

## DAFTAR PUSTAKA

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# LAMPIRAN

LAMPIRAN

## Lampiran 1. Surat Izin Etik



KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI  
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN  
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN  
RSPTN UNIVERSITAS HASANUDDIN  
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR  
Sekretariat : Lantai 2 Gedung Laboratorium Terpadu  
JL.PEDRITS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MARAWA 92415  
Cendek Perani di Agassalim Bukhari, J.Wahid.FNS, Isck TELP. 08524932618 041 2782101 Fax: 041 281431



**REKOMENDASI PERSETUJUAN ETIK**  
Nomor : B5/UN4.6.4.5.31/ PP36/ 2022

Tanggal: 2 Februari 2023

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

No Protokol	UH23010006	No Sponsor	
Peneliti Utama	Zalfah Firayanti	Protokol	
Judul Peneliti	Analisis Hubungan HbA1c dengan Kadar Galectin-3 Serum Pada Subjek Diabetes Mellitus Tipe 2	Sponsor	
No Versi Protokol	2	Tanggal Versi	31 Januari 2023
No Versi PSP	2	Tanggal Versi	31 Januari 2023
Tempat Penelitian	RS Universitas Hasanuddin Makassar		
Jenis Review	<input type="checkbox"/> Exempted	Masa Berlaku 2 Februari 2023 sampai 2 Februari 2024	Frekuensi review lanjutan
	<input checked="" type="checkbox"/> Expedited		
	<input type="checkbox"/> Fullboard Tanggal		
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 Komite 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. Surat Izin Penelitian

	<b>ADMINISTRASI</b>	<b>FORMULIR 1</b>
	Nomor : 047/02/FR1/2023	Tanggal : 6 Februari 2023
<b>SURAT PENGANTAR PENELITIAN</b>		

Kepada Yth.

Pembimbing/pendamping,

**Bpk. Muh. Yusuf Usman,**

Dengan ini menerangkan bahwa peneliti/mahasiswa berikut ini :

Nama : Zalfah Firayanti

NIM : P062212006

Institusi : Pascasarjana Ilmu Biomedik Universitas Hasanuddin

**Akan** melakukan pengambilan data/ analisa bahan hayati :

Pada tanggal : 9 Februari 2023 s/d Selesai

Jumlah subjek : ± 62 sampel

Jenis data : Data Primer

Untuk penelitian dengan judul :

**"Analisis Hubungan Hba1c dengan Kadar Galectin-3 Serum Pada Subjek Diabetes Mellitus Tipe 2"**

Harap dilakukan pembimbingan dan pendampingan seperutnya. Terima Kasih.

Staf Administrasi,

 **HUM-RC**  
science for a better future

Andi Fidyah Septiani

**Catatan :**

Jika pengambilan data telah selesai, **diwajibkan** bagi pendamping/pembimbing:

1. Membubuhi **paraf dan tanggal selesai** pengambilan data di formulir ini,
2. Mengisi **jumlah alat dan bahan habis pakai** yang digunakan peneliti pada form tarif penggunaan alat dan bahan,
3. **Mengembalikan formulir** yang sudah lengkap ke staf administrasi.

### Lampiran 3. Data Primer

No Sampel	Jenis Kelamin	Umur	HbA1c	<i>Galectin-3</i> Serum
101	P	63	12.4	23.8651
14	P	55	10.3	16.84022
19	L	60	7.6	25.32551
21	P	56	10	24.62647
22	P	61	8.3	28.12915
23	L	53	9.4	1.082064
24	P	64	9	15.36839
26	L	69	8,0	13.86711
27	P	56	8.1	14.44248
32	P	62	11.6	26.0627
33	P	50	11.1	26.73627
34	P	53	11.1	24.85315
37	L	37	10.4	13.94136
39	P	63	8.2	28.57744
40	P	49	7.9	17.60109
42	P	63	10,0	12.27535
43	P	58	10.1	20.64169
44	P	59	7.4	20.13889
45	L	65	7.7	29.00808
46	P	43	11.5	26.28997
47	L	60	8.3	20.089
48	L	63	15.9	24.68217
49	L	62	9.9	7.602462
56	P	61	14.4	17.74597
58	L	70	7.7	24.22335
61	P	63	10.8	25.78848
62	L	54	9,0	18.94239
65	L	56	13.6	8.146832
66	P	39	7,0	22.61465
73	L	79	7.7	24.86824
74	P	48	7.9	26.39665
76	L	61	7.6	20.00946
77	L	61	10.6	12.57619
78	P	73	7.2	23.50415
80	P	53	8.8	26.50536
81	P	52	7	23.85727
82	L	67	9.7	22.54081

84	L	61	10.1	15.288
86	L	47	9.7	24.61234
87	P	64	11.5	25.88335
88	P	46	9.6	18.09633
89	L	84	9.2	15.60424
90	P	65	13.8	18.92908
94	L	57	7.1	20.84981
95	P	63	9.4	17.62608
96	L	53	7.2	8.849652
97	P	58	7.2	23.98977
99	L	39	8.5	21.25984
105	P	58	13.9	18.29926
25	L	68	6.6	8.654182
50	P	56	6.3	22.07413
54	L	44	6.6	0.18263
71	L	63	6.2	12.54362
79	L	42	6.5	23.22995
91	P	67	6.9	18.12318
92	L	61	6.7	18.44517
93	P	72	6,0	14.46535
98	L	52	5.9	16.54308
103	L	62	6.5	13.29142
104	P	56	5.7	15.25746

## Lampiran 4. Analisis Data

### Statistik Deskriptif

#### Jenis Kelamin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laki-laki	28	46.7	46.7	46.7
	Perempuan	32	53.3	53.3	100.0
	Total	60	100.0	100.0	

#### Usia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	36-45 tahun	6	10.0	10.0	10.0
	46-55 tahun	13	21.7	21.7	31.7
	56-65 tahun	32	53.3	53.3	85.0
	>65 tahun	9	15.0	15.0	100.0
	Total	60	100.0	100.0	

#### Descriptive Statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
HbA1c	60	10.20	5.70	15.90	9.0050	2.32295
Galectin-3	60	28.82540	.18260	29.00800	19.1976772	6.49611139
Valid N (listwise)	60					

#### Statistics

		Gal-3 Tidak Terkendali (Laki-laki)	Gal-3 Terkendali (Laki-laki)	Gal-3 Tidak Terkendali (Perempuan)	Gal-3 Terkendali (Perempuan)
N	Valid	21	7	28	4
	Missing	0	0	0	0
Mean		17.7794	13.2700	21.9887	17.4800
Median		20.0094	13.2914	23.6807	16.6903
Mode		1.08 <sup>a</sup>	.18 <sup>a</sup>	12.28 <sup>a</sup>	14.47 <sup>a</sup>
Std. Deviation		7.23864	7.41405	4.54742	3.44227
Range		27.93	23.05	16.30	7.61
Minimum		1.08	.18	12.28	14.47

Maximum	29.01	23.23	28.58	22.07
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a. Multiple modes exist. The smallest value is shown

## Uji Normalitas

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
HbA1c	.119	60	.033	.932	60	.002
Galectin-3	.099	60	.200*	.941	60	.006

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

a. Lilliefors Significance Correction

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Gal-3 Tidak Terkendali (Laki-laki)	.145	21	.200*	.948	21	.319

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

a. Lilliefors Significance Correction

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Gal-3 Terkendali (Laki-laki)	.175	7	.200*	.971	7	.903

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

a. Lilliefors Significance Correction

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Gal-3 Tidak Terkendali (Perempuan)	.166	28	.046	.932	28	.068

a. Lilliefors Significance Correction



### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Gal-3 Terkendali (Perempuan)	.241	4	.	.916	4	.514

a. Lilliefors Significance Correction

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Hba1c (Laki-laki)	.151	28	.103	.856	28	.001
Gal-3 (Laki-laki)	.103	28	.200*	.957	28	.292

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

a. Lilliefors Significance Correction

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Hba1c (Perempuan)	.115	32	.200*	.958	32	.240
Gal-3 (Perempuan)	.142	32	.100	.939	32	.071

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

a. Lilliefors Significance Correction

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Hba1c Tidak Terkendali	.115	49	.117	.910	49	.001
Gal-3 Tidak Terkendali	.134	49	.029	.933	49	.008

a. Lilliefors Significance Correction

### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Hba1c Terkendali	.198	11	.200*	.957	11	.738
Gal-3 Terkendali	.180	11	.200*	.929	11	.400

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

a. Lilliefors Significance Correction

## Uji Perbandingan

		Group Statistics			
	HbA1c	N	Mean	Std. Deviation	Std. Error Mean
Galectin-3	Terkendali	11	14.8009242	6.40681749	1.93172816
	Tidak terkendali	49	20.1847687	6.15580303	.87940043

### Statistics

Terkendali

N	Valid	11
	Missing	0
Mean		14.8009242
Median		15.2574618
Mode		.18263 <sup>a</sup>
Std. Deviation		6.40681749
Minimum		.18263
Maximum		23.22995

a. Multiple modes exist. The smallest value is shown

Statistics

Tidak Terkendali

N	Valid	49
	Missing	0
Mean		20.1847687
Median		20.8498095
Mode		1.08206 <sup>a</sup>
Std. Deviation		6.15580303
Minimum		1.08206
Maximum		29.00808

a. Multiple modes exist. The smallest value is shown

Group Statistics					
	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Gal-3 (Laki-laki)	Gal-3 Tidak Terkendali (Laki-laki)	21	17.7794	7.23864	1.57960
	Gal-3 Terkendali (Laki-laki)	7	13.2700	7.41405	2.80225

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
Gal-3 (Laki-laki)	Equal variances assumed	.175	.679	1.419	26	.168	4.50947	3.17703	-2.02101	11.03996
	Equal variances not assumed			1.402	10.112	.191	4.50947	3.21679	-2.64719	11.66613

Group Statistics					
	Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Gal-3 (Perempuan)	Gal-3 Tidak Terkendali (Perempuan)	28	21.9887	4.54742	.85938
	Gal-3 Terkendali (Perempuan)	4	17.4800	3.44227	1.72114

### 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
Gal-3 (Peremp uan)	Equal variances assumed	1.636	.211	1.896	30	.068	4.50870	2.37824	-.34831	9.36572
	Equal variances not assumed			2.344	4.650	.070	4.50870	1.92376	-.55047	9.56788

### 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
Galectin -3	Equal variances assumed	.10 9	.742	-2.603	58	.012	-5.38384456	2.0685183 5	-9.52443390	-1.24325522
	Equal variances not assumed			-2.537	14.4 45	.023	-5.38384456	2.1224794 0	-9.92298505	-.84470407

## Uji Korelasi Spearman

### Correlations

			HbA1c	Galectin-3
Spearman's rho	HbA1c	Correlation Coefficient	1.000	.176
		Sig. (2-tailed)	.	.179
		N	60	60
	Galectin-3	Correlation Coefficient	.176	1.000
		Sig. (2-tailed)	.179	.
		N	60	60

### Correlations

			Hba1c (Laki-laki)	Gal-3 (Laki-laki)
Spearman's rho	Hba1c (Laki-laki)	Correlation Coefficient	1.000	.014
		Sig. (2-tailed)	.	.945
		N	28	28
	Gal-3 (Laki-laki)	Correlation Coefficient	.014	1.000
		Sig. (2-tailed)	.945	.
		N	28	28

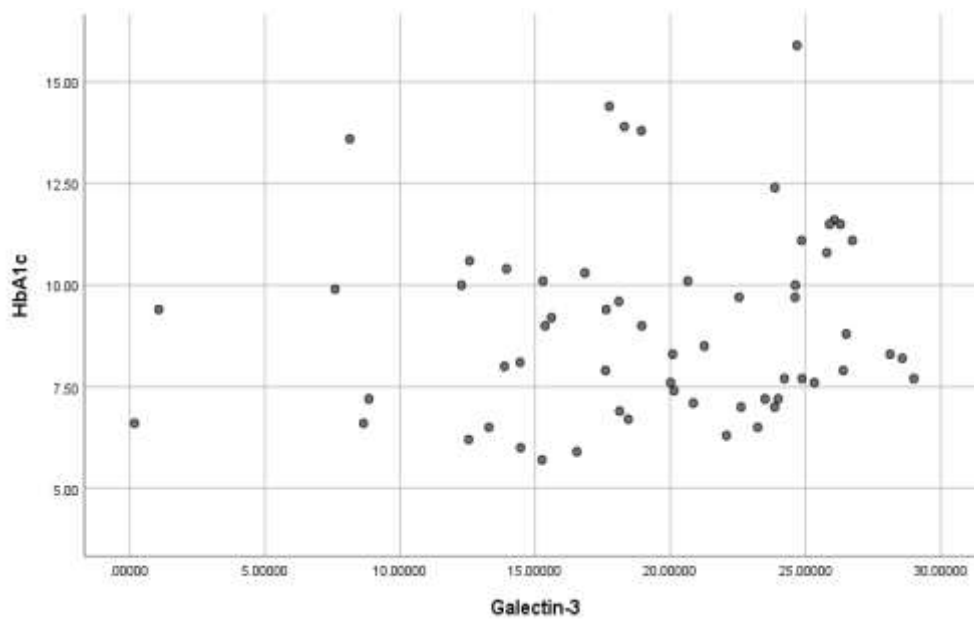
### Correlations

			Hba1c Tidak Terkendali	Gal-3 Tidak Terkendali
Spearman's rho	Hba1c Tidak Terkendali	Correlation Coefficient	1.000	-.072
		Sig. (2-tailed)	.	.625
		N	49	49
	Gal-3 Tidak Terkendali	Correlation Coefficient	-.072	1.000
		Sig. (2-tailed)	.625	.
		N	49	49

### Correlations

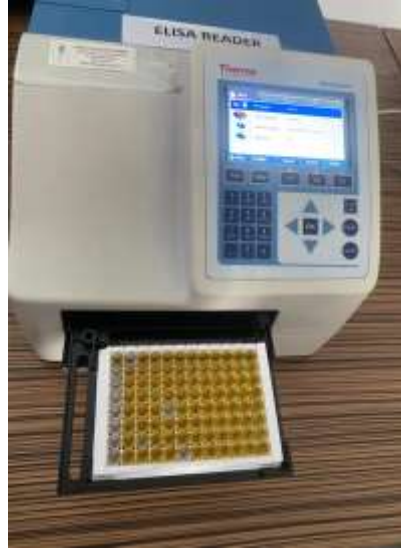
		Hba1c Terkendali	Gal-3 Terkendali
Hba1c Terkendali	Pearson Correlation	1	-.086
	Sig. (2-tailed)		.801
	N	11	11
Gal-3 Terkendali	Pearson Correlation	-.086	1
	Sig. (2-tailed)	.801	
	N	11	11

### Grafik Scatterplot Antara HbA1c dan *Galectin-3* Serum



## Lampiran 5. Dokumentasi







## Lampiran 6. Riwayat Hidup (*Curriculum Vitae*)

### A. DATA PRIBADI

Nama : Zaifah Firayanti  
Tempat, tanggal lahir : Ujung Pandang, 01 November 1998  
Agama : Islam  
No. HP/email : 083139730039/ 01zaifah@gmail.com  
Pekerjaan : Mahasiswa S2 Ilmu Biomedik  
NIP : -  
Pangkat/Golongan : -  
Alamat : Paccerakkang Permai b5 no 1A

<b>NO.</b>	<b>STRATA</b>	<b>INSTITUSI</b>	<b>TEMPAT</b>	<b>TAHUN LULUS</b>
1	SD	SDIT Al-Insyirahh	Makassar	2011
2	SMP	SMP Negeri 30	Makassar	2014
3	SMA	SMA Negeri 21	Makassar	2017
4.	S1	Universitas Negeri Makassar (Kimia Sains)	Makassar	2021
5	S2 (sementara)	Ilmu Biomedik Pascasarjana Unhas	Makassar	2022-Sekarang