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LAMPIRAN

LAMPIRAN 1. Persetujuan Etik Penelitian



REKOMENDASI PERSETUJUAN ETIK

Nomor : 289/UN4.6.4.5.31/ PP36/ 2022

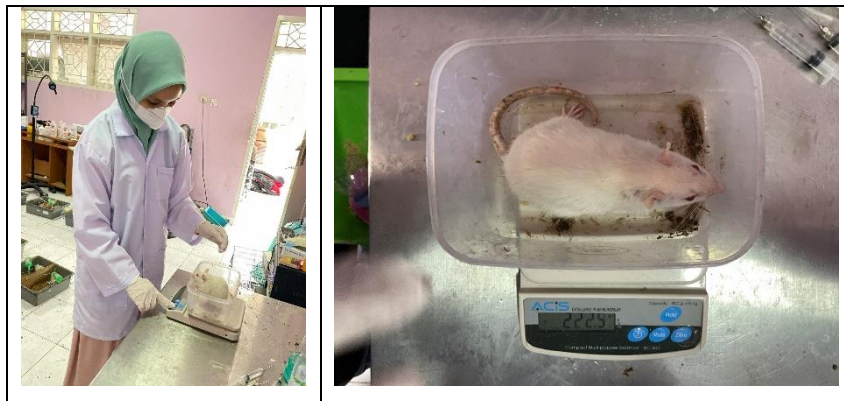
Tanggal: 17 Juni 2022

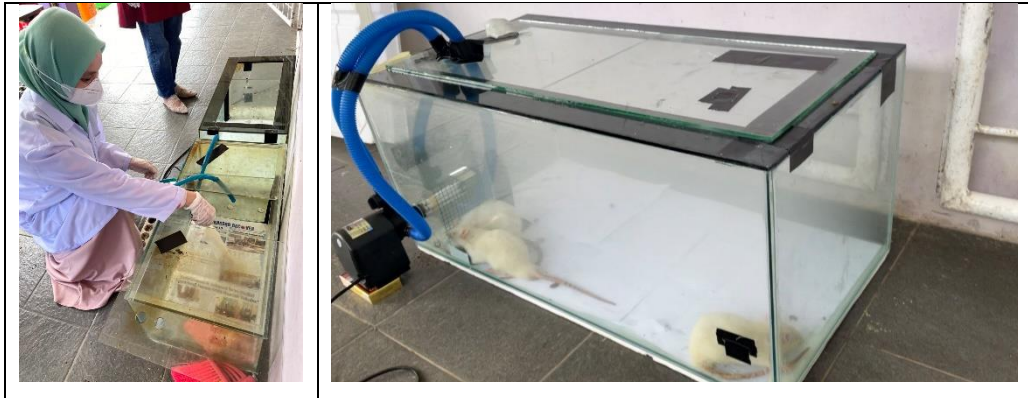
Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH22040174		No Sponsor	
Peneliti Utama	dr. A. Sitti Rahmatullah		Sponsor	
Judul Peneliti	EFEK ANTIINFLAMASI HYDROGEN-RICH WATER TERHADAP PARU YANG TERPAPAR ASAP ROKOK PADA TIKUS			
No Versi Protokol	2	Tanggal Versi	15 Juni 2022	
No Versi PSP		Tanggal Versi		
Tempat Penelitian	Laboratorium Fakultas Farmasi Universitas Hasanuddin Makassar			
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal		Masa Berlaku 17 Juni 2022 sampai 17 Juni 2023	Frekuensi review lanjutan
Ketua KEP Universitas Hasanuddin	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)		Tanda tangan	
Sekretaris KEP Universitas Hasanuddin	Nama dr. Agussalim Bukhari, M.Med,Ph.D.,Sp.GK (K)		Tanda tangan	

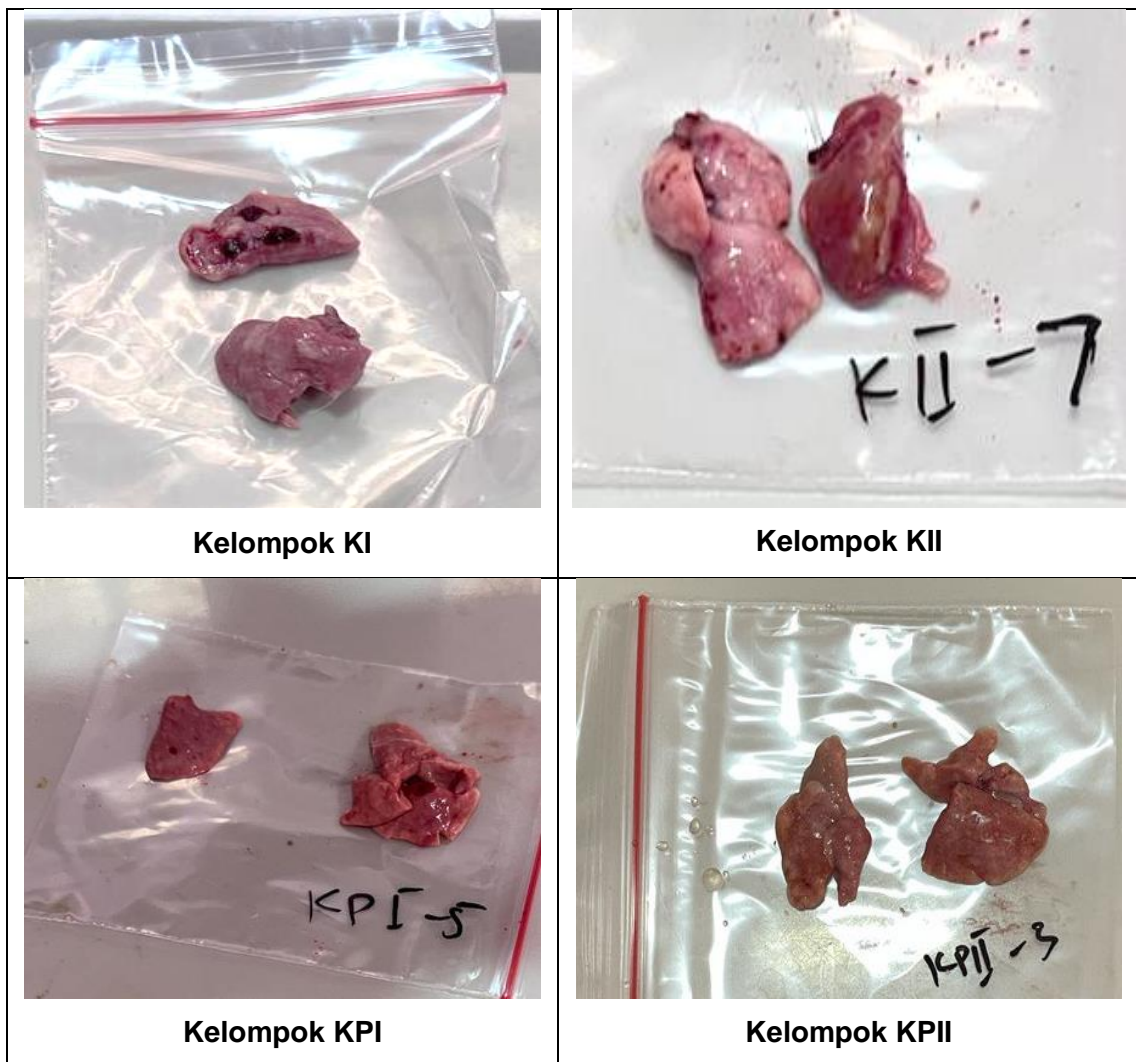
Kewajiban Peneliti Utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 jam dan dilengkapi dalam 7 hari dan Laporan 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 protokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

LAMPIRAN 2. Dokumentasi Penelitian**Gambar 13. Beberapa alat dan bahan untuk perlakuan hewan coba****Gambar 14. Penimbangan hewan coba****Gambar 15. Pembuatan dan pemberian HRW**



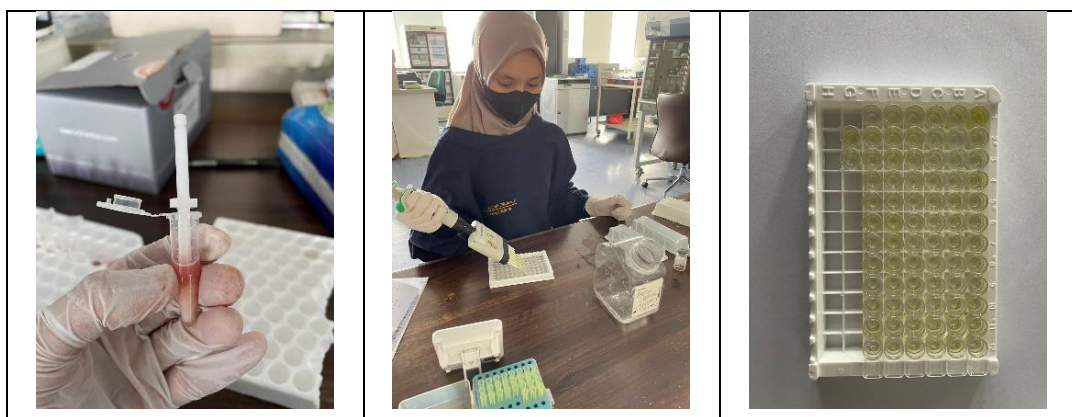
Gambar 16. Pemaparan asap rokok



Gambar 17. Penampakan makroskopik organ paru



Gambar 18. Beberapa alat dan bahan untuk pemeriksaan kadar NF-κB p65 dengan metode ELISA



Gambar 19. Pemeriksaan kadar NF-κB p65 dengan metode ELISA

LAMPIRAN 3. Data dan Analisa Statistik

Data Kadar NF-kB dan Skor Histopatologi

NO	KELOMPOK	SAMPSEL	PEMERIKSAAN ELISA		PEMERIKSAAN HISTOPATOLOGI		
			KADAR NF-kB	MEAN + SD	SKOR INFLAMASI	INTERPRETASI	MEAN + SD
1	KI	KI-1	1.4	1.20 ± 0.23	1	INFLAMASI RINGAN	0.80 ± 0.45
2		KI-2	1		1	INFLAMASI RINGAN	
3		KI-3	1.3		1	INFLAMASI RINGAN	
4		KI-4	0.9		0	NORMAL	
5		KI-5	1.4		1	INFLAMASI RINGAN	
6	KII	KII-1	1.8	2.44 ± 0.95	2	INFLAMASI SEDANG	2.60 ± 0.89
7		KII-2	4		4	INFLAMASI SGT BERAT	
8		KII-3	2.7		3	INFLAMASI BERAT	
9		KII-4	1.8		2	INFLAMASI SEDANG	
10		KII-5	1.9		2	INFLAMASI SEDANG	
11	KPI	KPI-1	1.7	1.74 + 0.26	1	INFLAMASI RINGAN	1.40 ± 0.55
12		KPI-2	1.5		1	INFLAMASI RINGAN	
13		KPI-3	1.5		1	INFLAMASI RINGAN	
14		KPI-4	1.9		2	INFLAMASI SEDANG	
15		KPI-5	2.1		2	INFLAMASI SEDANG	
16	KPII	KPII-1	0.7	1.28 ± 0.36	0	NORMAL	0.80 ± 0.84
17		KPII-2	1.3		0	NORMAL	
18		KPII-3	1.4		1	INFLAMASI RINGAN	
19		KPII-4	1.7		2	INFLAMASI SEDANG	
20		KPII-5	1.3		1	INFLAMASI RINGAN	

Ui Statistik Kadar NF-kB p65

Descriptives

Kelompok	Statistic	Std. Error
KADAR NF-kB KI	Mean	1.2000
	95% Confidence Interval for Mean	0.9088
	Lower Bound	1.4912
	Upper Bound	1.2056
	5% Trimmed Mean	1.3000
	Median	0.055
	Variance	0.23452
	Std. Deviation	0.90
Minimum		

	Maximum		1.40	
	Range		0.50	
	Interquartile Range		0.45	
	Skewness		-0.581	0.913
	Kurtosis		-2.628	2.000
KII	Mean		2.4400	0.42497
	95% Confidence Interval for Mean	Lower Bound	1.2601	
		Upper Bound	3.6199	
	5% Trimmed Mean		2.3889	
	Median		1.9000	
	Variance		0.903	
	Std. Deviation		0.95026	
	Minimum		1.80	
	Maximum		4.00	
	Range		2.20	
	Interquartile Range		1.55	
	Skewness		1.521	0.913
	Kurtosis		1.731	2.000
KPI	Mean		1.7400	0.11662
	95% Confidence Interval for Mean	Lower Bound	1.4162	
		Upper Bound	2.0638	
	5% Trimmed Mean		1.7333	
	Median		1.7000	
	Variance		0.068	
	Std. Deviation		0.26077	
	Minimum		1.50	
	Maximum		2.10	
	Range		0.60	
	Interquartile Range		0.50	
	Skewness		0.541	0.913
	Kurtosis		-1.488	2.000
KPII	Mean		1.2800	0.16248
	95% Confidence Interval for Mean	Lower Bound	0.8289	
		Upper Bound	1.7311	
	5% Trimmed Mean		1.2889	
	Median		1.3000	
	Variance		0.132	
	Std. Deviation		0.36332	
	Minimum		0.70	
	Maximum		1.70	

Range	1.00	
Interquartile Range	0.55	
Skewness	-1.036	0.913
Kurtosis	2.366	2.000

Tests of Normality

Kelompok		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
KADAR NF-kB	KI	0.265	5	.200*	0.836	5	0.154
	KII	0.315	5	0.117	0.781	5	0.056
	KPI	0.221	5	.200*	0.902	5	0.421
	KPII	0.322	5	0.099	0.899	5	0.402

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

a. Lilliefors Significance Correction

Ket:

- Data kadar NF-kB p65 terdistribusi normal ($p > 0.05$)

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
KADAR NF-kB	4.097	3	16	0.025

Ket:

- Data kadar NF-kB p65 tidak homogen ($p < 0.05$)

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
KADAR NF-kB	Between Groups	4.854	3	1.618	5.588	0.008
	Within Groups	4.632	16	0.290		
	Total	9.486	19			

Post Hoc Tests

Multiple Comparisons

LSD

Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
KADAR NF-kB	KI	KII	-1.24000*	0.34029	0.002	-1.9614	-0.5186
		KPI	-0.54000	0.34029	0.132	-1.2614	0.1814

	KPII	-0.08000	0.3402 9	0.817	- 0.8014	0.6414
KII	KI	1.24000*	0.3402 9	0.002	0.5186	1.9614
	KPI	0.70000	0.3402 9	0.056	- 0.0214	1.4214
	KPII	1.16000*	0.3402 9	0.004	0.4386	1.8814
KPI	KI	0.54000	0.3402 9	0.132	- 0.1814	1.2614
	KII	-0.70000	0.3402 9	0.056	- 1.4214	0.0214
	KPII	0.46000	0.3402 9	0.195	- 0.2614	1.1814
KPII	KI	0.08000	0.3402 9	0.817	- 0.6414	0.8014
	KII	-1.16000*	0.3402 9	0.004	- 1.8814	- 0.4386
	KPI	-0.46000	0.3402 9	0.195	- 1.1814	0.2614

Ui Statistik Skor Inflamasi (Histopatologi)

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
Kelompok		Statisti c	df	Sig.	Statisti c	df	Sig.
HISTOPATOLOGI	KI	0.473	5	0.001	0.552	5	0.000
	KII	0.349	5	0.046	0.771	5	0.046
	KPI	0.367	5	0.026	0.684	5	0.006
	KPII	0.231	5	.200*	0.881	5	0.314

Ket:

- Data skor inflamasi dari pemeriksaan histopatologi paru tidak terdistribusi normal ($p < 0.05$)

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
HISTOPATOLOGI	1.484	3	16	0.257

Ket:

- Data skor inflamasi dari pemeriksaan histopatologi paru homogen ($p > 0.05$)

Kruskal-Wallis Test

		Ranks	
Kelompok		N	Mean Rank
HISTOPATOLOGI	KI	5	6.80
	KII	5	17.10
	KPI	5	11.00
	KPII	5	7.10
	Total	20	

Test Statistics^{a,b}

	HISTOPATOLOGI
Chi-Square	11.205
df	3
Asymp. Sig.	0.011

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

Mann-Whitney Test

		Ranks		
Kelompok		N	Mean Rank	Sum of Ranks
HISTOPATOLOGI	KI	5	3.00	15.00
	KII	5	8.00	40.00
	Total	10		

Test Statistics^a

	HISTOPATOLOGI
Mann-Whitney U	0.000
Wilcoxon W	15.000
Z	-2.730
Asymp. Sig. (2-tailed)	0.006
Exact Sig. [2*(1-tailed Sig.)]	.008 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.

Mann-Whitney Test

		Ranks		
Kelompok		N	Mean Rank	Sum of Ranks
HISTOPATOLOGI	KI	5	4.20	21.00
	KPI	5	6.80	34.00
	Total	10		

Test Statistics^a

HISTOPATOLOGI	
Mann-Whitney U	6.000
Wilcoxon W	21.000
Z	-1.678
Asymp. Sig. (2-tailed)	0.093
Exact Sig. [2*(1-tailed Sig.)]	.222 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.

Mann-Whitney Test

		Ranks		
Kelompok		N	Mean Rank	Sum of Ranks
HISTOPATOLOGI	KI	5	5.60	28.00
	KPII	5	5.40	27.00
	Total	10		

Test Statistics^a

HISTOPATOLOGI	
Mann-Whitney U	12.000
Wilcoxon W	27.000
Z	-0.120
Asymp. Sig. (2-tailed)	0.905

Exact Sig. [2*(1-tailed Sig.)] 1.000^b

- a. Grouping Variable: Kelompok
b. Not corrected for ties.

Mann-Whitney Test

		Ranks		
Kelompok		N	Mean Rank	Sum of Ranks
HISTOPATOLOGI	KII	5	7.40	37.00
	KPI	5	3.60	18.00
	Total	10		

Test Statistics^a

	HISTOPATOLOGI
Mann-Whitney U	3.000
Wilcoxon W	18.000
Z	-2.147
Asymp. Sig. (2-tailed)	0.032
Exact Sig. [2*(1-tailed Sig.)]	.056 ^b

- a. Grouping Variable: Kelompok
b. Not corrected for ties.

Mann-Whitney Test

		Ranks		
Kelompok		N	Mean Rank	Sum of Ranks
HISTOPATOLOGI	KII	5	7.70	38.50
	KPII	5	3.30	16.50
	Total	10		

Test Statistics^a

HISTOPATOLOGI	
Mann-Whitney U	1.500
Wilcoxon W	16.500
Z	-2.386
Asymp. Sig. (2-tailed)	0.017
Exact Sig. [2*(1-tailed Sig.)]	.016 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.

Mann-Whitney Test

		Ranks		
Kelompok		N	Mean Rank	Sum of Ranks
HISTOPATOLOGI	KPI	5	6.60	33.00
	KPII	5	4.40	22.00
	Total	10		

Test Statistics^a

HISTOPATOLOGI	
Mann-Whitney U	7.000
Wilcoxon W	22.000
Z	-1.247
Asymp. Sig. (2-tailed)	0.212
Exact Sig. [2*(1-tailed Sig.)]	.310 ^b

a. Grouping Variable: Kelompok

b. Not corrected for ties.