

INNOVATIVE HEADACHE TREATMENTS WILL BE BETTER THAN WHAT WE CURRENTLY HAVE – CON

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Migraine is a complex neurobiological disorder with attacks of severe disabling unilateral pulsating headache with nausea, vomiting, photo-, phono-, and osmophobia. Treatment of migraine is not easy and requires acute headache medication, preventative treatment and psychological support.

Analgesics and ergots were used for acute migraine treatment for decades, whereas, ergots were replaced by triptans in early nineties. Up-to-date triptans are the most effective anti-migraine drugs, achieving response rates of 30% (60% absolute rate minus 30% placebo effect) and pain free rate of about 20% (absolute 40% minus 20% placebo, Ferrari et al, 2001). Combination of a triptan and analgesic can increase the efficacy, e.g. fixed combination of sumatriptan and naproxen is superior to sumatriptan alone (Law et al, 2013).

Intranasal application increases the efficacy: Zomig spray achieved 66% response rate compared to 35% rate of placebo (Dodick et al, 2005). Subcutaneous sumatriptan is even better and achieves 70% response rate compare to 22% rate of placebo (Cady et al, 1991).

Lasmiditan, 5HT_{1F} receptor agonist was superior to placebo with a therapeutic gain of about 40%, comparable with those of triptans (Färkkilä et al, 2012). CGRP Antagonists (Gepants) were studied in three different placebo controlled trials and were proved to be more effective than placebo but with a therapeutic gain again of about 30% and similar to zolmitriptan 5mg (Ho et al, 2008). In contrast, a well-known DHE orally inhaled had a robust response of 35% (minus placebo).

The review concludes that so far no new molecule was able to demonstrate superiority to existing 5HT agonists.

References:

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