

What is CGRP?

- CGRP means calcitonin gene related peptide.
- CGRP is a protein naturally present in our bodies. It plays different roles, including pain signalling and blood vessel dilatation.
- CGRP plays an important role in migraine, so researchers started to find ways to block it to treat migraine.

What are antibodies?

- Antibodies are naturally present in our bodies. They play a role in our response to infection and inflammation.
- Antibodies can be used as treatments as they can be designed to block specific proteins in our bodies.
- Antibodies are used to treat conditions like Crohn's disease, cancer, rheumatoid arthritis, multiple sclerosis and migraine.

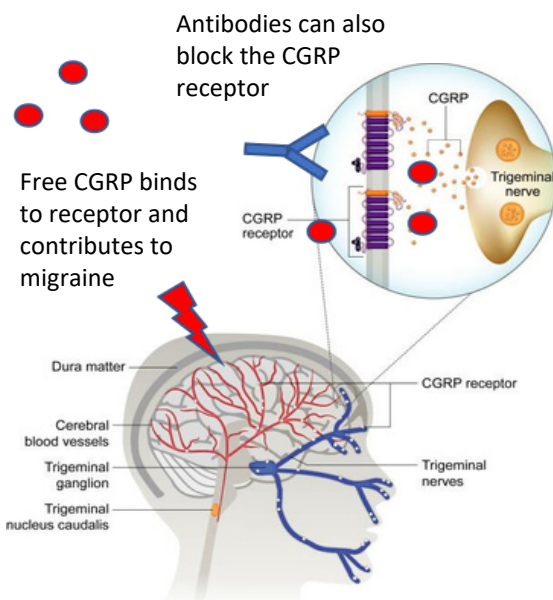
CGRP antibodies are the first preventive medications based on our scientific understanding of migraine underlying mechanisms

CGRP antibody	How is it administered?
Aimovig Erenumab	Subcutaneous injection 70 or 140 mg monthly
Ajovy Fremanezumab	Subcutaneous injection 225 mg monthly or 675 mg every 3 months
Emgality Galcanezumab	Subcutaneous injection 120 mg monthly First dose is 240 mg
Vyepti Eptinezumab	IV infusion 100 mg or 300 mg every 3 months



CGRP/CGRP receptor blocked by the antibody= migraine prevention
** antibodies look like the letter "Y" in real life

Migraine pain comes from the sensory nerves in the meninges and arteries



Antibodies are not cleared by the kidney or liver

Antibodies are cleared by our natural system managing all antibodies, called the reticulo-endothelial system. This is an advantage for people with kidney or liver disease.

Antibodies do not interact with other medications

Antibodies bind only to their target in the body, and don't influence other medications. If you are using other antibodies for other conditions discuss with your healthcare provider.

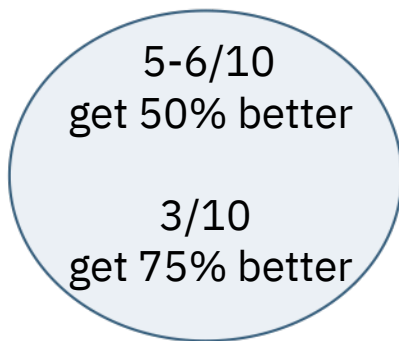
Which CGRP antibody is the best?

CGRP antibodies have not been compared to one another in clinical studies. They all have shown effectiveness in the prevention of episodic and chronic migraine in separate studies. There is a lot of variability in migraine in general. Experience suggests that some people who are not improved with one CGRP antibody may improve with another.

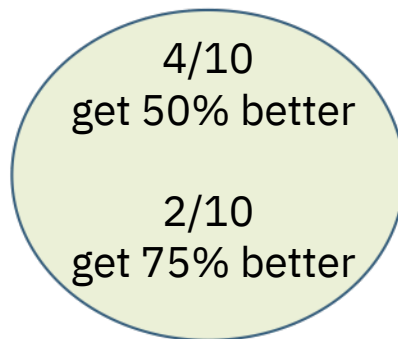


What are the chances of improving according to studies?

Episodic migraine ≤15 days/month



Chronic migraine ≥15 days/month



These are ball park figures for % decrease in migraine days from the trials for the different CGRP antibodies.

Other benefits can include

1. Decrease in attack intensity
2. Attacks easier to treat
3. Decrease of days on which an acute med is needed

How long should I try an antibody to see if it works for me?

Some people get better after the first injection. Others may take a few months to improve progressively. A 3 to 6 months trial is recommended. Discuss this with your healthcare provider.

What if I have tried other preventives or if I overuse acute meds?

In the studies on CGRP antibodies, patients who had failed other preventives or were overusing acute medications also improved (except patients using opioids who were not studied)

Are there risks or side effects I should know about?

Overall CGRP MABs are usually better tolerated than the oral preventives. Common side effects include skin reactions around the injection site and constipation. Allergic reactions are reported but rare. Experts recommend caution in the use of CGRP antibodies with some vascular diseases. Always discuss risks and side effects with your health care provider.

CGRP MABs should not be used by women who are pregnant or planning to be

CGRP does play a role in pregnancy, and safety has not been demonstrated. Most experts recommend to stop CGRP antibodies 5-6 months before conceiving. Discuss with your care provider.