

**Table I**

**Intralimbal Relaxing Incision  
Nomogram for Modern Phaco Surgery  
Empiric blade-depth setting of 600 microns**

*Louis D. "Skip" Nichamin, M.D. ~ Laurel Eye Clinic, Brookville, PA*

**SPHERICAL**

(up to +0.75 X 90 or +0.50 X 180)

*Incision Design* "Neutral" temporal clear corneal incision (ie., 3.5 mm. or less, single plane, just anterior to vascular arcade)

**AGAINST-THE-RULE**

(Steep Axis 0-40°/140-180°)

PRE-OP CYLINDER	Paired Incisions in Degrees of Arc*						
	30-40 yrs old	41-50 yrs old	51-60 yrs old	61-70 yrs old	71-80 yrs old	81-90 yrs old	91+ yrs old
+0.75 to +1.25	Nasal limbal arc only*					35°	
	55°	50°	45°	40°	35°		
+1.50 to +2.00	70°	65°	60°	55°	45°	40°	35°
+2.25 to +2.75	90°	80°	70°	60°	50°	45°	40°
+3.00 to +3.75	90° o.z. = 8mm	90° o.z. = 9mm	85°	70°	60°	50°	45°

*Incision Design* The temporal incision, if greater than 40° of arc, is made by first creating a two-plane, grooved phaco incision (600 μ depth), which is then extended to the appropriate arc length at the conclusion of surgery.

**WITH-THE-RULE**

(Steep Axis 45°-145°)

PRE-OP CYLINDER	Paired Incisions in Degrees of Arc						
	30-40 yrs old	41-50 yrs old	51-60 yrs old	61-70 yrs old	71-80 yrs old	81-90 yrs old	91+ yrs old
+1.00 to +1.50	50°	45°	40°	35°	30°		
+1.75 to +2.25	60°	55°	50°	45°	40°	35°	30°
+2.50 to +3.00	70°	65°	60°	55°	50°	45°	40°
+3.25 to +3.75	80°	75°	70°	65°	60°	55°	45°

*Incision Design* "Neutral" temporal clear corneal along with the following peripheral arcuate incisions

*When placing intralimbal relaxing incisions following or concomitant with radial relaxing incisions, total arc length is decreased by 50%*

*Table II*

<b>The “NAPA” Nomogram</b>				
<b>Nichamin Age &amp; Pachymetry-Adjusted Intralimbal Arcuate Astigmatic Nomogram</b>				
<b>Louis D. “Skip” Nichamin, M.D. ~ Laurel Eye Clinic, Brookville, PA</b>				
<b>WITH-THE-RULE</b> (Steep Axis 45°-145°)				
<b>PREOP CYLINDER</b> (Diopters)	<b>Paired Incisions in Degrees of Arc</b>			
	<b>20-30 yrs old</b>	<b>31-40 yrs old</b>	<b>41-50 yrs old</b>	<b>51-60 yrs old</b>
<b>0.75</b>	40	35	35	30
<b>1.00</b>	45	40	40	35
<b>1.25</b>	55	50	45	40
<b>1.50</b>	60	55	50	45
<b>1.75</b>	65	60	55	50
<b>2.00</b>	70	65	60	55
<b>2.25</b>	75	70	65	60
<b>2.50</b>	80	75	70	65
<b>2.75</b>	85	80	75	70
<b>3.00</b>	90	90	85	80
<b>AGAINST-THE-RULE</b> (Steep Axis 0-40°/140-180°)				
<b>PREOP CYLINDER</b> (Diopters)	<b>Paired Incisions in Degrees of Arc</b>			
	<b>20-30 yrs old</b>	<b>31-40 yrs old</b>	<b>41-50 yrs old</b>	<b>51-60 yrs old</b>
<b>0.75</b>	45	40	40	35
<b>1.00</b>	50	45	45	40
<b>1.25</b>	55	55	50	45
<b>1.50</b>	60	60	55	50
<b>1.75</b>	65	65	60	55
<b>2.00</b>	70	70	65	60
<b>2.25</b>	75	75	70	65
<b>2.50</b>	80	80	75	70
<b>2.75</b>	85	85	80	75
<b>3.00</b>	90	90	85	80
<b><i>When placing intralimbal relaxing incisions following or concomitant with radial relaxing incisions, total arc length is decreased by 50%</i></b>				

This resource is intended for use by physicians and other healthcare professionals involved in patient care. It is not intended and should not be construed as medical advice, nor is it intended to replace sound clinical judgment in the delivery of healthcare services. All medical and clinical data contained or made available in this resource is intended to supplement the knowledge of physicians and other healthcare professionals involved in patient care. The absence of a warning for a given procedure, technique or suggestion contained in this resource should not be construed to indicate that such procedure, technique or suggestion is safe, appropriate or effective in any given patient.