

**For men with prostate cancer post definitive surgical or radiotherapy treatment, what is the optimum follow up protocol to monitor for a biochemical prostate cancer recurrence?**

**Quality of Evidence**

**Patients post definitive surgical treatment**

There is no direct high quality research studies to address the optimum follow up protocol in patients post definitive surgical treatment. It is addressed in a number of international guidelines (National Comprehensive Cancer Network (NCCN), 2022, EAU 2022, NICE, 2019, Cancer Care Ontario, 2019).

The NICE (2019) guideline recommends PSA monitoring no sooner than six weeks post treatment and the guideline development group agree that PSA monitoring should ideally commence before 12 weeks.

The guidelines vary in their recommendation of a follow up protocol to monitor for a biochemical prostate cancer recurrence both in terms of intensity and duration.

The guidelines recommend monitoring PSA either every three months or six months post definitive surgical treatment. There is broad agreement that follow up in year two should be every six months then annually thereafter.

There is no clear recommendation for when monitoring for a biochemical prostate recurrence should start or cease.

**Patients post definitive radiotherapy**

There is no direct high quality research studies to address the optimum follow up protocol in patients post definitive radiotherapy. It is addressed in a number of international guidelines (National Comprehensive Cancer Network (NCCN), 2022, EAU 2022, NICE, 2019, Cancer Care Ontario, 2019).

The NICE (2019) guideline recommends PSA monitoring no sooner than six weeks post treatment and the guideline development group agree that PSA monitoring should ideally commence before 12 weeks.

The guidelines are consistent and recommend monitoring PSA every six months for the first year after treatment completion.

The guidelines are inconsistent on the duration of six monthly follow up. The NCCN recommends monitoring PSA every six months for five years. NICE and Cancer Care Ontario guidelines recommend PSA monitoring every six months for two years.

The guidelines are consistent that PSA monitoring should become annual at the end of year five.

## Benefit and Harm

### Benefit

The purpose of monitoring a PSA for a biochemical recurrence is to optimise the patient's opportunity for management of recurrent disease.

Having a national follow up protocol to monitor for biochemical recurrence provides equitable access to follow up.

### Harm

Regular monitoring of PSA for a biochemical recurrence may cause anxiety for the patient who is undergoing the PSA test.

The guideline development group recognise the use of healthcare resources for PSA monitoring post treatment, while also acknowledging that there is currently no high quality evidence to support doing so. This could be considered a harm as it represents an opportunity cost.

## Preferences and values

The guideline development group agreed that patients would prefer a standardised PSA follow up protocol to ensure that PSA above the expected range is picked up at an appropriate time.

The patient may have increased confidence and reassurance in the service to know that their follow up is consistent with the follow up for other patients.

Health professionals may have increased confidence and reassurance in having a consistent approach nationally.

(Driving value – empowerment of patient, autonomy)

## Resources, capacity and other considerations

There was no relevant cost-effectiveness literature found to address this clinical question.

Resources, capacity and other considerations in relation to follow up were discussed in detail by the guideline development group. It was agreed that implementation of the recommendations below would be supported by the NCCP Cancer Survivorship Programme.

**Recommendation PCa\_F2.1\***

In patients who have been treated with definitive surgery the frequency of PSA follow up should occur six to twelve weeks post-surgery then every three months for the first year, every six months for the second year and then annually.

**Quality of Evidence:** Very low

**Grade of recommendation:** Weak

**Recommendation PCa\_F2.2\***

In patients who have been treated with definitive radiotherapy the frequency of PSA follow up should occur six to twelve weeks post definitive radiotherapy then every six months for the first year, and then annually.

**Quality of Evidence:** Very low

**Grade of recommendation:** Weak

\*Due to the absence of evidence to answer this question, the current recommendations are the consensus of the guideline development group.

**Good practice point**

- Patients should have their PSA measured for at least 10 years. Healthcare professionals may use their discretion in determining the usefulness of annual PSA monitoring beyond 10 years in patients who are unlikely to benefit from salvage therapy.

**Practical considerations around patient care**

- The patient should be given information explaining what the results of their PSA test means and what the normal range is.
- The patient should have access to a CNS or ANP to discuss their PSA results.

**References**

EAU Guidelines. Edn. presented at the EAU Annual Congress Amsterdam 2022.  
 CANCER CARE ONTARIO 2019. Ontario Prostate Follow-up Care Clinical Guidance Summary.  
 NATIONAL COMPREHENSIVE CANCER NETWORK (NCCN) 2022. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) Prostate Cancer.  
 NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE (NICE) 2019. Prostate cancer: diagnosis and management (NG131).

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