Title: Laparoscopic remotely assisted radical prostatectomy (LRARP) Agency: Medical Services Advisory Committee (MSAC)

MDP 106

Commonwealth Department of Health and Ageing GPO Box 9849 Canberra ACT 2601 [http://www.msac.gov.au](http://www.msac.gov.au/)

Reference: MSAC 1091 Assessment report

First printed July 2007

ISBN 174186 127 6

# Aim

To evaluate safety, effectiveness and cost-effectiveness of laparoscopic remotely assisted radical prostatectomy (LRARP) in the resection of clinically localised prostate cancers relative to open radical prostatectomy (ORP).

# Results and conclusions

Safety

LRARP is at least as safe, if not safer, compared with ORP.

# Effectiveness

The available data comparing LRARP with ORP are not sufficiently mature to provide evidence of primary efficacy including long-term survival rates/tumour-free survival, or death rates. Based on secondary efficacy outcomes, there appear to be no differences in biochemical recurrence rates and margin positivity. LRARP might offer advantages in terms of quality of life—less pain, faster restoration of urinary continence and higher rates of faster resumption of erectile function and sexual intercourse. However, data comparing functional outcomes were based on a subgroup analysis with likely bias. Consequently, although a difference between LRARP and ORP in terms of functional outcomes cannot be ruled out, neither can it be confirmed confidently.

# Cost-effectiveness

There was insufficient evidence, free from potential bias, to perform a cost- effectiveness analysis. A cost comparison showed that LRARP was associated with markedly higher direct treatment costs than ORP ($15,469 versus $11,207 respectively). This difference was driven primarily by the high equipment costs associated with LRARP and need for a conjoint surgeon. The shorter hospital stay following LRARP (about 2 days versus 7.5 days following ORP) did not offset these additional costs.

# Recommendation

The MSAC has considered the safety, effectiveness and economic issues of laparoscopic remotely assisted radical prostatectomy (LRARP) compared with open radical prostatectomy. This procedure is being utilised under current funding arrangements in the public and private sectors in Australia. MSAC finds the procedure is at least as safe as and possibly safer than open radical prostatectomy. The procedure is likely to be as effective and may have some advantages over open radical prostatectomy. At present there is uncertainty about the comparative cost effectiveness.

MSAC recommends that current funding arrangements for LRARP remain the same at the present time.

-The Minster for Health and Ageing accepted this recommendation on 24 August

2006.-

# Methods

MSAC conducted a systematic review of the medical literature pertaining to LRARP. Citations that met predefined inclusion criteria were included in the review of evidence.