

## What is Salvage Radiation Therapy?

**Salvage radiation therapy** is a type of radiation therapy given to men who had their prostate removed but their prostate-specific antigen (PSA) levels increase during follow-up.



## Who Should Get Salvage Radiation Therapy?

- Men with a PSA level  $\geq 0.2$ ng/mL after undergoing prostate removal surgery, called biochemical recurrence.
- Additional imaging including CT scan, bone scan, or a PET scan can be used to determine if salvage radiation therapy is appropriate.

## What is the Significance of Biochemical Recurrence?

- Biochemical recurrence is an early finding of prostate cancer relapse.
- Biochemical recurrence can be treated with salvage radiation therapy, hormone therapy, combination therapy, or close observation.

Potential Benefits	Potential Side Effects
<ul style="list-style-type: none"> <li>• Help cure prostate cancer in men with biochemical recurrence</li> <li>• Reduce the risk of needing hormone therapy in the future</li> <li>• Prevent the development of metastasis (cancer spreading)</li> </ul>	<ul style="list-style-type: none"> <li>• Worsening of urinary control, sexual function, or your bowel habits</li> <li>• Diarrhea, bowel irritation, blood in your stool, blood in your urine, urinary urgency, urinary frequency, painful urination, urinary incontinence, urethral narrowing/scar tissue, or worsening of erections</li> </ul>

- Side effects may be experienced during the time of treatment, several years later, or not at all
- Most side effects are short term, mild to moderate, and are treatable
- Some side effects may be more severe and difficult to manage. Rarely additional procedures or surgeries may be needed

## When is Salvage Radiation Therapy Given?

- Recent data suggests that giving radiation at a level of  $\geq 0.2$ ng/mL (ideally before 1.0 ng/mL) is as effective as giving radiation therapy while the PSA is still undetectable.
- A PSA of  $\geq 0.2$ ng/mL is typically when doctors and patients consider giving salvage radiation therapy.
- **The exact value that is best for you may vary and you should discuss this further with your urologist or radiation oncologist.**

## How is Salvage Radiation Therapy Given?

- Radiation therapy is delivered by a radiation oncologist who works closely with your urologic surgeon.
- Salvage radiation therapy is a type of external beam radiation therapy.
- Typically administered to the prostate bed and sometimes the surrounding lymph node tissue.
- Most men receive a course of radiation, 5 days per week, over a 4-8 week period.
- Sometimes a course of hormone therapy or androgen deprivation therapy will be given with the radiation.
- You should discuss this further with your radiation oncologist if they believe you should receive hormone therapy with your salvage radiation.



## What are the Alternatives to Salvage Radiation Therapy?

- Hormone therapy.
  - Side effects: fatigue, hot flashes, worsening of sexual function, loss of libido, bone loss, weight gain, muscle loss/weakness and confusion or minor issues with cognitive function.
- Close observation. Some may wait and see if prostate cancer spreads to their lymph nodes, bones, or other organs before starting hormone therapy or other chemotherapy-like medications. This will be a shared decision between you and your urologist or radiation oncologist.



This document is designed for adult patient education.  
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