GammaPod Radiation Treatment Information for Breast Cancer

This information will help prepare you and your caregiver for your treatment.

What to Expect

You will receive GammaPod radiation therapy, a noninvasive treatment.

Breast Cup Immobilization Device

You will receive a CT scan wearing a plastic breast cup to prepare for the radiation. There are two components of the breast cup. The inner cup is made of thin, light plastic. It is disposable and only used once. The outer cup is attached to the inner cup. This cup does not touch your skin but is sterilized after every use using a hospital-supplied cleaning material. It is made of a thicker lightweight plastic. There is a small space of air between the two cups. This small space has many holes which allows us to remove the air to create suction. This suction is less forceful than a breast pump used by a nursing woman. The vacuum causes the skin of the breast to press against the inner surface of the cup.

The rim of the cup is surrounded by a layer of flexible silicone to create a tight seal between the cup and your skin. The silicone is a soft, flexible material which should not cause discomfort to you. In the event that the seal is not tight or does not maintain pressure, an adhesive spray and/or tegaderm will be applied to the flexible material. See *Figure 1* for a photograph of the cup system. Please note that all materials (cups and silicone) are stored in a clean area accessible only to radiation oncology staff.

You will be asked to put on a breast cup custom-fitted to the size of your breast. Once the breast cup immobilization device has been adjusted to fit comfortably, you will step onto a unique loading device designed specifically for the GammaPod treatment. You will lean forward onto the padded table and insert the cup through the hole (see *Figure* 2). The table will then slowly rotate into position onto the CT scan table and a CT simulation scan will be performed. Simulation scan is a specialized CT scan that allows designing a personalized radiation treatment plan for you. You will be lying on your stomach and your breast will be immobilized. Adjustments will be made to ensure your comfort.

Figure 1: The breast cup immobilization device (small size). The pink silicon surround seals the cup to the chest and the clear plastic cup fits through the hole in the patient couch and locks into place.

Figure 2: Table used to lower patient from standing position to prone position.





Figure 3: A patient lying prone (face down/on her stomach) with her breast in the cup which is secured within the hole on the table.



From your CT image, the doctors conducting the study will develop a treatment plan specifically for you. If the plan is satisfactory based on your physician's judgment, you will then be placed on the GammaPod in the same position as the CT scan to receive the treatment. There should not be pain associated with the radiation itself and no radiation will remain in your breast after the treatment. The entire procedure including CT imaging, treatment planning, and the treatment itself should take approximately 2.5 hours.

Figure 4: The GammaPod machine



Side Effects

Some people will develop side effects that usually occur within 1-3 weeks following the start of radiation therapy. You may experience some or all of the symptoms below, but they are usually temporary and will subside a few weeks after treatment is complete.

- Some patients may experience mild to moderate fatigue.
- Some patients report occasional warm sensations, tingling, or sharp pains in the breast. These sensations decrease slowly over time.
- Temporary skin changes might occur, including redness, dryness, peeling, itching of the treated area, and blistering of the breast. Darkening of the skin in the treated area can also occur. The timing of the peak skin reaction varies, so please discuss with your physician. Healing often takes 3-4 weeks.

Please discuss problems or concerns about side effects or any part of your treatment with your doctor, nurse, or therapist.

Personal Care and Lifestyle Recommendations

- Bathe and shower daily using warm water and a mild unscented soap such as Dove[®] or Purpose[®].
- DO NOT use a washcloth, scrubbing cloth, or brush on the treatment area when bathing.
- Pat skin dry with a soft towel or allow to air-dry.
- Apply unscented moisturizers, such as Aquaphor® or Aloe vera (90 to 100 percent Aloe vera), to the treated area 2-3 times a day. **DO NOT** use moisturizers within 4 hours before your radiation treatment.

DO NOT shave your underarm while under treatment. Applying deodorant to the underarm adjacent to the treated area might cause irritation. We **DO NOT** recommend using deodorant up to 4 hours before treatment; if deodorant is worn, clean underarm with a wet paper towel prior to treatment.

Daily use of deodorant after your treatment is acceptable. To minimize skin irritation, wear loose-fitting cotton underwear and clothing.

Since the area being treated has the potential for increased sensitivity than the rest of your skin, always protect the area from sun exposure after your treatment ends and skin is healed. Use PABA-free sunscreen with a SPF of at least 30.

A daily multi-vitamin is OK during your treatment. **DO NOT** take other vitamins or any supplements, including both nutritional and herbal supplements, without talking to your doctor. Never stop or change your medication without consulting your doctor first.

A well-balanced diet and adequate water intake are recommended. If you require supplemental nutrition, please follow your dietitian's guidelines. Safe levels of exercise are encouraged. Before exercising, please check first with your physician and surgeon.

Contact Your Nurse and Doctor if You Experience:

- Red and/or tender skin
- Pain
- Nipple tenderness
- Dry and/or itchy skin
- Discomfort in the treated area
- Swelling of the breast, underarm, or arm
- Rash

Call Immediately if You Have Any of the Following Symptoms:

- Fever and chills
- 100.5°F or above

Contact Us

During office hours, call your radiation oncologist. After-hours, call 214-645-8525.

End of Breast Treatment Frequently Asked Questions

Post-Treatment Appointments

You will be given a follow-up appointment to see your radiation oncologist in a few weeks or months.

Please ensure that all imaging and labs are completed prior to your follow-up appointment with your radiation oncologist. Please keep your follow-up appointment with other members of your health care team involved in your cancer care.

Side Effects and Symptom Management

- Symptoms related to your treatment may last for weeks or months after your treatment is complete.
- Your symptoms may initially worsen but will gradually improve over the next few weeks.
- Common post-treatment side effects include:
 - Skin redness or peeling
 - **Pain** may worsen the week after radiation but will gradually improve over the next few weeks.
 - **Fatigue**. Take rest periods and get plenty of sleep during your recovery period.

If any of your symptoms worsen, do not improve, or you experience new symptoms, contact the clinic via MyChart message or call your radiation oncology nurse for further direction at 214-645-8525.