

Supplementary Files:

Figure S1: Search strategy

Research up to 5 June 2021:

PUBMED

"Testicular Neoplasms"[Mesh] AND contrast enhanced ultrasound 93

"Testicular Neoplasms/diagnosis"[Mesh] AND CEUS 25

Testicular pathologies AND contrast enhanced ultrasound 99

Testicular Neoplasms AND contrast enhanced ultrasound 116

testicular masses AND CEUS 8

EMBASE

('testis tumor'/exp OR 'testis tumor') AND ('contrast-enhanced ultrasound'/exp OR 'contrast-enhanced ultrasound') 58

('testicular neoplasm'/exp OR 'testicular neoplasm') AND ('contrast-enhanced ultrasound'/exp OR 'contrast-enhanced ultrasound') 59

'testicular masses' AND ('contrast-enhanced ultrasound'/exp OR 'contrast-enhanced ultrasound') 9

WEB OF SCIENCE

TOPIC: (Testicular neoplasm) *AND* **TOPIC:** (CEUS) 9

TOPIC: (Testicular masses) *AND* **TOPIC:** (CEUS) 15

TOPIC: (Testicular tumor) *AND* **TOPIC:** (CEUS) 31

TOPIC: (Testicular tumor) *AND* **TOPIC:** (contrast enhanced ultrasound) 71

TOPIC: (Testicular MASSES) *AND* **TOPIC:** (contrast enhanced ultrasound) 41

Table S1a: Quality assessment of the studies according to QUADAS-2: neoplastic vs non-neoplastic testicular masses

References	Risk of bias				Applicability concerns		
	Patient selection	Index test	Reference standard	Flow and timing	Patient selection	Index test	Reference standard
Lung et al.	L	L	L	H	L	H	L
Lock et al.	L	L	L	L	L	L	L
Schröder et al.	H	L	L	H	L	H	L
Isidori et al.	H	H	L	H	H	L	L

L low risk of bias, H high risk of bias, U unclear risk of bias

Table S1b: Quality assessment of the studies according to QUADAS-2: malignant vs benign testicular masses

References	Risk of bias				Applicability concerns		
	Patient selection	Index test	Reference standard	Flow and timing	Patient selection	Index test	Reference standard
Isidori et al.	H	H	L	H	H	L	L
Auer et al.	H	L	L	H	L	H	L
Lerchbaumer et al.	L	L	L	L	L	H	L

L low risk of bias, H high risk of bias, U unclear risk of bias

Table S2: True positive (TP), false positive (FP), true negative (TN) and false negative (FN) values for each study

Neoplastic vs Non Neoplastic	TP	FP	TN	FN
Lock et al.	38	1	7	5
Isidori et al.	71	20	9	15
Schröder et al.	50	2	11	4
Lung et al.	44	13	32	2
Malignant vs Benign	TP	FP	TN	FN
Isidori et al.	35	8	63	9
Auer et al.	12	10	33	0
Lerchbaumer et al.	13	1	30	1