2024

台灣胸腔暨重症加護醫學會夏季青年會

2024 Youth Summer Workshop of Taiwan Society of Pulmonary and Critical Care Medicine

Aug. 10 Sat. -11 Sun.

嘉義長庚紀念醫院 胸 重 來 嘉

目錄

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理事長序

各位會員、先進及同道：

謹訂於 08 月 10 、 11 日 (星期六 、 日) ， 假嘉義長庚醫院 B1 國際會議中心舉辦「 2024 台灣胸腔暨重症加護醫學會夏季青年會 」 ， 會議中邀請多位國內醫學專家學者擔任講座 ， 竭誠邀請各位會員先進參與 。

本次學術研討會主題包含呼吸道疾病 、 肺部腫瘤醫學 、 肺感染及結核病 、 重症醫學 、 間質性肺病及罕見疾病 、 介入性支氣管鏡 、 睡眠醫學等最新醫學進展 ， 也規劃了針對年輕醫師之相關演講 。 主題多元精彩 ， 希望讓各位會員先進掌握胸腔領域最新知識 ， 了解未來發展 ， 同時也促進學術和情感交流 。

感謝各委員會的精心規劃 ， 受邀講者的用心準備 ， 全體理監事的支持與協助 ， 更歡迎大家熱烈參與 ！

會議晚宴謹訂於 08 月 10 日 (星期 六) 晚間 7 點 ， 假 棒棒積木飯店 - 賀采宴會廳 (嘉義縣太保市太子大道 223 號) 舉行 。

敬請　撥冗參加 ， 共襄盛舉

台灣胸腔暨重症加護醫學會
理事長 陳育民

歡迎胸重來嘉

各位會員大家好！

疫情過後，您有多久沒有出來走走？

此次學會特別舉辦夏季青年會，讓更多年輕醫師，有舞台可以發揮，更促進彼此溝通，讓學會可以向下紮根，生生不息。

嘉義西邊臨海，東有高山，有廣大平原，物產豐富。古名「諸羅」，是台灣最早開發的地方，自古人文薈萃。此次活動移師嘉義，除了學術演講與工作坊以外，更安排文化特區、在地小吃、特色紀念品等活動，打造不同以往的夏季青年會 , 期待讓會員有全新的感受。

回目錄

大會籌備處暨第 19 屆理、監事名單

理 事 長	**陳育民 醫師 臺北榮民總醫院**
理　　事	王金洲 醫師 長庚醫療財團法人高雄長庚紀念醫院
理　　事	古世基 醫師 國立臺灣大學醫學院附設醫院
理　　事	何肇基 醫師 國立臺灣大學醫學院附設醫院
理　　事	杭良文 醫師 中國醫藥大學附設醫院
理　　事	林基正 醫師 安泰醫療社團法人安泰醫院
理　　事	林鴻銓 醫師 長庚醫療財團法人林口長庚紀念醫院
理　　事	施金元 醫師 國立臺灣大學醫學院附設醫院
理　　事	夏德椿 醫師 中國醫藥大學附設醫院
理　　事	高國晉 醫師 長庚醫療財團法人林口長庚紀念醫院
理　　事	彭忠衍 醫師 三軍總醫院
理　　事	彭殿王 醫師 臺北榮民總醫院
理　　事	陽光耀 醫師 臺北榮民總醫院
理　　事	黃明賢 醫師 義大醫療財團法人義大癌治療醫院
理　　事	楊政達 醫師 長庚醫療財團法人桃園長庚紀念醫院
理　　事	賴俊良 醫師 佛教慈濟醫療財團法人大林慈濟醫院
理　　事	鍾飲文 醫師 高雄醫學大學附設中和紀念醫院
常務監事	**林恒毅 醫師 天主教耕莘醫療財團法人耕莘醫院**
監　　事	徐武輝 醫師 中國醫藥大學附設醫院
監　　事	陳昌文 醫師 國立成功大學醫學院附設醫院
監　　事	黃崇旂 醫師 長庚醫療財團法人林口長庚紀念醫院
監　　事	謝俊民 醫師 奇美醫療財團法人奇美醫院

秘 書 長	**周昆達 醫師 台北榮民總醫院**
副秘書長	劉景隆 醫師 台灣基督長老教會馬偕醫療財團法人馬偕紀念醫院
副秘書長	張博瑞 醫師 長庚醫療財團法人林口長庚紀念醫院
副秘書長	江起陸 醫師 臺北榮民總醫院
執行秘書	羅柏鈞 醫師 衛生福利部桃園醫院
執行秘書	洪緯欣 醫師 屏東榮民總醫院
執行秘書	張山岳 醫師 三軍總醫院

Aug. 10 (SAT.)

AGENDA

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11:30	Registration			
12:10 | 13:20	**第三會議室** 臺灣阿斯特捷利康股份有限公司 A survey on adherence to inhaled medications in patients with asthma Speaker: 劉景隆 醫師 Moderator: 賴俊良 醫師 COPD light up: treatment paradigm shift for AE prevention & cardiopulmonary risk Speaker: 蕭逸函 醫師 Moderator: 彭殿王 醫師	**第四會議室** 台灣東洋藥品工業股份有限公司 Optimizing NSCLC treatment: integrating Bevacizumab with TKIs in first-line therapy Speaker: 郭志熙 醫師 Moderator: 王金洲 醫師	**第五會議室** 葛蘭素史克藥廠股份有限公司台灣分公司 Prevention of RSV in older adults and adults with comorbidities Speaker: 張博瑞 醫師 Moderator: 陳育民 醫師	
13:30 | 14:10	**第一國際會議廳** Mucus plugs and small airway dysfunction in COPD Speaker: 楊聰明 醫師 Moderator: 彭殿王 醫師 徐武輝 醫師	**第二國際會議廳** Precision medicine advances in idiopathic pulmonary fibrosis Speaker: 林玠模 醫師 Moderator: 林鴻銓 醫師 王鶴健 醫師	**第三會議室** A pathologist's efforts in translational oncology Speaker: 李健逢 醫師 Moderator: 洪仁宇 醫師 王金洲 醫師	**第四會議室**
14:10 | 14:50	Clinical determinants of severity in non-cystic fibrosis bronchiectasis Speaker: 陳彥甫 醫師 Moderator: 彭殿王 醫師 林鴻銓 醫師	Beyond idiopathic pulmonary fibrosis: the world of progressive pulmonary fibrosis Speaker: 陳信均 醫師 Moderator: 杭良文 醫師 陳煒 醫師	Experience sharing regarding clinical study in pulmonology and critical care: an example of nontuberculous mycobacterial lung disease (NTM-LD) Speaker: 樹金忠 醫師 Moderator: 古世基 醫師 夏德椿 醫師	睡眠工作坊 13:30 - 13:50 Treatment of adult sleep apnea with PAP: make a wise choice Speaker: 徐上富 醫師 Moderator: 林嘉謨 醫師 14:00 - 15:00 CPAP Team1 ； BPAP Team2 CPAP Speaker: 鍾心珮 醫師 BPAP Speaker: 陳永瑄 醫師 15:00 - 15:20 Break 15:20 - 16:20 CPAP Team2 ； BPAP Team1 CPAP Speaker: 鍾心珮 醫師 BPAP Speaker: 陳永瑄 醫師 16:20 - 16:50 Understanding a PAP therapy report: CPAP and BPAP Speaker: 邱華彥 醫師 Moderator: 莊立邦 醫師
14:50	Coffee Break			
15:20 | 16:00	**第一國際會議廳** Academic journey beyond rural challenges Speaker: 沈德群 醫師 Moderator: 陳育民 醫師 林基正 醫師			
16:00 | 16:40	**第一國際會議廳** Bidirectional impact between lung cancer and pulmonary tuberculosis Speaker: 陳祐易 醫師 Moderator: 陳育民 醫師 王金洲 醫師	**第二國際會議廳** Cone-beam computed tomography image-guided percutaneous microwave ablation for lung nodules in a hybrid room Speaker: 張凌愷 醫師 Moderator: 何肇基 醫師 黃明賢 醫師	**第三會議室** Using the Chang Gung Medical Research Database (CGRD) as an example to illustrate how to utilize databases for retrospective studies on thoracic diseases Speaker: 方昱宏 醫師 Moderator: 林孟志 醫師 蔡鎮良 醫師	
16:40 | 17:20	Exploring pulmonary toxicity in novel lung cancer therapies Speaker: 沈佳儀 醫師 Moderator: 鍾欽文 醫師 謝俊民 醫師	Rapid diagnosis of TB: evidences and applications in Taiwan Speaker: 莊閔鈞 醫師 Moderator: 林恒毅 醫師 陳昌文 醫師	From clinical practice to basic research: diverse possibilities in thoracic medicine Speaker: 王馨儀 醫師 Moderator: 蔡鎮良 醫師 何肇基 醫師	
17:20 | 18:30	**第一國際會議廳** 台灣百靈佳殷格翰股份有限公司 Strategic approach to maximize overall survival for EGFRm+ NSCLC Speaker: 張晟瑜 醫師 Moderator: 蔡鎮良 醫師 What matters on triple therapy in COPD Speaker: 林玠模 醫師 Moderator: 林裕清 醫師	**第二國際會議廳** 臺灣阿斯特捷利康股份有限公司 Tezepelumab: a novel approach to overcome the heterogeneity of severe asthma Speaker: Prof. Mariko Koh Siyue Moderator: 林孟志 醫師 Urgency of removing eosinophilic inflammation in blood & tissue to improve SEA patient outcomes Speaker: 柯信國 醫師 Moderator: 郭炳宏 醫師	**第四會議室** 嬌生股份有限公司 Moving FORWARD in the treatment of NSCLC driven by EGFR exon 20 insertion mutation Speaker: 江起陸 醫師 Moderator: 陳育民 醫師 Practical management for skin-related toxicity associated with the use of EGFR target therapy Speaker: 盧俊瑋 醫師 Moderator: 楊政達 醫師	
19:00	大會晚宴（棒棒積木飯店 - 賀采宴會廳）			

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Aug. 11 (SUN.) AGENDA

08:30	Registration	
07:50 | 09:00	第三會議室 葛蘭素史克藥廠股份有限公司台灣分公司 What you need to know about caring for a patient with severe asthma: eosinophilic inflammation and comorbidities Speaker: 蕭逸函 醫師 Moderator: 彭殿王 醫師	
09:00 | 09:40	第一國際會議廳 Diagnosis and evaluation of new fever in ICU from SCCM and IDSA recommendations Speaker: 陳韋成 醫師 Moderator: 陽光耀 醫師 陳昌文 醫師	第二國際會議廳 Portable diagnostic tools for sleep disorder Speaker: 黃舒儀 醫師 Moderator: 陳奕仁 醫師 林裕清 醫師
09:40 | 10:20	Inhaled antibiotics for severe pneumonia in ICU Speaker: 馮嘉毅 醫師 Moderator: 高國晉 醫師 陽光耀 醫師	Interstitial lung disease and obstructive sleep apnea Speaker: 鄭至宏 醫師 Moderator: 林嘉謨 醫師 林明憲 醫師
10:20	Coffee Break	
10:50 | 11:30	ATS vs. ESICM guidelines in the management of ARDS Speaker: 呂紹煒 醫師 Moderator: 高國晉 醫師 詹明澄 醫師	Optimizing treatment strategy in EGFRm+ NSCLC beyond osimertinib: target therapy Speaker: 黃宗禎 醫師 Moderator: 施金元 醫師 夏德椿 醫師
11:30 | 12:10	Detection and management of right heart failure in ICU Speaker: 黃偉銘 醫師 Moderator: 林基正 醫師 黃崇旂 醫師	Optimizing treatment strategy in EGFRm+ NSCLC beyond osimertinib: non-target therapy Speaker: 郭家佑 醫師 Moderator: 楊政達 醫師 賴俊良 醫師
12:10 | 13:20	第四會議室 葛蘭素史克藥廠股份有限公司台灣分公司 Is achieving clinical remission an attainable goal for all asthma patients? Speaker: 廖光明 醫師 Moderator: 林裕清 醫師 Preventing in advance: can triple therapy aid symptomatic COPD patients without exacerbation history? Speaker: 張鼎育 醫師 Moderator: 林裕清 醫師	第五會議室 友華生技醫藥股份有限公司 Finding the right triple to improve respiratory therapy: from clinical trials to real world evidence Speaker: 潘奕宏 醫師 Moderator: 林明憲 醫師 How IOS detection tools can help diagnose SAD and treat COPD patients appropriately Speaker: 蕭逸函 醫師 Moderator: 彭殿王 醫師

會場平面圖

接駁時刻表

高鐵嘉義站	長榮文苑酒店	嘉義長庚紀念醫院
07:40	07:55	08:00
08:20	08:35	08:40
09:00	09:15	09:20
09:40	09:55	10:00
10:20	10:35	10:40
11:00	11:15	11:20
11:40	11:55	12:00
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14:20	14:35	14:40
15:00	15:15	15:20
15:40	15:55	16:00
16:20	16:35	16:40
17:00	17:15	17:20
17:40	17:55	18:00

嘉義長庚紀念醫院	長榮文苑酒店	高鐵嘉義站
08:30	08:45	08:55
09:10	09:25	09:35
09:50	10:05	10:15
10:30	10:45	10:55
11:10	11:25	11:35
11:50	12:05	12:15
12:30	12:45	12:55
13:10	13:25	13:35
13:50	14:05	14:15
14:30	14:45	14:55
15:10	15:25	15:35
15:50	16:05	16:15
16:30	16:45	16:55
17:10	17:25	17:35
17:50	18:05	18:15

- 長榮文苑酒店站鄰近棒棒積木飯店與國立故宮博物院南部院區
- 頭末班車發車時間 (約 40 分鐘一班車) 僅週六行駛 僅周日行駛
  - 08月10日(星期六)：11:00 - 17:40(高鐵發車)；11:50 - 17:50 (會場發車)
  - 08月11日(星期日)：07:40 - 12:20(高鐵發車)；08:30 - 13:10 (會場發車)
- 晚宴接駁：08月10日(星期六)
  - 18:20 - 19:00 : 嘉義長庚醫院至棒棒積木飯店 - 賀采宴會廳，持續來回接送
  - 20:45 - 21:30 : 棒棒積木飯店 - 賀采宴會廳至高鐵嘉義站，持續來回接送

演講摘要

第一國際會議廳

Aug. 10 (SAT.)

13:30-14:10 Mucus plugs and small airway dysfunction in COPD / **楊聰明 醫師** / **P.9**

14:10-14:50 Clinical determinants of severity in non-cystic fibrosis bronchiectasis / **陳彥甫 醫師** / **P.10**

15:20-16:00 Academic journey beyond rural challenges / **沈德群 醫師** / **P.11**

16:00-16:40 Bidirectional impact between lung cancer and pulmonary tuberculosis / **陳祐易 醫師** / **P.12**

16:40-17:20 Exploring pulmonary toxicity in novel lung cancer therapies / **沈佳儀 醫師** / **P.13**

17:20-18:30 Strategic approach to maximize overall survival for EGFRm+ NSCLC / **張晟瑜 醫師** / **P.14** (Satellite Symposium_ 台灣百靈佳殷格翰股份有限公司)

What matters on triple therapy in COPD / **林玠模 醫師** / **P.15** (Satellite Symposium_ 台灣百靈佳殷格翰股份有限公司)

Aug. 11 (SUN.)

09:00-09:40 Diagnosis and evaluation of new fever in ICU from SCCM and IDSA recommendations / **陳韋成 醫師** / **P.16**

09:40-10:20 Inhaled antibiotics for severe pneumonia in ICU / **馮嘉毅 醫師** / **P.17**

10:50-11:30 ATS vs. ESICM guidelines in the management of ARDS / **呂紹煒 醫師** / **P.17**

11:30-12:10 Detection and management of right heart failure in ICU / **黃偉銘 醫師** / **P.19**

Aug. 10

Mucus plugs and small airway dysfunction in COPD

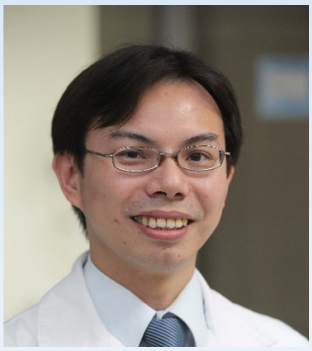
楊聰明 Tsung-Ming Yang

嘉義長庚紀念醫院 胸腔內科主治醫師
專長：Airway disease, Prolonged mechanical ventilation

Mucus overproduction due to mucus gland hyperplasia, goblet cell metaplasia and airway inflammation is typical pathophysiologic features of airway obstructive diseases. Mucus plugging results in increased respiratory symptoms, poor health-related quality of life, and decreased lung function, and thus subsequently increase the risk of exacerbations in patients with COPD.

COPD patients with mucus plugs had lower lung functions, compared to those without mucus plugs. Small airway dysfunction parameters, such as forced vital capacity (FVC) and resonant frequency (Fres), were found to be closely associated with the presence of mucus plugs in patients. However, FVC depends on patients' efforts and thus shows a lack of reproducibility and should thus be cautiously interpreted. High-resolution computed tomography (HRCT) had been used to detect mucus plugging and to assess the association between mucus plugging and airflow obstruction in COPD. In COPD patients, the prevalence of mucus plugs was relatively lower, and associations between mucus plugs and lung function declines were stronger than those in asthmatic and ACO patients. These findings suggested that neutrophilic inflammation might play a role in mucus plug formation and may be associated with the pathophysiology of COPD.

Clinical determinants of severity in non-cystic fibrosis bronchiectasis



陳彥甫 Yen-Fu Chen

臺大醫院雲林分院門診部主任
臺大醫院雲林分院胸腔內科主治醫師
臺大醫學院教育部部定臨床講師
專長：肺部疾病及感染、一般內科及重症加護疾病、慢性呼吸道疾病（氣喘、慢性阻塞性肺病、特發性肺纖維化）、胸腔腫瘤、肺癌、胸部超音波檢查，支氣管鏡檢查

在評估非囊性纖維化支氣管擴張 (Non-cystic fibrosis bronchiectasis) 病情嚴重性的臨床決定因素時，疾病嚴重性評分（Bronchiectasis Severity Score）和 E-FACED 等傳統評分系統是關鍵工具。E-FACED 及 BSI 評分綜合考慮肺功能、年齡、慢性支氣管阻塞性肺病（COPD）等因素，有效預測疾病進展。此外，患者的微生物群構成對疾病嚴重性也具有顯著影響，指出肺部及腸道菌群與病情之間的潛在聯繫。考慮到共病情況，如心血管疾病和糖尿病，這些都可能加劇病情或影響治療效果。如何利用這些臨床決定因素來改善治療策略和預後，提供更個性化的治療計劃，並最終改善患者的生活質量。這些內容對於臨床醫生在制定治療計劃時將具有實際的指導意義。

Academic journey beyond rural challenges

沈德群 Te-Chun Shen

竹山秀傳醫院教學副院長
竹山秀傳醫院重症醫學科主任兼加護病房主任
竹山秀傳醫院胸腔內科主治醫師
專長：內科學、胸腔醫學、重症醫學、高壓氧治療學、流行病學、大數據處理

The involvement of young physicians in academic research is crucial for advancing medical knowledge and improving patient care. However, many barriers hinder their participation in research activities.

Firstly, mentorship plays a pivotal role in fostering research interest among young physicians. Experienced researchers can provide guidance and valuable insights into the research process.

Secondly, creating a conducive research environment within healthcare institutions is essential. Providing access to research resources, funding opportunities, and dedicated research time can incentivize young physicians to prioritize research alongside clinical responsibilities.

Moreover, offering formal training in research methodology and critical appraisal equips young physicians with the necessary tools to conduct high-quality research.

Additionally, recognizing and rewarding research achievements are vital for sustaining young physicians' motivation and commitment to academic research.

Despite these strategies, challenges such as time constraints, limited resources, and competing demands remain significant barriers for young physicians. Addressing these challenges requires collaborative efforts from healthcare institutions, policymakers, and research stakeholders to create a supportive ecosystem that values and prioritizes research engagement among young physicians.

We have provided our own experience of sustaining academic output in rural medical environments, hoping to cultivate sharp intuition in young physicians and enable them to make progress in the academic field with limited resources.

Bidirectional impact between lung cancer and pulmonary tuberculosis

陳祐易 You-Yi Chen

台大醫院雲林分院胸腔科主治醫師
台大醫院雲林虎尾分院加護病房主任
臺灣大學醫學院兼任講師

Lung cancer and pulmonary tuberculosis do exhibit a bidirectional relationship, with each condition influencing the risk and progression of the other. This relationship is complex and involves multiple factors:

TB increases lung cancer risk due to chronic inflammation, scarring, fibrotic change, and immunosuppression. TB may also create microenvironments that are more susceptible to the development of malignancies. These factors can increase the likelihood of developing lung cancer independently of other common risk factors such as smoking.

Lung cancer and its treatments (like chemotherapy and immunotherapy) can suppress the immune system, making it more difficult for the body to contain latent TB infections, thereby increasing the risk of reactivation. The presence of lung cancer can also alter pulmonary architecture and local immune responses, which may compromise the body's defense against mycobacterial infections.

Given their interrelated nature, the management of one disease may need to consider the presence or risk of the other. Understanding and addressing the bidirectional relationship between TB and lung cancer is crucial for optimizing patient outcomes, emphasizing the need for comprehensive care and vigilance in managing patients at risk for both conditions.

Exploring pulmonary toxicity in novel lung cancer therapies

沈佳儀 Chia-I Shen

台北榮民總醫院胸腔部胸腔腫瘤科主治醫師
國立陽明交通大學醫學系兼任講師
專長：胸腔腫瘤、一般胸腔內科、胸腔超音波、支氣管鏡、重症照護

Numerous novel therapies have significantly transformed the prognosis and treatment landscape of lung cancer. Clinically, patients now undergo more extensive treatment regimens, including surgery and radiotherapy, and physicians tailor anti-cancer therapies based on disease progression. However, the significance of pulmonary toxicity should not be underestimated. Manifestations such as pneumonitis, interstitial lung disease, organizing pneumonia, and fibrotic changes have been reported in treatments involving tyrosine kinase inhibitors (TKIs), immunotherapy, and antibody-drug conjugates (ADCs). In this comprehensive review, we examine several clinical cases and assess the current evidence concerning pulmonary toxicity. Our goal is to enhance awareness of this issue and discuss strategies for management.

Satellite Symposium_ 台灣百靈佳殷格翰股份有限公司

Strategic approach to maximize overall survival for EGFRm+ NSCLC

張晟瑜 Cheng-Yu Chang

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Targeted therapy has revolutionized the approach to treating non-small cell lung cancer (NSCLC) over the past decade, and the years 2022-2023 are expected to bring even more significant advances in this field. Novel drugs under development, such as EGFR inhibitors and combination therapies that target multiple pathways, are showing promising results in clinical trials, offering hope to those with previously untreatable forms of NSCLC. Additionally, advancements in molecular profiling and the integration of artificial intelligence with precision medicine are set to further improve personalized treatment approaches, leading to better outcomes for patients with NSCLC. Dr. Chang will give a comprehensive talk about the management of EGFR TKI resistance in NSCLC treatment.

What matters on triple therapy in COPD

林玠模 Chieh-Mo Lin

嘉義長庚醫院肺感染及重症科 科主任
嘉義長庚醫院胸腔內科系主治醫師
專長：一般胸腔醫學、呼吸道疾病、重症醫學、肺部感染、肺部腫瘤、睡眠醫學

COPD (Chronic Obstructive Pulmonary Disease) coexists with many concurrent comorbidities. Among these, cardiovascular complications stand out as the primary causes of mortality in COPD patients. For those with advanced or severe COPD, who continue to experience recurrent exacerbations despite undergoing other treatments, triple therapy is typically the recommended course of action. This treatment approach has proven effective in controlling COPD symptoms and enhancing lung function.

However, it's crucial to note that the use of ICS, a component of triple therapy, has been linked to an increased risk of pneumonia. Therefore, it's essential to evaluate the risk/benefit ratio of triple therapy on a case-by-case basis. This helps in identifying the patients who are most likely to benefit from this treatment.

Furthermore, recent studies have suggested a correlation between the development of cardiovascular events in COPD patients and the use of triple therapy, as compared to ICS/LABA therapy, whereas the LAMA/LABA therapy did not show a significant association. This implies that the cardiovascular risk should be a significant consideration when prescribing triple therapy to COPD patients.

Aug. 11

Diagnosis and evaluation of new fever in ICU from SCCM and IDSA recommendations

陳韋成 Wei-Cheng Chen
中國醫藥大學附設醫院 院長室 主任祕書
中國醫藥大學附設醫院 呼吸加護病房主任
中國醫藥大學附設醫院 內科部胸腔科 主治醫師
專長：重症加護醫學、跨領域團隊照護、智慧醫療、抗藥性病原菌、急性呼吸窘迫症、敗血症

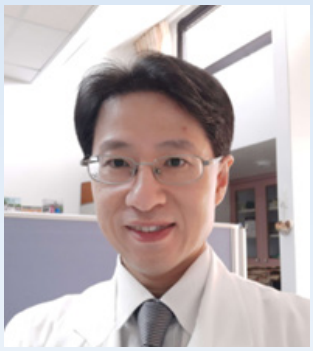
This presentation highlights best practices for diagnosing and managing new fevers in ICU patients based on SCCM and IDSA guidelines. It underscores the importance of using central temperature measurement methods, such as pulmonary artery or bladder catheters, when available, to ensure accuracy critical for effective management. In the absence of these devices, oral or rectal temperature measurements are recommended as more reliable than axillary or tympanic methods.

The use of antipyretics is discussed with a recommendation against their routine use for merely reducing fever, except when necessary for patient comfort. Diagnostic protocols include mandatory chest radiographs for all febrile ICU patients and CT scans for those with recent surgeries if initial evaluations do not identify the fever's cause. For complex diagnostic challenges, advanced imaging techniques like 18F-FDG PET/CT are considered if feasible.

The presentation also examines the role of bedside ultrasound, particularly thoracic ultrasound, in identifying lung pathologies in patients with abnormal chest X-rays, and outlines best practices for blood culture collection, emphasizing proper timing and site selection to enhance diagnostic yield.

Finally, the strategic use of biomarkers such as procalcitonin and C-reactive protein is advised. Their use should be based on clinical judgment and the probability of bacterial infections, highlighting a selective approach to improve diagnostic accuracy and therapeutic decisions in the management of febrile conditions in the ICU, aligning with current SCCM and IDSA recommendations.

Inhaled antibiotics for severe pneumonia in ICU



馮嘉毅 Jia-Yih Feng
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專長：慢性咳嗽、氣喘 / 氣促、慢性阻塞性肺疾病、肺感染症、肺結核病、胸腔腫瘤疾病、間質性肺病、重症照護

The issue of multidrug-resistant organisms (MDRO) pneumonia in intensive care units is clinically challenging, with relatively limited antibiotic options available. While antibiotics such as Colistin or Amikacin are few of those available for treating MDRO, their high in vitro sensitivity may be compromised by insufficient concentrations in lung tissues, which is a significant concern. Additionally, changes in pharmacokinetic/pharmacodynamic (PK/PD) characteristics in critically ill patients may further decrease drug concentrations in lung tissues.

Inhaled antibiotics, such as Colistin and Amikacin, offer the advantage of delivering high concentrations of antibiotics directly to the lungs. They can act synergistically with intravenous antibiotics, achieving high concentrations in local lung tissues and enhancing therapeutic effects. Moreover, inhaled antibiotics do not significantly increase systemic drug concentrations, thus minimizing systemic side effects like renal impairment. Furthermore, inhalation delivery allows for faster drug action and higher local drug concentrations, aiding in faster infection control.

However, the use of inhaled antibiotics has its limitations. For instance, they may cause local irritation or adverse reactions, including bronchospasm or bronchitis. Additionally, their use requires specialized inhalation devices, such as mesh nebulizers, to ensure better lung deposition and thus better efficacy.

Inhaled antibiotics like Colistin and Amikacin are important treatment options for MDRO hospital-acquired pneumonia in the intensive care unit. They can be used alone or in combination with systemic intravenous administration based on the patient's condition. However, prior to use, a detailed assessment of the patient's condition is necessary to select the appropriate inhalation therapy and to monitor treatment effectiveness and possible adverse reactions diligently.

ATS vs. ESICM guidelines in the management of ARDS

呂紹煒 Shaw-Wei Leu

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專長：急性肺損傷、敗血症、重症醫學

In 2017, a Clinical Practice Guideline for mechanical ventilation in adult patients with acute respiratory distress syndrome (ARDS) was published as collaborative work of the American Thoracic Society (ATS), European Society of Intensive Care Medicine (ESICM) and Society of Critical Care Medicine (SCCM). With emerging new date addressing multiple therapy and supportive interventions for ARDS, in 2023, ATS and ESICM updated guidelines for management of ARDS separately, which provides different perspectives and recommendations. The ATS guideline provides updated diagnostic criteria and recommendations for diagnosing ARDS, emphasizes low tidal volume ventilation and higher positive end-expiratory pressure (PEEP) strategies, recommends against routine use of adjunctive therapies like high-frequency oscillatory ventilation and prone positioning, and recommends against routine use of pharmacologic therapies like corticosteroids. The ESICM guidelines provides a comprehensive overview of ARDS definition and diagnostic criteria, emphasizes the importance of phenotyping ARDS for tailored management, discusses various respiratory support strategies (including oxygen support, mechanical ventilation, prone positioning, neuromuscular blockade, and extracorporeal life support), and highlights the need for further research in biomarkers, pharmacological interventions, and personalized medicine approaches.

Detection and management of right heart failure in ICU

黃偉銘 Wei-Ming Huang

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國立陽明交通大學助理教授
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右心衰竭是重症監護室中常見且致命的情況之一，其特點是右心室功能障礙，導致系統性靜脈壓升高和低心輸出量。主要原因包括急性肺栓塞、慢性肺病和肺動脈高壓。檢測方法通常涉及血流動力學監測、心臟超聲和生物標記如 NT-proBNP。管理策略包括糾正潛在病因，使用利尿劑減輕液體超負荷，以及應用正性肌力藥物以支持心功能。對於嚴重情況，可考慮使用機械循環支持，如 ECMO。此外，及早識別和干預對於改善預後至關重要。此主題的深入研究和綜合管理策略能夠顯著提高 ICU 中右心衰竭患者的生存率和生活質量。

第二國際會議廳

Aug. 10 (SAT.)

13:30-14:10 Precision medicine advances in idiopathic pulmonary fibrosis / **林玠模 醫師** / **P.21**

14:10-14:50 Beyond idiopathic pulmonary fibrosis: the world of progressive pulmonary fibrosis / **陳信均 醫師** / **P.22**

16:00-16:40 Cone-beam computed tomography image-guided percutaneous microwave ablation for lung nodules in a hybrid room / **張凌愷 醫師** / **P.23**

16:40-17:20 Rapid diagnosis of TB: evidences and applications in Taiwan / **莊閔鈞 醫師** / **P.24**

17:20-18:30 Tezepelumab: a novel approach to overcome the heterogeneity of severe asthma / **Prof. Mariko Koh Siyue** / **P.25** (Satellite Symposium_ 臺灣阿斯特捷利康股份有限公司)

Urgency of removing eosinophilic inflammation in blood & tissue to improve SEA patient outcomes / **柯信國 醫師** / **P.26** (Satellite Symposium_ 臺灣阿斯特捷利康股份有限公司)

Aug. 11 (SUN.)

09:00-09:40 Portable diagnostic tools for sleep disorder / **黃舒儀 醫師** / **P.27**

09:40-10:20 Interstitial lung disease and obstructive sleep apnea / **鄭至宏 醫師** / **P.28**

10:50-11:30 Optimizing treatment strategy in EGFRm+ NSCLC beyond osimertinib: target therapy / **黃宗禎 醫師** / **P.29**

11:30-12:10 Optimizing treatment strategy in EGFRm+ NSCLC beyond osimertinib: non-target therapy / **郭家佑 醫師** / **P.30**

Aug. 10

Precision medicine advances in idiopathic pulmonary fibrosis

林玠模 Chieh-Mo Lin

嘉義長庚醫院肺感染及重症科
嘉義長庚醫院胸腔內科系

Idiopathic pulmonary fibrosis (IPF) is a chronic, progressive lung disease with complex etiology involving genetic, epigenetic, and environmental factors. Its progression is unpredictable, displaying patterns like slow, rapid, or stable phases punctuated by exacerbations. Recent treatments include anti-fibrotic agents, yet a one-size-fits-all approach is inadequate due to varied molecular sub-phenotypes, demonstrating the need for personalized approaches in its management. Recent advancements underscore the significance of precision medicine, which tailors treatments based on genetic insights to optimize efficacy and reduce unnecessary exposure. This approach, already transformative in oncology and specific chronic diseases, offers a promising avenue for IPF, particularly through early identification of disease susceptibility and progression. Future strategies must integrate these insights into clinical practice to improve diagnostics, risk assessment, and individualized patient care.

Beyond idiopathic pulmonary fibrosis: the world of progressive pulmonary fibrosis

陳信均 Chen Hsing Chun

大林慈濟醫院胸腔內科主治醫師
大林慈濟醫院內科加護病房主任
專長：重症醫學、胸腔內科疾病、支氣管鏡

Progressive pulmonary fibrosis (PPF) represents a spectrum of interstitial lung diseases (ILDs) characterized by relentless progression, extending well beyond the confines of idiopathic pulmonary fibrosis (IPF). This presentation synthesizes key insights from recent expert consensus documents and clinical practice guidelines to provide a comprehensive overview of the evolving landscape in the diagnosis, management, and treatment of PPF.

We emphasize the need for precise and standardized definitions for progressive fibrosing ILDs, facilitating appropriate initial management strategies and enhancing longitudinal monitoring. The clinical trajectory of PPF varies significantly, underscoring the importance of personalized treatment plans based on detailed risk stratification at diagnosis.

Additionally, this presentation explores the role of immunosuppressants and antifibrotic therapies, which have shown promise in slowing disease progression in PPF patients where traditional management has failed. The expert consensus recommends early initiation of such therapies, following thorough assessment of progression risks.

Rehabilitation strategies tailored for ILD patients, including pulmonary rehabilitation, oxygen therapy, and the use of non-invasive ventilation, are highlighted as critical components of comprehensive patient care. The presentation concludes with a discussion on considerations for lung transplantation and the integration of palliative care measures to effectively address end-of-life issues.

This compilation of current expert recommendations and clinical practice guidelines aims to enhance the understanding and management of PPF, providing clinicians with a roadmap to navigate the complexities of this challenging condition.

Cone-beam computed tomography image-guided percutaneous microwave ablation for lung nodules in a hybrid room

張凌愷 Ling-Kai Chang

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教育部部定講師
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Pulmonary nodules are often detected during low dose CT screening. Early detection and management of lung lesions provide better survival in specific groups of patients. Various guidelines are available for the management of pulmonary nodules, and surgical resection is a commonly followed protocol; however, only up to 30% of patients are potential surgical candidates due to cardiopulmonary limitations, advancing age, and the presence of other comorbidities. Besides, the procedure may also require the sacrifice of a large lung volume when encountering a lesion in the central zone. This has led to the development of alternative nonsurgical interventions, including stereotactic body radiation therapy or proton therapy. Nevertheless, these therapies involve high radiation doses, potential damage to the surrounding tissue, chest wall pain, or dermatitis. Advancements have resulted in the emergence of percutaneous ablative therapies such as radiofrequency ablation (RFA), microwave ablation (MWA), cryoablation, and laser ablation. In clinical practice, thermal ablation methods have several benefits, including procedure safety and lung function preservation. MWA is a heat-based technique involving a lower heat-sink effect and related pain compared with RFA. However, most previous ablation studies were performed in solid organs such as the liver.

Recently, the development of the hybrid room has been an important advancement, especially in the management of pulmonary nodules.

The real-time and high-definition imaging guidance ability during the procedure has considerably improved current techniques in thoracic procedures. Using two-dimensional fluoroscopy and three-dimensional cone-beam computed tomography (CBCT) enables appropriate navigation and positioning of devices. CBCT provides more variable and flexible laser needle guidance compared with traditional CT guidance. Furthermore, invasive thoracic procedures involving ablation and resection can be performed under general anesthesia (GA) with single-lung ventilation, which is easily accessible in the operating room. We are going to present our experience of CBCT-guided percutaneous MWA for lung nodules.

Rapid diagnosis of TB: evidences and applications in Taiwan

莊閔鈞 Min-Chun Chuang

嘉義長庚醫院胸腔內科系 -- 肺感染及重症科主治醫師
專長：肺結核、肺癌、重症醫學

Pulmonary tuberculosis (TB) is an airborne infectious disease with high rates of morbidity and mortality. The World Health Organization (WHO) reported that in 2020, an estimated 10 million people had TB, and 1.5 million people died from it, making TB the second leading infectious killer after COVID-19 pandemic.

Rapid diagnosis and early initiation of anti-TB treatment are crucial in the End TB strategy. Delayed diagnosis in critically ill patients can lead to death before treatment starts, accounting for 11% to 24% of mortality cases in Taiwan. Traditional microbiological tests for TB diagnosis include smear tests for acid-fast bacilli (AFB) and Mycobacterium tuberculosis (MTB) cultures. However, the long turnaround time of cultures limits their use as a rapid diagnostic tool.

Despite advances in TB diagnosis, there is no reliable, simple, point-of-care test for definitive diagnosis. Nucleic acid amplification (NAA) assays represent a significant advancement, offering better accuracy than smear microscopy and a shorter turnaround time than cultures. In TB-endemic areas with sufficient medical resources, NAA tests should be considered as an initial diagnostic tool to enhance diagnostic accuracy and expedite treatment.

Satellite Symposium_ 臺灣阿斯特捷利康股份有限公司

Tezepelumab: a novel approach to overcome the heterogeneity of severe asthma

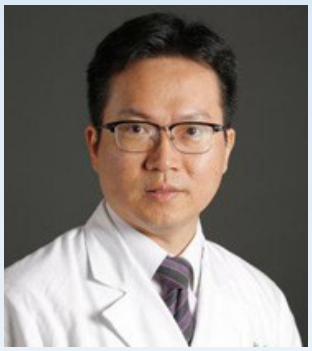
Clin Assoc Prof Mariko Koh Siyue

MBBS, MRCP
Senior Consultant
Singapore General Hospital
Specialty: Respiratory and Critical Care Medicine
Clinical Interest: Bronchiectasis, Cough, Asthma, Severe Asthma
Conditions Treated by this Doctor: Asthma, Bronchiectasis, Chronic Obstructive Pulmonary Disease (COPD), Lung Cancer, Lung Infection, Severe Asthma, Severe Asthma.

Severe asthma is complex and heterogeneous, despite recent advances, half of patients started on biological therapy continuous to have exacerbation and have multiple drivers of inflammation. Tezepelumab is the first and only Anti-TSLP that treats severe asthma at the top of the inflammatory cascade, it’ s time to treat across phenotypes and irrespective of biomarker levels and transform severe asthma patients live by targeting TSLP.

Satellite Symposium_ 臺灣阿斯特捷利康股份有限公司

Urgency of removing eosinophilic inflammation in blood & tissue to improve SEA patient outcomes



柯信國 Hsin-Kuo Ko

臺北榮民總醫院胸腔部呼吸治療科 主治醫師
專長：慢性咳嗽、氣喘 / 氣促、哮喘病、慢性阻塞性肺疾病、高壓氧治療、長期呼吸器使用疾患、呼吸重症治療

Removing eosinophilic inflammation in blood and tissue is critical to improve outcomes for patients with severe eosinophilic asthma (SEA). Benralizumab is an anti-IL5 receptor monoclonal antibody that directly targets and depletes eosinophils, offering a targeted approach to reduce inflammation and remove eosinophils not only in blood but also in tissue, which plays an important role in SEA with nasal polyps (SEAwNP) and airway remodeling. Clinical evidence and case studies will be presented to demonstrate its efficacy in improving patient outcomes, aiming to transform patient care and management of SEA.

Aug. 11

Portable diagnostic tools for sleep disorder

黃舒儀 Shu-Yi Huang

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嘉義長庚胸腔內科主治醫師
專長：睡眠疾病、呼吸道疾病

A Portable Sleep Study (PSG) is a portable device used to assess sleep quality and detect sleep disorders. Traditional sleep studies are typically conducted in sleep laboratories, requiring overnight hospitalization and comprehensive sleep monitoring. However, this approach is not only inconvenient but also costly. Therefore, the advent of portable PSG has brought significant improvements to sleep medicine.

A portable PSG system typically consists of various instruments, including:

1. Sleep monitoring devices: These instruments typically include electrocardiography (ECG), electroencephalography (EEG), electrooculography (EOG), electromyography (EMG), etc., to record physiological indicators during sleep.
2. Respiratory monitoring devices: Used to monitor breathing patterns during sleep, including sleep-disordered breathing such as sleep apnea.
3. Movement sensors: Used to record body movements during sleep to assist in assessing sleep quality and detecting sleep disorders.
4. Optical sensors: Used to record eye movements during sleep, typically used to detect rapid eye movement (REM) sleep.
5. Recorder: Records all data for subsequent analysis and evaluation.

One of the main advantages of portable PSG is that it can be conducted in the patient's home, making patients more comfortable and closer to their actual sleep environment, thus facilitating the collection of more authentic sleep data. Additionally, it saves time and costs because hospitalization or visits to sleep laboratories are not required.

However, portable PSG also has some limitations, such as potentially lower sensitivity compared to traditional sleep laboratory equipment, which may miss subtle physiological changes in some cases. Additionally, when using portable PSG, patients need to install and operate the equipment themselves, which may require some training and guidance to ensure the accuracy of the data.

Overall, portable PSG provides a more convenient and cost-effective option for sleep medicine, allowing more people to access sleep testing to improve sleep quality and promptly detect sleep disorders.

Interstitial lung disease and obstructive sleep apnea

鄭至宏 Chih-Hung Cheng

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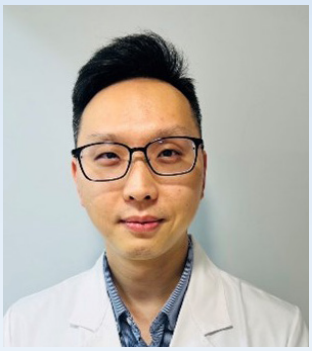
專長：急重症醫療照護、呼吸道疾病、間質性肺病、塵肺症、胸腔暨重症相關睡眠醫學

In recent years, studies have found that the incidence of interstitial lung disease (ILD, including pulmonary fibrosis) has gradually increased in the obstructive sleep apnea (OSA) patient population. In the recent guidelines for pulmonary fibrosis, OSA was also considered an important associated comorbidity. Severe OSA can lead to hypoxia during sleep, leading to an increase in oxidative stress. Studies have also pointed out that intermittent hypoxia and increased oxidative stress may lead to pulmonary fibrosis. Recent studies have found that moderate to severe OSA is associated with subclinical ILD and is associated with alveolar epithelial damage and evidence of extracellular matrix remodeling, findings that support the hypothesis that OSA may lead to early ILD. Besides, nocturnal hypoxaemia is a poor prognostic factor in patients in ILD.

Optimizing treatment strategy in EGFRm+ NSCLC beyond osimertinib: target therapy

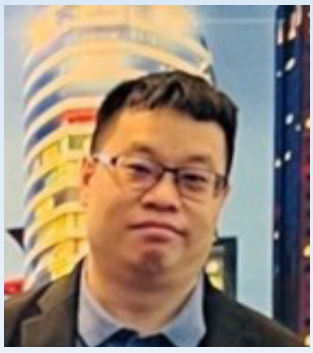


黃宗楨 Allen Chung-Cheng Huang

林口長庚紀念醫院 胸腔內科主治醫師
專長：
i. Thoracic Oncology, Clinical and Biology
ii. Critical Care Medicine, Sepsis, Clinical and Biology
iii. Bronchoscopy, Intervention and Diagnosis

The front-line treatment for EGFRm+ NSCLC has been well established. Osimertinib has been a key EGFR TKI in both first-line and second-line treatment (with T790M acquired resistance) since its success in FLUARA and AURA3 clinical trials. However, resistance to osimertinib eventually occurs, leading to disease progression. With NGS testing being reimbursed by Taiwan National Health Insurance, more opportunities for next-line targeted therapies were available to the patients. In this topic, we explore the optimal strategy for EGFRm+ NSCLC beyond osimertinib failure with positive targetable mutations.

Optimizing treatment strategy in EGFRm+ NSCLC beyond osimertinib: non-target therapy



郭家佑 Chia-Yuo Kuo

小港醫院胸腔內科主治醫師
專長：一般內科與各類胸腔及呼吸道疾病、睡眠醫學、老人醫學

Epidermal growth factor receptor tyrosine kinase inhibitors (EGFR-TKIs) are the preferential options for advanced nonsmall cell lung cancer (NSCLC) patients harboring EGFR mutations. Osimertinib is a potent irreversible third-generation EGFR-TKI targeting EGFR mutations. In view of its remarkable efficacy and manageable safety, osimertinib was recommended as the standard first-line treatment for advanced or metastatic NSCLC patients with EGFR mutations.

However, as the other EGFR-TKIs, osimertinib will inevitably develop acquired resistance. When patients progress on osimertinib, tissue biopsy and/or liquid biopsy should be conducted to determine the mechanisms of resistance to osimertinib to guide treatment. The etiology of triggering osimertinib resistance is complex including target or non-target pathways. A corresponding treatment regimen will be applied to treat patients if effective target genes currently exist; in the case of a lack of valid targets, preclinical studies and clinical trials are warranted to be taken into consideration to further explore viable therapeutic strategies, such as immune checkpoint inhibitors and antibody-drug conjuates. This talk aims to summarize the resistance mechanisms of osimertinib and discuss the potential therapeutic strategies for EGFR-mutated NSCLC patients suffering osimertinib resistance non-target pathways for the sake of the improvement of survival and further achievement of precise medicine.

第三會議室

Aug. 10 (SAT.)

12:10-13:20 A survey on adherence to inhaled medications in patients with asthma/ **劉景隆 醫師** / **P.32** (Satellite Symposium_ 臺灣阿斯特捷利康股份有限公司)

COPD light up: treatment paradigm shift for AE prevention & cardiopulmonary risk / **蕭逸函 醫師** / **P.33** (Satellite Symposium_ 臺灣阿斯特捷利康股份有限公司)

13:30-14:10 A pathologist's efforts in translational oncology / **李健逢 醫師** / **P.34**

14:10-14:50 Experience sharing regarding clinical study in pulmonology and critical care: an example of nontuberculous mycobacterial lung disease (NTM-LD) / **樹金忠 醫師** / **P.35**

16:00-16:40 Using the Chang Gung Medical Research Database (CGRD) as an example to illustrate how to utilize databases for retrospective studies on thoracic diseases / **方昱宏 醫師** / **P.36**

16:40-17:20 From clinical practice to basic research: diverse possibilities in thoracic medicine / **王馨儀 醫師** / **P.37**

Aug. 11 (SUN.)

07:50-09:00 What you need to know about caring for a patient with severe asthma: eosinophilic inflammation and comorbidities / **蕭逸函 醫師** / **P.38** (Satellite Symposium_ 葛蘭素史克藥廠股份有限公司台灣分公司)

Aug. 10

Satellite Symposium_ 臺灣阿斯特捷利康股份有限公司

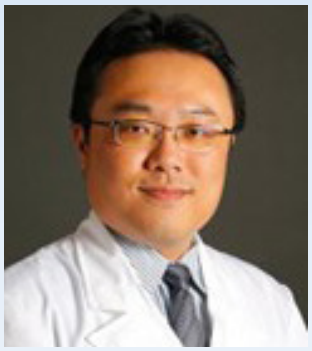
A survey on adherence to inhaled medications in patients with asthma

劉景隆 Ching-Lung Liu

馬偕紀念醫院 胸腔內科 資深主治醫師
專長：氣喘與慢性阻塞性肺病、睡眠呼吸障礙、肺部腫瘤、胸腔感染症、結核病診治、呼吸器及胸腔重症醫學

Asthma is a major chronic respiratory disease affecting millions of people worldwide. Although inhaled medications are the primary treatment for asthma and have significantly improved asthma control, non-adherence to medication remains a common problem in asthma management. In general, compliance with asthma medications is very poor. Non-adherence medications and inappropriate overuse of symptom-relieving medications are common, leading to poor asthma control, increased hospitalizations, and higher health care utilization. Although several studies have examined the prevalence and associated factors of non-adherence to inhaled medications in adult asthma patients, the true clinical situation in Taiwan remains unknown. Therefore, the main purpose of this survey is to observe and analyze the compliance of Taiwanese adult asthma patients with inhaled medications using routine outpatient medical records.

COPD light up: treatment paradigm shift for AE prevention & cardiopulmonary risk

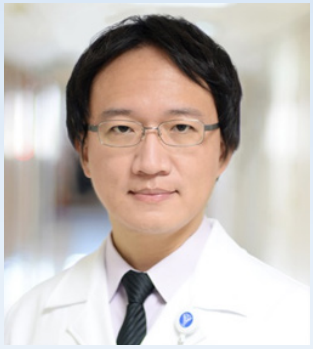


蕭逸函 Yi-Han Hsiao

台北榮總胸腔部主治醫師
國立陽明大學 醫學系內科學科兼任講師
中華民國教育部 部定講師
專長：氣喘、肺阻塞、呼吸重症、支氣管鏡檢查、胸腔腫瘤、睡眠醫學

In patients with COPD, the risk of both pulmonary and cardiac events is elevated, especially following a COPD exacerbation. Reducing severe cardiopulmonary events in COPD patients who are at increased risk is important. Early access to a single-inhaler, triple combination therapy can help reduce severe cardiopulmonary events and advance treatment goals in COPD. This is crucial even for patients with no history of exacerbations, as there is currently no evidence available for this group.

A pathologist's efforts in translational oncology



李健逢 Chien-Feng Li

奇美醫院醫學研究部 部長
專長：結締組織腫瘤、癌症轉譯醫學研究

There is an increasing need of biomarkers with clinical utility to predict post-operative tumor recurrence and to select patients most likely to have benefit from certain therapeutics in cancer therapeutics. Recent studies further disclosed the biological and immune landscapes of various cancers leading to the development of potential biomarkers carrying prognostic and/or therapeutic relevance. Emerging integration of molecular profiling datasets has led to the identification of distinct molecular subtypes with diverse clinical behaviors and potential sensitivity to various therapies even for cancers with the same histological features and same stages. It has also led to the disclosure of frequently altered genes and proteins that could lead to perturbation of intracellular signaling pathways and their microenvironment. As a pathologist, I am devoted to molecular diagnostics of cancer, seeking the utility of next-generation sequencing (NGS) in profiling cancer genomics. Acting in my capacity as director of both the Department of Clinical Pathology and Laboratory Medicine and the Department of Medical Research at Chi Mei Healthcare System, my top priorities are to ensure laboratory quality, integrate cutting-edge science, introduce innovative technologies, and translate them into clinical services. In the present presentation, I will share with you how can we get closer to precision oncology with the efforts of pathologists.

Experience sharing regarding clinical study in pulmonology and critical care: an example of nontuberculous mycobacterial lung disease (NTM-LD)

樹金忠 Chin-Chung Shu

台大醫院整合醫療病房主治醫師
臨床助理教授
專長：一般內科醫療、胸腔醫學、重症加護醫療、肺呼吸道疾病、胸腔感染症 (包括肺結核 / 潛伏結核感染 / 非結核分枝桿菌)、胸腔超音波醫學

Pulmonary and Critical Care Medicine involves multiple medical specialties. We are devoted to improve clinical patient care when we are qualified. In addition to optimal current standard care, if there are unmet clinical needs, research is necessary to improve patient care. In the yound stage of qualified pulmonologist, as we encounter a variety of patients, research naturally tends to be more diverse. As interests developed, research topics become more focused, facilitating in-depth exploration rather than surface-level investigation. In the field of clinical research, the treatment of NTM lung disease has always been a serious challenge. Under the guidance of mentors and with the help of experience, I have decided to dedicate myself to researching the etiology, pathogenesis, and new treatment strategies for NTM lung disease, aiming to improve patient survival and quality of life.

Using the Chang Gung Medical Research Database (CGRD) as an example to illustrate how to utilize databases for retrospective studies on thoracic diseases

方昱宏 Yu-Hung Fang

嘉義長庚醫院 胸腔內科系 胸腔腫瘤科
助理教授
專長：癌症、重症醫學、藥物學、呼吸學

The Chang Gung Research Database (CGRD), a large multi-institutional electronic medical record (EMR) database in Taiwan. The CGRD covers seven Chang Gung Memorial Hospitals throughout northern and southern Taiwan and contains the EMRs of 1.3 million patients (6.1% of Taiwan’s population). The CGRD covers approximately 6.1% and 10.2% of the entire Taiwanese outpatient and inpatient population, respectively. The CGRD data structures and representativeness have been described in more detail elsewhere and many diagnostic codes used within the CGRD have been validated. The upcoming lecture will utilize the CGRD as an example to introduce young chest physicians to clinical research on thoracic diseases through database analysis. The purpose is to reduce the barriers for young researchers to engage in clinical research.

From clinical practice to basic research: diverse possibilities in thoracic medicine

王馨儀 Hsin-Yi Wang

臺大醫院雲林分院老年醫學部副主任
台灣大學醫學院內科部兼任講師
專長：成人胸腔內科、支氣管鏡檢查、胸部超音波檢查、一般內科、重症醫學

Thoracic medicine presents a diverse array of clinical challenges, spanning from commonplace respiratory infections and airway diseases to more complex issues such as airway malignancies and critical care scenarios. However, beyond its clinical applications, thoracic medicine serves as a fertile ground for basic research, where investigations at the molecular and cellular levels can yield profound insights with profound implications for patient care.

One of the key strengths of clinicians in this field lies in their ability to translate direct clinical observations into research hypotheses. The convergence of clinical practice and basic research in thoracic medicine offers boundless opportunities for young clinicians to explore. As a young clinician and researcher in thoracic medicine, I intend to share my journey, starting from the development of practical skills in clinical service to venturing into the realm of clinical or bench research.

I will discuss how I embarked on my research journey, including the initiation of research projects, the process of writing research proposals, and navigating the intricacies of applying for research funding. Additionally, I will shed light on the challenges and hurdles that young clinicians and investigators often encounter along the way.

Aug. 11

Satellite Symposium_ 葛蘭素史克藥廠股份有限公司台灣分公司

What you need to know about caring for a patient with severe asthma: eosinophilic inflammation and comorbidities

蕭逸函 Yi-Han Hsiao

台北榮總胸腔部主治醫師
國立陽明大學 醫學系內科學科兼任講師
中華民國教育部 部定講師
專長：氣喘、肺阻塞、呼吸重症、支氣管鏡檢查、胸腔腫瘤、睡眠醫學

Severe asthma, particularly eosinophilic asthma (SEA), presents significant challenges due to its complexity and the prevalence of comorbidities. Comorbid conditions, such as chronic rhinosinusitis with nasal polyps (CRSwNP), frequently coexist with severe asthma and exacerbate the disease burden, leading to more frequent exacerbations and increased reliance on oral corticosteroids (OCS). Understanding the interplay between severe asthma and its comorbidities is crucial for optimizing patient outcomes.

This presentation will delve into the pathophysiology of eosinophilic asthma, emphasizing the role of eosinophils and the interleukin-5 (IL-5) pathway. We will explore the impact of common comorbidities on the severe asthma phenotype and treatment responses.

Mepolizumab, an anti-IL-5 biologic, has emerged as a pivotal treatment for SEA, demonstrating significant clinical benefits in both asthma and CRSwNP, including the reduction of OCS dependence.Real-world data and recent studies indicate that mepolizumab effectively minimizes the disease impact and corticosteroid burden in patients with SEA, regardless of the presence of comorbidities. These findings underscore the recommendation for mepolizumab as a first-line biologic therapy for patients with severe eosinophilic asthma and comorbid CRSwNP, targeting the common pathophysiological pathway and providing comprehensive disease management.

By the end of this session, you’ ll gain insights into the integrated management of severe asthma and its comorbidities, informed by the latest evidence supporting the use of mepolizumab. This knowledge will enhance clinical practice, ultimately improving patient care and reducing the overall disease burden.

第四會議室

Aug. 10 (SAT.)

12:10-13:20 Optimizing NSCLC treatment: integrating Bevacizumab with TKIs in first-line therapy / **郭志熙 醫師** / **P.40** (Satellite Symposium_ 台灣東洋藥品工業股份有限公司)

13:30~13:50 Treatment of adult sleep apnea with PAP: make a wise choice / **徐上富 醫師** / **P.41** (Workshop: treatment of adult sleep apnea with positive airway pressure)

16:20~16:50 Understanding a PAP therapy report: CPAP and BPAP / **邱華彥 醫師** / **P.42** (Workshop: treatment of adult sleep apnea with positive airway pressure)

17:20-18:30 Moving FORWARD in the treatment of NSCLC driven by EGFR exon 20 insertion mutation / **江起陸 醫師** / **P.43** (Satellite Symposium_ 嬌生股份有限公司)

Practical management for skin-related toxicity associated with the use of EGFR target therapy / **盧俊瑋 醫師** / **P.44** (Satellite Symposium_ 嬌生股份有限公司)

Aug. 11 (SUN.)

12:10-13:20 Is achieving clinical remission an attainable goal for all asthma patients? / **廖光明 醫師** / **P.45** (Satellite Symposium_ 葛蘭素史克藥廠股份有限公司台灣分公司)

Preventing in advance: can triple therapy aid symptomatic COPD patients without exacerbation history? / **張鼎育 醫師** / **P.46** (Satellite Symposium_ 葛蘭素史克藥廠股份有限公司台灣分公司)

Aug. 10

Satellite Symposium_ 台灣東洋藥品工業股份有限公司

Optimizing NSCLC treatment: integrating Bevacizumab with TKIs in first-line therapy

郭志熙 Chih-Hsi Kuo

林口長庚肺腫瘤及內視鏡科主任
林口長庚肺腫瘤及內視鏡科主治醫師
專長：慢性咳嗽、肺部腫瘤

The integration of bevacizumab with erlotinib in first-line treatment for non-small cell lung cancer (NSCLC) has recently been reimbursed under Taiwan's national health insurance, specifically for patients with the L858R mutation and brain metastases. This represents a significant advancement in personalized NSCLC treatment in Taiwan. This speech examines the rationale and clinical implications of this combination therapy. We explore its synergistic effects on angiogenesis and tyrosine kinase inhibitors (TKI), drawing from relevant clinical data and real-world evidence. Practical considerations for healthcare providers in Taiwan, such as patient selection criteria and adverse event management, are discussed. By empowering healthcare professionals with tailored insights into this treatment practice, this speech aims to optimize patient care and treatment outcomes for NSCLC in Taiwan.

Treatment of adult sleep apnea with PAP: make a wise choice

徐上富 Shang-Fu Hsu

臺北醫學大學附設醫院胸腔內科主治醫師
臺北醫學大學附設醫院睡眠中心副主任
專長：慢性氣道疾病 (如 : 氣喘、慢性肺阻塞)、肺炎、睡眠呼吸中止症與睡眠障礙

Obstructive sleep apnea (OSA), a common sleep disorder, not only affects sleep quality but is also associated with multiple health conditions. Positive airway pressure (PAP) therapy is the mainstay of therapy for adults with OSA, but the indications for PAP therapy varies. I have integrated several commonly used guidelines to provide the main indications for PAP therapy. However, non-adherence to PAP therapy is recognized as a significant treatment limitation in patients with OSA. I will also share the management strategies.

鍾心珮 Hsin-Pei Chung

馬偕紀念醫院淡水院區胸腔內科主治醫師
專長：肺部腫瘤、睡眠醫學

陳永瑄 Yung-Hsuan Chen

台大醫院內科部主治醫師
專長：睡眠呼吸障礙、一班胸腔疾病、重症醫學

Understanding a PAP therapy report: CPAP and BPAP

邱華彥 Hwa-Yen Chiu

臺北榮民總醫院新竹分院
專長：胸腔內科、呼吸照護病房、胸腔超音波、支氣管鏡、睡眠中心

Positive airway pressure(PAP) therapy is the first-line treatment for moderate to severe sleep apnea patients. However, due to various reasons, treatment adherence is suboptimal. With proper fitting, pressure titration, patient education and troubleshooting this issue can be improved. This workshop is designed to provide easy access to high-quality positive airway therapy through knowledge sharing, case-based discussion and real hands-on experience. The workshop is built around four key topics. The first topic is about the essential information of PAP selection, in which participants will learn to describe different types of PAP therapy and be able to assess the appropriate use of different devices. The second and third topics, continuous positive airway pressure(CPAP) and bilevel positive airway pressure(BPAP) are skills-based simulating training in which participants will join in groups of 3-4 to solve the clinical scenario provided. Finally, high-quality home PAP treatment will always incorporate patient tracking system that leads to problem-solving strategies. Overall, this is an exceptional stand-alone learning experience especially helpful for those who want to improve patient care.

Satellite Symposium_ 嬌生股份有限公司

Moving FORWARD in the treatment of NSCLC driven by EGFR exon 20 insertion mutation

江起陸 Chi-Lu Chiang

臺北榮總胸腔部 主治醫師
專長：一般胸腔內科、胸腔腫瘤、重症照護、胸腔超音波、支氣管鏡

Exon 20 insertion is the third most common EGFR mutation in non-small-cell lung cancer (NSCLC) patients. This mutation is associated with poor treatment outcomes when patients are treated with first- or second-generation tyrosine kinase inhibitors (TKIs). Amivantamab, an EGFR-MET bispecific antibody, binds to the extracellular domains of each receptor, thereby bypassing resistance at the TKI binding site.

The CHRYSALIS study, a phase I, open-label, dose-escalation, and dose-expansion trial, investigates the efficacy and safety profile of amivantamab in patients with EGFR exon 20 insertions. This session will provide an overview of the initial results from CHRYSALIS, including response rate, progression-free survival (PFS), and overall survival (OS), as well as recent clinical updates on other emerging treatment options.

Furthermore, the combination of amivantamab and chemotherapy has demonstrated superior clinical efficacy compared to chemotherapy alone, with improvements in PFS, overall response rate (ORR), and duration of response (DoR). While OS data remains immature, there is a noticeable trend favoring the amivantamab plus chemotherapy regimen. Currently, platinum-based chemotherapy is the standard of care in the first-line setting for patients with EGFR exon 20 insertions. In this session, we will also explore whether amivantamab plus chemotherapy could become the new standard of care in the first-line setting for the EGFR exon 20 insertion NSCLC population, potentially reshaping the treatment landscape for these patients.

Satellite Symposium_ 嬌生股份有限公司

Practical management for skin-related toxicity associated with the use of EGFR target therapy

盧俊瑋 Chun-Wei Lu

台灣林口長庚紀念醫院皮膚科助理教授
台灣重症藥物不良反應協會顧問
專長：一般皮膚科、感染性皮膚科、皮膚的藥物不良反應、抗癌藥物引起的皮膚毒性

The treatment strategies for EGFR-targeted therapies are continuously evolving. Dermatologists manage the skin-related toxic reactions frequently caused by EGFR-targeted therapies, which not only improve the patients' quality of life but also enhance their medication adherence and treatment response.

However, for non-small cell lung cancer (NSCLC) with EGFR exon 20 insertion mutations, the emergence of bispecific antibodies is reshaping treatment strategies and introducing new types of skin side effects, posing significant challenges to treatment.

This conference aims to provide a comprehensive understanding of the cutting-edge treatment methods for NSCLC with EGFR exon 20 mutations and effectively manage the associated skin toxicities, thereby improving patient treatment outcomes and quality of life.

Aug. 11

Satellite Symposium_ 葛蘭素史克藥廠股份有限公司台灣分公司

Is achieving clinical remission an attainable goal for all asthma patients?

廖光明 Kuang-Ming Liao

奇美醫院

Asthma is a chronic inflammatory airway disease, and the combination therapy of inhaled corticosteroids (ICS) and long-acting beta2-agonists (LABA) is the cornerstone of asthma treatment. In recent years, the addition of long-acting anticholinergic agents (LAMA) has become a new option for asthma treatment, in the form of triple therapy inhalation (ICS/LABA/LAMA), for those patients who are poorly controlled under ICS/LABA treatment regimens. With the implementation of triple inhalation therapy, asthma inhalation therapy has entered a new era.

Clinical remission in asthma is not a new topic, but data and discussions have been limited to biologics. Recently, new evidence has emerged regarding the possibility of achieving clinical remission using inhalers. In addition, the recently published GINA 2024 had also included a new topic on the possibility of achieving Clinical Remission for all asthma patients, including patients on ICS-containing medication.

This section will discuss the role of LAMA in asthma management and the possibility of achieving clinical remission using triple therapy inhalation (ICS/LABA/LAMA).

Satellite Symposium_ 葛蘭素史克藥廠股份有限公司台灣分公司

Preventing in advance: can triple therapy aid symptomatic COPD patients without exacerbation history?

張鼎育 Ding-Yu Chang

東港安泰醫院胸腔內科主治醫師
專長：咳嗽、咳血、氣喘症、胸悶、慢性阻塞性肺疾病、肺結核、肺腫瘤、慢性肺病、肺炎、呼吸道異物、塵肺症、肺病 (包括肺氣腫及慢性支氣管炎)、肺膿瘍、支氣管炎及支氣管擴張等各種肺部疾病、膿胸、肋膜炎等各種肋膜疾病與縱膈腔病變。

With recent updates to the GOLD guidelines, the role of Triple Therapy in COPD treatment has become increasingly clear, especially for patients with a history of exacerbations. The aim is to enhance overall patient care, including improving lung function, controlling symptoms, reducing the risk of exacerbations, and lowering mortality rates.

As the use of Triple Therapy becomes more widespread, there is growing clinical interest in exploring its potential benefits for patients without a history of exacerbations. Can Triple Therapy help improve their current condition?

This presentation will discuss which specific patient groups, even those without a history of exacerbations, might still benefit from Triple Therapy.

第五會議室

Aug. 10 (SAT.)

12:10-13:20 Prevention of RSV in older adults and adults with comorbidities / **張博瑞 醫師** / **P.48** (Satellite Symposium_ 葛蘭素史克藥廠股份有限公司台灣分公司)

Aug. 11 (SUN.)

12:10-13:20 Finding the right triple to improve respiratory therapy: from clinical trials to real world evidence / **潘奕宏 醫師** / **P.49** (Satellite Symposium_ 友華生技醫藥股份有限公司)

How IOS detection tools can help diagnose SAD and treat COPD patients appropriately / **蕭逸函 醫師** / **P.50** (Satellite Symposium_ 友華生技醫藥股份有限公司)

Aug. 10

Satellite Symposium_ 葛蘭素史克藥廠股份有限公司台灣分公司

Prevention of RSV in older adults and adults with comorbidities

張博瑞 Po-Jui Chang

林口長庚胸腔內科系呼吸道疾病主任
專長：氣喘及慢性阻塞性肺疾、慢性咳嗽、結核及感染性疾病

Respiratory Syncytial Virus (RSV) is often mistaken for a common cold, but it is a significant respiratory virus affecting all age groups, particularly adults over 60 and those with chronic illnesses. It is a leading cause of severe lower respiratory tract infections in adults. This lecture will explore the differences between RSV and the common cold, focusing on transmission in long-term care settings and the severe outcomes it can cause. We will highlight the impact of RSV immunodeficiency in older adults and those with chronic conditions. The discussion will emphasize the importance of understanding RSV in adults and chronic illness patients and introduce the newly available RSV vaccine in Taiwan. The aim is to raise awareness and promote better prevention and treatment measures, with specific considerations for pulmonologists.

Aug. 11

Satellite Symposium_ 友華生技醫藥股份有限公司

Finding the right triple to improve respiratory therapy: from clinical trials to real world evidence

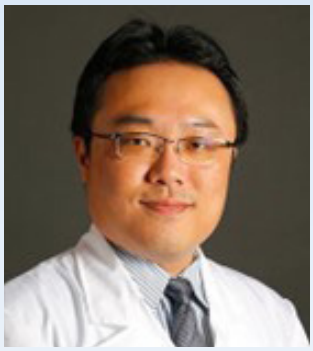
潘奕宏 Yi-Hung Pan

安泰醫院胸腔內科主治醫師
專長：氣喘、肺阻塞、肺癌、肺纖維化、支氣管擴張症

近年來肺部小呼吸道的疾病 (Small Airway Dysfunction) 一直受到國際間的重視，而吸入劑藥物的顆粒大小與肺部小呼吸道的藥物沉積率息息相關且 IOS 針對 SAD 之診斷也越來越受到重視，本次演講透過光田醫院潘信宏醫師從臨床試驗到真實世界上使用超細微粒 (Extra-fine particle) 的 ICS/LABA/LAMA 與其他吸入劑的比較及 Extrafine 針對於控制不佳氣喘病患之相關臨床文獻證據分享，並且針對運用 IOS 來增加 SAD 之診斷趨勢分享說明，來讓各位醫師了解更多 Extra-fine particle 的吸入型藥物對於台灣病人臨床上的益處。

Satellite Symposium_ 友華生技醫藥股份有限公司

How IOS detection tools can help diagnose SAD and treat COPD patients appropriately



蕭逸函 Yi-Han Hsiao

中華民國教育部 部定講師
國立陽明大學 醫學系內科學科兼任講師
台北榮民總醫院胸腔部 一般胸腔科 主治醫師
專長：氣喘、肺阻塞、呼吸重症、支氣管鏡檢查、胸腔腫瘤、睡眠醫學

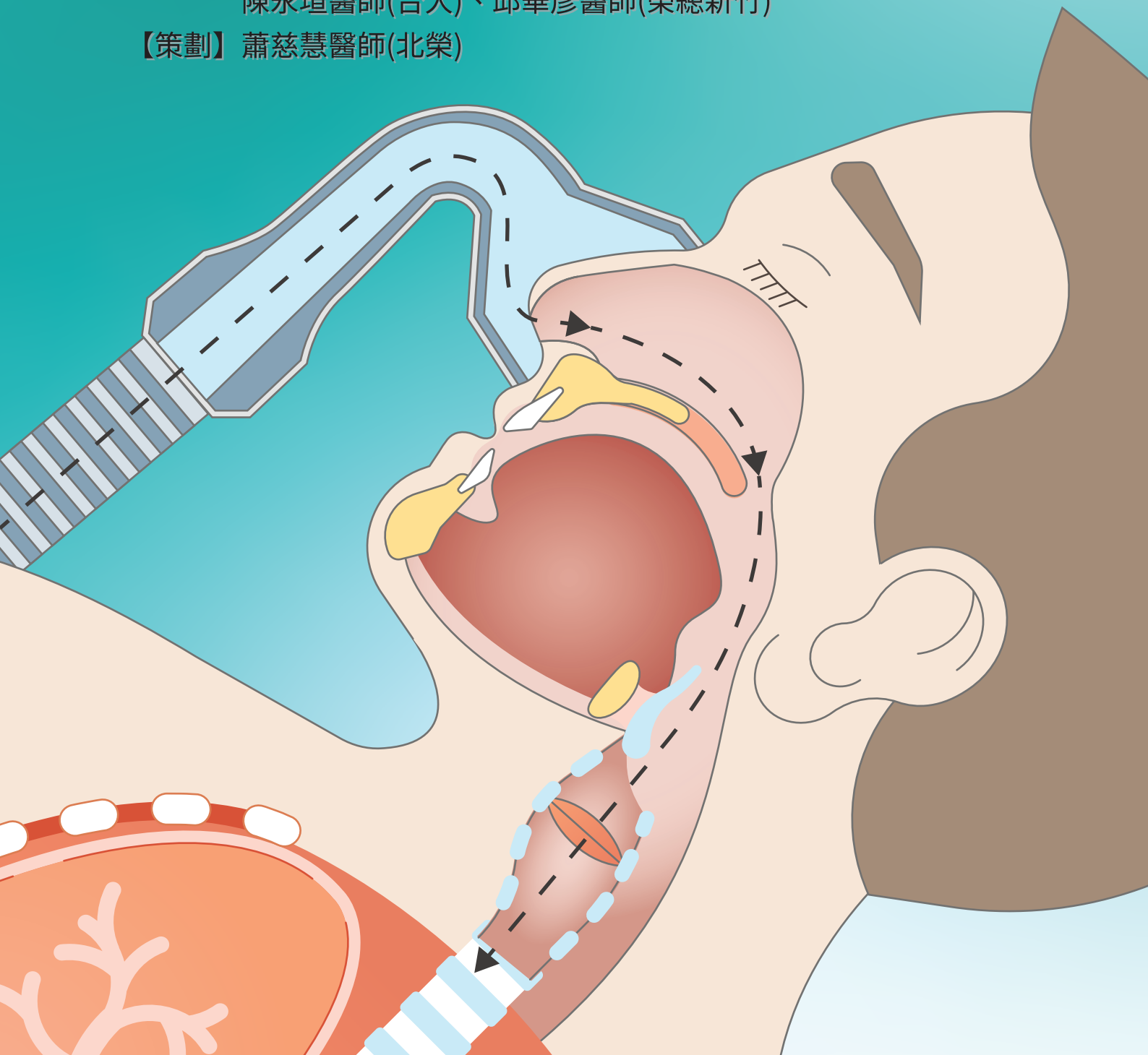
近年來肺部小呼吸道的疾病 (Small Airway Dysfunction) 的診斷開始受到各醫療院所的重視，由於許多肺功能正常的 COPD 患者仍有相當高的風險會有肺部小呼吸道的疾病，且目前的各項肺功能檢查針對小呼吸道疾病之診斷並無統一之共識，於 COVID-19 疫情開始，許多醫療院所購置 IOS 檢測機器日趨增多，且 IOS 的肺功能檢測使用上相當便利，而吸入劑藥物的顆粒大小與肺部小呼吸道的藥物沉積率息息相關且 IOS 針對 SAD 之診斷也越來越受到重視，台灣胸腔暨重症加護醫學會也針對 IOS 檢測規畫提出健保給付。故本次演講透過台北榮總蕭逸函醫師分享 IOS 檢測之學理及實際臨床使用上之臨床經驗，期待能增加與會者對於 IOS 檢測方式更加了解及實際運用方式，未來更能檢測出肺部小呼吸道疾病，給予患者更加完善之治療。

Note

Workshop: treatment of adult sleep apnea with positive airway pressure

工作坊：成人睡眠呼吸中止之陽壓呼吸器治療

【主題】瞭解實際臨床如何利用陽壓呼吸器，來治療睡眠呼吸中止
【內容】陽壓呼吸器原理與選擇、實際操作、報告判讀
【日期】2024年08月10日(星期六) 下午13:30-16:50
【地點】嘉義長庚醫院國際會議中心-第四會議室
【協辦】台灣瑞思邁
【講師】徐上富醫師(北醫)、鍾心珮醫師(馬偕)
陳永瑄醫師(台大)、邱華彥醫師(榮總新竹)
【策劃】蕭慈慧醫師(北榮)



ACT GENOMICS ™

ACT Onco® +

癌安克™癌症基因檢測

檢測內容：
與癌症高度相關的
440 個基因變異資訊

適用對象：
實體腫瘤的病患
- 尋找標靶用藥生物標記
- 治療產生抗藥、疾病復發或轉移時需尋找其他治療策略

檢體種類：
腫瘤組織切片
(FFPE/Cell block)

檢測時間：
10 個工作天

ACT Liquid™ Pro

液癌檢™癌症基因檢測

檢測內容：
與癌症高度相關的
523 個基因變異資訊

適用對象：
實體腫瘤的病患
- 無法取得腫瘤組織檢體的病患
- 針對癌症追蹤與監測有需求的病患

檢體種類：
血液檢體
(兩管 8.5mL 血液)

檢測時間：
7~10 個工作天

完整的基因資訊分析

點突變 (SNV)
插入/缺失 (In/Del)
拷貝數變異 (CNA)
融合基因 (Fusion)
腫瘤突變負荷 (TMB)
微衛星不穩定 (MSI)

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TW_MAD_03202024_ACTOnco&ACTLiquid_V01

MET exon 14 skipping mutation

健保給付正式生效

[產品名稱] 德邁特膜衣錠225毫克TEPMETKO Film-coated Tablets 225mg[適應症] TEPMETKO 適用於治療帶有導致間質上皮轉化因子外顯子- 14 跳讀式突變 (MET exon 14 skipping mutation) 的轉移性之非小細胞肺癌-(NSCLC)-成人病人。[主要成分] Tepotinib HCl hydrate 250mg, 相當於tepotinib 225 mg [用法用量] TEPMETKO 的建議劑量為每日一次 450 毫克隨餐口服, 直到疾病惡化或無法耐受毒性為止。指示病人, 應固定在每天大約相同時間服用 TEPMETKO, 藥錠應完整吞服, 不可咀嚼、壓碎或剝開。告知病人, 如果錯過服藥且距離下一劑的時間不到 8 小時, 應略過這一劑。告知病人, 如果服用 TEPMETKO 後嘔吐, 應等到下一劑的時間再服藥。[禁忌] 無。**[警語]** 間質性肺病 (ILD)/非感染性肺炎(Pneumonitis):接受 TEPMETKO 治療的病人曾發生 ILD/非感染性肺炎, 可能致死。接受 TEPMETKO 治療的病人有 2.2% 曾發生 ILD/非感染性肺炎, 一名病人為第 3 級以上事件並導致死亡。有 4 位病人 (0.9%) 因 ILD/非感染性肺炎停用 TEPMETKO。應監測病人是否出現新的 ILD/非感染性肺炎相關症狀, 或原有症狀惡化 (例如呼吸困難、咳嗽、發燒)。疑似 ILD/非感染性肺炎的病人, 應立即暫停 TEPMETKO, 若未發現可引起 ILD/非感染性肺炎的其他原因, 須永久停用TEPMETKO。肝毒性:肝毒性為使用TEPMETKO可能發生的不良反應, 大約13%使用TEPMETKO治療的病人曾發生AST/ALT升高。Grade 3或 4 ALT/AST上升的發生率約4.2%。臨床試驗中有一位病人(0.2%) 因肝衰竭而導致死亡。三人病人 (0.7%) 因ALT/AST上升而停止TEPMETKO治療。從開始治療到發生Grade 3以上ALT/AST上升的時間中位數為30天(範圍：1~178天)。臨床試驗中亞洲族群受試者 ALT/AST上升的發生率高於西方族群受試者, 然而Grade 3以上ALT/AST上升的發生率沒有明顯差異。應監測肝酵素 (包括 ALT和AST 及膽紅素), 包括開始 TEPMETKO 治療之前、治療前三個月每兩週一次、之後每個月一次及視臨床需要進行；發生轉胺**酶**或膽紅素上升的病人需要更頻繁的監測。根據不良反應的嚴重性, 暫時停用、調降劑量或永久停用 TEPMETKO。胚胎–胎兒毒性:根據動物試驗的結果及藥物作用機轉, TEPMETKO 用於懷孕女性可能對胎兒造成傷害。懷孕兔子在胚胎器官形成期間餵食 tepotinib, 會導致胎兒畸形 (畸胎) 及異常, 其暴露量低於每日一次 450 毫克臨床劑量下的人體暴露量 (依曲線下面積 [AUC] 計算)。應告知懷孕女性關於胎兒的可能風險。告知有生育能力的女性, 或女性伴侶有生育能力的男性, 在TEPMETKO 治療期間直到最後一劑後 1 週內, 需使用有效的避孕方法 [不良反應] 接受 TEPMETKO 治療的病人最常見的TEAE (≥ 20%), 包括水腫、倦怠、噁心、腹瀉、肌肉骨骼疼痛、呼吸困難。最常見第 3 至第 4 級實驗室檢驗值異常 (≥ 2%), 包括淋巴球減少、白蛋白降低、鈉降低、丙麩胺醯轉移酶升高、澱粉酶升高、ALT 升高、AST 升高、血紅素降低。接受 TEPMETKO 治療的病人, 發生率小於 20% 但具臨床意義的實驗室檢驗值異常為脂肪酶升高, 發生於 18% 的病人, 其中 3.7% 為第 3 至 4 級。

以上簡易仿單資訊僅供參考, 處方請詳閱完整仿單內容, 詳細處方資料備索

衛部藥輸字第028152號 北市衛藥廣字號第112090316號

MERCK | 台灣默克股份有限公司
地址：台北市內湖區堤頂大道二段 89 號 6 樓
電話：(02) 2162-1111
傳真：(02) 8751-0507

Retsevmo®
selpercatinib
銳癌寧®

主旨：RETSEVMO® (Selpercatinib) 銳癌寧® 的重要安全資訊

致親愛的醫療照護專業人員：

RETSEVMO®(Selpercatinib)銳癌寧®，已獲衛生福利部食品藥物管理署(TFDA)核准登記，適應症包含：

1. RET基因融合陽性非小細胞肺癌：RETSEVMO®適用於治療晚期或轉移性RET基因融合陽性非小細胞肺癌(NSCLC)的成人病人。本適應症係依據整體反應率及反應持續時間獲得加速核准。此適應症仍須執行確認性試驗以證實其臨床效益。
2. RET 基因突變甲狀腺髓質癌：RETSEVMO®適用於治療需要接受全身性療法之晚期或轉移性RET基因突變甲狀腺髓質癌(MTC)的成人病人。本適應症係依據整體反應率及反應持續時間獲得加速核准。此適應症仍須執行確認性試驗以證實其臨床效益。
3. RET基因融合陽性甲狀腺癌：RETSEVMO® 適用於治療需要接受全身性療法且以放射性碘治療無效(若適合接受放射性碘)之晚期或轉移性RET基因融合陽性甲狀腺癌的成人病人。本適應症係依據整體反應率及反應持續時間獲得加速核准。此適應症仍須執行確認性試驗以證實其臨床效益。

台灣禮來股份有限公司(以下簡稱台灣禮來) 謹以此信函告訴您與RETSEVMO® (Selpercatinib) 銳癌寧®有關的重要安全資訊。衛生福利部食品藥物管理署(TFDA)規定必須針對RETSEVMO®(Selpercatinib) 銳癌寧® 進行風險管理計畫，以確保此藥物的效益超越其潛在風險。請務必向病人說明使用RETSEVMO® (Selpercatinib) 銳癌寧®治療的相關風險，在適合的情況下，也應向其照顧者說明。

RETSEVMO® (Selpercatinib) 銳癌寧® 的警語與注意事項：

1. 肝毒性：接受 RETSEVMO® 治療的病人有3％發生嚴重肝臟不良反應。59％的病人發生AST增加，包括11%為第3或4級的事件，55%的病人發生ALT增加，包括12%為第3或4級的事件。AST首次增加的時間中位數為6週(範圍：1天至3.4年)，ALT首次增加的時間中位數為5.8週(範圍：1天至2年)。臨床試驗接受RETSEVMO®治療的東亞族群病人有69%的病人發生AST增加，包括11%為第3或4級的事件，60%的病人發生ALT增加，包括13%為第3或4級的事件。RETSEVMO®治療開始前、治療最初3個月每2週監測一次、之後每個月一次、及當臨床需要時都應監測ALT及AST。根據嚴重度，暫停使用、降低劑量或永久停用RETSEVMO®。
2. QT間隔延長：RETSEVMO®會產生與濃度相關的QT間隔延長。在7%的病人中測量到QTcF間隔增加至> 500 ms，並在20%的病人中測量到QTcF間隔較基期增加至少60 ms。RETSEVMO®不曾在具有臨床意義的活動性心血管疾病或近期發生心肌梗塞的病人中進行試驗。臨床試驗接受RETSEVMO®治療的東亞族群病人有20%發生QT間隔延長的不良事件，包括7%為第3級以上不良事件。於開始治療及治療期間定期評估QT間隔、電解質與TSH，並依據風險因子(包括腹瀉)調整監測頻率。有發生QTc延長顯著風險的病人應加強監測，包括已知患有長QT症候群、具臨床意義的心搏過緩及嚴重或未獲控制之心臟衰竭的病人。開始RETSEVMO®治療前及治療期間矯治低鉀血症、低鎂血症與低鈣血症。當RETSEVMO®併用強效或中效CYP3A抑制劑或已知會延長QTc間隔的藥物時，需更頻繁的監測QT間隔。依據嚴重度，暫停使用、降低劑量或永久停用RETSEVMO®。
3. 過敏：接受RETSEVMO®治療的病人中，有6％發生過敏，包括1.9％為第3級過敏。發作時間中位數為1.9週(範圍：5天至2年)。過敏的徵候和症狀包括發燒、皮疹與關節痛或肌痛合併血小板減少或轉胺酶增加。臨床試驗接受RETSEVMO®治療的東亞族群病人有10%發生過敏，包括4.2%為第3級過敏。若發生過敏，請暫停使用 RETSEVMO®並開始以皮質類固醇治療，劑量為prednisone 1 mg/kg (或等效劑量)。事件緩解後，以降低的劑量恢復RETSEVMO®治療，如果可耐受則每週以1個劑量層級的方式調高RETSEVMO®劑量，直到達到發生過敏前所服用的劑量。繼續類固醇治療直到病人達到RETSEVMO®目標劑量，接著逐漸減低類固醇劑量。過敏復發則永久停用RETSEVMO®。

RETSEVMO® (Selpercatinib) 銳癌寧® 的劑量調整建議：

不良反應	嚴重度	劑量調整
肝毒性	第 3 級或第 4 級	• 暫時停用RETSEVMO®，每週監測一次AST/ALT，直到緩解至第1級或基期(baseline)值。 • 以調降2個層級的劑量恢復治療，每週監測一次AST與ALT。 • 經過至少2週的治療與監測，若無復發，調高1個層級的劑量。之後經過至少4週的治療與監測，若無復發，再調高劑量到發生第3或4級AST或ALT增加前所服用的劑量。劑量調高達到發生第3或4級AST或ALT增加前所服用的劑量後，持續4週，每週監測一次AST與ALT。
QT間隔延長	第 3 級	• 暫停使用RETSEVMO®直到恢復到基期值或第0或1級。 • 以調降的劑量恢復治療。
	第 4 級	• 停用RETSEVMO®。
過敏反應	所有等級	• 暫停使用RETSEVMO®直到事件緩解。開始皮質類固醇治療。 • 以調降3個層級的劑量恢復治療，同時繼續皮質類固醇治療。 • 每週調高1個層級的劑量，直到達到發生過敏反應前所服用的劑量，接著逐漸減少皮質類固醇劑量。

RETSEVMO®(Selpercatinib)銳癌寧® 的劑量：

	病人體重低於50kg	病人體重在50kg以上
起始劑量	120 mg 每天口服兩次	160 mg 每天口服兩次
發生不良反應時，劑量調降		
第一次	80 mg 每天口服兩次	120 mg 每天口服兩次
第二次	40 mg 每天口服兩次	80 mg 每天口服兩次
第三次	40 mg 每天口服一次	40 mg 每天口服兩次

通報不良事件

在此提醒醫療照護專業人員若發現任何疑似與使用RETSEVMO®有關的不良反應必須主動通報台灣禮來股份有限公司及衛生福利部食品藥物管理署(TFDA) 建置之全國藥物不良反應通報中心。

- 撥打(02) 2715-2950或透過inbox_twmail-safety@lilly.com聯絡台灣禮來醫藥學術部門。
- 撥打(02) 2396-0100或透過http://adr.fda.gov.tw向全國藥物不良反應通報中心通報。

Lilly 台灣禮來股份有限公司
台北市復興北路365號11樓

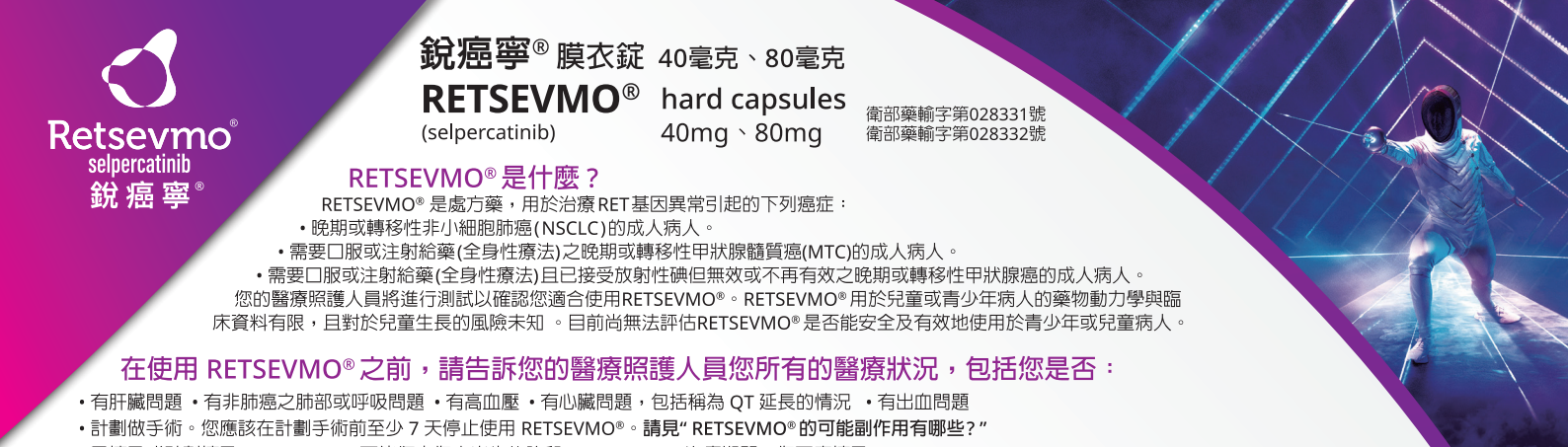
北市衛藥廣字第113050208號

RETSEVMO RMP-version 2.0
P-MKT-XC-006-24-May-30

Retsevmo®
selpercatinib
銳癌寧®

銳癌寧® 膜衣錠 40毫克、80毫克
RETSEVMO® hard capsules 40mg、80mg
(selpercatinib)

衛部藥輸字第028331號
衛部藥輸字第028332號



RETSEVMO® 是什麼？

RETSEVMO® 是處方藥，用於治療RET基因異常引起的下列癌症：
- 晚期或轉移性非小細胞肺癌(NSCLC)的成人病人。
- 需要口服或注射給藥(全身性療法)之晚期或轉移性甲狀腺髓質癌(MTC)的成人病人。
- 需要口服或注射給藥(全身性療法)且已接受放射性碘但無效或不再有效之晚期或轉移性甲狀腺癌的成人病人。

您的醫療照護人員將進行測試以確認您適合使用RETSEVMO®。RETSEVMO®用於兒童或青少年病人的藥物動力學與臨床資料有限，且對於兒童生長的風險未知。目前尚無法評估RETSEVMO®是否能安全及有效地使用於青少年或兒童病人。

在使用 RETSEVMO® 之前，請告訴您的醫療照護人員您所有的醫療狀況，包括您是否：

- 有肝臟問題 • 有非肺癌之肺部或呼吸問題 • 有高血壓 • 有心臟問題，包括稱為 QT 延長的情況 • 有出血問題
- 計劃做手術。您應該在計劃手術前至少 7 天停止使用 RETSEVMO®。**請見" RETSEVMO® 的可能副作用有哪些？"**
- 已懷孕或計劃懷孕。RETSEVMO®可能傷害您未出生的胎兒。RETSEVMO®治療期間，您不應懷孕。
  - ▶如果您有懷孕能力，您的醫療照護人員將在您開始使用RETSEVMO® 治療前進行妊娠試驗。
  - ▶**有懷孕能力的女性**在RETSEVMO® 治療期間及接受最後一劑後**1**週，應使用有效的避孕措施。與您的醫療照護人員討論可能適合您的避孕方法。
  - ▶如果您在RETSEVMO® 治療期間懷孕或認為您可能懷孕，請立即告訴您的醫療照護人員。
  - ▶**有懷孕能力女性伴侶的男性**在RETSEVMO® 治療期間及接受最後一劑後**1**週，應使用有效的避孕措施。
- 正在哺乳或計劃哺乳。目前尚不清楚RETSEVMO® 是否會進入您的乳汁。使用RETSEVMO® 治療期間及接受最後一劑後**1**週不要哺乳。

告訴您的醫療照護人員您服用的所有藥物，包括處方藥和非處方藥、維他命和草藥營養補充品。RETSEVMO®可能影響其他藥物的作用，某些藥物也可能影響RETSEVMO®的作用，這可能增加您發生副作用的風險。RETSEVMO®治療期間，**你應該避免使用**聖約翰草，氫離子幫浦抑制劑(PPI，例如：dexlansoprazole、esomeprazole、lansoprazole、omeprazole、pantoprazole sodium、rabeprazole)、H2 受體拮抗劑 (例如：famotidine、nizatidine及cimetidine)，及含有鋁、鎂、鈣、simethicone或緩衝藥物的制酸劑。如果您無法避免服用氫離子幫浦抑制劑、H2受體拮抗劑或制酸劑，**請參閱"我應該如何使用RETSEVMO®？"** 得到RETSEVMO® 與這些藥物一起服用的更多信息。了解您服用的藥物。準備一份您的藥物清單以便在您接受新的藥物時可出示給您的醫療照護人員和藥師。

我應該如何使用 RETSEVMO® ？

- 依照您的醫療照護人員告訴您的方式服用 RETSEVMO®。
- 若您發生副作用，您的醫療照護人員可能會改變您的治療劑量、暫時停止或永久停止RETSEVMO® 治療。除非您的醫療照護人員告訴您，否則不要改變劑量或停止服用RETSEVMO®。
- 口服使用RETSEVMO®， 通常每天使用 2 次，間隔約12小時。
- RETSEVMO® 可與或不與食物併服
- 如果您服用氫離子幫浦抑制劑 (PPI，例如：dexlansoprazole、esomeprazole、lansoprazole、omeprazole、pantoprazole sodium、rabeprazole)，RETSEVMO®應與食物併服。
- 如果您服用含有鋁、鎂、鈣、simethicone或緩衝藥物的制酸劑，請在使用制酸劑前2小時或2小時後服用 RETSEVMO®。
- 如果您服用H2受體拮抗劑 (例如：famotidine、nizatidine及cimetidine)，請在使用H2受體拮抗劑前2小時或 10 小時後服用 RETSEVMO®。
- 請吞服整顆膠囊。請勿壓碎或咀嚼膠囊。
- 如果您服用一劑RETSEVMO®後發生嘔吐，請勿服用額外的劑量。在下一個排定時間服用下一劑 RETSEVMO®。
- 除非離下一個排定服藥時間超過6小時，否則不要服用遺漏的RETSEVMO® 劑量。

RETSEVMO® 的可能副作用有哪些？

RETSEVMO® 可能導致嚴重副作用，包括：

- **肝臟問題**。肝臟問題(肝臟酵素上升)在使用RETSEVMO®時很常見，有時可能很嚴重。您的醫療照護人員將在RETSEVMO®治療前和治療期間進行血液檢查以確認是否有肝臟問題。如果您在治療期間出現任何以下肝臟問題的症狀，請立即告訴您的醫療照護人員：
  ▶皮膚或眼睛的白色部分變黃(黃疸) ▶深色"茶色"尿液 ▶嗜睡 ▶出血或瘀傷 ▶食慾不振 ▶噁心或嘔吐 ▶右上腹部疼痛
- **肺部問題**。使用RETSEVMO®治療期間可能引起嚴重或危及生命的肺部發炎，可能導致死亡。如果您有任何新的肺部症狀或肺部症狀惡化，請立即告訴您的醫療照護人員，包括：
  ▶呼吸困難 ▶咳嗽 ▶發燒
- **血壓高(高血壓)**。高血壓在使用 RETSEVMO® 時很常見，有時可能很嚴重。使用RETSEVMO®治療期間，您應該定期檢查您的血壓。如果您出現血壓問題，您的醫療照護人員可能會處方藥物來治療您的高血壓。如果您的血壓升高或出現高血壓的症狀，請告訴您的醫療照護人員, 包括：
  ▶意識混淆 ▶頭暈 ▶頭痛 ▶胸痛 ▶呼吸急促
- **心臟節律改變(QT延長)**。RETSEVMO®可能導致非常緩慢、非常快速或不規則的心跳。您的醫療照護人員將在 RETSEVMO®治療前和治療期間進行檢查，確認您的心臟活動以及血液中的電解質和促甲狀腺激素(TSH)數值。如果您出現任何以下症狀，請立即告訴您的醫療照護人員：
  ▶喪失意識 ▶暈倒 ▶頭暈 ▶心跳方式改變(心悸)
- **出血問題**。RETSEVMO®可能導致出血，嚴重時會導致死亡。如果您在使用RETSEVMO®治療期間有任何出血徵候，請告訴您的醫療照護人員，包括：
  ▶吐血或嘔吐物看起來像咖啡渣 ▶粉紅色或棕色尿液 ▶紅色或黑色(看起來像瀝青)糞便 ▶咳血或血塊 ▶皮膚異常出血或瘀傷 ▶月經出血比平常多 ▶不尋常的陰道流血 ▶經常流鼻血 ▶嗜睡或難被叫醒 ▶意識混淆 ▶頭痛 ▶說話改變
- **過敏反應**。RETSEVMO® 可能引起發燒、紅疹、肌肉或關節疼痛，特別是在治療的第一個月。如果您有任何這些症狀，請告訴您的醫療照護人員。
- **腫瘤溶解症候群(tumor lysis syndrome, TLS)**。腫瘤溶解症候群是因癌細胞快速分解引起的。腫瘤溶解症候群可能導致腎功能衰竭(需要透析治療)和心跳異常。腫瘤溶解症候群可能導致住院。您的醫療照護人員可能會進行血液檢查以確認您是否有腫瘤溶解症候群。RETSEVMO®治療期間您應該保持水分充足。如果您在治療期間出現任何以下症狀，請立即致電您的醫療照護人員或尋求緊急醫療協助：
  ▶噁心 ▶呼吸急促 ▶嘔吐 ▶肌肉痙攣 ▶虛弱 ▶癲癇發作 ▶腫脹
- **傷口癒合不全的風險**。RETSEVMO® 治療期間，傷口可能無法正常癒合。如果您計劃在RETSEVMO® 治療前或治療期間進行任何手術，請告訴您的醫療照護人員。
  ▶您應該在計劃的手術前至少 7 天停止服用RETSEVMO®。
  ▶您的醫療照護人員應該告訴您手術後可以再次開始服用RETSEVMO®的時機。
- **血液中甲狀腺賀爾蒙數值低(甲狀腺機能低下)**。您的醫療照護人員將在RETSEVMO®治療前和治療期間進行血液檢驗以檢查您的甲狀腺功能。如果您有甲狀腺賀爾蒙低的徵候和症狀，請告訴您的醫療照護人員，包括：
  ▶體重增加 ▶疲倦感變嚴重或疲倦感不會消失 ▶感覺冷 ▶便祕
- **RETSEVMO® 最常見的副作用包括：**
  ▶手臂、腿、手和腳腫脹(水腫) ▶腹瀉 ▶疲倦 ▶口乾 ▶高血壓 ▶胃部區域(腹部)疼痛 ▶便祕 ▶紅疹 ▶噁心 ▶頭痛

RETSEVMO®最常見的嚴重實驗室檢測結果異常包括：白血球細胞數減少，血鈉減少，血鈣減少。

RETSEVMO®可能影響女性和男性的生育能力，這可能影響您生育孩子的能力。若您對此感到擔憂，請諮詢您的醫療照護人員。

以上所列並未包含所有RETSEVMO®可能導致的副作用。有關副作用的醫療建議，請詢問您的醫生。

我該如何存放RETSEVMO®？

- RETSEVMO® 膠囊應儲存於室溫下(30°C以下)。**請將RETSEVMO®和所有藥物存放於孩童無法取得的地方。**

有關安全並有效使用RETSEVMO® 的一般資訊：

醫師有時會因其他未列於病人仿單的使用目的而處方藥物。請勿在未經處方的情況下使用RETSEVMO®。請勿將RETSEVMO®給予他人使用，即使他們與您患有相同的症狀。這可能會對他們造成傷害。您可詢問您的藥師或醫療照護人員有關提供給醫療專業人員的 RETSEVMO® 資訊。

RETSEVMO® 的成分有哪些？

- **活性成分**：selpercatinib
- **非活性成分**：microcrystalline cellulose、colloidal silicon dioxide
- 40毫克膠囊殼含：明膠、二氧化鈦(titanium dioxide)、ferric oxide black及黑色墨水。
- 80毫克膠囊殼含：明膠、二氧化鈦(titanium dioxide) 、FD&C藍色色素1號及黑色墨水。
- 黑色墨水含：shellac、potassium hydroxide及ferric oxide black。

北市衛藥廣字第113050208號 | 本藥須由醫師處方使用

製造廠：Lilly Del Caribe Inc. (PR01 site)
廠址：12.6KM, 65th Infantry Road, Carolina 00985, Puerto Rico
分包裝廠：Lilly S.A.
廠址：Avda. de la Industria 30, 28108 Alcobendas, Madrid, Spain
藥商：台灣禮來股份有限公司
住址：台北市復興北路365號11樓
RETSEVMO RMP-version 2.0
P-MED-RA-003-24-Feb-01
Literature revised 08Jun, 2023

銳癌寧® 膜衣錠 40毫克、80毫克
RETSEVMO® (selpercatinib) hard capsules 40mg、80mg

RETSEVMO® 40毫克 衛部藥輸字第028331號
RETSEVMO® 80毫克 衛部藥輸字第028332號

【適應症】：**1.1** RET基因融合陽性非小細胞肺癌：RETSEVMO® 適用於治療晚期或轉移性RET基因融合陽性非小細胞肺癌 (NSCLC) 的成人病人。**1.2** RET基因突變甲狀腺髓質癌：RETSEVMO® 適用於治療需要接受全身性療法之晚期或轉移性RET 基因突變甲狀腺髓質癌 (MTC) 的成人病人。**1.3** RET基因融合陽性甲狀腺癌：RETSEVMO® 適用於治療需要接受全身性療法且以放射性碘治療無效 (若適合接受放射性碘) 之晚期或轉移性 RET 基因融合陽性甲狀腺癌的成人病人。【用法用量】：RETSEVMO® 的每次建議劑量依體重為：• 低於50 kg：120 mg • 50 kg以上：160 mg 。每天口服兩次 RETSEVMO® (約隔12小時)，直到疾病惡化或出現無法接受的毒性為止。【禁忌】：無。【警語和注意事項】：肝毒性、間質性肺病 (ILD) / 肺發炎 (pneumonitis) 、高血壓、QT間隔延長、出血事件、過敏、腫瘤溶解症後群、傷口癒合不全的風險、甲狀腺機能低下、胚胎-胎兒毒性。【不良反應】：最常見 (≥25%) 的不良反應為水腫、腹瀉、疲倦、口乾、高血壓、腹痛、便秘、皮疹、噁心及頭痛。

使用前請詳閱RETSEVMO® 藥品仿單警語及注意事項。

P-MKT-XC-006-24-May-30

Lilly

2024 台灣胸腔暨重症加護醫學會夏季青年會

2024 Youth Summer Workshop of Taiwan Society of Pulmonary and Critical Care Medicine