Supplemental data

**Fig S1.** Images of flat-mount retinas in C57BL/6 and ATF4+/- controls and C57BL/6 and ATF4+/- OIR mice.
**Fig S2.** Images of flat-mount retinas in P17 C57BL/6 and ATF4+/- control and OIR retinas were used to calculated formation of new blood vessels and avascular area using Adobe Photoshop CS3. Total surface area and area without vasculature (empty space) were also measured. Vasculature was calculated as a difference between total area and empty space. Ten sections from each group were examined. The average number of neovascularized area was compared with the control group using the Student’s t test.
### Table S1

Relative gene expression in C57BL/6 and ATF4+- naïve mice during retinal development at P12, P13 and P15.

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Table S2. Relative gene expression in C57BL/6 OIR and ATF4+/- OIR mice at P12, P13 and P15. Averaged RQs are shown to evaluate relative gene expression. RQs of naïve C57BL/6 (normoxia) were used as a reference at each time point. Relative gene expression was calculated as ratio of $RQ_{\text{hypoxia}}$ to $RQ_{\text{normoxia}}$ for each group.