



Figure S1 Integrated analysis of differentially regulated mRNAs. (A) Volcano plot of differentially expressed mRNAs (DEGs). X-axis indicates \log_2 (fold change). Y-axis indicates $-\log_{10}$ (P value). Blue represents downregulated mRNAs. Red represents upregulated mRNAs. Gray indicates no significantly differentially expressed mRNAs. (B) Heat map of DEGs ($P < 0.05$). There were 4,279 mRNAs with a significant change in CGR, including 2,246 and 2,033 upregulated and downregulated, respectively. (C) Top 20 enriched GO biological processes of DEGs. (D) Top 20 enriched KEGG pathways of DEGs. CGR, corneal graft rejection; GO, gene ontology; KEGG, Kyoto Encyclopedia of Genes and Genome.

Table S1 Criteria of rejection after corneal transplantation

Score	Graft opacity	Graft edema	Graft neovascularization
0	Transparent without turbidity	No edema	No CNV
1	Slightly turbid	Corneal stroma slightly edematous and thickened	CNV around implantation bed
2	Opacity increased, but iris texture still visible	Diffuse corneal stromal edema	Neovascularization extends to periphery of the graft
3	Opacification further aggravated, but pupil still visible	Diffuse corneal stromal edema accompanied by epithelial microcystic edema	Neovascularization in the middle and periphery of the graft
4	Completely cloudy, the anterior chamber cannot be seen	Bullous keratopathy	Neovascularization covers the corneal graft

Table S2 PCR primers used in this study

Gene	Forward primer sequence (5'-3')	Reverse primer sequence (5'-3')
<i>miR-200c-3p</i>	CAGCAACGACACAGAACTG	AAAGTCCAGTGACTCTGGA
<i>miR-26a-5p</i>	TGCGCAACATCACTGCAAGTCT	CCAGTGCAGGGTCCGAGGTATT
<i>miR-200b-5p</i>	CATCTTACTGGGCAGCATTGGA	CAGTGCGTGTCTGGAGT
<i>miR-374-3p</i>	TATAATACAACCTGATAAGTG	GAACATGTCTGCGTATCTC
<i>miR-345-5p</i>	TCGGCGGCTGACTCCTAGTCCA	GTCGTATCCAGTGCAGGGTCCGAGGT
<i>miR-452-5p</i>	AGCGCGAACTGTTTGCAGAGGA	ATCCAGTGCAGGGTCCGAGG
<i>miR-542-3p</i>	UGUGACAGAUUGAUAAACUGAAA	GTGCAGGGTCCGAGGT
<i>miR-134-5p</i>	AACTGCATCCTGGCAATTC	CGTGGTGAATCGAGACTCAC
<i>miR-219a-5p</i>	GGTGATTGTCCAAACGG	CAGTGCGTGTCTGGAGT
<i>miR-673-3p</i>	AGCAGTGATGGGTGTGCTAC	TCCATTCCCATCCCCTTGC
<i>miR-151-5p</i>	TCGAGGAGCTCACAG	CAGTGCGTGTCTGGAGT
<i>miR-501-3p</i>	CTGCTCTGCTCGTCCTCTCT	CTCCTGTCTCACATGCAGA
<i>miR-101a-3p</i>	GCGCGCGCGTACAGTACTGTGATA	ATCCAGTGCAGGGTCCGAGG
<i>miR-505-3p</i>	GCGAGCACCGTCAACT	TGGTGTCTGGAGTCCGGC
<i>miR-204-5p</i>	TCCCTTCCCTTTGTATCCT	GTGCGTGTCTGGAGTCCG
<i>miR-382-3p</i>	ATCCGTGAAGTTGTTCTGG	TATGGTTGTAGAGGACTCCTTGAC
<i>miR-874-3p</i>	GAACTCCACTGTAGCAGAGATGGT	CATTTTTTCCACTCCTCTTCTCTC
<i>miR-324-5p</i>	CGTGAATGATAGTGAGGAAC	GTGAACGATTGCCACACACA
<i>miR-363-3p</i>	GCCGAGAATTGCACGGTATC	CTCAACTGGTGTCTGGAGT
<i>miR-361-3p</i>	ATGGTTCGTGGGCCCCAGGTG	GTGCAGGGTCCGAGGT
<i>U6</i>	CTCGCTTCGGCAGCACATATACT	ACGCTTCACGAATTTGCGTGTCT
<i>GAPDH</i>	TGTGTCCGTCGTGGATCTGA	CCTGCTTACCACCTTCTTGA