Title Page

Retinal transcriptome and cellular landscape in relation to the progression of diabetic retinopathy

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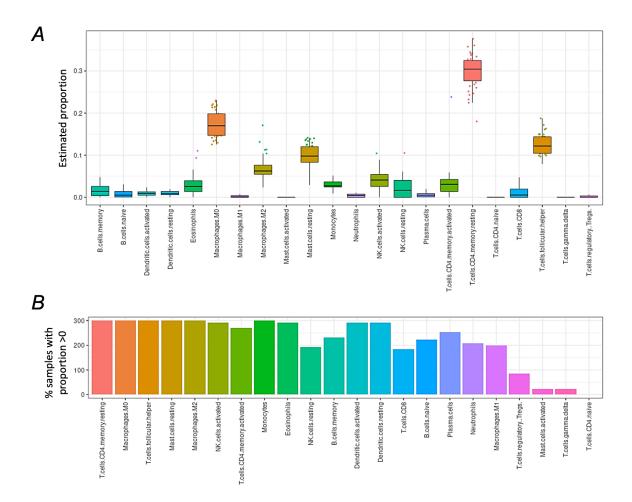
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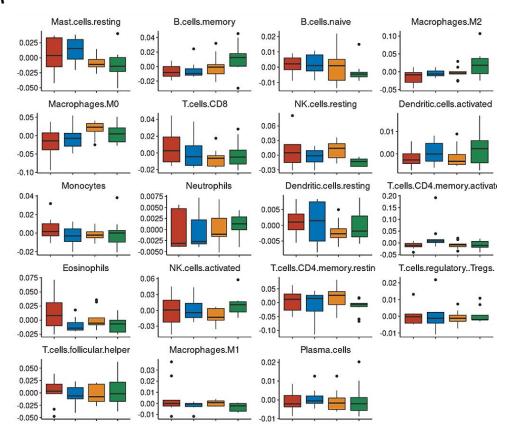
Menzies Institute for Medical Research, University of Tasmania, Hobart, Australia
 Aier Eye Institute, Changsha, Hunan, China

Supplementary Figures

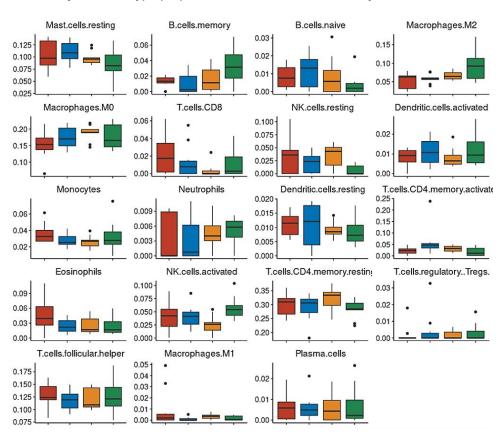


Supplementary Fig. 1. General information of deconvolution analyses for immune cells. A. Tukey boxplots (interquartile range (IQR) boxes with $1.5 \times IQR$ whiskers) showing the estimated proportions of immune cell types across all samples (n=39), as estimated by deconvolution analyses with CIBERSORTx (22 immune cell types). B. Bar plot indicating the percentage of samples with non-zero estimated proportions for each immune cell type (n = 39).

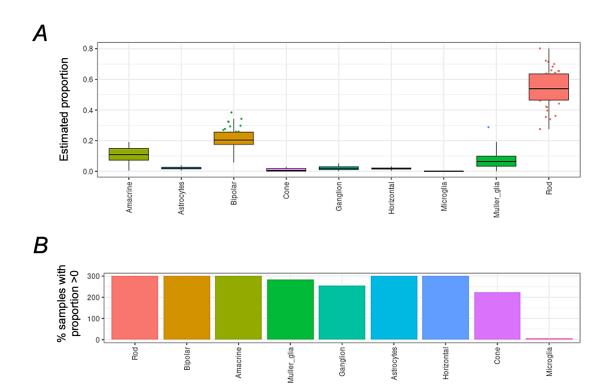
Adjusted cell type proportions in relation to the severity of DR



B Unadjusted cell type proportions in relation to the severity of DR

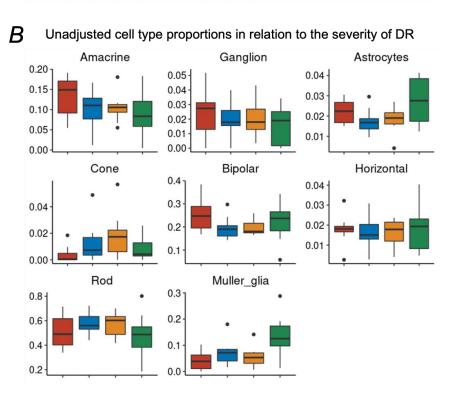


Supplementary Fig. 2. Adjusted and unadjusted proportions of immune cell types in relation to the severity of DR. A and B. Tukey boxplots (interquartile range (IQR) boxes with $1.5 \times IQR$ whiskers) showing the adjusted or unadjusted estimated proportions of each immune cell type across different degree of DR (n = 39). The proportions estimated by CIBERSORTx were adjusted for gender and age.



Supplementary Fig. 3. General information of deconvolution analyses for retinal cells. A. Tukey boxplots (interquartile range (IQR) boxes with $1.5 \times IQR$ whiskers) showing the estimated proportions of retinal cell types across all samples (n=39), as estimated by deconvolution analyses with CIBERSORTx (22 immune cell types). B. Bar plot indicating the percentage of samples with non-zero estimated proportions for each retinal cell type (n = 39).

A Adjusted cell type proportions in relation to the severity of DR Amacrine Ganglion Astrocytes 0.05 0.02 0.01 0.00 0.00 0.00 -0.05 -0.01 -0.02 -0.10 Cone Bipolar Horizontal 0.04 0.02 0.1 0.02 0.01 0.0 0.00 0.00 -0.1 -0.01 -0.02 Rod Muller_glia 0.21 0.2 0.1 0.1 0.0 -0.1 0.0 -0.2 -0.3



Supplementary Fig. 4. Adjusted and unadjusted proportions of retinal cell types in relation to the severity of DR. A and B. Tukey boxplots (interquartile range (IQR) boxes with $1.5 \times IQR$ whiskers) showing the adjusted or unadjusted estimated proportions of each retinal cell type across different degree of DR (n = 39). The proportions estimated by CIBERSORTx were adjusted for gender and age.