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Lampiran

Lampiran 1 analisis data variable penelitian

VARIABEL	KELOMPOK (n=12)				P*
	K15	P15	K30	P30	
Jenis kelamin	Jantan (6 ekor)	Jantan (6ekor)	Jantan(6 ekor)	Jantan(6ekor)	-
Umur(minggu)	12 minggu				
Berat badan (gr)	192.83±16.881	200.33±7.607	192.83±11.754	205.33±16.269	0.263

n=jumlah sampel P*=uji homogeneity dan normality test

K15= Kontrol 15 hari K30=kontrol 30 hari

P15=perlakuan 15 hari P30= perlakuan 30 hari

Lampiran 2 Hasil Pemeriksaan hematologi kelompok 15 hari

Hematologi	Kontrol						Perlakuan					
	1	2	3	4	5	6	1	2	3	4	5	6
WBC(White Bood Cell)	14.1	19.3	22	7.3	14.7	12.4	12.2	10.5	9.6	6.4	7.5	12.6
LYM(Limfosit)	84.1	83.5	56	72.7	79.3	86	78.8	68.2	67.4	82.6	74.7	77
MON(Monosit)	10.64	11.92	22.80	18	14.24	10.4	14.16	20.88	20.88	12.72	18.64	16.08
NEU(Neutrofil)	2.6	1.6	15.50	4.8	2.9	1.3	3.5	5.7	6.5	1.5	2	2.9
EOS(Eosinofil)	2.0	2.24	4.28	3.38	2.67	1.95	2.66	3.92	3.92	2.4	3.5	3.02
BAS(Basofil)	0.67	0.75	1.43	1.13	0.89	0.65	0.89	1.305	1.305	0.795	1.165	1.01
RBC(Red Blood Cell)	4.61	4.93	4.72	5.2	5.34	5.35	4.87	5.21	4.63	4.92	5.1	5.21
HGB(Hemoglobin)	10.1	11.2	9.6	11.2	12.3	11.4	10.7	11.5	12	11.4	11.2	12.4
HCT(Hematokrit)	21.2	22.1	21.6	22.6	24.8	24.1	21.8	23.4	20.9	21.5	23.5	24.9
MCV(Mean Corpuscular Volume)	45.9	44.8	45.8	43.5	46.5	45.1	44.9	45	45	43.7	46	47.7
MCH(Mean Corpuscular Hemoglobin)	21.9	22.7	20.3	21.6	23	21.3	22	22.1	25.9	23.2	22	23.8
MCHC	47.7	50.7	44.4	49.6	49.6	47.2	49	49.1	57.6	53.1	47.7	49.9
PLT(Platelet)	599	714	795	680	694	592	917	660	733	757	658	657
RDWcv	15.70	13	16.60	16.10	13.70	14.80	15.6	12.9	14.8	12.6	15.6	16.1
RDWsd	36	29.1	37.9	35	31.9	33.4	34.9	29	33.3	27.4	35.9	38.3
MPV(Mean Platelet Volume)	6.3	6.4	6.4	5.8	6.3	6.1	6.2	5.7	5.9	6	6.2	6.2
PDW(Platelet Distibution Width)	5.4	6.1	6.5	5.2	5.6	5.4	5.8	4.4	5.6	5.4	5	5.6
PCT(Plateletcrit)	0,38	0.45	0.51	0.39	0.44	0.36	0.57	0.37	0.44	0.46	0.41	0.41

MCHC(Mean Corpuscular Hemoglobin Concentration),
RDWCV(Red Blood Cell Distribution Width coefficient of variation)
RDWSD(Red Blood Cell Distribution Width standard deviation)

Hasil pemeriksaan hematologi kelompok 30 hari

Hematologi	Kontrol						Perlakuan					
	1	2	3	4	5	6	1	2	3	4	5	6
WBC(White Blood Cell)	9.56	7.40	10.45	5.41	10.13	10.14	9.53	6.50	7.75	4.24	6.30	6.68
LYM(Limfosit)	59.4	64.6	64.8	66.9	60.5	62.9	60.4	68.4	69.2	65.0	71.3	71.1
MON(Monosit)	6.6	3.9	1.8	3.2	6.5	5.2	7.4	6.9	5.0	7.6	2.0	3.7
NEU(Neutrofil)	34.0	31.6	33.4	29.9	33.1	31.9	32.2	24.7	25.8	27.4	26.7	25.2
EOS(Eosinofil)	0	0	0	0	0	0	0	0	0	0	0	0
BAS(Basofil)	0	0	0	0	0	0	0	0	0	0	0	0
RBC(Red Blood Cell)	9.00	9.36	9.49	9.51	9.66	9.65	8.79	9.09	9.05	8.69	9.19	9.16
HGB(Hemoglobin)	16.6	16.9	16.8	17.4	17.7	17.8	15.5	17.0	17.0	15.0	17.4	17.1
HCTHematokrit)	36.77	35.93	36.41	36.87	37.15	38.49	35.52	37.43	39.45	32.78	38.04	37.55
MCV(Mean Corpuscular Volume)	41	38	38	39	38	40	40	41	44	38	41	41
MCH(Mean Corpuscular Hemoglobin)	18.4	18	17.7	18.3	18.3	18.5	17.6	18.7	18.8	17.2	19.0	18.6
MCHC	45.0	47.0	46.2	47.3	47.6	46.3	43.7	45.3	43.2	45.7	45.8	45.5
PLT(platelet/trombosit)	420	293	302	346	341	343	355	335	332	308	366	456
RDWcv	19.0	18.5	19.5	18.8	18.5	19.1	19.0	19.3	18.5	18.9	19.3	19.3
RDWsd	31.2	28.9	30.5	29.7	28.9	30.5	31.2	32.0	32.8	28.9	32.0	32.0
MPV(Mean Platelet Volume)	6.3	5.6	5.8	5.7	5.7	5.8	5.7	5.9	6.0	5.9	6.4	6.2
PDW(Platelet Distribution Width)	7.2	6.1	6.9	7.2	6.4	6.9	6.4	7.2	6.6	6.6	7.2	6.6
PCT(Plateletcrit)	0.27	0.16	0.17	0.20	0.19	0.20	0.20	0.20	0.20	0.18	0.23	0.28

MCHC(Mean Corpuscular Hemoglobin Concentration),
RDWCV(Red Blood Cell Distribution Width coefficient of variation)
RDWSD(Red Blood Cell Distribution Width standard deviation)

Lampiran 3 Analisis data parameter hematologi

Sampel Keseluruhan	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Nilai p	Statistic	Df	Nilai p
WBC	0.172	24	0.064	0.898	24	0.019
LIMFOSIT	0.108	24	.200*	0.960	24	0.446
MONOSIT	0.171	24	0.068	0.931	24	0.105
NEUTROFIL	0.239	24	0.001	0.803	24	0.000
EOSINOFIL	0.321	24	0.000	0.793	24	0.000
BASOFIL	0.322	24	0.000	0.793	24	0.000
RBC	0.292	24	0.000	0.752	24	0.000
HGB	0.221	24	0.004	0.839	24	0.001
HCT	0.246	24	0.001	0.795	24	0.000
MCV	0.173	24	0.062	0.907	24	0.031
MCH	0.216	24	0.005	0.910	24	0.035
MCHC	0.164	24	0.096	0.902	24	0.024
PLT	0.213	24	0.006	0.882	24	0.009
RDWc	0.253	24	0.000	0.866	24	0.004
RDWs	0.140	24	.200*	0.947	24	0.230
MPV	0.170	24	0.072	0.917	24	0.049
PDW	0.130	24	.200*	0.944	24	0.199
PCT	0.205	24	0.010	0.900	24	0.022

Pengamatan		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Nilai p	Statistic	df	Nilai p
WBC	15 Hari	0.148	12	.200*	0.933	12	0.413
	30 Hari	0.208	12	0.160	0.921	12	0.295
LIMFOSIT	15 Hari	0.136	12	.200*	0.916	12	0.258
	30 Hari	0.132	12	.200*	0.941	12	0.506
MONOSIT	15 Hari	0.156	12	.200*	0.937	12	0.458
	30 Hari	0.187	12	.200*	0.924	12	0.324
NEUTROFIL	15 Hari	0.241	12	0.053	0.705	12	0.001
	30 Hari	0.212	12	0.144	0.887	12	0.109
EOSINOFIL	15 Hari	0.157	12	.200*	0.937	12	0.463
	30 Hari		12			12	

BASOFIL	15 Hari	0.160	12	.200*	0.939	12	0.487
	30 Hari		12			12	
RBC	15 Hari	0.183	12	.200*	0.918	12	0.266
	30 Hari	0.135	12	.200*	0.952	12	0.666
HGB	15 Hari	0.226	12	0.092	0.937	12	0.456
	30 Hari	0.226	12	0.091	0.861	12	0.050
HCT	15 Hari	0.166	12	.200*	0.919	12	0.278
	30 Hari	0.144	12	.200*	0.931	12	0.385
MCV	15 Hari	0.160	12	.200*	0.954	12	0.696
	30 Hari	0.194	12	.200*	0.864	12	0.055
MCH	15 Hari	0.190	12	.200*	0.921	12	0.293
	30 Hari	0.198	12	.200*	0.951	12	0.648
MCHC	15 Hari	0.218	12	0.122	0.900	12	0.158
	30 Hari	0.128	12	.200*	0.953	12	0.681
PLT	15 Hari	0.131	12	.200*	0.917	12	0.261
	30 Hari	0.206	12	0.172	0.882	12	0.094
RDWc	15 Hari	0.218	12	0.121	0.895	12	0.135
	30 Hari	0.165	12	.200*	0.913	12	0.235
RDWs	15 Hari	0.153	12	.200*	0.939	12	0.481
	30 Hari	0.158	12	.200*	0.908	12	0.204
MPV	15 Hari	0.211	12	0.146	0.924	12	0.317
	30 Hari	0.192	12	.200*	0.901	12	0.163
PDW	15 Hari	0.175	12	.200*	0.958	12	0.761
	30 Hari	0.202	12	0.190	0.892	12	0.125
PCT	15 Hari	0.159	12	.200*	0.917	12	0.263
	30 Hari	0.322	12	0.001	0.859	12	0.048

Kelompok		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
WBC	Non Perlakuan	0.200	12	.200*	0.926	12	0.340
	Perlakuan	0.171	12	.200*	0.940	12	0.500
LIMFOSIT	Non Perlakuan	0.200	12	0.200	0.898	12	0.151
	Perlakuan	0.159	12	.200*	0.977	12	0.969
MONOSIT	Non Perlakuan	0.181	12	.200*	0.935	12	0.431
	Perlakuan	0.209	12	0.153	0.918	12	0.274
NEUTROFIL	Non Perlakuan	0.277	12	0.011	0.766	12	0.004
	Perlakuan	0.275	12	0.013	0.799	12	0.009
EOSINOFIL	Non Perlakuan	0.310	12	0.002	0.817	12	0.015
	Perlakuan	0.323	12	0.001	0.767	12	0.004
BASOFIL	Non Perlakuan	0.310	12	0.002	0.817	12	0.015
	Perlakuan	0.323	12	0.001	0.766	12	0.004
RBC	Non Perlakuan	0.291	12	0.006	0.743	12	0.002
	Perlakuan	0.302	12	0.003	0.732	12	0.002
HGB	Non Perlakuan	0.275	12	0.013	0.817	12	0.015
	Perlakuan	0.225	12	0.096	0.837	12	0.025
HCT	Non Perlakuan	0.292	12	0.006	0.769	12	0.004
	Perlakuan	0.237	12	0.061	0.825	12	0.018
MCV	Non Perlakuan	0.196	12	.200*	0.855	12	0.042
	Perlakuan	0.186	12	.200*	0.950	12	0.636
MCH	Non Perlakuan	0.273	12	0.014	0.859	12	0.047
	Perlakuan	0.235	12	0.067	0.917	12	0.266
MCHC	Non Perlakuan	0.183	12	.200*	0.957	12	0.747
	Perlakuan	0.199	12	.200*	0.896	12	0.141
PLT	Non Perlakuan	0.227	12	0.088	0.871	12	0.067
	Perlakuan	0.221	12	0.111	0.881	12	0.091
RDWc	Non Perlakuan	0.254	12	0.032	0.891	12	0.122
	Perlakuan	0.245	12	0.045	0.849	12	0.036
RDWs	Non Perlakuan	0.181	12	.200*	0.888	12	0.110
	Perlakuan	0.127	12	.200*	0.970	12	0.908
MPV	Non Perlakuan	0.258	12	0.027	0.847	12	0.034
	Perlakuan	0.206	12	0.172	0.925	12	0.331
PDW	Non Perlakuan	0.152	12	.200*	0.918	12	0.273
	Perlakuan	0.163	12	.200*	0.945	12	0.567
PCT	Non Perlakuan	0.227	12	0.089	0.894	12	0.134
	Perlakuan	0.193	12	.200*	0.896	12	0.141

Lampiran 4 Hasil pmeriksaan kortisol serum kelompok 15 hari

Subjek Kontrol	Kadar kortisol (ng/ml)	Subjek perlakuan	Kadar kortisol (ng/ml)
1	28.4	1	29.6
2	31.44	2	44.1
3	29.56	3	34.34
4	30.3	4	30.41
5	23.44	5	25.34
6	28.64	6	31.12

Hasil Pemeriksaan kortisol serum kelompok 30 hari

Subjek Kontrol	Kadar kortisol (ng/ml)	Subjek perlakuan	Kadar kortisol (ng/ml)
1	26.78	1	35.83
2	30.26	2	31.98
3	31.85	3	32.71
4	30.20	4	31.32
5	28.61	5	32.87
6	31.10	6	31.91

Lampiran 5 Hasil analisis kortisol

Descriptives

	Kelompok			Statistic	Std. Error
KORTISOL.1	Non Perlakuan	Mean		29.4621	1.59402
		95% Confidence Interval for Mean	Lower Bound	25.3646	
			Upper Bound	33.5597	
		5% Trimmed Mean		29.4716	
		Median		29.1004	
		Variance		15.245	
		Std. Deviation		3.90454	
		Minimum		23.44	
		Maximum		35.31	
		Range		11.87	
		Interquartile Range		5.27	
		Skewness		-.061	.845
		Kurtosis		1.282	1.741
	Perlakuan	Mean		32.4799	2.60174
		95% Confidence Interval for Mean	Lower Bound	25.7919	
			Upper Bound	39.1679	
		5% Trimmed Mean		32.2326	
		Median		30.7701	
		Variance		40.614	
		Std. Deviation		6.37294	
		Minimum		25.35	
		Maximum		44.06	
		Range		18.72	
		Interquartile Range		8.26	
		Skewness		1.347	.845
		Kurtosis		2.534	1.741
KORTISOL.2	Non Perlakuan	Mean		32.1029	2.14298
		95% Confidence Interval for Mean	Lower Bound	26.5942	
			Upper Bound	37.6116	
		5% Trimmed Mean		31.9162	
		Median		30.2338	
		Variance		27.554	
		Std. Deviation		5.24921	
		Minimum		26.78	
		Maximum		40.78	
		Range		14.00	

		Interquartile Range	9.02	
		Skewness	1.049	.845
		Kurtosis	.089	1.741
	Perlakuan	Mean	32.7744	.65448
		95% Confidence Interval for Mean Lower Bound	31.0920	
		Upper Bound	34.4568	
		5% Trimmed Mean	32.6850	
		Median	32.3511	
		Variance	2.570	
		Std. Deviation	1.60315	
		Minimum	31.32	
		Maximum	35.84	
		Range	4.51	
		Interquartile Range	1.85	
		Skewness	1.786	.845
		Kurtosis	3.631	1.741

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Kelompok	N	Percent	N	Percent	N	Percent
KORTISOL.1	Non Perlakuan	6	100.0%	0	0.0%	6	100.0%
	Perlakuan	6	100.0%	0	0.0%	6	100.0%
KORTISOL.2	Non Perlakuan	6	100.0%	0	0.0%	6	100.0%
	Perlakuan	6	100.0%	0	0.0%	6	100.0%

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
KORTISOL.1	Non Perlakuan	.224	6	.200*	.964	6	.850
	Perlakuan	.251	6	.200*	.889	6	.313
KORTISOL.2	Non Perlakuan	.304	6	.088	.890	6	.317
	Perlakuan	.309	6	.075	.814	6	.078

*. This is a lower bound of the true significance. a. Lilliefors Significance Correction

Lampiran 6 Persetujuan etik

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN KESEHATAN
RSPTN UNIVERSITAS HASANUDDIN
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.
Contact Person: dr. Agussalim Bukhari.,MMed,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431

REKOMENDASI PERSETUJUAN ETIK
Nomor : 85/UN4.6.4.5.31/ PP36/ 2021

Tanggal: 15 Februari 2021

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH21020076	No Sponsor Protokol	
Peneliti Utama	**dr.Nila Ardilla Arief.R,S.Ked**	Sponsor	
Judul Peneliti	Analisis Pengaruh Cahaya LED Di Malam Hari terhadap Kadar Kortisol dan Hematologi padaTikus Wistar Jantan		
No Versi Protokol	1	Tanggal Versi	11 Februari 2021
No Versi PSP		Tanggal Versi	
Tempat Penelitian	**Laboratorium RS Universitas Hasanuddin dan Laboratorium Fakultas Farmasi Universitas Hasanuddin Makassar**		
Jenis Review	[ ] Exempted [x] Expedited [ ] Fullboard Tanggal	Masa Berlaku **15 Februari 2021** sampai **15 Februari 2022**	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian Kesehatan FKUH	Nama **Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)**	Tanda tangan	
Sekretaris Komisi Etik Penelitian Kesehatan FKUH	Nama **dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)**	Tanda tangan	

Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- 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 prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

Lampiran 7 dokumentasi kegiatan penelitian

1. Persiapan kandang

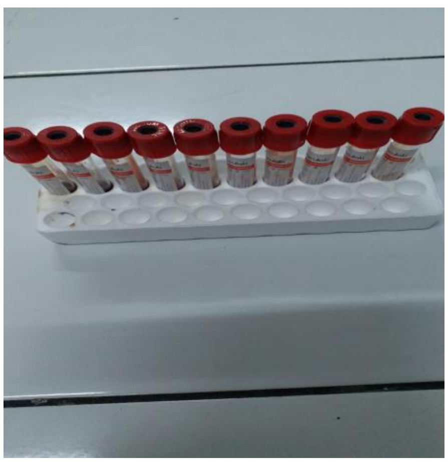
 

2. Aklimatisasi tikus

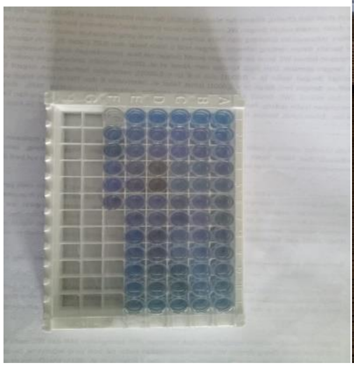
3. Proses perlakuan(pemberian cahaya LED)

4. Pengambilan darah

Persiapan serum



Lampiran 8 Pemeriksaan ELISA dan parameter hematologi

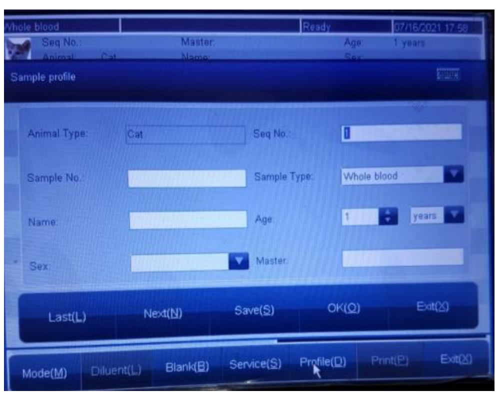




Pemeriksaan hematologi

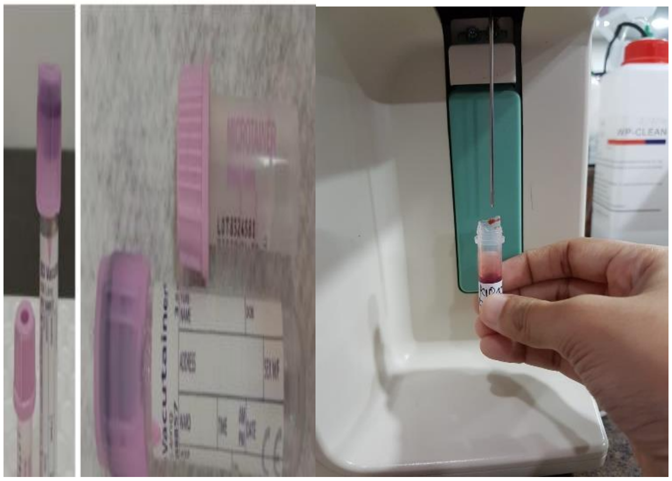
1. Nyalakan mesin darah dengan menekan tombol ON pada bagian belakang mesin
2. Tunggu hingga muncul tampilan utama pada layar
3. Pilih menu blank pada layar

4. Tunggu hingga mesin selesai berproses, pastikan hasil dari proses blank tersebut menunjukkan angka nol

5. Pilih gambar hewan pada menu bagian atas, pilih jenis hewan, lalu klik OK
6. Pilih menu profile dan isi profile sampel hewan yang akan dilakukan pengecekan, tekan tombol save atau ok



7. Jarum penghisap mesin akan keluar, posisikan jarum berada di dalam tabung darah lalu tekan tombol dibelakang jarum tersebut



8. Tunggu hingga mesin selesai berproses dan hasil akan keluar melalui printer mesin

Lampiran 9

Pakan standar AD II

Dengan komposisi pakan yaitu air : maksimal 12%, protein kasar : minimal 15%, lemak kasar : 3-7 %,serat kasar : maksimal 6%,abu : maksimal 7%,kalsium : 0,9-1,1% dan phosphor : 0,6-0,9%.