

CGRP Receptor Antagonists for the Treatment of Migraine

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The invention of UBRELVY™ (ubrogepant) and QULIPTA™ (atogepant) was the result of more than a decade of innovation and dedication by many colleagues at Merck. These novel migraine treatments inhibit the function of the 37-amino-acid neuropeptide calcitonin gene-related peptide (CGRP), which plays an important role in migraine headache. Notably, ubrogepant was the first approved orally-acting drug that targets a Family B GPCR – the CGRP receptor – a reflection of the challenges implicit in designing an orally bioavailable small molecule that can block the binding of a highly potent peptide to its receptor. This presentation will discuss these challenges and key lessons learned during this drug discovery program, including the importance of translational biomarkers and strategies for addressing drug-induced liver injury.