

"Dawning Era in Drug Discovery with Natural Resources in Asia"

Atsushi Hasuoka

Drug Alliance Expert Working Group (DAEWG)

Topics

1. Update on DAEWG activity
2. Reason for selecting "drug discovery with natural compounds" as the theme of the DA session

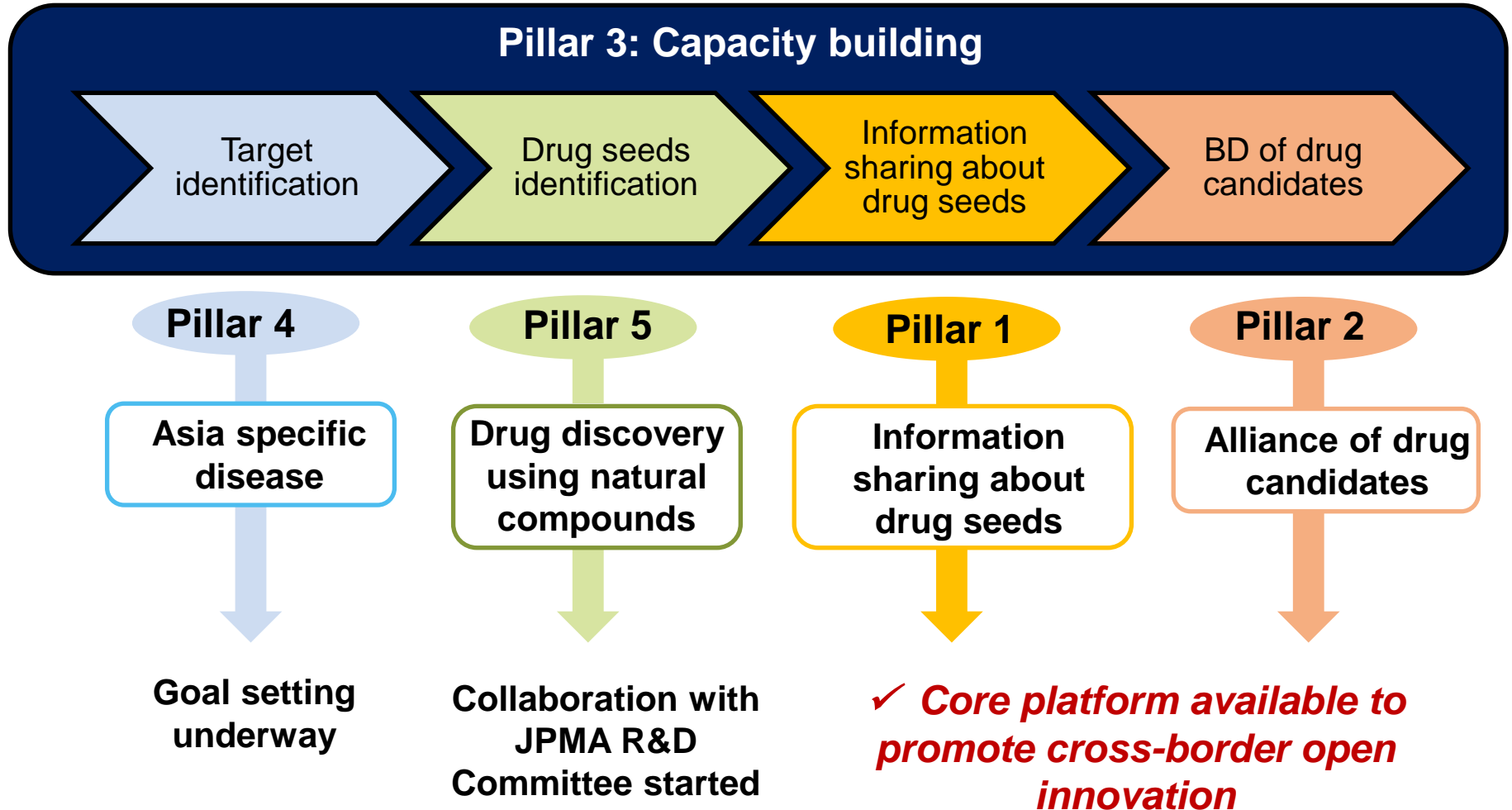
Mission of DAEWG

Promote cross-border open innovation in Asia to develop innovative medicines for patients in Asia

Strategy

Focus on critical drug R&D areas and promote them in collaboration with Asian countries

Each pillar activity corresponds to critical drug R&D process



- DAEWG have been closely collaborating with **Osaka Chamber of Commerce & Industry (OCCI)**
- **OCCI** has been leading in establishing information sharing platform
 - ✓ "**Drug Seeds Alliance Network in Asia (DSANA)**", Asian-wide information sharing platform, was launched (<http://willsonline.jp/dsana>)
 - ✓ Information about selected drug seeds from Japanese academia was shared with Taiwanese companies in 2016



The banner features a globe on the left showing Asia in blue. To its right is the DSANA logo, which includes a circular map of Asia and the text "DSANA Drug Seeds Alliance Network Asia" with a red and white flag icon above the text. Below the logo is the text "To promote open innovation of discovering drug in Asia". At the bottom of the banner are four small images: a group of people holding puzzle pieces, a blister pack of yellow pills, a blister pack of red and yellow capsules, and a blister pack of white capsules.

Pillar 2

~Alliance of drug candidate~

DAEWG arranges "APAC Business Development Partnering Conference" in Bio Japan every year

☑ Overview of the event in 2016

[Schedule] 1.00 pm - 4.00 pm Wednesday, October 12, 2016

[Venue] : Harbor Lounge-B, Annex Hall, Pacifico Yokohama



**16 Asian bio-ventures
and
9 Japanese pharma
attended**

Progress of "Pillar 1 and 2" will promote cross-border open innovation in Asia !

Reasons for focusing on cross-border open innovation using natural compounds

-1-

Potential of natural compound as an useful starting point in drug discovery

-2-

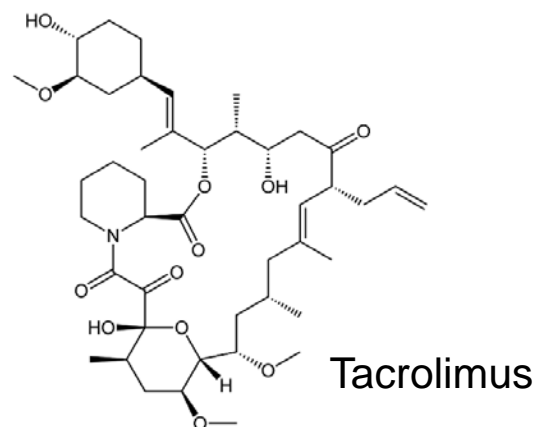
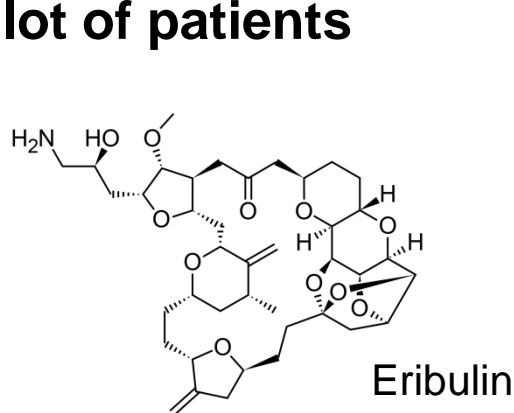
Advantages in doing drug discovery using natural compounds

-3-

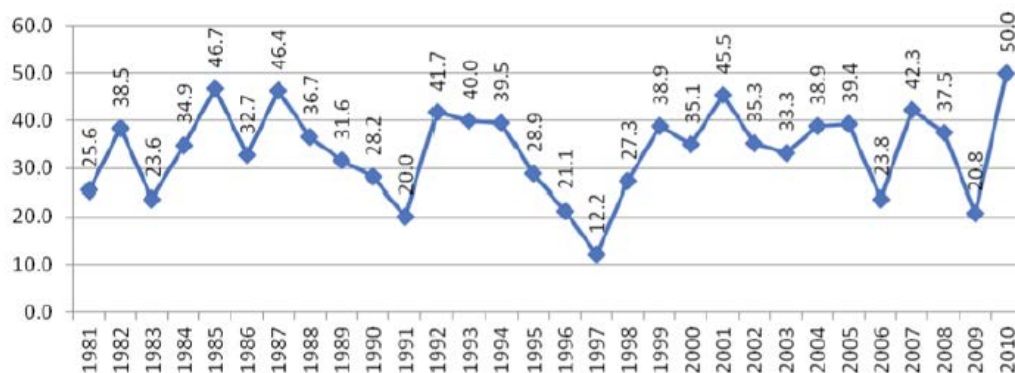
Capacity building of researchers in Asian countries

Potential of natural compound as an effective starting point in drug discovery

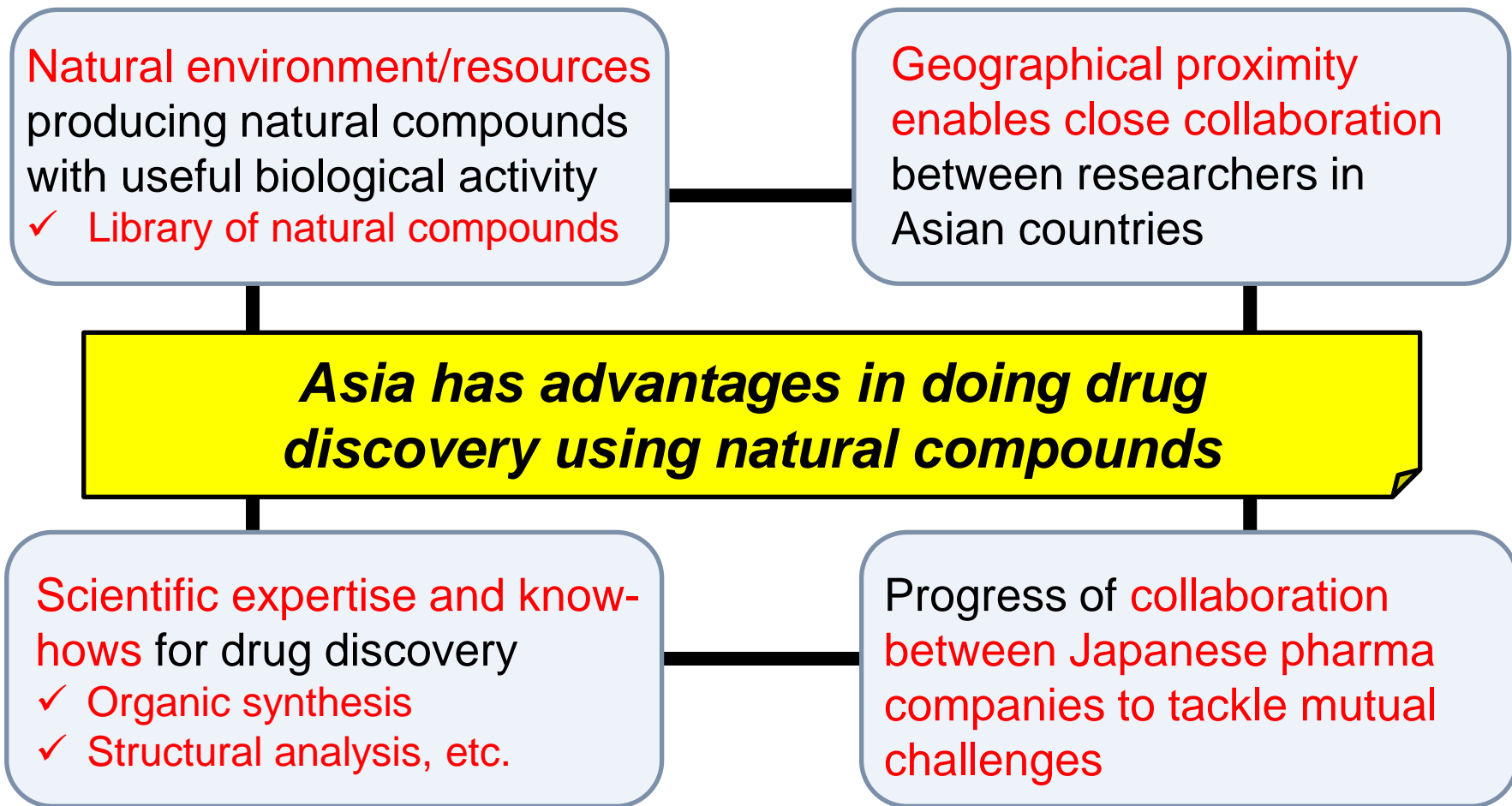
- Useful medicines were developed from natural compounds and saved a lot of patients



- Natural compound is an important starting point for drug discovery
- ✓ About 30% of new drugs approved by FDA in 1981-2010 originate from natural compounds , Newman, et.al., J Nat Prod. 2012 , 75(3): 311–335.

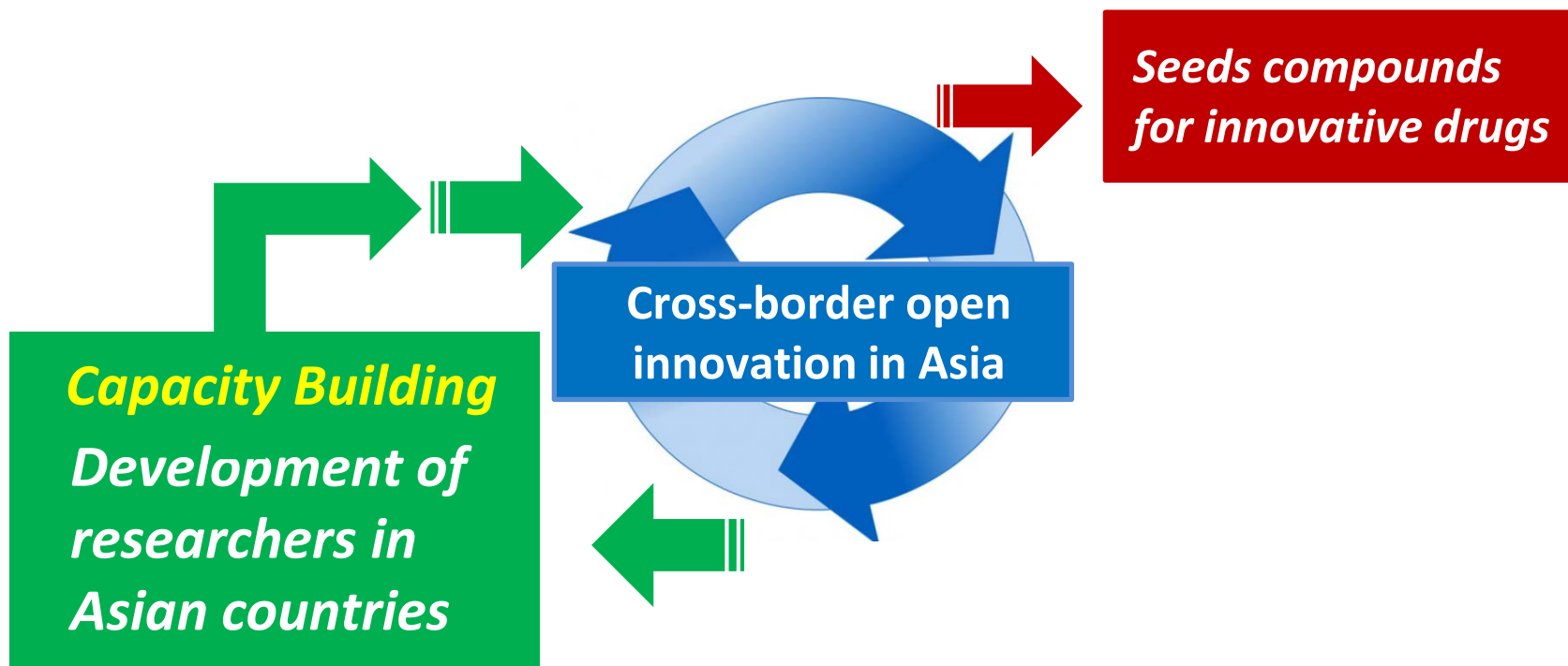


Requirements for an effective collaboration using natural compounds



Expected outcomes from cross-border open innovation using natural compounds

- Collaboration using natural compounds requires participation of researchers from Asian countries
- Researchers could learn by each other and improve their expertise by participating in the collaboration
- Capacity building is critical to ensure sustainability of cross-border open innovation in Asia



- **Advance Pillar 5 in collaboration with JPMA R&D Committee**
 - Leader: Dr. Nares, Thailand Center of Excellence of Life Science (TCELS)
 - Sub leader: Dr. Kawakami, (Eisai)
 - Representative from JPMA R&D Committee: Dr. Tsukahara, (Eisai)
- **Create action plans to promote collaboration using natural compounds**
 - policy for collaboration
 - sustainable research "ecosystem" including capacity building
 - a pilot collaboration project using natural compounds, etc.

Program of this year's DA session

13:15	~	13:20	Introduction to the DA Session	Hasuoka	JPMA
			Keynote Lecture		Chair : Chi & Hasuoka
13:20	~	13:45	Continued Efforts to Discover New Drugs using Natural Resources (tentative)	Shinya	AIST
			Presentations		
13:45	~	14:00	1. Drug discovery using natural compounds in Thailand	Wanchai	Chula. Univ.
14:00	~	14:15	2. Drug discovery using natural compounds in Taiwan	Su	SynCore
14:15	~	14:30	3. Application of Natural Resources to Drug Discovery in Eisai	Tagami	Eisai
14:30	~	14:45	4. Activities of Pillar 5 (Drug Discovery by Natural Resources) Task Force	Nares	TCELS
			Panel discussion		
14:45	~	15:10	<ul style="list-style-type: none"> Implementation of drug discovery using natural resources in Asia Issues & solution for drug discovery by natural resources in Asia 	all member & floor	
15:10	~	15:15	Session closing	Chi	DCB

Thank You !