## Comment



# Active surveillance in prostate cancer: when to exit and what are the options?

Jianliang Liu $^{1,2,3,4}$ , Dixon T.S. Woon $^{1,2}$ , Marlon Perera $^{1,2,4}$   $\bigcirc$  and Nathan Lawrentschuk $^{1,2,3,4}$   $\bigcirc$ 

<sup>1</sup>EJ Whitten Prostate Cancer Research Centre, Epworth Healthcare, <sup>2</sup>Department of Surgery, <sup>3</sup>Department of Surgery, The Royal Melbourne Hospital, University of Melbourne, and <sup>4</sup>Sir Peter MacCallum Department of Oncology, The University of Melbourne, Vic., Australia

Active surveillance (AS) is a common management strategy for localised low-risk and selected intermediate-risk prostate cancer (PCa) [1]. The goal of AS is to delay or avoid side effects associated with active treatment without compromising oncological outcome. However, transitioning from AS to active treatment can be a complex decision-making process influenced by multiple factors, which include the patient's comorbidities and preferences.

Firstly, the AS regimen should be tailored according to patient's risk of progression [2]. According to the guidelines of the AUA and the European Association of Urology (EAU), a DRE should be performed at least once a year, and PSA testing should be carried out at least every 6 months [3,4]. Some indications for repeat multiparametric MRI (mpMRI) and possibly repeat biopsies include new abnormalities detected on DRE and a serial increase in PSA levels (including PSA doubling time of <3 years; Fig. 1). Serial surveillance biopsies are also recommended, with intervals ranging from 1 to 4 years (1-3 years during the first decade, as per EAU guidelines). The frequency of serial surveillance is dependent on the patient's comorbidities, life expectancy, and risk of progression. Both guidelines recognise that serial mpMRI could help detect clinically significant PCa (csPCa), however, there is a lack of evidence regarding the optimal timing of serial mpMRI. In the absence of clinical concerns regarding PCa progression, our centre performs serial mpMRI, at least prior to serial surveillance biopsies. Additionally, there is emerging evidence of the ability of PSMA PET/CT to detect intraprostatic csPCa [5]. No recommendations can be made at this stage regarding frequency of PSMA PET/CT during AS, but trials are currently underway [5].

Patients should only remain on AS if they consent and their disease remains indolent, with a life expectancy of > 10 years [3,4]. Watchful waiting should be considered if the patient's life expectancy is < 10 years. The aim of watchful waiting is to minimise treatment-related side effects without

compromising survival, as PCa is unlikely to cause symptoms within a limited life expectancy. In this group, active treatment does not offer a survival advantage.

Active treatment (radical prostatectomy or radiotherapy) may be considered if patients have a life expectancy of > 10 years and have pathological progression: International Society of Urological Pathology (ISUP) Grade Group (GG)  $\geq 3$ , or ISUP GG 2 with increased systematic core positivity (> 3 cores involvement [> 50% per core]), or ISUP GG 2 with > 10% pattern 4 disease. Both surgery and radiation offer comparable efficacy in oncological control, with the decision often being complex and heavily influenced by patient preference.

Focal therapy has emerged as a potential middle ground for whom it is uncertain whether AS or active treatment. Current guidelines recommend focal therapy only for low- to intermediate-risk PCa within the context of a clinical trial or a prospective registry, due to the absence of long-term randomised data [4,6]. Earlier detection and the possible 'stage migration' from the adoption of novel imaging techniques (mpMRI and PSMA PET/CT) may enable more patients to be considered for focal therapy during AS [6].

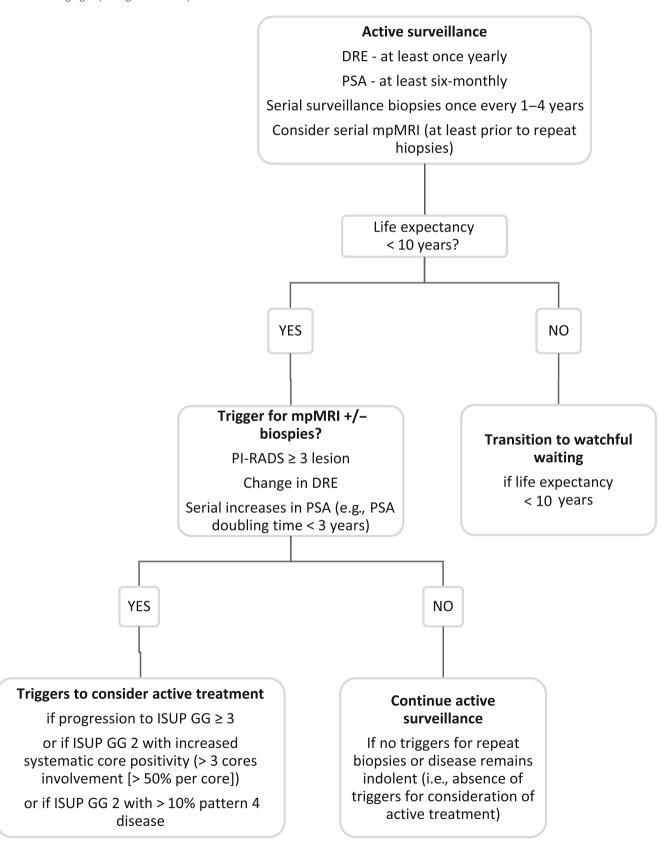
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Fig. 1 Simplified active surveillance algorithm. GG, Grade Group; ISUP, International Society for Urological Pathology; mpMRI, multiparametric MRI; PI-RADS, Prostate Imaging-Reporting and Data System.



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Correspondence: Nathan Lawrentschuk, EJ Whitten Prostate Cancer Research Centre, Epworth Healthcare, Epworth Freemasons, Albert St. East Melbourne Vic 3002, Australia. e-mail: lawrentschuk@gmail.com

Abbreviations: AS, active surveillance; csPCa, clinically significant prostate cancer; EAU, European Association of Urology; GG, grade group; ISUP, International Society of Urological Pathology; mpMRI, multiparametric MRI; PCa, prostate cancer.