

## APPENDIX 1

### Normality test of ICAM-1

#### 1. Control ( - )

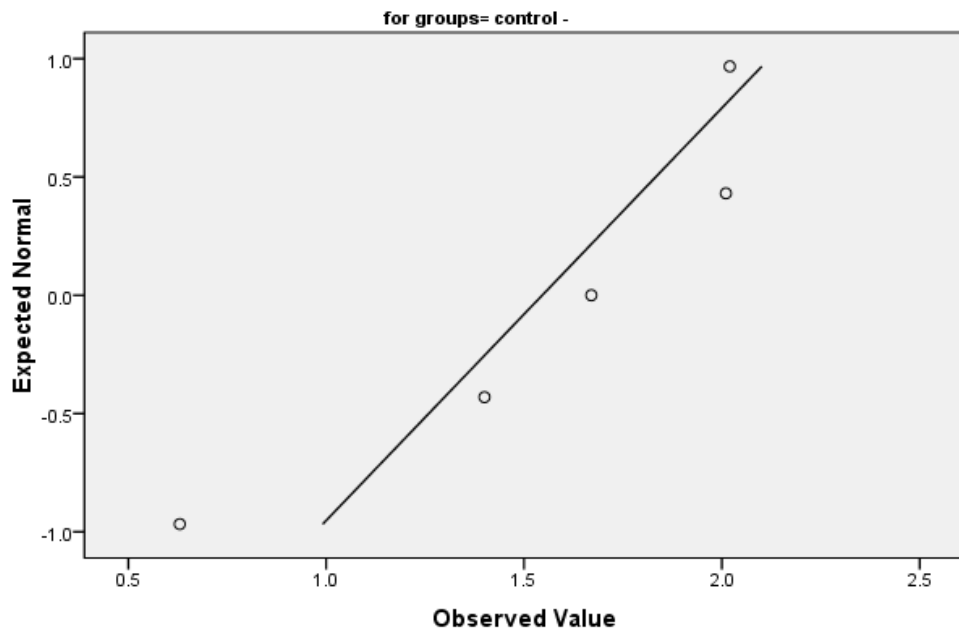
Tests of Normality

Group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results control -	.204	5	.200*	.872	5	.274

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

Normal Q-Q Plot of results



## 2. Control ( + )

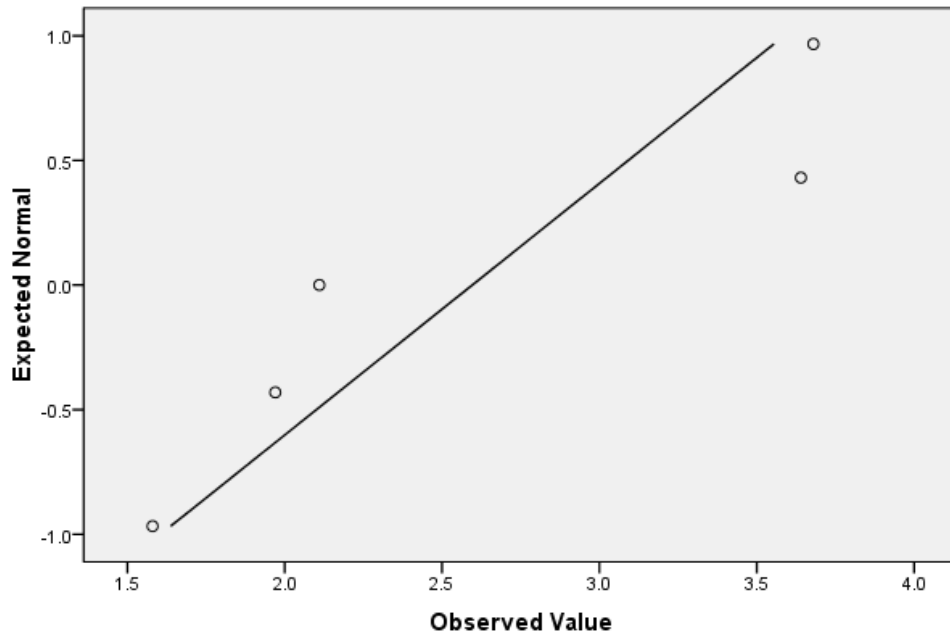
Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results	.288	5	.200 <sup>*</sup>	.824	5	.126

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

Normal Q-Q Plot of results



### 3. Group 1ml

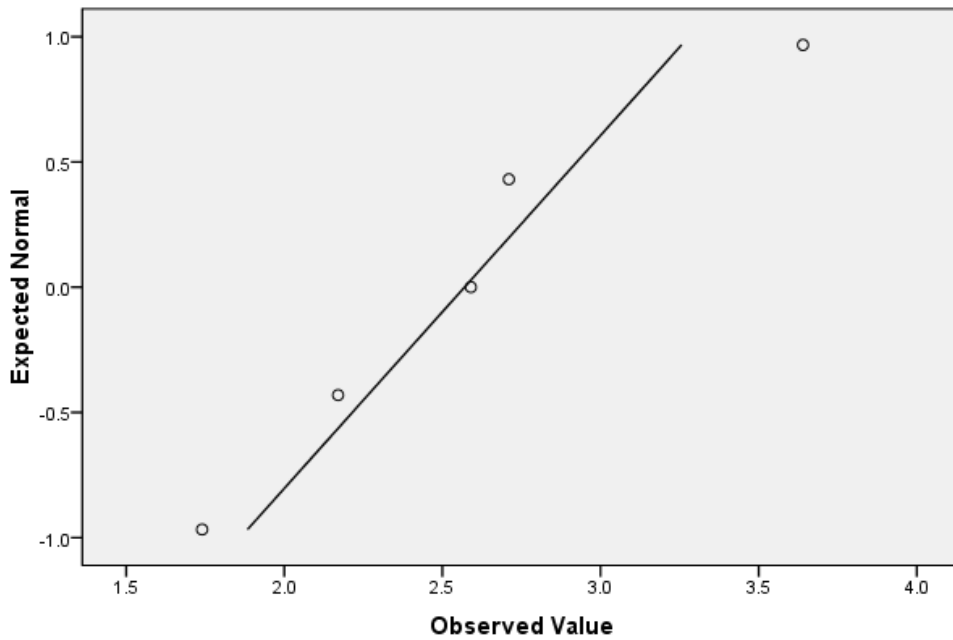
Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results	.222	5	.200 <sup>*</sup>	.964	5	.834

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

Normal Q-Q Plot of results



#### 4. Group 2ml

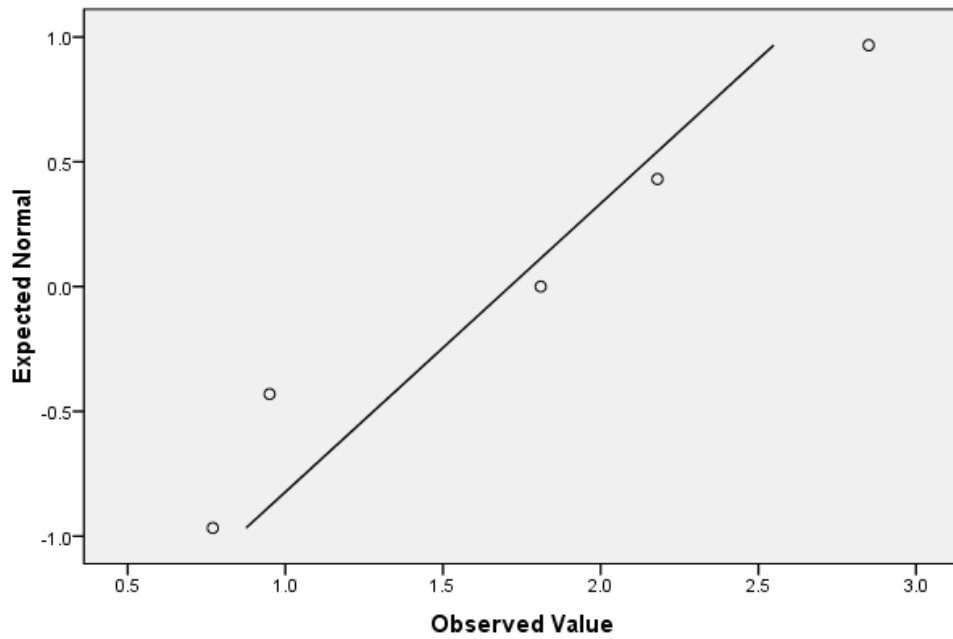
Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results	.211	5	.200 <sup>*</sup>	.943	5	.685

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

Normal Q-Q Plot of results



## 5. Group 3ml

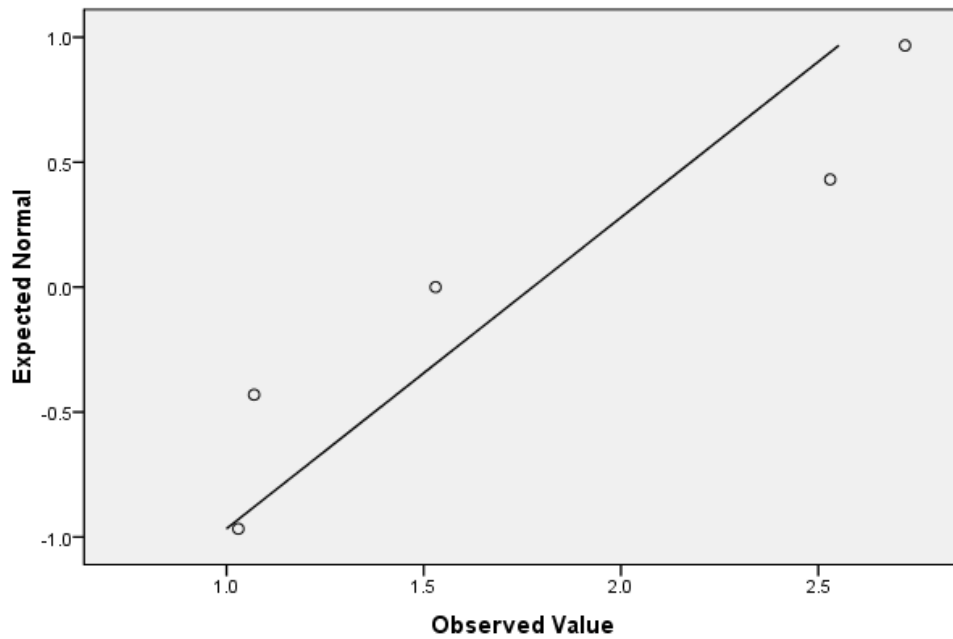
Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results	.226	5	.200 <sup>*</sup>	.846	5	.181

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

Normal Q-Q Plot of results



### Test of Homogeneity of Variances

result

Levene Statistic	df1	df2	Sig.
2.381	4	20	.086

### Descriptives

result	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					control ( - )	5		
control ( + )	5	2.5960	.99062	.44302	1.3660	3.8260	1.58	3.68
Group 1ml	5	2.2040	.44066	.19707	1.6569	2.7511	1.74	2.71
Group 2 ml	5	1.6540	.86633	.38744	.5783	2.7297	.77	2.85
Group 3ml	5	1.7760	.80236	.35883	.7797	2.7723	1.03	2.72
Total	25	1.9552	.80128	.16026	1.6244	2.2860	.63	3.68

### ANOVA

result	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.814	4	.954	1.645	.202
Within Groups	11.595	20	.580		
Total	15.409	24			

## Normality test of eNOS

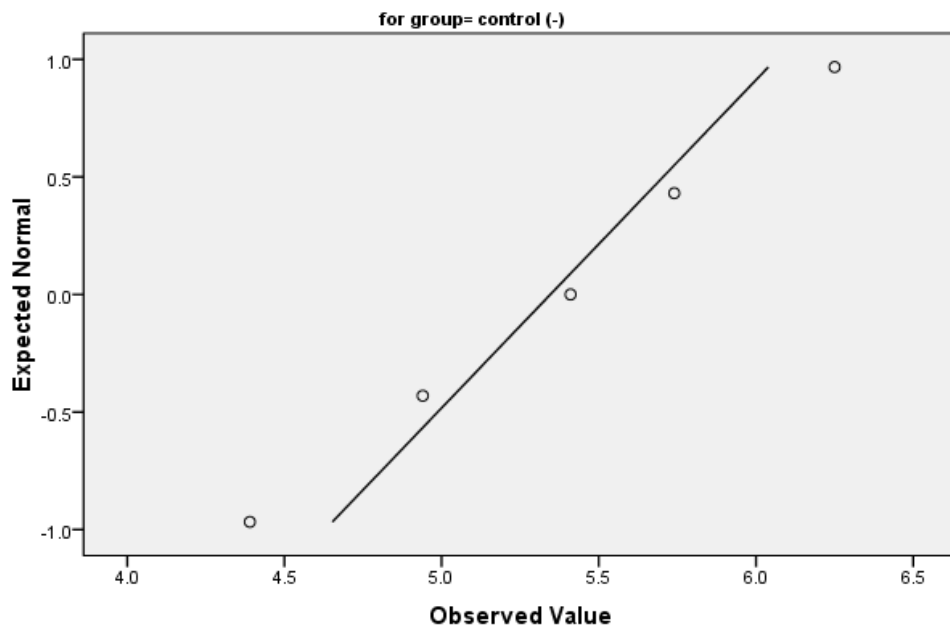
### 1. Control (-)

group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results control (-)	.136	5	.200*	.994	5	.992

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

### Normal Q-Q Plot of results



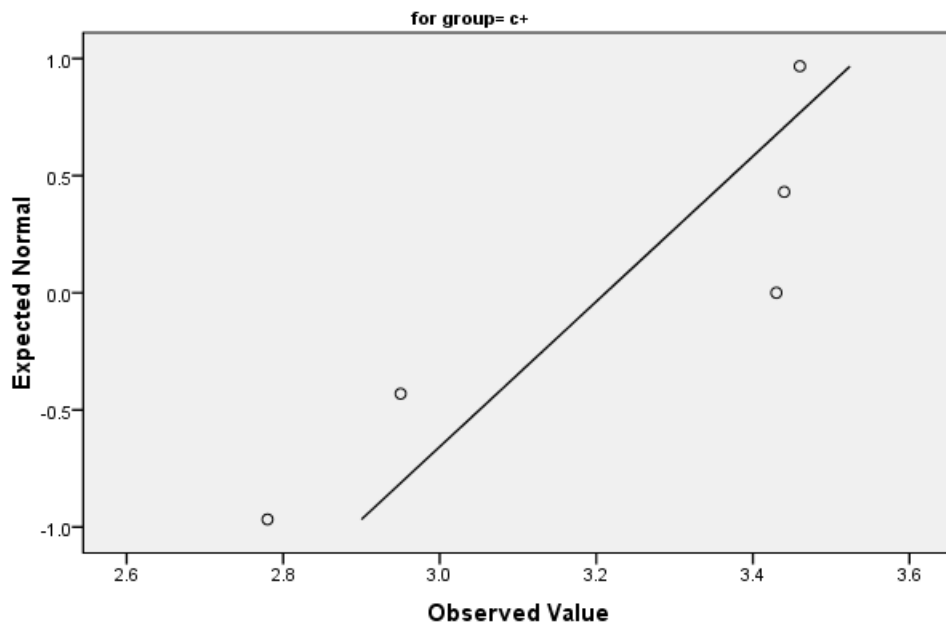
## 2. Control (+)

Tests of Normality

group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results c+	.350	5	.044	.781	5	.056

a. Lilliefors Significance Correction

Normal Q-Q Plot of results





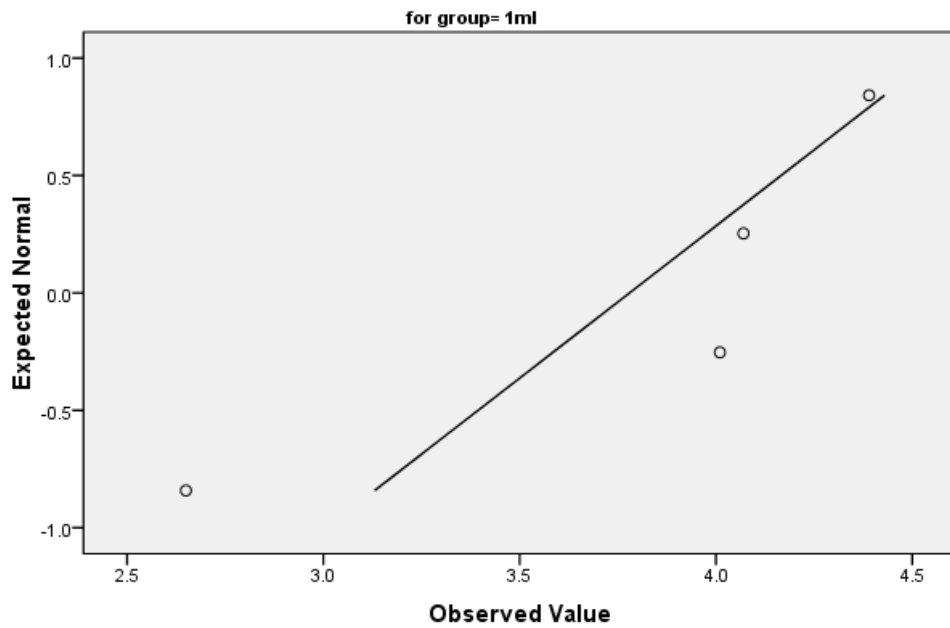
### 3. Group 1ml

Tests of Normality

group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results 1ml	.367	4	.	.814	4	.130

a. Lilliefors Significance Correction

Normal Q-Q Plot of results



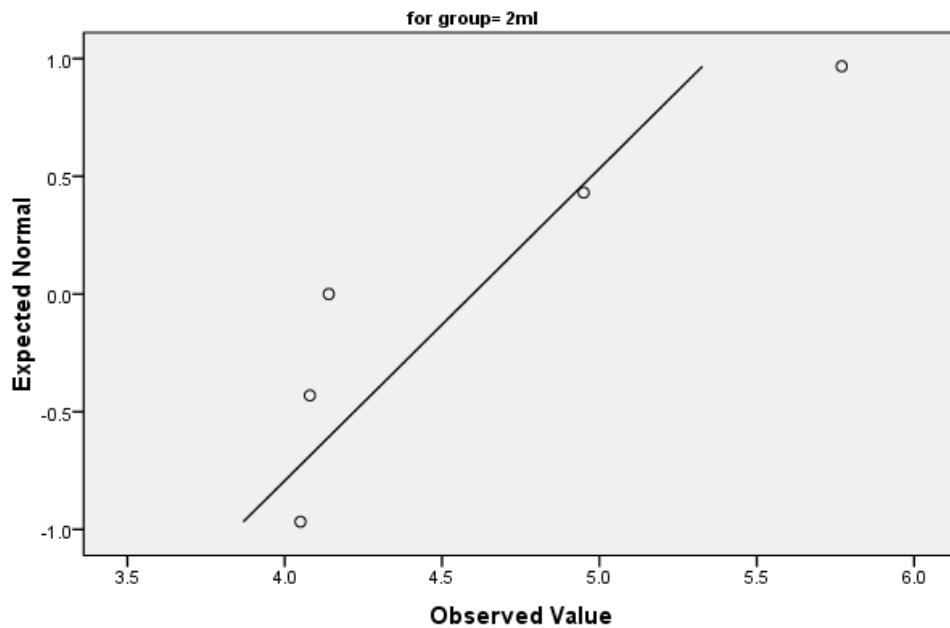
#### 4. Group 2ml

Tests of Normality

group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results 2ml	.328	5	.084	.805	5	.088

a. Lilliefors Significance Correction

Normal Q-Q Plot of results



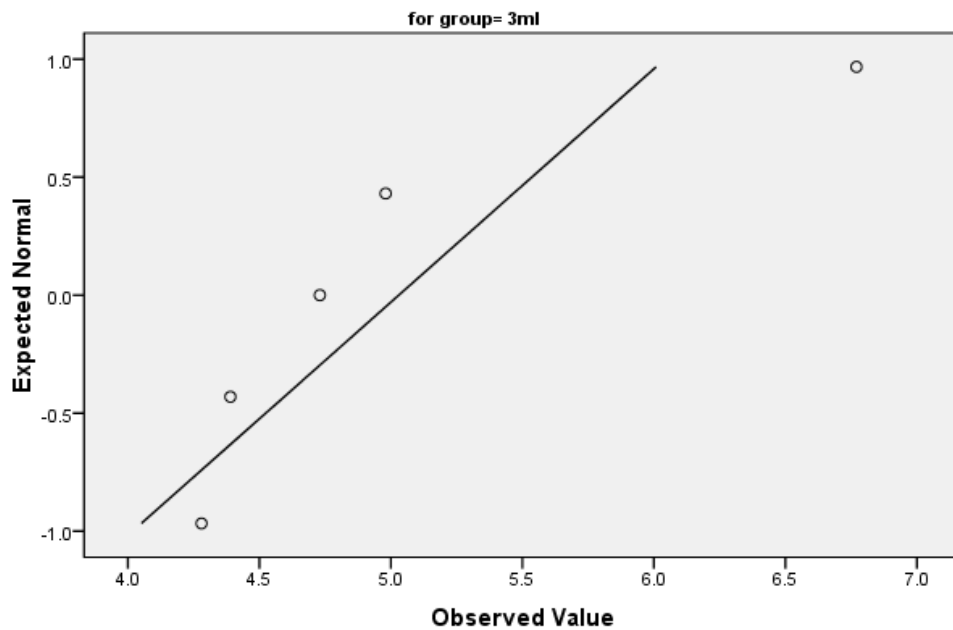
## 5. Group 3ml

Tests of Normality

group	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
results 3ml	.320	5	.105	.789	5	.066

a. Lilliefors Significance Correction

Normal Q-Q Plot of results



### Descriptives

results								
					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
control(-)	5	5.3460	.71682	.32057	4.4560	6.2360	4.39	6.25
control(+)	5	3.2120	.32260	.14427	2.8114	3.6126	2.78	3.46
group 1 ml	4	3.7800	.77158	.38579	2.5522	5.0078	2.65	4.39
group 2 ml	5	4.5980	.75430	.33733	3.6614	5.5346	4.05	5.77
group 3 ml	5	5.0300	1.01146	.45234	3.7741	6.2859	4.28	6.77
Total	24	4.4188	1.06049	.21647	3.9709	4.8666	2.65	6.77

### Test of Homogeneity of Variances

results

Levene Statistic	df1	df2	Sig.
.731	4	19	.582

### ANOVA

results					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15.241	4	3.810	6.813	.001
Within Groups	10.626	19	.559		
Total	25.867	23			

**Post Hoc Tests**

**Multiple Comparisons**

**results**

**Scheffe**

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
control(-)	control(+)	2.13400*	.47297	.006	.5245	3.7435
	group 1 ml	1.56600	.50166	.083	-.1411	3.2731
	group 2 ml	.74800	.47297	.650	-.8615	2.3575
	group 3 ml	.31600	.47297	.977	-1.2935	1.9255
control(+)	control(-)	-2.13400*	.47297	.006	-3.7435	-.5245
	group 1 ml	-.56800	.50166	.861	-2.2751	1.1391
	group 2 ml	-1.38600	.47297	.114	-2.9955	.2235
	group 3 ml	-1.81800*	.47297	.022	-3.4275	-.2085
group 1 ml	control(-)	-1.56600	.50166	.083	-3.2731	.1411
	control(+)	.56800	.50166	.861	-1.1391	2.2751
	group 2 ml	-.81800	.50166	.624	-2.5251	.8891
	group 3 ml	-1.25000	.50166	.228	-2.9571	.4571
group 2 ml	control(-)	-.74800	.47297	.650	-2.3575	.8615
	control(+)	1.38600	.47297	.114	-.2235	2.9955
	group 1 ml	.81800	.50166	.624	-.8891	2.5251
	group 3 ml	-.43200	.47297	.930	-2.0415	1.1775
group 3 ml	control(-)	-.31600	.47297	.977	-1.9255	1.2935
	control(+)	1.81800*	.47297	.022	.2085	3.4275
	group 1 ml	1.25000	.50166	.228	-.4571	2.9571
	group 2 ml	.43200	.47297	.930	-1.1775	2.0415

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

## Homogeneous Subsets

### results

#### Scheffe

group	N	Subset for alpha = 0.05	
		1	2
control(+)	5	3.2120	
group 1 ml	4	3.7800	3.7800
group 2 ml	5	4.5980	4.5980
group 3 ml	5		5.0300
control(-)	5		5.3460
Sig.		.129	.068

Means for groups in homogeneous subsets are displayed.



KOMISI ETIK PENELITIAN KESEHATAN (KEPK)  
FAKULTAS KEDOKTERAN UNIVERSITAS DIPONEGORO  
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Jl. Dr. Soetomo 18. Semarang  
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## ETHICAL CLEARANCE No.464 /EC/FK-RSDK/2014

Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Universitas Diponegoro-RSUP, Dr. Kariadi Semarang, setelah membaca dan menelaah USULAN Penelitian dengan judul :

### THE EFFECT OF EVOO IN REDUCING ICAM-1 AND INCREASING eNOS IN HIGH FAT DIET RATS

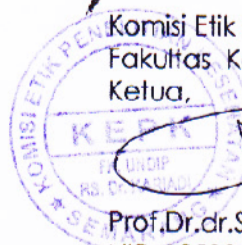
Peneliti Utama : Khaled Mohamed Salem Blhaj  
Anggota peneliti : 1. Prof. dr. Lysiani B Suromo, Sp.PK(K)  
2. Dr. dr. RA Kisdjamiatun, RMD.,M.Sc  
Penelitian : Dilaksanakan di LPPT Veterinary Faculty UGM Yogyakarta.

Setuju untuk dilaksanakan, dengan memperhatikan prinsip-prinsip yang dinyatakan dalam Deklarasi Helsinki 1975, yang diamended di Seoul 2008 dan Pedoman Nasional Etik Penelitian Kesehatan (PNEPK) Departemen Kesehatan RI 2011.

Pada laporan akhir peneliti harus melampirkan cara pemeliharaan & dekapitasi hewan coba dan melaporkan ke KEPK bahwa penelitian sudah selesai di lampiri Abstrak Penelitian.

Semarang, 21 JUL 2014

Komisi Etik Penelitian Kesehatan  
Fakultas Kedokteran Undip-RSUP Dr. Kariadi  
Ketua,



Prof.Dr.dr.Suprihati, M.Sc, Sp.THT-KL(K)  
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UNIVERSITAS GADJAH MADA

**LABORATORIUM PENELITIAN DAN PENGUJIAN TERPADU  
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Telp. (0274) 7497705, FAX. (0274) 546868, e-mail: lppt\_info@mail.ugm.ac.id

**SURAT KETERANGAN**  
**No : 679/LP3HP/24 - IV/2014**

Bersama ini kami menerangkan bahwa :

Nama : Khaled mohamed Salem Balhaj  
NIM : 22010112419056  
Instansi : Magister Ilmu Biomedik  
Fakultas Kedokteran UNDIP Semarang..  
Jenjang Studi : S2

Benar – benar telah selesai melakukan Penelitian di Unit Layanan Penelitian Pra – Klinik dan Pengembangan Hewan Percobaan (LP3HP) LPPT UGM. pada bulan April 2014 sesuai Proposal yang di ajukan dengan judul :

**“THE EFFECT OF EVOO IN REDUCING ICAM -1 AND  
IN CRESIASING ENOS IN HIGH FAT DIET RATS”**

dan telah dinyatakan bebas dari segala tanggungan di Laboratorium Penelitian dan Pengujian Terpadu Universitas Gadjah Mada.

Demikian surat keterangan ini dibuat, agar dapat dipergunakan sebagaimana mestinya.

Atas kerjasama yang baik diucapkan banyak terimakasih.

Yogyakarta, 24 April 2014  
Kabid Pra - Klinik.

Dr. Arief Nurrochmad, M.Si., M.Sc., Apt.  
NIP : 19730716 199803 1 001



### APPENDEX: 3

#### Picture of the experment



The way of giving EVOO



Feeding with HFd



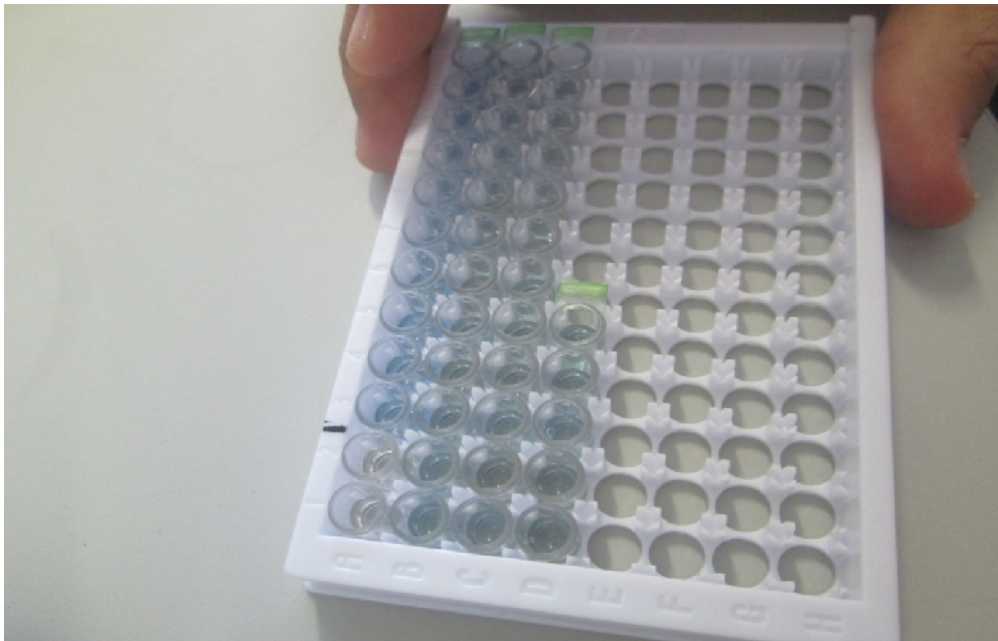
Doing anesthetized operation before killing the rats



Blood taking process



The blood samples



Coat ELISA plate





**ELISA device**