

## DAFTAR PUSTAKA

1. Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA Cancer J Clin.* 2021;71(3):209–49. <https://doi.org/10.3322/caac.21660>
2. Stephenson A, Klein E. Epidemiology, etiology, and prevention of prostate cancer. In: Wein A, Kavoussi L, Partin A, Peters C, editors. *Campbell-Walsh Urology*. 11th ed. Philadelphia: Elsevier; 2016. p. 2543–64.
3. Bray F, Ferlay J, Soerjomataram I, Siegel RL, Torre LA, Jemal A. Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin.* 2018;68(6):394–424. <https://doi.org/10.3322/caac.21492>
4. Fitzmaurice C, Abate D, Abbasi N, Abbastabar H, Abd-Allah F, Abdel-Rahman O, et al. Global, Regional, and National Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life-Years for 29 Cancer Groups, 1990 to 2017. *JAMA Oncol.* 2019;5(12):1749. <https://doi.org/10.1001/jamaoncol.2019.2996>
5. Di Zazzo E, Galasso G, Giovannelli P, Di Donato M, Castoria G. Estrogens and their receptors in prostate cancer: Therapeutic implications. *Front Oncol.* 2018;8(JAN):1–7. <https://doi.org/10.3389/fonc.2018.00002>
6. Pejčić T. Prostate Cancer: Epidemiology, Etiology, Pathogenesis, and Risk Factors. Kocic G, Hadzi-Djokic J, Simic T, editors. *Prostate Cancer*. Cham: Springer Nature Switzerland; 2024. [http://dx.doi.org/10.1007/978-3-031-51712-9\\_1](http://dx.doi.org/10.1007/978-3-031-51712-9_1)
7. Yeh C-R, Da J, Song W, Fazili A, Yeh S. Estrogen receptors in prostate development and cancer. *Am J Clin Exp Urol.* 2014;2(2):161–8. <https://pubmed.ncbi.nlm.nih.gov/25374919/>

8. Hoffman MA, DeWolf WC, Morgentaler A. Is Low Serum Free Testosterone a Marker for High Grade Prostate Cancer? *J Urol*. 2000 Mar;163(3):824–7. <https://pubmed.ncbi.nlm.nih.gov/10687985/>
9. García-Cruz E, Piqueras M, Huguet J, Peri L, Izquierdo L, Musquera M, et al. Low testosterone levels are related to poor prognosis factors in men with prostate cancer prior to treatment. *BJU Int*. 2012 Dec 15;110(11b). <https://doi.org/10.1111/j.1464-410x.2012.11232.x>
10. Wong HMC, Chiu PK-F, Puche-Sanz I, Xue Z, Chen D-N, Gomez-Gomez E, et al. Lower baseline testosterone level is related to earlier development of castration resistance in metastatic prostate cancer: a multi-center cohort study. *Front Oncol*. 2024 Feb 20;14. <https://doi.org/10.3389/fonc.2024.1321522>
11. Imamoto T, Suzuki H, Yano M, Kawamura K, Kamiya N, Araki K, et al. The role of testosterone in the pathogenesis of prostate cancer. *Int J Urol*. 2008 Jun 19;15(6):472–80. <https://doi.org/10.1111/j.1442-2042.2008.02074.x>
12. Bonkhoff H, Fixemer T, Hunsicker I, Remberger K. Estrogen receptor expression in prostate cancer and premalignant prostatic lesions. *Am J Pathol*. 1999;155(2):641–7. [https://doi.org/10.1016/s0002-9440\(10\)65160-7](https://doi.org/10.1016/s0002-9440(10)65160-7)
13. Royuela M, de Miguel MP, Bethencourt FR, Sánchez-Chapado M, Fraile B, Arenas MI, et al. Estrogen receptors  $\alpha$  and  $\beta$  in the normal, hyperplastic and carcinomatous human prostate. *J Endocrinol*. 2001;168(3):447–54. <https://doi.org/10.1677/joe.0.1680447>
14. Towe MM, Huynh LM, El Khatib F, Osman MM, Yafi FA, Ahlering TE. The predictive power of free (vs. total) testosterone in aggressive prostate cancer. *J Clin Oncol*. 2019 May 20;37(15\_suppl):e16570–e16570. [http://dx.doi.org/10.1200/JCO.2019.37.15\\_suppl.e16570](http://dx.doi.org/10.1200/JCO.2019.37.15_suppl.e16570)
15. Salami SS, Palapattu GS, Partin AW, Morgan TM. Prostate Cancer Biomarkers. In: Partin AW, Dmochowski RR, Kavoussi LR, Peters CA,

editors. Campbell-Walsh-Wein Urology. Twelfth Ed. Elsevier; 2020.

16. Safriadi F, Umbas R, Danarto D, Hakim L, Warli SM, Hamid AR, et al. Panduan Penanganan Kanker Prostat. Ikatan Ahli Urologi Indonesia. Ikatan Ahli Urologi Indonesia; 2022.
17. Epstein JI. An Update of the Gleason Grading System. *J Urol*. 2010;183(2):433–40. <https://doi.org/10.1016/j.juro.2009.10.046>
18. Kane CJ, Eggener SE, Shindel AW, Andriole GL. Variability in Outcomes for Patients with Intermediate-risk Prostate Cancer (Gleason Score 7, International Society of Urological Pathology Gleason Group 2–3) and Implications for Risk Stratification: A Systematic Review. *Eur Urol Focus*. 2017 Oct;3(4–5):487–97. <https://doi.org/10.1016/j.euf.2016.10.010>
19. Mottet N, Bellmunt J, Briers E, Bergh RCN van den, Bolla M, Casteren NJ van, et al. Guidelines on Prostate Cancer. *Urol Oncol Semin Orig Investig*. 2020;53(February):31–45. <https://doi.org/10.1016/j.eururo.2020.09.042>
20. Hadzi-Djokic J. Hormone Therapy for Advanced Prostate Cancer. In: *Prostate Cancer*. Cham: Springer Nature Switzerland; 2024. p. 295–324. [https://doi.org/10.1007/978-3-031-51712-9\\_15](https://doi.org/10.1007/978-3-031-51712-9_15)
21. Song W, Khera M. Physiological normal levels of androgen inhibit proliferation of prostate cancer cells in vitro. *Asian J Androl*. 2014;16(6):864. <https://doi.org/10.4103/1008-682x.129132>
22. Fixemer T, Remberger K, Bonkhoff H. Differential expression of the estrogen receptor beta (ER $\beta$ ) in human prostate tissue, premalignant changes, and in primary, metastatic, and recurrent prostatic adenocarcinoma. *Prostate*. 2003 Feb 20;54(2):79–87. <https://doi.org/10.1002/pros.10171>
23. Lucky Frannata, Ery Kus Dwianingsih, Raden Danarto, Indrawarman. Overexpression of Estrogen Receptor 1 (ESR-1) in metastatic prostate cancer. *Indones J Biomed Sci*. 2022 Jun 23;16(1):47–50. <https://doi.org/10.15562/ijbs.v16i1.394>

24. Livak KJ, Schmittgen TD. Analysis of relative gene expression data using real-time quantitative PCR and the 2(-Delta Delta C(T)) method. *Methods*. 2001;25(4):402–8. <https://doi.org/10.1006/meth.2001.1262>
25. Ljungberg B, Albiges L, Abu-Ghanem Y, Bedke J, Capitanio U, Dabestani S, et al. European Association of Urology Guidelines on Renal Cell Carcinoma: The 2022 Update. *Eur Urol*. 2022;82(4):399–410. <https://doi.org/10.1016/j.eururo.2022.03.006>
26. Tan RBW, Silberstein JL, Hellstrom WJG. Testosterone and the prostate. *Sex Med Rev*. 2014;2(3–4):112–20. <https://doi.org/10.1002/smrj.29>
27. Boyle P, Koechlin A, Bota M, d’Onofrio A, Zaridze DG, Perrin P, et al. Endogenous and exogenous testosterone and the risk of prostate cancer and increased prostate-specific antigen (PSA) level: a meta-analysis. *BJU Int*. 2016;118(5):731–41. <https://doi.org/10.1111/bju.13417>
28. Michaud JE, Billups KL, Partin AW. Testosterone and prostate cancer: An evidence-based review of pathogenesis and oncologic risk. *Ther Adv Urol*. 2015;7(6):378–87. <https://doi.org/10.1177/1756287215597633>
29. Carruba G. Estrogen and prostate cancer: An eclipsed truth in an androgen-dominated scenario. *J Cell Biochem*. 2007;102(4):899–911. <https://doi.org/10.1002/jcb.21529>
30. Miura N, Mori K, Mostafaei H, Quhal F, Sari Motlagh R, Abufaraj M, et al. Prognostic value of testosterone for the castration-resistant prostate cancer patients: a systematic review and meta-analysis. *Int J Clin Oncol*. 2020;25(11):1881–91. <https://doi.org/10.1007/s10147-020-01747-1>
31. Bhatnagar S, Soni A, Kaushik S, Rikhi M, Santhoshkumar TR, Jayaram B. Nonsteroidal estrogen receptor isoform-selective biphenyls. *Chem Biol Drug Des*. 2018 Feb;91(2):620–30. <https://doi.org/10.1111/cbdd.13126>