

LCQ19: Convalescent plasma treatment

Following is a question by Dr the Hon Chiang Lai-wan and a written reply by the Secretary for Food and Health, Professor Sophia Chan, in the Legislative Council today (June 10):

Question:

It has been reported that the treatment method which makes use of the convalescent plasma (convalescent plasma treatment) donated by people recovered from Coronavirus Disease 2019 (COVID-19) has certain curative effect on treating COVID-19 patients. The conditions of two patients of serious cases were substantially improved after they had received such treatment. In this connection, will the Government inform this Council:

(1) whether it knows the current stock of convalescent plasma in public hospitals and the estimated number of patients who may be treated with such stock; whether the Hospital Authority has set a target for the stock of convalescent plasma, so as to tackle the eventuality in which the COVID-19 epidemic rages on again in winter this year;

(2) if it knows the criteria adopted by doctors of public hospitals for deciding whether or not to apply convalescent plasma treatment in treating COVID-19 patients; how such treatment compares with other treatments in terms of efficacy in treating COVID-19 patients; and

(3) given that only eight out of the 1 000-odd people recovered from COVID-19 in Hong Kong have donated their convalescent plasma, whether such proportion meets the Government's expectation; if so, of the reasons for that; if not, the measures in place to boost the number of donors; whether it knows the reasons why people who have recovered from that disease refuse to donate their plasma?

Reply:

President,

The convalescent plasma donated by patients who have recovered from coronavirus disease-2019 (COVID-19) is currently being used by the Hospital Authority (HA) for the clinical purpose of treating other patients. In consultation with HA, my reply to the various parts of the question raised by Dr the Hon Chiang Lai-wan is as follows:

(1) As at May 31, 2020, the Hong Kong Red Cross Blood Transfusion Service (BTS) had collected a total of 12 units of convalescent plasma respectively donated by eight patients who have recovered from COVID-19. On clinical application, four units of convalescent plasma have been applied to three patients in critical condition. Convalescent plasma can be stored for one year. HA and BTS have not set any target for the reserve of convalescent

plasma at the moment, but will continue to recruit donors and collect donations as needed to prepare for the development of the epidemic in future.

(2) In accordance with HA's relevant guidelines on clinical management, the use of convalescent plasma for treatment may be considered for severe cases with acute respiratory distress syndrome upon assessment by doctors of the intensive care unit and doctors of infectious diseases. Preliminary data of a study by the University of Hong Kong showed that the viral load of COVID-19 patients was significantly reduced after receiving convalescent plasma treatment. The results of further clinical studies are still needed before a comparison with other treatment methods can be made.

(3) To ensure that the recovered COVID-19 patients are healthy and that the plasma collected is safe for use, with reference to local and overseas experiences in the collection and application of convalescent plasma as well as the blood donation guidelines laid down by BTS, the following factors will be considered when screening for suitable donors:

- (i) donors must be males aged between 18 and 60 without serious illnesses, and a neutralisation antibody titre of at least 1:160 must be attained at a follow-up consultation;
- (ii) donors must meet the basic criteria for blood donation and, having been briefed by a clinician, consent to a referral to BTS for joining the donation scheme; and
- (iii) donors will donate their plasma, with blood drawn from a vein, through an apheresis procedure with the aid of a blood cell separator.

Some potential donors cannot meet the basic criteria for blood donation due to various reasons. For example, some of them had stayed in relevant foreign regions and deferral of blood donation is required due to the risk of exposure to variant Creutzfeldt-Jakob Disease. HA and BTS will continue to recruit suitable donors.