Tumor board
-Ovarian cancer

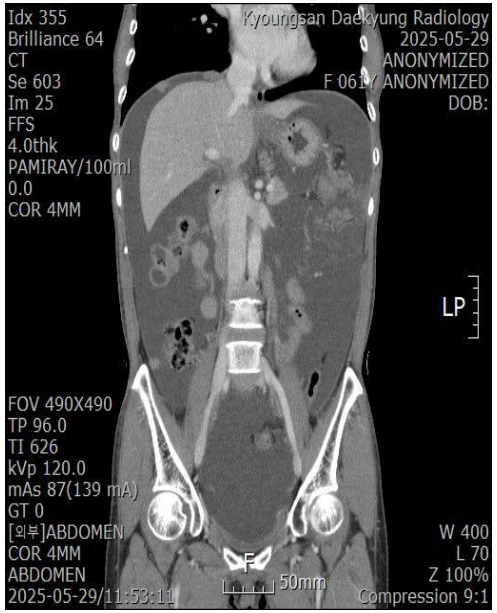
Sojin Shin
(Keimyung University Dongsan Hospital)

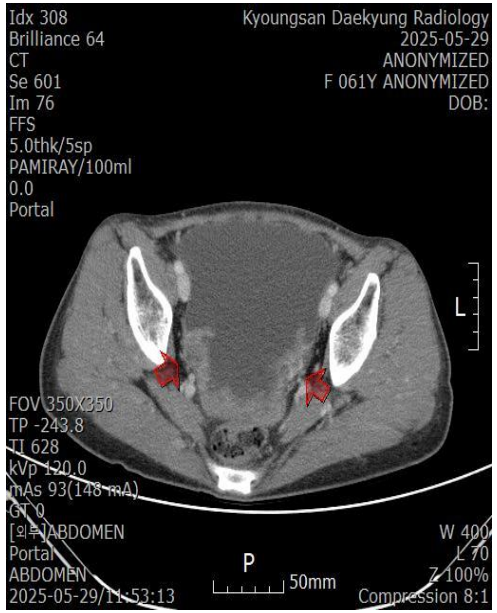
Real Clinical Decision Making ...

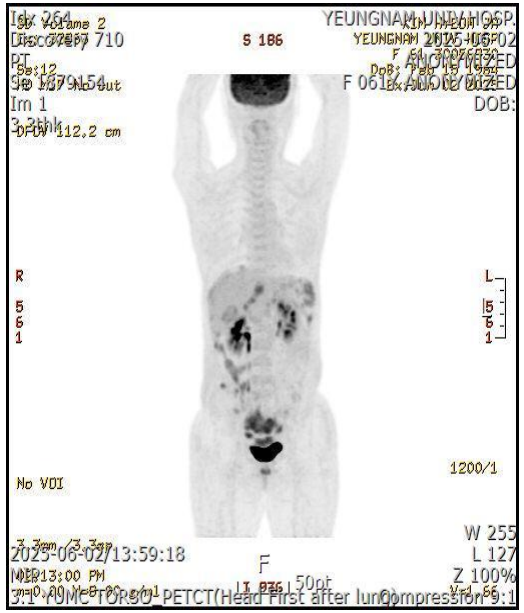
- 61세
- 복부 팽만감 및 조기 포만감
- CA 125 : 697 , HE4 : 131, ROMA 85.5

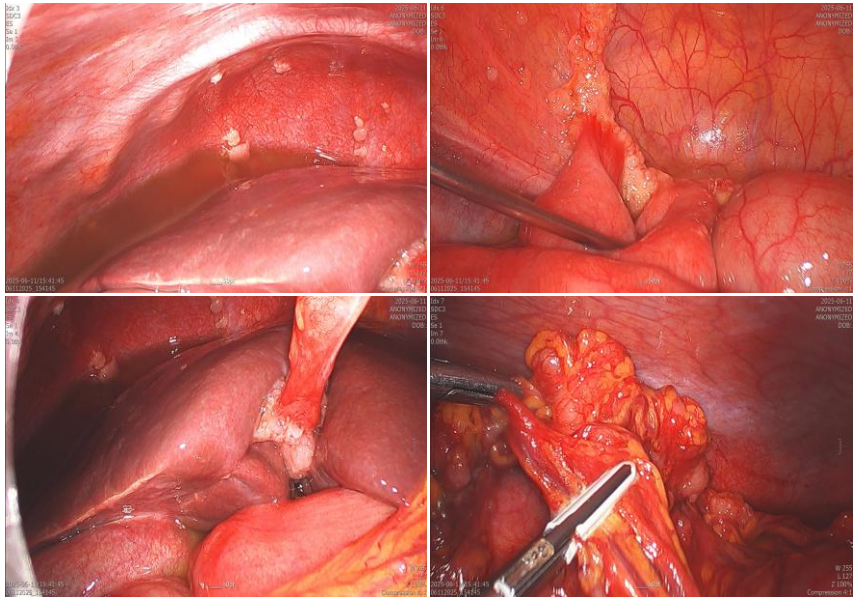
- **Should we operate first?**

A. Primary debulking surgery
B. Diagnostic laparoscopy first
C. Image-guided biopsy → NACT
D. Need more information









Real Clinical Decision Making
– Evidence-Based Surgical Strategy : PDS vs. NACT-IDS

- **Goal: Complete Cytoreduction (R0 resection)**
  → Strongest independent predictor of overall survival

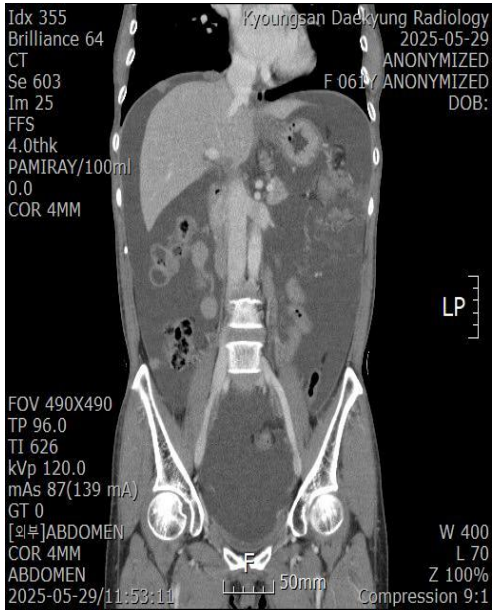
구분	**Primary Debulking Surgery (PDS)**	**NACT (3–4 cycles) → IDS**
대표 RCT	GOG-182, AGO pooled analyses	EORTC 55971, CHORUS, SCORPION
R0 달성률	~30–50% (stage III–IV, center-dependent)	~60–80%
Median OS	R0 달성 시 **~60–80개월**	Non-inferior overall (≈29–49개월)
Survival determinant	**R0 여부가 가장 중요**	IDS에서도 **R0 시 survival 유사**
수술 관련 이환율	↑ (grade ≥3 complication ~20–30%)	↓ (≈10–15%)
Perioperative mortality	~2–4%	<1–2%
Tumor burden	High tumor load 상태에서 수술	Tumor downstaging 후 수술

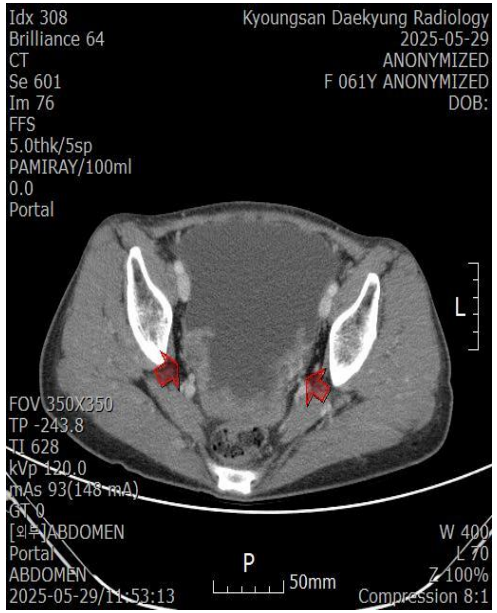
Real Clinical Decision Making ...

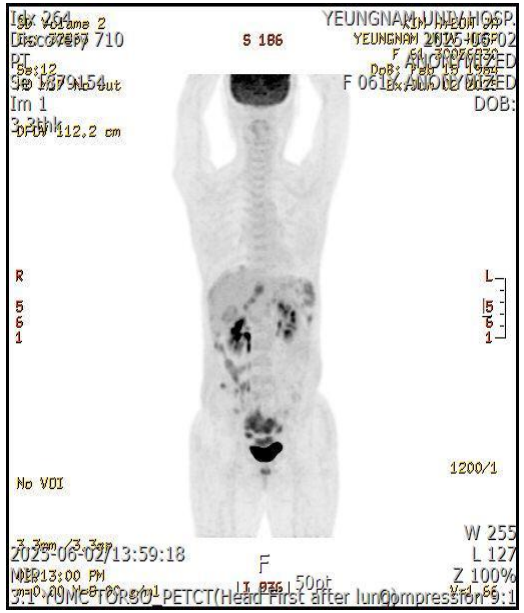
- 61세
- 복부 팽만감 및 조기 포만감
- CA 125 : 697 , HE4 : 131, ROMA 85.5

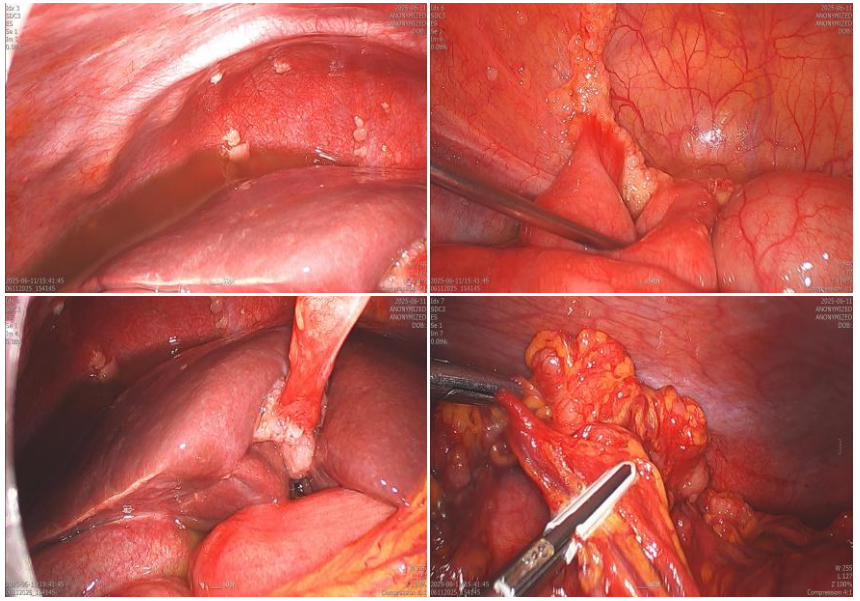
- **Should we operate first?**
  PDS vs NACT – IDS

"Can this patient achieve R0 with acceptable morbidity?"









Real Clinical Decision Making ...

- 61세
- 복부 팽만감 및 조기 포만감
- CA 125 : 697 , HE4 : 131, ROMA 85.5

→

- **Should we operate first?**
  PDS vs NACT – IDS

"Can this patient achieve R0 with acceptable morbidity?"

난소암 치료 전략 결정을 위한 두 예측 지표 비교

KELIM Score *vs* **Fagotti Score**

	KELIM Score	Fagotti Score (PIV)
Purpose	Predict chemosensitivity	Predict surgical resectability
When used	During neoadjuvant chemotherapy (or after starting first-line chemo)	Before deciding between PDS and NACT
Based on	CA-125 kinetics	Diagnostic laparoscopy
Main question	"Is this tumor responding well to platinum?"	"Can complete cytoreduction (R0) be achieved?"
Clinical decision	Prognosis and treatment planning	PDS vs NACT

KELIM 약이 잘 듣는가 (항암 반응성) **Fagotti/PIV** 다 제거할 수 있는가 (수술 가능성)

Fagotti Score (PIV)

복강경으로 확인하는 7가지 소견, 수술 가능성을 예측한다

1. 복막 파종 (Peritoneal carcinomatosis)
2. 횡격막 파종 (Diaphragmatic carcinomatosis)
3. 장간막 구축 (Mesenteric retraction)
4. 대망 케이크 (Omental cake)
5. 장 침윤 (Bowel infiltration)
6. 위 침윤 (Stomach infiltration)
7. 간표면 전이 (Liver surface metastasis)

각 소견은 0점(없음) 또는 2점(있음)으로 채점 — 총 0~14점

총점 ≥ 8 → 완전 절제(R0) 어려움 예측 → NACT 우선 고려

Access full ESGO Guidelines: www.esgo.org/explore/guidelines

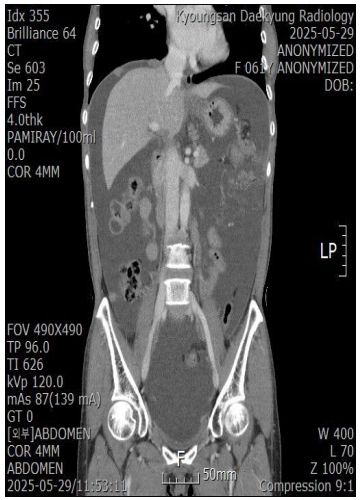
ESGO recommendation 2026

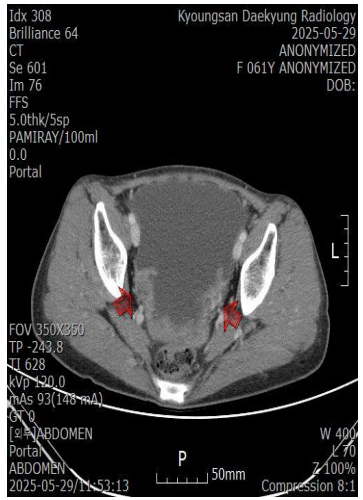
Real Clinical Decision Making ...

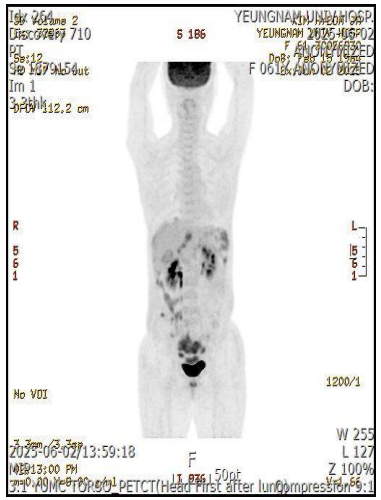
- 61세
- 복부 팽만감 및 조기 포만감
- CA 125 : 697 , HE4 : 131, ROMA 85.5

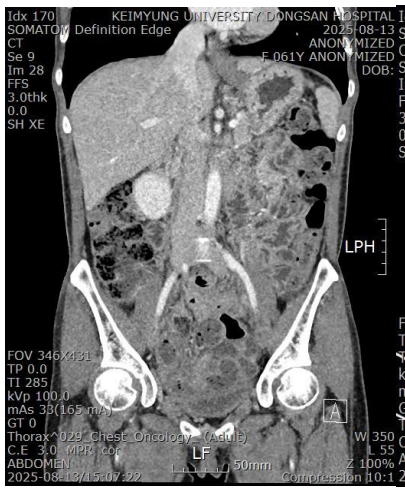
→

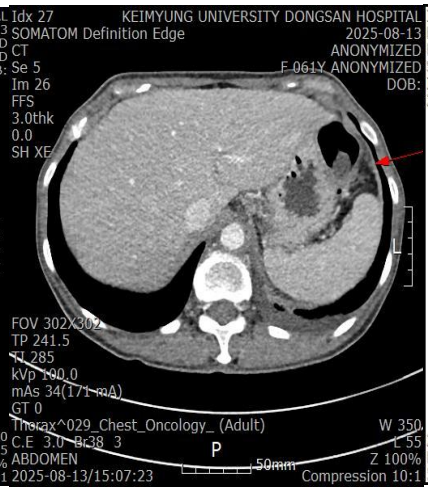
- Laparoscopic exam & Bx (High Grade serous Carcinoma)
- NACT (#3) c TC **(CA 125 : 697→296->116->46.4)**

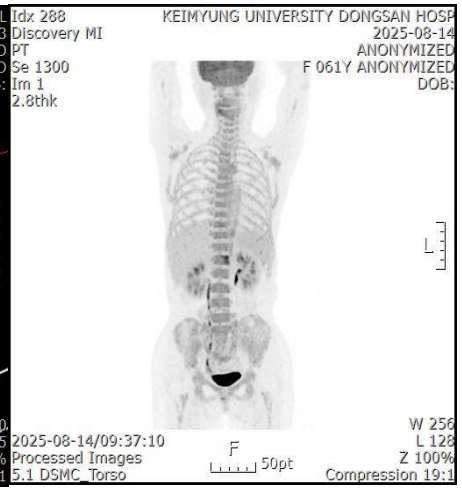








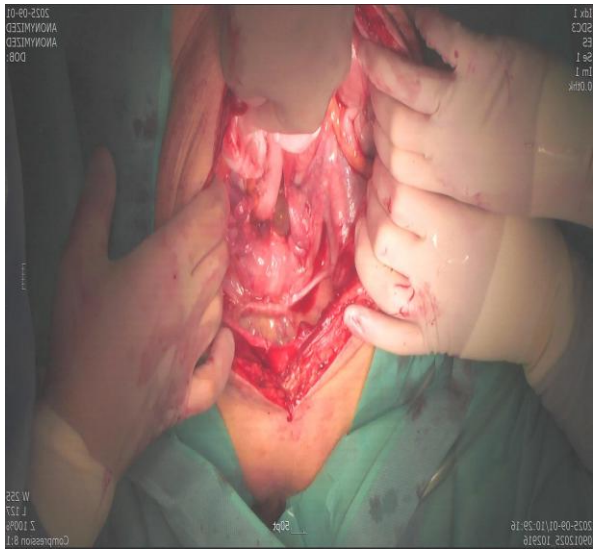


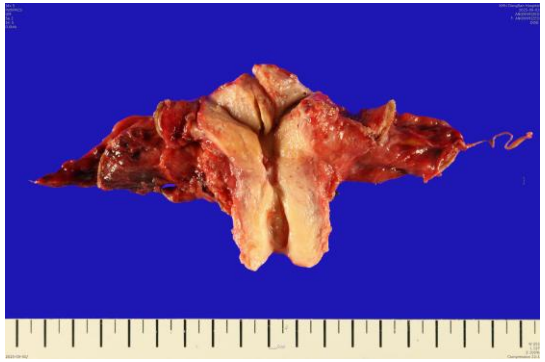


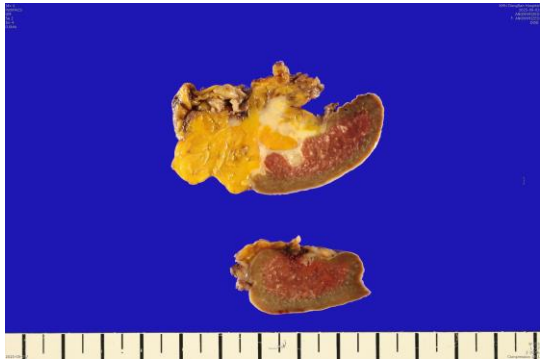
Real Clinical Decision Making
- IDS & Surgical outcome

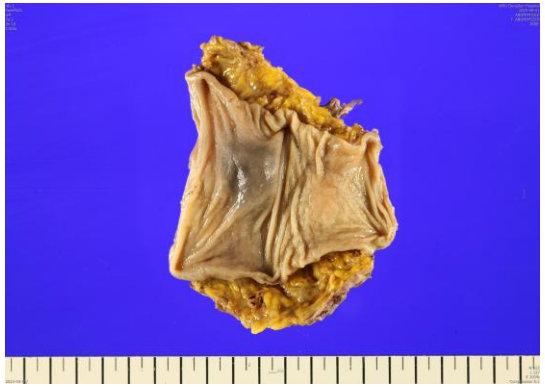
- 61세
- 복부 팽만감 및 조기 포만감
- CA 125 : 697 , HE4 : 131, ROMA 85.5

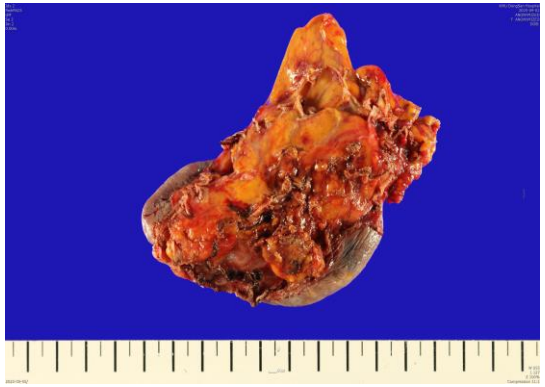
- Laparoscopic exam & Bx (HGSC)
- NACT (#3) c TC
- IDS(hysterectomy c BSO, LAR, splenectomy, cholecystectomy, partial hepatectomy seg 4 of falciform ligament, total omentectomy)
  : Peritoneal Cancer IVb



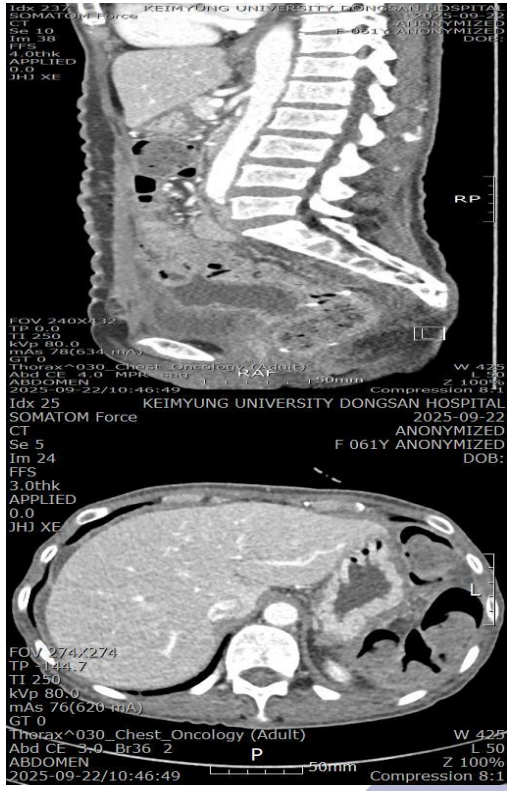








R0?



Real Clinical Decision Making
- Is Surgery the End of Decision Making?

- 61세 , Peritoneal CA IVb
- CA 125 : 697 , HE4 : 131, ROMA 85.5

→

- Laparoscopic exam & Bx (HGSC)
- NACT (#3) c TC
- IDS
- Post-IDS CTx (#3) c TC +? **1) w/o Bev** **2) Bev**

Biomarker Testing — 순서와 타이밍

1 진단 즉시	2 Germline BRCA1/2	3 Somatic BRCA1/2	4 HRD Assay	5 결과 확인 → 유지요법
수술/생검 시 조직 확보	혈액 검사 (필수, 유전성 확인)	조직 검사 (체세포 변이)	MyChoice / FoundationOne CDx	6차 종료 전 결과 확보 목표

Day 1 항암 시작 →

→ 6차 종료 전 결과 필요

Real Clinical Decision Making
-Biomarker-driven Treatment: BRCA, HRD …

- 61세 , Peritoneal CA IVb
- CA 125 : 697 , HE4 : 131, ROMA 85.5

→

- Laparoscopic exam & Bx (Bx : High Grade Serous Carcinoma)
- NACT (#3) c TC
- IDS
- Post-IDS CTx (#3) c TC + Bev (CA 125 :46.4 -> 11.9)
- gBRCA 1(-) & 2 (VUS), HRD (-)

What would you recommend as first-line maintenance?

A. Observation

B. Continue bevacizumab maintenance

C. PARP inhibitor

D. PARP inhibitor + bevacizumab

Does any of this information change today's decision?

Real Clinical Decision Making
-Biomarker-driven Treatment: BRCA, HRD …

- 61세 , Peritoneal CA IVb
- CA 125 : 697 , HE4 : 131, ROMA 85.5
- gBRCA 1(-) & 2 (VUS), HRD (-)

→

- Laparoscopic exam & Bx (Bx : High Grade Serous Carcinoma)
- NACT (#3) c TC
- IDS
- Post-IDS CTx (#3) c TC + Bev
- sNGS (NTRK,TP53, CCND1)

유지요법 선택 알고리즘

CR / PR after Platinum-based Chemo

BRCA 변이 (germline / somatic)?

YES

Olaparib
300mg BID × 2년

SOLO-1: PFS 56.0 vs 13.8mo
(HR 0.30) | 7년 OS benefit ✓

HRD +

Niraparib
200/300mg QD

PRIMA: PFS 21.9 vs 10.4mo
(HR 0.43)

HRD Status?

HRD –

Bevacizumab or 관찰

바이오마커 미일치 →
개별화 판단 필요

국내 급여 현황 (2025)

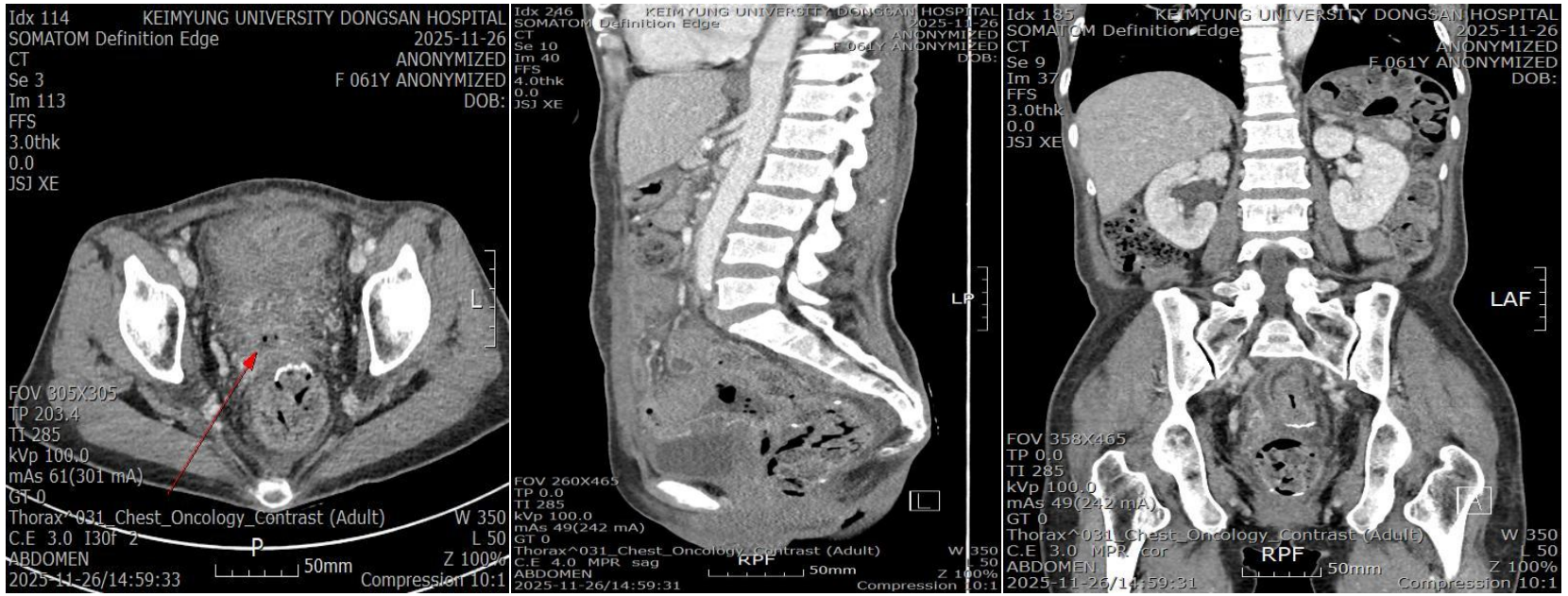
약제	조건	급여
Olaparib (Lynparza)	gBRCA 변이, 1차 CR/PR 후	급여
Niraparib (Zejula)	HRD(+) (BRCA 포함), 1차 CR/PR 후	급여
Bevacizumab	Stage IV or 수술 후 잔류병변	조건부
Olaparib + Bevacizumab	HRD(+)	비급여

Real Clinical Decision Making
- Is Surgery the End of Decision Making?

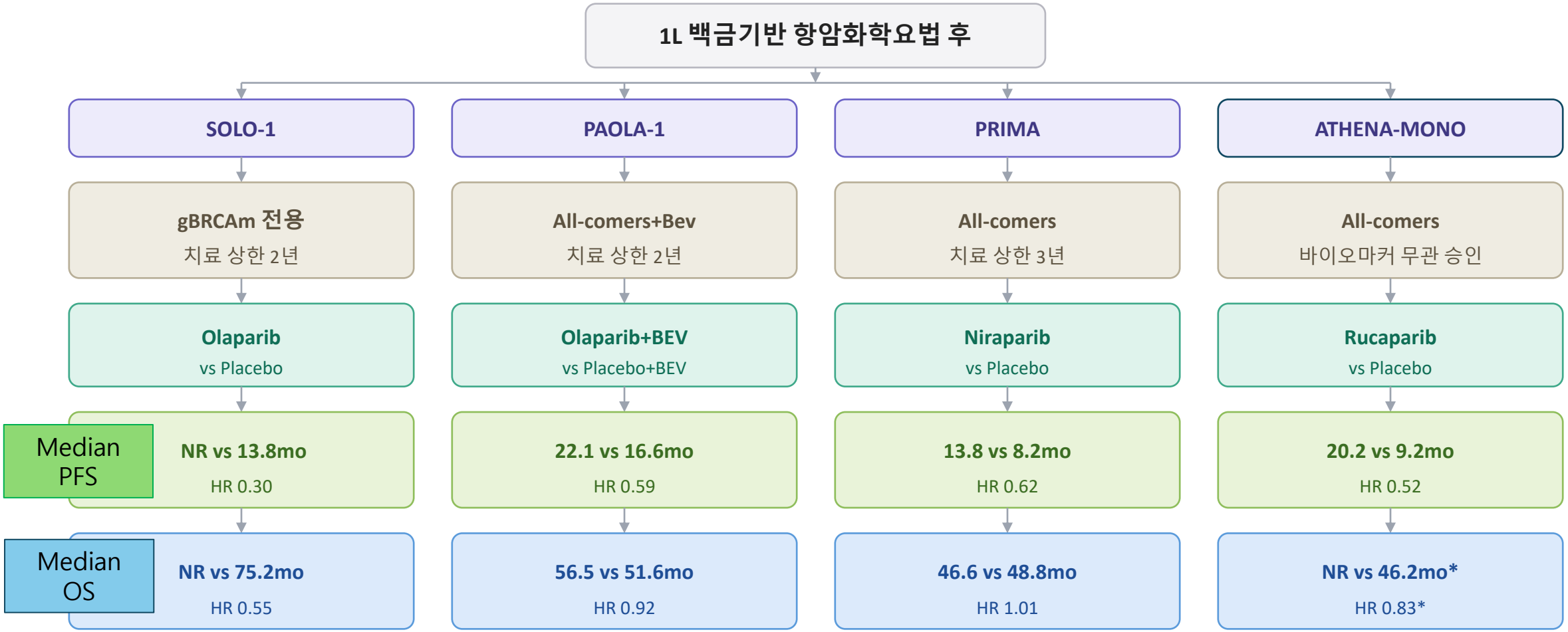
- 61세 , Peritoneal CA IVb
- CA 125 : 697 , HE4 : 131, ROMA 85.5
- gBRCA 1(-) & 2 (VUS), HRD (-),
  sNGS (NTRK,TP53, CCND1)

→

- Laparoscopic exam & Bx (HGSC)
- NACT (#3) c TC
- IDS
- Post-IDS CTx (#3) c TC + Bev



We achieved our surgical goal and completed first-line chemotherapy.
But is our clinical decision-making finished here?


1L 백금기반 항암화학요법 후
SOLO-1
PAOLA-1
PRIMA
ATHENA-MONO
gBRCAm 전용
치료 상한 2년
All-comers+Bev
치료 상한 2년
All-comers
치료 상한 3년
All-comers
바이오마커 무관 승인
Olaparib
vs Placebo
Olaparib+BEV
vs Placebo+BEV
Niraparib
vs Placebo
Rucaparib
vs Placebo
Median PFS
NR vs 13.8mo
HR 0.30
22.1 vs 16.6mo
HR 0.59
13.8 vs 8.2mo
HR 0.62
20.2 vs 9.2mo
HR 0.52
Median OS
NR vs 75.2mo
HR 0.55
56.5 vs 51.6mo
HR 0.92
46.6 vs 48.8mo
HR 1.01
NR vs 46.2mo*
HR 0.83*

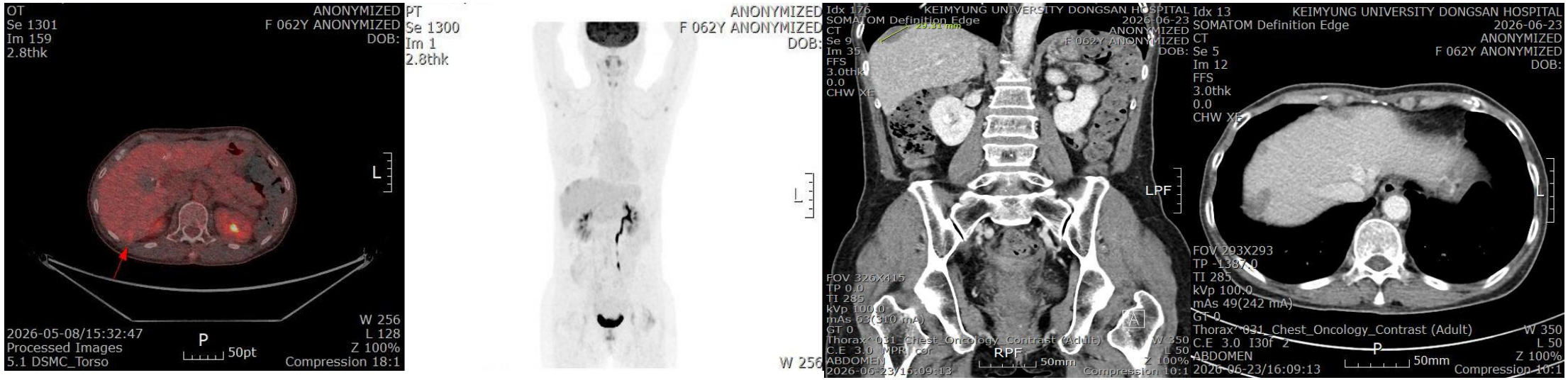
Real Clinical Decision Making
- Platinum sensitive vs Platinum Resistant

- 61세 , Peritoneal CA IVb
- CA 125 : 697 , HE4 : 131, ROMA 85.5
- gBRCA 1(-) & 2 (VUS), HRD (-), NGS (NTRK,TP53, CCND1)

→

- Laparoscopic exam & Bx (HGSC)
- NACT (#3) c TC
- IDS
- Post-IDS CTx (#3) c TC + Bev (2025.12.26)
- CA 125 : 10.3 (2026.02) -> 31.0 (2026.04) -> 122.0(2026.06.23)

2026.06.23



How should platinum sensitivity be defined in this patient?

Real Clinical Decision Making
-Biomarker-driven Treatment: BRCA, HRD …

- 61세 , Peritoneal CA Ivb
- Platinum Resistant
- CA 125 : 697 , HE4 : 131, ROMA 85.5
- Peritoneal CA IVb
- gBRCA 1(-) & 2 (VUS), HRD (-),
  NGS (NTRK,TP53, CCND1)

→

- Laparoscopic exam & Bx (Bx : High Grade Serous Carcinoma)
- NACT (#3) c TC
- IDS
- Post-IDS CTx (#3) c TC + Bev (2025.12.26)
- FOLR1 (75%), HER 2 (-)
  !!!! Clinical trial : J5E-MC-JZXB (FRAmework-01)

Available Molecular Results
Germline BRCA1/2: Negative
HRD: Negative

FRα (FOLR1): Positive (75%) — *Not immediately actionable in the first-line setting*
Other NGS alterations: TP53, CCND1 (no current first-line therapeutic implication)

!!! "Previously non-actionable biomarker
→ later becomes treatment-defining biomarker"

Treatment –NCCN 2026

: Recurrence Therapy for Platinum-Resistant Disease — Chemo, Targeted & Immunotherapy

PRINCIPLES OF SYSTEMIC THERAPY

Acceptable Recurrence Therapies for Epithelial Ovarian (including LCOC)[p]/Fallopian Tube/Primary Peritoneal Cancer

Recurrence Therapy for Platinum-Resistant Disease (alphabetical order)

Preferred	Other Recommended	Useful in Certain Circumstances
Cytotoxic Therapy • Oral Cyclophosphamide + Bevacizumab[r,44] • Docetaxel[45] • Gemcitabine[46,47] • Liposomal Doxorubicin[46,47] • Liposomal Doxorubicin + Bevacizumab[r,48] • Paclitaxel (Weekly)[h,49] • Paclitaxel (Weekly) + Bevacizumab[h,r,48] • Topotecan[50,51] • Topotecan + Bevacizumab[r,48] **Targeted Therapy (single agents)** • Mirvetuximab soravtansine-gynx (for FRα-expressing tumors [≥75% positive tumor cells])(category 1)[v,52,53]	**Cytotoxic Therapy**[t] • Capecitabine • Carboplatin[x] • Carboplatin/Docetaxel[x] • Carboplatin/Paclitaxel (Weekly)[h,x] • Carboplatin/Gemcitabine[15] ± Bevacizumab[r,s,x,16] • Carboplatin/Liposomal Doxorubicin[17] ± Bevacizumab[r,x,18] • Carboplatin/Paclitaxel[h,19] ± Bevacizumab[r,s,x,20] • Cisplatin/Gemcitabine[x,21] • Cyclophosphamide • Oral Cyclophosphamide + Pembrolizumab + Bevacizumab[r,54,55] • Doxorubicin • Oral Etoposide[56] • Gemcitabine + Bevacizumab[r,57] • Ifosfamide/Mesna • Irinotecan • Ixabepilone + Bevacizumab (category 2B)[r,y,58] • Oxaliplatin • Paclitaxel • Albumin-bound Paclitaxel • Pemetrexed • Sorafenib/Topotecan[59] • Vinorelbine **Targeted Therapy (single agents)** • Bevacizumab[r,25,26] • Pazopanib (category 2B)[28] **Hormone Therapy** • Aromatase inhibitors (Anastrozole, Exemestane, Letrozole) • Goserelin acetate • Leuprolide acetate • Megestrol acetate • Tamoxifen[k]	• Carboplatin/Paclitaxel (for age >70)[h,u,x] • Albumin-bound Paclitaxel/Carboplatin (for confirmed taxane hypersensitivity)[x] **Immunotherapy**[v] • Dostarlimab-gxly (for dMMR/MSI-H recurrent or advanced tumors)[41] • Paclitaxel + Pembrolizumab ± Bevacizumab (for PD-L1-positive tumors [CPS≥1])[h,r,s,z,60] • Pembrolizumab (for patients with MSI-H or dMMR solid tumors, or TMB-H tumors ≥10 mutations/megabase)[42] • For clear-cell carcinoma ▸ Ipilimumab + Nivolumab[61,62] **Hormone Therapy** • Fulvestrant (for low-grade serous carcinoma) **Targeted Therapy**[v] • Dabrafenib/Trametinib (for *BRAF* V600E positive tumors)[30] • Entrectinib[31] or Larotrectinib[32] or Repotrectinib[33] (for *NTRK1/2/3* gene fusion-positive tumors) • Fam-trastuzumab deruxtecan-nxki (for HER2-positive tumors [IHC 3+ or 2+])[34] • Mirvetuximab soravtansine-gynx + Bevacizumab (for FRα-expressing tumors [≥25% positive tumor cells])[r,36,63,64] • Selpercatinib (for *RET* gene fusion-positive tumors)[37] • For low-grade serous carcinoma: ▸ Avutometinib/Defactinib (for *KRAS*-mutated tumors)[38] ▸ Trametinib[39] ▸ Binimetinib (category 2B)[40,41] • For mucinous carcinoma: ▸ FOLFIRI ± Bevacizumab[r] (category 2B)[65-68]

Tumor board_
Uterine corpus cancer

Ji Geun Yoo
(Daejeon St. Mary's Hospital,
The Catholic University of Korea)

DECLARATION OF INTERESTS

Nothing to declare

National Comprehensive Cancer Network®

NCCN Guidelines Version 2.2026
Uterine Neoplasms

NCCN Guidelines Index
Table of Contents
Discussion

All staging in guideline is based on 2009 FIGO staging. (ST-1, ST-2, ST-3, and ST-4)

INITIAL EVALUATION[a]

- History and physical (H&P)
- Complete blood count (CBC), liver function test [LFT], renal function tests, chemistry profile; and consider CA-125
- Expert pathology review with additional endometrial biopsy as clinically indicated[b,c]
- Imaging[d]
- Recommend molecular evaluation of tumor and evaluation for inherited cancer risk (ENDO-A and UTSARC-A)
- For patients who are older with uterine cancer also see the NCCN Guidelines for Older Adult Oncology
- Consider germline and/or multigene panel testing
- Assess for distress[e]

INITIAL CLINICAL FINDINGS[c]

Malignant epithelial (carcinoma)

Pure endometrioid carcinoma

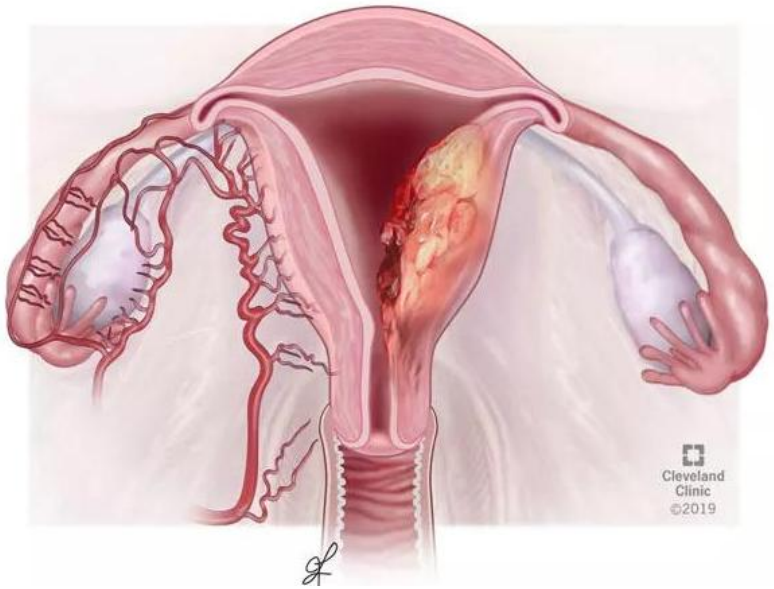
- Disease limited to uterus → Primary Treatment (ENDO-1)
- Suspected or gross cervical involvement → Primary Treatment (ENDO-2)
- Suspected extrauterine disease → Primary Treatment (ENDO-3)

High-risk endometrial carcinoma histology

- Serous carcinoma → Primary Treatment (ENDO-11)
- Clear cell carcinoma → Primary Treatment (ENDO-12)
- Undifferentiated/dedifferentiated carcinoma → Primary Treatment (ENDO-13)
- Carcinosarcoma[g,h] → Primary Treatment (ENDO-14)

Malignant mesenchymal (sarcoma)[f]
- Low-grade endometrial stromal sarcoma (ESS) or adenosarcoma
- High-grade ESS
- Undifferentiated uterine sarcoma (UUS)
- Leiomyosarcoma (LMS)
- Other sarcomas (eg, perivascular epithelioid cell tumor [PEComa])

→ Primary Treatment (UTSARC-1)



[a] Initial preoperative evaluation for known or suspected malignancy.
[b] Preoperative imaging and biopsy may help to identify uterine sarcomas, although biopsy sensitivity is less than for endometrial cancer. If there is suspicion of malignancy, fragmentation/morcellation should be avoided.
[c] See Principles of Pathology for Endometrial Carcinoma (ENDO-A) and Principles of Pathology and Molecular Analysis for Uterine Sarcoma (UTSARC-A).
[d] See Principles of Imaging for Endometrial Carcinoma (ENDO-B) and Principles of Imaging for Uterine Sarcoma (UTSARC-B).
[e] Refer to the NCCN Distress Thermometer and Problem List, which includes social determinants of health. See NCCN Guidelines for Distress Management (DIS-A).
[f] Consider referral to a center of expertise that specializes in the treatment of malignant mesenchymal tumors (sarcoma).
[g] Should be treated as a high-grade endometrial cancer.
[h] Also known as malignant mixed mesodermal tumor or malignant mixed Müllerian tumor, and including those with either homologous or heterologous stromal elements.

Note: All recommendations are category 2A unless otherwise indicated.

대한부인종양학회 Korean Society of Gynecologic Oncology

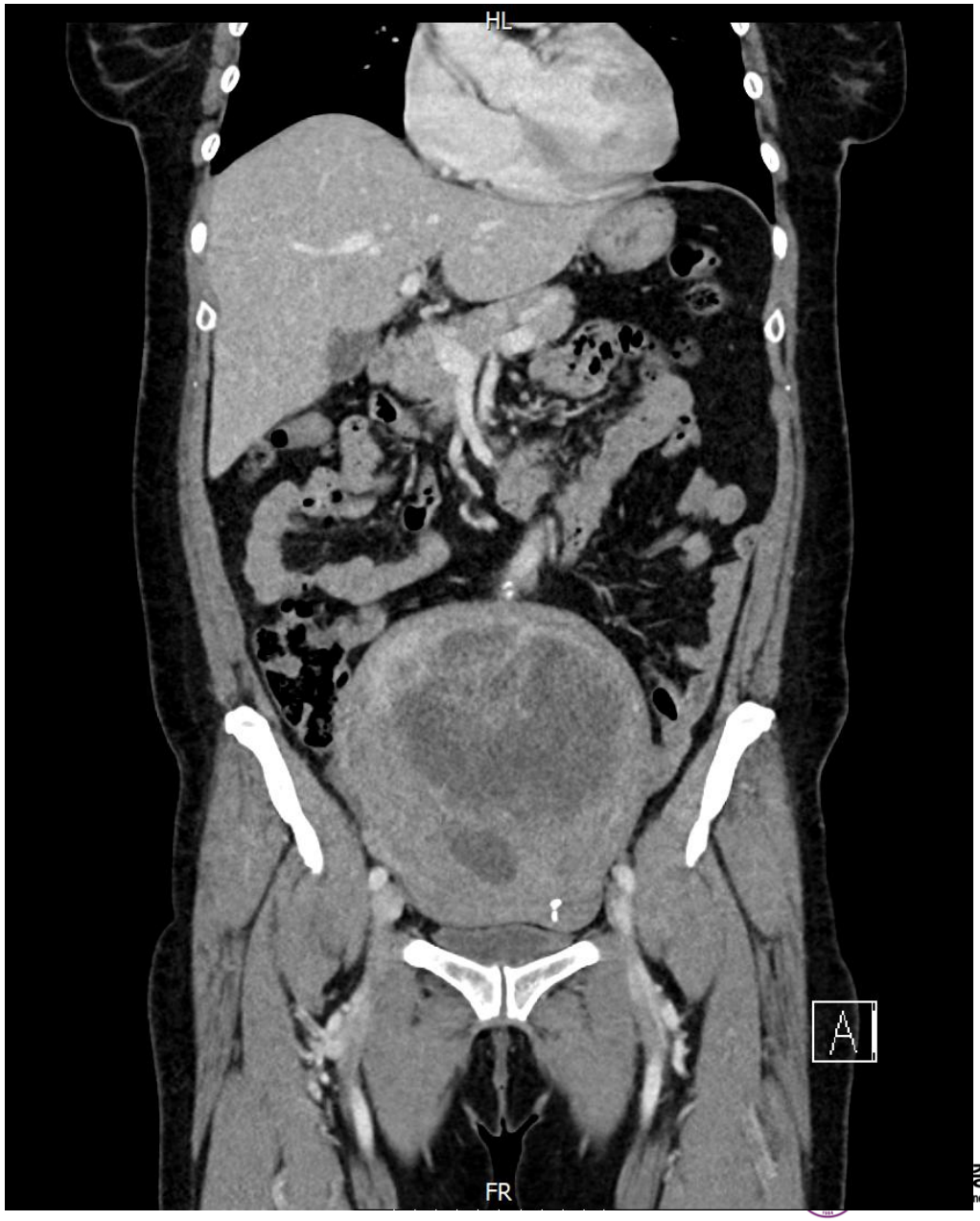
Case

- F/59, 기저질환: 고혈압, 고지혈증

- Chief complaint: 24시간 전부터 발생한 RLQ pain 주소로 응급실 내원
- Past history: 자궁근종으로 5년전까지 추적관찰함 (10cm)
- Physical exam: 단단하게 촉지되는 종괴로 인한 하복부 팽만, 임신 20주 자궁 크기

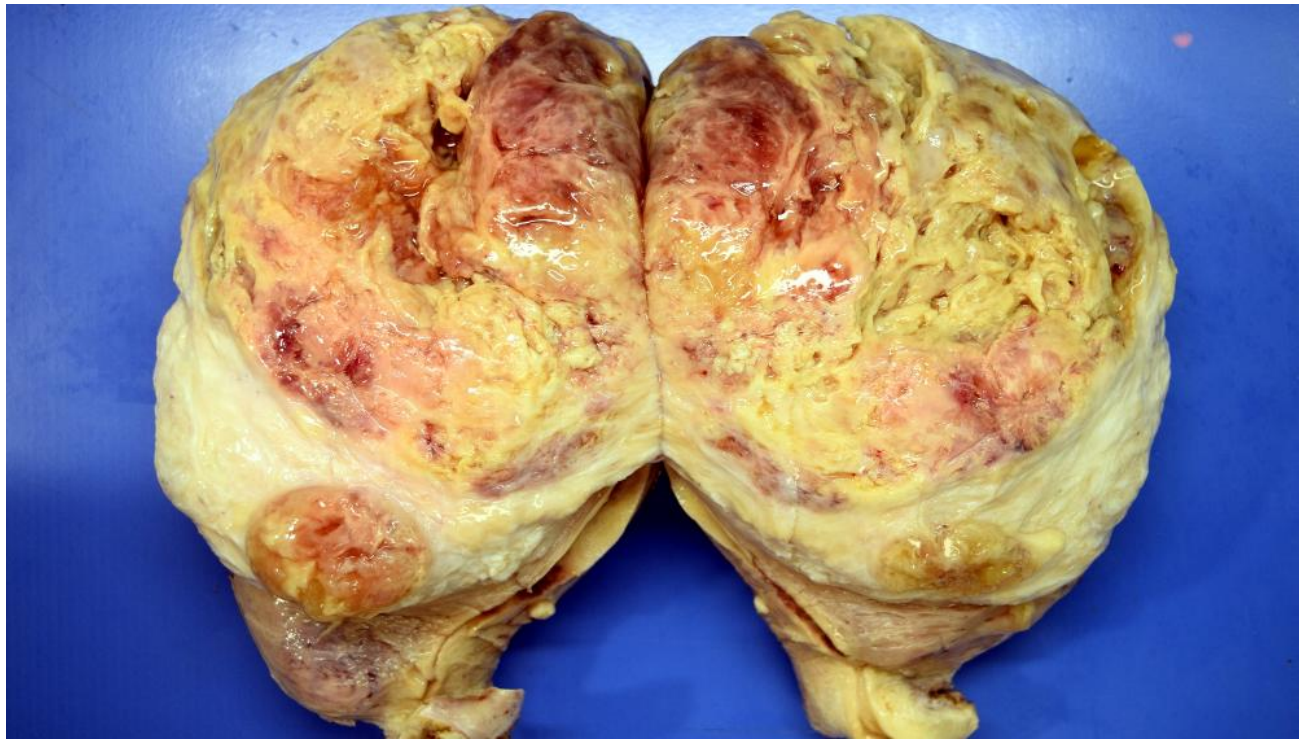
Case

- 2026.05.18 CT abdomen & pelvis (enhance)
  - Findings
    Uterus에 16cm 가량의 huge mass가 있음. enhancement시에 central portion에 enhancement defect가 있고, periphery에 enhancement가 heterogeneous함.
  - Conclusion
    Large uterine leiomyoma and secondary degeneration.



Case

- 2026.05.19 TH BSO



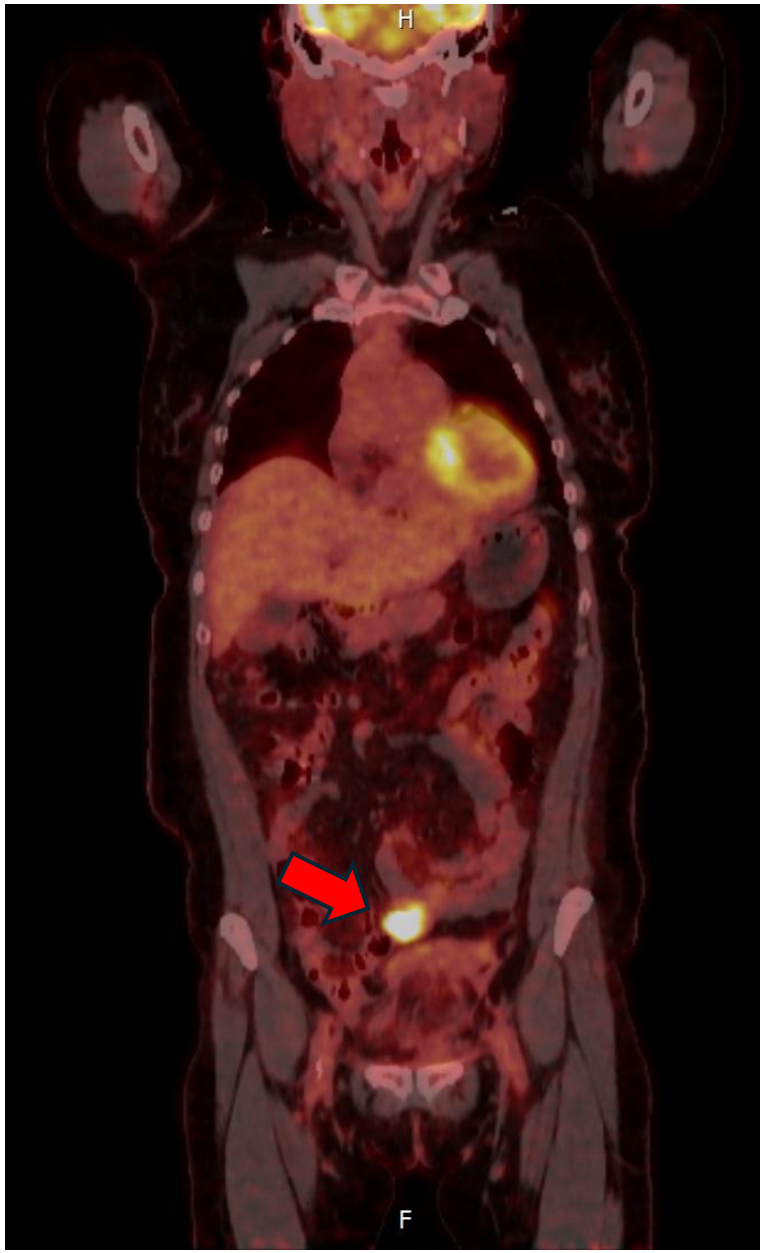
- Pathology:
  Uterus, ovary and fallopian tube;
  - Sarcoma (favor myxoid leiomyosarcoma)
  1) marked cytologic atypia.
  2) necrosis: present.
  3) mitotic figure: over 20/10HPF.
  4) infitrative growth

- Immunohistochemistry

Actin (-)	S-100 (-)	Cytokeratin AE1/3 (-)	Cyclin D1 (+: focally)
CD10 (+)	SMHC (Myosin) (-)	P53 (+: patchy)	ALK (+: focally)
Desmin (-)	Vimentin (+)	ER/PR (-)	P16 (-)
CD34 (-)	C-Kit (-)		

Case

- 2026.06.16 PET-CT (Postop)
  - Conclusion
    About 3 cm, hypermetabolic, mass-like l esion in pelvic cavity - R/O metastasis or residual tumor
    Postoperative change in pelvic walls
    Ascites

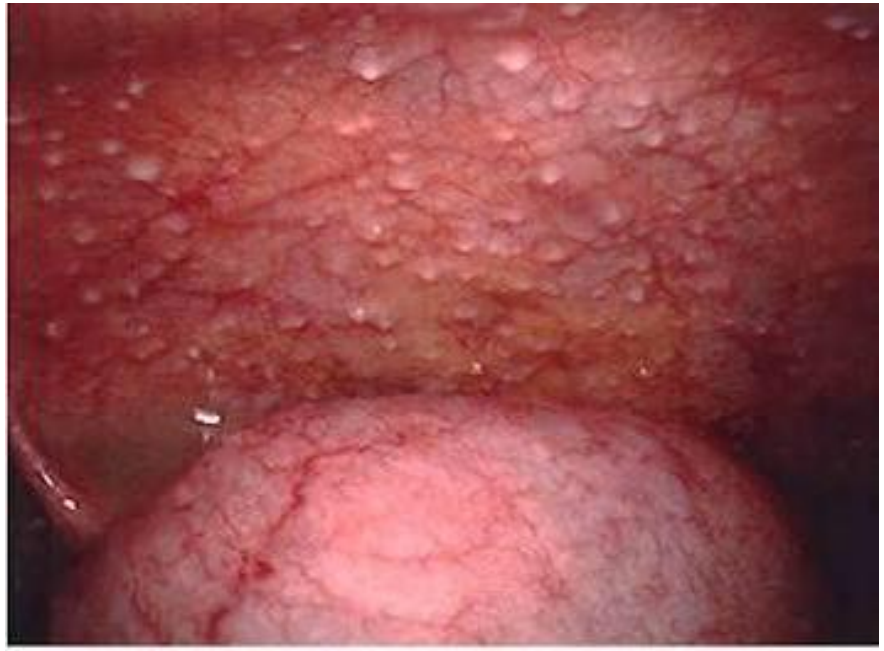


Case

- 2026.06.22 pelvic mass resection
  - OP findings
    Omentum 3cm mass, omentectomy was done
    Pelvic peritoneum, Rt diaphragmatic peritoneum, S-colon serosa, mesentery seeding mass (5mm)

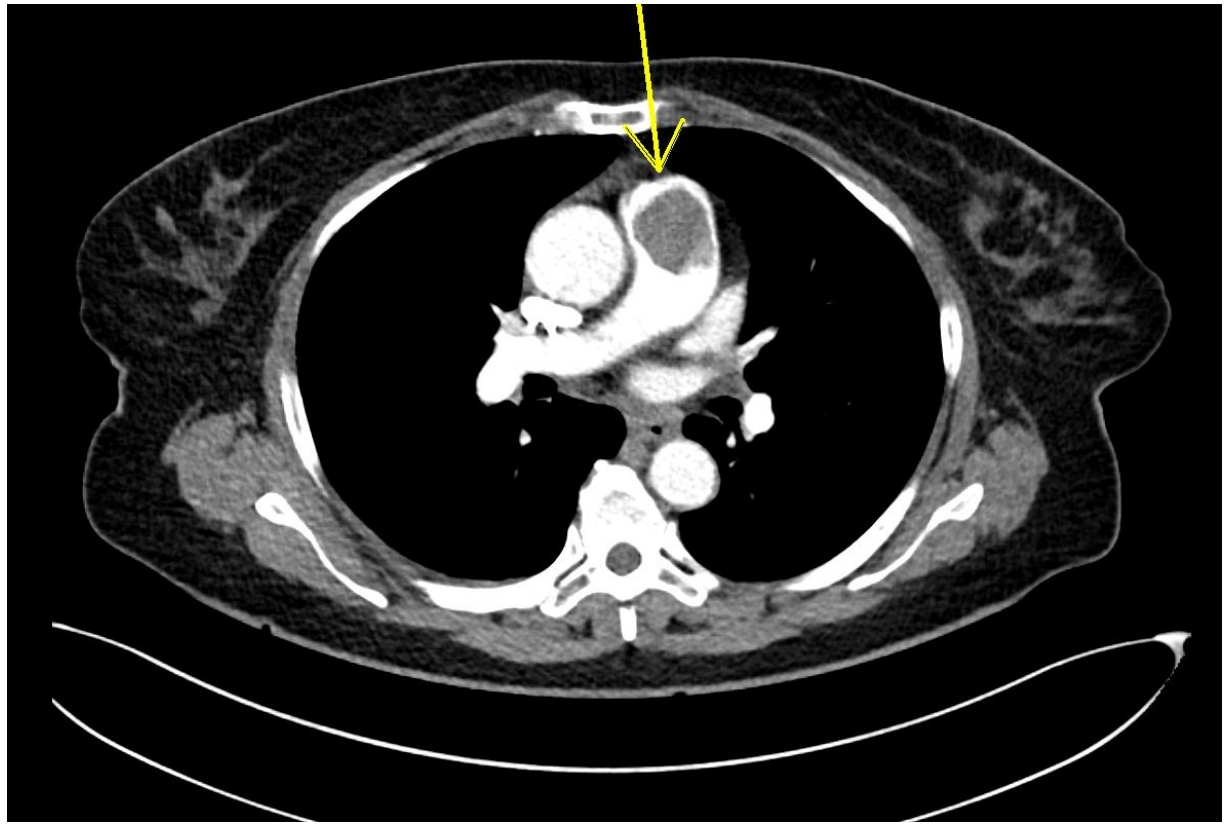
  - Pathology:
    Metastatic sarcoma

- Plan: Chemotherapy (doxorubicin + trabectedin)



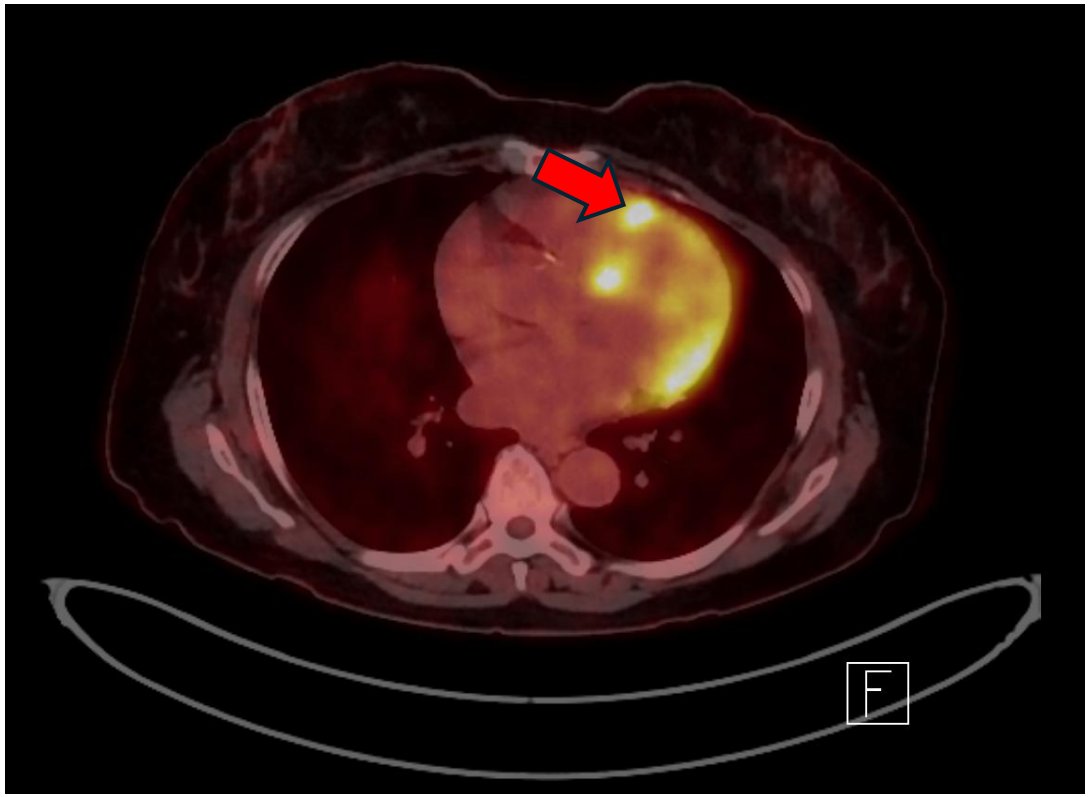
Case

- 2026.07.05
  - Exertional dyspnea 발생:
    화장실만 가도 숨이 차다.
  - Chest CT:
    Low attenuated mass like lesion and filling defect at Rt. ventricle and main pulmonary trunk
    - invisible on 2026-05-18 APCT



Case

- 2026.06.16 PET-CT review
  - Focal increased FDG uptake in the anterior wall of the Rt ventricle.



Case

- 2026.07.07 심초음파
  1. concentrically hypertrophied LV wall thickness
     (RWT=0.47 , LV mass index= 110g/m2)
     showed oval shape echogenic mass attached to RV free wall (5.5x2.5cm)
     enlarged RA&RV chamber size(RV basal : 37.5mm, RV mid : 53.2mm, longitudinal :87mm)
     decresed RV function(TAPSE : 1.3cm)
     mildly dilated LA chamber (LA diam.= 41.6mm, LAVI= 34.2ml/m2)
  2. pulmonic stenosis with RV mass protuding into pulmonary valve during systole
     (PS Vmax : 2.67m/s)
     mild TR(I/IV) with intermediate probability of pulmonary hypertension
     (TR Vmax= 3m/s, RVSP=45mmHg)
     trivial MR
  3. normal LV regional wall motion and LV systolic function (EF= 64,6%)

[CONCLUSION]

- RVOT mass result in pulmonary stenosis & RV dysfunction

Case

- 2026.07.07 CS consult for mass removal
  - 위험성 높고 근치적 치료 아니므로 항암치료 권고

- 2026.07.07
  - 1st line 1st doxorubicin-trabectedin
  - Palliative ERT 3000cGy/10fx, Rt ventricle and main pulmonary trunk mass
  - D#10, neutropenic fever (ANC 5)

- 2026.07.28
  - 1st line 2nd doxorubicin-trabectedin

The NEW ENGLAND JOURNAL of MEDICINE

Doxorubicin plus Trabectedin in Leiomyosarcoma

A PLAIN LANGUAGE SUMMARY

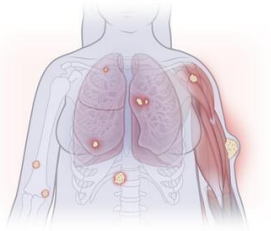
Based on the NEJM publication: Doxorubicin–Trabectedin with Trabectedin Maintenance in Leiomyosarcoma by P. Pautier et al. (published September 5, 2024)

In this trial, researchers examined the efficacy and safety of doxorubicin plus trabectedin followed by trabectedin maintenance, as compared with doxorubicin alone, as first-line therapy for patients with metastatic or unresectable leiomyosarcoma.

Leiomyosarcomas account for nearly one quarter of all soft-tissue sarcomas, which occur predominantly in the uterus.

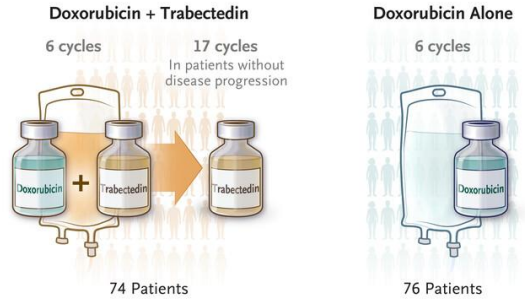
WHY WAS THE TRIAL DONE?

Locally advanced or metastatic leiomyosarcoma carries a bleak prognosis. Doxorubicin monotherapy has been the standard first-line therapy for 50 years, but combination therapy with trabectedin showed promising results in a phase 2 trial. Additional data are needed.

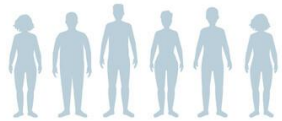


HOW WAS THE TRIAL CONDUCTED?

Patients with untreated locally advanced or metastatic leiomyosarcoma were assigned to receive either doxorubicin alone or doxorubicin plus trabectedin, with trabectedin continued as maintenance therapy in patients in the doxorubicin–trabectedin group who did not have disease progression. Posttreatment surgery for residual disease was allowed. Results for progression-free survival (the primary end point) were reported previously. The current analysis reports on overall survival and extends follow-up for progression-free survival.



PATIENTS



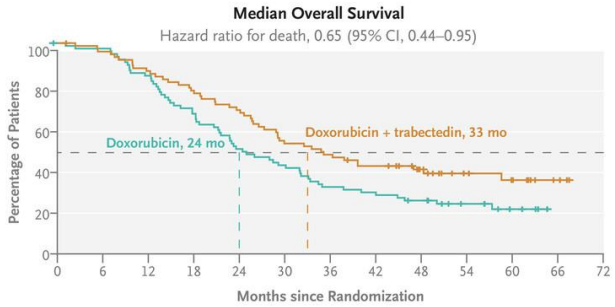
WHO	150 adults
	Median age: 59 years in the doxorubicin–trabectedin group and 64 years in the doxorubicin group
	Women: 75%; Men: 25%
CLINICAL STATUS	Histologically confirmed diagnosis of leiomyosarcoma
	Locally advanced or metastatic disease
	No previous chemotherapy
	At least one measurable lesion

TRIAL DESIGN

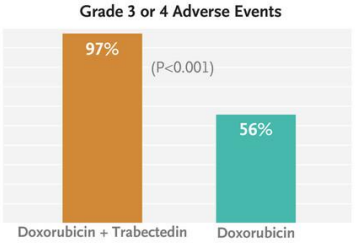
- PHASE 3
- MULTICENTER
- RANDOMIZED
- OPEN-LABEL
- LOCATION: FRANCE

RESULTS

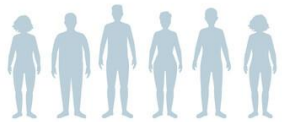
At a median follow-up of 55 months, fewer deaths were seen in the doxorubicin–trabectedin group than in the doxorubicin group, and the median overall survival was longer with doxorubicin–trabectedin.



The incidence of grade 3 or 4 adverse events was significantly higher in the doxorubicin–trabectedin group than in the doxorubicin group. Overall, neutropenia, anemia, thrombocytopenia, and febrile neutropenia occurred more often with doxorubicin–trabectedin but were reversible.



PROGRESSION-FREE SURVIVAL



Median progression-free survival at a median follow-up of 55 months was roughly twice as long with doxorubicin–trabectedin (12 months) as with doxorubicin alone (6 months). The hazard ratio for disease progression or death was 0.37 (95% CI, 0.26 to 0.53).

LIMITATIONS AND REMAINING QUESTIONS

- Information on patients' race was not collected, because this is not allowed in France.
- The maintenance phase of trabectedin could have contributed substantially to the survival results, but its actual effect is unknown.

CONCLUSIONS

Among patients with metastatic or surgically unresectable uterine or soft-tissue leiomyosarcoma, first-line treatment with doxorubicin–trabectedin followed by trabectedin maintenance was associated with improved overall survival and progression-free survival, as compared with doxorubicin alone.

LINKS: FULL ARTICLE | NEJM QUICK TAKE | EDITORIAL

FURTHER INFORMATION

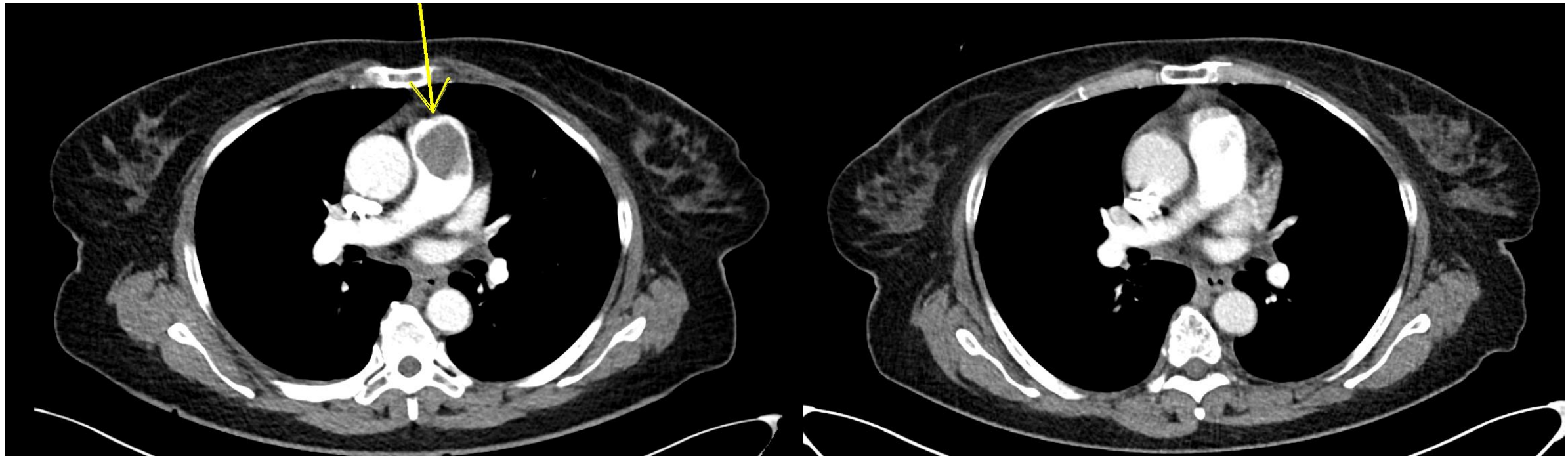
Trial registration: ClinicalTrials.gov number, NCT02997358

Trial funding: PharmaMar and others

Full citation: Pautier P, Italiano A, Piperno-Neumann S, et al. Doxorubicin–trabectedin with trabectedin maintenance in leiomyosarcoma. N Engl J Med 2024;391:789-99. DOI: 10.1056/NEJMoa2403394

Case

- **2026.08.04 Chest CT (CE)**



Review

- Uterine sarcoma
  - 3-7% of uterine cancers
  - Leiomyosarcoma (67%), endometrial stromal sarcoma (15-25%), undifferentiated sarcoma (10-15%)
- Leiomyosarcoma
  - 1-2% of uterine malignancies
  - Most occur in women over 40 years of age
  - Signs and symptoms resemble those of leiomyoma, and preoperative distinction between the two tumors may be difficult
  - Malignancy should be suspected by the presence of tumor growth in menopausal women who are not on hormonal therapy
  - Histologic subtypes
    - Conventional LMS
    - Myxoid LMS
    - Epithelioid LMS

Review

- Leiomyosarcoma
  - Very aggressive, recurrence rate 53-71%
  - Overall survival rate 15-25%
  - 5-year survival
    - Stage I: 50%
    - Stage II: 25%
    - Stage III-IV: 0%
  - Surgical treatment
    - Total hysterectomy ± both salpingo-oophorectomy
    - Routine pelvic/paraaortic LND not recommended
  - Chemotherapy for advanced disease
    - Doxorubicin
    - Doxorubicin + gemcitabine
    - Doxorubicin + Trabectedin
    - Doxorubicin + ifosfamide

Conclusion

1. Uterine leiomyosarcoma is a highly aggressive disease.
2. Meticulous initial imaging work-up is essential for accurate staging and optimal management.

Tumor board_ Cervical cancer

Eun Bi Jang
(Konkuk university medical center)

DECLARATION OF INTERESTS

Nothing to declare

Case

35/F

Chief complaint: abnormal bleeding
Onset: 1week

Sono: 7.8 * 6cm, r/o cervical cancer

Physical exam: > 4cm protruding mass, no definite vaginal involvement.
Fornix cannot be seen d/t mass

Case

2025.09.21 CT abdomen & pelvis

[Finding]

Cervix canal 에 약 7.5cm 크기의 heterogeneous mass 가 있고, parametrial in vasion 은 뚜렷하지 않음.

Both obturator 및 left external iliac space 에 multiple lymph node 들이 있어, metastasis 가능성이 있겠음.

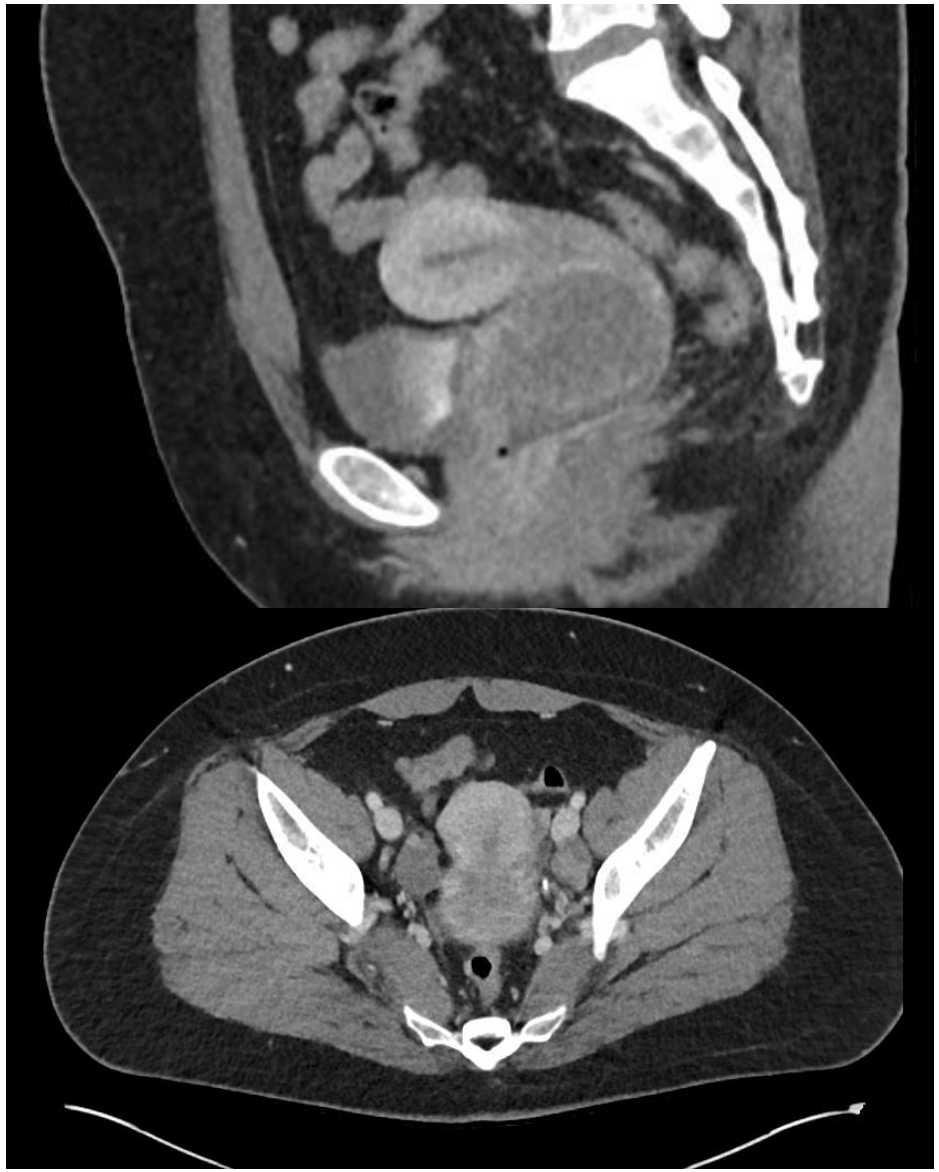
Liver를 비롯한 abdominal solid organ에 metastatic nodule은 보이지 않음.

양측 kidney에 hydronephrosis는 없음.

Pelvic cavity 에 abnormal fluid collection 보이지 않음.

[판정]

1. About 7.5cm heterogenous mass in cervical canal.
   -> R/O Uterine cervix cancer.
2. **Multiple LNs in both obturator and left external iliac space**
   -> R/O metastasis.
3. No evidence of metastasis in abdominal solid organ.

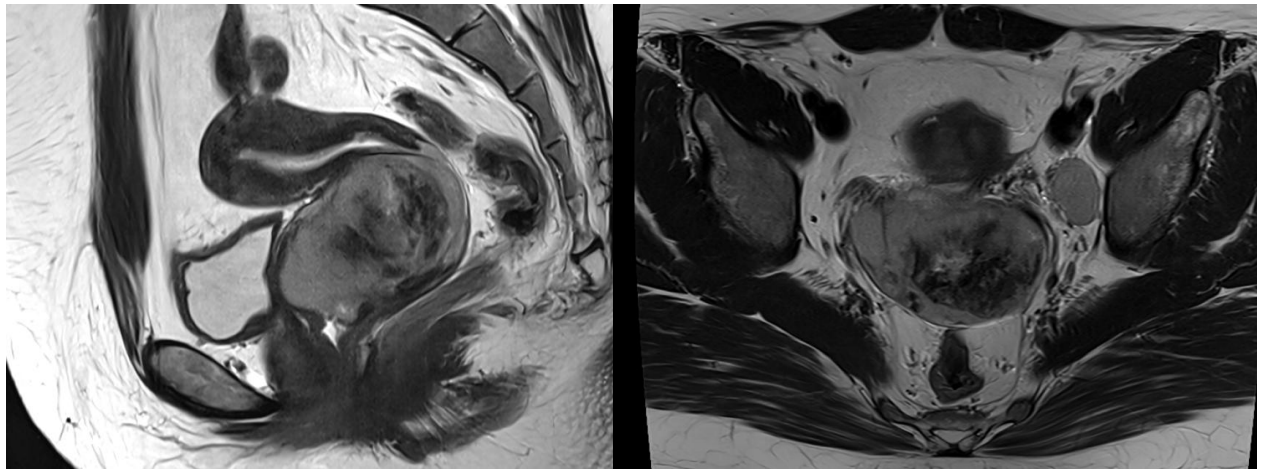


Case

2025.09.21 MRI

[판정]

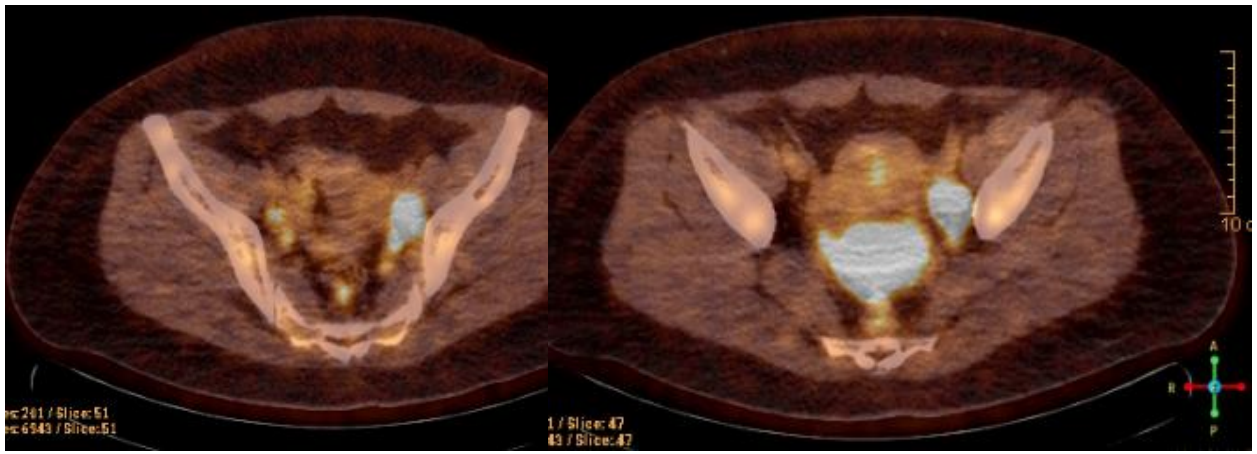
1. About 7.5cm heterogenous mass in cervical canal.
   -> R/O Uterine cervix cancer.
2. Multiple LNs in both obturator and left external iliac space
   -> R/O metastasis.
3. No evidence of metastasis in abdominal solid organ.



2025.09.24 PET CT

[판정]

1. Large hypermetabolic mass; uterine cervix.
   - Malignancy.
2. Hypermetabolic LNs; bilateral iliac and obturator area (Lt > Rt).
   - LN metastases.



Case

[Pathology]

Cervix mass biopsy: Neuroendocrine carcinoma, consistent with small cell type

- p16 (A01) : diffuse strong positive
- CD56 (A01) : positive
- Chromogranin (A01) : negative
- Synaptophysin (A01) : positive
- p40 (A01) : negative
- PD-L1 (22C3, VENTANA) Positive (A01) : CPS(combined positive score): 5

HPV 18 positive

National Comprehensive Cancer Network®

NCCN Guidelines Version 2.2026
Cervical Cancer

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Discussion

WORKUP

- History and physical (H&P)
- Complete blood count (CBC) (including platelets)
- Cervical biopsy, pathologic review[a]
- Cone biopsy as indicated[b]
- Liver function test (LFT)/ renal function studies
- Imaging[c]
- Smoking cessation and counseling intervention, if indicated (see NCCN Guidelines for Smoking Cessation)
- Consider HIV testing[d]
- Consider examination under anesthesia (EUA) cystoscopy/proctoscopy[e] (based on symptoms, barrel-shaped lesions, or anterior vaginal involvement)
- Consider options for fertility sparing or referral to reproductive endocrinology and infertility (REI) specialist
- Assess for distress[f]

Squamous cell cancer, adenocarcinoma, or adenosquamous carcinoma

CLINICAL STAGE

CLINICAL STAGE	
Stage IA1, Stage IA2	Primary Treatment (Fertility Sparing) (CERV-2)
	Primary Treatment (Non-Fertility Sparing) (CERV-3) and (CERV-4)
Stage IB1, Stage IB2	Primary Treatment (Fertility Sparing) (CERV-2)
	Primary Treatment (Non-Fertility Sparing) (CERV-4) and (CERV-5)
Stage IIA1	Primary Treatment (CERV-5)
Stage IB3, Stage IIA2	Primary Treatment (CERV-5)
Stage IIB, Stage III, Stage IVA	Primary Treatment (CERV-7)
Stage IVB	Treatment (CERV-12)
Incidental finding of invasive cancer after simple hysterectomy	Treatment (CERV-8)

Small cell neuroendocrine carcinoma of the cervix (NECC) → Primary Workup (CERV-13)

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Cervical Cancer

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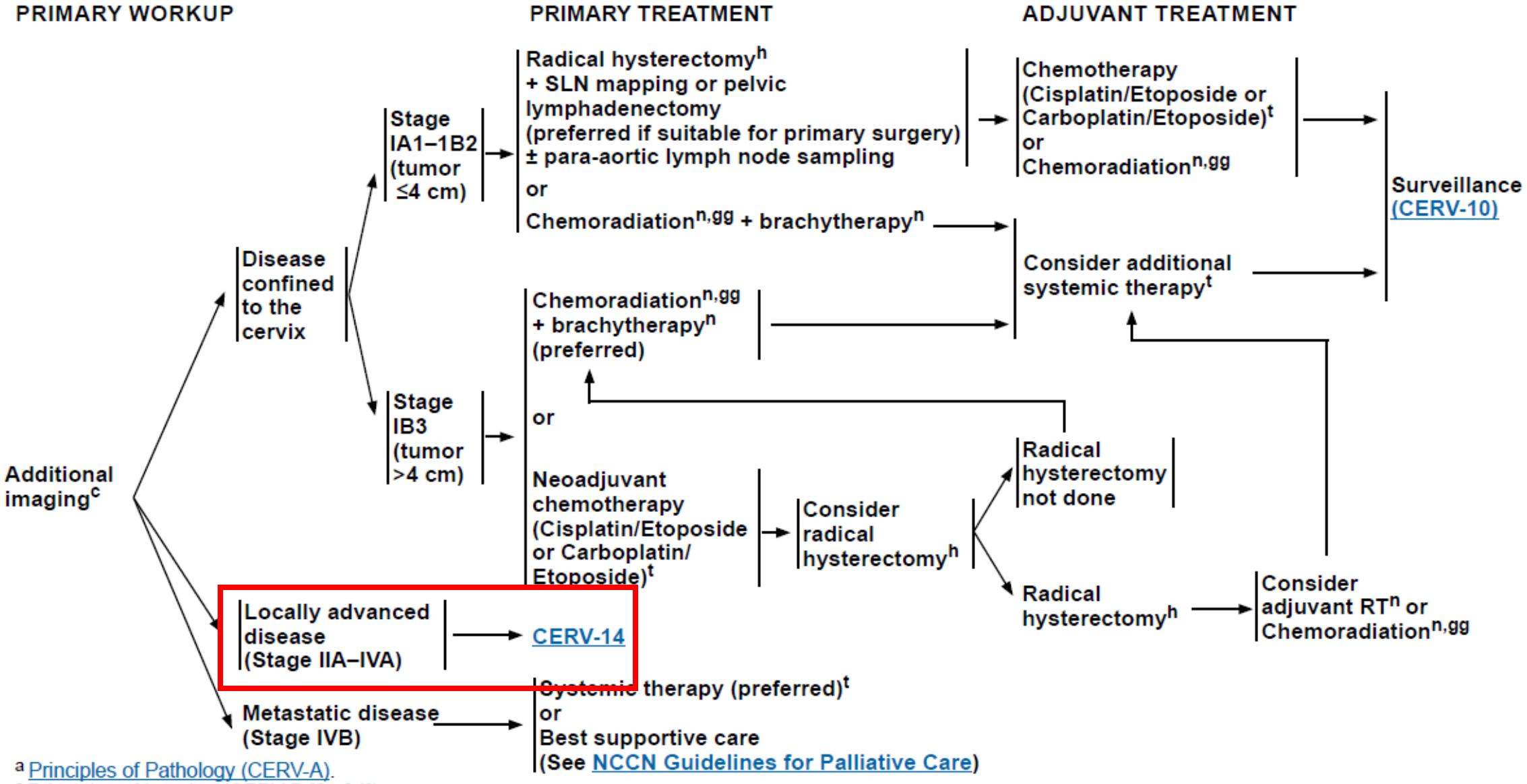
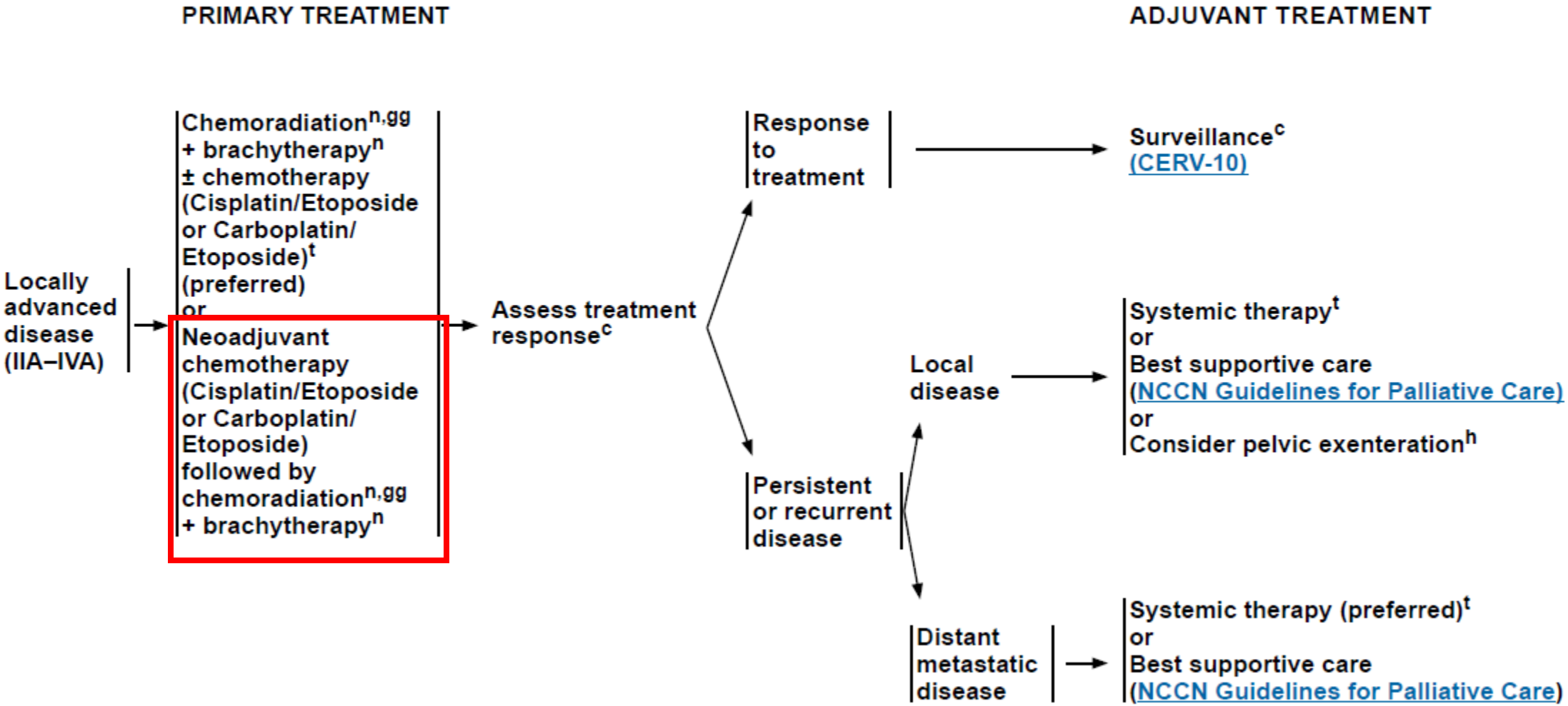
SMALL CELL NEUROENDOCRINE CARCINOMA OF THE CERVIX (NECC)[a]



[a] Principles of Pathology (CERV-A).

SMALL CELL NEUROENDOCRINE CARCINOMA OF THE CERVIX (NECC)[a]



Tempfer *et al. BMC Cancer* (2018) 18:530
https://doi.org/10.1186/s12885-018-4447-x

BMC Cancer

RESEARCH ARTICLE Open Access

Neuroendocrine carcinoma of the cervix: a systematic review of the literature

Clemens B. Tempfer[1*], Iris Tischoff[2], Askin Dogan[1], Ziad Hilal[1], Beate Schultheis[3], Peter Kern[4] and Günther A. Rezniczek[1]

Conclusion: NECC is a rare variant of cervical cancer with a poor prognosis. Multimodality treatment with radical surgery and neoadjuvant/adjuvant chemotherapy with cisplatin and etoposide with or without radiotherapy is the mainstay of treatment for early stage disease while chemotherapy with cisplatin and etoposide or topotecan, paclitaxel, and bevacizumab is appropriate for women with locally advanced or recurrent NECC. Immune checkpoint inhibitors may be beneficial, but controlled evidence for their efficacy is lacking.

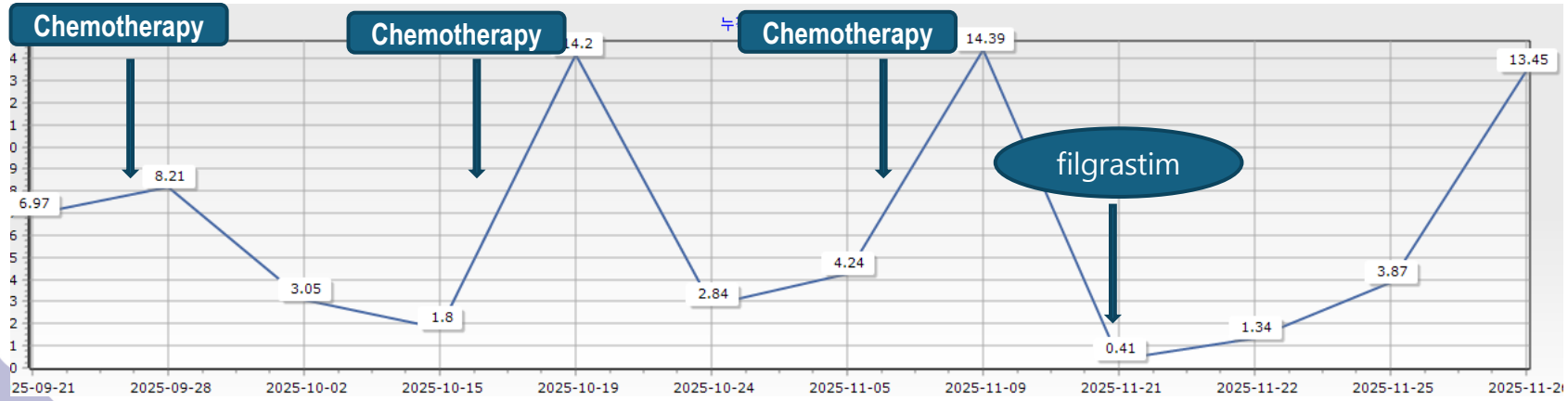
Case

Stage IIIC1r

Plan> Chemotherapy (etoposide + cisplatin)

2025.09.25 1st CTx #1 Etoposide + cisplatin (3day regimen, q3weeks)
2025.10.16 1st CTx #2 Etoposide + cisplatin (3day regimen, q3weeks)
2025.11.06 1st CTx #3 Etoposide + cisplatin (3day regimen, q3weeks)

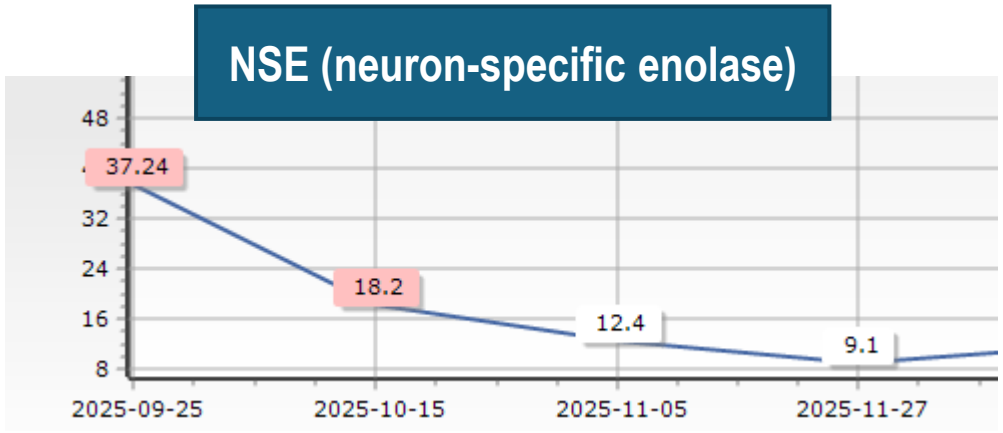
[ANC]

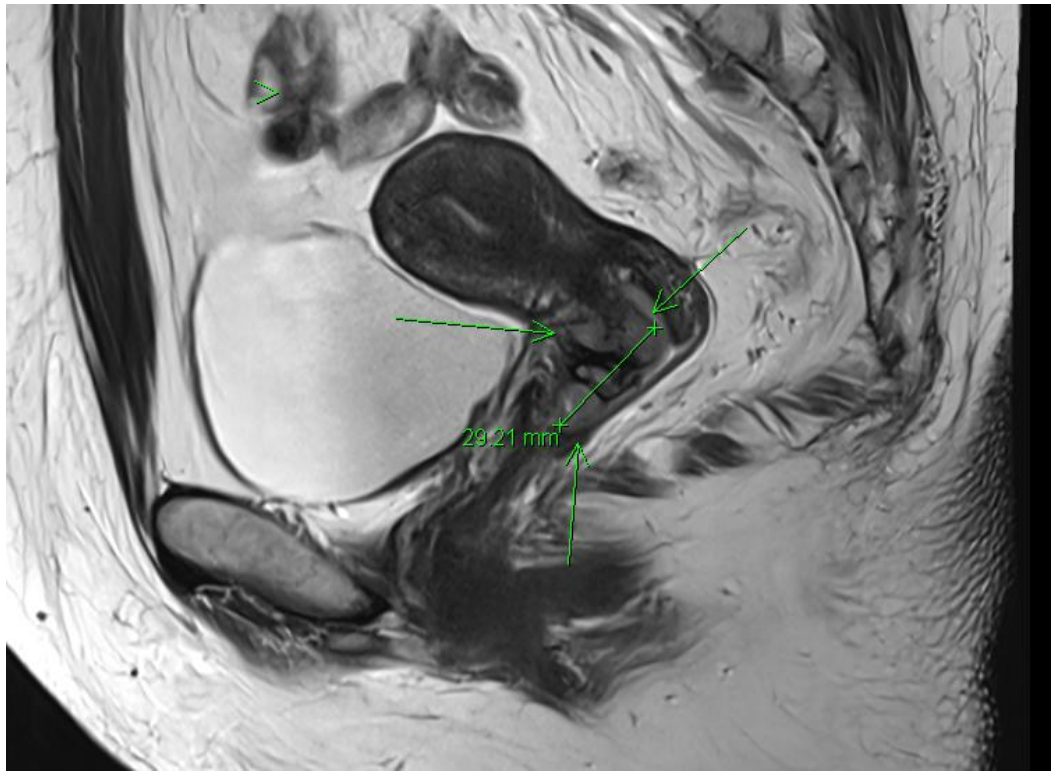


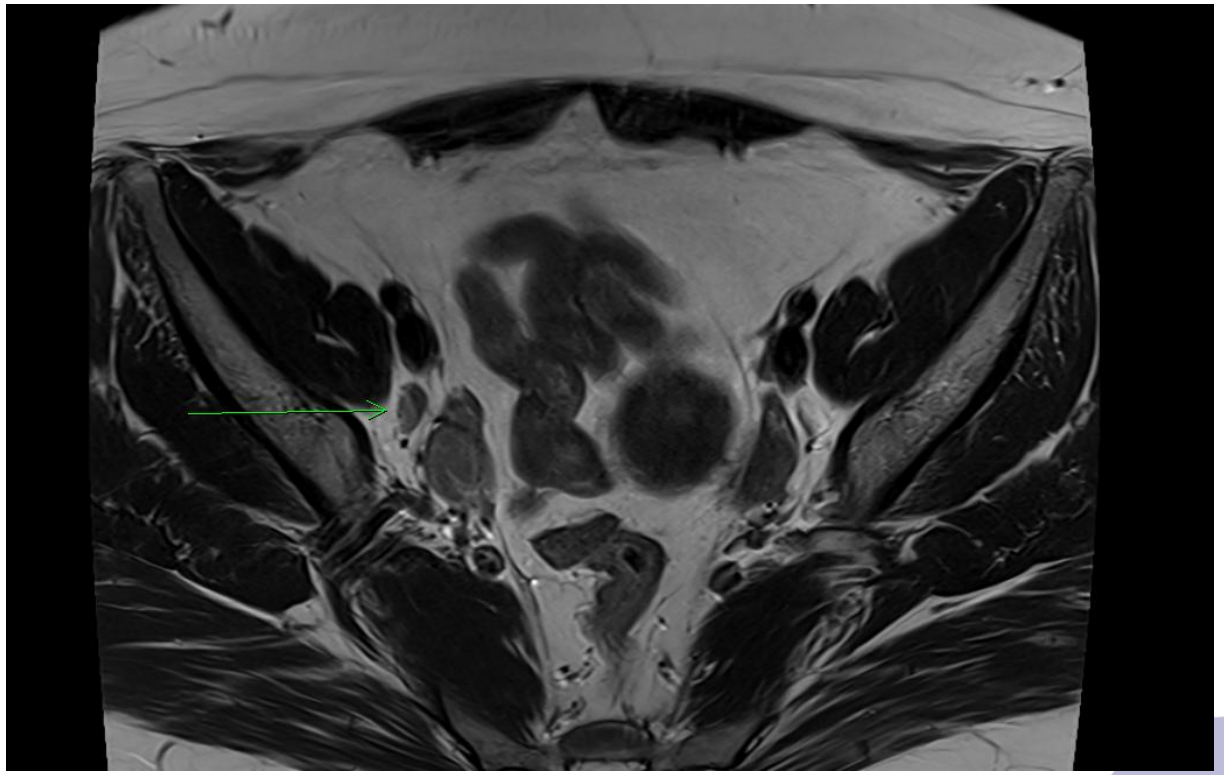
Case

2025.11.20 MRI

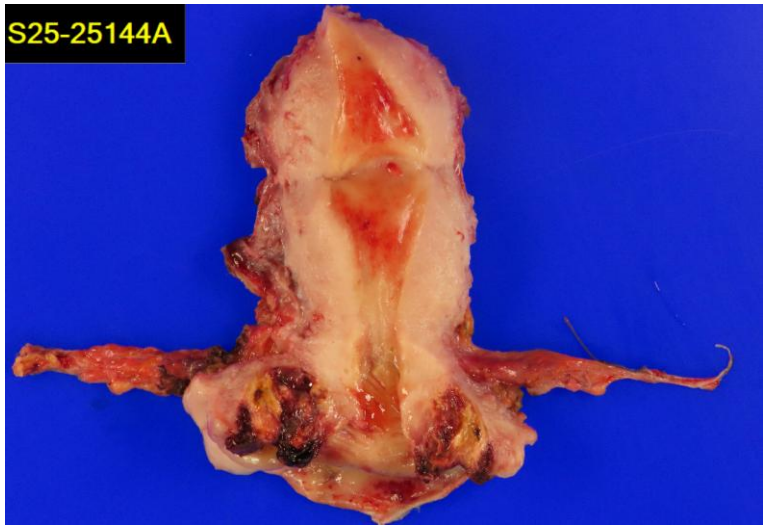
1. Decreased heterogeneous mass in cervical canal since previous study.
2. Decreased multiple LNs in both obturator and left external iliac space (especially LN in left obturator space) since previous study.







Case



2025.11.26 RAH BS PLND PALND Both ovary transposition

Uterus, radical hysterectomy with pelvic and paraaortic lymph node dissection:
SMALL CELL NEUROENDOCRINE CARCINOMA, uterine cervix (see comments)
(A, "uterus")
1) Tumor Site: Cervix: Not specified
2) Tumor Size: Dimensions: 3.3 (W) x 1.7 (L) cm
Depth: 1.0/2.0 total thickness cm
3) Extracervical Extension: None (confined to the uterine cervix)
4) Margins: (1) Distal resected margin: Uninvolved by invasive carcinoma (HSIL: Absent)
(2) Deep resected margin: Uninvolved by invasive carcinoma
5) Lymph-Vascular Invasion: Not identified
6) Regional Lymph Nodes: **No metastasis in all 48 regional lymph nodes**
(Right(0/22): B, "right pelvic LN": 0/16;
E, "right para-aortic LN": 0/6,
Left(0/20): C, "left pelvic LN": 0/14;
D, "left para-aortic LN": 0/6,
F, "pre-sacral LN": 0/6)

Case

Post op treatment

2025.12.15 CTx. #4 Etoposide + cisplatin (3day regimen, q3weeks)

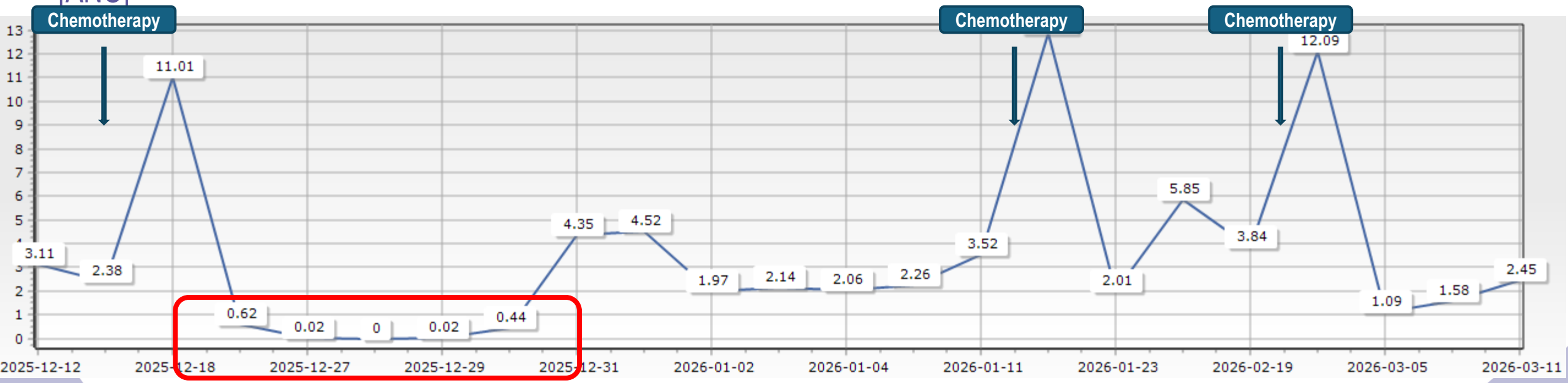
----------Neutropenic fever ANC 0----------

2026.01.12 CTx. #5 Etoposide + cisplatin (3day regimen, q3weeks) (1주 연기, DR 25% d/t neutropenic fever)

2026.01.12 IMRT, 5weeks start (50Gy/25fx)

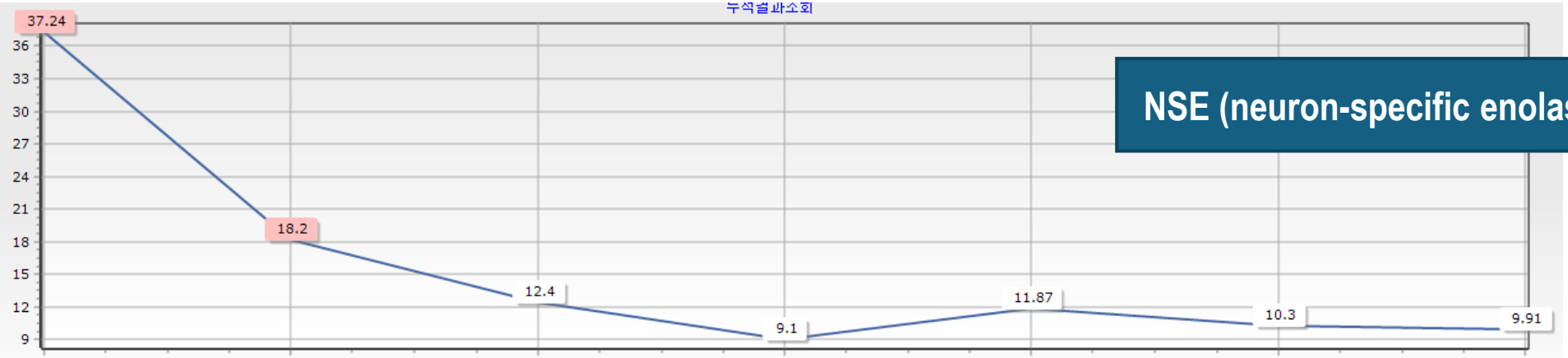
2026.02.20 CTx. #6 Etoposide + cisplatin (3day regimen) (DR 25%)

[ANC]



Case

2026.03.11 chest pelvis CT NED



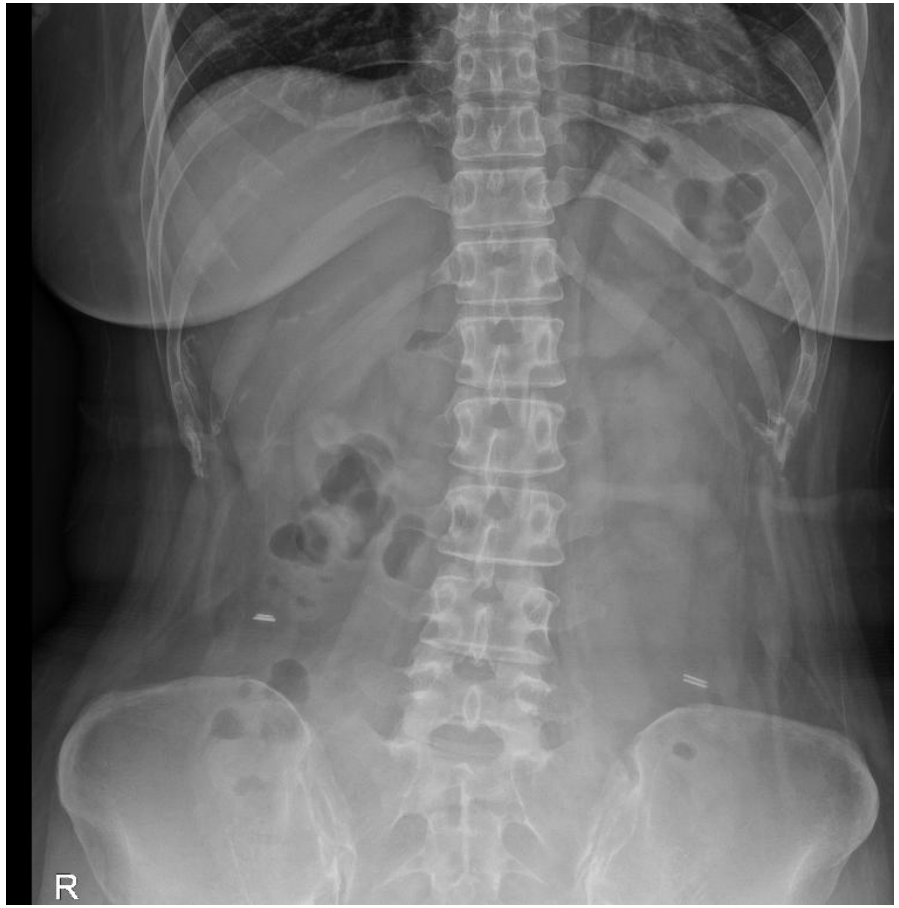
NSE (neuron-specific enolase)

Case

2month later

2026.05.07 “꼬이듯이 아프고 설사 했어요.”
Gas passing +, stump no definite recurred mass
Abdomen X-ray : non specific bowel gas pattern

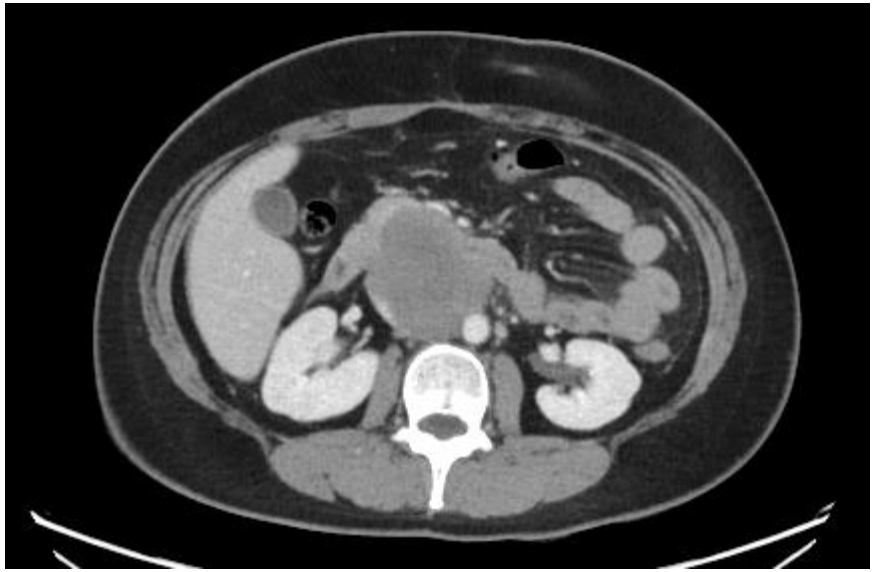
→ R/O ileus or colitis
1week follow up

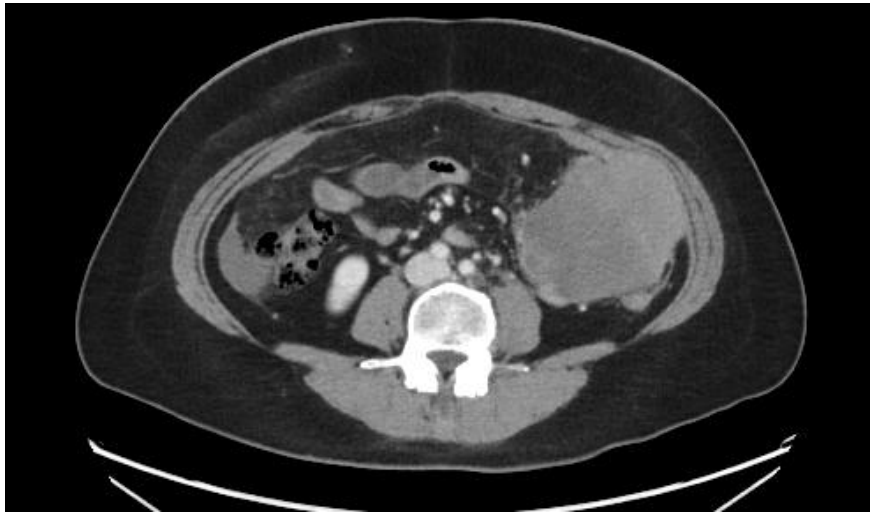


Case

2026.05.13 chest-pelvis CT

Large soft tissue mass in aortocaval space and left paraaortic space.
--> R/O Recurred mass.





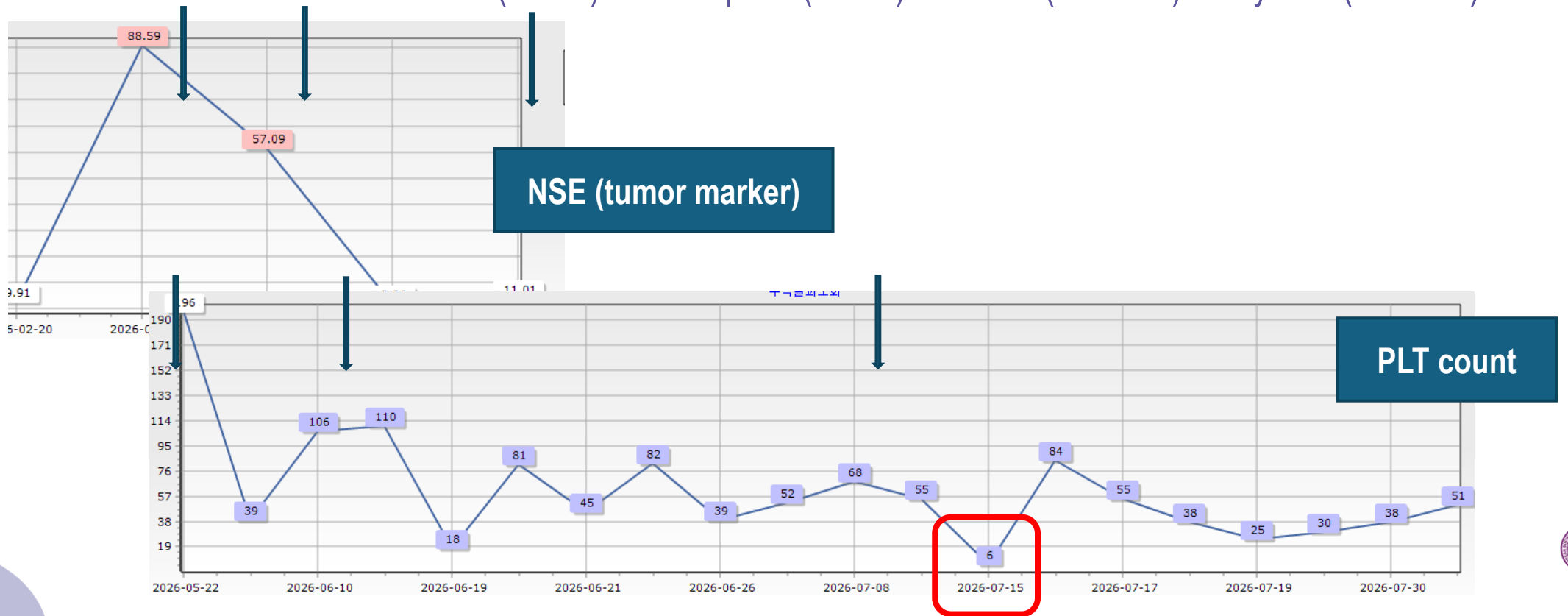
2025.11 RAH 검체 IHC profile

PD-L1 (22C3, VENTANA) Positive (A06) : CPS(combined positive score): 10
CD56 (A06) : positive
Chromogranin (A06) : negative
p63 (A06) : weak positive
Synaptophysin (A06) : positive
p16 (A06) : block positive
p40 (A06) : negative
C-erbB2 [Other] Level I (A06) : 0

Case

Treatment

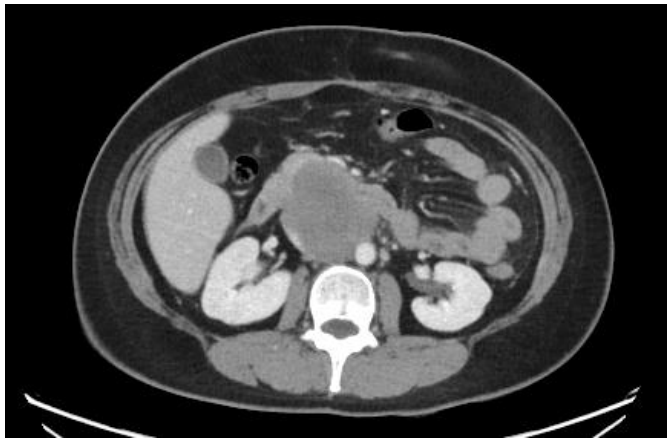
2026.05.21 CTx. 2nd #1 Paclitaxel + Carboplatin + avastin(100/100) + keytruda(100/100)
2026.05.27~2026.06.10 IMRT+SIB
2026.06.11 CTx. 2nd #2 Paclitaxel + Carboplatin + avastin(100/100) + keytruda(100/100)
2026.07.09 CTx. 2nd #3 Paclitaxel(DR25) + Carboplatin(DR25) + avastin(100/100) + keytruda(100/100)

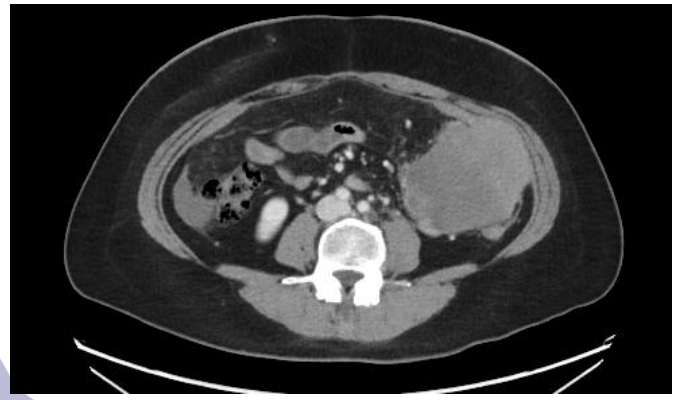


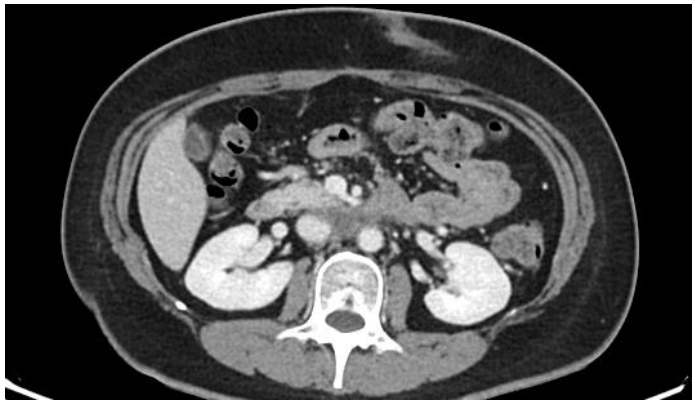
Case

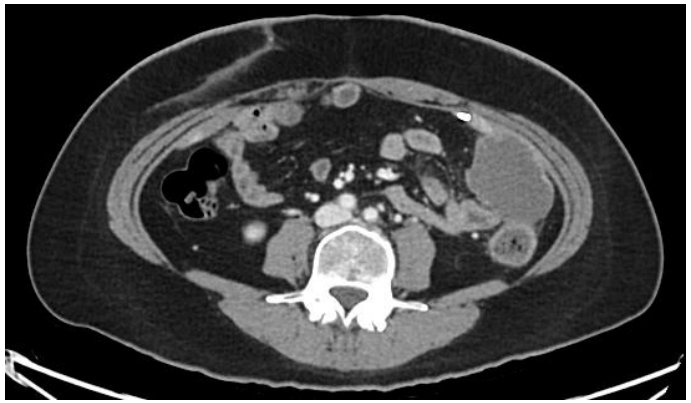
2026.08.04

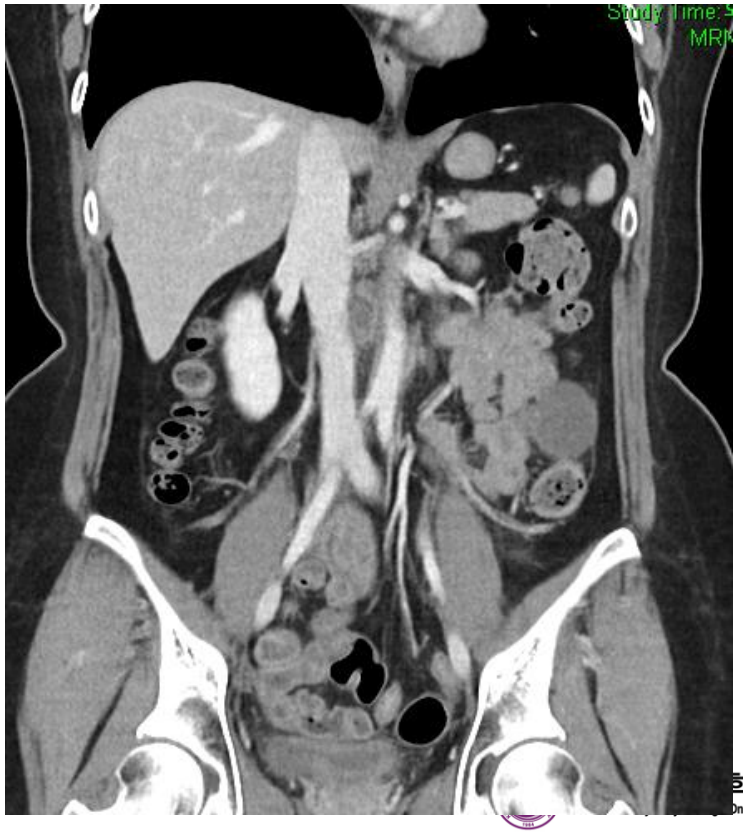
Aortocaval space및 left paracolic gutter에 recurred mass는 이전 검사에 비해 크기가 감소함. Aortocaval space의 mass는 2.8cm, left paracolic gutter의 mass는 5.4cm 가량으로 측정됨..











Uterine corpus cancer_Discussion

1. Uterine sarcoma의 감별진단에서 NGS의 역할은?

2. Clinically early-stage uterine sarcoma에서 peritoneal seeding을 예방하기 위한 방법은?

Cervical cancer_Discussion

Persistent grade 4 thrombocytopenia: further chemotherapy reduction vs pembrolizumab maintenance?

Korean Society of
Gynecologic Oncology

2026년
대한부인종양학회 하계학술대회
제20차 젊은의사 워크숍
제9차 분과전문의 연수강좌
제1차 부인종양간호사 연수강좌
& 카데바 워크숍

일자 2026년 8월 8일(토) - 9일(일)

장소 위례 밀리토피아 마린 호텔 / 가톨릭대학교 응용해부연구소

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Korean Society of Gynecologic Oncology