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**LAMPIRAN**  
**Lampiran 1. Dokumentasi Penelitian**

Gambar	Keterangan
	Pembagian kelompok perlakuan yang dibagi ke dalam 5 kelompok.

**Lampiran 2.** Pemberian cyclophosphamide, vitamin C dan enzim Bromelin

Gambar	Keterangan
	Pemberian cyclophosphamide dilakukan secara <i>intraperitoneal</i> .
	Pemberian vitamin C dan enzim Bromelin secara oral menggunakan sonde oral ( <i>gavage</i> ).

**Lampiran 3. Euthanasia dan nekropsi tikus**

<b>Gambar</b>	<b>Keterangan</b>
	Tikus yang telah di euthanasia dan dilakukan nekropsi.

**Lampiran 4. Pemeriksaan sampel penelitian**

Gambar	Keterangan
	Pengamatan sampel spermatozoa tikus menggunakan mikroskop dengan pembesaran 40x10.

**Lampiran 5. Data Penelitian****Data Kualitas Spermatozoa**

Perlakuan	Motilitas	Morfologi
PO 1	70%	15,5%
PO 2	75%	27%
PO 3	80%	19%
PO 4	80%	25%
PO 5	75%	21,5%
P1 1	50%	20,5%
P1 2	10%	36,5%
P1 3	35%	27,5%
P1 4	0%	45%
P1 5	10%	34,5%
P2 1	20%	29,5%
P2 2	40%	4%
P2 3	40%	5%
P2 4	10%	21,5%
P2 5	40%	19%
P3 1	55%	16%
P3 2	0%	2%
P3 3	10%	21,5%
P3 4	45%	14,5%
P3 5	55%	12,5%
P4 1	70%	15,5%
P4 2	35%	6%
P4 3	10%	1%
P4 4	90%	15%
P4 5	80%	17,5%

## UJI NORMALITAS KUALITAS SPERMATOZOA

**Tests of Normality**

	perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
motilitas(%)	PO	.231	5	.200*	.881	5	.314
	P1	.302	5	.153	.896	5	.390
	P2	.360	5	.033	.767	5	.042
	P3	.277	5	.200*	.824	5	.124
	P4	.251	5	.200*	.915	5	.500

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

a. Lilliefors Significance Correction

## UJI HOMOGENITAS KUALITAS SPERMATOZOA

**Test of Homogeneity of Variances**

		Levene Statistic	df1	df2	Sig.
		Based on Mean			
motilitas(%)	Based on Median	1.290	4	20	.307
	Based on Median and with adjusted df	1.290	4	14.302	.320
	Based on trimmed mean	6.562	4	20	.002

## UJI ONE WAY ANOVA KUALITAS SPERMATOZOA

Descriptives									
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
motilitas(%)	PO	5	76.00	4.183	1.871	70.81	81.19	70	80
	P1	5	21.00	20.736	9.274	-4.75	46.75	0	50
	P2	5	30.00	14.142	6.325	12.44	47.56	10	40
	P3	5	33.00	26.125	11.683	.56	65.44	0	55
	P4	5	57.00	33.466	14.967	15.45	98.55	10	90
	Total	25	43.40	28.857	5.771	31.49	55.31	0	90
	P4	5	.12800	.046984	.02101	.06966	.18634	.060	.175
	Total	25	.20220	.094230	.01884	.16330	.24110	.050	.450

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
motilitas(%)	Between Groups	10186.000	4	2546.500	5.197	.005
	Within Groups	9800.000	20	490.000		
	Total	19986.000	24			

## UJI KRUSKAL-WALLIS MOTILITAS

**Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
motilitas(%)	25	43.40	28.857	0	90
perlakuan	25	3.00	1.443	1	5

### Kruskal-Wallis Test

**Ranks**

	perlakuan	N	Mean Rank
motilitas(%)	PO	5	21.10
	P1	5	7.20
	P2	5	9.80
	P3	5	10.70
	P4	5	16.20
Total		25	

## MANN-WHITNEY TEST MOTILITAS

		Ranks		
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	PO	5	8.00	40.00
	P1	5	3.00	15.00
	Total	10		

### Test Statistics<sup>a</sup>

	motilitas(%)
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.635
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

		Ranks		
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	PO	5	8.00	40.00
	P2	5	3.00	15.00
	Total	10		

### Test Statistics<sup>a</sup>

	motilitas(%)
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.660
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

		Ranks		
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	PO	5	8.00	40.00
	P3	5	3.00	15.00
	Total	10		

**Test Statistics<sup>a</sup>**

	motilitas(%)
Mann-Whitney U	.000
Wilcoxon W	15.000
Z	-2.635
Asymp. Sig. (2-tailed)	.008
Exact Sig. [2*(1-tailed Sig.)]	.008 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

		Ranks		
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	PO	5	6.10	30.50
	P4	5	4.90	24.50
	Total	10		

**Test Statistics<sup>a</sup>**

	motilitas(%)
Mann-Whitney U	9.500
Wilcoxon W	24.500
Z	-.638
Asymp. Sig. (2-tailed)	.523
Exact Sig. [2*(1-tailed Sig.)]	.548 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

		Ranks		
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	P1	5	4.60	23.00
	P2	5	6.40	32.00
	Total	10		

**Test Statistics<sup>a</sup>**

	motilitas(%)
Mann-Whitney U	8.000
Wilcoxon W	23.000
Z	-.964
Asymp. Sig. (2-tailed)	.335
Exact Sig. [2*(1-tailed Sig.)]	.421 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

		Ranks		
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	P1	5	4.70	23.50
	P3	5	6.30	31.50
	Total	10		

**Test Statistics<sup>a</sup>**

	motilitas(%)
Mann-Whitney U	8.500
Wilcoxon W	23.500
Z	-.851
Asymp. Sig. (2-tailed)	.395
Exact Sig. [2*(1-tailed Sig.)]	.421 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

		Ranks		
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	P1	5	3.90	19.50
	P4	5	7.10	35.50
	Total	10		

**Test Statistics<sup>a</sup>**

	motilitas(%)
Mann-Whitney U	4.500
Wilcoxon W	19.500
Z	-1.697
Asymp. Sig. (2-tailed)	.090
Exact Sig. [2*(1-tailed Sig.)]	.095 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

		Ranks		
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	P2	5	4.90	24.50
	P3	5	6.10	30.50
	Total	10		

**Test Statistics<sup>a</sup>**

	motilitas(%)
Mann-Whitney U	9.500
Wilcoxon W	24.500
Z	-.638
Asymp. Sig. (2-tailed)	.523
Exact Sig. [2*(1-tailed Sig.)]	.548 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

<b>Ranks</b>				
	perlakuan	N	Mean Rank	Sum of Ranks
motilitas(%)	P2	5	4.50	22.50
	P4	5	6.50	32.50
	Total	10		

**Test Statistics<sup>a</sup>**

	motilitas(%)
Mann-Whitney U	7.500
Wilcoxon W	22.500
Z	-1.061
Asymp. Sig. (2-tailed)	.289
Exact Sig. [2*(1-tailed Sig.)]	.310 <sup>b</sup>

a. Grouping Variable: perlakuan

b. Not corrected for ties.

## MORFOLOGI

### Tests of Normality

	nama	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
morfo abnormal	PO	.170	5	.200*	.976	5	.911
	P1	.173	5	.200*	.988	5	.972
	P2	.236	5	.200*	.901	5	.415
	P3	.255	5	.200*	.933	5	.616
	P4	.313	5	.124	.864	5	.243

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

a. Lilliefors Significance Correction

## Oneway

### Descriptives

		95% Confidence Interval for Mean							
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
PO	5	21.600	4.6016	2.0579	15.886	27.314	15.5	27.0	
P1	5	32.800	9.2844	4.1521	21.272	44.328	20.5	45.0	
P2	5	15.800	11.0261	4.9310	2.109	29.491	4.0	29.5	
P3	5	13.300	7.1467	3.1961	4.426	22.174	2.0	21.5	
P4	5	11.000	7.1327	3.1898	2.144	19.856	1.0	17.5	
Total	25	18.900	10.8839	2.1768	14.407	23.393	1.0	45.0	

### Test of Homogeneity of Variances

		Levene	df1	df2	Sig.
		Statistic			
morfo abnormal	Based on Mean	1.443	4	20	.257
	Based on Median	.611	4	20	.660
	Based on Median and with adjusted df	.611	4	16.577	.661
	Based on trimmed mean	1.446	4	20	.256

### ANOVA

morfo abnormal

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1519.400	4	379.850	5.740	.003
Within Groups	1323.600	20	66.180		
Total	2843.000	24			

### Multiple Comparisons

Dependent Variable: morfo abnormal

Bonferroni

(I) nama	(J) nama	Mean	Std. Error	Sig.	95% Confidence Interval	
		Difference (I-J)			Lower Bound	Upper Bound
PO	P1	-11.2000	5.1451	.416	-27.425	5.025
	P2	5.8000	5.1451	1.000	-10.425	22.025
	P3	8.3000	5.1451	1.000	-7.925	24.525
	P4	10.6000	5.1451	.526	-5.625	26.825
P1	PO	11.2000	5.1451	.416	-5.025	27.425
	P2	17.0000*	5.1451	.035	.775	33.225
	P3	19.5000*	5.1451	.011	3.275	35.725
	P4	21.8000*	5.1451	.004	5.575	38.025
P2	PO	-5.8000	5.1451	1.000	-22.025	10.425
	P1	-17.0000*	5.1451	.035	-33.225	-.775
	P3	2.5000	5.1451	1.000	-13.725	18.725
	P4	4.8000	5.1451	1.000	-11.425	21.025

P3	PO	-8.3000	5.1451	1.000	-24.525	7.925
	P1	-19.5000*	5.1451	.011	-35.725	-3.275
	P2	-2.5000	5.1451	1.000	-18.725	13.725
	P4	2.3000	5.1451	1.000	-13.925	18.525
P4	PO	-10.6000	5.1451	.526	-26.825	5.625
	P1	-21.8000*	5.1451	.004	-38.025	-5.575
	P2	-4.8000	5.1451	1.000	-21.025	11.425
	P3	-2.3000	5.1451	1.000	-18.525	13.925

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