BACKGROUND: The ICG filling is supposed to be faster than Fluorescein filling. Interestingly the filling characteristics of these dyes were never correlated directly using precise quantitative methods. Since ICG and Fluorescein are injected as a mixture, the simultaneous 2-channel angiography provides a suitable method to correlate the filling characteristics of the dyes.

MATERIAL AND METHODS: The simultaneous ICG and Fluorescein angiograms were recorded with a Rodenstock Scanning Laser Ophthalmoscope. The angiographic images were digitized real-time with a graphic workstation. Filling characteristics of the two dyes was calculated after off-line eye tracking in different regions of interests (ROIs) on the central retina.

RESULTS: The Fluorescein filling was faster than the ICG filling in 56.5% of our patients. In 26% of our patients was a mixed filling detectable. Depending on the position of the ROIs the Fluorescein or ICG filling was faster. In only 17.5% of our cases was the ICG filling faster than the Fluorescein filling.

CONCLUSION: Our results show that Fluorescein filling in more than 50% of the cases is faster than ICG filling and only a minority of the patients has a faster ICG filling. According to our experience the filling pattern of the two dyes is individual, there is no rule of thumb for the filling.