherapy drugs
- Clinical studies demonstrate effectiveness across a wide range of chemotherapy regimens

# How Scalp Cooling Works

- Cooling caps reduce scalp temperature before, during and after chemotherapy administration.
- Vasoconstriction to the scalp causes cell metabolic rate to drop and general reduction of chemo cytotoxicity to that area. Temperatures -15 to -40 degrees F.



# Indications and Contraindications

- **US FDA clearance in 2017**
- **NCCN recommended-breast and ovarian**
- Approval for Solid Tumor patients such as:
  - Breast, Ovarian
- **Contraindications include:**
  - Head and Neck, CNS, Skin, SCLC
  - Cold diseases
- **More than 3000 scalp cooling machines are now in use across 50 countries**

# Efficacy

## Multiple systematic reviews have been published

- Grevelman and Breed (2005)
- Kadakia, Rozell, Butala, & Loprinzi (2014)
- Ross & Fischer-Carlidge (2017)
- Rugo & Melisko (2011)
- Shin, Jo, Kim, Kwon & Myung (2015)

## Report hair preservation from 10-100%

- Most preserve hair at 50%.

## Definition of hair preservation varies

- Amount of hair retained
- Less than 50% hair loss
- Lack of need for wig or head covering

# Efficacy con't

Study outcomes vary depending on study design

## Clinical Trials that prompt FDA approval

- NCT01986140 NCT01831024
- Rugo & Klein (2017)-Digni Cap
  - 66% hair preservation (n=67) vs 0% (n=16)
  - Breast Cancer treated with docetaxel/cyclophos
- Nangia et al.,(2017) -Paxman
  - 51% hair preservation (n=48) vs 0% (n=47)
  - 65% success rate-taxane
  - 22% success rate-anthracycline

# Safety

Concerns regarding scalp mets and distant cancer seeding unproven

## Ross & Fischer-Carlidge

- 50,000 patient records
- Low and comparable rate of scalp mets with scalp cooling 0.04%-1.1% vs no scalp cooling 0.3%-3%

## Rugo, Melin and Voight

- 3000 patient records
- 0.61% mets of pts who had scalp cooling vs 0.41% mets of pts without;  $p=0.43$  not statistically significant

## Lemieux et al

- No difference in overall survival between pts who scalp cooled and those who did not

Not approved for hematologic malignancies or conditions that would be exacerbated by cold exposure

# Tolerability

Not tolerated by all

Side effects:

- Cold sensation
- Headache
- Boredom
- Dizziness

Discontinuation rates

- 3-5% in adjuvant patients
- 13% metastatic disease patients

More than 70% reported they felt “very well” or “rather well” in one study



**LINDA AMACHER, RN, BSN, OCN**  
**INFUSION STAFF NURSE LEAD**  
**FROEDTERT & THE MEDICAL**  
**COLLEGE OF WISCONSIN**



# Program Initiation

- Patients, Providers and Staff Inquiring
- Competition in the area
- Froedtert chooses Paxman
- Interprofessional Team Recruited

# Financials

- Paxman contract negotiated
- Cost to patients
  - Personal Cap Kit-No charge
  - Treatment 1-4 \$300 per treatment
  - Treatment 5-6 \$200
  - Treatment 7-12 \$100
  - Pricing per patient capped at \$2200
  - No insurance coverage...yet in US
- Foundation support secured
- Paxman also assists with finding charitable support

# Roles and Workflows

MD/Clinic  
RN

- Pt given info about Paxman during new consult by the physician or RN
- Brochure “we help patients retain hair” and website: coldcap.com

Patient

- Decides on scalp cooling and completes enrollment form which includes MD prescription and consent
- Completes cap fitting by RN or Small Stones
- Prepares for cooling by watching you tube videos or reading on coldcap.com about hair preparation and cap

Scheduler

- Schedulers receive request to schedule cold cap appointment in infusion suite.

Paxman

- Receives enrollment form
- Mails personal cap kit within 3-5 days
- Handles all payments with patient

Small  
Stones

- Provides information about cold caps
- Completes cap fitting
- Maintains machines
- Assists with patient post cooling hook up and disconnect

Infusion  
Nurse/Tech

- Connects patients to machine 30min prior to starting chemo-cap remains on for entire chemo.
- Disconnects patient from cooling machine and patient is transferred to post cooling machine and connected for 90 min post cooling

# Staff Training

- How scalp cooling works
- Clinical data and efficacy
- Paxman machine
- Patient intro and awareness
- Workflow and Roles

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- Enrollment Form
- Cap fitting
- System maintenance
- Patient Haircare and responsibility





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**INFUSION STAFF NURSE**  
**FROEDTERT & THE MEDICAL**  
**COLLEGE OF WISCONSIN**



# Patient Preparation is Key!

Receive  
Cap Kit

Watch  
tutorial  
videos

Practice  
cap fitting  
x 3

Take kit to  
treatment

Prepare  
hair and  
fit cap at  
infusion  
visit



# Cooling Times

DRUG REGIMENS	STAGE 1	+	STAGE 2	+	STAGE 3
	RECOMMENDED PRE-COOLING TIME (MINS)		INFUSION TIME		RECOMMENDED POST-INFUSION COOLING TIME (MINS)*
<b>ALL REGIMENS AND COMBINATIONS</b> - this is any single agent drug, or combination of drugs (including those that combine with docetaxel or paclitaxel). EXCEPT FOR THE BELOW...	30 	+	TIME TO INFUSE DRUGS	+	90 
<b>SINGLE AGENT DOCETAXEL (TAXOTERE)</b>	30 	+	TIME TO INFUSE DRUGS	+	20 
<b>WEEKLY SINGLE AGENT PACLITAXEL (TAXOL)</b>	30 	+	TIME TO INFUSE DRUGS	+	60 
<b>THICK HAIR</b> Thick or voluminous hair will benefit from a longer pre-cool time.	45 	+	TIME TO INFUSE DRUGS	+	TIMES AS ABOVE

# Enrollment

- First patient one week after training
- All four foundation patients filled within 6 weeks
- 10 patients enrolled
  - 3 dropped out due to overwhelmed by dx, losing more hair than anticipated
- Over 50 treatments provided
- 3<sup>rd</sup> machine ordered
  - Patient same day treatments and timing

# Patient Feedback and Testimonials

We have started asking patients about their Paxman experience.

- “so far I have received 8 of 12 Taxol. I have minimal shedding with very little thinning. I follow the Paxman Facebook page and found the support from other people’s experiences and the Paxman staff is a comfort. The capfitting went well and I feel that I have good contact with my scalp. I am able to prepare my head and put on the caps myself. I am getting pretty quick at it! The first 10-15 minutes are pretty exhilarating but the whole process is quite manageable. I am so happy I was offered the opportunity to use the Paxman system”
- “Paxman’s Facebook group really helped me persevere through the process. There were many shared tricks and tips, encouragements, before and after pictures and Q&As that I found very helpful. I felt I wasn’t alone in tackling each session”
- “The sizing and design of the cap could be more streamlined to prevent gaps/strings hanging off back”
- “The phone payment is clumsy and didn’t work well. The cost can be prohibitive and insurance coverage is whimsical, at best. More effort must be made to make this accessible and promote insurance coverage”



## Paxman Scalp Cooling Cold Cap Patient Experience Survey

**Directions:**

Staff, please complete this survey by asking our scalp cooling patients these questions toward the end of their Paxman cooling journey (2<sup>nd</sup> last or last cooling appointment). Thank you!

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I am satisfied with the information/education that I received about Paxman Scalp Cooling	5	4	3	2	1
I am satisfied with the Paxman services received from arranging payment to getting the Paxman kit in the mail	5	4	3	2	1
I am satisfied with the Paxman Cap Fitting experience	5	4	3	2	1
The preparation prior to my scalp cooling is easy	5	4	3	2	1
I tolerate the Paxman Scalp Cooling with minimal side effects (headache/dizziness/nausea/coldness)	5	4	3	2	1
I am satisfied with the results I am getting with Paxman Scalp Cooling	5	4	3	2	1
The cost of Paxman is reasonable	5	4	3	2	1
I get the support from cancer center staff whenever needed	5	4	3	2	1
I would recommend Paxman Scalp Cooling to other patients	5	4	3	2	1
Overall, I am satisfied with my Paxman Scalp Cooling experience	5	4	3	2	1

Concerns about the Paxman product:

Comments or suggestions:

Please return this form to: Linda Amacher or Luanne Murray



## Patient Testimonial

### Before Taxotere/Cytosan q 3w



### After 4 cycles



“I first heard about cold capping by the nurse in my education class when I was first diagnosed with breast cancer. When my onco score came back and there was a benefit to chemo, my doctor discussed Paxman with me. He explained that even though most people say hair doesn't matter, when it is gone and everyone sees you are a cancer patient it can be upsetting. I honestly didn't think I was someone who cared about something so insignificant as hair, but he was right. I felt self conscious as it got thinner- I would go to the store and felt like everyone knew. Then I started using hair fillers and realized no stranger could possibly tell my hair was thinner.

The Paxman was easy to use, just watch the Paxman videos and practice at home.

The Paxman Facebook page has been my life saver. It is more than just helpful tips- its an online community where the members are so supportive of each other. Paxman is good about chiming in and keeping conversations on course. There I learned how to fill in those thin spots, to take an ativan and tylenol during pre meds, and all sorts of practical ideas. I also made new friends, cheered others on, and got to share my own experiences.

It really sucks to go through cancer treatments, and it really sucks to wear a freezing cap for hours on end to try to save your hair. But, I am so glad it did it. 4 weeks post my last chemo and I can go to Target and no one knows what I have been thru- I am a normal person. No looks of sympathy and questioning glances. I am so appreciative I was given this chance to save my hair and keep a part of my identity :-)”

# Staff Feedback



## Paxman Scalp Cooling Staff Evaluation Survey

### Directions:

Please complete this evaluation form by circling your response to each question about your experiences with Paxman Scalp Cooling. Thank you!

### Staff Agree:

- Patients come prepared
- Equipment is easy to use
- Amount of time I spend to support pts is reasonable
- Appointments are easy to schedule
- I received adequate training in my role
- I have the resources I need

My role (circle): Tech, RN, Scheduler, MD, Other

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
Patients come prepared to Paxman Scalp Cooling understanding their role in the process	5	4	3	2	1	X
The Paxman Scalp Cooling equipment is easy to use (infusion)	5	4	3	2	1	
The amount of time I spend to support Paxman is reasonable (all).	5	4	3	2	1	
Scalp cooling appointments are easy to schedule (schedulers)	5	4	3	2	1	
I received adequate training for Paxman work within my role (all)	5	4	3	2	1	
I have the resources I need to assist in the Paxman Scalp Cooling process (all)	5	4	3	2	1	
I am proud that we offer scalp cooling to our patients (all)	5	4	3	2	1	
I recommend adding scalp cooling at additional Froedtert Cancer Center locations (all)	5	4	3	2	1	

### Strongly Agree:

- I am proud that we offer scalp cooling to our patients
- I recommend scalp cooling at additional locations

Comments/Concerns about Paxman Scalp Cooling:

# Next Steps

- Satisfied with our process at FWB
- Enroll more patients before opening up to another cancer site
- Continue to collect feedback from patients and staff

# QUESTIONS?

CONTACT :

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