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LEMBAR ETIK



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
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REKOMENDASI PERSETUJUAN ETIK
 Nomor: 0058/PL.09/KEPK FKG-RSGM UNHAS/2023

Tanggal: 10 April 2023

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

No. Protokol	UH 17120795	No Protokol Sponsor	
Peneliti Utama	drg. Rachmawati Dian Puspitasari	Sponsor	Pribadi
Judul Peneliti	Efektivitas Kombinasi Gel Metformin 1% Dan Xenograft Terhadap Pembentukan Trabekula Tulang Alveolar pada Socket Pasca Pencabutan		
No. Versi Protokol	1	Tanggal Versi	31 Maret 2023
No. Versi Protokol		Tanggal Versi	
Tempat Penelitian	1. Laboratorium Biofarmaka Fakultas Farmasi Universitas Hasanuddin 2. Klinik Hewan Doc pet 3. Laboratorium PA RSP Universitas Hasanuddin 4. Laboratorium Biokimia-Biomolekuler Fakultas Kedokteran Universitas Brawijaya		
Dokumen Lain			
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard	Masa Berlaku 10 April 2023-10 April 2024	Frekuensi Review Lanjutan
Ketua Komisi Etik Penelitian	Nama: Dr. drg. Marhamah, M.Kes	Tanda Tangan 	Tanggal
Sekretaris Komisi Etik Penelitian	Nama: drg. Muhammad Iqbal, Sp.Prost	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

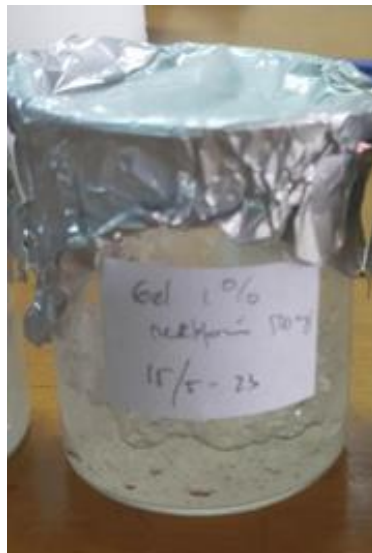
Dipindai dengan CamScanner

LAMPIRAN

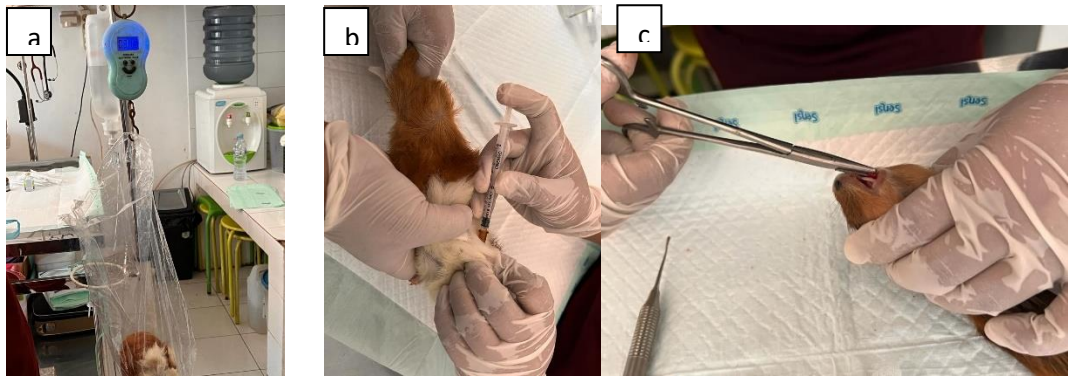
FOTO-FOTO PROSES PENELITIAN



Gambar 11. Proses pembuatan Gel Metformin 1% (6 Juli 2023). (a). Bubuk metformin murni sebanyak 2 gr (b). Bahan lain : manitol, citric acid, methyl parabean, sodium citrate, sucrose, prophyll parabean, gellan gum (c). Proses pemanasan semua bahan sesuai takaran hingga mencapai konsistensi yang diinginkan

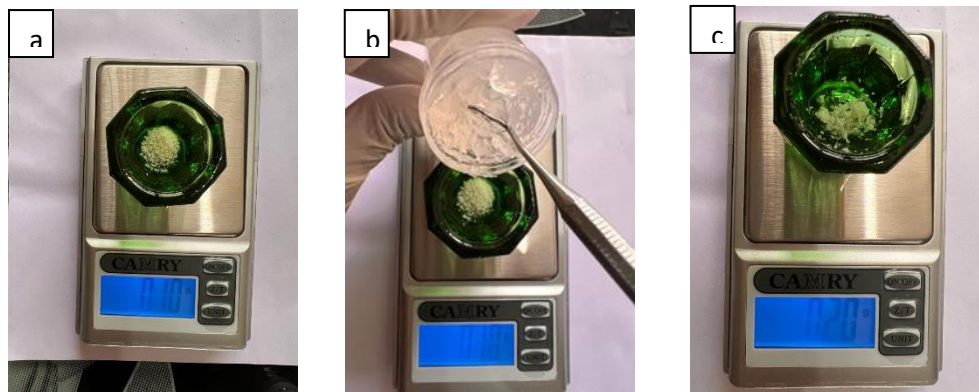


Gambar 12. Gel Metformin 1%

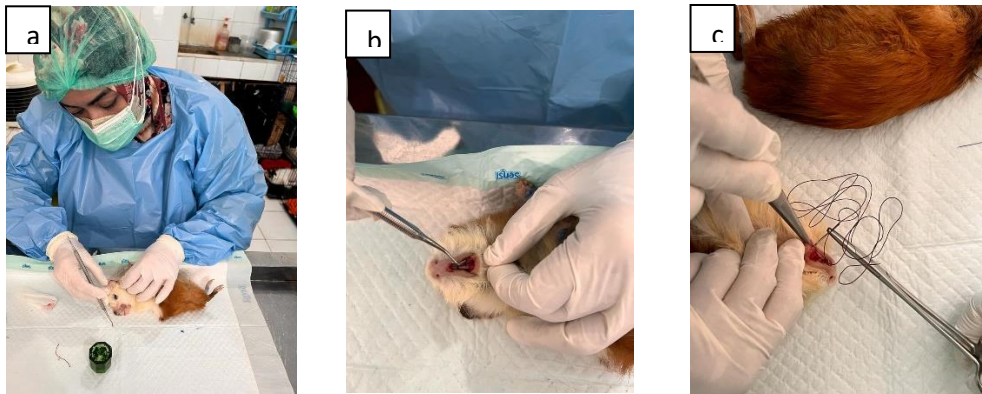


Gambar 13. Setelah marmut diadaptasikan selama 7 hari (30 Mei 2023), marmut dibagi menjadi 3 kelompok yaitu kelompok I (soket diisi dengan kombinasi gel metformin 1% dan xenograft), kelompok II (soket diisi xenograft/kontrol positif), dan kelompok III tanpa perlakuan (kontrol negatif). (a) Marmut ditimbang sesuai berat pada kriteria inklusi 250-300 gr (b) Anestesi dengan injeksi ketamin (c) Marmut yang sudah dianestesi (d) Pencabutan gigi insivus mandibula marmut

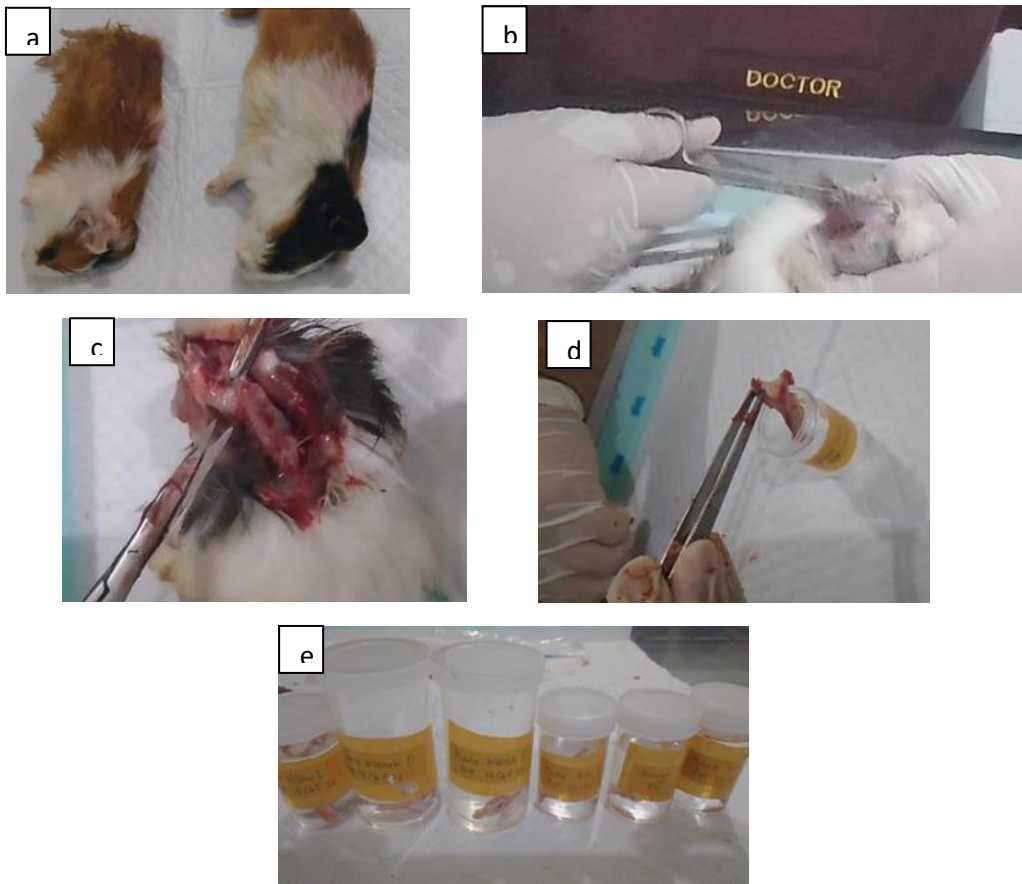
d



Gambar 14. Pencampuran gel metformin 1% dan xenograft dengan perbandingan 1:1. (a) Xenograft 0.10 gr (b) Gel metformin 1% 0.10 gr. (c) Kombinasi gel metformin 1% dan xenograft 0.20 gr

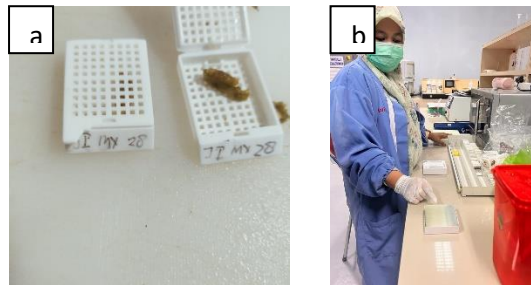


Gambar 15. (a) Proses memasukkan kombinasi gel meformin 1% dan xenograft kedalam soket bekas pencabutan gigi marmut. (b) Memasukkan bahan uji dengan bantuan excavator. (c) Penjahitan soket yang sudah diisi bahan uji dengan menggunakan benang black silk



Gambar 16. (a-e) Setelah pencabutan gigi insisivus rahang bawah dan diberi perlakuan, marmut dikorbkan pada hari ke 7, 14, dan 28 untuk pengambilan jaringan pada rahang

mandibula dan difiksasi menggunakan larutan buffer formalin 10% sebagai sampel penelitian



Gambar 17.(a) Sampel dibawa ke lab Patologi Anatomi untuk dilunakkan dan dibuat sampel preparatnya (12 juli 2023). (b) Slide preparat yang sudah siap kirim ke laboratorium Biokimia-Biomolekuler Universitas Brawijaya untuk dilakukan pemeriksaan histologis (28 juli 2023)

Lampiran Output SPSS.24

Tests of Normality

	Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Trabecula Tulang Alveolar	Perlakuan	.167	9	.200 [*]	.921	9	.404
	Kontrol Positif	.175	9	.200 [*]	.898	9	.240
	Kontrol Negatif	.228	9	.195	.837	9	.054

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

a. Lilliefors Significance Correction

Hari ke 7

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Perlakuan	3	28.2800	5.65533	3.26511
	Kontrol Positif	3	27.1000	4.32670	2.49802

Independent Samples Test

		Levene's Test for Equality of Variances		t-Test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	.338	.592	.287	4	.788	1.18000	4.11109	-10.23421	12.59421
	Equal variances not assumed			.287	3.744	.789	1.18000	4.11109	-10.54890	12.90890

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Perlakuan	3	28.2800	5.65533	3.26511
	Kontrol Negatif	3	21.2867	2.46743	1.42457

Independent Samples Test

		Levene's Test for Equality of Variances		t-Test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	2.394	.197	1.963	4	.121	6.99333	3.56235	-2.89734	16.88401
	Equal variances not assumed			1.963	2.735	.153	6.99333	3.56235	-4.99167	18.97834

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Kontrol Positif	3	27.1000	4.32670	2.49802
	Kontrol Negatif	3	21.2867	2.46743	1.42457

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	.968	.383	2.022	4	.113	5.81333	2.87568	-2.17082	13.79749
	Equal variances not assumed			2.022	3.176	.131	5.81333	2.87568	-3.05737	14.68403

Descriptives

Trabecula Tulang Alveolar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Perlakuan	3	28.2800	5.65533	3.26511	14.2314	42.3286	23.54	34.54
Kontrol Positif	3	27.1000	4.32670	2.49802	16.3519	37.8481	23.21	31.76
Kontrol Negatif	3	21.2867	2.46743	1.42457	15.1572	27.4161	18.65	23.54
Total	9	25.5556	4.97087	1.65696	21.7346	29.3765	18.65	34.54

ANOVA

Trabecula Tulang Alveolar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	84.094	2	42.047	2.221	.190
Within Groups	113.583	6	18.930		
Total	197.677	8			

HARI KE-14

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Perlakuan	3	63.9933	3.99555	2.30683
	Kontrol Positif	3	49.4700	6.03603	3.48490

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	.338	.592	.287	4	.788	1.18000	4.11109	-10.23421	12.59421
	Equal variances not assumed			.287	3.744	.789	1.18000	4.11109	-10.54890	12.90890

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Perlakuan	3	28.2800	5.65533	3.26511
	Kontrol Negatif	3	21.2867	2.46743	1.42457

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	2.394	.197	1.963	4	.121	6.99333	3.56235	-2.89734	16.88401
	Equal variances not assumed			1.963	2.735	.153	6.99333	3.56235	-4.99167	18.97834

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Kontrol Positif	3	27.1000	4.32670	2.49802
	Kontrol Negatif	3	21.2867	2.46743	1.42457

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	.958	.383	2.022	4	.113	5.81333	2.87568	-2.17082	13.79749
	Equal variances not assumed			2.022	3.176	.131	5.81333	2.87568	-3.05737	14.68403

Descriptives

Trabecula Tulang Alveolar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Perlakuan	3	63.9933	3.99555	2.30683	54.0678	73.9188	59.67	67.55
Kontrol Positif	3	49.4700	6.03603	3.48490	34.4757	64.4643	45.67	56.43
Kontrol Negatif	3	30.7933	4.64235	2.68026	19.2611	42.3256	25.51	34.22
Total	9	48.0856	15.04113	5.01371	36.5239	59.6472	25.51	67.55

ANOVA

Trabecula Tulang Alveolar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1661.985	2	830.993	33.712	.001
Within Groups	147.899	6	24.650		
Total	1809.884	8			

Multiple Comparisons

Dependent Variable: Trabecula Tulang Alveolar

LSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Perlakuan	Kontrol Positif	14.52333 [*]	4.05379	.012	4.6041	24.4426
	Kontrol Negatif	33.20000 [*]	4.05379	.000	23.2807	43.1193
Kontrol Positif	Perlakuan	-14.52333 [*]	4.05379	.012	-24.4426	-4.6041
	Kontrol Negatif	18.67667 [*]	4.05379	.004	8.7574	28.5959
Kontrol Negatif	Perlakuan	-33.20000 [*]	4.05379	.000	-43.1193	-23.2807
	Kontrol Positif	-18.67667 [*]	4.05379	.004	-28.5959	-8.7574

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

HARI KE-28

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Perlakuan	3	105.3733	9.11900	5.26486
	Kontrol Positif	3	86.6367	6.97878	4.02920

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	.458	.536	2.826	4	.048	18.73667	6.62972	.32962	37.14371
	Equal variances not assumed			2.826	3.744	.051	18.73667	6.62972	-.17672	37.65006

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Perlakuan	3	105.3733	9.11900	5.26486
	Kontrol Negatif	3	58.4500	2.01517	1.16346

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	7.625	.051	8.703	4	.001	46.92333	5.39188	31.95308	61.89359
	Equal variances not assumed			8.703	2.195	.010	46.92333	5.39188	25.59022	68.25645

Group Statistics

	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Trabecula Tulang Alveolar	Kontrol Positif	3	86.6367	6.97878	4.02920
	Kontrol Negatif	3	58.4500	2.01517	1.16346

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means		95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Trabecula Tulang Alveolar	Equal variances assumed	6.099	.069	6.721	4	.003	28.18667	4.19381	16.54277	39.83056
	Equal variances not assumed			6.721	2.331	.014	28.18667	4.19381	12.38942	43.98391

Descriptives

Trabecula Tulang Alveolar

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Perlakuan	3	105.3733	9.11900	5.26486	82.7205	128.0262	98.78	115.78
Kontrol Positif	3	86.6367	6.97878	4.02920	69.3004	103.9729	78.67	91.67
Kontrol Negatif	3	58.4500	2.01517	1.16346	53.4440	63.4560	56.42	60.45
Total	9	83.4867	21.26967	7.08989	67.1374	99.8360	56.42	115.78

ANOVA

Trabecula Tulang Alveolar

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3347.350	2	1673.675	36.941	.000
Within Groups	271.841	6	45.307		
Total	3619.191	8			

Multiple Comparisons

Dependent Variable: Trabecula Tulang Alveolar




LSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Perlakuan	Kontrol Positif	18.73667*	5.49586	.014	5.2888	32.1846
	Kontrol Negatif	46.92333*	5.49586	.000	33.4754	60.3712
Kontrol Positif	Perlakuan	-18.73667*	5.49586	.014	-32.1846	-5.2888
	Kontrol Negatif	28.18667*	5.49586	.002	14.7388	41.6346
Kontrol Negatif	Perlakuan	-46.92333*	5.49586	.000	-60.3712	-33.4754
	Kontrol Positif	-28.18667*	5.49586	.002	-41.6346	-14.7388

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

LEMBAR PERBAIKAN UJIAN SEMINAR HASIL PPDGS PERIODONSIA

NAMA : Rachmawati Dian Puspitasari
 NIM : J035202002
 TANGGAL SEMINAR : 25 Oktober 2023
 JUDUL : Efektivitas Kombinasi Gel Metformin 1% dan Xenograft Terhadap Pembentukan Trabekula Tulang Alveolar Pada Soket Pasca Pencabutan

NO	NAMA DOSEN PENGUJI/PEMBIMBING	KOREKSI TESIS	PARAF
1.	Prof.Dr.drg. Sri Oktawati, Sp.Perio (K)	1. Perbaiki kaidah penulisan sitasi sesuai metode penulisan Vancouver Jawaban : Telah dilakukan perbaikan cara penulisan sitasi pada naskah tesis sesuai dengan metode penulisan Vancouver	
2	Dr.drg. Nurlindah Hamrun, M.Kes	2. Koreksi cara penulisan daftar pustaka dengan menghilangkan penulisan sumber website Jawaban : Telah dilakukan koreksi penulisan pada daftar pustaka	
3.	Dr.drg. Arni Irawaty Djais, Sp.Perio (K)	3. Penambahan teori penelitian tentang metformin pada latar belakang Jawaban : Telah dilakukan penambahan teori tentang penelitian metformin pada latar belakang	
4	Dr.drg. Asdar Gani, M.Kes	1. Koreksi letak tabel 6 dipindahkan menjadi tabel 2 Jawaban : Telah dilakukan koreksi letak tabel	