



香港泌尿外科學會
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A Systematic Review of Novel Robots as a Feasible and Safe Intervention for RARP in Non-metastatic Prostate Cancer

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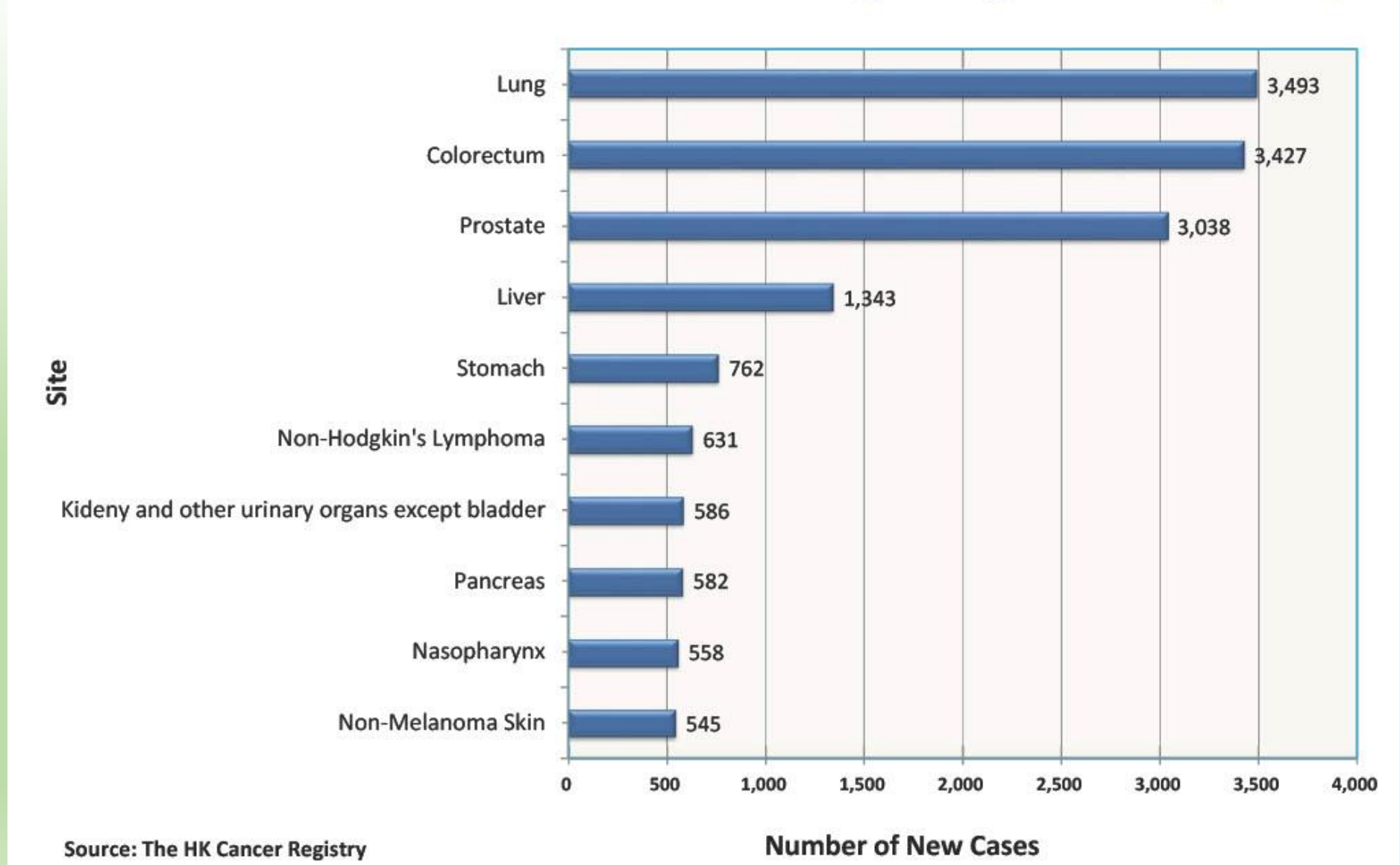
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Objective

Prostate cancer is the **third most common** cancer for men in Hong Kong and **RARP** is the current gold standard surgical treatment for non-metastatic prostate cancer. This study aims to evaluate the **feasibility** and **safety** of a novel surgical robot to treat prostate cancer. **Davinci S, Si and Xi** used to be the only model to provide up-to-standard treatment, but as more and more competitors are introduced into the market, it is worth evaluating other possible options for their **replaceability** of old systems.

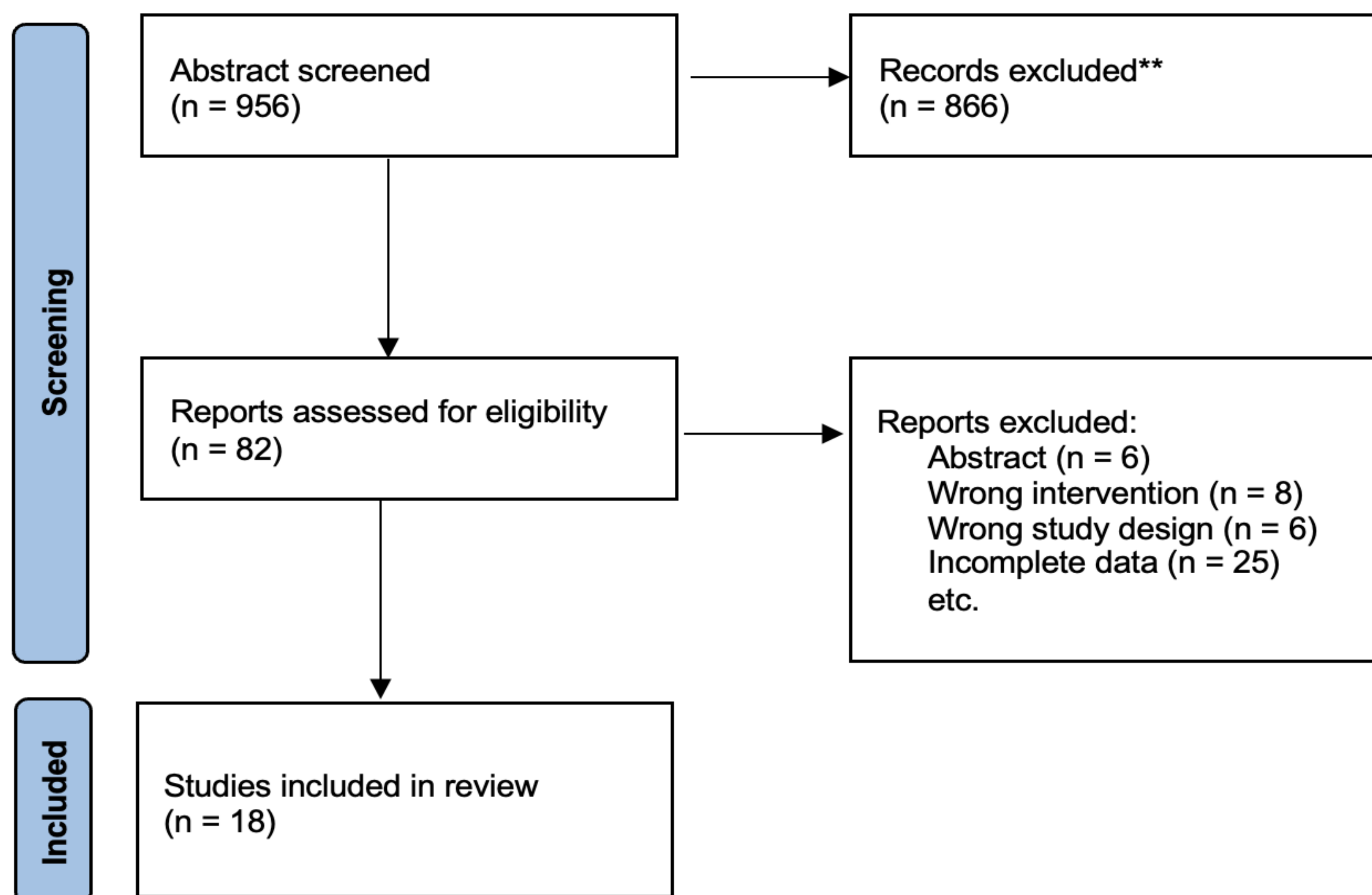
10 Most Common Cancers in Hong Kong in 2021 (Male)



Methodology

MEDLINE, Embase and Cochrane Library were searched for studies using a combination of keywords: “**Davinci SP**”, “**other novel robots**”, and “**Prostate cancer**”. The use of Davinci S, Si and Xi are excluded due to the well-established outcome of these old models. Data illustrating OT time, hospitalization duration, positive surgical margin, biochemical recurrence, continence, and complication were extracted from each study.

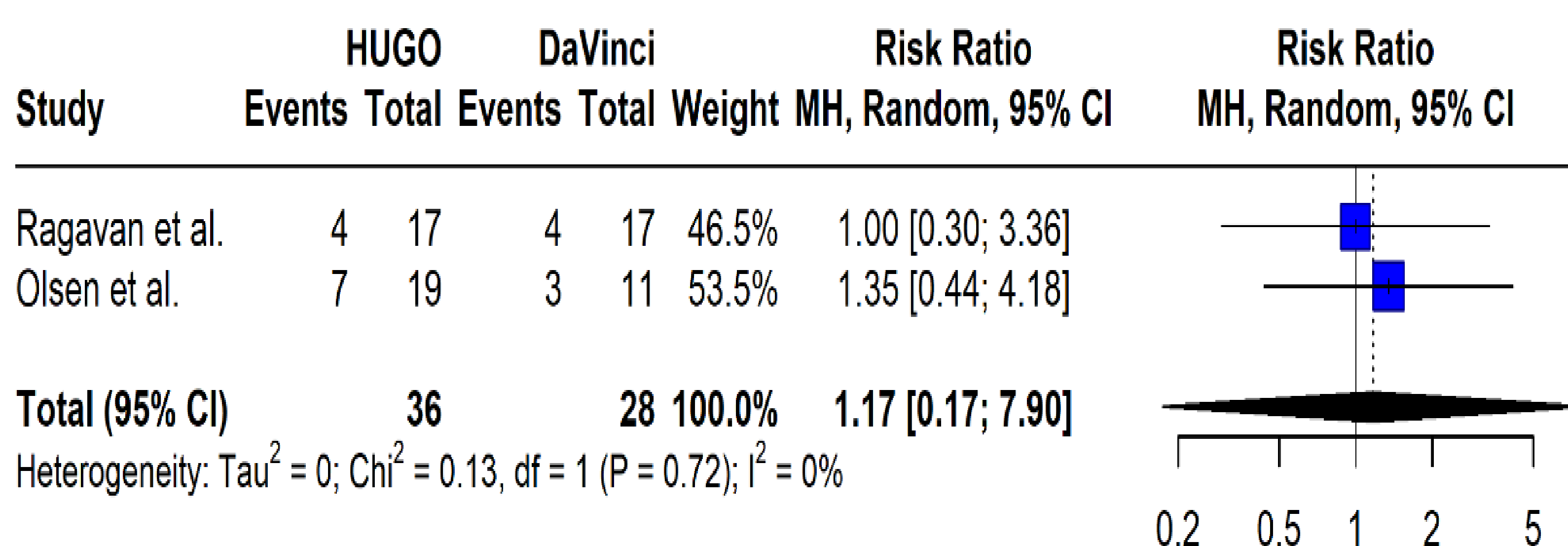
Identification of studies via databases and registers



Results

Parameter	Mean	Range
Operation time (mins)	185.4	125-245
Hospitalisation Duration (days)	2.69	0.19-7
Positive Surgical Margin (PSM)	24.6%	5%-83.3%
Biochemical Recurrence Rate (BCR)	5.74%	0-10%
3-Month Continence rate	74.5%	44.2%-85%
6-Month Continence rate	93.8%	87.2%-100%
Complication Clavien Dindo = 3	3.75%	0%-5.83%
Complication Clavien Dindo = 4	0.06%	0%-0.9%

Positive Surgical Margin:



Console time:

RE model estimates: **-4.58** [-31.88, 22.72]
Heterogeneity: Tau² = 278.84; Chi² = 3.46, df = 1 (P = 0.06); I² = 71.13%; H² = 3.46

Hospital stay:

RE model estimates: **0** [-0.44, 0.44]
Heterogeneity: Tau² = 0; Chi² = 0, df = 1 (P = 1); I² = 0%; H² = 1