

Medical innovation and internationalization strategy

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Medical Innovation by cross-industry collaborations



Advanced Medical Care



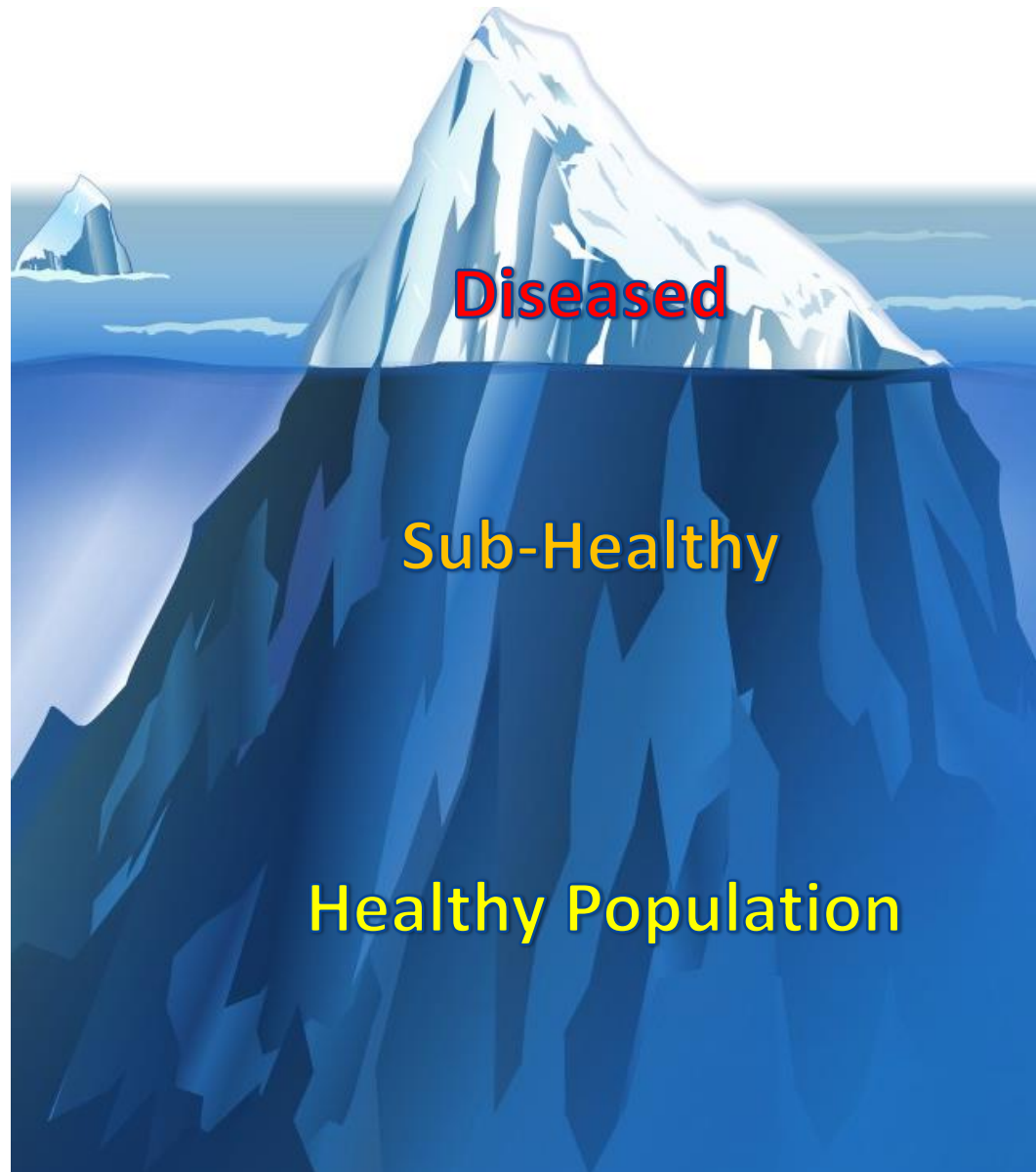
High Quality R&D and MFG



Strong ICT and Elec. Tech.



Precision Medicine and Precision Health



【 Precision Medicine 】

Precision Diagnosis : NGS, Liquid Biopsy, Medical AI, POC devices , Digital Imaging Equipment *etc.*

Precision Treatment : Targeted Therapy, Cell Therapy, Immunotherapy, Surgical Robot, *etc.*

Medical Care: Smart Hospital, Smart healthcare, *etc.*

【 Precision Health 】

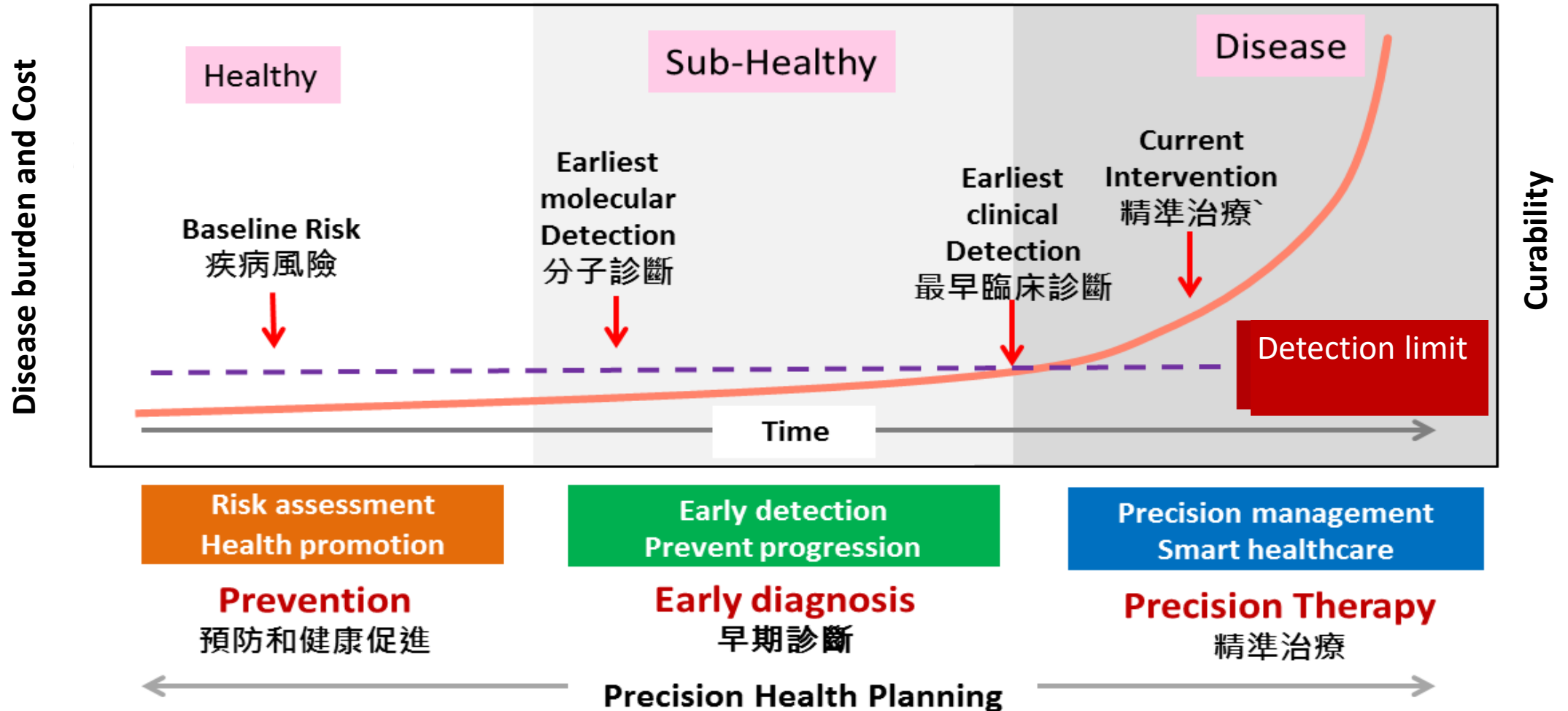
Risk Assessment : Genetic risk, Behavioral Patterns, family history *etc.*

Precision Prevention : Personalized Health Check 、 AI for Early Detection, Home Screening, Tele Health Consulting Services *etc.*

Health Promotion: Lifestyle, Environmental Adjustments, Personalized Diet, Sport and Exercise, Microbiota, Homecare and Wearable Devices, Health Management, *etc.*

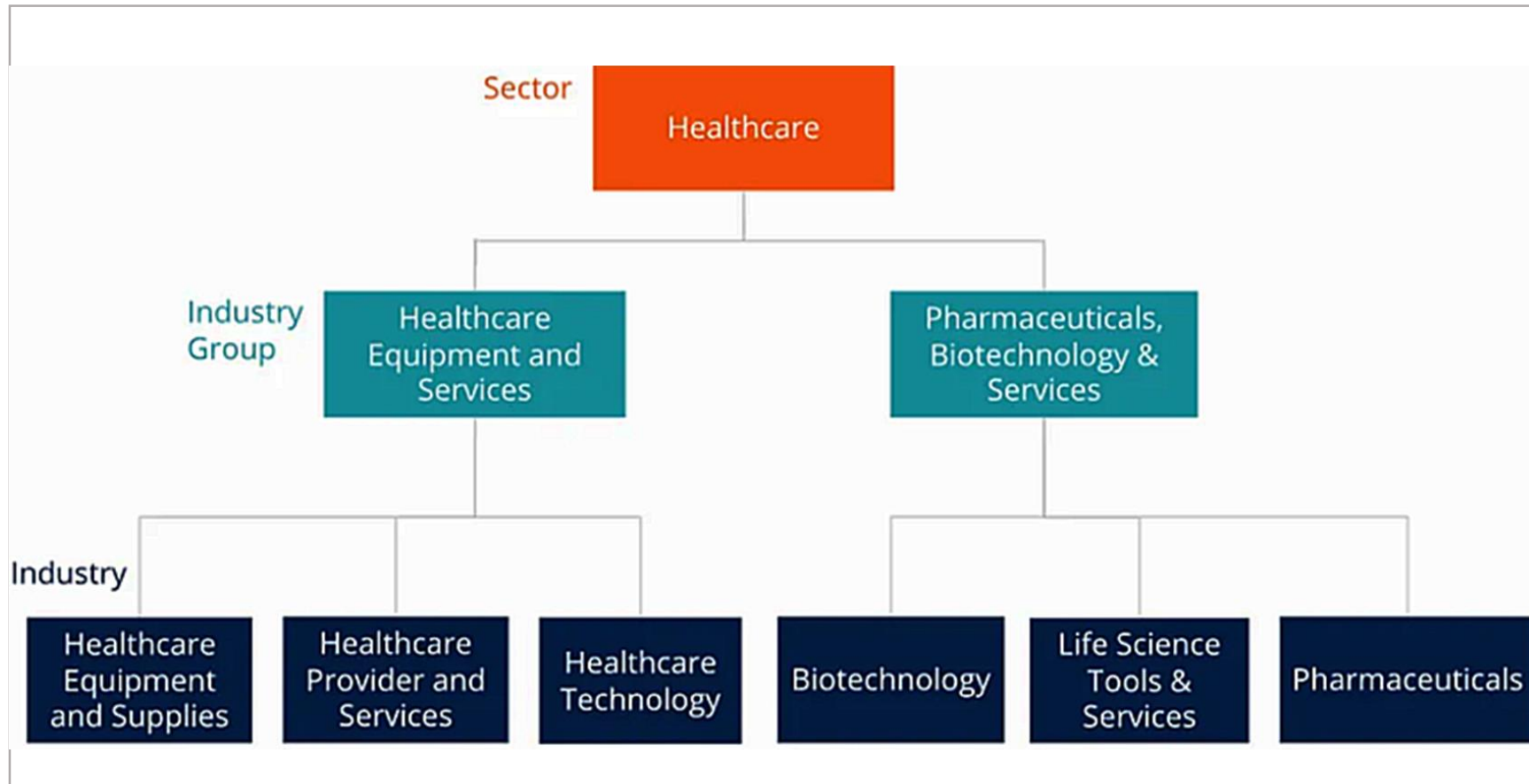
Healthcare from disease treatment to prevention

- Healthcare nowadays provides individuals with products and services ranging from prevention, health promotion, diagnosis to treatment.



Healthcare sector by GICS definition

- ❑ The healthcare sector includes the following subsections, as per Global Industry Classification Standard (GICS)

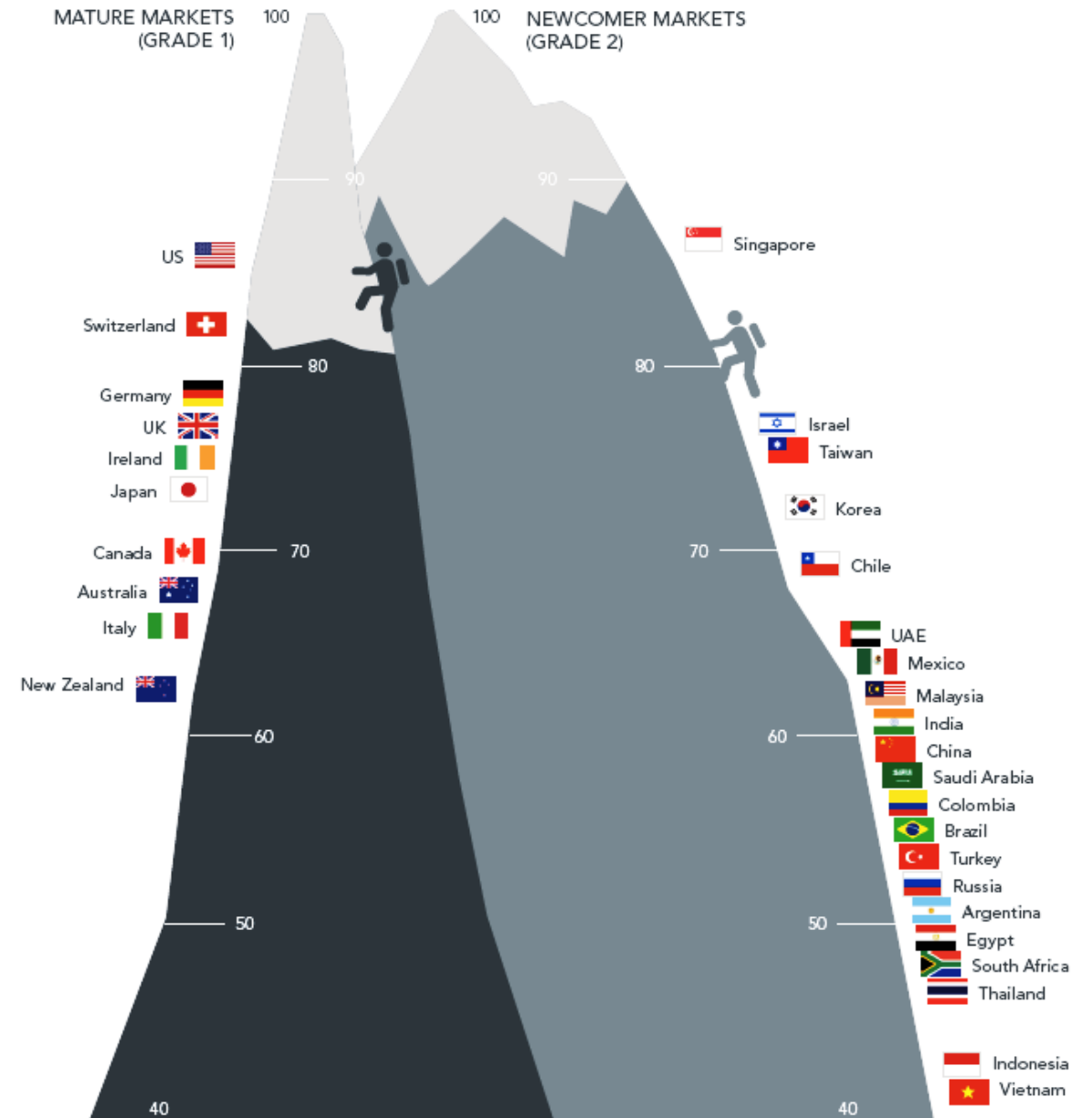


Global Markets:

- International Healthcare
- Bio-pharmaceutical
- Medical device
- Regenerative medicine
- Smart health
- Precision medicine
- Sports medicine

Taiwan Core Competences

- Taiwan ranks 3rd in the newcomer markets
- World-class quality of medicine and talent
- The best healthcare system and big data
- High quality clinical trials and R&D capacity
- Well-established research infrastructure
- ICT supply chain, talent and manufacturing
- AI and 5G R&D in national level









Source compiled by IBMI, RBMP (2021)

Taiwan ICT giants setting foot in healthcare

	Mobile health	Medical equipment	Smart hospital	Gene/cell therapy	Biomedicine	
Companies						
Product pipelines	<ul style="list-style-type: none"> ■ Telehealth ■ IoT solutions ■ Wearables ■ Health management 	<ul style="list-style-type: none"> ■ X ray / ultrasound ■ Micro CT ■ Surgical / service robots ■ Capsule endoscopy ■ Hemodialyzer ■ Molecular pathology ■ Vital sign monitor 	<ul style="list-style-type: none"> ■ Smart ward/operating room ■ Surgical VR ■ AI solution ■ HMS ■ EMR / EHR ■ Medical display 	<ul style="list-style-type: none"> ■ DNA sequencer ■ DNA microarray ■ Protein & genetic testing ■ CTC system ■ Cellular therapy 	<ul style="list-style-type: none"> ■ AI chip ■ Biochip for gene sequencing ■ RF & Wireless chip ■ Biosensor ■ Display component ■ Organic semiconductor 	
Areas of application						

Cross-industry cooperation at a glance

	+		<ol style="list-style-type: none"> 1) AI medical platform 2) Telemedicine / remote care 3) AI-assisted arrhythmia diagnosis 4) AIoT device/equipment
	+		<ol style="list-style-type: none"> 1) Genome database for Chinese 2) Medical wearables 3) Epidemic management products 4) Proton therapy / 8K medical imaging
	+		<ol style="list-style-type: none"> 1) Innovative devices / AI diagnostics 2) Health & chronic disease management 3) Medical imaging for animals 4) Cell therapy / AIoT solutions
	+		<ol style="list-style-type: none"> 1) Miniaturization of medical equipment 2) Exoskeleton / assistive devices 3) AI dialysis / medical AI imaging 4) Digital pathology / health management
	+		<ol style="list-style-type: none"> 1) Telehealth / IoT products 2) Auto detection of CTC 3) Data integration of sports health 4) AI-assisted detection of disease

Cross-industry collaborations in the spotlight, 2020

Company	Products	Technologies	Progress
Wistron	Exoskeleton 'Keeogo'	Motion sensing, AI, electrical auxiliary power system	Certification obtained-Taiwan, US
Acer	VeriSee DR AI-assisted solutions for Diabetic Retinopathy (DR) identification	Deep learning, edge computing	Certification obtained-Taiwan
Delta Electronics DelBio	Dagene G1 Automated Nucleic Acid Analysis System	Integration of microfluidics, optics, temperature controller and genomic testing	Certification obtained-EUA
Sharp Sharp & Innolux	Flexible X-ray detector 8K medical display	Flexible FPD Indium gallium zinc oxide (IGZO)	Certification obtained-Taiwan, US, Europe Product launched
Inventec Good Future Bio.	IronMag® CTC processor	Negative selection, CTC isolation, image capturing, AI-assisted diagnostics	Closeout phase
BenQ (Qisda)	BenQ Qflux Dialyzer	Phosphorus-removal membrane	Closeout phase



Internationalization Strategy



Taiwan-India Medical Cooperation Forum in Bangalore, India (2019)

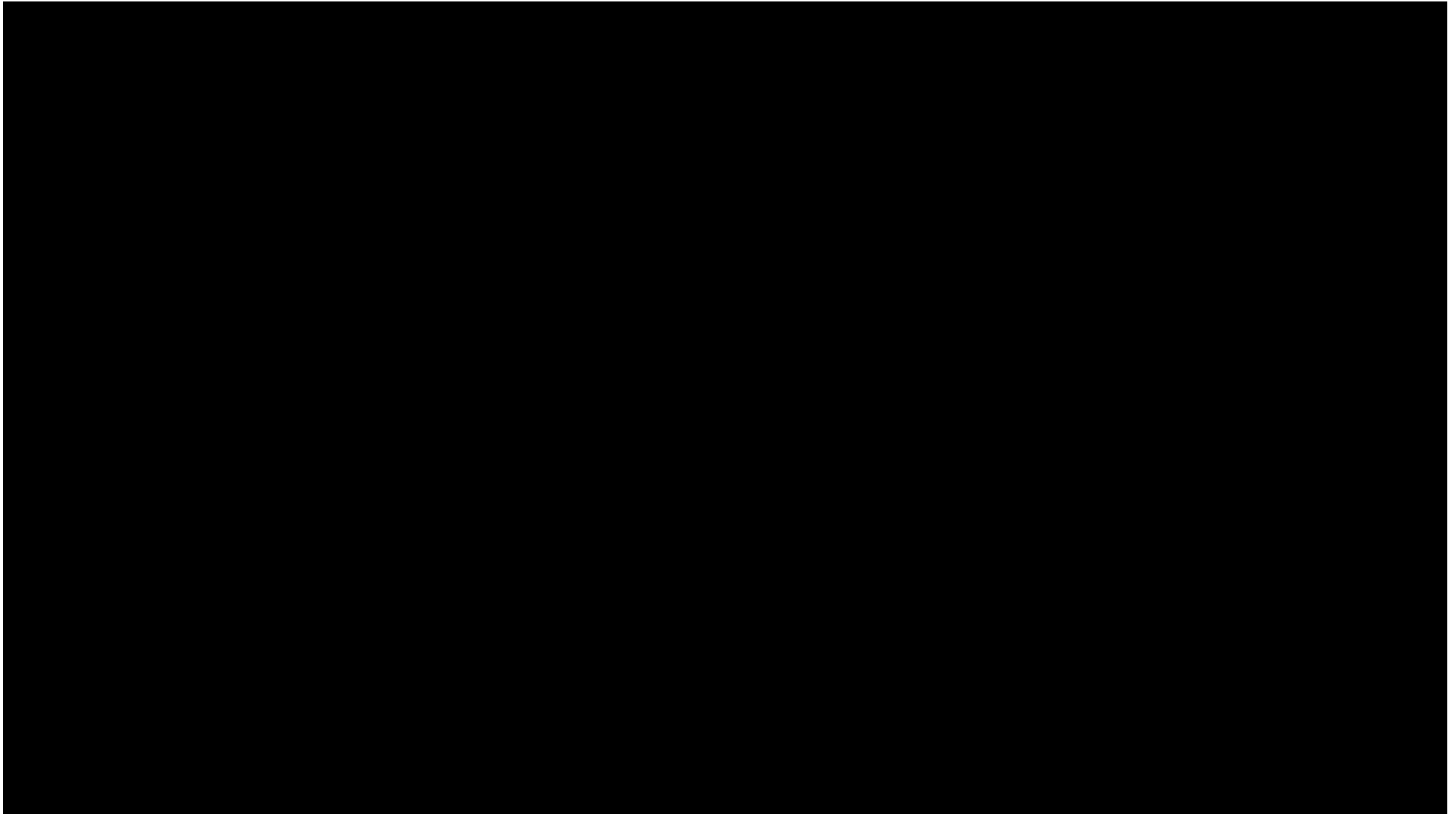


Medical industry collaboration between Thailand and Taiwan (2019)



Visiting the CEO of Malaysia Private Hospital Association (2019)

Taiwan Healthcare *Bring together & Link together!*



Singapore :

The top-ranked countries in *Regulatory quality* are Singapore, Australia, Canada, Finland, Hong Kong, New Zealand, and the United Kingdom. Source data from *Scientific American Worldview* (<http://www.saworldview.com>)



Medtech Connect in Singapore, 2019-05-23



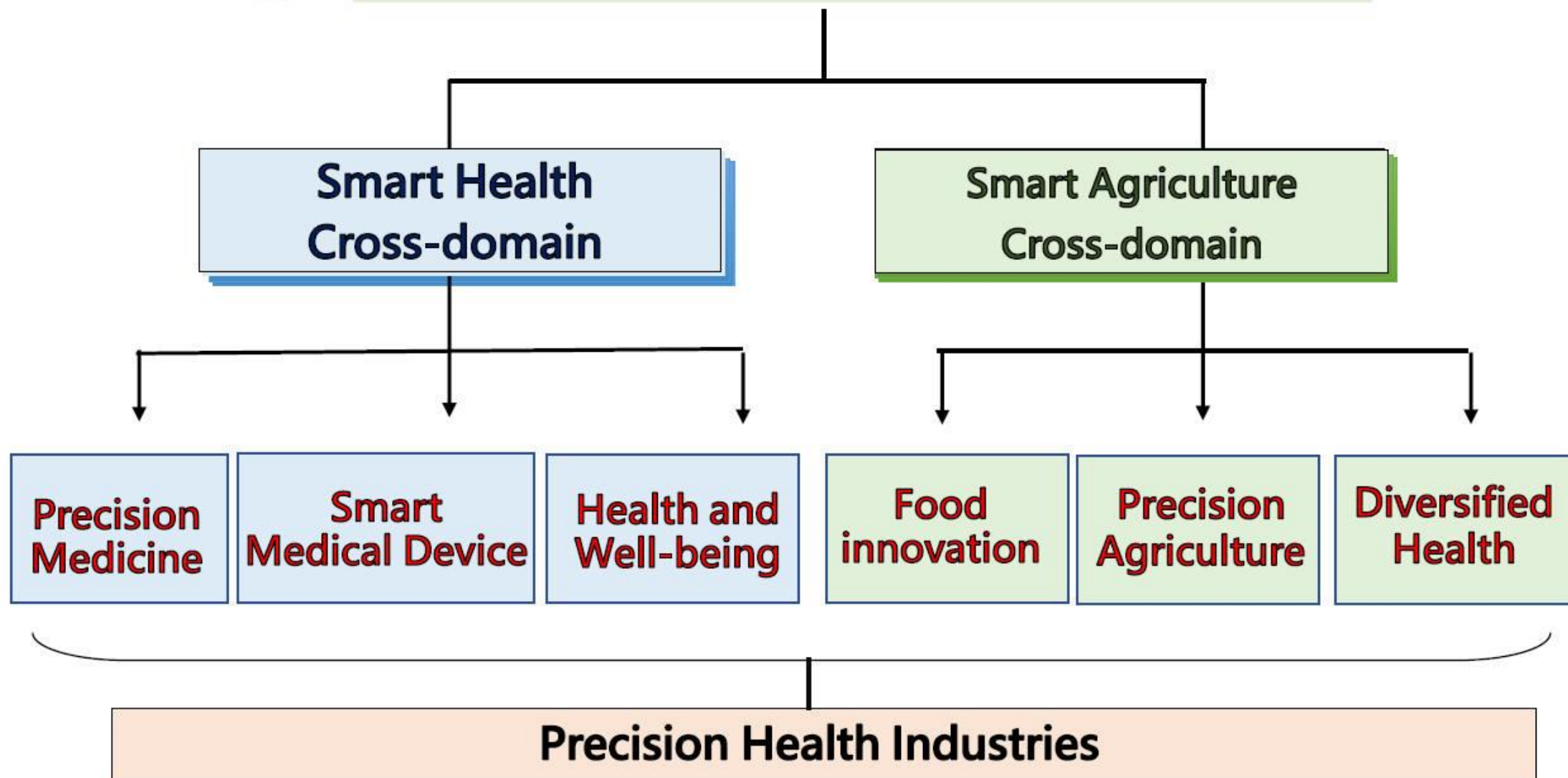
SGInnovate interview: <https://youtu.be/3ktQSyfe7n0>



精準健康產業跨領域人才培育計畫

Training Program for Interdisciplinary Talents of Precision Health

2022-2025



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- Getting Ahead in Healthcare Business booming in the APAC region

Organizers



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