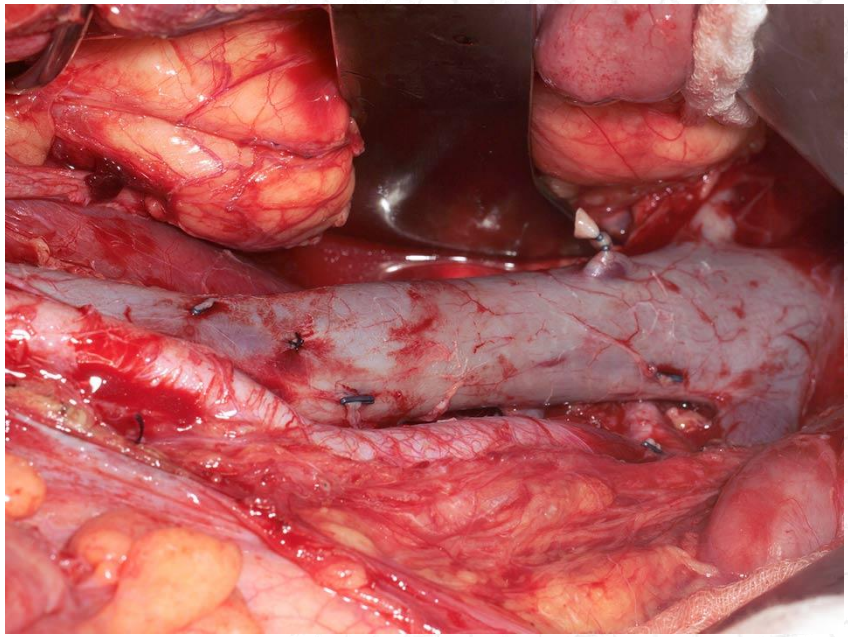
# Role of Lymphadenectomy in Endometrial cancer

**Seoul Metropolitan Boramae Hospital**

**Lee Taek Sang, MD.**

# Contents

- Introduction and historical overview
- Results of recent trials
- Future trials
- Summary



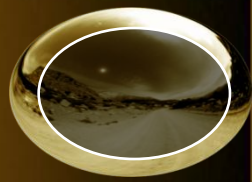
Asian Society of Gynecologic Oncology

# Introduction

- **Surgical staging: 4 Potential Benefits**
  - Disease assessment
  - Prognostic indicators
  - Adjuvant treatment determinant
  - Potentially therapeutic

- Controversies in Lymphadenectomy
  - **Who will really benefit from systematic LND?**
  - **Routine or *not* routine?**
  - **Should PALND be added to staging?**

# Introduction – History of Surgical staging



*Surgical Pathologic Spread Patterns of Endometrial Cancer*

*A Gynecologic Oncology Group Study*

WILLIAM T. CREASMAN, MD,* C. PAUL MORROW, MD,† BRIAN N. BUNDY, PHD,‡
HOWARD D. HOMESLEY, MD,§ JAMES E. GRAHAM, MD,‖ AND PAUL B. HELLER, MD¶

- **GOG 33 (Creasman et al., 1987)**
  - Surgical staging is necessary to accurately detect the extent of disease.
  - Specific Factors: depth of MMI, tumor grade, peritoneal spread
    - Independent prognostic factors for LNM
  - → the foundation that led to a change from a clinically based protocol to surgical staging.
  - → General gynecologist referred patients to tertiary centers.

# Introduction - History of Surgical staging

- FIGO surgical staging for endometrial cancer
  - ***Adopted*** **in 1988**
  - ***Revised*** **in 2009**
    - **IIIC: IIIC 1 (positive pelvic LNs)**
      **IIIC 2 (positive para-aortic LNs)**
  - **Pelvic and para-aortic LND – a"mandatory" part**

*(FIGO Committee, 2009; Creasman WT, 2009; Mariani A, 2009)*

***Question: Do you perform routine LND in endometrial cancer?***

| | Pelvic | Para-aortic |
|---|---|---|
| **North America** | **54.2%** | **?** |
| **Western Europe** | **24.4%** | **?** |
| **Japan** | **72%** | **20%** |
| **Korea** | **67%** | **33%** |

***(Maggino T, 1998; Watnabe, 2007; Kitchener H, 2006; Aalders JG, 2007, Lee TS 2009)***

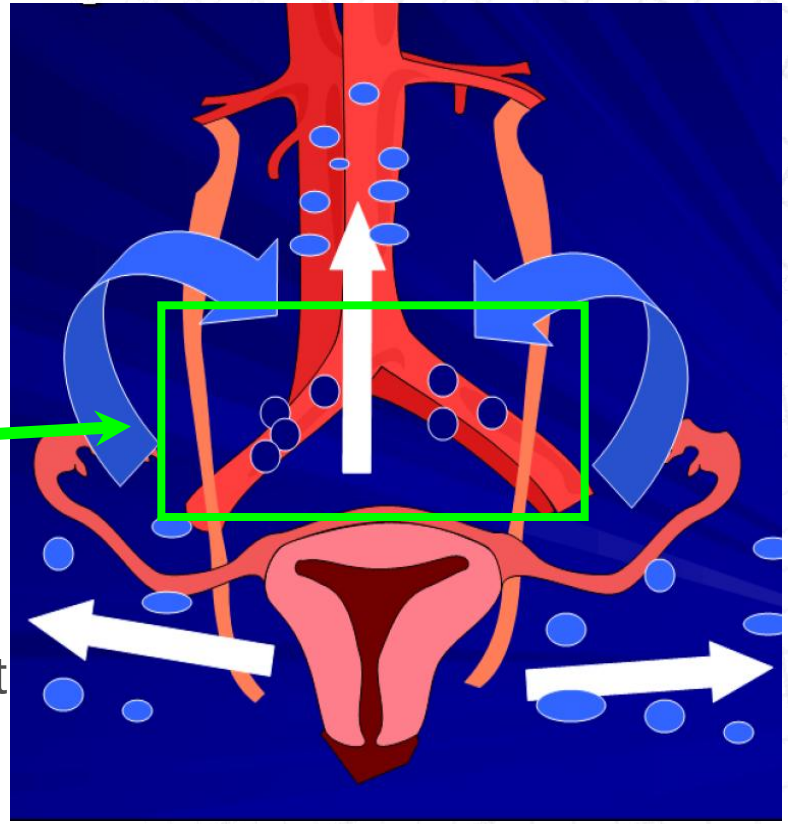
→ *"Routine LND was not performed worldwide."*

ASGO Asian Society of Gynecologic Oncology

# Data favoring systematic LND

- **Skipping common iliac node**
- **22% LN(+) at-risk patients**
  - 84% : pelvic nodes (+)
  - 67%: Paraaortic nodes (+)
    - **71% : negative common iliac node**
    - 60% : negative below IMA
    - 77%: Positive above IMA
    - Direct spread through I-P ligament

→ favoring necessity of systematic lymphadenectomy!



Mayo Clinic, Mariani et al., Gyn Oncol, 2008

ASGO Asian Society of Gynecologic Oncology

# Criteria for Low risk group

- ***Not*** **indicated for Lymphadenectomy**
  - **Low risk: Treated w/ only TAH, BSO**
    - **Endometrioid, G1&2, ≤ 2 cm, ≤ 50% MMI**

| Treatment^ | Pt | % 5 yr OS |
|---|---|---|
| Hysterectomy only | 59 | 100 |
| Hyst + LND* +/or RT** | 64 | 100 |
| Total | 123 | |

**Mayo Clinic , Mariani et al. Am J Ob Gyn 2000**

ASGO Asian Society of Gynecologic Oncology

# Selective LND in Emca

- ***Therefore,*** **LND is…**
  - No benefit in the low risk group
    - G1,2 and
    - MMI <50% and,
    - PTD < 2cm
  - PALND above IMA- mandatory
    - High rate of lymph node metastasis in the high risk group

Mariani et al., Gyn Oncol, 2008

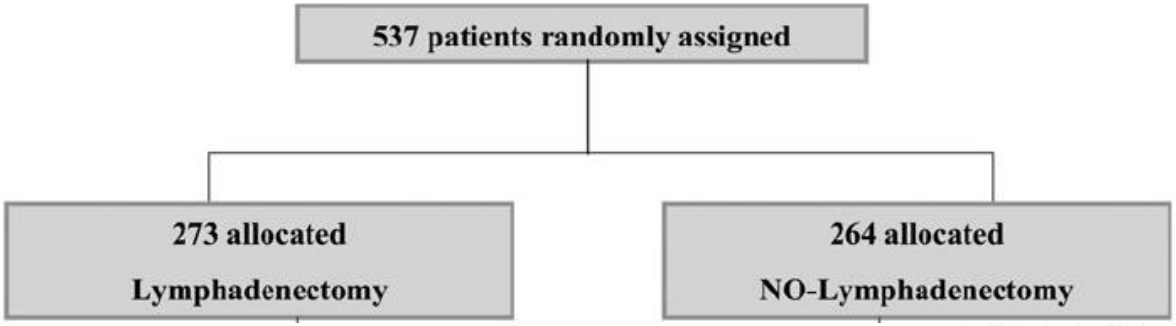
ASGO Asian Society of Gynecologic Oncology

# LND vs. No LND - RCTs

ARTICLE

## Systematic Pelvic Lymphadenectomy vs No Lymphadenectomy in Early-Stage Endometrial Carcinoma: Randomized Clinical Trial

Pierluigi Benedetti Panici, Stefano Basile, Francesco Maneschi, Andrea Alberto Lissoni, Mauro Signorelli, Giovanni Scambia, Roberto Angioli, Saverio Tateo, Giorgia Mangili, Dionyssios Katsaros, Gaetano Garozzo,

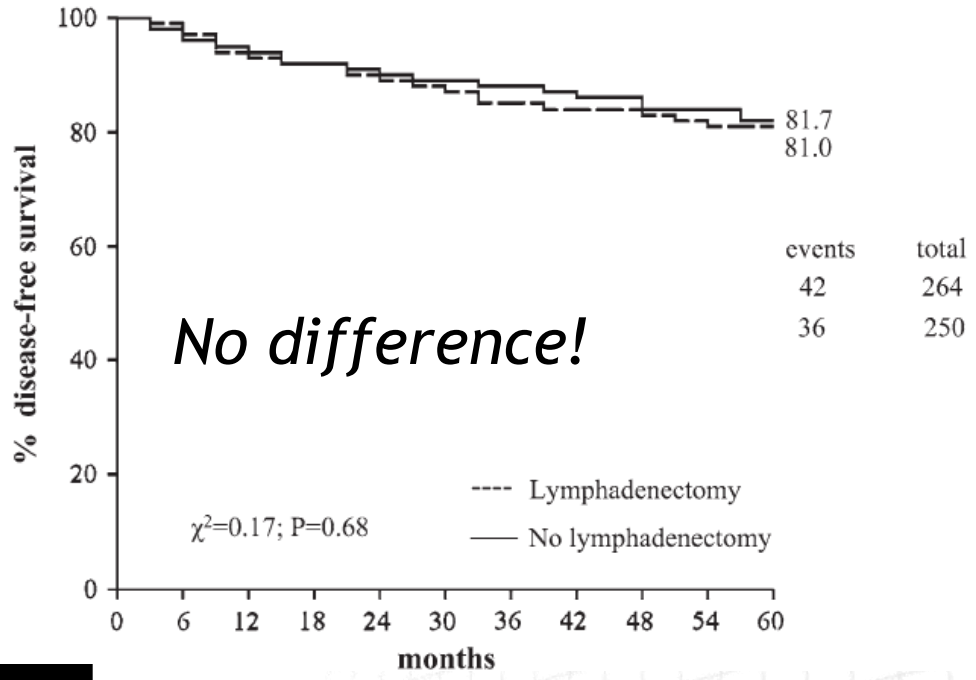



Panici et al., JNCI, 2008

ASGO Asian Society of Gynecologic Oncology

# LND vs. No LND - RCTs

- **537 stage I pts**
  - 67 recurrence
  - 53 deaths
- **Median f/u : 49 mon**
- **PALND: performed in <u>26%</u> in the LND arm**




***LND improved surgical staging but did not improve survival.***

Panici et al., JNCI, 2008

# Efficacy of systematic pelvic lymphadenectomy in endometrial cancer (MRC ASTEC trial): a randomised study

*The writing committee on behalf of the ASTEC study group**

## Summary

**Background** Hysterectomy and bilateral salpingo-oophorectomy (BSO) is the standard surgery for stage I endometrial cancer. Systematic pelvic lymphadenectomy has been used to establish whether there is extra-uterine disease and as a therapeutic procedure; however, randomised trials need to be done to assess therapeutic efficacy. The ASTEC surgical trial investigated whether pelvic lymphadenectomy could improve survival of women with endometrial cancer.

*Lancet* 2009; 373: 125–36
Published Online
December 13, 2008
DOI:10.1016/S0140-6736(08)61766-3

**Largest RCT that has ever been done in early EMca!*

- 4 countries
  - **UK**
  - South Africa
  - Poland
  - New Zealand.

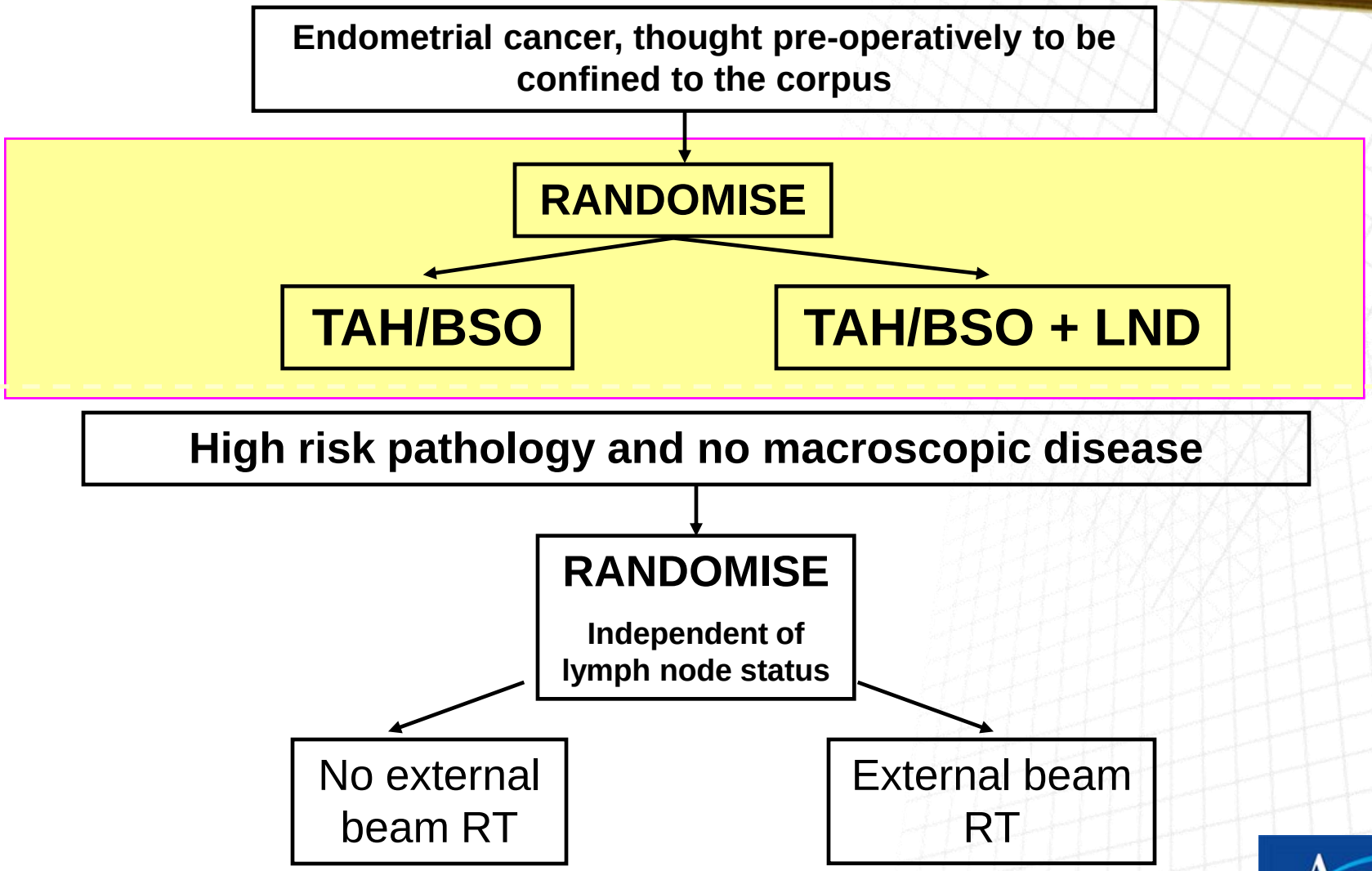
MRC
Medical Research Council

ASTEC

**A Study in the Treatment of Endometrial Cancer**

**A randomised trial of lymphadenectomy and of adjuvant external beam radiotherapy in the treatment of endometrial cancer (ISRCTN 16571884)**

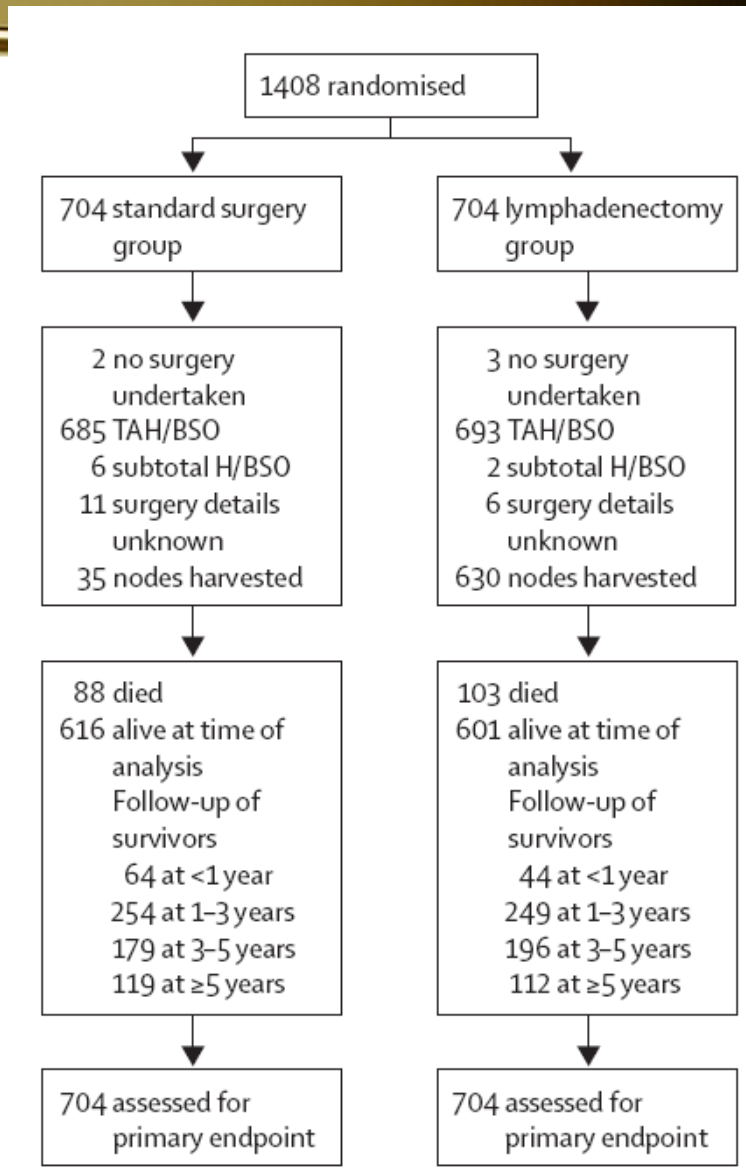
# ASTEC Schematic




*ASTEC writing group Lancet, 2009*

# ASTEC - Design

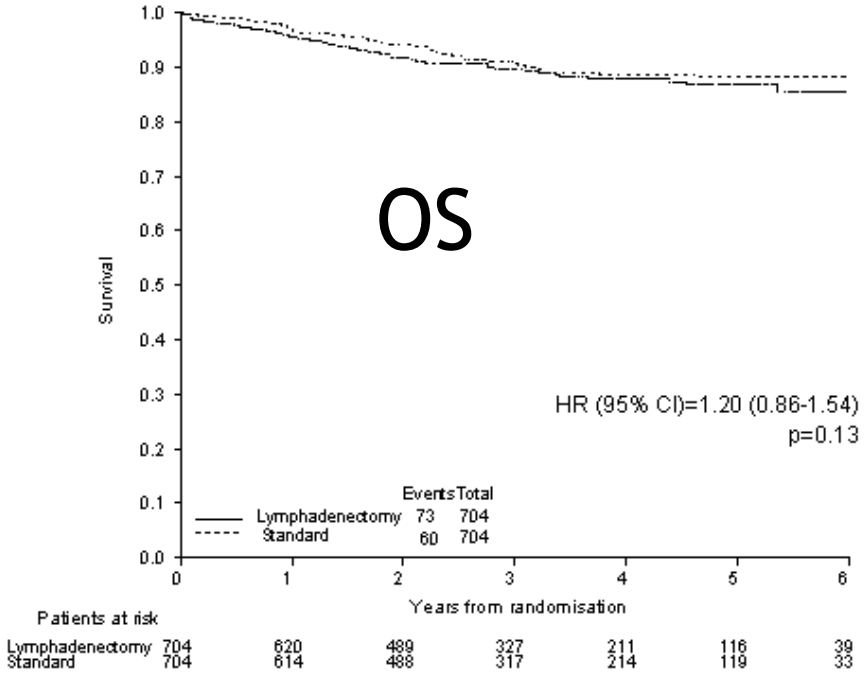
- 1998-2005, 85 centers
- 1,408 pts
- Preoperatively conifined to corpus : Low ~ High risk
- Standard surgery (TAH,BSO) group
  - LN palpation and sampling was allowed if enlarged
- PALND
  - Surgeon's discretion

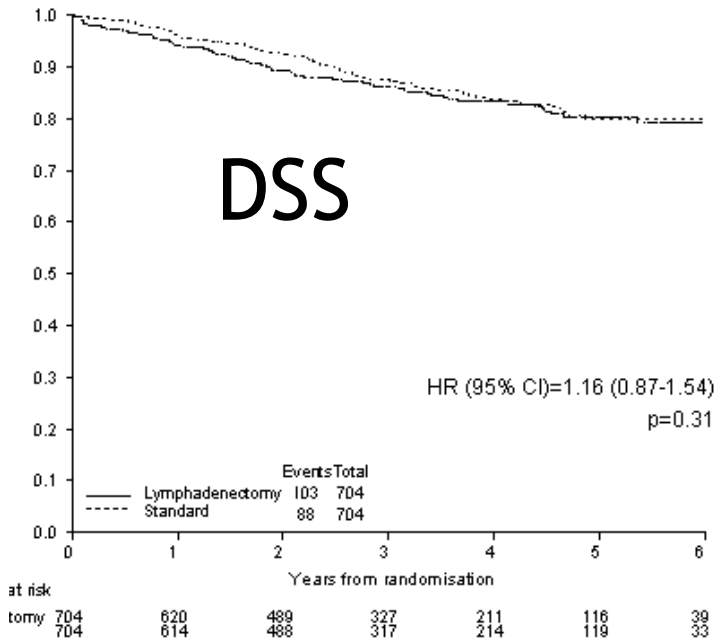



*ASTEC writing group Lancet, 2009*

# ASTEC - Results

No difference!

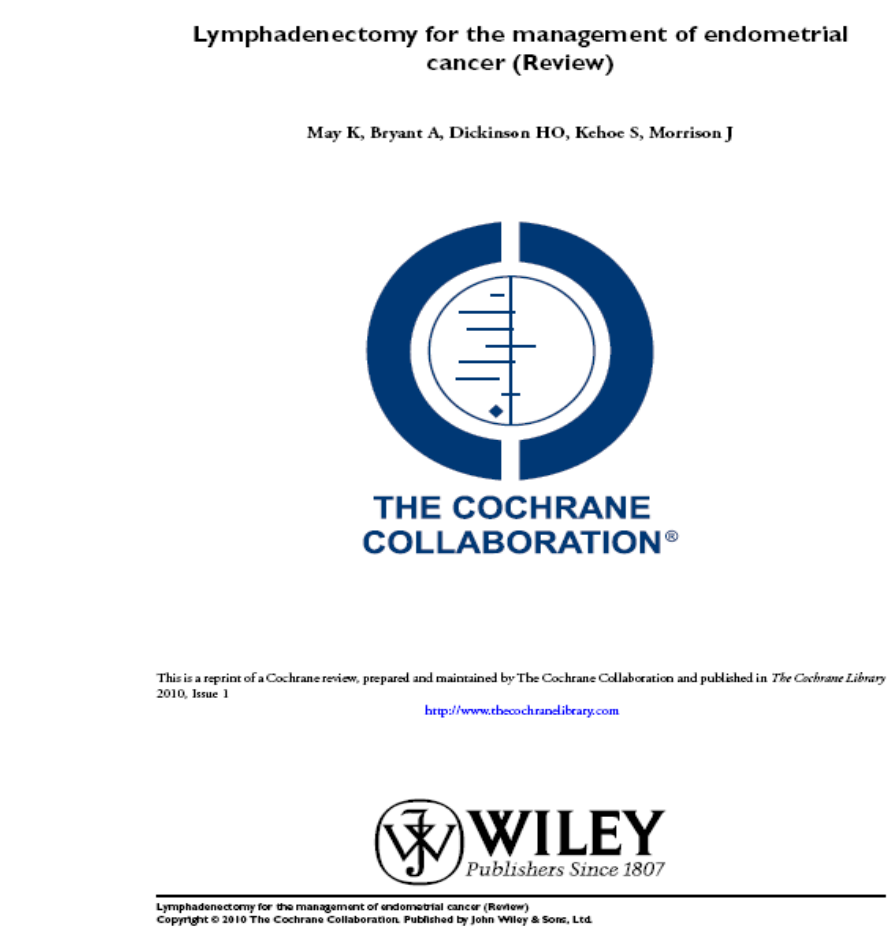



*ASTEC writing group Lancet, 2009*

ASGO Asian Society of Gynecologic Oncology

# Cochrane systematic reviews


Lymphadenectomy for the management of endometrial cancer (Review)

May K, Bryant A, Dickinson HO, Kehoe S, Morrison J

THE COCHRANE COLLABORATION®

This is a reprint of a Cochrane review, prepared and maintained by The Cochrane Collaboration and published in *The Cochrane Library* 2010, Issue 1

http://www.thecochranelibrary.com

WILEY Publishers Since 1807

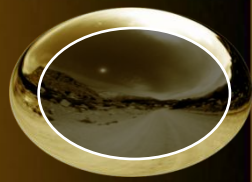
Lymphadenectomy for the management of endometrial cancer (Review)
Copyright © 2010 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

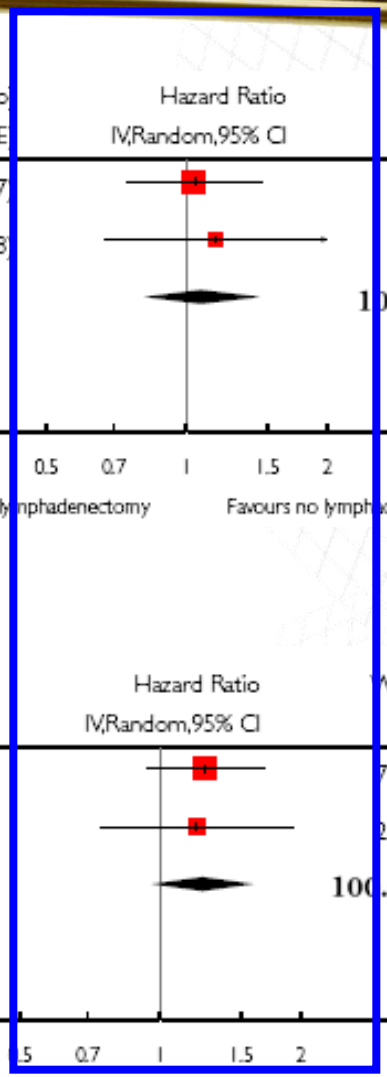
- CENTRAL, EMBASE, MEDLINE . 1966~2009
- ***Inclusion:***
  - Two RCTs:
    - **ASTEC, Panici's**
  - Non-RCT : excluded
- Meta-analysis
- Total of 1841 patients
- HR for OS, PFS
- RR for adverse events

May K, et al. The cochrane library 2010, issue 1

ASGO Asian Society of Gynecologic Oncology

# Cochrane reviews – Survival





| Study or subgroup | Lymphadenectomy N | No lymphadenectomy N | log [Hazard Ratio] (SE) | Hazard Ratio IV,Random,95% CI | Weight | Hazard Ratio IV,Random,95% CI |
|---|---|---|---|---|---|---|
| Kitchener 2009 | 670 | 667 | 0.04 (0.17) | | 73.1 % | 1.04 [ 0.75, 1.45 ] |
| Panici 2008 | 264 | 250 | 0.15 (0.28) | | 26.9 % | 1.16 [ 0.67, 2.01 ] |
| **Total (95% CI)** | | | | | **100.0 %** | **1.07 [ 0.81, 1.43 ]** |

Heterogeneity: $Tau^2 = 0.0$; $Chi^2 = 0.11$, df = 1 (P = 0.74); $I^2 = 0.0\%$

Test for overall effect: Z = 0.48 (P = 0.63)

0.5 0.7 1 1.5 2

Favours lymphadenectomy Favours no lymphadenectomy

OS

| Study or subgroup | Lymphadenectomy N | No lymphadenectomy N | log [Hazard Ratio] (SE) | Hazard Ratio IV,Random,95% CI | Weight | Hazard Ratio IV,Random,95% CI |
|---|---|---|---|---|---|---|
| Kitchener 2009 | 670 | 667 | 0.22 (0.15) | | 71.9 % | 1.25 [ 0.93, 1.67 ] |
| Panici 2008 | 264 | 250 | 0.18 (0.24) | | 28.1 % | 1.20 [ 0.75, 1.92 ] |
| **Total (95% CI)** | | | | | **100.0 %** | **1.23 [ 0.96, 1.58 ]** |

Heterogeneity: $Tau^2 = 0.0$; $Chi^2 = 0.02$, df = 1 (P = 0.89); $I^2 = 0.0\%$

Test for overall effect: Z = 1.64 (P = 0.10)

0.5 0.7 1 1.5 2

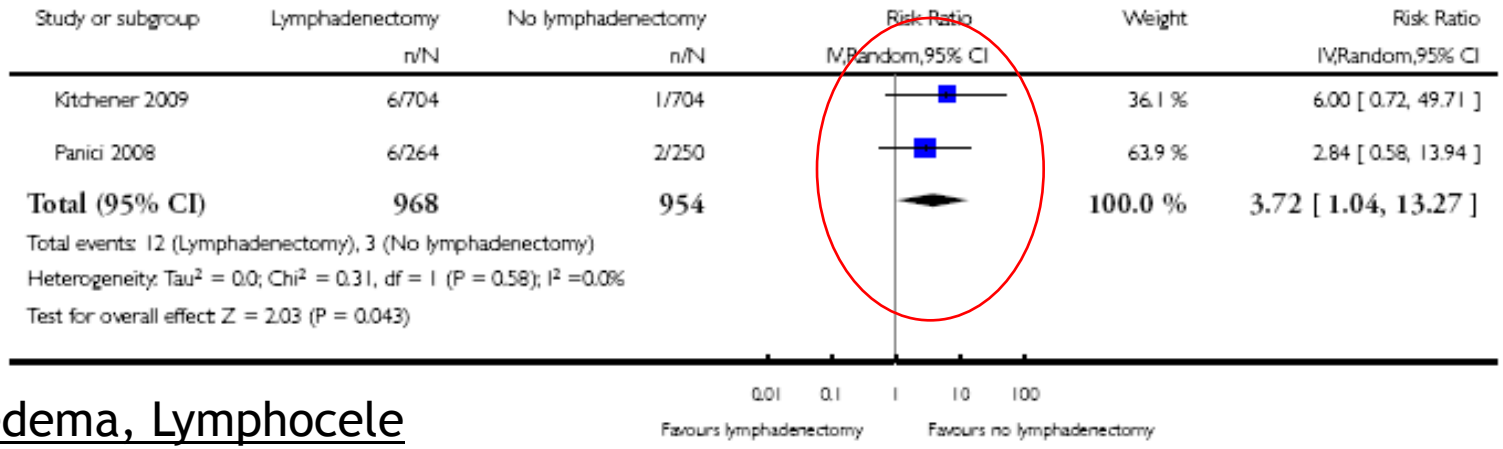
Favours lymphadenectomy Favours no lymphadenectomy

DFS

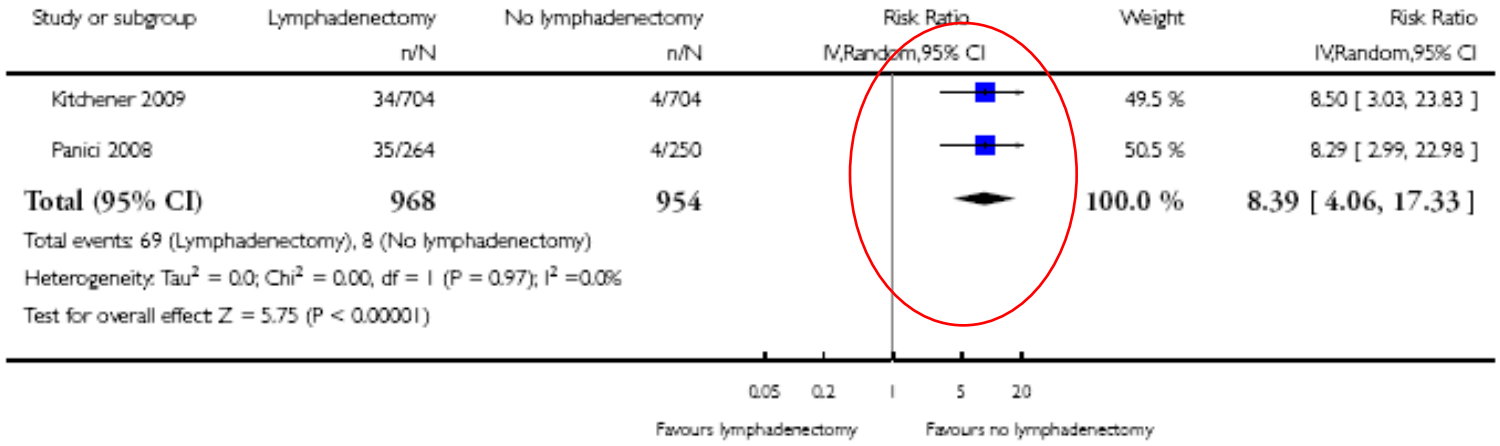
ASGO Asian Society of Gynecologic Oncology

# Cochrane reviews -Morbidity in LND

Postoperative systemic morbidity




Lymphedema, Lymphocele




**May K, et al.** The cochrane library 2010, issue 1

# After ASTEC... - critiques

THE IJGC FORUM:
THE ASTEC TRIAL

## Benefit of Lymphadenectomy in Endometrial Cancer

*Can the Truth Be Obtained by Randomized Controlled Trial After ASTEC?*

According to the result of ASTEC trials, it was contrarily discovered that pelvic lymph node dissection did not improve pelvic control or overall survival in early-stage intermediate and high-risk endometrial carcinoma. It was also noticed that pelvic external beam radiation did not influence on survival,[1,2] although it might reduce local recurrences.

Although the reports of ASTEC have the major important value due to the largest randomized controlled trials that have ever been performed, some cautions should be made for the interpretation of conclusions because these studies are subject to some pitfalls in study design.

First of all, the most important reason of showing negative results from the ASTEC trial could be related to the limited performance of both the extent of lymphadenectomy and external beam radiation therapy. These were performed only for regional control confined to the pelvic cavity without knowing disease status of para-aortic area. According to the recent reports, a significant portion (10%–30%) of the metastases is located in the high para-aortic area, and up to 67% of endometrial cancer patients with positive nodes have additional periaortic metastasis.[3,4]

Another main reason could be the inclusion of low-risk group (stages Ia–Ib and grades 1–2 disease) up to 44% with low number of resected lymph nodes relatively. Therefore, this might have diluted possible benefits of lymphadenectomy in the high-risk group. Lymphadenectomy in low-risk group might also be regarded as surgical treatment when it is considered with low rate of nodal metastasis, which is supported by recent Korean studies.[5,6]

Given the previously mentioned observations, we think the design of ASTEC trials, although their value should be granted as it is, has some weakness to reflect the real value of lymphadenectomy in most patients with endometrial cancer. We rather conclude that surgical and radiotherapeutic pelvic control itself has no therapeutic effect at least in low-risk subgroup.

The real question is which subgroup of high-risk patients might possibly benefit from systematic surgical staging to guide postoperative treatment. Gradually, another large-scale study with adequate numbers of high-risk patients has to be designed to solve this question. However, the dilemma will be raised whenever such a randomized trial is conducted. Based on ethical consideration, previous identified high-risk factors for lymph node metastasis and recurrences may prevent a trial design from determining what we really want to find out. On the contrary, performing trials with a subgroup of not so high-risk patients might be reasonable, although there is a significant portion of physicians who are reluctant to perform lymphadenectomy to those not so high-risk patients. However, because the difference between both groups is expected to be minimal, there might be a great chance to get another negative result, which is not the real purpose of our study. That is the point that we have to overcome.

Where should we go from here? If we assume that endometrial cancer, even in early-stage disease, has a great potential to be a systemic disease by lymphatic spread, systemic chemotherapy for the established high-risk candidates seems to be considered as a possible option, and appropriate trials can be designed based on small collected evidences.[7,8]


**Taek Sang Lee**
Department of Obstetrics and Gynecology
Seoul Metropolitan Boramae Hospital
Seoul, South Korea

**Jae Weon Kim**
Seoul National University Hospital
Seoul, South Korea

**Seok Ju Seong**
Kangnam CHA Medical Center
Seoul, South Korea

**Hee Sug Ryu**
Department of Obstetrics and Gynecology
Ajou University Hospital
Suwon, South Korea
hsryu@ajou.ac.kr
Hee Sug Ryu is a representative of the Korean Gynecologic Oncology Group—Uterine Corpus Committee


### REFERENCES


1. Blake P, Swart AM, Orton J, et al. Adjuvant external beam radiotherapy in the treatment of endometrial cancer (MRC ASTEC and NCIC CTG EN.5 randomised trials): pooled trial results, systematic review, and meta-analysis. *Lancet.* 2009;373: 137–146.
2. Kitchener H, Swart AM, Qian Q, et al. Efficacy of systematic pelvic lymphadenectomy in endometrial cancer (MRC ASTEC trial): a randomised study. *Lancet.* 2009;373:125–136.
3. Niikura H, Okamura C, Utsunomiya H, et al. Sentinel lymph node detection in patients with endometrial cancer. *Gynecol Oncol.* 2004;92:669–674.
4. Mariani A, Dowdy SC, Cliby WA, et al. Prospective assessment of lymphatic dissemination in endometrial cancer: a paradigm shift in surgical staging. *Gynecol Oncol.* 2008;109:11–18.
5. Kang WD, Kim CH, Cho MK, et al. Lymphadenectomy for low-risk endometrial cancer based on preoperative and intraoperative assessments. *Int J Gynecol Cancer.* 2009;19:657–661.
6. Lee KB, Ki KD, Lee JM, et al. The risk of lymph node metastasis based on myometrial invasion and tumor grade in endometrioid uterine cancers: a multicenter, retrospective Korean study. *Ann Surg Oncol.* 2009 (Epub ahead of print).
7. Kodama J, Seki N, Hiramatsu Y. Chemotherapy for high-risk early-stage endometrial cancer. *Curr Opin Obstet Gynecol.* 2007;19:42–47.
8. Kim JH, Lee SJ, Bae JH, et al. Adjuvant therapy in high-risk early endometrial carcinoma: a retrospective analysis of 46 cases. *J Gynecol Oncol.* 2008;19:236–240.




*Lancet*

## Lymphadenectomy in endometrial cancer

The main finding of the MRC ASTEC trial (Jan 10, p 125)[1] is that there is no evidence of benefit from pelvic lymphadenectomy for patients with endometrial cancer. In this trial, surgery consisted of a total abdominal hysterectomy and bilateral salpingo-oophorectomy with or without pelvic

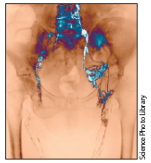

Department of Gynaecologic Oncology (MJEM, CBMB) and Epidemiology (GHdB), University Medical Center Groningen, University of Groningen, PO 30.001, 9700 RB Groningen, Netherlands

*Aoun Hakmi*
aoun_hakmi@hotmail.com
Conquest Hospital, St Leonards on Sea TN37 7RD, UK



1 The writing committee on behalf of the ASTEC study group. Efficacy of systematic pelvic lymphadenectomy in endometrial cancer (MRC ASTEC trial): a randomised study. *Lancet* 2009; 373: 125–36.


I have some concerns about the ASTEC study.[1] First, in the standard surgery group, surgeons could remove pelvic



Science Photo Library

H. Kitchener

K. Podratz

Panici PB

I. Vergote

# Major Critiques for ASTEC...

- **PALND: not included**
  - cf> 2/3 of LN mets → PALN (+)
- **# of resected LNs - Insufficient**
  - Median #: 12
  - 35% of pts; <9 → Not systematic
- **Many Patients with Low risk**
  - 44% stage Ia-Ib,Gr1-2.
  - Surgical overtreatment
  - Subgroup analysis with high risk group?
- Too small No. to detect OS difference
- Short f/u period (less than 3yr)
- Suspicious nodes could be sampled in no LND group

Low rate (9%) of LN mets

*Karl Podratz , Ignace Vergote, Aoun Hakmi et al., 2009, Lancet*

ASGO Asian Society of Gynecologic Oncology

# PLND vs. PLND +PALND : SEPAL

## Survival effect of para-aortic lymphadenectomy in endometrial cancer (SEPAL study): a retrospective cohort analysis

*Yukiharu Todo, Hidenori Kato, Masanori Kaneuchi, Hidemichi Watari, Mahito Takeda, Noriaki Sakuragi*


### Summary

**Background** In response to findings that pelvic lymphadenectomy does not have any therapeutic benefit for endometrial cancer, we aimed to establish whether complete, systematic lymphadenectomy, including the para-aortic lymph nodes, should be part of surgical therapy for patients at intermediate and high risk of recurrence.

**Methods** We selected 671 patients with endometrial carcinoma who had been treated with complete, systematic pelvic lymphadenectomy (n=325 patients) or combined pelvic and para-aortic lymphadenectomy (n=346) at two tertiary centres in Japan (January, 1986–June, 2004). Patients at intermediate or high risk of recurrence were offered adjuvant radiotherapy or chemotherapy. The primary outcome measure was overall survival.

**Findings** Overall survival was significantly longer in the pelvic and para-aortic lymphadenectomy group than in the pelvic lymphadenectomy group (HR 0·53, 95% CI 0·38–0·76; p=0·0005). This association was also recorded in 407 patients at intermediate or high risk (p=0·0009), but overall survival was not related to lymphadenectomy type in low-risk patients. Multivariate analysis of prognostic factors showed that in patients with intermediate or high risk of recurrence, pelvic and para-aortic lymphadenectomy reduced the risk of death compared with pelvic lymphadenectomy (0·44, 0·30–0·64; p<0·0001). Analysis of 328 patients with intermediate or high risk who were treated with adjuvant radiotherapy or chemotherapy showed that patient survival improved with pelvic and para-aortic lymphadenectomy (0·48, 0·29–0·83; p=0·0049) and with adjuvant chemotherapy (0·59, 0·37–1·00; p=0·0465) independently of one another.

**Interpretation** Combined pelvic and para-aortic lymphadenectomy is recommended as treatment for patients with endometrial carcinoma of intermediate or high risk of recurrence. If a prospective randomised or comparative cohort study is planned to validate the therapeutic effect of lymphadenectomy, it should include both pelvic and para-aortic lymphadenectomy in patients of intermediate or high risk of recurrence.


Published Online
February 25, 2010
DOI:10.1016/S0140-6736(09)62002-X

See Online/Comment
DOI:10.1016/S0140-6736(09)62068-7

Division of Gynaecologic Oncology, National Hospital Organization, Hokkaido Cancer Centre, Sapporo, Japan (Y Todo MD, H Kato MD); and Department of Gynaecology, Hokkaido University Hospital and Hokkaido University Graduate School of Medicine, Sapporo, Japan (M Kaneuchi MD, H Watari MD, M Takeda MD, Prof N Sakuragi MD)

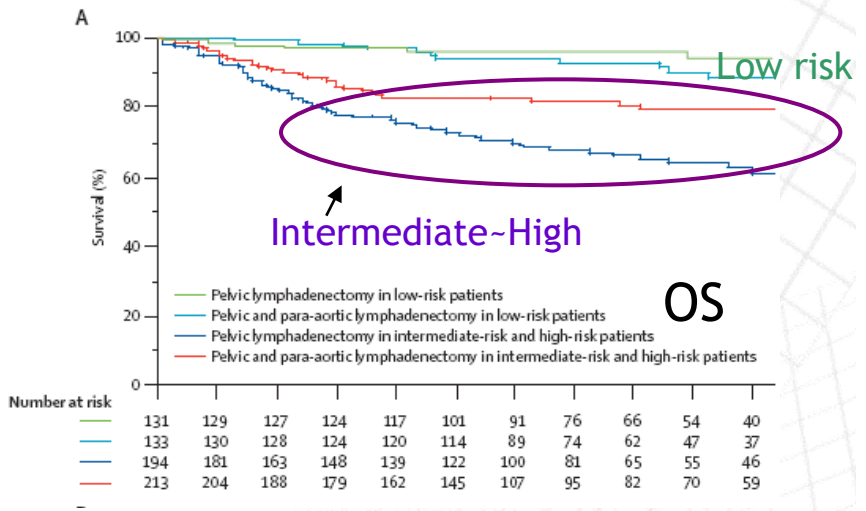
Correspondence to:
Prof Noriaki Sakuragi, Department of Gynaecology, Hokkaido University Graduate School of Medicine, N15, W7, Kita-ku, Sapporo, 060-8638, Japan
sakuragi@med.hokudai.ac.jp

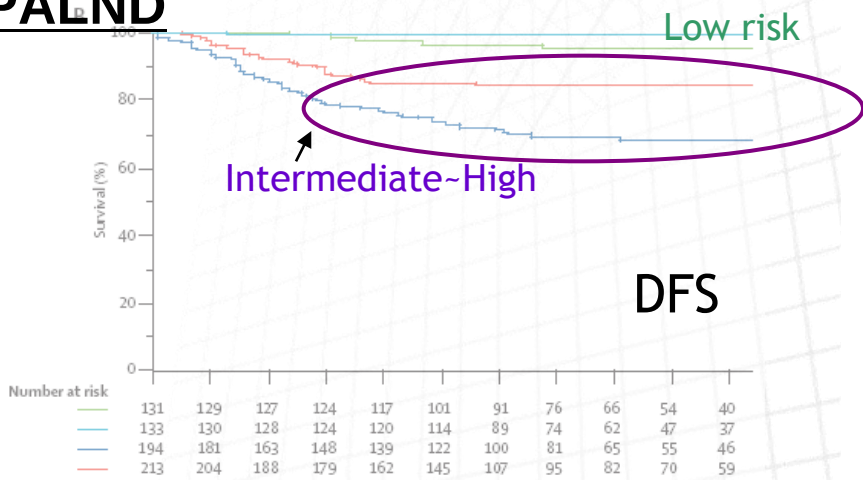
*Todo et al., Lancet. 2010*

ASGO Asian Society of Gynecologic Oncology

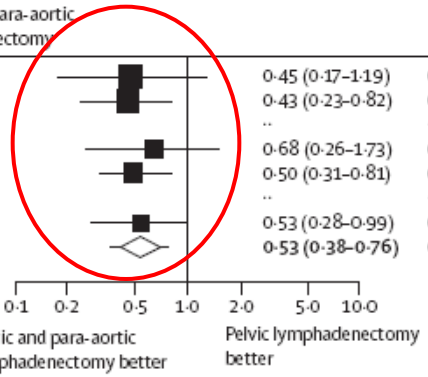
# PLND vs. PLND +PALND – SEPAL study

- 407 patients enrolled
- LN (+) : 16% of entire cohort
- Survival
  - Low risk - Not different
  - Int~high risk
    - **HR: 0.44 in PALND group**
    - **27% of LN (+) → benefit from PALND**




| | Number of deaths/ number of patients in group | | Hazard ratio (95% CI) | p value |
|---|---|---|---|---|
| | Pelvic lymphadenectomy | Pelvic and para-aortic lymphadenectomy | | |
| Low risk | 13/131 | 6/133 | 0·45 (0·17–1·19) | 0·11 |
| Intermediate risk | 32/124 | 13/116 | 0·43 (0·23–0·82) | 0·0106 |
| Radiotherapy | 21/56 | 0/1 | .. | .. |
| Chemotherapy | 7/42 | 12/82 | 0·68 (0·26–1·73) | 0·43 |
| High risk | 38/70 | 30/97 | 0·50 (0·31–0·81) | 0·0051 |
| Radiotherapy | 15/19 | 0/1 | .. | .. |
| Chemotherapy | 20/46 | 20/81 | 0·53 (0·28–0·99) | 0·0448 |
| Total | 83/325 | 49/346 | 0·53 (0·38–0·76) | 0·0005 |




Todo et al., Lancet. 2010

# Korean multi-center study

- 758 ealry stage EM ca from 8 institutes.
  - 547(72.2%)- systematic LND vs. 211(27.8%)- no LND
  - Median f/u 35month
  - Adjuvant RT; 207 (27.3%)
- Overall survival
  - No difference in all patients (p=0.448)
  - **Better in high risk group (p=0.001)**
- No MMI with Gr 1or 2 – minimal risk for LNM**.**

*Lee JM et al., 2010, J Gynecol Oncol, in press*

# How exactly can we predict low risk disease?

❖ **MRI for Myometrial invasion**

| | N | **Sensitivity (%)** | **Specificity (%)** |
|---|---|---|---|
| Nakao (2006) | 116 | **81** | **85** |
| Sanjuan (2006) | 180 | **79** | **82** |
| Chung (2006) | 120 | **50.6** | **89.2** |

→ *Current sensitivity is insuffcient to abandon lymphadenectomy!*

ASGO Asian Society of Gynecologic Oncology

# Predition of Low risk group – Histologic Grade

❖ **EM biopsy vs. hysterectomy specimen**

| | Pipelle | | D&C | |
|---|---|---|---|---|
| | **Discrepant (%)** | **Upgrade (%)** | **Discrepant (%)** | **Upgrade (%)** |
| Daniel (1988) | **29** | **11** | **31** | **11** |
| Zorlu (1994) | **13** | **4** | **7** | **4** |
| Larson (1995) | **46** | **31** | **24** | **14** |
| Frumovitz (2004) | **38** | **26** | **27** | **23** |

→ *Approximately 25% showed discrepancy or upgraded!*

→ *Not sufficient to exclude candidates for LND*

*Frumovitz et al., 2004, Gynecol Oncol*

# Risk of PALNM in presumed Grade 1

Ann Surg Oncol
DOI 10.1245/s10434-010-1199-5

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

ORIGINAL ARTICLE – GYNECOLOGIC ONCOLOGY

## Para-aortic Lymphadenectomy in the Management of Preoperative Grade 1 Endometrial Cancer Confined to the Uterine Corpus

Jong-Hyuck Yoon, MD, Seung-Chul Yoo, MD, PhD, Woo Young Kim, MD, Suk-Joon Chang, MD, PhD, Ki-Hong Chang, MD, PhD, and Hee-Sug Ryu, MD, PhD

Department of Obstetrics and Gynecology, Ajou University School of Medicine, Suwon, Korea

(Preoperative G1, endometrioid type, confined to the corpus)

*Yoon JH et al., 2010 Ann Surg Oncol*

# PALND in Grade 1 patients?

## ❖ Results

- 130 patients presumed to have low risk disease
  - PALN metastasis: 4.6%
  - high-risk non-endometrioid histology: 5.4%
  - upgraded disease on final pathology: 6.8%
  - advanced stage (stage II, III, IV): 13.0%
- Deep MMI, increased CA-125 (>31U/ml)
  - Independent risk factor for LNM

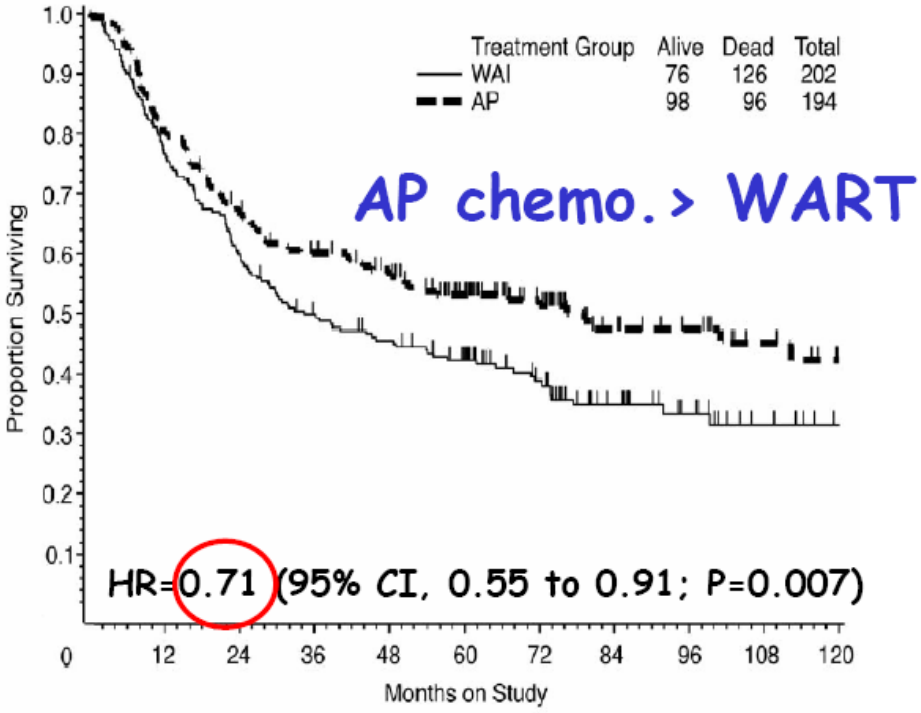
→ PALND should be considered in preoperative Gr 1 patients *if increased CA-125, deep MMI is suspected.*

*Yoon JH et al., 2010 Ann Surg Oncol*

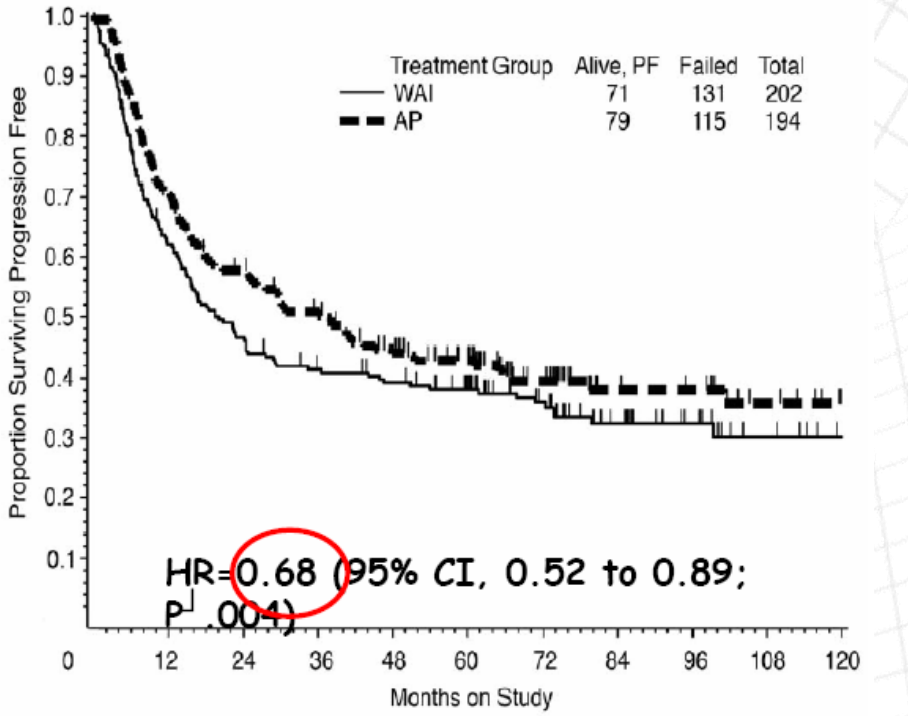
ASGO Asian Society of Gynecologic Oncology

# Chemo > RT in advanced EMca

❖ **GOG122**




Disease free survival




Overall survival

→ *LND- guide to tailoring optimal adjuvant treatment*

Randall et al., J Clin Oncol 2006;24:36-44

ASGO Asian Society of Gynecologic Oncology

# Elements for future RCT

- **First,** focus on patients at *high risk group*.
- **Second**, the status of lymph nodes should be used to *direct postoperative treatment*.
  - If not, morbidity ↑, without improvements of outcome
- **Third,** patients assigned to lymphadenectomy should receive a *systematic PLND and PALND.*

# Future trials - GOG

- **UC0904:** A prospective randomized trial of hysterectomy BSO with and without aortic and pelvic lymphadenectomy in patients with stage IA (Grade 1,2,3) and 1B (Grade 1,2) endometrial cancer (PI: Spirtos)

- **UC1015:** Randomized phase III trial of lymphadenectomy in high risk patients with endometrial cancer (LYTEC)

  (PI: Sean C Dowdy)

→ *These will answer the question on who will ultimately benefit from lymphadenectomy*!

# Summary (1)

- ***Therapeutic significance*** of combined pelvic and para-aortic LND ***is a matter of great debate.***

- Recent two ***RCTs showed no benefit*** of LND in survival, however, we ***cannot*** say that these two trials ***solved the debate*** because of several serious deficiencies in study design.

- Recent well designed non-randomized trials support the ***necessity of adding PALND to the high risk group*** in the surgical staging procedure.

ASGO
Asian Society of Gynecologic Oncology

# Summary (2)

- Current data consistently support that the ***low risk group does not benefit from LND***. However, preoperative ***prediction rate is still not enough to abandon LND***.

- ***Future trials*** *should be focused on* ***high risk group*** and ***include systematic pelvic and paraaortic LND***.

Asian Society of Gynecologic Oncology


Thank you for attention!