

## LCQ18: Study on the risk factors associated with breast cancer for local women

Following is a question by the Dr Hon Chiang Lai-wan and a written reply by the Secretary for Food and Health, Professor Sophia Chan, in the Legislative Council today (January 23):

Question:

The Government has commissioned the University of Hong Kong (HKU) to conduct a study on the risk factors associated with breast cancer for local women, so as to help formulate the future strategies for breast cancer screening in Hong Kong. The study is expected to be completed in the latter half of this year. Besides, some studies have pointed out that as compared with conventional 2D mammography, 3D mammography is more accurate and carry a lower dosage of radiation, and therefore is more suitable for carrying out breast cancer screening on Asian women (including Hong Kong women) who have a higher density of mammary glands. In this connection, will the Government inform this Council if it knows:

- (1) the membership list of the HKU team that is in charge of the aforesaid study and the professions to which the team members belong, as well as the scope and the latest progress of the study;
- (2) whether the team will meet with relevant overseas organisations (e.g. organisations in Taiwan and Singapore which advocate breast cancer screening) so as to learn from the experience of other countries or regions in implementing breast cancer screening; if the team will, of the details; if not, the reasons for that; and
- (3) whether the team will, by making reference to medical papers on mammography devices, put forward recommendations on the selection by the Government of mammography devices which will better meet the needs of Hong Kong women; if the team will, of the details; if not, the reasons for that?

Reply:

President,

Regarding the various parts of the question, our reply is as follows:

- (1) The commissioned study on the risk factors associated with breast cancer among local women is funded by the Health and Medical Research Fund administered under the Food and Health Bureau, and is approved by the Research Council after undergoing rigorous peer review and established procedures. This study is conducted by the research team led by Professor

Gabriel Leung from the School of Public Health of the University of Hong Kong. Other research team members include Professor Ava Kwong from the Department of Surgery; Dr Irene Wong and Dr Wendy Lam from the School of Public Health; Professor Khoo Ui-soon from the Department of Pathology; and Professor Roger Ngan from the Department of Clinical Oncology of the University of Hong Kong.

The study aims at developing a breast cancer risk prediction model for Hong Kong, identifying risk factors among the local population through a case-control study, as well as building a comprehensive tissue bank and clinical database. According to the latest progress report, the research team has obtained data from the Shanghai Breast Cancer Study research group, which would be used to develop the risk prediction model for women in Hong Kong. For the case-control study, the research team has established collaboration with 15 public hospitals, seven private hospitals and six private practitioners to collect local breast cancer data and samples. As at September 28, 2018, 3 522 breast cancer cases and 2 653 control cases were recruited respectively. The research team is analysing the difference between the case patients and control subjects including the demographic characteristics, body mass index (BMI) ratio, physical activity, known breast cancer risk factors such as age at menarche, age at first live birth or nulliparous, family history of breast cancer and prior benign breast disease diagnosis. The study team will translate predicted risk values into recommendations on whether women in Hong Kong should undergo regular breast cancer screening.

Upon completion of the study, the research should develop a personalised risk stratification tool for breast cancer in local women as well as determine and quantify potential breast cancer risk factors. The study is expected to be completed in the second half of 2019.

(2) and (3) The study aims at developing a local breast cancer risk prediction model to identify the high-risk groups among the local population. The objectives of the commissioned study do not include discussion with overseas advocacy groups on experience in implementing the breast cancer screening programmes and selection of the most appropriate local breast cancer screening test.