



# 제75차 한국췌장외과학회 학술대회

일시 | 2024년 6월 22일(토) 08:30-17:10

장소 | 전북대학교병원 임상연구지원센터 새만금홀



한국췌장외과학회  
Korean Pancreas Surgery Club



## **SOUND REACH**

Ultrasound Surgical Equipment  
CSUS 8000 Generator and Shears



**Tissue Sense  
2.0**



**Up to 7mm  
Sealing**



**Compact New  
Design**



**Touch Screen  
Interface**

**Medtronic**

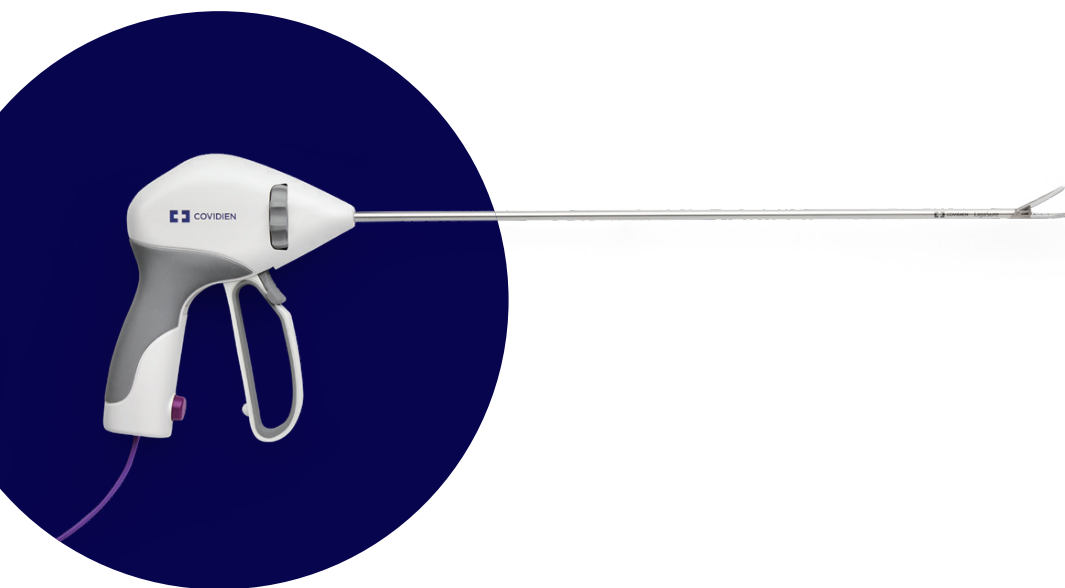
Less Sticking.<sup>1,‡</sup>

Easier Cleaning.<sup>1,§</sup>

Greater Efficiency.<sup>2,†</sup>

**Ligasure™ Maryland Jaw**

Laparoscopic Sealer / Divider



The reliable performance of Ligasure vessel-sealing technology,  
Now with non stick nano-coating on the jaws

# NEOVEIL

ABSORBABLE POLYGLYCOLIC ACID FELT **STERILE**



## 주성분

Polyglycolic acid  
(PGA)

## 사용목적

간, 폐, 기관지, 소화기 및 조직의 보수와 강화에 사용되는 흡수용 PGA 봉합 재료로  
약 15주 후에는 거의 다 흡수되며 안정한 봉합을 지지함

## 유효기간

제조일로부터 3년

## 포장단위

1 sheet / 1 box

## 규격 및 UDI 코드

M size(100x50x0,15mm) / 4548366322528  
L size(100x100x0,15mm) / 4548366322481

## 본인부담률

급여 상한가 대비 20%  
(등록 임환자 5%)





# 제75차 한국췌장외과학회 학술대회

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### PROGRAM

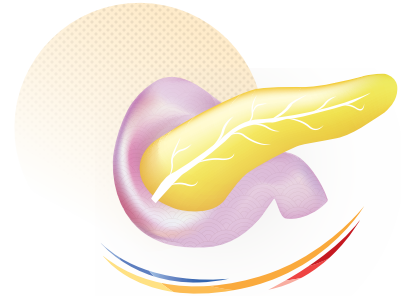
08:30-08:50	Registration		
08:50-09:00	Opening Remarks	장진영 (회장, 서울의대 외과)	
09:00-10:40	<b>Scientific Session 1. Still Ongoing Questions in Pancreas Cancer Treatment</b>	홍태호 (가톨릭의대 외과) 유영동 (고려의대 외과)	
09:00-09:20	Neoadjuvant chemotherapy for resectable pancreatic cancer - current status	김규표 (울산의대 종양내과)	/ 2
09:20-09:40	The resectability of pancreatic cancer after neoadjuvant treatment: a radiological perspective	한승철 (성균관의대 영상의학과)	/ 18
09:40-10:00	Histopathological tumor response scoring in resected pancreatic cancer following neoadjuvant therapy	이경분 (서울의대 병리과)	/ 21
10:00-10:20	Impact of surgical resection after preoperative chemotherapy for metastatic pancreatic cancer	황호경 (연세의대 외과)	/ 24
10:20-10:40	Discussion (Discussant 성민규, 정혜솔, 홍승수)		
10:40-10:50	<i>Coffee Break</i>		
10:50-11:20	<b>Special Lecture</b>	이현국 (이화의대 외과)	
10:50-11:10	Clinical utility of NGS panel in pancreato-biliary cancers	이성환 (차의대 외과)	/ 28
11:10-11:20	Discussion (Discussant 김나루, 김형선, 윤원건)		
11:20-12:00	<b>2024년도 한국췌장외과학회 임상 연구 지원 공모 및 결과 발표</b>	윤유석 (서울의대 외과) 한인웅 (성균관의대 외과)	
11:20-11:30	Role of adjuvant therapy in resected invasive intraductal papillary mucinous neoplasm of the pancreas after surgical resection: Korean multicenter study	최문석 (연세의대 외과)	/ 32
11:30-11:40	Analysis of the effects of probiotics intake on the microbiome of bile and feces in patients with chronic cholecystitis for the treatment of future biliary tract cancer; single center, single arm, prospective clinical trial	김석환 (충남의대 외과)	/ 35

11:40–11:50	Cost-effectiveness analysis of the revised International Association of Pancreatology (IAP) 2023 guidelines for the management of branch-duct intraductal papillary mucinous neoplasm	정혜술 (서울의대 외과)	/ 37
11:50–12:00	The Role of Intravenous Ferritin in Optimizing Postoperative Recovery Following Pancreaticoduodenectomy: A Multicenter, Randomized, Controlled Trial	박성은 (가톨릭의대 외과)	/ 39
12:00–12:45	<i>Lunch</i>		
12:45–13:00	<i>단체사진 촬영</i>		
13:00–13:50	<b>Video Session. Master's Secret Recipe for Solving Extremely Difficult Situation during Operating</b>	정치영 (경상의대 외과) 한성식 (국립암센터 외과)	
13:00–13:30	Surgical tips for advanced pancreatic cancer in open surgery	김송철 (울산의대 외과)	/ 42
13:30–13:50	Discussion (Discussant 변윤형, 정윤경, 조영수, 최문석)		
13:50–15:30	<b>Scientific Session 2. In - depth Exploration on the Cutting-edge Themes in HBP Surgery Week 2024</b>	문주익 (건양의대 외과) 이재훈 (울산의대 외과)	
13:50–14:10	Updated guidelines for pancreatic cyst surveillance	최새별 (고려의대 외과)	/ 46
14:10–14:30	Repeated pancreatectomy vs. chemotherapy for isolated local recurrence of pancreatic cancer in remnant pancreas	한인용 (성균관의대 외과)	/ 49
14:30–14:50	Borderline resectable bile duct cancer: chemotherapy first vs. surgery first	양석정 (차의대 외과)	/ 51
14:50–15:10	Fee for Hepatobiliary and pancreatic surgery in the National Health Insurance System	성민규 (울산의대 외과)	/ 53
15:10–15:30	Discussion (Discussant 손희주, 이미랑, 이보람, 최유진)		
15:30–15:40	<i>Coffee Break</i>		
15:40–17:00	<b>Champion's League: Case Presentation</b>	양재도 (전북의대 외과) 김희준 (전남의대 외과)	
15:40–15:55	If the Right hepatic artery has to be completely occluded after artery reconstruction for surgery of perihilar cholangiocarcinoma IIIb, what will happen next in remnant liver?	이재훈 (울산의대 외과)	/ 56
15:55–16:10	Incidental high-grade dysplasia of the cystic duct and margin involvement: Watch and wait or Extensive surgery	손희주 (중앙의대 외과)	/ 58
16:10–16:25	Pseudoaneurysm after pylorus-preserving PPPD, is there no other way?	유세현 (고려의대 외과)	/ 60
16:25–16:40	Diffuse bile duct cancer portal vein & proper hepatic artery invasion	이정우 (한림의대 외과)	/ 62
16:40–17:00	Discussion (Discussant 김성현, 이미린, 이승재, 이정민)		
17:00–17:10	Closing Remarks	장진영 (회장, 서울의대 외과)	

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# Scientific Session 1.

## Still Ongoing Questions in Pancreas Cancer Treatment



홍태호 (가톨릭의대 외과), 유영동 (고려의대 외과)



한국췌장외과학회

Korean Pancreas Surgery Club





## 김규표

Associate Professor, Department of Oncology, Asan Medical Center,  
University of Ulsan College of Medicine, Seoul, Korea

### • Brief Summary of Research Interests:

1. Translational and early phase cancer clinical trials
2. Precision medicine, Cancer genomics, Clinical data
3. PK/PD, Drug delivery, Exosomes

### • Education

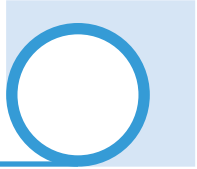
- 1993.03–1995.02 Pre-Medicine, College of Natural Sciences, Ulsan University, Ulsan, Korea  
1995.03–1999.02 M.D., College of Medicine, Ulsan University, Seoul, Korea  
2002.03–2004.02 Master of Science, College of Medicine, Ulsan University, Seoul, Korea  
2007.03–2010.02 Ph.D., Department of Clinical Pharmacology, College of Medicine,  
Seoul National University, Seoul, Korea

### • Graduate Training

- 1999.03–2000.02 Internship, Asan Medical Center, Seoul, Korea  
2000.03–2004.02 Residency, Internal Medicine, Asan Medical Center, Seoul, Korea  
2007.05–2009.02 Fellowship, Department of Clinical Pharmacology, Seoul National University Hospital,  
Seoul, Korea  
2009.03–2011.02 Fellowship, Oncology  
2011.03–2016.02 Assistant Professor, Oncology  
2016.03–2022.02 Associate Professor, Oncology  
2022.03– Professor, Oncology, Department of Internal Medicine, Asan Medical Center, Seoul,  
Korea

### • Professional Experience

- 2004.04–2005.03 Medical Director, Central Police Academy, Chungju-City, Chungbuk, Korea  
2005.04–2007.04 Researcher, Korea Health Industry Development Institute, Ministry of Health,  
Welfare, and Family Affairs, Seoul, Korea  
2014.07–2016.12 Visiting Scholar, University of Pittsburgh, Cancer Pharmacokinetics and  
Pharmacodynamics Core, Cancer Therapeutics Program



# Neoadjuvant Chemotherapy in Resectable Pancreatic Cancer

김규표 (울산의대 중앙내과)

Scientific Session 1. Still Ongoing Questions in Pancreas Cancer Treatment		홍태호 (가톨릭의대 외과) 유영동 (고려의대 외과)
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10:00-10:20	Impact of surgical resection after preoperative chemotherapy for metastatic pancreatic cancer (Discussant 성민규, 이정민, 정해술, 홍승수)	황호경 (연세의대 외과)
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Special Lecture		이현국 (이화의대 외과)
10:30-11:00	Clinical utility of NGS panel in pancreato-biliary cancers Discussion (Discussant 김나루, 김형선, 윤원건)	이성환 (차의대 외과)

## Breast cancer



- William S. Halsted
- Halsted radical mastectomy
- Breast cancer arose in one location and spread to nearby lymph nodes and then throughout the body
- So, removal of breast, chest wall muscle, and lymph nodes was the logical treatment.

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## Breast cancer



- **Bernard Fisher** - alternative hypothesis
- **“Breast cancer is a systemic disease in that, tumor cells were likely to have been disseminated throughout the body by the time of diagnosis and that more expansive locoregional therapy was unlikely to improve survival”**
- In 1967, chairman of NSABP

4

**Fisher hypothesis :**

“Breast cancer is considered a systemic disease at time of diagnosis, a condition requiring treatment of the entire patient rather than just the source organ”

 Check for updates

**Breast cancer is a systemic disease optimally treated by a multidisciplinary team**

Harbeck N Nat Rev Dis Primers. 2020 Apr 23

*Nadia Harbeck*

Summarizing a vast body of literature without losing meaningful information is a huge task, but the field — and patients — can benefit from these projects.

5

**Pancreatic cancer: local vs systemic**

- Local disease: surgery, radiation, carbon ion therapy
- Systemic disease: chemotherapy, immunotherapy
  
- Who requires local/systemic therapy?
- Which modality? How long?
- How aggressive?

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## Pancreatic Cancer: Neoadjuvant Therapy?

- Tumor shrinkage: size, vessel invasion
- Micrometastatic disease
- Tumor biology and response to therapy
- Cleaner surgical margins
- Optimal patient selection: resectable, borderline

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## Pancreatic Cancer: Neoadjuvant Therapy?

- Gross examination: pancreatoduodectomy specimen
- Lab/Radiologic evaluation: CA19-9, CT, MR, PET
- Pathologic evaluation: regression grade
- Neoadjuvant therapy: which modality? how long?
- Adjuvant therapy: how much more?

8



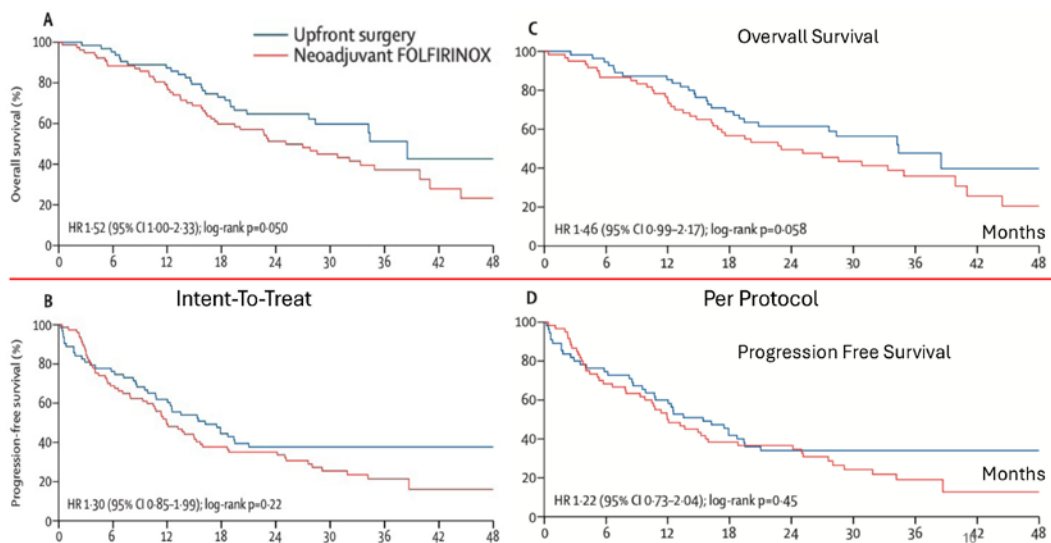
## NorPACT-1 (Nordic Pancreatic Cancer Trial-1)

Labori KJ et al. Neoadjuvant chemotherapy versus surgery first for resectable pancreatic cancer (Norwegian Pancreatic Cancer Trial - 1 (NorPACT-1)) - study protocol for a national multicentre randomized controlled trial. *BMC Surg.* 2017 Aug 25

Labori KJ et al. Neoadjuvant FOLFIRINOX versus upfront surgery for resectable pancreatic head cancer (NORPACT-1): a multicentre, randomised, phase 2 trial. *Lancet Gastroenterol Hepatol.* 2024 Mar

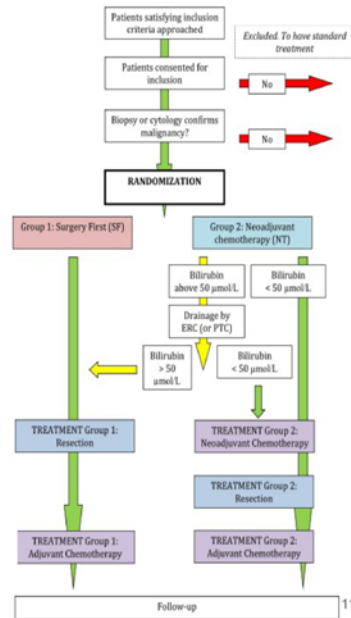
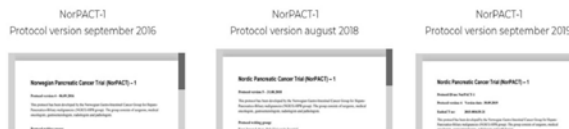
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## NorPACT-1 (Nordic Pancreatic Cancer Trial-1)



## NorPACT-1 (Nordic Pancreatic Cancer Trial-1)

- 2017 Norway (5); 2019 Sweden (5);  
2020 Denmark (1) Finland (1)
- Primary endpoint:  
overall mortality at 1 year

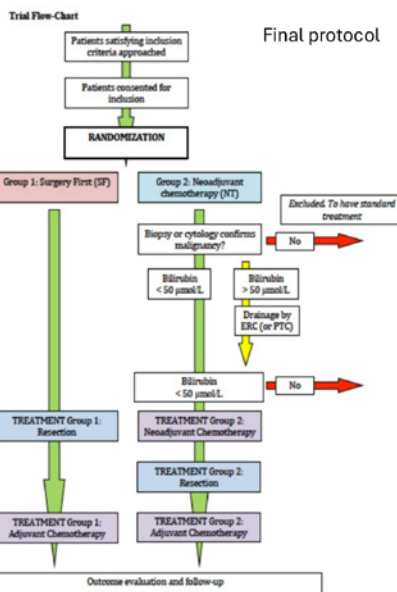


### Neoadjuvant therapy

- FOLFIRINOX 4 cycles

### Adjuvant therapy

- mFOLFIRINOX 8 cycles
- Gemcitabine-Capecitabine
- Gemcitabine



## Learning from NorPACT-1

- No role for 4 cycles of neoadjuvant FOLFIRINOX?
  - Neoadjuvant issues?
  - Surgery issues?
  - Adjuvant issues?
- Diagnosing pancreatic cancer in the neoadjuvant setting
- Quality control between multiple institutes

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Springfield C et al. Nat Rev Clin Oncol. 2023 May

## Neoadjuvant Issues

Regimen	Study phase	Number of patients	Tumour stage	Response rate (%)	Progressive disease (%)	Comments
<b>Chemotherapy</b>						
Gemcitabine <sup>32,38</sup>	III	171	IV	9.4	34.5	Used in CONKO-007 (ref. <sup>14</sup> )
	III	430	IV	7	26	
Gemcitabine plus capecitabine <sup>39</sup>	III	267	III/IV	19.1	15.7	Used in ESPAC-5F <sup>17</sup>
Gemcitabine plus nab-paclitaxel <sup>38</sup>	III	431	IV	23	20	Used in NEONAX <sup>15</sup> , SWOG S1505 (ref. <sup>27</sup> ), NEOLAP <sup>26</sup>
FOLFIRINOX <sup>37</sup>	III	171	IV	31.6	15.2	Used in ESPAC-5F, NEOLAP <sup>26</sup> , CONKO-007 (ref. <sup>14</sup> )
Cisplatin plus gemcitabine <sup>40</sup>	II	23	III/IV	65.2	21.7	Limited to patients with germline BRCA1/2 or PALB2 mutations
<b>Chemoradiotherapy</b>						
SCALOP (capecitabine)	II	35	III	23	14	50.4Gy in 28 fractions, used in ESPAC-5F
SCALOP (gemcitabine) <sup>41</sup>	II	36	III	19	14	

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## Resectability: Anatomy, Biology, Condition (ABC)

Type of definition	Anatomical	Biological	Conditional
<b>R</b> Resectable	R-Type A	No: R-Type A	No: R-Type A
		Yes: BR-Type B	Yes: BR-Type C
<b>BR</b> Borderline resectable	BR-Type A	No: BR-Type A	No: BR-Type A
		Yes: BR-Type AB	Yes: BR-Type AC
<b>Locally advanced: LA</b>	LA-Type A	No: LA-Type A	No: LA-Type A
		Yes: LA- Type AB	Yes: LA-Type AC

**Biological definition:**

- CA 19-9 more than 500 IU/ml
- Regional lymph node metastasis (biopsy or PET-CT)

**Conditional host-related definition:** • Depressed performance status (PS: 2 or more)

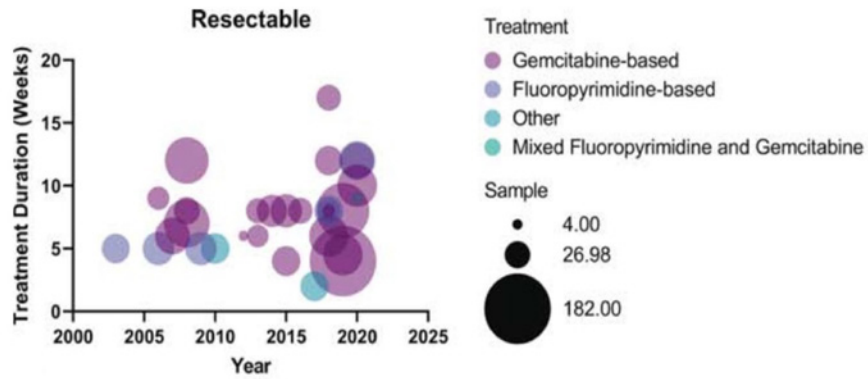
S. Isaji et al. Pancreatology 18 (2018) 2-11

## Evaluating Perioperative Therapy (Anatomy/Condition)

- When: is there a magical number? cycles vs months
- Tolerability and risk of progression/resistance
- How: imaging after neoadjuvant therapy
  - RECIST (Response Evaluation Criteria in Solid Tumours)
  - CT vs MR vs PET

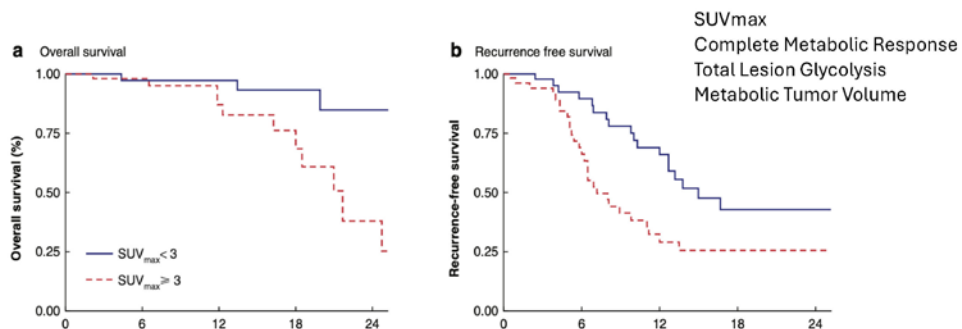
## Duration

Puleo A, Malla M, Boone BA. Defining the Optimal Duration of Neoadjuvant Therapy for Pancreatic Ductal Adenocarcinoma: Time for a Personalized Approach? *Pancreas*. 2022 Oct



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## Metabolic Activity by FDG-PET after Neoadj chemoTx in Borderline Resectable/Locally Advanced Pancreatic Cancer



Lee W, Oh M, Kim SC et al. *Br J Surg*. 2021 Dec 17

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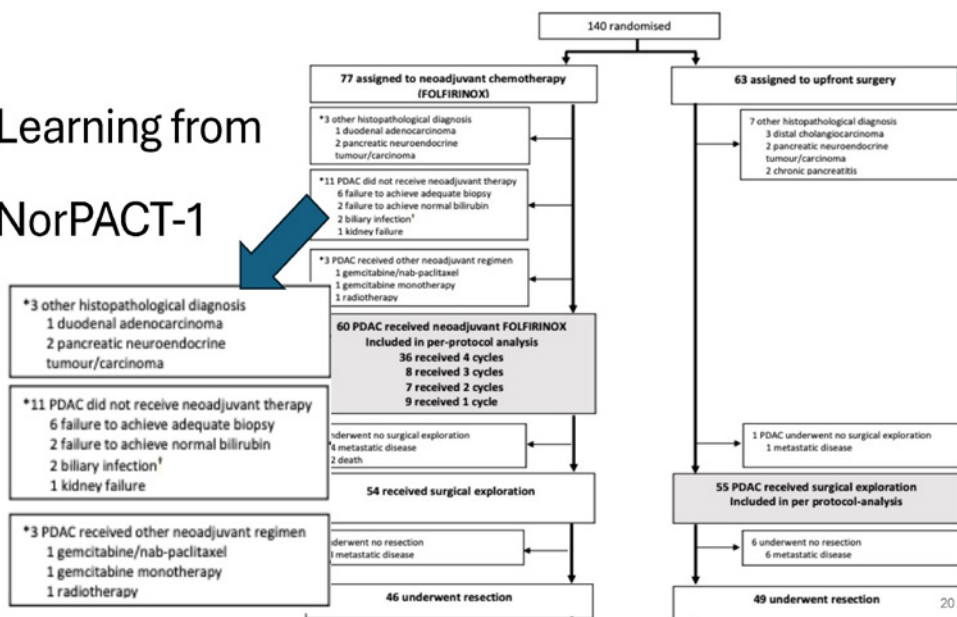


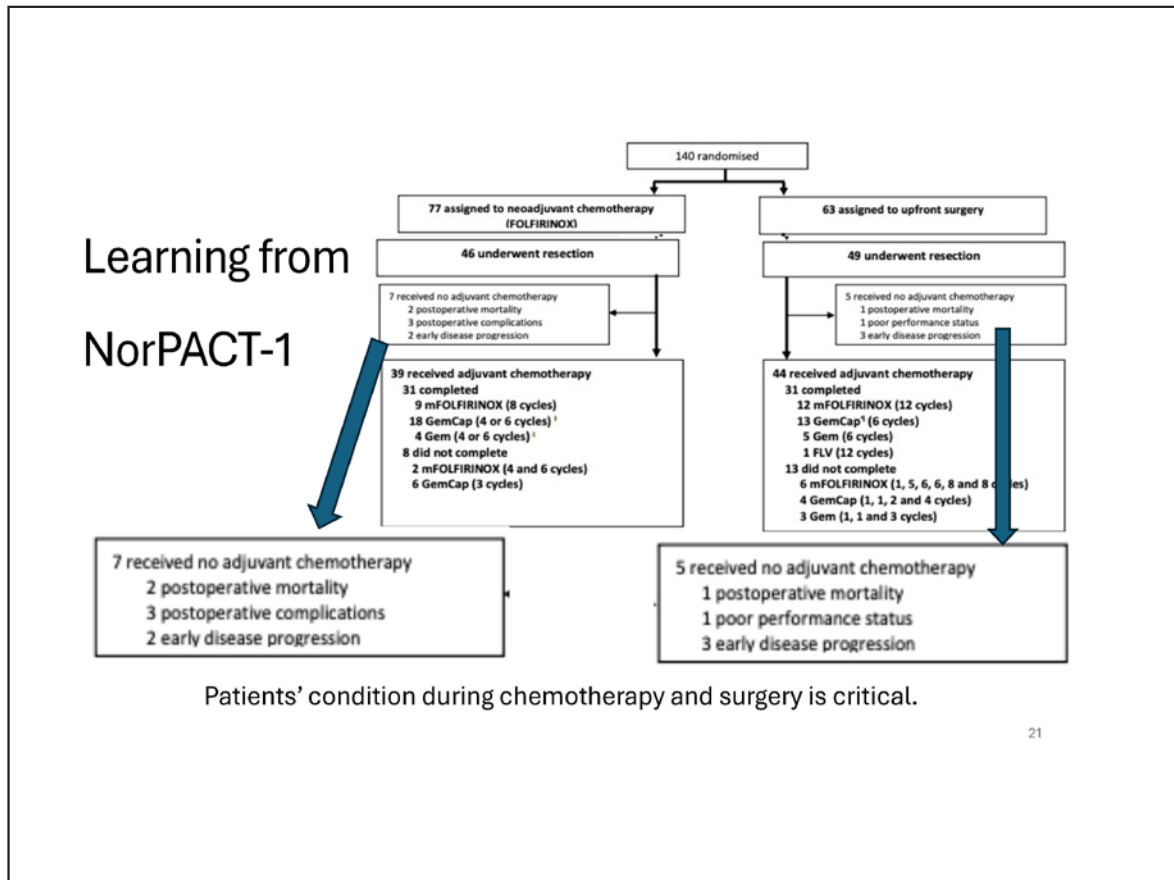
## Evaluating Perioperative Therapy (Anatomy/Condition)

- Perioperative issues: complication rates at 90 days after surgery (assessed with the Clavien–Dindo and International Study Group on Pancreatic Surgery classification systems)
- Starting adjuvant therapy: adverse events, dose reductions, delays
- Quality of life and rehabilitation
- Intent-to-treat, Per-protocol

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### Learning from NorPACT-1





### Evaluating Perioperative Therapy (Biology)

- CA 19-9: ELISA, CLIA, RIA, ECLIA
- circulating tumor DNA (ctDNA)
  - next generation sequencing (NGS)
  - droplet digital PCR (ddPCR)
- Circulating tumor cell (CTC)
- Exosome

Interpretation between various modalities/methods

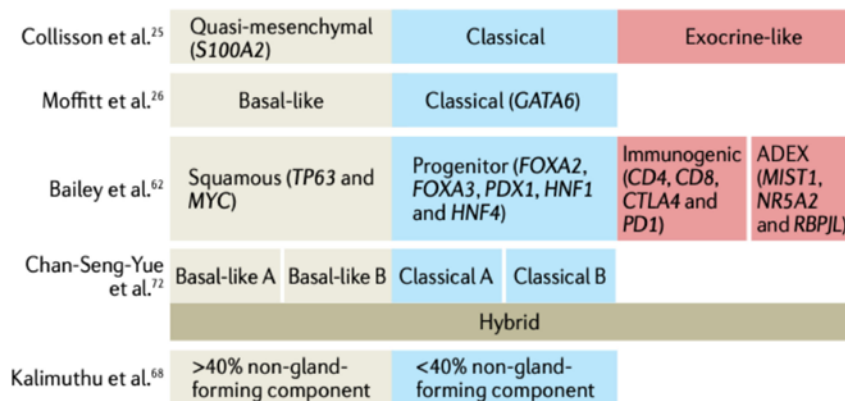
22

## Translational Research: Tissue is the Issue

- Adequate tissue: Surgery, Biopsy
  - Multidisciplinary collaboration : surgery, pathology, radiology, medicine
  - Additionally molecular biology, bioinformatics, immunology ...
- The list grows on and on...
- Cancer subtype (classical/basal-like, squamous, immunogenic)
  - Whole genome sequencing (ctDNA, RNA vaccines)

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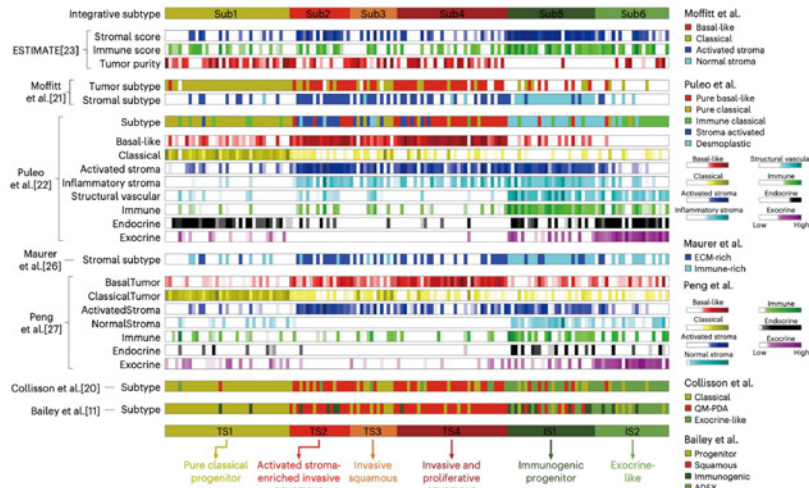
## Subtypes may help guide Tx strategies



Connor AA, Gallinger S. Pancreatic cancer evolution and heterogeneity: integrating omics and clinical data. Nat Rev Cancer. 2022 Mar;22(3)

24

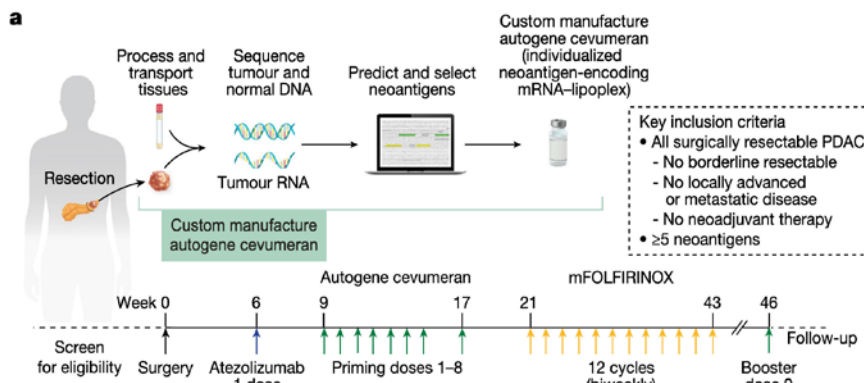
## Subtypes may help guide Tx strategies



Hyeon DY et al. Proteogenomic landscape of human pancreatic ductal adenocarcinoma in an Asian population reveals tumor cell-enriched and immune-rich subtypes. Nat Cancer. 2023 Feb;4(2)

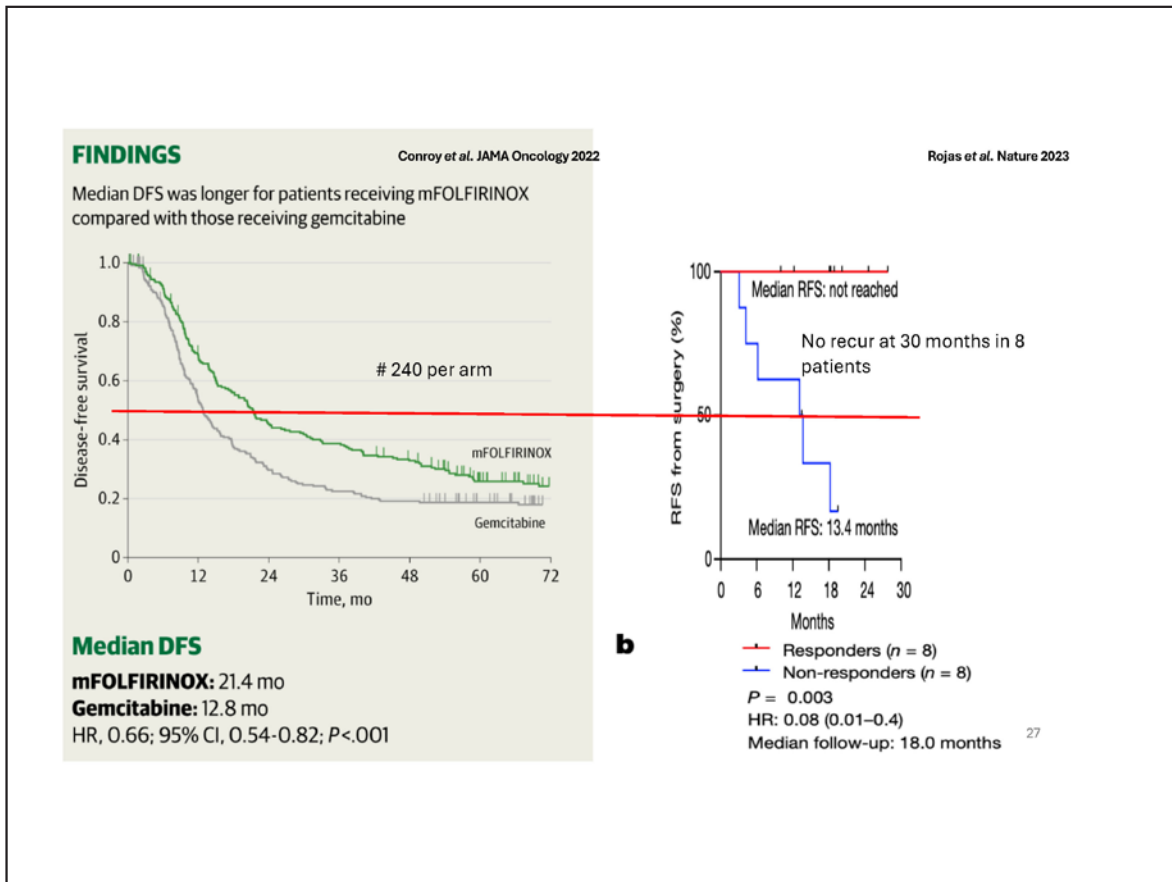
25

## Phase 1 trial of Autogene Cevumeran in Resectable Pancreatic Cancer



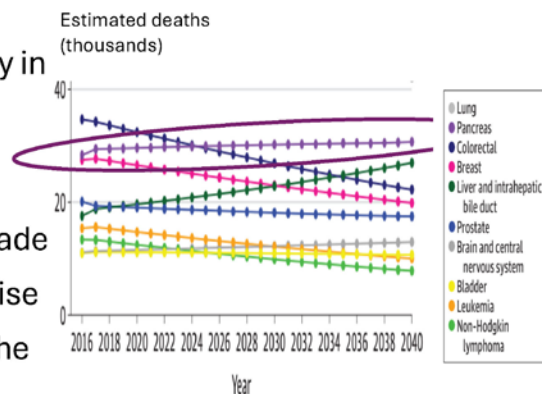
Rojas LA, Sethna Z, Soares KC et al Nature. 2023 Jun;618(7963):144-150

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## Conclusion

- The optimal perioperative therapy in pancreatic cancer is still under investigation.
- Multi-disciplinary efforts have made this approach feasible and promise better outcomes for patients in the near future.





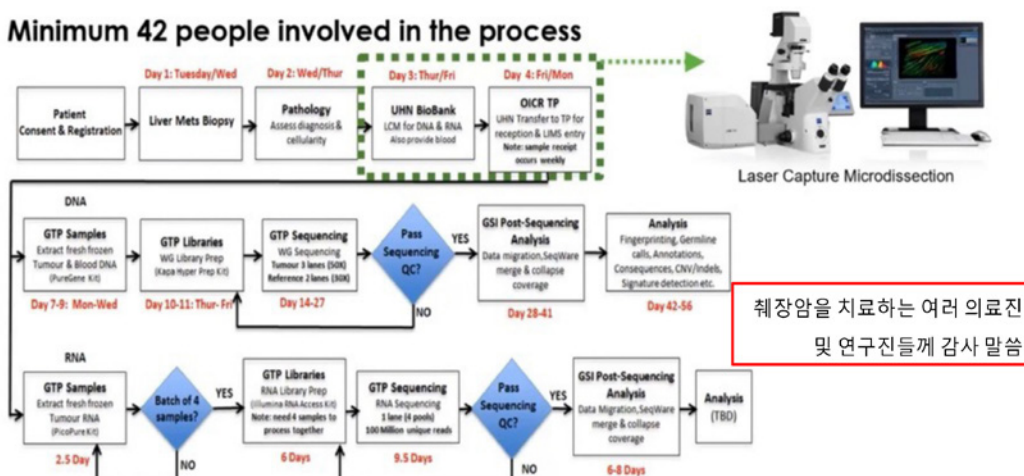
## Pancreatic cancer: local vs systemic

- Local disease: surgery, radiation, carbon ion therapy
- Systemic disease: chemotherapy, immunotherapy
- Who requires local/systemic therapy?
- Which modality? How long?
- How aggressive?

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**It takes a village** Collaborate, Translate, Change lives

Minimum 42 people involved in the process



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**Seungchul Han**

Assistant Professor, Department of Radiology, Samsung Medical Center

**• Education**

**Graduate**

2006.03–2012.02 Graduate School, College of Medicine – M.D., Seoul National University

2017.03–2019.08 Graduate School, College of Medicine – M.S., Seoul National University

**Postgraduate**

2012.03–2013.02 Rotating Internship, Seoul National University Hospital, Seoul

2016.03–2020.02 Radiology Residency, Seoul National University Hospital, Seoul

2020.03–2021.02 Radiology Fellowship, Seoul National University Hospital, Seoul

**Specialty Boards**

2020.03 Korean Board of Radiology (#4085)

**• Academic & Professional Appointments**

2021.03–2022.02 Full-time Lecturer of Radiology, Seoul National University Hospital

2022.03– Assistant professor, Samsung medical center

**• Membership**

**National**

2016– Korean Radiological Society

2016– Korean Society of Medical Ultrasound

2020– Korean Society of abdominal radiology

**International**

2020– European Society of Radiology

**• Awards**

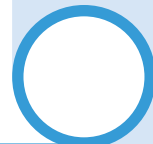
Top 20 presenter award in 2020 ESGAR

**• Other Activities**

Organizing Committee of KSUM 2023

Organizing Committee of AFSUMB 2024

Academic Committee Deputy Secretary of Korean Liver Cancer Association (2023)



# The resectability of pancreatic cancer after neoadjuvant treatment: a radiological perspective

한승철 (성균관대의대 영상의학과)

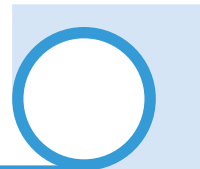
Neoadjuvant chemotherapy has become a pivotal intervention in the management of borderline resectable pancreatic cancer (BRPC), significantly enhancing resectability and improving patient prognosis. Despite these advancements, several challenges remain, necessitating a multidisciplinary approach to optimize outcomes. BRPC is defined by criteria from various guidelines, including those from the NCCN, Alliance, and MD Anderson, primarily based on the tumor's relationship with surrounding vessels. Accurate assessment of tumor response to neoadjuvant chemotherapy is critical for guiding surgical decision-making.

This session will focus on conventional and advanced imaging modalities used in evaluating BRPC response to neoadjuvant chemotherapy. The primary modality will be multiphase contrast-enhanced CT, which serves as the cornerstone for assessing changes in tumor size, vascular involvement, and potential metastases. However, a significant challenge for radiologists is differentiating between post-treatment fibrotic, inflammatory changes and residual tumor and in this matter, CT possesses crucial limitations in evaluating the tumor viability. Therefore, we will explore the crucial roles of MRI and PET-CT/MR in the post-treatment evaluation of BRPC. Diffusion weighted imaging in MRI and PET-CT/MR's capability to detect metabolic changes may offer specific advantages in characterizing tumor response and detecting subtle changes post-treatment, which are crucial for accurate assessment.

This session will also address experimental techniques to enhance diagnostic accuracy, including perfusion CT, molecular imaging and radiomics. While these approaches are still experimental, they hold considerable promise. Perfusion imaging and molecular imaging can provide detailed information about the microvascular and molecular environment, offering insights beyond conventional imaging. Radiomics, on the other hand, can analyze quantitative imaging features that are not visible to the naked eye. These advanced methods have the potential to provide more precise

characterization of tumor response.

In conclusion, this session will discuss the pivotal role of radiologic imaging in the management of BRPC following neoadjuvant chemotherapy. Detailed and accurate imaging evaluations are essential for optimizing treatment strategies and improving patient outcomes within a multidisciplinary framework. By enhancing radiologists' proficiency in interpreting imaging findings, this session aims to contribute to more effective clinical decision-making and better overall management of BRPC.



## 이경분

서울대학교 의과대학 병리학교실

### • 학력사항

1996-2002 서울대학교 의과대학 졸업  
 2004-2008 서울대학교 의과대학 박사 졸업

### • 경력사항

2002-2003 서울대학교병원 인턴  
 2003-2007 서울대학교 병원 병리과 전공의  
 2007-2008 강북삼성병원 병리과 전임의  
 2009-2022 서울대학교 병원 진료/임상교수  
 2022-현재 서울대학교 의과대학 병리학교실 부교수

### • 진료 분야

간담체 병리, 신장 병리 및 골연부 조직 병리

### • 연구 분야

- 전암성 병변의 분자유전학적 및 형태학적 진단 기준 연구 : dysplastic nodule in liver, pancreatic intraepithelial neoplasm in pancreas, intraductal papillary mucinous neoplasm in pancreas
- 염증성 질환의 병리학적 평가 기준의 정량화 연구: graft liver biopsy
- 디지털 병리의 구축 및 임상 활용성 평가



# Histopathologic tumor response scoring in resected pancreatic cancer following neoadjuvant therapy

이경분 (서울의대 병리과)

Tumor response evaluation of treated pancreatic cancer has three main issues: evaluation protocol of residual tumor, histologic change of tumor bed, and grading system of residual tumor.

## 1. Evaluation protocol of residual tumor

Pancreatic ductal adenocarcinoma is the most common histologic type, with prominent desmoplastic stroma and an infiltrative growth pattern. The gross estimation of pancreatic cancer is not correlated with the microscopic evaluation of cancer cells on tumor size and viable tumor burden. The current College of American Pathologists (CAP) cancer protocol recommends microscopically validated tumor size and systemic tumor mapping across the largest possible tumor/tumor bed.

## 2. Histologic change of tumor and tumor bed

Chemoradiotherapy induces degeneration or necrosis of viable cells, including nontumor and tumor cells, and fibrotic change on tumor stroma and vascular tissue. Estimation of the tumor bed, which is originally the tumor area, is based on the fibrotic stroma but cannot be exactly delineated with treatment-induced fibrosis and original tumor stroma. Cellular responsiveness of tumor cells is presumed by hyperchromatic pleomorphic nuclear change of residual tumor cells. Reactive fibroblasts, enlarged endothelial cells, wall thickening of vessels, foamy histiocytes of aggregates or edematous change of stroma, and acellular mucin suggest tissue response of treatment. Residual tumor size is the maximum linear dimension holding the whole residual tumor. Residual tumor burden means

### 3. Grading system of residual tumor

The grading system is basically a residual tumor burden on the tumor bed. Five or more grading systems have been published since 1988. They are a three- or four-tiered system. Evans, CAP, and MD Anderson systems are representative systems in which several studies on reproducibility and clinical implication or prognostic significance are reported. The cutoff of each score is slightly different among systems; less than <10% (Evans), less than 5%(MD Anderson), single or rare small group of cancer cells (CAP) groups, or no residual tumor have a better prognosis than the others, which means only microscopically identifiable residual tumors have survival gains. Interobserver concordance was reported to be 0.14 to 0.79, very wide. It results from semiquantitative scoring method. There is one quantitative evaluation system, multiplying tumor cellularity and the largest dimension of the tumor, but it is not evaluated in a multicenter.



### Ho Kyoung Hwang

Professor, Division of Hepato-Bilio-Pancreas surgery,  
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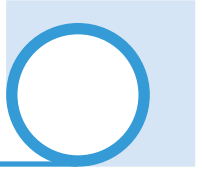
#### • Education

- 1994.03–2000.02 Medical School, Yonsei University Wonju College of Medicine, Wonju, Korea,  
Bachelor of Medicine, M.D.
- 2008.09–2014.08 Postgraduate School, The Graduate School,  
Yonsei University (Master course), Seoul, Korea
- 2015.03–2018.08 Postgraduate School, The Graduate School,  
Yonsei University (Ph.D. course), Seoul, Korea

#### • Training & Employment

- 2001.03–2005.02 Residency, Department of Surgery, Severance Hospital  
Yonsei University college of medicine
- 2005.03–2008.04 Military Service : Chief of department of surgery,  
Department of Surgery, Migrant Worker's Hospital
- 2008.05–2010.02 Fellowship, Division of HBP surgery, Department of surgery, Gangnam Severance  
Hospital, Yonsei University college of medicine
- 2010.03–2014.02 Clinical assistant professor, Division of HBP surgery  
Department of surgery, Severance Hospital, Yonsei University College of Medicine
- 2016.08–2017.08 Visiting scholar, Department of Surgery  
University of California San Diego, USA
- 2014.02–2019.02 Assistant Professor, Division of HBP surgery  
Department of surgery, Severance Hospital, Yonsei University College of Medicine
- 2019.03–2024.02 Associate Professor, Division of HBP surgery  
Department of surgery, Severance Hospital, Yonsei University College of Medicine
- 2024.03–present Professor, Division of HBP surgery  
Department of surgery, Severance Hospital, Yonsei University College of Medicine





## Impact of surgical resection after preoperative chemotherapy for metastatic pancreatic cancer

황호경 (연세의대 외과)

제75차  
한국척장외과학회 학술대회



**제75차  
한국췌장외과학회 학술대회**



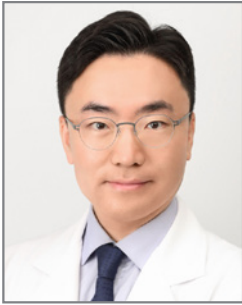
# Special Lecture



**이현국 (이화의대 외과)**



**한국췌장외과학회**  
Korean Pancreas Surgery Club



## Sung Hwan Lee

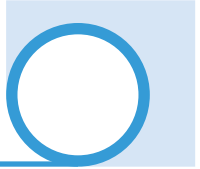
Associate Professor / Vice Director, Department of Surgery / Advanced OMICs Research Center, CHA Bundang Medical Center, CHA University / CHA Future Medicine Research Institution

### • Education Background

- 1997–2005 M.D., Yonsei University Wonju College of Medicine, Wonju, Korea
- 2009–2017 M.S.–Ph.D., Yonsei College of Medicine, Seoul, Korea (Integrated Ph.D. program)

### • Professional Experience

- 2005–2006 Internship, Wonju Christian Hospital, Wonju, Korea
- 2006–2010 Residency, Severance Hospital, Seoul, Korea
- 2010–2013 Public Health Doctor, Migrant Worker’s Hospital, Seoul, Korea
- 2013–2015 Clinical Fellow, Department of HBP surgery, Severance Hospital, Seoul, Korea
- 2015–2017 Research Fellow, Department of Pathology, Yonsei University College of Medicine
- 2017–2019 Postdoctoral Fellow, Department of Systems Biology, University of Texas MD Anderson Cancer Center, USA
- 2019–2021 Assistant Professor, Department of Surgery, CHA University School of Medicine, Seongnam, Korea
- 2022–Present Associate Professor, Department of Surgery, CHA University School of Medicine, Seongnam, Korea



## Clinical utility of NGS panel in pancreato-biliary cancer

이성환 (차의대 외과)

Tumor heterogeneity and complexity are well-known causes of therapeutic resistance and poor prognosis in pancreato-biliary cancer. Emerging technology using NGS panel sequencing has recently become popular, with reimbursement from national health insurance in the clinical practice of solid cancer to get helpful information for personalized molecular target therapy. This technology allows us to decipher molecular characteristics that can be actionable with precision strategy and tumor biology. The formalin-fixed paraffin-embedded (FFPE) blocks from biopsy or surgical tissue, the principal repository form of clinical tumor samples, can be utilized to apply the NGS panel sequencing to guide molecular classifications. Recent advances in this platform enable precision medicine, especially in the medical oncology field. This presentation will introduce and discuss the NGS panel technology focusing on clinical usability in pancreaticobiliary cancer. This technology warrants translational research by HBP surgical oncologists for clinically relevant molecular deciphering with clinical samples in the era of precision surgical oncology.

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# 2024년도 한국췌장외과학회 임상 연구 지원 공모 및 결과 발표



윤유석 (서울의대 외과)  
한인웅 (성균관대의대 외과)



한국췌장외과학회  
Korean Pancreas Surgery Club



**Munseok Choi**

Clinical assistant professor, Division of Hepato-Biliary-Pancreatic Surgery.  
Department of Surgery, Yongin Severance Hospital.  
Yonsei University, College of Medicine, Yongin-si, Korea

**• Education**

2003.03.01–2009.02.28 Keimyung University College of Medicine, Daegu, Korea  
2019.03.01–present Doctoral Degree, Graduate School, Yonsei University

**• Work Experience**

2010.04.25–2013.04.25 Mandatory military service as army surgeon  
2014.03.01–2015.02.28 Internship, Yonsei University Health System, Seoul, Korea  
2015.03.01–2019.02.28 Residentsip, Department of Surgery, Severance Hospital,  
Yonsei University College of Medicine  
2019.03.01–2021.02.28 Clinical Fellowship, Division of Hepato-Biliary-Pancreatic Surgery  
Department of Surgery, Severance Hospital, Yonsei University College of Medicine  
2021.03.01–2022.02.28 Contract Doctor, Department of Surgery, Yongin Severance Hospital,  
Yonsei University College of Medicine  
2022. 3. 1– Clinical Assistant Professor, Department of Surgery, Yongin Severance Hospital,  
Yonsei University College of Medicine

**• RESEARCH INTERESTS**

Hepato-biliary-pancreatic science  
Minimally invasive pancreatic surgery  
Surgical treatment for primary and metastatic liver cancer

**• Professional Organization**

2015– Member, The Korean Surgical Society  
2019– Member, The Korean Association of Hepato-Biliary-Pancreatic Surgery  
2023– Educational committee, The Korean Society of Endo-Laparoscopic & Robotic Surgery  
2023– Academic committee, The Korean Association of Hepato-Biliary-Pancreatic Surgery  
2024– Secretary General, The Korean Study Group on Minimally Invasive Pancreatic Surgery





# Impact of Adjuvant Therapy on Resected Invasive Intraductal Papillary Mucinous Neoplasm of the Pancreas : an Korean multicenter cohort Study

최문석 (연세의대 외과)

Munseok Choi, M.D.; In W. Han, M.D. Ph.D.; Wooil Kwon, M.D. Ph.D.; Joon Seong Park, M.D. Ph.D.; Hyung Sun Kim, M.D.; Seok Jeong Yang, M.D.; Seung Eun Lee, M.D., Ph.D.; Hyung-Il Seo, M.D., Ph.D.; Myunghee Yoon, M.D., Ph.D.; Seungjae Lee, M.D., Ph.D.; Min Su Park, M.D., Ph.D.; Yoo-Seok Yoon, M.D., Ph.D.; Sung-Sik Han, M.D., Ph.D.; Huisong Lee, M.D., Ph.D.; Jae Do Yang, M.D., Ph.D.; Jun Chul Jung M.D., Ph.D.; Jin Ho Lee, M.D.; Dong Do You M.D., Ph.D.; Keun Soo Ahn M.D., Ph.D.; Koo Jeong Kang M.D., Ph.D.; Woohyung Lee, MD, Ph.D.; Jin-Young Jang, M.D., Ph.D.; Song-Cheol Kim, M.D., Ph.D., Chang Moo Kang, M.D., Ph.D. Korean Pancreas Surgery Club

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<sup>2</sup>Department of Surgery, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea

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<sup>4</sup>Department of Surgery, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Korea

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<sup>8</sup>Department of Surgery, Konyang University Hospital, Daejeon, Korea

<sup>9</sup>Department of Surgery, School of Medicine, Kyung Hee University, Seoul, Republic of Korea

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<sup>11</sup>Center for Liver and Pancreatobiliary Cancer, National Cancer Center, Goyang, Republic of Korea.

<sup>12</sup>Department of Surgery, Ewha Womans University College of Medicine, Seoul, Korea.

<sup>13</sup>Department of Surgery, Jeonbuk National University Medical School and Hospital, Jeonju, Republic of Korea

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<sup>17</sup>Department of Surgery, Keimyung University Dongsan Hospital, Keimyung University School of Medicine, Daegu, Republic of Korea

<sup>18</sup>Department of Surgery, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

<sup>19</sup>Department of Surgery, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea

**Background:** Adjuvant therapy (AT) has demonstrated survival benefits in patients with pancreatic ductal adenocarcinoma (PDAC). However, the oncologic efficacy of AT in resected invasive

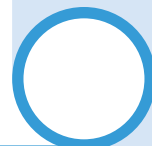
intraductal papillary mucinous neoplasms (IPMN) remains unclear, and there are no established guidelines in this context. This study aimed to investigate the potential role of AT in patients with resected invasive IPMN.

**Materials and Methods:** A retrospective analysis was conducted on 618 patients with invasive pancreatic IPMN treated between 2005 and 2020 across 18 centers in Korea. Propensity score-matched and stage-matched survival analyses were performed.

**Results:** After exclusions, 539 patients were included in the study. In a 1:1 propensity score-matched analysis with covariates, 354 patients were enrolled. Multivariate analysis identified perineural invasion (hazard ratio [HR], 2.589; 95% confidence interval [CI], 1.528-4.385,  $p < 0.001$ ) and CA 19-9  $> 37$  (HR, 2.589; 95% CI, 1.528-4.385,  $p < 0.001$ ) as adverse prognostic factors in resected invasive IPMN. In the overall cohort, there were no significant differences in disease-free survival (DFS) and overall survival (OS) between the surgery alone (SA) group and AT group ( $p = 0.882$ ,  $p = 0.080$ ). Likewise, in the stage-matched analysis, no significant differences in OS were observed between the SA and AT groups (stage I,  $p = 0.621$ ; stage II,  $p = 0.662$ , stage III,  $p = 0.571$ ). While DFS was improved in the stage I group with SA group ( $p = 0.020$ ), this benefit was not observed in other stages (stage II,  $p = 0.452$ , stage III,  $p = 0.492$ ). Subgroup analysis by perineural invasion and CA 19-9  $> 37$  status did not show a survival benefit with AT (PNI+,  $p = 0.568$ ; CA 19-9  $> 37$ ,  $p = 0.703$ ).

**Conclusion:** Unlike in PDAC, the current AT strategy may not be recommended for resected invasive IPMN. Further investigations are warranted to elucidate the potential role of AT in invasive IPMN.

**Keywords:** pancreatic IPMN, pancreas cancer, adjuvant therapy, invasive IPMN, multicenter study



## 김석환

Assistant Professor,  
Liver Transplantation and Hepatobiliary Surgery  
Chungnam National University Hospital

### • Educational Background

2006	Doctor of Medicine Chungnam National University School of Medicine
2009	M.S. in Medicine Chungnam National University Graduate School
2017	Ph.D. in Medicine Ulsan University Graduate School

### • Professional Experiences

2014–2017	Clinical Instructor, Ulsan University College of Medicine, Asan Medical Center
2018–2022	Assistant Professor Chungnam National University School of Medicine
2023–Present	Associate Professor Chungnam National University School of Medicine
2023–Present	Vice dean for Research Chungnam National University School of Medicine

### • Professional Organizations

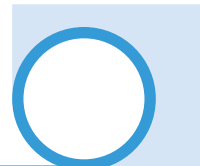
2023–Present	Director of the informatics board, Korean Society for Transplantation
2023–Present	Vice Secretary General, Korean Association of HBP Surgery
2022–Present	Clinical Trial Committee, Korean Society of Surgical Oncology
2021–Present	Research Committee, Korean Association of HBP Surgery
2021–Present	Education Committee, Korean Association of HBP Surgery
2021–Present	Scientific program and research Committee, Korean Society for Transplantation
2021–Present	Insurance Committee, Korean Society for Transplantation
2021–2023	Liaison Committee, Korean Association of HBP Surgery
2021–2023	Research Committee, Korean Liver Transplantation Society
2020–2022	Editorial Committee, Korean Society of Surgical Metabolism and Nutrition



Analysis of the effects of probiotics intake on the microbiome of bile and feces in patients with chronic cholecystitis for the treatment of future biliary tract cancer; single center, single arm, prospective clinical trial

김석환 (충남의대 외과)

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## Hye-Sol Jung

Division of HBP Surgery, Department of Surgery,  
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Seoul National University Hospital, Seoul, Korea

### • Education

2008–2014 J.D., Seoul National University College of Law  
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2021– Ph.D., Seoul National University College of Medicine

### • Experience and Training

2012.03–2014.02 Judicial Research and Training Institute  
2017.01.04–01.27 Clinical Training Program  
Osaka Medical Center and Research Institute for Maternal and Child Health

#### Internships and Residencies

2018.03–2019.02 Internship, Severance Hospital, Seoul, Korea.  
2019.03–2022.02 Residency in Department of Surgery, Seoul National University Hospital, Seoul, Korea.  
2022.03– Fellowship in Division of HBP Surgery, Department of Surgery  
Seoul National University Hospital, Seoul, Korea.

#### Faculty

2024.03– Assistant professor, Seoul National University Hospital, Seoul, Korea.

### • Awards

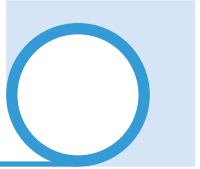
2019–2021 Department of Surgery, Seoul National University Hospital  
Top honors of the Surgical Residency Program  
2021 HBP Surgery Week, KHBPS (Korean Association of Hepato-biliary-pancreatic Surgery)  
Best Poster Presentation Award  
2021 A-PHPBA 2021 Bali - Virtual Congress, 4th Favorite of E-Video Session  
2022 Seoul National University College of Medicine  
The SNU Medicine Graduate Student Best Paper Award (Clinical Medicine) – First Place –  
2022 ACRLS 2022 (Asian-Pacific Congress of Robotic Laparoscopic Surgery 2022)  
Best Presentation Award  
2023 HBP Surgery Week, KHBPS (Korean Association of Hepato-biliary-pancreatic Surgery)  
Best Oral Presentation Award  
2023 The 75th Annual Congress of Korean Surgical Society  
The Korean Society of Endo-Laparoscopic & Robotic Surgery  
The Best Mentor-Mentee Video Award  
2023 The Annual Congress of the Korean Surgical Society, Best Investigator Award  
2023 The 74th Congress of the Korean Pancreas Surgery Club  
(The 1st Korean Pancreas Surgery Club and Japanese Society of Pancreatic Surgery  
Joint Symposium), Best of the Best Presentation Award  
2024 HBP Surgery Week, KHBPS (Korean Association of Hepato-biliary-pancreatic Surgery),  
Presidential Award



Cost-effectiveness analysis of the revised  
International Association of Pancreatology (IAP) 2023  
guidelines for the management of branch-duct  
intraductal papillary mucinous neoplasm

정혜솔 (서울의대 외과)

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**박성은**

가톨릭의대 외과 임상진료조교수

• **학력**

- 2006-2010 가톨릭대학교 화학 학사
- 2010-2014 인하대학교 의학 석사



The Role of Intravenous Ferritin in Optimizing Postoperative Recovery Following Pancreaticoduodenectomy: A Multicenter, Randomized, Controlled Trial

박성은 (가톨릭의대 외과)

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제75차  
한국췌장외과학회 학술대회



Video Session.

Master's Secret Recipe for Solving  
Extremely Difficult Situation during  
Operating



정치영 (경상의대 외과)  
한성식 (국립암센터 외과)



한국췌장외과학회  
Korean Pancreas Surgery Club



## 김송철

서울아산병원 외과

### • 학력 사항

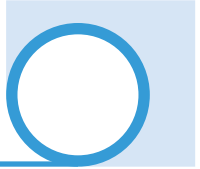
- 1987.02            서울대학교 의과대학 학사
- 1995.02            서울대학교 의과대학 석사
- 1999.02            서울대학교 의과대학 박사
- 2021.08            미국 미네소타 의대, 박사 후 과정, 연구교수
- 2002.02            미국 마이애미 대학, Diabetes Research Center 연수

### • 경력 사항

- 1995.02            서울대학교 병원 외과 수련의, 전공의
- 1999.04-현재      울산대학교 서울 아산 병원 조교수, 부교수, 교수
- 2014.04            한국 췌장 외과 학회 회장
- 2019.03            한국 최소 침습 췌장 수술 학회, 회장 (초대 회장)
- 2020.03- 현재    대한 암학회 재무이사, 상임이사

### • 수상 사항

- 2000.05            대한 이식학회 학술상
- 2017.12            울산의대 올해의 연구 교수상
- 2022.03            한국 간담췌 학회 우수 논문상
- 2022.04            서울시 의사회 유한 의학상 (우수상)



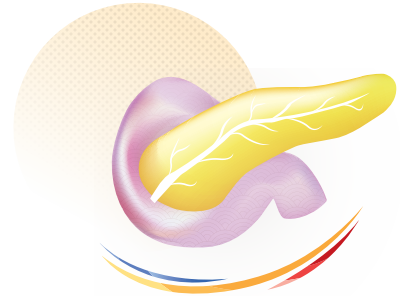
## Surgical tips for advanced pancreatic cancer in open surgery

김송철 (울산의대 외과)

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제75차  
한국췌장외과학회 학술대회



Scientific Session 2.  
In – depth Exploration on  
the Cutting–edge Themes in HBP  
Surgery Week 2024



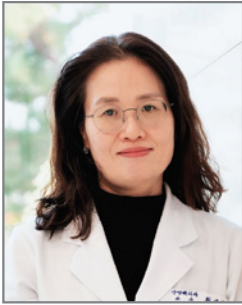
문주익 (건양의대 외과)

이재훈 (울산의대 외과)



한국췌장외과학회

Korean Pancreas Surgery Club



**Sae Byeol Choi**

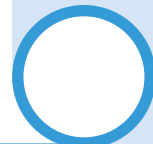
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**• Educational Background**

- 1996.03–2002.02 Medical Doctor, College of Medicine, Korea University
- 2003.09–2006.02 Master’s degree, Undergraduate school, General surgery, College of Medicine, Korea University
- 2006.03–2008.08 Doctor’s degree, Graduate school, General surgery, College of Medicine, Korea University

**• Professional Experiences**

- 2002.03–2003.02 Internship, Korea University Medical Center
- 2003.03–2007.02 Resident, Department of Surgery, Korea University Medical Center
- 2007.03–2009.02 Clinical Instructor, Division of Hepatobiliary pancreas Surgery, Yonsei University College of Medicine, Severance Hospital, Seoul
- 2009.03–2012.08 Clinical Instructor, Division of Hepatobiliary Pancreas Surgery and Transplant Korea University Guro Hospital, Seoul
- 2011.03–2011.06 New York Memorial Sloan Kettering Cancer Center
- 2011.07–2011.09 Kurume University, Japan
- 2011.10–2011.12 Nagoya University, Japan
- 2012.09–2016.02 Assistant professor Division of Hepatobiliary Pancreas Surgery Korea University College of Medicine, Korea University Guro Hospital, Seoul
- 2016.03–2021.02 Associate professor Division of Hepatobiliary Pancreas Surgery Korea University College of Medicine, Korea University Guro Hospital, Seoul
- 2021.03–current Professor Division of Hepatobiliary Pancreas Surgery Korea University College of Medicine, Korea University Guro Hospital, Seoul



# Updated guidelines for pancreatic cyst surveillance

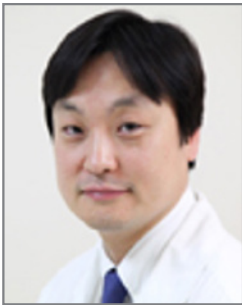
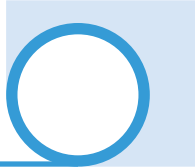
최세별 (고려의대 외과)

The prevalence of undefined pancreatic cystic neoplasms (PCNs) is high in the general population, increasing with patient age. PCNs account for different biological entities with different potential for malignant transformation. The 2018 American College of Gastroenterology (ACG), and the 2018 European Study Group on Cystic tumours of the Pancreas (European) guidelines, 2017 International Association of Pancreatology (IAP), differ in their recommendations on the management of pancreas cyst. Because of the heterogeneity of pancreas cyst, it is very challenging for clinicians to balance their practice between the risk of surgical overtreatment and the tragic error of keeping a malignant lesion under surveillance. Recently International Association of Pancreatology (IAP) have reported the revised version of pancreas cyst guideline March 2023. And the guideline was revised as a result of systematic review, and published separately to provide evidence-based recommendations. For pancreas cyst surveillance, a surveillance interval of 18, 12, and 6 months for branch duct IPMN (BD-IPMN) measuring  $< 20\text{mm}$ ,  $\geq 20\text{mm}$  and  $< 30\text{mm}$ , and  $\geq 30\text{mm}$  respectively, following an initial short-term (6 months) follow-up is recommended. Surveillance may be discontinued for patients with cysts  $< 20\text{mm}$  showing no morphological changes and no worrisome feature after 5-years of surveillance, with consideration of patient condition and life expectancy. The recommendations for discontinuation of surveillance may not be applicable to younger patients with BD-IPMN and in those with familial or genetic risk as the risk of pancreatic cancer appears to be cumulative over time. And postoperative surveillance after resection of non-invasive IPMN is necessary; yearly imaging surveillance for patients without additional risk factors. And for patients with a family history of pancreatic cancer or HGD(initial pathology), we recommend imaging surveillance every 6 months.

## References

1. Tanaka M, Fernández-Del Castillo C, Kamisawa T, et. Al: Revisions of international consensus Fukuoka guidelines for the management of IPMN of the pancreas. *Pancreatology* 2017;17:738-753
2. Ohtsuka T, Fernandez-Del Castillo C, Furukawa T, Hijioka S, Jang JY, Lennon AM, Miyasaka Y, Ohno E, Salvia R, Wolfgang CL, Wood LD. International evidence-based Kyoto guidelines for the management of intraductal papillary mucinous neoplasm of the pancreas *Pancreatology* 2024 Mar;24(2):255-270.
3. M. Del Chiaro, C. Verbeke, R. Salvia, et al. European experts consensus statement on cystic tumours of the pancreas *Dig Liver Dis*
4. Elta GH, Enestvedt BK, Sauer BG, Lennon AM. ACG Clinical Guideline: Diagnosis and Management of Pancreatic Cysts. *Am J Gastroenterol.* 2018 Apr;113(4):464-479.





## 한인웅

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1996.03-2002.02 서울대학교 의과대학 의학과 학사  
 2010.09-2012.08 서울대학교 의과대학 외과학 석사  
 2013.03-2017.08 서울대학교 의과대학 외과학 박사

### • 경력

2003-2007 서울대학교 병원 외과 전공의  
 2010-2012 서울대학교 병원 외과 전임의  
 2012-2016.08 동국대학교 의과대학 일산병원 외과 조교수  
 2016.09-2018.02 삼성서울병원 외과 조교수  
 2019.09-2020.08 UCSD Moores Cancer Center 방문교수  
 2018.03-2024.02 성균관대의대 삼성서울병원 부교수  
 2021.04-현재 삼성서울병원 외과 간담췌외과 분과장  
 2024.03-현재 성균관대의대 삼성서울병원 교수

### • 수상경력

2011 대한외과학회 Young investigator award 최우수상  
 2015 한국간담췌외과학회 학술상 (Best poster presentation award)  
 2016 한국간담췌외과학회 학술상 (Best oral presentation award)  
 2018 미국경정맥영양학회 (ASPEN) 학술상 (Best of ASPEN AWARD-GI)  
 2018 대한외과대사영양학회 학술상 대상  
 2019 한국간담췌외과학회 학술상 (Best of best presentation award)  
 2024 SIDDS 학술상 (Best poster presentation award)

### • 국내외 학회/대외활동

2009-현재 대한외과학회 평생회원  
 2010-현재 한국간담췌외과학회 평생회원  
 2013-현재 대한내시경복강경외과학회 평생회원  
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 2014-현재 대한암학회 평생회원  
 2015-현재 세계간담췌외과학회(IHPBA), 아시아태평양간담췌외과학회 (APHPBA) 정회원  
 2018-현재 미국췌장학회(Pancreas Club) 평생회원



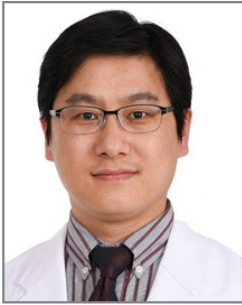
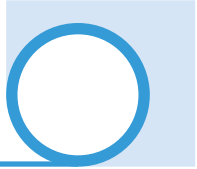
# Repeated pancreatectomy for isolated local recurrence of pancreatic cancer in remnant pancreas: *Favoring chemotherapy*

한인웅 (성균관대의대 외과)

Basic principle of initial metastasis or recurrence after primary curative treatment for most of solid organ malignancy is to perform systemic treatment such as chemotherapy, immunotherapy, or clinical trials rather than local treatment. This is because we have no way of knowing whether this is the only site of metastasis or whether there may be others elsewhere because of presence of systemic micro-metastasis at the time of recurrence.

Although the basic treatment principle for recurrence after primary curative treatment for solid organ malignancy is systemic treatment, in some cases, local treatment may be effective for even recurrence and metastasis. Metastasis-directed therapy, which is a local treatment aimed at eradicating specific metastatic lesions, can be effective in certain malignant diseases such as colorectal cancer, non-small cell lung cancer, and prostate cancer. These metastasis-directed treatments have been driven by advances in diagnostic and therapeutic modalities as well as many options for maintenance therapy with systemic chemotherapy, hormonal therapy, or immunotherapy.

If so, how about pancreatic cancer? In this session today, I would like to explain the role of chemotherapy for isolated local recurrence of pancreatic cancer in remnant pancreas.



## 양석정

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2003	전북대학교 의과대학 졸
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2014-2015	신촌세브란스병원 간담췌외과 임상강사
2016-2018	울산대학교병원 외과 임상조교수
2018-2019	에이치플러스 양지병원 외과 과장
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2020-2021.08	용인세브란스병원 이식혈관중환자외과 임상부교수
2021.08-현재	분당차병원 간담췌/이식외과 임상부교수



# Borderline resectable bile duct cancer: chemotherapy first vs. surgery first

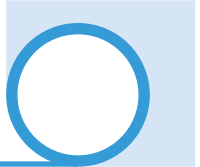
양석정 (차의대 외과)

Cholangiocarcinoma(CCA) is the one of the deadly GI malignancy without the improvement of prognosis, eventhough recent medical achievement.

Up to date, the only curative management to this disease is surgical resection with clear margins (R0) with adjuvant capecitabine chemotherapy, but 5 year survival is ranging from 23-44%.

Recently, some large scale retrospective reports showed longer overall survival with neoadjuvant therapy in CCA when compared to upfront resection(Yadav, et al. Neoadjuvant vs. adjuvant chemotherapy for cholangiocarcinoma: A propensity score matched analysis. Eur J Surg Oncol. 2019;45(8):1432-1438. / Parente A, et al Neoadjuvant Chemotherapy for Intrahepatic, Perihilar, and Distal Cholangiocarcinoma: a National Population-Based Comparative Cohort Study. J Gastrointest Surg. 2023 Apr;27(4):741-749.) Moreover, one prospective study(Neo-GAP) for neoadjuvant chemotherapy for intrahepatic cholagniocarcioma was reported recently and my institution have been applied Gemza/Cisplatin/Nab-paclitaxel triple chemotherapay for high risk bile duct cancer patient before surgery, same as Neo-Gap study.

So, I would like share my experiences and outcomes of neoadjuvant Gemza/Cisplatin/Nab-paclitaxel triple chemotherapy for bile duct cancer with literature reviews.



## 성민규

서울아산병원 간담도췌외과

### • 학력사항

- 2006.03-2012.02 건양대학교 의학 학사
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- 2021.03- 울산대학교 의학 박사과정

### • 경력사항

- 2013.03-2017.02 서울아산병원 외과 전공의
- 2020.05-2023.02 서울아산병원 간담도췌외과 임상강사
- 2023.03- 서울아산병원 간담도췌외과 촉탁임상조교수



## Scientific Session 2.

In - depth Exploration on the Cutting-edge Themes in HBP Surgery Week 2024

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# Fee for Hepatobiliary and pancreatic surgery in the National Health Insurance System

성민규 (울산의대 외과)

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제75차  
한국췌장외과학회 학술대회



# Champion's League: Case Presentation



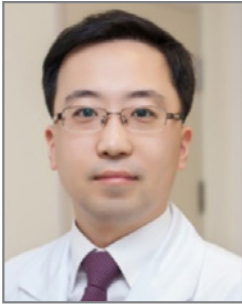
양재도 (전북의대 외과)

김희준 (전남의대 외과)



한국췌장외과학회

Korean Pancreas Surgery Club



**Jae Hoon Lee**

Hepato-biliary & Pancreatic Surgery  
Asan Medical Center & Univ. of Ulsan College of Medicine, Korea

**• Education**

- 2007.09–2010.08 Ph.D., College of Medicine, Hanyang University, Seoul, Korea
- 1995.03–2001.02 College of Medicine, Hanyang University, Seoul, Korea

**• Professional Qualifications**

**Training**

- 2010.03–2012.02 Fellowship, Surgery, Asan Medical Center, Seoul, Korea
- 2009.03–2010.02 Fellowship, Surgery, Hanyang University Hospital, Seoul, Korea
- 2001.03–2006.02 Internship/Resident, Hanyang University Hospital, Seoul, Korea

**Positioning**

- 2012.03–2016.02 Clinical Assistant Professor, Division of Hepatobiliary & Pancreatic Surgery, Asan Medical Center, Korea
- 2016.03–2016.05 Robotic HBP center, UPMC (Univ. of Pittsburgh Medical center, USA)
- 2017.03–2022.02 Clinical Associate Professor, Division of Hepatobiliary & Pancreatic Surgery, Asan Medical Center, Korea
- 2022.03–present Professor, Division of Hepatobiliary & Pancreatic Surgery, Asan Medical Center, Univ. of Ulsan College of Medicine, Korea

**• Social activities**

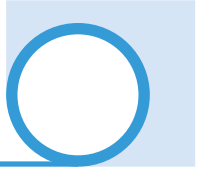
**Present**

- Director of Public Relation committee, KAHBPS (Korean association of Hepato-biliary-pancreatic surgery)
- Director of educational committee, KSERS (Korean Society of Endo-Laparoscopic & Robotic Surgery)
- Director of educational committee, KPSC (Korean Pancreas Surgery Club)

**Past**

- Director of educational committee, KAHBPS 2021.3 - 2023.2
- Vice President, KAROS (Korean Association of Robotic Surgeons) 2021.5 - 2023.5





If the Right hepatic artery has to be completely occluded after artery reconstruction for surgery of perihilar cholangiocarcinoma IIIb, what will happen next in remnant liver?

이재훈 (울산의대 외과)



**손희주**

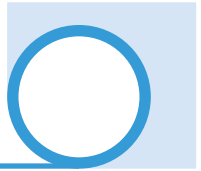
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• **학력**

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- 2014.03-2017.02 중앙대학교 의과대학 외과학 석사
- 2017.03-2024.02 중앙대학교 의과대학 외과학 박사

• **경력**

- 2012.03-2013.02 중앙대학교병원, 인턴
- 2013.03-2017.02 중앙대학교병원 외과, 레지던트
- 2017.02-2020.04 대한민국 해군, 해군 군의관
- 2020.05-2022.02 서울대학교병원 간담체외과 임상강사
- 2022.03-현재 중앙대학교 광명병원 외과 조교수



## Incidental high-grade dysplasia of the cystic duct and margin involvement: Watch and wait or Extensive surgery

손희주 (중앙의대 외과)

High grade dysplasia (HGD) of the cystic duct margin without evidence of concurrent malignancy is a rare finding, often discovered unexpectedly during cholecystectomy. Obtaining a negative margin in cases of high-grade dysplasia is ideal; however, this is often not achievable in clinical practice. I would like to introduce a case who underwent cholecystectomy for acute cholecystitis, and the final pathology revealed HGD of the cystic duct. The lesion measured 6mm and showed evidence of margin involvement. Surgical treatment was recommended, but the patient refused and was followed up as an outpatient. Three years later, a CT scan suggested a newly detected enhancing lesion in the distal common bile duct. Consequently, surgical treatment in the form of PPPD was performed, and the final pathology confirmed cancer. The cancer showed a continuous progression of HGD along the cystic duct. This case aims to review existing studies and examine treatment strategies.



## Sehyeon Yu

Division of HBP Surgery & Liver Transplantation,  
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### • Education

- 2015.03–2019.02 Kanwon National University, Chuncheon, Korea  
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- 2022.03–present Korea University Graduate School, Seoul, Korea  
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### • Residencies/Fellowships

- 2019.03–2020.02 Internship, Seoul Medical Center  
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- 2023.03–present Clinical Fellowship, Division of HBP Surgery & Liver Transplantation  
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### • Academic Appointments

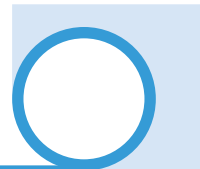
- 2023.03–present Clinical Instructor  
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### • Memberships & Activity in Honorary/Professional Societies

- Member of the Korean Medical Association
- Member of the Korean Surgical Society
- Member of Korean Association of HBP Surgery

### • Licensure/Certificate

- 2019–Present Korean Medical Licensure (# 133775)
- 2023–Present Korean Board of Surgery (# 8643)



## Pseudoaneurysm after pylorus-preserving PPPD, is there no other way?

유세현 (고려의대 외과)

Among the complications that occur after pylorus-preserving pancreaticoduodenectomy (PPPD), pseudoaneurysm is a very emergency and important event that determines the life or death of a patient. We would like to introduce a case of pseudoaneurysm that we experienced and ask what kind of management is best after the procedure in such a case. A 62-year-old man was in postoperative care after undergoing PPPD for common bile duct cancer. The surgery was performed with robot-assisted PPPD, with no special events. On postoperative day 7, a pseudoaneurysm accompanied by active bleeding was confirmed in the proper hepatic artery, and hepatic artery embolization could not be avoided. After about 3 months of intensive care, he eventually died from liver failure. We would like to find out what other efforts can be made to solve problems such as coagulation disorders and infections that occur as liver failure progresses after hepatic artery embolization, and further improve the patient's prognosis.



### Jung Woo Lee

Chief of Hepatobiliary & Pancreatic Surgery Center, Clinical Associate Professor  
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#### • Education

- 1998.03–2005.02 College of Medicine, Korea University, Seoul, Korea
- 2009.03–2016.02 The Graduate School of Medicine, University of Ulsan, Korea

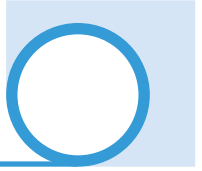
#### • Professional Qualifications

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- 2013.03–2015.02 Fellowship, Surgery, Asan Medical Center, Seoul, Korea
- 2006.03–2010.02 Resident, Surgery, Asan Medical Center, Seoul, Korea
- 2005.03–2006.02 Internship, Surgery, Asan Medical Center, Seoul, Korea

##### Degree and Qualification

- 2010.02 Board of Surgery (No.6441), granted by Ministry of Health and Social Affairs, Republic of Korea
- 2005.02 M.D.(No. 87257), granted by Ministry of Health and Social Affairs, Republic of Korea



## Diffuse bile duct cancer portal vein & proper hepatic artery invasion

이정우 (한림의대 외과)



## 제75차 한국척장외과학회

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발행일 · 2024년 6월 22일

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# Baxter

**Tisseel**  
FIBRIN SEALANT

**Floseal**  
HEMOSTATIC MATRIX

**Hemopatch**  
SEALING HEMOSTAT

**PerClot**  
POLYSACCHARIDE  
HEMOSTATIC SYSTEM

