257. Luteinising hormone-releasing hormone (LHRH) agonists in prostate cancer

Across England and Wales, £76.5 million (NHSBSA Aug – Oct 2019) is spent annually on LHRH agonists. Using three or six monthly triptorelin or three monthly leuprorelin in place of 28 days / monthly or 4 weekly goserelin, leuprorelin and triptorelin is recommended as these are more convenient for patients and have reduced costs.

Key recommendations

- When deciding on LHRH agonist formulary choices in discussion with local Trust urologists, consider efficacy, safety, licensed uses, dosage intervals, administration, product price, and fees paid for administration.
- Local decision making may take account of local Trust discounts or primary care rebate scheme activity dependent upon local policies.
- Three monthly and six monthly triptorelin (Decapeptyl® SR 11.25mg and 22.5mg) and three monthly leuprorelin (Prostap® 3 DCS) are the preferred cost-effective LHRH agonists for prostate cancer in new patients.
- Use three monthly or six monthly LHRH agonist injections in preference to 28 days / four weekly / monthly injections as these are more convenient for patients and have reduced costs.
- Agree guidance on switches to cost-effective LHRH agonists with local Trust urologists for existing patients. Consider switches suitable for the individual patient at the next clinic appointment.
- Review long-term LHRH agonist treatment in men with high risk localised prostate cancer. Consider using intermittent androgen deprivation therapy (ADT) with monitoring in men with high risk localised prostate cancer who are on long term (up to three years) ADT.[1,2]
- Engage with and establish opinion from local Trust urologists on the use of intermittent LHRH agonist therapy. Where intermittent therapy is appropriate the urologist should discuss this with patients (including risks and benefits as recommended by NICE). The urologist should inform the GP if the patient is to be treated with LHRH agonist intermittent therapy and provide details of the monitoring requirements.

Clinical effectiveness

All LHRH agonists, except Gonapeptyl® Depot, are licensed for the following indications:[3-10]

- Metastatic prostate cancer
- Locally advanced, non-metastatic prostate cancer, as an alternative to surgical castration
- As an adjuvant treatment to radiotherapy in patients with high-risk localised or locally advanced prostate cancer
- As an adjuvant treatment to radical prostatectomy in patients with locally advanced prostate cancer at high risk of disease progression
- As neo-adjuvant treatment prior to radiotherapy in patients with high-risk localised or locally advanced prostate cancer

Although there is no formal direct comparison between the LHRH agonists, they are considered to be equally effective and comparable to orchidectomy.[11]

Savings

Switching to three or six monthly triptorelin (Decapeptyl® SR 11.25mg or Decapeptyl® SR 22.5mg) would reduce the number of injections administered per year and **result in a potential saving of £9.8 million per year across England and Wales. This equates to £15,531 per 100,000 population.**

Alternatively, switching to three monthly leuprorelin (Prostap® 3 DCS) would reduce the number of injections administered per year and **result in potential savings of £3.7 million per year across England and Wales. This equates to £5,972 per 100,000 population.**

Any switches to cost-effective alternatives should be considered through discussion with the patient at the next clinic appointment.

References

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11. European Association of Urology 2019. EAU, EAMN, ESTRO, ESUR, SIOG Guidelines on Prostate Cancer. Available at https://uroweb.org/guideline/prostate-cancer/ Accessed 05/05/19.

Additional resources available	Bulletin	https://www.prescqipp.info/our-resources/bulletins/bulletin-257-lhrh-agonists-in-prostate-cancer/
	Tools	
	Data pack	https://pdata.uk/#/views/B257_LHRHanalogues/FrontPage?:iid=1