

# Precision-tinted spectral filters

A successful intervention for medically-resistant headaches and migraines after brain injury

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## Introduction

Precision-tinted spectral filters remedy perceptual difficulties and physical symptoms (including headaches and migraines) associated with the perceptual processing disorder, Irlen Syndrome. Advanced brain-mapping technology shows both anatomical and functional changes in brain activity that correspond directly with a reduction of symptoms when the correct color is worn as glasses. In March 2011, Irlen partnered with Semper Fi Fund to provide Irlen Spectral Filters to military personnel experiencing "medically resistant" headaches and migraines as a result of combat-related brain or head trauma.

## Objective

Extend the current therapeutic use of precision-tinted spectral filters to individuals who have acquired headaches and migraines as a result of head injury or brain trauma.

## Conclusion

For military personnel experiencing debilitating headaches and migraines that fail to respond to other interventions, Irlen Spectral Filters provide immediate relief and improvements. These improvements extend beyond headaches and migraines to impact other areas of life and daily functioning that are crucial to both their ability to remain in active duty and to achieve success after retiring from the military. Irlen Spectral Filters are able to eliminate the pain and discomfort that other interventions or medication have not been able to eliminate, provide stability and clarity in the visual field, and improve physical, emotional, and academic functioning. Future research should utilize brain imaging to document the reported improvements as functional and/or anatomical changes in the brain.

## References

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## For More Info

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## Methods

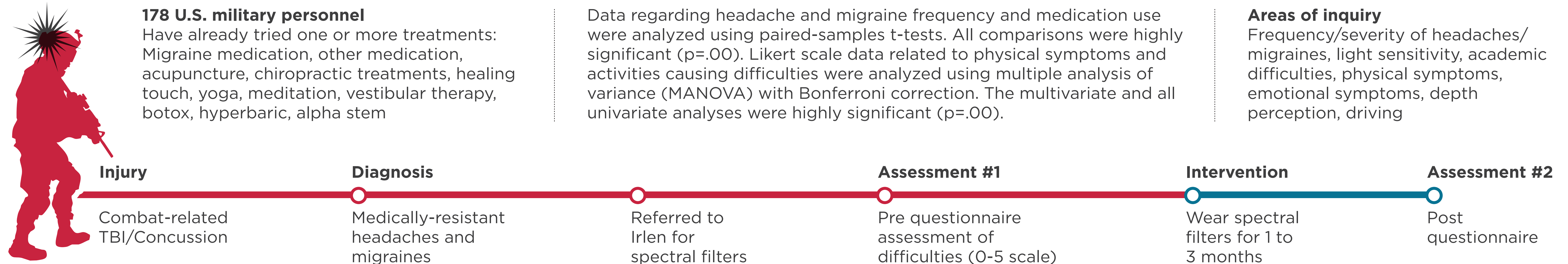
### 178 U.S. military personnel

Have already tried one or more treatments: Migraine medication, other medication, acupuncture, chiropractic treatments, healing touch, yoga, meditation, vestibular therapy, botox, hyperbaric, alpha stem

Data regarding headache and migraine frequency and medication use were analyzed using paired-samples t-tests. All comparisons were highly significant ( $p=.00$ ). Likert scale data related to physical symptoms and activities causing difficulties were analyzed using multiple analysis of variance (MANOVA) with Bonferroni correction. The multivariate and all univariate analyses were highly significant ( $p=.00$ ).

### Areas of inquiry

Frequency/severity of headaches/migraines, light sensitivity, academic difficulties, physical symptoms, emotional symptoms, depth perception, driving



## Results



## SEVERITY OF DIFFICULTY BEFORE AND AFTER

Average rating of difficulty (0-5 scale, 0 means "no problem" and 5 means "severe problem")

