



Lunch Symposium

Sunday, 8 December 2019 • 12:00 – 13:30 • Run Run Shaw Hull (1/F)

Target Therapy (CGRP monoclonal antibodies) for Intractable Migraine



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Dr. Fong graduated from the University of Hong Kong in 1986 with further post-graduate training in Neurology and Epilepsy at the Institute of Neurology, Queen Square, University of London. Dr. Fong was appointed chief of Division of Neurology at the Department of Medicine, University of Hong Kong from 1995 to 1996 and is currently in private practice. He was appointed Honorary Consultant in Neurology at Ruttonjee and Tang Siu Kin Hospital in 2001 to improve the standard of service in epilepsy and supervise post-graduate training in Neurology. Dr. Fong pioneered the formation of the Hong Kong Epilepsy Society which was inaugurated in 2003. He was elected President, Hong Kong Epilepsy Society, from 2005 to 2009.

Migraine is a common medical condition and one of the leading cause of disability worldwide. Many patients have a severe unilateral throbbing headache, which sometimes can be bilateral or generalised (20%). Common associated features include nausea with vomiting, light sensitivity (photophobia), sound sensitivity (phonophobia), and visual aura which can persist after the pain goes away. Migraine is usually treated by painkiller (e.g. NSAID, paracetamol, triptans) but analgesic overuse can be problematic given the frequent recurring nature of migraine. Migraines generally don't get worse over time but serious complications may rarely occur e.g. status migrainosus, stroke, seizures, anxiety and depression.

Drug treatment of migraine includes acute and preventive treatment of attacks. Commonly used preventive treatments for episodic migraine include β blockers (mainly propranolol and metoprolol), antiepileptic drugs (mainly topiramate and valproate), and antidepressants (eg, amitriptyline, dothiepin). About 45% patients on prophylaxis have more than 50% reduction in migraine frequency, but compliance to long term treatment is variable due to troublesome side effects. In addition, these medications were developed for other indications rather than for a target specific for migraine pathophysiology. Many patients are therefore suboptimally treated and experience high disability and impaired quality of life.

On the other hand, Calcitonin gene-related peptide (CGRP) is involved in the pathophysiological mechanism underlying migraine through nociceptive mechanisms in the trigeminovascular system. CGRP is a neuropeptide which is a target for migraine preventive therapies. The role of CGRP in migraine was shown in phase 2 and phase 3 clinical trials of small-molecule CGRP-receptor antagonists in acute migraine and is further supported by phase 2 and phase 3 trials of monoclonal antibodies targeting the CGRP pathway, which suggests that the pathway could be a target for preventive migraine treatment.