

Supplementary Material

Benefit of Latanoprostene Bunod (Vyzulta) for Glaucoma Switched from Prior Pharmacotherapy: A Retrospective Cohort Study in Taiwan

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Supplementary Table S1. Significance estimation of time and group effects by repeated measures ANOVA analyses

ANOVA model	Time effect	Group effect	Group $\times$ Time interaction
Overall	<0.001	NA	NA
Initial IOP	<0.001	<0.001	<0.001
Type of glaucoma	<0.001	0.006	0.417
Type of previous PGA	<0.001	0.472	0.673
Number of previous antiglaucoma drugs	<0.001	0.005	0.182
History of IOL implantation	<0.001	0.211	0.499

p-values are presented.

ANOVA, Analysis of Variance; PGA, prostaglandin analog; IOL, intraocular lens; IOP, intraocular pressure; NA, not applicable.

Supplementary Table S2. Post-hoc pairwise comparisons via repeated measures ANOVA

Model A

Overall		Time (1)			
Difference of IOP: Time (1)-(2)		Baseline	1 month	3 months	6 months
Time (2)	1 month	1.79 (0.33)*			
	3 months	1.71 (0.35)*	-0.08 (0.18)		
	6 months	1.45 (0.37)*	-0.34 (0.21)	-0.26 (0.16)	
	1 year	1.33 (0.37)*	-0.46 (0.21)	-0.38 (0.16)	-0.12 (0.12)

Model B

Initial IOP level		Time (1)			
Difference of IOP: Time (1)-(2)		Baseline	1 month	3 months	6 months
Time (2)	1 month	2.234 (0.29)*			
	3 months	2.167 (0.32)*	-0.07 (0.19)		
	6 months	1.945 (0.35)*	-0.29 (0.22)	-0.22 (0.17)	
	1 year	1.902 (0.35)*	-0.33 (0.22)	-0.26 (0.17)	-0.04 (0.13)
Difference of IOP: Initial IOP level (1)-(2)		Initial IOP level (1)			
		< 15 mm Hg	15-20 mm Hg		
Initial IOP level (2)	15-20 mmHg	-3.04 (0.55)*			
	≥ 20 mm Hg	-6.38 (0.67)*	-3.34 (0.62)*		

Model C

Type of glaucoma		Time (1)			
Difference of IOP: Time (1)-(2)		Baseline	1 month	3 months	6 months
Time (2)	1 month	2.28 (0.40)*			
	3 months	2.06 (0.43)*	-0.23 (0.23)		
	6 months	1.65 (0.46)*	-0.63 (0.25)	-0.41 (0.20)	
	1 year	1.64 (0.46)*	-0.65 (0.26)	-0.42 (0.20)	-0.01 (0.15)
Difference of IOP: Glaucoma type (1)-(2)		Type of glaucoma (1)			
		PACG	POAG		
Type of glaucoma (2)	POAG	-1.06 (0.78)			
	Others	-3.31 (1.04)*	-2.24 (0.86)*		

Model D

Type of previous PGA		Time (1)			
Difference of IOP: Time (1)-(2)		Baseline	1 month	3 months	6 months
Time (2)	1 month	1.86 (0.33)*			
	3 months	1.73 (0.36)*	-0.13 (0.19)		
	6 months	1.46 (0.38)*	-0.40 (0.21)	-0.27 (0.16)	

	1 year	1.34 (0.38)*	-0.51 (0.22)	-0.39 (0.17)	-0.12 (0.13)
Difference of IOP: PGA type (1)-(2)		Type of previous PGA (1)			
		Lumigan	Xalatan	Travoprost	
Type of previous PGA (2)	Xalatan	0.20 (0.87)			
	Travoprost	-0.81 (0.81)	-1.01 (0.91)		
	Non- Prostaglandin	-0.98 (0.87)	-1.18 (0.96)	-0.17 (0.91)	

Model E

Number of previous antiglaucoma drugs		Time (1)			
Difference of IOP: Time (1)-(2)		Baseline	1 month	3 months	6 months
Time (2)	1 month	1.62 (0.34)*			
	3 months	1.61 (0.37)*	-0.01 (0.19)		
	6 months	1.26 (0.39)*	-0.36 (0.22)	-0.35 (0.17)	
	1 year	1.17 (0.39)*	-0.45 (0.23)	-0.44 (0.17)	-0.09 (0.13)

No post hoc for 2-group comparison by number of antiglaucoma drugs (≥ 3 vs. < 3)

Model F

History of IOL implantation		Time (1)			
Difference of IOP: Time (1)-(2)		Baseline	1 month	3 months	6 months
Time (2)	1 month	1.81 (0.34)*			
	3 months	1.76 (0.36)*	-0.05 (0.19)		
	6 months	1.50 (0.39)*	-0.32 (0.22)	-0.27 (0.17)	
	1 year	1.30 (0.39)*	-0.51 (0.22)	-0.46 (0.17)	-0.20 (0.13)

No post hoc for 2-group comparison by history of IOL (Yes vs. No)

Data are presented as estimated difference (standard error). * indicates significance.

PGA, prostaglandin analog; IOL, intraocular lens; IOP, intraocular pressure; PACG, primary angle-closure glaucoma; POAG, primary open-angle glaucoma.

Supplementary Table S3. Clinical reasons for switching from conventional prostaglandin analogs to LBN (per treated eye)

Clinical reasons	n
For further IOP control	86
Previous medication side effect	
Itchiness	2
PAP (Prostaglandin Associated Periorbitopathy)	28
Red eye	11
Red eye + PAP	2

LBN, Latanoprostene bunod; IOP, intraocular pressure; PAP, prostaglandin-associated periorbitopathy.