

To: All clinical doctors who would like to prescribe carbamazepine

**From: Dr Margaret HL Ng and Prof HK Ng
University Pathology Service
The Chinese University of Hong Kong**

Re: Genetic testing prior to prescription of carbamazepine

Dear Doctors,

About 80% of the Steven Johnson Syndrome/Toxic Epidermal Necrolysis (SJS/TEN), potentially fatal conditions with no effective treatment apart from symptomatic therapies, are related to drugs. Of which, carbamazepine is top on the list, which also includes phenytoin and phenobarbital. The reaction is also dose independent.

Overwhelming evidence from multiple studies including our recent paper (Man et al, Epilepsia, 2007) have confirmed the strong association of HLA-B*1502 with carbamazepine induced SJS/TEN. Since B*1502 is highly prevalent in some Asian populations including China, **Hong Kong (highest with ~ 20% carrier rate)** and Taiwan, following the recommendation by the FDA and change in drug labeling, the test is considered mandatory before starting carbamazepine. **In line with this, the Hospital Authority has also issued an alert on 16th September 2008 to advise all clinical doctors to test for the HLA-B*1502 allele in new patients receiving this drug and to prescribe carbamazepine only for indicated patients tested negative for the HLA allele.**

We are pleased to announce the **availability of HLA-B*1502 testing service** in the University Pathology Service **with immediate effect.** To enhance the test turn around time (TAT), B*1502 will first be detected by a quick screening platform (SSP-PCR) **to identify non-B*1502 carrier (TAT=2 days).** Cases with **positive or indeterminate status** will be further confirmed by **sequence based typing**, the gold standard for **precise HLA-B genotyping (TAT=5 days).** Requests can be made to our Department by filling the attached **request form** and at a charge of HK\$1,500.

Thank you very much for your attention.

***Accredited for Molecular Testing, National Authority of Testing of Australasia.**