Asia Digital Transformation (ADX) projects

# CarbGeM Inc.

#### Targeted economic/social issues



FTRO



https://carbgem.com/

- Address: Shinagawa-ku, Tokyo
- Employees: 7
- Established in 2021
- Business:

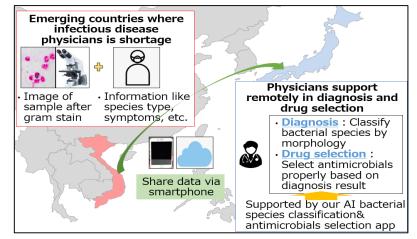
Telecommunications

## Outline of the demonstration project

 Development of an AI-assisted online bacteria identification support platform aimed at promoting DX in the infectious disease area in Vietnam

### Cooperation with local companies/governments

 Local partner: Bach Mai Hospital
Details of cooperation and collaboration : Clinical advice, evaluation of usefulness, etc.



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- Bacteric infections frequently occur in emerging countries, and one of the reasons is antimicrobial resistance (AMR), which is resistance to antimicrobial drugs.
- One of the reasons of the above is the frequent inappropriate use of antimicrobial drugs from improper diagnosis due to the lack and uneven distribution of medical specialists.
- AMR is particularly serious in Vietnam, where the use of antimicrobial agents is high, and 42% of the population carries drug-resistant bacteria, making it a social issue.

#### Contents of demonstration

- We have built a remote platform to assist doctors in diagnosis and treatment by incorporating data such as Gram stain images, specimens, and symptoms taken with local general-purpose optical microscopes.
- In collaboration with medical institutions in Japan and Vietnam, the system will enable quick and highly accurate identification of causative bacteria in infectious disease even in facilities where there are no specialists for infectious diseases or in the absence of specialists such as in nighttime emergency.

# Expected outcome of beneficiary effects

- With Vietnam as the starting point, it is possible to expand to emerging countries that are facing similar issues.
- Because infectious diseases include many different of disease areas, we expect to expand new businesses, such as the development of ancillary services.
- This will contribute not only to the market of partners, but also to the promotion of Japanese industry and the export of medical technology.