COMPARATIVE BIOSCIENCES, INC.

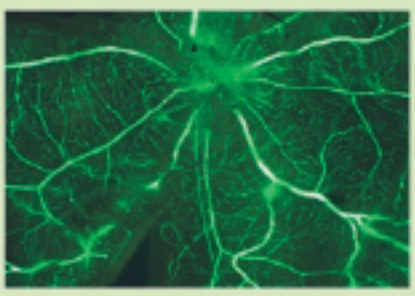
A TRANSLATIONAL APPROACH TO PRECLINICAL RESEARCH

Oxygen Induced Retinopathy

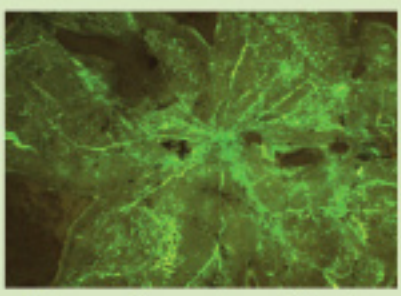
The most popular model to study abnormal angiogenesis in the retina is the oxygen- induced retinopathy (OIR) model in mice. One-week-old mouse pups are exposed to hyperoxia, which obliterates capillaries in the retina. Upon return to room air, the retina becomes hypoxic and triggers a vascular repair response, which then results in the formation of neovasuclar tufts towards the vitreous, a hallmark of ischaemic retinopathies in human and veterinary diseases.

Please note: All laboratory animals are cared for and treated humanely in all CBI studies. These research animals are used to provide us with new science and new treatments for human and veterinary diseases.

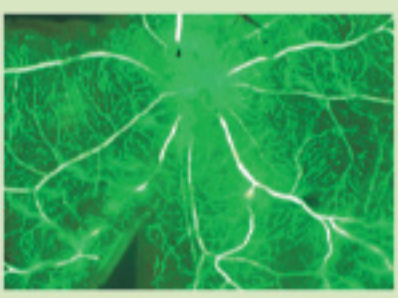
OIR model retinal flat mounts



Normal Rat
Flat Mount



Flat mount from rat pup following 2 weeks in ROP chamber demonstrating vascular proliferation and leakage.



Flat mount from rat pup following 2 weeks in ROP chamber demonstrating vascular proliferation and leakage followed by a single IVT injection of triamcinolone showing a reduction in the amount of leakage.

Contact us for more information on Oxygen Induced Retinopathy:
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