

CIRCUL clinical validation in hospital 12 samples with 4 black people

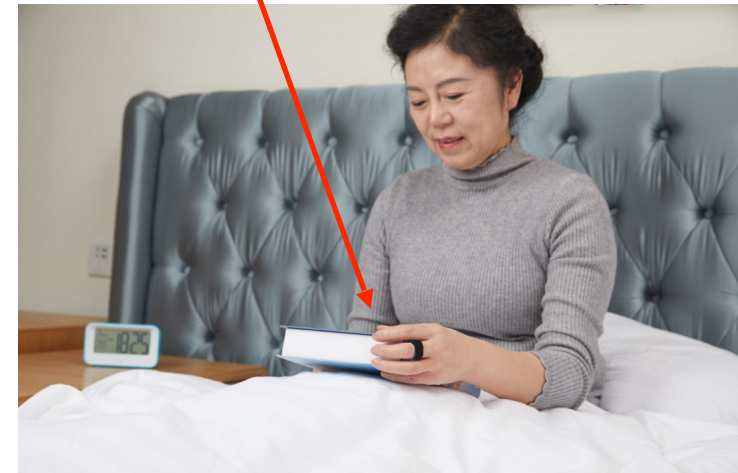
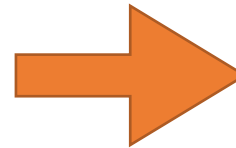


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Continuous SpO2 monitoring by CIRCUL

Most comfortable, no drop off during sleep in the world
Suitable for long-term, everyday continuous measurement



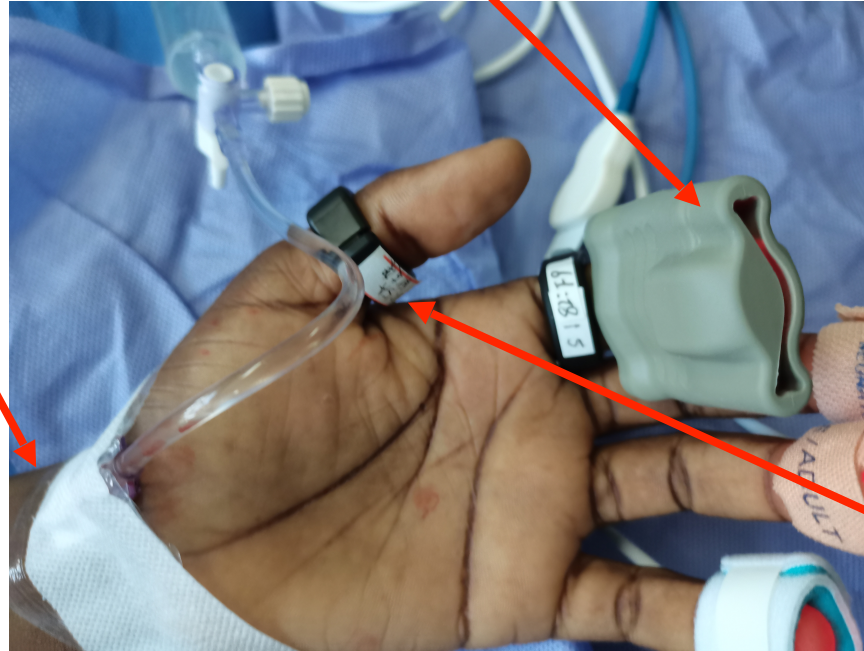
CIRCUL 12 samples clinical validation in hospital with 4 black people



TONGDE HOSPITAL OF ZHEJIANG PROVINCE

ABG

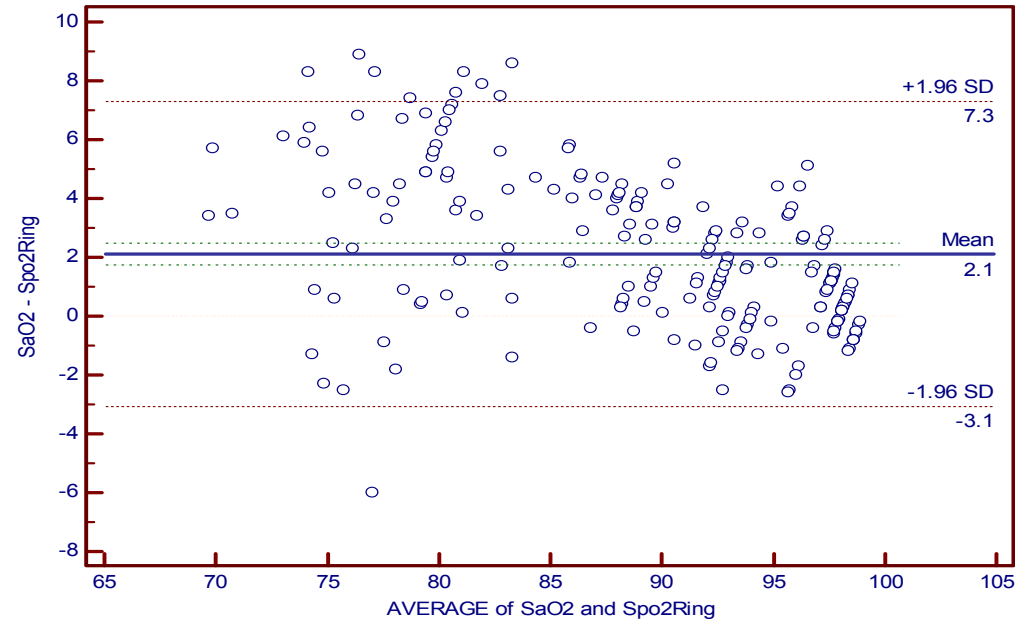
GE Oximeter



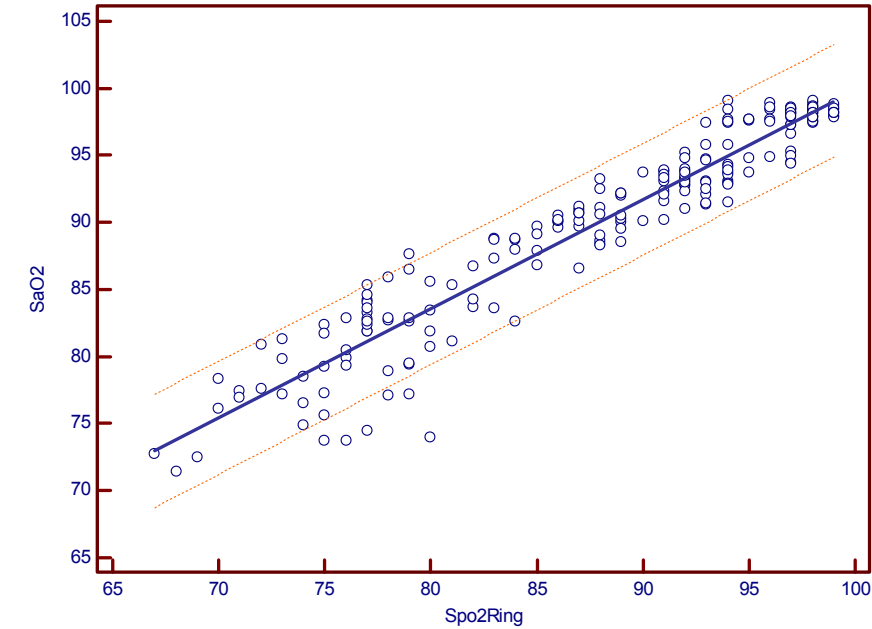
CIRCUL

Bland-Altman Analyse

Ring VS SaO2
Arms = 3.38%;



Scatter diagram and regression line



Paired samples t-test

Sample 1	
Variable	SaO2
Sample 2	
Variable	Spo2Ring

	Sample 1	Sample 2
Sample size	209	209
Arithmetic mean	90.1847	88.0813
95% CI for the mean	89.1824 to 91.1870	86.9027 to 89.2599
Variance	54.0205	74.7001
Standard deviation	7.3499	8.6429
Standard error of the mean	0.5084	0.5978

Paired samples t-test

Mean difference	-2.1033
Standard deviation	2.6481
95% CI	-2.4645 to -1.7422
Test statistic t	-11.483
Degrees of Freedom (DF)	208
Two-tailed probability	P < 0.0001

[Dot-and-Line diagram](#)



Correlation

Variable Y	SaO2
Variable X	Spo2Ring

Sample size	209
Correlation coefficient r	0.9580
Significance level	P<0.0001
95% Confidence interval for r	0.9451 to 0.9679

[Scatter diagram](#)



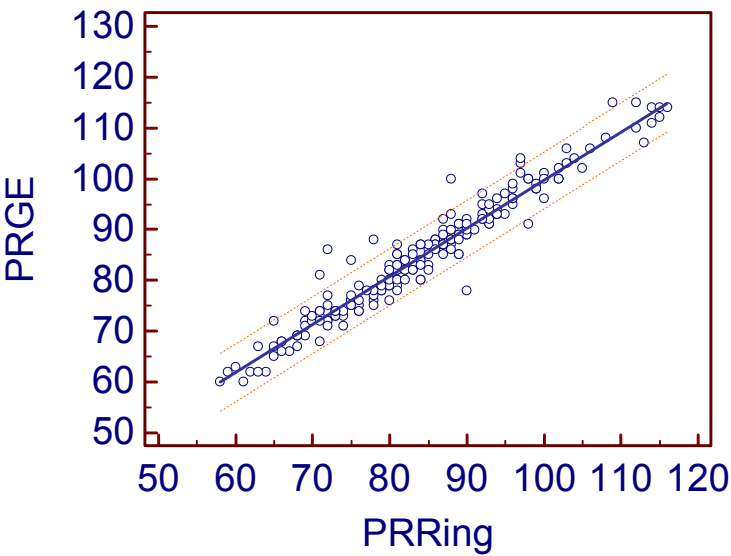
Ring vs GE:

Ring VS GE:
Heart Rate

Bland-Altman Analyse



Scatter diagram and regression line



Paired samples t-test

Sample 1		
Variable	PRGE	
Sample 2		
Variable	PRRing	

	Sample 1	Sample 2
Sample size	209	209
Arithmetic mean	84.7895	84.1914
95% CI for the mean	83.1599 to 86.4191	82.5213 to 85.8614
Variance	142.8016	149.9824
Standard deviation	11.9500	12.2467
Standard error of the mean	0.8266	0.8471

Paired samples t-test

Mean difference	-0.5981
Standard deviation	2.8925
95% CI	-0.9925 to -0.2036
Test statistic t	-2.989
Degrees of Freedom (DF)	208
Two-tailed probability	P = 0.0031

[Dot-and-Line diagram](#)

Correlation

Variable Y	PRGE
Variable X	PRRing

Sample size	209
Correlation coefficient r	0.9717
Significance level	P<0.0001
95% Confidence interval for r	0.9630 to 0.9784

[Scatter diagram](#)