Gene info database to be created for treatment

How genetic information search database would work

- Cancer
- Intractable disease
- Infectious disease
- Dementia

Genetic information (mutations, characteristics, etc.), disease information of 100,000 anonymous patients

Database

Search   Display

- Genetic mutations related to diseases
- Effective medicines
- Effective treatments

Doctor
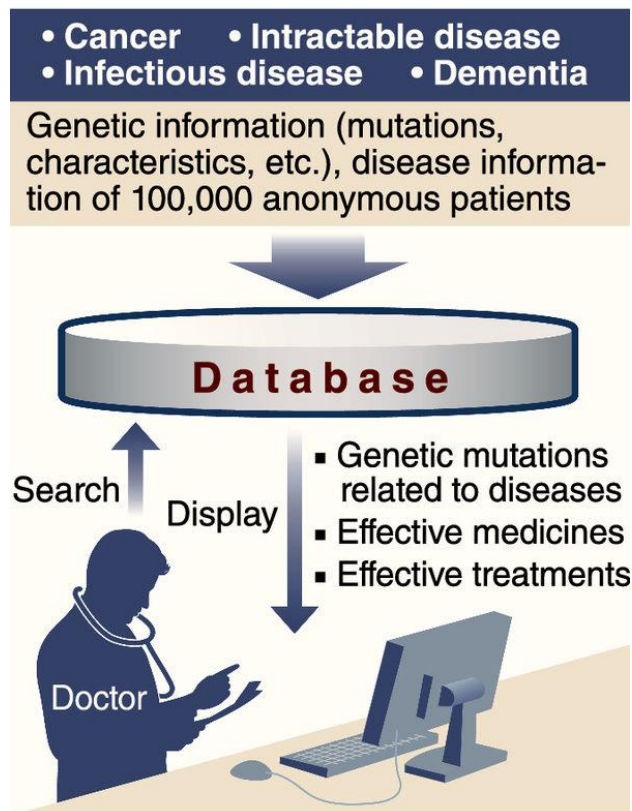
The Yomiuri Shimbun

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The state-funded Japan Agency for Medical Research and Development (AMED) is creating a database that can use patients' genetic information to search for relevant diseases and treatment methods, according to sources.

AMED aims to establish a single database containing the results of research on the genetic information of Japanese people, and put that database on the internet.

Such data are expected to become the foundation of genomic medicine in the future, providing the best possible treatment based on genetic information.

The agency plans to create an experimental version of the database next fiscal year and aims to introduce it from fiscal 2018. The budget for this project is expected to total about ¥8 billion over five years from this fiscal year.

It is currently possible in some cases to use genetic information to predict the effectiveness of certain medicines and identify diseases. The United States already has collective data covering genetic information on about 170,000 cases, and Japanese doctors and researchers use them for reference.

However, as genetic information may differ among races, it has been considered desirable to create a database concerning Japanese people, the sources said.

Universities and research institutions have released a number of articles about the relationship between the genetic information of Japanese people and diseases, based on data from several hundreds of thousands of people. But research results on genetic information remain unorganized, and they are not available for diagnosis and treatment.

Under the AMED database project, experts in cancers and intractable diseases will evaluate the research results. Based on the evaluations, the genetic and other information of 100,000 anonymous patients will be entered into the database.

When searched using the name of the genetic mutation, which differs from an ordinary sequence, the names of possible diseases and treatment methods will be made available.

The agency is also considering using artificial intelligence so that helpful information will be prioritized when it is displayed.

http://the-japan-news.com/news/article/0003223033