TOS summit

winter session

Date

October 18, 2020(Sunday)

Venue

張榮發
會議中心八樓
801會議室
803會議室

Program Book

主辦單位：中華民國癌症醫學會

贊助單位：台灣小野藥品工業股份有限公司、羅氏大藥廠股份有限公司、臺灣阿斯特捷利康股份有限公司、
台灣拜耳股份有限公司、美商默沙東藥廠股份有限公司、台灣安進藥品有限公司、台灣中外製藥股份有限公司、
台灣諾華股份有限公司、台灣禮來股份有限公司、輝瑞生醫股份有限公司、台灣百靈佳殷格翰股份有限公司、
台灣第一三共股份有限公司、法商益普生股份有限公司台灣分公司、台灣愛思唯爾有限公司

TOS summit

winter session

Date
October 18, 2020(Sunday)

Venue
張榮發
會議中心八樓
801會議室
803會議室

October 18, 2020 (Sunday) 801 會議室

Time	Topic	Speaker	Moderator
08:30~09:00	Registration		
09:00~09:50	董大成博士癌症基礎醫學研究傑出獎頒獎暨演講 得獎人：潘敏雄教授	潘敏雄教授 臺灣大學	董光世董事長 財團法人董大成醫學研究基金會 陳立宗理事長 中華民國癌症醫學會
09:50~10:00	癌症醫學終身成就獎頒獎 得獎人：陳博明教授		
10:00~10:30	The Evolving Therapeutic Landscape for HR+, HER2- Early Breast Cancer Speaker: Hope Rugo Professor, Department of Medicine (Hematology/Oncology); and Director, Breast Oncology and Clinical Trials Education, University of California San Francisco	盧彥伸教授 臺大醫院 腫瘤醫學部	
10:30~10:50	Break		
10:50~11:20	New Strategy and Evidence for Front-line TKI Treatment in Advanced EGFR-mutant NSCLC	吳教恩醫師 林口長庚腫瘤科	張文震主任 林口長庚免疫腫瘤學卓越中心
11:20~11:50	Frontline Immunotherapy Treatment Options in mNSCLC, what we can know from 5-yr KEYNOTE-024 data?	楊志新院長 臺大癌醫中心醫院	賴俊良副院長 大林慈濟醫院
11:50~12:20	What's optimal sequencing treatment for ALK NSCLC patients? - From a Taiwan clinician's perspective	李日翔主任 新竹臺大醫院腫瘤醫學中心	楊志新院長 臺大癌醫中心醫院
12:20~13:00	Lunch		
13:00~13:30	New strategy for front-line treatment: multiple IO Combo regimens in advanced NSCLC	李岡遠醫師 雙和醫院 胸腔內科	陳育民教授 臺北榮民總醫院胸腔部
13:30~14:00	The update treatment of HER2 - metastatic breast cancer :Focus on Target therapy	劉峻宇 主任 臺北榮民總醫院內科部輸血醫學科	林季宏 醫師 臺大醫院腫瘤醫學部 / 臺大癌醫中心醫院腫瘤內科部
14:00~14:30	Raise the bar higher: evolving treatment landscape in neoadjuvant TNBC with immunotherapy	戴明樂主任 三軍總醫院血液腫瘤科	俞志誠教授 三軍總醫院 一般外科
14:30~14:40	Break		
14:40~15:10	The role of PIK3CA mutation and PI3K inhibitor in HR+ HER2- advanced breast cancer	陳偉武 醫師 臺大醫院 腫瘤醫學部	趙祖怡副院長 台北癌症中心
15:10~15:40	Footprints in DDR driven cancers- now and future	劉建廷醫師 高雄長庚 血液腫瘤科	饒坤銘副院長 義大癌治療醫院

October 18, 2020 (Sunday) 803 會議室

Time	Topic	Speaker	Moderator
10:50~11:00	年輕研究者癌症研究傑出論文獎頒獎 得獎人：李杰醫師、許家齊博士		陳立宗理事長 中華民國癌症醫學會
11:00~11:50	年輕研究者癌症研究傑出獎頒獎暨演講 得獎人：李健逢醫師	李健逢醫師 奇美醫院	
13:00~13:30	Updated ESMO Guidelines: Bone health in cancer – focus on Breast cancer	沈雯琪醫師 林口長庚 腫瘤科	趙祖怡副院長 台北癌症中心
13:30~14:00	Targeting Actionable KRAS Mutation in NSCLC	蔡俊明教授 臺北榮總腫瘤醫學部教授級教職特約醫師	蘇五洲教授 成大醫院內科部 / 腫瘤醫學部
14:00~14:30	Updates of driver gene targeted agents in non small cell lung cancer	楊展庚醫師 林口長庚 腫瘤科	張文震主任 林口長庚免疫腫瘤學卓越中心
14:40~15:10	Moving to immunotherapy era: long-term experience and survival of immuno-therapy in lung cance	廖斌志醫師 臺大醫院 腫瘤醫學部	張文震主任 林口長庚免疫腫瘤學卓越中心

TOS summit

winter session

Venue
張榮發
會議中心八樓
801會議室

09:00~09:50

董大成博士癌症基礎醫學研究傑出獎演講

Chemopreventive effects of dietary natural compounds on human diseases

Speaker: 潘敏雄 教授
臺灣大學食品科技研究所

Moderator: 董光世 董事長
財團法人董大成醫學研究基金會

陳立宗 理事長
中華民國癌症醫學會

Min-Hsiung Pan

Personal Profile

Name/Position title	Min-Hsiung Pan/Distinguished Professor	Gender	Male
Date of Birth	1968/04/15	Nationality	Taiwan

Contact Information

Email Address: mhpan@ntu.edu.tw

Mailing Address: No. 1, Sec. 4, Roosevelt Road, Taipei, 10617 Taiwan (R.O.C) Institute of Food Science and Technology R408

Education&Training Background

Higher Education(University or other degree-awarding institute)

From	To	Degree	University/ Institute	Country	Subject
1996	2000	Ph.D.	College of Medicine, NTU	Taiwan	Biochemistry and Molecular Biology

Employment History

From (yr)	To (yr)	Department	Position/ professional status
2015/08	Now	Institute of Food Science and Technology, NTU	Distinguished Professor
2018/08	Now	Institute of Food Science and Technology, NTU	Director
2013/08	2015/07	Institute of Food Science and Technology, NTU	Professor
2012/08	2013/07	Research & Development Affairs, NKMU	Dean/Professor
2011/08	2012/07	Academic Affairs, NKMU	Associate Dean/Professor
2009/07	2011/01	Interns and Alumni Service Division, NKMU	Director/Professor
2007/08	2008/07	Department of Seafood Science, NKMU	Director/ Professor
2005/08	2007/07	Department of Seafood Science, NKMU	Director/ Associate Professor
2005/06	2005/09	Department of Food Science at Rutgers SEBS - Rutgers University	Visiting Scholar
2004/08	2007/07	Department of Seafood Science, NKMU	Associate Professor

2001/08	2004/07	Department of Seafood Science, NKMU	Assistant Professor
2000/08	2001/07	Institute of Biochemistry, College of Medicine, NTU	Postdoctoral Associate

Selected Publications

1. Lin, WS., Leland JV., Ho CT., **Pan MH***.Occurrence, Bioavailability, Anti-inflammatory, and Anticancer Effects of Pterostilbene. ***Journal of Agricultural and Food Chemistry***. 2020. doi: 10.1021/acs.jafc.9b07860.
2. Chou YC., Li S, Ho CT. **Pan MH*.** Preparation and evaluation of self-microemulsifying delivery system containing 5-demethyltangeretin on inhibiting xenograft tumor growth in mice.***Int J Pharm.***2020 ;579:119134.
3. Hung WL., Ho CT., **Pan MH***.Targeting the NLRP3 Inflammasome in Neuroinflammation: Health Promoting Effects of Dietary Phytochemicals in Neurological Disorders. ***Molecular Nutrition and Food Research.*** 2020 64(4):e1900550.
4. Koh YC., Ho CT., **Pan MH***.Recent advances in cancer chemoprevention with phytochemicals. ***J Food Drug Anal.*** 2020 Jan;28(1):14-37.

EXPERTISE:

1. Purification and structure determination of dietary nature compounds from functional foods and herbal medicine.
2. Bioavailability and Epigenetic studies of dietary bioactive compounds in cells and animals.
3. Molecular mechanisms of action of natural dietary compounds on cancer chemoprevention.
4. Discovery and development of novel phytochemicals that can be used in functional foods/ dietary supplements to prevent chronic diseases such as liver disease and obesity.
5. Epigenetic and disease targets by natural dietary compounds.

HONORS AND AWARDS:

- **2019, Outstanding Research Award of MOST, Taiwan**
- **2018, 2018 Highly Cited Researchers of Clarivate Analytics**
- 2018, Outstanding Research Award of Taiwan Association for Food Science and Technology
- 2018, Journal of Agricultural and Food Chemistry (JAFC) Excellence in Review Award
- 2015, Outstanding reviewer Award of Journal of Agriculture and Food Chemistry
- **2014, Fellow, Agricultural & Food Chemistry Division, American Chemistry Society**

- 2013, Outstanding Research and Technology Development Award of Health Food Society of Taiwan
- **2011, Outstanding Research Award of National Science Council**
- 2009, Outstanding Research Award of National Kaohsiung Marine University, Taiwan
- **2008, The 46th Ten Outstanding Young People, Taiwan**
- **2007, Ta-You Wu Memorial Award of National Science Council, Taiwan**

PROFESSIONAL AFFILIATIONS:

- American Chemical Society
- International Society for Nutraceuticals and Functional Foods (ISNFF)
- Health Food Society of Taiwan
- Taiwan Association for Food Science and Technology

PATENT

- Hsu, Ping-Chi; **Pan, Min-Hsiung**; Jiang, Yi-Peng; Chen, Meng-Ting. Herbal natural complex for improving sperm function and manufacturing method thereof. Patent Number: CN 201636012.
- Badmaev, Vladimir; **Pan, Min-Hsiung** . Method Use of Polymethoxyflavones (PMFs) in Body Composition Management. US Patent. 20,160,082,066: 2016.
- Ho, Chi-Tang; Li, S.; **Pan, Min-Hsiung**; Lo, Chih-Yu; Dushendov, Slavik. Provided herein are compositions enriched in polyhydroxylatedpolymethoxyflavones useful as dietary supplements, food additives, pharmaceutical compositions, nutraceutical compositions and cosmetic compositions. Patent Number: WO/2007/109071
- **Pan, Min-Hsiung**; Chang, Chi-I; Wu, Chia-Li; Hsu, Pang-Kuei. Trans-2-nonadecyl-4-hydroxymethyl-1,3-dioxolane and method for producing thereof. Patent Number: CN 201529564
- **Pan, Min-Hsiung** and Wu, Chia-Li. The uses of hydroxyl polymethoxylflavones and/or derivative thereof. Patent Number: CN 201507725
- Liu, Chen-Shan; **Pan, Min-Hsiung**; Chang, Chih-I. The extraction method of orchid extracts and its application. Patent Number: CN 201318647
- Tu, Shih-Hsin; Ku, Chung-Yu; Chen, Ching-Shyang; Huang, Ching-Shui; Lee, Chia-Hwa; Chen, Li-Ching; **Pan, Min-Hsiung**; Chang, Hui-Wen; Chang, Chien-Hsi; Chang, Yu-Jia; Wei, Po-Li; Wu, Chih-Hsiung; Ho, Yuan-Soon. Use of tea polyphenols for treating and/or

preventing nicotine or nicotine-derived compounds or estrogen induced breast cancer. Patent Number: CN 201233385

- **Pan, Min-Hsiung**; Tsai Chen-Yu; Chang, Chih-I; Sun, Bonnie. Clam purification processes and purification of substance. Patent Number: CN 201114465

Short Biography

Prof. Min-Hsiung Pan completed his PhD in 1996-2000 in Biochemistry and Molecular Biology from College of Medicine, National Taiwan University. Currently he is a Distinguished Professor in Institute of Food Science and Technology, National Taiwan University. The major research focus of my laboratory is to understand the molecular mechanisms responsible for natural dietary compounds on human diseases and carcinogenesis. He has published over 247 journal articles. His current research interests focus on the discovery and development of novel nutraceuticals that can be used in functional foods/dietary supplements to prevent chronic diseases such as cancer, inflammatory condition, epigenetic regulation, liver fibrosis and obesity.

Keywords of your research interest

Cancer chemoprevention, functional foods, carcinogenesis, anti-inflammation, gut microbiota

Chemopreventive effects of dietary natural compounds on human diseases

Min Hsiung, Pan 潘敏雄

Institute of Food Science and Technology National Taiwan University

The research field that I am interested in is mainly focusing on elucidating the underlying mechanism of disease chemoprevention. Since Tang Dynasty of China, one of the most popular medical scientist and pharmacologist, Simiao SUN (c. 581-682) had classified diseases into three levels, which are “healthy”, “feeling ill” and “sick”. As according to the paragraph written in QianJingYaoFang ·LunZhenHouDiSi, saying that, “In ancient, there is a classification for the people whom is good in medication. The best is those who prevent the occurrence of illness, the moderates will nail it when others are going to sick while the rest can only deal with the illness. And the doctors must understand their intention or the illness will be untreatable.” From the perspective of medical issues in this age, the quote is found to be reasonable and show the importance of disease prevention. Thinking of strategies against various diseases, prevention is naturally a better choice and more effective path as compared to treatments or cure. As abovementioned, chemopreventive strategies of various diseases are the topic that we centralize and expertise, which includes colon cancer, skin cancer, liver metabolic diseases, obesity and aging and up to 250 SCI publications have been issued. Due to the remarkable findings and pronounced contribution on the chemopreventive effects of natural compounds, I have earned **Ta-You Wu Memorial Award of National Science Counci**l in year 2007, the **46th Ten Outstanding Young People** in year 2008, my first **Outstanding Research Award of National Science Council** in year 2011, and being chosen as **ACS Fellow** in year 2014. Our ongoing efforts allows me to be chosen as Clarivate Analytics **Highly Cited Researcher** in agricultural science and my second **Outstanding Research Award of MOST** in year 2018. The important research approaches of mine are briefly introduced as following.

Phytochemicals chemopreventive strategies

1. Chemopreventive effect of phytochemicals on liver fibrosis and hepatocarcinogenesis (2012-2017)
2. Chemopreventive effect of phytochemicals on inflammatory bowel disease (IBD) and colorectal carcinogensis (2012-2020)

3. Ameliorative effect of phytochemicals on obesity and their relationship to gut microbiota (2012-2020)
4. Prevention of cardiovascular disease via gut microbiota modulation by phytochemicals (2017-2018)
5. Food safety associated compound polycyclic aromatic hydrocarbons (PAHs) and their relationship to gut microbiota and phytochemicals (2016-2020)

Future prospective (circadian clock, aging and microbiota)

TOS summit
winter session

Venue
張榮發
會議中心八樓
801會議室

09:50~10:00

癌症醫學終身成就獎頒獎

得獎人: 陳博明教授
臺北榮民總醫院醫療顧問
國立陽明大學名譽教授

Po-Min Chen, M.D., Ph.D.
陳博明

Senior Medical Consultant/Professor, Taipei Veterans General Hospital

Honorary Professor, National Yang-Ming University

Education

1962 - 1969	Taipei Medical College, Department of Medicine, Bachelor of Medicine
1972 - 1978	Okayama University (Japan), Department of Medicine, Doctor of Medical Science
1978 - 1980	Sapporo Medical College (Japan), Department of Pathology, Clinic Fellow

Brief Chronology of Employment

1970 - 1972	Resident, Taipei Veterans General Hospital
1980 - 1989	Associate Professor, Department of Medicine, National Yang-Ming Medical College. Specialist, Taipei Veterans General Hospital
1984 - 2005	Chief, Division of Medical Oncology, Taipei-Veterans General Hospital
1984	Founder, Bone marrow transplantation team, Taipei-Veterans General Hospital
1985	Founder, Medical Oncology, National Yang-Ming University
1989 - 2008	Professor, Department of Medicine, National Yang-Ming University
1992	Founder, Taiwan Society of Blood and Marrow Transplantation (中華民國血液及骨髓移植學會)
1993 - 2004	National Councilor, International Society of Hematology
1994 - 2004	Founder, Annual meeting of Sino-Japan Symposium on Cancer Treatment (中日癌症研討會); Co-chair with Dean Kiyoji KIMURA (木村禧代二National Nagoya Hospital); Dean Kazuo OTA (太田和雄Municipal Nagoya Hospital and Aichi Cancer Center); Professor Tetsuo TAGUCHI (田口鐵男The University of Osaka); and Professor Shigetaka ASANO (淺野茂隆The University of Tokyo)
1994 - 1996	President, Taiwan Society of Blood and Marrow Transplantation
1995 - current	Representative, Asian-Pacific Bone Marrow Transplantation Group
1996 - 1998	Honorary Chair, Taiwan Society of Blood and Marrow Transplantation

1997	Founder, Taiwan Clinical Oncology Research Foundation (台灣癌症臨床研究發展基金會)
1999 - 2002	President, The Hematology Society of Taiwan
2001 - 2003	President, Taiwan Oncology Society
2003	Chair, Roche Asia Cancer Forum
2004 - 2006	Founder and President, Taiwan Society of Cancer Palliative Medicine (台灣癌症安寧緩和醫學會)
2006 - 2007	Chief, Division of Hematology and Oncology, Taipei Veterans General Hospital
2006 - 2008	Emeritus President, Taiwan Society of Blood and Marrow Transplantation
2007 - 2008	Chair, Department of Medicine, Taipei Veterans General Hospital
2008	President, Asian-Pacific Bone Marrow Transplantation Group
2008 - current	Chair, Taiwan Clinical Oncology Research Foundation
2008 - 2009	Senior Medical Advisor, Taipei Veterans General Hospital
2008 - current	Honorary Professor, National Yang-Ming University
2010 - current	Senior Medical Consultant/Professor, Taipei Veterans General Hospital

Fields of Interest

Hematological malignancies, Solid tumor and hematopoietic stem cell transplantation

Awards

1989	Outstanding Research Award of National Science Council
1991	Chi-Shuen Tsou Medical Research Special Award
1997	Medical Research Award of the Chinese Medical Association
2011	Recipient, Taiwan Cancer Medical Care Lifetime Achievement Award (Taiwan Joint Cancer Conference)

TOS summit

winter session

Venue
張榮發
會議中心八樓
801會議室

10:00~10:30

The Evolving Therapeutic Landscape for HR+, HER2- Early Breast Cancer

Speaker: Prof. Hope Rugo
Professor, Department of Medicine (Hematology/Oncology); and Director, Breast Oncology and Clinical Trials Education, University of California San Francisco

Moderator: 盧彥伸 教授
臺大醫院腫瘤醫學部

MEMO

TOS summit
winter session

Venue
張榮發
會議中心八樓
801會議室

10:50~11:20

New Strategy and Evidence for Front-line TKI Treatment in Advanced EGFR-mutant NSCLC

Speaker: 吳教恩 醫師
林口長庚腫瘤科

Moderator: 張文震 主任
林口長庚免疫腫瘤學卓越中心

New Strategy and Evidence for Front-line TKI Treatment in Advanced EGFR-mutant NSCLC

吳教恩醫師

Non-small-cell lung cancer (NSCLC) is believed as one of the main reasons that cause deaths from cancer worldwide. Three generations of epidermal growth factor receptor (EGFR) tyrosine kinase inhibitors (TKIs) are now approved in the first-line setting for patients with EGFR mutation-positive non-small-cell lung cancer (NSCLC). Recent randomized trials have demonstrated that afatinib and osimertinib all confer significantly improved progression-free survival versus first-generation TKIs. However, TKI resistance is always a pervasive challenge. While we implement the treatment strategy for our NSCLC patients, how to consider PFS with maximizing overall survival (OS), the most important measure of treatment efficacy, and balance patients' the quality of life, is an important topic in NSCLC.

TOS summit
winter session

Venue
張榮發
會議中心八樓
801會議室

11:20~11:50

Frontline Immunotherapy Treatment Options in mNSCLC, what we can know from 5-yr KEYNOTE-024 data?

Speaker: 楊志新 院長
臺大癌醫中心醫院

Moderator: 賴俊良 副院長
大林慈濟醫院

James Chih-Hsin Yang, MD, PhD

James Chih-Hsin Yang, MD, PhD, received his MD from National Taiwan University (NTU) in Taipei in 1986 and completed his PhD degree between 1996 and 2000 at the Graduate Institute of Clinical Medicine, NTU, in 2000. He first completed his internal medicine residency at the NTU Hospital, and between 1992 and 1995, he undertook medical oncology fellowship training at the National Cancer Institute at Bethesda, Maryland. He is currently the director and distinguished professor of the Graduate Institute of Oncology at National Taiwan University. He has been a staff member in the Department of Oncology at the University Hospital since 1995 and chair the Department of Oncology between 2015-2020. He was appointed as the superintendent of the National Taiwan University Cancer Center hospital in Aug 2020.

Dr Yang's research focuses on lung cancer treatment and the mechanism of resistance of chemotherapy, targeted therapy and immunotherapy. Dr Yang is a leader in lung cancer clinical studies, especially in the new drug development for lung cancer treatment. He and other Asian investigators have established EGFR TKI as the front-line treatment for lung cancer patients with *EGFR* mutation (IPASS). He is also the principal investigator of several studies that led to the global approval of the 2nd-generation irreversible EGFR TKI, afatinib, and the 3rd-generation EGFR TKI, osimertinib. He has published 300 papers in peer-reviewed scientific journals such as *New England Journal of Medicine*, *Lancet Oncology*, and *Journal of Clinical Oncology,* and has served on the editorial board of *Annals of Oncology* and *Lung Cancer.* He is the current associate editor of *Journal of Thoracic Oncology*, *Journal of Thoracic Oncology Clinical Research and Report* and *Nature Scientific Report*. He received the 2nd Kobayashi Foundation Cancer Research Award from the Asian Clinical Oncology Society in 2012, the distinguished research award of the Taiwan National Science Council 2012-2015, the TECO award for biotechnology in 2015, distinguished research award of the Ministry of Science and Technology, Taiwan, from 2016-2018 and Academic Award from Taiwan Ministry of Education in 2018; Outstanding Scholar Award, Foundation For the Advancement of Outstanding Scholarship 2019 Aug -2022 July. His also the highly cited researcher of 2019 in Clinical Medicine category awarded by Clarivate Analytics (Web of Science Group). He currently serves on the board of directors of the International Association for the Study of Lung Cancer (IASLC), with an appointment from 2017-2021.

MEMO

TOS summit
winter session

Venue
張榮發
會議中心八樓
801會議室

11:50~12:20

What's optimal sequencing treatment for ALK NSCLC patients? - From a Taiwan clinician's perspective

Speaker: 李日翔 主任
新竹臺大醫院腫瘤醫學中心

Moderator: 楊志新 院長
臺大癌醫中心醫院

Jih-Hsiang Lee, M.D.

李日翔

Date of birth: May-19-1977
Place of birth: Tainan, Taiwan
e-mail: leejihhsiang@ntu.edu.tw

Current Positions and previous experiences

Aug, 2017-present	Chief, Center of Oncology Medicine, National Taiwan University Hospital (NTUH), Hsin-Chu Branch
Jul, 2017-present	Attending physician, Department of Oncology, National Taiwan University Hospital (NTUH), Taiwan
Feb, 2015-Jul, 2017	Attending physician, Department of Medical Research, National Taiwan University Hospital (NTUH), Taiwan In charge of internal audit and quality control of clinical researches in the NTUH
Oct, 2008-Feb, 2015	Attending physician, National center of excellence for clinical trial and research, National Taiwan University Hospital, Taiwan.
Jul, 2012-present	Associate secretary of Human Research Protection Center, NTUH.
Jul, 2012-present	Member of the Research Ethic Committee, NTUH.

Medical Education

Sep, 1993-Jun., 2000	M.D. School of Medicine, Medical College, National Taiwan University, Taiwan

Postgraduate Training

Jul, 2002-Jun., 2005	Resident, Department of Internal Medicine, NTUH, Taiwan
Jul, 2005-Jun., 2008	Fellow, Department of Oncology, NTUH, Taiwan
Jul, 2007-Jun., 2008	Fellow, Section of hematology, department of internal medicine, NTUH, Taiwan
May, 2009-Jan., 2012	Visiting fellow, Dr. Giuseppe Giaccone's laboratory, Medical Oncology Branch, National Cancer Institute, National Institutes of Health, USA

Medical License

- Board of Medicine, Taiwan (2000-)
- Board of Internal Medicine, Taiwan (2005-)
- Board of Medical Oncology, Taiwan (2007-)
- Board of Cancer Palliative Medicine, Taiwan (2015-)

Membership:

- Member, Taiwan Society of Internal Medicine, Taiwan
- Member, Chinese Society of Cancer, Taiwan
- Member, Taiwan Society of Cancer Palliative Medicine, Taiwan
- Member, International Association for Study of Lung Cancer

Honorship

- Young Investigator Award of the International Association for Study of Lung Cancer (IASLC), 2012-2014

Journal reviewer

Cell Cycle, Journal of Formosan Medical Association, PLoS One, Scientific Reports, BMC Cancer

Publications:

1. **Lee JH**, Chen HY, Hsu FM, Chen JS, Liao WY, Shih JY, Yu CJ, Chen KY, Tsai TH, Yang JC. Cranial Irradiation for Patients with Epidermal Growth Factor Receptor (EGFR) Mutant Lung Cancer Who Have Brain Metastases in the Era of a New Generation of EGFR Inhibitors. Oncologist. 2019;Dec;24(12):e1417-e1425
2. Yang CY, Liao WY, Ho CC, Chen KY, Tsai TH, Hsu CL, Su KY, Chang YL, Wu CT, Hsu CC, Liao BC, Hsu WH, **Lee JH**, Lin CC, Shih JY, Yang JC, Yu CJ. Association between programmed death-ligand 1 expression, immune microenvironments, and clinical outcomes in epidermal growth factor receptor mutant lung adenocarcinoma patients treated with tyrosine kinase inhibitors. Eur J Cancer. 2020 Jan;124:110-122
3. de Bono J, Lin CC, Chen LT, Corral J, Michalarea V, Rihawi K, Ong M, **Lee JH**, Hsu CH, Yang JC, Shiah HS, Yen CJ, Anthoney A, Jove M, Buschke S, Fuertig R, Schmid U, Goeldner RG, Strelkowa N, Huang DC, Bogenrieder T, Twelves C, Cheng AL. Two first-in-human studies of xentuzumab, a humanised insulin-like growth factor (IGF)-neutralising antibody, in patients with advanced solid tumours. Br J Cancer. 2020

What’s optimal sequencing treatment for ALK NSCLC patients?

李日翔醫師

Alectinib is among the standard therapies for advanced ALK + non-small cell lung cancer (NSCLC) patients. The updated ALEX study results revealed a 5-year survival rate of 62.5% in the alectinib treatment group, versus 45.5% with crizotinib. Additionally, the study found that the OS benefit of alectinib was seen in patients with CNS metastases at baseline (42% reduction in the risk of death versus crizotinib) as well as in those without CNS metastases at baseline (24% reduction in the risk of death versus crizotinib). The safety profile of Alectinib was consistent with previous data, with no new safety signals identified.

Multiple different resistance mechanisms to ALK inhibitors were identified in post-progression tumor specimens including either “on-target” genetic alterations or “off-target” mechanisms, which may involve activation of parallel/downstream pathways or lineage trans-differentiation. Lorlatinib demonstrated clinical activity in resistant patients previously treated with two or more ALK inhibitors including second-generation inhibitors. Compared to first or second generation drugs, the third generation drug lorlatinib has a lower IC50 for most of resistant mutations in cell lines, and also found that increase the risk of compound mutations by 35% after treatment with lorlatinib, and the required IC50 is also higher or even ineffective. Therefore, when thinking about the treatment sequence, it is necessary to consider that the first line ALK-TKI should not make the gene mutations too complicated, such as compound mutations.

TOS summit
winter session

Venue
張榮發
會議中心八樓
803會議室

10:50~11:00

年輕研究者癌症研究傑出論文獎頒獎

得獎人: 李　杰 醫師
馬偕紀念醫院放射腫瘤科

許家齊 博士
臺灣大學腫瘤醫學研究所

Jie Lee

Citizenship: R.O.C (Taiwan)

Office Address: No. 45, Minsheng Rd., Tamshui District, New Taipei City 25160, Taiwan.

Email: sinus.5706@mmh.org.tw

Language: Chinese and English

Education:

2002-2009 M.D. Department of Medicine, Chung Shan Medical University, Taichung, Taiwan.

2016-2019 Ph.D. Department of Biomedical Imaging and Radiological Sciences, National Yang-Ming University, Taipei, Taiwan.

Employment Record:

2016- Attending Physician, Department of Radiation Oncology, MacKay Memorial Hospital, Taipei

2020- Assistant Professor, Department of Medicine, MacKay Medical College, Taipei

Board Certification:

Chinese Board of Therapeutic Radiology and Oncology, Certification NO.: 293.

Professional Affiliations:

1. The Taiwanese Society for Therapeutic Radiology and Oncology (TASTRO)
2. American Society for Therapeutic Radiology and Oncology (ASTRO)
3. European Society for Radiotherapy and Oncology (ESTRO)
4. Society on Sarcopenia, Cachexia and Wasting Disorders (SCWD)

Research Interest:

Radiation-induced complication, Gynecologic oncology, Esophageal cancer, Sarcopenia.

Awards and Honors:

1. The 20th Taiwan Joint Cancer Conference, May 2015, outstanding paper award.
2. Resident Research Award, MacKay Memorial Hospital, 2015
3. Award of the Cancer Prevention & Treatment Foundation 2016-2017 (Radiation Physics)

Bibliography: (First or Corresponding author)

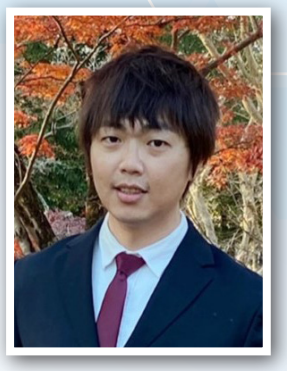
1. **Lee J***, Lin JB, Wu MH, Chang CL, Jan YT, Chen YJ. Muscle Loss after Chemoradiotherapy as a Biomarker of Distant Failures in Locally Advanced Cervical Cancer. ***Cancers (Basel)***. 2020 Mar 5;12(3).
2. Huang CY, Yang YC, Chen TC, Chen JR, Chen YJ, Wu MH, Jan YT, Chang CL, **Lee J***. Muscle loss during primary debulking surgery and chemotherapy predicts poor survival in advanced-stage ovarian cancer. ***J Cachexia Sarcopenia Muscle.*** 2020. doi: 10.1002/jcsm.12524. [Epub ahead of print]
3. Huang CY, Sun FJ, and **Lee J***. Prognostic value of muscle measurement using the standardized phase of computed tomography in patients with advanced ovarian cancer. ***Nutrition***. doi: 10.1016/j.nut.2019.110642. [Epub ahead of print]
4. **Lee J***, Lin JB, Wu MH, et al. Muscle radiodensity loss during cancer therapy is predictive for poor survival in advanced endometrial cancer. ***J Cachexia Sarcopenia Muscle.*** 2019 Aug;10(4):814-826.
5. Lin JB, Hung LC, Cheng CY, **Lee J*** et al. Prognostic significance of lung radiation dose in patients with esophageal cancer treated with neoadjuvant chemoradiotherapy ***Radiat Oncol.*** (2019) 14:85.
6. **Lee J***, Liu SH, Lin JB, et al. Image-guided study of inter-fraction and intra-fraction set-up variability and margins in reverse semi-decubitus breast radiotherapy. ***Radiat Oncol.*** 2018 Dec 27;13(1):254.
7. **Lee J***, Chang CL, Lin JB, et al. Skeletal Muscle Loss is an Imaging Biomarker of Outcome After Definitive Chemoradiotherapy for Locally Advanced Cervical Cancer. ***Clin Cancer Res.*** 2018 Oct 15;24(20):5028-5036.
8. **Lee J***, Chang CL, Lin JB, et al. The Effect of Body Mass Index and Weight Change on Late Gastrointestinal Toxicity in Locally Advanced Cervical Cancer Treated With Intensity-modulated Radiotherapy. ***Int J Gynecol Cancer.*** 2018 Sep;28(7):1377-1386.
9. **Lee J***, Wu MH, Chen YJ. Delineation guideline for the para-aortic lymph node region in cervical cancer. ***Radiother Oncol.*** 2019 Jul;136:197.
10. **Lee J***, Lin JB, Chang CL, et al. Impact of para-aortic recurrence risk-guided intensity-modulated radiotherapy in locally advanced cervical cancer with positive pelvic lymph nodes. ***Gynecol Oncol.*** 2018;148:291-8.
11. **Lee J**, Lin JB, Chang CL, et al. Prophylactic lower para-aortic irradiation using intensity-modulated radiotherapy mitigates the risk of para-aortic recurrence in locally advanced

cervical cancer: A 10-year institutional experience. ***Gynecol Oncol.*** 2017;146:20-6.

12. **Lee J***, Lin JB, Sun FJ, et al. Safety and Efficacy of Semi-Extended Field Intensity-Modulated Radiation Therapy and Concurrent Cisplatin in Locally Advanced Cervical Cancer Patients. ***Medicine (Baltimore).*** 2017 Mar;96(10):e6158.
13. **Lee J**, Hua KL, Hsu SM, et al. Development of delineation for the left anterior descending coronary artery region in left breast cancer radiotherapy: An optimized organ at risk. ***Radiother Oncol.*** 2017 Mar;122(3):423-430.
14. **Lee J**, Lin JB, Sun FJ, et al. Dosimetric predictors of acute haematological toxicity in oesophageal cancer patients treated with neoadjuvant chemoradiotherapy. ***Br J Radiol.*** 2016 Oct;89(1066):20160350.
15. **J. Lee**, K.W. Lu, H.M. Fu, K.Y. Dai, Y.J. Chen, M.H. Wu, Evaluation of dose to heart and left anterior descending coronary artery during left breast irradiation. ***Therapeutic Radiology and Oncology*** March 2015;22:13-23.

Chia-Chi Hsu Ph.D.

許家齊



Interest and Specialty：

1. Basic research
2. Translational cancer research
3. Mechanism of drug resistance in cancer treatment
4. Cancer metabolism

Education：

- Ph.D., Department and Institute of Pharmacology, School of Medicine, National Yang-Ming University (2009-2015)
- M.S., Institute of Biochemistry and Biotechnology, College of Medicine, Chung Shan Medical University (2007-2009)

Academia Appointments：

Post-doctoral fellow-

- Graduate Institute of Oncology, National Taiwan University (2018-)
- National Taiwan University Cancer Center (2017-2018)
- Department of Oncology, National Taiwan University Hospital (2016-2017)

Honors:

- Young Investigator Award for Cancer Research, Taiwan Oncology Society, 2020
- JTO Editor′ s Choice | January, Journal of Thoracic Oncology, 2020
- Selected Oral Presenter, The 60th Annual Meeting of the Japan Lung Cancer Society, 2019
- Travel Grant Award, The 60th Annual Meeting of the Japan Lung Cancer Society, 2019
- Best Poster/Oral Award, The 24th Taiwan Joint Cancer Conference, 2019
- Merit Poster Award, The 11th Conference of Asian Society for Mitochondrial Research & Medicine 2014 Annual Meeting of TSMRM, 2014
- Scholarship, Toyo Biotechnology, 2014
- Best Poster/Oral Award, The Taipei International Breast Cancer Symposium & International

Oncoplastic Breast Surgery Symposium, 2012

- Fourth Prize Winner, The Recent Advances in Bioenergetics and Mitochondrial Medicine, 2010

Society membership:

- American Association of Cancer Research, Associate membership, (2018-)
- Taiwan Oncology Society (2017-)
- The Pharmacological Society in Taiwan (2009-)

Publication list

1. **Chia-Chi Hsu**, Bin-Chi Liao, Wei-Yu Liao, Aleksandra Markovets, Daniel Stetson, Kenneth Thress & James Chih-Hsin Yang. (2020, Jan). Exon-16-skipping HER2 as a novel mechanism of osimertinib-resistance in EGFR L858R/T790M-positive non-small-cell lung cancer. *Journal of Thoracic Oncology*, 15(1):50-61. doi: 10.1016/j.jtho.2019.09.006.
2. Yu-Ling Liu, **Chia-Chi Hsu**, Hui-Ju Huang, Chih-Jung Chang, Shu-Hui Sun & Anya Maan-Yuh Lin (2020, Jan). Gallic Acid Attenuated LPS-Induced Neuroinflammation: Protein Aggregation and Necroptosis. *Molecular Neurobiology*, 57(1):96-104. doi: 10.1007/s12035-019-01759-7.
3. Wen-Chien Ho, **Chia-Chi Hsu**, Hui-Ju Huang, Hsiang-Tsui Wang & Anya Maan-Yuh Lin (2020 Jan). Anti-inflammatory Effect of AZD6244 on Acrolein-Induced Neuroinflammation. *Molecular Neurobiology*, 57(1):88-95. doi: 10.1007/s12035-019-01758-8.
4. Ching-Yao Yang, Wei-Yu Liao, Chao-Chi Ho, Kuan-Yu Chen, Tzu-Hsiu Tsai, Chia-Lin Hsu, Kang-Yi Su, Yih-Leong Chang, Chen-Tu Wu, **Chia-Chi Hsu**, Bin-Chi Liao, Wei-Hsun Hsu, Jih-Hsiang Lee, Chia-Chi Lin, Jin-Yuan Shih, James C.-H. Yang & Chong-Jen Yu (2019, Nov). Association between programmed death-ligand 1 expression, immune microenvironments, and clinical outcomes in epidermal growth factor receptor mutant lung adenocarcinoma patients treated with tyrosine kinase inhibitors. *European Journal of Cancer*, 124, 110-122.
5. Yen-Ju Chen, **Chia-Chi Hsu**, Young-Ji Shiao, Hsiang-Tsui Wang, Yu-Li Lo & A. M. Y. Lin (2019, Feb). Anti-inflammatory effect of afatinib (an EGFR-TKI) on OGD-induced neuroinflammation. *Scientific Reports*, 9(1), 2516.
6. Chun-Yu Liu, **Chia-Chi Hsu**, Tzu-Ting Huang, Chia-Han Lee, Ji-Lin Chen, Shung-Haur Yang, Jeng-Kai Jiang, Wei-Shone Chen, Kuan-Der Lee, & Hao-Wei Teng (2018, Jul). ER stress-related ATF6 upregulates CIP2A and contributes to poor prognosis of colon cancer.

Molecular Oncology, Mol Oncol. 2018 Jul 31. doi: 10.1002/1878-0261.12365.

7. Chun-Yu Liu, **Chia-Chi Hsu**, Ka-Yi Lau, Tzu-Ting Huang, Yi-Ting Chen, Chun-Teng Huang, Po-Han Lin & Ling-Ming Tseng (2017, Dec). Combination of palbociclib with enzalutamide shows in vitro activity in RB proficient and androgen receptor positive triple negative breast cancer cells. *PLoS One*, 12(12):e0189007.
8. **Chia-Chi Hsu**, Ling-Ming Tseng & Hsin-Chen Lee (2016, Jun). Role of mitochondrial dysfunction in cancer progression. *Experimental Biology and Medicine*, 241(12): 1281–1295.
9. Chun-Yu Liu, Ming-Hung Hu, Chia-Jung Hsu, Chun-Teng Huang, Duen-Shian Wang, Wen-Chun Tsai, Yi-Ting Chen, Chia-Han Lee, Pei-Yi Chu, **Chia-Chi Hsu**, Ming-Huang Chen, Chung-Wai Shiau, Ling-Ming Tseng & Kuen-Feng Chen (2016, Jan). Lapatinib inhibits CIP2A/PP2A/p-Akt signaling and induces apoptosis in triple negative breast cancer cells. *Oncotarget*, 7(8):9135-49..
10. **Chia-Chi Hsu**, Ling-Chia Wu, Cheng-Yuan Hsia, Pen-Hui Yin, Chin-Wen Chi, Tien-Shun Yeh & Hsin-Chen Lee (2015, Sep). Energy metabolism determines the sensitivity of human hepatocellular carcinoma cells to mitochondrial inhibitors and biguanide drugs. *Oncology Reports*, 34(3):1620-1628.
11. Cheng-Yi Chuang, Ling-Yun Chen, Ru-Huei Fu, Shih-Ming Chen, Ming-Hua Ho, Jie-Mau Huang, **Chia-Chi Hsu**, Chien-Cheng Wang, Meng-Shian Chen & Rong-Tzong Tsai (2014, Aug). Involvement of the carboxyl-terminal region of the yeast peroxisomal half ABC transporter Pxa2p in its interaction with Pxa1p and in transporter function. *PLoS One*, 9(8):e104892.
12. Kuo-Hung Huang, **Chia-Chi Hsu**, Wen-Liang Fang, Chin-Wen Chi, Ming-Ta Sung, Hwa-Li Kao,Anna Fen-Yau Li, Pen-Hui Yin, Muh-Hwa Yang & Hsin-Chen Lee (2014, Apr). SIRT3 expression as a biomarker for better prognosis in gastric cancer. *World Journal of Surgery*, 38(4):910-917.
13. **Chia-Chi Hsu**, Hsin-Chen Lee & Yau-Huei Wei (2013, Dec). Mitochondrial DNA alterations and mitochondrial dysfunction in the progression of hepatocellular carcinoma. *World Journal of Gastroenterology*, 19(47):8880-8886.
14. **Chia-Chi Hsu**, Chun-Hui Wang, Ling-Chia Wu, Cheng-Yuan Hsia, Chin-Wen Chi, Pen-Hui Yin, Chun-Ju Chang, Ming-Ta Sung, Yau-Huei Wei, Shing-Hwa Lu & Hsin-Chen Lee (2013, Oct). Mitochondrial dysfunction represses HIF-1α protein synthesis through AMPK activation in human hepatoma HepG2 cells. *Biochimica et Biophysica Acta (BBA) - General Subjects*, 1830(10):4743-4751.
15. Ya-Chun Lee, Liang-Ming Lee, Chih-Hsin Yang, Anya Maan-Yuh Lin, Yi-Chia Huang, **Chia-**

Chi Hsu, Meng-Shian Chen, Chin-Wen Chi, Pen-Hui Yin, Cheng-Deng Kuo, Jyh-Fei Liao & Hsin-Chen Lee (2013, Oct). Norcantharidin suppresses cell growth and migration with enhanced anticancer activity of gefitinib and cisplatin in human non-small cell lung cancer cells. *Oncology Reports*, 29(1):237-243.

16. Ya-Chun Lan, Chia-Ling Chang, Ming-Ta Sung, Pen-Hui Yin, **Chia-Chi Hsu**, Kuo-Chung Wang, Hsin-Chen Lee, Ling-Ming Tseng & Chin-Wen Chi (2013, Sep). Zoledronic acid-induced cytotoxicity through endoplasmic reticulum stress triggered REDD1-mTOR pathway in breast cancer cells. *Anticancer Research*, 33(9):3807-3814.

TOS summit
winter session

Venue
張榮發
會議中心八樓
803會議室

11:00~11:50

年輕研究者癌症研究傑出獎演講

Speaker: 李健逢 醫師
奇美醫院病理中心

Moderator: 陳立宗 理事長
中華民國癌症醫學會

LI, CHIEN-FENG

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Kaohsiung Medical University, Kaohsiung, Taiwan	M.D.	1995-2002	Medicine
National Sun Yat-sen University, Kaohsiung, Taiwan	Ph.D.	2009-2012	Biomedical Sciences

A. Personal Statement

As a physician scientist, my lab research interest is to integrate genetic, epigenetic, and expression alternations in cancer progression and metastasis, with special emphasize on sarcomas and therapy-resistant carcinomas. With the opportunities to integrate large-scaled clinical samples and advanced functional evaluation, my research has been more focused on potential therapeutic opportunities of metabolic transformations (Clin Cancer Res. 2009, 2013, 2014, 2017; Cancer Res. 2014; OncoTarget. 2014, 2015). We also work on genome and/or epigenetic regulation of critical E3 ligases - Skp2, RNF8, HectH9, ... etc. (Ann Surg Oncol. 2008, Clin Cancer Res. 2012, Cell. 2012, 2013, and Molecular Cell 2015, 2016, Nat Comm 2019). In the present stage, we are most interested in understanding the mechanism how the metabolic characters of cancer implicate tumor progression (Cancer Res. 2014, Clin Cancer Res. 2017, and some unpublished works), as well as how metabolic aberrations induce mutagenesis in cancer (unpublished works).

B. Positions and Honors

Positions and Employment

2002-2007 Resident, Department of Pathology, Chi Mei Medical Center, Taiwan

2007-2009 Attending physician, Department of Pathology, Chi Mei Medical Center, Taiwan

2009-Present Chief, Division of Clinical Pathology, Department of Pathology, Chi Mei Medical Center, Taiwan

2010-2013	Adjunct attending physician, National Institute of Cancer Research, National Health Research Institutes, Taiwan
2010-Present	Principal Investigator, Translational Research Laboratory of Human Cancers, Department of Medical Research, Chi Mei Medical Center, Taiwan
2012-2015	Assistant professor, Department of Biotechnology, Southern Taiwan University of Science and Technology, Taiwan
2013-2018	Joint-Appointment Assistant Investigator, National Institute of Cancer Research, National Health Research Institutes, Taiwan
2015-2018	Associate Professor, Department of Biotechnology, Southern Taiwan University of Science and Technology, Taiwan
2017-Present	Chair, Department of Pathology, Chi Mei Medical Center, Taiwan
2018-Present	Joint-Appointment Associate Investigator, National Institute of Cancer Research, National Health Research Institutes, Taiwan
2018-2019	Professor, Department of Biotechnology, Southern Taiwan University of Science and Technology, Taiwan
2019-Present	Joint-Appointment Professor, Institute of Medical Science and Technology, National Sun Yat-sen University

Other Experience and Professional Memberships

2004-	United States and Canadian Academy of Pathology
2015-	International Society of Bone and Soft Tissue Pathology
2019-	American Associations for Cancer Research

Honors

2006	IACP best abstract award
2009	Best research paper (Taiwan Academy of Pathology)
2011	Outstanding poster award, Asia-Pacific Congress on Pancreas and Biliary Tract Cancer, 14th TCOG Annual Meeting & 2010 International Conference on Translational Cancer Research
2012	IACP best abstract award (corresponding author)
2012	National Innovation Award (Teamed with National Cheng-Kung University)
2014	IACP best abstract award (corresponding author)
2014	Young Investigator (Encouragement) Award, Japanese Society of Medical Oncology (JSMO)

2014 Travel Award, Japanese Society of Medical Oncology (JSMO)

2014 National Innovation Award (Teamed with Kun Shan University)

2015 Best Poster Award (Multi-national Alliant Gastro-Intestinal Cancer Symposium, 2015)

2015 Travel Award (Multi-national Alliant Gastro-Intestinal Cancer Symposium, 2015)

2015 National Innovation Award (Teamed with Kun Shan University)

2015 National Innovation Award (Teamed with National Cheng-Kung University)

2016 Academic Research Award-Wu-Da-You Memorial Award

2016 Outstanding Alumni Award, National Sun Yat-sen University

2020 Young Investigator Outstanding Cancer Research Award, Taiwan Oncology Society

Journal Editorial Board (SCI)

2010-Present Editorial board, Oncology letters, Spandidos publication

2018-Present Associate Editor-in-Chief, Cancer Management of Research, Dove Medical Press

Grant Review (International)

2015,2018,2020 Ministry of Health, Italy

2015 Netherlands Organisation for Scientific Research (NWO), Netherlands

C. Contribution to Science

1. **Metabolic transformation in sarcoma driven by genomic alternations**: Metabolic aberration is important in cancer initiation and progression. We have tried to decipher the impacts of genomic alterations in regulating metabolic aberration. With our efforts, we identified the clinicopathological and biological significances and therapeutic implications of amplification-driven AMACR expression and MTAP deficiency as a result of 9p21.3 deletion, respectively. AMACR promotes the β-oxidation of branched-chain fatty acids and is frequently overexpressed in common carcinomas, mostly through transactivation. We performed genomic profiling of human sarcomas and validated amplification of *AMACR* at 5p13.3 in 20% of cases that exhibited mRNA and protein overexpression with negative prognostic impact. In vitro and in vivo functional assays demonstrated that the oncogenic function of AMACR was linked to upregulated cyclin D1 and cyclin T2, hence promoting cell proliferation. Ebselen oxide, a non-substrate-based inhibitor of AMACR, enabled selective susceptibility in AMACR-expressing myxofibrosarcomas through induction of cellular apoptosis and proteasome-mediated degradation of AMACR protein. We also confirmed MTAP deficiency adversely affected prognosis in cancer, particularly that caused

by homozygous deletion of its gene at 9p21.3. In vitro and in vivo, MTAP acted as a functioning tumor suppressor, governing angiogenic, proliferative, and migratory or invasive processes in myxofibrosarcoma. Notably, the antiangiogenic function of MTAP may link to the transcriptional repression of MMP-9 by using RT-PCR expression array profiling and reporter luciferase assay. In the MTAP-deficient cell lines and xenografts, we demonstrated their selective susceptibility to L-alanosine, which could significantly increase cell apoptosis. Our findings indicate that MTAP deficiency represents a useful prognostic marker and a potential therapeutic target in cancer patients.

a. Homozygous deletion of MTAP gene as a poor prognosticator in gastrointestinal stromal tumors. Huang HY, Li SH, Yu SC, Chou FF, Tzeng CC, Hu TH, Uen YH, Tian YF, Wang YH, Fang FM, Huang WW, Wei YC, Wu JM, **Li CF***. **Clin Cancer Res**. 2009 Nov 15;15(22):6963-72. PMID: 19887491

b. AMACR amplification in myxofibrosarcomas: a mechanism of overexpression that promotes cell proliferation with therapeutic relevance. **Li CF**, Fang FM, Lan J, Wang JW, Kung HJ, Chen LT, Chen TJ, Li SH, Wang YH, Tai HC, Yu SC, Huang HY. **Clin Cancer Res**. 2014 Dec 1;20(23):6141-52. PMID: 25384383

c. Overexpressed Fatty Acid Synthase in Gastrointestinal Stromal Tumors: Targeting a Progression-Associated Metabolic Driver Enhances the Antitumor Effect of Imatinib. **Li CF**, Fang FM, Chen YY, Liu TT, Chan TC, Yu SC, Chen LT, Huang HY. **Clin Cancer Res**. 2017 Aug 15;23(16):4908-4918.

d. Hydroxysteroid 11-Beta Dehydrogenase 1 Overexpression with Copy-Number Gain and Missense Mutations in Primary Gastrointestinal Stromal Tumors. **Li CF**, Liu TT, Wang JC, Yu SC, Chen YY, Fang FM, Li WS, Huang HY. **J Clin Med**. 2018 Nov 1;7(11). pii: E408. doi: 10.3390/jcm7110408.

2. **Epigenetic silencing of *ASS1* gene and cellular responses to arginine derivation**: Through data mining of the cancer transcriptome and tissue validation, we identified ASS1 gene as the most frequent and prominently downregulated candidate among those regulating amino acid metabolism. An ASS1 protein deficiency was validated in various human cancer samples and was associated with gene methylation, adverse prognosticators, and worse outcomes. Our in vitro and in vivo studies disclosed ASS1-deficient cells were susceptible to arginine-depriving ADI-PEG20 at therapeutic doses, compared to ASS1-re-expressing counterparts and non-tumor cells. An ASS1 deficiency contributed to aggressive phenotypes, including tumor growth, migration/invasion, and angiogenesis, which were attenuated by forced ASS1 re-expression. We substantiated the clinical, biological, and

pharmacological relevance of ASS1, highlighting its novel tumor suppressive role and therapeutic potential in human cancers.

a. ASS1 as a novel tumor suppressor gene in myxofibrosarcomas: aberrant loss via epigenetic DNA methylation confers aggressive phenotypes, negative prognostic impact, and therapeutic relevance. Huang HY, Wu WR, Wang YH, Wang JW, Fang FM, Tsai JW, Li SH, Hung HC, Yu SC, Lan J, Shiue YL, Hsing CH, Chen LT*, **Li CF***. **Clin Cancer Res**. 2013 Jun 1;19(11):2861-72. PMID: 23549872

b. Prognostic and therapeutic impact of argininosuccinate synthetase 1 control in bladder cancer as monitored longitudinally by PET imaging. Allen MD, Luong P, Hudson C, Leyton J, Delage B, Ghazaly E, Cutts R, Yuan M, Syed N, Lo Nigro C, Lattanzio L, Chmielewska-Kassassir M, Tomlinson I, Roylance R, Whitaker HC, Warren AY, Neal D, Frezza C, Beltran L, Jones LJ, Chelala C, Wu BW, Bomalaski JS, Jackson RC, Lu YJ, Crook T, Lemoine NR, Mather S, Foster J, Sosabowski J, Avril N, **Li CF***, Szlosarek PW*. **Cancer Res**. 2014 Feb 1;74(3):896-907. PMID: 24285724

c. Chromatophagy: autophagy goes nuclear and captures broken chromatin during arginine-starvation. Kung HJ, Changou CA, **Li CF**, Ann DK. **Autophagy**. 2015;11(2):419-21. PMID: 25650867

3. **Deciphering the clinicopathological, biological, therapeutic impacts of SKP2 and other E3 ligase and associated metabolic transformation in cancer**: We identified SKP2 gene amplification and overexpression in sarcoma and other major human cancers. Our studies provide insight into how oncogenic Skp2 and Myc coordinate to induce RhoA transcription and establishes a novel SCF-Skp2 E3-ligase-independent function for oncogenic Skp2 in transcription and cancer metastasis. We suggest that distinct E3 ligases are utilized by diverse growth factors for Akt activation and that targeting glycolysis sensitizes Her2-positive tumors to Herceptin treatment. Our studies also provide pharmacological evidence that Skp2 is a promising target for restricting cancer stem cell and cancer progression as well as potential targets, the Ras/Skp2/LKB1 axis and Skp2-mH2A1-CDK8 axis for cancer therapy. We also systemically evaluated the oncogenic roles of other important E3 ligase, namely TRAF6, RNF8, and HectH9 and their impacts on various caner hallmarks.

a. Skp2 overexpression is highly representative of intrinsic biological aggressiveness and independentlyassociated with poor prognosis in primary localized myxofibrosarcomas. Huang HY, Kang HY, **Li CF**, Eng HL, Chou SC, Lin CN, Hsiung CY. **Clin Cancer Res**. 2006 Jan 15;12(2):487-98. PMID: 16428491

b. Flow cytometric analysis of DNA ploidy and S-phase fraction in primary localized myxofibrosarcoma: correlations with clinicopathological factors, Skp2 expression, and patient survival. Huang HY, Huang WW, Wu JM, Huang CK, Wang JW, Eng HL, Lin CN, Chou SC, Yu SC, Fang FM, Lee JC, **Li CF***. **Ann Surg Oncol**. 2008 Aug;15(8):2239-49. PMID: 18516647

c. Deciphering the transcriptional complex critical for RhoA gene expression and cancer metastasis. Chan CH, Lee SW, **Li CF**, Wang J, Yang WL, Wu CY, Wu J, Nakayama KI, Kang HY, Huang HY, Hung MC, Pandolfi PP, Lin HK. **Nat Cell Biol**. 2010 May;12(5):457-67. PMID: 20383141

d. Characterization of gene amplification-driven SKP2 overexpression in myxofibrosarcoma: potential implications in tumor progression and therapeutics. **Li CF**, Wang JM, Kang HY, Huang CK, Wang JW, Fang FM, Wang YH, Wu WR, Li SH, Yu SC, Lee JC, Lan J, Shiue YL, Wu LC, Huang HY. **Clin Cancer Res**. 2012 Mar 15;18(6):1598-610. PMID: 22322669

e. The Skp2-SCF E3 ligase regulates Akt ubiquitination, glycolysis, herceptin sensitivity, and tumorigenesis. Chan CH, **Li CF**, Yang WL, Gao Y, Lee SW, Feng Z, Huang HY, Tsai KK, Flores LG, Shao Y, Hazle JD, Yu D, Wei W, Sarbassov D, Hung MC, Nakayama KI, Lin HK. **Cell**. 2012 May 25;149(5):1098-111. PMID: 22632973

f. Pharmacological inactivation of Skp2 SCF ubiquitin ligase restricts cancer stem cell traits and cancer progression. Chan CH, Morrow JK, **Li CF**, Gao Y, Jin G, Moten A, Stagg LJ, Ladbury JE, Cai Z, Xu D, Logothetis CJ, Hung MC, Zhang S, Lin HK. **Cell**. 2013 Aug 1;154(3):556-68. PMID: 23911321

g. Skp2-dependent ubiquitination and activation of LKB1 is essential for cancer cell survival under energy stress. Lee SW, **Li CF**, Jin G, Cai Z, Han F, Chan CH, Yang WL, Li BK, Rezaeian AH, Li HY, Huang HY, Lin HK. **Mol Cell**. 2015 Mar 19;57(6):1022-33. PMID: 25728766

h. Skp2-macroH2A1-CDK8 axis orchestrates G2/M transition and tumorigenesis. Xu D, **Li CF**, Zhang X, Gong Z, Chan CH, Lee SW, Jin G, Rezaeian AH, Han F, Wang J, Yang WL, Feng ZZ, Chen W, Wu CY, Wang YJ, Chow LP, Zhu XF, Zeng YX, Lin HK. **Nat Commun**. 2015 Mar 30;6:6641. PMID: 25818643

i. The DNA Damage Transducer RNF8 Facilitates Cancer Chemoresistance and Progression through Twist Activation. Lee HJ, **Li CF**, Ruan D, Powers S, Thompson PA, Frohman MA, Chan CH. **Mol Cell**. 2016 Sep 15;63(6):1021-33.

j. TRAF6 Restricts p53 Mitochondrial Translocation, Apoptosis, and Tumor Suppression. Zhang X, **Li CF**, Zhang L, Wu CY, Han L, Jin G, Rezaeian AH, Han F, Liu C, Xu C, Xu X,

Huang CY, Tsai FJ, Tsai CH, Watabe K, Lin HK. **Mol Cell**. 2016 Nov 17;64(4):803-814.

k. A hypoxia-responsive TRAF6-ATM-H2AX signalling axis promotes HIF1α activation, tumorigenesis and metastasis. Rezaeian AH, **Li CF**, Wu CY, Zhang X, Delacerda J, You MJ, Han F, Cai Z, Jeong YS, Jin G, Phan L, Chou PC, Lee MH, Hung MC, Sarbassov D, Lin HK. **Nat Cell Biol**. 2017 Jan;19(1):38-51.

l. Non-proteolytic ubiquitination of Hexokinase 2 by HectH9 controls tumor metabolism and cancer stem cell expansion. Lee HJ, **Li CF**, Ruan D, He J, Montal ED, Lorenz S, Girnun GD, Chan CH. **Nat Commun**. 2019 Jun 14;10(1):2625. doi: 10.1038/s41467-019-10374-y.

4. **Functional genomic exploration of urothelial cancer:** Urothelial cancer is the most common malignancy involving the urinary system. Taking into account both histopathological and molecular features, this 'two-pathway' model proposes that papillary non-muscle-invasive bladder cancer (NMIBC) develops via epithelial hyperplasia and recruitment of a branching vasculature, while MIBC derives through flat dysplasia and carcinoma in situ (CIS). Our studies comprehensively profile the genomic and expression alterations associated with urothelial cancer progression followed by using systemic high-throughput study, bio-informatics analysis, and solid tissue and functional validations. Our findings confirm the essential role played by amplification-driven YWHAZ, CEBPD, and BCL6 in sustaining cell proliferation, metastasis, and resistance to chemo/radiotherapy. We also successfully explore the tumor suppressor functions of three novel membranous proteins, including the role of EMP2 in G2/M cell cycle arrest, suppressing cell viability via regulation of G2/M checkpoints; the recruitment of PHLPP2 by TMCO1 to dephosphorylate pAKT1; and a novel dual tumor suppressor roles of SLC14A1 for its ability to keep the homeostasis of urea cycle and to orchestrate of transcriptionally suppressive SIN3A/HDAC1 complex. Moreover, we systemically evaluate the clinicopathologic and biologic significance of galectin-1, as well as the prognostic significances of a list of genes, including PTP4A3 and FGF7.

a. Wang WJ, **Li CF* (Co-last author)**, Chu YY, Wang YH, Hour TC, Yen CJ, Chang WC, Wang JM. Inhibition of the EGFR/STAT3/CEBPD Axis Reverses Cisplatin Cross-resistance with Paclitaxel in the Urothelial Carcinoma of the Urinary Bladder. **Clin Cancer Res**. 2017 Jan 15;23(2):503-513.

b. Downregulation of transmembrane and coiled-coil domain 1 in urinary bladder urothelial carcinoma: a characterization of tumor suppressor function impairs AKT signaling pathway. **Li CF**, WR Wu, YH Wang, TC Chan, Chen LR, Yen CJ, Hsieh CW, Wang WT,

Wu WJ, Yeh BW, Liang SS, YL Shiue. **Clin Cancer Res**. 2017 Dec 15;23(24):7650-7663.

c. Amplification-driven BCL6-suppressed cytostasis is mediated by transrepression of FOXO3 and post-translational modifications of FOXO3 in urinary bladder urothelial carcinoma. Wu WR, Lin JT, Pan CT, Chan TC, Liu CL, Wu WJ, Sheu JC, Yeh BW, Huang SK, Jhung JY, Hsiao MS, **Li CF* (Co-corresponding author)**, Shiue YL*. **Theranostics** 2020; 10(2): 707-724.

d. YWHAZ amplification/overexpression defines aggressive bladder cancer and contributes to chemo-/radio-resistance by suppressing caspase-mediated apoptosis. Yu CC#, **Li CF# (Co-First author)**, Chen IH, Lai MT, Lin ZJ, Korla PK, Chai CY, Ko G, Chen CM, Hwang T, Lee SC, Sheu JJ. **J Pathol**. 2019 Apr 3. doi: 10.1002/path.5274.

e. FGF7 Over Expression is an Independent Prognosticator in Patients with Urothelial Carcinoma of the Upper Urinary Tract and Bladder. Fan EW, Li CC, Wu WJ, Huang CN, Li WM, Ke HL, Yeh HC, Wu TF, Liang PI, Ma LJ*, **Li CF*(Co-corresponding author)**. ***J Urol***. 2015 Jul;194(1):223-9.

f. PTP4A3 Independently Predicts Metastasis and Survival in Upper Tract Urothelial Carcinoma Treated with Radical Nephroureterectomy. Yeh HC, Li CC, Huang CN, Hour TC, Yeh BW, Li WM, Liang PI, Chang LL, **Li CF*(Co-corresponding author)**, Wu WJ*. ***J Urol***. 2015 Nov;194(5):1449-55. doi: 10.1016/j.juro.2015.05.101.

g. Role of Microtubule-Associated Protein 1b in Urothelial Carcinoma: Overexpression Predicts Poor Prognosis. Chien TM, Chan TC, Huang SK, Yeh BW, Li WM, Huang CN, Li CC, Wu WJ, **Li CF* (Corresponding author)**. ***Cancers*** 2020, 12(3), 630

D. Selected Published works

1. Role of Microtubule-Associated Protein 1b in Urothelial Carcinoma: Overexpression Predicts Poor Prognosis. Chien TM, Chan TC, Huang SK, Yeh BW, Li WM, Huang CN, Li CC, Wu WJ, **Li CF* (Corresponding author)** *Cancers* 2020, 12(3), 630 **(IF=6.162)**

2. Amplification-driven BCL6-suppressed cytostasis is mediated by transrepression of FOXO3 and post-translational modifications of FOXO3 in urinary bladder urothelial carcinoma. Wu WR, Lin JT, Pan CT, Chan TC, Liu CL, Wu WJ, Sheu JC, Yeh BW, Huang SK, Jhung JY, Hsiao MS, **Li CF* (Co-corresponding author)**, Shiue YL*. *Theranostics* 2020; 10(2): 707-724. **(IF=8.063)**

3. Nuclear KIT induces a NFKBIB-RELA-KIT autoregulatory loop in imatinib-resistant gastrointestinal stromal tumors. Hsueh YS, Chang HH, Shan YS, Sun HS, Fletcher JA, **Li CF* (Co-corresponding author)**, Chen LT*. *Oncogene* 2019; 38: 6550-6565. **(IF=6.634)**

4. Hepatoma-derived growth factor supports the antiapoptosis and profibrosis of pancreatic stellate cells. Chen YT, Chen FW, Chang TH, Wang TW, Hsu TP, Chi JY, Hsiao YW, **Li CF*(Co-corresponding author)**, Wang JM*. *Cancer Lett.* 2019 May 9. pii: S0304-3835(19)30277-0. doi: 10.1016/j.canlet.2019.05.001. **(IF=6.508)**
5. Non-proteolytic ubiquitination of Hexokinase 2 by HectH9 controls tumor metabolism and cancer stem cell expansion. Lee HJ, **Li CF**, Ruan D, He J, Montal ED, Lorenz S, Girnun GD, Chan CH. *Nat Commun*. 2019 Jun 14;10(1):2625. doi: 10.1038/s41467-019-10374-y. **(IF=11.878)**
6. YWHAZ amplification/overexpression defines aggressive bladder cancer and contributes to chemo-/radio-resistance by suppressing caspase-mediated apoptosis. Yu CC#, **Li CF# (Co-first author)**, Chen IH, Lai MT, Lin ZJ, Korla PK, Chai CY, Ko G, Chen CM, Hwang T, Lee SC, Sheu JJ. J Pathol. 2019 Aug;248(4):476-487. **(IF=5.942)**

Complete List of Published Work in My Bibliography

http://www.ncbi.nlm.nih.gov/pubmed/?term=Chien-Feng+Li

TOS summit
winter session

Venue
張榮發
會議中心八樓
801會議室

13:00~13:30

New strategy for front-line treatment: multiple IO Combo regimens in advanced NSCLC

Speaker: 李岡遠 醫師
雙和醫院胸腔內科

Moderator: 陳育民 教授
臺北榮民總醫院胸腔部

Lee/ Kang-Yun

Office Address

Taipei Medical University-Shuang Ho Hospital, New Taipei City, Taiwan, R.O.C.

EDUCATION

1. September 1987- June 1994
   Medical Department, School of Medicine, Taipei Medical University, Taipei, Taiwan
2. July 1993- June 1994
   Internship in Chang Gung Memorial Hospital, Taipei, Taiwan

POST-GRADUATE EDUCATION

March 2003-June 2006 National Heart and Lung Institute, Imperial College of Science, Technology and Medicine, University of London, London, UK-- PhD

ACADEMIC APPOINTMENT

1. July 2001- July 2013
   Attending physician (V.S.)
   Department of Thoracic Medicine, Lin-Kou Medical Center of Chang Gung Memorial Hospital, Tao-Yuan, Taiwan
2. November 2006 – July 2013
   Physician scientist
   Department of Thoracic Medicine, Lin-Kou Medical Center of Chang Gung Memorial Hospital, Tao-Yuan, Taiwan
3. July 2007-2013
   Assistant professor in Chang Gung University College of Medicine, Taiwan
4. July 2013-2013
   Associate professor in Lin-Kou Medical Center of Chang Gung Memorial Hospital
5. March 2014-July 2017
   Associate professor of Medicine, School of Medicine, College of Medicine, Taipei Medical University
6. **Since August 2017**
   Professor of Internal Medicine, School of Medicine, College of Medicine, Taipei Medical University

EMPLOYMENT RECORD

1. October 1994-June1996
   Officer doctor, second lieutenant, 151 Division, Army, R.O.C.
2. July 1996-June1999
   Residency in Department of Internal Medicine, Lin-Kou Medical Center of Chang Gung Memorial Hospital, Tao-Yuan, Taiwan
3. July 1999- June 2001
   Fellowship in Department of Thoracic Medicine II, Lin-Kuo Medical Center of Chang Gung Memorial Hospital, Tao-Yuan, Taiwan
4. July 2001- July 2013
   Attending physician (V.S.) in Department of Thoracic Medicine, Lin-Kou Medical Center of Chang Gung Memorial Hospital, Tao-Yuan, Taiwan
5. Oct 2006- July 2013
   Physician scientist, Chang Gung Memorial Hospital, Tao-Yuan, Taiwan
6. Aug 2013 – Jul 2019
   Chief of Pulmonary Medicine, Department of Internal Medicine, Taipei Medical University-Shuang Ho Hospital, New Taipei City, Taiwan
7. Aug 2014 – Jul 2019
   Chief of Division of Thoracic Medicine, School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan
8. Since Aug 2016 – Jul 2019
   Vice-director, Department of Internal Medicine, Taipei Medical University-Shuang Ho Hospital, New Taipei City, Taiwan
9. 2019-July 2019
   Director of International Ph. D. Program for Cell Therapy and Regeneration Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan
10. Since May 2018-July 2020
    Director, Department of Medical Research, Taipei Medical University-Shuang Ho Hospital, New Taipei City, Taiwan
11. **Since July 2013**
    Attending physician (V.S.), Division of Pulmonary Medicine, Department of Internal Medicine, Taipei Medical University-Shuang Ho Hospital, New Taipei City, Taiwan

12. Since Aug 2019
Dean, Office of Human Research, Taipei Medical University

12. Since Aug 2020
Vice Superintendent, Taipei Medical University-Shuang Ho Hospital, New Taipei City, Taiwan

RESEARCH INTEREST

Lung cancer, immunology, airway inflammation, airway pharmacology, and molecular cell biology

New strategy for front-line treatment: multiple IO Combo regimens in advanced NSCLC

李岡遠醫師

It has been a debate whether chemotherapy may be omitted in selected patients with advanced non-small cell lung cancer. In CheckMate 227 trial, dual immunotherapies with anti-PD1 plus anti-CTLA4 improve the overall survival of patients with NSCLC, regardless PD-L1 expression. CheckMate 9LA further confirmed the additional benefits of dual immunotherapy combined with two cycles of chemotherapy for patients with NSCLC. These two trials (CM227/CM9LA) further evaluated subgroup data of Asian population and presented at ESMO this year. Both data showed promising result of OS, PFS, ORR and CR rate that proved Nivolumab+Ipilimumab would be the most suitable dual IO regimen for Asian NSCLC patients.

Cytotoxic chemotherapy and angiogenesis inhibitors may lead to a synergistic effect on immune checkpoint inhibitor. A phase 1b trial (ONO-4538-04) has shown tolerable safety profiles and a promising efficacy of nivolumab with carboplatin, paclitaxel, and bevacizumab combination in patients with advanced NSCLC. 2020 ESMO, the first disclosure of TASUKI-52/ONO-4538-52, showing the significant PFS and response benefit for first line NSCLC patients.

TOS summit

winter session

Venue
張榮發
會議中心八樓
801會議室

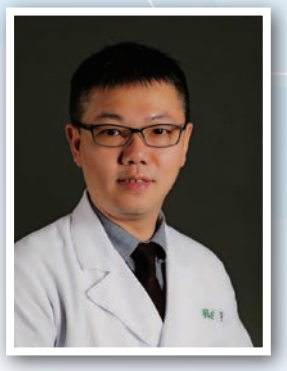
13:30~14:00

The update treatment of HER2 - metastatic breast cancer :Focus on Target therapy

Speaker: 劉峻宇 主任
臺北榮民總醫院內科部輸血醫學科

Moderator: 林季宏 醫師
臺大醫院腫瘤醫學部
臺大癌醫中心醫院腫瘤內科部

Chun-Yu Liu, MD, PhD
劉峻宇



學 位：

1993/06 ~ 2000/6台北醫學大學醫學士

2010/09~ 2013/07國立陽明大學生物藥學研究所博士

現 職：

2018/02/01台北榮民總醫院內科部輸血醫學科 主任

教 職：

2008/08~ 國立陽明大學內科兼任講師

2013/08~國立陽明大學內科兼任助理教授

經 歷：

2002/07/15~2005/07台北榮民總醫院內科部住院醫師、

2005/07~2007/05台北榮民總醫院血液腫瘤科總醫師、

2007/06~2008/05台北榮民總醫院內科部部總醫師

2008/08~2014/04 台北榮民總醫院血液腫瘤科契約主治醫師

2014/04/1-2015/10/30台北榮民總醫院血液腫瘤科主治醫師(師三級)

2015/11/1 台北榮民總醫院腫瘤醫學部藥物治療科主治醫師(師三級)

2017/12/28 台北榮民總醫院腫瘤醫學部藥物治療科主治醫師(師二級)

2015/11~ 2018/1/31 台北榮民總醫院腫瘤醫學部藥物治療科主治醫師

2018/02/01台北榮民總醫院內科部輸血醫學科 主任

專長學科：

腫瘤內科學、血液學、周邊血液幹細胞及骨髓移植、抗癌藥物機轉研究

專科證書：

中華民國內科專科醫師、

中華民國腫瘤科專科醫師、

中華民國血液病專科醫師、

台灣癌症安寧緩和專科醫師、
中華民國血液及骨髓移植專科醫師

專科學會：

中華民國內科醫學會、
中華民國血液病醫學會、
中華民國癌症醫學會、
台灣癌症安寧緩和醫學會、
中華民國血液及骨髓移植學會
中華醫學會

The update treatment of HER2 - metastatic breast cancer :Focus on Target therapy

劉峻宇 主任

This speech will cover topics such as how to maximise outcomes in patients with HER2− metastatic breast cancer and provide expert perspectives and recommendations for the use of target theeapy in clinical practice.

Especially contextualizing the latest data with CDK 4-6 inhibitors and implications on treatment outcomes in patients with HR+/HER2- metastatic breast cancer & provide an update on research efforts with CDK 4-6 inhibitors in early breast cancer.

TOS summit

winter session

Venue
張榮發
會議中心八樓
801會議室

14:00~14:30

Raise the bar higher: evolving treatment landscape in neoadjuvant TNBC with immunotherapy

Speaker: 戴明燊 主任
三軍總醫院血液腫瘤科

Moderator: 俞志誠 教授
三軍總醫院一般外科

Ming-Shen Dai, M.D., Ph.D.

Attending Physician,
Division of Hematology and Oncology,
Department of Internal Medicine,
Tri-Service General Hospital (TSGH),

Associate Professor,
School of Medicine,
National Defense Medical Center (NDMC).

Education:

1990-1997	National Defense Medical Center, M.D. (Doctor of Medicine)
2005-2009	Queen Mary, University of London, Ph.D.

Experiences:

1999-2003	Resident, Department of Medicine, TSGH, NDMC.
2003-2004	Chief Resident, Department of Medicine, TSGH, NDMC. Lecturer, School of Medicine, TSGH, NDMC.
2004-	Attending Physician, Division of Hematology and Oncology, Department of Medicine, TSGH, NDMC
2005-2006	M.Phil, Queen Mary University of London, UK
2006-2009	Ph.D., Queen Mary University of London, UK
2006-2009	Clinical fellow, Queen Mary University of London, UK
2007-2009	Collaborative Research, CHU de Nantes, INSERM U948, France
2010-2015	Assistant Professor, School of Medicine, TSGH, NDMC.
2016-	Associate Professor, School of Medicine, TSGH, NDMC.

Memberships:

The Society of Internal Medicine.
The Society of Hematology.
The Society of Bone Marrow Transplantation.

The Society of Clinical Oncology.

The Society of Hospice and Palliative Medicine.

The Society of Taiwan Breast Cancer.

Honor and Award:

- Young Investigators' Award in Clinical Research. Year 2002 and 2004, Tri-Service General Hospital, National Defense Medical Center.
- Mr. Gin-Shi Wang's Award for outstanding clinical research, 2003.
- Outstanding Research Article Award 2004, Taiwan Society of Hematology and BMT.
- International PhD Student Award. 2005-2009. Medical Affairs Bureau, Ministry of National Defense, Taiwan
- Overseas Research Student Award 2006-2008, Queen Mary University of London, UK.

Raise the bar higher: evolving treatment landscape in neoadjuvant TNBC with immunotherapy

戴明燊 醫師

Several accomplishments have been achieved in triple-negative breast cancer (TNBC) research over these years. One remarkable achievement is the impressive success of immunotherapy in patient treatment of TNBC. For instance, the phase III IMpassion130 trial comparing chemotherapy plus atezolizumab versus chemotherapy plus placebo brought metastatic triple-negative breast cancer (mTNBC) into the immunotherapy era with a good start. Early TNBC generally have a poor prognosis, with high rates of systemic recurrence and refractoriness to conventional therapy regardless of the choice of adjuvant treatment. Thus, more effective therapeutic options are sorely needed for eTNBC. Immunotherapy introduce into neoadjuvant setting have been considered as an attractive approach for treatment of early TNBC. Dr. Dai's presentation will cover current development status of neoadjuvant immunotherapy in TNBC and provide his vision about some open questions remain, as well as the future perspectives of immunotherapy in TNBC.

TOS summit
winter session

Venue
張榮發
會議中心八樓
801會議室

14:40~15:10

The role of PIK3CA mutation and PI3K inhibitor in HR+ HER2- advanced breast cancer

Speaker: 陳偉武 醫師
臺大醫院腫瘤醫學部

Moderator: 趙祖怡 副院長
台北癌症中心

Tom Wei-Wu Chen, MD

Attending physician
Department of Oncology
National Taiwan University Hospital
National Taiwan University Cancer Center
Taipei, Taiwan

Dr. Tom W. Chen is currently an attending physician at the Department of Oncology, National Taiwan University Hospital (NTUH) and National Taiwan University Cancer Center in Taipei, Taiwan. Dr. Chen received internal medicine training followed by a fellowship course as a medical oncologist in NTUH. Afterwards, he joined Drug Development Program (DDP) in Princess Margaret Cancer Centre in Toronto, Canada as a clinical fellow to study early phase clinical trials with Dr. Lillian Siu and Dr. Phil Bedard. During his stay in Princess Margaret, he gained more experience with next-generation sequencing and precision medicine, as well as interest in breast cancer patients.

After returning to NTUH, he joined in NTUH breast cancer team and was invovled in various clinical trials including the bevacizumab, cisplatin, and etoposide (the BEEP) regimen in brain cancer patients with brain metastases, the ESR1 mutation landscape in Asian ER+/HER2- metastatic patients, and the combination of lapatinib and vinorelbine in HER2+ MBC.. His publications included studies regarding the thromboembolism events of tamoxifen in Asian population, HER2 treatment reviews, and next-generation sequecing studies in breast cancer. Besides breast cancer, he is also involved in sarcoma and phase I drug development studies.

Notable publications

1. **Chen TW**, Yeh DC, Chao TY, et al. A Phase I/II study of the combination of lapatinib and oral vinorelbine in HER2-positive metastatic breast cancer. *Jpn J Clin Oncol.* 2018 Mar 1;48(3):242-247.
2. Pezo RC, **Chen TW**, Berman HK, et al., Impact of multi-gene mutational profiling on clinical trial outcomes in metastatic breast cancer. *Breast Cancer Res Treat* 2018 Feb;168(1):159-168.
3. **Chen TW**, Lin CH, Huang CS. Should pertuzumab be used as part of neoadjuvant treatment prior to the release of the APHINITY trial results? Transl Cancer Res 2016. doi: 10.21037/

tcr.2016.10.17

4. **Chen TW**, Lin CH, Lu YS. Tailor the adjuvant hormonal manipulation for premenopausal breast cancer patients. Transl Cancer Res 2016. doi: 10.21037/ tcr.2016.08.27
5. Chen BB, Lu YS, Lin CH, **Chen WW**, Wu PF, Hsu CY, Yu CW, Wei SY, Cheng AL, Shih TT. A pilot study to determine the timing and effect of bevacizumab on vascular normalization of metastatic brain tumors in breast cancer. *BMC Cancer*. 2016 Jul 13;16:466.
6. Lu YS, **Chen, TW**, Lin CH et al. Bevacizumab Preconditioning Followed by Etoposide and Cisplatin Is Highly Effective in Treating Brain Metastases of Breast Cancer Progressing from Whole-Brain Radiotherapy. *Clin Cancer Res* 2015 Apr 15;21(8):1851
7. **Chen, TW**, Chen HM, Lin CH, Huang CS, Cheng AL, Lai MS, Lu YS. No increased venous thromboembolism risk in Asian breast cancer patients receiving adjuvant tamoxifen. *Breast Cancer Res Treat*. 2014 Nov;148(1):135-42

The role of PIK3CA mutation and PI3K inhibitor in HR+ HER2- advanced breast cancer

陳偉武 醫師

The treatment landscape for ER+ MBC has changed dramatically in the past few years. In addition to CDK4/6 inhibitor, alpelisib, a PIK3CA-specific inhibitor, is now also available for patients with ER+ /HER2- MBC. The recent update in the overall survival benefit in favor of fulvestrant plus alpelisib also confirmed the importance of suppressing PIK3CA activation in patients with PIK3CA mutation. In this lecture, we will discuss the updated results of the SOLAR-1 study and the role and comparison with various other available treatments in ER+/HER2- MBC.

TOS summit
winter session

Venue
張榮發
會議中心八樓
801會議室

15:10~15:40

Footprints in DDR driven cancers- now and future

Speaker: 劉建廷 醫師
高雄長庚血液腫瘤科

Moderator: 饒坤銘 副院長
義大癌治療醫院

CHIEN-TING LIU
劉建廷

Education

9/1997-6/2004 Bachelor of Medicine (A seven-year medical school training program)
College of Medicine, Chang Gung University, Taiwan

Post-Graduate Education

9/2016-6/2018 Master of Science Institute of Medical Science and Technology, National Sun Yat-sen University, Taiwan

Master Thesis: Molecular dynamics to survey possible mechanisms of ALK Inhibitors to G1202R resistance mutation in EML4-ALK Translocation positive lung cancer (Advisors: Prof. Chih-Chieh Chen, Ph.D.)

Academic Appointment

9/2017- present Assistant professor of Clinical Medicine
Chang Gung University, Taiwan.

3/2016-9/2017 Lecturer of Clinical Medicine
Chang Gung University, Taiwan

Professional Experience

8/2009-present Staff Physician and Clinical Instructor Division of Hematology and Oncology
Kaohsiung Chang Gung Memorial Hospital (KCGMH), Taiwan.

8/2007-7/2009 Fellowship
Division of Oncology
Kaohsiung Chang Gung Memorial Hospital (KCGMH), Taiwan

8/2004-7/2009 Department of Internal Medicine
Kaohsiung Chang Gung Memorial Hospital(KCGMH), Taiwan

Awards/Honors

8/2003-7/2004	Intern (Best Intern of the Year Award Recipient) . Kaohsiung Chang Gung Memorial Hospital (KCGMH), Taiwan
2011	*Great Attendance Award* 1st Paul Carbone Academy, National Health Research Institute, Taiwan
5/2018	Member of The Phi Tau Phi Scholastic Honor Society of the Republic of China (National Sun Yat-sen University, Taiwan)

Membership of Society

- Member of Taiwan Society of Internal Medicine (License No. 7762)
- Member of Taiwan Society of Clinical Oncology (License No. 897)

Posters and Presentations

1. **Liu, C. T.**, Chen, M. H., Chen, J. S., Chen, L. T., Shan, Y. S., Lu, C. H., Su, Y. L., Ku, F. C., Chou, W. C., & Chen, Y. Y. (2015). The safety and efficacy of everolimus for the treatment of progressive gastroenteropancreatic neuroendocrine tumors: A multi-institution observational study in Taiwan. 18th European CanCerOrganisation (ECCO) - 40th European Society for Medical Oncology(ESMO 2015) European Cancer Congress. Vienna, Austria.
2. **Liu, C. T.,** Chen, M. H., Chen, J. S., Chen, L. T., Shan, Y. S., Lu, C. H., Su, Y. L., Ku, F. C., Chou, W. C., & Chen, Y. Y. (2016). Sequential use of everolimus and sunitinib in WHO grade 1 and 2 pancreatic neuroendocrine tumors--retrospective multi-center study.European Society for Medical Oncology Asia Congress(ESMO Asia 2016). Singapore.
3. **Liu, C. T.**, Chen, C.C.. (2017). Molecular Dynamic Simulation to Survey Possible Mechanisms of ALK Inhibitors to G1202R Resistance Mutation in *EML4-ALK* Translocation Positive Lung Cancer. 18th World Conference on Lung Cancer(WCLC 2017), Yokohama, Japan.

Publications

1. **Liu CT**, Chen YH, Huang YC, Chen SY, Tsai MY: Chemotherapy in conjunction with traditional Chinese medicine for survival of patients with early female breast cancer: protocol for a non-randomized, single center prospective cohort study. *Trials* 2019, 20(1):741.
2. Ma MC, Chen YJ, Chiu TJ, Lan J, **Liu CT**, Chen YC, Tien HH, Chen YY: Positive expression of Midkine predicts early recurrence and poor prognosis of initially resectable combined hepatocellular cholangiocarcinoma. *BMC cancer* 2018, 18(1):227.
3. Huang PW, Chou WC, Shen WC, Hung CY, Huang KG, Su YL, Lu CH, **Liu CT**, Chang YS,

Liau CT: Hand-foot skin reaction predicts treatment outcome of pazopanib in patients with metastatic soft tissue sarcoma: A multicenter study in the Asian population. *Asia-Pacific journal of clinical oncology* 2018, 14(4):353-360.

4. Chen JS, Hung CY, Chang H, **Liu CT**, Chen YY, Lu CH, Chang PH, Hung YS, Chou WC: Venous Thromboembolism in Asian Patients with Pancreatic Cancer Following Palliative Chemotherapy: Low Incidence but a Negative Prognosticator for Those with Early Onset. *Cancers* 2018, 10(12).

Footprints in DDR driven cancers - Now and Future

劉建廷 醫師

Nowadays, precision medicine is no longer a novel concept but already a practice on a day-to-day basis. Also, along with popularity of NGS and advent of gene-guiding treatment, a load of researches and experts will be able to push the boundary to optimize cancer treatment.

When it comes to gene-targeting therapy, *BRCA*, the most frequently-discussed gene might pop up first in our mind. Besides its well-established correlation to cancer development, thereby guiding a following series of preventive management and surveillance plan, we now more focus on its clinical value of treatment. PARP inhibitors (PARPi) have transformed the treatment for *BRCA*-mutated ovarian and breast cancers. Recently, clinical strategies for extending the benefit beyond *BRCA*-mutant cancers has been studied, toward broader populations through the use of novel biomarkers of homologous recombination repair deficiency, as well as predictive biomarkers rooted in mechanisms of deficiency.

Based on specific companion diagnosis, indications has been done with PARPi both as single agent and in combination with other agents in different malignancies, as well as different stages. With a tsunami of data coming up and various of trials ongoing, Dr. Liu from CGMH-KS will navigate us through the paradigm shift in the treatment of DDR driven cancer, and prospect the future directions of PARPi development.

TOS summit
winter session

Venue
張榮發
會議中心八樓
803會議室

13:00~13:30

Updated ESMO Guidelines: Bone health in cancer – focus on Breast cancer

Speaker: 沈雯琪 醫師
林口長庚腫瘤科

Moderator: 趙祖怡 副院長
台北癌症中心

Wen-Chi Shen
沈雯琪

Birth Date: Aug 27, 1974 Citizenship: Taiwan, ROC.

Office Address:

Division of Hematology-Oncology, Department of Internal Medicine, Chang Gung Medical Foundation. Linkou Branch.

No. 5, Fu-Hsing St., Kuei-Shan Township, Tao-Yuan County 33305, Taiwan

E-mail: c220273@adm.cgmh.org.tw

Language: Mandarin

Education: June,1999. Taipei medical college, Taipei, Taiwan.

Employment Record :

June 1998 to June 1999	Medical Intern, National Taiwan University Hospital (NTUH)
July 1999 to June 2000	Resident, Department of Internal Medicine, NTUH
Aug 2000 to June 2002	Resident, Department of Internal Medicine, CGMH, Tao Yuan
July 2002 to June 2004	Fellow/Chief Resident, Division of Oncology, CGMH, Tao Yuan
July 2004 to June 2005	Fellow/Chief Resident, Division of Hematology, CGMH, Tao Yuan
July 2005 to present	Attending Physician, Division of Hematology/Oncology, Department of Internal Medicine, CGMH. Tao Yuan

Oncologic experience: 2 years' fellowship

Hematologic experience: 1 year's fellowship

Board Certification : Internal Medicine (內專醫字 006334 號, Dec 9, 2002)

Licensers: 1. Chinese License No.醫字第 030584 號

Professional Affiliations:

The Hematology Society of the Republic of China

The Chinese Oncology Society

The Society of Internal Medicine R.O.C.

Publications:

1. **Shen WC**, Chen JS, Shao YY, Lee KD, Chiou TJ, Sung YC, Rau KM, Yen CJ, Liao YM, Liu TC, Wu MF, Lee MY, Yu MS, Hwang WL, Lai PY, Chang CS, Chou WC, Hsieh RK.

   Impact of Undertreatment of Cancer Pain With Analgesic Drugs on Patient Outcomes: A Nationwide Survey of Outpatient Cancer Patient Care in Taiwan. J Pain Symptom Manage. 2017, 54,55-65

   (SCI ; IF = 2.905 Medicine, general & internal 31/155 (20%))

2. Lu CY, **Shen WC(co-first author)**, Kao CY, Wang HM, Tang SC, Chin TL, Chi CC, Yang JM, Chang CW, Lai YF, Yeh YC, Hung YS, Chou WC.

   Impact of Palliative Care Consultation Service on Terminally Ill Cancer Patients: A 9-Year Observational Cohort Study in Taiwan. Medicine (Baltimore). 2016 Mar; 95(10):e2981.

   (SCI ; IF =1.804 ; Medicine, general & internal 57/155 (36.7%))

3. **Shen WC**; Yang TS; Hsu HC; Chen JS*.

   A Phase II Study of Irinotecan in Combination With Cisplatin as Second-line Chemotherapy in Patients with Metastatic or Locally Advanced Gastric Cancer. Biomed J. 2011 Nov-Dec;34(6):590-8

4. Chen JS, Chen YY, Huang JS, Yeh KY, Chen PT, **Shen WC**, Hsu HC, Lin YC, Wang HM.;

   A multiple-center phase II study of weekly docetaxel and oxaliplatin as first-line treatment in patients with advanced gastric cancer. Gastric Cancer. 2012 Jan;15(1):49-55

   (SCI ; IF = 5.454 ; oncology 38/217(17.5%))

Research:

1. CMRPG 360391 **Principle investgator**

   To evaluate the predictive value of Topo2A gene amplication in high-risk patients with different doses of adjuvant anthracycline chemotherapy 2007/4/1-2008/9/30

2. XMRPG 360581 **Principle investgator**

   Open label study to evaluate the efficacy of palonosetrone 0.25mgIB in association with dexamethasion 10 mg in the prevention of chemotherapy induce nausea and vomiting 2007/9/1-2008/8/31

3. XMRPG 370231 **Principle investgator**

   An open-label, multicentre study to evaluat the safety/tolerability and clinical utility of low-dose TTS-F D-trans in Taiwan patients with cancer pain 2008/6/10- 2009/6/9

4. XMRPG390261 **Principle investgator**

   A Multicenter, Randomized, Double-Blind, Placebo-Controlled, and Parallel-Group Study of

Subcutaneous MOA-728 for the Treatment of Opioid-Induced Constipation in Adult Subjects With Advanced Illness. (Protocol No:3200K1-3361-AP) 2010/03/11- 2012/06/17

5. CMRPG3D1081-3 **Principle investgator**

   Neoadjuvant chemotherapy plus bevacizumab for triple negative breast cancer and explore if biomarker(sVEGFR1) correlation with response 2014/06/01-2017/05/31

6. (201601522A3C601) **Principle investgator**

   A Pilot study of Eribulin in Breast Cancer (BC) Patients with Brain Metastases Previously Treated with Anthracyclines and Taxanes. 2017/8/22-2020/8/22

推薦者:

1. 陳仁熙醫師 (Jen-Shi Chen) 財團法人長庚紀念醫院林口院區血液腫瘤科，血液腫瘤科主任，為本人之主管及師長
2. 陳訓徽 醫師 (Shin-Cheh Chen) 財團法人長庚紀念醫院林口院區乳房外科，教授，為指導本人於乳癌治療及研究之師長

Bone health in cancer: ESMO Clinical Practice Guidelines

沈雯琪醫師

It is important that clinicians are familiar with the interventions to apply when patients with breast cancer develop bone metastases in order to minimize bone-related clinical symptoms. In the treatment of cancer, bone-targeted therapies are meant primarily for patients with metastatic bone disease to prevent skeletal-related events (SRE), to control the pain associated with bone metastasis, and to treat malignant hypercalcaemia, while in early disease the primary aim is the prevention of bone loss caused by cancer treatments.

In order to overcome some of the differences between treatment guidelines and clinical practice, the revised 2020 ESMO Bone Health Guidelines aim to provide clearer evidence-based guidance. Major differences between the 2020 edition and the previous 2014 treatment guidelines include: input from a wider group of experts across different fields, including orthopedics, imaging, radiation-based therapies and supportive care as well as specific expertise in multiple myeloma, prostate cancer and other solid tumors. Additionally, expertise from North America was included to help ensure the guidelines were appropriate across the globe and for the many different health care systems.

In terms of optimizing bone targeted treatment of patients with metastatic bone disease, bone-targeted therapies (BTAs) bone-targeted therapies should be initiated at diagnosis of bone metastasis whether they are symptomatic or not, and considered throughout the course of the disease. The option to reduce the frequency of bisphosphonate administration is now clearer based on recent trial information. However, denosumab is still recommended as every four week frequency due to the PK/PD profiles, and should be sustained denosumab treatment with careful discontinuation due to the potential rebound osteolysis effect.

In the 2020 ESMO guidelines, several recommendations in early stage breast cancer or prostate cancer are updated, such as BTAs effectively prevent against bone loss from cancer treatments with clear fracture prevention seen with denosumab for both breast cancer patients on AI and ADT treated men with prostate cancer. Bisphosphonates can also serve as post-operative adjuvant therapy for post-menopausal women with early-stage breast cancer in order to reduce the risk of cancer recurrence in the future.

TOS summit

winter session

Venue
張榮發
會議中心八樓
803會議室

13:30~14:00

Targeting Actionable KRAS Mutation in NSCLC

Speaker: 蔡俊明 教授
臺北榮總腫瘤醫學部教授級教職特約醫師

Moderator: 蘇五洲 教授
成大醫院內科部/腫瘤醫學部

蔡俊明

現職:

台北榮總腫瘤醫學部教授級教職特約醫師
國泰綜合醫學中心台北總院顧問醫師
好心肝門診中心特聘胸腔內科教授

經歷:

中山醫科大學附設醫院顧問醫師 (2016/10-2020/06)
臺北榮民總醫院 胸腔部/胸腔腫瘤科 科主任 (1990/06-2016/1)
美國國家健康研究所(NIH)癌症研究院(NCI) 研究員 (1986-1987)
臺北榮民總醫院 胸腔部主治醫師 (1983-1990)
臺北榮民總醫院住院總醫師 (1982/07-1983/06)
臺北榮民總醫院 住院醫師 (1978/07-1982/06)
振興醫療財團法人振興醫學中心顧問醫師
曾擔任NCCN亞洲版委員會委員
陽明大學醫學院與臨醫所合聘教授
台灣肺癌學會運用低劑量電腦斷層攝影進行肺癌篩檢共識召集人
主持國科會及院內研究計畫
主持國內多中心臨床試驗計劃
台北榮總產官學合作研發委員會委員
台灣胸腔暨重症加護醫學會 理事

學歷:

高雄醫學大學 醫學系 (1969至1976)

獎項:

國科會甲種研究獎助
國科會傑出研究獎
徐千田癌症傑出研究獎

論文及出版:

論文發表於國際醫學期刊百餘篇

「圖解肺癌診治照護全書」總策劃

學會與認證：

內科專科學會 內科專科醫師資格

台灣胸腔暨重症加護醫學會 胸腔暨重症專科醫師資格

台灣臨床腫瘤醫學會 臨床腫瘤專科醫師資格

台灣肺癌學會 肺癌專科醫師資格

臨床專長:

胸腔腫瘤醫學

胸腔醫學

Targeting Actionable KRAS Mutation in NSCLC

蔡俊明教授

KRAS is recognized as one of the most frequently mutated oncogene in human cancer. Despite nearly four decades of scientific efforts, KRAS has been one of cancer research's toughest challenges due to lack of surface targets for KRAS binding. KRAS mutant has been identified a poorer prognostic factor in NSCLC patients due to no durable therapies. Immuno-checkpoint inhibitors (ICI) may show slightly clinical benefit in KRAS mutant NSCLC population; however, the data is still controversial due to different PD-L1 expression in KRAS subtypes and different ICI treatment strategy (mono therapy or combine to chemotherapy). K*RAS G12C* mutation is most comment subtype among KRAS mutant NSCLC. AMG 510, a small molecule, irreversibly bind to inactive KRAS *G12C* mutant protein with P2 pocket, which leads to a new covalent binding to inhibit the activation of KRAS protein. In preclinical analyses, treatment with AMG 510 led to the regression of KRAS *G12C* tumors and improved the anti-tumor efficacy of chemotherapy and targeted agents. In immune-competent mice, treatment with AMG 510 resulted in a pro-inflammatory tumor microenvironment and produced durable cures alone as well as in combination with immune-checkpoint inhibitors. In clinical development, CodeBreak 100, the first dose finding phase 1 outcome of AMG 510 monotherapy in *KRAS G12C* mutant solid tumors was first presented in 2019 ASCO. In 2020 ESMO, the updated heavily pretreated NSCLC subgroup with 59 subjects is presented. The data showed a favorable safety profile without patients reported dose limited toxicity and durable clinical outcomes. 91.2% of disease control rate as detected in 960mg cohort, and 6.3 month of median progression free survival was observed in all dosage cohorts. Daily dose of 960 mg was selected in the following confirmatory phase 3 trial. In the meanwhile, anther phase 1b trial, CodeBreak 101, combining AMG 510 with targeted therapies or immunotherapies is ongoing. This trial is in progress and expect clinical outcomes soon.

TOS summit

winter session

Venue
張榮發
會議中心八樓
803會議室

14:00~14:30

Updates of driver gene targeted agents in non small cell lung cancer

Speaker: 楊展庚 醫師
林口長庚腫瘤科

Moderator: 張文震 主任
林口長庚免疫腫瘤學卓越中心

Chan-Keng Yang
楊展庚

現職
桃園長庚醫院腫瘤科講師級主治醫師

學歷
長庚大學醫學系

經歷
長庚醫院腫瘤科總醫師

學會與認證

腫瘤內科專科醫師

內科專科醫師

相關發表
1. Chen, Po-Jui & Yap, Wing-Keen & Chang, Yu-Chuan & Tseng, Chen-Kan & Chao, Yin Kai & Hsieh, Chia-Hsun & Pai, Ping-Ching & Lee, Ching-Hsin & Yang, Chan-Keng & Ho, Albert & Hung, Tsung-Min. (2020). Prognostic value of lymph node to primary tumor standardized uptake value ratio in unresectable esophageal cancer. BMC Cancer. 20. 10.1186/s12885-020-07044-4.
2. Wu, Chiao-En & Yang, Chan-Keng & Peng, Meng-Ting & Huang, Pei-Wei & Lin, Yu-Fen & Cheng, Chi-Yuan & Chang, Yao-Yu & Chen, Huan-Wu & Hsieh, Jia-Juan & Chang, John. (2020). Immune Checkpoint Inhibitors for Advanced Melanoma: Experience at a Single Institution in Taiwan. Frontiers in Oncology. 10. 10.3389/fonc.2020.00905.
3. Chen, Po-Jui & Yap, Wing-Keen & Chang, Yu-Chuan & Tseng, Chen-Kan & Chao, Yin Kai & Hsieh, Chia-Hsun & Pai, Ping-Ching & Lee, Ching-Hsin & Yang, Chan-Keng & Ho, Albert & Hung, Tsung-Min. (2020). Prognostic Value of Lymph Node to Primary Tumor Standardized Uptake Value Ratio in Unresectable Esophageal Cancer. 10.21203/rs.3.rs-25249/v1.
4. Lin, Chun-Yen & Hsu, Chen-Yu & Huang, Sheng-Kai & Fan, Yun-Han & Huang, Chien-Hao & Yang, Chan-Keng & Su, Wan-Ting & Chang, Po-Chia & Dutta, Avijit & Liu, Yu-Jen & Huang, Ching Tai & Chen, Tse-Ching. (2018). Induction of liver-specific intrahepatic myeloid cells

aggregation expands CD8 T cell and inhibits growth of murine hepatoma. Oncoimmunology. 7. e1502129. 10.1080/2162402X.2018.1502129.

5. Chen, Chun-Bing & Wu, Ming Ying & Ng 黃昭瑜, Chau Yee & Lu, Chun-Wei & Wu, Jennifer & Kao, Pei-Han & Yang, Chan-Keng & Peng, Meng-Ting & Huang, Chen-Yang & Chang, Wen-Cheng & Hui, Rosaline & Yang, Chih-Hsun & Yang, Shun-Fa & Chung, Wen-Hung & Su, Shih-Chi. (2018). Severe cutaneous adverse reactions induced by targeted anticancer therapies and immunotherapies. Cancer Management and Research. Volume 10. 1259-1273. 10.2147/CMAR.S163391.
6. Shen, Shih-Che & Ueng, Shir-Hwa & Yang, Chan-Keng & Yu, Chi-Chang & Lo, Yung-Feng & Chang, Hsien-Kun & Lin, Yung-Chang & Chen, Shin-Cheh. (2017). Impact of Detection Method and Accompanying Ductal Carcinoma in Situ on Prognosis of T1a,bN0 Breast Cancer. Journal of Cancer. 8. 2328-2335. 10.7150/jca.19293.
7. Yang, Chan-Keng & Huang, Wen-Kuan & Jung, Shih-Ming. (2016). Human Papillomavirus Type 18-Associated Cervical and Lung Mixed Adenoneuroendocrine Carcinoma. Journal of Cancer Research and Practice. 3. 10.1016/j.jcrpr.2016.05.008.
8. Yang, Chan-Keng & Wu, Chiao-En & Liaw, Chuang-Chi. (2016). Combination of palonosetron, aprepitant, and dexamethasone as primary antiemetic prophylaxis for cisplatin-based chemotherapy. Biomedical Journal. 39. 10.1016/j.bj.2015.08.006.
9. Huang, Chen-Yang & Lu, Chang-Hsien & Yang, Chan-Keng & Hsu, Hung-Chih & Kuo, Yung-Chia & Huang, Wen-Kuan & Chen, Jen-Shi & Lin, Yung-Chang & Chia-Yen, Hung & Shen, Wen-Chi & Chang, Pei-Hung & Yeh, Kun-Yun & Hung, Yu-Shin & Chou, Wen-Chi. (2015). A Simple Risk Model to Predict Survival in Patients With Carcinoma of Unknown Primary Origin. Medicine. 94. e2135. 10.1097/MD.0000000000002135.

Updates of driver gene targeted agents in non small cell lung cancer

楊展庚 醫師

Lung cancer is the leading cause of cancer death, accounting for more than 1.7 million deaths annually. NSCLC represents 85% of all lung cancer cases, with an estimated 30% of patients presenting with resectable disease at diagnosis. Surgery is first choice of treatment in resectable NSCLC followed by adjuvant chemotherapy which is recommended for patients with resected stage II—IIIA NSCLC and select patients with stage IB disease. However, rates of disease recurrence following surgery remain high across disease stages, regardless of postoperative chemotherapy use.

EGFR-TKIs are standard-of-care for patients with EGFRm advanced NSCLC and previous studies have suggested there may be a role for EGFR-TKIs in the resected setting. In the phase III ADAURA study, adjuvant osimertinib (a third-generation EGFR-TKI), demonstrated a highly statistically significant and clinically meaningful improvement in DFS in patients with resectable (stage IB—IIIA) EGFRm NSCLC.

The type of recurrence is a key consideration in resected NSCLC. Local and regional recurrence is associated with longer post-recurrence survival than distant recurrence. Osimertinib has been shown to achieve clinically significant exposure in the brain compared with other EGFR-TKIs, and has shown greater penetration of the blood-brain barrier. Hence, the predefined analysis of CNS disease recurrence was reported in 2020 ESMO. Patients who received osimertinib had fewer local / regional and distant relapses than those who received placebo, with a lower incidence of metastatic disease in those patients with recurrence, including fewer CNS recurrence events.

For advanced EGFRm NSCLS patients not previously treated, Phase III FLAURA trial osimertinib significantly prolonged progression free survival (PFS) and overall survival (OS) versus comparator EGFR TKIs (gefitinib/erlotinib). Previously reported outcome showed improved PFS versus comparator EGFR TKI in the FLAURA China osiemrtinib group with HR: 0.56 (95% CI: 0.37,0.85). Here comes the OS data from the 2020 ESMO. In the FLAURA China study, median OS was extended by a clinically meaningful 7.4 months in the osimertinib group vs comparator EGFR-TKI group, which is consistent with the global population, where median OS was extended by 6.8 months in the osimertinib group.

Combination therapy such as Erlotinib + Ramucirumab or Erlotinib + Bevacizumab are also first line

choice for advanced EGFRm NSCLS patients. ACTIVE is the phase III study evaluating apatinib, an oral small molecule VEGFR2-TKI, or placebo plus gefitinib as first-line therapy in patients (pts) with EGFRm NSCLC. Apatinib plus gefitinib as first-line therapy demonstrated superior PFS with HR= 0.71 (95% CI 0.54-0.95; p = 0.0189), which is consistent to previous studies. In the Phase III RELAY study evaluating Erlotinib + Ramucirumab as first line therapy, results in regard to PFS effect on del 19/L858R was published (del 19 HR= 0.65 (0.47, 0.90 ; L858R HR= 0.62(0.44, 0.87)). Both ACTIVE and RELAY study analyse the association of TP53 mutation an PFS. Whether TP53 mutation status could serve as an efficacy predictor needs further reseach.

TOS summit
winter session

Venue
張榮發
會議中心八樓
803會議室

14:40~15:10

Moving to immunotherapy era: long-term experience and survival of immunotherapy in lung cance

Speaker: 廖斌志 醫師
臺大醫院腫瘤醫學部

Moderator: 張文震 主任
林口長庚免疫腫瘤學卓越中心

Bin-Chi Liao, M.D.

廖斌志

Attending Physician
Department of Oncology, National Taiwan University Hospital
National Taiwan University Cancer Center (NTUCC)

Biography

Bin-Chi Liao is a medical oncologist. He completed his medical oncology subspecialty training in 2012, and has been a staff physician and medical oncology consultant at National Taiwan University Hospital (NTUH) since 2014. He has special interest in lung cancer and head and neck cancer patient care, clinical trial design, new drug development and conduction of clinical trials. Dr. Liao also has been the co-investigator of lung cancer clinical trials lead by Professor James Chih-Hsin Yang. He also involved many clinical and basic research programs in collaboration with Prof. Yang.

Current Position

Jul. 2014~
Staff Physician (主治醫師)
Department of Oncology (腫瘤醫學部)
National Taiwan University Hospital, Taiwan (臺大醫院)

Past Position

Jul. 2012~Jun. 2014
Staff Physician (主治醫師)
Department of Internal Medicine (內科部)
National Taiwan University Hospital Hsin-Chu Branch (臺大醫院新竹分院內科部)

Postgraduate Training

Resident , Department of Internal Medicine, National Taiwan University Hospital, Taiwan (臺大醫院內科部住院醫師) Aug. 2006~June 2009

Fellowship, Department of Oncology National Taiwan University Hospital, Taiwan (臺大醫院腫瘤醫學部研修醫師) July 2009~June 2012

Military Service

Obligatory General Medical Officer at ROC Army (中華民國國軍軍醫官) July 2005~June 2006

Medical Education

M.D. School of Medicine, Medical College, National Cheng Kung University, Taiwan (國立成功大學醫學院醫學系) Sept. 1998~June 2005

Graduate Institute of Clinical Medicine, College of Medicine, National Taiwan University (國立臺灣大學醫學院臨床醫學研究所) Sept. 2016~

Medical License

Medical License for practice in Taiwan, ROC, 2005 (中華民國醫師證書)

Certifications

Board of Internal Medicine Taiwan, ROC (2009~) (中華民國內科專科醫師證書)

Board of Medical Oncology, Taiwan, ROC (2011~) (中華民國腫瘤內科專科醫師證書)

Board of Cancer Palliative Medicine, Taiwan, ROC (2013~) (台灣癌症安寧緩和醫學專科醫師證書)

Membership:

Member, American Society of Clinical Oncology (ASCO)(美國臨床腫瘤醫學會)

Member, International Association for the Study of Lung Cancer (IASLC)(國際肺癌研究學會)

Member, Taiwan Oncology Society, Taiwan, ROC(中華民國癌症醫學會)

Member, Chinese Society of Internal Medicine, Taiwan, ROC(中華民國內科醫學會)

Member, Taiwan Society of Cancer Palliative Medicine, Taiwan, ROC(台灣癌症安寧緩和醫學會)

Committee Members:

1. Member, Thoracic Oncology Multidisciplinary Team, National Taiwan University Hospital (2014~).
2. Member, Head and Neck Cancer Multidisciplinary Team, National Taiwan University Hospital (2014~).
3. Member, Nasopharyngeal Carcinoma Multidisciplinary Team, National Taiwan University Hospital (2016~).

Invited Reviewers of Manuscripts:

1. Lung Cancer
2. ESMO Open
3. Oncotarget
4. Investigational New Drugs
5. Cancer Biomarkers
6. Gene
7. Asia-Pacific Journal of Clinical Oncology
8. Journal of Formosan Medical Association
9. Journal of Cancer
10. Thoracic Cancer
11. Current Medical Research & Opinion

Honors:

1. Travel Grant Award, European Lung Cancer Conference (ELCC) 2016, Geneva, Switzerland.

Workshops:

1. Participant, the 3rd Paul Carbone Academy Clinical Trial Training, Taiwan (2013~2014).
2. Participant, Practical Workshop on Good Clinical Practice and Ethics Training, PRACTISE™ Core & PRACTISE™ Act, organized by The University of Hong Kong Clinical Trial Centre, Taichung, Taiwan (2013); Sponsored by Boehringer Ingelheim.
3. Participant, MD Anderson Cancer Center J-HOPE Program, the 3rd Clinical Research Skill Advancement Workshop, Tokyo, Japan (2015).
4. Participant, Medical Speaker Training in Lung Cancer (Lux-Lung 7, Afatinib), Taipei, Taiwan (2016); Sponsored by Boehringer Ingelheim.
5. Invited speaker and participant, the 4th International Symposium of Training Plan for Oncology Professionals, Osaka, Japan (2016).
6. Invited speaker and participant, Young East Asian Investigators Exchange Summit, Tokyo, Japan (2017); Sponsored by Eli Lilly.
7. Participant, JSMO Young Oncologist Preceptorship, Singapore (2017); Sponsored by Boehringer Ingelheim
8. Participant, Lung Cancer Consortium Singapore (LCCS) Lung Preceptorship Program Ideal Workshop, Singapore (2018); Sponsored by Pfizer

Invited Speech in International Symposiums:

1. Outcomes in Research Biopsies in Clinical Trials of EGFR mutation-positive NSCLC patients Pretreated with EGFR-TKIs; the 4th International Symposium of Training Plan for Oncology Professionals, Feb. 27th, 2016, Osaka, Japan.
2. How to treat lung cancer patients: learnings from clinical trials; 2016 CTONG (Chinese Thoracic Oncology Group)-Lilly Non-Small Cell Lung Cancer Forum, July 2nd, 2016, Dalian, China; Sponsored by Eli Lilly.
3. Case presentation: typical case of stage IV non-Sq NSCLC without EGFR mutation and docetaxel usage in daily practice & AE management; Young East Asian Investigators Exchange Summit, Mar. 25th, 2017, Tokyo, Japan; Sponsored by Eli Lilly.
4. Cetuximab for Recurrent / Metastatic Head & Neck Squamous Cell Carcinoma; Merck Oncology Summit 2017, Aug. 26th, 2017, Kuala Lumpur, Malaysia; Sponsored by Merck.
5. Current therapeutic topics of EGFR mutation-positive NSCLC; the 1st International Cancer Research Symposium of Training Plan for Oncology Professionals, Mar. 11th, 2018, Osaka, Japan; Sponsored by AstraZeneca.
6. The evolving landscape of immunotherapy for the treatment of NSCLC; the 23rd Hong Kong Medical Forum, the University of Hong Kong, Queen Mary Hospital, May 6th, 2018, Hong Kong; Sponsored by MSD.

IASLC activities

1. Executive secretary, the 1st Taiwan Lung Cancer Society (TLCS)-IASLC Lung Cancer Symposium (TILS1), Oct. 28th to 29th 2017, Taipei, Taiwan.
2. Participant, the World Conference on Lung Cancer, (2015, 2018)
3. Participant and poster presenter, the World Conference on Lung Cancer, (2016, 2017, 2019)

Publication:

1. **Liao B-C**, W-H Hsu, J-H Lee, et al. Serial plasma cell-free circulating tumor DNA tests identify genomic alternations for early prediction of osimertinib treatment outcome in *EGFR* T790M-positive non-small-cell lung cancer. **JTO Clinical and Research Reports** (Non-SCI) 2020. (Original Article)
2. **Liao B-C**, Griesing S., Yang JC-H. Second-line Treatment of EGFR T790M-negative Non-small Cell Lung Cancer Patients. **Therapeutic Advances in Medical Oncology** 2019 (Review Article)

Moving to immunotherapy era: long-term experience and survival of immunotherapy in lung cancer

廖斌志醫師

Lung cancer is the leading cause of cancer death, accounting for more than 1.7 million deaths annually. In recent five years, immunotherapy has successfully demonstrated the efficacy and take treatment in the new era in lung cancer field. One of the key value of immunotherapy is the potential to cure patients or to maintain disease controlled for a long period of time in even metastasis setting.

Now that we have experience of immunotherapy for a longer period of time, we can start to look at how many patients will survive or maintain disease free in the long run and what characteristic and biomarkers could predict these patients with long term benefit on immunotherapy. Here we are presenting the results from 2020 ESMO that mainly focus on the long-term follow up results of immunotherapy studies in lung cancer or identification of lung cancer patients with long term benefit of immunotherapy.