CGRP Antibody Therapy and Cerebral Hemodynamics (CATCH)

Study Summary for Providers

Contact Information

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Brief Summary

This research will make within-subjects comparisons of two aspects of cerebrovascular function—cerebral autoregulation (CA) and cerebral vasoreactivity (CVR)—before and after initiating CGRP monoclonal antibody therapy. It will also assess for any changes in peripheral vascular resistance (PVR). The goal of the study is to evaluate the hemodynamic effect of anti-CGRP therapy.

- Total of 30 subjects
- 2 research visits per subject (to coincide with clinical visits)
- Visit 1 should occur same-day in clinic; call Sarah to notify of patient interest
- 3-4 month follow-up

Data Collection

- All measurements are non-invasive and involve little to no risk
- Monitoring sessions involve: unilateral TCD Doppler ultrasound of 2 vessels (MCA and PCA); non-invasive continuous BP monitoring using a finger cuff; 2 minutes per vessel of inhaled 5% CO2 Airgas mixture administered through a face mask

Inclusion Criteria

- 18 years of age or older
- Newly prescribed CGRP monoclonal antibody therapy for migraine prevention
- Subject must sign the informed consent form

Exclusion Criteria

- History of anti-CGRP medication use (including small molecule antagonists)
- History of stroke
- History of brain mass (other than meningioma)
- Skull defect or skull surgery that will interfere with TCD monitoring
- Unable or unwilling to remain in bed for 30 minutes to tolerate TCD monitoring
- Unable or unwilling to return for 3-month study visit
- Any other illness/condition that the investigator feels would pose a hazard to the subject from participation in the study