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Zhou, L. et al. (2018) 'Downregulation of leucine-rich repeats and immunoglobulin-like domains 1 by microRNA-20a modulates gastric cancer multidrug resistance', *Cancer Science*, 109(4), pp. 1044–1054. doi: 10.1111/cas.13538.

LAMPIRAN

Lampiran 1. Ethical Clearance

	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.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245. Contact Person: dr. Agussalim Bukhari.,M.Med,PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431	
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REKOMENDASI PERSETUJUAN ETIK

Nomor : 483/UN4.6.4.5.31/ PP36/ 2023

Tanggal: 13 Juli 2023

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

No Protokol	UH23050359	No Sponsor	
Peneliti Utama	dr. Anak Agung Ayu Niti, M.Kes	Sponsor	
Judul Peneliti	Analisis Ekspresi Hubungan Protein Leuchine-Rich Repetas And Immunoglobulin Like Domains-1 (LRIG1) dan Ekspresi Epidermal Growth Factor (EGFR) serta Gambaran Histopatologi pada Tikus Wistar Dengan Displasia Nasofaring yang diberikan Isolate Betanin		
No Versi Protokol	2	Tanggal Versi	12 Juli 2023
No Versi PSP		Tanggal Versi	
Tempat Penelitian	Laboratorium Farmakologi Universitas Gadjah Mada, Yogyakarta		
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard Tanggal	Masa Berlaku 13 Juli 2023 sampai 13 Juli 2024	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 Lapo 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 prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

Lampiran 2. Case Report Form

Case Report Form

Research Title: Expression Analysis of Leuchine-Rich Repeats and Immunoglobulin-Like Domains-1 (LRIG1) protein and Epidermal Growth Factor (EGFR) Expression with Histopatological Features in Wistar Rats With Nasopharyngeal displasia Given Betanin.
Researcher: dr. Anak Agung Ayu Niti Wedayani, M.Sc
Date Complected: (Month/date/years) : .../.../....

Animal Information									
Type of animal:	(...) <i>Rattus norvegicus</i>	(...) strain wistar							
Number of animal	(...) One	(...) Multiple	Species	Breed	Color	Weight	Sex	Age	Name
Anatomical abnormalities	Eyes: Dextra Sinistra	Nose:	Mouth	Feet Dextra Sinistra	Tail				
Animal Owner									
First name	Last Name								
Address	City:				Zip:				
Phone	Email:								
Animal Location									
First name	Last Name								
Address	City:				Zip:				
Phone	Email:								
Animal Origin									
Name of veterinarian	Facility name:								
Address	City:				Zip:				
Phone	Email:								
History (please provide any details about this animal, including travel history or vaccine history if applicable)									
Was the animal imported from outside? (...) Yes (...) No If Yes, from where?									
Clinical Signs/Physical Examination Finding									

Onset date:	Presentation Date:		Date of death:
General	(...) Normal	(...) Abnormal	Comments
Skin	(...) Normal	(...) Abnormal	Comments
Eyes	(...) Normal	(...) Abnormal	Comments
Ears	(...) Normal	(...) Abnormal	Comments
Nose	(...) Normal	(...) Abnormal	Comments
Throat	(...) Normal	(...) Abnormal	Comments
Respiratory	(...) Normal	(...) Abnormal	Comments
Cardiovascular	(...) Normal	(...) Abnormal	Comments
Abdomen/ Digestive	(...) Normal	(...) Abnormal	Comments
Urogenital	(...) Normal	(...) Abnormal	Comments
Musculoskeletal	(...) Normal	(...) Abnormal	Comments
Nervous system	(...) Normal	(...) Abnormal	Comments
Lymph nodes	(...) Normal	(...) Abnormal	Comments
Other	(...) Normal	(...) Abnormal	Comments
ELISA (LRIG1) Pre induction formaldehyde:			
Presentation date:			
ELISA (LRIG1) Post induction formaldehyde:			
Presentation date:			
ELISA (Egf) Pre induction formaldehyde:			
Presentation date:			
ELISA (Egf) Post induction formaldehyde:			
Presentation date:			
IHC (LRIG1) :			
Presentation date:			

IHC (EGFR) :
Presentation date:
Histopathology features of Nasopharyng:
Presentation date:
Treatment (please describe any treatments or medications given)
Date: Treatment (name, strength/dose, duration given):
Additional Comments

Lampiran 3. Hasil Analisis Data Displasia

Your temporary usage period for IBM SPSS Statistics will expire in 4443 days.

```
NEW FILE.
DATASET NAME DataSet1 WINDOW=FRONT.
CROSSTABS
  /TABLES=KelompokPerlakuan BY Nasofaring Paru
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT
  /COUNT ROUND CELL.
```

Crosstabs

Notes		
Output Created		01-NOV-2023 22:35:31
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	30
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each table are based on all the cases with valid data in the specified range(s) for all variables in each table.
Syntax		CROSSTABS /TABLES=KelompokPerlakuan BY Nasofaring Paru /FORMAT=AVALUE TABLES /STATISTICS=CHISQ /CELLS=COUNT /COUNT ROUND CELL.
Resources	Processor Time	00:00:00.00

Elapsed Time	00:00:00.00
Dimensions Requested	2
Cells Available	524245

[DataSet1]

Case Processing Summary

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Kelompok perlakuan * Derajat displasia nasofaring	30	100.0%	0	0.0%	30	100.0%
Kelompok perlakuan * Derajat displasia paru-paru	30	100.0%	0	0.0%	30	100.0%

Kelompok perlakuan * Derajat displasia nasofaring

Crosstab

Count

		Derajat displasia nasofaring			Total
		.00	2.00	3.00	
Kelompok perlakuan	Sehat	5	0	0	5
	Kontrol negatif	0	0	5	5
	Kontrol positif	0	0	5	5
	Perlakuan 1	0	0	5	5
	Perlakuan 2	1	0	4	5
	Perlakuan 3	2	2	1	5
Total		8	2	20	30

Chi-Square Tests

	Value	df	Asymptotic Significance (2- sided)
Pearson Chi-Square	32.100 ^a	10	.000
Likelihood Ratio	32.646	10	.000
Linear-by-Linear Association	1.088	1	.297
N of Valid Cases	30		

a. 18 cells (100.0%) have expected count less than 5. The minimum expected count is .33.

Lampiran 4. Hasil Analisis LRIG1 dan EGFR

Descriptives			Statistic	Std. Error
Lapisan mukosa	Mean		.6613	.05725
LRIG1	95% Confidence	Lower Bound	.5443	
	Interval for Mean	Upper Bound	.7784	
	5% Trimmed Mean		.6756	
	Median		.8400	
	Variance		.098	
	Std. Deviation		.31355	
	Minimum		.11	
	Maximum		.96	
	Range		.85	
	Interquartile Range		.62	
	Skewness		-.749	.427
	Kurtosis		-1.194	.833
Lapisan mukosa	Mean		.3537	.06408
EGFR	95% Confidence	Lower Bound	.2226	
	Interval for Mean	Upper Bound	.4847	
	5% Trimmed Mean		.3411	
	Median		.2150	
	Variance		.123	
	Std. Deviation		.35096	
	Minimum		.00	
	Maximum		.94	
	Range		.94	
	Interquartile Range		.74	
	Skewness		.665	.427
	Kurtosis		-1.287	.833

Tests of Normality

Kolmogorov-Smirnov^a

Shapiro-Wilk

Descriptives

		Kelompok perlakuan	Statistic	Std. Error
Lapisan mukosa LRIG1	Sehat	Mean	.9140	.01600
		95% Confidence Lower Bound	.8696	
		Interval for Mean Upper Bound	.9584	
		5% Trimmed Mean	.9150	
		Median	.9200	
		Variance	.001	
		Std. Deviation	.03578	
		Minimum	.86	
		Maximum	.95	
		Range	.09	
		Interquartile Range	.06	
		Skewness	-.871	.913
		Kurtosis	.148	2.000
	Kontrol negatif	Mean	.1820	.02267
		95% Confidence Lower Bound	.1191	
		Interval for Mean Upper Bound	.2449	
		5% Trimmed Mean	.1833	
		Median	.2000	
		Variance	.003	
		Std. Deviation	.05070	
		Minimum	.11	
		Maximum	.23	
		Range	.12	
		Interquartile Range	.10	
		Skewness	-.751	.913
		Kurtosis	-1.296	2.000
	Kontrol positif	Mean	.3240	.07534
		95% Confidence Lower Bound	.1148	
		Interval for Mean Upper Bound	.5332	
		5% Trimmed Mean	.3244	
		Median	.3000	
		Variance	.028	
		Std. Deviation	.16846	
		Minimum	.11	
		Maximum	.53	
		Range	.42	
		Interquartile Range	.32	
		Skewness	.008	.913

		Kurtosis	-1.437	2.000
Perlakuan		Mean	.7440	.05391
1	95% Confidence	Lower Bound	.5943	
	Interval for Mean	Upper Bound	.8937	
	5% Trimmed Mean		.7467	
	Median		.7600	
	Variance		.015	
	Std. Deviation		.12054	
	Minimum		.56	
	Maximum		.88	
	Range		.32	
	Interquartile Range		.21	
	Skewness		-.824	.913
	Kurtosis		.933	2.000
Perlakuan		Mean	.8780	.01562
2	95% Confidence	Lower Bound	.8346	
	Interval for Mean	Upper Bound	.9214	
	5% Trimmed Mean		.8800	
	Median		.9000	
	Variance		.001	
	Std. Deviation		.03493	
	Minimum		.82	
	Maximum		.90	
	Range		.08	
	Interquartile Range		.06	
	Skewness		-1.600	.913
	Kurtosis		2.098	2.000
Perlakuan		Mean	.9260	.01249
3	95% Confidence	Lower Bound	.8913	
	Interval for Mean	Upper Bound	.9607	
	5% Trimmed Mean		.9256	
	Median		.9200	
	Variance		.001	
	Std. Deviation		.02793	
	Minimum		.90	
	Maximum		.96	
	Range		.06	

		Interquartile Range	.05	
		Skewness	.340	.913
		Kurtosis	-2.692	2.000
Lapisan mukosa EFGR	Sehat	Mean	.0000	.00000
		95% Confidence Lower Bound	.0000	
		Interval for Mean Upper Bound	.0000	
		5% Trimmed Mean	.0000	
		Median	.0000	
		Variance	.000	
		Std. Deviation	.00000	
		Minimum	.00	
		Maximum	.00	
		Range	.00	
		Interquartile Range	.00	
		Skewness	.	.
		Kurtosis	.	.
	Kontrol negatif	Mean	.8760	.03124
		95% Confidence Lower Bound	.7893	
		Interval for Mean Upper Bound	.9627	
		5% Trimmed Mean	.8767	
		Median	.9200	
		Variance	.005	
		Std. Deviation	.06986	
		Minimum	.80	
		Maximum	.94	
		Range	.14	
		Interquartile Range	.13	
		Skewness	-.544	.913
		Kurtosis	-3.224	2.000
	Kontrol positif	Mean	.7580	.06629
		95% Confidence Lower Bound	.5740	
		Interval for Mean Upper Bound	.9420	
		5% Trimmed Mean	.7633	
		Median	.7900	
		Variance	.022	
		Std. Deviation	.14822	
		Minimum	.51	

1	Perlakuan	Maximum		.91	
		Range		.40	
		Interquartile Range		.21	
		Skewness		-1.487	.913
		Kurtosis		3.190	2.000
		Mean		.2220	.03470
		95% Confidence	Lower Bound	.1257	
		Interval for Mean	Upper Bound	.3183	
		5% Trimmed Mean		.2244	
		Median		.2400	
		Variance		.006	
		Std. Deviation		.07759	
		Minimum		.10	
		Maximum		.30	
		Range		.20	
		Interquartile Range		.14	
		Skewness		-1.102	.913
		Kurtosis		1.113	2.000
		Mean		.2040	.01720
2	Perlakuan	95% Confidence	Lower Bound	.1562	
		Interval for Mean	Upper Bound	.2518	
		5% Trimmed Mean		.2044	
		Median		.2000	
		Variance		.001	
		Std. Deviation		.03847	
		Minimum		.15	
		Maximum		.25	
		Range		.10	
		Interquartile Range		.07	
		Skewness		-.332	.913
		Kurtosis		-.310	2.000
		Mean		.0620	.01356
		95% Confidence	Lower Bound	.0243	
3	Perlakuan	Interval for Mean	Upper Bound	.0997	
		5% Trimmed Mean		.0622	
		Median		.0600	
		Variance		.001	

Std. Deviation	.03033	
Minimum	.02	
Maximum	.10	
Range	.08	
Interquartile Range	.05	
Skewness	-.226	.913
Kurtosis	-.139	2.000

	Statistic	df	Sig.	Statistic	df	Sig.
Lapisan mukosa LRIG1	.249	30	.000	.791	30	.000
Lapisan mukosa EFGR	.228	30	.000	.813	30	.000

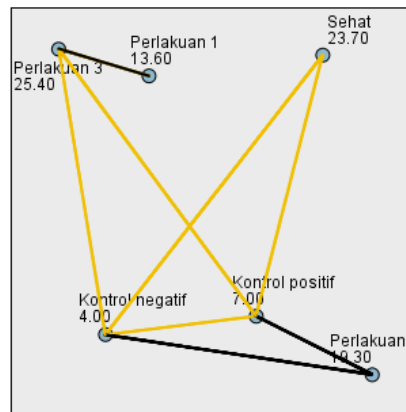
a. Lilliefors Significance Correction

Tes Normalitas

	Lapisan mukosa LRIG1	Lapisan mukosa EFGR
Kruskal-Wallis H	25.238	27.219
df	5	5
Asymp. Sig.	.000	.000

LM LGIR1

Pairwise Comparisons of Kelompok perlakuan



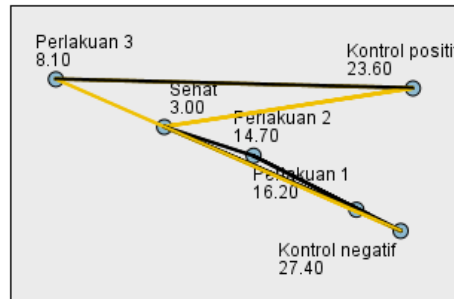
Each node shows the sample average rank of Kelompok perlakuan.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Kontrol negatif-Kontrol positif	-3.000	5.544	-.541	.588	1.000
Kontrol negatif-Perlakuan 1	-9.600	5.544	-1.732	.083	1.000
Kontrol negatif-Perlakuan 2	-15.300	5.544	-2.760	.006	.087
Kontrol negatif-Sehat	19.700	5.544	3.554	.000	.006
Kontrol negatif-Perlakuan 3	-21.400	5.544	-3.860	.000	.002
Kontrol positif-Perlakuan 1	-6.600	5.544	-1.191	.234	1.000
Kontrol positif-Perlakuan 2	-12.300	5.544	-2.219	.027	.398
Kontrol positif-Sehat	16.700	5.544	3.013	.003	.039
Kontrol positif-Perlakuan 3	-18.400	5.544	-3.319	.001	.014
Perlakuan 1-Perlakuan 2	-5.700	5.544	-1.028	.304	1.000
Perlakuan 1-Sehat	10.100	5.544	1.822	.068	1.000
Perlakuan 1-Perlakuan 3	-11.800	5.544	-2.129	.033	.499
Perlakuan 2-Sehat	4.400	5.544	.794	.427	1.000
Perlakuan 2-Perlakuan 3	-6.100	5.544	-1.100	.271	1.000
Sehat-Perlakuan 3	-1.700	5.544	-.307	.759	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

LM EFGR

Pairwise Comparisons of Kelompok perlakuan



Each node shows the sample average rank of Kelompok perlakuan.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Sehat-Perlakuan 3	-5.100	5.551	-.919	.358	1.000
Sehat-Perlakuan 2	-11.700	5.551	-2.108	.035	.526
Sehat-Perlakuan 1	-13.200	5.551	-2.378	.017	.261
Sehat-Kontrol positif	-20.600	5.551	-3.711	.000	.003
Sehat-Kontrol negatif	-24.400	5.551	-4.396	.000	.000
Perlakuan 3-Perlakuan 2	6.600	5.551	1.189	.234	1.000
Perlakuan 3-Perlakuan 1	8.100	5.551	1.459	.145	1.000
Perlakuan 3-Kontrol positif	15.500	5.551	2.792	.005	.079
Perlakuan 3-Kontrol negatif	19.300	5.551	3.477	.001	.008
Perlakuan 2-Perlakuan 1	1.500	5.551	.270	.787	1.000
Perlakuan 2-Kontrol positif	8.900	5.551	1.603	.109	1.000
Perlakuan 2-Kontrol negatif	12.700	5.551	2.288	.022	.332
Perlakuan 1-Kontrol positif	7.400	5.551	1.333	.183	1.000
Perlakuan 1-Kontrol negatif	11.200	5.551	2.018	.044	.654
Kontrol positif-Kontrol negatif	3.800	5.551	.685	.494	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .05. Significance values have been adjusted by the Bonferroni correction for multiple tests.