February 27-28, 2025 London, UK



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Regulatory Overview of the Key Growth Markets in the APAC Region



Jack Wong CEO and Founder ARPA

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> JACK WONG – FOUNDER OF ARPA



Regulatory Affairs - APAC 9:30-10:30am 28 Feb 2025

# 09.30 - 10.30 Regulatory Overview of the Key Growth Markets in the APAC Region

Speaker: Jack Wong, CEO and Founder at Asia Regulatory Professionals Association (ARPA), Singapore

- Innovative pathways for quicker registration
- Developing effective regulatory strategies for APAC

• Case studies: Accelerating product launches in markets like Vietnam, South Korea, and China



# Jack Wong



#### Summary

- 1. More than 26 years experience in Pharma and MedTech sector
- 2. Founder of Asia Regulatory Professionals Association (ARPA) with more than 7000 members www.ARPAedu.com
- 3. Author of Medical Regulatory Affairs Handbook (3rd Edition now)
- 4. Adjunct Professor/Lecturer in Chinese University of Hong Kong, Hong Kong University, National University of Singapore and Tohoku University Japan

5. CEO of RNAscence (a Biotech start-up spin off from Nanyang Technological University and National Skin Centre Singapore) www.BioRNA.sg

#### 王龍

- 亞洲法規事務專業人員協會會長
- 《醫療監管事務》作者(第三版)
- 新加坡国立大学, 香港中文大學 及香港大學法規事務 兼任副教授/客座講師
- 日本東北大學亞洲醫療法規事務研究院士
- 瑞纳生物科技行政总裁







Summary

- 1. A member of Asia Regulatory Professionals Association (ARPA)
- 2. Be interested in data science and learning regulatory

#### **Your Regulatory Partner - ARPA**





# **About ARPA**

- Asia Regulatory Professionals Association aims to raise the standard and social recognition of Regulatory Professionals as part of Healthcare team.
- Established 1 Jan 2010
- Partner for Advisory, Education, Publication and Community support





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#### **Deep Thinking Time**

Warm up question

How to know regulatory requirement in Asia? For example, do you need to do this test or not?



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#### Introduction to Asia Drug Regulatory

(Lots of opportunity but very diverse and dynamic)

| Aspect                      | Explanation  | Relevance to Generic Drugs  |
|-----------------------------|--|---|
| Regulatory<br>Goals         | Ensure safety, efficacy, and quality of generic drugs. | Requires proof of bioequivalence and robust manufacturing data.                     |
| Role in Asian<br>Healthcare | Lower costs and improve access to medicines.           | High demand in Asia due to<br>large populations and disease<br>burden.              |
| Challenges in<br>Asia       | Diverse and complex regulatory systems.                | Country-specific variations<br>require tailored strategies for<br>faster approvals. |



#### **Challenges in Generic Drug Approvals**

| Category                            | Details  | Example   |
|-------------------------------------|--|---|
| Diverse<br>Regulatory<br>Frameworks | Unique country requirements without harmonization.                         | China's dossier vs. Vietnam's<br>ACTD.  |
| Long<br>Approval<br>Timelines       | Delays due to clinical trial requirements and capacity constraints.        | China, Korea requires extensive<br>local data.  |
| High Data<br>Standards              | Stringent requirements for<br>bioequivalence and manufacturing<br>quality. | WHO Prequalification<br>recognized only in Vietnam but<br>not China. <mark>(local testing &amp; local<br/>trails impact approval time)</mark> |



#### **Innovative Regulatory Pathways**

| Pathway                  | Key Features  | Impact  | Example   |
|--------------------------|---|---|---|
| Abbreviated<br>Approval  | Focus on_bioequivalence as the<br>primary evidence of safety and<br>efficacy instead of extensive clinical<br>data. | Saves time by skipping redundant clinical trials.                 | US FDA ANDA model<br>used as a reference in<br>Korea.                     |
| Reliance<br>Pathways     | Regulatory agencies <mark>leverage</mark><br>approvals from trusted bodies like<br><u>WHO PQ, US FDA, or EMA</u> .  | Accelerates approval by reducing the need for repeat evaluations. | WHO PQ pathway<br>adopted in Vietnam.                                     |
| Priority<br>Reviews      | Assigns accelerated timelines for drugs addressing_critical public health needs or shortages.                       | Reduces review time by prioritizing high-impact applications.     | China's Priority Review<br>reduced oncology drug<br>approval to 7 months. |
| Harmonized<br>Frameworks | Use of a common regulatory standard<br>across regions to avoid duplicative<br>submissions.                          | Streamlines the approval process for multiple countries.          | ASEAN ACTD framework<br>simplifies applications in<br>Southeast Asia.     |
| Conditional<br>Approvals | Temporary approval granted for<br>urgent drugs, with ongoing post-<br>marketing surveillance requirements.          | Enables faster access to essential medicines in emergencies.      | COVID-19 treatments in Korea.   |



#### **Vietnam Regulatory Strategy**

| Aspect                            | Details   | Impact  |
|-----------------------------------|---|---|
| Regulatory<br>Authority           | Vietnam Ministry of Health (MOH), specifically the Drug<br>Administration of Vietnam (DAV).   | MOH and DAV regulate<br>pharmaceutical products, ensuring<br>their safety, efficacy, and quality.                         |
| Approval<br>Pathways              | - Fast-Track Approval for urgent health needs Conditional Approval for new generics used in public health emergencies.  | Speeds up approval for drugs<br>addressing urgent needs, such as<br>epidemic drugs or emergency-use<br>generics.          |
| Key<br>Requirements               | - <b>Bioequivalence studies</b> for generic drugs Evidence of <b>safety and</b><br><b>efficacy</b> from major international agencies like WHO or US FDA.  | Ensures generics meet high safety<br>and efficacy standards, reducing the<br>need for duplicative trials.                 |
| Reliance<br>Pathways              | <b>Reliance on WHO PQ and international agencies (e.g., US FDA)</b><br>approval data <b>Mutual Recognition Agreements (MRAs)</b> with<br>certain countries.   | Reduces the time and cost by<br>leveraging the approval data from<br>reputable international regulatory<br>agencies.      |
| Harmonization<br>Efforts          | Adherence to <b>ICH guidelines</b> for pharmaceutical registration and Good Manufacturing Practices (GMP).  | Alignment with ICH standards<br>facilitates global submission<br>processes and ensures high-quality<br>drug registration. |
| Approval<br><mark>Timeline</mark> | - Standard approval: Around 12 months Fast-Track: Typically 6–8 months for urgent drugs.  | Fast-track approval pathway greatly shortens time-to-market for critical drugs.   |
| Strategic Tips                    | - Use Fast-Track Approval for generics addressing public health<br>needs Leverage WHO PQ and US FDA data to streamline the<br>approval process Prepare for bioequivalence studies early in the<br>process to minimize delays. | Helps reduce approval time by focusing on priority health issues and leveraging international data.                       |



### **Korea Regulatory Strategy**

| Aspect                   | Details  | Impact  |
|--------------------------|--|---|
| Regulatory<br>Authority  | Ministry of Food and Drug Safety (MFDS)  | Oversees all pharmaceutical regulations,<br>ensuring the safety, efficacy, and quality<br>of drugs in Korea.  |
| Approval<br>Pathways     | - Fast Track for critical or urgent drugs, especially for epidemic or pandemic situations Conditional Approval for emergency-use drugs that require post-marketing surveillance.   | Speeds up approval for drugs addressing<br>urgent public health issues, reducing<br>review time for generics.   |
| Key<br>Requirements      | - <b>Bioequivalence studies</b> to demonstrate that the generic drug<br>performs similarly to the reference drug <b>Clinical trial data</b> or<br>evidence of safety and efficacy from foreign regulatory bodies<br>like WHO or US FDA.          | Bioequivalence is mandatory, but clinical<br>trial data can be waived if the drug has<br>already been approved by major<br>international regulators (e.g., US FDA,<br>EMA).     |
| Reliance<br>Pathways     | - Reliance on global regulatory agencies: Uses approvals from<br>international bodies (e.g., WHO PQ, US FDA, EMA) Mutual<br>Recognition Agreements (MRAs) with countries like the US,<br>EU, and Japan.  | Reliance on international approval data reduces duplication of trials, saves time, and lowers costs for generics.   |
| Harmonization<br>Efforts | - ICH (International Council for Harmonisation) guidelines are followed for drug registration, safety, and efficacy standards.   | Adherence to ICH standards helps ensure global consistency in regulatory practices, easing approval in multiple markets.  |
| Approval<br>Timeline     | <ul> <li>- Standard approval timeline: Typically 12–18 months for<br/>generics Fast Track timeline: 6–8 months for critical drugs<br/>(e.g., antiviral or emergency-use generics).</li> </ul>  | Fast Track significantly shortens approval timelines, especially for urgent health crises.  |
| Strategic Tips           | <ul> <li>Leverage Fast Track for high-demand generics or those addressing public health crises.</li> <li>Use reliance on international approvals (e.g., US FDA, WHO PQ) to streamline the process.</li> <li>Test tips case studies !!</li> </ul> | Strategic use of Fast Track and<br>international data can reduce approval<br>time and cost. Focus on bioequivalence<br>and regulatory recognition for a faster<br>market entry. |



### **China Regulatory Strategy**

| Aspect                            | Details  | Impact   |
|-----------------------------------|--|--|
| Regulatory<br>Authority           | National Medical Products Administration (NMPA).   | Oversees drug approvals, implements national guidelines, and ensures safety and quality standards. |
| <mark>Approval</mark><br>Pathways | <ul> <li>Priority Review for unmet medical needs</li> <li>Conditional Approval for urgent use.</li> </ul>  | Accelerates approval for high-priority or critical drugs.  |
| Key<br>Requirements               | - Local bioequivalence studies Compliance with Quality Consistency Evaluation (QCE).   | Ensures that generics meet the same quality and efficacy as the reference drug.                    |
| <mark>Reliance</mark><br>Pathways | Limited reliance on foreign approvals (e.g., FDA, EMA). WHO PQ not recognized.   | Requires duplicative testing and evaluations, increasing time and cost.                            |
| Harmonization<br>Efforts          | Aligning with ICH guidelines for Good Manufacturing<br>Practices (GMP) and dossier submissions.  | Simplifies global submissions for manufacturers targeting both China and ICH-member regions.       |
| Timeline for<br>Approvals         | - Standard review: 12–18 months Priority Review:<br>6–8 months.  | Priority Review significantly reduces approval time for critical drugs.                            |
| Local Trials                      | Mandatory local clinical/bioequivalence trials for generics, even if foreign data exists.  | Adds cost and time but ensures product alignment with local population needs.                      |
| Data Protection<br>Policies       | Data exclusivity for new drugs lasts 6 years. Generics cannot reference this data during that time.  | Protects innovator drugs, creating delays for generic entry.                                       |
| Strategic Tips                    | <ul> <li>Multicentre studies</li> <li>Focus on Priority Review pathways</li> <li>Standard development tips !!</li> <li>Product standard tips !!</li> </ul> | <ul> <li>Helps streamline the process and mitigate<br/>delays.</li> </ul>                          |



#### **Deep Thinking Time**

Let's solved Test problem and Standard problem

What if you keep on fail local test?

What if your product does not meet local standard?



### **China Regulatory Strategy – Greater Bay Area**

Guangdong-Hong Kong-Macao Greater Bay Area (9 cities in Guangdong province-HK-Macao)

Drug and medical device can be used in Greater Bay Area if this product launched in Hongkong government hospital (not need product registration in HK) with recognized medical needs;

5 hospitals in Greater Bay Area considered as pilot;

The real-world data used in Greater Bay Area can support product registration;

The product used in HK should be same with the one used in 5 hospital



#### **Your Regulatory Partner - ARPA**





**About ARPA** 

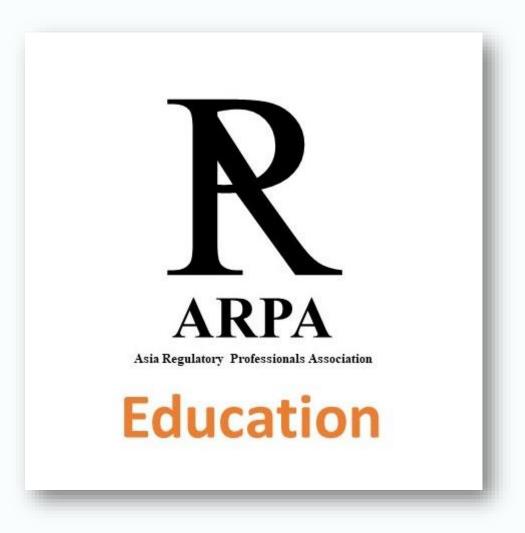
- Asia Regulatory Professionals Association aims to raise the standard and social recognition of Regulatory Professionals as part of Healthcare team.
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#### Undergraduate and postgraduate courses in Universities















THE UNIVERSITY OF



香港大學 THE UNIVERSITY OF HONG KONG

















### **Education – Vietnam**



#### **RAEA – Regulatory Affairs Education Alliance**



# **About RAEA**

We intended to create a group of universities and education institutes which has RA course or want to have RA course

Established 18 Aug 2022

We aim to

- share good practice on RA teaching syllabus including teaching materials (value to teachers)

- provide wider RA knowledge and network to students e.g. internship, exchange, rotation program (*values to students*)

- gather RA teaching experts (from academic, industry, government and certification bodies) in different countries as our Teachers or partners (*create talent pool*)

- develop RA trainings fit for student and research. Of course industry and government are welcome to join our trainings (*create more training*)

- Regulatory Affairs scope RAEA aims to cover are all regulatory science and soft skills for all healthcare products including medical device, pharmaceuticals etc (**RA scope focus**)





| Chairman   | Chinese University of Hong Kong                                     | Prof. Raymond Tong       |  |
|------------|---|--------------------------|--|
| Secretary  | ARPA (Asia Regulatory   | Prof. Jack Wong          |  |
|            | Professionals Association)  | PTOL JACK WONG           |  |
| Founding N | Founding Members  |                          |  |
| Australia  | University of Sydney  | Dr Orin Chisholm         |  |
| China      | YeeHong Business School,  | ТВС                      |  |
|            | Shenyang University   |                          |  |
| Hong Kong  | Hong Kong University, Pharmacy<br>department                        | Ass. Prof Aviva Chow     |  |
| Hong Kong  | Chinese University of Hong Kong                                     | Prof. Raymond Tong       |  |
| India      | SIES (School of Business Studies)                                   | Dr Shuchi Midha          |  |
| Japan      | Tohoku University   | Prof Saijo Yoshifumi     |  |
| Korea      | KIST (Korea Institute of Science & Technology)/ HongNueng Innopolis | Dr. Dae-Shin Kang        |  |
| Korea      | KIST (Korea Institute of Science & Technology)/ HongNueng Innopolis | Dr. Sung-Hun Kwon        |  |
| Korea      | KIST(Korea Institute of Science &<br>Technology), BioCenter         | Dr. Hyung-Min Kim        |  |
| Korea      | Kyunghee University(Department of Business Administration)          | Prof. KT Jung, Kyunghee  |  |
| Malaysia   | Universiti Malaysia Perlis  | Associated Prof. NASHRUL |  |
| Singapore  | NanYang Technological University                                    | Prof. Jack Wong,         |  |
| Singapore  | National University of Singapore                                    | Prof. Mark Chong         |  |
| Singapore  | Temasek Polytechnic   | Adrian Danker (TBC)      |  |
| Thailand   | Chulalongkorn University  | Ornsiree Junchaya (TBC)  |  |
| Vietnam    | Hanoi University  | ТВС                      |  |



## **Online courses**

#### CERTIFICATE OF MEDICAL DEVICE REGULATORY MANAGEMENT

PRESENTED TO

#### Sowjanya Kallakuri

FOR SUCCESFULLY COMPLETING THE COURSE AND PASSING THE EXAMINATION ON 22nd SEPTEMBER 2020

TOPICS COVERED: Medtech overview and opportunities, key definition, Medtech industry overview and opportunities, Regulatorism, what is regulatory affairs and their roles, key definitions of regulatory system and their exceptions, global classitification system, ISO 13455, ISO 14971, global quality system comparison, product registration requirements, 3 major criteria to get product registration approval, Critical soft skills related to regulatory affairs, how to work with regulators, project acceleration and stakeholder management skill.



Online Courses







## **Publications**

### **Regulatory Textbook**

- To develop the professional, the very first
   Asia Regulatory textbook was developed
- Name of book: Handbook of Medical
   Device Regulatory Affairs in Asia
- We got support and writers from the following organisations to write the book (AHWP, WHO, US FDA, EU, Japan PMDA etc.)





Andbook of Medical Device Regulatory Affairs in Asia Bace by Raymond Tong & Jack Wett





## **University Scholarship**



ASK ARPA RESOURCES ~ EDUCATION ~ COMMUNITY

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#### Qianna Chung:

"With the Asia Regulatory Professionals Association Enrichment Award and summer placement at HKAPI, I hope to gain precious insight into the pharmaceutical industry of Hong Kong and pursue my passion of being an industrial pharmacist through exposing to the working environment of the organization. I hope to build connections with various pharmaceutical companies and explore local policies by carrying out healthcare-related researches."



## **Community Development**



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### **Community Development**

ARPA supports handicapped individuals to learn and work as regulatory professionals.





**ARPA** introduction

- 1. Join the free membership
- 2. Build your RA knowledge
- 3. Build your RA network



#### **Your Regulatory Partner - ARPA**





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