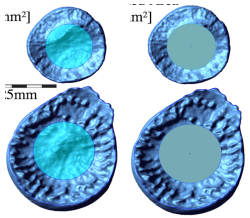
Central Region Surface Complexity

Age [Days]	Real Surface	Projected	Difference	Ratio	Scaled (-0.8)
120 1R	236.9	200.1	36.77	1.18	0.38
120 2R	198.6	171.2	27.40	1.16	0.36
120 3R	232.4	195.8	36.66	1.19	0.39
120 4R	212.1	181.2	30.99	1.17	0.37
1201L	209.6	174.9	34.72	1.20	0.40
120 2L	151.1	130.7	20.44	1.16	0.36
120 3L	193.7	166.9	26.84	1.16	0.36
120 4L	230.9	195.0	35.90	1.18	0.38
Mean	208.19	176.98	31.22	1.18	0.38
SD	28.03	22.40	5.91	0.31	0.49

Age [Days]	Real Surface	Projected	Difference	Ratio	Scaled (-0.8)
900 1R	366.9	314.2	52.70	1.17	0.37
900 2R	343.0	293.6	49.40	1.17	0.37
900 3R	365.5	314.2	51.30	1.16	0.36
9001L	352.3	293.6	58.70	1.20	0.40
900 2L	364.6	314.2	50.40	1.16	0.36
900 3L	361.9	314.2	47.70	1.15	0.35
Mean	359.03	307.33	51.70	1.17	0.37
SD	9.44	10.64	3.82	0.07	0.73

To calculate the Sdr Standard Deviation 120 Days

Convert error to percentage [%]		add errors	Ratio	Convert from	Final
Age	Real	Projected	Real + Projected	Real/Projected	percentage	Answer
120	13.47	12.66	26.12	1.18	0.31	1.18 ± 0.31
900	2.63	3.46	6.09	1.17	0.07	1.17 ± 0.07



Central Region Real vs Projected Surface Area 120 Day

Descriptive Statistics

	Difference
Mean	31.22
Standard Erro	2.08974456
Median	32.85
Mode	#N/A
Standard Dev	5.91069021
Sample Varia	34.9362587
Kurtosis	-0.264352
Skewness	-0.8392753
Range	16.33
Maximum	36.77
Minimum	20.44
Sum	249.72
Count	8
Geometric M	30.6694603
Harmonic Me	30.0672378
AAD	4.79835
MAD	3.86335
IQR	8.83355

Box Plot

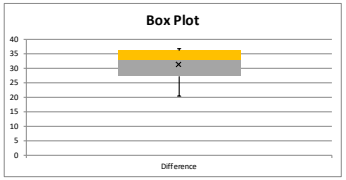
	Difference
Min	20.4446
Q1-Min	6.812925
Med-Q1	5.595575
Q3-Med	3.237975
Max-Q3	0.681125
Mean	31.22
Min	20.4446
Q1	27.257525
Median	32.85
Q3	36.091075
Max	36.7722
Mean	31.22
Grand Min	0
Outliers	

Shapiro-Wilk Test

	Difference
W-stat	0.88185196
p-value	0.19614678
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	1.27711436
p-value	0.52805376
alpha	0.05
normal	yes



Central Region Real vs Projected Surface Area 120 Day

T Test: Two Paired Samples

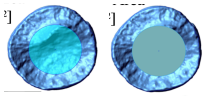
1

SUMMARY		Alpha	0.05	Hyp Mean Di	0			
Groups	*Count*	*Mean*	*Std Dev*	*Std Err*	*t*	*df*	*Cohen d*	*Effect r*
Real Surface	8	208.19	28.0339762					
Projected	8	176.98	22.4017834					
Difference	8	31.22	5.91069021	2.089744564	14.9373759	7	5.28115988	0.98467344

Effect size	Effect size
Choen's *d* score	Choen's *r* score
0.2 Small	0.1 Small
0.5 Medium	0.3 Medium
0.8 Large	0.5 Large

T TEST

	p-value	*t-crit*	*lower*	*upper*	*sig*
One Tail	7.22894E-07	1.89457861			yes
Two Tail	1.44579E-06	2.36462425	26.2738393	36.15676067	yes



The 120-day-old average central region's real sufrace area (208.19 ± 28.03 mm²) was larger than the projected surface area (176.98± 22.40 mm²).
This difference (31.22 mm²), 95% CI [26.27, 36.16] was statistically significant, $t(7) = 14.94$, $P < .001$, with a large effect size ($d = 5.28$).

Central Region Real vs Projected Surface Area 900 Day

Descriptive Statistics

	Difference
Mean	51.70
Standard Erro	1.56140962
Median	50.85
Mode	#N/A
Standard Dev	3.82465685
Sample Varia	14.628
Kurtosis	2.54624392
Skewness	1.42405286
Range	11
Maximum	58.70
Minimum	47.70
Sum	310.20
Count	6
Geometric M	51.5870061
Harmonic Me	51.4788015
AAD	2.66666667
MAD	1.65
IQR	2.7

Box Plot

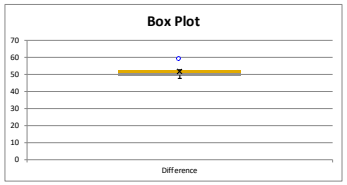
	Difference
Min	47.7
Q1-Min	1.95
Med-Q1	1.2
Q3-Med	1.5
Max-Q3	0.35
Mean	51.70
Min	47.7
Q1	49.65
Median	50.85
Q3	52.35
Max	52.7
Mean	51.70
Grand Min	0
Outliers	58.70

Shapiro-Wilk Test

	Difference
W-stat	0.89228257
p-value	0.33032072
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	4.97860536
p-value	0.0829678
alpha	0.05
normal	yes



Central Region Real vs Projected Surface Area 900 Day

T Test: Two Paired Samples

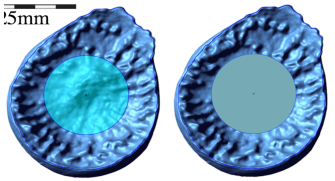
2

SUMMARY		Alpha	0.05	Hyp Mean Di	0			
Groups	*Count*	*Mean*	*Std Dev*	*Std Err*	*t*	*df*	*Cohen d*	*Effect r*
Real Surface	6	359.03	9.43730187					
Projected	6	307.33	10.6377943					
Difference	6	51.70	3.82465685	1.56140962	33.1111064	5	13.5175526	0.99772747

Effect size	Effect size
Choen's *d* score	Choen's *r* score
0.2 Small	0.1 Small
0.5 Medium	0.3 Medium
0.8 Large	0.5 Large

T TEST

	p-value	*t-crit*	*lower*	*upper*	*sig*
One Tail	2.36141E-07	2.01504837			yes
Two Tail	4.72281E-07	2.57058184	47.6862688	55.71373121	yes



The 900-day-old average central region's real sufrace area (359.03 ± 9.44 mm²) was larger than the projected surface area (307.33± 10.64 mm²).
This difference (51.70 mm²), 95% CI [47.69, 55.71] was statistically significant, $t(5) = 33.11$, $P < .001$, with a large effect size ($d = 13.51$).

Central Region Surface Area 120 to 900 Day

Test For Normality 120 Day

Descriptive Statistics

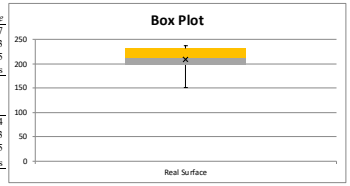
	Real Surface		*Real Surface*
Mean	208.2	Min	151.1427
Standard Erro	9.91150734	Q1-Min	46.249075
Median	210.9	Med-Q1	13.502025
Mode	#N/A	Q3-Med	20.416325
Standard Dev	28.0339762	Max-Q3	5.580075
Sample Varia	785.903822	Mean	208.2
Kurtosis	1.72575383		
Skewness	-1.2092372	Min	151.1427
Range	85.7475	Q1	197.391775
Maximum	236.9	Median	210.9
Minimum	151.1	Q3	231.310125
Sum	1665.5	Max	236.8902
Count	8	Mean	208.2
Geometric M	206.36304		
Harmonic Me	204.33977	Grand Min	0
AAD	20.2707344		
MAD	18.59675	Outliers	
IQR	33.91835		

Shapiro-Wilk Test

	Real Surface
W-stat	0.88868057
p-value	0.22749453
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	3.9431134
p-value	0.13923993
alpha	0.05
normal	yes



Test For Normality 900 Day

Descriptive Statistics

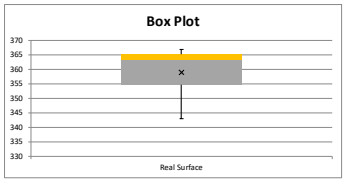
	Real Surface		*Real Surface*
Mean	359.0	Min	343
Standard Erro	3.85276236	Q1-Min	11.7
Median	363.3	Med-Q1	8.55
Mode	#N/A	Q3-Med	2.025
Standard Dev	9.43730187	Max-Q3	1.625
Sample Varia	89.0626667	Mean	359.0
Kurtosis	0.34617159		
Skewness	-1.2398259	Min	343
Range	23.9	Q1	354.7
Maximum	366.9	Median	363.3
Minimum	343.0	Q3	365.275
Sum	2154.2	Max	366.9
Count	6	Mean	359.0
Geometric M	358.928423		
Harmonic Me	358.821968	Grand Min	0
AAD	7.58888889		
MAD	2.95	Outliers	
IQR	10.575		

Shapiro-Wilk Test

	Real Surface
W-stat	0.83739485
p-value	0.12402623
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	2.19158114
p-value	0.33427523
alpha	0.05
normal	yes



Central Region Surface Area 120 to 900 Day

T Test: Two Independent Samples

SUMMARY				Hyp Mean Di	0
Groups	*Count*	*Mean*	*Variance*	*Cohen d*	
Real Surface	6	359.03	89.0626667		
Real Surface	8	208.19	785.903822		
Pooled		150.84	495.55334	6.776013443	

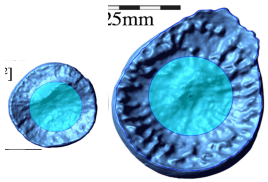
Effect size		Effect size	
Choen's *d* score		Choen's *r* score	
0.2	Small	0.1	Small
0.5	Medium	0.3	Medium
0.8	Large	0.5	Large

T TEST: Equal Variances — Alpha 0.05

	std err	*t-stat*	*df*	*p-value*	*t-crit*	*lower*	*upper*	*sig*	*effect r*
One Tail	12.02232885	12.5467389	12	1.46955E-08	1.78228756			yes	0.96393484
Two Tail	12.02232885	12.5467389	12	2.93911E-08	2.17881283	124.646616	177.035425	yes	0.96393484

T TEST: Unequal Variances — Alpha 0.05

	std err	*t-stat*	*df*	*p-value*	*t-crit*	*lower*	*upper*	*sig*	*effect r*
One Tail	10.63399057	14.1847992	8.98793334	9.28277E-08	1.83339316			yes	0.97838659
Two Tail	10.63399057	14.1847992	8.98793334	1.85655E-07	2.2626202	126.780339	174.901703	yes	0.97838659



The central region's real surface area increased from 120-days-old (208.19 ± 28.03 mm) to 900-days-old (359.03 ± 9.44 mm^2).
This difference (150.84 mm^2), 95% CI [126.78, 174.90] was statistically significant, t (8.99) = 14.18, P < .001, with a large effect size (d = 6.78).

Central Region Developed Interfacial Area Ratio (S_{dr}) 120 to 900 Days

Test For Normality 120 Days

Descriptive Statistics

Box Plot

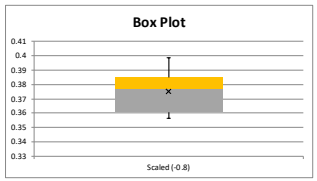
	Scaled (-0.8)		*Scaled (-0.8)*
Mean	0.38	Min	0.35642615
Standard Erro	0.00542269	Q1-Min	0.00419237
Median	0.38	Med-Q1	0.01678134
Mode	#N/A	Q3-Med	0.00747266
Standard Dev	0.01533768	Max-Q3	0.01361155
Sample Varia	0.00023524	Mean	0.38
Kurtosis	-1.5124218		
Skewness	0.12483417	Min	0.35642615
Range	0.04205792	Q1	0.36061852
Maximum	0.40	Median	0.38
Minimum	0.36	Q3	0.38487251
Sum	3.00	Max	0.39848407
Count	8	Mean	0.38
Geometric M	0.37496172		
Harmonic Me	0.37468858	Grand Min	0
AAD	0.01315865		
MAD	0.01322253	Outliers	
IQR	0.024254		

Shapiro-Wilk Test

	Scaled (-0.8)
W-stat	0.91689507
p-value	0.40517959
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	1.07060127
p-value	0.58549325
alpha	0.05
normal	yes



Descriptive Statistics

Box Plot

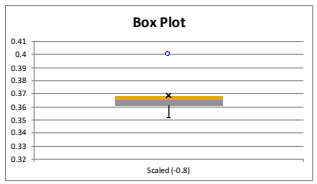
	Scaled (-0.8)		*Scaled (-0.8)*
Mean	0.37	Min	0.35181413
Standard Erro	0.00673259	Q1-Min	0.00930936
Median	0.37	Med-Q1	0.00437619
Mode	#N/A	Q3-Med	0.00262431
Standard Dev	0.01649142	Max-Q3	0.00013214
Sample Varia	0.00027197	Mean	0.37
Kurtosis	3.7025931		
Skewness	1.70273129	Min	0.35181413
Range	0.04811775	Q1	0.36112349
Maximum	0.40	Median	0.37
Minimum	0.35	Q3	0.36812399
Sum	2.21	Max	0.36825613
Count	6	Mean	0.37
Geometric M	0.36827039		
Harmonic Me	0.36798214	Grand Min	0
AAD	0.01045458		
MAD	0.00392437	Outliers	0.40
IQR	0.0070005		

Shapiro-Wilk Test

	Scaled (-0.8)
W-stat	0.82700009
p-value	0.10136
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	8.58304597
p-value	0.01368407
alpha	0.05
normal	no



Central Region Developed Interfacial Area Ratio (S_{dr}) 120 to 900 Days

Mann-Whitney Test for Two Independent Samples

	Scaled (-0.8)	Scaled (-0.8)	Difference
count	8	6	
median	0.38	0.37	0.01
rank sum	65	40	
U	19	29	

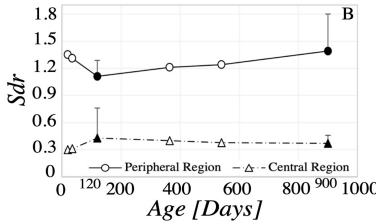
	one tail	two tail
alpha	0.05	
U	19	
mean	24	
std dev	7.745966692	ties
z-score	0.645497224	
effect r	0.17251639	
U-crit	11.25901859	8.81818426
p-value	0.259302508	0.51860502
sig (norm)	no	no
U-crit	10	7
sig (table)	no	no
p-value	0.286380286	0.57276057
sig (exact)	no	no

Calculate the 95% CI

Hodges-Lehmann estimation for the difference betweenpopulation medians

(m-n) table

	0.37	0.37	0.36	0.40	0.36	0.35
0.38	-0.02	-0.02	-0.02	0.02	-0.02	-0.03
0.36	0.01	0.01	0.01	0.04	0.00	-0.01
0.39	-0.02	-0.02	-0.02	0.01	-0.03	-0.04
0.37	0.00	0.00	0.00	0.03	-0.01	-0.02
0.40	-0.03	-0.03	-0.03	0.00	-0.04	-0.05
0.36	0.01	0.01	0.01	0.04	0.00	0.00
0.36	0.01	0.01	0.01	0.04	0.00	-0.01
0.38	-0.02	-0.02	-0.02	0.02	-0.02	-0.03



Calculate the 95% CI

alpha	0.05	
U-crit	8.00	MWINV(alpha, n2, n1)
alpha	0.04	MWDIST(U-crit, n1, n2)
lower	-0.03	SMALL(F9:P20, U-crit)
upper	0.01	LARGE(F9:P20, U-Crit)
median	-0.01	MEDIAN(F9:F20)
U-crit+	9.00	U-crit+1
alpha	0.06	MWDIST(U-crit+, n1, n2)
lower	-0.03	SMALL(F9:P20, U-crit+)
upper	0.01	LARGE(F9:P20, U-Crit+)

95% CI = [-0.03, 0.01]

Effect size		Effect size	
Choen's *d* score		Choen's *r* score	
0.2	Small	0.1	Small
0.5	Medium	0.3	Medium
0.8	Large	0.5	Large

No difference could be detected for the developed interfacial area ratio from 120-days-old (Mdn = 0.38) to 900-days-old (Mdn = 0.37).
A Mann-Whitney test indicated the 0.01 difference was not statistically significant, 95% CI [-0.03, 0.01], $U(N_{90}$ = 6, N_{120} = 8) = 19, z = 0.65, P = .573, with a small effect size (r = .17).

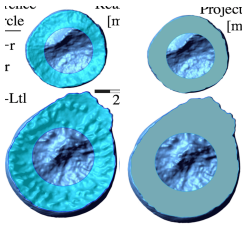
Peripherall Region Surface Complexity

Age [Days]	Real Surface	Projected	Difference	Ratio	Scaled (-0.8)
120 1R	391.7	338.7	53.04	1.16	0.36
120 2R	334.0	296.2	37.79	1.13	0.33
120 3R	375.5	337.3	38.27	1.11	0.31
120 4R	448.4	380.6	67.78	1.18	0.38
1201L	394.5	352.3	42.17	1.12	0.32
120 2L	374.6	328.0	46.55	1.14	0.34
120 3L	445.2	396.9	48.27	1.12	0.32
120 4L	421.9	358.2	63.70	1.18	0.38
Mean	398.22	348.52	49.69	1.14	0.34
SD	38.79	31.30	11.18	0.31	0.49

Age [Days]	Real Surface	Projected	Difference	Ratio	Scaled (-0.8)
900 1R	1238.1	917.4	320.70	1.35	0.55
900 2R	995.1	705.7	289.40	1.41	0.61
900 3R	1095.2	798.4	296.80	1.37	0.57
9001L	1411.3	962.7	448.60	1.47	0.67
900 2L	929.2	669.4	259.80	1.39	0.59
900 3L	1082.4	809.8	272.60	1.34	0.54
Mean	1125.22	810.57	314.65	1.39	0.59
SD	174.74	114.57	68.87	0.07	0.73

To calculate the Sdr Standard Deveiation 120 Days

	Convert error to percentage [%]		add errors	Ratio	Convert from	Final
Age	Real	Projected	Real + Projected	Real/Projected	percentage	Answer
120	9.74	8.98	18.72	1.14	0.21	1.14 ± 0.21
900	15.53	14.13	29.66	1.39	0.41	1.39 ± 0.41



Peripheral Region Real vs Projected Surface Area 120 Day

Descriptive Statistics

	Difference
Mean	49.69
Standard Erro	3.95404877
Median	47.41
Mode	#N/A
Standard Dev	11.1837388
Sample Varia	125.076014
Kurtosis	-0.8210945
Skewness	0.68908503
Range	29.9947
Maximum	67.78
Minimum	37.79
Sum	397.56
Count	8
Geometric M	48.6484874
Harmonic Me	47.6706475
AAD	8.86
MAD	7.38825
IQR	14.5131

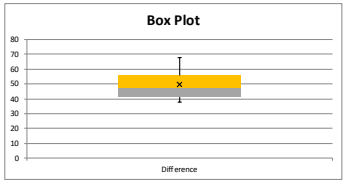
	Difference
Min	37.7876
Q1-Min	3.40575
Med-Q1	6.2128
Q3-Med	8.3003
Max-Q3	12.07585
Mean	49.69
Min	37.7876
Q1	41.19335
Median	47.41
Q3	55.70645
Max	67.7823
Mean	49.69
Grand Min	0
Outliers	

Shapiro-Wilk Test

	Difference
W-stat	0.90797489
p-value	0.3400235
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	1.14687605
p-value	0.56358449
alpha	0.05
normal	yes



Peripheral Region Real vs Projected Surface Area 120 Day

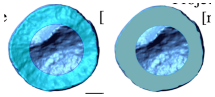
T Test: Two Paired Samples

SUMMARY			Alpha	0.05	Hyp Mean Di	0		
Groups	*Count*	*Mean*	*Std Dev*	*Std Err*	*t*	*df*	*Cohen d*	*Effect r*
Real Surface	8	398.2	38.7945372					
Projected	8	348.5	31.29982					
Difference	8	49.69	11.1837388	3.954048774	12.568105	7	4.44349612	0.97855238

Effect size	Effect size
Choen's *d* score	Choen's *r* score
0.2 Small	0.1 Small
0.5 Medium	0.3 Medium
0.8 Large	0.5 Large

T TEST

	p-value	*t-crit*	*lower*	*upper*	*sig*
One Tail	2.32939E-06	1.89457861			yes
Two Tail	4.65879E-06	2.36462425	40.3450604	59.04473962	yes



The 120-day-old average peripheral region's real suface area (398.22 ± 38.79 mm^2) was larger than the projected surface area (348.52± 31.30 mm^2).
This difference (49.69 mm^2), 95% CI [40.35, 59.04] was statistically significant, t (7) = 12.57, P < .001, with a large effect size (d = 4.44).

Peripheral Region Real vs Projected Surface Area 900 Day

Descriptive Statistics

	Difference
Mean	314.65
Standard Erro	28.1141216
Median	293.10
Mode	#N/A
Standard Dev	68.8652525
Sample Varia	4742.423
Kurtosis	4.16488914
Skewness	1.96805374
Range	188.8
Maximum	448.60
Minimum	259.80
Sum	1887.90
Count	6
Geometric M	309.276989
Harmonic Me	304.730532
AAD	46.6666667
MAD	24.05
IQR	37.925

Box Plot

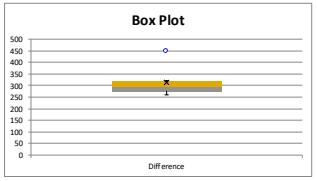
	Difference
Min	259.8
Q1-Min	17
Med-Q1	16.3
Q3-Med	21.625
Max-Q3	5.975
Mean	314.65
Min	259.8
Q1	276.8
Median	293.10
Q3	314.725
Max	320.7
Mean	314.65
Grand Min	0
Outliers	448.60

Shapiro-Wilk Test

	Difference
W-stat	0.77485047
p-value	0.03449578
alpha	0.05
normal	no

d'Agostino-Pearson

DA-stat	11.1468092
p-value	0.00379753
alpha	0.05
normal	no



Peripheral Region Real vs Projected Surface Area 900 Day

Wilcoxon Signed-Rank Test for Paired Samples

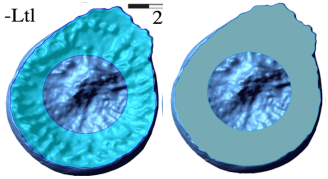
	Real Surface	Projected	Difference
median	1088.80	804.10	284.70
count	6		
# unequal	6		
T+	0		
T-	21		
T	0		

	one tail	two tail
alpha	0.05	
mean	10.5	
std dev	4.769696007	ties
z-score	2.201398157	
effect r	0.635488909	
T-crit	2.654548223	1.15156761
p-value	0.013853925	0.02770785
sig (norm)	yes	yes
T-crit	2	0
sig (table)	yes	no
p-value	0.015625	0.03125
sig (exact)	yes	yes

Hodges-Lehmann estimation for the difference betweenpopulation medians

Walsh Averages (row+column)/2

	320.70	289.40	296.80	448.60	259.80	272.60
320.70	320.7	305.05	308.75	384.65	290.25	296.65
289.40		289.4	293.1	369	274.6	281
296.80			296.8	372.7	278.3	284.7
448.60				448.6	354.2	360.6
259.80					259.8	266.2
272.60						272.6



Calculate the 95% CI

alpha	0.05	
T-crit	0.00	SRINV(alpha, N)
alpha	0.03	SRDIST(T-crit, N)
lower	259.80	SMALL(H7:V21,T-crit)
upper	384.65	LARGE(H7:V21,T-crit)
median	289.40	MEDIAN(H7:V21)
T-crit+	1.00	T-crit + 1
alpha	0.06	SRDIST(T-crit+, N)
lower	259.80	SMALL(H7:V21,T-crit+)
upper	384.65	LARGE(H7:V21,T-crit+)

The 95%CI for the median is:
95%CI = [259.80, 384.40]

Effect size	Effect size
Choen's *d* score	Choen's *r* score
0.2 Small	0.1 Small
0.5 Medium	0.3 Medium
0.8 Large	0.5 Large

The 900-day-old average peripheral region's real surface area (Mdn = 1088.80 mm^2) was larger than the projected surface area (Mdn = 804.10 mm^2).
A Wilcoxon signed-rank test indicated this difference (284.70 mm^2) was statistically significant, 95% CI [259.80, 384.65], T = 0, z = 2.20 P =.028, with a large effect size (r = .63).

Peripheral Region Surface Area 120 to 900 Days

Test For Normality 120 Day

Descriptive Statistics

Multiplier 2.2

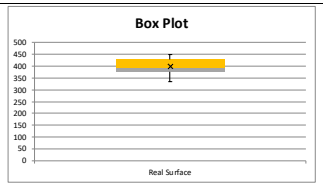
	Real Surface		Real Surface
Mean	398.2	Min	334.0197
Standard Erro	13.7159402	Q1-Min	41.268625
Median	393.1	Med-Q1	17.789225
Mode	#N/A	Q3-Med	34.61285
Standard Dev	38.7945372	Max-Q3	20.7121
Sample Varia	1505.01612	Mean	398.2
Kurtosis	-0.4973626		
Skewness	-0.1518174	Min	334.0197
Range	114.3828	Q1	375.288325
Maximum	448.4	Median	393.1
Minimum	334.0	Q3	427.6904
Sum	3185.7	Max	448.4025
Count	8	Mean	398.2
Geometric M	396.538141		
Harmonic Me	394.839038	Grand Min	0
AAD	30.1998188		
MAD	23.64045	Outliers	None
IQR	52.402075		

Shapiro-Wilk Test

	Real Surface
W-stat	0.9456302
p-value	0.66717443
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	0.08268817
p-value	0.95949893
alpha	0.05
normal	yes



Test For Normality 900 Days

Descriptive Statistics

Box Plot

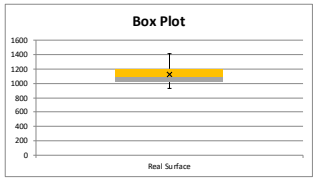
	Real Surface		Real Surface
Mean	1125.2	Min	929.2
Standard Erro	71.3380376	Q1-Min	87.725
Median	1088.8	Med-Q1	71.875
Mode	#N/A	Q3-Med	113.575
Standard Dev	174.741791	Max-Q3	208.925
Sample Varia	30534.6937	Mean	1125.2
Kurtosis	0.22759981		
Skewness	0.84408774	Min	929.2
Range	482.1	Q1	1016.925
Maximum	1411.3	Median	1088.8
Minimum	929.2	Q3	1202.375
Sum	6751.3	Max	1411.3
Count	6	Mean	1125.2
Geometric M	1114.39384		
Harmonic Me	1104.09345	Grand Min	0
AAD	132.988889		
MAD	121.5	Outliers	
IQR	185.45		

Shapiro-Wilk Test

	Real Surface
W-stat	0.94242342
p-value	0.67878061
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	1.0145723
p-value	0.60212745
alpha	0.05
normal	yes



Peripheral Region Surface Area 120 to 900 Days

T Test: Two Independent Samples

SUMMARY			Hyp Mean Di	0
Groups	*Count*	*Mean*	*Variance*	*Cohen d*
Real Surface	6	1125.22	30534.6937	
Real Surface	8	398.22	1505.01612	
Pooled		727.00	13600.7151	6.233819902

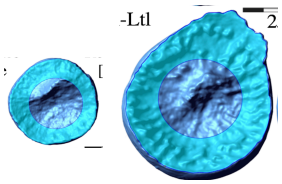
Effect size	Effect size
Choen's *d* score	Choen's *r* score
0.2 Small	0.1 Small
0.5 Medium	0.3 Medium
0.8 Large	0.5 Large

T TEST: Equal Variances — Alpha 0.05

	std err	*t-stat*	*df*	*p-value*	*t-crit*	*lower*	*upper*	*sig*	*effect r*
One Tail	62.98313454	11.5427915	12	3.723E-08	1.78228756			yes	0.95779741
Two Tail	62.98313454	11.5427915	12	7.446E-08	2.17881283	589.72273	864.229653	yes	0.95779741

T TEST: Unequal Variances — Alpha 0.05

	std err	*t-stat*	*df*	*p-value*	*t-crit*	*lower*	*upper*	*sig*	*effect r*
One Tail	72.64463246	10.0076381	5.37125524	5.633E-05	1.98468612			yes	0.97421725
Two Tail	72.64463246	10.0076381	5.37125524	0.00011266	2.51804923	544.078431	909.923953	yes	0.97421725



The peripheral region's real surface area increased from 120-days-old (398.22 ± 38.79 mm) to 900-days-old (1125.22 ± 174.74 mm).
This difference (727.0 mm), 95% CI [544.08, 909.92] was statistically significant $t(5.37) = 10.01$, $P < .001$, with a large effect size ($d = 6.23$).

Peripheral Region Developed Interfacial Area Ratio (S_{dr}) 120 to 900 Days

Test For Normality 120 Day

Descriptive Statistics

Box Plot

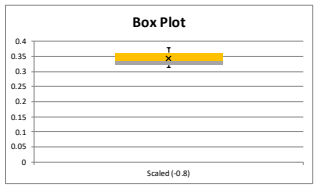
	Scaled (-0.8)		Scaled (-0.8)
Mean	0.34	Min	0.31345912
Standard Erro	0.00919813	Q1-Min	0.00766977
Median	0.33	Med-Q1	0.01359722
Mode	#N/A	Q3-Med	0.02720801
Standard Dev	0.02601623	Max-Q3	0.01614971
Sample Varia	0.00067684	Mean	0.34
Kurtosis	-1.5307578		
Skewness	0.52989613	Min	0.31345912
Range	0.0646247	Q1	0.32112889
Maximum	0.38	Median	0.33
Minimum	0.31	Q3	0.36193411
Sum	2.74	Max	0.37808382
Count	8	Mean	0.34
Geometric M	0.3412474		
Harmonic Me	0.34041397	Grand Min	0
AAD	0.02156828		
MAD	0.01814677	Outliers	
IQR	0.04080522		

Shapiro-Wilk Test

	Scaled (-0.8)
W-stat	0.87641783
p-value	0.17398989
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	1.56489249
p-value	0.45728601
alpha	0.05
normal	yes



Test For Normality 900 Day

Descriptive Statistics

Box Plot

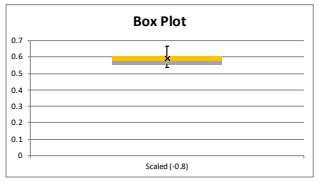
	Scaled (-0.8)		Scaled (-0.8)
Mean	0.59	Min	0.53662633
Standard Erro	0.01909909	Q1-Min	0.01849071
Median	0.58	Med-Q1	0.02480908
Mode	#N/A	Q3-Med	0.02466802
Standard Dev	0.04678304	Max-Q3	0.06138695
Sample Varia	0.00218865	Mean	0.59
Kurtosis	0.70958771		
Skewness	0.93911169	Min	0.53662633
Range	0.12935477	Q1	0.55511704
Maximum	0.67	Median	0.58
Minimum	0.54	Q3	0.60459414
Sum	3.52	Max	0.66598109
Count	6	Mean	0.59
Geometric M	0.5855116		
Harmonic Me	0.58404774	Grand Min	0
AAD	0.0343724		
MAD	0.03025719	Outliers	
IQR	0.04947711		

Shapiro-Wilk Test

	Scaled (-0.8)
W-stat	0.94333223
p-value	0.68614676
alpha	0.05
normal	yes

d'Agostino-Pearson

DA-stat	1.40086292
p-value	0.49637109
alpha	0.05
normal	yes



Peripheral Region Developed Interfacial Area Ratio (S_{dr}) 120 to 900 Days

T Test: Two Independent Samples

SUMMARY			Hyp Mean Di	0
Groups	*Count*	*Mean*	*Variance*	*Cohen d*
Ratio	6	1.387	0.00218865	
Ratio	8	1.142	0.00067684	
Pooled		0.245	0.00130676	6.775331098

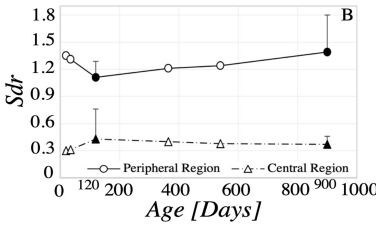
Effect size	Effect size
Choen's *d* score	Choen's *r* score
0.2 Small	0.1 Small
0.5 Medium	0.3 Medium
0.8 Large	0.5 Large

T TEST: Equal Variances — Alpha 0.05

	std err	*t-stat*	*df*	*p-value*	*t-crit*	*lower*	*upper*	*sig*	*effect r*
One Tail	0.019522797	12.5454754	12	1.47121E-08	1.78228756			yes	0.96392797
Two Tail	0.019522797	12.5454754	12	2.94243E-08	2.17881283	0.20238624	0.28745928	yes	0.96392797

T TEST: Unequal Variances — Alpha 0.05

	std err	*t-stat*	*df*	*p-value*	*t-crit*	*lower*	*upper*	*sig*	*effect r*
One Tail	0.021198607	11.5537199	7.30756844	2.94316E-06	1.88265012			yes	0.97370334
Two Tail	0.021198607	11.5537199	7.30756844	5.88632E-06	2.3445976	0.19522056	0.29462497	yes	0.97370334



The peripheral region's developed interfacial Area Ratio (S_{dr}) increased from 120-days-old (1.14 ± 0.31) to 900-days-old (1.39 ± 0.07).
This difference (0.25), 95% CI [0.20, 0.30] was statistically significant $t(7.31) = 11.55$, $P < .001$, with a large effect size ($d = 6.78$).