

**URGENT REQUEST TO ACCELERATE THE DEVELOPMENT OF DRUGS AND
VACCINES AGAINST THE CORONAVIRUS DISEASE (COVID-19)**

**April 20, 2020
Shizuoka Prefecture**

As the COVID-19 pandemic rages unabated, there is a pressing need for the development of effective drug treatments and vaccines to prevent the further spread of the coronavirus disease.

On March 28, Prime Minister Abe addressed the need to "generate collective wisdom to rapidly develop effective drug treatments and vaccines" and stated that "the Government of Japan strongly supports this undertaking to explore every possibility."

What the public really wants to know is the prospect of when this will all end. Detailed updates by the government on the status of drug and vaccine development to counter COVID-19 will help alleviate this sense of uncertainty.

Developing new drugs and vaccines come at an enormous cost. Combining the anti-influenza drug Avigan (favipiravir), developed by Dr. Shiraki Kimiyasu and successfully manufactured by Fujifilm Toyama Chemical Co., Ltd., with other treatments has been recommended for its possible efficacy in treating coronavirus patients. Pharmaceuticals and scientists around the world are racing to develop a vaccine and treatment for COVID-19, including Osaka University and AnGes Inc.'s DNA vaccine. The effectiveness of other existing treatments are being explored, such as the use of the rheumatoid arthritis drug Actemra (tocilizumab) before the coronavirus-induced pneumonia patient is critically ill; Alvesco (ciclesonide), an inhalation aerosol used for asthma treatment; intravenous immunoglobulin collected from recovered coronavirus patients; and PD-1 immune therapy when conditions turn acute. We must readily provide the necessary funds to test the efficacy of these alternative treatments to COVID-19.

The Japanese government adopted an emergency economic stimulus package worth a record 108 trillion yen. In 2018, 1.4 trillion yen was spent on the research and development of medical and pharmaceutical products. Thus, Japan stands in a good position to strongly support the fight against COVID-19 if we allocate one percent of the 108 trillion yen stimulus package, in other words, one trillion yen to develop life-saving medicines and a coronavirus vaccine.

To fight this invisible enemy, we must significantly increase our PCR testing capacity to identify those infected, rapidly deploy treatments once they are found to be effective, and increase health care fees for coronavirus-related examinations and treatments.

Due to the COVID-19 pandemic, the Tokyo 2020 Olympic and Paralympic Games have been postponed to July 23, 2021. The Olympic flame, which flares during the Games as if to witness the celebration of humanity's shared peace, has remained in Japan. It is our mission to keep this flame lit and shining as a beacon of hope for us all. To safely welcome athletes and visitors from around the world, we must have the drugs to treat us and a viable vaccine to protect us from the coronavirus when Japan hosts the Games.

COVID-19 is a national security issue. Although the national discourse on security revolves around the interpretation of self-defense and Article 9 of the Constitution, disaster preparedness that protects citizens in the face of natural disasters is also another form of national security. We must now include infectious disease control and prevention in our national security agenda. The government and people of Japan must have a shared understanding that national security today involves self-defense, disaster preparedness, and infectious disease control and prevention.

The Self-Defense Forces are our last stronghold to defend our nation and provide disaster relief. For disease control, our last stronghold is the medical care system, which includes medical institutions (hospitals and public health centers), healthcare professionals (doctors, pharmacists, nurses, and public health nurses), and pharmaceuticals and medical equipments. Currently, our medical institutions are on the verge of collapse. This is a grave situation and is comparable to the "collapse" of the Self-Defense Forces at a moment our nation is in dire need of defense and/or disaster relief. To halt this health care collapse and turn this crisis into opportunity, now is the time to strengthen our medical care system. This equates to strengthening our national security.

To save lives from this unprecedented crisis and for Japan to "win the gold medal" by developing safe and effective drugs and vaccines before the Tokyo 2020 Olympic and Paralympic Games, Shizuoka Prefecture strongly requests the implementation of the following measures:

1. Establish a one-trillion-yen nationally-funded development fund (hereinafter, the fund) that specializes in emerging infectious diseases. This fund will enable early development of drugs and vaccines against emerging infectious diseases, including

COVID-19.

The following is the suggested operational scheme for the new fund:

- a. The fund will operate under the premise that it will be exhausted.
 - b. Universities, research institutes, and pharmaceutical companies are invited to apply for the fund. Ten or so entities will be selected to each receive up to 10 billion yen. (According to the Nobel laureate Dr. Honjo Tasuku as part of his emergency proposals on April 16, 2020, he urged the Japanese government to inject 10 billion yen for emergency research and called for all researchers and scientists to unite to immediately begin uncovering how the coronavirus disease progress in our bodies and develop drugs to treat it.)
 - c. The grantee of the fund will conduct and report outcomes of their basic research and non-clinical tests.
 - d. After a rigorous review of the findings, the top three development proposals will receive additional funding of up to 100 billion yen to conduct clinical trials and develop and produce the drugs and/or vaccines.
 - e. Upon consideration of the cost incurred to develop the new drugs and vaccines, the Japanese government will buy them and make them available to hospitals and developing countries. Advanced countries will be able to purchase the drugs and vaccines from pharmaceutical companies.
 - f. The remainder of the fund will be used in the future when the need to develop drugs and vaccines against a newly emerged infectious disease arises.
2. Build the capacity and system to conduct over 20,000 PCR tests per day.
 3. Provide acute-care coronavirus patients with the antifu drug Avigan, or tocilizumab, which works to stop the inflammatory response from severe pneumonia, or the option to undergo PD-1 immune therapy in the event they wish to do so without having to bear additional treatment costs.
 4. Raise only coronavirus-related health care fees to ensure that our frontline medical professionals are able to actively administer medical services.

Note:

This urgent request is based on comments made by Governor Kawakatsu Heita during

the National Governors' Association video conference concerning the state of emergency held on April 17, 2020.