

# Best practice in active surveillance for prostate cancer: A consensus guideline for health professionals

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## Introduction

We have developed guidelines on best practice in **active surveillance** in prostate cancer. These are based on:

- a review of all the available research
- an audit of current practice in the UK and other countries
- research into how men with prostate cancer feel about active surveillance.

They have been agreed by our Expert Reference Group and published in the British Journal of Urology International. The full paper is: **Merriel et al. 'Best practice in active surveillance for men with prostate cancer: a Prostate Cancer UK consensus statement'. BJU International. 2019.**

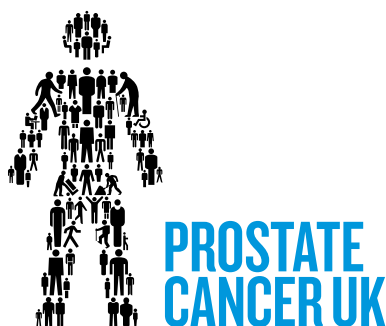
They include guidance for health professionals on:

- who should be offered active surveillance
- who shouldn't be offered active surveillance
- decision-making
- follow-up and support
- when to stop active surveillance.

Our guidelines have been developed for health professionals in centres using pre-biopsy multi-parametric magnetic resonance imaging (mpMRI) scans to help diagnose prostate cancer.

### If you have prostate cancer

These guidelines outline what we believe is best practice in active surveillance, however, your hospital may do things slightly differently. If you have prostate cancer and are thinking of going on active surveillance you can read more about what it involves, the advantages and disadvantages and what to expect on our website at [prostatecanceruk.org/active-surveillance](http://prostatecanceruk.org/active-surveillance) For general information about prostate cancer, visit [prostatecanceruk.org/information](http://prostatecanceruk.org/information)



## Our guidelines for health professionals

### 1) Who should be offered active surveillance?

Active surveillance is suitable for men whose prostate cancer is contained inside the prostate (localised prostate cancer) and isn't likely to spread (low-risk prostate cancer).

Men with a Gleason score of 6 (3+3) should be offered active surveillance as a first management approach.

Active surveillance may also be suitable for some men with prostate cancer who have **all of the following**:

- a Gleason score of 7 (3+4)
- an mpMRI scan that shows a T stage of T2\* or lower
- the biopsy results match the MRI results (they both show signs of prostate cancer in the same areas)
- a PSA density value of 0.2ng/ml<sup>2</sup> or lower
- should be well enough to have treatments such as surgery or radiotherapy.

For more information about tests and test results, visit [prostatecanceruk.org/tests](http://prostatecanceruk.org/tests)

### 2) Who shouldn't be offered active surveillance?

Active surveillance is not suitable for men with prostate cancer who have any of the following:

- a Gleason score of 7 (4+3) or higher where Gleason grade 4 is found in more than two biopsy samples
- an mpMRI scan that shows a T stage of T3a\*\* or higher
- more than 5mm of cancer in any of their biopsy samples.

Men with a Gleason score of 7 (4+3) where Gleason grade 4 is found in only one or two biopsy samples, or who have less than 5mm cancer in all of their biopsy samples, can be offered another biopsy if they are interested in active surveillance.

### 3) Decision-making

Men who are offered active surveillance should be given easy-to-understand information and support to help them decide whether to go on active surveillance or have treatment straight away.

This should include a discussion about what's important to them, all other suitable treatment options, and the risks, benefits and side effects of each treatment.

### 4) Follow-up and support

#### Support for men

Men on active surveillance should have access to a clinical nurse specialist (CNS).

They should be offered and have access to support and counselling at any time while they are on active surveillance.

#### Year one of active surveillance

All men who choose active surveillance should be given an active surveillance plan that is tailored to them and their cancer by their consultant urologist.

The plan should tell them how often they should have a PSA test, and the PSA level that means they need to see a consultant again (PSA threshold). The active surveillance plan should be shared with their GP.

Men should have regular PSA tests (as set out in their active surveillance plan). How often a man has a PSA test will depend on their:

- previous PSA levels
- mpMRI scan results
- PSA density.

\*If a man can't have an mpMRI scan then their T stage from other tests, such as a digital rectal examination (DRE), CT scan or ultrasound scan, can be used.

\*\*If a man can't have an mpMRI scan then their T stage from other tests, such as a DRE, CT scan or ultrasound scan, can be used.

If a man's PSA level goes above their personal PSA threshold, their GP should test for a urine infection and, if no infection is found, do another PSA test after six weeks. If the PSA level is still above their personal PSA threshold, then the man should be referred to the hospital for further tests.

Men on active surveillance should also have an mpMRI scan 12 months after their previous (baseline) scan. If a man can't have an mpMRI scan, then they should have a DRE at 12 months instead.

They should then have a biopsy if their mpMRI scan results show changes to their cancer or if their PSA level has risen above their personal PSA threshold.

A routine biopsy after 12 months can be delayed if other tests suggest the cancer is unlikely to spread, for example if the man's mpMRI scan results and PSA level haven't changed. However, men may choose to have a biopsy after 12 months, even if their mpMRI scan results and PSA level suggest their cancer hasn't changed.

### **Year two of active surveillance and onwards**

The following guidelines are for men who are in their second year (or later) on active surveillance. They should be used every year until a man begins a treatment like surgery or radiotherapy, or moves on to **watchful waiting**.

If a man stays on active surveillance, their consultant should update their active surveillance plan. This updated plan should be shared with their GP. The plan should still tell men how often they should have a PSA test and what their personal PSA threshold is.

Men should have regular PSA tests (as set out in their active surveillance plan). How often a man has a PSA test will depend on their:

- previous PSA levels
- mpMRI scan results
- PSA density.

If a man's PSA level goes above their personal PSA threshold, their GP should test for a urine infection and, if no infection is found, do another PSA test after six weeks. If the PSA level is still above their personal PSA threshold, then the man should be referred to the hospital for further tests.

Men may have an mpMRI scan in their second year (or later) of active surveillance if cancer was visible on their first (baseline) mpMRI scan, or if their PSA level goes above their PSA threshold. Their GP, consultant or CNS may also decide to do a DRE.

If a man can't have an mpMRI scan, then they should have a DRE instead.

Men should then have a biopsy if their mpMRI scan results show changes to their cancer. Men may also choose to have a biopsy, even if their mpMRI scan results and PSA level suggest their cancer hasn't changed.

Men's general health should be checked regularly to make sure they are still fit enough to receive other treatments, like surgery or radiotherapy, if they need them.

### **5) When to stop active surveillance**

A man should be able to stop active surveillance at any time to either have treatment to get rid of the cancer, such as surgery or radiotherapy, or go on to watchful waiting.

The decision should only be made after discussion with their GP, CNS or consultant, and should consider the man's personal preferences and whether their cancer has grown. Doctors will also look at men's general health and any other health problems they have when deciding whether treatment or watchful waiting would be more suitable.

Read more about active surveillance on our website at [prostatecanceruk.org/active-surveillance](http://prostatecanceruk.org/active-surveillance)

## Expert Reference Group

These guidelines have been developed and agreed by the following Expert Reference Group:

- Mark Ashworth, School of Population Health and Environmental Sciences, King's College London.
- Robert Bradley, Consultant Radiologist, Sheffield Teaching Hospitals NHS Foundation Trust.
- Keith Cass, Founder of The Red Sock Campaign and Board member and Trustee of Tackle Prostate Cancer.
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## References used in the review

- BAUS. Active Surveillance for low to intermediate grade prostate cancer. London: British Association of Urological Surgeons; 2017. p. 1–5.
- Bruinsma SM, Bangma CH, Carroll PR, Leapman MS, Rannikko A, Petrides N, et al. Active surveillance for prostate cancer: a narrative review of clinical guidelines. *Nat Rev Urol* [Internet]. 2016 Jan 27;13:151. Available from: [dx.doi.org/10.1038/nrurol.2015.313](https://doi.org/10.1038/nrurol.2015.313)
- Bruinsma SM, Roobol MJ, Carroll PR, Klotz L, Pickles T, Moore CM, et al. Expert consensus document: Semantics in active surveillance for men with localized prostate cancer—results of a modified Delphi consensus procedure. *Nat Rev Urol*. 2017;14(5):312–22.
- Bruinsma SM, Zhang L, Roobol MJ, Bangma CH, Steyerberg EW, Nieboer D, et al. The Movember Foundation's GAP3 cohort: a profile of the largest global prostate cancer active surveillance database to date. *BJU Int*. 2018;121(5):737–44.
- BUG, BAUS Section of Oncology. Multi-disciplinary Team (MDT) Guidance for Managing Prostate Cancer. London: British Uro-oncology Group; 2013.
- Bul M, Zhu X, Valdagni R, Pickles T, Kakehi Y, Rannikko A, et al. Active surveillance for low-risk prostate cancer worldwide: The PRIAS study. *Eur Urol* [Internet]. 2013 Apr 1;63(4):597–603. Available from: [linkinghub.elsevier.com/retrieve/pii/S030228381201336X](https://linkinghub.elsevier.com/retrieve/pii/S030228381201336X)
- Chen RC, Bryan Rumble R, Andrew Loblaw D, Finelli A, Ehdiaie B, Cooperberg MR, et al. Active surveillance for the management of localized prostate cancer (Cancer Care Ontario guideline): American Society of Clinical Oncology clinical practice guideline endorsement. *J Clin Oncol*. 2016;34(18):2182–90.
- Dahabreh IJ, Chung M, Balk EM, Yu WW, Mathew P. Active Surveillance in Men With Localized Prostate Cancer. *Ann Intern Med*. 2012;156:582–90.
- Davison BJ, Goldenberg SL. Patient acceptance of active surveillance as a treatment option for low-risk prostate cancer. *BJU Int*. 2011;108(11):1787–93.
- Ferlay J, Soerjomataram I, Ervik M, Dikshit R, Eser S, Mathers C, et al. GLOBOCAN 2012 v1.0, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11 [Internet] International Agency for Research on Cancer. 2013 [cited 2018 May 24]. Available from: [globocon.iarc.fr](http://globocon.iarc.fr)
- Hamdy FC, Donovan JL, Lane JA, Mason M, Metcalfe C, Holding P, et al. 10-Year Outcomes after Monitoring, Surgery, or Radiotherapy for Localized Prostate Cancer. *N Engl J Med* [Internet]. 2016 Sep 14;NEJMoa1606220-10. Available from: [nejm.org/doi/10.1056/NEJMoa1606220](https://doi.org/10.1056/NEJMoa1606220)
- Martin G. Sanda, MD; Ronald C. Chen MTCFS, MD; Kirsten Greene, MD; Laurence H. Klotz, MD; Danil V. Makarov MJB, Nelson, MD; James Reston, PhD; George Rodrigues, MD; Howard M. Sandler M, Mary Ellen Taplin, MD; Jeffrey A. Cadeddu M. Clinically Localized Prostate Cancer: AUA/ASTRO/SUO Guideline. American Urological Association. American Urological Association Education and Research, Inc.; 2017. p. 1–56.
- Mohler JL, Armstrong AJ, Bahnson RR, D'Amico A V, Davis BJ, Eastham J, et al. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines): Prostate Cancer [Internet]. National Comprehensive Cancer Network; 2016. Available from: [tri-kobe.org/nccn/guideline/urological/english/prostate.pdf](https://www.nccn.org/guidelines/urological/english/prostate.pdf)
- Moore CM, Giganti F, Albertsen P, Allen C, Bangma C, Briganti A, et al. Reporting Magnetic Resonance Imaging in Men on Active Surveillance for Prostate Cancer: The PRECISE Recommendations—A Report of a European School of Oncology Task Force. *Eur Urol* [Internet]. 2017;71(4):648–55. Available from: [dx.doi.org/10.1016/j.eururo.2016.06.011](https://doi.org/10.1016/j.eururo.2016.06.011)
- Moore CM, Petrides N, Emberton M. Can MRI replace serial biopsies in men on active surveillance for prostate cancer? *Curr Opin Urol*. 2014;24(3):280–7.
- Moore CM, Ridout A, Emberton M. The role of MRI in active surveillance of prostate cancer. *Curr Opin Urol*. 2013;23(3):261–7.
- Morash C, Tey R, Agbassi C, Klotz L, McGowan T, Srigley J, et al. Active surveillance for the management of localized prostate cancer: Guideline recommendations. *Can Urol Assoc J* [Internet]. 2015;9(5–6):171–8. Available from: [journals.sfu.ca/cuaj/index.php/journal/article/view/2806](https://journals.sfu.ca/cuaj/index.php/journal/article/view/2806)
- Mottet N, Bellmunt J, Briers E, Bolla M, Bourke L, Cornford P, et al. EAU - ESTRO - ESUR - SIOG Guidelines on Prostate Cancer [Internet]. European Association of Urology; 2017. Available from: [uroweb.org/wp-content/uploads/09-Prostate-Cancer\\_2017\\_web.pdf](https://uroweb.org/wp-content/uploads/09-Prostate-Cancer_2017_web.pdf)
- NICE. Prostate cancer: diagnosis and management [Internet]. London: National Institute for Health and Care Excellence; 2014. Available from: [nice.org.uk/guidance/cg175/resources/prostate-cancer-diagnosis-and-management-pdf-35109753913285](https://www.nice.org.uk/guidance/cg175/resources/prostate-cancer-diagnosis-and-management-pdf-35109753913285)
- NICE. Prostate cancer: diagnosis and treatment [Internet]. Cardiff: National Collaborating Centre for Cancer; 2008 Feb. Available from: [ncbi.nlm.nih.gov/books/NBK49533/pdf/Bookshelf\\_NBK49533.pdf](https://www.ncbi.nlm.nih.gov/books/NBK49533/pdf/Bookshelf_NBK49533.pdf)
- NICE. Prostate cancer: protocol for active surveillance [Internet]. London: National Institute for Health and Care Excellence; 2014. Available from: [nice.org.uk/guidance/cg175/resources/cg175-prostate-cancer-protocol-for-active-surveillance2](https://www.nice.org.uk/guidance/cg175/resources/cg175-prostate-cancer-protocol-for-active-surveillance2)
- Payne H, Clarke N, Huddart R, Parker C, Troup J, Graham J. Nasty or Nice? Findings from a UK Survey to Evaluate the Impact of the National Institute for Health and Clinical Excellence (NICE) Clinical Guidelines on the Management of Prostate Cancer. *Clin Oncol* [Internet]. 2013;25(3):178–89. Available from: [dx.doi.org/10.1016/j.clon.2012.09.001](https://doi.org/10.1016/j.clon.2012.09.001)
- Pickles T, Ruether JD, Weir L, Carlson L, Jakulj F, Hack TF, et al. Psychosocial barriers to active surveillance for the management of early prostate cancer and a strategy for increased acceptance. *BJU Int*. 2007;100(3):544–51.
- RCS. The National Prostate Cancer Audit (NPCA) Annual Report 2017 [Internet]. London: National Prostate Cancer Audit; 2017. Available from: [npca.org.uk](https://www.npca.org.uk)
- Sandhu GS, Andriole GL. Overdiagnosis of prostate cancer. *J Natl Cancer Inst - Monogr* [Internet]. 2012 Dec 27;2012(45):146–51. Available from: [jncimono.oxfordjournals.org/cgi/doi/10.1093/jncimonographs/lgs031](https://doi.org/10.1093/jncimonographs/lgs031)
- Scarpato KR, Barocas DA. Use of mpMRI in active surveillance for localized prostate cancer. *Urol Oncol Semin Orig Investig* [Internet]. 2016;34(7):320–5. Available from: [dx.doi.org/10.1016/j.urolonc.2016.02.020](https://doi.org/10.1016/j.urolonc.2016.02.020)
- Thurtle D, Barrett T, Thankappan-Nair V, Koo B, Warren A, Kastner C, et al. Progression and treatment rates using an active surveillance protocol incorporating image-guided baseline biopsies and multiparametric magnetic resonance imaging monitoring for men with favourable-risk prostate cancer. *BJU Int*. 2018;59–65.
- Van Den Bergh RCN, Korfage IJ, Bangma CH. Psychological aspects of active surveillance. *Curr Opin Urol*. 2012;22(3):237–42.
- Wilt TJ, Brawer MK, Jones KM, Barry MJ, Aronson WJ, Fox S, et al. Radical Prostatectomy versus Observation for Localized Prostate Cancer. *N Engl J Med* [Internet]. 2012 Jul 19;367(3):203–13. Available from: [nejm.org/doi/abs/10.1056/NEJMoa1113162](https://doi.org/10.1056/NEJMoa1113162)

# PROFESSIONAL SUPPORT

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