

Clinical Data on the CGRP Antagonist BIBN4096BS for Treatment of Migraine Attacks

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ABSTRACT

Basal studies have shown that calcitonin gene-related peptide (CGRP) is a major sensory neuronal messenger in the trigeminovascular system, the pathway conveying intracranial pain. In migraine and cluster headache attacks, CGRP is released in parallel with the pain and successful treatment of the attacks abort both the associated pain and the CGRP release. The search for a potent small molecule CGRP antagonist has been successful and such an agent has been tested in preclinical and clinical studies. The aim of the present study was to examine current knowledge on the clinical pharmacology of systemic BIBN4096BS, which has been shown in man to abort acute migraine attacks as well or better than oral sumatriptan. BIBN4096BS is a specific and potent CGRP receptor antagonist in humans. In safety and tolerability studies the substance is well tolerated with no or only mild side effects. In acute migraine attacks the overall response was 66% with the drug and 27% with placebo. A difference as compared to placebo was seen at 30 min; the response was still rising at 4 h suggesting a long duration of action. At 24 h the pain-free rate was better than that with triptans, suggesting a lower grade of rebound and perhaps even a prophylactic possibility.

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