


LAMPIRAN-LAMPIRAN

1. Surat Lolos Uji Etik



Fakultas Kedokteran dan Ilmu Kesehatan
Universitas Muhammadiyah Yogyakarta

Nomor : 246/EP-FKIK-UMY/IV/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 :

"Potensi Insulin Mimik Infusa Kayu Manis (*Cinnamomum burmanii*) Terhadap Penghambatan Kadar TNF- α Pada Tikus Diabetes Strain *Sprague Dawley*"


Peneliti Utama : Citra Ayuma Rupamiza
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, 25 April 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 dan *informed consent*

Kampus:
Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta 55183
Telp. (0274) 387656 ext. 213, 7491380 Fax. (0274) 387658

Muda mendunia

2. Hasil Uji Statistik

2.1 Uji statistic gula darah sebelum, sesudah induksi Steptozotocin dan setelah pemberian terapi

Descriptives

Kelompok		Statistic	Std. Error	
glukosa_pre_ normal stz	Mean	64.9160	.72435	
	95% Confidence Interval for Mean	Lower Bound	62.9049	
		Upper Bound	66.9271	
	5% Trimmed Mean	64.9272		
	Median	64.9800		
	Variance	2.623		
	Std. Deviation	1.61970		
	Minimum	62.63		
	Maximum	67.00		
	Range	4.37		
	Interquartile Range	2.86		
	Skewness	-.265	.913	
	Kurtosis	.466	2.000	
	dm	Mean	66.4660	.77150
95% Confidence Interval for Mean		Lower Bound	64.3240	
		Upper Bound	68.6080	
5% Trimmed Mean		66.5372		
Median		66.6700		
Variance		2.976		
Std. Deviation		1.72512		
Minimum		63.64		
Maximum		68.01		
Range		4.37		

	Interquartile Range		2.86	
	Skewness		-1.387	.913
	Kurtosis		2.111	2.000
glibenkl amid	Mean		67.2740	1.500 54
	95% Confidence Interval for Mean	Lower Bound	63.1078	
		Upper Bound	71.4402	
	5% Trimmed Mean		67.3789	
	Median		67.6800	
	Variance		11.258	
	Std. Deviation		3.35530	
	Minimum		61.95	
	Maximum		70.71	
	Range		8.76	
	Interquartile Range		5.72	
	Skewness		-1.119	.913
	Kurtosis		1.487	2.000
dosis 300	Mean		65.9280	.6682 3
	95% Confidence Interval for Mean	Lower Bound	64.0727	
		Upper Bound	67.7833	
	5% Trimmed Mean		65.9578	
	Median		65.9900	
	Variance		2.233	
	Std. Deviation		1.49421	
	Minimum		63.64	
	Maximum		67.68	
	Range		4.04	
	Interquartile Range		2.53	
	Skewness		-.776	.913
	Kurtosis		1.312	2.000

dosis 150	Mean		66.4660	.6254 5
	95% Confidence Interval for Mean	Lower Bound	64.7295	
		Upper Bound	68.2025	
	5% Trimmed Mean		66.4811	
	Median		66.3300	
	Variance		1.956	
	Std. Deviation		1.39855	
	Minimum		64.65	
	Maximum		68.01	
	Range		3.36	
	Interquartile Range		2.69	
	Skewness		-.159	.913
	Kurtosis		-1.742	2.000
	glukosa_post normal STZ_sebelum _terapi	Mean		65.5600
95% Confidence Interval for Mean		Lower Bound	63.1177	
		Upper Bound	68.0023	
5% Trimmed Mean			65.5600	
Median			65.5600	
Variance			3.869	
Std. Deviation			1.96694	
Minimum			63.07	
Maximum			68.05	
Range			4.98	
Interquartile Range			3.73	
Skewness			.000	.913
Kurtosis			-1.185	2.000
dm		Mean		2.2872E2
	95% Confidence Interval for Mean	Lower Bound	2.2512E2	
		Upper Bound	2.3231E2	
	5% Trimmed Mean		2.2877E2	

	Median		2.2946E2	
	Variance		8.379	
	Std. Deviation		2.89473	
	Minimum		224.90	
	Maximum		231.54	
	Range		6.64	
	Interquartile Range		5.60	
	Skewness		-.494	.913
	Kurtosis		-2.108	2.000
<hr/>				
glibenkl amid	Mean		2.2930E2	1.773 18
	95% Confidence Interval for Mean	Lower Bound	2.2437E2	
		Upper Bound	2.3422E2	
	5% Trimmed Mean		2.2937E2	
	Median		2.3112E2	
	Variance		15.721	
	Std. Deviation		3.96495	
	Minimum		224.07	
	Maximum		233.20	
	Range		9.13	
	Interquartile Range		7.47	
	Skewness		-.601	.913
	Kurtosis		-2.244	2.000
<hr/>				
dosis 300	Mean		2.3013E2	1.178 09
	95% Confidence Interval for Mean	Lower Bound	2.2686E2	
		Upper Bound	2.3340E2	
	5% Trimmed Mean		2.3020E2	
	Median		2.3071E2	
	Variance		6.939	
	Std. Deviation		2.63428	
	Minimum		226.14	
	Maximum		232.78	

	Range		6.64	
	Interquartile Range		4.77	
	Skewness		-.903	.913
	Kurtosis		.166	2.000
dosis 150	Mean		2.2797E2	.5958 5
	95% Confidence Interval for Mean	Lower Bound	2.2631E2	
		Upper Bound	2.2962E2	
	5% Trimmed Mean		2.2799E2	
	Median		2.2780E2	
	Variance		1.775	
	Std. Deviation		1.33236	
	Minimum		226.14	
	Maximum		229.46	
	Range		3.32	
	Interquartile Range		2.49	
	Skewness		-.303	.913
	Kurtosis		-1.017	2.000
glukosa_1mi nggu	Mean		66.1660	.9206 0
	95% Confidence Interval for Mean	Lower Bound	63.6100	
		Upper Bound	68.7220	
	5% Trimmed Mean		66.1244	
	Median		66.1700	
	Variance		4.238	
	Std. Deviation		2.05853	
	Minimum		63.91	
	Maximum		69.17	
	Range		5.26	
	Interquartile Range		3.76	
	Skewness		.604	.913
	Kurtosis		-.148	2.000
dm	Mean		2.2993E2	.8188 9

	95% Confidence Interval for Mean	Lower Bound	2.2765E2	
		Upper Bound	2.3220E2	
	5% Trimmed Mean		2.2989E2	
	Median		2.2970E2	
	Variance		3.353	
	Std. Deviation		1.83109	
	Minimum		228.20	
	Maximum		232.33	
	Range		4.13	
	Interquartile Range		3.56	
	Skewness		.385	.913
	Kurtosis		-2.019	2.000
<hr/>				
glibenkl amid	Mean		1.4166E2	1.720 12
	95% Confidence Interval for Mean	Lower Bound	1.3688E2	
		Upper Bound	1.4643E2	
	5% Trimmed Mean		1.4163E2	
	Median		1.4286E2	
	Variance		14.794	
	Std. Deviation		3.84630	
	Minimum		137.22	
	Maximum		146.62	
	Range		9.40	
	Interquartile Range		7.14	
	Skewness		.033	.913
	Kurtosis		-1.591	2.000
<hr/>				
dosis 300	Mean		1.6556E2	1.079 36
	95% Confidence Interval for Mean	Lower Bound	1.6257E2	
		Upper Bound	1.6856E2	
	5% Trimmed Mean		1.6554E2	
	Median		1.6541E2	
	Variance		5.825	

	Std. Deviation		2.41352	
	Minimum		162.41	
	Maximum		169.17	
	Range		6.76	
	Interquartile Range		3.75	
	Skewness		.456	.913
	Kurtosis		1.877	2.000
dosis 150	Mean		1.7932E2	.7223 7
	95% Confidence Interval for Mean	Lower Bound	1.7732E2	
		Upper Bound	1.8133E2	
	5% Trimmed Mean		1.7934E2	
	Median		1.7932E2	
	Variance		2.609	
	Std. Deviation		1.61526	
	Minimum		177.07	
	Maximum		181.20	
	Range		4.13	
	Interquartile Range		3.00	
	Skewness		-.374	.913
	Kurtosis		-.637	2.000
glukosa_2mi normal nggu	Mean		66.5680	.9127 5
	95% Confidence Interval for Mean	Lower Bound	64.0338	
		Upper Bound	69.1022	
	5% Trimmed Mean		66.5439	
	Median		66.0600	
	Variance		4.166	
	Std. Deviation		2.04097	
	Minimum		64.23	
	Maximum		69.34	
	Range		5.11	
	Interquartile Range		3.83	

	Skewness		.429	.913
	Kurtosis		-1.207	2.000
dm	Mean		2.3101E2	.7674 6
	95% Confidence Interval for Mean	Lower Bound	2.2888E2	
		Upper Bound	2.3314E2	
	5% Trimmed Mean		2.3097E2	
	Median		2.3058E2	
	Variance		2.945	
	Std. Deviation		1.71609	
	Minimum		229.20	
	Maximum		233.58	
	Range		4.38	
	Interquartile Range		3.10	
	Skewness		.839	.913
	Kurtosis		.090	2.000
glibenkl amid	Mean		1.0876E2	1.460 00
	95% Confidence Interval for Mean	Lower Bound	1.0471E2	
		Upper Bound	1.1281E2	
	5% Trimmed Mean		1.0876E2	
	Median		1.0876E2	
	Variance		10.658	
	Std. Deviation		3.26466	
	Minimum		104.38	
	Maximum		113.14	
	Range		8.76	
	Interquartile Range		5.84	
	Skewness		.000	.913
	Kurtosis		.200	2.000
dosis 300	Mean		1.2029E2	2.017 76
	95% Confidence Interval for Mean	Lower Bound	1.1469E2	
		Upper Bound	1.2590E2	

	5% Trimmed Mean		1.2012E2	
	Median		1.1971E2	
	Variance		20.357	
	Std. Deviation		4.51185	
	Minimum		116.06	
	Maximum		127.74	
	Range		11.68	
	Interquartile Range		7.30	
	Skewness		1.431	.913
	Kurtosis		2.421	2.000
dosis 150	Mean		1.4730E2	.8905 1
	95% Confidence Interval for Mean	Lower Bound	1.4483E2	
		Upper Bound	1.4977E2	
	5% Trimmed Mean		1.4726E2	
	Median		1.4708E2	
	Variance		3.965	
	Std. Deviation		1.99123	
	Minimum		145.26	
	Maximum		150.00	
	Range		4.74	
	Interquartile Range		3.83	
	Skewness		.441	.913
	Kurtosis		-1.576	2.000

Tests of Normality

kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
glukosa_pre_st z	normal	.154	5	.200*	.994	5 .993
	dm	.269	5	.200*	.877	5 .294
	glibenklamid	.229	5	.200*	.930	5 .596
	dosis 300	.229	5	.200*	.961	5 .812
	dosis 150	.207	5	.200*	.946	5 .710
glukosa_postS TZ_sebelum_t erapi	normal	.136	5	.200*	.987	5 .969
	dm	.201	5	.200*	.907	5 .450
	glibenklamid	.277	5	.200*	.887	5 .345
	dosis 300	.188	5	.200*	.942	5 .679
	dosis 150	.192	5	.200*	.957	5 .789
glukosa_1ming gu	normal	.168	5	.200*	.964	5 .833
	dm	.227	5	.200*	.897	5 .395
	glibenklamid	.223	5	.200*	.932	5 .608
	dosis 300	.263	5	.200*	.938	5 .649
	dosis 150	.158	5	.200*	.980	5 .937
glukosa_2ming gu	normal	.198	5	.200*	.966	5 .848
	dm	.198	5	.200*	.953	5 .758
	glibenklamid	.127	5	.200*	.999	5 1.00 0
	dosis 300	.287	5	.200*	.881	5 .312
	dosis 150	.201	5	.200*	.937	5 .645

a. Lilliefors Significance
Correction

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

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
glukosa_pre_stz	1.026	4	20	.418
glukosa_postSTZ_sebelum_terapi	3.157	4	20	.036
glukosa_1minggu	1.680	4	20	.194
glukosa_2minggu	.809	4	20	.534

ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
glukosa_pre_stz	15.086	4	3.771	.896	.485
z					
Between Groups					
Within Groups	84.184	20	4.209		
Total	99.270	24			
glukosa_postSTZ_sebelum_terapi	106897.678	4	26724.420	3.643E3	.000
Between Groups					
Within Groups	146.735	20	7.337		
Total	107044.413	24			
glukosa_1minggu	71874.748	4	17968.687	2.915E3	.000
Between Groups					
Within Groups	123.274	20	6.164		
Total	71998.022	24			
glukosa_2minggu	74781.699	4	18695.425	2.221E3	.000
Between Groups					
Within Groups	168.361	20	8.418		
Total	74950.060	24			

POST HOC

Multiple Comparisons

Tamhane

Dependent Variable	(I) kelompok	(J) kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
glukosa_postS TZ_sebelum_t erapi	normal	dm	163.1560 0*	1.5651 4	.000	169.4181	156.8939
		glibenklamid	163.7360 0*	1.9793 8	.000	172.3418	155.1302
		dosis 300	164.5660 0*	1.4702 6	.000	170.3362	158.7958
		dosis 150	162.4080 0*	1.0624 5	.000	166.6619	158.1541
	dm	normal	163.1560 0*	1.5651 4	.000	156.8939	169.4181
		glibenklamid	-.58000	2.1954 6	1.000	-9.2328	8.0728
		dosis 300	-1.41000	1.7503 7	.997	-8.1104	5.2904
		dosis 150	.74800	1.4251 1	1.000	-5.5800	7.0760
	glibenklamid	normal	163.7360 0*	1.9793 8	.000	155.1302	172.3418
		dm	.58000	2.1954 6	1.000	-8.0728	9.2328
		dosis 300	-.83000	2.1288 6	1.000	-9.3915	7.7315
		dosis 150	1.32800	1.8706 1	.999	-7.6741	10.3301
	dosis 300	normal	164.5660 0*	1.4702 6	.000	158.7958	170.3362

	dm	1.41000	1.75037	.997	-5.2904	8.1104
	glibenklamid	.83000	2.12886	1.000	-7.7315	9.3915
	dosis 150	2.15800	1.32020	.812	-3.5505	7.8665
dosis 150	normal	162.40800*	1.06245	.000	158.1541	166.6619
	dm	-.74800	1.42511	1.000	-7.0760	5.5800
	glibenklamid	-1.32800	1.87061	.999	-10.3301	7.6741
	dosis 300	-2.15800	1.32020	.812	-7.8665	3.5505
glukosa_1min ggu	normal dm	-163.76000*	1.23210	.000	-168.4842	-159.0358
	glibenklamid	-75.49000*	1.95098	.000	-83.7928	-67.1872
	dosis 300	-99.39800*	1.41863	.000	-104.8587	-93.9373
	dosis 150	-113.15600*	1.17018	.000	-117.7100	-108.6020
dm	normal	163.76000*	1.23210	.000	159.0358	168.4842
	glibenklamid	88.27000*	1.90509	.000	79.8904	96.6496
	dosis 300	64.36200*	1.35484	.000	59.0599	69.6641
	dosis 150	50.60400*	1.09197	.000	46.4143	54.7937
glibenklamid	normal	75.49000*	1.95098	.000	67.1872	83.7928

	dm	- 88.27000 *	- 1.9050 9	.000	-96.6496	- 79.8904
	dosis 300	- 23.90800 *	- 2.0307 2	.000	-32.1889	- 15.6271
	dosis 150	- 37.66600 *	- 1.8656 4	.000	-46.1612	- 29.1708
dosis 300	normal	- 99.39800 *	- 1.4186 3	.000	93.9373	- 104.858 7
	dm	- 64.36200 *	- 1.3548 4	.000	-69.6641	- 59.0599
	glibenkl amid	- 23.90800 *	- 2.0307 2	.000	15.6271	- 32.1889
	dosis 150	- 13.75800 *	- 1.2987 8	.000	-18.9724	- -8.5436
dosis 150	normal	- 113.1560 0*	- 1.1701 8	.000	108.6020	- 117.710 0
	dm	- 50.60400 *	- 1.0919 7	.000	-54.7937	- 46.4143
	glibenkl amid	- 37.66600 *	- 1.8656 4	.000	29.1708	- 46.1612
	dosis 300	- 13.75800 *	- 1.2987 8	.000	8.5436	- 18.9724
glukosa_2min ggu	normal	- 164.4400 0*	- 1.1925 2	.000	- 169.0376	- 159.842 4
	glibenkl amid	- 42.19200 *	- 1.7218 3	.000	-49.2199	- 35.1641
	dosis 300	- 53.72600 *	- 2.2146 0	.000	-63.6072	- 43.8448

	dosis 150	- 80.73200 *	1.2751 9	.000	-85.5996	- 75.8644
dm	normal	164.4400 0*	1.1925 2	.000	159.8424	169.037 6
	glibenkl amid	122.2480 0*	1.6494 2	.000	115.1930	129.303 0
	dosis 300	110.7140 0*	2.1587 8	.000	100.6271	120.800 9
	dosis 150	83.70800 *	1.1755 8	.000	79.1878	88.2282
glibenkla mid	normal	42.19200 *	1.7218 3	.000	35.1641	49.2199
	dm	- 122.2480 0*	- 1.6494 2	- .000	- 129.3030	- 115.193 0
	dosis 300	- 11.53400 *	- 2.4905 7	- .021	-21.3671	-1.7009
	dosis 150	- 38.54000 *	- 1.7101 5	- .000	-45.5644	- 31.5156
dosis 300	normal	53.72600 *	2.2146 0	.000	43.8448	63.6072
	dm	- 110.7140 0*	- 2.1587 8	- .000	- 120.8009	- 100.627 1
	glibenkl amid	11.53400 *	2.4905 7	.021	1.7009	21.3671
	dosis 150	- 27.00600 *	- 2.2055 3	- .000	-36.9141	- 17.0979
dosis 150	normal	80.73200 *	1.2751 9	.000	75.8644	85.5996
	dm	- 83.70800 *	- 1.1755 8	- .000	-88.2282	- 79.1878

	glibenkl amid	38.54000 *	1.7101 5	.000	31.5156	45.5644
	dosis 300	27.00600 *	2.2055 3	.000	17.0979	36.9141

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

2.2 Uji Uji statistik TNF α sebelum,dan setelah pemberian terapi

Descriptives

Kelompok			Statistic	Std. Error
P1	Normal	Mean	2.3280E2	12.99769
		95% Confidence Interval for Mean	1.9671E2	
		Upper Bound	2.6889E2	
		5% Trimmed Mean	2.3172E2	
		Median	2.2500E2	
		Variance	844.700	
		Std. Deviation	2.90637E1	
		Minimum	204.00	
		Maximum	281.00	
		Range	77.00	
		Interquartile Range	45.50	
		Skewness	1.451	.913
		Kurtosis	2.714	2.000
Diabetes Melitus		Mean	3.6080E2	80.83959
		95% Confidence Interval for Mean	1.3635E2	
		Upper Bound	5.8525E2	
		5% Trimmed Mean	3.5756E2	
		Median	3.2800E2	
		Variance	3.268E4	
		Std. Deviation	1.80763E2	

	Minimum	140.00	
	Maximum	640.00	
	Range	500.00	
	Interquartile Range	286.00	
	Skewness	.766	.913
	Kurtosis	1.905	2.000
Glibenklamid	Mean	2.9040E2	12.52438
	95% Confidence Lower Bound Interval for Mean	2.5563E2	
	Upper Bound	3.2517E2	
	5% Trimmed Mean	2.8994E2	
	Median	2.8600E2	
	Variance	784.300	
	Std. Deviation	2.80054E1	
	Minimum	256.00	
	Maximum	333.00	
	Range	77.00	
	Interquartile Range	46.00	
	Skewness	.680	.913
	Kurtosis	1.557	2.000
Kayu Manis dosis 300mg/KgBB	Mean	2.8420E2	16.86238
	95% Confidence Lower Bound Interval for Mean	2.3738E2	
	Upper Bound	3.3102E2	
	5% Trimmed Mean	2.8311E2	
	Median	2.7100E2	
	Variance	1.422E3	
	Std. Deviation	3.77054E1	
	Minimum	249.00	
	Maximum	339.00	
	Range	90.00	

		Interquartile Range	70.00	
		Skewness	.828	.913
		Kurtosis	-.924	2.000
Kayu Manis dosis150mg/ KgBB		Mean	3.0340E2	51.3883 3
		95% Confidence Lower Bound Interval for Upper Bound Mean	1.6072E2 4.4608E2	
		5% Trimmed Mean	2.9622E2	
		Median	2.4400E2	
		Variance	1.320E4	
		Std. Deviation	1.14908E2	
		Minimum	232.00	
		Maximum	504.00	
		Range	272.00	
		Interquartile Range	163.50	
		Skewness	1.992	.913
		Kurtosis	3.994	2.000
P2	Normal	Mean	2.0440E2	12.5004 0
		95% Confidence Lower Bound Interval for Upper Bound Mean	1.6969E2 2.3911E2	
		5% Trimmed Mean	2.0306E2	
		Median	1.8800E2	
		Variance	781.300	
		Std. Deviation	2.79517E1	
		Minimum	184.00	
		Maximum	249.00	
		Range	65.00	
		Interquartile Range	47.00	
		Skewness	1.350	.913
		Kurtosis	.866	2.000

Diabetes Melitus	Mean	2.2680E2	35.5645 9
	95% Confidence Lower Bound Interval for	1.2806E2	
	Upper Bound Mean	3.2554E2	
	5% Trimmed Mean	2.2200E2	
	Median	1.9300E2	
	Variance	6.324E3	
	Std. Deviation	7.95248E1	
	Minimum	173.00	
	Maximum	367.00	
	Range	194.00	
	Interquartile Range	107.50	
	Skewness	2.078	.913
	Kurtosis	4.437	2.000
	Glibenklamid	Mean	1.9740E2
95% Confidence Lower Bound Interval for		1.7581E2	
Upper Bound Mean		2.1899E2	
5% Trimmed Mean		1.9761E2	
Median		1.9700E2	
Variance		302.300	
Std. Deviation		1.73868E1	
Minimum		173.00	
Maximum		218.00	
Range		45.00	
Interquartile Range		32.00	
Skewness		-.367	.913
Kurtosis		-.400	2.000
Kayu Manis dosis 300mg/KgBB		Mean	2.0360E2
	95% Confidence Lower Bound Interval for	1.7974E2	
	Upper Bound Mean	2.2746E2	
	5% Trimmed Mean	2.0289E2	

		Median	1.9300E2	
		Variance	369.300	
		Std. Deviation	1.92172E1	
		Minimum	188.00	
		Maximum	232.00	
		Range	44.00	
		Interquartile Range	34.50	
		Skewness	.991	.913
		Kurtosis	-.911	2.000
Kayu Manis dosis150mg/ KgBB		Mean	2.1220E2	10.3266 6
		95% Confidence Lower Bound Interval for Mean	1.8353E2	
		Upper Bound	2.4087E2	
		5% Trimmed Mean	2.1267E2	
		Median	2.1100E2	
		Variance	533.200	
		Std. Deviation	2.30911E1	
		Minimum	177.00	
		Maximum	239.00	
		Range	62.00	
		Interquartile Range	39.00	
		Skewness	-.755	.913
		Kurtosis	1.137	2.000
P3	Normal	Mean	4.8660E2	1.11932 E2
		95% Confidence Lower Bound Interval for Mean	1.7583E2	
		Upper Bound	7.9737E2	
		5% Trimmed Mean	4.8061E2	
		Median	4.5100E2	
		Variance	6.264E4	
		Std. Deviation	2.50288E2	
		Minimum	206.00	

	Maximum	875.00	
	Range	669.00	
	Interquartile Range	427.00	
	Skewness	.917	.913
	Kurtosis	1.314	2.000
Diabetes Melitus	Mean	7.3680E2	2.00436 E2
	95% Confidence Lower Bound Interval for Upper Bound Mean	1.8030E2 1.2933E3	
	5% Trimmed Mean	7.1806E2	
	Median	5.6500E2	
	Variance	2.009E5	
	Std. Deviation	4.48189E2	
	Minimum	329.00	
	Maximum	1482.00	
	Range	1153.00	
	Interquartile Range	715.50	
	Skewness	1.528	.913
	Kurtosis	2.512	2.000
Glibenklamid	Mean	1.1058E3	1.06006 E2
	95% Confidence Lower Bound Interval for Upper Bound Mean	8.1148E2 1.4001E3	
	5% Trimmed Mean	1.1034E3	
	Median	1.0660E3	
	Variance	5.619E4	
	Std. Deviation	2.37036E2	
	Minimum	825.00	
	Maximum	1430.00	
	Range	605.00	
	Interquartile Range	442.50	
	Skewness	.365	.913

	Kurtosis	-.859	2.000
Kayu Manis dosis 300mg/KgBB	Mean	3.1120E2	37.14081
	95% Confidence Interval for Mean	2.0808E2	
	Lower Bound	4.1432E2	
	Upper Bound	3.0856E2	
	5% Trimmed Mean	2.9600E2	
	Median	6.897E3	
	Variance	8.30494E1	
	Std. Deviation	222.00	
	Minimum	448.00	
	Maximum	226.00	
	Range	122.00	
	Interquartile Range	1.332	.913
	Skewness	2.878	2.000
	Kurtosis		
Kayu Manis dosis 150mg/KgBB	Mean	5.0460E2	1.01433E2
	95% Confidence Interval for Mean	2.2298E2	
	Lower Bound	7.8622E2	
	Upper Bound	5.0606E2	
	5% Trimmed Mean	4.2600E2	
	Median	5.144E4	
	Variance	2.26811E2	
	Std. Deviation	239.00	
	Minimum	744.00	
	Maximum	505.00	
	Range	434.50	
	Interquartile Range	.186	.913
	Skewness	-2.521	2.000
	Kurtosis		

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
P1	Normal	.284	5	.200*	.881	5	.313
	Diabetes Melitus	.249	5	.200*	.936	5	.635
	Glibenklamid	.221	5	.200*	.957	5	.788
	Kayu Manis dosis 300mg/KgBB	.237	5	.200*	.909	5	.460
	Kayu Manis dosis150mg/KgB B	.326	5	.089	.713	5	.013
P2	Normal	.321	5	.100	.806	5	.091
	Diabetes Melitus	.379	5	.018	.710	5	.012
	Glibenklamid	.148	5	.200*	.984	5	.955
	Kayu Manis dosis 300mg/KgBB	.309	5	.133	.843	5	.172
	Kayu Manis dosis150mg/KgB B	.245	5	.200*	.952	5	.754
P3	Normal	.211	5	.200*	.955	5	.776
	Diabetes Melitus	.250	5	.200*	.864	5	.245
	Glibenklamid	.167	5	.200*	.982	5	.943
	Kayu Manis dosis 300mg/KgBB	.335	5	.070	.866	5	.250
	Kayu Manis dosis150mg/KgB B	.249	5	.200*	.872	5	.273

a. Lilliefors Significance Correction

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

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
P1	2.472	4	20	.078
P2	2.743	4	20	.057
P3	1.866	4	20	.156

Kruskal-Wallis Test

Ranks

	Kelompok	N	Mean Rank
P1	Normal	5	5.70
	Diabetes Melitus	5	17.60
	Glibenklamid	5	15.30
	Kayu Manis dosis 300mg/KgBB	5	14.30
	Kayu Manis dosis150mg/KgBB	5	12.10
	Total	25	
P2	Normal	5	11.60
	Diabetes Melitus	5	12.70
	Glibenklamid	5	11.60
	Kayu Manis dosis 300mg/KgBB	5	13.50
	Kayu Manis dosis150mg/KgBB	5	15.60
	Total	25	

Test Statistics^{a,b}

	P1	P2
Chi-Square	7.600	1.021
df	4	4
Asymp. Sig.	.107	.907

a. Kruskal Wallis Test

b. Grouping Variable:
Kelompok

ANOVA

P3					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1878545.200	4	469636.300	6.211	.002
Within Groups	1512176.800	20	75608.840		
Total	3390722.000	24			

Multiple Comparisons

P3

LSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Normal	Diabetes Melitus	-250.20000	1.73907E2	.166	-612.9630	112.5630
	Glibenklamid	-619.20000*	1.73907E2	.002	-981.9630	-256.4370
	Kayu Manis dosis 300mg/KgBB	175.40000	1.73907E2	.325	-187.3630	538.1630
	Kayu Manis dosis150mg/Kg BB	-18.00000	1.73907E2	.919	-380.7630	344.7630
Diabetes Melitus	Normal	250.20000	1.73907E2	.166	-112.5630	612.9630
	Glibenklamid	-369.00000*	1.73907E2	.047	-731.7630	-6.2370
	Kayu Manis dosis 300mg/KgBB	425.60000*	1.73907E2	.024	62.8370	788.3630
	Kayu Manis dosis150mg/Kg BB	232.20000	1.73907E2	.197	-130.5630	594.9630
Glibenklamid	Normal	619.20000*	1.73907E2	.002	256.4370	981.9630
	Diabetes Melitus	369.00000*	1.73907E2	.047	6.2370	731.7630
	Kayu Manis dosis 300mg/KgBB	794.60000*	1.73907E2	.000	431.8370	1157.3630
	Kayu Manis dosis150mg/Kg BB	601.20000*	1.73907E2	.002	238.4370	963.9630
Kayu Manis dosis 300mg/KgBB	Normal	-175.40000	1.73907E2	.325	-538.1630	187.3630
	Diabetes Melitus	-425.60000*	1.73907E2	.024	-788.3630	-62.8370

	Glibenklamid	-794.60000*	1.73907E2	.000	-1157.3630	-431.8370
	Kayu Manis dosis150mg/Kg BB	-193.40000	1.73907E2	.279	-556.1630	169.3630
Kayu Manis dosis150mg/Kg BB	Normal	18.00000	1.73907E2	.919	-344.7630	380.7630
	Diabetes Melitus	-232.20000	1.73907E2	.197	-594.9630	130.5630
	Glibenklamid	-601.20000*	1.73907E2	.002	-963.9630	-238.4370
	Kayu Manis dosis 300mg/KgBB	193.40000	1.73907E2	.279	-169.3630	556.1630

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

Paired Samples Test

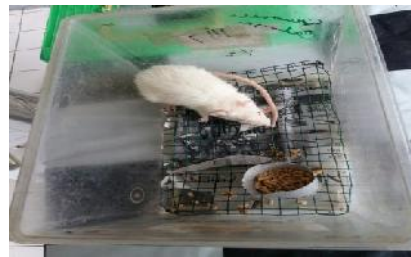
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Sebelum_terapi - Sesudah_terapi dosis 300mg/kgBB	2.70000E1	8.51469	3.80789	16.42761	37.57239	7.091	4	.002

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 Sebelum_terapi - Sesudah_terapi dos is 150mg/kgBB	-5.50000E 1	223.99526	100.17372	-333.12685	223.12685	-.549	4	.612

3. Gambar proses penelitian

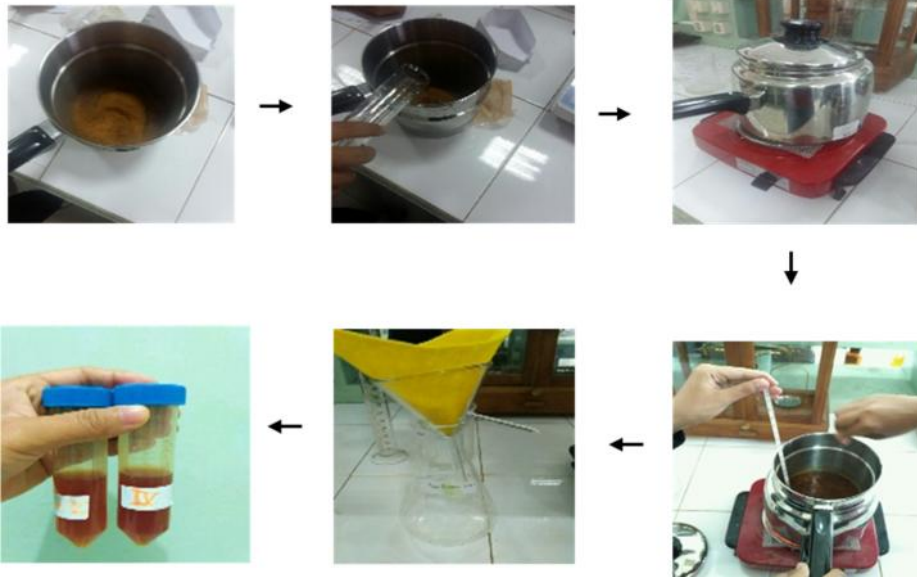
Tikus di adaptasi



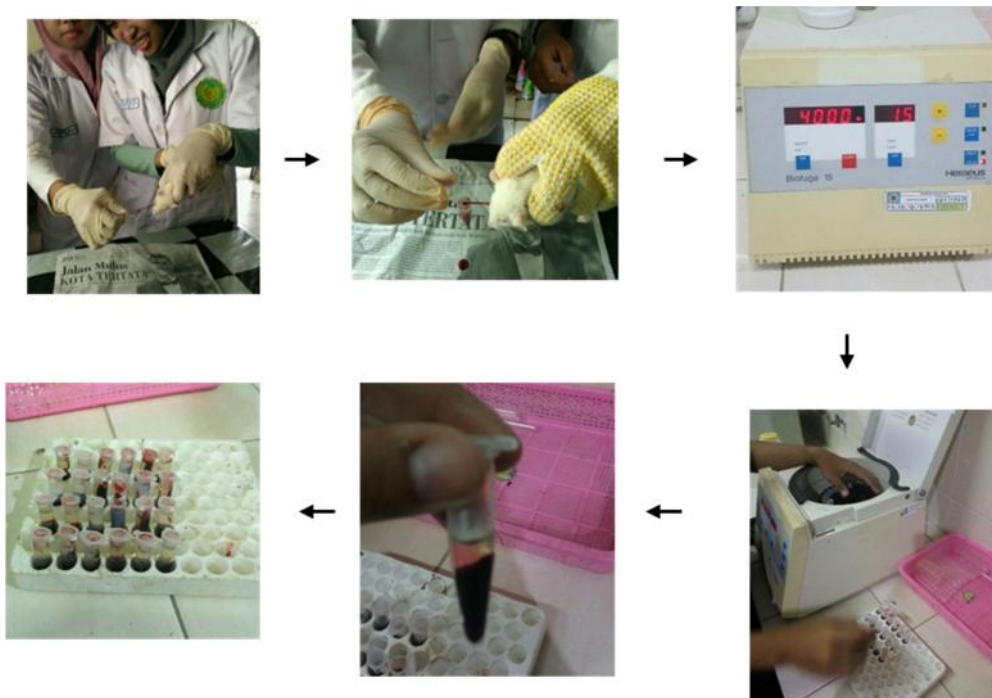
Induksi Streptozotocin +NA



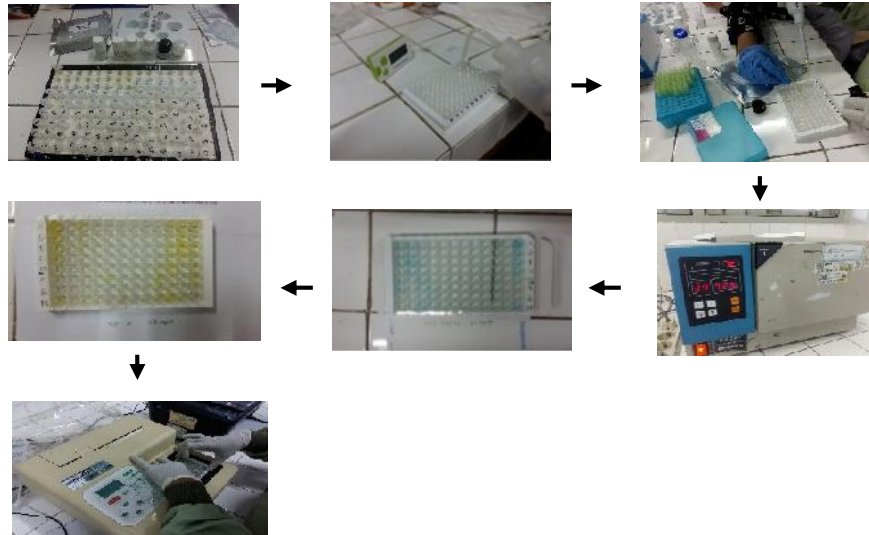
Cara pembuatan infusa



Pengambilan darah dan pembuatan serum



Pemeriksaan ELISA



4. Penghitungan dosis

4.1 Induksi STZ+NA

416

Ghasemi A et al.

Strain*	Weight (g)/ age at time of diabetes induction	Fasting state before diabetes induction	NA dose (mg/kg)	STZ dose (mg/kg)	Time between NA and STZ injection (min)	Time of blood glucose test after diabetes induction/ fasted or non-fasted	Glucose levels (mg/dL) to be considered diabetics	Reference
Wistar	200-220/NR	Overnight	110 i.p.	45 i.p.	15	30 days/ fasted	262 ± 16 (mean ± SD)	(57)
Wistar	NR/2-3 months	NR	210 i.p.	60 i.v.	15	2 weeks/NR	149 ± 3.6	(37)
Wistar	250-300 i.v.	NR	200 i.p.	60 i.v.	15	1 h	180	(22)
Sprague-Dawley	NR/8-10 weeks	Overnight	120 i.p.	60 i.v.	15	3 and 7 days/NR	238 ± 14.4	(74)
Wistar	160-200 g/3 weeks	Overnight	110 i.p.	65 i.p.	15	72 h and 7 days/NR	200	(44)
Wistar	NR/2 months	NR	180 i.p.	50 i.v.	30	8 weeks/NR	159.6 ± 23.8 (mean ± SD)	(18)

4.2 Pemberian terapi Glibenklamid

Dosis *glibenclamide* untuk manusia 70 kg: 5 mg

Nilai konversi dosis dari manusia 70 kg kepada tikus 200 g: 0,018

Dosis untuk 200 g tikus: 5 mg x 0,018 = 0,09 mg/200 gBB