## Supplemental Table 5: Inflammation

| Techniques          | Timepoint | Outcomes                                                                                           |
|---------------------|-----------|----------------------------------------------------------------------------------------------------|
| Cytokine Array      | 1wk       | Inflammatory cytokine increase in vitreous after blast (Shedd et al., 2018)                        |
| ELISA               | 1h        | Increased neutrophil peroxidase myeloperoxidase levels in the blood following repetitive blast (Por et al., 2017) |
|                     | 4, 24, 72h| **Compound 49b decreased TNFα & IL-1β levels when administered 72h after injury** (Jiang et al., 2013) |
|                     | 4, 24, 72h| **Compound 49b treatment decreased TNFα and IL-1β in IGFBP-3KD mice when administered 24h after injury** (Jiang et al., 2014) |
|                     | 72h, 2wk  | Increased retinal inflammatory cytokines IL-1α, IL-1β, IL-2, IL-4, IL-6, IL-10, IL-12, IL-13, IFN-γ, TNFα, GM-CSF and RANTES. Varied based on timepoint and between 26.11 psi and 69.62 psi blast conditions (Zou et al., 2013) |
|                     | 14, 30d   | Increased retinal IL-1α, IL-1β, and IL-2 inflammatory cytokine levels (Bernardo-Colon et al., 2019) |
|                     | 2, 4wk    | Increased retinal IL-1α, IL-1β, and IL-18 following 1x and repetitive blast. **Ketogenic diet decreased retinal IL-1α after 1x and repetitive blast;** insufficient vitamin C caused increased IL-1α, IL-1β, and IL-18 after 1x and repetitive blast (Bernardo-Colon et al., 2018). **Vitamin E decreased retinal IL-1α and IL-18 levels after 1x and repetitive blast** (Bernardo-Colon et al., 2018) |
| qPCR/Microarray     | 1mo       | **Galantamine decreased IL-1α and IL-1β to sham levels** (Naguib et al., 2020)                       |
|                     | 4, 24h    | Increased ipsilateral retinal IL-1β, IL-1α, TNFα and IL-6 following blast compared to sham, with all cytokines trending down at 24h except TNFα (Evans et al., 2020) |
|                     | 1, 3, 5d  | **10 mg/kg raloxifene decreased M1 markers and increased M2 markers in the retina and thalamus following blast** (Honig et al., 2019) |
|                     | 3d, 4wk   | **ACS-CCM decreased IL-1β, antigen-presenting cell maker CD86 and CD68+ macrophage expression compared to saline blast** (Jha et al., 2018) |
|                     | 5d        | Differential activation of 13,971 genes. Found three major processes altered after blast: loss of synaptic transmission, impaired cell metabolism, activation of immune system (Struebing et al., 2018) |
| Western Blot        | 24, 72h, 2wk | Increased retinal NOS and NO levels stimulate vasodilation and neuroinflammation after blast (Zou et al., 2013) |
| RNA-Sequencing      | 5d        | Blast preconditioning protects RGC from injury, potentially by decreased expression of KMO (Harper et al., 2019b) |