Discussion Session-2 of the ‘Expert Group Meeting on Strengthening Regional Cooperation in Healthcare Biotechnology and Biomedical Sector’

‘Opportunities and modalities for mechanisms to establish R&D facilities.’

Case of NSTDA, Thailand

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NSTDA AT A GLANCE

National Science and Technology Development Agency (NSTDA)
Ministry of Higher Education, Science, Research and Innovation

RDDE
Research, Development Design and Engineering

TT
Technology Transfer

Infra
Infrastructure

HRD
Human Resource Development

IM
Internal Management
During COVID-19 situation, more than 25 innovations have been developed.
Monitoring application & Management Software
Protective Equipment

PETE: Patient Isolation and Transportation Chamber

Specifications:
- Negative pressure generation module
- Patient isolation chamber
- Controller (reusable)

Operating Conditions:
- 600/hr (50x greater than ACH)
- a neg. pres. room, 12/hr
- 25 - 80 Pa

Helmet:
- 300 g
- 370 g

Duration:
- 3.5 hr (with alarm)
COVID-19 Diagnostic kits

COVID XO-AMP colorimetric detection kit

Nano COVID-19 Antigen test

Antibody ELISA test kit
• Synthesis of favipiravir to against the SARS-CoV-2
• Collaboration with Government Pharmaceutical Organization (GPO) and PTT Innovation Institute
Factors for successful COVID-19 vaccine development

• Developed Technology Platforms to support COVID-19 vaccine research
• Partnerships with Win-Win sharing expertise & facilities
• Look for clinical testing support & technical support for FDA registration
API and Pinpoint in SEA

- For sustainability, need to increase capability and new technologies for API development in addition to the dose manufacturers
- Harmonized registration for API and finished products

>90% import
From outside SEA

Active Pharmaceutical Ingredient (API) $$$ + Inert Ingredients $
= Medicine

Cost of API = 60-70% of cost of goods sold