Table S1: PRISMA Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked	

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assessment		independently, and if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
Study characteristics	17	Cite each included study and present its characteristics.	
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	

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Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	
	23b	Discuss any limitations of the evidence included in the review.	
	23c	Discuss any limitations of the review processes used.	
	23d	Discuss implications of the results for practice, policy, and future research.	
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	
Competing interests	26	Declare any competing interests of review authors.	
Availability of data, code and other	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	

Section and Topic	Item #	Checklist item	Location where item is reported
materials			

Table S2. Search Strategy.

Ovid MEDLINE(R) ALL <1946 to July 20, 2022>
1 exp Venous Thromboembolism/ or VTE.mp. or exp Thromboembolism/ or exp Venous Thrombosis/ 117948
2 exp Post-Exposure Prophylaxis/ or prophylaxis.mp. or exp Pre-Exposure Prophylaxis/ 119950
3 prevention.mp. or exp Secondary Prevention/ or exp Primary Prevention/ or exp Tertiary Prevention/ 1927721
4 2 or 3 1978040
5 1 and 4 31189
6 prostatectomy.mp. or exp Prostatectomy/ 45963
7 exp Surgery, Computer-Assisted/ or exp Robotics/ or exp Robotic Surgical Procedures/ or exp Urologic Surgical Procedures/ or robotic surgery.mp. 294112
8 6 and 7 35678
9 laparoscopic.mp. or Laparoscopy/ 150036
10 exp Postoperative Period/ or exp Postoperative Care/ or exp Postoperative Complications/ or postoperative.mp. 1022302
11 8 or 9 182151
12 10 and 11 65067
13 5 and 12 **317**
Embase <1974 to 2022 July 20>
1 exp thromboembolism/ or exp venous thromboembolism/ or VTE.mp. or exp deep vein thrombosis/ 590089
2 prophylaxis.mp. or exp post exposure prophylaxis/ or exp prophylaxis/ or exp pre-exposure prophylaxis/ 1161540
3 exp primary prevention/ or exp thrombosis prevention/ or exp prevention/ or exp tertiary prevention/ or prevention.mp. or exp secondary prevention/ 2886408
4 2 or 3 2917157
5 1 and 4 118697
6 exp robot-assisted prostatectomy/ or exp prostatectomy/ or prostatectomy.mp. 72216
7 robotic surgery.mp. or exp robot assisted surgery/ 27568
8 6 and 7 5249
9 exp prostatectomy/ or prostatectomy.mp. 72216
10 exp laparoscopic surgery/ or laparoscopic.mp. 226885
11 exp laparoscopy/ or exp hand assisted laparoscopy/ 183897
12 10 or 11 265184
13 9 and 12 8716
14 postoperative.mp. or exp postoperative care/ or exp postoperative complication/ or exp postoperative period/ 1558398
15 8 or 13 11978
16 5 and 14 and 15 **75**
Cochrane
Search Name: VTE prophylaxis post-prostatectomy
Last Saved: 21/07/2022 09:55:27
Comment:

ID	Search
#1	VTE
#2	MeSH descriptor: [Venous Thromboembolism] explode all trees
#3	MeSH descriptor: [Thromboembolism] explode all trees
#4	MeSH descriptor: [Venous Thrombosis] explode all trees
#5	#1 or #2 or #3 or #4
#6	prophylaxis
#7	MeSH descriptor: [Post-Exposure Prophylaxis] explode all trees
#8	MeSH descriptor: [Post-Exposure Prophylaxis] explode all trees
#9	prevention
#10	MeSH descriptor: [Primary Prevention] explode all trees
#11	MeSH descriptor: [Secondary Prevention] explode all trees
#12	MeSH descriptor: [Tertiary Prevention] explode all trees
#13	#6 or #7 or #8 or #9 or #10 or #11 or #12
#14	#5 and #13
#15	prostatectomy
#16	MeSH descriptor: [Prostatectomy] explode all trees
#17	#15 or #16
#18	robotic surgery
#19	MeSH descriptor: [Robotics] explode all trees
#20	MeSH descriptor: [Robotic Surgical Procedures] explode all trees
#21	MeSH descriptor: [Surgery, Computer-Assisted] explode all trees
#22	MeSH descriptor: [Urologic Surgical Procedures] explode all trees
#23	#18 or #19 or #20 or #21 or #22
#24	#17 and #23
#25	laparoscopic
#26	MeSH descriptor: [Laparoscopy] explode all trees
#27	#25 or #26
#28	#17 and #27
#29	postoperative
#30	MeSH descriptor: [Postoperative Care] explode all trees
#31	MeSH descriptor: [Postoperative Complications] explode all trees
#32	MeSH descriptor: [Postoperative Period] explode all trees
#33	#29 or #30 or #31 or #32
#34	#24 and #28 and #14 and #33 **(1)**

ClinicalTrials.gov

prostatectomy | venous thromboembolism prevention **(1)**

International Clinical Trials Registry Platform (ICTRP)

prostatectomy and VTE **(0)**

prostatectomy and venous thromboembolism **(0)**

Table S3. Clinicopathological Characteristics.

Mean PSA (7 Studies)	7.20
Staging (7 Studies)	
T1c	26.00%
T2	52.51%
T3a	14.90%
T3b or 4	02.81%
Gleason Score (8 studies)	
6	51.98%
7	37.06%
8-10	10.12%

Table S4. Venous Thromboembolism (VTE) Risk Stratification in Surgical Patients.

Level of risk	**Defining factors**	**Incidence of VTE, %**		
		DVT	**PE**	**Fatal PE**
Low	Minor surgery in patients < 40 yr old without risk factors	2.5	0.2	0.002
Moderate	Minor surgery in patients with risk factors Minor surgery in patients 40–59 yr without risk factors Major surgery in patients < 40 yr or with risk factors	12–25	1–2	0.1–0.4
High	Minor surgery in patients > 60 yr Major surgery in patients > 40 yr or with risk factors	25–50	2–4	0.4–1.0
Highest	Major surgery in patients > 60 yr Major orthopedic surgery Spinal cord injury Trauma	50–70	4–10	0.2–5.0

DVT = deep vein thrombosis, PE = pulmonary embolism.