

# NEC Innovation Day

05

**Healthcare and Life Science**

**Growth Strategy**

**in Healthcare and Life Science Area**

**NEC Innovation Day**

# **Growth Strategy in Healthcare and Life Science area**

December 17, 2021

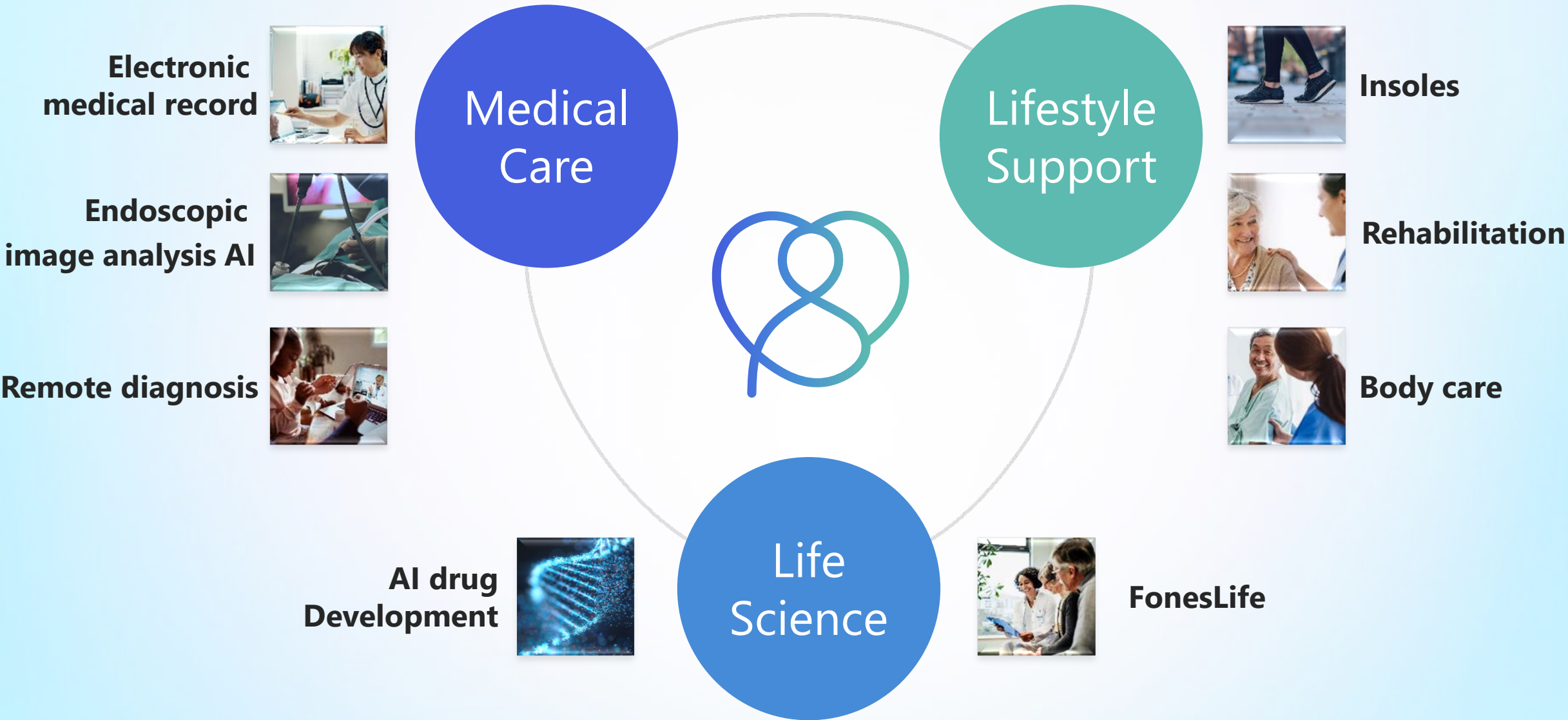
NEC Corporate Executive

Masamitsu Kitase

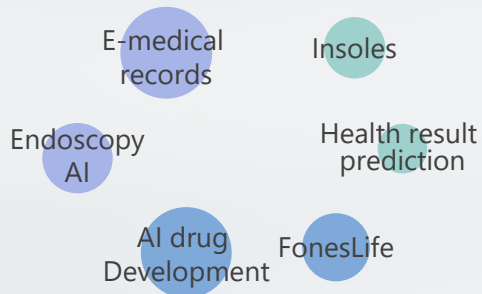
# Live as you



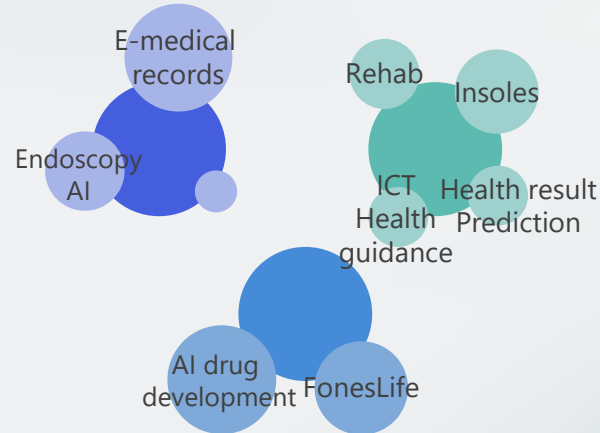
# NEC's Focus Areas for 2030



**Create strong individual businesses**

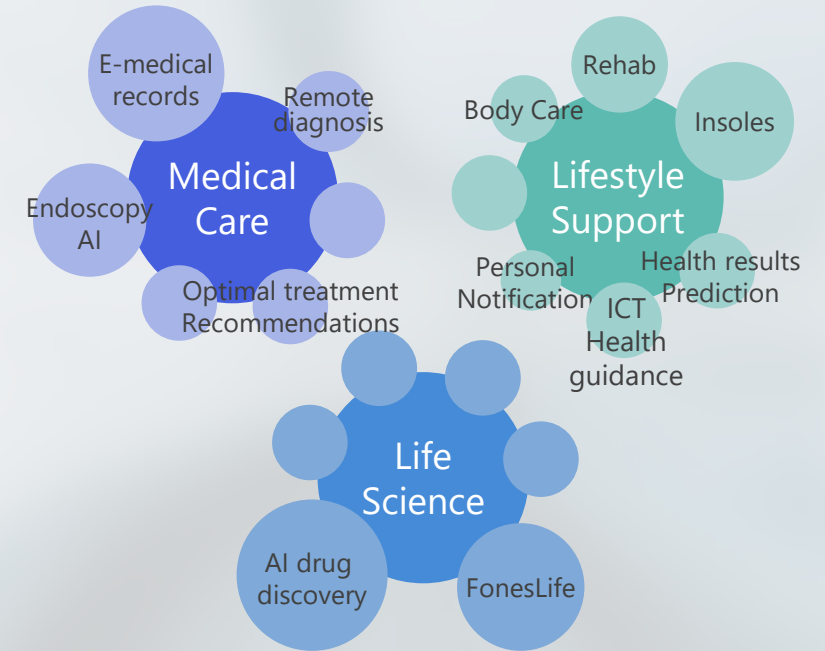


**Expand into peripheral businesses with strong businesses as the core**



**Business values**

**500 billion yen\*1**



Use secure data platform for a secure data management infrastructure

**2021**

**2030**

\*1 Calculated using both the comparable company method and the DCF method based on a target for 2030 (sales revenue of 100 billion yen).

# Integrating R&D and business development to accelerate social implementation

## Endoscopic image analysis AI

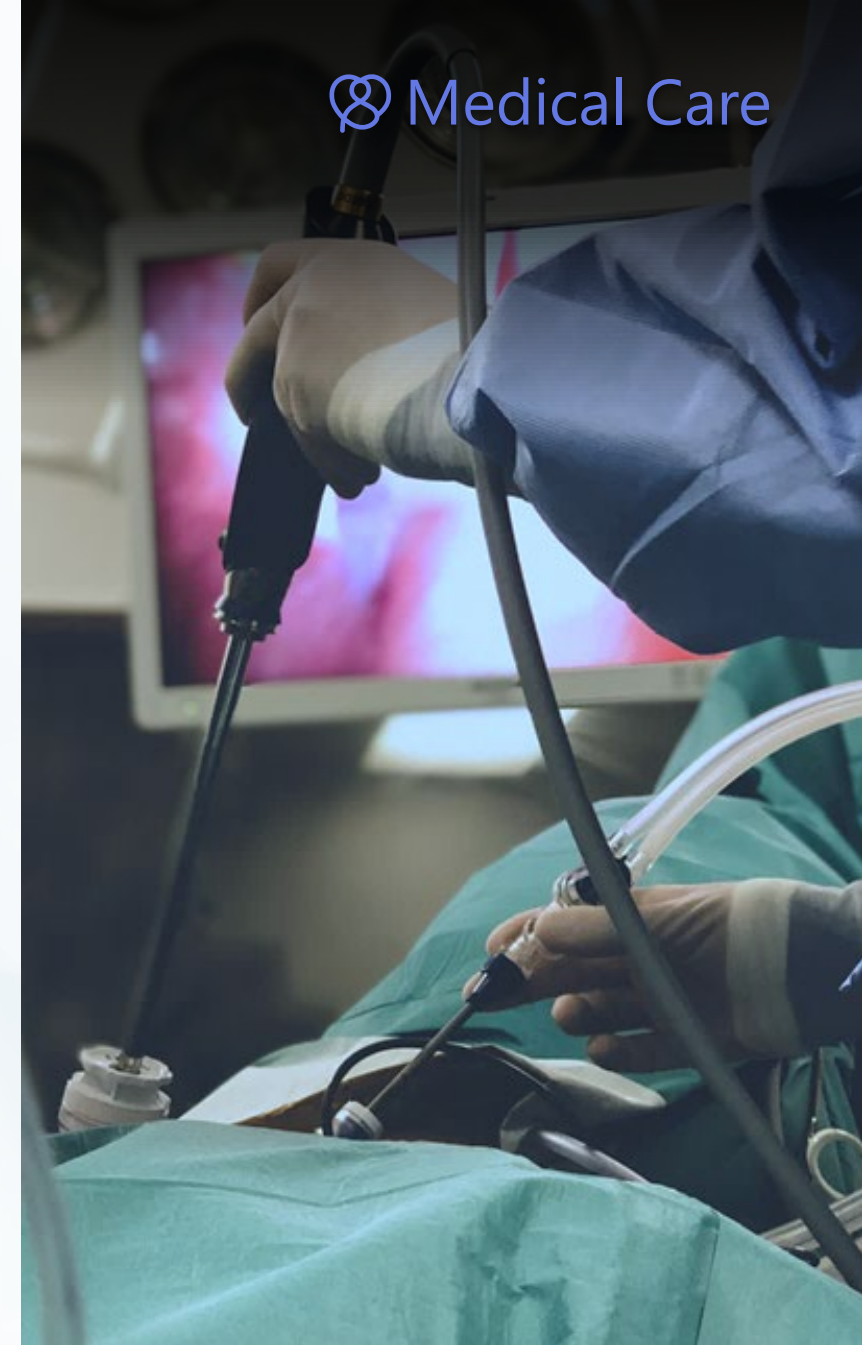
Applying the world's No.1 facial recognition technology<sup>\*1</sup> to detect all cancer lesions

**2021** Product launch for colorectal cancer in Japan and Europe  
World's first CE mark-compliant software<sup>\*2</sup> (Barrett's esophagus)

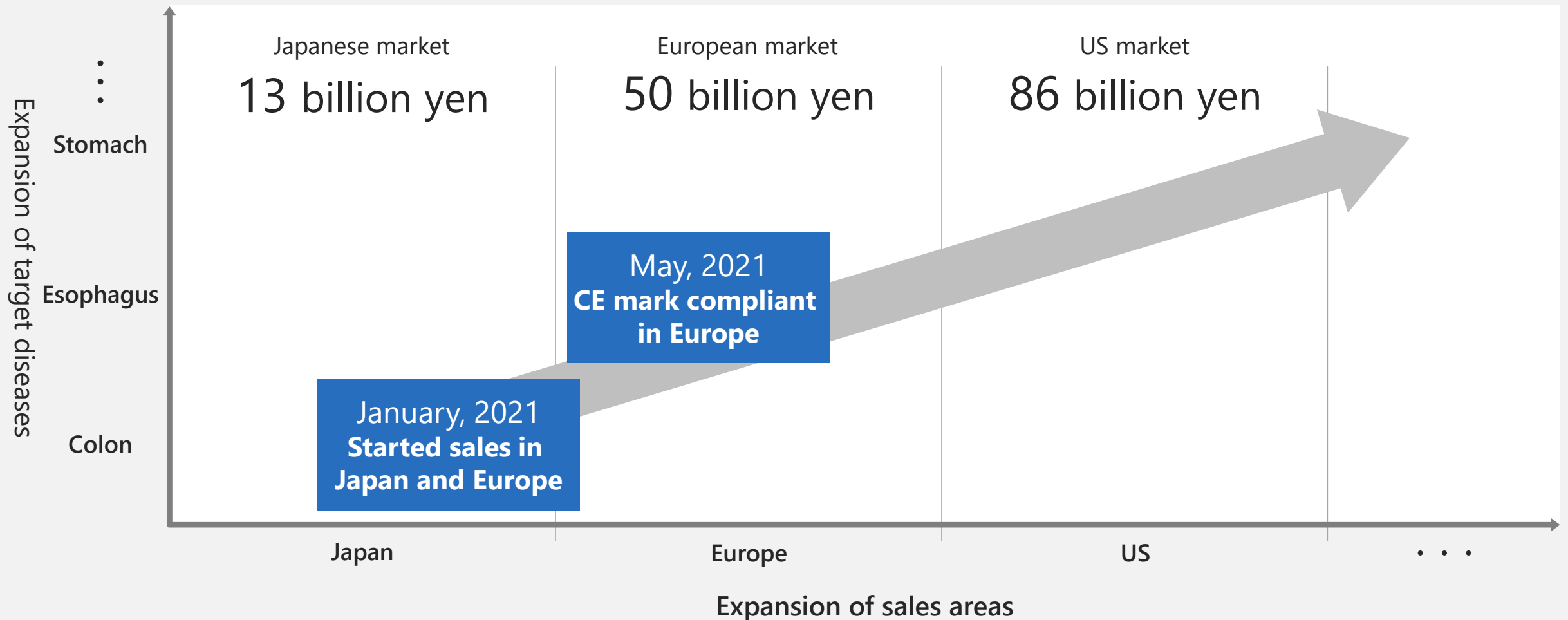
**Future** Improve AI accuracy, expand target cancers and sales regions

\*1 Since 2009, NEC has repeatedly been ranked first in the face recognition accuracy evaluation by the National Institute of Standards and Technology (NIST).

\*2 NEC research (as of May 28, 2021)



## Aiming for business growth by expanding target diseases and sales areas





# Creating new value through collaboration with external partners

## Walking sensing insole

Health management advice based on gait data

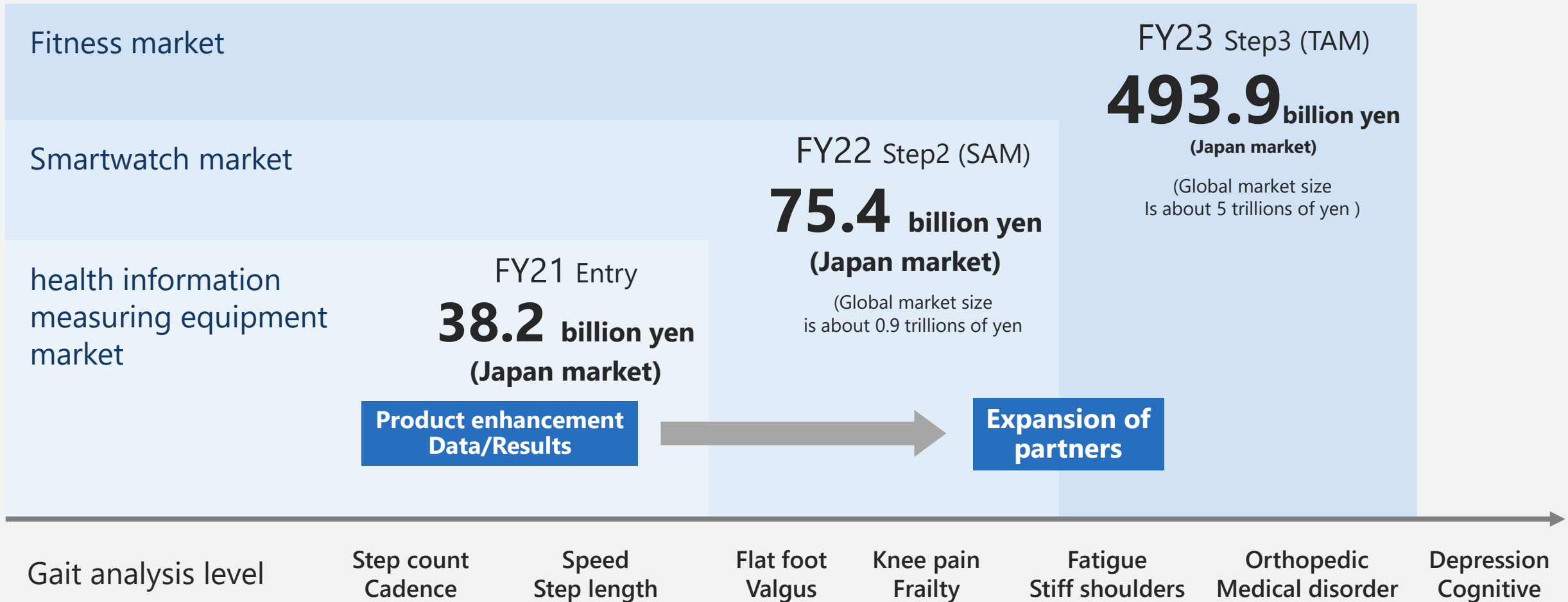
- 2019** 445 early adapters enrolled in with FiNC and Makuake<sup>\*1</sup>
- 2021** Commenced joint research into gait analysis with Teikyo University<sup>\*2</sup> and others  
Market entry in October
- Future** Accelerate B2C2B business in collaboration with multiple partners

\*1 Website for supporting new things and experiences through purchases operated by Makuake, Inc.

\*2 Teikyo University Hospital, Mizonokuchi



## Cultivating fitness market with daily prevention/intervention services through gait diagnosis AI



# Strengthening business through strategic cooperation and M&A

## AI Drug Development Business

AI-based personalized cancer vaccines for improved cancer treatments

- 2018** Joint clinical trial with Transgene for personalized cancer vaccines announced
- 2020** Cancer and infectious disease vaccine development accelerated through acquisition of Oncolmmunity<sup>\*1</sup>
- Future** Accelerate further alliances in the area of drug development in Europe

\*1 Current "NEC Oncolmmunity AS"



## Toward a paradigm shift in drug development processes optimized for individual patient

### Technological progress

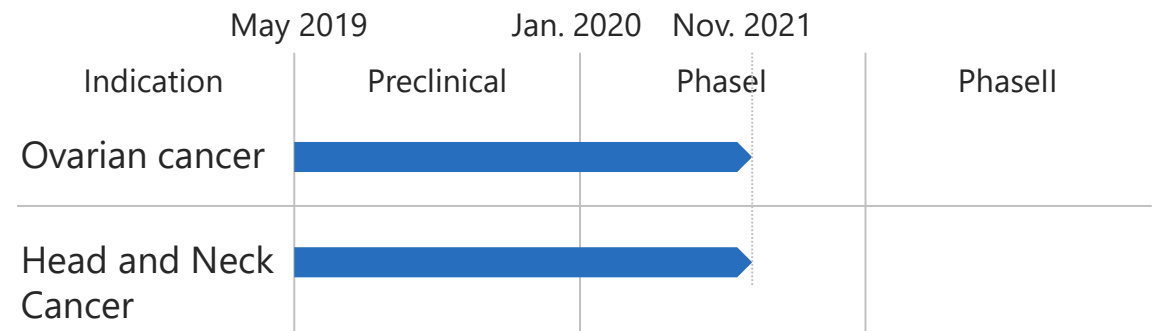
AI-based personalized vaccine design

Graph AI

Multi-race vaccine design technology

\*) Calculated based on common methods for drug development ;  
Market size of pipeline / Development phase / Valuation of competitors / The number of drug development pipelines

Business values **300** Billion yen\* in 2025



November 24, 2021 Press Transgene & NEC  
**Announce positive preliminary data from Phase I studies**

Their personalized neoantigen vaccine induced robust anti-tumor cellular immune responses against multiple neoantigen targets in all evaluable patients (4/4)



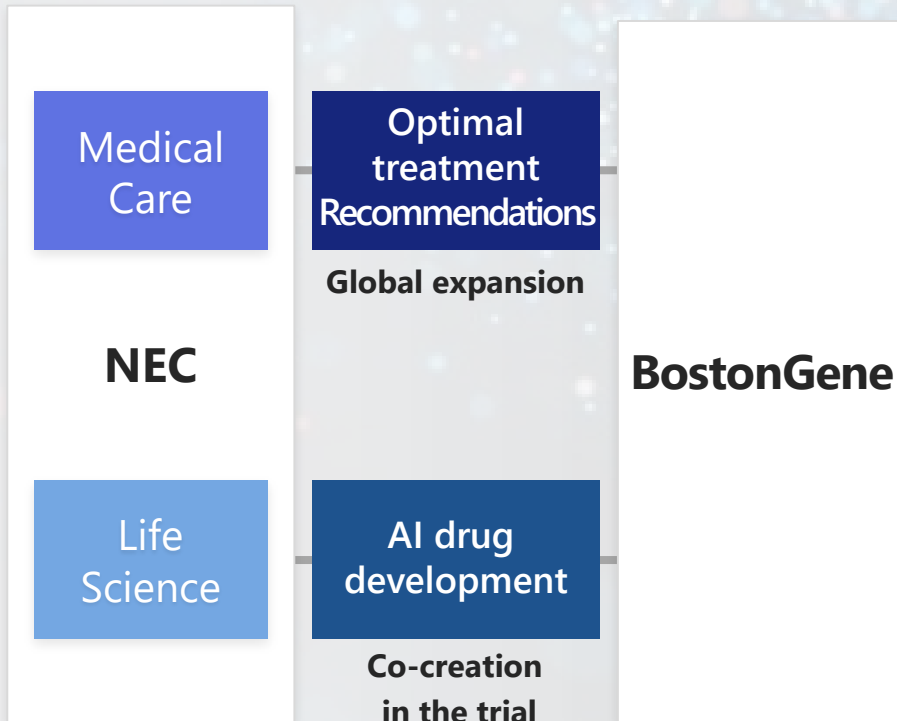
# Strategic Global Partnership with BostonGene

April 2019  
**\$50M invested**

July 2020  
**Collaborate to analyze cancer patients in clinical trials**

Oct 2020  
**Collaboration on genetic analysis of clinical patients with ovarian and head and neck cancers in clinical trials**

Dec 2021  
**Expansion into strategic and global partnership**



## Jointly Cultivating Global market

In Japan, the companies aim to utilize NEC's healthcare and life science network in order to provide BostonGene platform to hospitals throughout the country.

## BostonGene platforms

The platform performs AI-based molecular and immune profiling and support physicians in actualizing personalized therapy for cancer patients.

Conducted joint research in 7 hospitals and organizations in the U.S.

Massachusetts General Hospital (October 2021, January 2020)  
University of Texas MD Anderson Cancer Center (September 2021)

# Live as you

