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Lampiran 1. Biodata Mahasiswa

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Lampiran 2. Ethical Clearance

KOMISI ETIK PENELITIAN KESEHATAN (KEPK)
FAKULTAS KEDOKTERAN UNIVERSITAS DIPONEGORO
DAN RSUP dr KARIADI SEMARANG
Sekretariat : Kantor Dekanat FK Undip Lt.3
Jl. Dr. Soetomo 18. Semarang
Telp/Fax. 024-8318350

RSUP Dr. KARIADI

ETHICAL CLEARANCE
No. 241/EC/FK-RSDK/2015

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

Judul : Analisa gambaran post mortem makroskopis dan mikroskopis otak dan hati pada tikus wistar setelah pemberian warfarin LD-50 dan LD-100

Peneliti : ***Husein Alaydrus***

Judul : Analisa gambaran post mortem makroskopis paru dan usus halus pada tikus wistar setelah pemberian warfarin LD-50 dan LD-100

Peneliti : ***Mada Aji Prakoso***

Pembimbing : dr. Gatot Suharto, SH., Sp.F.,M.Kes & dr. Siti Amarwati, Sp. PA(K)

Penelitian : Dilaksanakan di : Laboratorium Biologi Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Negeri Semarang, Laboratorium Patologi Anatomi Waspada

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 dilampiri Abstrak Penelitian.

Semarang, 29 APR 2015
Komisi Etik Penelitian Kesehatan
Fakultas Kedokteran Undip-RS. Dr. Kariadi
Wakil Ketua,

Dr.dr.Selamat Budijitno,M.Si.Med,Sp.B,Sp.B(K),Onk,FICS
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Lampiran 3. Ijin Penelitian

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS NEGERI SEMARANG
FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM
LABORATORIUM JURUSAN BIOLOGI
Alamat : Gedung D11 FMIPA UNNES Kampus Sekaran Gunungpati Semarang 50229

Semarang, 23 Maret 2015

Nomor : 310 /UN.3.7.4.5/PP/2015
Lampiran : -
Perihal : -

Yth. Pembantu Dekan I
Fakultas Kedokteran
Universitas Diponegoro

Dengan hormat,

Menjawab Surat saudara nomor 1371/UN7.3.4/DI/PP/2014 tanggal 18 Maret 2015 perihal permohonan ijin penelitian dengan menggunakan hewan percobaan, dalam rangka penyusunan Karya Tulis Ilmiah mahasiswa :

1. Nama : Husein Alaydrus
   NIM : 22010111110140
2. Nama : Mada Aji Prakoso
   NIM : 22010111130098
3. Nama : Anggoro Adjar Mangestu
   NIM : 22010222240185

Judul : Analisa Gambaran Post Mortem Makroskopis Organ Otak, Hati, Paru-paru, Usus Halus, Jantung dan Ginjal pada Tikus Wistar setelah Pemberian Walfarin LD-50 dan LD-100

Dengan ini kami beritahukan bahwa permohonan ijin tersebut dapat kami setujui sesuai peraturan yang berlaku. Adapun pelaksanaannya akan dibantu oleh teknisi kami sdri. Kartika Widya dan Bapak Ngatiman.

Demikian kami sampaikan, terimaksih atas perhatian dan kerjasamanya

Laboratorium Biologi FMIPA Unnes

Kepala,

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LAMPIRAN 4

PERHITUNGAN DOSIS

Tabel 22. Konversi Dosis Pages dan Barnes

Hewan dengan dosis diketahui	Hewan yang Dicari Ekivalensi Dosisnya							
	Mencit	Tikus	Marmot	Kelinci	Kucing	Kera	Anjing	Manusia
	20g	200g	400g	1,5g	2kg	4kg	12kg	70kg
Mencit	1,0	7,0	12,25	27,8	29,7	64,1	124,2	387,9
Tikus	0,14	1,0	1,74	3,9	4,2	9,2	17,8	56,0
Marmot	0,08	0,57	1,0	2,25	2,4	5,2	10,2	31,5
Kelinci	0,04	0,25	0,44	1,0	1,08	2,4	4,5	14,2
Kucing	0,03	0,23	0,41	0,92	1,0	2,2	4,1	13,0
Kera	0,016	0,11	0,19	0,42	0,45	1,0	1,9	6,1
Anjing	0,08	0,06	0,10	0,22	0,24	0,52	1,0	3,1
Manusia	0,0026	0,018	0,031	0,07	0,076	0,16	0,32	1,0

LAMPIRAN 5

DATA SPESIFIKASI WARFARIN

Warfarin yang digunakan dalam penelitian adalah Simarc® 2. Simarc® 2 bekerja dengan cara menginhibisi beberapa faktor pembekuan. Secara in vivo, obat bekerja menginhibisi faktor VII, IX, X dan II yang terlibat pada proses pembekuan darah. Antikoagulan tidak memiliki efek langsung terhadap thrombus dan tidak memperbaiki jaringan rusak, tetapi lebih ditujukan untuk mencegah terjadinya thrombus lebih lanjut, agar bahaya komplikasi terhindarkan.[1]

Komposisi Simarc® 2 : tiap tablet mengandung Warfarin Sodium 2mg

LAMPIRAN 6. Output Statistik

Paru

Case Summaries

Paru

Kelompok	N	Mean	Std. Deviation	Median	Minimum	Maximum
Kontrol	3	.2000	.34641	.0000	.00	.60
LD50	3	1.4667	.11547	1.4000	1.40	1.60
LD100	3	2.2667	1.33167	1.6000	1.40	3.80
Total	9	1.3111	1.13627	1.4000	.00	3.80

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Paru	Kontrol	.385	3	.	.750	3	.000
	LD50	.385	3	.	.750	3	.000
	LD100	.358	3	.	.812	3	.144

a. Lilliefors Significance Correction

NPar Tests

Kruskal-Wallis Test

Ranks

	Kelompok	N	Mean Rank
Paru	Kontrol	3	2.00
	LD50	3	5.83
	LD100	3	7.17
	Total	9	

Test Statistics[a,b]

	Paru
Chi-Square	6.058
df	2
Asy mp. Sig.	.048

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

NPar Tests

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Paru	Kontrol	3	2.00	6.00
	LD50	3	5.00	15.00
	Total	6		

Test Statistics[b]

	Paru
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.023
Asy mp. Sig. (2-tailed)	.043
Exact Sig. [2*(1-tailed Sig.)]	.100[a]

a. Not corrected for ties.

b. Grouping Variable: Kelompok

NPar Tests

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Paru	Kontrol	3	2.00	6.00
	LD100	3	5.00	15.00
	Total	6		

Test Statistics[b]

	Paru
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100[a]

a. Not corrected for ties.

b. Grouping Variable: Kelompok

NPar Tests

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Paru	LD50	3	2.83	8.50
	LD100	3	4.17	12.50
	Total	6		

Test Statistics[b]

	Paru
Mann-Whitney U	2.500
Wilcoxon W	8.500
Z	-.943
Asymp. Sig. (2-tailed)	.346
Exact Sig. [2*(1-tailed Sig.)]	.400[a]

a. Not corrected for ties.

b. Grouping Variable: Kelompok

Explore

Ukuran paru

Case Summaries

Ukuran paru

Kelompok	N	Mean	Std. Deviation	Median	Minimum	Maximum
Kontrol	9	5.3511	.47325	5.5400	4.49	6.00
LD50	9	4.3578	1.43857	4.7300	2.08	6.33
LD100	9	4.5244	1.38682	3.9400	3.23	7.29
Total	27	4.7444	1.22203	4.9000	2.08	7.29

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Ukuran paru	Kontrol	.211	9	.200*	.960	9	.800
	LD50	.158	9	.200*	.961	9	.812
	LD100	.302	9	.018	.790	9	.016

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Ukuran paru	Based on Mean	4.325	2	24	.025
	Based on Median	2.000	2	24	.157
	Based on Median and with adjusted df	2.000	2	15.692	.168
	Based on trimmed mean	3.793	2	24	.037

NPar Tests

Kruskal-Wallis Test

Ranks

	Kelompok	N	Mean Rank
Ukuran paru	Kontrol	9	18.44
	LD50	9	11.89
	LD100	9	11.67
	Total	27	

Test Statistics[a,b]

	Ukuran paru
Chi-Square	4.236
df	2
Asymp. Sig.	.120

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

Explore

Berat paru

Case Summaries

Berat paru

Kelompok	N	Mean	Std. Deviation	Median	Minimum	Maximum
Kontrol	9	1.3844	.08847	1.3500	1.28	1.50
LD50	8	1.1525	.27871	1.1750	.63	1.60
LD100	9	1.4900	.27749	1.4200	1.11	1.96
Total	26	1.3496	.26241	1.3250	.63	1.96

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Berat paru	Kontrol	.207	9	.200*	.881	9	.160
	LD50	.189	8	.200*	.952	8	.733
	LD100	.155	9	.200*	.959	9	.783

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Berat paru	Based on Mean	2.856	2	23	.078
	Based on Median	2.176	2	23	.136
	Based on Median and with adjusted df	2.176	2	15.888	.146
	Based on trimmed mean	2.792	2	23	.082

Oneway

ANOVA

Berat paru

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.499	2	.250	4.696	.019
Within Groups	1.222	23	.053		
Total	1.721	25			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Berat paru

Bonferroni

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	LD50	.23194	.11202	.149	-.0573	.5212
	LD100	-.10556	.10868	1.000	-.3862	.1750
LD50	Kontrol	-.23194	.11202	.149	-.5212	.0573
	LD100	-.33750*	.11202	.019	-.6267	-.0483
LD100	Kontrol	.10556	.10868	1.000	-.1750	.3862
	LD50	.33750*	.11202	.019	.0483	.6267

*. The mean difference is significant at the .05 level.

Explore

Usus

Case Summaries

Usus

Kelompok	N	Mean	Std. Deviation	Median	Minimum	Maximum
Kontrol	3	.1333	.11547	.2000	.00	.20
LD50	3	1.5333	.30551	1.6000	1.20	1.80
LD100	3	2.5333	.46188	2.8000	2.00	2.80
Total	9	1.4000	1.08167	1.6000	.00	2.80

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	Statistic	df	Sig.	Statistic	df	Sig.
Usus	Kontrol	.385	3	.	.750	3	.000
	LD50	.253	3	.	.964	3	.637
	LD100	.385	3	.	.750	3	.000

a. Lilliefors Significance Correction

NPar Tests

Kruskal-Wallis Test

Ranks

	Kelompok	N	Mean Rank
Usus	Kontrol	3	2.00
	LD50	3	5.00
	LD100	3	8.00
	Total	9	

Test Statistics[a,b]

	Usus
Chi-Square	7.322
df	2
Asy mp. Sig.	.026

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

NPar Tests

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Usus	Kontrol	3	2.00	6.00
	LD50	3	5.00	15.00
	Total	6		

Test Statistics[b]

	Usus
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asy mp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100[a]

a. Not corrected for ties.

b. Grouping Variable: Kelompok

NPar Tests

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Usus	Kontrol	3	2.00	6.00
	LD100	3	5.00	15.00
	Total	6		

Test Statistics[b]

	Usus
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-2.023
Asymp. Sig. (2-tailed)	.043
Exact Sig. [2*(1-tailed Sig.)]	.100[a]

a. Not corrected for ties.

b. Grouping Variable: Kelompok

NPar Tests

Mann-Whitney Test

Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
Usus	LD50	3	2.00	6.00
	LD100	3	5.00	15.00
	Total	6		

Test Statistics[b]

	Usus
Mann-Whitney U	.000
Wilcoxon W	6.000
Z	-1.993
Asymp. Sig. (2-tailed)	.046
Exact Sig. [2*(1-tailed Sig.)]	.100[a]

a. Not corrected for ties.

b. Grouping Variable: Kelompok