

# THE PAXMAN GUIDE TO SCALP COOLING

IN THE UNITED STATES OF AMERICA

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PAXMAN<sup>o</sup>

CHANGING THE FACE OF CANCER



# CONTENTS

- 03 INTRODUCTION
- 04 GETTING STARTED
- 10 A BEGINNER'S GUIDE TO SCALP COOLING
- 24 HAIRCARE GUIDE TYPE 1-2
- 30 HAIRCARE GUIDE TYPE 3-4
- 36 PROBLEM SOLVING & TROUBLE SHOOTING
- 52 POST SCALP COOLING HAIRCARE GUIDE
- 58 SUPPORT & CONTACT US
- 64 DATA AND REFERENCE



**So, you've decided that scalp cooling is for you.  
You are about to take your first big steps towards doing  
everything you can to retain your hair.**

**Scalp cooling can be challenging, but we are here to guide  
you through every single step along the way, until you  
complete your chemotherapy and can move  
on to your next chapter.**

This booklet will give you all sorts of information on the different stages of the scalp cooling experience, so not everything will be relevant for you initially, but please do read it all and refer back when you need to, as this should be your first stop when you have questions or are in any doubt.

We know that an informed patient has a better outcome, so we are here to arm you with all the info you need to get the most from your cold capping.

There is also our website [coldcap.com](http://coldcap.com) which is a great supportive resource, so get online and have a look.

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## ***Let's get started...***

By now your Cap Kit will have arrived with you, and you will have everything you will need including your cap, haircare and the extras to prepare your hair for scalp cooling.

You are probably feeling a little apprehensive about your first treatment, so we have put together a guide on the things you need to know as a beginner.



## GETTING STARTED

You will need to come to your chemotherapy treatments ready to manage the cold cap part of your treatment by yourself or someone to help and support you.



## Preparation for scalp cooling

A nurse will help you connect your cap to the cooling machine in the treatment suite, but you will need to prepare your hair and fit your cap on your own. You can learn how to do this by watching the videos on the Paxman website at [www.coldcap.com](http://www.coldcap.com)

You can also bring a friend or family member to your appointment to help you.

Coldcap.com has a lot of information to help you prepare for your scalp cooling.

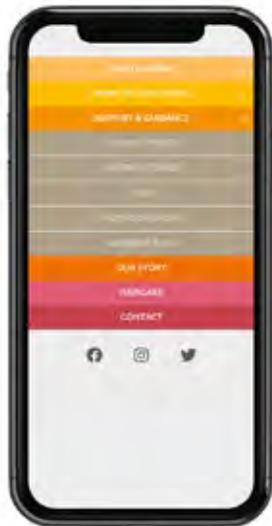
Get to know the website and watch the tutorial videos. Practice preparing your hair and fitting your cap at home. This will help you feel more comfortable on your first day of treatment. You will be wearing your cold cap before, during and for a while after your infusion.

1. visit: [www.coldcap.com](http://www.coldcap.com)

2. Go to: Support & Guidance > Tutorial Videos



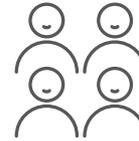
1



2

3. Choose who you want to follow through the tutorials

(Mai, Jaqui, Joe or Cleo)



3

4. Watch all four tutorials

Cap Sizing



Hair Preparation



Cap Fitting



Hints & Tips



REMEMBER TO PRACTICE FITTING THE CAP AT LEAST 3 TIMES

## 5. Explore coldcap.com

There's support, advice and guidance on all areas of scalp cooling including FAQs, financial information, site locator and our haircare blog.



## 6. Important Information

**Practice preparing your hair and fitting your cap at least 3 times at home.**

The more familiar you are with the process, the more comfortable and confident you will feel fitting your cap on your first day of treatment.

Remember you can watch the videos while you are fitting the cap for treatment too.

**Please tick after each practice:**



## 7. Before your first treatment

Make sure that you have practiced fitting your cold cap, but if you have any questions please feel free to get in touch with us via email - [patientsupport@paxmanusa.com](mailto:patientsupport@paxmanusa.com) or phone on 8885 PAXMAN (888-572-9626).



*There's a community of people who are going through the same things as you are on our Facebook Group.*

If you are looking for help and support from people who are or have been through cold capping, you may find our Facebook Group useful. It's a private international community with a really positive outlook, who can give you advice and guidance on what scalp cooling was like for them..

**[facebook.com/groups/PaxmanScalpCooling](https://facebook.com/groups/PaxmanScalpCooling)**



YOU'VE  
GOT THIS!



## A BEGINNER'S GUIDE TO **SCALP COOLING**

The first chemo is often the hardest as there are so many unknowns. A level of anxiety is completely normal.

This guide will help you to be as prepared as possible to face the unknown and ready for scalp cooling.



## Watch our cap tutorial videos

Become as familiar as you can with how the cold cap should fit before your first chemo session. Getting a good fit with consistent contact across your scalp is the most important thing you can do to achieve the best possible results. If you can, practice putting your cap on. The first few times can be tricky, but the more frequently you try the process, the more confident you will be that you can achieve a good fit.

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## Do your research

Get well acquainted with our website so you understand fully. Or you might want to join our Facebook group. It's a wonderful positive community full of people who have or are scalp cooling and a great place to find advice, learn and get support. Reading the posts will give you an idea of the common problems and concerns that people face and the realities of scalp cooling.

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## There are no guarantees

Scalp cooling doesn't work for everyone. It's frustrating, but it's true. It would be wonderful if you didn't have to lose a single hair while scalp cooling, but realistically that is not what is going to happen. Shedding will vary from person to person and from drug to drug. Be realistic, but positive - most drug regimens administered without scalp cooling would leave you without a single hair on your head. We would always recommend giving the cold cap a try - you have a lot to lose and potentially a lot to retain.



*You might want to join our Facebook group.*



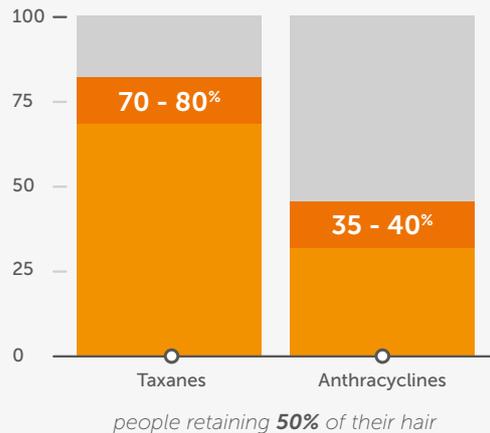
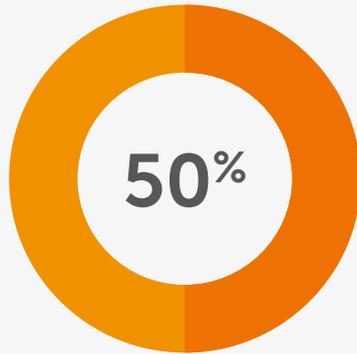
[facebook.com/groups/  
PaxmanScalpCooling](https://facebook.com/groups/PaxmanScalpCooling)

## Be realistic in your expectations

The first question a lot of people want to know is how much hair they will keep. The problem is that everyone responds differently to scalp cooling, so there are no hard or fast rules about hair retention.

### CURRENTLY OUR DATA LOOKS LIKE THIS:

Across the board there is a **50% chance of retaining 50% or more of your hair.**



## Be prepared for treatment day

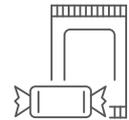
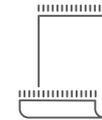
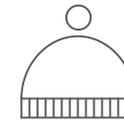
There are a few items that you can take with you that will make your first chemo a little more comfortable.

Ensure you take layers so that you can keep warm and something to cover your head for the journey home when your hair is damp (a hat or a hoodie would be perfect).

Some people like to take a neck pillow and a blanket for comfort, and something as a distraction, a book, magazine, music or a film.

Snacks can also be useful, and a supply of your favorite hot drink for before infusion.

It can be a long day, so dress to be as comfortable as possible.





*Try to focus on the hair on your head, not the hair you are losing."*



## The first 15 minutes maybe tough

It's going to be cold! Try distraction. It sounds too simple but it can really work. Have a conversation, listen to music, watch a film, meditate, set a count down and concentrate on your breathing.

You may want to ask your clinical team for a pain killer. Soon your body will begin to acclime and you won't feel the cold as much. For the majority of people, it's a numb sensation for the majority of the session. If the cap isn't as cold as you thought, don't worry that the machine isn't working, not everyone finds it uncomfortable. If the system isn't cold enough, it will alert.

## Pre, infusion and post cooling stages are all at the same temperature

Don't worry if for some reason your clinical staff don't change you from one stage to the next. It just functions as a timer. If you need advice on how long you should be cooling for, there should be a 'Recommended Cooling Times' sheet hanging from the system.

## You can disconnect for a short period

If you need to go to the bathroom, you can disconnect from the system for up to 8 minutes. The system will then begin to alert to tell you to reconnect. Just make sure it's not in your pre-infusion cooling time, or you will have to start the cooling time again.

## When you finish your treatment wait 10 minutes before removing the cap

This will give it a chance to warm up and be easier to remove. Give it a little rock and if it moves easily then you can take it off. If not, give it another 5 minutes.

## Rinse out the conditioner from treatment day

Try to do this within 24 hours. If you are really tired when you get home you may want to wait until the next morning. There's no need to shampoo unless you want to, just rinse the conditioner out. The longer you leave it in, the less manageable your hair will become.

## Don't panic when your hair starts to shed

Shedding is an inevitable part of the cold capping process for everyone and will start between days 14 and 21 after your first chemo. This is completely normal, and not a sign that scalp cooling won't work for you.

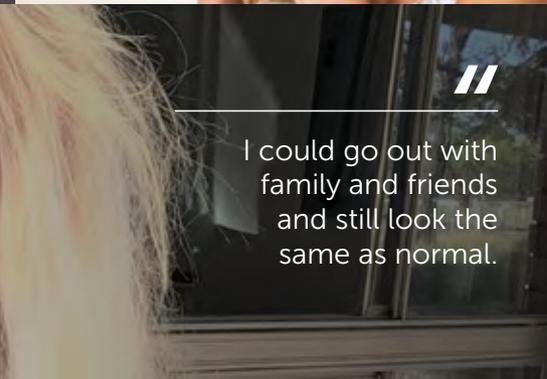
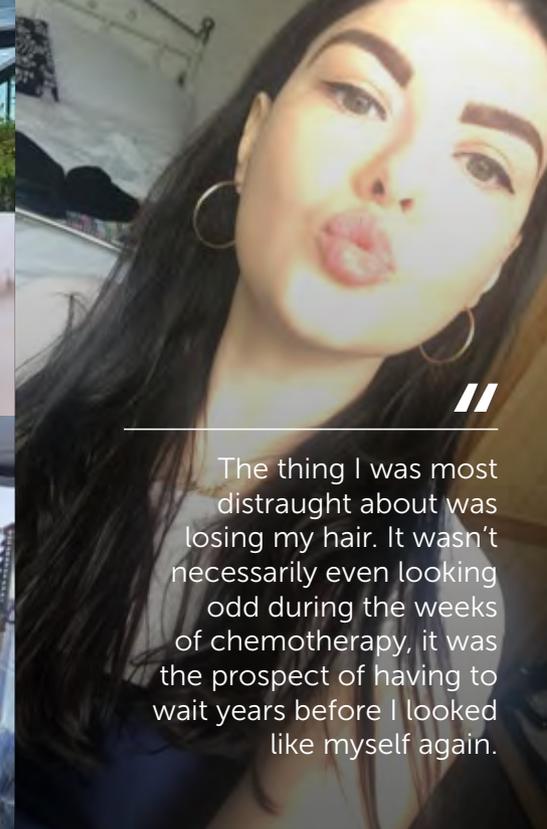
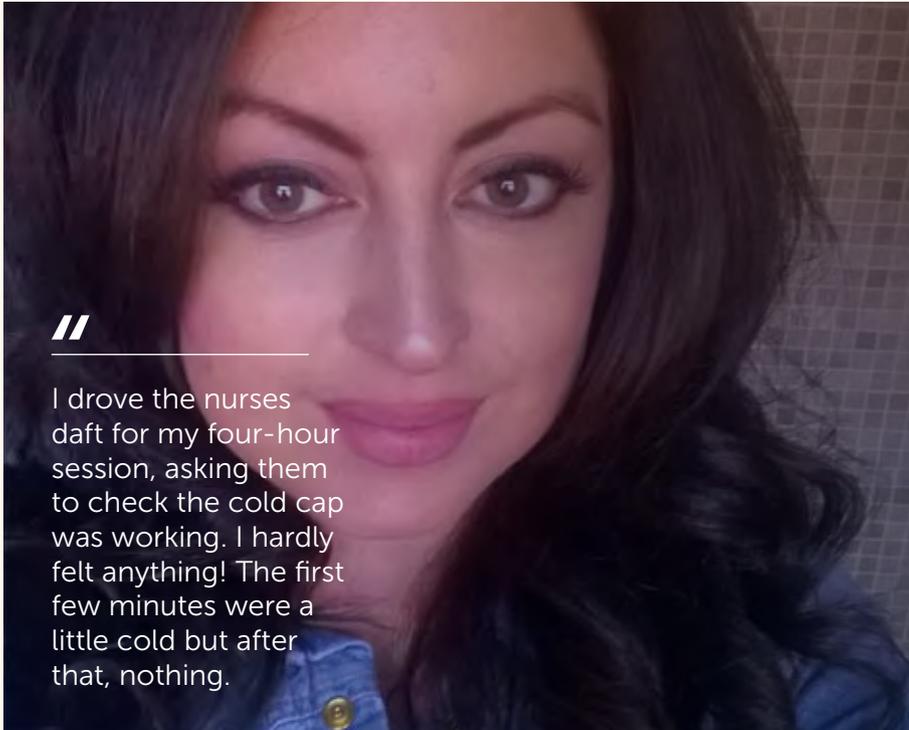
For the majority of people shedding is at its heaviest between cycles 1-3, but you do need to anticipate shedding of some level throughout your chemo.

No matter how much you anticipate it, the shedding can be very scary. Try to focus on the hair on your head, not the hair you are losing; and remember, by scalp cooling you are doing everything you can to retain your hair.

# PATIENT STORIES

Hearing from other people who have been through the scalp cooling process can be really helpful.

Read the full stories: [coldcap.com/stories](https://coldcap.com/stories)

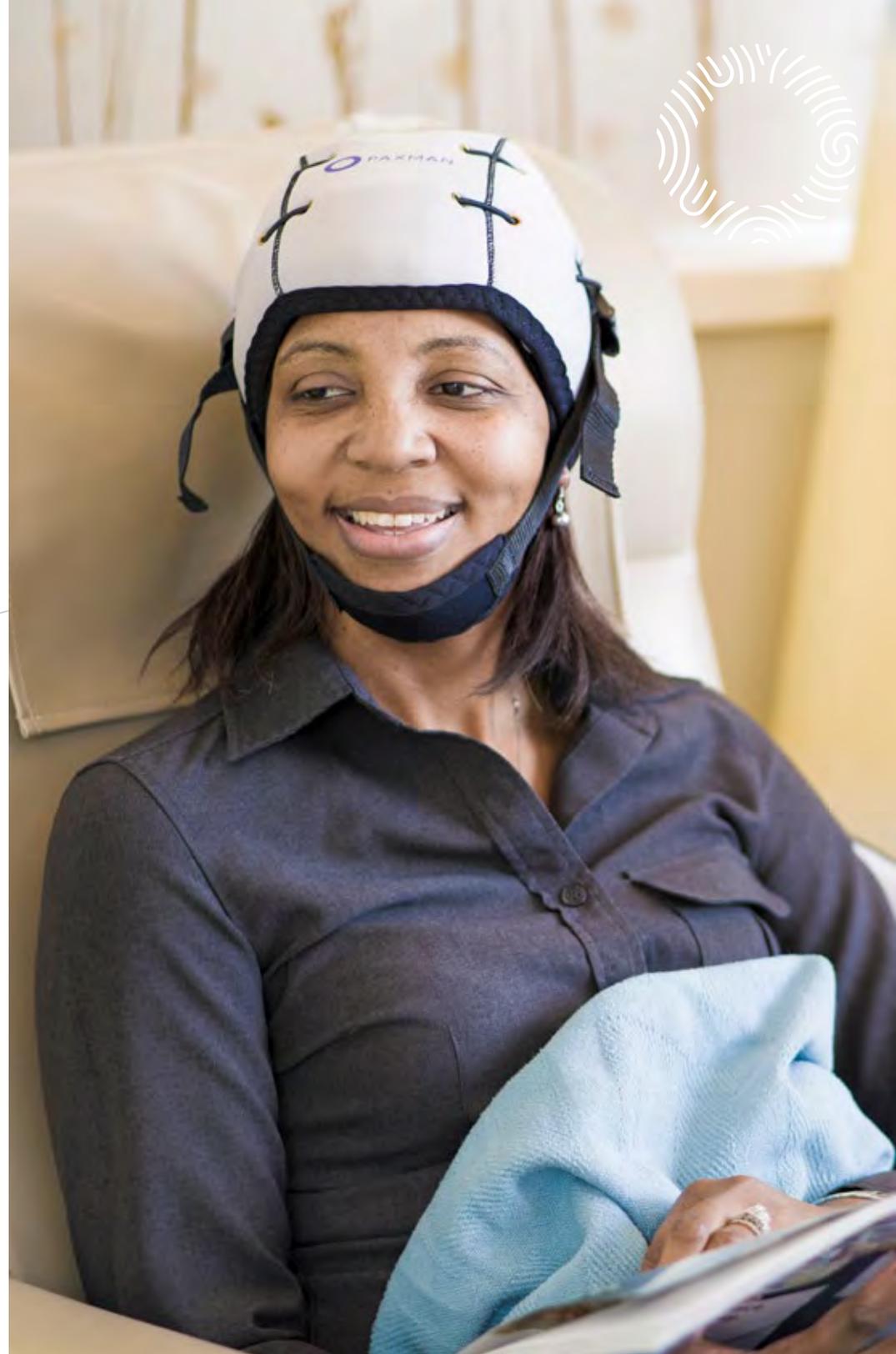




# YOU'RE **READY TO GO!**

You should now be ready for your first treatment,  
even if it doesn't feel like it.

Once you've gotten through the first one, believe it or not,  
you have probably gotten through your toughest cycle  
and jumped the first hurdle.





# IDENTIFYING YOUR HAIR

**For many people their hair is precious to them even under normal circumstances. But given that you have made the decision to give scalp cooling a try, your hair may understandably become something that you are constantly worrying about.**

It is really important to tailor your hair care to ensure that cold capping is as easy as possible but also to keep the hair you retain in the best possible condition so that you can move forward when your chemo is done.

**We have developed two hair care guides - one for those with type 1 and 2 hair and one for those with type 3 and 4 hair.**

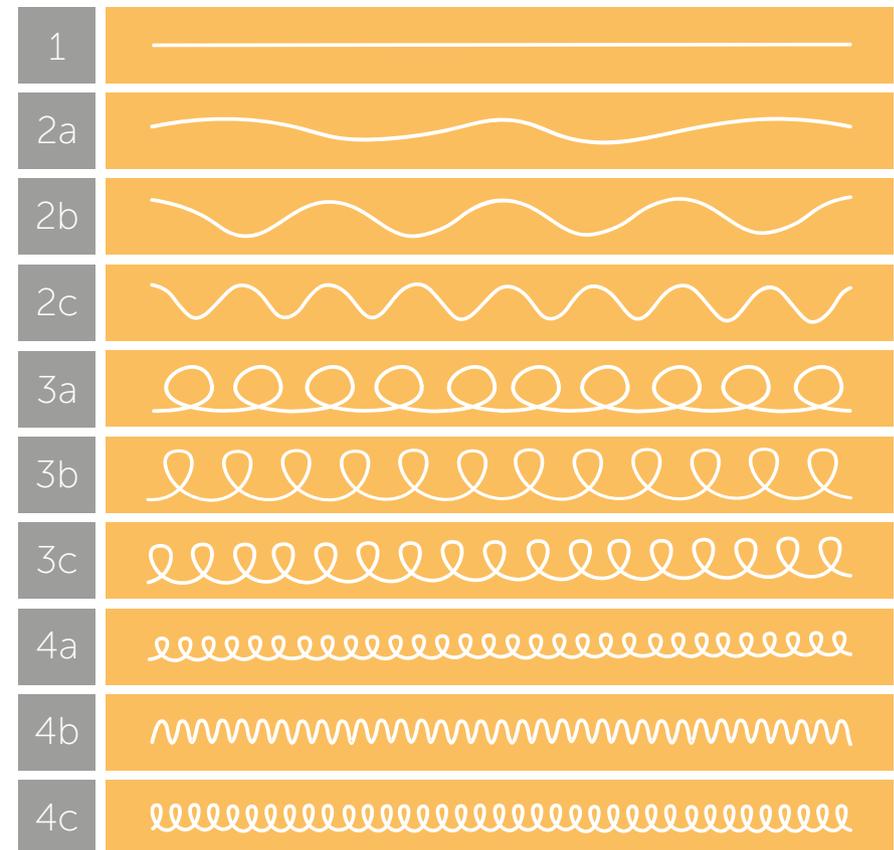
These will give you some simple advice on how to look after your hair and make the most of what you have during the scalp cooling experience.

While there are lots of similarities for caring for all hair types, there are some specific differences, so get to know the right guide and approaches for you.

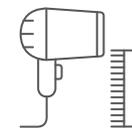
The image below will help you identify which hair type you have.

Remember this is based on your natural hair texture, so how it would naturally look if it was unstyled and left to its own devices when drying.

Not everyone has the same texture all over their head, so pick the one that matches the majority of your hair.



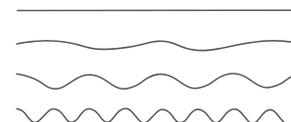
# BE KIND TO **YOUR HAIR**



## THE COMMON- SENSE GUIDE TO **COLD CAP** **HAIRCARE**

It is really important to tailor  
your haircare to your hair type.

This guide is for:  
**HAIR TYPE 1-2**





## Don't wash your hair more than twice a week or less than once every 10 days

For some people this may be very daunting, particularly if you are a daily washer. Keep in mind though that a common side effect of chemo is a drying effect on your hair and scalp skin, and washing very frequently will contribute to and exacerbate this.

Even if you currently wash your hair every day, your scalp adapts quickly and you shouldn't find your hair to be too greasy once your treatment is in full swing.

It is however important to keep washing your hair regularly, even if it's once a week and especially if you are shedding heavily - keeping your hair and scalp clean and manageable is crucial.

Washing has the added benefit of liberating hairs that are in the process of shedding, which can be terrifying, particularly if you are shedding quite a lot and you find the shower drain full of hair. But it's really important to remember that washing will not cause hairs to fall out that weren't already in the process of shedding.

In conclusion, you know your hair best - be open minded and follow your instincts, you'll find out what works for you.

## Use color, perfume and sulfate free shampoo and conditioner

It doesn't matter which brand you use if it fits these criteria. They are all ingredients that can act as irritants, even if you were perfectly fine with them before you started treatment.

Chemo will most likely cause your scalp to become very sensitive and sometimes itchy, and your hair to become dry, so these ingredients are best avoided. Also avoid baby shampoo as it is very alkaline, and not gentle enough for a sensitive scalp. It's often suggested as an option, but we know that it has caused people problems in the past.

Try to avoid parabens too, as they are believed to disrupt hormone function by mimicking estrogen.

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## Smooth shampoo and conditioner into your hair, don't rub

Piling hair on top of your head and massaging in shampoo is all very well and good in adverts, but it's a one-way street to tangled, matted hair while cold capping.

Smooth shampoo and conditioner in and run your fingers through your hair, but avoid at all costs the circular rubbing motions you may be used to.

## Brush your hair everyday

This may seem counter intuitive, especially if you are experiencing heavy shedding, but it is SO important to liberate any shedding hairs.

Brushing morning and night will not pull out any hairs that weren't already shed, but will ensure that loose strands, and hairs that are in the process of dropping will be removed, making it significantly less likely to tangle and even mat.

It will also help to brush before you wash your hair too.

## Avoid heated styling

Using straighteners, flat irons or a curling wand, can have a further drying effect on already dry hair, not to mention the tension that it can put on the roots of your hair. It is fine to use your hairdryer on a cool setting, but use your hands and fingers rather than a brush, again to avoid tension at the roots.



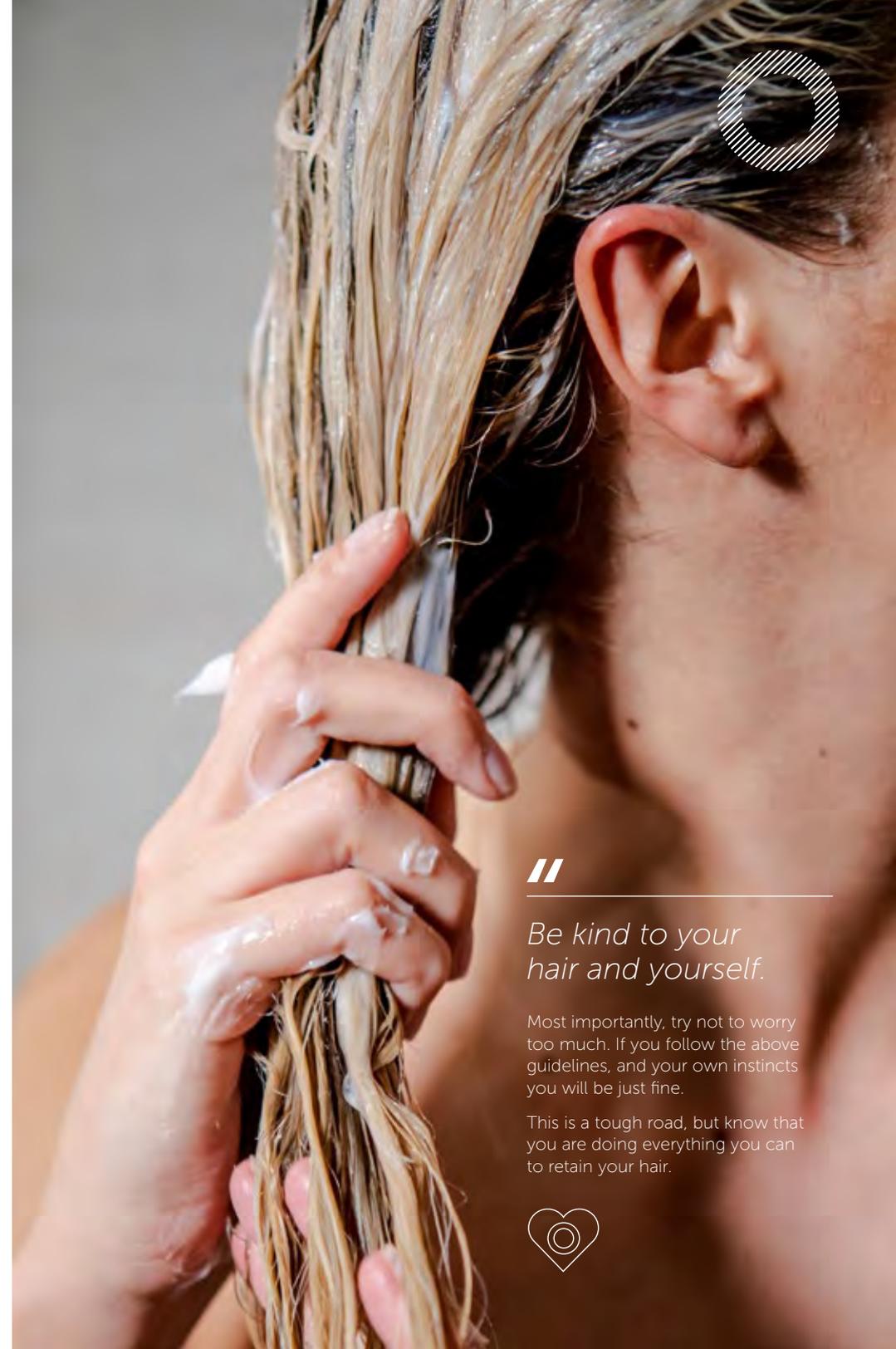
## Feel free to use headbands, clips, hats, scarves etc

Accessorize to your heart's content! You can be creative to hide patchy baldness, or thinning with whatever works for you, just avoid tension at the roots, so no tight ponytails etc.

For those with long hair a braid or low bun can be a good solution, for those with shorter hair, pin back front sections of hair, or a soft head band can be great.

## Dry shampoo and coloured root sprays are fine

Always test first to be sure of no scalp sensitivity, but using dry shampoo if you are having a bad hair day, or coloured fibres or root spray to cover patchy hair loss is just fine. Though try to avoid using so much that there is a build-up in your hair.



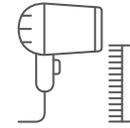
*Be kind to your hair and yourself.*

Most importantly, try not to worry too much. If you follow the above guidelines, and your own instincts you will be just fine.

This is a tough road, but know that you are doing everything you can to retain your hair.



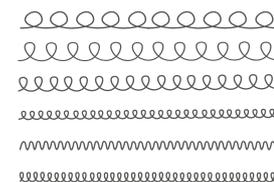
BE KIND TO  
**YOURSELF**



# THE COMMON- SENSE GUIDE TO **COLD CAP** HAIRCARE

It is really important to tailor  
your haircare to your hair type.

This guide is for:  
**HAIR TYPE 3-4**





## Wash your hair less frequently than normal

Chemo has a real drying effect on your hair and scalp skin and you will probably quickly begin to notice that your hair doesn't require washing as often. It is important to keep washing your hair regularly though, especially if you are shedding heavily - keeping your hair and scalp clean and manageable is important.

Washing has the added benefit of liberating hairs that are in the process of shedding, which can be terrifying. But it's really important to remember that washing will not cause hairs to fall out that weren't already in the process of shedding. You know your hair best - be open minded and follow your instincts, you'll find out what works for you.

## Use color, perfume and sulfate free shampoo and conditioner

It doesn't matter which brand you use if it fits these criteria. They are all ingredients that can act as irritants, even if you were perfectly fine with them before you started treatment.

Chemo will most likely cause your scalp to become very sensitive and sometimes itchy, and your hair to become dry, so these ingredients are best avoided.

Try to avoid parabens too, as they are believed to disrupt hormone function by mimicking oestrogen.

## Smooth shampoo and conditioner into your hair, don't rub

Piling hair on top of your head and massaging in shampoo is all very well and good in adverts, but it's a one-way street to tangled, matted hair while cold capping.

Smooth shampoo and conditioner in and run your fingers through your hair, or alternatively mix some shampoo with a little water and pour over your hair to get right in to the scalp. At all costs avoid the circular rubbing motions you may be used to.

## Use plenty of conditioner and natural oils

Chemo is going to really dry your hair out so use plenty of conditioning products to keep your hair as manageable and healthy as possible.

Use lots of conditioner when you wash, spray in conditioner whenever you fancy, and natural oils such as vitamin E, grape seed or argan oil. Just avoid oils the day before your treatment as it will make it harder to wet your hair in preparation for the cap.



## Really wet your hair before putting on your cold cap

You may need some help from a friend or assistant if you have really thick hair, but it's important that you really get water through to the scalp and ensure that you get as much volume out of your hair as possible to get a good fit with your cap.

Make sure you get your hair as wet as needed to get it as flat as possible, then smooth conditioner over the surface. It is also important to wet your hair when your cap is sized, to get an accurate fit. If during your treatment you do shed quite a bit you may also want to consider going down a cap size to achieve a better fit as your hair volume may have reduced.

## Brushing your hair is really important

This may seem counter intuitive, especially if you are experiencing heavy shedding, but it is SO important to liberate any shedding hairs to avoid knotting and matting. Use a wide tooth comb or curly hair detangling brush and brush through thoroughly but gently while it is still wet after you have washed it. Every 2 days, dampen your hair (with water or spray in conditioner/ detangler) and brush thoroughly.

On in-between days make sure that you finger comb your hair. Brushing or finger combing gently but thoroughly will not pull out any hairs that weren't already shed, but will ensure that loose strands, and hairs that are in the process of dropping will be removed, making it significantly less likely to tangle and mat.

## Avoid all heated styling

Using straighteners, flat irons, blow dryers or a curling wand can have a further drying effect on already dry hair, not to mention the tension that it can put on the roots of your hair. No matter how tempting it is, try to avoid.

## Use a scarf, loose band or hat to keep your hair away from your face

They will keep your hair back without adding tension to your roots. A soft fabric head band or combs can also be great. Avoid clips, pins or tight ponytail bands as your hair is likely to tangle around them.



## *Be kind to your hair and yourself.*

Most importantly, try not to worry too much. If you follow the above guidelines, and your own instincts you will be just fine.

This is a tough road, but know that you are doing everything you can to retain your hair.



## Don't use dry shampoo but coloured root sprays are fine

Dry shampoo will clog your follicles. But coloured root sprays are fine and can be a really simple way to hide roots or cover patchy hair loss. Always test first in case it causes problems with scalp sensitivity, though try to avoid using so much that there is a build-up in your hair.

## No braids or weaves while scalp cooling

The additional tension on the roots of hair can be detrimental to hair retention. Similarly, relaxing should be avoided too, firstly because the chemicals on a sensitive scalp should be completely avoided, but also because it will cause further drying to your hair. It is no problem to wear a wig if it makes you feel more comfortable, but again, avoid additional tension or friction on the roots of your hair.



WE ARE  
**HERE TO  
HELP**



## COLD CAPPING **PROBLEM SOLVING AND TROUBLE SHOOTING**

**Problems come up and there can be bumps in the road often for no reason whatsoever.**

**But where there is a will there is a way,  
and we are here to help.**

In theory, if you are following our guidance on the treatment days and the hair care advice for your hair type, then it should just be a case of getting on with it and counting down your remaining treatments.

If only it was that simple!

Here's some problem solving and troubleshooting information.

If anything these things are common, we see these issues every day, so please remember that you are not alone and you can get through this.



## Cap Fitting

A good cap fit is crucial to achieving the best possible outcome. Please get as familiar as you can with our cap tutorial videos, they walk you through the fitting process and give you guidance on what a good fit should look and feel like.

If you have followed these steps and are still encountering issues, you may find the following helpful.

## Tenting of the cap cover

This can happen when the cap cover isn't pulled down sufficiently.

Once you have the inner and outer caps on, make sure that you are pulling the cover firmly down before you tighten the bungee cords. Get your thumbs up inside the cap cover and methodically pull the cover down from the front to the back, and don't be afraid to use quite a bit of force.

Once the cover is pulled down you can also use your palms to smooth the cover from the crown downwards. Remember that the cover doesn't need to be completely smooth (for some people there may be some lumps and bumps in the cover), it is just there to ensure that the bungee cords can do their thing, which is to give a consistent all over pressure to the inner cap.

It is also important that you loosen the bungee cords properly at the end of treatment to prevent the cover from warping during storage.

## Changing cap size

You may find as you progress through your treatment that the fit of your cap changes. If you started with particularly thick hair and have lost quite a bit of hair, you may find that your cap is now too large and you may wish to try a smaller size. Speak to your clinical team about this.

## Chin strap

We know that the chin strap can be problematic, but this is more often than not a result of it being over tightened.

To get the best possible fit from your chin strap, firstly make sure that it is actually on your chin, not underneath it or on your neck.

Secondly, it is important that the chin strap is pulled very tight, but this is just while you adjust the bungee cords on the outer cap cover. Once this is complete the strap can be loosened, so that it is still secure, but certainly not so that it is tight enough to cause pain, or to prevent you from eating or drinking.

Some patients who had an uncomfortable experience with the chin strap found adding some form of padding to be helpful. Some people have used a sleep eye mask or even a fluffy sock.



## Realistic expectations

Everyone responds differently to scalp cooling, but it is important going into your treatment to know what realistic expectations are for you. There are all sorts of factors that can affect hair retention and outcomes including your drug regimen, dosage and how frequently the chemotherapy is given as well as overall health and hair condition.

We would recommend that you spend some time on our website and look at our hair retention guide and the outcomes of other patients that have had similar regimens to you; this will give you an idea of what success could look like for you.

What can make the difference between disappointment with your outcome and feeling that you have had success can be a positive attitude.

Try to remember that without scalp cooling it is quite possible that you would have lost most, if not all of your hair. It is not an easy road to travel down, but by scalp cooling you are giving yourself the best possible chance to retain your hair.

Don't be afraid to reach out to others. There's a community of people who are going through the same things as you are on our Facebook Group, and there may be a support group at your treatment centre or in your local area.

The help, guidance and support of others can make such a difference – you don't have to do this on your own.

## Prepping thick or curly hair for scalp cooling

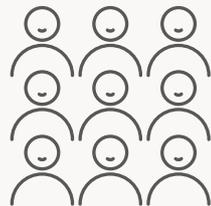
If you have particularly thick hair or very curly hair, you may want to increase the amount of water you use when prepping your hair. Dampening the hair is an important part of the preparation process as it reduces the hair volume but also allow better conductivity of heat from your scalp.

While we would advise against completely saturating the full length of your hair, it is worth considering using significantly more water to ensure that the conductivity process is effective. You may find you get a better result when wetting your hair across the entire scalp area if you have someone to assist you.

You should also increase your pre-infusion cooling time from 30 mins to 45 mins as this will give the cold cap the best chance to reduce your scalp down to the optimum temperature for scalp cooling before the chemo drugs are infused. You may also consider parting your hair at the centre, rather than pushing it all back to achieve better contact with the inner cap at the crown.



*There's a community of people who are going through the same things as you are on our Facebook Group.*



## Discomfort for the first 15 minutes

The first 15 minutes of scalp cooling can be really tough for some people but generally after this time your body will acclimatise and you will stop feeling discomfort and may just feel numb. There are a few things that you can do to help to increase tolerability in those first 15 minutes and for the whole of your scalp cooling experience.

## Protect your forehead

Your forehead is full of nerve endings, and having the inner cap making direct contact with your forehead will be uncomfortable to say the least. The inner cap only needs to be around 2mm below the hair line, but by using a soft stretchy headband, gauze or cotton pads, you can protect your forehead and make the cap a lot more comfortable.

## Don't be afraid to ask for something that could help with the discomfort

Your clinical team are there to support you, so don't be afraid to ask for something that could help with the discomfort, at the start of your scalp cooling session. Such as a blanket or a pillow and an appropriate painkiller. It can help to make the first 15 minutes a lot more doable.

## Distraction

It sounds way too simple, but distraction can really help for that first difficult period. Do whatever might work for you, but some patients have listened to music, watched a film, chatted to someone or even meditated.

Deep breathing can also really help with the initial stages of scalp cooling. The benefits can include immediate relaxation as well as an improved ability to handle stress and calm down. You'll be so surprised how different cold capping feels after that first 15 minutes, so please stick with it.



*It sounds way too simple, but distraction can really help for that first difficult period.*



## Infusion times

The scalp cooling process comes in 3 stages which are timed by the system. The system will be operated by a trained member of clinical staff, but all of the stages happen at the same temperature. The change in stage acts like a timer rather than a change in setting for the system.

### 1. Pre-infusion cooling:

This lasts for 30 mins, or 45 mins if you have thick hair. This allows your scalp to reduce in temperature to the optimum temperature for hair retention.

### 2. Infusion cooling:

This stage is for the length of the infusion of alopecia inducing chemotherapy drugs. If you are receiving chemotherapy drugs that don't induce alopecia, or any other drugs, these can be infused during the post-infusion or pre-infusion cooling stages.

### 3. Post-infusion cooling:

This is the only stage of cooling that has any variation depending on drugs. If you are receiving single agent docetaxel (Docetaxel/Taxotere on its own) then you will need 20 minutes post-infusion cooling.

If you are receiving single agent weekly taxol (Taxol/Paclitaxel on its own) then you will need 60 minutes post-infusion cooling.

For all other drugs and any drugs used in combination, you will require 90 minutes post-infusion cooling.

Our Recommended Cooling Times sheet can be found on our systems.

The post- infusion cooling times are based on the half-life of the drugs you are receiving. This is the amount of time that the drugs are at their most potent and will have the most effect on your body.

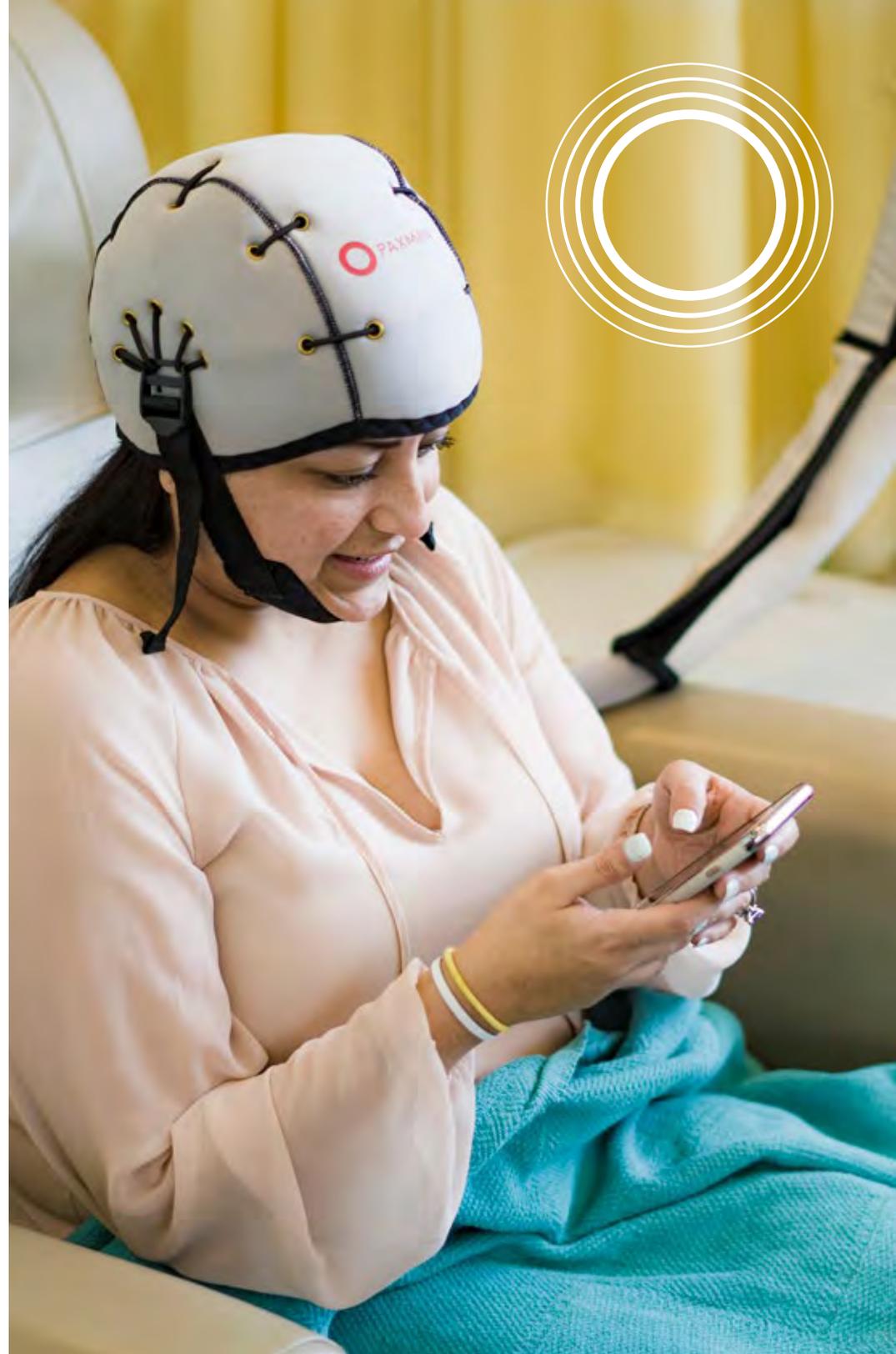


## What if I miss some of my pre or post-infusion cooling times?

It is possible that this will affect your hair retention. It will depend on how much time was missed, and when the time was missed and the drug you are receiving.

If you have to break the pre-infusion cooling time for some reason, it is important to start the 30 minutes again from the beginning. If the drugs are infused before your scalp has reduced to the appropriate temperature, it is quite possible that chemo will target your hair follicles and hair loss may occur as a result.

If you miss some or all of your post-infusion cooling, it is again possible that you could lose some hair. If your scalp warms up while the chemotherapy drugs are still at their strongest in your system, then it could compromise your results. There is no real way of knowing what will happen in terms of hair retention, so prepare yourself for the worst, but hope for the best.



## Patchy hair loss

Shedding and hair loss is a part of scalp cooling. It will vary in quantity from person to person, often depending on drug type and dosage, and will come in two forms – thinning or patchy hair loss. Thinning is loss of hair consistently across the scalp, patchy hair loss is where shedding happens in specific areas.

Patchy hair loss can occur for a number of reasons, and is most common at the crown. It can be because of cap fit issues as a result of the inner cap not making sufficient contact with the scalp – if your cap is too small you may see loss at the crown, if the cap is too large you may see hair loss at the back of the head.

There are over 100,000 different head shapes across the globe, and we have designed our caps to be the best fit possible for the majority of people, but for some people the cap just isn't quite the right shape for them, and this can result in patchy hair loss.

Loss at the crown can also happen regardless of how well the cap fits as the crown is the hottest part of the head, meaning that in some people this area of the scalp just won't cool down to the optimum temperature for scalp cooling.

## Hiding patches

There are a few ways that patchy hair loss can be successfully hidden.

Most simply, depending on the location of the patchy loss, you can use your retained hair to cover up noticeable loss. There are lots of ways to do this from changing your parting, to clipping, pinning or tying back hair over affected areas. Don't be afraid to experiment. As long as you're not putting tension on the roots of your hair, there may be a simple way that works for you.

Accessories such as wide soft headbands and scarves can also be useful at hiding hair loss at the crown and top of the head.

Another option would be to use colored hair fibres which are widely available online. This approach is particularly effective for hair loss and thinning at the crown, and you'd be amazed what can be hidden with these little fibres.

## Continuing to scalp cool after patchy hair loss has occurred

A lot of people are told that they should discontinue using the cold cap if patchy hair loss occurs. This simply is not the case, if you don't want to stop you don't have to.

We would recommend covering any exposed areas of scalp to prevent direct contact with the inner silicone cap, as this will make the experience significantly more comfortable.

If you can, rearrange your retained hair to cover any exposed scalp. You can also cut gauze to size and cover any exposed areas, and if you have quite extensive hair loss, a disposable theatre or surgical cap could be a good idea. Your clinical team should be able to provide you with gauze or a cap, but if not, they are both readily available online.



*There is no real way of knowing what will happen in terms of hair retention, so prepare yourself for the worst, but hope for the best.*



## Knotting, tangling and matting

Chemo has a very drying effect on your scalp and hair, which can mean your hair can become difficult to care for while you are scalp cooling. Dry and damaged hair (particularly if it is colour treated or bleached) is particularly susceptible to tangling, and when your hair is also shedding a small tangle can quickly become a knot or even a mat.

### ***There are a few simple things that you can do to avoid this situation:***

- It is really important that you brush (if it is straight or wavy) or finger comb (if it is curly or coily) your hair every day, preferably in the morning and in the evening. This will remove loose strands of shed hair, which if left in can become tangled and knotted in with your retained hair.
- When washing your hair avoid circular lathering motions, and absolutely do not pile your hair on top of your head and rub, like you see in shampoo commercials. The dryness of your hair in combination with the shampoo and friction can be a one-way street to matting. Smooth shampoo and conditioner through your hair, and try to be as gentle as possible.
- Use lots of conditioner and spray in conditioner or detangler can help too. Try to keep your hair in the best possible condition, as it will make it a little easier to care for during the scalp cooling process, and make sure that your retained hair is as healthy as possible going forward.
- Try a silk pillow case or sleep cap. Silk will cause less friction on your hair than cotton as you sleep, and will help to prevent knots from forming.
- If your hair is long and in bad condition it may be worth considering cutting it to shoulder length or into a bob, as this can make it a lot easier to manage.
- Sometimes, no matter how careful you are, knotting can happen. Often with patience, a lot of conditioner or oil and some help, these knots can be detangled.
- It is often easier for a friend or hairdresser to work on the tangles as they can see what they are working on. Use a pure natural oil such as olive, argan or almond or conditioner and a detangling brush or comb and start at the bottom of the hair.

Slowly and methodically try to detangle the hair. When you start to make some progress, you can move further up the hair. It may be that snipping the worst affected areas may be necessary, and if the hair has matted and fused together there may be no choice but to cut it out. Be patient, it can take a lot of time, and it is always worth trying before resorting to cutting.

## Extensive hair loss

For some people, extensive hair loss is something that they have to deal with when scalp cooling. Certain drug regimens can be very harsh on the follicles, which can result in hair loss quickly, or over several treatments.

We would always encourage anyone who has experienced extensive hair loss to continue scalp cooling. We have clinical data to show that by continuing to use the cold cap and protecting your follicles, regrowth is stronger, healthier and faster. Do remember to cover any exposed scalp.

For more info see 'patchy hair loss'.

## To shave or not to shave?

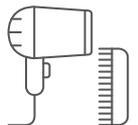
For many people with patchy and extensive hair loss, dealing with different lengths of hair can be very challenging. Do what is best for you, but we would encourage you to be as patient as possible and wait until you see regrowth before you cut your hair. It's amazing how quickly regrowth can make a style viable, when a few weeks before it wasn't. You may be able to have a short bob or a pixie, rather than having to regrow everything from scratch.

Topper and wigs are always an option. It may be worth a trip to see an experienced wig seller. Explain your situation and they may be able to give you some amazing solutions to work with the hair you have.

## Cutting hair mid treatment

It is no problem at all to have a haircut or trim whilst you are mid treatment. Make sure you go to an experienced hairdresser, and explain your circumstances.

You may feel more confident having a dry cut, and asking them not to style your hair at all. People often find that having thinning ends cut off leaves their hair looking thicker and healthier, or going from longer lengths to shorter increases manageability. Be open minded, and don't be afraid to adapt your hair in a way that makes things easier for you.



# NCCN RECOMMENDED

The National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology (NCCN Guidelines) now recommend scalp cooling as a category 2A treatment option for patients with invasive breast cancer and ovarian cancer, fallopian tube cancer and primary peritoneal cancer. To reduce incidence of chemotherapy-induced alopecia in those receiving chemotherapy with high rates of alopecia.



## Insurance reimbursement

Sadly, at the moment scalp cooling is an out of pocket expense that is not covered by the majority of payers, though there are a few that do pay. Success with reimbursement varies depending on health plan, beneficiary coverage, and geographic location.

We are doing our best to change this and are currently engaged with a reimbursement consulting organization to assess insurance coverage for scalp cooling technologies.

The good news is that the NCCN Guidelines now recommend scalp cooling as a category 2A treatment option for patients with invasive breast cancer, as well as for ovarian cancer, fallopian tube cancer and primary peritoneal cancer. Which is an important step toward increasing patient and provider access to scalp cooling, as the majority of public and private payers recognize NCCN Guidelines® as the gold standard for coverage and reimbursement policies in the US.

There have also been patients who have challenged their insurance companies and had successful reimbursement.

If you head to [coldcap.com](http://coldcap.com) you will find lots of information and guidance including downloadable letters and information to help you make an insurance claim for scalp cooling.



YOU'VE  
MADE IT!



## POST SCALP COOLING HAIRCARE GUIDE

Take a moment to celebrate that you not only finished your chemo, but that you did it all and you scalp cooled.

That's no small feat. You are made of strong stuff!  
But what can you do with your hair now?

There's lots of questions that inevitably come from getting to this marvellous point. We've answered the most common ones in this guide.



## ***You've made it through scalp cooling, so what now?***

### **Shedding can continue for some time**

Don't expect the shedding to stop on the final day of your chemo. It can take a while for the drugs to work their way out of your body, and many people will continue to shed for a number of weeks. If you are getting past the two month mark, it might be worth speaking to your doctor, as additional factors (such as low haemoglobin/anaemia) can cause hair loss.

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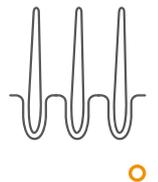
### **Regrowth is stronger, faster and healthier with the cold cap**

You have done everything you could to ensure the best possible regrowth. Depending on the drug regimen, some people will see regrowth before the end of their chemo, for others it can take a little while. But it does come. There will be fluffy new hairs sprouting before you know it. And it is pretty common to see shedding and regrowth at the same time.

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### **Losing brows and lashes post chemo**

This is really common. They hold on throughout chemo and then when you've finally finished they all drop out. Cruel beyond belief! The good news is that they tend to grow back very quickly, but be aware that losing brows and lashes is a possibility.



## Don't make a snap decision and cut your hair off

Lots of people get through scalp cooling then feel like they can't handle a combination of patchy hair loss, retained hair and regrowth.

But try to be patient for a little while before going for a style change you don't really want. You'd be amazed how quickly hair can grow back in and what all of a sudden works as a style option again. A bob may be possible rather than a pixie crop etc.

## What's normal shedding?!

After focusing on your hair so intensely, it can be easy to forget what 'normal' shedding looks like.

The average healthy person will lose around 100 hairs a day, which is quite a lot really. There may not be a lightning bolt moment where your hair suddenly stops shedding, but you may get to a point where you just don't notice it so much, which means you are probably back to your normal.

## Return to your normal hair care routine once shedding stops

Once you reach normal shedding you can go back to standard products and use heat styling tools again. Just be gentle and go carefully, as your scalp may still be sensitive.

You should also be mindful that your hair may now be much drier and more fragile than it was before chemo, which may mean you need different products than those you used before.

If your hair is really dry you should avoid straighteners and curling tongs until your hair is in better condition.



Before Chemotherapy  
Grade 0 Alopecia



After 3-4 weeks and 4 cycles of Chemo  
Grade 1 Alopecia



Before Chemotherapy  
Grade 0 Alopecia



After 3 weeks and 2nd cycle of Chemo  
Grade 2 Alopecia

## Any retained hair is often very dry

It's time to start focusing on improving the condition of your hair. Try masks, deep conditioning treatments or oils. Give it some love!

You may also see an improvement if you get a trim to remove any really damaged hair. Hang on in there, it will get better.

## Be careful when it comes to dyeing your hair

A lot of people are desperate to get rid of roots or greys, but you may want to take your time. You certainly shouldn't be dyeing your hair before shedding returns to normal and ideally you would be waiting another couple of months after that.

If you do decide to take the plunge, please follow the advice of an experienced hairdresser. They will be able to tell you if your hair is in good enough condition, and it is imperative that they patch test ahead of time.



# COLD CAPPING SUPPORT

**If you have questions that aren't answered here,  
or you are just looking for more support and advice,  
please do not hesitate to reach out.**



First of all, our website is a brilliant resource full of information. Please do get to know [coldcap.com](http://coldcap.com)



If you want to speak to people who are going through the same thing as you, and tap into an international positive community who have wisdom, support and advice in abundance, then our Facebook Group could be for you.

It is private and full of people who know exactly what you are going through because they are facing it themselves.



If you want more information on haircare and would like to read in more detail, our Cold Cap Haircare blog could be exactly what you are looking for.

There is lots of advice in the form of posts and video as well as in-depth information on the science of hair and scalp cooling and guest posts from experts.



And last but not least, we are always here and would be delighted if you got in touch. If you'd like to reach out directly to us, you'll find all our contact details at the back page of this brochure. There may also be someone that you can speak to at your center for support throughout your treatment.

# CONTACT US

Please feel free to drop us a line,  
we would love to hear from you...



We would ask that you visit our websites as your first port of call, but if you can't find the answer to your questions, or would like to speak to a member of our team, please send an email to [patient@paxmanusa.com](mailto:patient@paxmanusa.com) or call **888-572-9626**



If you have an issue with payment or with your cap or you'd like to talk about payer coverage please get in touch with the Hub on **844-572-9626**



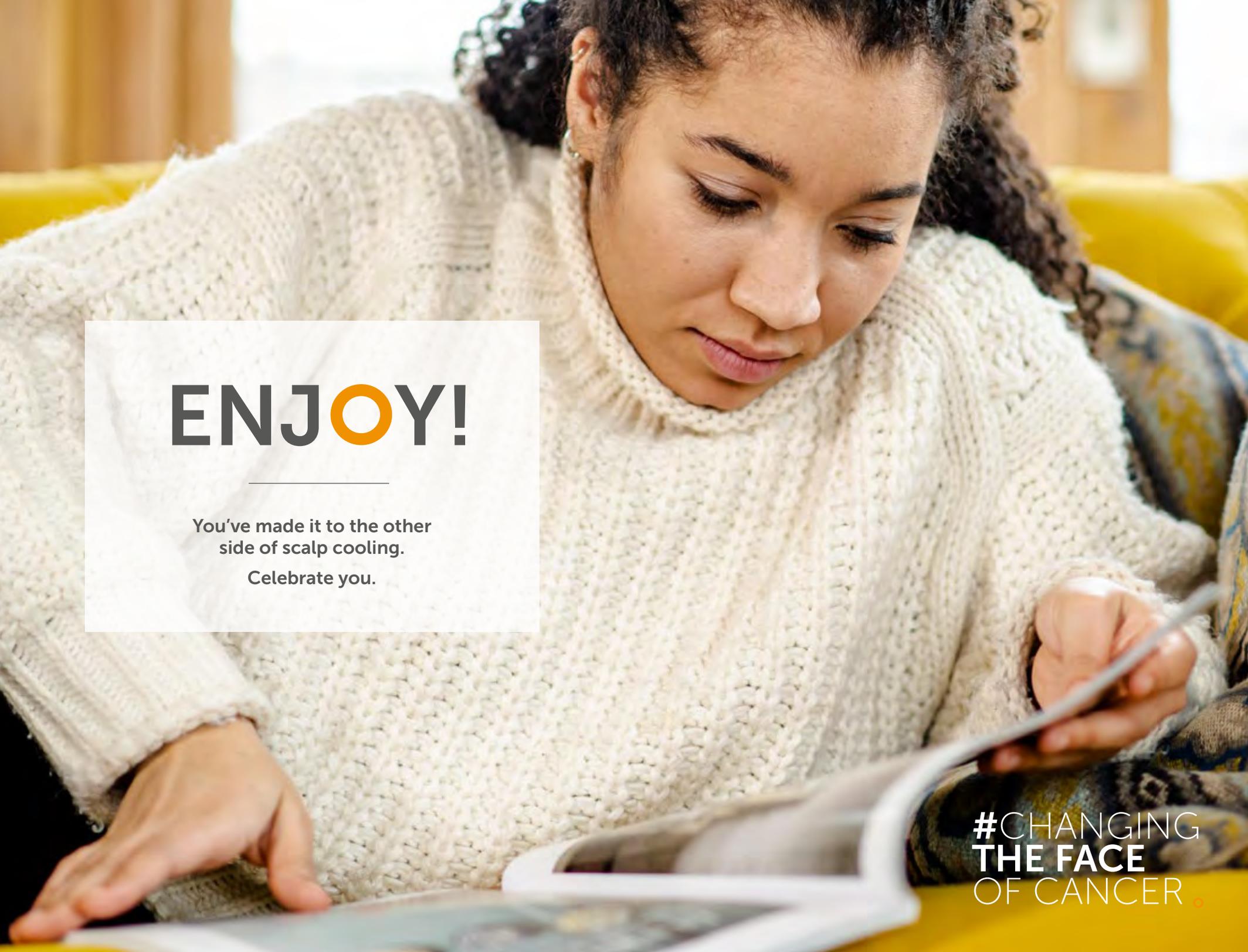
If you want to share your scalp cooling journey, or how you got on with insurance reimbursement then head to our website.



Information on Paxman Scalp Cooling indications for use, contraindications, adverse effects, warnings and precautions and our device description are available to view in full here:

**[www.coldcap.com/data-and-reference](http://www.coldcap.com/data-and-reference)**

You will also find our recommended reading list of summarised clinical data, with abstracts available on request.



# ENJOY!

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You've made it to the other  
side of scalp cooling.

Celebrate you.

#CHANGING  
THE FACE  
OF CANCER

**Caution:** Federal Law (USA) restricts this device to sale by or on the order of a physician.

## Device Description

### What is scalp cooling?

Scalp cooling is a simple treatment that can prevent hair loss caused by certain chemotherapy drugs. The use of scalp cooling has been proven to be effective in preventing chemotherapy-induced alopecia, or hair loss, and can result in people retaining much of the hair. Some people retain all of it.

For people receiving chemotherapy, scalp cooling can mean the opportunity to regain some control, ensure some privacy, and maintain a positive attitude toward treatment.

### Why does chemotherapy make hair fall out?

Chemotherapy works by targeting all rapidly dividing cells in the body. Hair is the second fastest dividing cell, which is why many chemotherapy drugs cause hair loss. Chemotherapy damages hair follicles (at the root of the hair), resulting in hair loss about 2 weeks after the start of chemotherapy.

### Does hair always fall out with chemotherapy?

Many chemotherapy drugs used to treat solid tumor cancers, including taxanes and anthracyclines, cause alopecia, or hair loss. Ask a member of your healthcare team if your specific chemotherapy drugs cause this side effect.

### How does scalp cooling work?

Scalp cooling reduces the damage that chemotherapy causes to hair follicles. It does this by lowering the temperature of the scalp immediately before, during, and after chemotherapy. This in turn reduces blood flow to the area around the hair follicles, which may prevent or minimize hair loss.

The Paxman Scalp Cooling System has excellent heat extraction technology, making it the most comfortable and tolerable scalp cooling method. In addition, the Paxman Scalp Cooling System is administered by healthcare professionals during chemotherapy.

### How long does scalp cooling take?

If you choose to have scalp cooling during chemotherapy, you will wear the Paxman Scalp Cooling Cap for 30 minutes preinfusion, during chemotherapy infusion, and for a maximum of 90 minutes afterward (depending on your therapy).

It is important to continue with scalp cooling each time you go for chemotherapy to get the full benefits of hair preservation.

For more information and to watch instructional videos, please visit [coldcap.com](http://coldcap.com)

## Indication for Use

### Who should use the Paxman Scalp Cooling System?

The Paxman Scalp Cooler is indicated to reduce the likelihood of chemotherapy-induced alopecia (CIA) in cancer patients with solid tumors.

### Intended use

The Paxman Scalp Cooling System is intended for use by appropriately qualified healthcare professionals who have been trained in correct operation of the device by a Paxman representative.

### You should be aware of the following:

- Hair loss is a possible side effect of chemotherapy
- The treatment success rates with the Paxman Scalp Cooling System vary from patient to patient and with different drug regimens being administered
- Patients cannot be guaranteed they will not lose any or all of their hair
- Patients may have a headache during treatment
- Some patients may feel cold during treatment
- Some patients may feel lightheaded after the Paxman Scalp Cooling Cap has been removed
- Patients may visit the restroom during treatment

## Contraindications

### Scalp cooling is contraindicated in pediatric patients. Scalp cooling is contraindicated in patients with:

- An existing history of scalp metastases or the presence of scalp metastasis is suspected.
- Cancers of the head and neck.
- CNS malignancies (either primary or metastatic).
- Cold sensitivity, cold agglutinin disease, cryoglobulinemia, cryofibrinogenemia, cold migraine, cold urticaria, and post-traumatic cold dystrophy.
- Hematological malignancies (leukemia, non-Hodgkin and other generalized lymphomas) or hematological malignancies that are being treated for cure.
- Imminent bone marrow ablation chemotherapy.
- Imminent skull irradiation.
- Previously received, or scheduled to undergo skull irradiation.
- Scalp metastases have rarely been reported in the literature, but caution regarding their development has been a limitation for the broad-scale application of scalp cooling during chemotherapy.
- Theoretically, tumor cells that have seeded in the scalp might not receive adequate chemotherapy during hypothermia, thus allowing them to grow at a later date.
- Severe liver or renal disease from any etiology who may not be able to metabolize or clear the metabolites of the chemotherapeutic agent.
- Skin cancers including melanoma, squamous cell carcinoma, and Merkel cell carcinoma.
- Small cell carcinoma of the lung.
- Solid tumors that have a high likelihood for metastasis in transit.
- Squamous cell carcinoma of the lung.

## Warnings and Precautions

- Scalp and/or cutaneous metastases have been reported in patients with non-small cell lung cancer, colon cancer, renal cell carcinoma, ovarian cancer, and bladder cancer. Patients

with advanced forms of these tumors may be more likely to experience scalp metastases with the scalp cooling system.

- It cannot be guaranteed that scalp cooling will prevent all patients undergoing chemotherapy from losing any or all their hair. The success rate of scalp cooling in reducing chemotherapy-induced hair loss varies from patient to patient and according to the chemotherapy regimen administered.
- Long-term effects of scalp-cooling and scalp metastasis have not been thoroughly studied.
- Use of Scalp Cooling in the palliative setting in patients with metastatic cancer may also increase the risk for scalp metastases.
- Use of scalp cooling with Taxanes plus anthracyclines when used together or in sequence has not been shown to be successful in preventing chemotherapeutic drug induced alopecia. The Paxman Scalp Cooler should not be used in these patients.
- The effectiveness of this device in patients who have received previous chemotherapy has not been evaluated.
- Clinical studies have demonstrated variable success rates in patient reduction of chemotherapy-induced alopecia with scalp cooling since the outcome is dependent on multiple factors including chemotherapy regimen, dose, duration of drug infusion, chemotherapy drug metabolism, and concomitant comorbidities. Data have shown that women who experience hair loss despite using scalp cooling might have worse quality of life than women who did not have scalp cooling.
- The Paxman Scalp Cooler should only be used by appropriately qualified healthcare professionals who have been trained in the operation of the device.
- Do not allow any liquids to be placed on the scalp cooler or near the touch screen controller, including drips from the cooling caps.
- Avoid use in ambient temperatures of over 30°C/86°F.
- Do not touch the side ventilation grills whilst the device is in use.

## Attention:

Clinical studies have successfully demonstrated the effectiveness of the Paxman Scalp Cooling System in the prevention of chemotherapy-induced alopecia, or hair loss, with widely used chemotherapy dosages and regimens for solid tumor cancers. Hair retention rates are variable, however, since successful scalp cooling depends on many factors such as the chemotherapy regimen and dose, duration of drug infusion, metabolism of the chemotherapy drug, and concomitant comorbidities or other conditions. Age, hair type, hair condition, and general health can also affect the results of the Paxman Scalp Cooling System.

It cannot be guaranteed that scalp cooling will prevent all patients undergoing chemotherapy from losing any or all of their hair. The success rates of scalp cooling in reducing chemotherapy-induced alopecia, or hair loss, vary from patient to patient and depend on the chemotherapy regimen administered.

Research has shown that scalp cooling is very effective across a wide range of chemotherapy regimens. You may experience some hair loss and overall thinning of the hair while using scalp cooling, and the normal shedding cycle of the hair will continue. We encourage you to continue scalp cooling even if you experience some hair loss. Many people report hair growth during their chemotherapy treatment while using scalp cooling, as new hair growth is also protected from the chemotherapy drugs.

Based on recent research, it is advised not to buy a wig during scalp cooling. The study suggests that you should wait until a wig becomes necessary. This study was authored by Dr van den Hurk and others and is available at [www.paxmanscalpcooling.com](http://www.paxmanscalpcooling.com)

Your healthcare professionals and medical team will let you know if scalp cooling is likely to be successful with your chemotherapy treatment.

## Adverse Effects

### Known side effects associated with scalp cooling include:

- Chills
- Dizziness
- Headache
- Nausea
- Paresthesia (an abnormal sensation such as tingling, tickling, pricking, numbness, or burning of the skin—a “pins and needles” feeling)
- Pruritus (severe itching)
- Sinus pain
- Skin tissue disorders
- Skin ulceration

All of these side effects occur during the scalp cooling process. They are transient or temporary in duration, and are generally recognized as presenting a low risk of harm (although in some cases, patients have discontinued scalp cooling because of these effects).

## A Potential Long-Term Side Effect

The only known potential long-term side effect of scalp cooling is also the most controversial one; this is that scalp cooling when used on women receiving chemotherapy for breast cancer could lead to an increased incidence of scalp metastases. (This is because the same mechanisms that restrict the effectiveness of the chemotherapeutic agent against hair roots or follicle cells in the scalp can also restrict the effectiveness of the chemotherapeutic agent against cancerous tissue in the scalp.)

The natural incidence of scalp metastases in patients with breast cancer is approximately 1 in 4000. This incidence seems to be about the same in patients who receive scalp cooling and those who don't.

There is no clinical evidence that cooling the scalp during adjuvant and palliative chemotherapy treatment increases the risk of developing scalp metastases. The issue remains a theory or possibility, but it has not been proven.

The Paxman Scalp Cooling System is the leading product found to minimize the risk of hair loss during chemotherapy in women with breast cancer. Your healthcare professionals can advise you if scalp cooling is likely to be successful with your chemotherapy treatment, or whether any other treatments, or the use of a wig, scarf, or headcover, may be more appropriate.

*Information on Paxman Scalp Cooling indications for use, contraindications, adverse effects, warnings and precautions and our device description are available to view in full here:*

**[www.coldcap.com/data-and-reference](http://www.coldcap.com/data-and-reference)**

*You will also find our recommended reading list of summarized clinical data, with abstracts available on request.*



A DEGREE OF  
**CONTROL**



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**PAXMAN<sup>o</sup>**

CHANGING THE FACE OF CANCER