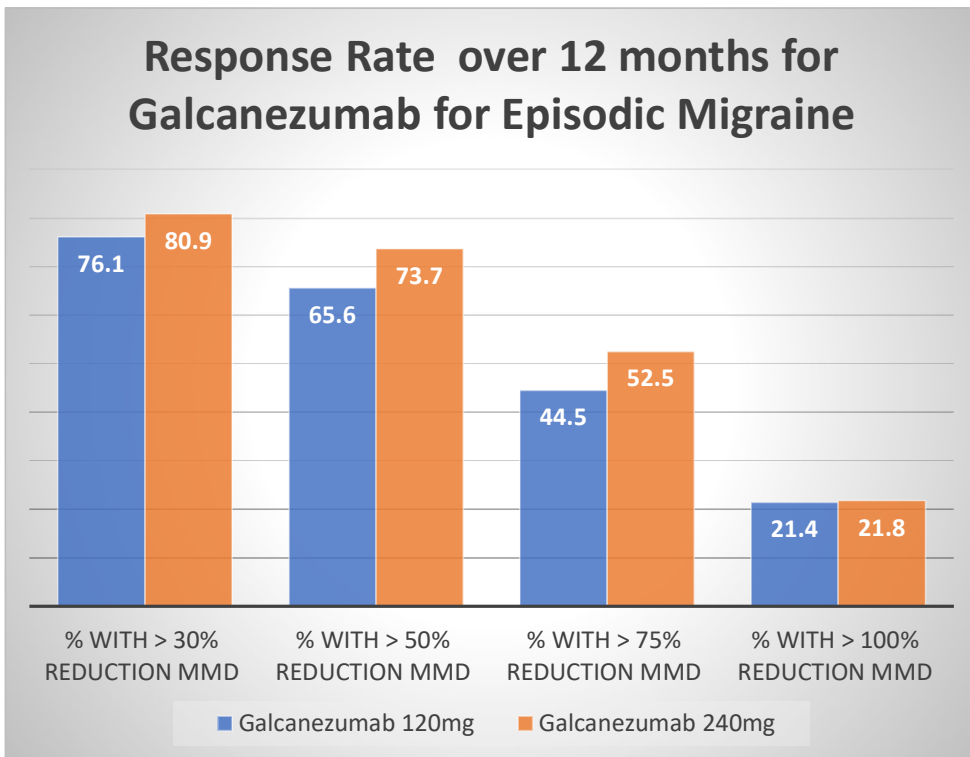
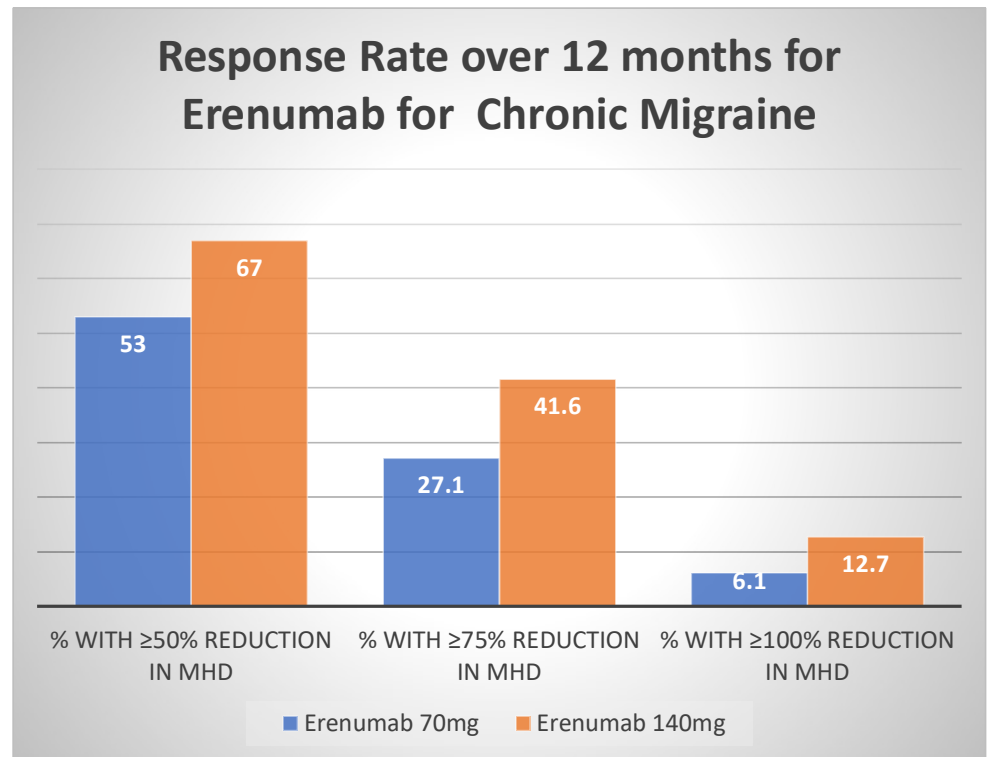


Anti -CGRP Monoclonal Antibody treatment response over 12 months (OLE data)



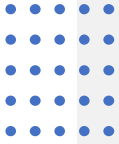
Camporeale et al: BMC Neurology & Cephalgia (2017) 37: 319-374



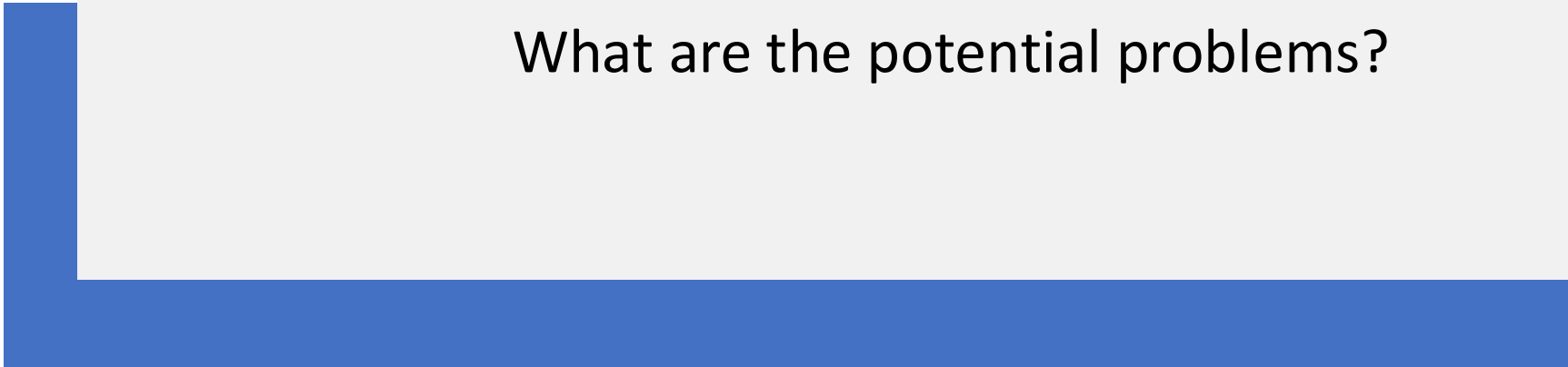
Tepper et al: (2017) 37:



Anti-CGRP Monoclonal Antibodies for Migraine



So we know they work:
What are the potential problems?



CGRP Monoclonal Antibodies Adverse Events & Trial Adherence in Migraine Populations

- In general – No serious adverse events so far
- Treatment emergent events
 - Injection site pain - Galcanezumab & Fremanezumab > Erenumab
 - URTI
 - Low back Pain
 - Injection site reactions – “Hypersensitivity”
 - Post-Marketing – Constipation ~ 10-20%
 - Hypertension – Erenumab - In the USA
 - Raynauds – exacerbation - Caution
- No major metabolic, immunological, CVS or haemodynamic
- Trial adherence – 88-95% completion across all trials

Anti-CGRP Mabs & Raynauds syndrome: Be aware?



JAMA
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Original Investigation | Pharmacy and Clinical Pharmacology

Evaluation of the Safety of Calcitonin Gene-Related Peptide Antagonists for Migraine Treatment Among Adults With Raynaud Phenomenon

Ilana D. Breen, BS; Caitlin M. Brumfiel, MS; Meera H. Patel, BS; Richard J. Butterfield, MA; Juliana H. VanderPluym, MD; Leroy Griffing, MD; Mark R. Pittelkow, MD; Aaron R. Mangold, MD

JAMA Network Open. 2021;4(4):e217934. doi:10.1001/jamanetworkopen.2021.7934

Calcitonin gene-related peptide-targeting drugs and Raynaud's phenomenon: a real-world potential safety signal from the WHO pharmacovigilance database



Alexandre O. Gérard^{1,2,3}, Diane Merino¹, Elise K. Van Obberghen⁴, Fanny Rocher¹, Alexandre Destere¹, Michel Lantéri-Minet^{4,5†} and Milou-Daniel Drici^{1†}

Gérard et al.
The Journal of Headache and Pain (2022) 23:53
<https://doi.org/10.1186/s10194-022-01424-w>

- USA - 30 month Retrospective cohort study (Mayo clinic)
- 169 patients with Raynaud's syndrome & CGRP therapy exposure
- Outcome = Microvascular complications after CGRP started
- 9 of 169 (5.3%) had microvascular complications
- 5 of 9 known Raynaud's; 4 of 9 - no prior history
- 2 patients (1.2%) had severe injury, one with autonecrosis needing amputation

Ask About Raynaud's when considering MaBs therapy



TAKE HOME MESSAGES

- Migraine is common
- Address medication overuse
- Triptans/Preventives
- CGRP monoclonal antibodies/Botox in treatment refractory cases