Tadalafil once daily

Tadalafil once daily (2.5mg and 5mg) is licensed for erectile dysfunction (ED) and for the signs and symptoms of benign prostatic hyperplasia (5mg only).¹ In common with other phosphodiesterase-5 (PDE5) inhibitors it has also been used to improve long term erectile function in men after radical prostatectomy for prostate cancer (penile rehabilitation), although it is not specifically licensed for this purpose.^{1,2}

Key recommendations

Erectile dysfunction

- Do not choose tadalafil once daily for treating ED on the assumption of favourable efficacy. Evidence suggests that tadalafil 5mg once daily has a similar efficacy to tadalafil 10mg or 20mg taken on-demand for ED.
- Choose the PDE5 inhibitor with the lowest acquisition cost (currently generic sildenafil), unless it is clinically unsuitable.
- Note that the price of some strengths of generic tadalafil have fallen to a level comparable with generic sildenafil. This can make it a favourable alternative where sildenafil is not tolerated or is unsuccessful. Be aware that men who do not meet the NHS criteria for tadalafil should be offered a private prescription.
- Consider switching to generic sildenafil (or other low cost PDE5 inhibitor) for men receiving comparatively expensive PDE5 inhibitors such as tadalafil 2.5mg once daily or Cialis® branded products, where clinically appropriate.
- Periodically reassess the appropriateness of continued daily use of tadalafil in line with anticipated use by the patient. The product licence only supports consideration of daily dosing in men who anticipate frequent use (at least twice weekly).

Use after radical prostatectomy

- Men with prostate cancer should have early and ongoing access to specialist ED services. Those who experience loss of
 erectile function should be offered PDE5 inhibitors to improve their chance of spontaneous erections, in line with NICE
 guidance.
- All of the available PDE5 inhibitors are licensed for treating ED and can be prescribed on an NHS prescription after prostatectomy. None however, are specifically licensed for prevention of long term ED or penile rehabilitation after prostatectomy.
- Guidelines from expert bodies advocate early initiation of pro-erectile treatment after radical prostatectomy.
- In the absence of robust evidence favouring a particular PDE5 inhibitor treatment regimen, local policy makers may advocate choosing a lower cost option where clinically appropriate. Consultation with local stakeholders including urology specialists is needed.

Costs and savings

Based on prescribing data from NHSBSA (December 2022 to February 2023) and Public Health Scotland (November 2022 to January 2023). Generic tadalafil once daily 2.5mg costs £30.31 for 28 days treatment. Branded Cialis® tablets (both 2.5mg and 5mg strengths) are more expensive, costing £54.99 for 28 days. Generic tadalafil 5mg is less costly (£1.93 (£1.95 Scotland) for 28 days), but still costs more than on demand generic sildenafil 25-100mg (£0.77-£0.90 (£1.01-£1.08 Scotland) for 4 doses) or on demand

generic tadalafil 10-20mg

(£0.96-£1.07 for four

doses).3,4

Table 1. Tadalafil for daily use cost and saving figures

Tadalafil for daily dosing	England	Wales	Scotland
% of all PDE5 inhibitor prescriptions	5.1%	11.6%	10.3%
Annual cost	£1,415,804	£195,768	£239,604
12 months cost avoidance by switching to PDE5 inhibitors costing <£1.50 per 28 days	£1,345,014	£185,979	£227,623
Savings per 100,000 population by switching to PDE5 inhibitors costing <£1.50 per 28 days	£2,460		

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References

- 1. Joint Formulary Committee. BNF (online) London: BMJ Group and Pharmaceutical Press. https://www.medicinescomplete.com/ accessed on 20/01/2023.
- 2. Philippou YA, Jung JH, Steggall MJ et al. Penile rehabilitation for postprostatectomy erectile dysfunction. Cochrane Database of Systematic Reviews 2018, Issue 10. Art. No.: CD012414. https://doi.org/10.1002/14651858.CD012414.pub2
- 3. NHS Business Services Authority. Drug Tariff. May 2023 https://www.nhsbsa.nhs.uk/pharmacies-gp-practices-and-appliance-contractors/drug-tariff
- 4. NHS Prescription Services. dm&d browser, accessed 04/05/23 https://services.nhsbsa.nhs.uk/dmd-browser/

		Bulletin	
Additional resources available		Tools	https://www.prescqipp.info/our-resources/bulletins/bulletin-322-tadalafil-once-daily/
	avaiiable	Data pack	https://data.prescqipp.info/?pdata.u/#/views/B322_Tadalafiloncedaily/FrontPage?:iid=1

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