

## DAFTAR PUSTAKA

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## Lampiran 1. Etik Penelitian



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI  
UNIVERSITAS HASANUDDIN  
FAKULTAS KEDOKTERAN GIGI  
RUMAH SAKIT GIGI DAN MULUT  
KOMITE ETIK PENELITIAN KESEHATAN  
Sekretariat : Lantai 2, Gedung Lama RSGM Unhas  
JL.Kandea No. 5 Makassar  
Contact Person: drg. Muhammad Iqbal, Sp.Prost/Nur Andah AR TELP. 081342971011/08114919191



### REKOMENDASI PERETUJUAN ETIK

Nomor: 0021/PL.09/KEPK FKG-RSGM UNHAS/2023

Tanggal: 24 Januari 2023

Dengan ini menyatakan bahwa protokol dan dokumen yang berhubungan dengan protokol berikut ini telah mendapatkan persetujuan etik:

No. Protokol	UH 17120760	No Protokol Sponsor	
Peneliti Utama	drg. Fadli Rum	Sponsor	Pribadi
Judul Peneliti	Perbandingan Pengukuran Orthopantomograph X-Ray Terhadap Penggunaan Stereolitografi pada Rekonstruksi Mandibula		
No. Versi Protokol	1	Tanggal Versi	13 Januari 2023
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	Rumah Sakit Pendidikan Universitas Hasanuddin		
Dokumen Lain			
Jenis Review	<input checked="" type="checkbox"/> Exempted <input type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku 24 Januari 2023-24 Januari 2024	Frekuensi Review Lanjutan
Ketua Komisi Etik Penelitian	Nama: Dr. drg. Marhamah, M.Kes	Tanda Tangan 	Tanggal
Sekretaris Komisi Etik Penelitian	Nama: drg. Muhammad Iqbal, Sp.Prost	Tanda Tangan 	Tanggal

Kewajiban peneliti utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum diimplementasikan
- Menyerahkan laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan lapor SUSAR dalam 72 jam setelah peneliti utama menerima laporan.
- Menyerahkan laporan kemajuan (*progress report*) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah.
- Menyerahkan laporan akhir setelah penelitian berakhir.
- Melaporkan penyimpangan dari protokol yang disetujui (*protocol deviation/violation*)
- Mematuhi semua aturan yang berlaku.

## Lampiran 2. Surat Izin Penelitian



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN,  
RISET, DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN  
**FAKULTAS KEDOKTERAN GIGI**  
Jalan Perintis Kemerdekaan Km. 10, Makassar 90245  
Telepon (0411) 586012, Faximile (0411) 584641  
Laman [www.unhas.ac.id](http://www.unhas.ac.id) Email [fdhu@unhas.ac.id](mailto:fdhu@unhas.ac.id)

Nomor : 00138/UN4.13/PT.01.04/2023  
Hal : **Izin Penelitian**

11 Januari 2023

Yth.  
**Direktur Rumah Sakit Perguruan Tinggi Negeri (RSPTN)**  
Universitas Hasanuddin  
Makassar

Dengan hormat kami sampaikan bahwa mahasiswa PPDGS Bedah Mulut dan Maksilofasial Fakultas Kedokteran Gigi Universitas Hasanuddin bermaksud untuk melakukan penelitian.

Sehubungan dengan hal tersebut, mohon kiranya dapat diberikan **izin penelitian** kepada peneliti di bawah ini:

Nama / NIM : **drg. Fadli Rum / J045182008**  
Waktu Penelitian : 1 Juni 2019 s.d. 28 Februari 2023  
Tempat Penelitian : Rumah Sakit Perguruan Tinggi Negeri (RSPTN) Universitas Hasanuddin  
Judul Penelitian : Perbandingan Pengukuran Orthopantomograph X-Ray Terhadap Penggunaan Stereolitografi Pada Rekonstruksi Mandibula

Atas perhatian dan kerjasama yang baik, disampaikan terima kasih.

a.n. Dekan,  
Wakil Dekan Bidang Akademik dan Kemahasiswaan



Irfan Sugianto, drg., M.Med.Ed., Ph.D.  
NIP. 198102152008011009

Tembusan Yth:  
1. Dekan FKG Unhas;  
2. Kepala Bagian Tata Usaha FKG Unhas.

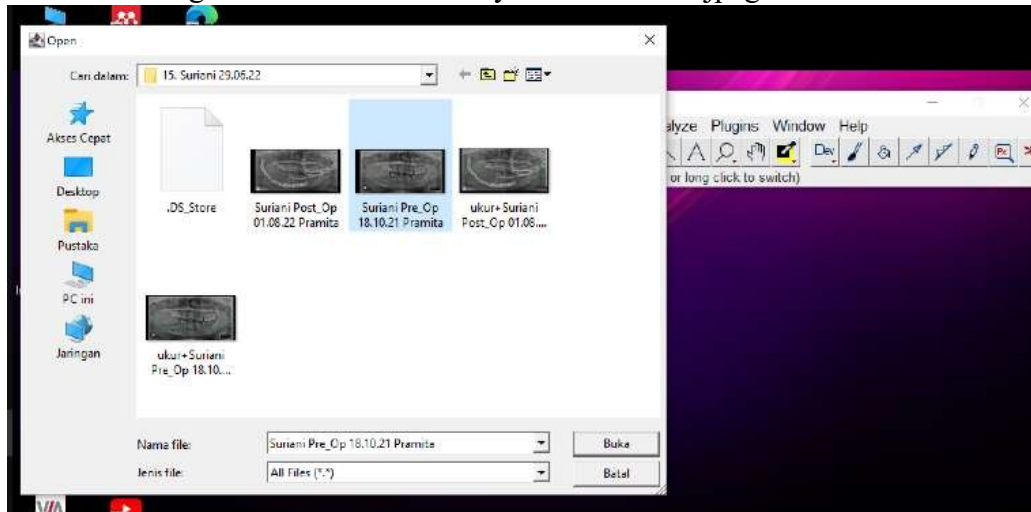


### Lampiran 3. Prosedur Penggunaan Perangkat Lunak ImageJ

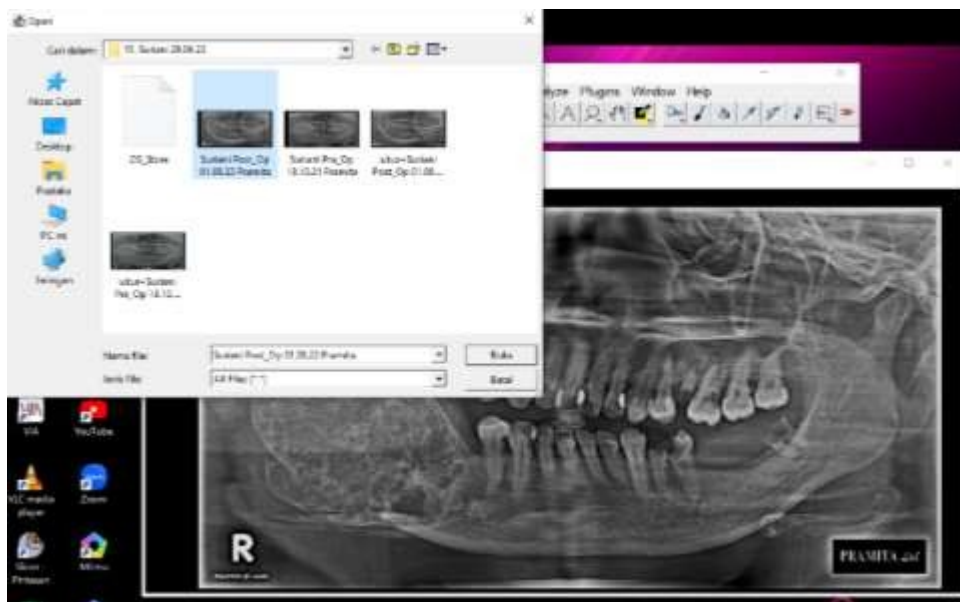
1. Klik ikon Fiji ImageJ pada dekstop. Tampilkan dari perangkat lunak ImageJ



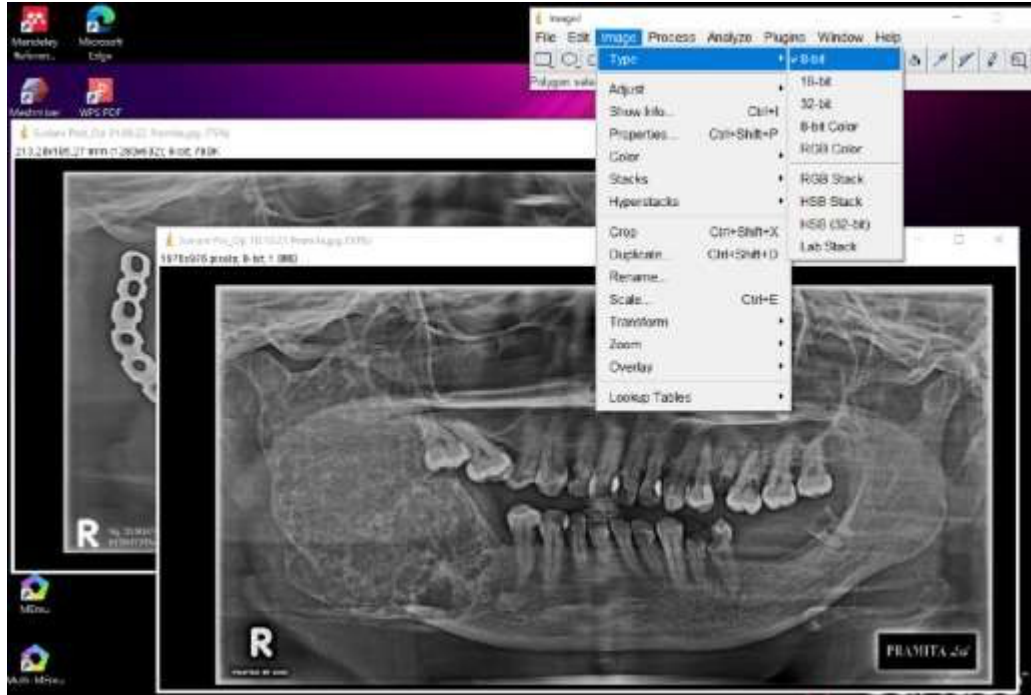
2. Klik File pada Toolbar ImageJ lalu pilih Open atau klik Ctrl+O untuk membuka file gambar foto OPG X-Ray dalam format .jpeg.



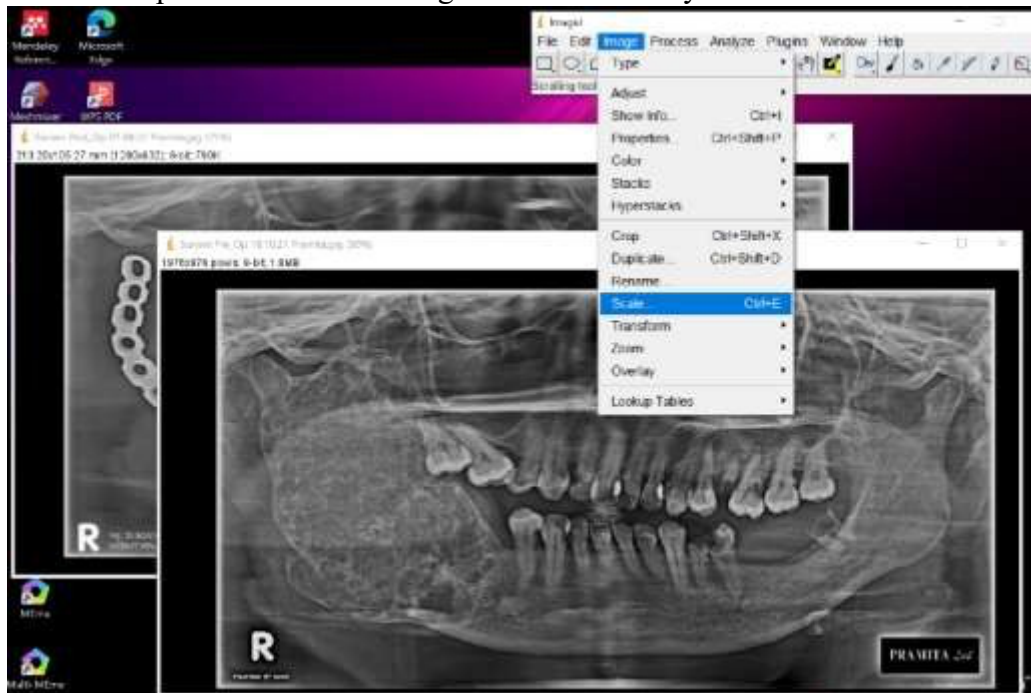
3. Munculkan gambar OPG X-Ray sebelum dan setelah operasi secara bersamaan.



4. Pilih Image pada toolbar lalu pilih Type dan pilih 8-bit. Lakukan pada kedua gambar OPG X-Ray.

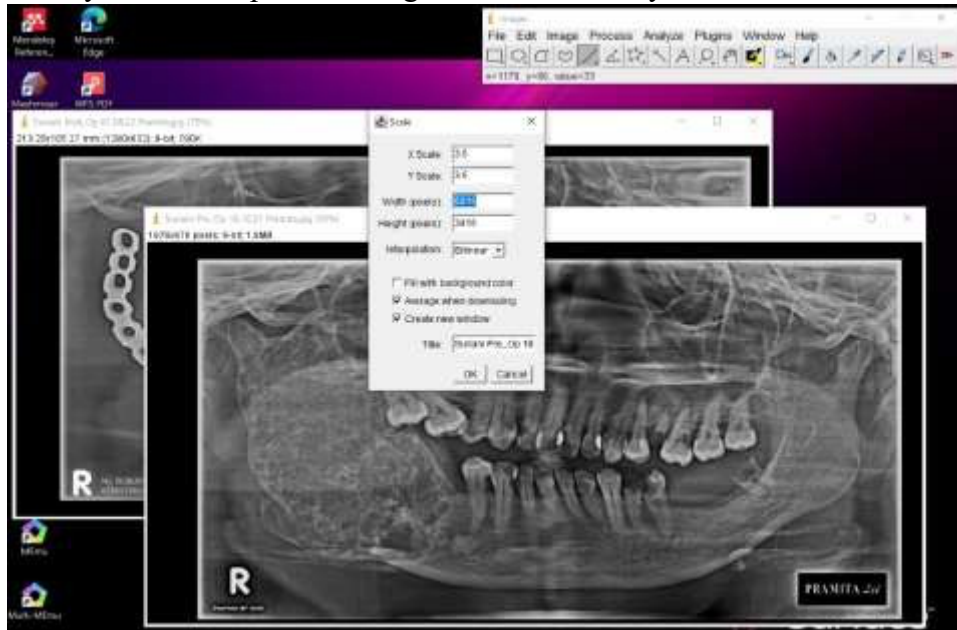


5. Pilih Image pada toolbar lalu pilih Scale atau klik Ctrl+E pada keyboard. Untuk memperbesar resolusi dari gambar OPG X-Ray.





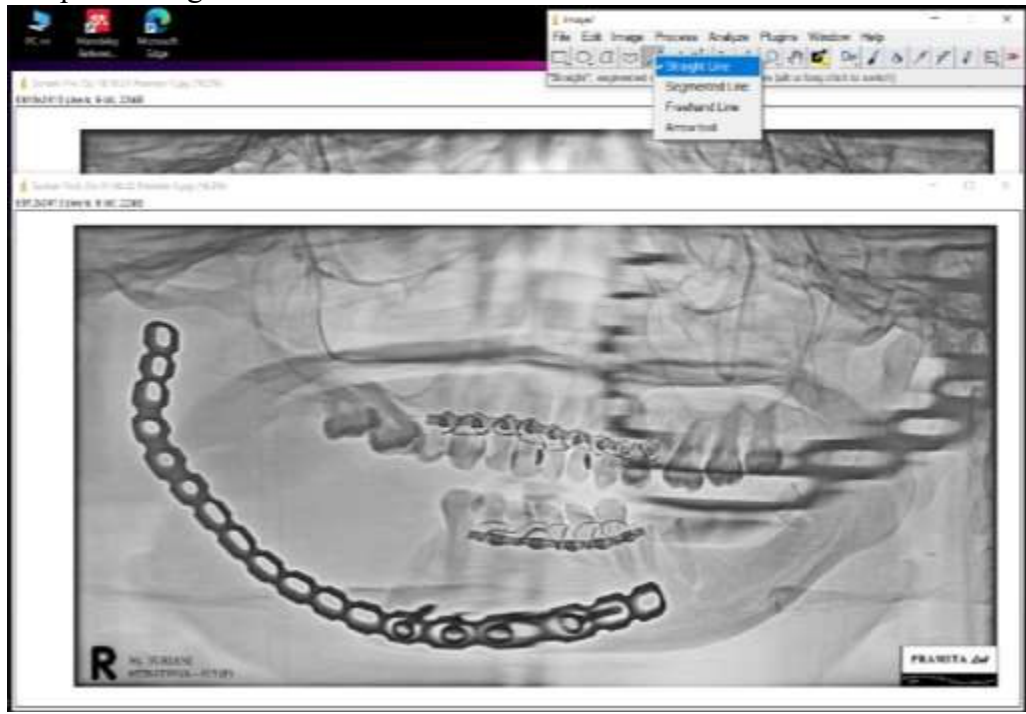
6. Buat pembesaran gambar hingga mendapatkan resolusi gambar diatas 6000 pixel. Hal ini bertujuan untuk mendapatkan gambar yang lebih detail saat dilakukan zoom-in pada gambar untuk menempatkan titik pengukuran nantinya. Lakukan pada kedua gambar OPG X-Ray.



7. Pilih Edit pada toolbar lalu pilih Invert atau klik Ctrl+Shift+I pada keyboard untuk menukar warna pada gambar. Hal ini bertujuan untuk melihat batasan gambar agar lebih mudah dalam memilih objek atau menentukan batas pada gambar OPG X-Ray.



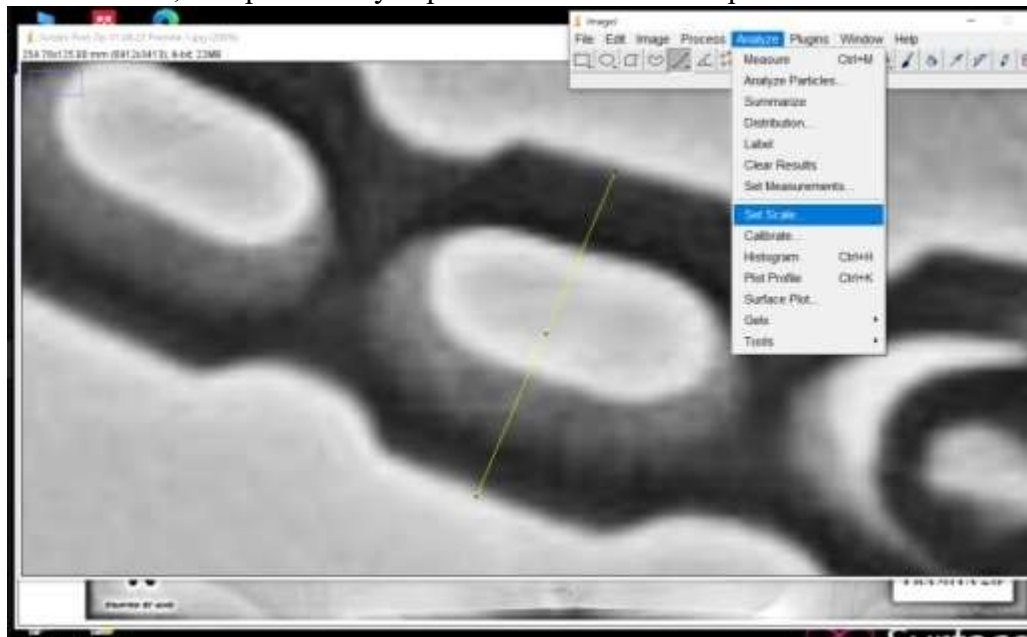
8. Pilih ikon garis pada toolbar, tekan agak lama untuk memunculkan pilihan lalu pilih Straight Line.



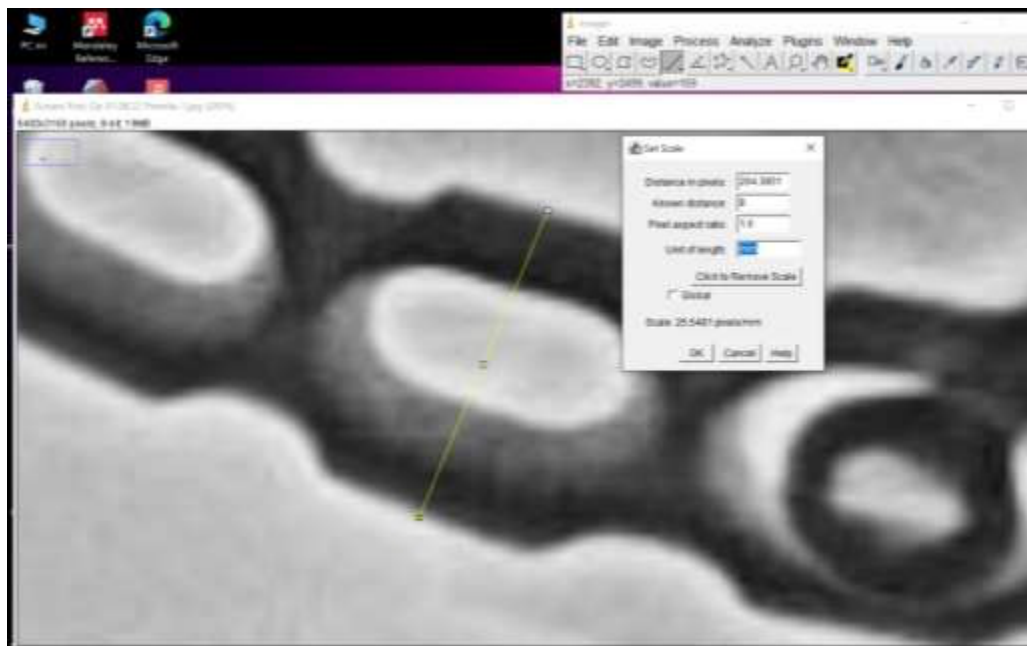
9. Pilih Analyze pada toolbar lalu pilih Set Scale, pilih Click to Remove Scale untuk memastikan tidak ada ukuran skala yang digunakan pada gambar OPG X-Ray. Lakukan pada kedua gambar OPG X-Ray.



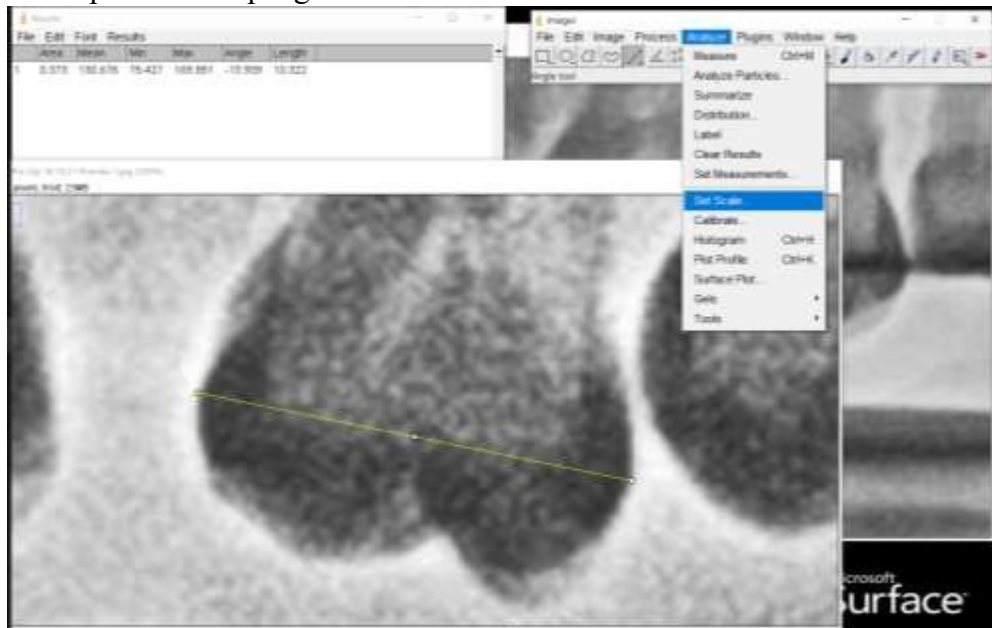
10. Lakukan zoom-in pada gambar dengan menekan + pada keyboard untuk melihat gambar OPG X-Ray secara detail. Pilih batas tepi dari Plat AO Rekonstruksi, lalu pilih Analyze pada toolbar kemudian pilih Set Scale.



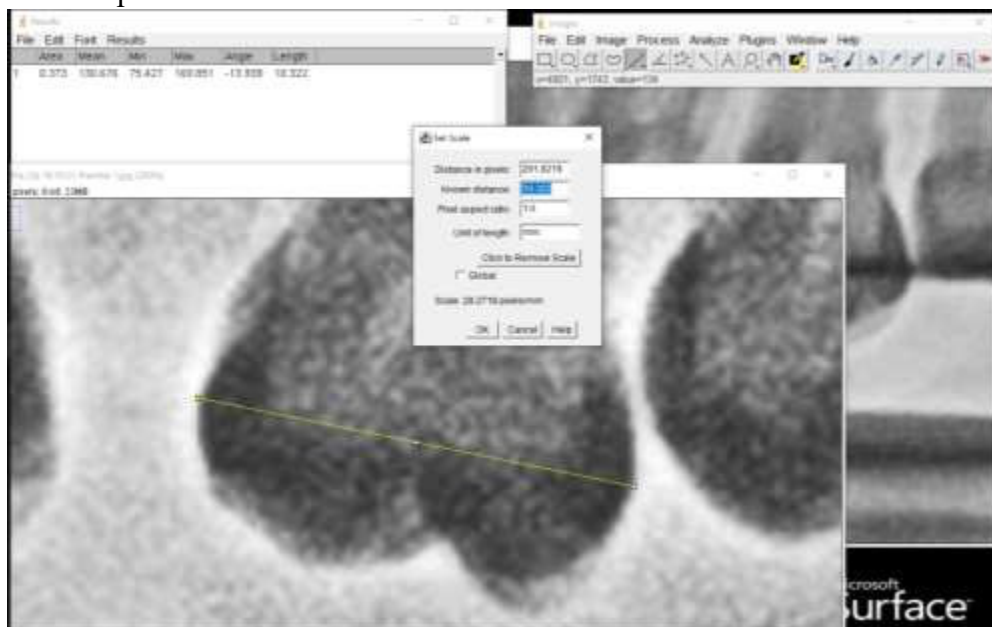
11. Ubah ukuran skala pada kolom Known distance sesuai dengan lebar asli Plat AO Rekonstruksi. Pastikan satuan dari Unit of length telah sesuai kemudian klik OK.



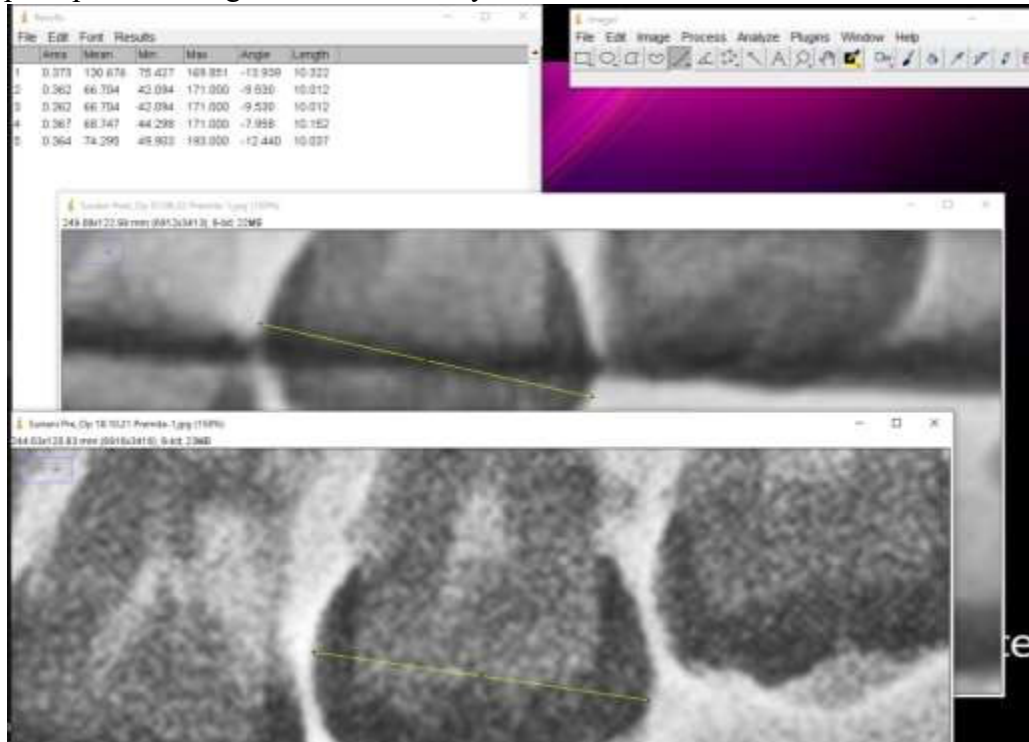
12. Tentukan daerah pengukuran yang detail dan spesifik pada gambar OPG X-Ray setelah operasi pilih Analyze lalu pilih Measure atau klik Ctrl+M untuk mendapatkan nilai pengukuran.



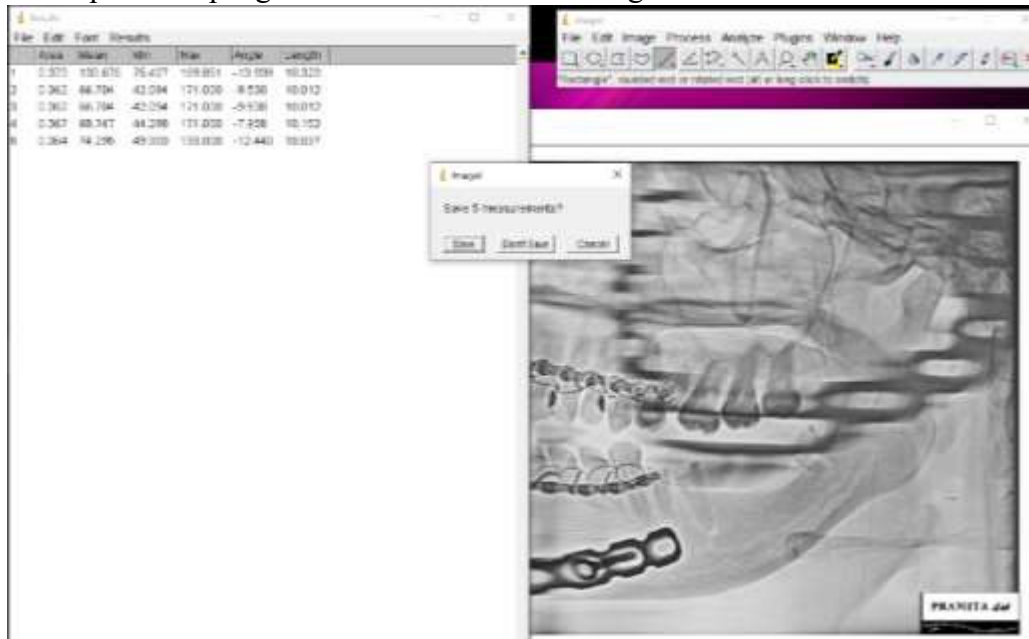
13. Pilih gambar OPG X-Ray sebelum operasi. Lakukan pengukuran pada titik yang sama pada gambar, pilih Analyze pada toolbar lalu pilih Set Scale kemudian masukkan angka pengukuran yang telah didapatkan pada gambar OPG X-Ray setelah operasi. Hal ini bertujuan untuk mendapatkan skala gambar yang sama (mengkalibrasi) antara OPG X-Ray sebelum operasi dan setelah operasi.



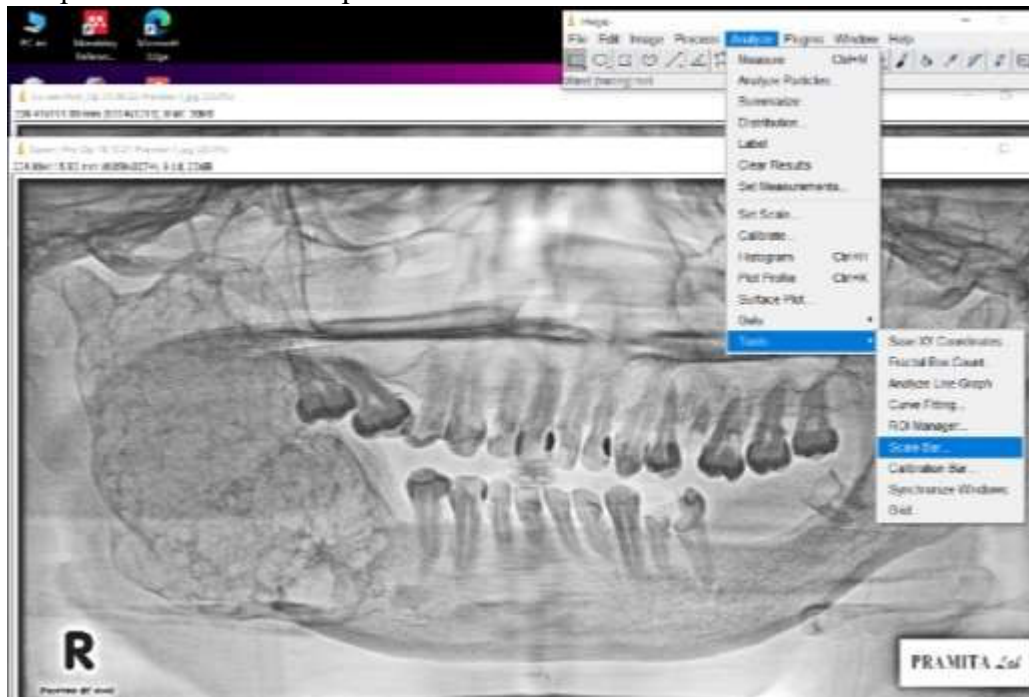
14. Lakukan pengukuran berulang pada beberapa titik dan daerah yang sama pada kedua gambar OPG X-Ray untuk memastikan ukuran skala yang sama pada pada kedua gambar OPG X-Ray.



15. Hapus hasil pengukuran kalibrasi dari kedua gambar.



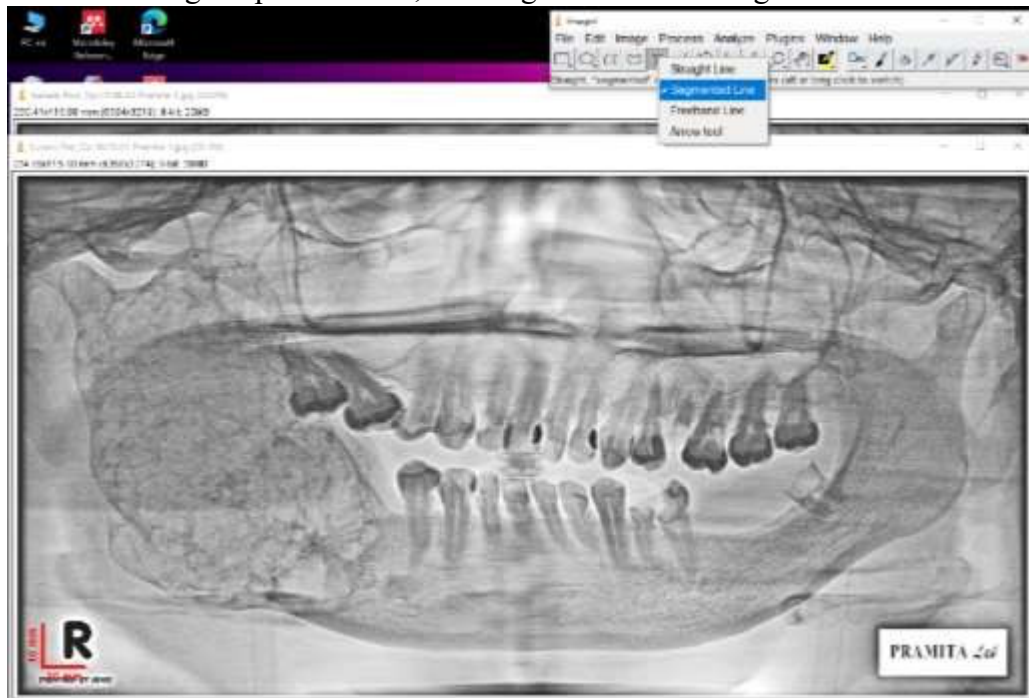
16. Buat Scale Bar pada kedua gambar dengan memilih Analyze pada toolbar lalu pilih Tools kemudian pilih Scale Bar.



17. Tempatkan Scale Bar pada kedua gambar OPG X-Ray.



18. Pilih ikon garis pada toolbar, tekan agak lama. Pilih Segmented Line



19. Tarik garis bantu pada daerah terluar dari ramus atau gambaran tumor daerah ramus pada gambar OPG X-Ray untuk membuat garis bantu Ramus Line. Pilih Edit pada toolbar lalu pilih Draw atau klik Ctrl+D pada keyboard untuk mendapatkan gambaran garis bantu pada gambar OPG X-Ray.



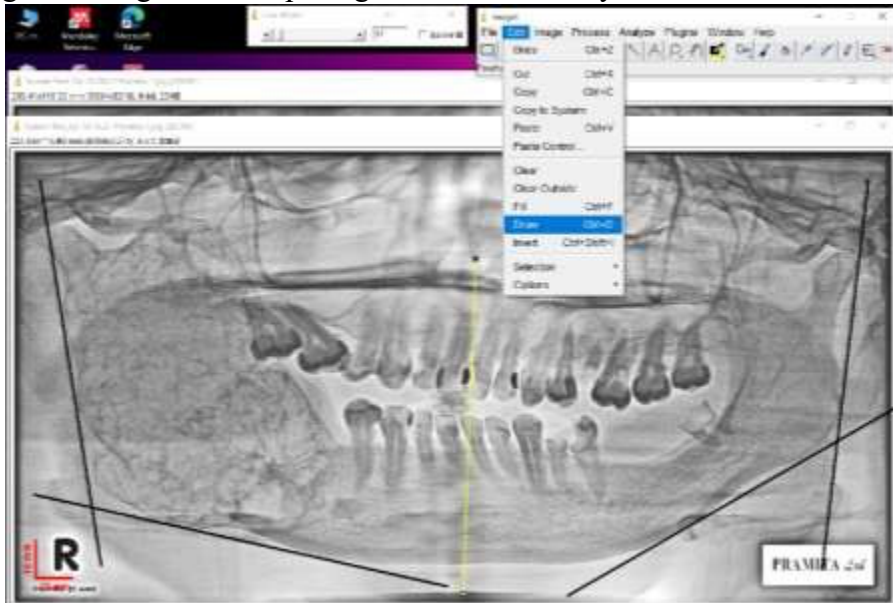
20. Buat garis bantu pada daerah terluar dari korpus mandibula atau gambaran tumor daerah margin mandibula pada gambar OPG X-Ray untuk membuat garis bantu Mandibular Line. Pilih Edit pada toolbar lalu pilih Draw atau klik Ctrl+D pada keyboard untuk mendapatkan gambaran garis bantu pada gambar OPG X-Ray.



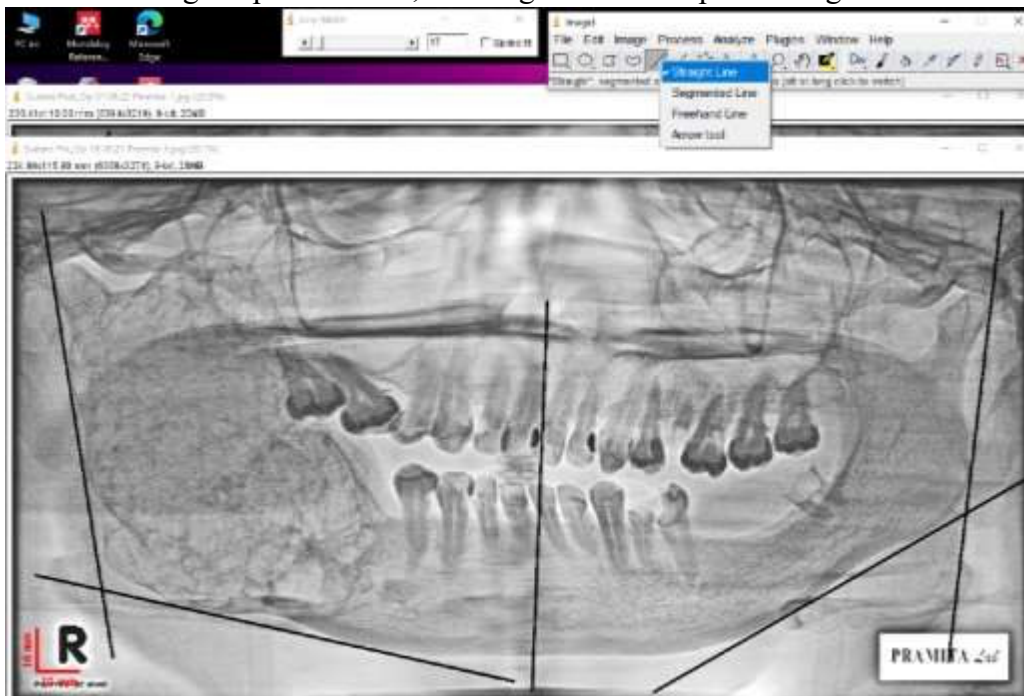
21. Tarik garis bantu pada daerah midline yaitu pada anterior nasal spine kearah interdental gigi insisivus sentralis rahang atas dan rahang bawah pada gambar OPG X-Ray untuk membuat garis bantu Middle Line. Pilih Edit pada



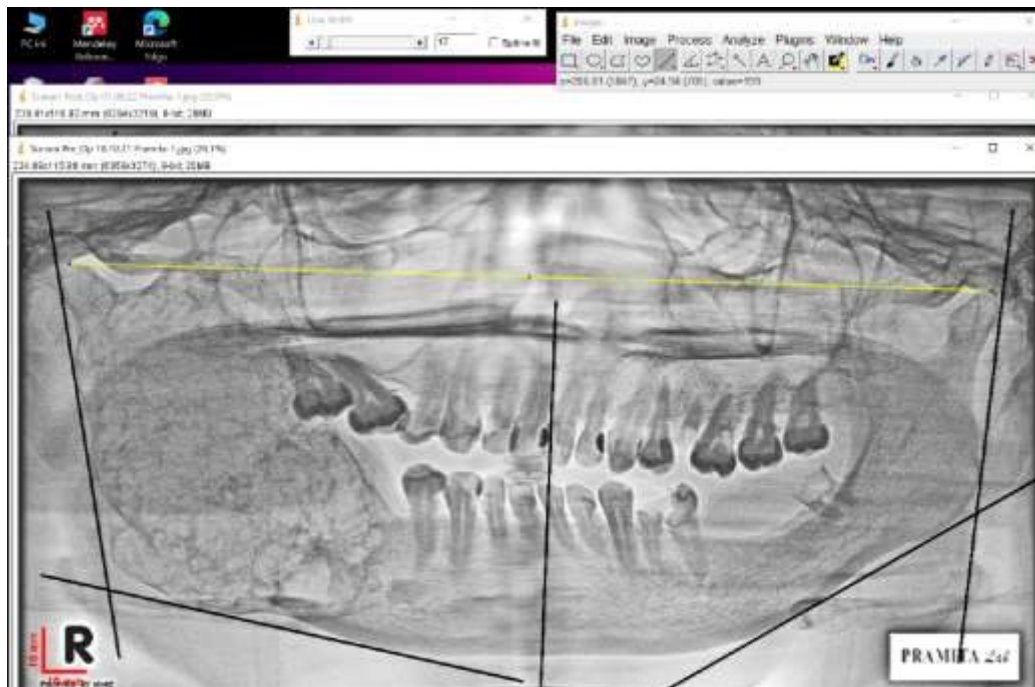
toolbar lalu pilih Draw atau klik Ctrl+D pada keyboard untuk mendapatkan gambaran garis bantu pada gambar OPG X-Ray.



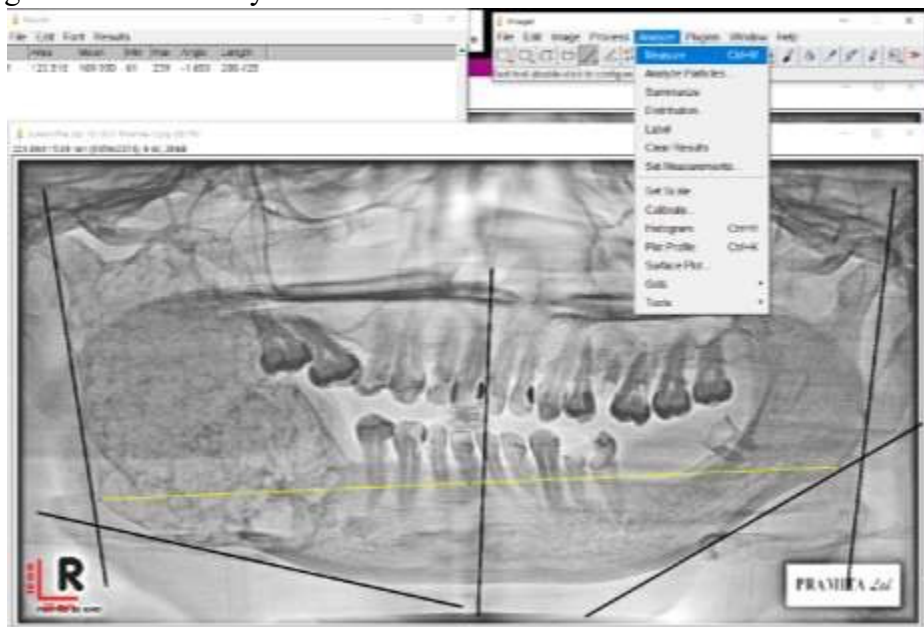
22. Pilih ikon garis pada toolbar, tekan agak lama lalu pilih Straight Line.



23. Tarik garis pengukuran pada batas teratas dari gambaran kedua sisi condyle pada gambar OPG X-Ray. Klik Analyze lalu pilih Measure atau tekan Ctrl+M pada keyboard untuk mendapatkan nilai pengukuran Lebar Bi-Condyle dari gambar OPG X-Ray.

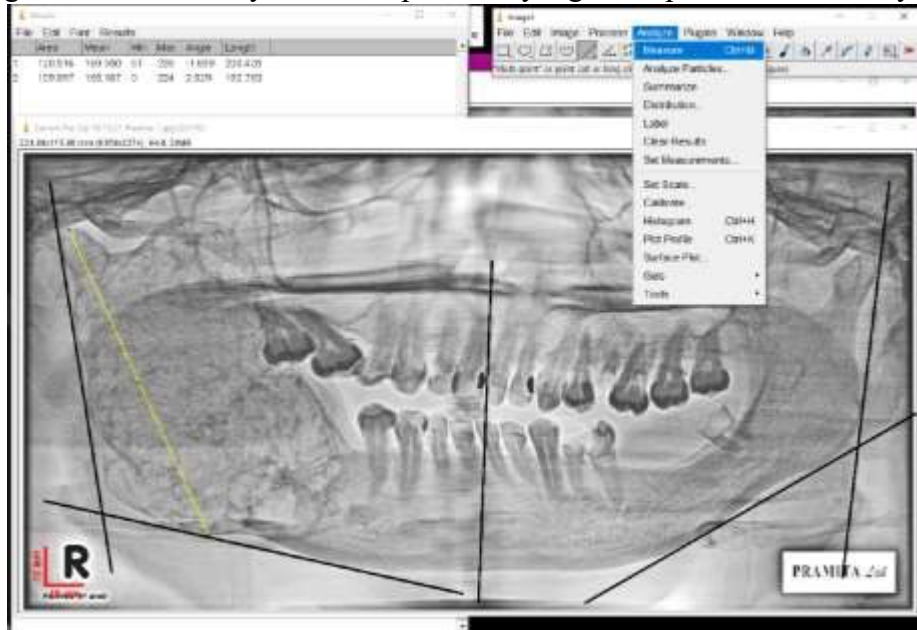


24. Tarik garis pengukuran pada batas terluar dari gambaran kedua sisi Gonial pada gambar OPG X-Ray. Klik Analyze lalu pilih Measure atau tekan Ctrl+M pada keyboard untuk mendapatkan nilai pengukuran lebar Bi-Gonial dari gambar OPG X-Ray.



25. Tarik garis pengukuran pada batas teratas dari gambaran condyle ke arah angulus pada gambar OPG X-Ray. Klik Analyze lalu pilih Measure atau tekan

Ctrl+M pada keyboard untuk mendapatkan nilai pengukuran tinggi Ramus dari gambar OPG X-Ray. Lakukan prosedur yang sama pada sisi sebelahnya.

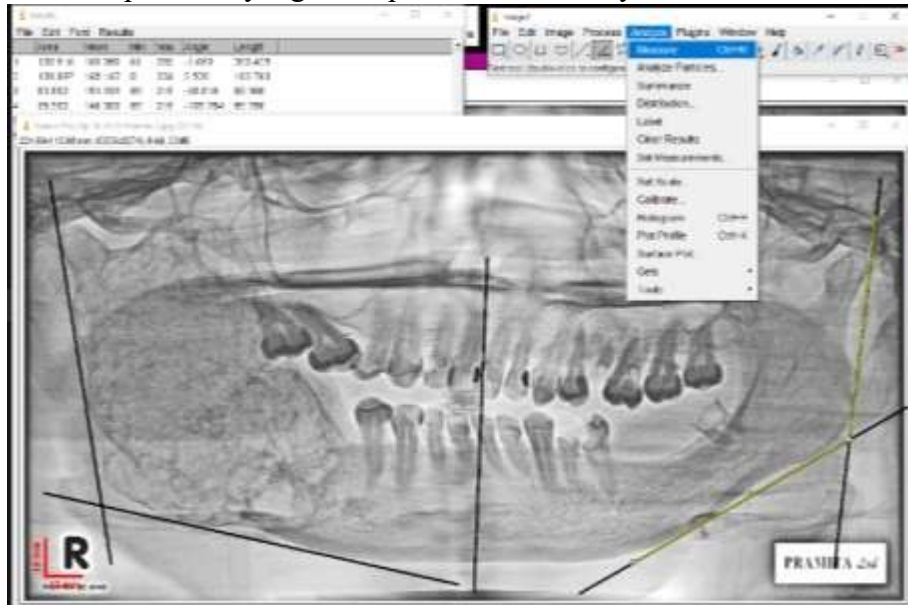


26. Tarik garis pengukuran mulai dari garis bantu Ramus Line ke arah garis bantu Middle Line di daerah inferior mandibula pada gambar OPG X-Ray. Klik Analyze lalu pilih Measure atau tekan Ctrl+M pada keyboard untuk mendapatkan nilai pengukuran panjang body atau panjang korpus mandibula dari gambar OPG X-Ray. Lakukan prosedur yang sama pada sisi sebelahnya.

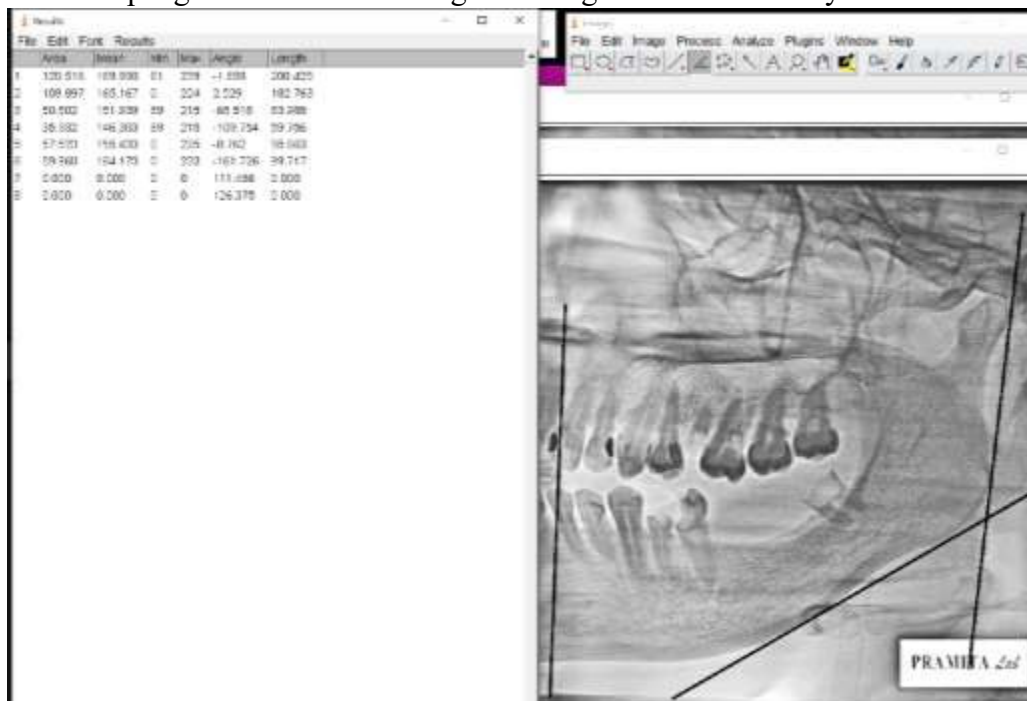


27. Pilih Angle Tool pada toolbar. Tempatkan titik pengukuran pada garis bantu Ramus Line dan Mandibular Line pada gambar OPG X-Ray. Hal ini

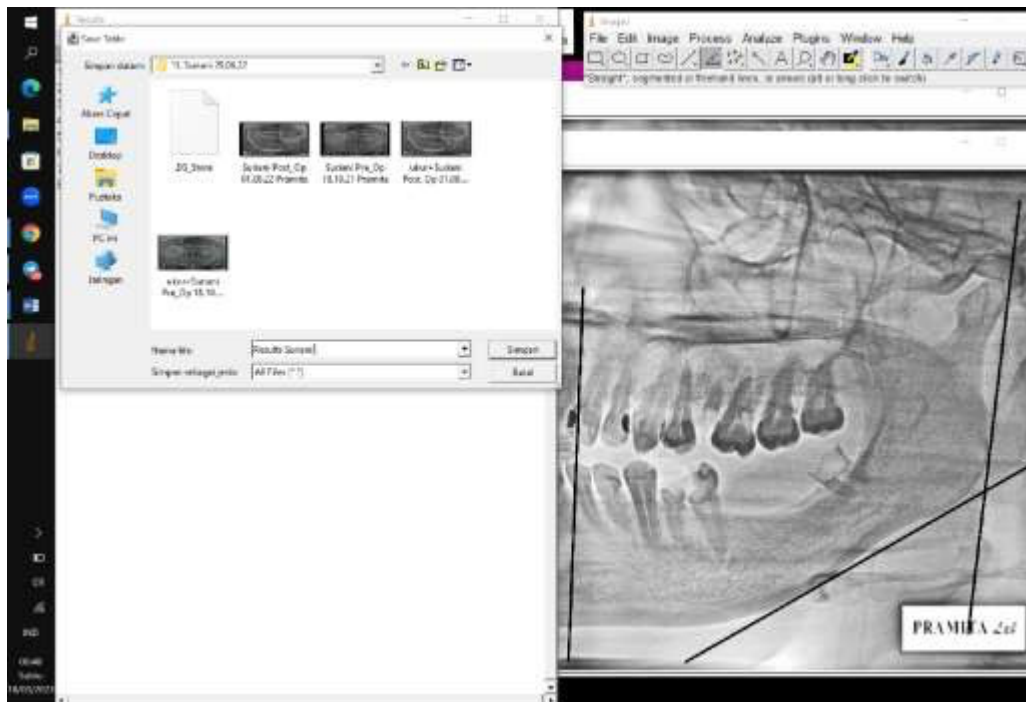
untuk mendapatkan pengukuran sudut dari angulus pada gambar OPG X-Ray. Lakukan prosedur yang sama pada sisi sebelahnya.



28. Hasil pengukuran linear dan angular dari gambar OPG X-Ray.



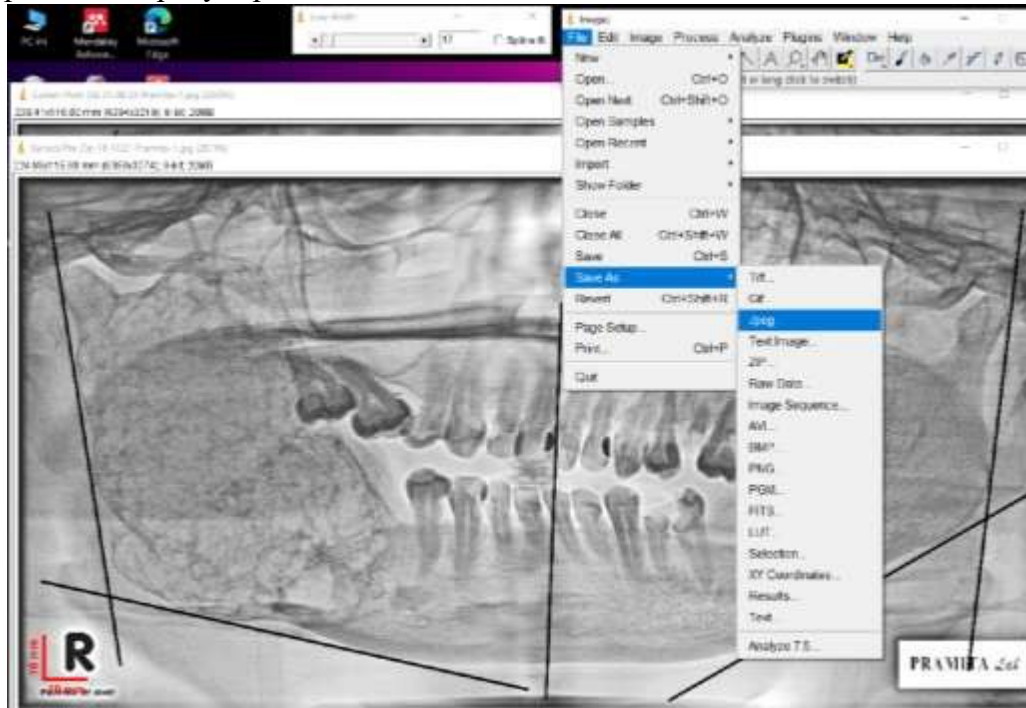
29. Simpan hasil pengukuran yang didapatkan dengan memilih File pada toolbar result lalu pilih save as kemudian pilih folder penyimpanan.



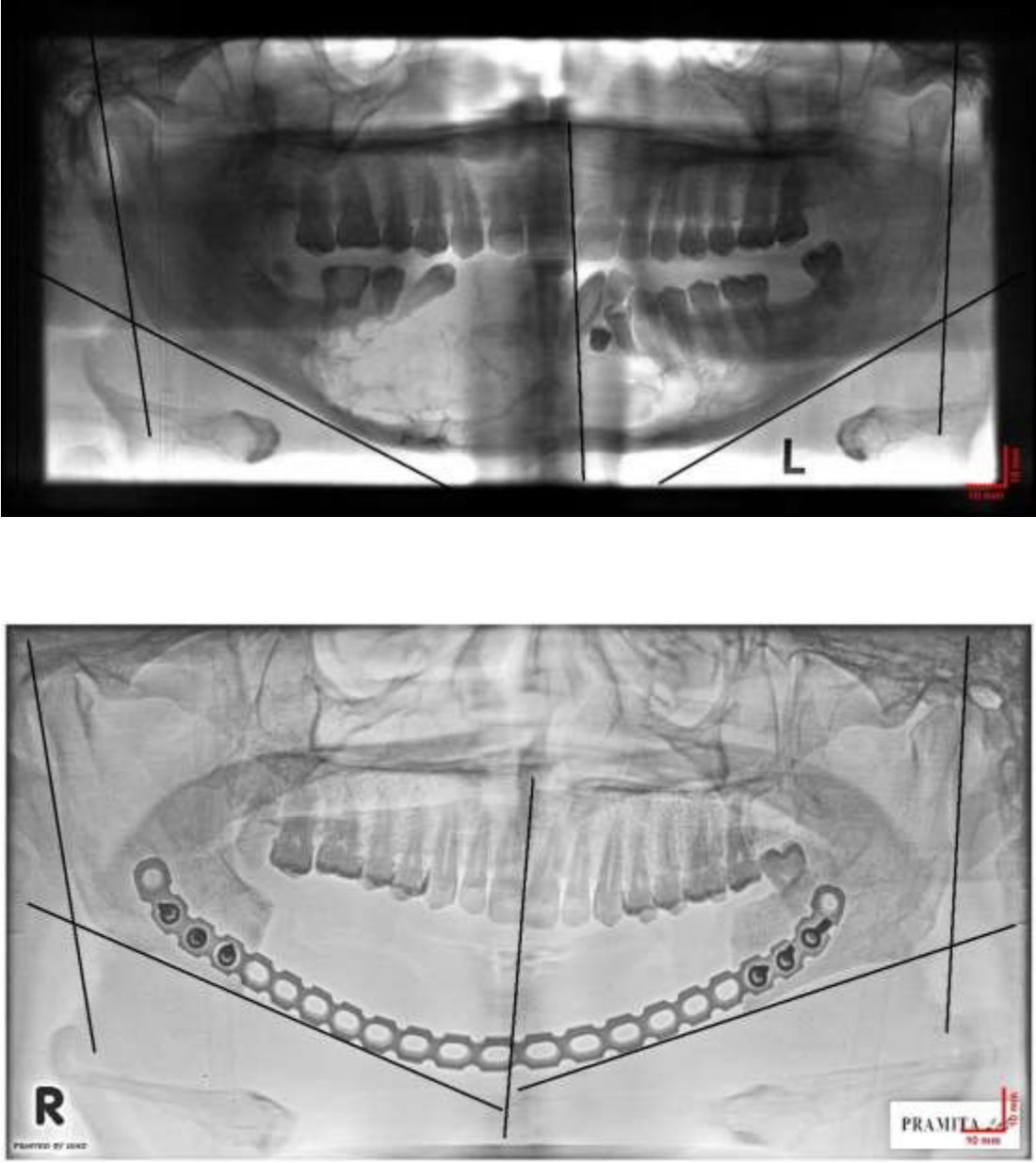
30. Lakukan Prosedur yang sama pada gambar OPG X-Ray setelah operasi.



31. Pilih File pada toolbar lalu pilih Save As kemudian pilih Jpeg. Simpan file pada folder penyimpanan.

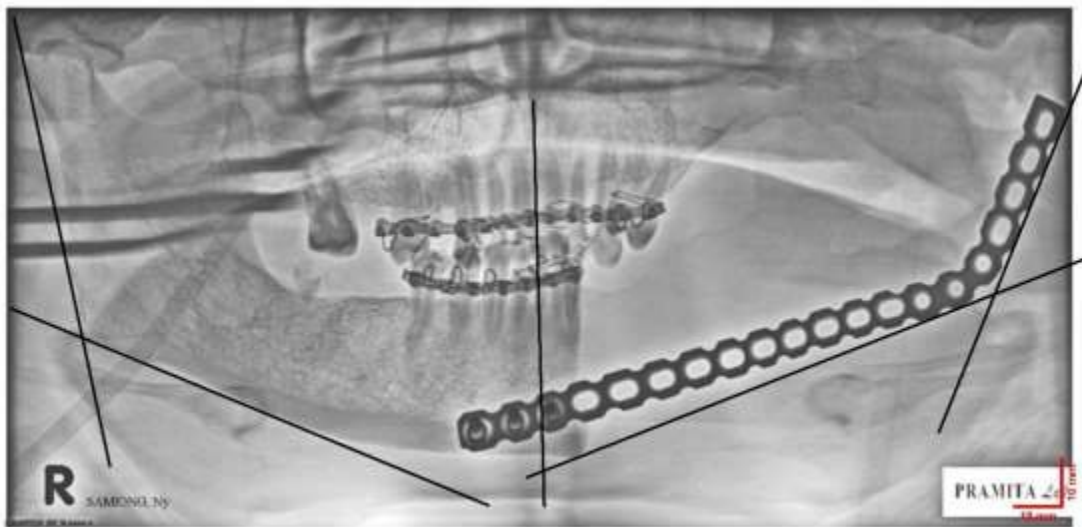


#### Lampiran 4. OPG X-Ray Pre-operasi dan Post-operasi

No.	Gambar OPG X-Ray sebelum dan setelah operasi
1.	<p>Tn. Kasman / L / 50Thn</p>  <p>The figure consists of two OPG X-ray images of the mandible. The top image is the pre-operative view, showing the natural anatomy of the lower jaw with natural teeth. The bottom image is the post-operative view, showing the same patient after a surgical procedure. A significant portion of the anterior mandible has been removed and replaced with a dental arch prosthesis, which appears as a series of white, circular structures. The images are marked with 'L' and 'R' to indicate the left and right sides respectively. The text 'Tn. Kasman / L / 50Thn' is centered above the images. A logo for 'PRAMITA' is visible in the bottom right corner of the post-operative image.</p>

2.

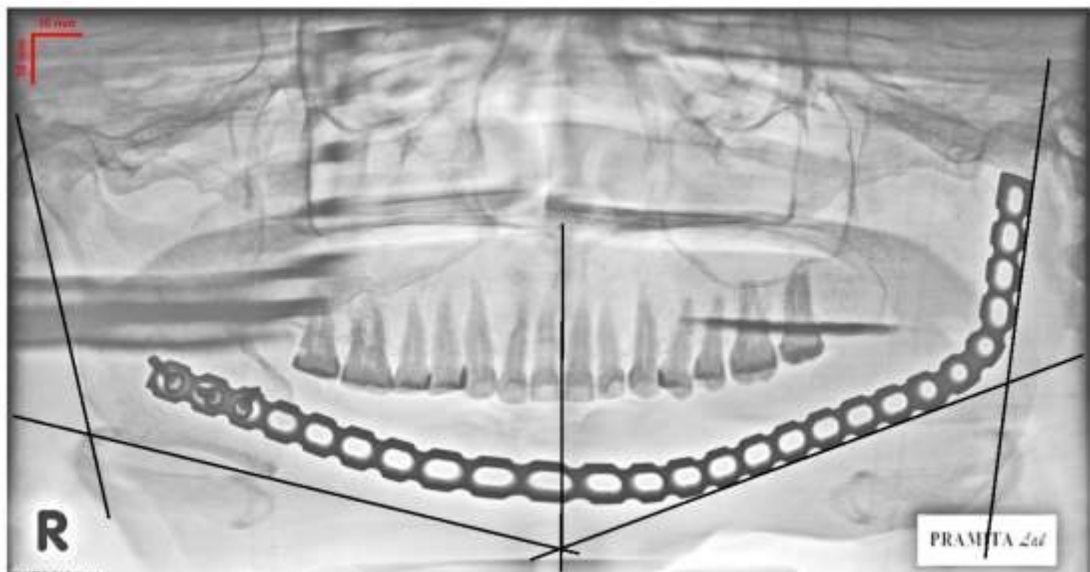
Ny. Samiong / P / 44Thn





3.

Ny. Nurbaeti / P / 60Thn



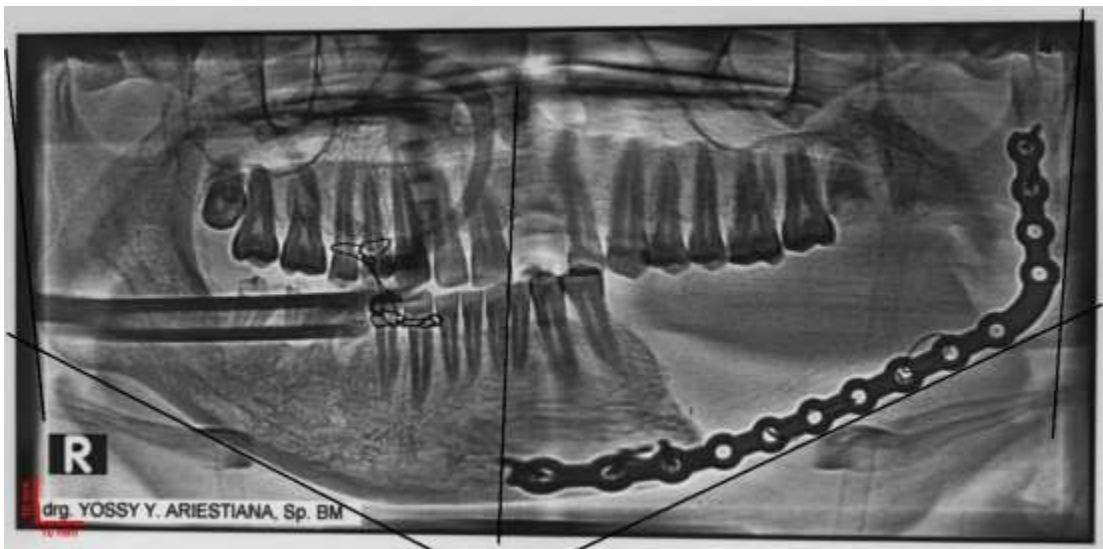
4.

Tn. Anwar Rahim / L / 58Thn



5.

Tn. Radi Sandi / L / 34Thn



6.

Ny. Nurliyah / P / 50Thn



7.

Ny. Rahmawati / P / 52Thn



8.

Ny. Hisna Djufri / P / 52Thn



9.

Nn. Arni / P / 21Thn



10.

Tn. Zet A. Sandia / L / 50Thn





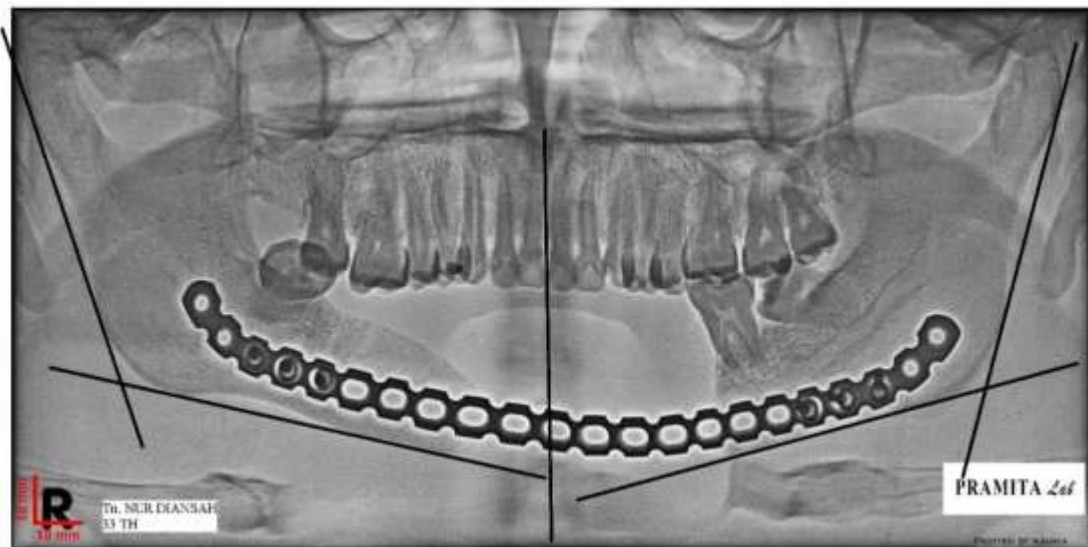
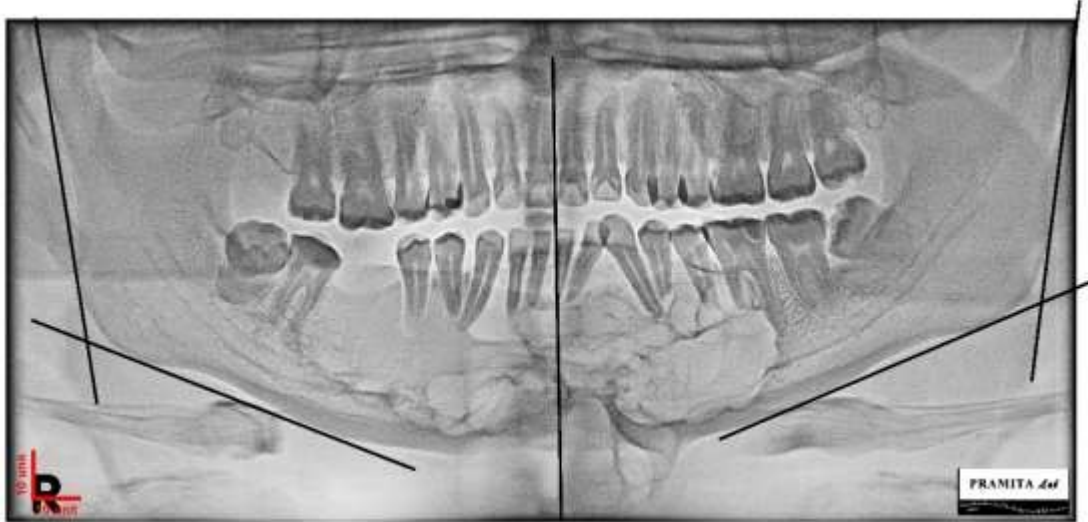
11.

Tn. Derri Defriyanto / L / 19Thn



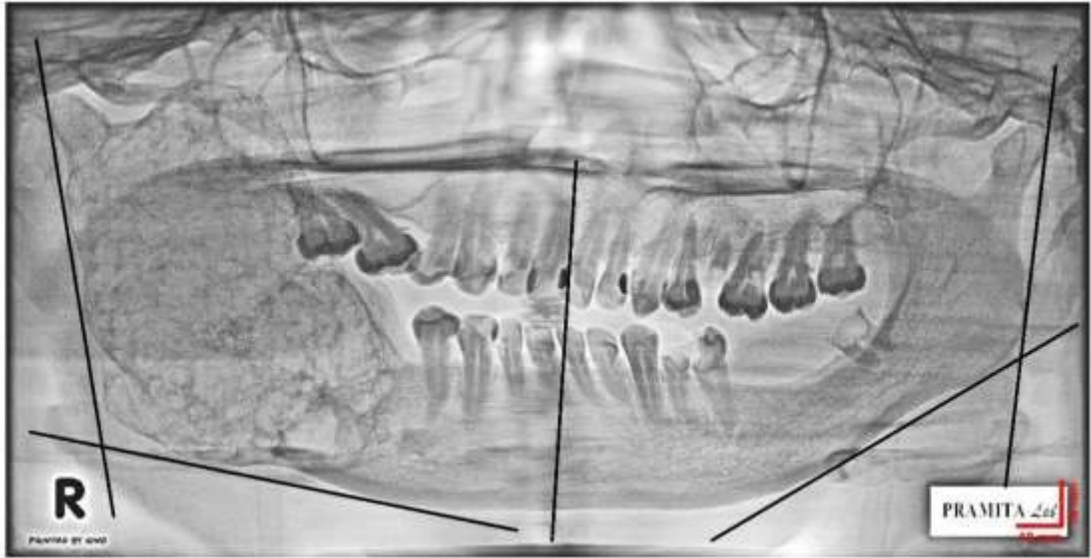
12.

Tn. Nur Diansah / L / 32Thn



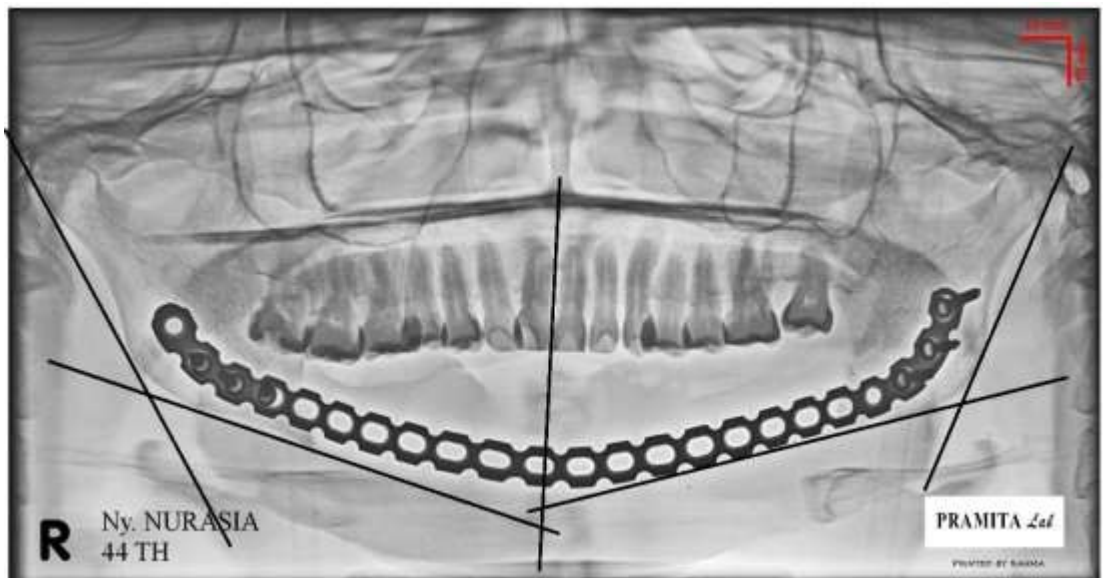
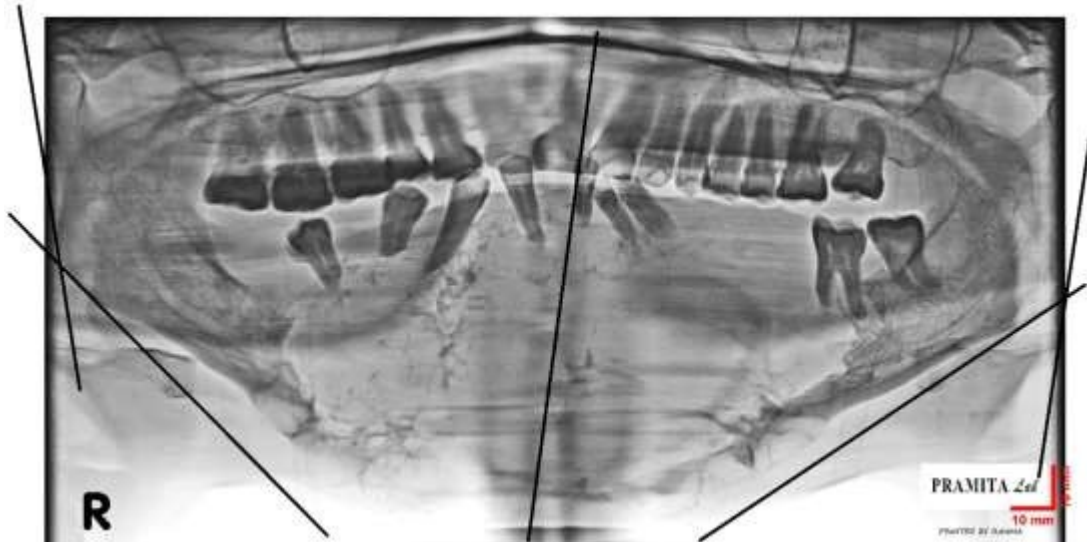
13.

Ny. Suriani / P / 41Thn



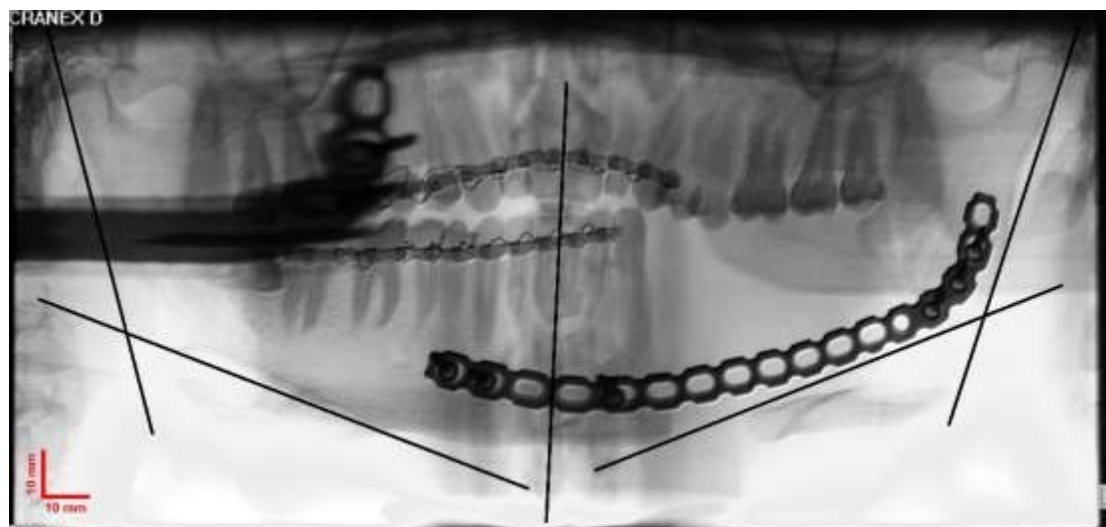
14.

Ny. Nurasia / P / 43Thn



15.

Tn. Asri / L / 25Thn



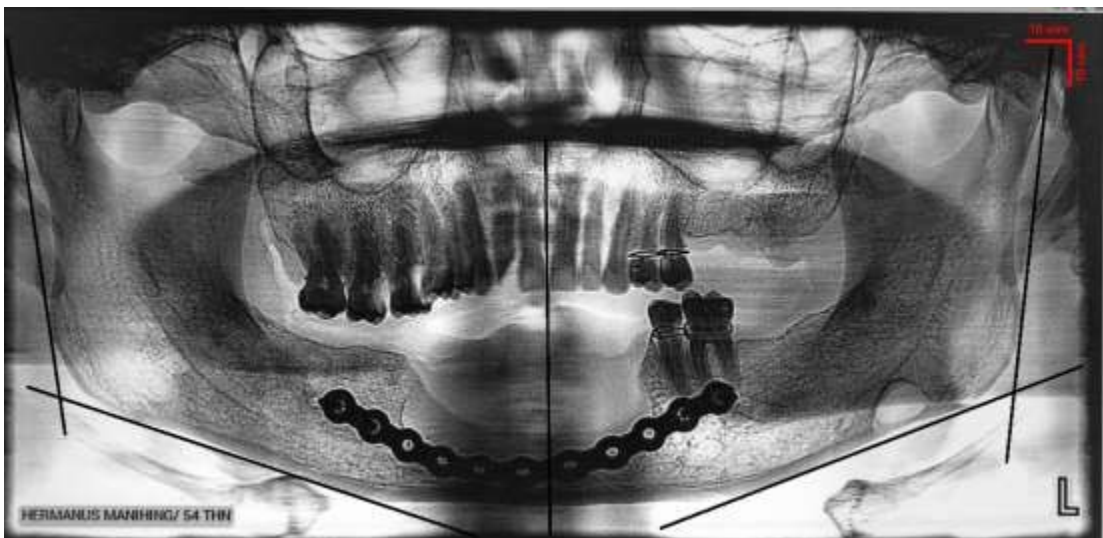
16.

Ny. Ramlah / P / 39Thn



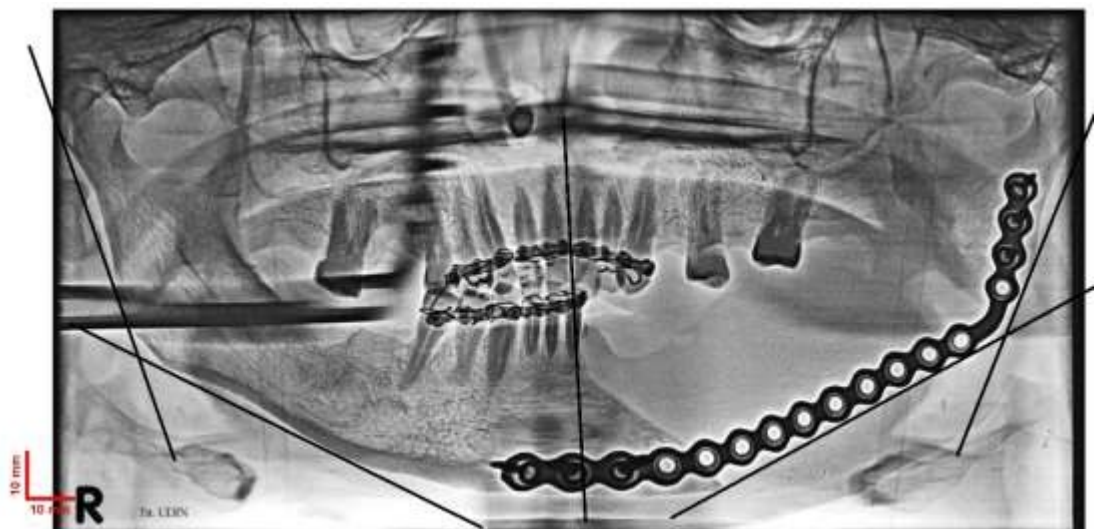
17.

Tn. Hermanus Manihing / L / 54Thn



18.

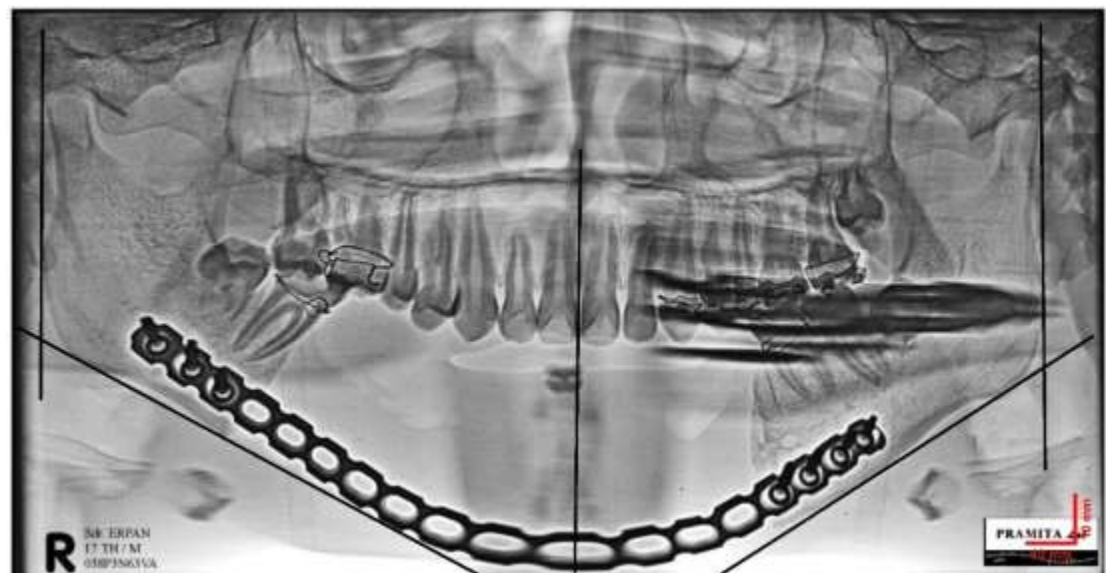
Tn. Udin / L / 59Thn





19.

Tn. Erfan / L / 17Thn



## Lampiran 5. Hasil Olah Data

### I. KARAKTERISTIK

		Posisi			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dextra	6	31.6	31.6	31.6
	Anterior	5	26.3	26.3	57.9
	Sinistra	8	42.1	42.1	100.0
	Total	19	100.0	100.0	

		Klasifikasi			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Kelas I	4	21.1	21.1	21.1
	Kelas Ic	2	10.5	10.5	31.6
	Kelas II	3	15.8	15.8	47.4
	Kelas Ilc	2	10.5	10.5	57.9
	Kelas III	4	21.1	21.1	78.9
	Kelas IV	4	21.1	21.1	100.0
	Total	19	100.0	100.0	

		JK			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Perempuan	9	47.4	47.4	47.4
	Laki-laki	10	52.6	52.6	100.0
	Total	19	100.0	100.0	

		Umur			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0 - 20 Tahun	2	10.5	10.5	10.5
	20 - 40 Tahun	5	26.3	26.3	36.8
	40 - 60 Tahun	12	63.2	63.2	100.0
	Total	19	100.0	100.0	

### II. ICC

#### A. PENGUKURAN ANGULAR

##### 1. Sudut Gonial Kanan

###### Reliability Statistics

Cronbach's Alpha	N of Items
.997	3

###### Intraclass Correlation Coefficient

	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.992 <sup>a</sup>	.984	.997	394.424	18	36	.000
Average Measures	.997	.995	.999	394.424	18	36	.000

##### 2. Sudut Gonial Kiri

###### Reliability Statistics

Cronbach's Alpha	N of Items
.998	3

	Intraclass Correlation Coefficient			F Test with True Value 0			
	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		Value	df1	df2	Sig
		Lower Bound	Upper Bound				
Single Measures	.994 <sup>a</sup>	.986	.997	470.088	18	36	.000
Average Measures	.998	.995	.999	470.088	18	36	.000

#### B. PENGUKURAN LINIER

#### 3. Lebar Bi Condial

##### Reliability Statistics

Cronbach's Alpha	N of Items
.997	3

	Intraclass Correlation Coefficient			F Test with True Value 0			
	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		Value	df1	df2	Sig
		Lower Bound	Upper Bound				
Single Measures	.990 <sup>a</sup>	.980	.996	311.719	18	36	.000
Average Measures	.997	.993	.999	311.719	18	36	.000

#### 4. Lebar Bi Gonial

##### Reliability Statistics

Cronbach's Alpha	N of Items
.998	3

	Intraclass Correlation Coefficient			F Test with True Value 0			
	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		Value	df1	df2	Sig
		Lower Bound	Upper Bound				
Single Measures	.995 <sup>a</sup>	.989	.998	574.324	18	36	.000
Average Measures	.998 <sup>c</sup>	.996	.999	574.324	18	36	.000

#### 5. Tinggi Ramus Kanan

##### Reliability Statistics

Cronbach's Alpha	N of Items
.997	3

	Intraclass Correlation Coefficient			F Test with True Value 0			
	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		Value	df1	df2	Sig
		Lower Bound	Upper Bound				
Single Measures	.992 <sup>a</sup>	.984	.997	376.092	18	36	.000
Average Measures	.997 <sup>c</sup>	.994	.999	376.092	18	36	.000

#### 6. Tinggi Ramus Kiri

##### Reliability Statistics

Cronbach's Alpha	N of Items
.998	3

	Intraclass Correlation Coefficient			F Test with True Value 0			
	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		Value	df1	df2	Sig
		Lower Bound	Upper Bound				
Single Measures	.995 <sup>a</sup>	.990	.998	604.042	18	36	.000
Average Measures	.998 <sup>c</sup>	.997	.999	604.042	18	36	.000

### 7. Panjang Body Kanan

#### Reliability Statistics

Cronbach's Alpha	N of Items
.992	3

#### Intraclass Correlation Coefficient

	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.976 <sup>a</sup>	.950	.990	119.438	18	36	.000
Average Measures	.992 <sup>c</sup>	.983	.997	119.438	18	36	.000

### 8. Panjang Body Kiri

#### Reliability Statistics

Cronbach's Alpha	N of Items
.999	3

#### Intraclass Correlation Coefficient

	Intraclass Correlation <sup>b</sup>	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
Single Measures	.996 <sup>a</sup>	.991	.998	715.037	18	36	.000
Average Measures	.999 <sup>c</sup>	.997	.999	715.037	18	36	.000

## III. DEXTRA - ANALISIS PERBANDINGAN

### A. PENGUKURAN ANGULAR – INTER OBSERVER

#### One-Sample Kolmogorov-Smirnov Test

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri	
N		36	36	
Normal Parameters <sup>a,b</sup>	Mean	118.0865	126.9358	
	Std. Deviation	15.85722	10.88562	
Most Extreme Differences	Absolute	.193	.253	
	Positive	.096	.138	
	Negative	-.193	-.253	
Test Statistic		.193	.253	
Asymp. Sig. (2-tailed) <sup>c</sup>		.002	.000	
Monte Carlo Sig. (2-tailed) <sup>d</sup>	Sig.	.002	.000	
	99% Confidence Interval	Lower Bound	.001	.000
		Upper Bound	.003	.000

#### 1. Sudut Gonial Kanan

##### Test Statistics<sup>a</sup>

Post\_gonial\_kanan - Pre\_gonial\_kanan

Z	-3.332 <sup>b</sup>
Asymp. Sig. (2-tailed)	.001

#### 2. Sudut Gonial Kiri

##### Test Statistics<sup>a</sup>

Post\_gonial\_kiri - Pre\_gonial\_kiri

Z	-.632 <sup>b</sup>
Asymp. Sig. (2-tailed)	.528

B.PENGUKURAN LINIER – INTER OBSERVER

**One-Sample Kolmogorov-Smirnov Test**

		Lebar_Bi_ Con	Lebar_Bi_ Gon	Tinggi_Ramus_ Kanan	Tinggi_Ramus_ _Kiri	Panjang_Body_ Kanan	Panjang_Body_ _Kiri
N		36	36	36	36	36	36
Normal Parameter s <sup>a,b</sup>	Mean	200.8049	180.0655	70.0310	62.7554	100.3546	96.9718
	Std. Deviation	23.39955	20.83837	16.38721	10.05956	11.26287	12.78160
Most Extreme Difference s	Absolute	.232	.133	.147	.176	.087	.127
	Positive	.232	.121	.103	.176	.074	.127
	Negative	-.097	-.133	-.147	-.130	-.087	-.105
Test Statistic		.232	.133	.147	.176	.087	.127
Asymp. Sig. (2-tailed) <sup>c</sup>		.000	.110	.046	.006	.200 <sup>e</sup>	.149

**3. Lebar Bi Condial**

**Test Statistics<sup>a</sup>**

Post\_Lebar\_Con -  
Pre\_Lebar\_Con

Z	-1.764 <sup>b</sup>
Asymp. Sig. (2-tailed)	.078

**4. Lebar Bi Gonial**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	18.26172	14.93447	3.52009	10.83498	25.68846	5.188	17	.000

**5. Tinggi Ramus Kanan**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	24.38444	15.29129	3.60419	16.78026	31.98863	6.766	17	.000

**6. Tinggi Ramus Kiri**

**Test Statistics<sup>a</sup>**

Post\_Tinggi\_Ramus\_Kiri - Pre\_Tinggi\_Ramus\_Kiri

Z	-1.416 <sup>b</sup>
Asymp. Sig. (2-tailed)	.157

### 7. Panjang Body Kanan

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	10.25228	8.15933	1.92317	6.19474	14.30982	5.331	17	.000	

### 8. Panjang Body Kiri

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	4.79967	10.79477	2.54435	-5.6845	10.16778	1.886	17	.076	

### C.PENGUKURAN ANGULAR – OBSERVER 1

#### One-Sample Kolmogorov-Smirnov Test

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		12	12
Normal Parameters <sup>a,b</sup>	Mean	117.9677	126.9269
	Std. Deviation	16.28545	11.25399
Most Extreme Differences	Absolute	.193	.263
	Positive	.093	.134
	Negative	-.193	-.263
Test Statistic		.193	.263
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	.021

### 9. Sudut Gonial Kanan

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	-15.604333	14.636049	5.975142	-30.963925	-.244742	-2.612	5	.048	

### 10. Sudut Gonial Kiri

Test Statistics <sup>a</sup>		Post_gonial_kiri - Pre_gonial_kiri
Z		-.314 <sup>b</sup>
Asymp. Sig. (2-tailed)		.753

### D.PENGUKURAN LINIER – OBSERVER 1

#### One-Sample Kolmogorov-Smirnov Test

		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		12	12	12	12	12	12
Normal Parameters <sup>a,b</sup>	Mean	200.7925	179.8783	69.9428	62.6879	100.2793	96.9313
	Std. Deviation	24.14660	21.79108	16.73410	10.17183	11.58968	13.18381
	Absolute	0.248	0.144	0.163	0.178	0.097	0.141

Most Extreme Differences	Positive	0.248	0.131	0.104	0.178	0.070	0.141
	Negative	-0.109	-0.144	-0.163	-0.129	-0.097	-0.099
Test Statistic		0.248	0.144	0.163	0.178	0.097	0.141
Asymp. Sig. (2-tailed) <sup>c</sup>		.040	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>

#### 11. Lebar Bi Condial

##### Test Statistics<sup>a</sup>

Post\_Lebar\_Con - Pre\_Lebar\_Con

Z	-943 <sup>b</sup>
Asymp. Sig. (2-tailed)	.345

#### 12. Lebar Bi Gonial

##### Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	18.21500	16.29884	6.65397	1.11042	35.31958	2.737	5	.041

#### 13. Tinggi Ramus Kanan

##### Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	24.14117	16.34426	6.67252	6.98892	41.29341	3.618	5	.015

#### 14. Tinggi Ramus Kiri

##### Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	.94483	2.72783	1.11363	-1.91785	3.80751	.848	5	.435

#### 15. Panjang Body Kanan

##### Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	10.16083	8.50344	3.47151	1.23702	19.08464	2.927	5	.033

#### 16. Panjang Body Kiri

##### Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	4.84300	11.49664	4.69349	-7.22199	16.90799	1.032	5	.349

#### E. PENGUKURAN ANGULAR – OBSERVER 2

##### One-Sample Kolmogorov-Smirnov Test

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		12	12
Normal Parameters <sup>a,b</sup>	Mean	118.1285	126.9838

	Std. Deviation	16.31023	11.13593
Most Extreme Differences	Absolute	.198	.251
	Positive	.094	.136
	Negative	-.198	-.251
Test Statistic		.198	.251
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	.035

### 17. Sudut Gonial Kanan

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-15.609667	14.522444	5.928763	-30.850037	-.369296	-2.633	5	.046

### 18. Sudut Gonial Kiri

Test Statistics <sup>a</sup>	
Post_gonial_kiri - Pre_gonial_kiri	
Z	-.524 <sup>b</sup>
Asymp. Sig. (2-tailed)	.600

## F. PENGUKURAN LINIER – OBSERVER 2

One-Sample Kolmogorov-Smirnov Test							
		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		12	12	12	12	12	12
Normal Parameters <sup>a,b</sup>	Mean	200.6133	178.4163	70.0618	62.6758	98.6578	95.6844
	Std. Deviation	23.99960	22.38793	16.93518	10.42328	13.64873	10.66411
Most Extreme Differences	Absolute	0.231	0.131	0.145	0.173	0.164	0.120
	Positive	0.231	0.131	0.105	0.173	0.164	0.120
	Negative	-0.093	-0.097	-0.145	-0.149	-0.097	-0.109
Test Statistic		0.231	0.131	0.145	0.173	0.164	0.120
Asymp. Sig. (2-tailed) <sup>c</sup>		0.077	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>

### 19. Lebar Bi Condial

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	6.272667	11.573507	4.724865	-5.872984	18.418318	1.328	5	.242

### 20. Lebar Bi Gonial

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	18.30567	15.45086	6.30779	2.09098	34.52035	2.902	5	.034



21. Tinggi Ramus Kanan

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	24.67083	16.36487	6.68093	7.49696	41.84471	3.693	5	.014

22. Tinggi Ramus Kiri

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	.93700	2.48403	1.01410	-1.66983	3.54383	.924	5	.398

23. Panjang Body Kanan

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	10.15933	8.71921	3.55960	1.00909	19.30958	2.854	5	.036

24. Panjang Body Kiri

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	4.86250	11.52719	4.70595	-7.23454	16.95954	1.033	5	.349

G.PENGUKURAN ANGULAR – OBSERVER 3

One-Sample Kolmogorov-Smirnov Test

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		12	12
Normal Parameters <sup>a,b</sup>	Mean	118.1633	126.8966
	Std. Deviation	16.39542	11.24142
Most Extreme Differences	Absolute	.193	.261
	Positive	.096	.135
	Negative	-.193	-.261
Test Statistic		.193	.261
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	.024

25. Sudut Gonial Kanan

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-15.961167	14.646493	5.979406	-31.331718	-.590615	-2.669	5	.044

26. Sudut Gonial Kiri

Test Statistics <sup>a</sup>	
Post_gonial_kiri - Pre_gonial_kiri	
Z	-.314 <sup>b</sup>
Asymp. Sig. (2-tailed)	.753

H.PENGUKURAN LINIER – OBSERVER 3

**One-Sample Kolmogorov-Smirnov Test**

		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		12	12	12	12	12	12
Normal Parameters <sup>a,b</sup>	Mean	201.0089	180.2351	70.0885	62.9023	100.3768	97.0498
	Std. Deviation	24.14630	21.23703	16.95889	10.48031	11.75607	13.15055
Most Extreme Differences	Absolute	0.241	0.137	0.138	0.191	0.095	0.140
	Positive	0.241	0.127	0.104	0.191	0.075	0.140
	Negative	-0.097	-0.137	-0.138	-0.131	-0.095	-0.101
Test Statistic		0.241	0.137	0.138	0.191	0.095	0.140
Asymp. Sig. (2-tailed) <sup>c</sup>		0.052	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>	.200 <sup>e</sup>

**27. Lebar Bi Condial**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	5.646833	11.787945	4.812408	-6.723856	18.017523	1.173	5	.293

**28. Lebar Bi Gonial**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	18.26450	15.93563	6.50570	1.54108	34.98792	2.807	5	.038

**29. Tinggi Ramus Kanan**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	24.34133	16.12095	6.58135	7.42343	41.25923	3.699	5	.014

**30. Tinggi Ramus Kiri**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	1.16767	2.27900	.93040	-1.22400	3.55933	1.255	5	.265

**31. Panjang Body Kanan**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	10.43667	8.82948	3.60462	1.17070	19.70264	2.895	5	.034

### 32. Panjang Body Kiri

#### Paired Samples Test

Pair		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
1	Pre_Panjang_Body_Kiri - Post_Panjang_Body_Kiri	4.69350	11.45087	4.67480	-7.32346	16.71046	1.004	5	.361

#### IV. ANTERIOR – ANALISIS PERBANDINGAN

##### I. PENGUKURAN ANGULAR – INTER OBSERVER

#### One-Sample Kolmogorov-Smirnov Test

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		30	30
Normal Parameters <sup>a,b</sup>	Mean	126.4632	122.7347
	Std. Deviation	7.74559	5.86016
Most Extreme Differences	Absolute	.183	.125
	Positive	.183	.102
	Negative	-.100	-.125
Test Statistic		.183	.125
Asymp. Sig. (2-tailed) <sup>c</sup>		.012	.200 <sup>e</sup>

#### 1. Sudut Gonial Kanan

##### Test Statistics<sup>a</sup>

Post\_gonial\_kanan - Pre\_gonial\_kanan

Z	-3.067 <sup>b</sup>
Asymp. Sig. (2-tailed)	.002

#### 2. Sudut Gonial Kiri

#### Paired Samples Test

Pair	Paired Differences				t	df	Sig. (2-tailed)	
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower				Upper
1	6.38773	3.69948	.95520	4.33903	8.43644	6.687	14	.000

##### J. PENGUKURAN LINIER – INTER OBSERVER

#### One-Sample Kolmogorov-Smirnov Test

		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		30	30	30	30	30	30
Normal Parameters <sup>a,b</sup>	Mean	201.5820	180.1645	66.5783	65.7904	103.1025	107.4045
	Std. Deviation	11.53539	7.10909	7.72102	7.83913	11.52792	15.85170
Most Extreme Differences	Absolute	0.190	0.159	0.200	0.223	0.170	0.223
	Positive	0.190	0.117	0.200	0.223	0.124	0.223
	Negative	-0.118	-0.159	-0.129	-0.165	-0.170	-0.131

Test Statistic	0.190	0.159	0.200	0.223	0.170	0.223
Asymp. Sig. (2-tailed) <sup>c</sup>	<b>0.007</b>	<b>0.051</b>	<b>0.003</b>	<b>0.001</b>	<b>0.027</b>	<b>0.001</b>

### 3. Lebar Bi Condial

#### Test Statistics<sup>a</sup>

Post\_Lebar\_Con - Pre\_Lebar\_Con

Z	-284 <sup>b</sup>
Asymp. Sig. (2-tailed)	<b>.776</b>

### 4. Lebar Bi Gonial

#### Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	4.11047	8.55048	2.20773	-.62463	8.84557	1.862	14	<b>.084</b>

### 5. Tinggi Ramus Kanan

#### Test Statistics<sup>a</sup>

Post\_Tinggi\_Ramus\_Kanan - Pre\_Tinggi\_Ramus\_Kanan

Z	-1.590 <sup>b</sup>
Asymp. Sig. (2-tailed)	<b>.112</b>

### 6. Tinggi Ramus Kiri

#### Test Statistics<sup>a</sup>

Post\_Tinggi\_Ramus\_Kiri - Pre\_Tinggi\_Ramus\_Kiri

Z	-1.533 <sup>b</sup>
Asymp. Sig. (2-tailed)	<b>.125</b>

### 7. Panjang Body Kanan

#### Test Statistics<sup>a</sup>

Post\_Panjang\_Body\_Kanan - Pre\_Panjang\_Body\_Kanan

Z	-3.408 <sup>b</sup>
Asymp. Sig. (2-tailed)	<b>.001</b>

### 8. Panjang Body Kiri

#### Test Statistics<sup>a</sup>

Post\_Panjang\_Body\_Kiri - Pre\_Panjang\_Body\_Kiri

Z	-3.067 <sup>b</sup>
Asymp. Sig. (2-tailed)	<b>.002</b>

### K.PENGUKURAN ANGULAR – OBSERVER 1

#### One-Sample Kolmogorov-Smirnov Test

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		10	10
Normal Parameters <sup>a,b</sup>	Mean	126.3865	122.7036
	Std. Deviation	8.11701	6.28832
Most Extreme Differences	Absolute	.191	.124
	Positive	.191	.123
	Negative	-.124	-.124

Test Statistic	.191	.124
Asymp. Sig. (2-tailed) <sup>e</sup>	.200 <sup>d</sup>	.200 <sup>d</sup>

### 9. Sudut Gonial Kanan

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	9.065800	6.533347	2.921802	.953578	17.178022	3.103	4	.036

### 10. Sudut Gonial Kiri

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	6.38480	4.32659	1.93491	1.01263	11.75697	3.300	4	.030

### L.PENGUKURAN LINIER – OBSERVER 1

One-Sample Kolmogorov-Smirnov Test							
		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		10	10	10	10	10	10
Normal Parameters <sup>a,b</sup>	Mean	201.0368	180.0767	66.7240	65.6869	103.1119	107.4244
	Std. Deviation	11.70812	7.39450	7.86508	8.10556	11.87258	16.41551
Most Extreme Differences	Absolute	0.239	0.171	0.190	0.274	0.195	0.219
	Positive	0.239	0.124	0.190	0.274	0.125	0.219
	Negative	-0.132	-0.171	-0.145	-0.181	-0.195	-0.130
Test Statistic		0.239	0.171	0.190	0.274	0.195	0.219
Asymp. Sig. (2-tailed) <sup>c</sup>		0.111	.200 <sup>e</sup>	.200 <sup>e</sup>	0.032	.200 <sup>e</sup>	0.190

### 11. Lebar Bi Condial

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	1.802800	16.767684	7.498736	-19.017029	22.622629	.240	4	.822

### 12. Lebar Bi Gonial

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	4.30300	9.51871	4.25690	-7.51604	16.12204	1.011	4	.369

### 13. Tinggi Ramus Kanan

#### Paired Samples Test

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-2.40000	4.18598	1.87203	-7.59758	2.79758	-1.282	4	.269

#### 14. Tinggi Ramus Kiri

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-1.98620	3.58494	1.60323	-6.43749	2.46509	-1.239	4	.283

#### 15. Panjang Body Kanan

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	17.37700	13.86524	6.20072	.16103	34.59297	2.802	4	.049

#### 16. Panjang Body Kiri

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	24.45640	18.84763	8.42891	1.05398	47.85882	2.901	4	.044

M.PENGUKURAN ANGULAR – OBSERVER 2

**One-Sample Kolmogorov-Smirnov Test**

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		10	10
Normal Parameters <sup>a,b</sup>	Mean	126.5543	122.7260
	Std. Deviation	7.90645	5.89251
Most Extreme Differences	Absolute	.183	.135
	Positive	.183	.103
	Negative	-.124	-.135
Test Statistic		.183	.135
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	.200 <sup>d</sup>

**17. Sudut Gonial Kanan**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	8.991800	6.252109	2.796028	1.228781	16.754819	3.216	4	.032

**18. Sudut Gonial Kiri**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	6.48040	3.83385	1.71455	1.72005	11.24075	3.780	4	.019

N.PENGUKURAN LINIER – OBSERVER 2

**One-Sample Kolmogorov-Smirnov Test**

		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		10	10	10	10	10	10
Normal Parameters <sup>a,b</sup>	Mean	201.8018	180.2920	66.5939	65.7986	103.1013	107.4296
	Std. Deviation	12.03634	7.39657	8.00013	8.04322	12.04419	16.55237
Most Extreme Differences	Absolute	0.225	0.180	0.230	0.213	0.178	0.219
	Positive	0.225	0.136	0.230	0.213	0.115	0.219
	Negative	-0.125	-0.180	-0.141	-0.174	-0.178	-0.123
Test Statistic		0.225	0.180	0.230	0.213	0.178	0.219
Asymp. Sig. (2-tailed) <sup>c</sup>		0.166	.200 <sup>e</sup>	0.143	.200 <sup>e</sup>	.200 <sup>e</sup>	0.189

**19. Lebar Bi Condial**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	1.942800	17.277717	7.726830	-19.510319	23.395919	.251	4	.814

20. Lebar Bi Gonial

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	3.95520	9.24941	4.13646	-7.52946	15.43986	.956	4	.393	

21. Tinggi Ramus Kanan

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	-1.32900	3.83573	1.71539	-6.09169	3.43369	-.775	4	.482	

22. Tinggi Ramus Kiri

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	-2.65640	3.96321	1.77240	-7.57737	2.26457	-1.499	4	.208	

23. Panjang Body Kanan

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	17.74500	13.80327	6.17301	.60598	34.88402	2.875	4	.045	

24. Panjang Body Kiri

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	24.56680	18.99543	8.49501	.98086	48.15274	2.892	4	.044	

O.PENGUKURAN ANGULAR – OBSERVER 3

One-Sample Kolmogorov-Smirnov Test			
		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		10	10
Normal Parameters <sup>a,b</sup>	Mean	125.5487	121.7744
	Std. Deviation	9.48762	6.22186
Most Extreme Differences	Absolute	.228	.158
	Positive	.228	.158
	Negative	-.167	-.115
Test Statistic		.228	.158
Asymp. Sig. (2-tailed) <sup>c</sup>		.152	.200 <sup>e</sup>

25. Sudut Gonial Kanan

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	8.968200	6.818735	3.049431	.501622	17.434778	2.941	4	.042	



**26. Sudut Gonial Kiri**

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1	6.29800	3.80303	1.70077	1.57591	11.02009	3.703	4	.021

P.PENGUKURAN LINIER – OBSERVER 3

One-Sample Kolmogorov-Smirnov Test							
N	Mean	Lebar Bi	Lebar Bi	Tinggi	Tinggi	Panjang	Panjang
		Con	Gon	Ramus Kanan	Ramus Kiri	Body Kanan	Body Kiri
10		10	10	10	10	10	10
Normal Parameters <sup>a,b</sup>	Mean	201.9074	180.0248	66.0169	65.8857	103.0944	107.3594
	Std. Deviation	12.09591	17.01644	8.13687	8.22171	11.92435	16.31610
Most Extreme Differences	Absolute	0.184	0.214	0.253	0.254	0.178	0.225
	Positive	0.184	0.214	0.253	0.254	0.119	0.225
	Negative	-0.124	-0.199	-0.158	-0.174	-0.178	-0.126
Test Statistic		0.184	0.214	0.253	0.254	0.178	0.225
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	.200 <sup>d</sup>	0.070	0.068	.200 <sup>d</sup>	0.163

**27. Lebar Bi Condial**

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1	.981200	17.391152	7.777560	-20.612768	22.575168	.126	4	.906

**28. Lebar Bi Gonial**

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1	4.07320	8.92480	3.99129	-7.00840	15.15480	1.021	4	.365

**29. Tinggi Ramus Kanan**

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1	-1.51980	3.57176	1.59734	-5.95473	2.91513	-.951	4	.395

**30. Tinggi Ramus Kiri**

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pair 1	-2.10180	3.95952	1.77075	-7.01820	2.81460	-1.187	4	.301

### 31. Panjang Body Kanan

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference						
			Lower	Upper					
Pair 1	17.58600	13.47211	6.02491	.85817	34.31383	2.919	4	.043	

### 32. Panjang Body Kiri

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference						
			Lower	Upper					
Pair 1	24.56680	18.34584	8.20451	1.78743	47.34617	2.994	4	.040	

## V. SINISTRA – ANALISIS PERBANDINGAN

### Q.PENGUKURAN ANGULAR – INTER OBSERVER

#### One-Sample Kolmogorov-Smirnov Test

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		48	48
Normal Parameters <sup>a,b</sup>	Mean	123.7673	113.6715
	Std. Deviation	4.56583	26.16694
Most Extreme Differences	Absolute	.108	.198
	Positive	.108	.137
	Negative	-.062	-.198
Test Statistic		.108	.198
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	.000

#### 1. Sudut Gonial Kanan

Paired Samples Test							t	df	Sig. (2-tailed)
Paired Differences									
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference						
			Lower	Upper					
Pair 1	-.835583	2.922312	.596514	-2.069567	.398401	-1.401	23	.175	

#### 2. Sudut Gonial Kiri

#### Test Statistics<sup>a</sup>

		Post_gonial_kiri - Pre_gonial_kiri
Z		-3.686 <sup>b</sup>
Asymp. Sig. (2-tailed)		.000

### R.PENGUKURAN LINIER – INTER OBSERVER

#### One-Sample Kolmogorov-Smirnov Test

		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		48	48	48	48	48	48
Normal Parameters <sup>a,b</sup>	Mean	198.0246	183.3576	66.6291	75.6816	97.8458	100.4172
	Std. Deviation	13.03155	19.69818	3.52387	24.24309	6.16078	14.74644
	Absolute	0.077	0.305	0.116	0.189	0.171	0.167

Most Extreme Differences	Positive	0.077	0.305	0.116	0.189	0.171	0.167
	Negative	-0.057	-0.152	-0.080	-0.108	-0.108	-0.134
Test Statistic		0.077	0.305	0.116	0.189	0.171	0.167
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	0.000	0.116	0.000	0.001	0.002

### 3. Lebar Bi Condial

Paired Samples Test							t	df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	Paired Differences		Lower	Upper			
			95% Confidence Interval of the Difference						
Pair 1	-4.689917	19.220330	3.923333	-12.805950	3.426117	-1.195	23	.244	

### 4. Lebar Bi Gonial

Test Statistics <sup>a</sup>	
Post_Lebar_Gon - Pre_Lebar_Gon	
Z	-3.429 <sup>b</sup>
Asymp. Sig. (2-tailed)	.001

### 5. Tinggi Ramus Kanan

Paired Samples Test							t	df	Sig. (2-tailed)
Mean	Std. Deviation	Std. Error Mean	Paired Differences		Lower	Upper			
			95% Confidence Interval of the Difference						
Pair 1	-.18133	3.62844	.74065	-1.71349	1.35082	-.245	23	.809	

### 6. Tinggi Ramus Kiri

Test Statistics <sup>a</sup>	
Post_Tinggi_Ramus_Kiri - Pre_Tinggi_Ramus_Kiri	
Z	-3.857 <sup>b</sup>
Asymp. Sig. (2-tailed)	.000

### 7. Panjang Body Kanan

Test Statistics <sup>a</sup>	
Post_Panjang_Body_Kanan - Pre_Panjang_Body_Kanan	
Z	-1.686 <sup>b</sup>
Asymp. Sig. (2-tailed)	.092

### 8. Panjang Body Kiri

Test Statistics <sup>a</sup>	
Post_Panjang_Body_Kiri - Pre_Panjang_Body_Kiri	
Z	-3.000 <sup>b</sup>
Asymp. Sig. (2-tailed)	.003

### S.PENGUKURAN ANGULAR – OBSERVER 1

One-Sample Kolmogorov-Smirnov Test			
		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		16	16
Normal Parameters <sup>a,b</sup>	Mean	123.7927	113.6233
	Std. Deviation	4.70683	26.76581
Most Extreme Differences	Absolute	.123	.198
	Positive	.123	.131
	Negative	-.095	-.198

Test Statistic	.123	.198
Asymp. Sig. (2-tailed) <sup>c</sup>	.200 <sup>d</sup>	.093

### 9. Sudut Gonial Kanan

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	-.847250	3.073662	1.086704	-3.416896	1.722396	-.780	7	.461

### 10. Sudut Gonial Kiri

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	-28.11537	27.21958	9.62357	-50.87151	-5.35924	-2.922	7	.022

T.PENGUKURAN LINIER – OBSERVER 1

### One-Sample Kolmogorov-Smirnov Test

		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		16	16	16	16	16	16
Normal Parameters <sup>a,b</sup>	Mean	197.8451	184.0764	66.6562	75.6316	98.2267	100.8425
	Std. Deviation	13.40109	19.06687	3.59397	24.61552	7.21513	15.42663
Most Extreme Differences	Absolute	0.091	0.220	0.144	0.195	0.167	0.176
	Positive	0.091	0.220	0.144	0.195	0.167	0.176
	Negative	-0.079	-0.149	-0.092	-0.109	-0.146	-0.122
Test Statistic		0.091	0.220	0.144	0.195	0.167	0.176
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	0.037	.200 <sup>d</sup>	0.105	.200 <sup>d</sup>	.200 <sup>d</sup>

### 11. Lebar Bi Condial

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	-4.496125	20.489450	7.244114	-21.625733	12.633483	-.621	7	.554

### 12. Lebar Bi Gonial

Test Statistics <sup>a</sup>	
Post_Lebar_Gon - Pre_Lebar_Gon	
Z	-1.963 <sup>b</sup>
Asymp. Sig. (2-tailed)	.049

### 13. Tinggi Ramus Kanan

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	.01137	3.82079	1.35085	-3.18288	3.20563	.008	7	.994

14. Panjang Ramus Kiri

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	34.26200	23.51531	8.31392	14.60270	53.92130	4.121	7	.004

15. Panjang Body Kanan

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	4.02113	10.58525	3.74245	-4.82837	12.87062	1.074	7	.318

16. Panjang Body Kiri

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	17.19650	19.63540	6.94216	.78090	33.61210	2.477	7	.042

U.PENGUKURAN ANGULAR – OBSERVER 2

One-Sample Kolmogorov-Smirnov Test

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		16	16
Normal Parameters <sup>a,b</sup>	Mean	123.7354	113.7187
	Std. Deviation	4.66938	26.76110
Most Extreme Differences	Absolute	.148	.201
	Positive	.148	.134
	Negative	-.071	-.201
Test Statistic		.148	.201
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	.085

17. Sudut Gonial Kanan

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	-.839375	2.965294	1.048390	-3.318423	1.639673	-.801	7	.450

18. Sudut Gonial Kiri

Paired Samples Test								
Pair 1	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
	-27.83950	27.40400	9.68878	-50.74981	-4.92919	-2.873	7	.024

V.PENGUKURAN LINIER – OBSERVER 2

One-Sample Kolmogorov-Smirnov Test

Lebar Bi Con	Lebar Bi Gon	Iinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri

N		16	16	16	16	16	16
Normal Parameters <sup>a,b</sup>	Mean	198.0774	184.1895	66.5213	75.6788	97.6226	100.2937
	Std. Deviation	13.47426	19.17220	3.59045	24.86084	5.69300	14.80823
Most Extreme Differences	Absolute	0.078	0.242	0.162	0.196	0.184	0.165
	Positive	0.078	0.242	0.162	0.196	0.184	0.165
	Negative	-0.066	-0.162	-0.113	-0.102	-0.107	-0.138
Test Statistic		0.078	0.242	0.162	0.196	0.184	0.165
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	0.013	.200 <sup>d</sup>	0.103	0.149	.200 <sup>d</sup>

#### 19. Lebar Bi Condial

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
				Pair 1	-5.252000			

#### 20. Lebar Bi Gonial

Test Statistics <sup>a</sup>	
Post_Lebar_Gon - Pre_Lebar_Gon	
Z	-2.100 <sup>b</sup>
Asymp. Sig. (2-tailed)	.036

#### 21. Tinggi Ramus Kanan

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
				Pair 1	-.37013			

#### 22. Tinggi Ramus Kiri

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
				Pair 1	34.50512			

#### 23. Panjang Body Kanan

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
				Pair 1	2.78325			

#### 24. Panjang Body Kiri

Paired Samples Test								
Paired Differences	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
				Pair 1	16.05188			

W.PENGUKURAN ANGULAR – OBSERVER 3

**One-Sample Kolmogorov-Smirnov Test**

		Sudut_Gonial_Kanan	Sudut_Gonial_Kiri
N		16	16
Normal Parameters <sup>a,b</sup>	Mean	123.7736	113.6724
	Std. Deviation	4.62177	26.69926
Most Extreme Differences	Absolute	.126	.204
	Positive	.126	.132
	Negative	-.072	-.204
Test Statistic		.126	.204
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	.075

**25. Sudut Gonial Kanan**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-.820125	3.133509	1.107863	-3.439804	1.799554	-.740	7	.483

**26. Sudut Gonial Kiri**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-.27.88613	27.16302	9.60358	-50.59498	-5.17727	-2.904	7	.023

X.PENGUKURAN LINIER – OBSERVER 3

**One-Sample Kolmogorov-Smirnov Test**

		Lebar Bi Con	Lebar Bi Gon	Tinggi Ramus Kanan	Tinggi Ramus Kiri	Panjang Body Kanan	Panjang Body Kiri
N		16	16	16	16	16	16
Normal Parameters <sup>a,b</sup>	Mean	198.1513	184.2445	66.7099	75.7343	97.6881	100.1153
	Std. Deviation	13.07315	18.43891	3.61670	24.85064	5.85011	14.95980
Most Extreme Differences	Absolute	0.095	0.208	0.118	0.187	0.185	0.158
	Positive	0.094	0.208	0.111	0.187	0.185	0.158
	Negative	-0.095	-0.149	-0.118	-0.101	-0.101	-0.134
Test Statistic		0.095	0.208	0.118	0.187	0.185	0.158
Asymp. Sig. (2-tailed) <sup>c</sup>		.200 <sup>d</sup>	0.064	.200 <sup>d</sup>	0.139	0.148	.200 <sup>d</sup>

**27. Lebar Bi Condial**

**Paired Samples Test**

	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-4.321625	19.734023	6.977031	-20.819681	12.176431	-.619	7	.555

**28. Lebar Bi Gonial**

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	20.35750	24.06103	8.50686	.24198	40.47302	2.393	7	.048

**29. Tinggi Ramus Kanan**

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	-.18525	3.39764	1.20125	-3.02575	2.65525	-.154	7	.882

**30. Tinggi Ramus Kiri**

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	34.50513	23.34641	8.25420	14.98704	54.02321	4.180	7	.004

**31. Panjang Body Kanan**

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	2.66113	8.11471	2.86898	-4.12294	9.44519	.928	7	.385

**32. Panjang Body Kiri**

Paired Samples Test								
	Mean	Std. Deviation	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1	16.22262	19.26728	6.81201	.11478	32.33047	2.381	7	.049



## Lampiran 6. Tabel Hasil Penelitian

**Tabel 4.** Distribusi Frekuensi Karakteristik Responden

Karakteristik	Sampel Penelitian	
	n	%
<b>Posisi Tumor Primer</b>		
Dextra	6	31.58
Anterior	5	26.32
Sinistra	8	42.11
<b>Klasifikasi Defek</b>		
Kelas I	4	21.05
Kelas Ic	2	10.53
Kelas II	3	15.79
Kelas Iic	2	10.53
Kelas III	4	21.05
Kelas IV	4	21.05
<b>Jenis Kelamin</b>		
Perempuan	9	47.37
Laki-laki	10	52.63
<b>Umur</b>		
0 - 20 Tahun	2	10.53
20 - 40 Tahun	5	26.32
40 - 60 Tahun	12	63.16

**Tabel 5.** ICC Observer Pada OPG X-Ray Pre-operasi Dengan OPG X-Ray Post-operasi

Variabel	Intra-observer 95% CI	Cronbach Alpha	p-value
<b>Pengukuran Angular</b>			
Sudut Angulus Mandibula Kanan	0.992 (0.984 - 0.997)	0.997	0.000
Sudut Angulus Mandibula Kiri	0.994 (0.986 - 0.997)	0.998	0.000
<b>Pengukuran Linier</b>			
Lebar Bi-Kondilar	0.99 (0.98 - 0.996)	0.997	0.000
Lebar Bi-Gonial	0.995 (0.989 - 0.998)	0.998	0.000
Tinggi Ramus Kanan	0.992 (0.984 - 0.997)	0.997	0.000
Tinggi Ramus Kiri	0.995 (0.99 - 0.998)	0.998	0.000
Panjang Korpus Kanan	0.976 (0.95 - 0.99)	0.992	0.000

**Tabel 6.** Perbandingan Hasil Pengukuran OPG X-Ray Pre-operasi Dengan OPG X-Ray Post-operasi Dari Sudut Pandang Observer Dan Inter Observer pada Posisi Tumor Primer Dextra

Variabel		Observer 1		Observer 2		Observer 3		Inter Observer	
		(Mean±SD)	p-value	(Mean±SD)	p-value	(Mean±SD)	p-value	(Mean±SD)	p-value
<b>Pengukuran Angular</b>									
Sudut Angulus Mandibula Kanan	Pre-operasi	(110.166±15.056)	<b>0.048</b> *	(110.324±15.072)	<b>0.046</b> *	(110.183±15.021)	<b>0.044</b> *	(110.224±14.137)	<b>0.000</b> **
	Post-operasi	(125.77±14.515)		(125.933±14.556)		(126.144±14.591)		(125.949±13.672)	
Sudut Angulus Mandibula Kiri	Pre-operasi	(126.506±12.086)	0.753 **	(126.53±11.823)	0.600 **	(126.506±12.054)	0.753 **	(126.514±11.261)	0.162 **
	Post-operasi	(127.348±11.495)		(127.438±11.512)		(127.287±11.504)		(127.358±10.806)	
<b>Pengukuran Linier</b>									
Lebar Bi-Kondilar	Pre-operasi	(203.618±26.842)	0.345	(203.75±26.566)	0.242	(203.832±26.876)	0.293	(203.733±25.139)	0.078
	Post-operasi	(197.967±23.304)	**	(197.477±23.19)	*	(198.186±23.264)	*	(197.877±21.844)	**
Lebar Bi-Gonial	Pre-operasi	(188.986±21.972)	<b>0.041</b>	(189.236±21.654)	<b>0.034</b>	(189.367±21.356)	<b>0.038</b>	(189.196±20.349)	<b>0.000</b>
	Post-operasi	(170.771±19.048)	**	(170.93±18.239)	**	(171.103±18.33)	**	(170.935±17.418)	*
Tinggi Ramus Kanan	Pre-operasi	(82.013±11.59)	<b>0.015</b>	(82.397±11.525)	<b>0.014</b>	(82.259±12.067)	<b>0.014</b>	(82.223±11.02)	<b>0.000</b>
	Post-operasi	(57.872±11.492)	**	(57.726±11.53)	**	(57.918±11.472)	**	(57.839±10.801)	*
Tinggi Ramus Kiri	Pre-operasi	(63.16±10.706)	0.435	(63.144±10.775)	0.398	(63.486±11.064)	0.265	(63.264±10.193)	0.157
	Post-operasi	(62.216±10.605)	*	(62.207±11.063)	*	(62.319±10.882)	*	(62.247±10.193)	**
Panjang Korpus Kanan	Pre-operasi	(105.36±9.094)	<b>0.033</b>	(105.488±8.893)	<b>0.036</b>	(105.595±9.183)	<b>0.034</b>	(105.481±8.509)	<b>0.000</b>
	Post-operasi	(95.199±12.283)	**	(95.328±12.14)	**	(95.159±12.424)	**	(95.229±11.538)	*
Panjang Korpus Kiri	Pre-operasi	(99.353±13.877)	0.349	(99.366±13.786)	0.349	(99.397±13.745)	0.361	(99.372±12.965)	0.076
	Post-operasi	(94.51±13.257)	*	(94.503±13.284)	*	(94.703±13.354)	*	(94.572±12.492)	*

\* : Paired T Test, \*\* : Wilcoxon Test

**Tabel 4.** Perbandingan Hasil Pengukuran OPG X-Ray Pre-operasi Dengan OPG X-Ray Post-operasi Dari Sudut Pandang Observer Dan Inter Observer Posisi Tumor Primer Anterior

Variabel		Observer 1		Observer 2		Observer 3		Inter Observer	
		(Mean±SD)	p-value	(Mean±SD)	p-value	(Mean±SD)	p-value	(Mean±SD)	p-value
<b>Pengukuran Angular</b>									
Sudut Angulus Mandibula Kanan	Pre-operasi	(120.705±36.244)	<b>0.036</b> *	(122.233±28.262)	<b>0.032</b> *	(121.701±30.478)	<b>0.042</b> *	(130.967±8.227)	<b>0.002</b> **
	Post-operasi	(112.056±34.311)		(113.827±25.426)		(113.281±27.963)		(121.959±3.621)	
Sudut Angulus Mandibula Kiri	Pre-operasi	(115.796±35.297)	<b>0.030</b> *	(117.534±26.405)	<b>0.019</b> *	(116.949±28.896)	<b>0.021</b> *	(125.929±4.528)	<b>0.000</b> *
	Post-operasi	(110.049±33.356)		(111.533±25.247)		(111.028±27.543)		(119.541±5.364)	
<b>Pengukuran Linier</b>									
Lebar Bi-Kondilar	Pre-operasi	(186.518±55.815)	0.822	(188.824±44.094)	0.814	(188.231±47.419)	0.906	(202.37±14.17)	0.776
	Post-operasi	(184.761±56.039)	*	(187.136±42.252)	*	(186.719±46.376)	*	(200.794±8.575)	**
Lebar Bi-Gonial	Pre-operasi	(167.478±51.248)	0.369	(170.101±38.012)	0.393	(169.189±41.773)	0.365	(182.22±5.57)	0.084
	Post-operasi	(163.851±49.614)	*	(166.222±37.698)	*	(165.494±41.065)	*	(178.109±8.038)	*
Tinggi Ramus Kanan	Pre-operasi	(60.814±18.167)	0.269	(61.354±15.589)	0.482	(61.24±16.328)	0.395	(65.703±8.159)	0.112
	Post-operasi	(62.533±18.683)	*	(63.094±15.59)	*	(62.572±16.358)	*	(67.453±7.434)	**
Tinggi Ramus Kiri	Pre-operasi	(59.983±17.937)	0.283	(60.312±15.055)	0.208	(60.158±15.829)	0.301	(64.666±7.482)	0.125
	Post-operasi	(61.94±18.556)	*	(62.461±15.831)	*	(62.384±16.585)	*	(66.914±8.283)	**
Panjang Korpus Kanan	Pre-operasi	(102.927±31.212)	<b>0.049</b> *	(104.417±23.623)	<b>0.045</b> *	(103.946±25.766)	<b>0.043</b> *	(111.887±4.796)	<b>0.000</b> **
	Post-operasi	(87.272±26.003)	*	(88.045±21.441)	*	(87.678±22.629)	*	(94.318±9.323)	**
Panjang Korpus Kiri	Pre-operasi	(110.671±32.925)	<b>0.044</b> *	(111.702±27.309)	<b>0.044</b> *	(111.316±28.732)	<b>0.040</b> *	(119.669±11.903)	<b>0.002</b> **
	Post-operasi	(87.835±26.237)	*	(88.815±20.993)	*	(88.41±22.389)	*	(95.139±7.515)	**

\* : Paired T Test, \*\* : Wilcoxon Test

**Tabel 5.** Perbandingan Hasil Pengukuran OPG X-Ray Pre-operasi Dengan OPG X-Ray Post-operasi Dari Sudut Pandang Observer Dan Inter Observer Posisi Tumor Primer Sinistra

Variabel		Observer 1		Observer 2		Observer 3		Inter Observer	
		(Mean±SD)	p-value	(Mean±SD)	p-value	(Mean±SD)	p-value	(Mean±SD)	p-value
<b>Pengukuran Angular</b>									
Sudut Angulus Mandibula Kanan	Pre-operasi	(117.838±26.356)	0.461	(117.649±23.147)	0.450	(117.457±23.885)	0.483	(123.349±4.037)	0.175
	Post-operasi	(119.039±26.598)	*	(118.478±23.467)	*	(118.259±24.176)	*	(124.185±5.093)	*
Sudut Angulus Mandibula Kiri	Pre-operasi	(100.185±34.208)	<b>0.022</b>	(96.073±32.82)	<b>0.024</b>	(95.84±32.954)	<b>0.023</b>	(99.698±30.463)	<b>0.000</b>
	Post-operasi	(122.45±27.312)	*	(121.795±24.788)	*	(121.59±25.362)	*	(127.645±7.981)	**
<b>Pengukuran Linier</b>									
Lebar Bi-Kondilar	Pre-operasi	(185.775±41.705)	0.554	(186.437±39.47)	0.484	(186.525±39.911)	0.555	(195.68±16.437)	0.244
	Post-operasi	(190.992±42.56)	*	(191.107±37.932)	*	(190.953±39.017)	*	(200.37±8.085)	*
Lebar Bi-Gonial	Pre-operasi	(182.386±42.747)	<b>0.049</b>	(186.128±40.495)	<b>0.036</b>	(185.791±41.367)	<b>0.048</b>	(194.806±20.878)	<b>0.040</b>
	Post-operasi	(166.984±37.063)	**	(165.597±31.813)	**	(165.486±33.76)	*	(173.701±5.425)	**
Tinggi Ramus Kanan	Pre-operasi	(63.503±14.182)	0.994	(63.426±12.725)	0.807	(63.321±13.045)	0.882	(66.538±3.37)	0.809
	Post-operasi	(63.431±14.146)	*	(63.58±12.851)	*	(63.583±13.174)	*	(66.72±3.742)	*
Tinggi Ramus Kiri	Pre-operasi	(86.541±25.254)	<b>0.004</b>	(88.741±25.289)	<b>0.004</b>	(88.965±25.445)	<b>0.004</b>	(92.894±20.765)	<b>0.000</b>
	Post-operasi	(56.741±14.887)	*	(55.947±15.573)	*	(55.932±15.422)	*	(58.47±12.31)	**
Panjang Korpus Kanan	Pre-operasi	(100.251±22.758)	0.318	(95.032±19.859)	0.363	(94.397±19.715)	0.385	(99.423±7.556)	0.092
	Post-operasi	(91.887±20.456)	*	(91.749±18.219)	*	(91.704±18.736)	*	(96.268±3.909)	**
Panjang Korpus Kiri	Pre-operasi	(104.134±25.321)	<b>0.042</b>	(103.974±24.938)	<b>0.048</b>	(103.405±24.753)	<b>0.049</b>	(108.662±16.092)	<b>0.003</b>
	Post-operasi	(88.404±19.675)	*	(88.01±18.162)	*	(87.797±18.524)	*	(92.172±6.599)	**

\* : Paired T Test, \*\* : Wilcoxon Test

## Lampiran 7. Riwayat Hidup Penulis

### Data Pribadi



Nama : Fadli Rum  
Tempat, tanggal lahir : Ujung Pandang, 28 Februari 1986  
Jenis kelamin : Laki-laki  
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### PENDIDIKAN FORMAL

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2019 – sekarang : Program Studi Spesialis Bedah Mulut dan Maksilofasial  
Fakultas Kedokteran Gigi, Universitas Hasanuddin, Makassar  
2004 – 2012 : Program Dokter Gigi, Fakultas Kedokteran Gigi, Fakultas

	Kedokteran Gigi, Universitas Hasanuddin, Makassar
2003 – 2004	: Jurusan Teknik Sipil, Politeknik Negeri Ujung Pandang, Makassar
2000 – 2003	: Sekolah Menengah Atas Negeri 2 Makassar
1997 – 2000	: Madrasah Tsanawiyah Negeri Model, Makassar
1991 – 1997	: Sekolah Dasar Inpres Minasa Upa, Makassar

## **PARTISIPASI SEMINAR DAN PELATIHAN**

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Tahun 2018	: P3KGB Bidang Bedah Mulut untuk Dokter Gigi – Modul A, Makassar 2018
Tahun 2019	: 2 <sup>nd</sup> <i>Indonesian Surgical Orthodontic Scientific Meeting</i> . Makassar, 4-7 Mei 2019
	: Seminar dan Pelatihan Dental Implan, Makassar, 5-6 Juli 2019
	: <i>Advanced Traumatology Life Support (ATLS) 10<sup>th</sup> Edition</i> . Makassar, 6-8 September
	: Rakernas PABMI ke XIV, tanggal 19-21 September 2019. Balikpapan, Indonesia
	: <i>Clinical Workshop, Oral and Maxillofacial Trauma</i> . Makassar, 24 Oktober 2019
	: Kongres Nasional PABMI 2019 dan <i>Continuing Education in Oral and Maxillofacial Surgery IV</i> . Balikpapan, 30 November - 2 Desember 2019
Tahun 2020	: <i>Makassar Cleft Lip and Scientific Meeting</i> . Makassar, 10-11 Januari 2020
	: Temu Ilmiah Internasional Kedokteran Gigi (TIKKG) ke-11. Makassar, 19-21 Februari 2020
	: <i>Virtual International Symposium Series #1. A Surgical-Orthodontics Combined Treatment</i> . Seminar virtual via Zoom, 7 Juli 2020.

- : *4<sup>th</sup> International Conference on Biophysical Technology in Dentistry (ICoBTD)*. Seminar virtual via Zoom.  
27-29 Agustus 2020
- Tahun 2021 : *5<sup>th</sup> International Conference on Biophysical Technology in Dentistry (ICoBTD)*. Seminar virtual via Zoom.  
25-27 Maret 2020
- : *Dental Implan, Clinical Skill Lab*. Makassar, 9-10 September 2021
- : *Laser in Dentistry, Sharing Case and Live Demo*. Makassar, 25-26 November 2021
- Tahun 2022 : Kongres Nasional 2020, Persatuan Ahli Bedah Mulut dan Maksilofasial Indonesia. Bandung, 28-30 Januari 2022
- : *9<sup>th</sup> Makassar Scientific Meeting*. Makassar, 3-6 Maret 2022
- : Workshop Fraktur Maksilofasial. Makassar, 25 Juni 2022
- Tahun 2023 : S.O.R.G. e.V. *Management of Condylar Fractures*, Webinar via Go To Webinar, 3 Maret 2023
- : S.O.R.G. e.V. *Management of Mandibular Fractures, Including Complex Fractures*. Webinar via Go To Webinar, 10 Maret 2023.
- : S.O.R.G. e.V. *Management of Midface Trauma*, Webinar via Go To Webinar, 24 Maret 2023
- : S.O.R.G. e.V. *Management of Frontal and NOE Fractures*, Webinar via Go To Webinar, 7 April 2023

## **PENGALAMAN ORGANISASI**

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- 2004 – 2005 : Pengurus HMI Komisariat Kedokteran Gigi, Universitas Hasanuddin
- 2005 - 2006 : Ketua Bidang Kekaryaannya HMI Komisariat Kedokteran Gigi Universitas Hasanuddin

- 2006 - 2007 : Ketua Majelis Permusyawaratan Mahasiswa, FKG Universitas Hasanuddin.
- 2008 - 2009 : Pengurus HMI Cabang Makassar Timur
- 2009 - 2010 : Pengurus LKMI HMI Cabang Makassar Timur
- 2010 - 2012 : Pengurus Dewan Mahasiswa Profesi FKG Universitas Hasanuddin
- 2013 - 2015 : Pengurus PDGI Wilayah Kalimantan Selatan
- 2015 - 2017 : Pengurus PDGI Cabang Tabalong, Kalimantan Selatan
- 2018 - 2022 : Pengurus MASIKA ICMI korwil Silawesi Selatan:

## **PENGALAMAN KERJA**

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- 2013 – 2015 : Dokter Gigi Perusahaan PT. Thiess, Kalimantan Selatan
- 2015 – 2017 : Dokter Gigi PTT Pusat, Kementrian Kesehatan RI di Kec. Muara Harus, Kab. Tabalong, Kalimantan Selatan
- 2016 – 2018 : Dokter Gigi Praktek Mandiri di Kota Tanjung, Kab. Tabalong, Kalimantan Selatan

## **KARYA ILMIAH**

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1. Odontektomi Gigi Molar Impaksi Pada Pasien Dengan Sindrom Pierre Robin: Laporan Kasus, dibawakan pada Rakernas PABMI ke XIV, tanggal 19-21 September 2019, Balikpapan, Indonesia.
2. Penatalaksanaan Sialolitiasis Sublingual Dengan Teknik Marsupialisasi: Laporan Kasus, dibawakan pada *Short Lecture* Dies Natalis ke-61 FKG Unpad, Tahun 2020.
3. *Transformation Epulis Granulomatous Into Fibrosarcoma In The Maxilla. Can It Happen?* Dibawakan pada *4<sup>th</sup> International Conference on Biophysical Technology in Dentistry (ICoBTD)*, Tahun 2020.



4. *Fibrosarcoma of Maxilla Begins With Epulis Granulomatosa: A Case Report*, dibawakan pada Temu Ilmiah Internasional Kedokteran Gigi (TIIKG) ke-11, tanggal 19-21 Februari 2020, Makassar, Indonesia.
5. *The Effect Povidone-Iodine (PVP-I) As A Basic For Mouthwash In The Covid-19 Pandemic: A Literature Review*. Dibawakan pada 5<sup>th</sup> International Conference on Biophysical Technology in Dentistry (ICoBTD), Tahun 2021.
6. *Management of Ameloblastoma: A Case Series and Literature Review*. Dibawakan pada 6<sup>th</sup> International Conference on Biophysical Technology in Dentistry (ICoBTD), Tahun 2021.
7. *Application of 3-Dimensional Printing in Mandibular Reconstruction Post-Resection: A Systematic Review*. Dibawakan pada Kongres Nasional 2020, Persatuan Ahli Bedah Mulut dan Maksilofasial Indonesia, tanggal 28-30 Januari, Bandung, 2022.