Heru Prime: Clinical Study

Our results indicate that Heru Prime pupillometer provides consistent and reproducible pupillometry results.

High reproducibility measurements for pupil size in both dim and bright light conditions were found, with Cronbach's alpha values of 0.987 and 0.985, respectively.

Intraclass Correlation Coefficient (ICC) for average measures was 0.981 (95% CI: 0.959 to 0.991) for dim light and 0.973 (95% CI: 0.909 to 0.988) for bright light.

For accommodation measurements, the results demonstrated good consistency, with a Cronbach's alpha of 0.837 and an ICC for average measures of 0.829 (95% CI: 0.724 to 0.898).

Pupillary reactivity was categorized into three groups based on constriction velocity: non-reactive (velocity < 0.4 mm/s), sluggish (0.4 mm/s \leq velocity < 0.8 mm/s), and brisk (velocity \geq 0.8 mm/s). The measured reproducibility among these categories was 100%.



	Cronbach's alpha	ICC – Average Measures			ICC- Single Measures		
		95% CI			95% CI		
			Lower	Upper		Lower	Upper
Dim Light (Diameter mm)	0.987	0.981	0.959	0.991	0.946	0.886	0.973
Bright Light (Diameter mm)	0.985	0.973	0.909	0.988	0.922	0.770	0.966
Reactive Velocity (mm/s)	0.716	0.717	0.544	0.832	0.458	0.284	0.622
Pupil Reactivity Category	1.000	1.000			1.000		
Accommodation (mm)	0.837	0.829	0.724	0.898	0.618	0.467	0.747

Intraclass Correlation Coefficient (ICC), Confidence Interval (CI)