

## Supplementary Online Information

Appendix Table S1: Search strategy

Search strategy (1 <sup>st</sup> July 2022)			
Database	MeSH / Emtree terms	Search terms in database	Hits (n)
MEDLINE (PubMed)	#1 Sentinel Lymph Node Biopsy	"Sentinel Lymph Node Biopsy"[Mesh] OR (sentinel [tiab] AND (node*[tiab] OR lymph*[tiab] OR biops*[tiab])) OR (lymphatic*[tiab] AND mapping[tiab])	20270
	#2 Ovarian Neoplasms	ovarian neoplasms[Mesh] or (ovar*[tiab] AND (neoplasm*[tiab] OR cancer*[tiab] OR carcinoma*[tiab] OR adenocarcinoma*[tiab] OR tumor*[tiab] OR ((early[tiab] OR l[tiab] OR 1[tiab] OR ll[tiab] OR 2[tiab]) AND stage*[tiab]))	154995
	#3	#1 AND #2	252
	<b>Total: 252 results</b>		
Embase (Elsevier)	#1 Sentinel Lymph Node Biopsy	sentinel:ab,ti,kw AND lymph*:ab,ti,kw OR (sentinel:ab,ti,kw AND node*:ab,ti,kw) OR (sentinel:ab,ti,kw AND biops*:ab,ti,kw) OR (sentinel:ab,ti,kw AND (dissection*:ab,ti,kw OR excision*:ab,ti,kw)) OR (lymphatic:ab,ti,kw AND mapping:ab,ti,kw) OR ('sentinel'/exp AND 'lymph'/exp AND node AND 'biopsy'/exp) OR ('sentinel'/exp AND 'lymph'/exp AND node)	30,063
	#2 Ovary Cancer	(ovarian Neoplasm*):ab,ti,kw OR (ovary neoplasm*):ab,ti,kw OR (Ovarian Cancer*):ab,ti,kw OR (ovary cancer)/exp OR (Ovary Cancer*):ab,ti,kw OR (Ovarian Carcin*):ab,ti,kw OR (Ovary Carcin*):ab,ti,kw OR (Ovarian tumor*):ab,ti,kw OR (Ovary tumor*):ab,ti,kw OR (Ovarian Malign*):ab,ti,kw OR (Ovarian surgery):ab,ti,kw OR (Ovarian mass*):ab,ti,kw	194,555
	#3	#1 AND #2	309
	<b>Total: 309 results</b>		
Cochrane	#1 Sentinel Lymph Node	[Sentinel Lymph Node] explode all trees	48
	#2	(Sentinel lymph node OR (sentinel AND node) OR (sentinel AND lymph) OR (lymphatic mapping) OR (sentinel biops*)):ab AND (Sentinel lymph node OR (sentinel AND node) OR (sentinel AND lymph) OR (lymphatic mapping) OR (sentinel biops*)):ti	691
	#3	#1 OR #2	702
	#4 Ovarian Neoplasms	[Ovarian Neoplasms] explode all trees	2207
	#5	((ovary) OR ((adnex*) OR early-stage AND ovarian AND (cancer OR neoplasm)) OR (early-stage AND epithelial AND ovarian AND (cancer OR neoplasm OR mass*)) OR (ovarian AND cancer) OR (ovarian AND mass) OR (ovarian AND neoplasm) OR (ovarian AND surgery)):ti,ab	20605
	#6	#3 AND (#4 OR #5)	99
<b>Total: 99 results</b>			
Scopus (Elsevier)	#1	ABSTRACT((sentinel AND (lymph OR node)) OR (sentinel AND node) OR (lymphatic AND mapping) OR (lymph AND node)) AND ((ovary) OR (early-stage AND ovarian AND (cancer OR neoplasm)) OR (early-stage AND epithelial AND ovarian AND (cancer OR neoplasm)) OR (ovarian AND cancer) OR (ovarian AND tumor) OR (ovarian AND mass) OR (ovarian AND neoplasm) OR (ovarian AND surgery))	4525
	#2	TITLE (((sentinel) OR (lymphatic) OR (map*)) AND ((ovary) OR (adnex*) OR (ovarian AND (cancer OR neoplasm OR tumor)) OR (early-stage AND ovarian AND (cancer OR neoplasm OR tumor)) OR (ovarian AND (neoplasm OR cancer OR tumor))))	334
	<b>Total: 50 results</b>		
<b>Total: 710</b>			

**Appendix Table S2:** References excluded at abstract stage (a), at full-text stage (b) and ongoing trials (c).

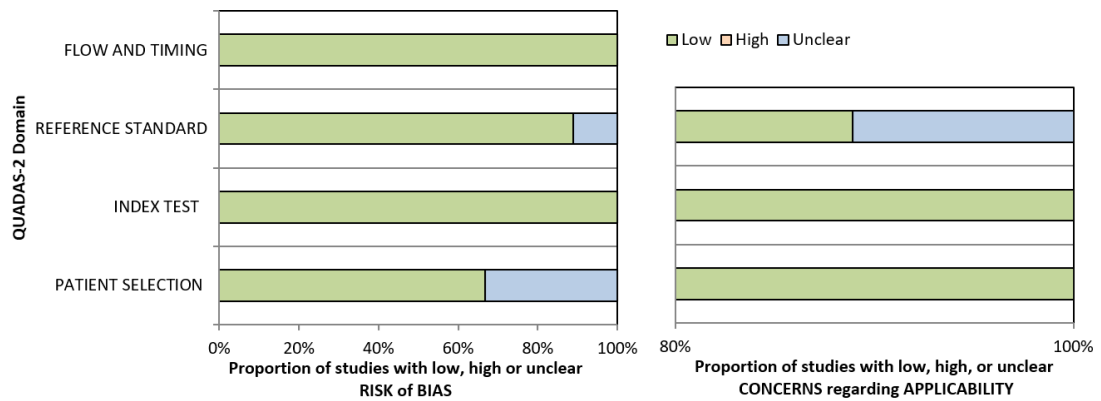
(a) References excluded at abstract stage	Reason for exclusion
Nyberg RH, Korkola P, Mäenpää JU. Sentinel Node and Ovarian Tumors: A Series of 20 Patients. <i>Int J Gynecol Cancer</i> . 2017 May;27(4):684-689	Case series: only 1 case of early-stage OC.
Speth SC, Kruitwagen RF, Kleppe M, Pooters IN, Van Gorp T, Slangen BF, Brans B. Comparison of Intraoperative $\gamma$ -Probe Imaging and Postoperative SPECT/CT in Detection of Sentinel Nodes Related to the Ovary. <i>J Nucl Med</i> . 2017 Feb;58(2):243-245	Case series
Buda A, Passoni P, Reato C, Di Martino G. Laparoscopic Minimally Invasive Approach to Sentinel Lymph Node Mapping of the Ovary Using the Near-infrared Fluorescent S1 HD Pinpoint System with Indocyanine Green Dye. <i>J Minim Invasive Gynecol</i> . 2018 Feb;25(2):336-337.	Case-report (video-article)
Kimmig R, Buderath P, Rusch P, Mach P, Aktas B. Early ovarian cancer surgery with indocyanine-green-guided targeted compartmental lymphadenectomy (TCL, pelvic part). <i>J Gynecol Oncol</i> . 2017 Sep;28(5):e68.	Case-report (video-article) Part II
Kimmig R, Buderath P, Mach P, Rusch P, Aktas B. Surgical treatment of early ovarian cancer with compartmental resection of regional lymphatic network and indocyanine-green-guided targeted compartmental lymphadenectomy (TCL, paraaortic part). <i>J Gynecol Oncol</i> . 2017 May;28(3):e41.	Case-report (video-article) Part I
Uccella S, Gisone B, Stevenazzi G, Ghezzi F. Laparoscopic sentinel node detection with ICG for early ovarian cancer: Description of a technique and literature review. <i>Eur J Obstet Gynecol Reprod Biol</i> . 2018 Feb;221:193-194.	Case-report
Uccella S, Fagotti A, Zannoni GF, Coleman RL. Presumed early ovarian cancer with isolated tumor cells in para-aortic sentinel nodes. <i>Int J Gynecol Cancer</i> . 2019 Jan;29(1):216-220.	Case report
Lago V, Bello P, Marina Martín MT, Montero B, Padilla-Iserte P, Lopez S, Matute L, Domingo S. Sentinel lymph node in apparent early ovarian cancer: open technique. <i>Int J Gynecol Cancer</i> . 2019 Nov;29(9):1449.	Case-report (video article)
Turco LC, Vargiu V, Nero C, Fagotti A, Scambia G, Cosentino F. Laparotomy approach to sentinel lymph node detection in ovarian cancer using a near-infrared fluorescent system camera with indocyanine green dye. <i>Int J Gynecol Cancer</i> . 2020 May;30(5):712-713.	Case-report (video-article)
Lago V, Bello P, Matute L, Padilla-Iserte P, Marina T, Agudelo M, Domingo S. Sentinel Lymph Node Technique in Apparent Early Ovarian Cancer: Laparoscopic Technique. <i>J Minim Invasive Gynecol</i> . 2020 Jul-Aug;27(5):1019-1020.	Case-report (video-article)
Farazestanian M, Ataei S, Azad A, Jahani N, Sadeghi R. Unusual location of sentinel node in the inferior gluteal region in a patient with ovarian tumor. <i>Revista Española de Medicina Nuclear e Imagen Molecular (English Edition)</i> , Volume 41, Supplement 1, 2022, Pages S6-S7, ISSN 2253-8089,	Case-Report
D, Scambia G, Franchi M. Isolated tumour cells in a sentinel lymph node of apparent early-stage ovarian cancer: Ultrastaging of all other 27 lymph nodes. <i>Gynecol Oncol Rep</i> . 2022 Jul 20;42:101047.	Case-Report
Matanes E, Gupta V, Kogan L, Racicot J, Salvador S, Gottlieb WH, Lau S. Surgical Technique for Sentinel Lymph Node Sampling in Presumed Early-stage Ovarian Cancer. <i>J Minim Invasive Gynecol</i> . 2021 Aug;28(8):1446.	Video-article (description of the technique)
Agusti N, Paredes P, Vidal-Sicart S, Glickman A, Torne A, Díaz-Feijoo B. Sentinel lymph node mapping in early-stage ovarian cancer: surgical technique in 10 steps. <i>Int J Gynecol Cancer</i> . 2022 Aug 1;32(8):1082-1083	Video-article (description of the technique)
Agustí N., Paredes P., VidalSicart S., Glickman A.G., Fusté P., Carreras N., Pahisa J., Del Pino M., Fristch A., Torne A., Diaz-Feijoo B. Study of the lymphatic map and detection of the sentinel lymph node in ovarian masses with suspected malignancy. <i>Int J Gynecol Cancer</i> . 2021 31:SUPPL 1 (A278-A279)	Conference abstract

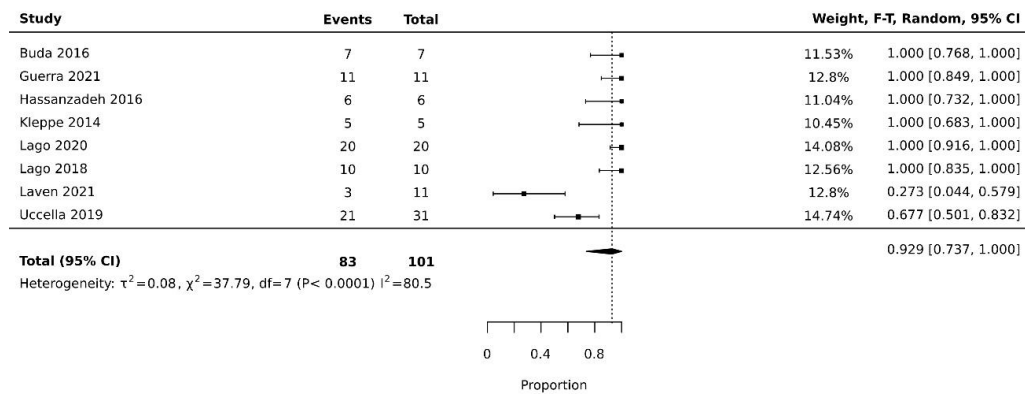
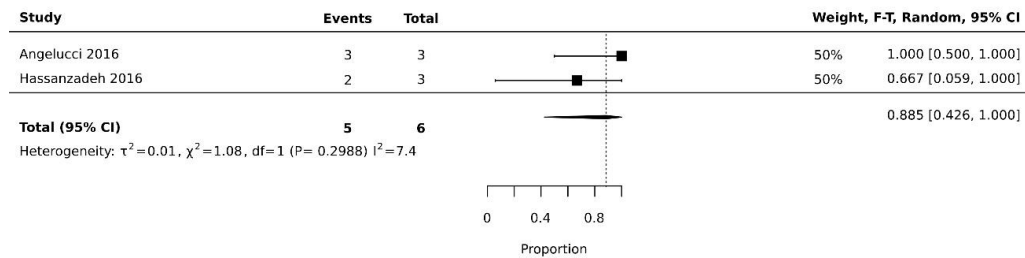
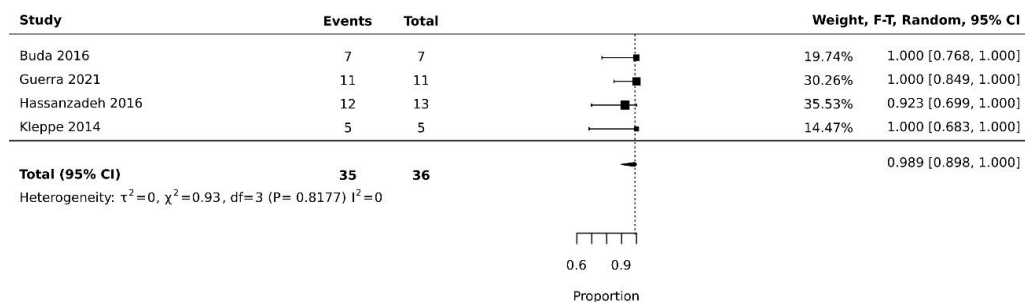
Laven P., Kruitwagen R., Lambrechts S., Van Gorp T., Slangen B., Zusterzeel P., Van Der Pol J. Sentinel lymph node identification in early stage ovarian cancer: Is it still possible after prior tumor resection? Int J Gynecol Cancer. 2021 31:SUPPL 4 (A109-A110)	Conference abstract
Ataei S.,Farazestanian M.,Mostafavi S.,Sadri K.,Azad A.,Jahani N.,Esmaeil Poor M.,Yousefi Z.,Hassanzadeh M.,Sadeghi R. Sentinel Node Mapping in Patients with Ovarian Tumors: A Study Using Intraoperative 99mTc-Phytate Gamma Probing and Post-Operative SPECT/CT Lymphoscintigraphy. Eur. J. Nucl. Med. 2021 48:SUPPL 1 (S376-S377)	Conference abstract
Laven P., Kruitwagen R., Lambrechts S. Sentinel lymph node identification in early stage ovarian cancer: Is it still possible after prior tumor resection? Int J Gynecol Cancer. 2020 30:SUPPL 3 (A45-)	Conference abstract
Lago V., Bello P., Montero B., Matute L., Lopez S., Marina T., Agudelo M., Domingo S.Sentinel lymph node technique in early stage ovarian cancer (SENTOV): A phase II clinical trial. Int J Gynecol Cancer. 2019 29 Supplement 4 (A645-)	Conference abstract
Lago V., Bello P., Montero B., Matute L., Padilla-Iserte P., Lopez S., Agudelo M., Domingo S. Clinical application of the sentinel lymph node technique in early ovarian cancer: Phase II clinical trial. Int J Gynecol Cancer. 2019 29 Supplement 4 (A485-)	Conference abstract
Lago V., Bello P., Padilla-Iserte P., Matute L., Marina T., Gurrea M., Domingo S. Sentov (sentinel lymph node technique in ovarian cancer): Video technique. Int J Gynecol Cancer 2019 29 Supplement 4 (A652-)	Conference abstract
Utrera A., Agudelo-Cifuentes M., Bernal J., Bello-Arques P., Matute L., Lago V., Yepes-Agudelo A., Figueroa G., Vera V.Findings in sentinel lymph node biopsy in 19 patients with ovarian cancer. Eur. J. Nucl. Med. 2019 46:1 Supplement 1 (S518-S519)	Conference abstract
Lago Leal V., Domingo Del Pozo S., Matute Tobias L., Padilla Iserte P., Gurrea Soteras M., Diaz Garcia C. Sentov I: Tailoring clinical feasibility of sentinel lymph node technique in early ovarian cancer. Int J Gynecol Cancer 2017 27 Supplement 4 (1559-)	Conference abstract
Kleppe M., Van Gorp T., Slangen B.F.M., Krüse A.J., Brans B., Pooters I.N.A., Van De Vijver K.K., Kruitwagen R.F.P.M. Sentinel node in ovarian cancer: A feasibility study. Int J Gynecol Cancer 2013 23:8 SUPPL. 1 (558-)	Conference abstract
Ataei Nakhaei S, Mostafavi SM, Farazestanian M, Hassanzadeh M, Sadeghi R. Feasibility of sentinel lymph node mapping in ovarian tumors: A systematic review and meta-analysis of the literature. Front Med (Lausanne). 2022 Aug 1;9:950717.	Review
Van NT, Nguyen-Xuan HT, Koual M, Bentivegna E, Bats AS, Azaïs H. Place du ganglion sentinelle dans la prise en charge du cancer de l'ovaire de stade précoce : revue de la littérature [Sentinel lymph node biopsy in the management of early-stage ovarian cancer: A systematic review of the literature]. Gynecol Obstet Fertil Senol. 2022 Jan;50(1):75-81. French	Review
Yujia WANG; Jing CAI; Si SUN; Zehua WANG. The feasibility and effectiveness of sentinel lymph node detection in ovarian neoplasms: a systematic review / 中国医师杂志. (2021) Journal of Chinese Physician, 23 (2), pp. 171-177.	Review. Not English, Spanish, Italian or French
Dell'Orto F, Laven P, Delle Marchette M, et al Feasibility of sentinel lymph node mapping of the ovary: a systematic review International Journal of Gynecologic Cancer 2019;29:1209-1215.	Review
Uccella S, Zorzato PC, Lanzo G, Fagotti A, Cianci S, Gallina D, Gueli Alletti S, Monterossi G, Franchi M, Ghezzi F, Zannoni GF, Scambia G. The role of sentinel node in early ovarian cancer: a systematic review. Minerva Med. 2019 Aug;110(4):358-366.	Review
Sadeghi R. Sentinel lymph node biopsy in ovarian cancers: Are intracervical injections necessary? Eur J Obstet Gynecol Reprod Biol. 2018 May;224:204-205	Letter to the editor
Sadeghi R. Feasibility of Sentinel Node Mapping in Ovarian Tumors: What Is the Evidence? Int J Gynecol Cancer. 2018 Feb;28(2):421-422	Letter to the editor
Lago V, Domingo S. New horizons of sentinel lymph node technique in early ovarian cancer. Am J Obstet Gynecol. 2020 Jan;222(1):94.	Letter to the editor

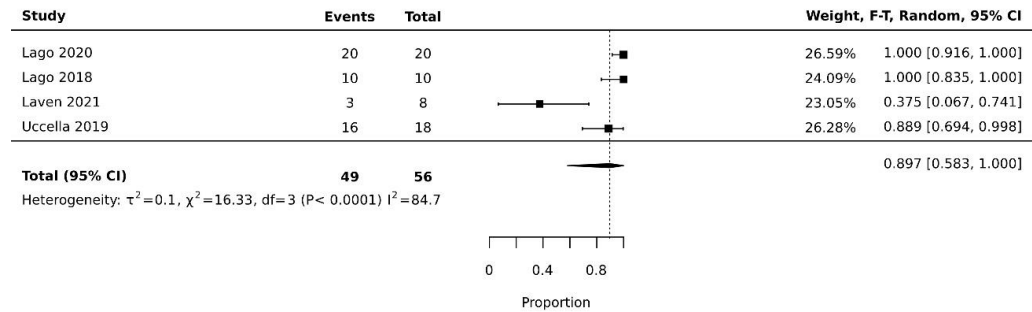
Kleppe M, Kraima AC, Kruitwagen RF, Van Gorp T, Smit NN, van Munsteren JC, DeRuiter MC. Understanding Lymphatic Drainage Pathways of the Ovaries to Predict Sites for Sentinel Nodes in Ovarian Cancer. <i>Int J Gynecol Cancer</i> . 2015 Oct;25(8):1405-14.	Non-human
<b>(b) References excluded at full text stage</b>	
Matsuo K, Klar M, Barakzai SK, Jooya ND, Nusbaum DJ, Shimada M, Roman LD, Wright JD. Utilization of sentinel lymph node biopsy in the early ovarian cancer surgery. <i>Arch Gynecol Obstet</i> . 2022 May 20.	SLN technique not assessed
Lago V, Montero B, López S, Padilla-Iserte P, Matute L, Marina T, Gurrea M, Montoliu G, Bello P, Domingo S. Ultrastaging protocol in sentinel lymph node for apparent early stage ovarian cancer. <i>Gynecol Oncol</i> . 2021 May;161(2):408-413.	SLN ultrastaging protocol
Uccella S, Garzon S, Bosco M, Porcari I, Lanzo G, Laganà AS, Chiantera V, Cliby WA, Mariani A, Franchi M, Zorzato PC. Cervical versus utero-ovarian ligament injection of the tracer for the pelvic sentinel lymph node mapping in gynecologic oncology: a prospective observational study. <i>Gynecol Obstet Invest</i> . 2022 May 18.	Only pelvic SLN evaluation
Scambia G, Nero C, Uccella S, Vizza E, Ghezzi F, Cosentino F, Chiantera V, Fagotti A. Sentinel-node biopsy in early stage ovarian cancer: a prospective multicentre study (SELLY). <i>Int J Gynecol Cancer</i> . 2019 Nov;29(9):1437-1439	Clinical trial protocol
Pop CF, Veys I, Gomez Galdon M, Moreau M, Larsimont D, Donckier V, Bourgeois P, Libérale G. Ex vivo indocyanine green fluorescence imaging for the detection of lymph node involvement in advanced-stage ovarian cancer. <i>J Surg Oncol</i> . 2018 Dec;118(7):1163-1169.	Advanced-stage ovarian cancer
Kleppe M, Van Gorp T, Slangen BF, Kruse AJ, Brans B, Pooters IN, Van de Vijver KK, Kruitwagen RF. Sentinel node in ovarian cancer: study protocol for a phase 1 study. <i>Trials</i> . 2013 Feb 15;14:47.	Clinical trial protocol
Nyberg RH, Korkola P, Mäenpää J. Ovarian sentinel node: is it feasible? <i>Int J Gynecol Cancer</i> . 2011 Apr;21(3):568-72.	Non-ovarian malignancy
Negishi H, Takeda M, Fujimoto T, Todo Y, Ebina Y, Watari H, Yamamoto R, Minakami H, Sakuragi N. Lymphatic mapping and sentinel node identification as related to the primary sites of lymph node metastasis in early-stage ovarian cancer. <i>Gynecol Oncol</i> . 2004 Jul;94(1):161-6.	Non-ovarian malignancy
Vanneuville G, Mestas D, Le Bouedec G, Veyre A, Dauplat J, Escande G, Guillot M. The lymphatic drainage of the human ovary in vivo investigated by isotopic lymphography before and after the menopause. <i>Surg Radiol Anat</i> . 1991;13(3):221-6.	Non-ovarian malignancy
<b>(c) Ongoing trials</b>	
US National Library of Medicine. Mapping Sentinel Lymph Node in Initial Stages of Ovarian Cancer (MELISA). Available at: <a href="https://clinicaltrials.gov/ct2/show/NCT05184140">https://clinicaltrials.gov/ct2/show/NCT05184140</a> . Accessed 1 <sup>st</sup> July, 2022	Ongoing
US National Library of Medicine. SEntine Lymph Node in earLY Ovarian Cancer (SELLY). Available at: <a href="https://clinicaltrials.gov/ct2/show/NCT03563781">https://clinicaltrials.gov/ct2/show/NCT03563781</a> . Accessed 18th August, 2022.	Ongoing
US National Library of Medicine. Sentinel Lymph Node Assessment in Ovarian Cancer (TRSGO-SLN-OO5). Available at: <a href="https://clinicaltrials.gov/ct2/show/NCT04714931">https://clinicaltrials.gov/ct2/show/NCT04714931</a> . Accessed 18th August, 2022.	Ongoing
US National Library of Medicine. Magtrial: Magtrace® as Tracer for Sentinel Lymph Node Detection in Early-Stage Epithelial Ovarian Cancer. Available at: <a href="https://clinicaltrials.gov/ct2/show/NCT05375526">https://clinicaltrials.gov/ct2/show/NCT05375526</a> . Accessed 18th August, 2022.	Ongoing
US National Library of Medicine. ICG-Enabled Mapping of Ovarian Sentinel Lymph Nodes: A Feasibility Study. Available at: <a href="https://clinicaltrials.gov/ct2/show/NCT04051502">https://clinicaltrials.gov/ct2/show/NCT04051502</a> . Accessed 18th August, 2022.	Ongoing
US National Library of Medicine. Fluorescence for Sentinel Lymph Node Identification in Cancer Surgery (GASVERT). Available at: <a href="https://clinicaltrials.gov/ct2/show/NCT02997553">https://clinicaltrials.gov/ct2/show/NCT02997553</a> . Accessed 18th August, 2022.	Ongoing

**Appendix Figure S1.** Graphical presentation of the QUADAS-2

Study	RISK OF BIAS				APPLICABILITY CONCERNS		
	PATIENT SELECTION	INDEX TEST	REFERENCE STANDARD	FLOW AND TIMING	PATIENT SELECTION	INDEX TEST	REFERENCE STANDARD
Kleppe, 2014	😊	😊	😊	😊	😊	😊	😊
Hassanzadeh, 2016	?	😊	😊	😊	😊	😊	😊
Angelucci, 2016	?	😊	😊	😊	😊	😊	😊
Buda, 2017	?	😊	😊	😊	😊	😊	😊
Uccella, 2019	😊	😊	😊	😊	😊	😊	😊
Lago, 2018	😊	😊	😊	😊	😊	😊	😊
Lago, 2020	😊	😊	😊	😊	😊	😊	😊
Laven, 2021	😊	😊	?	😊	😊	😊	?
Guerra, 2021	😊	😊	😊	😊	😊	😊	😊



**Appendix Figure S2.** Forest plot showing the detection rate depending on the injection site**a) Utero-ovarian and infundibulo-pelvic ligaments****b) Other sites****Appendix Figure S3.** Forest plot showing the detection rate depending on the type of surgery**a) Primary surgery with the tracer injection prior to the adnexa removal**

**b) Primary surgery with the tracer injection after the adnexa removal****c) Re-staging surgery**