

## Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

**eTable 1. Investigator-Reported Adverse Events, Intraoperative Complications, and Refractive/Acuity Outcomes (Surgical Cohort).**

	Safety Outcomes in Surgical Cohorts		
	PROWL-1		PROWL-2
<b>Adverse Events</b>	Events in 6 eyes (1.2%)†		Events in 4 eyes (0.7%)††
<b>Intraoperative Complications*</b>	Events in 23 eyes (4.8%)		Events in 3 eyes (0.5%)
<b>Loss of BCVA (at 3 months or later)</b> number of eyes with $\geq 2$ lines loss	1**		0
<b>BCVA &lt;20/40 (at 3 months or later)</b> (number of eyes)	0		0
<b>BCVA &lt;20/25 when pre-op <math>\geq 20/20</math></b> (at 3 months or later) number of eyes	0		0
<b>Cylinder Increase &gt;2 D</b> (at 3 months or later) number of eyes	0		0
	Effectiveness Outcomes in Surgical Cohorts		
	Month 3		Month 6
	PROWL-1	PROWL-2	PROWL-1
<b>BCVA <math>\geq 20/20</math> (% of eyes)</b>	99.8%	99.8%	100.0%
<b>Uncorrected Visual Acuity</b>			
$\geq 20/20$ (% of eyes)	97.6%	91.7%	98.3%
$\geq 20/40$ (% of eyes)	100.0%	99.1%	100.0%
<b>Manifest Refraction Spherical Equivalent (D)</b>			
Mean (SD)	-0.1 (.23)	-0.1 (.36)	-0.1 (.23)

BCVA= Best corrected visual acuity; D= diopter; SD= standard deviation; PROWL= Patient-Reported Outcomes with LASIK

† Included flap miscreation (1), flap difficulties (2 eyes in 1 subject), central serous chorioretinopathy (1), loss of suction (1), and recurrent corneal erosion (1).

††Included corneal foreign body (1), flap difficulty (1), and viral conjunctivitis (2 eyes in 1 subject).

\*Included, immediate flap refloats (16 and 1), anterior chamber gas bubbles (2 and 0), epithelial drying or epithelial defects (5 and 2) for PROWL-1 and PROWL-2, respectively.

\*\*Eye went from 20/16 pre-op to 20/25 at 3 months postop.

**eTable 2. Distribution of Oxford Grade Over Time (Surgical Cohort).<sup>†</sup>**

Oxford Grade*	Baseline		3 Months		6 Months
	PROWL-1	PROWL-2	PROWL-1	PROWL-2	PROWL-1
<b>0</b>	90.9% (440/484)	80.0% (467/584)	87.3% (393/450)	83.5% (451/540)	89.7% (375/418)
<b>1</b>	7.6% (37/484)	8.6% (50/584)	10.2% (46/450)	10.9% (59/540)	9.8% (41/418)
<b>2</b>	1.5% (7/484)	1.0% (6/584)	1.6% (7/450)	2.4% (13/540)	0.5% (2/418)
<b>3</b>	0.0% (0/484)	0.2% (1/584)	0.4% (2/450)	0.0% (0/540)	0.0% (0/418)
<b>4</b>	0.0% (0/484)	0.0% (0/584)	0.0% (0/450)	0.2% (1/540)	0.0% (0/418)
<b>5</b>	0.0% (0/484)	0.0% (0/584)	0.0% (0/450)	0.0% (0/540)	0.0% (0/418)
<b>Missing Observations**</b>	0.0% (0/484)	10.3% (60/584)	0.4 (2/450)	3.0% (16/540)	0.0% (0/418)

PROWL= Patient-Reported Outcomes with LASIK

<sup>†</sup>The percentage of eyes is reported with the number of eyes in category / number of eyes in surgical cohort seen at visit being in parentheses.

\*Note that higher Oxford grades correspond to greater ocular surface e staining related to dryness.

\*\*Observations missing among eyes in surgical cohort seen at visit.

**eTable 3. Participant-Reported Visual Symptoms\* (Analytical Cohort)**

	3 months		6 months
	PROWL-1	PROWL-2	PROWL-1
<b>PROWL Questionnaires</b>	50% (112/224)	61% (154/254)	41% (89/216)
<b>Investigators</b>	8% (18/225)	28% (73/258)	7% (14/208)

PROWL=Patient-Reported Outcomes with LASIK

\*Denominators are either the number of submitted questionnaires (Analytical Cohort) at the visit or the number of subjects with an investigator visit.

**eTable 4. Distribution of Participant-Reported Satisfaction with Vision\* (Analytical Cohort).**

	Baseline		3 months		6 months
	PROWL-1	PROWL-2	PROWL-1	PROWL-2	PROWL-1
Completely satisfied	2.1% (5/240)	2.2% (6/271)	62.5% (140/224)	52.7% (135/256)	69.9% (151/216)
Very satisfied	8.8% (21/240)	17.3% (47/271)	30.8% (69/224)	38.7% (99/256)	22.7% (49/216)
Somewhat satisfied	15.8% (38/240)	26.2% (71/271)	4.5% (10/224)	4.7% (12/256)	4.2% (9/216)
Somewhat dissatisfied	25.8% (62/240)	19.2% (52/271)	0.4% (1/224)	1.2% (3/256)	0.9% (2/216)
Very dissatisfied	33.8% (81/240)	26.6% (72/271)	0.4% (1/224)	1.6% (4/256)	0.9% (2/216)
Completely dissatisfied	13.8% (33/240)	8.5% (23/271)	0.4% (1/224)	1.2% (3/256)	0.9% (2/216)

PROWL=Patient-Reported Outcomes with LASIK

\*Denominators are the number of submitted questionnaires (Analytical Cohort) at the visit.

**eTable 5. Correlations\* of Satisfaction Scores with Visual Symptoms Scores (Analytical Cohort).**

	<b>3 months Correlation</b>		<b>6 months Correlation</b>	<b>3 months Correlation</b>		<b>6 months Correlation</b>
	<b>SATISFACTION WITH VISION</b>			<b>SATISFACTION WITH SURGERY</b>		
<b>SYMPTOM</b>	<b>PROWL-1</b>	<b>PROWL-2</b>	<b>PROWL-1</b>	<b>PROWL-1</b>	<b>PROWL-2</b>	<b>PROWL-1</b>
<b>Double Images</b>	0.27	0.24	0.34	0.31	0.26	0.32
<b>Glare</b>	0.29	0.26	0.33	0.35	0.30	0.40
<b>Halos</b>	0.35	0.33	0.43	0.33	0.37	0.41
<b>Starbursts</b>	0.26	0.34	0.34	0.28	0.34	0.28

PROWL= Patient-Reported Outcomes with LASIK

\*Spearman rank correlation coefficient; p < 0.001 for all correlations

**eTable 6. Mean Participant Satisfaction Scores Stratified by Reports of Adverse Events/Intraoperative Complications, Postoperative Acuity, and Postoperative Use of Corrective Lenses (Analytical Cohort).**

	3 months Mean Satisfaction Score (SD)		6 months Mean Satisfaction Score (SD)	3 months Mean Satisfaction Score (SD)		6 months Mean Satisfaction Score (SD)
	Satisfaction with Vision			Satisfaction with Surgery		
	PROWL- 1	PROWL- 2	PROWL-1	PROWL- 1	PROWL- 2	PROWL-1
<b>One or more AEs/ICs</b>	91.6 (16.8) n=19	76.0 (32.9) n=5	88.4 (26.1) n=19	86.8 (25.8) n=19	81.6 (29.8) n=5	87.1 (25.0) n=19
<b>No AEs/ICs</b>	90.8 (14.1) n=203	87.5 (17.7) n=251	91.8 (15.4) n=196	93.5 (11.9) n=202	90.8 (14.3) n=251	93.7 (12.1) n=196
p-value*	0.451	0.434	0.868	0.601	0.619	0.677
<b>UCVA ≤20/40</b> (monocular either eye)	60.0 (N/A) n=1	57.1 (33.5) n=7	0.0 (N/A) n=1	52.9 (N/A) n=1	66.3 (24.3) n=7	17.1 (N/A) n=1
<b>UCVA &gt; 20/40</b> (monocular, in both eyes)	91.3 (12.9) n=216	88.2 (17.0) n=243	92.2 (15.3) n=201	93.0 (13.6) n=215	91.3 (13.9) n=243	93.9 (12.5) n=201
p-value*	N/A	0.001	N/A	N/A	0.001	N/A
<b>Use corrective lenses</b>	78.0 (22.0) n=10	81.4 (14.6) n=14	73.3 (21.5) n=12	78.7 (27.0) n=10	88.6 (11.3) n=14	72.8 (23.7) n=12
<b>Do not use corrective lenses</b>	91.5 (13.6) n=212	87.5 (18.3) n=240	92.8 (15.5) n=202	93.6 (12.4) n=211	90.7 (14.9) n=240	94.4 (12.0) n=202
p-value*	0.025	0.046	<.0001	0.034	0.150	0.0002

PROWL= Patient-Reported Outcomes with LASIK; SD=standard deviation; UCVA=uncorrected visual acuity; AEs/ICs = Adverse events or intraoperative complications

\* p-value from Mann-Whitney test