

Table 3. Risk Factor Analysis for Failure in the Ahmed Baerveldt Comparison Study

Risk Factor	Relative Risk (95% confidence interval) [*]			
	Failure by any criterion (NLP, glaucoma reoperation, failing IOP at 6 and 12 months)		Reoperation for glaucoma (implantation of a new shunt to control IOP or cyclodestructive procedure)	
	Univariate	Multivariate [†]	Univariate	Multivariate [‡]
Randomization to Baerveldt	0.8 (0.4, 1.5)	0.8 (0.4, 1.4)	0.1 (0.01, 0.7) [§]	0.04 (0.01, 0.3) [§]
Stratum				
2:High Risk	2.2 (0.9, 5.5)	3.1 (1.2, 8.1) [§]	8.0 (0.7, 88)	
3:NVG	2.6 (1.3, 5.4)	2.7 (1.3, 5.6) [§]	13.5 (1.7, 110)	
4:Uveitic	1.9 (0.6, 6.8)	2.7 (0.7, 9.8)	17.2 (1.6, 190)	
(1:Primary with prior surgery=ref)				
Female gender	0.9 (0.5, 1.7)		0.5 (0.2, 1.8)	
Race				
Black	0.9 (0.5, 1.9)		1.9 (0.5, 7.7)	
Hispanic	0.5 (0.2, 1.8)		2.1 (0.4, 11.4)	
Asian	0.9 (0.4, 2.5)		2.1 (0.4, 11.2)	
Other	**		**	
(White=ref)				
Diabetes Mellitus	1.6 (0.9, 2.9)		2.1 (0.7, 6.7)	
Hypertension	1.2 (0.6, 2.2)		1.0 (0.3, 3.3)	
Lens Status				
PCIOL	0.8 (0.4, 1.6)		0.2 (0.1, 0.9)	
ACIOL	0.5 (0.07, 3.7)		1.1 (0.1, 9.0)	
Aphake	1.2 (0.2, 8.7)		2.6 (0.3, 21.2)	
(Phakic=ref)				
Ten additional years of age	0.9 (0.7, 1.0)		0.7 (0.5, 0.9) [§]	
Age < 60	1.7 (0.9, 3.2)		3.0 (0.9, 9.4)	
Previous laser	1.7 (0.9, 3.3)	2.0 (1.0, 4.0) [§]	2.2 (0.7, 7.2)	
Previous incisional surgery	0.8 (0.4, 1.8)		0.2 (0.07, 0.7) [§]	
Five mmHg higher preoperative IOP	1.1 (1.0, 1.2)		1.2 (1.0, 1.5)	1.4 (1.1, 1.8) [§]
Preoperative acuity ≤20/200	1.3 (0.7, 2.5)		1.8 (0.6, 5.4)	
One additional preoperative med	0.9 (0.7, 1.2)		1.0 (0.6, 1.8)	

≥20 prior cases performed with randomized device	0.8 (0.6, 1.0) [§]	0.7 (0.6, 0.9) [§]	0.7 (0.4, 1.0) [§]	0.4 (0.3, 0.7) [§]
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NLP - No light perception

IOP - Intraocular pressure

NVG - Neovascular glaucoma

PCIOL - Posterior chamber intraocular lens

ACIOL - Anterior chamber intraocular lens

* Calculated using Cox proportional hazards regression. For polychotomous variables, reference category is indicated in parentheses.

† Multivariate analysis was performed by allowing all risk factors, including treatment, to be candidates for inclusion into the model in a forward stepwise fashion with an alpha to enter of 0.05. Following stepwise fitting, treatment assignment was forced into the model if it was not already included. Multivariate relative risks and confidence intervals were only calculated for variables included in the model.

‡ Multivariate analysis of reoperation for glaucoma followed the same strategy as with all failure criteria; however, if stratum was forced into the model, previous incisional surgery lost statistical significance while treatment effect and the effect of surgeon experience remained substantially unchanged with respect to both effect size and statistical significance.

§ Denotes confidence intervals excluding 1.0, that is, which are statistically significant with $p \leq 0.05$. Polychotomous variables are only indicated if the overall multiple degree of freedom test was significant.

** Model did not converge due to small numbers