

Lampiran 1

Perhitungan Dosis

1. Perhitungan Dosis Aloksan

Dosis = 120 mg / kgBB tikus

Dosis untuk tikus 200g

$$\rightarrow (200 / 1000) \times 120 \text{ mg} = 24 \text{ mg} / \text{tikus } 200 \text{ g}$$

Faktor konversi dosis tikus 200 g ke mencit 20 g = 0,14

Berat mencit rata-rata pada percobaan = 25,5 g

Dosis Aloksan untuk mencit 20 g

$$\rightarrow 24 \text{ mg} \times 0,14 = 3,36 \text{ mg}$$

Dosis Aloksan untuk mencit 25,5 g

$$\rightarrow (25,5 \text{ g} / 20 \text{ g}) \times 3,36 \text{ mg} = 4,28 \text{ mg}$$

Volume penyuntikan intravena mencit = 0,1 ml

Jadi dosis yang diberikan untuk mencit = 4,28 mg / 0,1 ml intravena

2. Perhitungan Dosis Glibenklamid

Dosis Glibenklamid manusia 70 kg = 10 mg

Faktor konversi dosis untuk manusia 70 kg ke mencit 20 g = 0,0026

Berat mencit rata-rata 25,5 g

Dosis Glibenklamid untuk mencit 20 g

$$\rightarrow 10 \text{ mg} \times 0,0026 = 0,026 \text{ mg} = 1,3 \text{ mg} / \text{KgBB}$$

Dosis untuk mencit 25,5 g

$$\rightarrow (25,5 \text{ g} / 20 \text{ g}) \times 0,026 \text{ mg} = 0,033 \text{ mg}$$

Volume lambung mencit = 0,5 ml

Jadi dosis yang diberikan untuk mencit = 0,033 mg / 0,5 ml per oral

3. Perhitungan Ekstrak Kayu Manis

Dosis ekstrak air Kayu Manis untuk manusia = 2 gram/hari

A. Ekstrak Kayu Manis Dosis 1 Mencit

Dosis untuk manusia = 2.00 g

Konversi dosis dari manusia 70 Kg ke mencit 20 g = 0,0026 (1 g Kayu Manis)

Dosis untuk mencit 20 g = $0,0026 \times 2 \text{ g} = 0,0052 \text{ g}$

Dosis untuk mencit 25,5 g = $(25,5 \text{ g} / 20) \times 0,0052 \text{ g} = 0,0066 \text{ g}$

Volume lambung mencit = 0,5 ml

Jadi dosis yang diberikan pada mencit = $0,0066 \text{ g} / 0,5 \text{ ml}$ per oral

B. Ekstrak Kayu Manis Dosis 2 Mencit

Dosis untuk manusia = 4.00 g

Konversi dosis dari manusia 70 Kg ke mencit 20 g = 0,0026 (1 g Kayu Manis)

Dosis untuk mencit 20 g = $0,0026 \times 4 \text{ g} = 0,0104 \text{ g}$

Dosis untuk mencit 25,5 g = $(25,5 \text{ g} / 20) \times 0,0104 \text{ g} = 0,013 \text{ g}$

Volume lambung mencit = 0,5 ml

Jadi dosis yang diberikan pada mencit = $0,013 \text{ g} / 0,5 \text{ ml}$ per oral

C. Ekstrak Kayu Manis Dosis 3 Mencit

Dosis untuk manusia = 8.00 g

Konversi dosis dari manusia 70 Kg ke mencit 20 g = 0,0026 (1 g Kayu Manis)

Dosis untuk mencit 20 g = $0,0026 \times 8,00 \text{ g} = 0,0208 \text{ g}$

Dosis untuk mencit 25,5 g = $(25,5 \text{ g} / 20) \times 0,0208 \text{ g} = 0,026 \text{ g}$

Volume lambung mencit = 0,5 ml

Jadi dosis yang diberikan pada mencit = $0,026 \text{ g} / 0,5 \text{ ml}$ per oral

Lampiran 2

Hasil Pengukuran Kadar Glukosa Darah Sebelum dan Sesudah Perlakuan

| | Mencit | Kadar Glukosa Darah (mg%) | | Penurunan (mg%) | % Penurunan |
|-----------------|--------|---------------------------|----------------------|--------------------|----------------|
| | | Sebelum Perlakuan | Setelah Perlakuan | | |
| Kelompok I | 1 | 147 | 62 | 85 | 57.82 |
| | 2 | 174 | 42 | 132 | 75.86 |
| | 3 | 136 | 57 | 79 | 58.08 |
| | 4 | 137 | 50 | 87 | 63.50 |
| | 5 | 138 | 67 | 71 | 51.44 |
| | 6 | 138 | 64 | 74 | 53.62 |
| Kelompok II | 1 | 147 | 60 | 87 | 59.18 |
| | 2 | 128 | 54 | 74 | 57.81 |
| | 3 | 135 | 73 | 62 | 45.92 |
| | 4 | 141 | 65 | 76 | 53.90 |
| | 5 | 152 | 62 | 90 | 59.21 |
| | 6 | 187 | 76 | 111 | 59.35 |
| Kelompok III | 1 | 164 | 53 | 111 | 67.68 |
| | 2 | 134 | 64 | 70 | 52.23 |
| | 3 | 127 | 48 | 79 | 50.31 |
| | 4 | 138 | 62 | 76 | 55.07 |
| | 5 | 136 | 59 | 77 | 56.61 |
| | 6 | 138 | 57 | 81 | 58.69 |
| Kelompok IV | 1 | 132 | 60 | 72 | 54.54 |
| | 2 | 149 | 65 | 84 | 56.37 |
| | 3 | 136 | 61 | 75 | 55.14 |
| | 4 | 152 | 67 | 85 | 55.92 |
| | 5 | 159 | 65 | 94 | 59.11 |
| | 6 | 132 | 68 | 64 | 48.48 |
| Kelompok V | 1 | 128 | 126 | 2 | 1.56 |
| | 2 | 137 | 128 | 9 | 6.56 |
| | 3 | 141 | 136 | 5 | 3.54 |
| | 4 | 155 | 151 | 4 | 2.58 |
| | 5 | 131 | 133 | 2 | 1.65 |
| | 6 | 160 | 150 | 10 | 6.25 |

Keterangan :

- Kelompok I : Kelompok perlakuan yang diberi 5,2 mg infusa Kayu Manis dalam 0,5 ml akuades
- Kelompok II : Kelompok perlakuan yang diberi 10,4 mg infusa Kayu Manis dalam 0,5 ml akuades
- Kelompok III : Kelompok perlakuan yang diberi 20,8 mg infusa Kayu Manis dalam 0,5 ml akuades
- Kelompok IV : Kontrol positif diberi Glibenklamid 0.033 mg
- Kelompok V : Kontrol negatif diberi akuades 0,5 ml

Lampiran 3

Hasil Uji Anova dan Tukey HSD Sebelum Perlakuan

Oneway

Descriptives

| Hasil | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
|-----------------|----|----------|----------------|------------|----------------------------------|-------------|---------|---------|
| | | | | | Lower Bound | Upper Bound | | |
| Dosis I | 6 | 145.0000 | 14.75127 | 6.02218 | 129.5195 | 160.4805 | 136.00 | 174.00 |
| Dosis II | 6 | 148.3333 | 20.76215 | 8.47611 | 126.5448 | 170.1219 | 128.00 | 187.00 |
| Dosis III | 6 | 139.5000 | 12.67675 | 5.17526 | 126.1966 | 152.8034 | 127.00 | 164.00 |
| Kontrol Positif | 6 | 143.3333 | 11.51810 | 4.70225 | 131.2458 | 155.4208 | 132.00 | 159.00 |
| Kontrol Negatif | 6 | 142.0000 | 12.93058 | 5.27889 | 128.4302 | 155.5698 | 128.00 | 160.00 |
| Total | 30 | 143.6333 | 14.15306 | 2.58398 | 138.3485 | 148.9182 | 127.00 | 187.00 |

Test of Homogeneity of Variances

| Hasil | Levene Statistic | df1 | df2 | Sig. |
|-------|------------------|-----|-----|------|
| | .340 | 4 | 25 | .849 |

ANOVA

| Hasil | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | 262.800 | 4 | 65.700 | .296 | .878 |
| Within Groups | 5546.167 | 25 | 221.847 | | |
| Total | 5808.967 | 29 | | | |

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Hasil

Tukey HSD

| (I) Perlakuan | (J) Perlakuan | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|-----------------|-----------------|--------------------------|------------|-------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| Dosis I | Dosis I | | | | | |
| | Dosis II | -3.33333 | 8.59935 | .995 | -28.5885 | 21.9219 |
| | Dosis III | 5.50000 | 8.59935 | .967 | -19.7552 | 30.7552 |
| | Kontrol Positif | 1.66667 | 8.59935 | 1.000 | -23.5885 | 26.9219 |
| | Kontrol Negatif | 3.00000 | 8.59935 | .997 | -22.2552 | 28.2552 |
| Dosis II | Dosis I | 3.33333 | 8.59935 | .995 | -21.9219 | 28.5885 |
| | Dosis II | | | | | |
| | Dosis III | 8.83333 | 8.59935 | .840 | -16.4219 | 34.0885 |
| | Kontrol Positif | 5.00000 | 8.59935 | .977 | -20.2552 | 30.2552 |
| | Kontrol Negatif | 6.33333 | 8.59935 | .946 | -18.9219 | 31.5885 |
| Dosis III | Dosis I | -5.50000 | 8.59935 | .967 | -30.7552 | 19.7552 |
| | Dosis II | -8.83333 | 8.59935 | .840 | -34.0885 | 16.4219 |
| | Dosis III | | | | | |
| | Kontrol Positif | -3.83333 | 8.59935 | .991 | -29.0885 | 21.4219 |
| | Kontrol Negatif | -2.50000 | 8.59935 | .998 | -27.7552 | 22.7552 |
| Kontrol Positif | Dosis I | -1.66667 | 8.59935 | 1.000 | -26.9219 | 23.5885 |
| | Dosis II | -5.00000 | 8.59935 | .977 | -30.2552 | 20.2552 |
| | Dosis III | 3.83333 | 8.59935 | .991 | -21.4219 | 29.0885 |
| | Kontrol Positif | | | | | |
| | Kontrol Negatif | 1.33333 | 8.59935 | 1.000 | -23.9219 | 26.5885 |
| Kontrol Negatif | Dosis I | -3.00000 | 8.59935 | .997 | -28.2552 | 22.2552 |
| | Dosis II | -6.33333 | 8.59935 | .946 | -31.5885 | 18.9219 |
| | Dosis III | 2.50000 | 8.59935 | .998 | -22.7552 | 27.7552 |
| | Kontrol Positif | -1.33333 | 8.59935 | 1.000 | -26.5885 | 23.9219 |
| | Kontrol Negatif | | | | | |

Homogeneous Subsets

| Hasil | | |
|------------------------------|---|-------------------------------|
| Tukey HSD^a | | |
| | | Subset for alpha = . 05 |
| Perlakuan | N | 1 |
| Dosis III | 6 | 139.5000 |
| Kontrol Negatif | 6 | 142.0000 |
| Kontrol Positif | 6 | 143.3333 |
| Dosis I | 6 | 145.0000 |
| Dosis II | 6 | 148.3333 |
| Sig. | | .840 |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Lampiran 4
Hasil Uji Anova dan Tukey HSD Setelah Perlakuan

Oneway

Descriptives

| Hasil | | | | | | | | |
|-----------------|----|---------|----------------|------------|----------------------------------|-------------|---------|---------|
| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| | | | | | Lower Bound | Upper Bound | | |
| Dosis I | 6 | 60.0533 | 8.78851 | 3.58789 | 50.8304 | 69.2763 | 51.44 | 75.86 |
| Dosis II | 6 | 55.8950 | 5.30783 | 2.16691 | 50.3248 | 61.4652 | 45.92 | 59.35 |
| Dosis III | 6 | 56.7650 | 6.13145 | 2.50315 | 50.3304 | 63.1996 | 50.31 | 67.68 |
| Kontrol Positif | 6 | 54.9267 | 3.53057 | 1.44135 | 51.2216 | 58.6318 | 48.48 | 59.11 |
| Kontrol Negatif | 6 | 3.6900 | 2.22457 | .90818 | 1.3555 | 6.0245 | 1.56 | 6.56 |
| Total | 30 | 46.2660 | 22.35039 | 4.08060 | 37.9202 | 54.6118 | 1.56 | 75.86 |

Test of Homogeneity of Variances

| Hasil | | | |
|------------------|-----|-----|------|
| Levene Statistic | df1 | df2 | Sig. |
| 1.680 | 4 | 25 | .186 |

ANOVA

| Hasil | | | | | |
|----------------|----------------|----|-------------|---------|------|
| | Sum of Squares | df | Mean Square | F | Sig. |
| Between Groups | 13684.561 | 4 | 3421.140 | 106.631 | .000 |
| Within Groups | 802.096 | 25 | 32.084 | | |
| Total | 14486.657 | 29 | | | |

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Hasil

Tukey HSD

| (I) Perlakuan | (J) Perlakuan | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|-----------------|-----------------|--------------------------|------------|------|-------------------------|-------------|
| | | | | | Lower Bound | Upper Bound |
| Dosis I | Dosis I | | | | | |
| | Dosis II | 4.15833 | 3.27026 | .710 | -5.4460 | 13.7627 |
| | Dosis III | 3.28833 | 3.27026 | .850 | -6.3160 | 12.8927 |
| | Kontrol Positif | 5.12667 | 3.27026 | .531 | -4.4777 | 14.7310 |
| | Kontrol Negatif | 56.36333* | 3.27026 | .000 | 46.7590 | 65.9677 |
| Dosis II | Dosis I | -4.15833 | 3.27026 | .710 | -13.7627 | 5.4460 |
| | Dosis II | | | | | |
| | Dosis III | -.87000 | 3.27026 | .999 | -10.4743 | 8.7343 |
| | Kontrol Positif | .96833 | 3.27026 | .998 | -8.6360 | 10.5727 |
| | Kontrol Negatif | 52.20500* | 3.27026 | .000 | 42.6007 | 61.8093 |
| Dosis III | Dosis I | -3.28833 | 3.27026 | .850 | -12.8927 | 6.3160 |
| | Dosis II | .87000 | 3.27026 | .999 | -8.7343 | 10.4743 |
| | Dosis III | | | | | |
| | Kontrol Positif | 1.83833 | 3.27026 | .979 | -7.7660 | 11.4427 |
| | Kontrol Negatif | 53.07500* | 3.27026 | .000 | 43.4707 | 62.6793 |
| Kontrol Positif | Dosis I | -5.12667 | 3.27026 | .531 | -14.7310 | 4.4777 |
| | Dosis II | -.96833 | 3.27026 | .998 | -10.5727 | 8.6360 |
| | Dosis III | -1.83833 | 3.27026 | .979 | -11.4427 | 7.7660 |
| | Kontrol Positif | | | | | |
| | Kontrol Negatif | 51.23667* | 3.27026 | .000 | 41.6323 | 60.8410 |
| Kontrol Negatif | Dosis I | -56.36333* | 3.27026 | .000 | -65.9677 | -46.7590 |
| | Dosis II | -52.20500* | 3.27026 | .000 | -61.8093 | -42.6007 |
| | Dosis III | -53.07500* | 3.27026 | .000 | -62.6793 | -43.4707 |
| | Kontrol Positif | -51.23667* | 3.27026 | .000 | -60.8410 | -41.6323 |
| | Kontrol Negatif | | | | | |

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

| Hasil | | | |
|-------------------------------|----------|----------|----------|
| Tukey HSD ^a | | | |
| <i>Subset for alpha = .05</i> | | | |
| Perlakuan | <i>N</i> | <i>1</i> | <i>2</i> |
| Kontrol Negatif | 6 | 3.6900 | |
| Kontrol Positif | 6 | | 54.9267 |
| Dosis II | 6 | | 55.8950 |
| Dosis III | 6 | | 56.7650 |
| Dosis I | 6 | | 60.0533 |
| Sig. | | 1.000 | .531 |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

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