



TÜRK JİNEKOLOJİK ONKOLOJİ DERNEĞİ
YIL SONU TOPLANTISI

Endometrium Kanseri Cerrahisinde Sentinel Lenf Nodu Uygulaması Standart Tedavidir

Dr. İlker Kahramanoğlu
İstanbul EAH
Kadın Hastalıkları ve Doğum Kliniği

Cerrahi Evreleme

Kemoterapi

Adjuvan EBRT

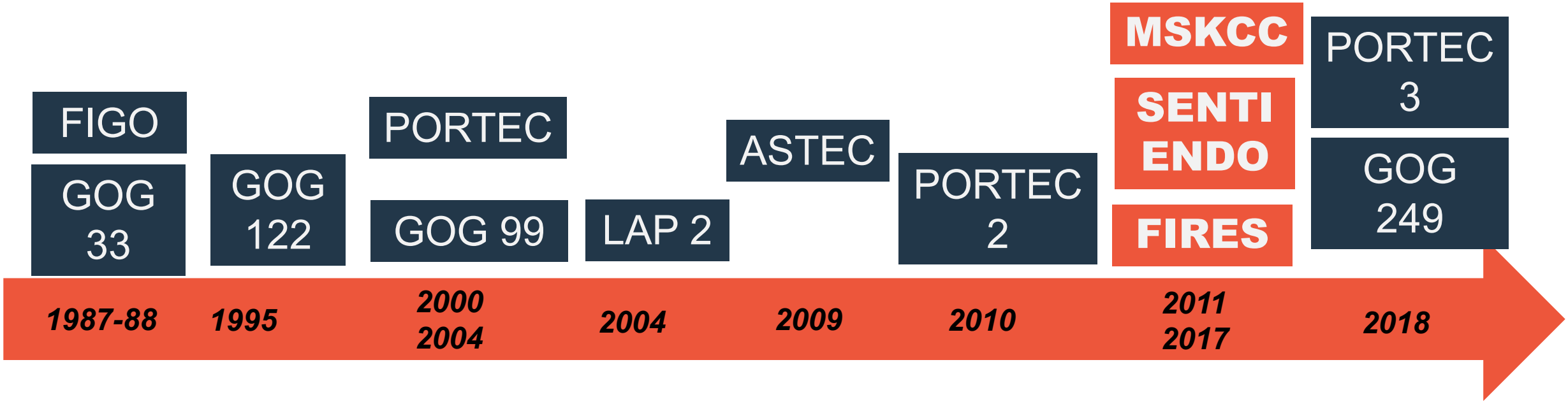
LS altın standart

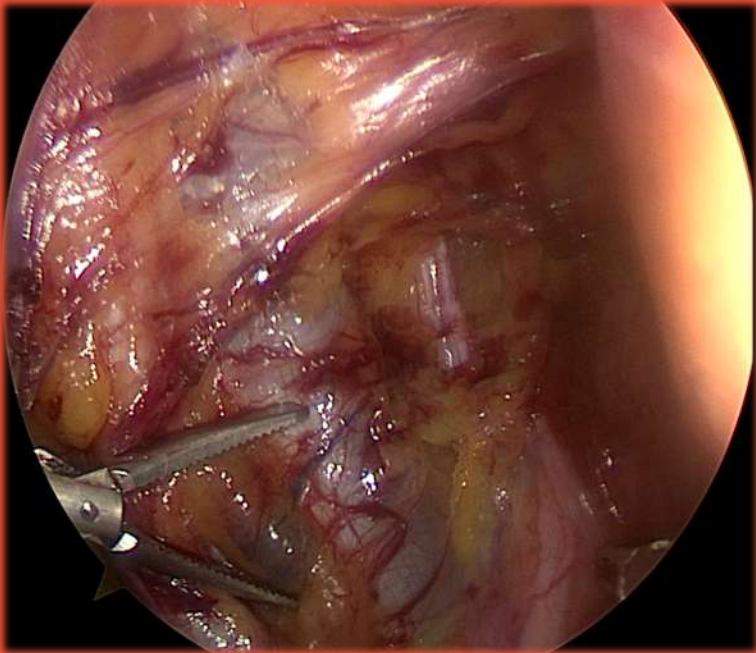
LND katkısı yok

VB

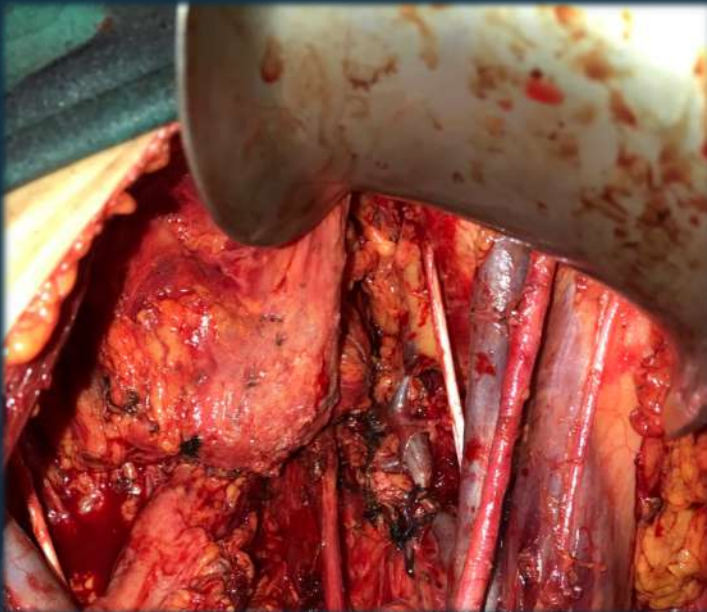
SENTİNEL LND

Adjuvan tedavi



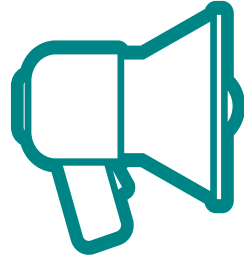


Diagnostik

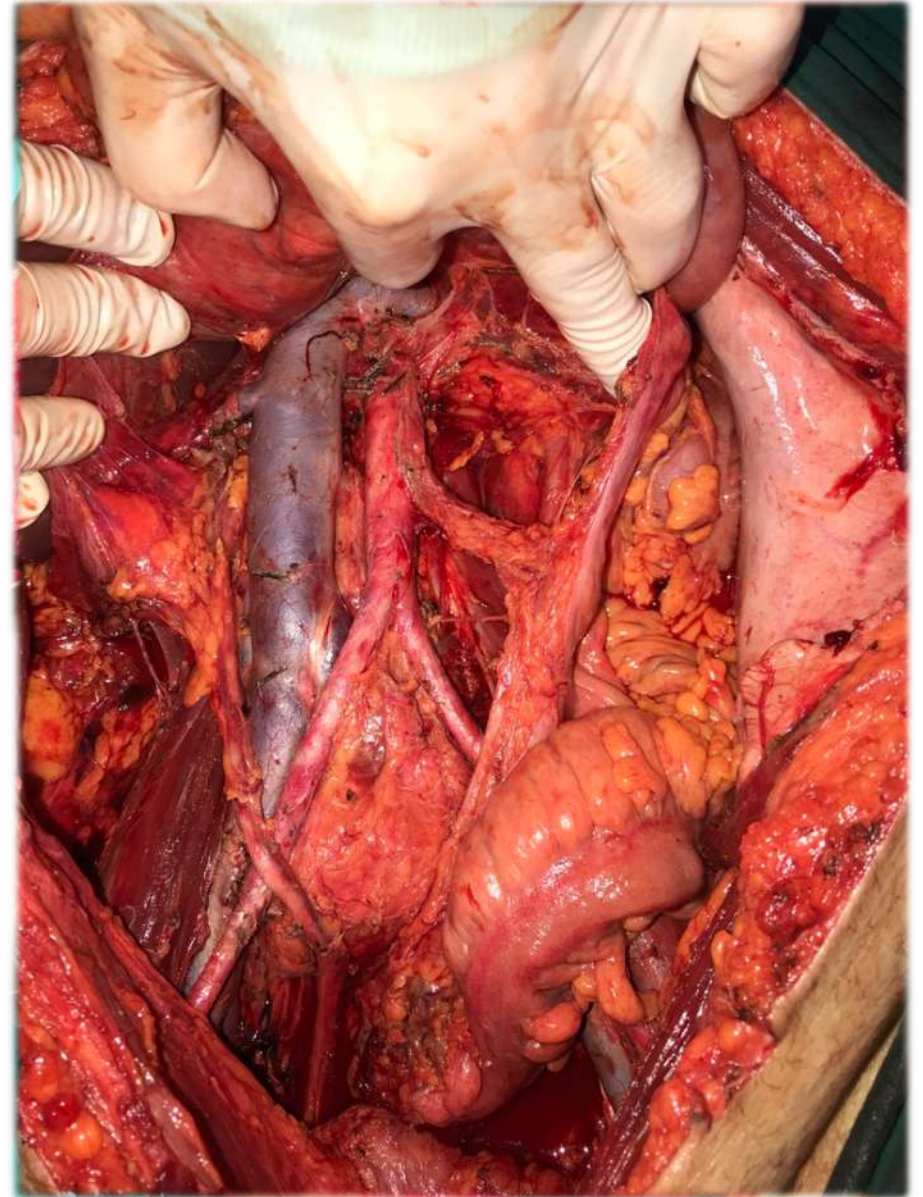


Terapötik





~~SLN~~





GOG-244 (The LeG Study) Abstract

Carlson J et al.

Leg volume change

N= 734 with EC

>10%

34%

>15%

19%

>20%

11%



% 15

*%11 mikrometastaz
%4 izole tümör hücresi*

Cibula, Gynecol Oncol, 2019

Neden **Komplet Lenfadenektomi** yerine **SLND** ?

Saptama gücü



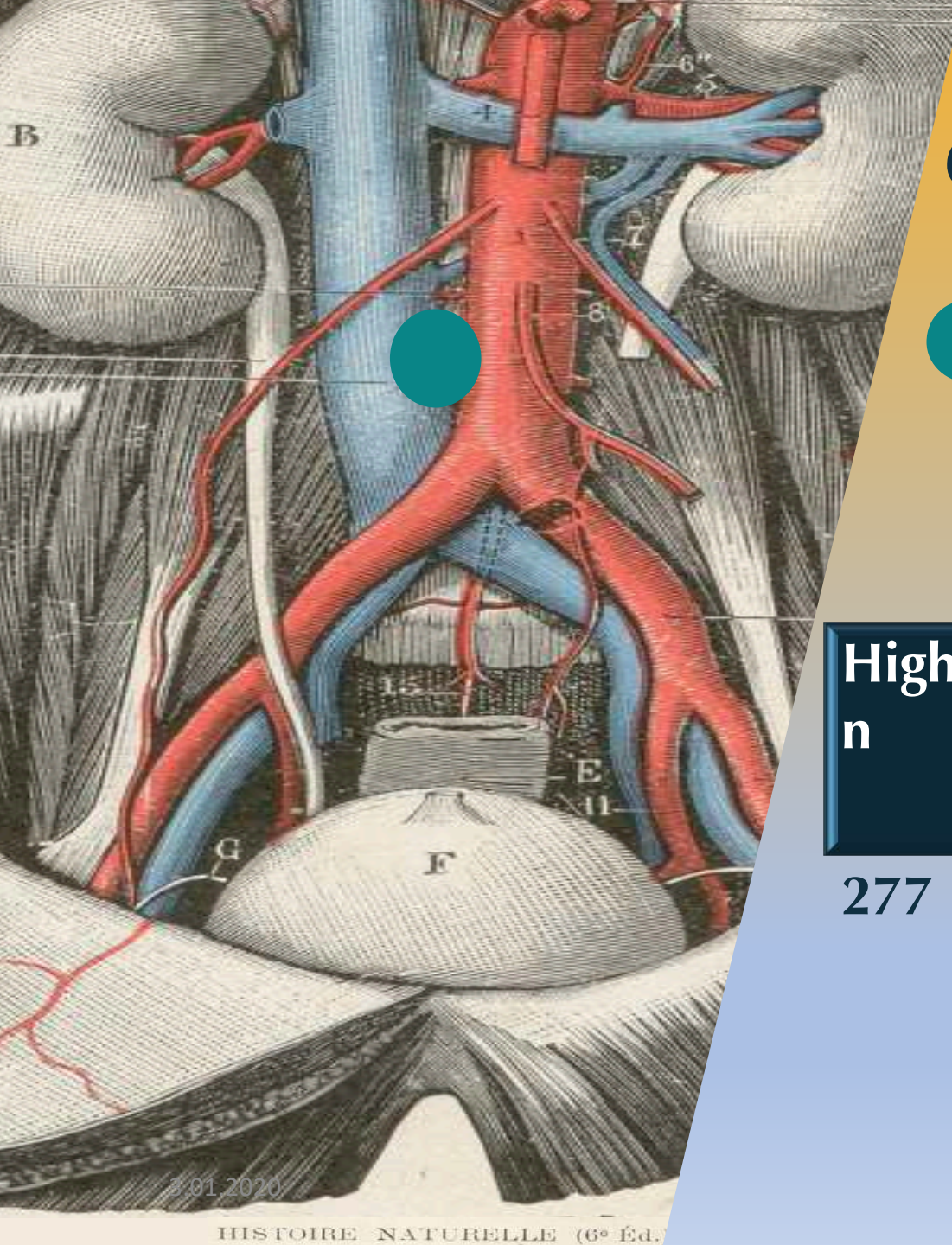
Prospective assessment of lymphatic dissemination in endometrial cancer: A paradigm shift in surgical staging

Andrea Mariani, Sean C. Dowdy, William A. Cliby, Bobbie S. Gostout, Monica B. Jones, Timothy O. Wilson, and Karl C. Podratz*

Division of Gynecologic Surgery, Mayo Clinic, Rochester, Minnesota, USA



2267/8 %



Gerçekten izole mi?

? *Ultrastaging yapılsaydı*



High grade,
n

277

Non-
endometrioid,
n

169

(+) nod

27 %

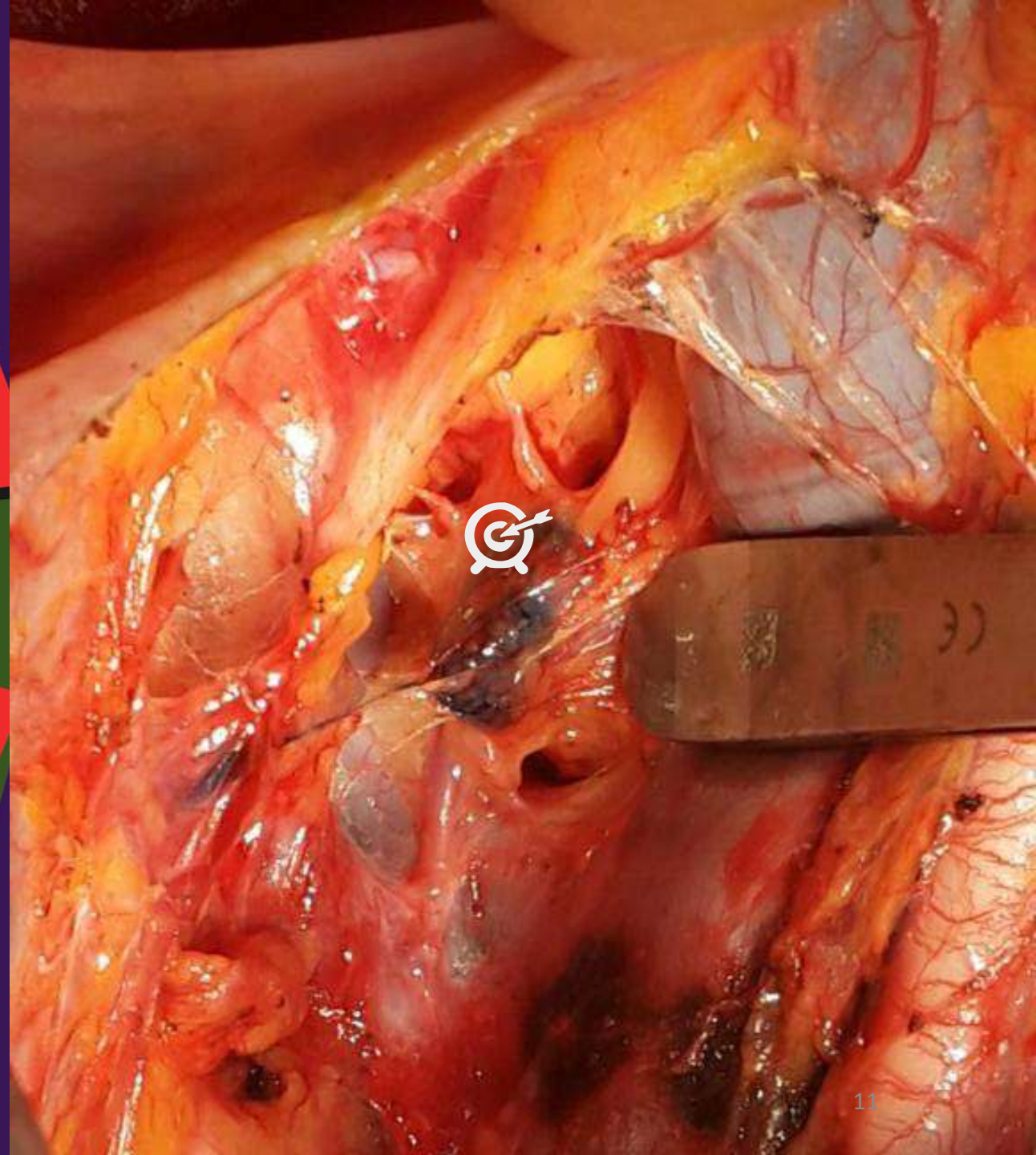
İzole PA (+)
nod

0

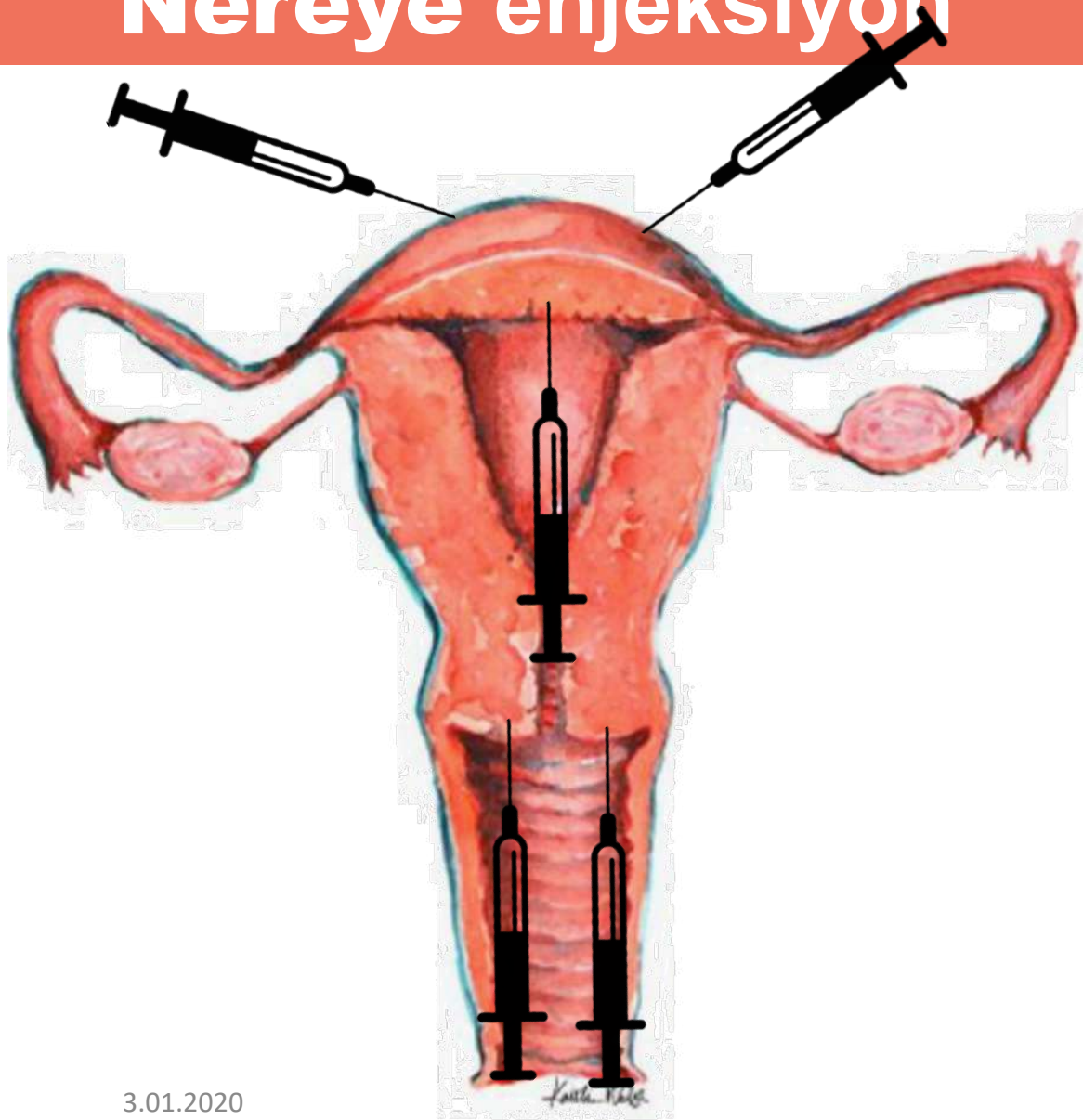
Holloway et al. Gynecol Oncol 2016
Rossi EC et al. FIRES trial. Lancet Oncol 2017
Soliman et al. Gynecol Oncol 2017
Baiocchi et al. Ann Surg Oncol 2017



3.01.2020

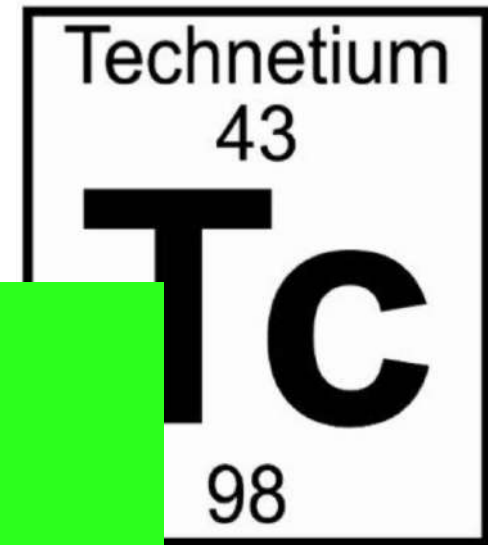


Nereye enjeksiyon



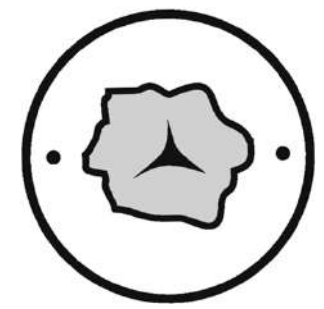
3.01.2020

Ne enjekte edilecek



12

Finding SLNs



Near-infrared fluorescence for detection of sentinel lymph nodes in women with cervical and uterine cancers (FILM): a randomised, phase 3, multicentre, non-inferiority trial

Lancet Oncol 2018;

Michael Frumovitz, Marie Plante, Paula S Lee, Samith Sandadi, James F Lilja, Pedro F Escobar, Lilian T Gien, Diana L Urbauer, Nadeem R Abu-Rustum

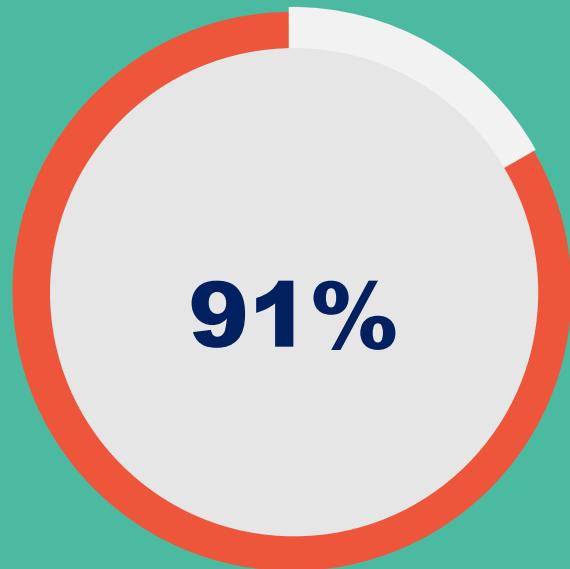
	Mavi	Yeşil	<i>p</i>
>1 SLN	75 %	95 %	<0.001
Bilateral SLN	31 %	84 %	<0.001

Funding Novadaq

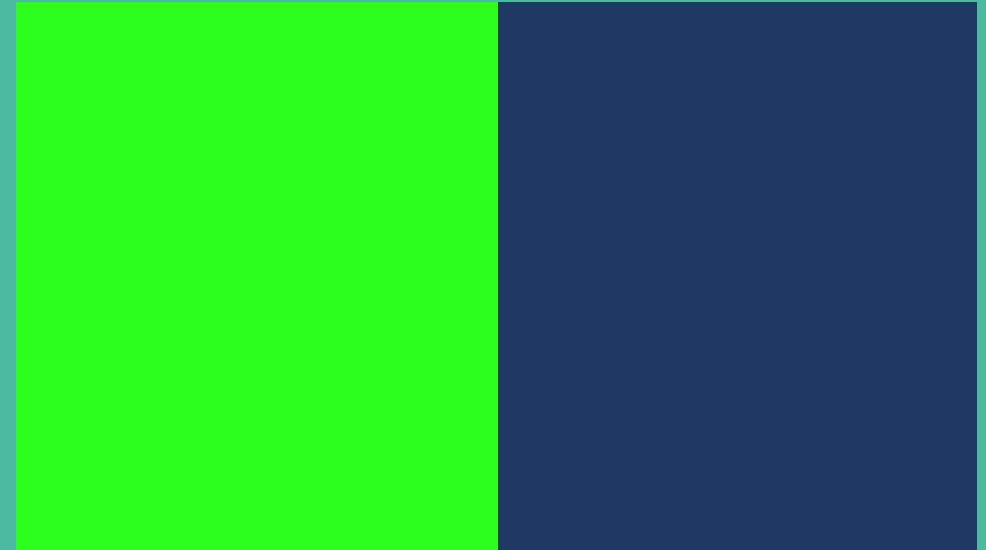
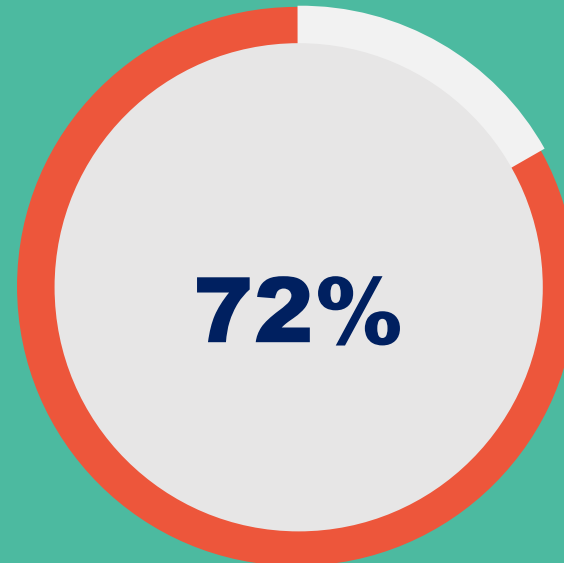
Sentinel lymph node biopsy in early stage endometrial cancer: a Turkish gynecologic oncology group study (TRSGO-SLN-001)

Salih Taşkın,¹ Duygu Altın,¹ Dogan Vatansever ², Nedim Tokgozoglu,³ Emine Karabük,⁴ Hasan Turan,⁵ Özgüç Takmaz,⁴ Ilker Kahramanoglu,⁶ Mehmet Murat Naki,⁴ Mete Güngör,⁴ Faruk Köse,⁴ Fırat Ortac,¹ Macit Arvas,⁷ Ali Ayhan,⁸ Cagatay Taskiran²

SLN saptama



Bilateral





The Combination of Preoperative Fluorodeoxyglucose Positron Emission Tomography/Computed Tomography and Sentinel Lymph Node Mapping in the Surgical Management of Endometrioid Endometrial Cancer

Tugan Bese, MD, Veysel Sal, MD,* Fuat Demirkiran, MD,* Ilker Kahramanoglu, MD,*
Nedim Tokgozoglu, MD,* Sennur Ilvan, MD,† Ovgu Aydin, MD,† Metin Hallac, MD,‡
Betul Vatankulu, MD,‡ Gokhan Demirayak, MD,§ Hasan Turan, MD,* and Macit Arvas, MD**

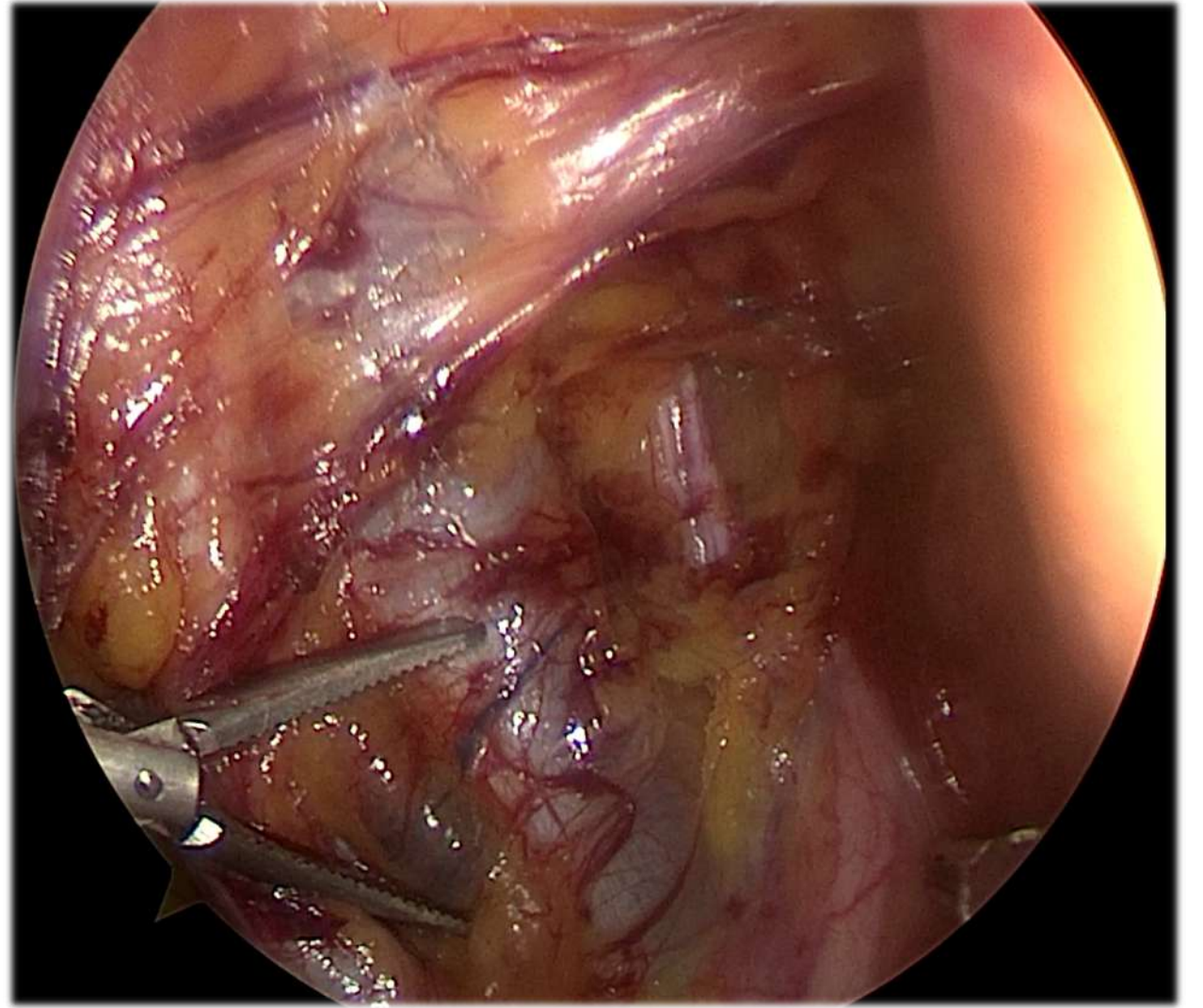
Deneyim

Sadece metilen mavisi ile

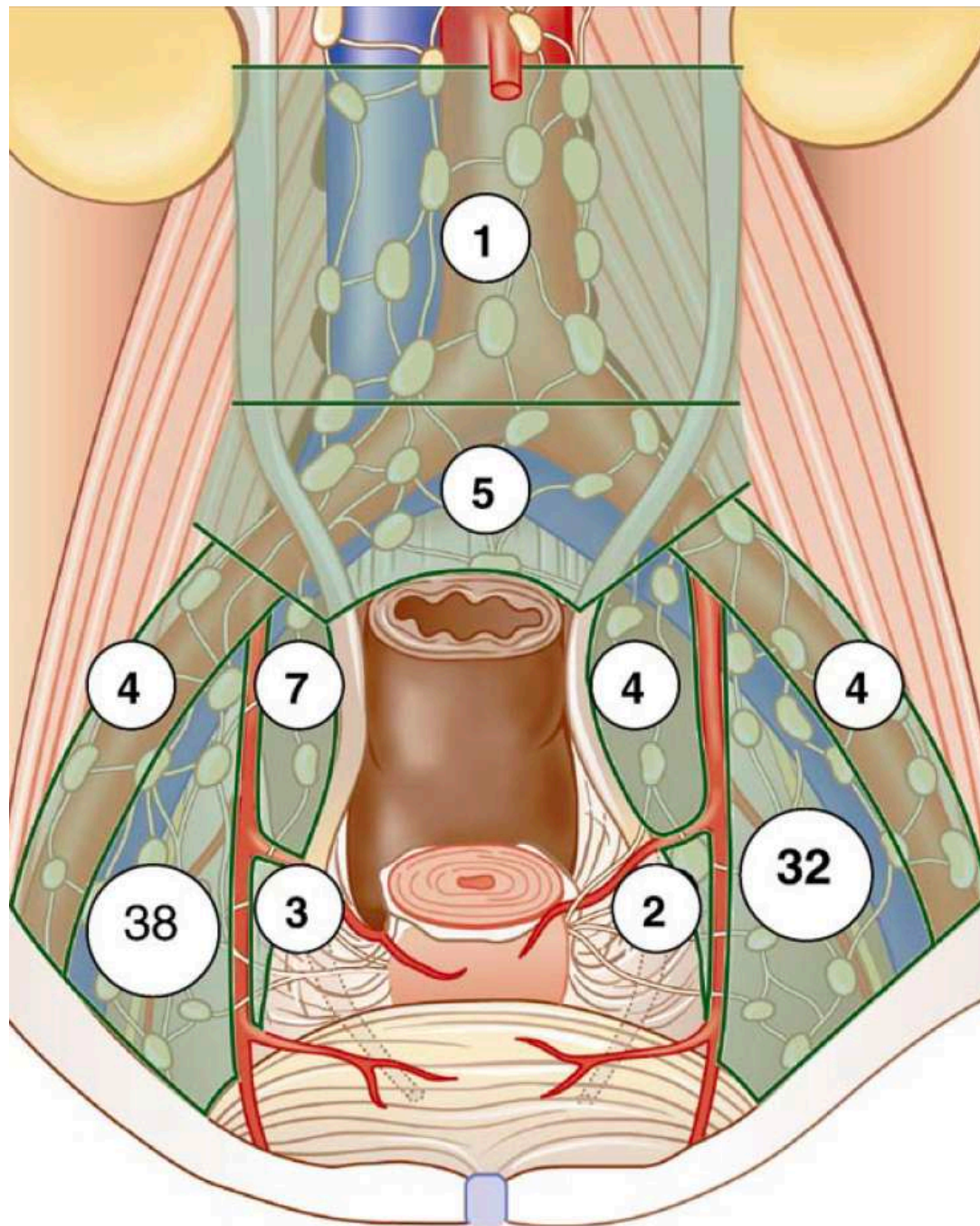
Kanser	SLN saptama	Bilateral SLN
--------	----------------	------------------

Endometrium n=177	89.2%	70.6%
----------------------	-------	-------

- *Makromet: n=10*
- *Mikromet: n=4*
- *ITC: n=10*

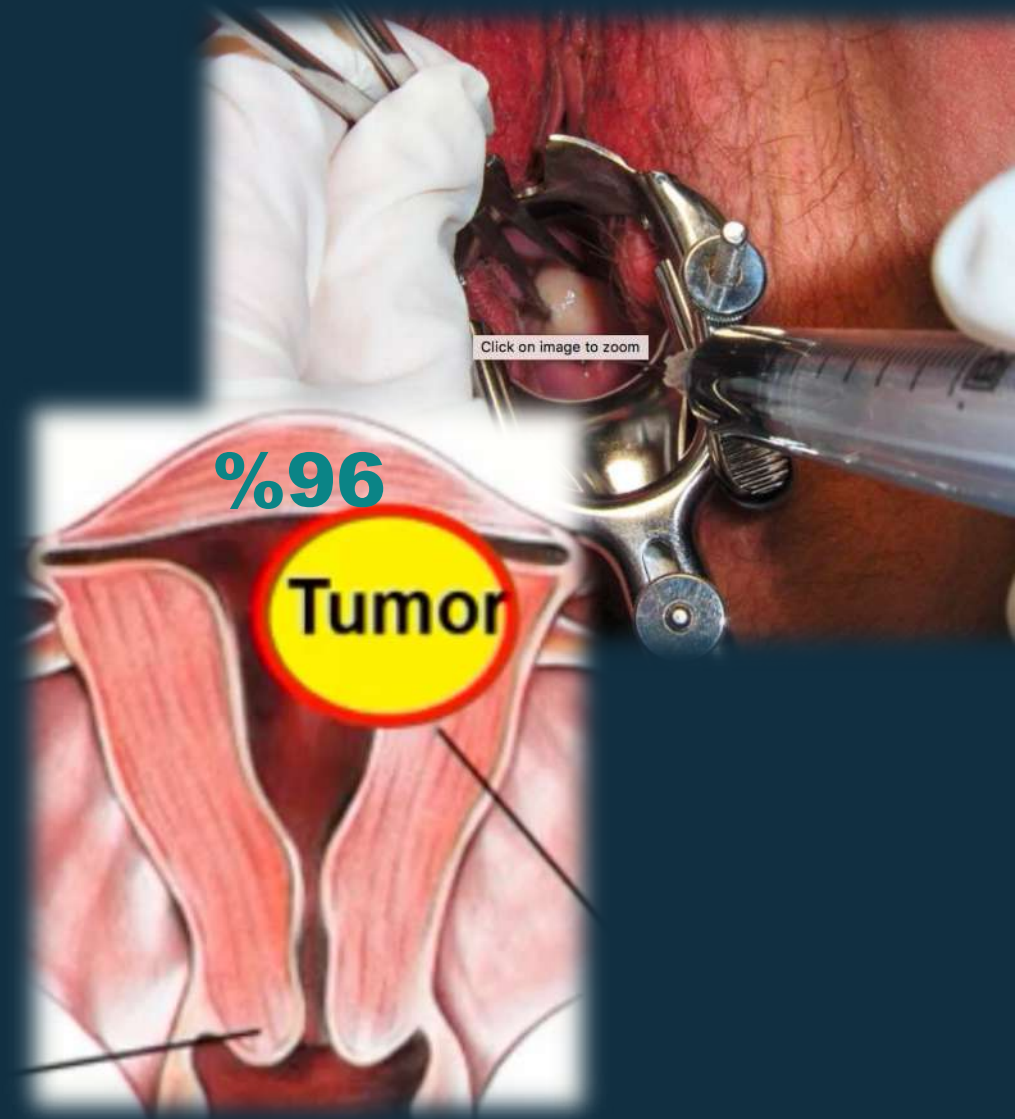


En sık SLN saptanan alan
%65

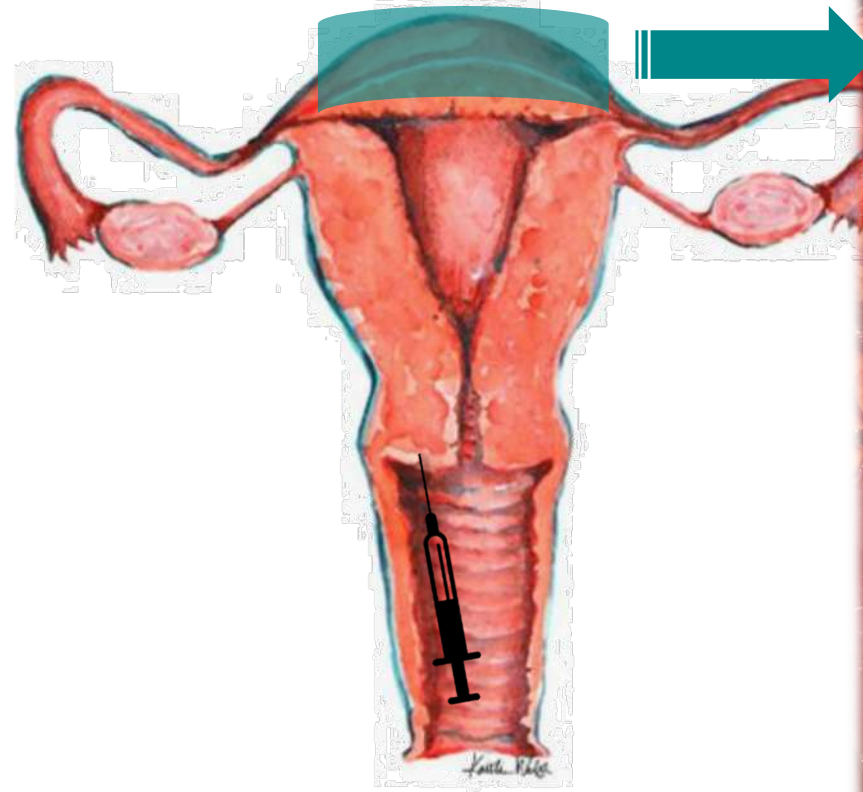
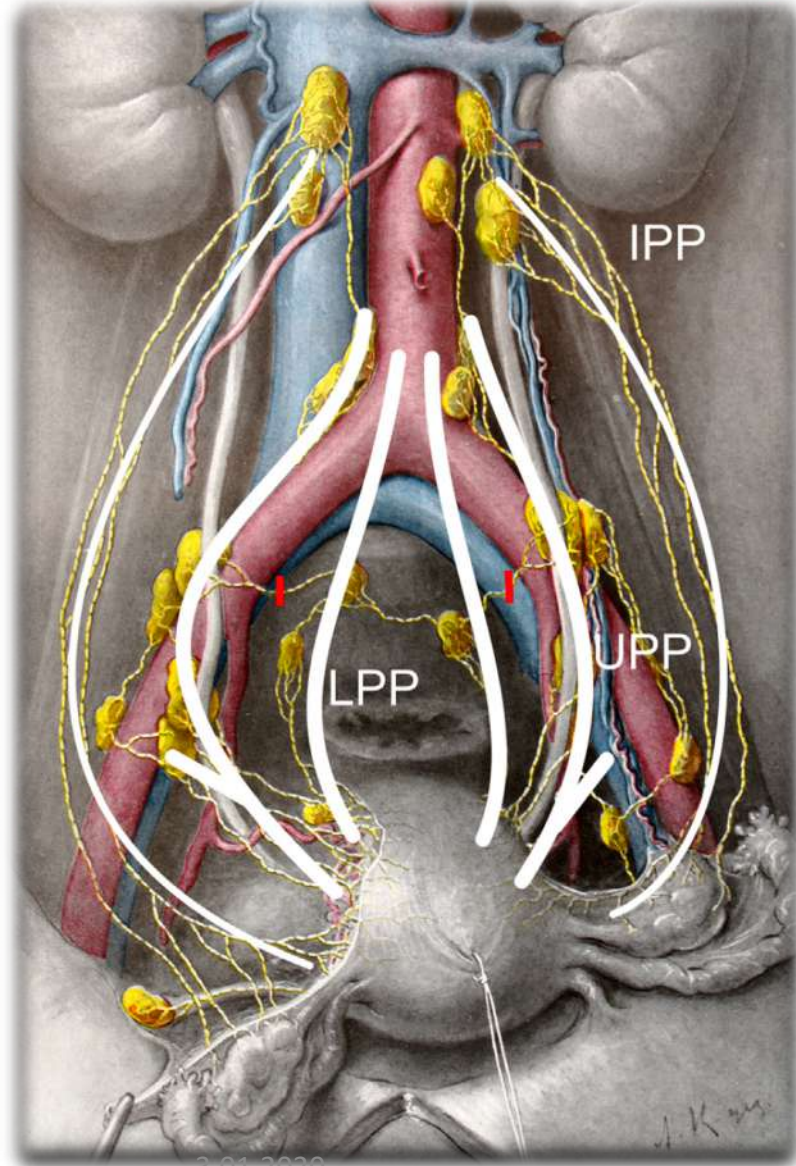


Marnitz, Gynecol Oncol, 2006

Servikal Enjeksiyon



En Önemli Kaygı





Detection rate and diagnostic accuracy of sentinel-node biopsy in early stage endometrial cancer: a prospective multicentre study (SENTI-ENDO)

Marcos Ballester, Gil Dubernard, Fabrice Lécure, Denis Heitz, Patrice Mathevet, Henri Marret, Denis Querleu, François Golfier, Eric Leblanc, Roman Rouzier, Emile Daraï

Saptama

% 89

Bilateral

% 62

Metastaz

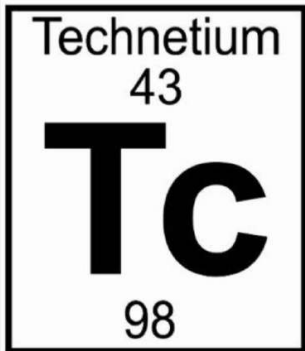
% 17

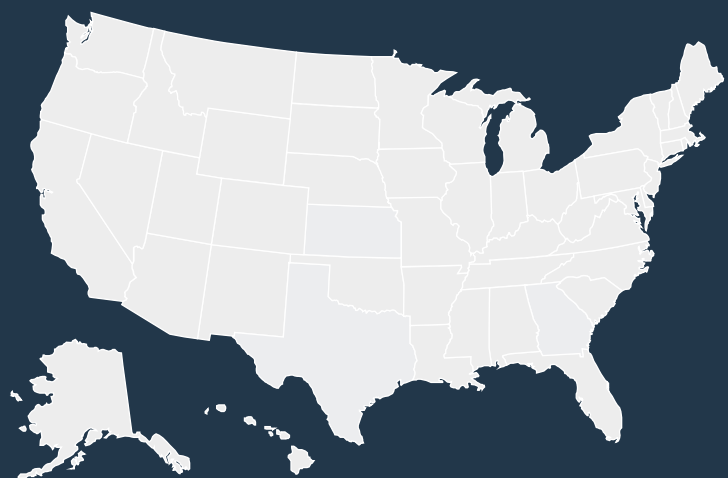
Sensitivite

% 100

NPV

% 100





n=293

A comparison of sentinel lymph node biopsy to lymphadenectomy for endometrial cancer staging (FIRES trial): a multicentre, prospective, cohort study

Emma C Rossi, Lynn D Kowalski, Jennifer Scalici, Leigh Cantrell, Kevin Schuler, Rabbie K Hanna, Michael Method, Melissa Ade, Anastasia Ivanova, John F Boggess

Saptama

% 86

Bilateral

% 52

Metastaz

% 14

Sensitivite

% 97

NPV

% 99.6



ELSEVIER

Contents lists available at ScienceDirect

Gynecologic Oncology

journal homepage: www.elsevier.com/locate/ygyno

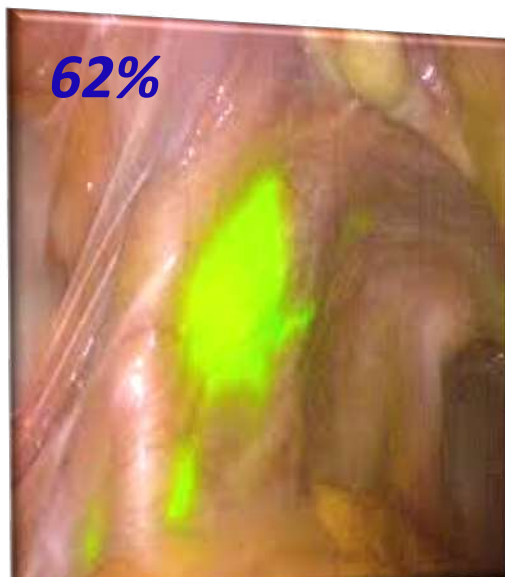
A prospective validation study of sentinel lymph node mapping for high-risk endometrial cancer☆

Pamela T. Soliman ^{a,*}, Shannon N. Westin ^a, Shayan Dioun ^a, Charlotte C. Sun ^a, Elizabeth Euscher ^b, Mark F. Munsell ^c, Nicole D. Fleming ^a, Charles Levenback ^a, Michael Frumovitz ^a, Pedro T. Ramirez ^a, Karen H. Lu ^a

- MI>50%
- Serous, clear cell, cs
- Endometrioid grade 3
- Cervical involvement

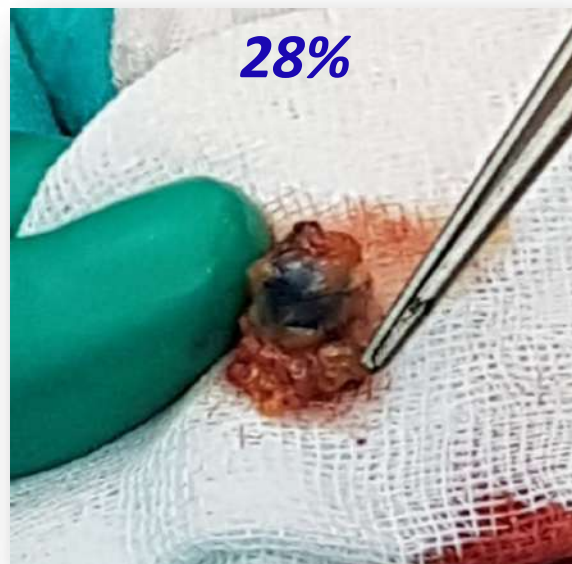
N=100

62%

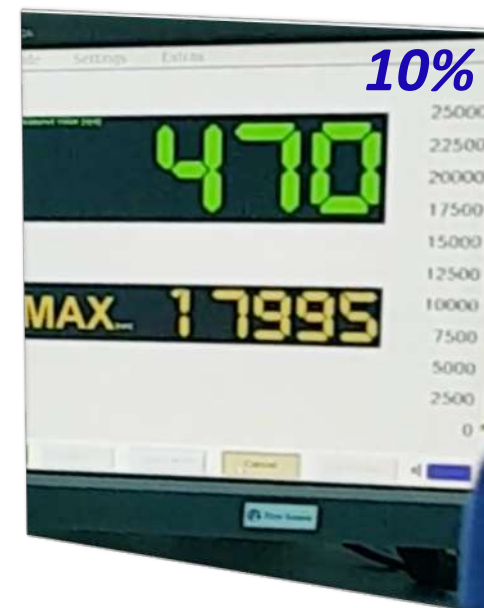


3.01.2020

28%



10%



21



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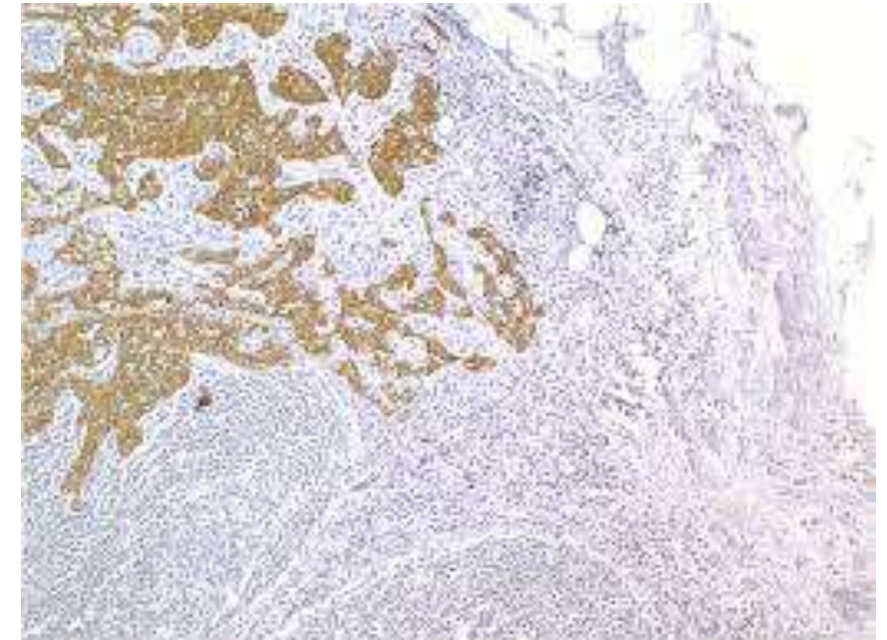
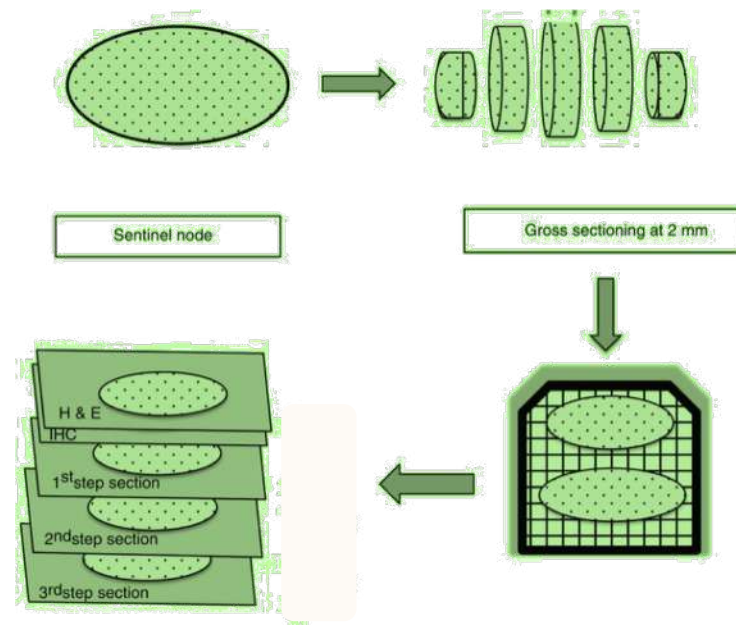
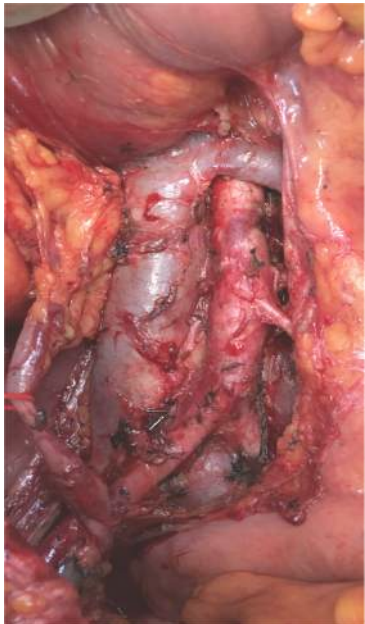
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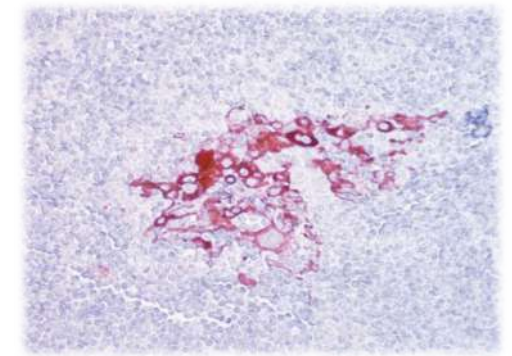
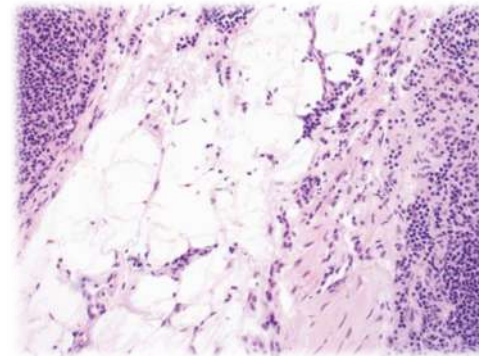
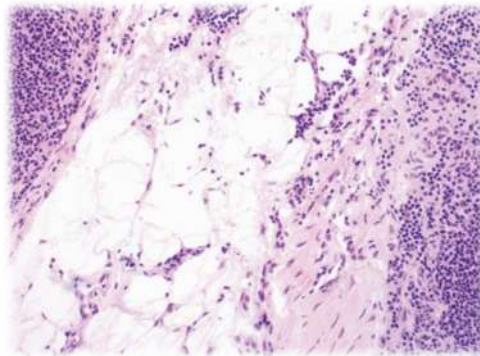
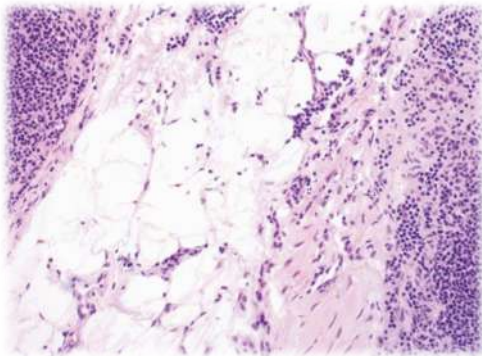
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95% Sensitivity

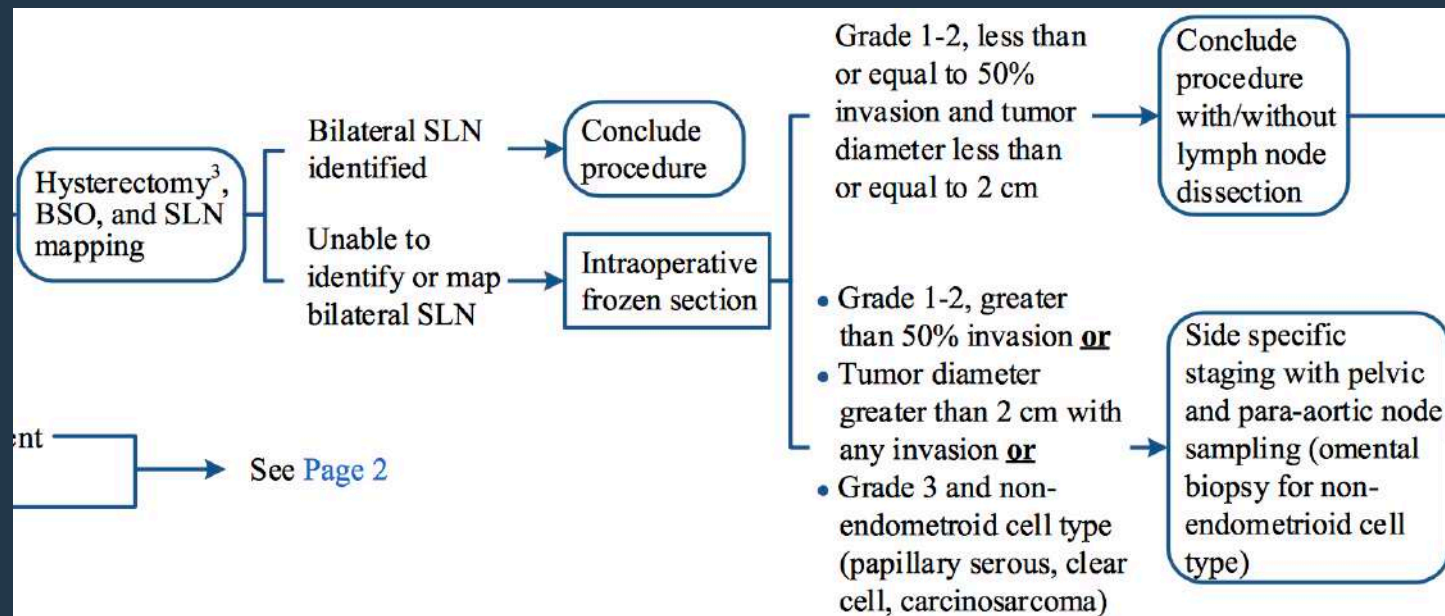
99% NPV



- MI>50%
- Serous, clear cell, cs
- Endometrioid grade 3
- Cervical involvement

5% FNR → *SLN ALONE*

1.4% FNPV



2012

3.01.2020

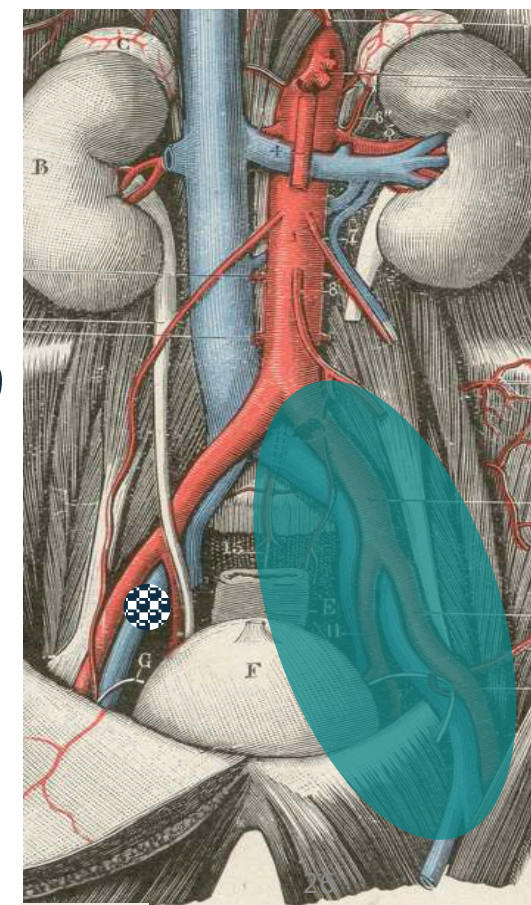


SLN Algorithm

Including high risk cases



- Sensitivity **98%**
- False negative %**1.9**



Barlin et al. Gynecol Oncol 2012



MIS in EC

2008

2009

2010

**Operative
time,
minutes**

Operative time, minutes

**Median
nodal count**

Median nodal count

**Detection of
stage III**

Detection of stage III

Validation Studies of the MSKCC Algorithm

Vidal F et al. IJGC 2013

Sadeghi R. Gynecol Oncol 2014

Eitan R et al. EJSO 2015

Eriksson AG et al. Gynecol Oncol 2016

Hagen B et al. Gynecol Oncol 2016

Tschernichovsky R et al. AJCO 2016

Ducie J et al. Gynecol Oncol 2017

Rossi E et al. Lancet Oncol 2017

Geppert B et al. Gynecol Oncol 2017

Holloway R et al. Gynecol Oncol 2017

How J et al. Gynecol Oncol 2017

Liu C et al. Gynecol Oncol 2017

Soliman P et al. Gynecol Oncol 2017

Buda A et al. Gynecol Oncol 2018

Papadia A et al. J Cancer Res Clin Oncol 2018



Complete LND (Mayo) VS SLND (MSKCC)

MI < %50

	Mayo	MSKCC	P
N	493	642	
3 yıllık DSS, %	98	100	0.03

Eriksson AG, Gynecol Oncol 2016

High risk (Serous or clear cell)

	Mayo	MSKCC	P
N	103	120	
Nodal (+), %	19,4	21,7	0.68
PA nodal (+), %	15,9	17,9	0.76

Ducie et al. Gynecol Oncol 2017

SLN in Deeply Invasive EEC



2004

2008

2013

Mayo- LND n= 94

MSKCC- SLN Algorithm n= 82



33 %

(+) Pelvic Node

14%

3.7 %

(+) PA Node

15 %

75 %

3-year PFS

81 %

92 %

3-year OS

83 %

Sağkalım

Prospektif data yok



Survival

3.01.2020

European Journal of Surgical Oncology 44 (2018) 1562–1567

Contents lists available at ScienceDirect

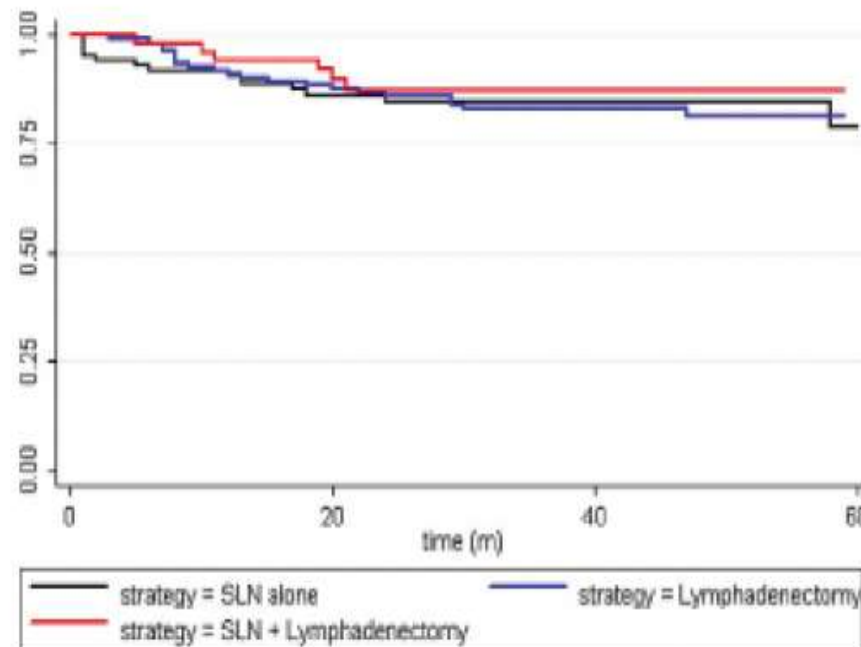
European Journal of Surgical Oncology

journal homepage: www.ejso.com

The impact of the type of nodal assessment on prognosis in patients with high-intermediate and high-risk ESMO/ESGO/ESTRO group endometrial cancer. A multicenter Italian study

Alessandro Buda ^{a,*}, Stefano Restaino ^b, Giampaolo Di Martino ^a, Elena De Ponti ^c, Giorgia Monterossi ^d, Giorgia Dinoi ^d, Sonia Magni ^a, Lorena Quagliozzi ^d, Federica Dell'Orto ^a, Francesca Ciccarone ^d, Maria Lamanna ^a, Giovanni Scambia ^d, Fabio Landoni ^a, Francesco Fanfani ^e





n= 200
3-year DFS: 84 %

Similar



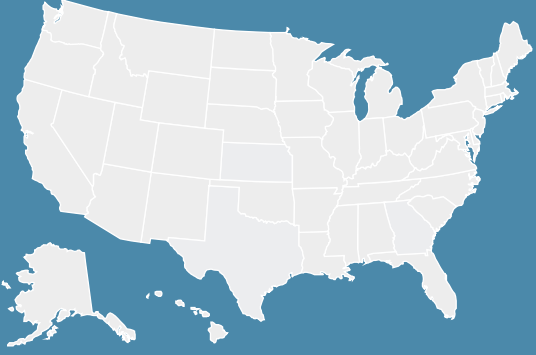
*Add-on completion
lymphadenectomy*

SGO Consensus 2017

SLN algorithm

*Completion of
paraaortic dissection*

*ICG is
preferable*



NCCN

Yapılabilir
ALGORITMA

2019



ESGO

Deneysel

2017



TRSGO

Deneyimli
merkezler

2018

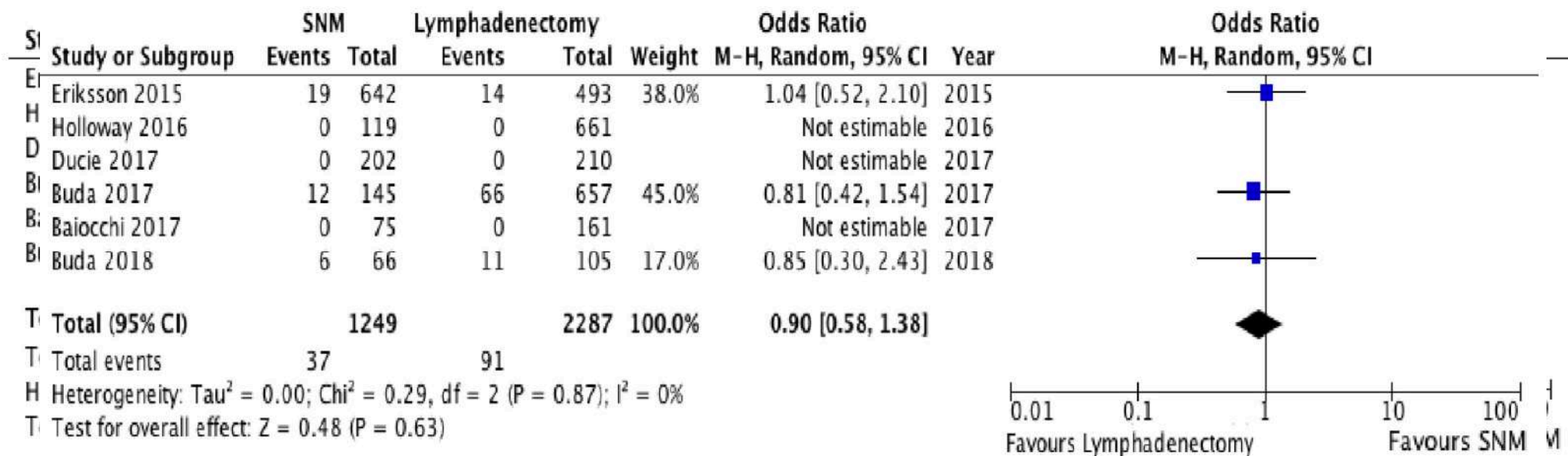


Evidence

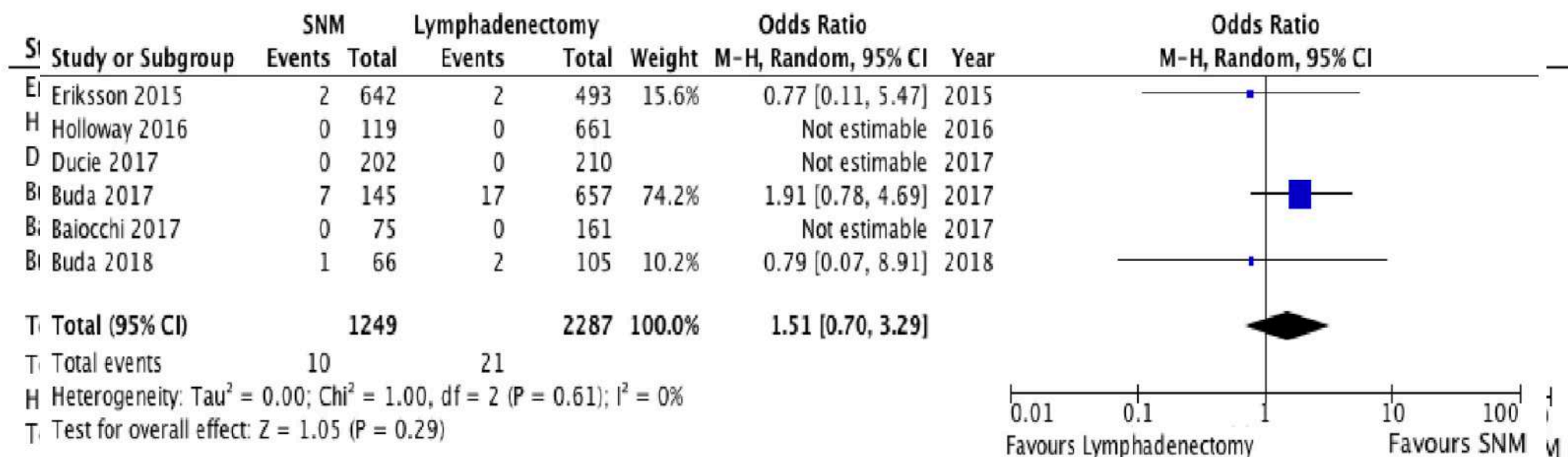


...

A: Recurrences (any site)



B B: Nodal recurrences



30 Studies found for: sentinel lymph node | Endometrial Cancer

5	☐	Recruiting	Sentinel Node Mapping in High Risk Endometrial Cancer	• Endometrial Cancer • Lymph Node Metastases	• Procedure: Sentinel Node Mapping • Procedure: Lymphadenectomy	• AC Camargo Cancer Center Sao Paulo, SP, Brazil
9	☐	Recruiting	Accuracy of Sentinel Lymph Node Biopsy in Nodal Staging of High Risk Endometrial Cancer	• Endometrial Cancer • Sentinel Lymph Node	• Biological: Indocyanine Green (ICG)	• Sunnybrook Health Sciences Center Toronto, Ontario, Canada • University Health Network - Princess Margaret Hospital Toronto, Ontario, Canada
11	☐	Recruiting	Evaluation of Sentinel Node Policy in Early Stage Endometrial Carcinomas at Intermediate and High Risk of Recurrence.	• Endometrial Carcinoma	• Drug: Pre-operative SN mapping with radionuclide • Drug: Intra-operative SN mapping with patent V blue dye • Drug: Intra-operative SN mapping with indocyanin green • (and 2 more...)	• Polyclinique Urbain V Avignon, France • Centre Hospitalier Régional Universitaire Besançon, France • Institut Bergonié Bordeaux, France • (and 16 more...)
21	☐	Not yet recruiting	Evaluation of the Efficacy for Sentinel Lymph Node Policy in High-risk Endometrial Carcinoma	• Endometrial Adenocarcinoma	• Procedure: SLN mapping	
24	☐	Active, not recruiting	PET/CT and Lymph Node Mapping in Finding Lymph Node Metastasis in Patients With High-Risk Endometrial Cancer	• Endometrial Clear Cell Adenocarcinoma • Endometrial Mixed Adenocarcinoma • Endometrial Serous Adenocarcinoma • (and 2 more...)	• Procedure: Computed Tomography • Drug: Indocyanine Green Solution • Other: Laboratory Biomarker Analysis • (and 3 more...)	• Lyndon Baines Johnson General Hospital Houston, Texas, United States • M D Anderson Cancer Center Houston, Texas, United States • The Woman's Hospital o Texas Houston, Texas, United States • (and 4 more...)

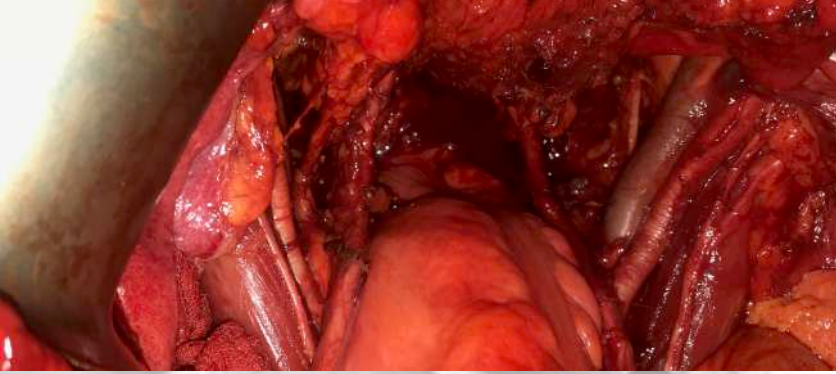
de, and ENDOMETRIAL CARCINOMA. [See Search Details](#)



Clinicopathological features Age, stage, grade, LVSI	Mol Class 1 <i>POLE</i> mutant (i.e. <i>POLE</i> EDM)	Mol Class 2 MMRd (i.e. MSI)	Mol Class 3 NSMP (i.e. p53 wt)	Mol Class 4 p53 aberrant (i.e. p53 abn, p53-mutant)
Preoperative Low grade High grade	<u>Surgery</u>		Urgency and extent	
Stage I-II Low risk Intermediate risk High risk Stage III-IV	<u>Adjuvant treatment</u>		VBT/ EBT/ chemotherapy/ none	
	<u>Surveillance</u>		3 months/ 6 months/ annual/discharge	
Recurrent disease	<u>Targeted therapy</u>		Checkpoint inhibitors/ small molecules/ PARPi/ hormonal treatment/ mTOR inhibition	



Evreleme için lenfadenektomi



50 negatif nod

QUALITY
~~QUANTITY~~

VEYA



Bir (+) nod



TÜRK JİNEKOLOJİK ONKOLOJİ DERNEĞİ
YIL SONU TOPLANTISI

Teşekkürler

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00905334746497