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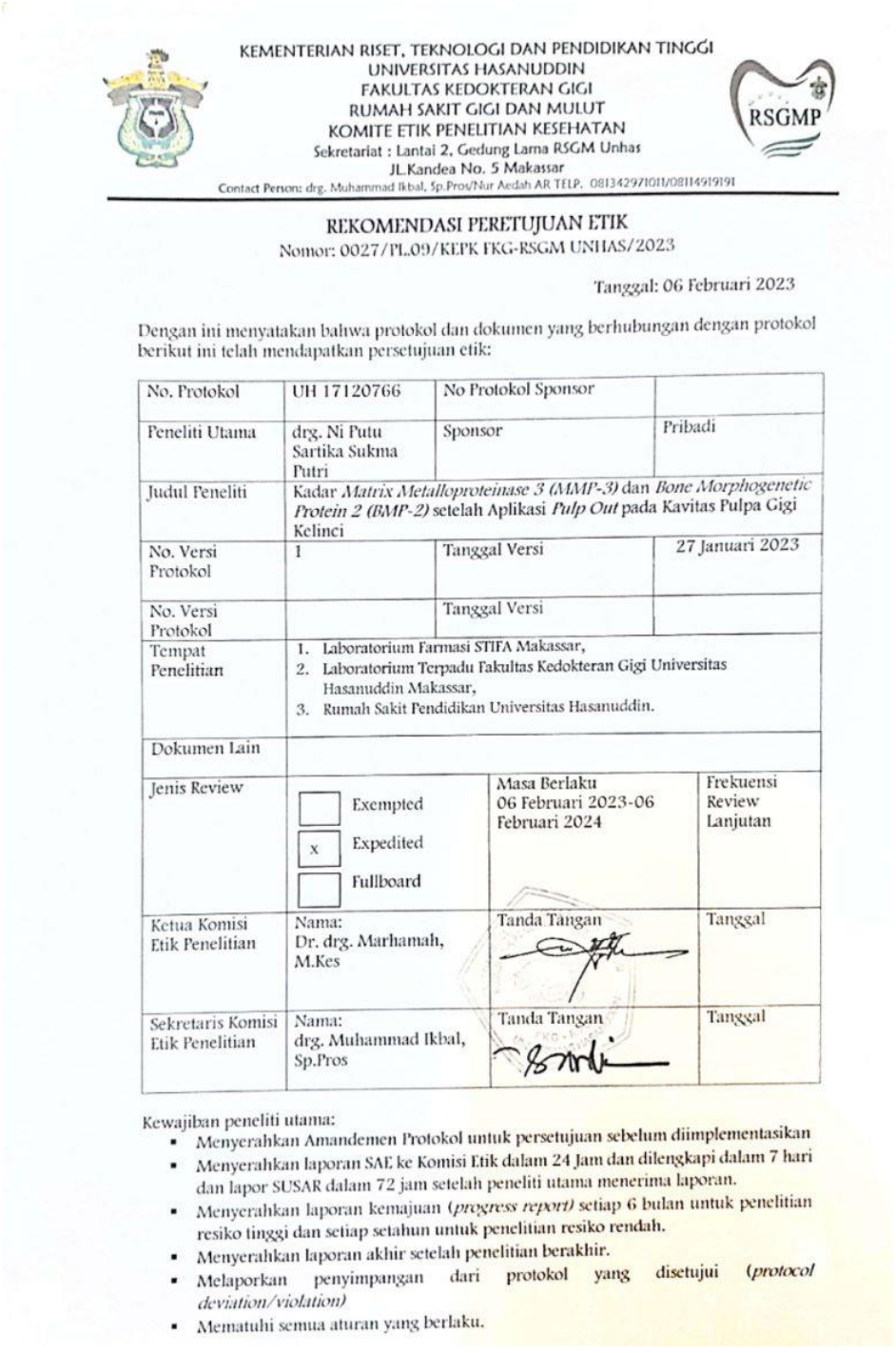
LAMPIRAN

Lampiran 1. Surat Rekomendasi Persetujuan Etik Penelitian



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN GIGI
RUMAH SAKIT GIGI DAN MULUT
KOMITE ETIK PENELITIAN KESEHATAN
Sekretariat : Lantai 2, Gedung Larna RSGM Unhas
JL.Kandea No. 5 Makassar
Contact Person: drg. Muhammad Ikbal, Sp.Pros/Nur Aedah AR TELP. 081342971011/081149191 91

RSGMP

REKOMENDASI PERETUJUAN ETIK
Nomor: 0027/PL.09/KEPK FKG-RSGM UNHAS/2023

Tanggal: 06 Februari 2023

Dengan ini menyatakan bahwa protokol dan dokumen yang berhubungan dengan protokol berikut ini telah mendapatkan persetujuan etik:

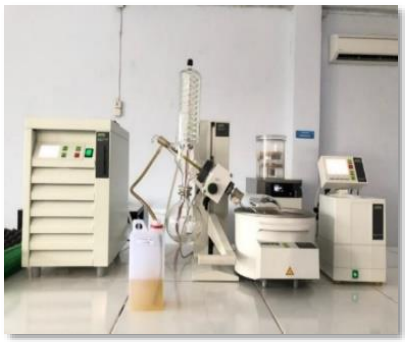
No. Protokol	UH 17120766	No Protokol Sponsor	
Peneliti Utama	drg. Ni Putu Sartika Sukma Putri	Sponsor	Pribadi
Judul Peneliti	Kadar *Matrix Metalloproteinase 3 (MMP-3)* dan *Bone Morphogenetic Protein 2 (BMP-2)* setelah Aplikasi *Pulp Out* pada Kavitas Pulpa Gigi Kelinci		
No. Versi Protokol	1	Tanggal Versi	27 Januari 2023
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	1. Laboratorium Farmasi STIFA Makassar, 2. Laboratorium Terpadu Fakultas Kedokteran Gigi Universitas Hasanuddin Makassar, 3. Rumah Sakit Pendidikan Universitas Hasanuddin.		
Dokumen Lain			
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard	Masa Berlaku 06 Februari 2023-06 Februari 2024	Frekuensi Review Lanjutan
Ketua Komisi Etik Penelitian	Nama: Dr. drg. Marhamah, M.Kes	Tanda Tangan	Tanggal
Sekretaris Komisi Etik Penelitian	Nama: drg. Muhammad Ikbal, Sp.Pros	Tanda Tangan	Tanggal

Kewajiban peneliti utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum diimplementasikan
- 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 protokol yang disetujui (*protocol deviation/violation)*
- Mematuhi semua aturan yang berlaku.

Lampiran 2. Dokumentasi Penelitian

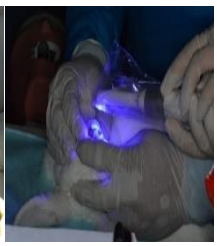
A. Pembuatan Ekstrak Bahan Uji




B. Penyimpanan Hewan Uji dan Aplikasi Bahan



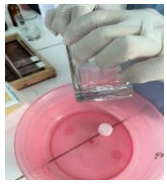




C. Pemeriksaan Hewan Uji






Lampiran 3. Perhitungan Pemeriksaan ELISA

A. MMP-3

[ng/mL]	ABS1	ABS2	Rata-rata	Minus blanko	
0,0	0,1521	0,1635	0,1578		
0,3	0,3182	0,3216		0,1604	0,1638
0,6	0,4857	0,4985		0,3279	0,3407
1,3	0,6758	0,6857		0,5180	0,5279
2,5	1,2730	1,2511		1,1152	1,0933
5,0	1,4354	1,4352		1,2776	1,2774
10,0	1,9381	1,9383		1,7803	1,7805
20,0	2,3621	2,3621		2,2043	2,2043

Perlakuan	ABS1	ABS2	Minus blanko		pg/mL		Rata-rata
25%	0,6463	0,6283	0,4885	0,4705	1,03	0,98	1,01
25%	0,5746	0,5746	0,4168	0,4168	0,85	0,85	0,85
25%	0,5847	0,5933	0,4269	0,4355	0,87	0,89	0,88
50%	0,6584	0,6745	0,5006	0,5167	1,06	1,10	1,08
50%	0,6465	0,6253	0,4887	0,4675	1,03	0,97	1,00
50%	0,5849	0,6164	0,4271	0,4586	0,87	0,95	0,91
Kontrol Negatif	0,3746	0,3746	0,2168	0,2168	0,41	0,41	0,41
Kontrol Negatif	0,4746	0,4738	0,3168	0,3160	0,62	0,62	0,62
Kontrol Negatif	0,4039	0,4038	0,2461	0,2460	0,47	0,47	0,47
Normal	0,2748	0,2173	0,1170	0,0595	0,21	0,10	0,16
Normal	0,1847	0,1849	0,0269	0,0271	0,05	0,05	0,05
Normal	0,1847	0,2392	0,0269	0,0814	0,05	0,14	0,10

B. BMP-2

pg/mL	ABS1	ABS2	Rata-rata	Minus blanko	
0,0	0,0670	0,0620	0,0645		
62,5	0,1635	0,1635		0,0990	0,0990
125,0	0,3543	0,3645		0,2898	0,3000
250,0	0,6027	0,6028		0,5382	0,5383
500,0	0,9037	1,0366		0,8392	0,9721
1000,0	1,6377	1,6370		1,5732	1,5725
2000,0	2,2530	2,3741		2,1885	2,3096
4000,0	2,6371	2,8362		2,5726	2,7717

Perlakuan	ABS1	ABS2	Minus blanko		pg/mL		Rata-rata
25%	0,3645	0,3676	0,3000	0,3031	112,16	113,42	112,79
25%	0,4192	0,4273	0,3547	0,3628	134,81	138,23	136,52
25%	0,3746	0,3948	0,3101	0,3303	116,28	124,61	120,45
50%	0,4273	0,4283	0,3628	0,3638	138,23	138,65	138,44
50%	0,4635	0,4637	0,3990	0,3992	153,71	153,80	138,76
50%	0,4273	0,42847	0,3628	0,3640	138,23	138,74	138,48
Kontrol Negatif	0,3524	0,3264	0,2879	0,2619	107,24	96,81	102,03
Kontrol Negatif	0,3322	0,3354	0,2677	0,2709	99,12	100,40	99,76
Kontrol Negatif	0,2736	0,2736	0,2091	0,2091	76,11	76,11	76,11
Normal	0,2534	0,2736	0,1889	0,2091	68,35	76,11	72,2293
Normal	0,2364	0,2172	0,1719	0,1527	61,90	54,68	58,2891
Normal	0,2463	0,2533	0,1818	0,1888	65,65	68,31	66,9814

Lampiran 4. Uji Statistik ANOVA

A. *Mean* dan *Standard Deviation*

```
GET FILE='D:\FILE TIKA\TESIS TIKA\Hasil Penelitian\from dok
afri\Elisa 2 DRG. AFRI.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
DESCRIPTIVES VARIABLES=BMP25 BMP50 BMPKN BMPS MMP25 MMP50 MMPKN
MMPS/STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptives

```
[DataSet1] D:\FILE TIKA\TESIS TIKA\Hasil Penelitian\from dok
afri\Elisa 2 DRG. AFRI.sav
```

Descriptive Statistics

	N	Mean	Std. Deviation
BMP50	3	138.5600	.017436
BMP25	3	123.2533	12.11083
BMPKN	3	92.6333	14.35457
BMPS	3	65.833	7.0404
MMP50	3	.9967	.08505
MMP25	3	.9133	.08505
MMPKN	3	.5000	.10817
MMPS	3	.1033	.05508
Valid N (listwise)	3		

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
BMP-2	Pulp Out 25%	3	123.2533	12.11083	6.99219	93.1684	153.3383	112.79	136.52
	Pulp Out 50%	3	138.7600	.017436	5.10001	121.6164	165.5036	138.44	153.76
	Kontrol negatif	3	92.6333	14.35457	8.28761	56.9746	128.2921	76.11	102.03
	sehat	3	65.8333	7.04039	4.06477	48.3440	83.3226	58.29	72.23
	Total	12	106.3200	32.27833	9.31795	85.8113	126.8287	58.29	153.76
MMP-3	Pulp Out 25%	3	.9133	.08505	.04910	.7021	1.1246	.85	1.01
	Pulp Out 50%	3	.9967	.08505	.04910	.7854	1.2079	.91	1.08
	Kontrol negatif	3	.5000	.10817	.06245	.2313	.7687	.41	.62
	sehat	3	.1033	.05508	.03180	-.0335	.2401	.05	.16
	Total	12	.6283	.37964	.10959	.3871	.8695	.05	1.08

B. Uji Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelompok	*Statistic*	*df*	Sig.	Statistic	df	Sig.
BMP25	Pulp Out 25%	.258	3	.	.960	3	.615
BMP50	Pulp Out 25%	.343	3	.	.842	3	.220
BMPKN	Pulp Out 25%	.357	3	.	.815	3	.151
BMPS	Pulp Out 25%	.231	3	.	.980	3	.730
MMP25	Pulp Out 25%	.319	3	.	.885	3	.339
MMP50	Pulp Out 25%	.182	3	.	.999	3	.935
MMPKN	Pulp Out 25%	.276	3	.	.942	3	.537
MMPS	Pulp Out 25%	.191	3	.	.997	3	.900

a. Lilliefors Significance Correction

b. There are no valid cases for BMP25 when Kelompok = 2.000. Statistics cannot be computed for this level.

c. There are no valid cases for BMP50 when Kelompok = 2.000. Statistics cannot be computed for this level.

d. There are no valid cases for BMPKN when Kelompok = 2.000. Statistics cannot be computed for this level.

e. There are no valid cases for BMPS when Kelompok = 2.000. Statistics cannot be computed for this level.

f. There are no valid cases for MMP25 when Kelompok = 2.000. Statistics cannot be computed for this level.

g. There are no valid cases for MMP50 when Kelompok = 2.000. Statistics cannot be computed for this level.

h. There are no valid cases for MMPKN when Kelompok = 2.000. Statistics cannot be computed for this level.

i. There are no valid cases for MMPS when Kelompok = 2.000. Statistics cannot be computed for this level.

m. There are no valid cases for COXS when Kelompok = 2.000. Statistics cannot be computed for this level.

C. Uji Homogenitas

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
BMP-2	Based on Mean	4.205	3	8	.046
	Based on Median	.714	3	8	.571
	Based on Median and with adjusted df	.714	3	3.850	.594
	Based on trimmed mean	3.752	3	8	.060
MMP-3	Based on Mean	.590	3	8	.638
	Based on Median	.163	3	8	.918
	Based on Median and with adjusted df	.163	3	6.249	.917
	Based on trimmed mean	.550	3	8	.662

D. One Way ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TNF	Between Groups	11996.451	3	3998.817	32.806	.000
	Within Groups	975.137	8	121.892		
	Total	12971.588	11			
BMP-2	Between Groups	10500.151	3	3500.050	29.147	.000
	Within Groups	960.647	8	120.081		
	Total	11460.798	11			
MMP-3	Between Groups	1.527	3	.509	69.725	.000
	Within Groups	.058	8	.007		
	Total	1.585	11			
COX-2	Between Groups	8.277	3	2.759	51.819	.000
	Within Groups	.426	8	.053		
	Total	8.703	11			

E. Post Hoc

Multiple Comparisons

LSD

Dependent Variable	(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
BMP-2	Pulp Out 25%	Pulp Out 50%	-15.30667	8.18864	.099	-34.1897	3.5764
		Kontrol negatif	30.62000*	8.18864	.006	11.7370	49.5030
		sehat	57.42000*	8.18864	.000	38.5370	76.3030
	Pulp Out 50%	Pulp Out 25%	15.30667	8.18864	.099	-3.5764	34.1897
		Kontrol negatif	45.92667*	8.18864	.001	27.0436	64.8097
		sehat	72.72667*	8.18864	.000	53.8436	91.6097
	Kontrol negatif	Pulp Out 25%	-30.62000*	8.18864	.006	-49.5030	-11.7370
		Pulp Out 50%	-45.92667*	8.18864	.001	-64.8097	-27.0436
		sehat	26.80000*	8.18864	.011	7.9170	45.6830
	sehat	Pulp Out 25%	-57.42000*	8.18864	.000	-76.3030	-38.5370
		Pulp Out 50%	-72.72667*	8.18864	.000	-91.6097	-53.8436
		Kontrol negatif	-26.80000*	8.18864	.011	-45.6830	-7.9170
MMP-3	Pulp Out 25%	Pulp Out 50%	-.08333	.06976	.266	-.2442	.0775
		Kontrol negatif	.41333*	.06976	.000	.2525	.5742
		sehat	.81000*	.06976	.000	.6491	.9709
	Pulp Out 50%	Pulp Out 25%	.08333	.06976	.266	-.0775	.2442
		Kontrol negatif	.49667*	.06976	.000	.3358	.6575
		sehat	.89333*	.06976	.000	.7325	1.0542
	Kontrol negatif	Pulp Out 25%	-.41333*	.06976	.000	-.5742	-.2525
		Pulp Out 50%	-.49667*	.06976	.000	-.6575	-.3358
		sehat	.39667*	.06976	.000	.2358	.5575
	sehat	Pulp Out 25%	-.81000*	.06976	.000	-.9709	-.6491
		Pulp Out 50%	-.89333*	.06976	.000	-1.0542	-.7325
		Kontrol negatif	-.39667*	.06976	.000	-.5575	-.2358

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