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香港中華醫學會 — 使命和願景

香港中華醫學會於1995年正式在香港註冊成為有限公司，時任會長為曹世植醫生，副會長為鍾尚志教授，秘書為沈祖堯教授。公司註冊處列明，香港中華醫學會的首四大宗旨如下：

- 促進醫療行業的福利和保護醫療行業的合法利益。
- 向公眾推廣和傳播醫學知識。
- 促進醫學科學的研究和工作。
- 促進和鼓勵醫學界成員之間的團結和友好關係。

HKCMA Vision and Mission

In 1995, the HKCMA Ltd. was formally registered as a limited company by guarantee. The first President of the registered company was late Dr. William Chao Sai-chik; the Vice-President was Professor Sydney Chung Sheung-chee; and the Honorary Secretary was Professor Joseph Sung Jao-yiu. The Memorandum of Association stated that the top four objectives of the HKCMA Ltd. are as follows:

- To promote the welfare and protect the lawful interests of the medical profession.
- To promote and spread knowledge of medical science among the public.
- To promote the study of and work for the advancement of medical science.
- To promote and encourage unity and friendly relationship among members of the medical profession.



Back row from the left: Dr. Ricky Chan, Dr. Albert Kong, Dr. Chung-ping Ho, Dr. Norman Chan, Dr. Man-kay Poon, Dr. James Wong, Dr. Chun-kong Ng, Dr. Catherine Chen, Dr. Kacey Hau, Dr. Paul Shea

Front row from the left: Dr. Loletta So, Dr. Carol Kwok, Dr. Yim-kwai Law, Dr. Jane Chan, Dr. Daniel Chu, Dr. Charas Ong, Dr. Adrian Leung



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HKCMA Membership Application



For Doctor



For Associate Member



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Introduction 導言



Dr. Charas Yeu-theng Ong

Specialist in Obstetrics and Gynaecology
FRCOG, FHKAM (Obstetrics and
Gynaecology), Cert RCOG (Maternal and
Fetal Medicine)

王予婷醫生

Welcome to the October Bulletin! In this edition, we extend our heartfelt gratitude to Dr. Leung Wing Cheong and Professor Terence Lao for their invaluable contributions. Your expertise and dedication have enriched our services, inspiring progress and innovation.

It is my pleasure to share insights from Dr. Leung and Professor Lao, who have contributed significantly to our understanding of recent advancements in obstetric care in Hong Kong. Thank you for being integral to our journey!

Dr. Leung has elucidated the history of development of public funded algorithms of prenatal screening and diagnosis in Hong Kong over the recent 30 years and beyond. He highlights the evolution of prenatal screening and diagnosis, which began in the 1980s with karyotyping for advance maternal age pregnant women. Since then, technological advancements have introduced a variety of screening methods and training, including ultrasound for soft markers and morphological fetal abnormalities, fetal Down syndrome screening using nuchal translucency (NT) measurement with various maternal serum markers, PCR, chromosomal microarray, non-invasive prenatal screening (NIPS) using maternal plasma cell free fetal (placental) DNA, multidisciplinary team approach with Whole Exome Sequencing or Whole Genome Sequencing including fetal MRI, fetal autopsy and genetic counselling. Recent developments have emerged, all aimed at supporting women and families in making informed decisions during pregnancy.

In a related discussion, Professor Terence Lao addresses the critical issue of obstetric

haemorrhage, the leading cause of maternal morbidity and mortality globally, accounting for up to 25-30% of maternal deaths. He focuses on atonic postpartum haemorrhage, which is increasingly linked to factors such as pre-labour Caesarean deliveries and extensive use of oxytocin during labour. Understanding these exact mechanisms is vital for prevention measures, improving treatment and reducing adverse outcomes.

Reflecting on the state of maternal and perinatal health in Hong Kong, we take pride in the significant achievements of our healthcare system in lowering maternal and perinatal mortality rates. This success is indebted to our universal, publicly funded healthcare system, which ensures access to quality care for every mother and newborn. Key components include well-organized antenatal care, high-quality peripartum services, and 24-hour emergency interventions, all made possible by the dedication and professionalism of our healthcare colleagues.

However, we must remain vigilant as challenges persist. Understanding and preventing the causes of maternal and perinatal deaths is essential, particularly in addressing hidden mortality, which may not be immediately obvious in statistical reports. A multidisciplinary approach is crucial for managing high-risk patients, as dedicated care units that encourage teamwork can significantly improve outcomes. Improving communication between healthcare providers and patients is another critical area for enhancement. Effective communication fosters trust and ensures that patients are informed about their health and

care, ultimately leading to better adherence to treatment plans and improved maternal and perinatal outcomes.

Looking forward, adopting a data-driven policy framework is essential for guiding healthcare initiatives. Comprehensive data collection and analysis will help us track trends and refine programmes to improve maternal and perinatal health. The significance of a robust data infrastructure cannot be overstated; it provides the evidence needed to identify areas requiring attention and resources. Engaging in international comparisons and collaborations can also offer valuable insights for our healthcare strategies.

In conclusion, as we celebrate our successes in maternal and perinatal health, we must remain vigilant and committed to addressing the enduring challenges ahead. By leveraging data alongside evidence-based medicine, fostering international collaboration, and prioritizing preventive measures, we can work toward a future where maternal and perinatal mortality rates are not only low but virtually non-existent. Together, we shall strive to ensure the safety and well-being of mothers and their newborns in Hong Kong and beyond.

Editor's Words 主編的話



Dr. Kacey Hau
Editor
HKCMA Bulletin

侯鈞翔醫生
香港中華醫學會會訊主編

香港中華醫學會期刊一周年

香港中華醫學會期刊出版轉眼快一年了，作為主編，非常感恩有會長和董事委員們的支持，令這本期內容更充實豐富，也成為業界重要溝通橋樑。當中嘉賓們的分享，對我們的專業行業具有戰略指標意義。

這輯期刊都有很多與諸位前線同仁相關、而且關係非常密切深遠的話題。

人口老化，醫療服務日益複雜，公私營合作，最終希望位廣大市民謀求福祉；離不開基層醫療治未病、預防教育和普查，找出城市裡的健康脆弱關口（the weakest link）。醫療，今次一個重要的文章分享，來自醫務衛生局副局長范婉雯醫生對未來發展的展望和抱負，值得細看。

龐大的醫療服務，一定涉及成本；就醫療改革，梁漢邦醫生之前就未來醫療改革綜合學會各方意見，提出不少建議。今期他也分享一些看法，怎樣在有限成本為病人市民謀福祉。香港的醫療質素全球領先，但與其只談如何做得「更好」，更應著眼於如何在資源有限的情況下持續保持優質服務。

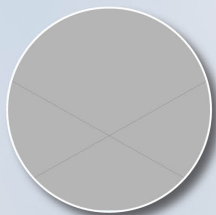
產後出血，是臨床上需要全力搶救的一個非常緊急的狀況。當年在深切治療部工作時，也經歷過這類充滿驚濤駭浪的案例。能最終母子平安，殊不容易。今天，細讀勞子僖教授的文章，百般滋味湧上心頭。

梁永昌醫生昌哥是我中學學兄，也是當年我在兒科實習時的主診醫生；同樣作為婦產科重量級專家的分享，由他來說說令香港驕傲國際的產前檢查適合不過。

也有來自臨床腫瘤科郭子熹醫生、皮膚科盧景勳醫生及兒童內分泌科專科傅振祥醫生的病例研討。個人認為，問答 Quiz 形式，是非常有效掌握臨床知識的方法。

醫生會員們今年有參與本會的周年科研會的，一定會為當中精彩內容喝采，大家可以在期刊中重溫內容和相片。

Future direction of Primary Care: Guest of Honour Speech at the 2025 Annual Scientific Meeting 14 September 2025



Dr. Cecilia Yuen-man Fan, JP
Under Secretary for Health
Health Bureau
范婉雯醫生
醫務衛生局副局長

Dr. Jane Chan, distinguished guests, ladies and gentlemen,

1. Good morning. It is my pleasure to join you all at this year's Annual Scientific Meeting. My heartfelt thanks to Hong Kong Chinese Medical Association Ltd for your unwavering commitment, not just for organising this event, but also for three decades of championing medical advancement and collaboration since 1995. This meeting is a testament to that spirit, and reflects our joint mission to elevating care for all.
2. This joint mission has never been more critical considering the ageing population and the increasing prevalence of chronic diseases, which is why I am delighted by this year's theme of "Management of Chronic Diseases: Bridging Primary and Specialist Care", as it is the very corner stone of the healthcare system reform that the Government is taking forward.
3. The Primary Healthcare Blueprint (Blueprint) published by the Government in December 2022 recommends a fundamental transformation of our healthcare system, shifting from a treatment-focused, hospital-centric model to a prevention-oriented,

family-centric one. It is about sustainability, and about empowering our citizens to manage their own health at all stages of life, supported by our evidence-based Reference Frameworks for Life Course Preventive Care.

4. We are now building the architecture to support this reform. At the institutional level, the Health Bureau Primary Healthcare Commission has been established to drive standard setting, quality assurance and personnel training. At the community level, our network of District Health Centres and interim District Health Centre Expresses (collectively DHCs) across all 18 districts form a network of resource hubs to coordinate and deliver community-based, multi-disciplinary primary healthcare services.
5. In support of the concept of "Family Doctor for All", DHCs play the role of navigating the public in matching family doctors, following up of participants with health risks on life style modification, educating the public on life course preventive care, as well as bridging the community healthcare providers with the hospital system through protocol-driven bi-directional referrals.
6. A major initiative that utilises DHCs' bridging role is our Chronic Disease Co-Care (CDCC) Pilot Scheme. It is encouraging that over 152,000 participants enrolled since its launch almost two years ago. The Scheme provides subsidised screening and management of the "three highs" (i.e. high blood pressure, high blood sugar and high lipid) for Hong Kong residents aged 45 years or above with no known medical history of hypertension and diabetes mellitus.

Over 40% of screened participants have been found to have pre diabetes or suffer from any of the "three highs", proving that the Scheme is effective in assisting hidden

patients to detect chronic diseases and receive treatment at an early stage. For those clinically indicated, Family Doctors can arrange a one-off specialist consultation at the Hospital Authority under the bi-directional referral mechanism, for clinical advice on health management plan. This empowers our frontline Family Doctors to be the gatekeepers of the healthcare system, and facilitates patients to receive continuous and co-ordinated care in the community with a long-term doctor-patient relationship.

7. Building on these results, we plan to expand and deepen the CDCC Pilot Scheme by transforming it to a CDCC Platform after its three-year pilot phase to cover more types of chronic diseases, eg. to launch a Hepatitis B screening and management programme. We will also integrate more health empowerment elements and preventive care programmes to establish a truly coherent and systematic primary healthcare system.
8. Another milestone of our endeavour on community-based preventive care is the recent launch of our Women Wellness Satellites (WWSSs), with the first centre in Chai Wan commencing operations in June, followed by the other two in Lam Tin and Tuen Mun in September, 4 days ago (10 Sept). This integration of women's health services aims to strengthen the district-based healthcare network and to utilise resources more effectively, reduce healthcare service duplication and provide comprehensive and convenient health services. The Government will progressively integrate other primary healthcare services under the Department of Health, such as elderly health services, into the primary healthcare system.
9. Looking ahead, we are also laying the groundwork for the Community Pharmacy Programme, slated for phased implementation beginning in the last quarter of 2026, which will facilitate access to affordable primary healthcare drugs and professional pharmacy services for

participants of our primary healthcare programmes. We shall also develop the "Guideline of Practice for Community Pharmacy". This is a critical tool for establishing service standards and a quality assurance system for community pharmacies, and the establishment of collaborative models between community pharmacies and primary healthcare service providers.

10. I look forward to the insightful exchanges and productive discussions during this meeting. Your expertise and insights on bridging care are what will turn our vision into tangible better health outcomes for patients. Thank you, and I wish you all excellent health and a successful meeting.



Celebrating 110 Years of Excellence: The Chinese Medical Association's Milestone Anniversary in Beijing



Dr. Christopher Hui
Vice President of HKCMA



It was an honour and a privilege for us to join the esteemed members, guests, and leaders of the Chinese Medical Association (CMA) in Beijing for the grand celebration of its 110th Anniversary on 19th September 2025. As representatives of the global medical

community and close partners in advancing healthcare, we extend our heartfelt and heartiest congratulations to the CMA on this remarkable milestone. Over 110 years, the CMA has navigated through countless challenges of history and time—enduring wars, political shifts, rapid societal transformations, and health crises—emerging stronger, more resilient, and ever committed to the health and well-being of the Chinese people and beyond.

The event, held in the vibrant heart of Beijing, brought together medical professionals from across the world to reflect on the CMA's storied legacy. Founded in 1915, the CMA has been a pillar of medical progress in China, fostering innovation, education, and ethical practice amid evolving landscapes. We were particularly moved by the warm welcome from Dr. Zhao Yupei, President of the CMA, whose leadership exemplifies the association's dedication to excellence.

From our perspective, the ties between the WMA, CMA, and HKCMA run deep and enduring. The CMA was among the founding members of the WMA in 1947, and our shared history has been marked by collaborative efforts, even through vigorous debates. As Dr. Philip noted in his address during the

celebrations, these discussions have always been grounded in civil discourse, strengthening our collective resolve.

The CMA's over 700,000-strong membership has enriched the WMA, providing invaluable insights into long-term strategic thinking—a hallmark of Chinese culture that emphasises patience and dialogue over haste. Indeed, as an ancient Chinese proverb reminds us, "He who strikes the first blow admits he has lost the argument." This commitment to thoughtful exchange is a model we all aspire to emulate.

We were impressed by the visible transformations in Beijing since previous visits, from the state-of-the-art airport to the impressive improvements in air quality, which underscore China's massive strides in public health. The CMA's role in advancing universal health coverage, now accessible to over 97% of China's vast population, is a testament to its impact on equitable healthcare delivery. In Hong Kong, the HKCMA draws inspiration from such achievements, working in tandem with regional

and global bodies to address shared challenges like climate change, artificial intelligence in medicine, and ethical policymaking.

A key highlight of the celebrations was the alignment of the CMA's work with China's visionary "Healthy China 2030" initiative, launched in 2016 as a national blueprint to elevate public health as a cornerstone of sustainable development. This ambitious plan has emphasised promoting healthy lifestyles, optimizing health services, improving health security, building a healthy environment, and developing health industries. It has included many key actions such as health education promotion, mental health support, tobacco control, and enhancing physical activity to combat non-communicable diseases (NCDs). By focusing on prevention over treatment, equitable access, and healthcare system transformation, Healthy China 2030 aims to reduce NCD deaths significantly and ensure comprehensive well-being for all citizens.

The CMA has been instrumental in driving these themes forward, from capacity-building in primary care to integrating innovative technologies, demonstrating how physician-led efforts can turn policy visions into tangible health outcomes.

Looking further ahead, the anniversary discussions inspired visions of a "Healthy World 2050." This concept envisions a global framework to ensure nutritious, sustainable food systems for a projected 8.6 billion people, mitigate climate impacts, advance healthy longevity through education and economic growth, and build resilient healthcare systems all across the world, to avert climate-driven health catastrophes and address emerging threats like pandemics and aging populations. Initiatives like these will help to emphasise and consolidate post-COVID investments in health equity, innovation, and cross-border collaboration.

The CMA's leadership in Healthy China 2030 positions it as a vital partner in shaping this global vision, fostering international partnerships that promote preventive health, sustainable diets, climate-resilient infrastructure, and equitable access for the benefit of humanity.

As physicians and leaders, we reaffirm our strongest belief in the correct drivers—that a healthcare system can only be led most effectively by the correct team of experienced physician-leaders. These individuals should lead the way, much as expert drivers lead the team in a Formula 1 race. We cannot at this critical juncture permit for those who are prone to hyperbole, inadequacy, inaction, over-reach, or presumption, to drive or access such a specialised, delicately-balanced, and complex healthcare vehicle—one that is so critical to all stakeholders in society.

Doctors must double-down to help guide policymakers to ensure that innovations serve individual patients effectively, not just theoretically. Needless to say, given witness to the many myriad of problems in the world's

public health systems, it is important to do so in a financially sustainable manner. The WMA's expertise and policies in these ethical considerations align closely with the CMA's efforts, and we look forward to continued collaboration—perhaps even co-developing new guidelines to tackle emerging global issues. By extending the principles of Healthy China 2030 towards a Healthy World 2050 now, we can advance a shared common mission of health equity and sustainability worldwide.

We are proud and delighted to attach herewith (with kind permission, and for shared record), the transcribed speech of WMA President, Dr. Ashok Philip in Beijing on the 19th September 2025.

Once again, congratulations to the CMA on 110 years of unwavering service. May the next century bring even greater advancements, fortified by our ongoing partnership for the benefit of patients, our profession, and medical ethics worldwide. Here's to many, many more proud milestones ahead!

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Address to the Chinese Medical Association



Dr. Ashok Philip, President of the World Medical Association (WMA)

Esteemed President of the Chinese Medical Association, Dr Zhao Yupei, members, guests, ladies and gentlemen,

I would first like to express my thanks and the thanks of the World Medical Association to the Chinese Medical Association for the kind invitation to attend the celebration of its 110th Anniversary. Heartfelt congratulations on reaching this auspicious milestone. Your association has weathered many storms during this period, and surmounted all challenges, becoming stronger with each challenge mastered.

The WMA has had close ties with the CMA for many years. The list of members from August 1947, the year the WMA was formed, includes the CMA along with 27 other associations.

As in any diverse and democratic organisation, there have been differences of opinion, sometimes quite vigorous. However, during my time in the WMA, I have seen that even during heated debates, all parties remain committed to civil discourse. Disagreements may not be able to be fully resolved in all cases, but the parties involved remain in discussion and work together on matters where there is more agreement. I would say that the WMA is stronger with the CMA as a constituent member, and I believe that the CMA also gains strength and influence from its membership.

A feature of Chinese history has been the ability to look at things in the long term. With so many thousands of years of recorded history to learn from, the Chinese nation understands that haste and impatience rarely deliver favourable outcomes. This cultural tendency to carefully considered actions is shared by the institutions of the country, including the CMA.

Another noteworthy feature of your history is your commitment to dialogue and discussion. I believe it is a Chinese proverb that states “He who strikes the first blow admits he has lost the argument”. This long standing and deeply ingrained dedication to dialogue is a praiseworthy feature which I believe you can spread to others by your example.

This is my second visit to Beijing – the first was more than a decade ago, and I must say there have been many changes since then – starting with your beautiful new airport. I can also literally see that the air quality has improved by leaps and bounds, with I am sure hugely beneficial effects on the health of your population.

In a huge country like this, ensuring progress that doesn't leave large numbers of people behind is difficult. From what I can see, most of the population has reaped the benefits of the decades of remarkable economic progress. I am also very happy to note that the difficult task of streamlining the delivery of healthcare to such a huge and logistically diverse population has made great progress, such that more than 95% of the population may truly be said to have access to universal health coverage.

As you may know, I have a strong aversion to being told how to practice medicine. I strongly believe that doctors should be the ones telling policymakers what the best way



to implement their ideas is. We all agree that the individual patient's welfare must underlie all facets of healthcare – and we doctors are the ones dealing with the individual patient. Therefore, it makes sense for doctors to work with politicians, economists and other policymakers to design systems that deliver healthcare efficiently, effectively and economically to the patient. It is only if doctors are involved that systems can be designed that not only look good on paper but really deliver the goods in real life.

The WMA has many statements and policies that highlight the importance of physician leadership in delivering care and designing systems. I hope that the CMA will not only put what we have developed to good use, but also actively help in redesigning and revising our policies to meet impending and actual challenges such as climate change, conflicts, artificial intelligence and robotics among many others.



《賀中華醫學會百十華誕》

中天北斗耀經年

華夏岐黃一脈連

醫道精誠驅疾苦

學貫乾坤展鴻猷

會盟四海擎旗志

共繪康衢堯舜天

百川匯萃英才聚

十紀耕耘碩果盈

誕育仁風澤萬世

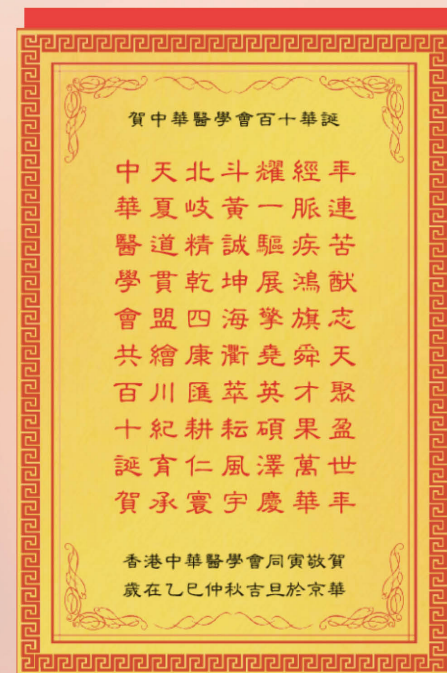
賀承寰宇慶華年

香港中華醫學會同寅敬賀

歲在乙巳仲秋吉旦於京華



副會長許建名醫生、理事林美玲醫生及陳偉強醫生向中華醫學會會長趙玉沛院士致送紀念品，恭賀中華醫學會成立 110 周年





與會代表在國際交流與合作及港澳台事務專家委員會分會場合影留念



參觀北京協和醫院



副會長許建名醫生於國際交流與合作及港澳台事務專家委員會分會場上發言



國際交流與合作及港澳台事務專家委員會分會會議



參觀北京協和醫院



慶祝中華醫學會成立 110 周年大會 (由左至右):
副會長許建名醫生、Dr. Ashok Philip, President
of the World Medical Association、蔡明忠醫生



理事陳偉強醫生參觀中華醫學會會史展



中華醫學會會史展

沒有最好只有更好的醫療系統

- 但我們可以負擔到嗎？



Dr. Adrian Hon-bong Leung 梁漢邦醫生
Specialist Orthopaedics & Traumatology

香港是全球壽命最長的地區之一，同時嬰兒夭折率更是最低，這充分反映出本地醫療系統的卓越水平。然而，值得注意的是，香港每人的醫療平均開支在人均醫療花費高昂的發達國家中並不算高，僅略高於南韓。

近年來，醫院管理局及衛生署合共每年在醫療服務的支出超過港幣 1110 億元，相較四年前增長近 29%，平均每年以約百億港元的速度持續增加。若要具體理解這筆開支的龐大，可簡單比照其佔政府整體支出的約六分之一。相反，比較教育等其他公共開支同期增長幅度，持續增長的醫療經費幾乎是教育的兩倍以上。

醫療支出主要分成三大部分：軟件，即人力資源費用；硬件，包括醫院基礎設施的建設與維護；以及耗材，如藥物等。面對人手短缺的問題，政府近年大幅擴大醫療人員的培訓名額。以醫護專業培訓名額為例，由 2017/18 學年的約 4,000 名，增長至 2023/24 學年的近 6,000 名，六年內增加超過五成。醫院管理局的全職員工人數持續增加，2024 年已達約 94,000 人，且考慮即將有新畢業生加入及私人市場部分人流失的情況，未來人手增長速度有望突破每年 5,000 人。這種人手的穩定增長，即使不計薪酬增幅，也必然推高公共醫療的整體開支，難怪醫療相關的通脹率是一般通脹的兩倍之多。

但香港當前面臨經濟低迷，特區政府很可能出現結構性財政赤字的風險。未來幾年除了要應付現有債券利息支出，還須準備債券贖回。面對人口逐步老化，社會生產力相對減退，公共醫療需求與成本持續攀升，這對財政帶來巨大壓力。

現屆政府有兩年時間做好基礎研究及公眾諮詢，這些調查成果將交予下一屆政府作出政策決定。醫療體系的改革涉及面廣，牽涉眾多持份者，既有合作基礎，也存在利益糾葛。建議政府委託中立的學術機構，聚焦探討以下十大核心方向：

1. 強化基層醫療發展，落實基層診療的功能。
2. 推動地區化醫療服務，便利社區就醫。
3. 聚焦專科醫療服務，優化資源配置。
4. 醫療人才全面培訓及持續教育。
5. 公私營醫療協作及人才流動機制。
6. 進一步推展電子醫療記錄系統。
7. 推動西藥、醫療儀器與中藥的臨床研發及轉化。
8. 探討醫療融資新模式，支持醫療發展。
9. 促進大灣區藥械通關和人才雙向交流。
10. 發展醫療旅遊產業，提升競爭力。

目前香港的醫療質素全球領先，但與其只談如何做得「更好」，更應著眼於如何在資源有限的情況下持續保持優質服務。香港醫療體系採用雙軌制，公營醫療承擔約三分之二的醫護人手，私營醫療聽起來成本較高，但效率與服務速度快，成為經濟條件許可市民的理想選擇。

公營醫療服務極大部分仰賴專科門診，但專科診療昂貴，每次超過 1700 港元，普通科約 700 港元，住院每日成本甚至超過 7000 港元。雖然公營醫院負責複雜及重症病例並肩負培訓責任，成本較高是合理，但這些數字仍提供重要參考。改善方法之一是將病情穩定的病人更多引導至基層醫療，不僅能顯著降低診療成本，也減少患者需要往返多個專科的情況，有助整體減低醫療開支。

將公私營、專科與基層醫療分成立體四象限框架，對各範疇明確定位及相互補充，是打造優質醫療體系的關鍵。眼下公私營醫療協作、慢病管理、策略採購、地區健康中心等服務範疇，無論市民還是醫護人員對其具體定位和範圍都存在不少誤解，甚至認為政府以公帑競爭私營市場，或認為資助金額不足以覆蓋成本，這削弱了協作效能。

因此，急需成立一個高層次的策略機構來重新配置服務與人手，現時公營醫療系統內每年自動薪酬增點制度，與私營市場脫節，薪酬調整應該與工作績效掛鉤，部門整體工作量未變不應有超通脹的薪酬增長。離職後的薪酬剩餘可重新分配給現職員工或用於新聘，真正落實「能者多勞，多勞多得」的公平原則。

以上只是開啟改革議題的初步建議。無論如何，尋求並建構一個未來 20 年甚至更長時間內都能持續運作的醫療體系，將是現屆政府極為重要的任務之一。這不僅關乎市民健康生活質素，更關乎香港社會長遠的福祉與穩定。[1][4][5]

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History of development of public funded algorithms of prenatal screening and diagnosis in Hong Kong over the recent 30 years and beyond



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Abstract

Similar to the development of the roadmap of MTR in Hong Kong, the public funded algorithms of prenatal screening and diagnosis in Hong Kong also started with a single line offering CVS or amniocentesis for karyotyping to pregnant women with advanced maternal age from the 1980s. Thereafter, different extension lines have been developed with the advancement in technologies and training including ultrasound for soft markers and structural fetal abnormalities, fetal Down syndrome screening using NT measurement with various maternal serum markers, PCR, chromosomal microarray, NIPS using maternal plasma cell free fetal (placental) DNA, MDT approach with WES or WGS including fetal MRI, fetal autopsy and genetic counseling. More extension lines are developing with the common goal to facilitate the pregnancy journey and decision making of women and their families. The philosophy of knowing more vs. knowing less is challenging – what would be missed & who should decide? The direction seems to be knowing more and more towards Eugenics. Deep thinking about this direction from time to time is required.

Keywords: prenatal screening; prenatal diagnosis; public funded; history; algorithms

The author graduated from the Medical School of University of Hong Kong (HKU) in 1989. He has completed his specialist training in O&G in the Dept of O&G, Tsan Yuk Hospital & Queen Mary Hospital, HKU and become a specialist in O&G (HKAM) in 1997. Thereafter he has subspecialized in Maternal Fetal Medicine (MFM) & undergone overseas training in the Perinatal Centre, University of Toronto, Canada in 1999 and the Fetal Medicine Centre, University College London, UK in 2002/3. He becomes an accredited subspecialist in MFM by RCOG (UK) in 2003 (1st one in HK) and by HKCOG in 2005. He got his MD (HKU) in 2010 with the thesis entitled: Rapid aneuploidy testing or traditional karyotyping, or both, in prenatal diagnosis. He has continued serving the public sector (Hospital Authority, HA) for more than 30 years and has experienced the development of public funded algorithms of prenatal screening and diagnosis in Hong Kong.

There are various milestones during the development of public funded algorithms of prenatal screening and diagnosis as listed in Figure 1.

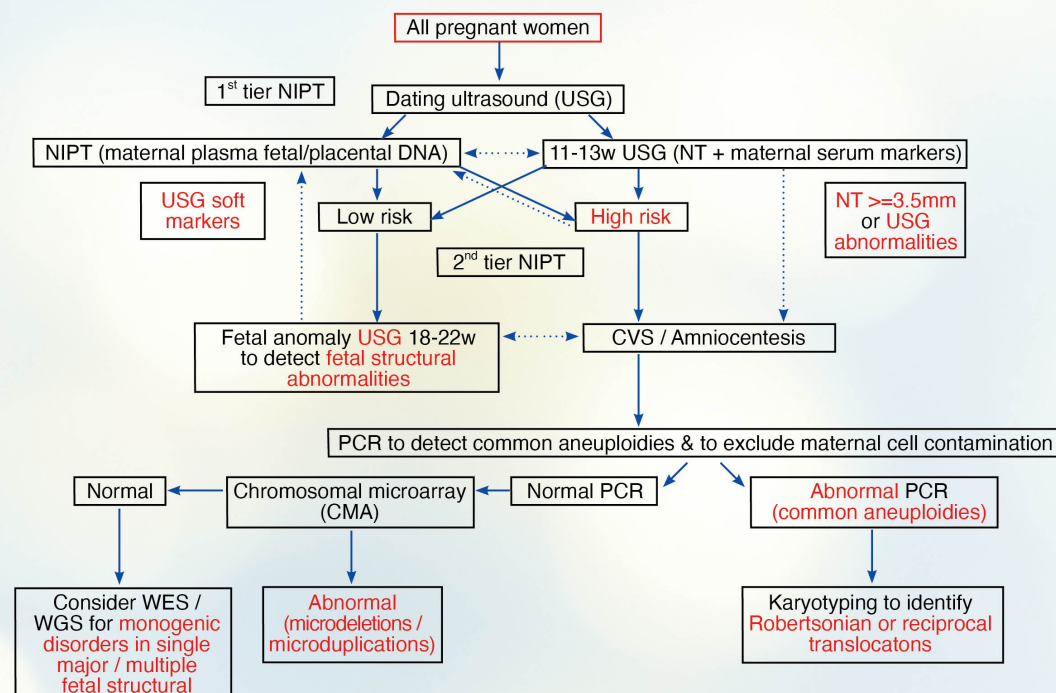
Figure 1. Milestones

- 1980s: Amniocentesis & chorionic villus sampling (CVS) for karyotyping in pregnant women with advanced maternal age.
- 1990s: Routine ultrasound screening for fetal structural abnormalities.
- 1990s: First & second trimester combined screening for fetal Down syndrome.
- 2000s: PCR + karyotyping for amniocentesis & CVS.
- 2010: Universal Down syndrome screening for all pregnant women irrespective of maternal age.
- 2019: PCR + chromosomal microarray +/- karyotyping for amniocentesis & CVS.
- 2019: 2nd tier Non-invasive prenatal testing (NIPT) – maternal plasma for fetal (placental) DNA.
- 2021: MDT – FMPRG (Fetal Medicine, Pathology, Radiology, Genetics / Genomics) web-based platform selecting complex fetal structural abnormalities for WES or WGS.

PCR=polymerase chain reaction; MDT=multidisciplinary team; WES=whole exome sequencing; WGS=whole genome sequencing

Interestingly the roadmap of development is very similar to that of the MTR in Hong Kong with the addition of different routes from time to time. [Figure 2]

Figure 2. Current algorithms in 2025.[1]





Historically, the concept of prenatal screening and diagnosis focused on fetal Down syndrome (trisomy 21), which is the most common and well-known congenital abnormality since the 1960s. In the 1980s, pregnant women with advanced maternal age (arbitrary defined as 40 or 38 or 35 years old) were eligible for CVS or amniocentesis because the likelihood of having a child with Down syndrome increases with maternal age. Although this represented a substantial advancement in prenatal diagnosis, the approach had important limitations. Women with advanced maternal age faced the risk of miscarriage associated with CVS or amniocentesis [2], whereas those younger mothers to be were excluded from screening. This exclusion was a considerable oversight, considering that most expectant mothers at the time were younger than 35 years old.

With the progressive development of ultrasound technology and training for ultrasound skills, the concept of routine ultrasound screening at 18 to 22 weeks gestation was developed in the 1990s. This scan evaluates fetal development and identifies potential fetal structural abnormalities, such as heart defects, spina bifida, and other major organ anomalies.[3,4] The inclusion of the fetal anomaly ultrasound scan is particularly important in regions such as Hong Kong, where termination of pregnancy is legally permissible only within 24 weeks of gestation. By detecting major structural abnormalities within the legal timeframe, pregnant women are enabled to make informed decisions regarding their options and to prepare for any required neonatal interventions. However, despite the gradual improvement in ultrasound machines and standard training offered to O&G specialty trainees, even up to now in HA, routine ultrasound screening at 18 to 22 weeks gestation with minimal standard can only be offered to pregnant women with advanced maternal age (≥ 35 years old) in some of the HA Obstetric units. There are certainly rooms for improvement.

In the 1990s & 2000s, there were enormous amount of international and local studies focusing on the use of first trimester (preferably), second trimester or combined screening for fetal Down syndrome targeting all pregnant women irrespective of their maternal age, making use of nuchal translucency (NT) measurements in 11 to 13 weeks scan with various maternal serum markers (PAPP-A, beta-hCG, AFP, uE3, inhibin) to select high risk cases for CVS or amniocentesis (achieving a sensitivity of 90% with a false positive rate of 5%). This performance is already reasonably good as a screening test. It was not until 2010 when universal Down syndrome screening is offered in HA for all pregnant women irrespective of their maternal age. Nevertheless, this was a big step forward in the public funded algorithms of prenatal screening in Hong Kong. [5,6,7,8]

In 2000s, there was the breakthrough development of the clinical application of polymerase chain reaction (PCR) as rapid aneuploidy testing (RAT) with turn-around-time (TAT) of 1 to 2 days (for trisomy 21, 18, 13 & XY aneuploidies) on top of the standard karyotyping with TAT of 2 to 3 weeks (for the entire 23 pairs of chromosomes).[9,10,11,12,13,14] The accuracy of PCR has been robustly confirmed before its widespread use after CVS or amniocentesis to confirm the common aneuploidies within 1 to 2 days and thus the decision on termination of pregnancy as well as to rapidly reduce the maternal anxiety associated with false positive Down screening tests (up to 5% of CVS or amniocentesis performed for positive Down screening tests).[15,16] In 2019, routine PCR is offered in HA for all CVS and amniocentesis.

2019 is an important year in the milestones for development of the public funded algorithms of prenatal screening and diagnosis in Hong Kong. PCR is coupled with chromosomal microarray (CMA) to improve the diagnostic yield from CVS or amniocentesis. CMA, also known as molecular karyotyping, can detect an additional 10% (mainly microdeletions or microduplications) on top of PCR and traditional karyotyping (approximately 30% yield).[17]



In 2010s, another major breakthrough must be the discovery on using maternal plasma cell free fetal (placental) DNA as a non-invasive prenatal screening (NIPS). The best performance of NIPS is on fetal Down syndrome (trisomy 21) with sensitivity as high as $> 99\%$ with false positive rate as low as much $< 1\%$ [18], followed by the detection of other common aneuploidies (trisomy 18 & 13).[19] Starting from 2019, 2nd tier NIPS has been offered in HA for those cases with positive conventional Down screening tests.[20] This approach has significantly reduced the unnecessary CVS or amniocentesis performed for those false positive Down screening tests. However, the ultimate advantage could only be achieved when NIPS is offered as 1st tier screening test for the common aneuploidies (trisomy 21, 18, 13 & XY aneuploidies). Costing is an important issue if 1st tier NIPS is offered universally in HA for all pregnant women. A co-payment arrangement can be considered for cost-sharing. On the other hand, under this approach, there will be savings from stopping the testing for conventional maternal serum markers (NT to remain as high NT $\geq 3.5\text{mm}$ has its own implications)[21]; no more 2nd tier NIPS; unnecessary CVS or amniocentesis for false positive conventional Down screening tests; and the associated call back procedures & maternal anxiety.

In 2020s, whole-exome sequencing (WES) or whole-genome sequencing (WGS) for single gene mutations has been found to be able to increase another 30% diagnostic yield when PCR & CMA are negative after CVS or amniocentesis for complex fetal structural abnormalities detected by ultrasound.[22] In 2021, the FMPRG platform is established in HA for this purpose.[23] The FMPRG platform uses a multidisciplinary team (MDT) approach to select cases with complex fetal structural abnormalities for public funded WGS or WES. The FMPRG represents the MDT comprising specialists in Fetal Medicine, Pathology, Radiology (including fetal MRI)[24,25], and Genetics/Genomics. The voting team currently includes 15 core members, including MFM subspecialists from all eight HA hospitals offering prenatal diagnosis clinical services, clinical geneticists, the heads of the two university prenatal diagnosis laboratories, pathologists, and radiologists. The complex fetal cases are uploaded to the platform for online interactive discussion and voting, enabling the team to select appropriate cases for public funded WES or WGS in a fair and timely manner. Not only does WES or WGS increase the probability of identifying the genetic cause of complex fetal abnormalities, but the anonymised archiving of these cases on the platform also creates a valuable database for future education and research. The current public funding has allowed 60 cases annually, the initiative aims to alleviate the financial burden on eligible mothers while empowering families with critical genetic insights to guide their pregnancies.

Finally, the author envisions the following future development of public funded algorithms of prenatal screening and diagnosis in Hong Kong in the next 5 years:

- (1) 1st tier NIPS for trisomy 21, 18, 13 & XY aneuploidies. The pregnant women also have the option of NIPS in the private sector with the addition of NIPS for microdeletions, rare aneuploidies, single gene disorders & others (although the test performance is inferior to the common aneuploidies);
- (2) The use of artificial intelligence (AI) in performing NT scan at 11 to 13 weeks (coupled with the coming Preeclampsia screening); routine fetal anomaly scan at 18 to 22 weeks; the role of MFM trainees or subspecialists is to review the ultrasound images taken by AI;
- (3) The use of artificial intelligence (AI) in personalized education and counselling to alleviate the unnecessary stress and anxiety for pregnant women and their family members during the waiting time for face-to-face consultations. By thoughtfully integrating AI within prenatal care, this approach combines the efficiency of AI chatbots with the human touch of in-person interactions, resulting in a more streamlined and responsive care experience;

(4) New alternative to CMA such as low pass genome sequencing;

(5) The quota for the public funded WES or WGS could be increased with increased funding as well as reducing cost with mass processing (high throughput) of samples. The voting mechanism in the FMPRG platform might become unnecessary when the MFM team members have gained more and more experience via the submission of complex fetal cases to the FMPRG platform.

In conclusion, the author is confident that with the joint effort from the MFM team members, together with a MDT approach, the common goal for equitable access to prenatal diagnoses for all expectant mothers can be achieved. The vision is to establish a 'universal safety net' for all pregnant women, regardless of their economic status, equipping them with the resources necessary to make informed decisions about their health and the health of their babies.[26]

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Atonic Postpartum Haemorrhage



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Abstract

The rising incidence of atonic postpartum haemorrhage can be attributed to caesarean section before labour, the widespread use of oxytocin in labour management, the commonly overlooked problems of hypocalcaemia and hypofibrinogenaemia, and the occasional peripartum $MgSO_4$ treatment. An in-depth understanding of its mechanisms could enhance its prompt and effective treatment and mitigate its consequences.

Key words – atonic postpartum haemorrhage, oxytocin receptor downregulation, hypocalcaemia, hyperfibrinogenaemia, $MgSO_4$ treatment

Introduction

Primary postpartum haemorrhage (PPH) is a leading cause of maternal morbidity and mortality. Of the four classical causes of tone, tissue, trauma and thrombin, tone is the most frequent, accounting for >70% of the cases. Furthermore, despite emphasis and guidelines on active management of the third stage of labour, both the incidence and proportion of atonic PPH continue to increase in developed countries such as Australia, Canada, Ireland, The UK and USA. This article examines the underlying pathophysiological mechanism and contributing factors to atonic PPH and proposes a rational and effective approach to

its management.

The mechanism of uterine contraction in labour

Before labour onset, hormonal signalling events suppress coordinated contractions via activation of the adenylyl-cyclase through G-protein coupled receptors. Towards term, there is increasing density of myometrial gap junction to reach a 25-fold increase at active labour. Progression of pregnancy to term is associated with increasing expression of oxytocin receptor (OTR) which enables the appearance of uterine contractions through activation of calcium mobilization via oxytocin mediated binding to the oxytocin G-protein coupled receptor. Oxytocin and calcium ion (Ca^{++}) are the two key elements that act together to induce myometrial prostaglandin (PG) production causing myometrial contraction.

Effective and coordinated uterine contractions occur when sufficient myometrial gap junctions appear to turn myometrial cells into a syncytium to respond synchronously. There is a six-fold increase in gap junctions from before labour to the time of active labour. In physiological labour, pulsatile release of oxytocin only increases at the end of the second stage induced through Ferguson's reflex.

The third stage of labour consists of four phases, i.e. latent (thickening of placenta-free

wall), contraction (thickening of placenta-site wall), detachment (shearing force separating the placenta), and expulsion (placenta sliding out from the uterine cavity) phases. In the absence of placental accreta spectrum, delayed or failure of placental separation reflect inadequate uterine contraction and retraction.

Exposure of OTR to persistently or increasingly high serum level of oxytocin, as during induced labour, leads to its progressive down-regulation through mechanisms at different levels. Hence the incidence of atonic PPH and especially severe PPH is associated with labour induction, the duration of labour and especially the duration and total dose of oxytocin infusion and the incidence of atonic PPH remained unabated at 6-7% with oxytocin dosage increasing from 10, 40 to 80 units/500ml [1]. In vitro studies confirmed the inverse correlation between myometrial response with duration and dose of prior oxytocin exposure, the half inactivation time of OTR is 4.2 hours. Furthermore, reduced serum Ca^{++} level impairs myometrial contraction even with progressively increasing infusion of oxytocin [2]. However, post-receptor signalling pathway is maintained so that the myometrium can still respond to PG.

Factors in the development of atonic PPH

These factors act singularly and in combination to impair effective myometrial contraction.

1. Inadequate OTR expression – when delivery takes place before physiological increase in OTR expression, such as caesarean section before labour and induction of labour.
2. Down regulation of OTR – this follows exposure to exogenous oxytocin, especially prolonged exposure to high doses as in labour induction and augmentation in which incidence of atonic PPH is related to the duration and total amount of oxytocin infusion and the failure of increasing dose oxytocin infusion in reducing severe PPH [1].

3. Placental factor plays an important but often overlooked role. An increase in the absolute placental size and/or the ratio of the placental weight to birthweight ratio (placental ratio, from ≥ 0.20) is found in fetal macrosomia, multiple pregnancy, fetal growth restriction, maternal anaemia and hypoxia from causes like smoking, living at high altitude, and gestation diabetes mellitus, and these conditions are associated with increased atonic PPH [3, 4]. This factor is aggravated by the retention of whole or part of the placenta which continues to release chemical agents which interfere with satisfactory contraction of the placental site. These include nitric oxide (NO), progesterone and relaxin which inhibit myometrial contraction through a paracrine effect to ensure quiescence in the part of the uterine wall it is attached to maintain intervillous perfusion and minimise fetal hypoxia during labour, as shown by the difference in the abdominal electromyographic activity over the placental implantation site with significantly lower tocodynametry signal when the placenta is on the anterior uterine wall.

4. Retained placental membranes – sometimes the removal of retained pieces of placental membranes quickly improves uterine contraction and response to uterotonic treatment because both placental tissue and membranes produce an inhibitor against the dihydropyridine site of myometrial L-type calcium channel to inhibit myometrial contraction, the release of this inhibitor is time dependent and shows a dose effect [5].

Complications and conditions predisposing to atonic PPH

1. Certain complications are established risk factors for PPH, including induction and augmentation of labour, pre-eclampsia/hypertensive diseases (OR 2.5-2.8), twin pregnancy, fetal growth restriction, and iron deficiency anaemia (IDA) [3,4]. These conditions result in placental compensatory adaptation to induced hypoxaemia so as to maintain sufficient intervillous perfusion

to sustain fetal growth and prevent fetal hypoxia. Placental hypertrophy occurs to increase placental surface area for oxygen and nutrient exchange, and greater dilation of the lumen of the spiral arteries from increased placental expression of angiogenic proteins like vascular endothelial growth factor, placental growth factor, nitrotyrosine residues, and endothelial nitric oxide synthase (e-NOS) with NOS activity being highest in the villous trophoblast, and release of progesterone and relaxin. Progesterone inhibits spontaneous myometrial contractility by non-genomic mechanisms, induces rapid increase of eNOS activity and production of NO in human endothelial cells, and stimulates prostacyclin and promotes vasodilation. Relaxin inhibits spontaneous myometrial contractility. The involvement of these compensatory mechanisms in the development of atonic PPH has been examined [4]. The extent of these mechanisms in impairing myometrial response to third stage oxytocin is further aggravated by myometrial refractoriness from prior exposure to infused oxytocin for labour induction, thus predisposing to PPH.

2. Depletion of serum Ca^{++} plays an important yet usually overlooked role. Serum Ca^{++} level is correlated with strength of uterine contractions, and PPH is associated with lower Ca^{++} levels in the absence of calcium chelating treatment, hypocalcaemia being found in 51.5% versus 10.6% in patients with severe PPH with an adjusted OR of 1.97 for each 0.1 mmol/L decrease in Ca^{++} [2]. Reduction of Ca^{++} also results from citrate toxicity during rapid massive blood transfusion without simultaneous replacement with calcium gluconate, as release of endogenous calcium cannot catch up to maintain circulating Ca^{++} level.
3. Hypofibrinogenaemia is also independently associated with PPH severity with the adjusted OR of 1.14 for each 10 mg/dL decrease in fibrinogen, and its presence aggravates the effect of hypocalcaemia [2].

4. Intrapartum treatment with $MgSO_4$ is associated with increased PPH (adjusted OR 2.8) [3]. In vitro studies have demonstrated the effect of $MgSO_4$ in reducing spontaneous, oxytocin- and KCL-evoked contractions in a time- and concentration-dependent manner, and calcium is the antidote.

5. Chorioamnionitis is independently associated with PPH with adjusted OR of 2.5 [3], and this is often overlooked.

Management of uterine atony and atonic PPH

An understanding of the mechanisms of and conditions associated with atonic PPH can lead to its prediction, early diagnosis and prompt and effective treatment in mitigating its consequences.

1. Recognition of pre-existing, evolving and emergence of risk factors enables the anticipation of impending PPH and aggressive management of the third stage of labour.
2. Early initiation of accurate measurement of third stage blood loss and close monitoring of the hemodynamic effects using robust parameters such as the shock index allow timely stepping up of uterotonic and blood replacement treatments.
3. Consider the early and prompt use of additional agents including carbetocin, ergot and prostaglandin preparations.
4. Comprehensive assessment and serial monitoring of parameters including calcium and fibrinogen levels help to guide timely and sufficient replacement therapy.

Conclusion

A thorough in-depth understanding of the mechanism and contributing factors of atonic PPH is the only way to control its escalating incidence and reduce its adverse sequelae.

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Education:

Primary and secondary school – St. Paul's Coeducational College, Hong Kong.
Tertiary: Faculty of Medicine, The University of Hong Kong.

Academic Qualifications:

M.B.,B.S. (Hong Kong) 1976, M.D. 2002, M.R.C.O.G. (England) 1982, F.R.C.O.G. 1997, Certificate in Maternal-Fetal Medicine (University of Toronto) 1992, F.H.K.A.M. 1993, F.H.K.C.O.G. 1999, Honorary Fellow, H.K.C.O.G. 2015

Previous academic positions held (in reverse chronological order with dates):

Professor (2008-2017), Department of Obstetrics & Gynaecology, The Chinese University of Hong Kong, Prince of Wales Hospital, Shatin, Hong Kong.

Professor (2002-2008) and Associate Professor (1993-2002), and Director of Maternal-Fetal Medicine, Department of Obstetrics & Gynaecology, University of Hong Kong, HK.

Clinical and Research Fellow (May 1989 – March 1993), University of Toronto Perinatal Complex and Mount Sinai Hospital, Toronto, Canada.

Lecturer (1984-1989) and Senior Lecturer (1989-1990), Department of Obstetrics & Gynaecology, CUHK, HK.

Honorary Registrar (1983-1984), Queen Charlotte's Maternity Hospital, London, UK

Medical Officer (1977-1983), Department of Obstetrics & Gynaecology, Princess Margaret Hospital, HK.

Post-retirement positions:

Honorary Professor (June 2017-June 2022), Department of Obstetrics & Gynaecology, CUHK, HK.

Honorary Professor (2018-19, 2021-date), Department of Obstetrics & Gynaecology, University of HK, HK.

Honorary Visiting Professor (2003-2020), Department of Obstetrics & Gynaecology, Medical University of Kunming at the First Affiliated Hospital of Kunming, Yunnan, China.

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Clinical and research interest:

Maternal medicine and high-risk pregnancies, perinatal effect of maternal complications.

Medicolegal aspects in obstetric practice – provided expert medical opinion in >140 cases, gave expert opinion in court on 8 cases

Publications:

>450 in peer reviewed international journals (as of 31 Jan 2025)

h-index: 63

i10-index: 254

Total citations: 13443

CME Questions

Please answer the following statements T(True) or F(False):

1. Atonic PPH accounts for less than 50% of the cases in the literature.
2. The active management of the third stage of labour has resulted in a progressive decrease in the incidence of primary PPH.
3. Myometrial gap junctions increase by 25-folds at the time of active labour.
4. Oxytocin causes myometrial contraction through the induction of myometrial prostaglandin production in conjunction with calcium ion.
5. Myometrial oxytocin receptors are upregulated by a continuous high blood level of oxytocin.
6. Labour induction, but not augmentation, with oxytocin infusion is associated with increased risk of atonic PPH.
7. Maternal peripartum treatment with MgSO₄ infusion increases the risk of atonic PPH.
8. The placenta can interfere with myometrial activity at its attachment site through the release of nitric oxide.
9. The risk of primary PPH is increased with pre-eclampsia and hypertensive diseases of pregnancy.
10. There is an inverse correlation between the risk of severe PPH with serum level of calcium ion.

Answer Sheet HKCMA Bulletin Issue 05 (October 2025)

Doctors are most welcome to answer the self-assessment questions to attain the CME point for respective authorities if 5 answers out of the 10 short questions are correct by returning the completed answer sheet via fax 3007 1019 or by email to info@hk-cma.org.hk on or before 5 December 2025 for documentation. Answers to questions will be provided in the next issue of the HKCMA Bulletin.

Atonic Postpartum Haemorrhage

By Prof. Terence Tzu-hsi Lao, MBBS, MD

Honorary Professor, Department of O&G, The University of Hong Kong, Queen Mary Hospital

Self-assessment Questions 1-10: Please answer T(True) or F(False)

1	2	3	4	5	6	7	8	9	10

Full Name (block letters): _____ Signature: _____

HKID No.: _____ () MCHK No. _____

HKMA No.: _____ or HKUD No. _____

College: _____ Fellowship No.: _____

Answers to Issue 03 (April 2025)

Latest Updates in Asthma Management: A Focus on Biologics and Local Treatment Outcomes in Hong Kong

Dr. Christopher Kim-ming Hui, MBE FRCP, Specialist in Respiratory Medicine

1	2	3	4	5	6	7	8	9	10
T	F	F	T	F	T	T	F	T	T

Molecular testing interpretation in lung cancer patients



Dr. Carol Chi-hei Kwok
Specialist in Clinical Oncology, FHKCR, FHKAM (Radiology)

Objective: to know how molecular test help in the management of advanced/metastatic non-small cell lung cancer (NSCLC)

Case presentation

This is a 58 years old male patient, who has known history of hypertension. He is a chronic smoker for 30-40 years with one pack cigarette per day. He is a driver.

He presented with hoarseness and cough in May 2024. He was seen by ENT surgeon. Examination showed matted lymph nodes at left level V of neck, largest one around 1.5cm. Endoscopy showed the nasal cavity, nasopharynx, oro- and hypopharynx were clear. There is left vocal cord palsy in paramedian position with good compensation from right side.

CXR done on 27 June 2024 showed increased streaky densities at left suprahilar region, which is non-specific (image 1).

CT scan of brain, neck and thorax with contrast (images 2-4) done on 23 July 2024 showed:

- A 1.3x0.5x1.1cm contrast enhancing lesion in left frontal lobe, suspicious of metastasis
- Necrotic lymph nodes at bilateral level IV and supraclavicular fossa, measuring up to 1.83x1.34x1.14cm; multiple enlarged necrotic lymph nodes also noted in mediastinum, highly suspicious of metastasis
- Multiple nodules in bilateral lung fields, measuring up to 0.73cm, suspicious of metastases
- Thin rim of pericardial effusion, ~0.81cm
- A 1.05x1.61cm contrast enhancing lesion in segment III of liver, nature is indeterminate

Question 1. What is (are) the diagnostic test (s) to be performed for further work up at this juncture?

- MRI of brain
- PET-CT
- Bronchoscopy to obtain tissue for histological diagnosis
- Fine needle aspiration of lower cervical/supraclavicular lymph nodes to obtain tissue for histological diagnosis and molecular test for genomic alterations and biomarker to guide further systemic therapy

Answer: a, b, d

Comment: Imaging of the central nervous system (CNS) should be considered at diagnosis for all lung cancer patients with metastatic disease and is required for patients with neurological symptoms or signs. If available, CNS imaging with gadolinium-enhanced MRI should be considered for all patients.¹ In this case, since initial CT brain showed suspicious of brain metastasis, MRI is indicated for further evaluation. FDG-PET-CT is suggested for further metastatic work up, e.g. to exclude bone metastasis, in this case, to delineate the nature of the liver lesion.

To obtain tumour tissue for histological diagnosis is the first step in the management of lung cancer. In stage IV lung cancer, in general, if judged to be safe, it is advised to biopsy a metastatic lesion for diagnostic as well as staging purposes. However, in case multiple metastases are present, obtaining lung or mediastinal samples is also an option.^{1,2} Bronchoscopy is a technique ideally suited to central lesions. In this patient, CT thorax did not show gross lung tumour, thus chance of obtaining tissue by bronchoscopy is likely to be small.

Question 2. Which is (are) the method(s) commonly used for the detection of genomic alterations in NSCLC?

- Mutation-specific polymerase chain reaction (PCR) for EGFR mutations
- Immunohistochemistry (IHC) for ALK rearrangement
- Fluorescence in-situ hybridization (FISH) for ROS-1 rearrangement
- Next generation sequencing (NGS)
- Liquid biopsy

Answer: all of the above

For this patient, ultrasound guided fine needle aspiration cytology of supraclavicular lymph node was done on 14 August 2024, which showed metastatic carcinoma, immunohistochemistry favour metastatic carcinoma of lung origin. Next generation sequencing (NGS) test was arranged, results were pending.

He was referred to Neurosurgical unit for suspected left frontal lobe metastasis. He was asymptomatic. There were no neurological signs. MRI of brain was arranged to further assess the nature of the left frontal lobe lesion. He was referred to Oncology department for further treatment.

He was seen by the oncologist on 2 September 2024. PET-CT scan was suggested for further staging work up. Next appointment was arranged to see NGS result to decide further systemic therapy.

MRI brain (image 5) was done on 17 September, which showed:

- A few enhancing lesion noted at left parietal lobe (1.47x1.5x0.67cm and 0.75x0.7x0.64cm) (image 5) and bilateral cerebellar hemispheres. DDx: cerebral and cerebellar metastases
- A focal enhancing lesion is noted at right pons measuring 0.39x0.55cm. It appears T2W hyperintense and DWI hyperintense, ADC isointense. DDx: pontine m

- Multiple T2W and FLAIR hyperintense foci are noted at bilateral cerebral white matter from frontal to occipital regions. No restricted diffusion or mass effect is noted. Findings are compatible with chronic microangiopathic changes

The patient was admitted to Northern District Hospital Medical department on 27 September 2024 for shortness of breath and dysphagia. Bedside V-scan showed large amount of pericardial effusion >4cm with cardiac tamponade. Pericardiocentesis was done, ~1L blood stained fluid was aspirated, then connected to bed side bag for drainage. NGS results subsequently found EGFR exon 19 deletion. Oncology team received urgent phone call for starting targeted therapy. Community Care Fund for osimertinib was applied for him. He was taken over to Princess Margaret Hospital Medical department on 8 October 2024. Pericardiocentesis was repeated, total 2L output was yielded. Cytology showed metastatic adenocarcinoma. He also had massive left pleural effusion with chest drain inserted. Chemical pleurodesis was done subsequently. He was started on osimertinib since 5 November 2024. His condition was stabilized with no re-accumulation of pleural and pericardial effusion.

Discussion

1. Personalized, precision oncology guided by molecular profiling has been a new treatment paradigm for advanced/metastatic NSCLC

With advancements in molecular biology, there has been a growing focus on identifying and targeting specific oncogenic pathways in cancer treatment. This approach, known as precision oncology, utilizes molecular profiling to tailor therapies to an individual's tumour's unique genetic makeup of an individual. Molecular testing or profiling is a broad term referring to laboratory techniques that analyze biological molecules like DNA, RNA, or proteins to identify genetic or molecular changes. It is crucial for guiding personalized treatment strategies. Genomic testing, also known as biomarker or genetic testing, analyzes cancer cells to identify specific gene mutations that drive the cancer's growth and behavior. This information helps select targeted therapies that specifically target cancer cells with these mutations, potentially leading to more effective treatment with fewer side effects compared to traditional therapies like chemotherapy. The most common targetable genetic alterations in lung adenocarcinoma are EGFR (Epidermal Growth Factor Receptor)- and KRAS (Kirstin rat sarcoma virus)-activating mutations followed by, in frequency, ALK (anaplastic lymphoma kinase) and ROS1 (ROS proto-oncogene 1) rearrangements, BRAF (v-raf murine sarcoma viral oncogene homolog B) mutations, MET (mesenchymal-epithelial transition) exon 14 skipping mutations and MET amplifications, RET (rearranged during transfection) gene fusions and HER2 (human epidermal receptor 2) mutations. NTRK (neurotrophic tyrosine receptor kinase) and NRG1 (neuregulin-1) gene fusions rarely occur in NSCLC (Table 1).¹ Precision oncology approach utilizes targeted therapies, e.g. EGFR tyrosine kinase inhibitors (EGFR-TKIs), and checkpoint inhibitors [e.g., programmed cell death-1 (PD-1)/programmed cell death ligand-1 (PD-L1) inhibitors], over chemotherapy in the first-line setting with improved treatment outcomes.^{1,2}

Pathological diagnosis and histology subtyping are the first step in managing advanced/metastatic lung cancer. Lung cancer is categorized as either small-cell lung cancer in approximately 10% to 15% of cases or non-small cell lung cancer (NSCLC) in approximately 80% to 85% of cases. The availability of targeted therapies has created a need for precise subtyping of NSCLC. It is most important to differentiate squamous cell from non-squamous cell carcinoma, as most targetable oncogenic alterations occur in lung adenocarcinoma (LUAD).¹ Tumours for oncogenic driver testing are triaged on the basis of probability of finding a therapeutic target (Figure 1).. In practice,

molecular test is recommended in patients with advanced non-squamous-cell carcinoma, and not recommended in patients with a confident diagnosis of squamous-cell carcinoma, except in unusual cases, e.g. young (<50 years) patients, never (<100 cigarettes in a lifetime)/former light smokers (≤15 pack-years, all kinds of tobacco) or long-time ex-smokers (quit smoking >15 years ago, all kinds of tobacco) (Figure 1).¹

2. Commonly used molecular test methods for the detection of genomic alterations in NSCLC

Immunohistochemistry (IHC), fluorescence in-situ hybridization (FISH), polymerase chain reaction (PCR) and next generation sequencing (NGS) are the common methodologies used for molecular testing in advanced NSCLC. IHC identifies oncoprotein expression, the oncogenic effector and usually the drug target. ISH techniques (fluorescence: FISH, chromogenic: CISH) may identify aberrant gene copy number (GCN) including true gene amplifications or gene rearrangements/fusions. PCR can be used in a highly targeted fashion (specific mutations targeted), e.g. mutation-specific PCR or allele-specific PCR which are essentially the same technique. They both involve using primers designed to bind to and amplify specific DNA sequences, with the primary goal of detecting the presence or absence of a particular allele or mutation. While stand-alone single gene assays remain valid, sequential single-gene testing is not only time-consuming but also leads to tissue exhaustion. Multigene sequencing using NGS, also known as massively parallel sequencing, is the preferred option. It enables the identification of point mutations, insertions, deletions, copy number alterations, fusion genes, and microsatellite instability information needed to guide the potential use of targeted therapy. DNA sequencing is the standard for identifying most mutations; RNA sequencing on NGS platforms is increasingly used for fusion gene detection. GCN changes are less reliably detected.

Clinically-relevant EGFR gene mutations in NSCLC include substitutions, deletions and insertions in exons 18-21. Complete sequencing of exons 18-21 by NGS is strongly recommended, to identify all possible sensitizing mutations. Some allele-specific EGFR sequencing solutions do not provide complete coverage. EGFR FISH or IHC have no clinical utility and should not be tested. Fusions (rearrangements) involving ALK, ROS1, NTRK1-3 and RET genes are important oncogenic drivers in small groups of LUADs. Oncogenic fusion proteins result in constitutive activation of the kinase and may increase fusion gene protein levels, allowing for screening of tumours for some of these fusions by IHC. Positive ALK IHC with an appropriately validated assay may be used to prescribe ALK inhibitors. Cases positive by ROS1 or NTRK IHC must be confirmed by a molecular method. Fusions can be detected by FISH, or multiplex RT-PCR panel assays, the latter requiring a tailored reaction for each potential fusion gene which makes this approach more complex. RNA-based NGS is preferred for identifying an expanding range of fusion genes (Table 1).^{1,3,4,5}

After histological diagnosis of LUAD in patients with advanced NSCLC, pathologists automatically order molecular testing immediately, referred to as reflex testing. It has the advantage of shorter turnaround time, although some test results may not be needed.

Testing is generally carried out in the same tissue sample(s) that were initially used for the diagnosis and subtyping of NSCLC. Although tumour testing has been primarily focused on use of FFPE (formalin fixed, paraffin embedded) tissues, increasingly, any biopsy or cytology-type sample,

if sufficiently cellular and prepared in an appropriate fashion, can be used for broad genotyping and for programmed death ligand 1 (PD-L1) IHC. For genotyping, tumour content (percentage tumour nuclei) is more important than actual tumour cell number for DNA and RNA sequencing analysis. Ideally this proportion would be $\geq 20\%$, but successful clinically-relevant genotyping can be achieved even with tumour proportions as low as 5%. This is somewhat dependent on the next-generation sequencing (NGS) platform used¹

While tissue biopsy remains the standard for molecular testing, liquid biopsies (using cell-free DNA [cfDNA] extracted from blood, specifically circulating tumor DNA [ctDNA]) are increasingly used as a complementary or alternative method for molecular testing, especially when tissue samples are unavailable or unsuitable. Testing of cfDNA lacks sensitivity, especially where disease burden is low. Negative ctDNA tests should be verified by tissue testing, if available. If feasible, testing should be performed via broad, panel-based molecular profiling, e.g. NGS.

3. How does NGS report help prioritize which alterations should be targeted

NGS report contains details of the tumour sample, the technology used and it highlights the most important and potentially actionable results, but also other pathogenic alterations detected. Several classification systems have been developed to value the clinical significance (actionability) of genomic alterations.^{6,7} The 2017 AMP/ASCO/CAP guidelines classify the variants into four tiers of clinical significance: Tier I (Strong clinical significance), Tier II (Potential clinical significance), Tier III (Unknown clinical significance) and Tier IV (Benign/likely benign).⁸ Only Tier I, II and III are reported. These tiers are based on the strength of evidence from different sources (clinical trials, databases, etc.) for classifying the clinical importance of genomic alterations and their clinical impact integrating FDA approval for specific therapy.^{6,8}

The ESMO Scale for Clinical Actionability of Molecular Targets (ESCAT) is a framework used to rank genomic alterations in cancer based on the strength of evidence supporting their potential as therapeutic targets.⁹ It categorizes alterations into different tiers, ranging from those with the strongest clinical evidence to those with little or no evidence of clinical actionability. It helps prioritize which alterations should be targeted in precision oncology.

The current landscape of druggable molecular targets in NSCLC includes *EGFR*, *ALK*, *ROS1*, *BRAF*, *KRAS*, *HER2*, *MET*, *RET*, *NTRK*, *NRG1*. Current guidelines recommended routine testing of *EGFR*, *ALK*, *ROS1*, *BRAF V600*, *NTRK*, *MET* exon 14 skipping mutations, *MET* amplifications, *RET* rearrangements, *KRAS G12C* mutations and *HER2* mutations as targeted therapies are available.^{1,3,4} For all patients with newly diagnosed metastatic NSCLC who do not carry either *EGFR* or *ALK* genomic tumour aberrations, PD-L1 testing is required (Figure 1).^{2,3} Although PD-L1 expression can be elevated in patients with an oncogenic driver, targeted therapy for certain oncogenic drivers should take precedence over treatment with an immune checkpoint inhibitor.³ The treatment landscape for advanced NSCLC is rapidly evolving, with targeted therapies and NGS playing increasingly important roles. In addition to these known targets, others including Phosphoinositide 3-kinases (PI3K) and fibroblast growth factor receptor (FGFR) have garnered significant attention and are the subject of numerous ongoing trials.¹⁰

4. Targeted therapy is used based on the results of molecular test which identified the presence of particular genetic alteration and clinical evidence of its efficacy

In this case, the patient was diagnosed with stage IV adenocarcinoma of lung with lower cervical/supraclavicular fossa and mediastinal nodal, intrapulmonary and brain metastases. His NGS test showed *EGFR* exon 19 deletion, a sensitizing *EGFR* mutation, thus he was treated with the third generation *EGFR* TKI, osimertinib. This was based on the results of FLAURA trial, which assessed first-line therapy with osimertinib compared with either erlotinib or gefitinib in patients with metastatic NSCLC and *EGFR* mutations (exon 19 deletion or L858R).¹¹ The median progression-free survival (PFS) was longer with osimertinib compared with either erlotinib or gefitinib (18.9 months vs. 10.2 months; hazard ratio [HR], 0.46; $P < 0.001$). The median duration of response was longer with osimertinib compared with erlotinib or gefitinib (median response, 17.2 vs. 8.5 months). Among patient with brain metastasis at presentation, only 6% of patients receiving osimertinib had CNS progression events when compared with 15% of those receiving erlotinib or gefitinib. An updated analysis showed that median overall survival (OS) was 38.6 months with osimertinib compared with 31.8 months for either erlotinib or gefitinib (HR, 0.8; $P = 0.046$). In summary, for patients with previously untreated advanced NSCLC with an *EGFR* mutation, treatment with third generation *EGFR* TKI osimertinib is the treatment of choice which led to longer OS, PFS, and lesser CNS progression in those with brain metastasis at presentation, than those who received a comparator *EGFR*-TKI.

Take home message

- Personalized, precision oncology with targeted therapy has evolved the treatment paradigm of advanced NSCLC
- Management of advanced NSCLC begins with histological diagnosis and histology subtyping, followed by molecular test to detect targetable genetic alterations
- IHC, FISH, mutation-specific PCR and NGS are the commonly used molecular tests to detect genomic alterations in NSCLC
- Liquid biopsy (e.g. plasma ctDNA) are increasingly used as a complementary or alternative method for molecular testing, especially when tissue samples are unavailable or unsuitable

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Table 1. Most common targetable genetic alterations in lung adenocarcinoma^{1,3,4,5}

Biomarker or genomic alteration	Incidence and Epidemiology	Detection method	Targeted therapy
EGFR mutations (exon 19 deletion or exon 21 L858R)	~15% of LUADs, incidence increases in patients who have never smoked, female and younger patients and can reach ~40-60% in female Asians Exon 19 deletions, p.L858R point mutation in exon 21 are the most commonly described mutations in EGFR, which are associated with responsiveness to oral EGFR TKI therapy. These represent approximately 85% to 90% of all EGFR alterations in NSCLC	Mutation-specific PCR Real-time PCR NGS EGFR FISH or IHC have no clinical utility and should not be tested	EGFR TKI (e.g. gefitinib, erlotinib, afatinib, dacomitinib, osimertinib)
'Uncommon' TKI-sensitizing mutations, (L861Q in exon 21, G719X in exon 18, S768I in exon 20)	Many of the less commonly observed alterations in EGFR, which cumulatively account for ~10% of EGFR-mutation positive NSCLC (i.e., exon 21 p.L861Q, exon 18 p.G719X, and exon 20 p.S768I mutations), are also associated with responsiveness to certain EGFR TKIs, such as afatinib and osimertinib		EGFR TKI (e.g. afatinib, osimertinib)
EGFR exon 20 mutations	2%-3% of NSCLC (10-15% of all EGFR mutations) Mostly resistant to current EGFR TKI EGFR exon 20 insertions are associated with responsiveness to EGFR MET bispecific antibody		EGFR TKI EGFR MET bispecific antibody (e.g. amivantamab)
Acquired T790M exon 20 mutation (EGFR T790M resistance mutation)	EGFR p.T790M is most commonly observed as a mutation that arises in response to and as a mechanism of resistance to first- and second-generation EGFR TKI. In patients with progression on first- or second-generation TKI with p.T790M as the primary mechanism of resistance, third-generation TKIs are typically efficacious	Mutation-specific PCR (re-biopsy of the tumour tissue or liquid biopsy) Real-time PCR NGS	EGFR TKI (osimertinib)
ALK rearrangements	4%-5% of patients with NSCLC, mainly in young patients without a smoking history with LUAD histology The predominant ALK fusion in lung cancer is EML4-ALK. Several other ALK fusions have now been identified	IHC FISH RNA-based NGS Detection of the ALK translocation by FISH is the standard, but IHC with high-performance ALK antibodies and validated assays may be used as a screening approach, or preferably RNA-based NGS	ALK TKI (e.g. crizotinib, ceritinib, alectinib, brigatinib, lorlatinib)



Biomarker or genomic alteration	Incidence and Epidemiology	Detection method	Targeted therapy
ROS1 rearrangements	Approximately 1%-2% of patients with LUAD have ROS1 translocations, usually these patients are young and have never smoked Numerous fusion partners are seen with ROS1, and common fusion partners include: CD74, SLC34A2, CDC6, and GOPC (FIG)	IHC (only screening) FISH RNA-based NGS	ROS1 TKI (e.g. crizotinib, lorlatinib, entrectinib)
BRAF V600 mutations	BRAF mutations have been described in 2%-4% of NSCLCs and are more frequent in patients with a smoking history Three classes of BRAF mutations exist: class I (BRAF V600E), class II and class III The presence of a specific mutation resulting in a change in amino acid position 600 (most commonly p.V600E, but rarely p.V600K, p.V600D, or other changes) has been associated with responsiveness to combined therapy with oral inhibitors of BRAF and MEK	Real-time PCR NGS	BRAF + MEK TKI (dabrafenib + trametinib)
RET rearrangements	RET translocations are found in ~1%-2% of patients with NSCLC, with peculiar clinicopathological features and a higher incidence in patients who have never smoked, females, LUAD and poorly differentiated tumours. The most common RET fusion found in NSCLC is KIF5B-RET	FISH RNA-based NGS (preferably)	RET TKI (e.g. selpercatinib, pralsetinib)
MET exon 14 skipping mutations	MET exon 14 skipping mutations are found in ~3% of NSCLCs and are most frequent in older patients with a smoking history and a LUAD, although pulmonary sarcomatoid carcinomas are also enriched for MET exon 14 skipping mutations	NGS-based testing is the primary method for detection of METex14 skipping events; RNA-based NGS may have improved detection. IHC is not a method for detection of METex14 skipping	MET TKI (e.g. capmatinib, tepotinib)
MET amplification	1-6% treatment-naïve NSCLC (de novo) or due to acquired resistance on TKIs in patients with various NSCLC mutations	Droplet digital PCR (dd-PCR) FISH NGS	
MET overexpression	This involves an increased production of the c-MET protein, even without gene amplification	Droplet digital PCR (dd-PCR) FISH NGS	
HER2 mutations	Mutations in HER2, a member of the EGFR family, define a subset of NSCLC (~1%-5%) with clinicopathological features that resemble those of other molecularly defined subgroups, including Asian ethnicity, female sex, never-smoking status, LUAD and high morphological grade Three HER2 activating mechanisms have been described in NSCLC: gene mutation (1%-4% of cases), gene amplification (2%-5%) and protein overexpression (2%-30%) Almost all (95%) of HER2 mutations are exon 20 insertions. Mutations and amplifications are not associated	Real-time PCR (mutations) IHC (overexpression) FISH (amplifications) NGS (mutations) While targeted PCR techniques can be utilized to examine HER2 mutations, the diversity and spectrum of mutations are best surveyed using NGS-based approaches	TKI (larotrectinib, pyrotinib, poziotinib) Antibody-drug conjugate (trastuzumab deruxtecan)
KRAS G12C mutations	KRAS is the most commonly mutated RAS isoform, present in 20%-40% of LUAD and 5% of squamous-cell carcinoma and mainly seen in patients with a smoking history (unlike the other targets described here). Most mutations (>95%) occur at codons 12 and 13 in exon 2. About 45% are KRAS G12C substitutions, which, at around 14%, matches or slightly exceeds total EGFR mutation prevalence in Caucasian populations	Real-time PCR NGS	KRAS G12C inhibitor (e.g. adagrasib, sotorasib)
NTRK rearrangements	Frequency of NTRK fusions in NSCLC is estimated at ~0.2% and seems independent of sex and smoking history The presence of NTRK1/2/3 gene fusions is associated with responsiveness to TRK inhibitors	IHC for screening RNA-based NGS	NTRK inhibitors (e.g. entrectinib, larotrectinib)
NRG1 fusions	NRG1 fusions occur in ~0.2% of lung cancers, in NSCLC the most common fusion partner is CD74 NRG1 fusions mainly occur in LUAD (especially mucinous), and slightly more frequently in females and patients who have never smoked They lead to HER3 dimerization and signaling is often mediated through HER2, resulting in downstream activation of, for example, MAPK and PI3K/Akt NRG1 fusions are a potential emerging target in LUADs	RNA-based NGS	HER inhibitors targeting HER2 and HER3, or pan-HER inhibitors

ALK, anaplastic lymphoma kinase; BRAF, proto-oncogene B-Raf and v-Raf murine sarcoma viral oncogene homolog B; EGFR, epidermal growth factor receptor; HER, human epidermal growth factor receptor; IHC, immunohistochemistry; ISH, in situ hybridization; KRAS, Kristen rat sarcoma virus; LUAD, lung adenocarcinoma; MET, mesenchymal-epithelial transition; NGS, next-generation sequencing; NRG1, neuregulin 1; NTRK, neurotrophic tyrosine receptor kinase; PCR, polymerase chain reaction; RET, rearranged during transfection; ROS1, ROS proto-oncogene 1, receptor tyrosine kinase; TKI, tyrosine kinase inhibitor

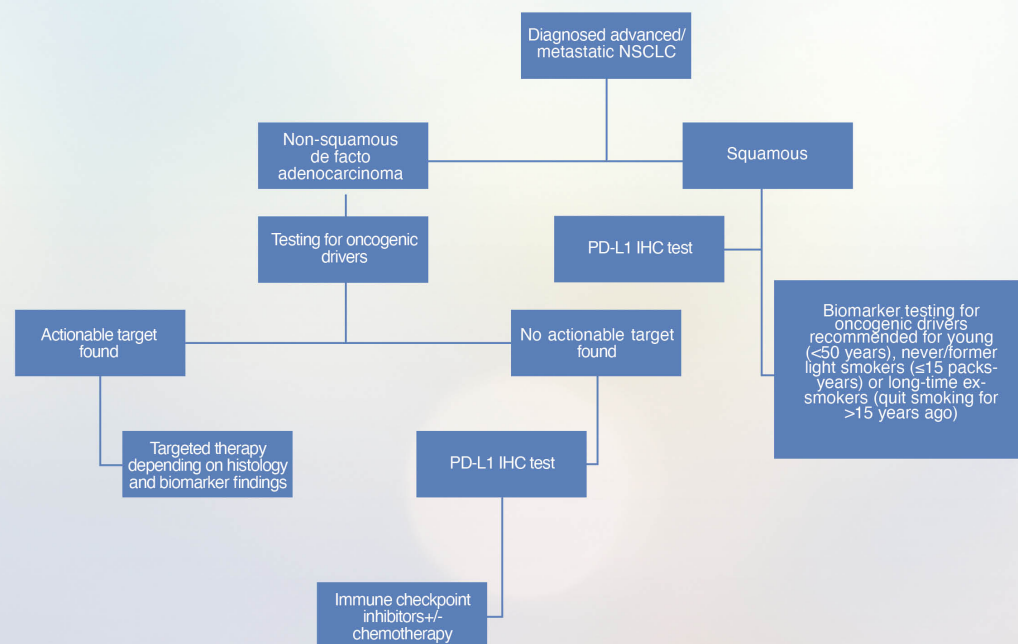


Figure 1. Flow chart for diagnosis and testing biopsy/cytology samples in stage IV NSCLC2

Remark: PD-L1 IHC test can also be done parallel to testing for oncogenic drivers

Reference: Figure S1. Flow chart for diagnosis and testing biopsy/cytology samples in stage IV NSCLC. Supplementary material, Hendriks L E, Kerr K, Menis J, et al, on behalf of the ESMO Guidelines Committee. Non-oncogene addicted metastatic non-small-cell lung cancer: ESMO Clinical Practice Guideline for diagnosis, treatment and follow-up. Ann Oncol 2023;34(4):358-376.

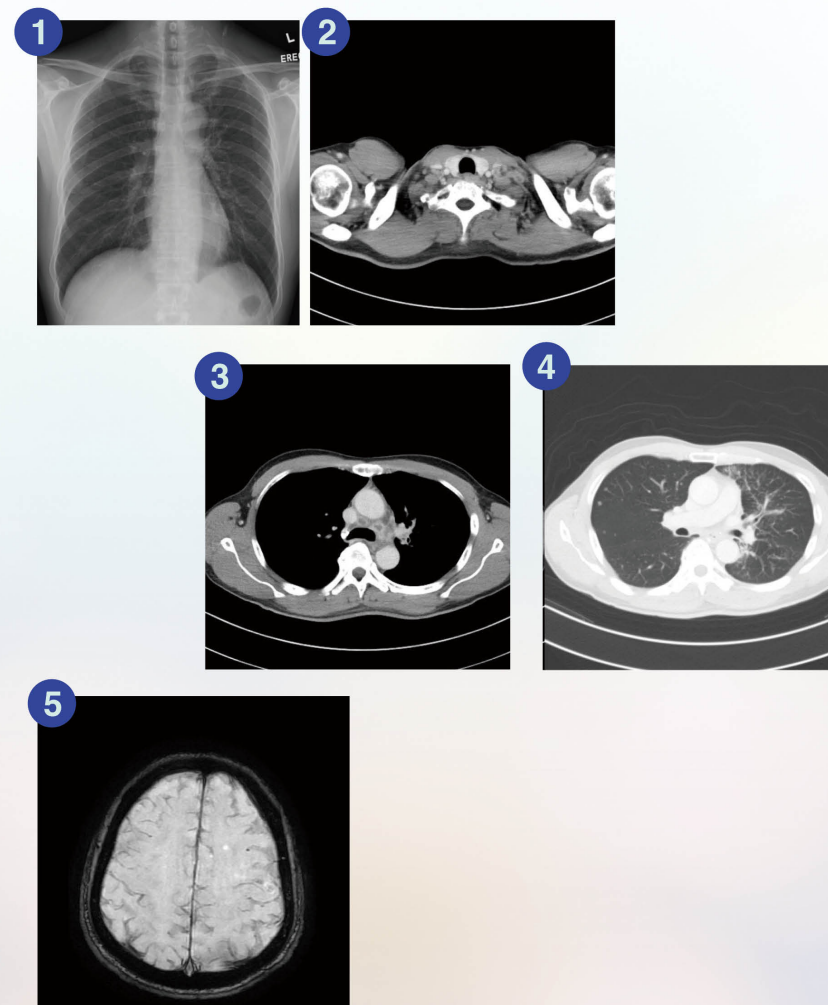


Image 1. CXR showed increased streaky densities at left suprahilar region, which is non-specific.

Image 2 (right upper). CT scan showed necrotic lymph nodes at bilateral level IV and supraclavicular fossa.

Image 3 (middle left). CT scan showed multiple enlarged necrotic lymph nodes in mediastinum, highly suspicious of metastasis.

Image 4 (middle right). CT scan showed multiple nodules in bilateral lung fields, suspicious of metastases.

Image 5. (below) MRI showed a 1.47x1.5cm left parietal brain metastasis at the cortical subcortical region.

A young lady with lower extremity rash



Dr. Steven King-fan Loo

Specialist in Dermatology
Honorary Clinical Assistant Professor, CUHK

Case History:

A 28-year-old woman presents with a 10-day history of "skin rash" on both lower extremities. She reports the lesions are slightly tender and some have a "bruised" appearance. She recently completed a course of antibiotics for a suspected urinary tract infection about two weeks prior. She denies fever, joint pain, or other systemic symptoms. Her past medical history is unremarkable, and she takes no regular medications other than oral contraceptives.

Physical Examination:

On examination, multiple palpable purpuric papules and plaques, ranging from 0.5 to 3 cm in diameter, are present bilaterally over the thigh and shin. Some lesions show early signs of hyperpigmentation. There is no evidence of ulceration or necrosis. Cardiopulmonary and abdominal examinations are normal. No lymphadenopathy is noted.



Quiz Questions:

1. What is the most likely diagnosis based on the presentation?
2. What is the most crucial initial diagnostic step to confirm the suspected diagnosis?
3. Name two common potential triggers for this condition, one of which is suggested in this patient's history.
4. Beyond a complete blood count and basic metabolic panel, what are three initial investigations that would be important in evaluating this patient for potential systemic involvement or underlying causes?
5. What is the general mainstay of treatment for mild, cutaneous-limited small vessel vasculitis, particularly if a trigger (like a medication) has been identified and removed?

Answer

Q1 Answer:

Cutaneous Small Vessel Vasculitis (CSVV), also known as leukocytoclastic vasculitis. The history of a preceding medication (antibiotics) and the classic presentation of palpable purpura on the lower limbs are highly suggestive.

Q2 Answer:

A skin biopsy from one of the fresh purpuric lesions (ideally < 48 hours old) for histopathological examination, including direct immunofluorescence. This will typically show neutrophilic infiltration of small vessel walls, fibrinoid necrosis, and extravasation of erythrocytes.

Q3 Answer:

Medications (as suggested by the recent antibiotic use in this case).

Infections (e.g., bacterial, viral such as Hepatitis B or C, HIV, or streptococcal infections). (Other triggers include autoimmune diseases and malignancies, though less common for isolated cutaneous presentations).

Q4 Answer:

Urinalysis (to screen for renal involvement, such as glomerulonephritis).

Antinuclear antibody (ANA) and Extractable Nuclear Antigen (ENA) panel (to investigate for underlying connective tissue disease).

Others: Hepatitis B and C serologies (as viral hepatitis can be an underlying cause). Consider cryoglobulins and ANCA if clinical suspicion is high for specific vasculitides.

Q5 Answer:

Supportive care is often sufficient. This includes leg elevation, rest, compressive stockings, and symptomatic relief with non-steroidal anti-inflammatory drugs (NSAIDs) and topical steroid for pain or pruritus. If a trigger is identified and removed (e.g., discontinuing the offending drug), the condition often resolves spontaneously within weeks to months. More severe or persistent cases might require corticosteroids or other immunosuppressive agents.

Burning questions parents would ask their doctors



Dr. Antony Chun-cheung Fu

Paediatric Endocrinologist

When Puberty Comes Too Soon: The Top Questions Doctors Get from Parents

Growth and puberty are among the most common concerns raised by parents during clinic visits. As practising paediatricians, we are frequently approached with questions about a child's height, weight, and pubertal development—often on a daily basis. In this article, we are pleased to share our clinical insights and practical experience in managing these concerns, with the hope that they will be helpful in your everyday practice when supporting families.

「女孩比男孩較早踏入青春期的嗎？」

Yes, girls typically enter puberty earlier than boys, which is a normal physiological phenomenon.

Below are some key points for explanation:

Average onset age of puberty:

Girls: puberty usually begins between 8 and 13 years of age, with the most common onset around 10 to 11 years old.

Boys: puberty generally starts between 9 and 14 years of age, with the typical onset around 11 to 12 years old.

The earliest sign of puberty in girls is usually breast development (thelarche).

「女孩比男孩容易性早熟嗎？」

Girls generally enter puberty earlier than boys, and their physical signs of puberty tend to be more noticeable. In contrast, in boys, parents may have fewer opportunities to observe changes in their genitalia.

Meanwhile, researchers observed a secular trend toward earlier puberty onset in girls over recent decades, which correlates with rising prevalence of childhood obesity.

Nonetheless, most cases of early puberty in girls are idiopathic, meaning no specific cause can be identified. However, in boys, a higher proportion of precocious puberty cases are associated with underlying central nervous system abnormalities. The younger the boy is at the onset of puberty, the higher the likelihood of identifying an underlying condition.

「我的孩子有「性早熟」嗎？」

「我的女兒五歲多胸部就有硬塊！」

「女兒小學四年級就來月經了！」

True (or central) precocious puberty refers to early activation of the hypothalamic–pituitary–gonadal (HPG) axis and is manifested by breast development in girls or testicular enlargement in boys before the normal physiological age ranges. It is typically associated with accelerated linear growth, advanced bone age, and sex steroid levels that are elevated relative

to chronological age. It is classically defined as the onset of secondary sexual characteristics before the age of 8 years in girls and 9 years in boys.

「牛奶、雞或牛究竟能不能吃？」

Hong Kong and many countries have banned the use of artificial hormones in poultry! The HK Health Department also tests imported meat for residual artificial hormones. Children will not suffer from precocious puberty due to the hormones contained in chicken wings. But it is recommended to purchase products from reliable suppliers to ensure products pass safety testing

「還有哪些外在因素會造成性早熟？」

It is found that increased body mass index (BMI) in girls is associated with an earlier onset of puberty. This includes earlier development of secondary sexual characteristics and menarche.

Early maturing girls were twice as likely to be overweight than average maturers, and this was true for all racial/ethnic groups. Obesity influences pubertal development through several hormonal pathways, including insulin, leptin and sex hormone-binding globulin. Yet the findings between obesity and puberty onset in boys are not consistent.

Girls exposed to prenatal tobacco smoke and environmental tobacco smoke experienced menarche earlier than unexposed peers. In addition, girls exposed to certain endocrine-disrupting chemicals (EDCs) may be more likely to start puberty early. Those substances include musk ambrette, which is a fragrance used in some detergents, perfumes, and personal care products, and a group of medications called cholinergic agonists.

Furthermore, although definitive conclusions cannot be drawn, a potential link is found

between the exposure of bisphenol A, an aromatic compound largely used worldwide in some plastics and chemical additives, and altered pubertal timing, particularly in young girls.

「怎麼判斷孩子是不是性早熟？」

The clinical assessment of puberty in children should be conducted with a parent or carer present, in a private setting, using age-appropriate and simple explanations, and approached with sensitivity and respect.

Paediatric endocrinologists may arrange the following assessments for children:

1. Initial evaluation, including:

- Measurement of the child's height and weight
- Assessment of growth velocity
- Collection of parental height data and the age at menarche of the mother

2. Evaluation of the onset and sequence of secondary sexual characteristics:

- Girls: breast development, pubic and axillary hair growth, maturation of the external genitalia, and presence or absence of menarche
- Boys: changes in the testes, penis, and scrotum; development of pubic and axillary hair; appearance of the Adam's apple, voice deepening, and facial hair

3. Bone age assessment (typically via X-ray of the left hand and wrist). Always remember bone age assessment is a supportive tool, not a definitive diagnostic test!

4. Blood tests for hormonal levels, such as luteinizing hormone (LH), follicle-stimulating hormone (FSH), estradiol, and/or testosterone

5. Pelvic or testicular ultrasound (if indicated), to assess the uterus, ovaries or testes for any abnormalities

6. After the above assessments, if the physician has a strong clinical suspicion of precocious puberty, a LHRH Stimulation Test will be arranged to confirm the diagnosis. This test helps differentiate between central (gonadotropin-dependent) and peripheral (gonadotropin-independent) precocious puberty.

「是不是所有性早熟的小朋友都應該用打針的方式抑制生長？」

The primary aims of CPP treatment are to increase adult height and postpone development of secondary sexual characteristics to an age that is more commensurate with peers.

Children with precocious puberty are at risk of advanced bone age and early closure of growth plates, which may result in a shorter final adult height compared to peers with normal pubertal timing.

Beyond physical growth, the psychosocial impact of early puberty—such as premature breast development or menarche—can expose children, particularly girls, to social stigma and emotional stress. These challenges should not be underestimated.

That said, menarche at the age of nine still falls within the medically acceptable range. If the child and her parents are emotionally well-adjusted and coping effectively, medical intervention may not be necessary. However, if the child demonstrates emotional difficulty, feels unprepared for menstruation, or experiences embarrassment or distress in social or school environments, treatment with GnRH analogues (GnRHa) may be considered following a thorough medical assessment.

「打針有副作用嗎？」

GnRH analogues have been used in clinical practice for over 40 years. Adverse effects of GnRHa therapy are rare and are generally well tolerated. Fewer than 5% of patients may experience mild reactions, such as sterile fluid accumulation at the injection site, skin itching, or gastrointestinal discomfort. Women who were treated with GnRH analogues during childhood for CPP generally achieve fertility outcomes comparable to those of the general population. Decades of experience have shown that GnRHa treatment is both safe and efficacious.

Successful Conclusion of the HKCMA 2025 Annual Scientific Meeting: Bridging Primary and Specialist Care in Chronic Disease Management



Dr. Christopher Hui

Specialist in Respiratory Medicine



Dr. Catherine Chen

Specialist in Family Medicine

The Hong Kong Chinese Medical Association (HKCMA) is delighted to report on the resounding success of our 2025 Annual Scientific Meeting (ASM), held on Sunday, 14 September 2025, at the Cordis Hotel in Hong Kong. Under the theme "Management of Chronic Diseases: Bridging Primary and Specialist Care," the event brought together a diverse array of medical professionals, researchers, and experts from Greater China and around the world. The meeting was fully booked well in advance, attracting over 450 attendees in total and more than 300 participants joining in person and virtually through our hybrid platform. This impressive turnout underscored the growing interest in collaborative approaches to chronic disease management, fostering meaningful exchanges between primary care practitioners and specialists.

The day commenced with registration, accommodating both onsite and online participants seamlessly. Dr. Jane Chun-kwong Chan, President of the HKCMA, delivered a warm welcome message, setting an inspiring tone by emphasising the association's commitment to advancing medical science while promoting unity within the profession. This was followed by Session 1, chaired by

Dr. Chan herself, which featured cutting-edge presentations on innovative technologies and treatments.

A highlight of the morning was the online lecture by Prof. Georges El Fakhri from Yale University, USA, on "Recent Development in PET Technology: Role in Guiding Therapy." Prof. El Fakhri, a renowned expert in quantitative molecular imaging, discussed how advancements in Positron Emission Tomography (PET) integrated with artificial intelligence (AI) are enhancing diagnostic accuracy in oncology, cardiology, and neurology. He illustrated synergies between PET and MR spectroscopy for guiding radiotherapy, using examples like PSMA imaging in prostate cancer and applications in neurodegenerative diseases. Attendees appreciated the practical insights into personalized medicine, with many noting how these tools could bridge gaps between primary screening and specialist interventions.

The centrepiece of the event was the Chinese Academy of Engineering Academician Distinguished Lecture, delivered by Prof. Huang Xiaojun from Beijing. As a Peking University Chair Professor, Member of the Chinese Academy of Engineering, and Director

of the National Clinical Research Centre for Hematologic Diseases, Prof. Huang presented "Advances in the Treatment of Haematological Malignancies: Contributions from China." Introduced by orator Dr. Chun-kong Ng, the lecture chronicled Prof. Huang's lifetime of groundbreaking work in haematopoietic stem cell transplantation and targeted immunotherapies.

Prof. Huang began by reflecting on his 37-year career at Peking University People's Hospital, where he has mentored over 100 students and faculty while pioneering solutions to donor shortages in bone marrow transplants. He detailed the evolution of the "Beijing Protocol," a granulocyte colony-stimulating factor (G-CSF) and anti-thymocyte globulin (ATG)-based haploidentical transplantation system that has revolutionized treatment for leukaemia, lymphoma, and other blood disorders. Drawing from his early experiences witnessing families' struggles with HLA matching requirements, Prof. Huang explained how his team's shift away from traditional T-cell depletion in 1998 led to the first successful non-T-cell-depleted haploidentical transplant in 2000—a patient who remains alive today. By 2022, this protocol had been adopted by over 190 centres in China, boosting haploidentical transplantation rates from near zero to 65%, and influencing practices in countries like South Korea, Italy, and France.

He highlighted dramatic improvements in survival rates, elevating three-year leukaemia survival from 20% to 70%. Prof. Huang also discussed China's leadership in CAR-T cell therapy, focusing on innovations in new targets, enhanced functionality, and universal CAR-T cells. For instance, he shared case studies from multi-centre collaborations in Tianjin, Suzhou, and Guangzhou, demonstrating how these therapies have improved quality of life for patients with acute promyelocytic leukemia (APL) through discoveries like all-trans retinoic acid (ATRA) and arsenic trioxide (ATO). The lecture emphasized national and international collaboration, urging young doctors to engage in frontline clinical work. Attendees were

captivated by Prof. Huang's passion, with one participant commenting that his talk "not only showcased China's contributions but also inspired global efforts to end donor shortages." This session aligned perfectly with the meeting's theme, illustrating how specialist advancements in haematology can inform primary care strategies for early detection and management of chronic blood malignancies.

Following this, the Opening Ceremony featured an address by Guest of Honour Dr. Cecilia Yuen-man Fan, JP, Under Secretary for Health, Health Bureau, HKSAR. Dr. Fan praised the HKCMA's role in fostering interdisciplinary dialogue, highlighting Hong Kong's position as a powerful bridge between Greater China and the international community.

The program continued with Prof. Gilberto Ka-kit Leung's presentation on "The IMACE and the Ethico-legal Status of Clinical Practice Guidelines," exploring ethica considerations in guideline implementation for chronic care. After a coffee break, Prof. Philip Wai-yan Chiu, Dean of the Faculty of Medicine at The Chinese University of Hong Kong, discussed "AI in Surgery," sharing examples of robotic systems enhancing precision in minimally invasive procedures for chronic conditions like gastrointestinal disorders. Dr. Alex Ng from Tencent Healthcare followed with "How AI is Augmenting the Doctor-Patient Relationship," using real-world scenarios where AI tools improve patient engagement in managing diabetes and hypertension.

Session 2, the Lunch Symposium, focused on obesity management. Prof. Roger Chen from Australia presented an online lecture on "Elevating the Treatment of Obesity and Its Complications with GIP/GLP-1 RA," detailing the efficacy of dual-agonist therapies in reducing cardiovascular and metabolic risks. This was complemented by a patient-sharing segment with Dr. Henry Chiu-fat Yeung and Dr. Raymond Wai-chuen Lee, moderated by Dr. Daniel Wai-sing Chu, offering personal insights into lifestyle interventions alongside

pharmacological treatments. In the afternoon, Session 3, chaired by various experts, covered chronic kidney disease, severe asthma, and COPD. Dr. Annette Wai-kwan Tso presented "Personalized Strategies for Chronic Kidney Disease Management: A Holistic Cardio-Kidney-Metabolic Approach," advocating integrated care models. Prof. Zhang Qingling from Guangzhou shared translational discoveries in severe asthma from the decade-long C-BIOPRED multi-centre project, while Prof. Chen Rong-chang discussed "Multi-omics in COPD: Exploration and Challenges," using vast datasets of genomic data at the Guangzhou Institute of Respiratory Health and Shenzhen Respiratory Institute to predict disease progression over time.

The day concluded with concurrent sessions in Session 4. In the main ballroom, Prof. Ivan Fan-ngai Hung addressed pneumococcal disease prevention in adults with comorbidities, and Prof. Christopher Koon-chi Lai covered strategies to protect older adults from RSV. Meanwhile, in the Shanghai Room, Dr. Dorothy Fung-ying Chan presented on "The Effectiveness of E-Parenting on Parental Competence in Hong Kong," with applications for chronic paediatric conditions, and Dr. Geraldine Dean from the UK delivered an online talk on "Real World Experience Using AI in Imaging," showcasing AI's role in early detection of chronic diseases through early radiology detection.

Closing remarks reflected on the day's achievements, with attendees praising the hybrid format for enabling broader participation. The meeting not only disseminated cutting-edge knowledge but also strengthened networks, aligning with HKCMA's mission to promote medical advancement and professional unity.

We extend heartfelt thanks to all speakers, chairpersons, sponsors, and participants for making this event a triumph. Special appreciation goes to the anonymous charitable foundation and the Chinese Medical Association for facilitating Prof. Huang's participation, as well

as supporting organizations like the Medical Protection Society. Looking ahead, we are excited to build on this momentum for future gatherings.

Dr. Christopher Kim-ming Hui Co-Chairperson, Organising Committee Hong Kong Chinese Medical Association

Dr. Catherine Xiao-rui Chen Member, Organising Committee Hong Kong Chinese Medical Association

2025 Annual Scientific Meeting



The Guest of Honour, Dr. Cecilia Fan, delivered an opening address at the Opening Ceremony.



The officiating guests applauded warmly to celebrate the moment.



Grateful moments from this year's ASM. A huge thank you to our officiating guests, the HKCMA Council, and our valued industry partners for their unwavering support.



The Opening Ceremony was graced by the officiating guests (from left to right): Dr. Alex Ng, Prof. Zhang Qingling, Prof. Philip Chiu, Dr. the Hon. David Lam, 陳澤濤副部長, Dr. Jane Chan, Dr. Cecilia Fan, Prof. Huang Xiaojun, Prof. Gilberto Leung, Prof. Chen Rongchang, Dr. C.K. Ng.



Dr. Cecilia Fan presented the commemorative souvenir to our renowned speaker from Beijing, Prof. Huang Xiaojun.



Prof. Philip Chiu gave an excellent talk on "AI in Surgery".

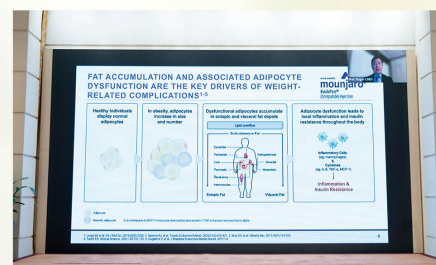
2025 Annual Scientific Meeting



Prof. Zhang Qingling delved deeper into the topic of "AI in Surgery" with the speaker Prof. Philip Chiu during the Q&A session.



Prof. Christopher Lai delivered an insightful presentation on "Shielding the Vulnerable – Emerging Strategies to Protect High-Risk Older Adults from RSV".



Prof. Roger Chen presented an online lecture titled "Elevating the Treatment of Obesity and Its Complications with GIP/ GLP-1 RA" at the Lunch Symposium.



The audience was captivated by Prof. Zhang Qingling's talk titled "From Bench to Bedside: Translational Discoveries in Severe Asthma from CBIOPRED".



Prof. Chen Rongchang presented an exemplary lecture titled "Multi-omics in COPD: Exploration and Challenges" which captivated the audience.



Prof. Patrick Ip and Prof. Christopher Lai took a photo together to commemorate the event.

2025 Annual Scientific Meeting



Dr. Jane Chan and Dr. Albert Kong presented the commemorative souvenir to Dr. Dorothy Chan following her talk on “The effectiveness of E-parenting on Parental Competence in Hong Kong” at the Shanghai Room.



Prof. Ivan Hung delivered his talk titled “Proactive Approach to Prevent Pneumococcal Disease by Enhancing Immunity of Adults with Underlying Medical Condition” in the main ballroom.



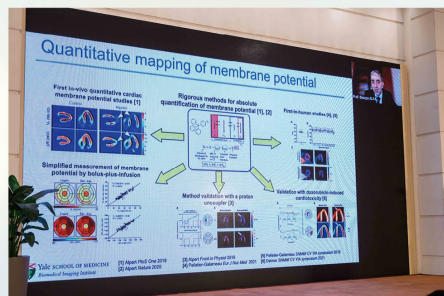
Dr. Carol Kwok warmly introduced the speaker, Dr. Geraldine Dean, who was set to deliver an online talk titled “Real World Experience Using AI in Imaging”.



Dr. Daniel Chu shared his personal journey with obesity.



Prof. Gilberto Leung captivated the audience with an outstanding lecture on “The IMACE and the Ethico-legal Status of Clinical Practice Guidelines”.



Prof. Georges El Fakhri, a renowned expert in quantitative molecular imaging, gave an online lecture titled “Recent Development in PET Technology: Role in Guiding Therapy” in the morning session.

2025 Annual Scientific Meeting



Prof. Huang Xiaojun gave an excellent talk titled “Advances in the Treatment of Hematological Malignancies: Contributions from China” during the Distinguished Lecture. Everyone was truly captivated by his passion and profound expertise.



Dr. C.K. Ng, Orator of the Distinguished Lecture, asked a thought-provoking question to Prof. Huang Xiaojun during the Q&A Session.

Dr. Christopher Hui and Dr. Catherine Chen, our Master of Ceremonies for the ASM, warmly welcomed everyone with their presence and support.



A fantastic group shot with our distinguished guests and attendees in the main ballroom.

2025 Annual Scientific Meeting



The attendees were enjoying a friendly chat during the coffee break.



A patient-sharing session with Dr. Henry Yeung and Dr. Raymond Lee moderated by Dr. Daniel Chu.



Distinguished speakers and the President gather for a group Photo (from left to right): Dr. Christopher Hui, Prof. Zhang Qingling, Dr. Jane Chan, Prof. Chen Rongchang, Dr. C.K. Ng.



Dr. Alex Ng gave his outstanding lecture on "How AI is Augmenting the Doctor-patient Relationship".

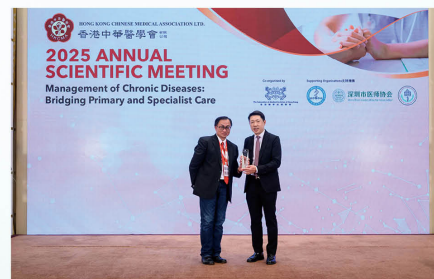


Dr. Annette Tso delivered an excellent lecture titled "Personalized Strategies for Chronic Kidney Disease Management: A Holistic Cardio-Kidney-Metabolic Approach" that captivated the audience.



Prof. Ivan Hung delivered his excellent talk titled "Proactive Approach to Prevent Pneumococcal Disease by Enhancing Immunity of Adults with Underlying Medical Condition" in the main ballroom.

2025 Annual Scientific Meeting



Dr. Mike Kwan presented the commemorative souvenir to Prof. Ivan Hung following his talk.



Co-chair Dr. Mike Kwan delivered the closing remarks, marking the successful conclusion of this year's ASM.

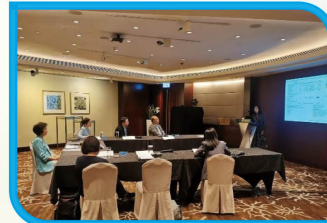


A wonderful commemorative photo taken after the event:
Ms. Cecilia So, along with nurses, HKCMA Council, and representatives from our sponsors.

Past CME and Non-CME Activities

Date	Topic	
12 June 2025 (Thursday) Time: 1:00 pm to 2:30 pm Venue: The Chinese Bank's Association Limited Speaker: Dr. David Ka-yip Lo Specialist in Cardiology	Academic Lunch Lecture: A Cardiologist's Approach to Manage Cardio-kidney-metabolic (CKM) syndrome in Primary Care (Non-CME Lecture)	 Dr. Jane Chun-kwong Chan and Dr. Law Yim-kwai presented a souvenir to the representative of the sponsor.  Before the talk began, Dr. Jane Chun-kwong Chan and Dr. Law Yim-kwai took a moment to present a souvenir to the speaker, Dr. David Ka-yip Lo.  Dr. David Ka-yip Lo delivered his presentation.
17 July 2025 (Thursday) Time: 1:00 pm to 2:30 pm Venue: The Chinese Bank's Association Limited Speaker: Dr Dominic Yik-kiu Lai Specialist in Dermatology & Venereology	Academic Lunch Lecture: Advancing the disease management of Atopic Dermatitis in the new era (Non-CME Lecture)	 Dr. Jane Chun-kwong Chan presented a souvenir to the speaker, Dr. Dominic Yik-kiu Lai, before the talk began.  Dr. Jane Chun-kwong Chan presented a souvenir to the representative of the sponsor.  An engaging Q&A session moderated by Dr. Poon Man-kay following the talk delivered by the speaker.  Group photo with Dr. Christina Kit-chee Maw, Assistant Director, Health Bureau

Past CME and Non-CME Activities

Date	Topic		
27 August 2025 (Wednesday) Time: 1:00 pm to 2:30 pm Venue: The Chinese Bank's Association Limited Speaker: Dr. Ho Chung-ping Specialist in Nephrology	Academic Lunch Lecture: Beyond Glucose: Early Optimization of Cardiorenal Protection in Hypertensive – Chronic Kidney Disease with SGLT2i (Non-CME Lecture)	 Group photo with the speaker, Dr. Ho Chung-ping.  Dr. Jane Chun-kwong Chan presented a souvenir to the representative of the sponsor.  The Q&A Session moderated by Dr. Poon Man-kay, during which Dr. Wong King-ying, asked her questions to the speaker.	
13 September 2025 (Saturday) Speaker: Dr. Fanny Wai-san Ko Head of Clinical Respiratory Medicine, The CUHK, Scientific Committee of GINA Prof. Ivan Fan-ngai Hung Chair Professor of Infectious Disease, The HKU Prof Margaret IP Chairperson of Department of Microbiology, The CUHK Dr. Ng Chun-kong Specialist in Respiratory Medicine, Queen Elizabeth Hospital	Expert Meeting: Expert Dialogue on Pneumococcal Disease Prevention in COPD Patients (Non-CME Lecture)	 Group photo with speakers and chair (From left to right: Dr. Ng Chun-kong, Prof Ivan Fan-ngai Hung, Dr Jane Chun-kwong Chan, Prof. Mary Ip, Prof. Margaret Ip, Dr. Fanny Wai-shan Ko and Dr. Ada Wai-chi Lin)  Dr. Jane Chun-kwong Chan presented a souvenir to the representative of the sponsor.  Dr. Fanny Wai-shan Ko delivered her presentation.	

Past CME and Non-CME Activities

Date	Topic		
14 September 2025 (Sunday) Time: 9:00 pm - 5:00 pm Venue: Cordis Hong Kong	2025 Annual Scientific Meeting: Management of Chronic Diseases: Bridging Primary and Specialist Care		
		Our distinguished Guest of Honour, Dr. Cecilia Yuen-man Fan, Under Secretary for Health, Health Bureau, delivered her opening address at the 2025 Annual Scientific Meeting.	Happy birthday to our esteemed speaker, Dr. Alex Ng, President of Tencent Healthcare.

Upcoming CME & Non-CME Activities

Date	Topic	Date	Topic
10 November 2025 (Monday) Time: 1:00 pm – 2:30 pm Venue: Queen Victoria 8 (八公館) Speaker: Dr. Adrian Piers Yan-yue Cheong Specialist in Cardiology	PCSK9 inhibition is still the strongest and safest form of LDL lowering available	27 November 2025 (Thursday) Time: 1:00 pm – 2:30 pm Venue: Queen Victoria 8 (八公館) Speaker: Dr. Sieh Koon-man Specialist in Orthopaedics & Traumatology	Osteoporotic vertebral fracture: treatment and prevention

Past Activities

Date	Activity				
14 June 2025 (Saturday) Time: Two Identical Sessions Session I: 11:15 am - 12:15 pm Session II: 12:35 pm - 1:35 pm Speakers: Dr. Jacky Wai-kei Lam Assistant Professor & Assistant Dean (Research), Faculty of Medicine, The CUHK Dr. Jackie Ching-kan Leung Assistant Director of Health (Health Adm & Planning), Department of Health Dr. Daniel Wai-sing Chu Specialist in Family Medicine and Vice-President of HKCMA	2025 Career Talk				
		Dr. Jane Chun-kwong Chan presented the souvenir to the speakers of Career Talk: Dr. Jacky Lam, Dr. Jackie Leung and Dr. Daniel Chu	Dr. Jacky Lam delivered his presentation titled "Academic Careerwho, when, why/ why not"	Dr. Jackie Leung delivered her presentation titled "Public Health-who, when, why/ why not".	
					
		The Q&A Session moderated by Dr. Ng Siu-kwan.		Dr. Daniel Chu delivered his presentation titled "Private practice - who, when, why/ why not"	

Past Activities

Date	Activity				
14 June 2025 (Saturday) Time: 1:00 pm – 6:00 pm Venue: 5/F, Duke of Windsor Social Service Building Speaker: Dr. Ho Chung-Ping, Dr. Samuel Fung, Dr. Becky Ma, Dr. Yeung Shing, Dr. Jane Chan	Seminar on the Management of Chronic Kidney Disease	 Dr. Jane Chan gave her presentation on "Screening for CKD".	 Dr. Ho Chung-ping introduced Dr. Pang Fei-Chau, Commissioner for Primary Healthcare, Health Bureau, to deliver the Opening Remarks.	 Dr. Ho Chung-ping gave his presentation on "What is CKD and the Renal Failure Progression Prediction".	 Group photo (from left to right): Dr. Samuel Fung, Dr. Yeung Shing, Joseph, Dr. Ho Chung-ping, Dr. Choi Koon-shing, Dr. Liu Shao-haei and Ms. Dora Leung.
11 August 2025 (Monday) Time: 7:25 pm to 10:30 pm Venue: Hong Kong City Hall	2025「中國醫師節」香港慶祝大會	 「向醫者致敬，杏林春暖、惠澤社群、感恩有您」亮燈儀式。	 2023「最美醫生」康敏醫生（廣東省疾病預防控制中心傳染病預防控制中心所長）為我們做專題演講。		
14 September 2025 (Sunday) Time: 6:00 pm - 8:00 pm Venue: Cordis Hong Kong	Faculty Dinner	 Group photo with our 2025 ASM speakers, chairs, panelists and representatives of sponsors.			

Upcoming Social Activity

Date	Activity	
日期：2025 年 11 月 1 日（星期六） 時間：上午 9 時至晚上 9 時 30 分 地點：佛山和祐國際醫院	參觀佛山和祐國際醫院	



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References: 1.VEOZA Hong Kong Prescribing Information. 2.Depyperre H, Lademacher C, Siddiqui E, et al. Fezolinetant in the treatment of vasomotor symptoms associated with menopause. Expert Opin Investig Drugs. 2021;30(7):681-94. 3.Lederman S, Ottery FD, Cano A, et al. Fezolinetant for treatment of moderate-to-severe vasomotor symptoms associated with menopause (SKYLIGHT 1): a phase 3 randomised controlled study. Lancet 2023;401:1091-102. 4.Johnson KA, Martin N, Nappi RE, et al. Efficacy and safety of fezolinetant in moderate to severe vasomotor symptoms associated with menopause: a phase 3 RCT. J Clin Endocrinol Metab 2023;108(8):1981-97. 5.Neal-Perry G, Cano A, Lederman S, et al. Safety of fezolinetant for vasomotor symptoms associated with menopause: a randomized controlled trial. Obstet Gynecol. 2023;141(4):737-47. 6.Thurston RC. Vasomotor symptoms. In: Crandall CJ, Bachman GA, Faubion SS, et al. eds. Menopause Practice: A Clinician's Guide. 6th ed. Pepper Pike, OH: The North American Menopause Society. 2019:43-55.

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HKCMA Bulletin

HKCMA is inviting private general practitioners and relevant specialists to participate in this highly impactful "Chronic Kidney Disease Screening Programme" !

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慢性腎病免費篩查計劃
Chronic Kidney Disease Free Screening Programme

香港中華醫學會 舉辦
慢性腎病免費篩查

Chronic Kidney Disease Screening Programme
spearheaded by Hong Kong Chinese Medical Association

計劃對象

年滿45歲至80歲人士及具有以下其中一個慢性腎病高風險因素：



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