

**Specific Question:**

In adult males with prostate cancer, which is the most clinically and cost effective drug; Prostag (Leuprorelin) or Zoladex (Goserelin).

**Clinical bottom line**

Three monthly and 6 monthly Triptorelin and 3 monthly Leuprorelin are the preferred cost effective luteinizing hormone releasing hormone agonists (LHRH) for prostate cancer in new patients.

Switch guidance would need to be agreed by local Trust urologists for existing patients and should be considered at clinical appointments.

Use 12 weekly/3 monthly or 6 monthly injections in preference to 4 weekly/monthly injections to support administration, convenience to the patient and costs.

Review long term treatment in men with high risk localised prostate cancer. Androgen deprivation therapy may be considered for up to 3 years in this group. Intermittent therapy may be considered.

**Why is this important?**

Patients are generally prescribed either prostap or Zoladex for the treatment of prostate cancer. Both drugs are luteinising hormone blockers (LH blockers). Prostag is said to be easier to administer. There is minimal difference in cost between the two drugs. Practice nurses are unsure whether or not one drug is more clinically effective than the other when discussing the drugs with patients.

**Search timeframe (e.g. 2006-2016)**

Inception of searched databases to Sept 2016

Getting Evidence into Clinical Practice:  
 General Practice Nurse Evidence Based Practice (CAT Group)  
 Date: Sept 2016

**Inclusion Criteria**

	Description	Search terms
<b>Population and Setting</b>	<b>Adults males with prostate cancer</b>	<b>P:</b> exp PROSTATE CANCER (neoplasm adj3 prostate)
<b>Intervention or Exposure</b>	<b>Prostap (Leuprorelin acetate)</b>	<b>I:</b> exp LEUPRORELIN (prostap OR leuprorelin OR lupron).
<b>Comparison, if any</b>	<b>Zoladex (Goserelin acetate)</b>	<b>C:</b> zoladex OR goserelin
<b>Outcomes of interest</b>	<b>Primary:</b> Lower PSA  <b>Secondary:</b> Effectiveness of castration	<b>O:</b> PROSTATE CANCER (neoplasm prostate Prostate Specific Antigen PSA
<b>Types of studies</b>	RCTs and systematic reviews. Guidelines/ Recommendations	COMPARATIVE STUDY

**Routine Databases Searched**

TRIP Database, The Cochrane Library, Medline, EMBASE, Web of Science, PresQuipp

**Date of search-** Sept 2016

**Results of the search**

CAT Lead: Andrew Finney and Marie Williams  
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Date CAT completed: Sept 2016  
 Date CAT to be reviewed: Sept 2018

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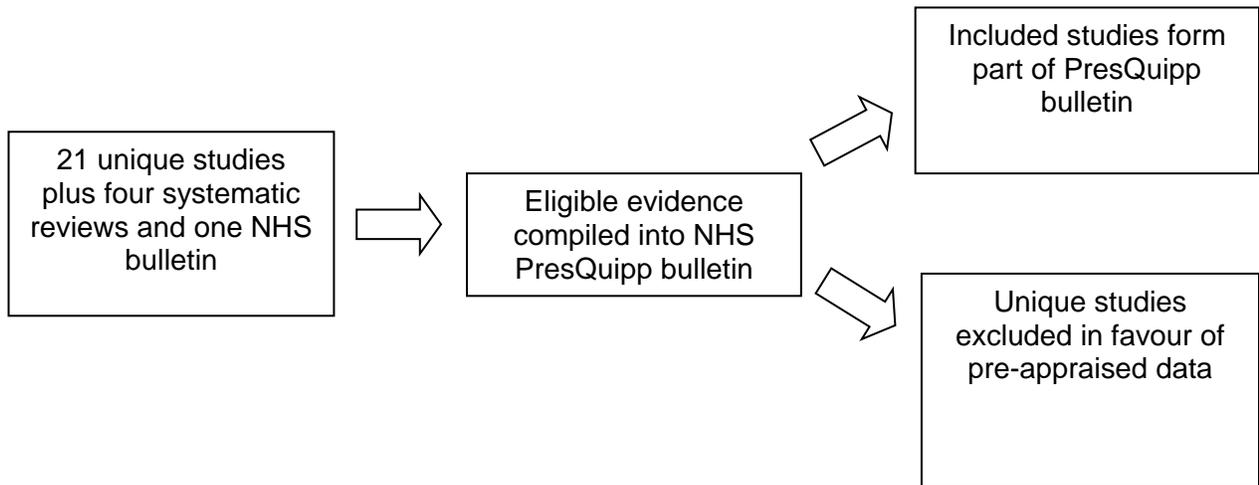


Table 1- Detail of included studies

First Author, year and type of study	Population and setting	Intervention or exposure tested	Study results	Assessment of quality and comments
NHS PresQuipp bulletin no. 88 (April, 2015)	na	na		The NHS PresQuipp bulletins offer high quality, pre-appraised literature to answer the question.

## Summary

The Midlands Therapeutic Review & Advisory Committee (MTRAC) commissioning support review states that when considering cost effectiveness and which product to use, patient frequency of GP surgery attendance, the frequency of drug administration and associated monitoring, and any GP practice fees for administration of the injections need to be taken into account. Fees for drug administration may vary as goserelin is an implant and leuprorelin is a liquid injection. MTRAC also states that commissioners should engage with providers to reach agreement on product use to achieve the most economic model for LHRH agonist use across the health economy. This should take into account product price and local discounts available from manufacturers.

## Implications for Practice/research

It is clear that there are things to consider for these drugs beyond clinical effectiveness. Patient satisfaction, route of medication, side effects and cost effectiveness are all equally important.

Locally, (North Staff and Stoke-on-Trent CCGs) there was a switch from Zoladex to Prostag when the price difference was more favourable; however, the cost is now very similar. Regardless of the price, prostap is apparently easier for the patient to administer as it is a straightforward injection instead of a sub-cut depo, so patient choice is very much included in the decision making. As it stands the medicines optimisation team will not be planning a switch from Zoladex to Prostag this year, so if patients are happy on Zoladex they won't ask for them to be changed.

## What would you tweet? (140 characters)

Across England, a switch from 12 weekly Goserelin and 3 monthly Leuprorelin to 12 weekly or 6 monthly Triptorelin could result in an annual saving of £6.8 million!

## References

**NHS PresQuipp bulletin 88 (April 2015)**

**<https://www.presquipp.info/lhrh-analogues/send/155-lhrh-analogues/1900-bulletin-88-lhrh-analogues>**