



RLES AI® OUTCOME REGISTRY REPORT

COMPLEX CASE: A PERSONAL NOMOGRAM FROM 32 CASES — DEMO

REFRACTIVE LASER EYE SURGERY - ARTIFICIAL INTELLIGENCE ASSISTED

DEMO REPORT — FICTITIOUS PATIENT

This document is a demonstration output of the RLES AI® report engine. The patient and all measurements are FICTITIOUS; they belong to no real person. Not for clinical use; no medical decision may rely on it. Real reports are produced by the same engine from the surgeon's uploaded examinations.

1 · THE CASE — TURNING 'THEY END UP SLIGHTLY PLUS' INTO A NUMBER

DEMO SURGEON (fictitious) · 32 standard myopic LASIK cases accumulated in 9 months through one-line FOLLOW-UP records. The surgeon's feeling was 'my patients end up slightly hyperopic'; the registry measured it. There is no fixed threshold — the proposal gate derives from the surgeon's OWN distribution ($CI = 1.96 \cdot SD/\sqrt{n}$).

2 · POOL ANALYSIS — THE GATE IS CLEARED

Metric	Value	Reading
Pool	32 cases (rolling window of 50)	uncomplicated standard cases only
Mean spherical deviation	+0.18 D	a systematic slightly hyperopic outcome
95% CI	± 0.11 D	BELOW the ± 0.125 gate → the 'proposal' tier is OPEN
Predictability	± 0.50 D: %84	post-nomogram target: $\geq 90\%$
Alpins (21 cases with TIA ≥ 0.50 D)	CI 0.96 · IOS 0.31	cylinder correction slightly under



A case from the pool — TIA · SIA · DV (double angle)

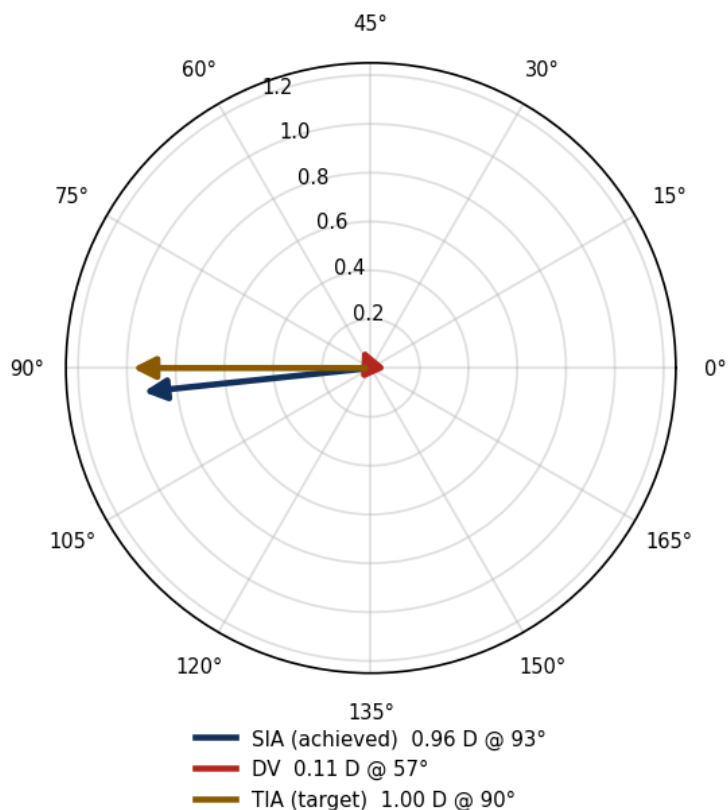


Figure 1 — Alpines postoperative vectors (a case from the pool): TIA 1.00 @ 90 · SIA 0.96 @ 93 → DV 0.11 · CI 0.96 · IOS 0.11. The pool mean CI of 0.96 shows a slight under-correction trend in cylinder — the cylinder subgroup keeps filling its own gate.

2b · THE STANDARD OUTCOME METRICS — FULL POOL

Metric	Value	Definition
Efficacy index	0.97	mean postop UDVA / preop CDVA
Safety index	1.01	mean postop CDVA / preop CDVA — no line loss
±0.25 / ±0.50 / ±1.00 D	%59 · %84 · %100	the predictability spread; post-nomogram target ±0.50 ≥ 90%
Rolling window	32/50	uncomplicated standard cases only; old cases roll out of the window
Subgroups	with cylinder 21 · high myopes 6	each subgroup fills its OWN gate — the global proposal never auto-applies to a subgroup

3 · THE NOMOGRAM PROPOSAL & ROLL-OUT PLAN

Item	Plan
Spherical proposal	programmed sphere reduced 3% (example −6.00 → −5.82) — rationale: n=32 · mean +0.18 · CI ±0.11
Cylinder	CI 0.96: NO proposal yet — the cylinder subgroup fills its own gate separately



Item	Plan
Roll-out	the proposal is NEVER auto-applied: the next case shows a 'nomogram proposal' line on the planning screen for the surgeon to accept or reject; every outcome feeds back into the pool

CONCLUSION

Thirty-two one-line messages turned a feeling into a statistically defensible personal nomogram. The surgeon still decides every case — the engine merely shows surgeons their own results.

SURGEON'S SIGNATURE & AI VERIFICATION

This report is clinical decision support; the plan is finalised by surgeon approval. Signature: _____ Date: _____