

Editorial

Dissemination reports are concise informative reports of health-related research supported by the Health and Medical Research Fund (and its predecessor funds) administered by the Food and Health Bureau. In this edition, we present 13 dissemination reports of projects related to clinical genetics, neurology, and reference values, biomarkers and diagnostics. In particular, three projects are highlighted due to their potentially significant findings, impact on healthcare delivery and practice, and/or contribution to health policy formulation in Hong Kong.

In Hong Kong, breast cancer accounts for about one-third of all newly diagnosed cancers and about 11% of all cancer deaths. Hereditary breast and ovarian cancer syndrome is a genetic disease in which alterations in *BRCA1* and *BRCA2* genes are common. About 10% of breast cancer cases in Hong Kong are inherited. Kwong et al¹ screened over 630 blood samples obtained from local Chinese breast, ovarian, and prostate cancer patients with a panel targeting 25 *BRCA* mutations. The prevalence of *BRCA* mutations among various local cancers was determined. Development of a screening panel for recurrent mutations offers a simple, rapid, and affordable routine molecular diagnostic method for prevention or management of these high-risk patients and their families with *BRCA* mutations.

Post-stroke apathy is a debilitating condition with a prevalence of 20% to 25% in stroke patients. Post-stroke apathy is often undiagnosed and thus untreated, even though it may impair stroke recovery. Tang et al² aimed to evaluate the clinical and magnetic resonance imaging correlates of post-stroke apathy in a cohort of stroke survivors, and to describe the 12-month course of post-stroke apathy in over 260 local Chinese stroke patients. They found that the prevalence of post-stroke

apathy at 3 months was 24.7%, with older age, male sex, history of hyperlipidaemia, depressive symptoms, a lower level of cognitive function, and functional disability identified as risk factors. A pontine acute infarct on magnetic resonance images was an independent predictor of post-stroke apathy at 3 months. The authors stressed the psychological burden of post-stroke apathy and thus early identification and treatment are essential.

Colorectal cancer is the most common cancer in Hong Kong and surgery is the only curative treatment. Adjuvant chemotherapy is indicated in high-risk stage II and stage III disease to reduce the risk of recurrence and metastasis after surgery. For stage IV disease, chemotherapy is the mainstay of treatment for palliation. Capecitabine is often used as an oral chemotherapeutic agent. During capecitabine treatment, the rate of toxicity differs between western and Asian patients. A higher serum folate level has been associated with a higher rate of toxicity in western populations. Chan et al³ conducted a prospective study to examine the association of serum folate level with toxicity during capecitabine treatment in over 140 local Chinese patients. They found that a higher serum folate level is associated with a higher rate of moderate-to-severe toxicity of capecitabine in patients with colorectal cancer.

We hope you will enjoy this selection of research dissemination reports. Electronic copies of these dissemination reports and the corresponding full reports can be downloaded individually from the Research Fund Secretariat website (<https://rfs2.fhb.gov.hk/>). Researchers interested in the funds administered by the Food and Health Bureau also may visit the website for detailed information about application procedures.

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References

1. Kwong A, Shin VY, Ma ES, et al. Screening for founder and recurrent *BRCA* mutations in Hong Kong and US Chinese populations. *Hong Kong Med J* 2018;24(Suppl 3):S4-6.
2. Tang WK, Wong LK, Mok VC, Chu WC, Wang DF. Apathy after stroke: potential risk factors and magnetic resonance imaging markers. *Hong Kong Med J* 2018;24(Suppl 3):S18-20.
3. Chan SL, Ma BB, Chan AK. Association of serum folate level with toxicity of capecitabine in patients with colorectal cancers: a prospective cohort study. *Hong Kong Med J* 2018;24(Suppl 3):S29-31.