

Lampiran 1.

Surat Ijin Penelitian



DEPARTEMEN FARMAKOLOGI DAN TERAPI

FAKULTAS KEDOKTERAN UNIVERSITAS GADJAH MADA YOGYAKARTA
Gedung Radiopetro Lt. II Sayap Timur Jl. Farmako, Sekip Utara Yogyakarta 55281
Telp. (0274) 6492491, 511103, Fax.: (0274) 511103

Nomor : UGM/KU/FAR/360/M/05/08/10.17

2 Oktober 2017

Hal : Permohonan ijin penelitian dan Pengambilan Data

Yth : Dekan Fakultas Kedokteran dan Ilmu.Kesehatan
Universitas Muhammadiyah Yogyakarta.
Yogyakarta

Dengan hormat,

Menanggapi surat Saudara tanggal 22 September 2017 perihal : Permohonan ijin penggunaan fasil
Laboratorium Farmakologi dan Terapi FK UGM, tujuan penggunaan fasilitas tersebut u
melakukan penelitian dengan judul " Efektivitas Antiinflamasi Ekstrak Batang Serai (*Cymbopo
citratu*s) pada Tikus Wistar Jantan yang Diinduksi Karagenin"

Bagi mahasiswa :

Nama : Kholifatul Amalia

NIM : 20150310023

Dengan ini kami dapat menyetujui dengan catatan :

1. Penelitian mulai dilakukan setelah mendapatkan "Ethical approval" dari Komisi Etik.
2. Mentaati peraturan yang berlaku di FK UGM Departemen Farmakologi dan Terapi
3. Dalam melakukan kegiatan dibantu pembantu pelaksana sdr : Rena Widani
4. Menulis semua kegiatan dan hasil Penelitian yang dilakukan di laboratorium dalam buku Penelitian, buku Log ditinggal di Laboratorium.
5. Setelah selesai melaporkan hasilnya kepada Ketua Departemen Farmakologi dan Terapi Fakultas Kedokteran UGM.

Demikian atas perhatiannya diucapkan terima kasih.

Ketua Departemen



Dr. dr. Eti Nurwening S.M.Kes.,M.Med.Ed
NIP. 196911021996012001

TEMBUSAN KEPADA :

1. Yth. Kholifatul Amalia
2. dr.Imaniar Ranti,M.Sc.
3. Yth.Sdr. Rena Widani

Lampiran 2.

Surat Keterangan Telah Melakukan Penelitian



DEPARTEMEN FARMAKOLOGI DAN TERAPI
FAKULTAS KEDOKTERAN UNIVERSITAS GADJAH MADA YOGYAKARTA
 Gedung Radiopetro Lt. II Sayap Timur Jl. Farmako, Sekip Utara, Yogyakarta 55281
 Telp. (0274) 6492491, 511103, Fax. (0274) 511103

SURAT KETERANGAN
 Nomor : UGM/KU/FAR/427/M/05/09/11.17

Yang bertanda tangan di bawah ini :

N a m a : Dr. dr. Eti Nurwening Sholikhah, M.Kes., M.Med.Ed
 N I P : 196911021996012001
 Jabatan : Ketua Departemen Farmakologi dan Terapi
 Fakultas Kedokteran UGM

dengan ini menerangkan bahwa :

N a m a : Kholifatul Amalia
 N I M : 20150310027
 Program Studi : S1 Fakultas Kedokteran UGM

telah melakukan penelitian pada tanggal 15 November – 22 November 2017 di Departemen Farmakologi dan Terapi FK UGM dan telah menyelesaikan semua kewajiban sebagai peneliti serta tidak mempunyai tanggungan pengembalian alat/bahan.

Demikian surat keterangan ini agar dapat dipergunakan sebagaimana mestinya.

Yogyakarta, 28, November 2017

Ketua Departemen,



Dr. dr. Eti Nurwening S, M.Kes., M.Med.Ed
 NIP : 196911021996012001

Lampiran 3.

Lembar Etik



Fakultas Kedokteran dan Ilmu Kesehatan
Universitas Muhammadiyah Yogyakarta

Nomor : 599/EP-FKIK-UMY/XI/2017

KETERANGAN LOLOS UJI ETIK
ETHICAL APPROVAL

Komite Etik Penelitian Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Yogyakarta dalam upaya melindungi hak asasi dan kesejahteraan responden/subyek penelitian, telah mengkaji dengan teliti protokol berjudul :

The Ethics Committee of the Faculty of Medicine and Health Sciences, University of Muhammadiyah Yogyakarta, with regards of the protection of human rights and welfare in research, has carefully reviewed the research protocol entitled :

**“Efektivitas Antiinflamasi Ekstrak Batang Serai (*Cymbopogon citratus*)
Pada Tikus Wistar Jantan Yang Diinduksi Karagenin”**

Peneliti Utama : Kholifatul Amalia
Principal Investigator

Nama Institusi : Program Studi Pendidikan Dokter FKIK UMY
Name of the Institution

Negara : Indonesia
Country

Dan telah menyetujui protokol tersebut diatas.
And approved the above-mentioned protocol.

Yogyakarta, 14 November 2017

Sekretaris
Secretary



Dr. dr. Titiek Hidayati, M.Kes.

*Peneliti Berkewajiban :

1. Menjaga kerahasiaan identitas subyek penelitian
2. Memberitahukan status penelitian apabila :
 - a. Setelah masa berlakunya keterangan lolos uji etik, penelitian masih belum selesai, dalam hal ini *ethical clearance* harus diperpanjang
 - b. Penelitian berhenti di tengah jalan
3. Melaporkan kejadian serius yang tidak diinginkan (*serious adverse events*)
4. Peneliti tidak boleh melakukan tindakan apapun pada responden/subyek sebelum penelitian lolos uji etik

Kampus:

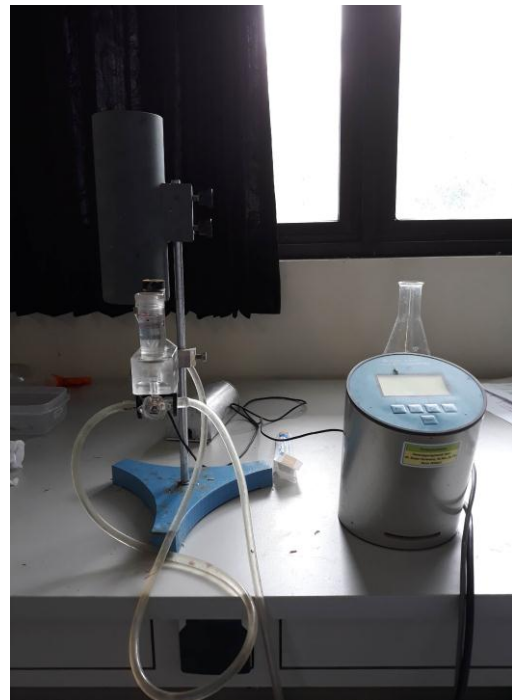
Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta 55183
Telp. (0274) 387656 ext. 213 , 7491350 Fax. (0274) 387658

Muda mendunia

Lampiran 4.

Dokumentasi





Lampiran 5.

Statistik

Berat Tikus Kelompok 1

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 1 Hari Ke 1	Mean		236.00	14.876
	95% Confidence Interval for Mean	Lower Bound	194.70	
		Upper Bound	277.30	
	5% Trimmed Mean		234.83	
	Median		228.00	
	Variance		1106.500	
	Std. Deviation		33.264	
	Minimum		205	
	Maximum		288	
	Range		83	
	Interquartile Range		59	
	Skewness		1.107	.913
	Kurtosis		.766	2.000
	Mean		261.80	15.124
Kelompok 1 Hari Ke 7	95% Confidence Interval for Mean	Lower Bound	219.81	
		Upper Bound	303.79	
	5% Trimmed Mean		261.28	
	Median		265.00	
	Variance		1143.700	
	Std. Deviation		33.819	
	Minimum		222	
	Maximum		311	
	Range		89	
	Interquartile Range		60	
	Skewness		.501	.913
	Kurtosis		.220	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 1 Hari Ke 1	.195	5	.200 [*]	.914	5	.494
Kelompok 1 Hari Ke 7	.193	5	.200 [*]	.971	5	.879

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

a. Lilliefors Significance Correction

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus Kelompok 1	Hari Ke 1	5	236.00	33.264	14.876
	Hari Ke 7	5	261.80	33.819	15.124

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Berat Tikus Kelompok 1	Equal variances assumed	.002	.963	-1.216	8	.259	-25.800	21.214	-74.720	23.120
	Equal variances not assumed			-1.216	7.998	.259	-25.800	21.214	-74.722	23.122

Berat Tikus Kelompok 2

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 2 Hari Ke 1	Mean		201.60	4.366
	95% Confidence Interval for Mean	Lower Bound	189.48	
		Upper Bound	213.72	
	5% Trimmed Mean		201.61	
	Median		200.00	
	Variance		95.300	
	Std. Deviation		9.762	
	Minimum		190	
	Maximum		213	
	Range		23	
	Interquartile Range		19	
	Skewness		.099	.913
	Kurtosis		-2.236	2.000
	Mean		218.40	6.904
Kelompok 2 Hari Ke 7	95% Confidence Interval for Mean	Lower Bound	199.23	
		Upper Bound	237.57	
	5% Trimmed Mean		218.89	
	Median		223.00	
	Variance		238.300	
	Std. Deviation		15.437	
	Minimum		194	
	Maximum		234	
	Range		40	
	Interquartile Range		27	
	Skewness		-1.142	.913
	Kurtosis		1.244	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 2 Hari Ke 1	.205	5	.200*	.938	5	.650
Kelompok 2 Hari Ke 7	.217	5	.200*	.927	5	.575

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

a. Lilliefors Significance Correction

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus Kelompok 2	Hari Ke 1	5	201.60	9.762	4.366
	Hari Ke 7	5	218.40	15.437	6.904

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Berat Tikus Kelompok 2	Equal variances assumed	.726	.419	-2.057	8	.074	-16.800	8.168	-35.636	2.036
	Equal variances not assumed			-2.057	6.758	.080	-16.800	8.168	-36.256	2.656

Berat Tikus Kelompok 3

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 3 Hari Ke 1	Mean		212.20	14.465
	95% Confidence Interval for Mean	Lower Bound	172.04	
		Upper Bound	252.36	
	5% Trimmed Mean		212.67	
	Median		210.00	
	Variance		1046.200	
	Std. Deviation		32.345	
	Minimum		170	
	Maximum		246	
	Range		76	
	Interquartile Range		63	
	Skewness		-.211	.913
	Kurtosis		-1.832	2.000
	Mean		224.60	12.867
Kelompok 3 Hari Ke 7	95% Confidence Interval for Mean	Lower Bound	188.88	
		Upper Bound	260.32	
	5% Trimmed Mean		225.28	
	Median		226.00	
	Variance		827.800	
	Std. Deviation		28.772	
	Minimum		182	
	Maximum		255	
	Range		73	
	Interquartile Range		53	
	Skewness		-.710	.913
	Kurtosis		-.029	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 3 Hari Ke 1	.222	5	.200*	.929	5	.587
Kelompok 3 Hari Ke 7	.171	5	.200*	.955	5	.775

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

a. Lilliefors Significance Correction

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus Kelompok 3	Hari Ke 1	5	212.20	32.345	14.465
	Hari Ke 7	5	224.60	28.772	12.867

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Berat Tikus	Equal variances assumed	.173	.688	-.641	8	.540	-12.400	19.360	-57.044	32.244
Kelompok 3	Equal variances not assumed			-.641	7.893	.540	-12.400	19.360	-57.149	32.349

Berat Tikus Kelompok 4

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 4 Hari Ke 1	Mean		212.20	12.290
	95% Confidence Interval for	Lower Bound	178.08	
	Mean	Upper Bound	246.32	
	5% Trimmed Mean		211.00	
	Median		210.00	
	Variance		755.200	
	Std. Deviation		27.481	
	Minimum		188	
	Maximum		258	
	Range		70	
	Interquartile Range		44	
	Skewness		1.523	.913
	Kurtosis		2.636	2.000
	Mean		215.20	10.442
Kelompok 4 Hari Ke 7	95% Confidence Interval for	Lower Bound	186.21	
	Mean	Upper Bound	244.19	
	5% Trimmed Mean		214.22	
	Median		213.00	
	Variance		545.200	
	Std. Deviation		23.350	
	Minimum		195	
	Maximum		253	
	Range		58	
	Interquartile Range		40	
	Skewness		1.301	.913
	Kurtosis		1.747	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 4 Hari Ke 1	.317	5	.111	.849	5	.190
Kelompok 4 Hari Ke 7	.252	5	.200*	.872	5	.276

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

a. Lilliefors Significance Correction

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus Kelompok 4	Hari Ke 1	5	212.20	27.481	12.290
	Hari Ke 7	5	215.20	23.350	10.442

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Berat Tikus Kelompok 4	Equal variances assumed	.039	.848	-.186	8	.857	-3.000	16.127	-40.189	34.189
	Equal variances not assumed			-.186	7.797	.857	-3.000	16.127	-40.358	34.358

Berat Tikus Kelompok 5

Uji Normalitas

Descriptives

			Statistic	Std. Error
Kelompok 5 Hari Ke 1	Mean		231.00	10.330
	95% Confidence Interval for Mean	Lower Bound	202.32	
		Upper Bound	259.68	
	5% Trimmed Mean		231.11	
	Median		239.00	
	Variance		533.500	
	Std. Deviation		23.098	
	Minimum		205	
	Maximum		255	
	Range		50	
	Interquartile Range		45	
	Skewness		-.355	.913
	Kurtosis		-2.922	2.000
	Mean		227.00	10.668
Kelompok 5 Hari Ke 7	95% Confidence Interval for Mean	Lower Bound	197.38	
		Upper Bound	256.62	
	5% Trimmed Mean		227.39	
	Median		236.00	
	Variance		569.000	
	Std. Deviation		23.854	
	Minimum		199	
	Maximum		248	
	Range		49	
	Interquartile Range		47	
	Skewness		-.456	.913
	Kurtosis		-3.019	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 5 Hari Ke 1	.240	5	.200 [*]	.862	5	.235
Kelompok 5 Hari Ke 7	.247	5	.200 [*]	.819	5	.116

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

a. Lilliefors Significance Correction

Uji Independent Sampel T-Test

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Berat Tikus Kelompok 5	Hari Ke 1	5	231.00	23.098	10.330
	Hari Ke 7	5	227.00	23.854	10.668

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Berat Tikus Kelompok 5	.031	.864	.269	8	.794	4.000	14.849	-30.242	38.242	
			.269	7.992	.794	4.000	14.849	-30.249	38.249	

Efek Antiinflamasi pada Semua Kelompok

Uji Normalitas

Descriptives			Statistic	Std. Error
Menit ke 15	Mean		2.1684	.07249
	95% Confidence Interval for	Lower Bound	2.0188	
	Mean	Upper Bound	2.3180	
	5% Trimmed Mean		2.1674	
	Median		2.1100	
	Variance		.131	
	Std. Deviation		.36244	
	Minimum		1.63	
	Maximum		2.71	
	Range		1.08	
	Interquartile Range		.62	
	Skewness		.102	.464
	Kurtosis		-1.397	.902
	Mean		2.2748	.06620
Menit Ke 30	95% Confidence Interval for	Lower Bound	2.1382	
	Mean	Upper Bound	2.4114	
	5% Trimmed Mean		2.2693	
	Median		2.2000	
	Variance		.110	
	Std. Deviation		.33098	
	Minimum		1.74	
	Maximum		2.92	
	Range		1.18	
	Interquartile Range		.50	
	Skewness		.397	.464
	Kurtosis		-.761	.902
	Mean		2.0328	.06762
	Menit Ke 60	95% Confidence Interval for	Lower Bound	1.8932
Mean		Upper Bound	2.1724	
5% Trimmed Mean			2.0378	
Median			1.9900	
Variance			.114	
Std. Deviation			.33811	

	Minimum		1.31	
	Maximum		2.64	
	Range		1.33	
	Interquartile Range		.40	
	Skewness		-.040	.464
	Kurtosis		-.217	.902
	Mean		2.0268	.07229
	95% Confidence Interval for	Lower Bound	1.8776	
	Mean	Upper Bound	2.1760	
	5% Trimmed Mean		2.0051	
	Median		1.9700	
	Variance		.131	
Menit Ke 90	Std. Deviation		.36144	
	Minimum		1.56	
	Maximum		2.94	
	Range		1.38	
	Interquartile Range		.41	
	Skewness		.926	.464
	Kurtosis		.364	.902

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Menit ke 15	.138	25	.200*	.921	25	.055
Menit Ke 30	.166	25	.075	.949	25	.233
Menit Ke 60	.124	25	.200*	.967	25	.563
Menit Ke 90	.147	25	.172	.920	25	.052

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

a. Lilliefors Significance Correction

Uji One Way Anova

Descriptives

Efek Antiinflamasi

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Menit ke 15	25	2.1684	.36244	.07249	2.0188	2.3180	1.63	2.71
Menit Ke 30	25	2.2748	.33098	.06620	2.1382	2.4114	1.74	2.92
Menit Ke 60	25	2.0328	.33811	.06762	1.8932	2.1724	1.31	2.64
Menit Ke 90	25	2.0268	.36144	.07229	1.8776	2.1760	1.56	2.94
Total	100	2.1257	.35849	.03585	2.0546	2.1968	1.31	2.94

Test of Homogeneity of Variances

Efek Antiinflamasi

Levene Statistic	df1	df2	Sig.
.395	3	96	.757

ANOVA

Efek Antiinflamasi

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.062	3	.354	2.913	.038
Within Groups	11.661	96	.121		
Total	12.723	99			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Efek Antiinflamasi

	(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD		Menit Ke 30	-.10640	.09858	.703	-.3641	.1513
	Menit ke 15	Menit Ke 60	.13560	.09858	.518	-.1221	.3933
		Menit Ke 90	.14160	.09858	.480	-.1161	.3993
		Menit ke 15	.10640	.09858	.703	-.1513	.3641
	Menit Ke 30	Menit Ke 60	.24200	.09858	.074	-.0157	.4997
		Menit Ke 90	.24800	.09858	.064	-.0097	.5057
		Menit ke 15	-.13560	.09858	.518	-.3933	.1221
	Menit Ke 60	Menit Ke 30	-.24200	.09858	.074	-.4997	.0157
		Menit Ke 90	.00600	.09858	1.000	-.2517	.2637
		Menit ke 15	-.14160	.09858	.480	-.3993	.1161
	Menit Ke 90	Menit Ke 30	-.24800	.09858	.064	-.5057	.0097
		Menit Ke 60	-.00600	.09858	1.000	-.2637	.2517
		Menit Ke 30	-.10640	.09858	.283	-.3021	.0893
		Menit ke 15	.13560	.09858	.172	-.0601	.3313
		Menit Ke 90	.14160	.09858	.154	-.0541	.3373
LSD		Menit ke 15	.10640	.09858	.283	-.0893	.3021
	Menit Ke 30	Menit Ke 60	.24200	.09858	.016	.0463	.4377
		Menit Ke 90	.24800*	.09858	.014	.0523	.4437
		Menit ke 15	-.13560	.09858	.172	-.3313	.0601
	Menit Ke 60	Menit Ke 30	-.24200*	.09858	.016	-.4377	-.0463
		Menit Ke 90	.00600	.09858	.952	-.1897	.2017
		Menit ke 15	-.14160	.09858	.154	-.3373	.0541
	Menit Ke 90	Menit Ke 30	-.24800*	.09858	.014	-.4437	-.0523
		Menit Ke 60	-.00600	.09858	.952	-.2017	.1897

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

Homogeneous Subsets

Efek Antiinflamasi			
	Kelompok	N	Subset for alpha = 0.05
			1
Tukey HSD ^a	Menit Ke 90	25	2.0268
	Menit Ke 60	25	2.0328
	Menit ke 15	25	2.1684
	Menit Ke 30	25	2.2748
	Sig.		.064

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 25.000.

Kelompok 1 Efek Antiinflamasi

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 1 Menit ke 15	Mean		2.1200	.16730
	95% Confidence Interval for Mean	Lower Bound	1.6555	
		Upper Bound	2.5845	
	5% Trimmed Mean		2.1206	
	Median		1.9700	
	Variance		.140	
	Std. Deviation		.37410	
	Minimum		1.70	
	Maximum		2.53	
	Range		.83	
	Interquartile Range		.72	
	Skewness		.284	.913
	Kurtosis		-2.698	2.000
	Mean		2.3360	.15664
Kelompok 1 Menit Ke 30	95% Confidence Interval for Mean	Lower Bound	1.9011	
		Upper Bound	2.7709	
	5% Trimmed Mean		2.3389	
	Median		2.3200	
	Variance		.123	
	Std. Deviation		.35026	
	Minimum		1.84	
	Maximum		2.78	
	Range		.94	
	Interquartile Range		.62	
	Skewness		-.289	.913
	Kurtosis		.365	2.000
	Mean		2.4360	.11919
	Kelompok 1 Menit Ke 60	95% Confidence Interval for Mean	Lower Bound	2.1051
		Upper Bound	2.7669	
5% Trimmed Mean			2.4506	
Median			2.5200	
Variance			.071	
Std. Deviation			.26651	

Kelompok 1 Menit Ke 90	Minimum		1.97	
	Maximum		2.64	
	Range		.67	
	Interquartile Range		.37	
	Skewness		-1.982	.913
	Kurtosis		4.186	2.000
	Mean		2.4920	.16092
	95% Confidence Interval for Mean	Lower Bound	2.0452	
		Upper Bound	2.9388	
	5% Trimmed Mean		2.4933	
	Median		2.6100	
	Variance		.129	
	Std. Deviation		.35982	
	Minimum		2.02	
	Maximum		2.94	
	Range		.92	
	Interquartile Range		.66	
	Skewness		-.219	.913
	Kurtosis		-.989	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 1 Menit ke 15	.256	5	.200 [*]	.866	5	.253
Kelompok 1 Menit Ke 30	.170	5	.200 [*]	.990	5	.981
Kelompok 1 Menit Ke 60	.380	5	.017	.752	5	.031
Kelompok 1 Menit Ke 90	.229	5	.200 [*]	.961	5	.817

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

a. Lilliefors Significance Correction

Uji Kruskal Wallis

Ranks

	Kelompok	N	Mean Rank
Kelompok 1	Menit ke 15	5	6.70
	Menit Ke 30	5	9.90
	Menit Ke 60	5	11.90
	Menit Ke 90	5	13.50
	Total	20	

Test Statistics^{a,b}

	Kelompok 1
Chi-Square	3.688
df	3
Asymp. Sig.	.297

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

Kelompok 2 Efek Antiinflamasi

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 2 Menit ke 15	Mean		2.2200	.18488
	95% Confidence Interval for Mean	Lower Bound	1.7067	
		Upper Bound	2.7333	
	5% Trimmed Mean		2.2256	
	Median		2.2500	
	Variance		.171	
	Std. Deviation		.41340	
	Minimum		1.71	
	Maximum		2.63	
	Range		.92	
	Interquartile Range		.82	
	Skewness		-.219	.913
	Kurtosis		-2.456	2.000
	Mean		2.3120	.20412
Kelompok 2 Menit Ke 30	95% Confidence Interval for Mean	Lower Bound	1.7453	
		Upper Bound	2.8787	
	5% Trimmed Mean		2.3178	
	Median		2.1600	
	Variance		.208	
	Std. Deviation		.45642	
	Minimum		1.74	
	Maximum		2.78	
	Range		1.04	
	Interquartile Range		.86	
	Skewness		.021	.913
	Kurtosis		-2.080	2.000
	Mean		1.9580	.22710
	Kelompok 2 Menit Ke 60	95% Confidence Interval for Mean	Lower Bound	1.3275
		Upper Bound	2.5885	
5% Trimmed Mean			1.9683	
Median			2.1500	
Variance			.258	
Std. Deviation			.50781	

Kelompok 2 Menit Ke 90	Minimum		1.31	
	Maximum		2.42	
	Range		1.11	
	Interquartile Range		.98	
	Skewness		-.540	.913
	Kurtosis		-2.577	2.000
	Mean		1.9840	.10361
	95% Confidence Interval for Mean	Lower Bound	1.6963	
		Upper Bound	2.2717	
	5% Trimmed Mean		1.9956	
	Median		2.0900	
	Variance		.054	
	Std. Deviation		.23169	
	Minimum		1.59	
	Maximum		2.17	
	Range		.58	
	Interquartile Range		.36	
	Skewness		-1.741	.913
	Kurtosis		3.106	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 2 Menit ke 15	.227	5	.200 [*]	.896	5	.391
Kelompok 2 Menit Ke 30	.247	5	.200 [*]	.878	5	.300
Kelompok 2 Menit Ke 60	.247	5	.200 [*]	.862	5	.235
Kelompok 2 Menit Ke 90	.276	5	.200 [*]	.809	5	.096

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

a. Lilliefors Significance Correction

Uji One Way Anova

Descriptives

Kelompok 2

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Menit ke 15	5	2.2200	.41340	.18488	1.7067	2.7333	1.71	2.63
Menit Ke 30	5	2.3120	.45642	.20412	1.7453	2.8787	1.74	2.78
Menit Ke 60	5	1.9580	.50781	.22710	1.3275	2.5885	1.31	2.42
Menit Ke 90	5	1.9840	.23169	.10361	1.6963	2.2717	1.59	2.17
Total	20	2.1185	.41174	.09207	1.9258	2.3112	1.31	2.78

Test of Homogeneity of Variances

Kelompok 2

Levene Statistic	df1	df2	Sig.
2.348	3	16	.111

ANOVA

Kelompok 2

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.458	3	.153	.884	.470
Within Groups	2.763	16	.173		
Total	3.221	19			

Kelompok 3 Efek Antiinflamasi

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 3 Menit ke 15	Mean		2.2080	.18203
	95% Confidence Interval for Mean	Lower Bound	1.7026	
		Upper Bound	2.7134	
	5% Trimmed Mean		2.2083	
	Median		2.3000	
	Variance		.166	
	Std. Deviation		.40703	
	Minimum		1.70	
	Maximum		2.71	
	Range		1.01	
	Interquartile Range		.77	
	Skewness		-.136	.913
	Kurtosis		-1.551	2.000
	Mean		2.3480	.15702
Kelompok 3 Menit Ke 30	95% Confidence Interval for Mean	Lower Bound	1.9121	
		Upper Bound	2.7839	
	5% Trimmed Mean		2.3356	
	Median		2.2100	
	Variance		.123	
	Std. Deviation		.35110	
	Minimum		2.00	
	Maximum		2.92	
	Range		.92	
	Interquartile Range		.57	
	Skewness		1.342	.913
	Kurtosis		2.083	2.000
	Mean		2.0020	.04017
	Kelompok 3 Menit Ke 60	95% Confidence Interval for Mean	Lower Bound	1.8905
		Upper Bound	2.1135	
5% Trimmed Mean			2.0022	
Median			1.9900	
Variance			.008	
Std. Deviation			.08983	

Kelompok 3 Menit Ke 90	Minimum		1.88	
	Maximum		2.12	
	Range		.24	
	Interquartile Range		.16	
	Skewness		-.056	.913
	Kurtosis		.096	2.000
	Mean		2.0620	.13264
	95% Confidence Interval for Mean	Lower Bound	1.6937	
		Upper Bound	2.4303	
	5% Trimmed Mean		2.0500	
	Median		1.9900	
	Variance		.088	
	Std. Deviation		.29660	
	Minimum		1.79	
	Maximum		2.55	
	Range		.76	
	Interquartile Range		.49	
	Skewness		1.433	.913
	Kurtosis		2.227	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 3 Menit ke 15	.189	5	.200 [*]	.964	5	.835
Kelompok 3 Menit Ke 30	.253	5	.200 [*]	.889	5	.353
Kelompok 3 Menit Ke 60	.161	5	.200 [*]	.991	5	.982
Kelompok 3 Menit Ke 90	.249	5	.200 [*]	.886	5	.335

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

a. Lilliefors Significance Correction

Uji One Way Anova

Descriptives

Kelompok 3

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Menit ke 15	5	2.2080	.40703	.18203	1.7026	2.7134	1.70	2.71
Menit Ke 30	5	2.3480	.35110	.15702	1.9121	2.7839	2.00	2.92
Menit Ke 60	5	2.0020	.08983	.04017	1.8905	2.1135	1.88	2.12
Menit Ke 90	5	2.0620	.29660	.13264	1.6937	2.4303	1.79	2.55
Total	20	2.1550	.31627	.07072	2.0070	2.3030	1.70	2.92

Test of Homogeneity of Variances

Kelompok 3

Levene Statistic	df1	df2	Sig.
2.171	3	16	.131

ANOVA

Kelompok 3

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.361	3	.120	1.249	.325
Within Groups	1.540	16	.096		
Total	1.901	19			

Kelompok 4 Efek Antiinflamasi

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 4 Menit ke 15	Mean		2.0620	.18824
	95% Confidence Interval for Mean	Lower Bound	1.5394	
		Upper Bound	2.5846	
	5% Trimmed Mean		2.0522	
	Median		2.1100	
	Variance		.177	
	Std. Deviation		.42092	
	Minimum		1.63	
	Maximum		2.67	
	Range		1.04	
	Interquartile Range		.77	
	Skewness		.556	.913
	Kurtosis		-.473	2.000
	Mean		2.1960	.17611
Kelompok 4 Menit Ke 30	95% Confidence Interval for Mean	Lower Bound	1.7070	
		Upper Bound	2.6850	
	5% Trimmed Mean		2.1922	
	Median		2.0200	
	Variance		.155	
	Std. Deviation		.39380	
	Minimum		1.82	
	Maximum		2.64	
	Range		.82	
	Interquartile Range		.76	
	Skewness		.470	.913
	Kurtosis		-3.108	2.000
	Mean		1.8400	.11194
	Kelompok 4 Menit Ke 60	95% Confidence Interval for Mean	Lower Bound	1.5292
		Upper Bound	2.1508	
5% Trimmed Mean			1.8439	
Median			1.8600	
Variance			.063	
Std. Deviation			.25030	

Kelompok 4 Menit Ke 90	Minimum		1.52	
	Maximum		2.09	
	Range		.57	
	Interquartile Range		.49	
	Skewness		-.287	.913
	Kurtosis		-2.191	2.000
	Mean		1.9120	.10832
	95% Confidence Interval for Mean	Lower Bound	1.6112	
		Upper Bound	2.2128	
	5% Trimmed Mean		1.8978	
	Median		1.8300	
	Variance		.059	
	Std. Deviation		.24222	
	Minimum		1.74	
	Maximum		2.34	
	Range		.60	
	Interquartile Range		.31	
	Skewness		2.094	.913
	Kurtosis		4.562	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 4 Menit ke 15	.205	5	.200*	.930	5	.597
Kelompok 4 Menit Ke 30	.273	5	.200*	.822	5	.120
Kelompok 4 Menit Ke 60	.221	5	.200*	.911	5	.474
Kelompok 4 Menit Ke 90	.433	5	.003	.686	5	.007

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

a. Lilliefors Significance Correction

Uji Kruskal Wallis

Ranks

	Kelompok	N	Mean Rank
Kelompok 4	Menit ke 15	5	11.40
	Menit Ke 30	5	13.30
	Menit Ke 60	5	8.20
	Menit Ke 90	5	9.10
	Total	20	

Test Statistics^{a,b}

	Kelompok 4
Chi-Square	2.275
df	3
Asymp. Sig.	.517

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

Kelompok 5 Efek Antiinflamasi

Uji Normalitas

Descriptives			Statistic	Std. Error
Kelompok 5 Menit ke 15	Mean		2.2320	.14634
	95% Confidence Interval for Mean	Lower Bound	1.8257	
		Upper Bound	2.6383	
	5% Trimmed Mean		2.2206	
	Median		2.0800	
	Variance		.107	
	Std. Deviation		.32722	
	Minimum		1.96	
	Maximum		2.71	
	Range		.75	
	Interquartile Range		.60	
	Skewness		.920	.913
	Kurtosis		-1.045	2.000
	Mean		2.1820	.05713
Kelompok 5 Menit Ke 30	95% Confidence Interval for Mean	Lower Bound	2.0234	
		Upper Bound	2.3406	
	5% Trimmed Mean		2.1733	
	Median		2.1300	
	Variance		.016	
	Std. Deviation		.12775	
	Minimum		2.11	
	Maximum		2.41	
	Range		.30	
	Interquartile Range		.15	
	Skewness		2.210	.913
	Kurtosis		4.912	2.000
	Mean		1.9280	.05426
	Kelompok 5 Menit Ke 60	95% Confidence Interval for Mean	Lower Bound	1.7774
		Upper Bound	2.0786	
5% Trimmed Mean			1.9233	
Median			1.9000	
Variance			.015	
Std. Deviation			.12133	

Kelompok 5 Menit Ke 90	Minimum		1.81	
	Maximum		2.13	
	Range		.32	
	Interquartile Range		.19	
	Skewness		1.489	.913
	Kurtosis		2.792	2.000
	Mean		1.6840	.05715
	95% Confidence Interval for Mean	Lower Bound	1.5253	
		Upper Bound	1.8427	
	5% Trimmed Mean		1.6828	
	Median		1.6400	
	Variance		.016	
	Std. Deviation		.12779	
	Minimum		1.56	
	Maximum		1.83	
	Range		.27	
	Interquartile Range		.25	
	Skewness		.399	.913
	Kurtosis		-3.015	2.000

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelompok 5 Menit ke 15	.279	5	.200 [*]	.861	5	.230
Kelompok 5 Menit Ke 30	.458	5	.001	.609	5	.001
Kelompok 5 Menit Ke 60	.293	5	.184	.876	5	.293
Kelompok 5 Menit Ke 90	.238	5	.200 [*]	.845	5	.180

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

a. Lilliefors Significance Correction

Uji Kruskal Wallis

Ranks			
	Kelompok	N	Mean Rank
Kelompok 5	Menit ke 15	5	14.40
	Menit Ke 30	5	15.50
	Menit Ke 60	5	8.80
	Menit Ke 90	5	3.30
	Total	20	

Test Statistics ^{a,b}	
	Kelompok 5
Chi-Square	13.676
df	3
Asymp. Sig.	.003

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok