

S2. Efficacy Evaluation

S2.1. The complete retinal reattachment rate at 7 days after surgery (PPS).

	Experimental Group	Control Group	Statistical Approach	P Value
N(nmiss)	58(0)	58(1)		
No	0(0.00%)	0(0.00%)		
Yes	58(100%)	58(100.00%)		

The difference and 95% confidence interval of retinal reattachment rate between the experimental group and the control group at 7 days after surgery was 0.00% (-6.26%, 6.26%).

S2.2. The complete retinal reattachment rates after surgery (PPS).

Observation item		Experimental Group	Control Group	Statistical Approach	P Value
1 day after surgery	N(nmiss)	57(1)	59(0)	Exact probability method	0.491
	Yes	56(98.25%)	59(100.00%)		
	Not applicable	1(1.75%)	0(0.00%)		
14 days after surgery	N(nmiss)	51(7)	51(8)	Exact probability method	1.000
	No	0(0.00%)	1(1.96%)		
	Yes	51(100.00%)	50(98.04%)		
28 days after surgery	N(nmiss)	47(11)	52(7)	Exact probability method	1.000
	No	0(0.00%)	1(1.92%)		
	Yes	47(100.00%)	51(98.08%)		
60 days after surgery	N(nmiss)	52(6)	56(3)	Exact probability method	1.000
	No	1(1.92%)	1(1.79%)		
	Yes	51(98.08%)	55(98.21%)		

S2.3. BCVA at 1, 7, 14, 28 and 60 days after surgery (PPS).

Observation item		Experimental Group	Control Group	Statistical Approach	Statistical Magnitude	P Value
1 day after surgery	N(nmiss)	46(12)	43(16)	Wilcoxon	0.000	1.000
	No change	46(100.00%)	43(100.00%)			
7 days after surgery	N(nmiss)	54(4)	57(2)	Wilcoxon	0.000	1.000
	No change	54(100.00%)	57(100.00%)			
14 days after surgery	N(nmiss)	51(7)	50(9)	Wilcoxon	0.000	1.000
	No change	51(100.00%)	50(100.00%)			
28 days after surgery	N(nmiss)	48(10)	51(8)	Wilcoxon	0.000	1.000
	No change	48(100.00%)	51(100.00%)			
60 days after surgery	N(nmiss)	57(1)	56(3)	Wilcoxon	-0.973	0.330
	No change	56(98.25%)	56(100.00%)			
	Improve	1(1.75%)	0(0.00%)			

S2.4. IOP at 1, 7, 14, 28 and 60 days after surgery (PPS).

Observation item (mmHg)	Experimental Group	Control Group	Statistical Approach	Statistical Magnitude	P Value
1 day after surgery	N(nmiss) Mean±SD	56(2) 17.62±7.70	59(0) 17.42±8.74	T test	0.128 0.898
7 days after surgery	N(nmiss) Mean±SD	58(0) 17.00±8.85	59(0) 18.56±8.51	T test	-0.974 0.332
14 days after surgery	N(nmiss) Mean±SD	53(5) 16.36±7.03	51(8) 18.50±8.35	T test	-1.417 0.160
28 days after surgery	N(nmiss) Mean±SD	49(9) 16.32±8.19	52(7) 16.93±5.83	T test	-0.432 0.667
60 days after surgery	N(nmiss) Mean±SD	57(1) 14.37±2.77	59(0) 14.72±2.81	T test	-0.668 0.505

S2.5. Gas retention at 1, 7, 14, 28 and 60 days after surgery (PPS).

Observation item	Experimental Group	Control Group	Statistical Approach	Statistical Magnitude	P Value
1 day after surgery	N(nmiss) 75%	57(1) 57(100.00%)	58(1) 58(100.00%)	Wilcoxon	0.000 1.000
7 days after surgery	N(nmiss) 75% 50% 30% Absorbed	58(0) 47(81.03%) 3(5.17%) 7(12.07%) 1(1.72%)	58(1) 47(81.03%) 8(13.79%) 3(5.17%) 0(0.00%)	Wilcoxon	0.230 0.818
14 days after surgery	N(nmiss) 75% 50% 30% Absorbed	51(7) 9(17.65%) 27(52.94%) 12(23.53%) 3(5.88%)	51(8) 10(19.61%) 25(49.02%) 15(29.41%) 1(1.96%)	Wilcoxon	0.095 0.924
28 days after surgery	N(nmiss) 50% 30% Absorbed	45(13) 2(4.44%) 35(77.78%) 8(17.78%)	52(7) 0(0.00%) 49(94.23%) 3(5.77%)	Wilcoxon	1.114 0.265
60 days after surgery	N(nmiss) 30% Absorbed	52(6) 2(3.85%) 50(96.15%)	56(3) 2(3.57%) 54(96.43%)	Wilcoxon	-0.066 0.948