



# Case presentation

# HER2-positive metastatic colon cancer

So Jung Han

Division of Gastroenterology, Department of Internal Medicine,  
Severance Hospital, Yonsei University College of Medicine

*Severance*



# Case presentation

- F/73
- **Chief complaint** Further treatment for metastatic colon cancer
- **Present illness (2021.6.24)** HER2 3+, RAS/RAF WT/WT 전이성 구불결장암으로 타병원에서 1st line Cetuximab+FOLFOX, Hartmann's operation, 2<sup>nd</sup> line Avastin +FOLFIRI, 3<sup>rd</sup> line Capecitabine 투약 후에도 disease progression되어 임상 연구 enroll위해 전원의뢰되어 내원함

- **Family history** none
- **Smoking/ Drinking** nondrinker, nonsmoker
- **Current medication**
  - Dulcolax-S 2T QD PO
  - Prucaloride 1mg QD PO
  - Ursa 100mg TID PO
  - Godex 2C TID PO
  - IR codon 5mg TID PO
  - Transamin 250mg TID PO
  - Megace F susp 5ml QD PO

## Review of system

- General weakness/Fatigue (-/-)
- Fever/Chill (-/-) Weight loss (-)
- **Poor oral intake**/Polydipsia (+/-)
- Abdominal discomfort/**Pain** (-/+)
- **Anorexia**/Nausea/Vomiting (+/-/-)
- Diarrhea/**Constipation** (-/+)
- Melena/Hematochezia (-/-)
- Chest pain/discomfort (-/-)
- Cough/Sputum/Rhinorrhea (-/-/-)
- Dyspnea/DOE/Orthopnea (-/-/-)
- Dysuria/**hematuria** (-/-)
- Frequency/Polyuria (-/-)

## Physical examination

- **Vital sign**  
BP 130/79mmHg HR 89회|  
RR 20회| BT 36.5 °C
- **Height** 162.2cm **Body weight** 61.5 kg
- **ECOG** 1
- **Karnofsky Performance Status** 90%
- Chronic ill looking appearance
- Soft abdomen, DT/RT (-/-)

# Laboratory finding

CBC			
WBC(/uL)	5840	Hct (%)	35.3
Hb (g/dL)	11.3	MCV (fL)	87.2
Platlet (/uL)	234K	MCH(pg)	27.9
Seg. Neutrophil (%)	68.3	Lymphocyte (%)	19
ANC	3990		
Routine chemistry			
Ca / P (mg/dL)	9.2 / 3.6	Total protein / albumin (g/dL)	6.9 / 4.0
Glucose (mg/dL)	101	AST / ALT (IU/L)	87↑ / 41
BUN / Cr (mg/dL)	14.5 / 0.62 (eGFR > 90)	Alk.Phosphatase (IU/L)	545 ↑
Na / K / Cl (mmol/L)	137 / 4.1 / 100	T.bilirubin (mg/dL)	0.4
		Tumor marker	
PT(INR) / apTT(sec)	1.03 / 27.6	CEA (ng/mL)	572 ↑
Free T4 (ng/dL)	0.94	CA 19-9 (U/mL)	70.7 ↑
TSH (uIU/mL)	6.66 ↑		

# Pathologic finding

## Adenocarcinoma, moderately differentiated

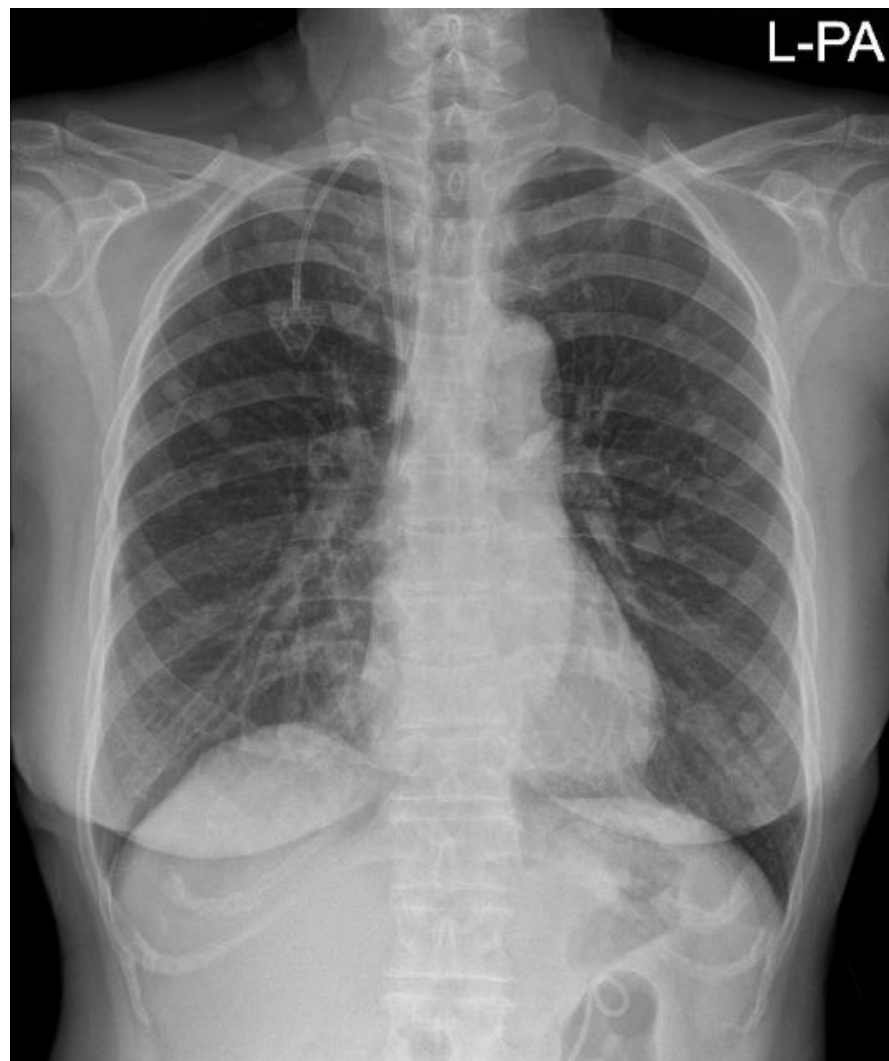
- Location : sigmoid colon
- Gross type : ulceroinfiltrative
- Size : 8.0\*7.5\*2.5cm
- Depth of invasion : directly invades adjacent organs or structures (pT4b) (site : bladder wall)
- Regional lymph node metastasis : No metastasis in all 25 regional lymph nodes (pN0) (0/25 : pericolic, 0/25)
- Lymphatic invasion : Present (intramural)
- Venous/Perineural invasion : Not identified
- Tumor border : infiltrative
- Stromal resection : Desmoplasia
- Micropapillary component : No
- Pre-existing adenoma : not identified

- **EGFR positive (1+, 5%)**
- **Her-2 Positive (score 3)**

IHC scoring : Negative : 0%, IHC 1+:0%, IHC 2+:0%, **IHC 3+:100%**

- **MLH1** intact nuclear expression (in about 95% of tumor cells)
- **MSH2** intact nuclear expression (in about 95% of tumor cells)
- **MSH6** intact nuclear expression (in about 95% of tumor cells)
- **PMS2** intact nuclear expression (in about 95% of tumor cells)
- **CK7** Negative in tumor cells
- **CK20** Negative in tumor cells
- **CDX-2** positive in tumor cells
- **PAS** Non-reactive in tumor cells
- **Masson-trichrome** Positive in fibrotic area
- **Reticulin** Decreased reticulin network in tumor cells

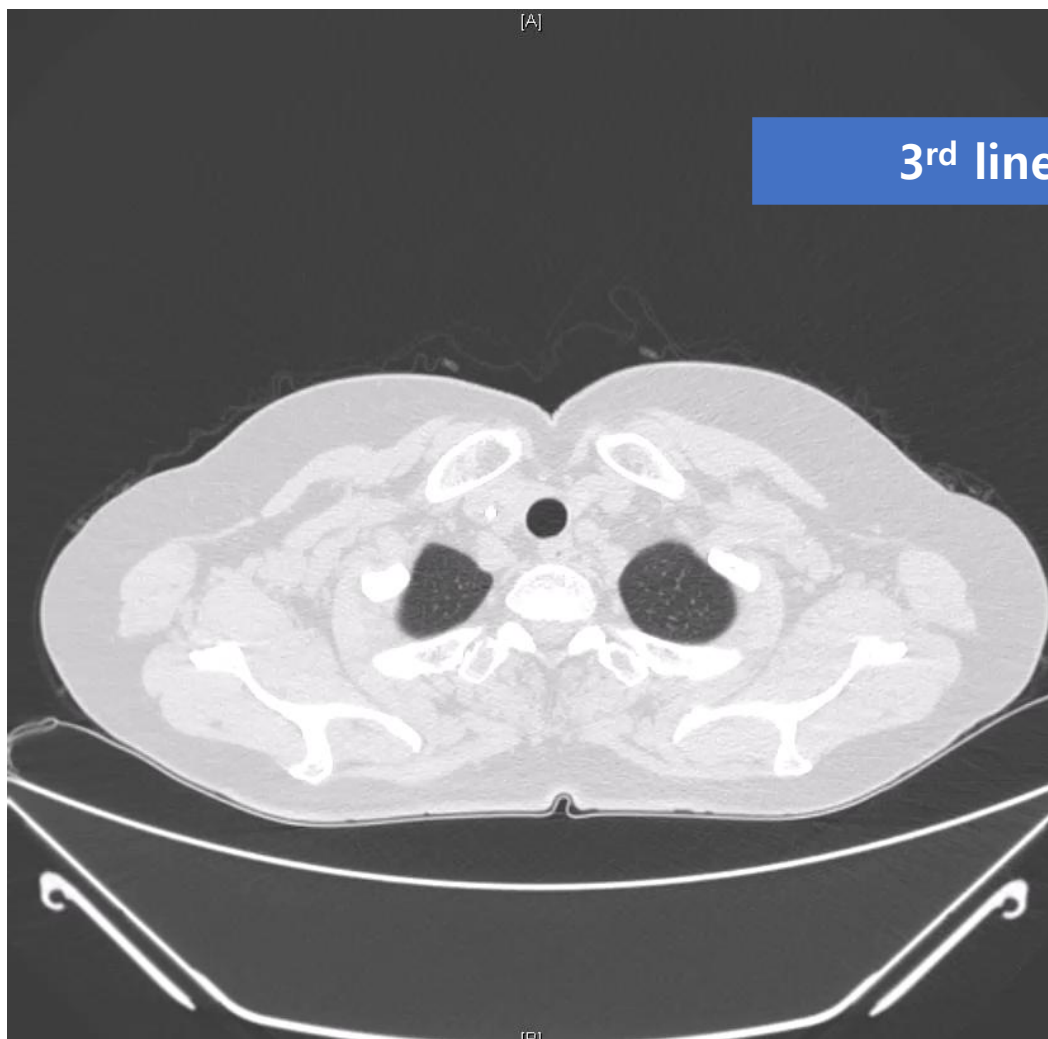
## Chest PA



## Abdomen X ray (upright)

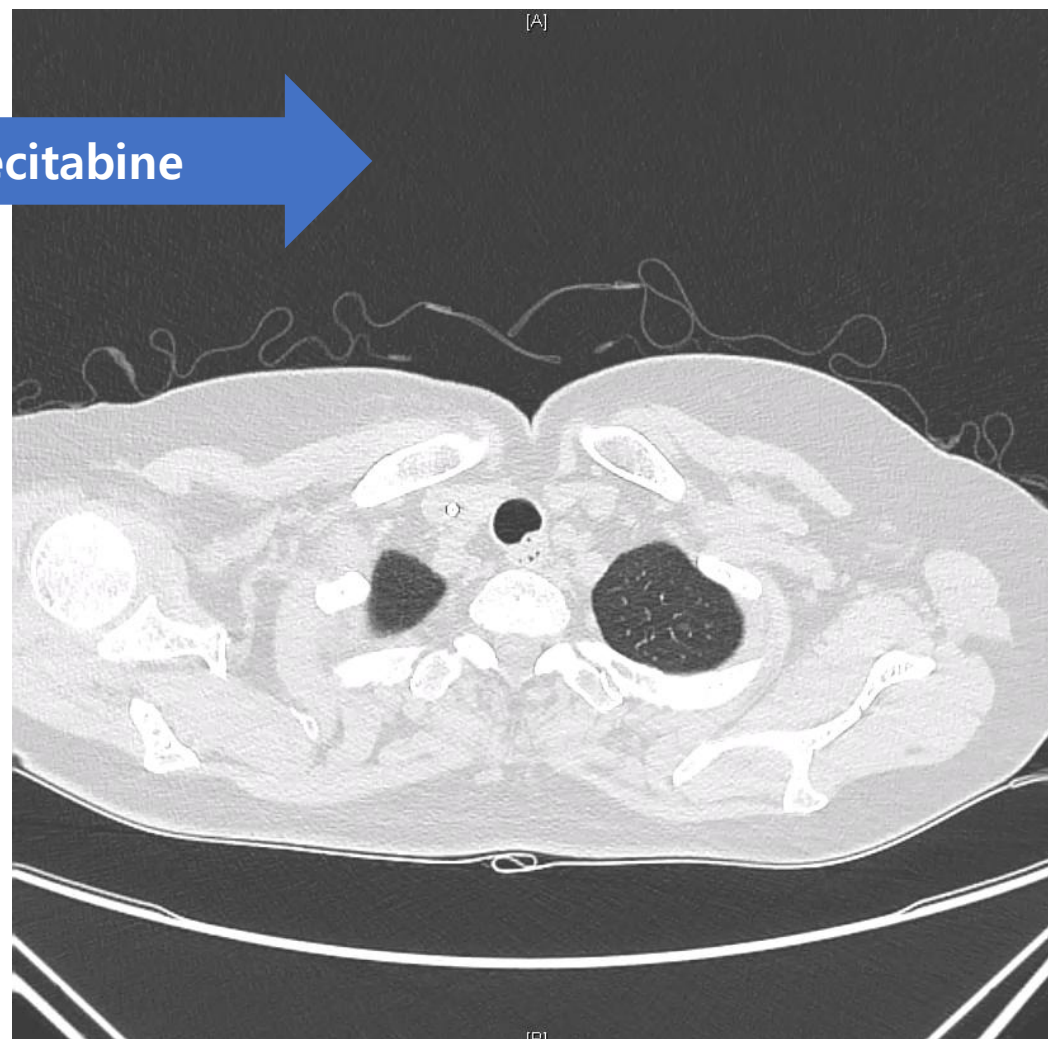


# Chest CT



2021-01-28

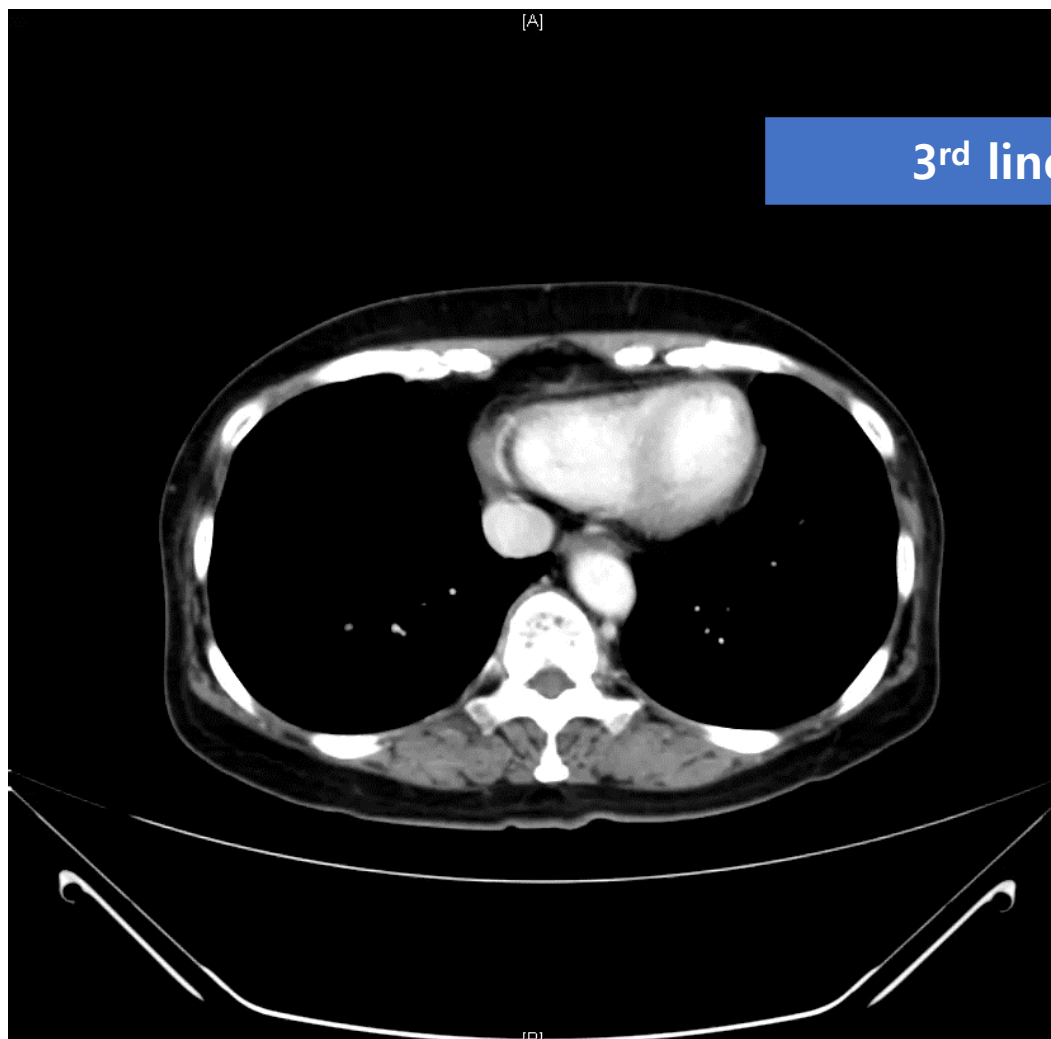
3<sup>rd</sup> line Capecitabine



2021-04-19

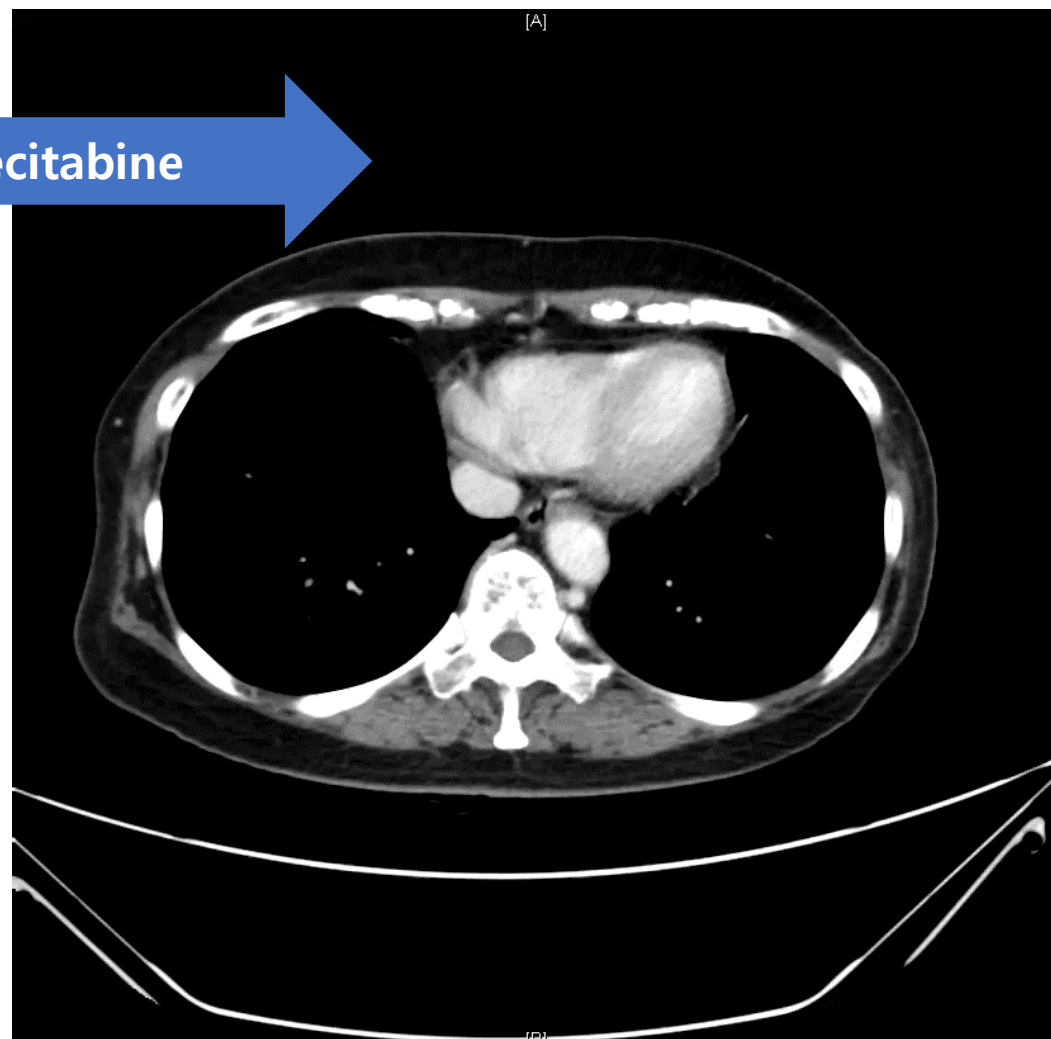


# Abdomen CT



2021-01-28

3<sup>rd</sup> line Capecitabine



2021-04-19

# Diagnosis

- # S-colon cancer c partial obstruction, AMD c bladder invasion, liver mets [E-RAS: WT, MSS, HER2 3+]  
s/p 1L-Cetuximab+FOLFOX #12 (2019.07.29 ~ 2020.02.17)  
s/p Radiofrequency ablation at liver (2019.11.21)  
s/p Hartmann OP c colostomy (2019.12.11) → **ypT4bN0**, resection margin(+, bladder wall) L/V/N(+/-/-)  
s/p Partial cystectomy & Omentectomy with Hartmann Reversal(2020.03.10)  
s/p Lung Radiofrequency ablation (2020.05.25)  
s/p 2L-Avastin+FOLFIRI #11 (2020.06.08~2020.10.27)  
s/p 3L-Capecitabine #4 (2021.02.02~2021.04.07)
- # s/p Double-J stent insertion, Lt due to hydronephrosis (2021.02.05)

# Plan

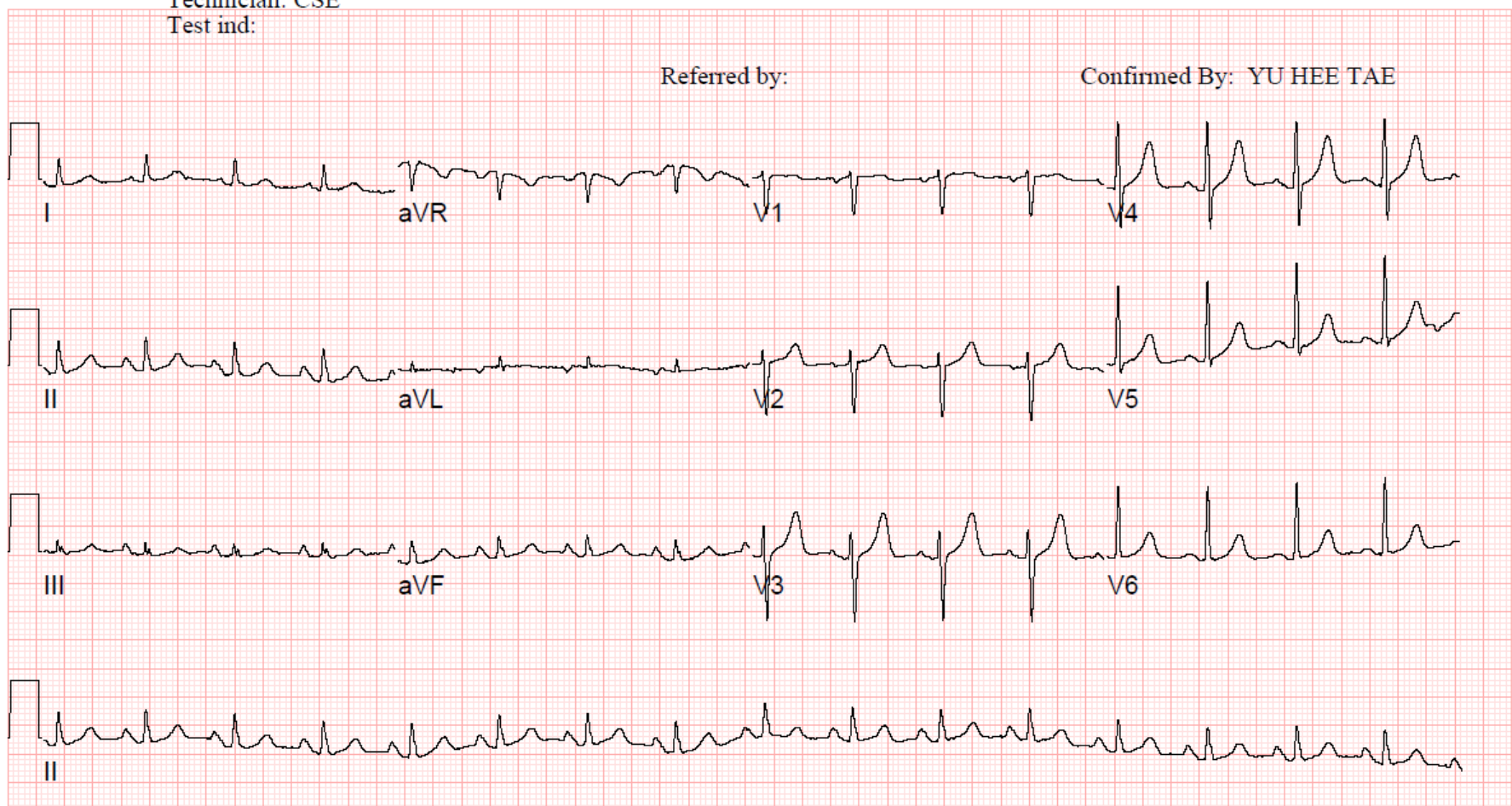
- Baseline APCT, chest CT, MUGA scan & EKG
- T-DXd

# Electrocardiogram

Technician: CSE  
Test ind:

Referred by:

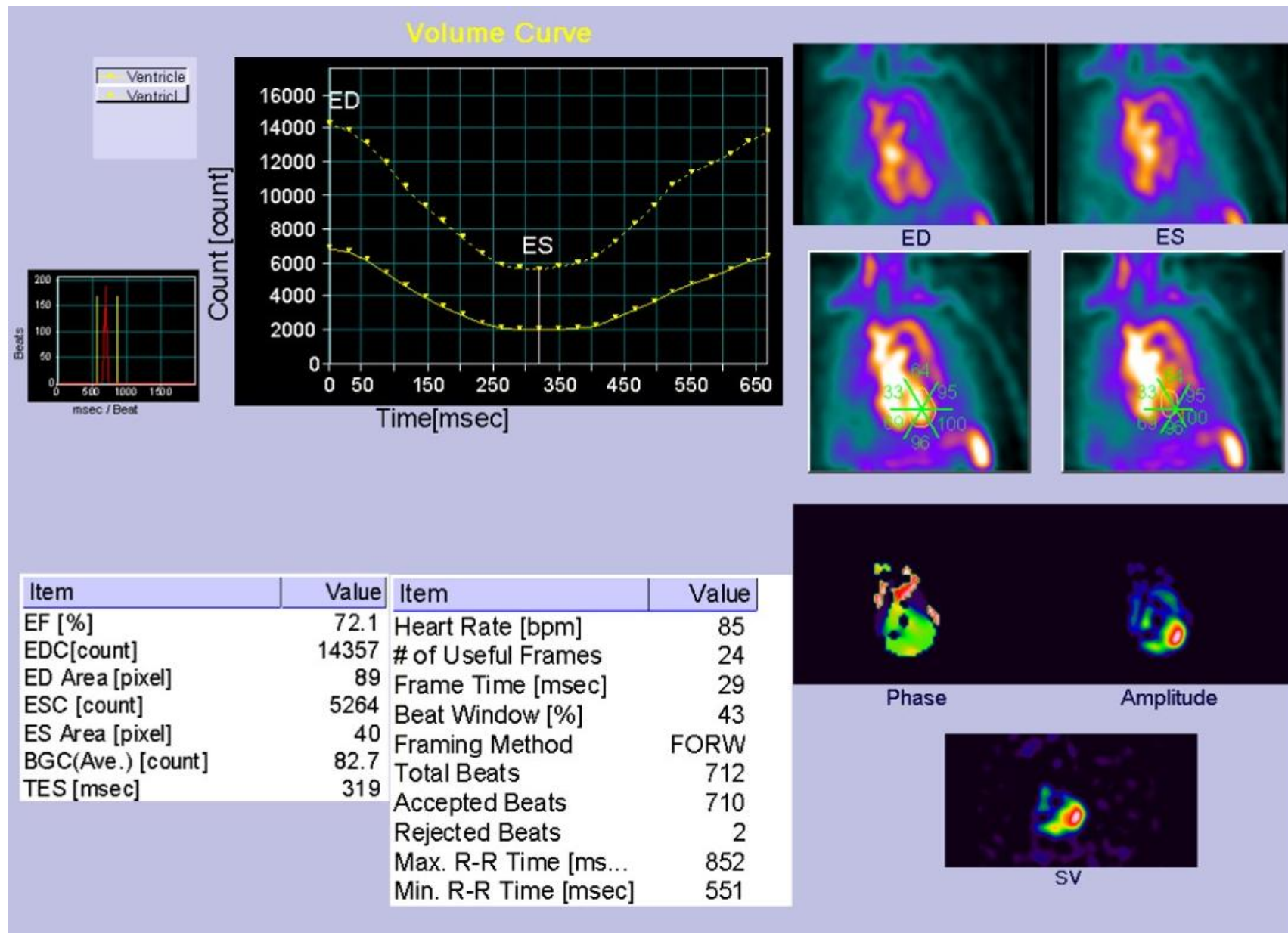
Confirmed By: YU HEE TAE



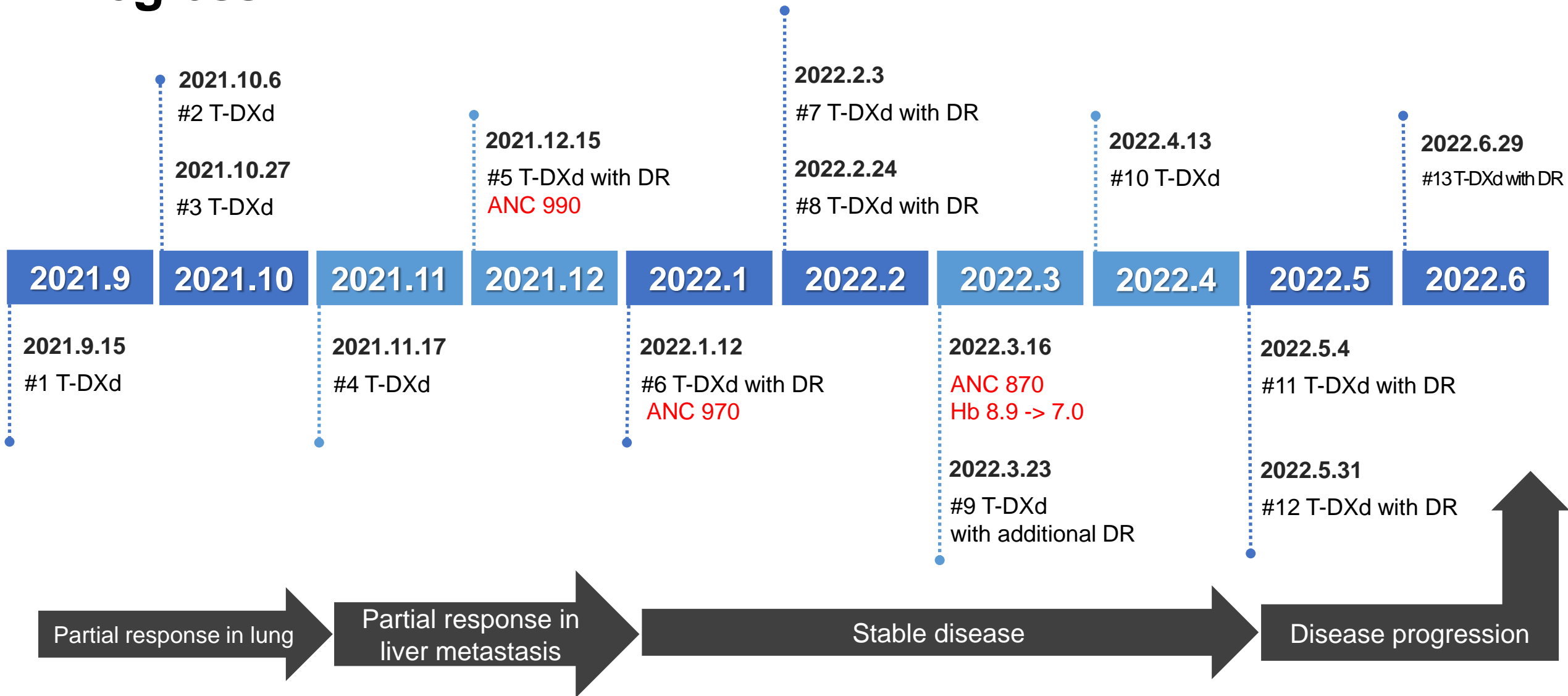
Vent. rate	96BPM
PR interval	140 ms
QRS duration	66 ms
QT/QTc	338/427 ms
P-R-T axes	66 49 51

# Multigated Blood Pool Scan (MUGA scan)

Estimated LVEF :  
**72%**



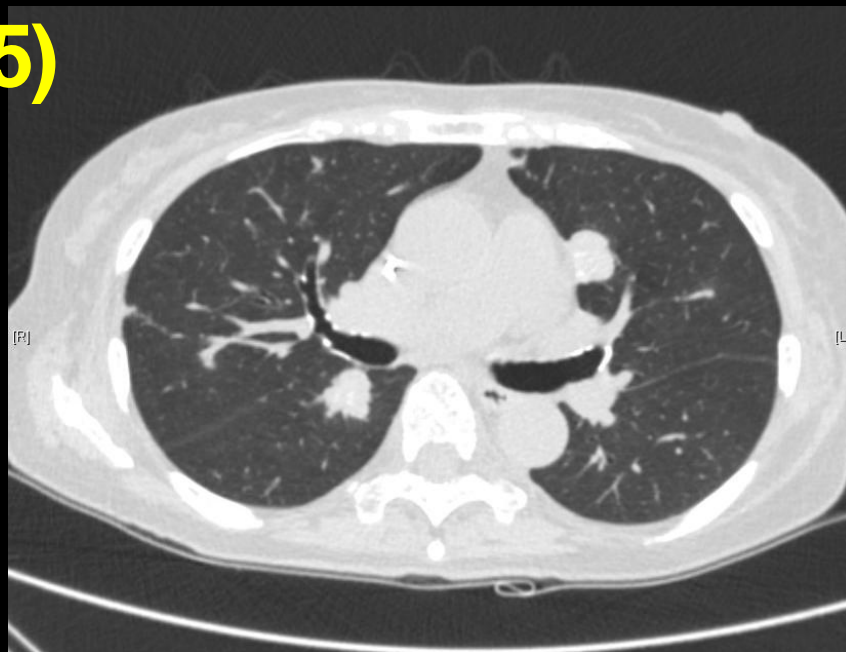
# Progress



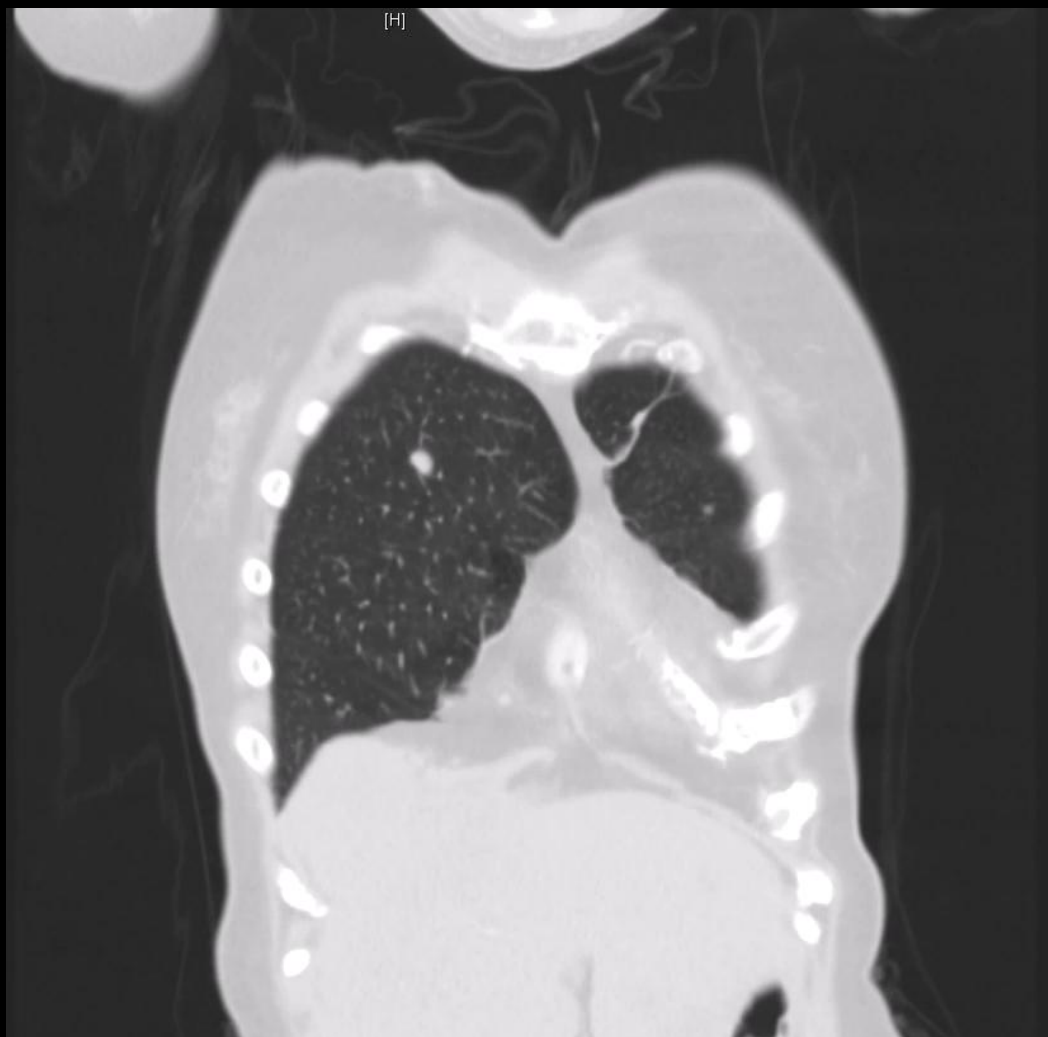
# Chest CT (2021.08.19)



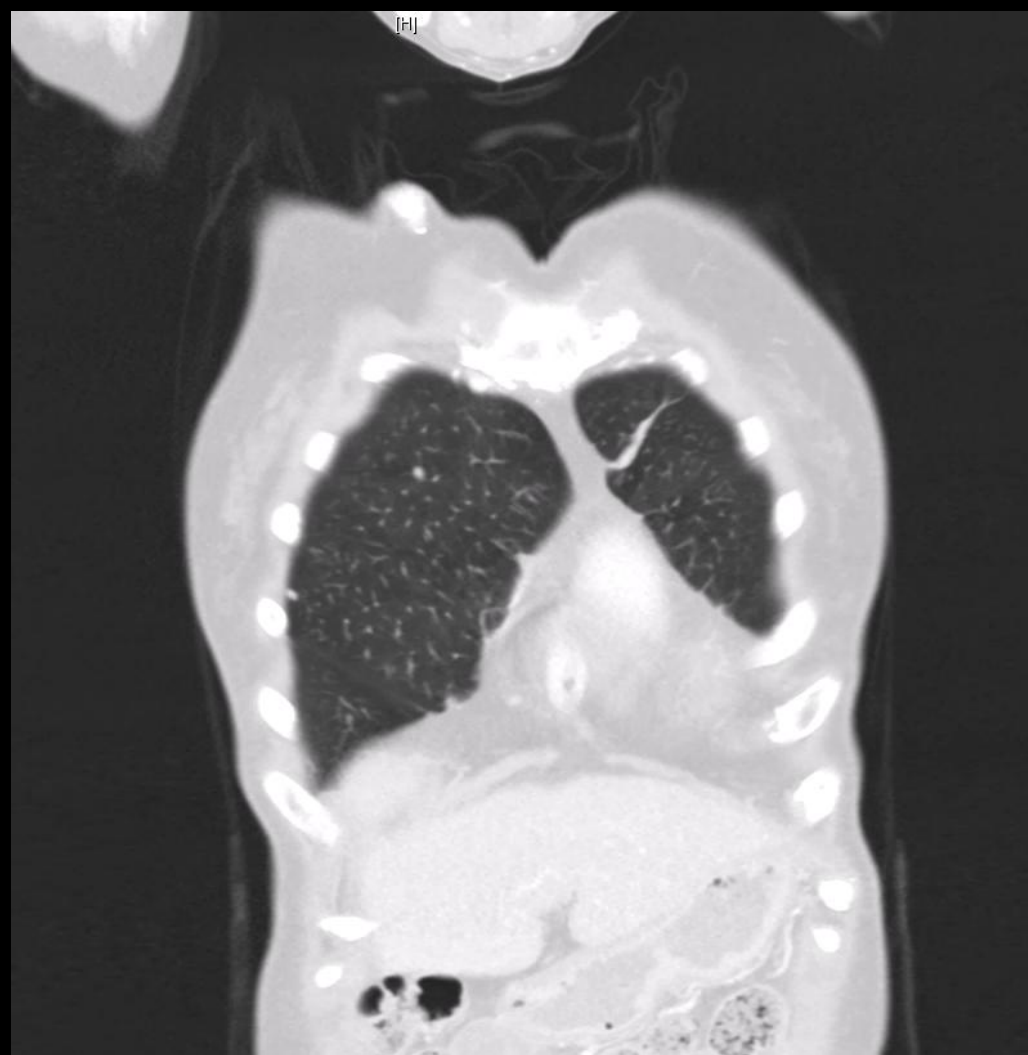
# Chest CT (2022.04.25)



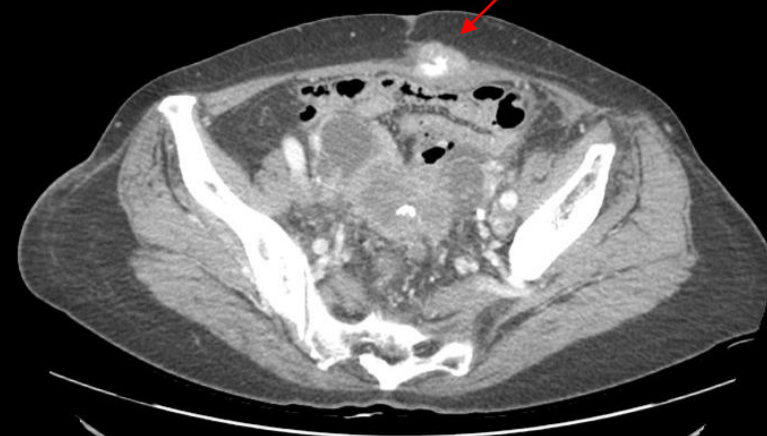
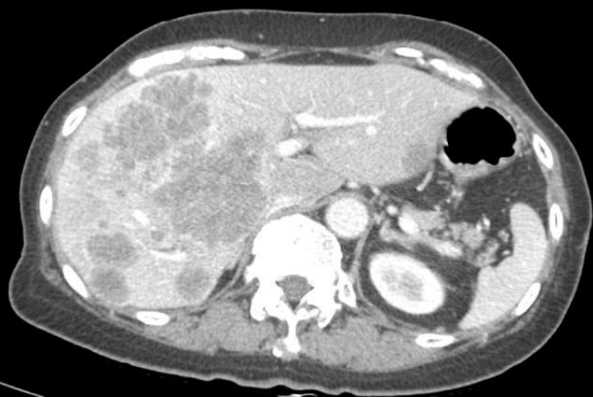
## Chest CT (21.8.19)



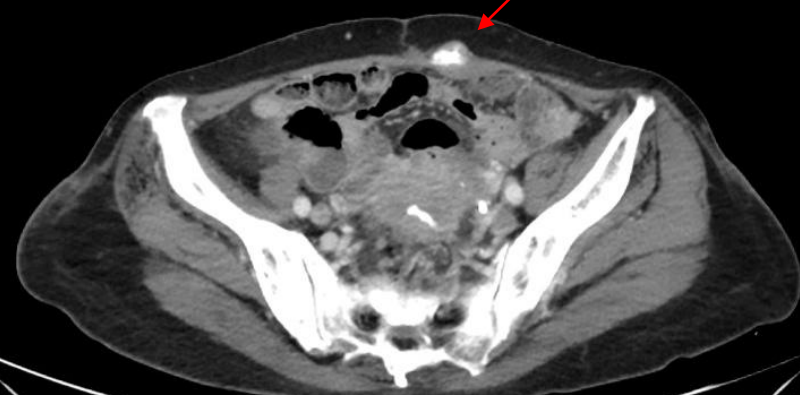
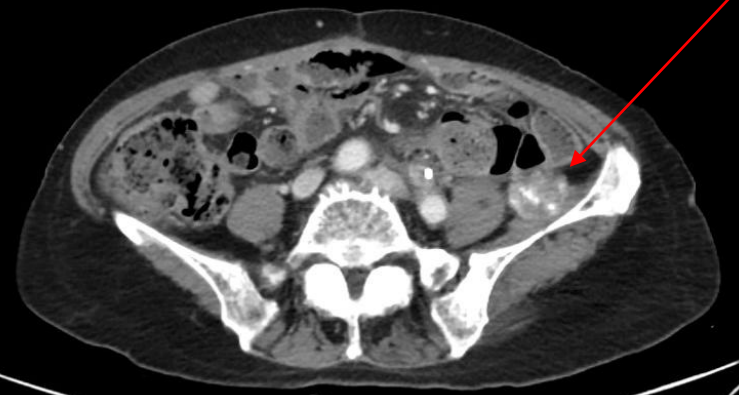
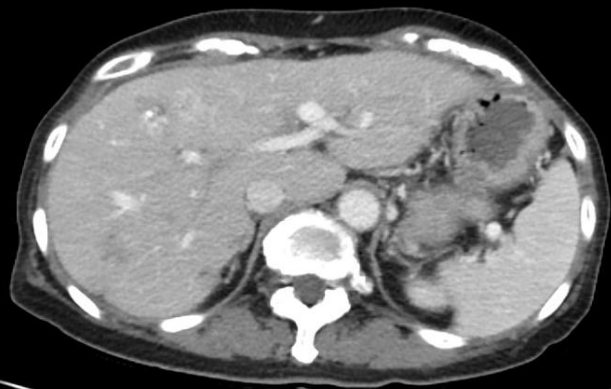
## Chest CT (22.04.28)



# APCT (2021.08.19)

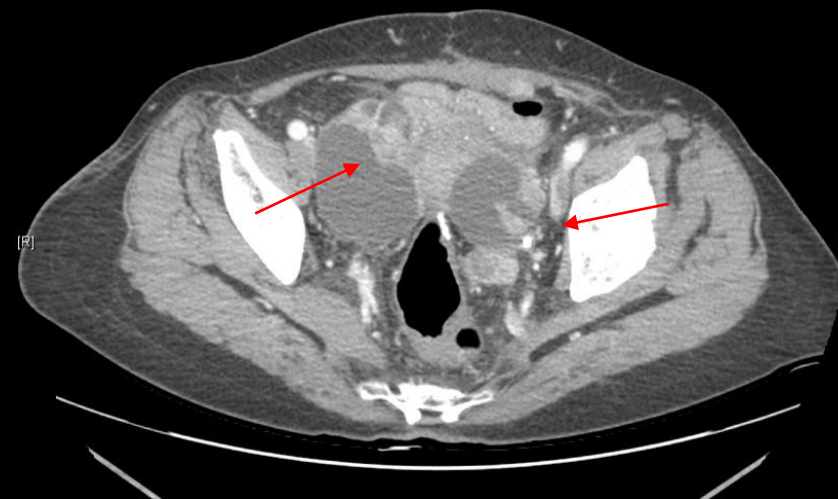


# APCT (2022.04.25)

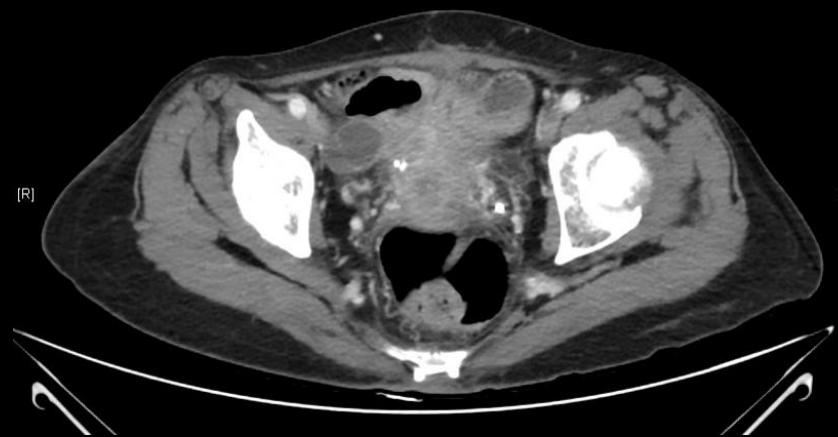
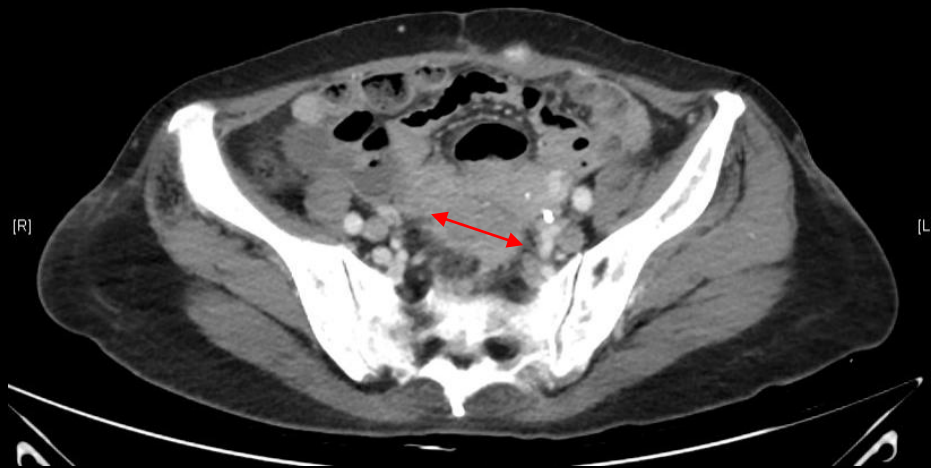




# APCT (2021.08.19)



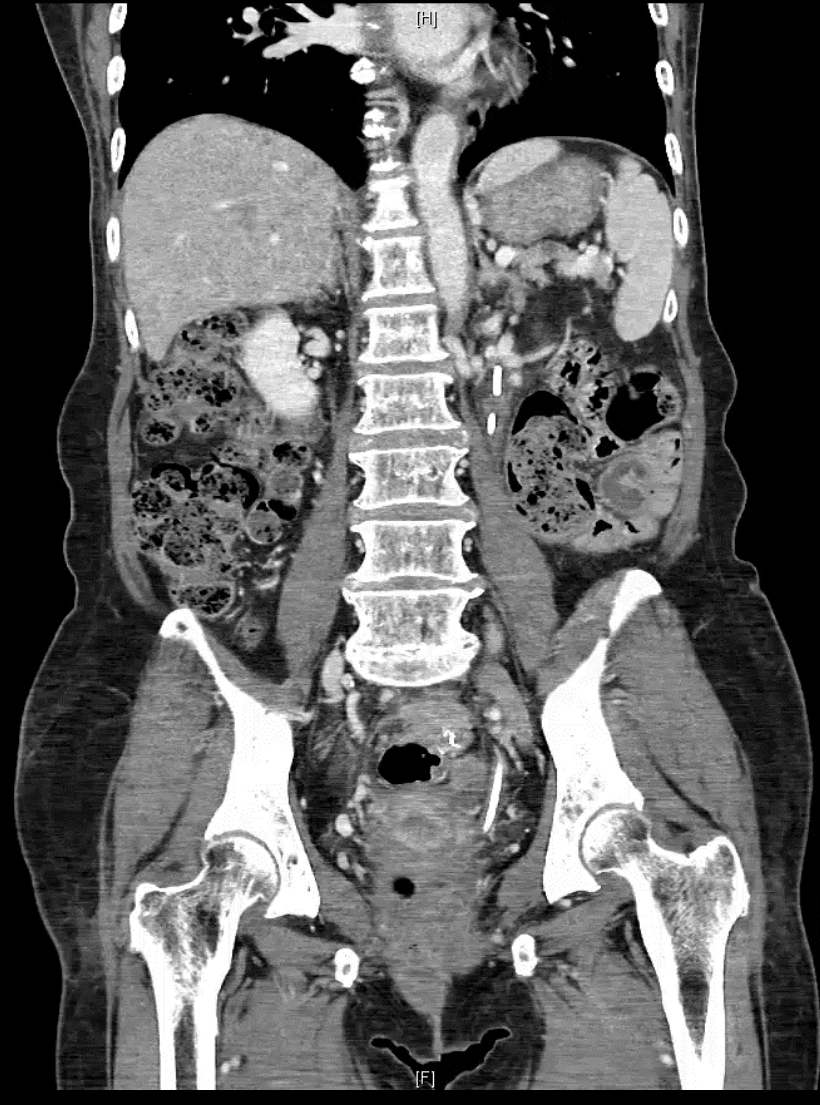
# APCT (2022.04.25)



# APCT (2021.08.19)

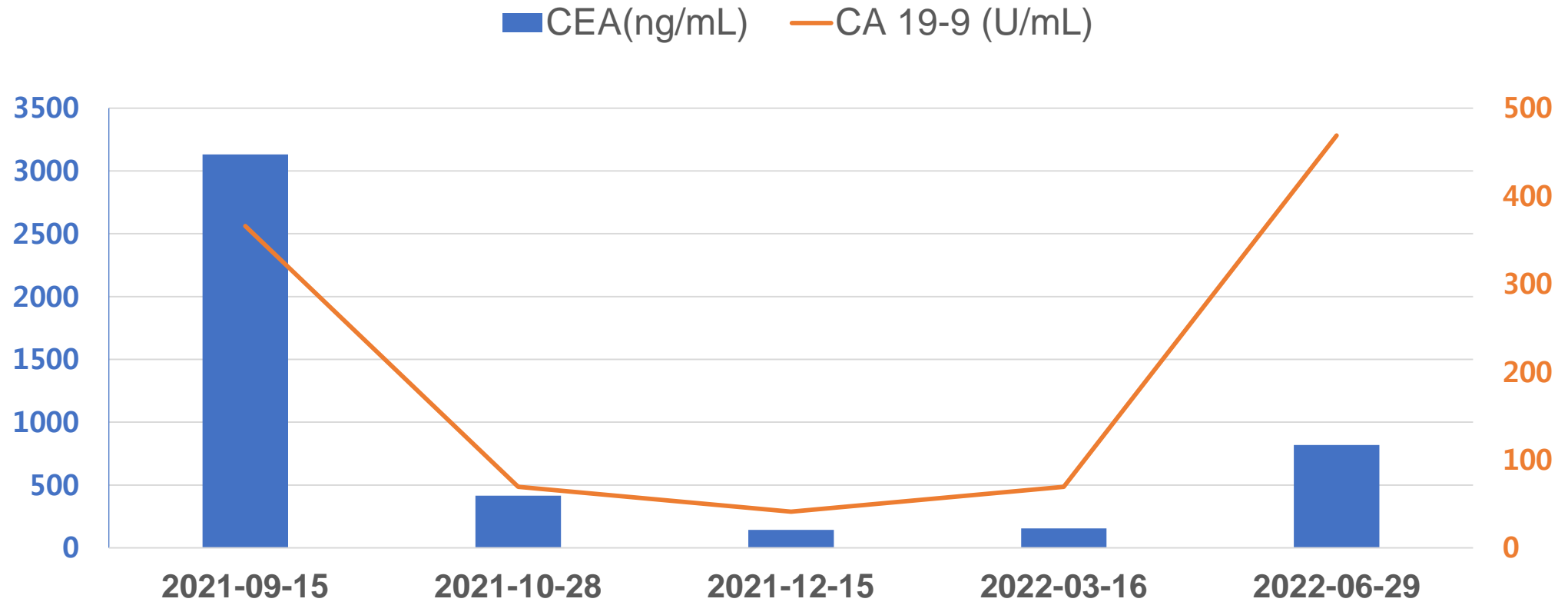


# APCT (2022.04.25)

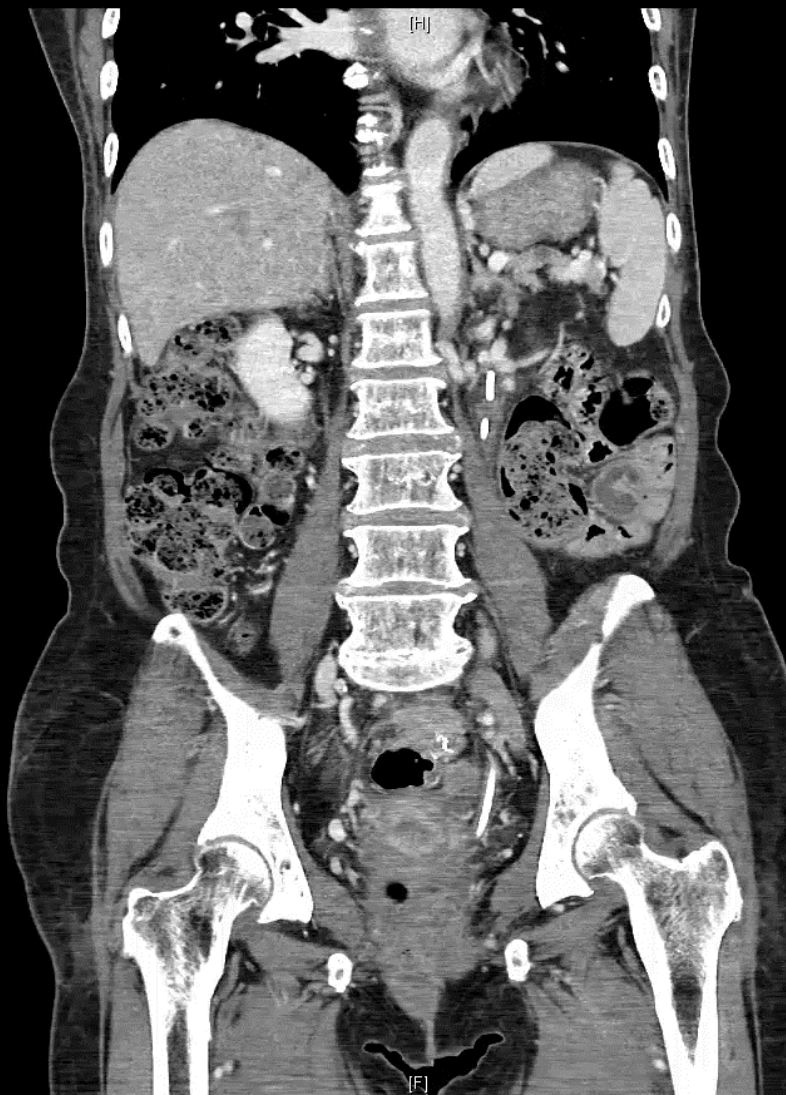


# Progress

- Tumor marker



**APCT (2022.04.25)**



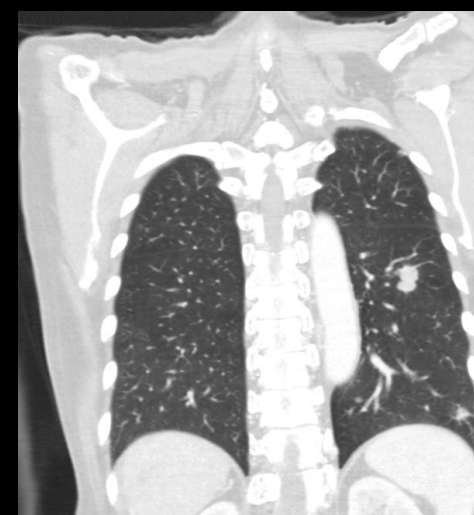
**APCT (2022.07.02)**



**Chest CT (2022.04.25)**



**Chest CT (2022.07.02)**





YONSEI UNIVERSITY  
COLLEGE OF MEDICINE

