

Level of therapeutic innovation of new drugs for the treatment of migraine

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Abstract

Aim: Migraine is one of the most prevalent and disabling medical illnesses. Preventive drugs are used to reduce the frequency, severity, and duration of attacks. Most patients were no longer on their medication due to contraindications or poor clinical response. Therefore, there is need for novel prophylactic agents for migraine. New preventive treatments are those of the class of Calcitonin Gene Related Peptide (CGRP)-targeting therapies. We aimed to assess the real level of therapeutic innovation of these new drugs. **Methods:** The information on the new drugs was collected from several documents, including the European public assessment reports (EPARs). The level of therapeutic innovation was assessed with the algorithm published by some of us in 2006. **Results:** All new approved drugs (eptinezumab, galcanezumab, fremanezumab, erenumab) are indicated for the prophylaxis of migraine in adults who have at least 4 migraine days for month. All these drugs have been tested only in comparison to placebo. Their level of therapeutic innovation was only modest, i.e. the lowest value of our algorithm. **Conclusion:** The new monoclonal antibodies of the class of CGRP targeting therapies have been authorized with efficacy data only against placebo. They do not offer additional clinical benefits compared to available therapies for the prevention of migraine attacks, with the exception of a lower frequency of administration and a more rapid effect. All this assigns to these drugs only a modest role in therapy according to our algorithm for therapeutic innovation with a significantly higher cost than similar therapies.

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