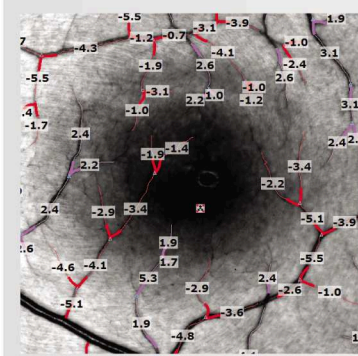


## Comprehensive Blood Flow Velocity Analysis

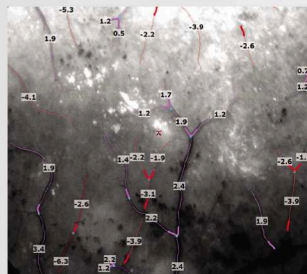


Blood Flow Velocity Map

The RFI's direct visualization of retinal blood flow, without the injection of contrast agents, opens up many new diagnostic possibilities of abnormal retinal blood flow velocity, particularly in capillaries, arterioles and venules.

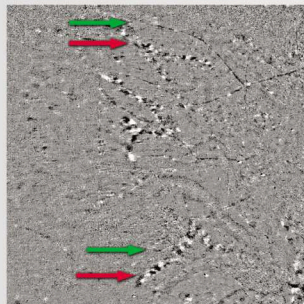
The RFI imaging system can clearly reveal the motion of individual clusters of red blood cells, providing a powerful tool for measurement of retinal blood dynamics.

## Clinical Findings of Retinal Blood Flow Velocity



### Diabetes Mellitus

- The RFI revealed a significant velocity decrease in arteries and veins of patients with non-proliferative diabetic retinopathy (NPDR) compared to healthy controls. The RFI detected increased blood flow velocity compared to controls in retinal arteries and veins of patients with early DM with no diabetic retinopathy.
- The RFI detected increased blood flow velocity compared to controls in retinal arteries and veins of patients with early DM with no diabetic retinopathy.



### Age related macular degeneration (AMD)

The RFI detected reduced blood flow velocity in exudative AMD eyes compared to fellow dry AMD eyes (in all sizes of veins and in the small arteries)

Heterogeneous flow in the choroid of an AMD patient. Flow was selectively reduced in some choroidal vessels (red arrow), while flow in nearby vessels of similar diameter (green) was much faster.

## Effect of Avastin Injections

The RFI was used to assess early changes in blood flow velocity following intravitreal Bevacizumab (Avastin) injection. A distinctive change pattern was noted in responders versus non-responders patients.

