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LAMPIRAN

LAMPIRAN

1. FOTO PELAKSANAAN KEGIATAN

a. Pemeliharaan hewan coba *Rattus Norvegicus* di Laboratorium Prakinik Fakultas Farmasi UMI (19 Mei 2022)

Tikus Wistar (*Rattus Norvegicus*) dipelihara dan diadaptasikan dalam kandang yang bersih dan menggunakan rang-rang agar mendapat ventilasi baik, bedding dgn sekam, makanan yang cukup dan bergizi, minuman yang bersih dan tidak terbatas, serta monitoring kesehatan lingkungan setiap hari.



b. Pembuatan gel VCO

1) Pembuatan VCO di Laboratorium Farmakognosi Fitokimia Fakultas Farmasi UMI (21 – 22 Mei 2022)

- Buah kelapa yang matang diambil dagingnya kemudian diparut. Lalu diambil santannya dan ditambahkan air sebanyak ± 10 liter air, diperas dan disaring.

- Masukkan di dalam toples besar setelah itu didiamkan selama 1,5 jam, sampai terpisah menjadi dua bagian, yaitu krim dan skim.



- Lapisan krim kemudian di mikser dengan putaran sedang selama 15 menit. Lalu krim dimasukkan ke dalam toples kecil dan diperam selama 24-48 jam.

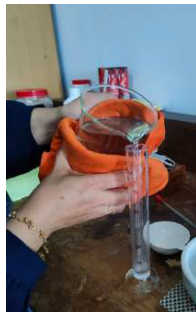


- Selanjutnya 3 lapisan yaitu VCO, gelendo (protein) dan air. Minyak dipisahkan dari gelendo dengan kertas saring.



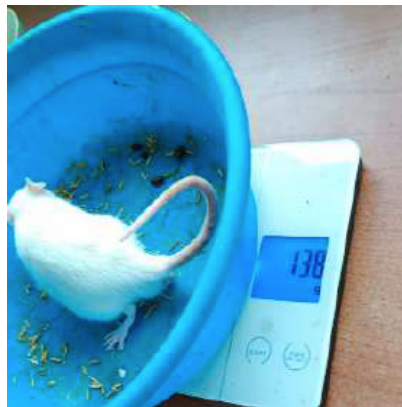
2) Pembuatan Gel VCO di Laboratorium Farmakognosi Fitokimia Fakultas Farmasi UMI (30 Mei 2022)

NA CMC dengan konsentrasi 1% dimasukkan ke dalam air lalu dipanaskan, kemudian ditambahkan Treatanolamin (TEA) untuk mengembangkan NA CMC. VCO yang telah dilarutkan dengan gliserin, kemudian dimasukkan ke dalam larutan NA CMC tadi dengan perbandingan 1:1. Diaduk hingga terbentuk massa gel yang kental, jernih dan homogen, lalu dimasukkan ke dalam wadah yang tertutup rapat.



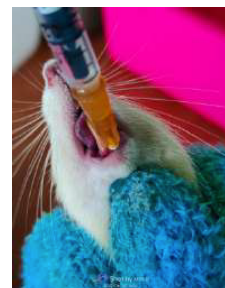
c. Perlakuan hewan coba

1) Standarisasi Hewan Coba di Laboratorium Praklinik Fakultas Farmasi UMI (15 Juni 2022)



2) Induksi Periodontitis Pada Rattus Norvegicus di Laboratorium Praklinik Fakultas Farmasi UMI (22 Juni 2022)

- Anastesi Ratus Norvegicus dengan Ketamin HCL 10% IM pada otot paha dan pemasangan silk ligature pada daerah servikal gigi anterior RB.
- Induksi bakteri Porphyromonas Gingivalis pada bagian labial gigi anterior RB kemudian melepas silk dan mengamati Ratus Norvegicus pada hari ke 7 dimana terjadi periodontitis.





3) Perlakuan hewan coba di Laboratorium Praklinik Fakultas Farmasi UMI (29 Juni 2022)

- Dibagi dalam 3 kelompok : perlakuan, kontrol (+) dan kontrol (-), kemudian dilakukan SRP pada 3 kelompok.



- Kelompok perlakuan : gel VCO 1 ml ke dalam sulkus gingiva yang mengalami periodontitis.



- Kelompok kontrol (+) : gel metronidazole 1 ml ke dalam sulkus gingiva yang mengalami periodontitis.



- Kelompok kontrol (-) : tanpa perlakuan

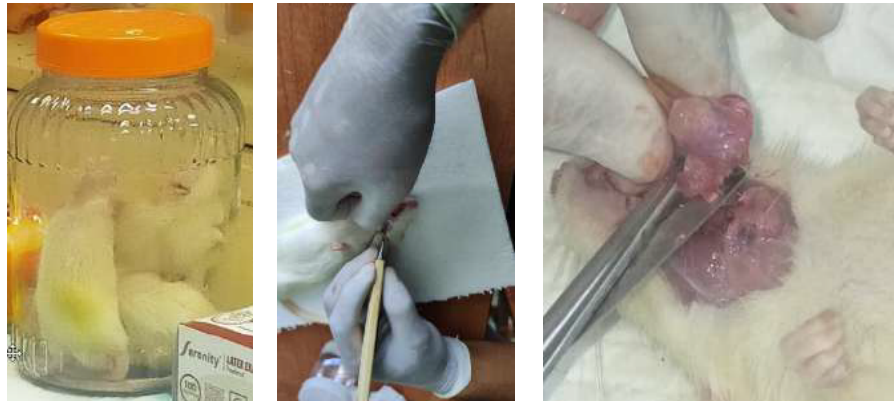
4) Sacrificed hewan coba di Laboratorium Praktlinik Fakultas Farmasi UMI

Hewan coba dimasukkan ke dalam toples yang berisi kapas yang telah diberi eter sampai tikus tidak bergerak, kemudian dilakukan penekanan pada bagian posterior dasar tulang tengkorak dan sumsum tulang belakang. Selanjutnya dilakukan pemotongan specimen tulang anterior rahang bawah dan specimen dicuci dengan aquades, kemudian disimpan dalam tabung sediaan yang berisi formalin buffer 10% diberi label pada setiap tabung sediaan.

- Sacrificed hari ke 7 (6 Juli 2022)



- Sacrificed hari ke 14 (13 Juli 2022)

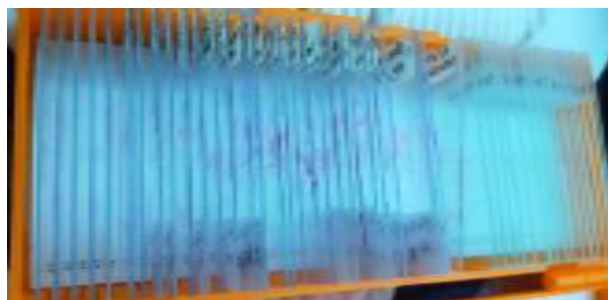


5) Pengiriman Sampel di Laboratorium Veteriner Maros (23 Juli 2022)

Sampel diletakkan ke dalam tabung sediaan yang berisis formalin 10% untuk dibuat ke dalam bentuk slide.

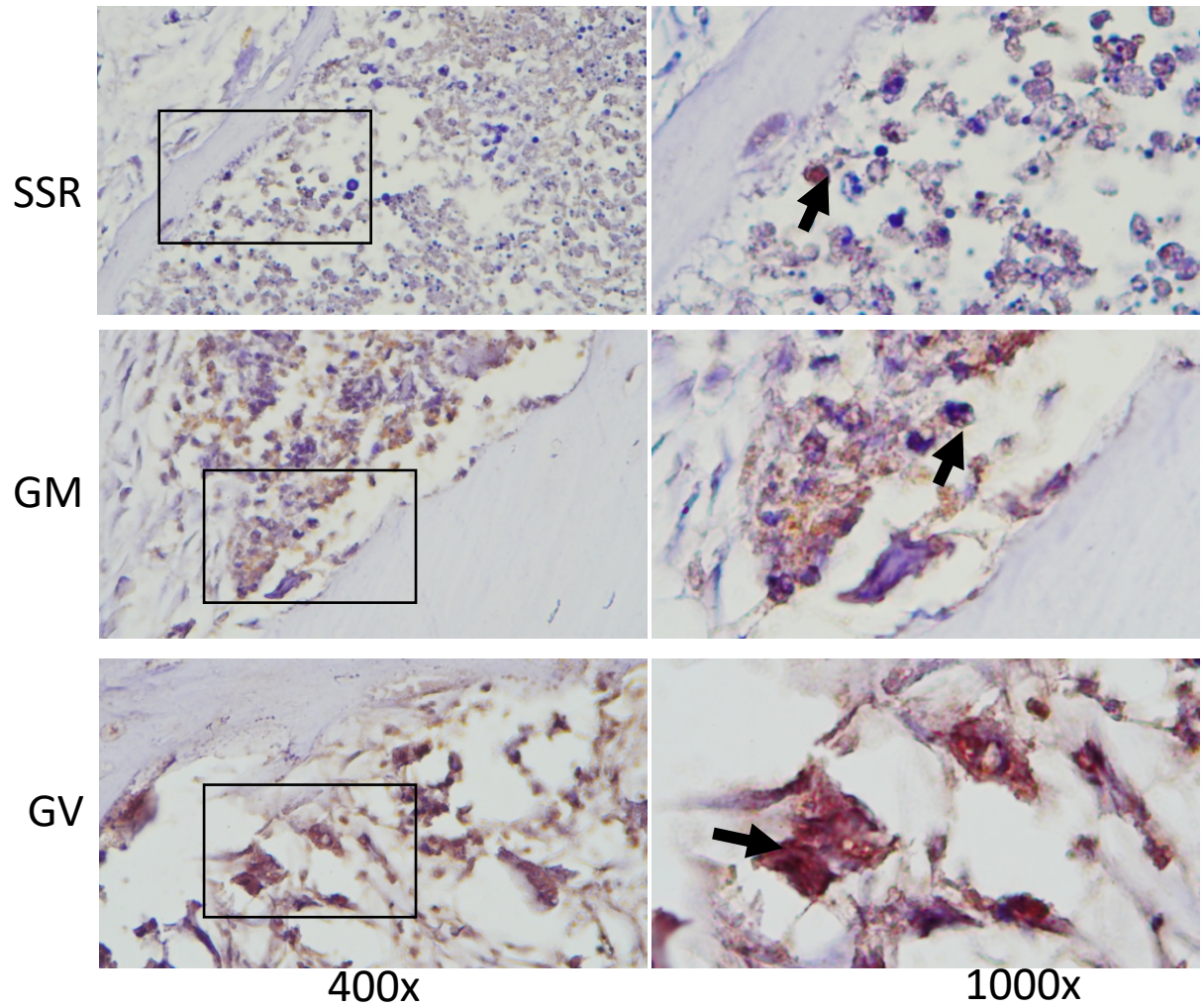


6) Pengiriman slide ke Laboratorium Biokimia – Biomolekuler Fakultas Kedokteran Universitas Brawijaya (12 Agustus 2022)

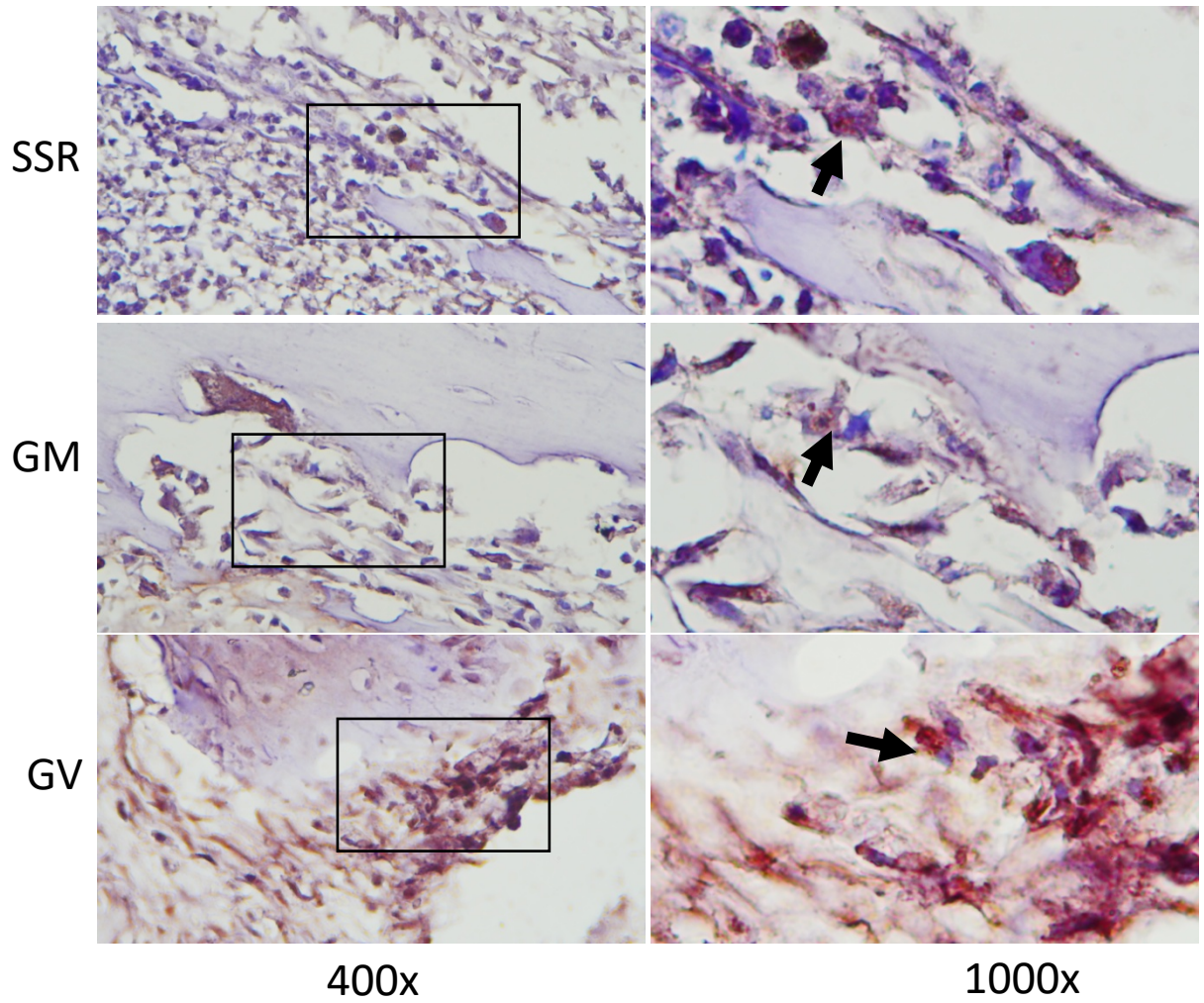


2. FOTO PEMERIKSAAN HISTOLOGI

a. Gambaran histologi osteoclastin hari ke-7



b. Gambaran histologi osteocalcin hari ke-14



3. HASIL ANALISIS DATA PENELITIAN SPSS

a. Uji Normalitas Osteocalcin

Warning # 849 in column 23. Text: in_ID
 The LOCALE subcommand of the SET command has an invalid parameter.
 It could
 not be mapped to a valid backend locale.

```
SAVE OUTFILE='C:\Users\Panasonic\Documents\OCN RAHMI.sav'  

  /COMPRESSED.  

EXAMINE VARIABLES=OSTEOCLASIN BY KELOMPOK  

  /PLOT NPLOT  

  /STATISTICS DESCRIPTIVES  

  /CINTERVAL 95  

  /MISSING LISTWISE  

  /NOTOTAL.
```

Explore

[DataSet0] C:\Users\Panasonic\Documents\OCN RAHMI.sav

KELOMPOK

Case Processing Summary

		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
OSTEOCLASIN	SRP (7)	4	100,0%	0	0,0%	4	100,0%
	METRO (7)	4	100,0%	0	0,0%	4	100,0%
	VCO (7)	4	100,0%	0	0,0%	4	100,0%
	SRP (14)	4	100,0%	0	0,0%	4	100,0%
	METRO (14)	4	100,0%	0	0,0%	4	100,0%
	VCO (14)	4	100,0%	0	0,0%	4	100,0%

Descriptives

		KELOMPOK		Statistic	Std. Error
OSTEOCLASIN	SRP (7)	Mean		5,00	1,155
		95% Confidence Interval for Mean Lower Bound		,03	

		Upper Bound	9,97	
		5% Trimmed Mean	.	
		Median	5,00	
		Variance	4,000	
		Std. Deviation	1,630	
		Minimum	3	
		Maximum	7	
		Range	4	
		Interquartile Range	.	
		Skewness	,000	1,225
		Kurtosis	.	.
METRO (7)		Mean	7,25	,882
	95% Confidence Interval for Mean	Lower Bound	3,54	
		Upper Bound	11,13	
		5% Trimmed Mean	.	
		Median	7,00	
		Variance	2,333	
		Std. Deviation	1,260	
		Minimum	6	
		Maximum	9	
		Range	3	
		Interquartile Range	.	
		Skewness	,935	1,225
		Kurtosis	.	.
VCO (7)		Mean	8,75	,882
	95% Confidence Interval for Mean	Lower Bound	4,87	
		Upper Bound	12,46	
		5% Trimmed Mean	.	
		Median	9,00	
		Variance	2,333	
		Std. Deviation	1,260	
		Minimum	7	
		Maximum	10	
		Range	3	
		Interquartile Range	.	

	Skewness		-,935	1,225
	Kurtosis		.	.
SRP (14)	Mean		6,75	,667
	95% Confidence Interval for Mean	Lower Bound	3,80	
		Upper Bound	9,54	
	5% Trimmed Mean		.	
	Median		6,00	
	Variance		1,333	
	Std. Deviation		0,960	
	Minimum		6	
	Maximum		8	
	Range		2	
	Interquartile Range		.	
	Skewness		1,732	1,225
	Kurtosis		.	.
METRO (14)	Mean		9,00	1,155
	95% Confidence Interval for Mean	Lower Bound	4,03	
		Upper Bound	13,97	
	5% Trimmed Mean		.	
	Median		9,00	
	Variance		4,000	
	Std. Deviation		1,630	
	Minimum		7	
	Maximum		11	
	Range		4	
	Interquartile Range		.	
	Skewness		,000	1,225
	Kurtosis		.	.
VCO (14)	Mean		11,75	,882
	95% Confidence Interval for Mean	Lower Bound	7,87	
		Upper Bound	15,46	
	5% Trimmed Mean		.	
	Median		12,00	
	Variance		2,333	
	Std. Deviation		1,260	

Minimum	10	
Maximum	13	
Range	3	
Interquartile Range	.	
Skewness	-,935	1,225
Kurtosis	.	.

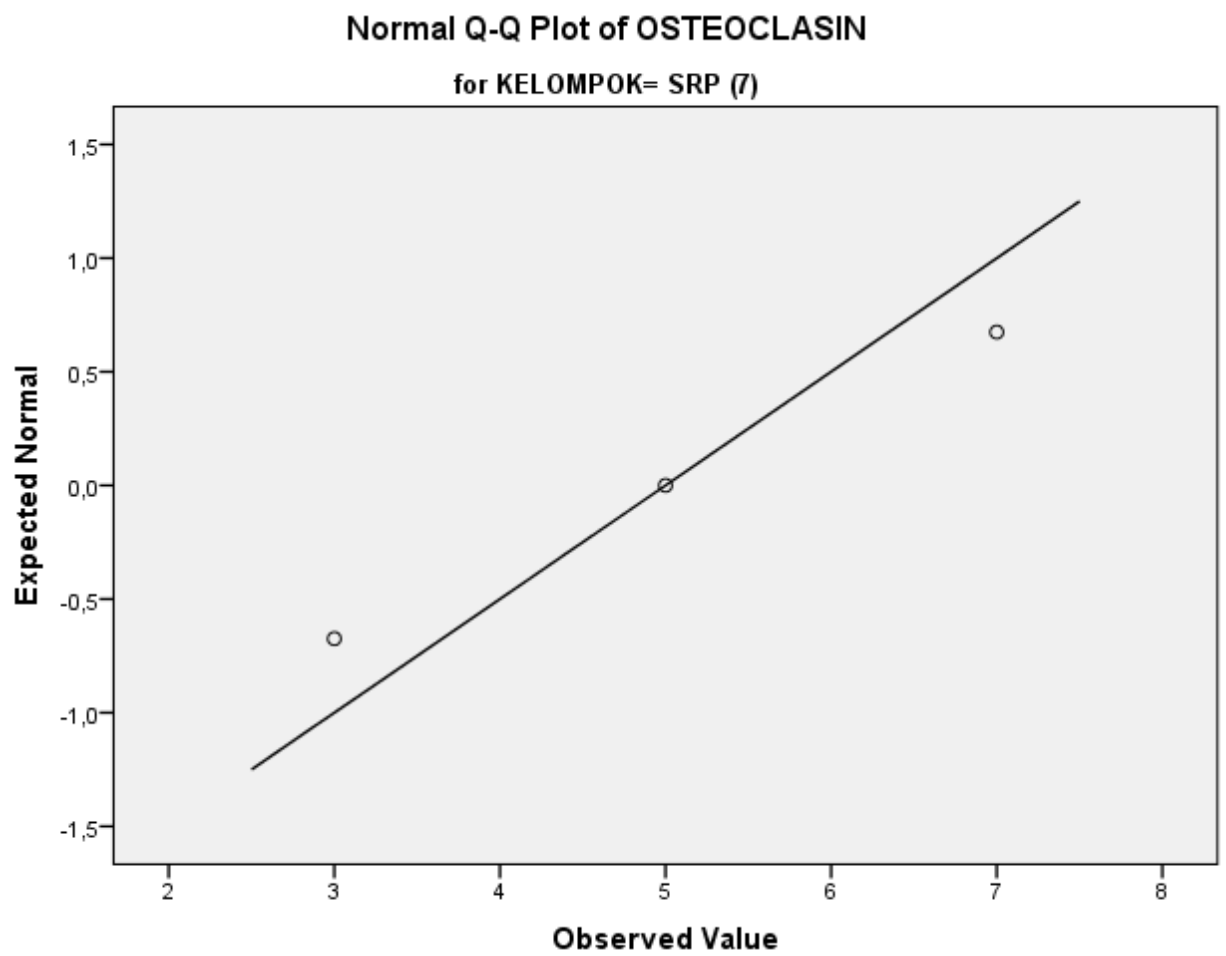
Tests of Normality

	KELOMPOK	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
OSTEOCLASIN	SRP (7)	,175	4	.	1,000	4	1,000
	METRO (7)	,253	4	.	,964	4	,637
	VCO (7)	,253	4	.	,964	4	,637
	SRP (14)	,385	4	.	,750	4	,000
	METRO (14)	,175	4	.	1,000	4	1,000
	VCO (14)	,253	4	.	,964	4	,637

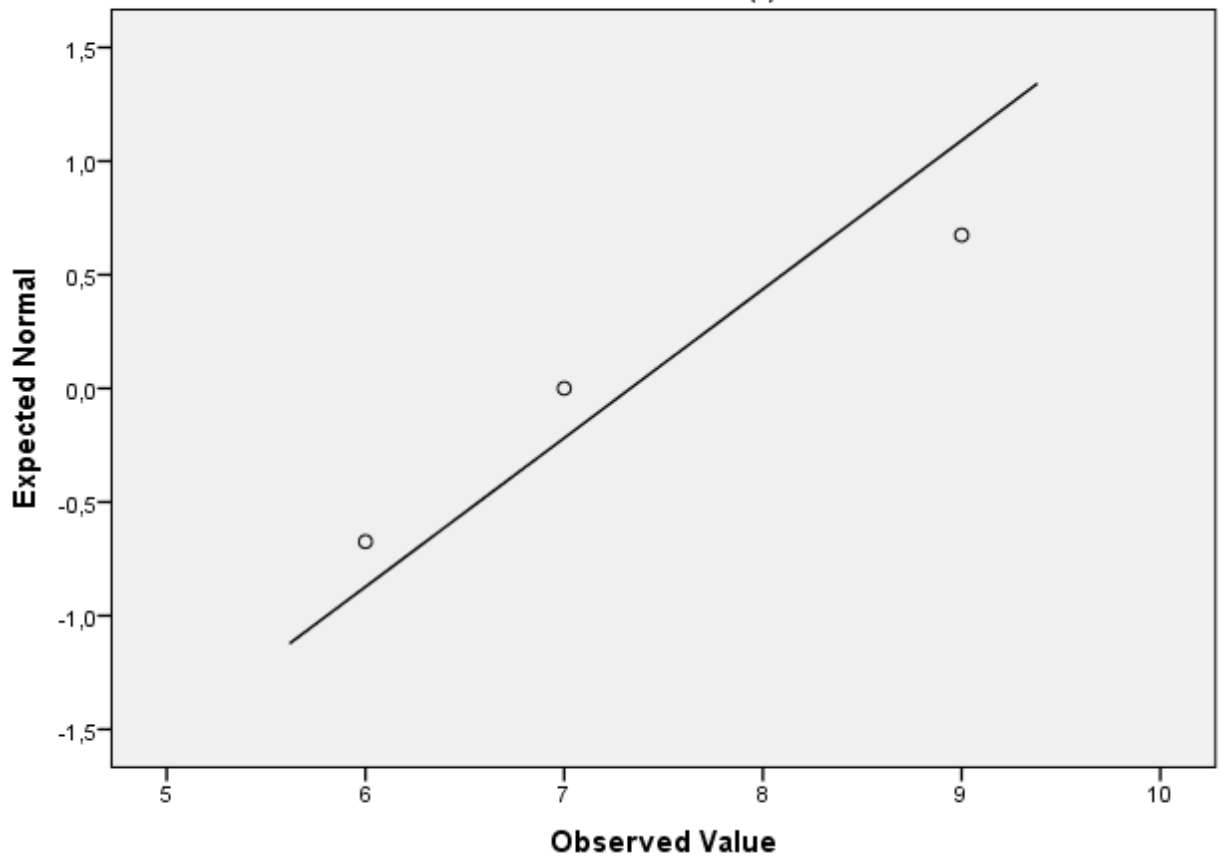
a. Lilliefors Significance Correction

OSTEOCLASIN

Normal Q-Q Plots

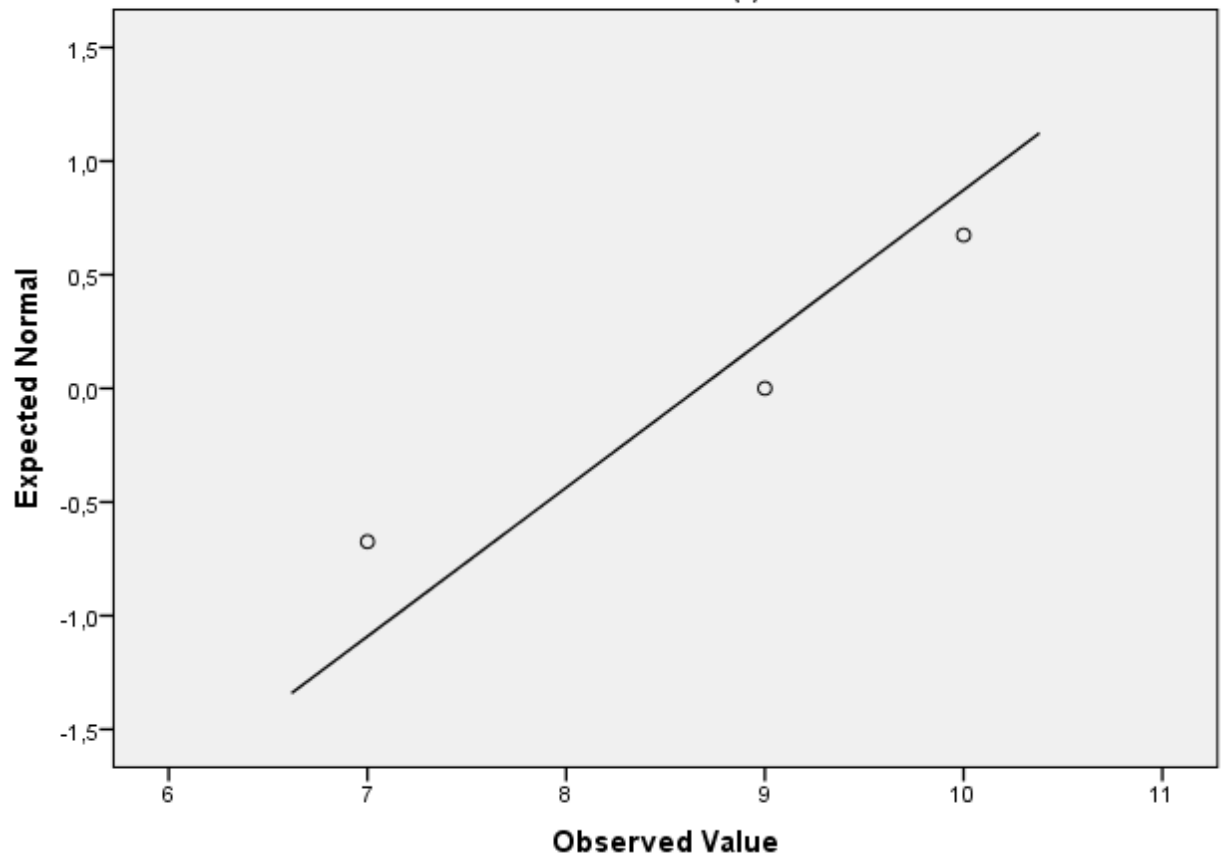


Normal Q-Q Plot of OSTEOKLASIN
for KELOMPOK= METRO (7)

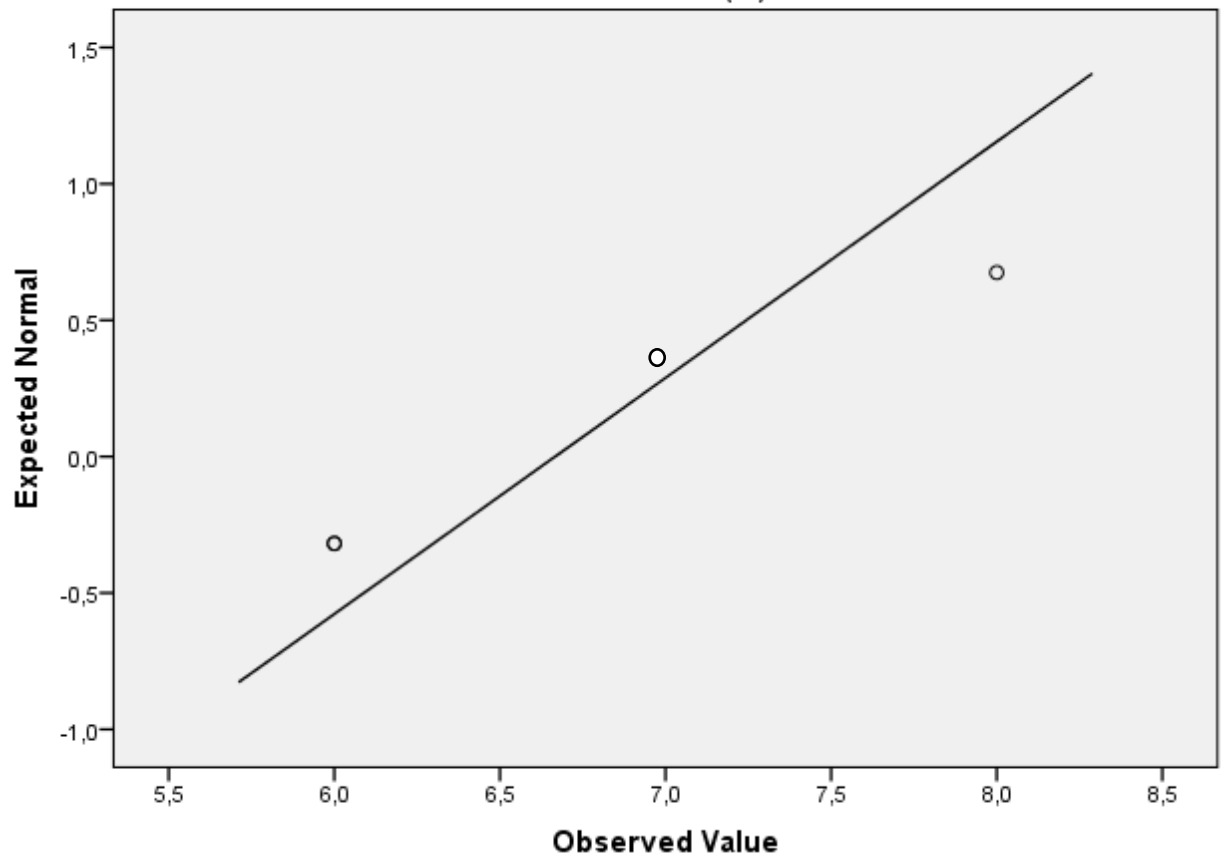


Normal Q-Q Plot of OSTEOCLASIN

for KELOMPOK= VCO (7)

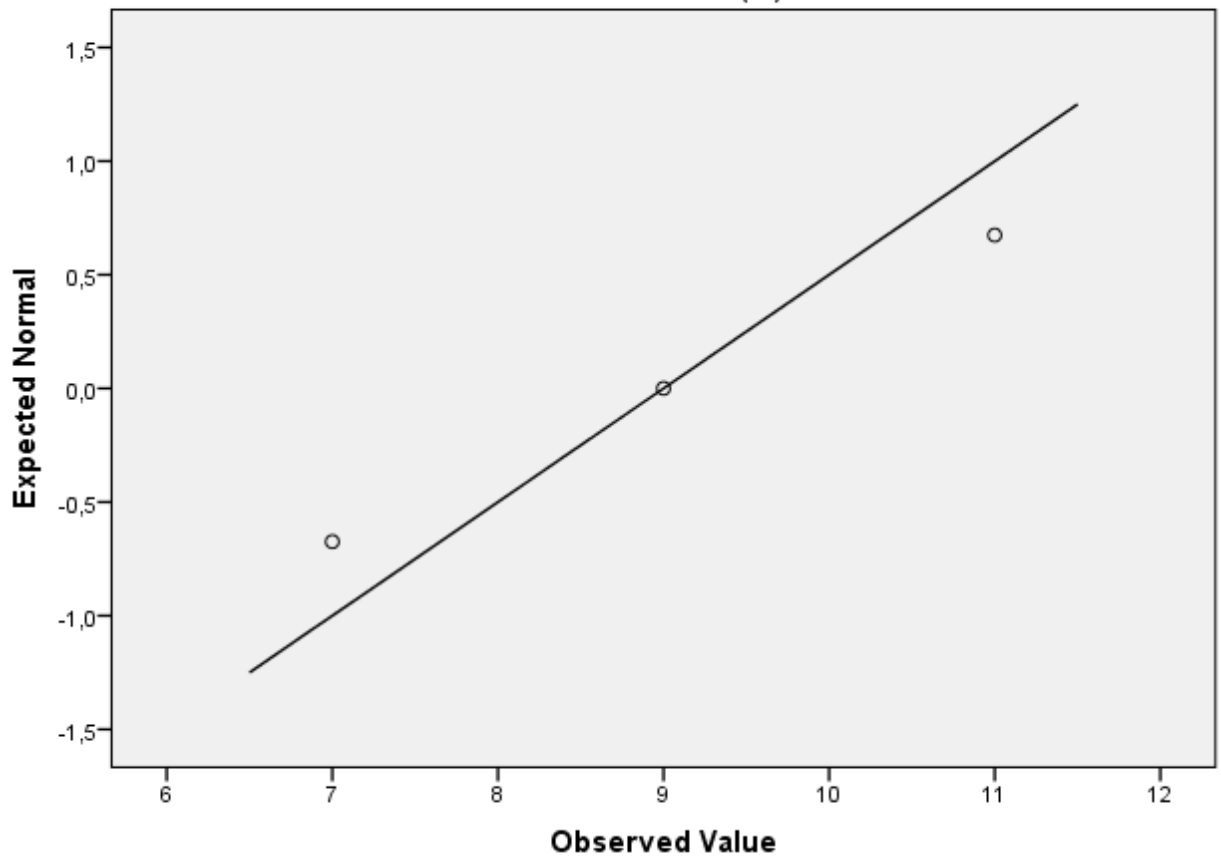


Normal Q-Q Plot of OSTEOCLASIN
for KELOMPOK= SRP (14)



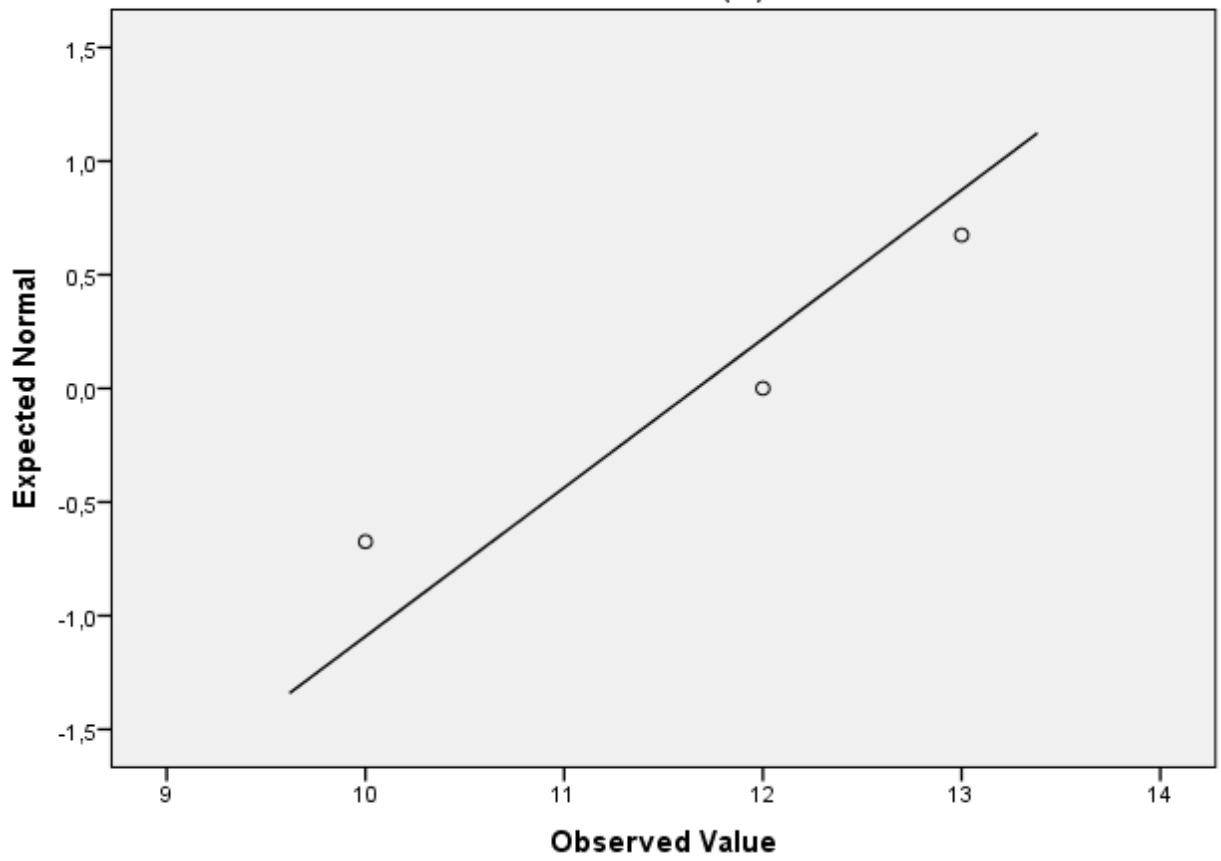
Normal Q-Q Plot of OSTEOCLASIN

for KELOMPOK= METRO (14)

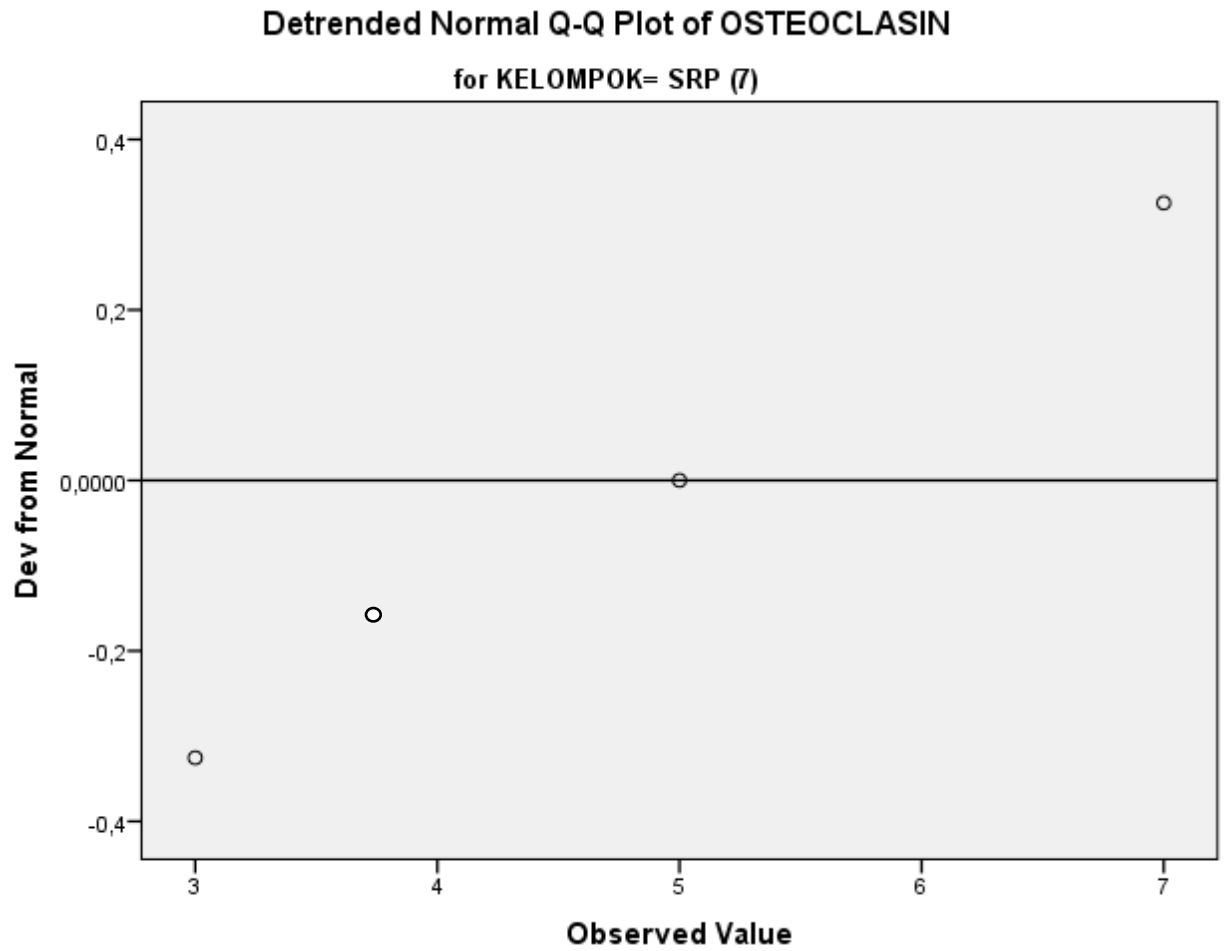


Normal Q-Q Plot of OSTEOCLASIN

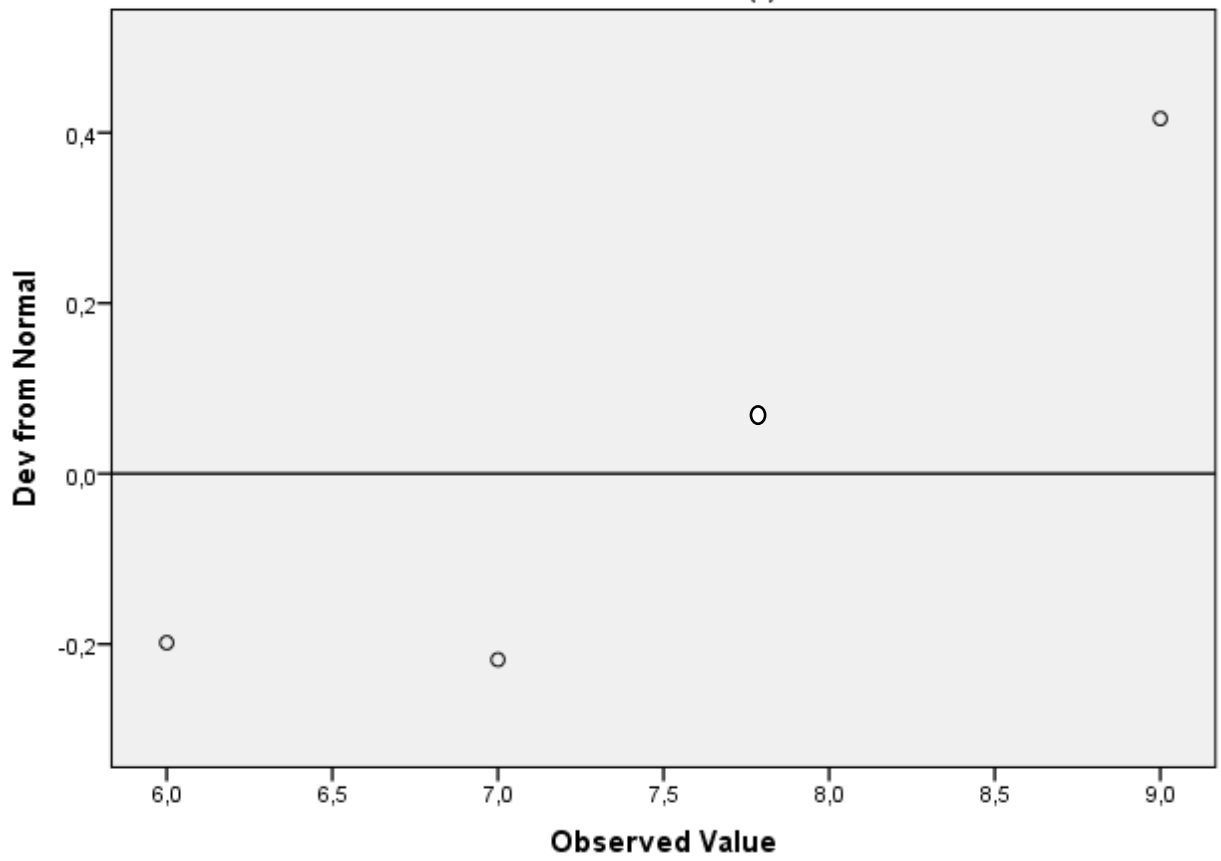
for KELOMPOK= VCO (14)



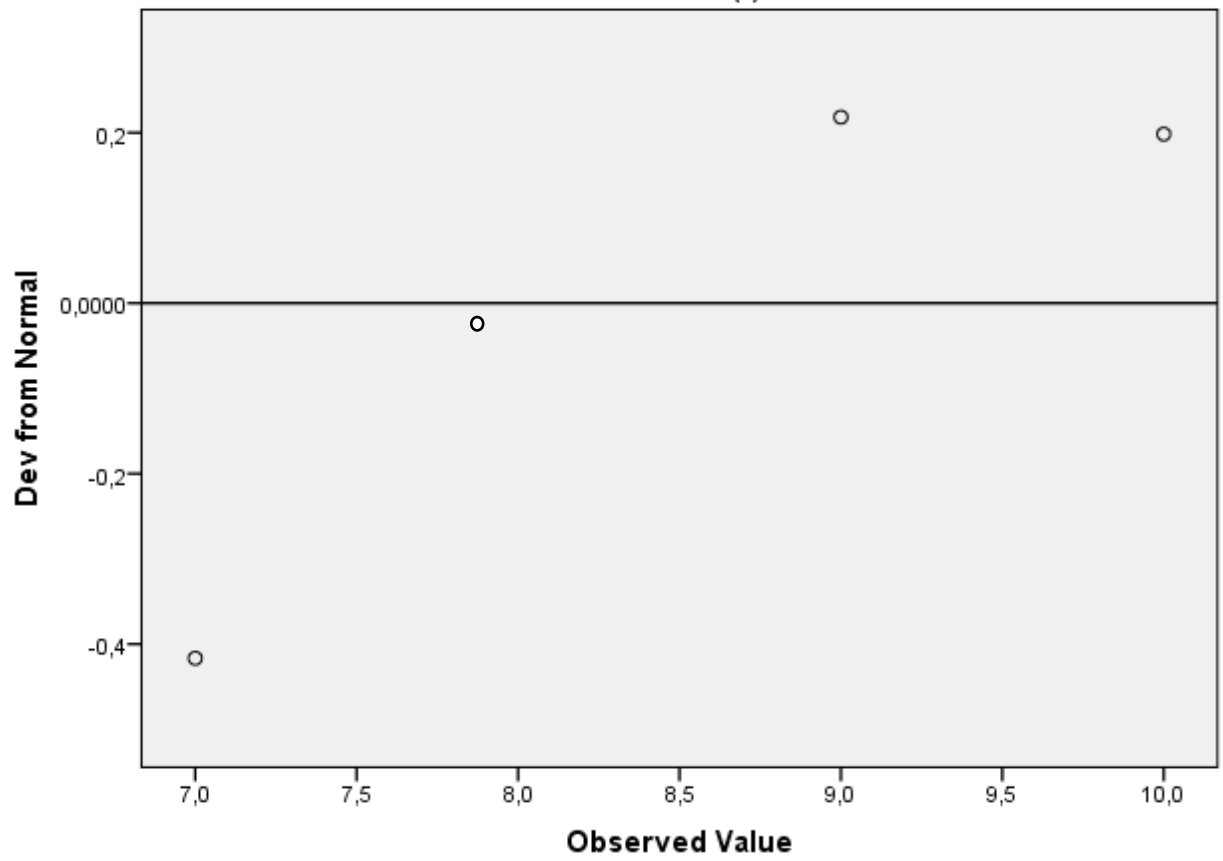
Detrended Normal Q-Q Plots



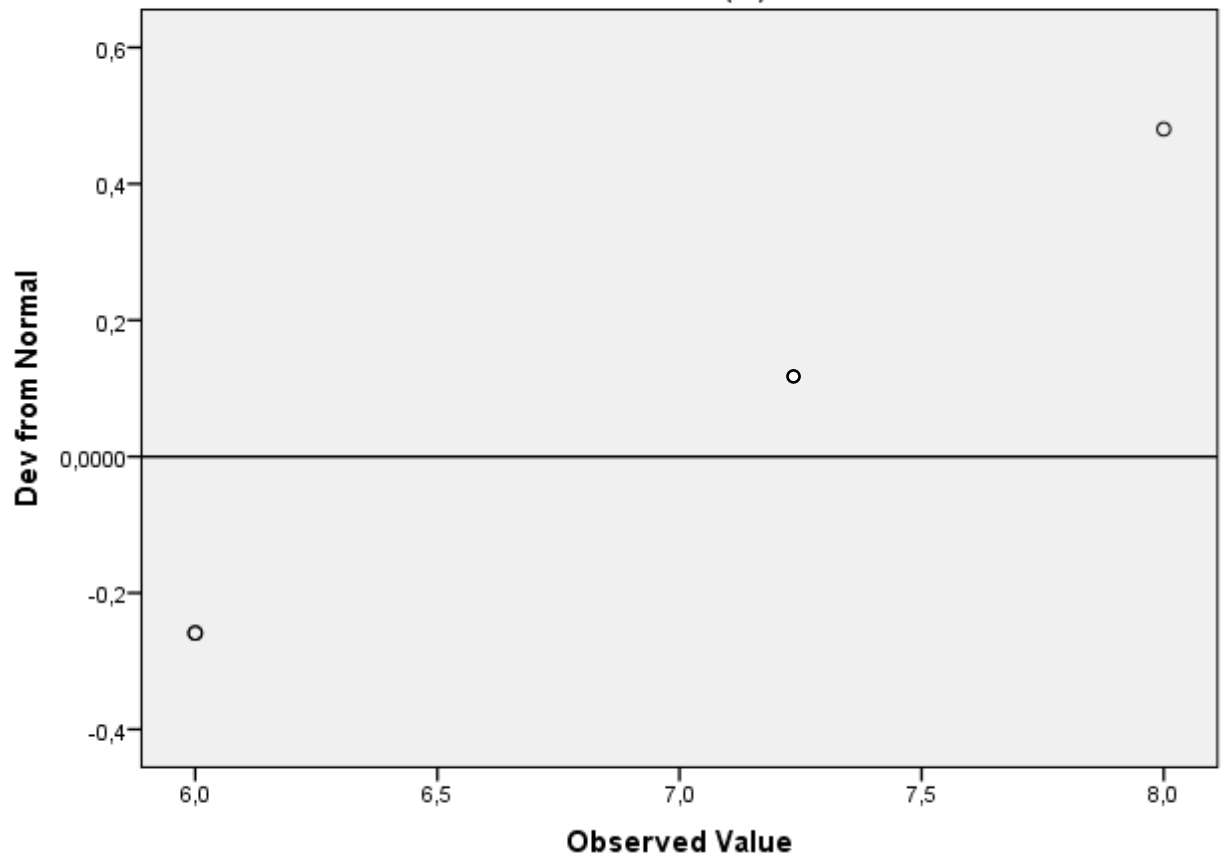
Detrended Normal Q-Q Plot of OSTEOCLASIN
for KELOMPOK= METRO (7)



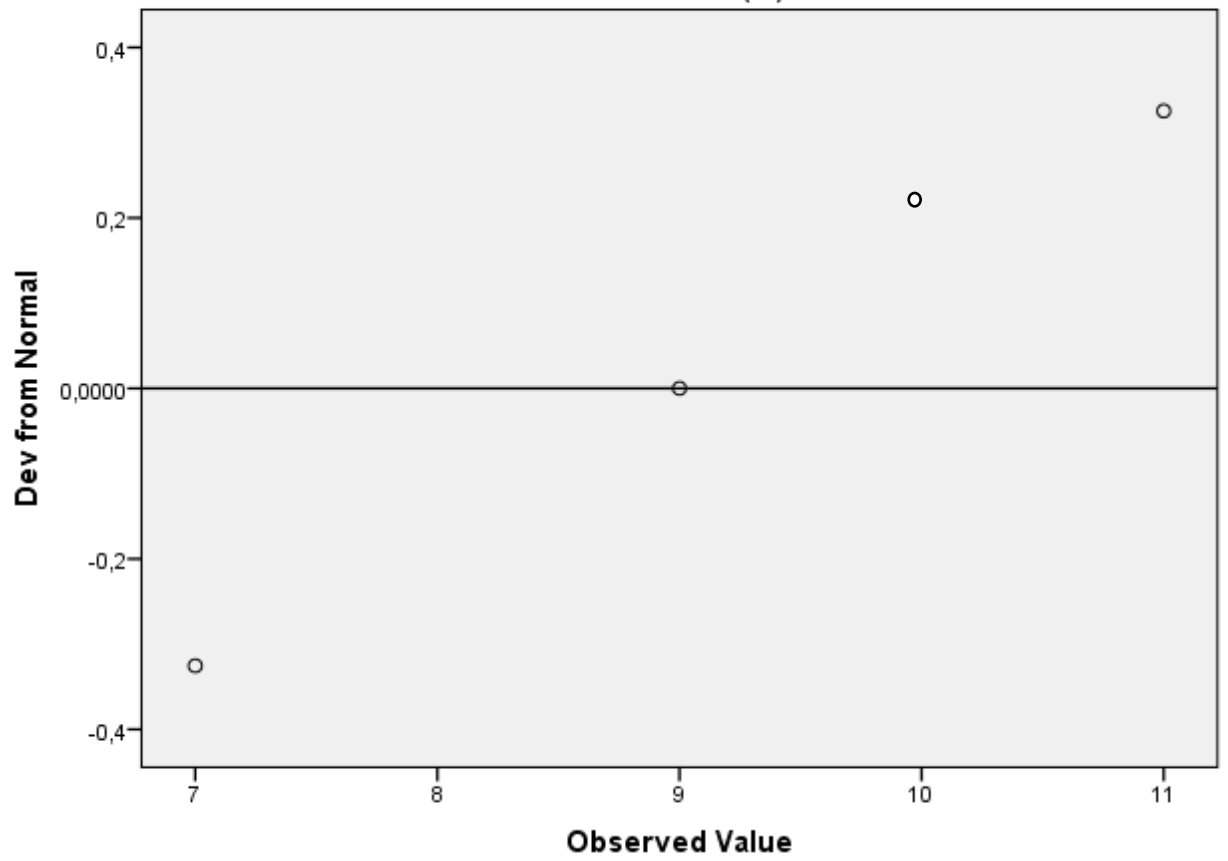
Detrended Normal Q-Q Plot of OSTEOCLASIN
for KELOMPOK= VCO (7)



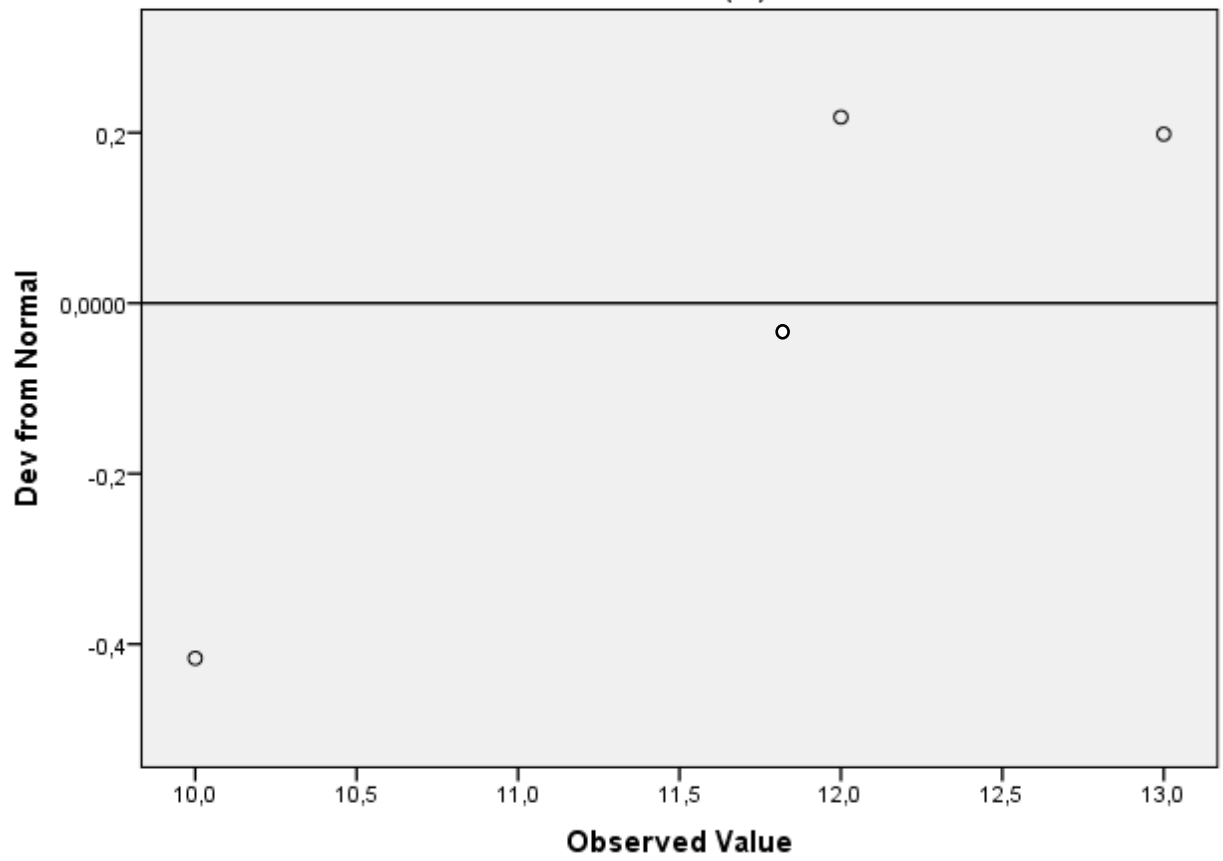
Detrended Normal Q-Q Plot of OSTEOCLASIN
for KELOMPOK= SRP (14)



Detrended Normal Q-Q Plot of OSTEOCLASIN
for KELOMPOK= METRO (14)



Detrended Normal Q-Q Plot of OSTEOCLASIN
for KELOMPOK= VC0 (14)



b. Uji Anova Osteocalcin

ONEWAY OSTEOCLASIN BY KELOMPOK
 /STATISTICS DESCRIPTIVES HOMOGENEITY
 /MISSING ANALYSIS
 /POSTHOC=TUKEY ALPHA(0.05) .

Oneway

Descriptives

OSTEOCLASIN

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimu m	Maximu m
					Lower Bound	Upper Bound		
					SRP (7)	4		
METRO (7)	4	7,25	1,260	,882	3,54	11,13	6	9
VCO (7)	4	8,75	1,260	,882	4,87	12,46	7	10
SRP (14)	4	6,75	0,960	,667	3,80	9,54	6	8
METRO (14)	4	9,00	1,630	1,155	4,03	13,97	7	11
VCO (14)	4	11,75	1,260	,882	7,87	15,46	10	13
Total	24	8,06	1,333	,602	6,79	9,33	3	13

Test of Homogeneity of Variances

OSTEOCLASIN

Levene Statistic	df1	df2	Sig.
,118	5	18	,986

ANOVA

OSTEOCLASIN

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	78,278	5	15,656	8,630	,006
Within Groups	32,667	18	1,814		
Total	110,944	23			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: OSTEOCLASIN

Tukey HSD

(I) KELOMPOK	(J) KELOMPOK	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
SRP (7)	METRO (7)	-2,333	1,347	,538	-6,86	2,19
	VCO (7)	-3,667	1,347	,141	-8,19	,86
	SRP (14)	-1,667	1,347	,811	-6,19	2,86
	METRO (14)	-4,000	1,347	,095	-8,52	,52
	VCO (14)	-6,667 [*]	1,347	,004	-11,19	-2,14
METRO (7)	SRP (7)	2,333	1,347	,538	-2,19	6,86
	VCO (7)	-1,333	1,347	,913	-5,86	3,19
	SRP (14)	,667	1,347	,995	-3,86	5,19
	METRO (14)	-1,667	1,347	,811	-6,19	2,86
	VCO (14)	-4,333	1,347	,063	-8,86	,19
VCO (7)	SRP (7)	3,667	1,347	,141	-,86	8,19
	METRO (7)	1,333	1,347	,913	-3,19	5,86
	SRP (14)	2,000	1,347	,679	-2,52	6,52
	METRO (14)	-,333	1,347	1,000	-4,86	4,19
	VCO (14)	-3,000	1,347	,294	-7,52	1,52
SRP (14)	SRP (7)	1,667	1,347	,811	-2,86	6,19
	METRO (7)	-,667	1,347	,995	-5,19	3,86
	VCO (7)	-2,000	1,347	,679	-6,52	2,52
	METRO (14)	-2,333	1,347	,538	-6,86	2,19
	VCO (14)	-5,000 [*]	1,347	,028	-9,52	-,48
METRO (14)	SRP (7)	4,000	1,347	,095	-,52	8,52
	METRO (7)	1,667	1,347	,811	-2,86	6,19
	VCO (7)	,333	1,347	1,000	-4,19	4,86
	SRP (14)	2,333	1,347	,538	-2,19	6,86
	VCO (14)	-2,667	1,347	,406	-7,19	1,86
VCO (14)	SRP (7)	6,667 [*]	1,347	,004	2,14	11,19
	METRO (7)	4,333	1,347	,063	-,19	8,86
	VCO (7)	3,000	1,347	,294	-1,52	7,52
	SRP (14)	5,000 [*]	1,347	,028	,48	9,52
	METRO (14)	2,667	1,347	,406	-1,86	7,19

*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

OSTEOCLASIN

Tukey HSD^a

KELOMPOK	N	Subset for alpha = 0.05	
		1	2
SRP (7)	4	5,00	
SRP (14)	4	6,75	
METRO (7)	4	7,25	7,25
VCO (7)	4	8,75	8,75
METRO (14)	4	9,00	9,00
VCO (14)	4		11,75
Sig.		,095	,063

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

* Chart Builder.

GGRAPH

```

/GRAPHDATASET NAME="graphdataset" VARIABLES=KELOMPOK
MEANSE(OSTEOCLASIN, 1) [name="MEAN_OSTEOCLASIN"
LOW="MEAN_OSTEOCLASIN_LOW" HIGH="MEAN_OSTEOCLASIN_HIGH"]
MISSING=LISTWISE REPORTMISSING=NO
/GRAPHSPEC SOURCE=INLINE.

```

BEGIN GPL

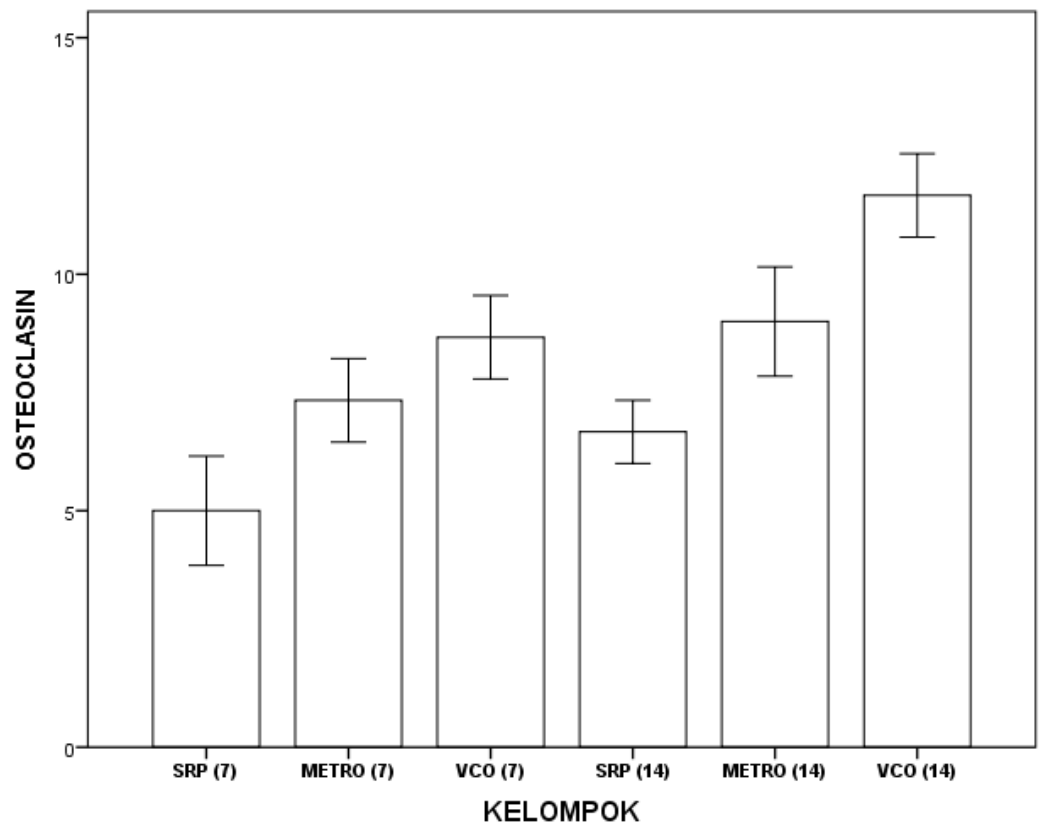
```

SOURCE: s=userSource(id("graphdataset"))
DATA: KELOMPOK=col(source(s), name("KELOMPOK")),
unit.category()
DATA: MEAN_OSTEOCLASIN=col(source(s),
name("MEAN_OSTEOCLASIN"))
DATA: LOW=col(source(s), name("MEAN_OSTEOCLASIN_LOW"))
DATA: HIGH=col(source(s), name("MEAN_OSTEOCLASIN_HIGH"))
GUIDE: axis(dim(1), label("KELOMPOK"))
GUIDE: axis(dim(2), label("Mean OSTEOCLASIN"))
GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
SCALE: cat(dim(1), include("1", "2", "3", "4", "5", "6"))
SCALE: linear(dim(2), include(0))
ELEMENT: interval(position(KELOMPOK*MEAN_OSTEOCLASIN),
shape.interior(shape.square))
ELEMENT:
interval(position(region.spread.range(KELOMPOK*(LOW+HIGH))),
shape.interior(shape.ibeam))
END GPL.

```

GGraph

[DataSet0] C:\Users\Panasonic\Documents\OCN RAHMI.sav



4. SURAT 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/Sp.Ortho/Sp.Perio. TELP. 081342971011/08114919191



REKOMENDASI PERSETUJUAN ETIK

Nomor: 0076/PL.09/KEPK FKG-RSGM UNHAS/2022

Tanggal: 31 Mei 2022

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

No. Protokol	UH 17120660	No Protokol Sponsor	
Peneliti Utama	drg. Alfrida Pasangallo	Sponsor	Pribadi
Judul Peneliti	Efektifitas Gel Virgin Coconut Oil (VCO) terhadap Level Osteocalcin pada Rattus Norvegicus yang Diinduksi Bakteri Porphyromonas Gingivalis		
No. Versi Protokol	1	Tanggal Versi	23 Mei 2022
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	1. Laboratorium Farmakognosi Fitokimia Fakultas Farmasi Universitas Muslim Indonesia, 2. Laboratorium Praktikum Fakultas Farmasi UMI, 3. Laboratorium Mikrobiologi Fakultas Kedokteran Universitas Hasanuddin, 4. Laboratorium Patologi Anatomi Fakultas Kedokteran Universitas Brawijaya.		
Dokumen Lain			
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku 31 Mei 2022 - 31 Mei 2023	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*)

Memahami peraturan yang berlaku