

50. WHO. Research guidelines for evaluating the safety and efficacy of herbal medicines. Manila: WHO Regional Office for the Western Pacific, 1993: 35.

### Lampiran 1. Data dasar penelitian

| Nomor urut | Nomor sampel | Berat badan ( gram ) | Kadar AST ( mg/dl ) | Kadar ALT ( mg/dl ) | Perlakuan |
|------------|--------------|----------------------|---------------------|---------------------|-----------|
| 1          | 354          | 297                  | 30,33               | 79,42               | Kontrol   |
| 2          | 351          | 289                  | 37,91               | 99,28               | Kontrol   |
| 3          | 362          | 287                  | 18,96               | 55,59               | Kontrol   |
| 4          | 359          | 298                  | 18,90               | 63,54               | Kontrol   |
| 5          | 356          | 270                  | 34,12               | 95,30               | Kontrol   |
| 6          | 357          | 282                  | 30,30               | 79,42               | Kontrol   |
| 7          | 361          | 288                  | 18,96               | 47,65               | Perlakuan |
| 8          | 353          | 288                  | 22,75               | 47,05               | Perlakuan |
| 9          | 360          | 291                  | 34,12               | 83,39               | Perlakuan |
| 10         | 355          | 268                  | 30,33               | 79,42               | Perlakuan |
| 11         | 358          | 276                  | 22,75               | 67,51               | Perlakuan |
| 12         | 352          | 287                  | 26,54               | 67,51               | Perlakuan |

\*) Kelompok Kontrol ( K ): Kelompok tikus yang diberi garam fisiologis per oral selama 5 hari. Pada hari ke-6 diberi asetaminofen dosis toksik per oral.

\*\*) Kelompok Perlakuan ( P ): Kelompok tikus yang diberi asetaminofen dosis bertingkat *pretreatment* selama 5 hari. Pada hari ke-6 diberi asetaminofen dosis toksik per oral.

### Kadar AST dan ALT awal penelitian pada kelompok Kontrol (K)

| Nomor urut | Nomor sampel | Kadar AST awal penelitian ( mg/dl ) | Kadar ALT awal penelitian ( mg/dl ) |
|------------|--------------|-------------------------------------|-------------------------------------|
| 7          | 361          | 30,33                               | 79,42                               |
| 8          | 353          | 37,91                               | 99,28                               |
| 9          | 360          | 18,96                               | 55,59                               |
| 10         | 355          | 18,96                               | 63,54                               |
| 11         | 358          | 34,12                               | 95,30                               |
| 12         | 352          | 30,33                               | 79,42                               |

### Kadar AST dan ALT awal penelitian pada kelompok Perlakuan (P)

| Nomor urut | Nomor sampel | Kadar AST awal penelitian ( mg/dl ) | Kadar ALT awal penelitian ( mg/dl ) |
|------------|--------------|-------------------------------------|-------------------------------------|
| 1          | 354          | 18,96                               | 47,65                               |
| 2          | 351          | 22,75                               | 47,65                               |
| 3          | 362          | 34,12                               | 83,39                               |
| 4          | 359          | 30,33                               | 79,42                               |
| 5          | 356          | 22,75                               | 67,51                               |
| 6          | 357          | 26,54                               | 67,51                               |

### Kadar AST dan ALT 1 hari setelah pretreatment pada kelompok Perlakuan

| Nomor urut | Nomor sampel | Kadar AST 1 hari setelah <i>pretreatment</i> ( mg/dl ) | Kadar ALT 1 hari setelah <i>pretreatment</i> ( mg/dl ) | Rasio de ritis |
|------------|--------------|--|--|----------------|
| 7          | 361          | 790,23   | 1405,73  | 0,56           |
| 8          | 353          | 79,42  | 99,28  | 0,79           |
| 9          | 360          | 95,30  | 3373,27  | 0,03           |
| 10         | 355          | 182,67   | 234,29   | 0,78           |
| 11         | 358          | 345,48   | 599,62   | 0,58           |
| 12         | 352          | 599,62   | 1215,51  | 0,49           |

### Kadar AST dan ALT akhir penelitian pada kelompok Kontrol

| Nomor urut | Nomor sampel | Kadar AST 6 hari setelah dosis toksik ( mg/dl ) | Kadar ALT 6 hari setelah dosis toksik ( mg/dl ) | Rasio de ritis |
|------------|--------------|---|---|----------------|
| 1          | 354          | 754,49  | 1501,00   | 0,50           |
| 2          | 351          | 540,06  | 448,72  | 1,20           |
| 3          | 362          | 968,92  | 1080,10   | 0,89           |
| 4          | 359          | 1111,90   | 1580,50   | 0,70           |
| 5          | 356          | 1068,62   | 988,78  | 1,08           |
| 6          | 357          | 794,20  | 1119,80   | 0,71           |

### Kadar AST dan ALT akhir penelitian pada kelompok Perlakuan

| Nomor urut | Nomor sampel | Kadar AST 6 hari setelah dosis toksik (mg/dl) | Kadar ALT 6 hari setelah dosis toksik (mg/dl) | Rasio de ritis |
|------------|--------------|---|---|----------------|
| 7          | 361          | 393,13  | 146,93  | 2,67           |
| 8          | 353          | 512,26  | 814,06  | 0,63           |
| 9          | 360          | 345,48  | 1258,80                                       | 0,27           |
| 10         | 355          | 520,20  | 1389,90                                       | 0,37           |
| 11         | 358          | 829,94  | 1489,90                                       | 0,56           |
| 12         | 352          | 1036,40                                       | 1159,50                                       | 0,89           |

### Hasil pembacaan preparat hepar

| No urut | Nomor sampel | Sel Normal | Degenerasi albuminosa | Degenerasi hidropik | Nekrosis | Total | Derajat |
|---------|--------------|------------|-----------------------|---------------------|----------|-------|---------|
|         |              | N          | N                     | N                   | N        | N     |         |
| 1       | 354          | 44         | 0                     | 4                   | 52       | 100   | 5       |
| 2       | 351          | 29         | 5                     | 3                   | 63       | 100   | 5       |
| 3       | 362          | 56         | 4                     | 5                   | 34       | 100   | 3       |
| 4       | 359          | 17         | 2                     | 5                   | 76       | 100   | 5       |
| 5       | 356          | 45         | 5                     | 0                   | 45       | 100   | 4       |
| 6       | 357          | 43         | 0                     | 0                   | 57       | 100   | 5       |
| 7       | 361          | 26         | 60                    | 1                   | 13       | 100   | 2       |
| 8       | 353          | 76         | 0                     | 1                   | 23       | 100   | 2       |
| 9       | 360          | 47         | 24                    | 0                   | 29       | 100   | 3       |
| 10      | 355          | 17         | 69                    | 3                   | 11       | 100   | 2       |
| 11      | 358          | 65         | 11                    | 3                   | 21       | 100   | 2       |
| 12      | 352          | 64         | 7                     | 0                   | 29       | 100   | 3       |

Keterangan :

|   |   |                              |
|---|---|------------------------------|
| 0 | = | Tanpa nekrosis hepatosit     |
| 1 | = | 1 – 10% nekrosis hepatosit   |
| 2 | = | 11 – 25 % nekrosis hepatosit |
| 3 | = | 26 – 40 % nekrosis hepatosit |
| 4 | = | 41 – 50 % nekrosis hepatosit |
| 5 | = | > 50 % nekrosis hepatosit    |

## Lampiran 2. Analisis Data

### Distribusi frekuensi kadar AST awal dan akhir penelitian pada kelompok kontrol Explore

#### Case Processing Summary

|  | Cases |         |         |         |       |         |
|--|-------|---------|---------|---------|-------|---------|
|  | Valid |         | Missing |         | Total |         |
|  | N     | Percent | N       | Percent | N     | Percent |
| Kadar AST awal penelitian pd kelompok Kontrol (K)  | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |
| Kadar AST akhir penelitian pd kelompok Kontrol (K) | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |

#### Descriptives

|   |  |             | Statistic | Std. Error |          |
|---|--|-------------|-----------|------------|----------|
| Kadar AST awal penelitian pd kelompok Kontrol (K) | Mean   |             | 28.4200   | 3.21380    |          |
|   | 95% Confidence Interval for Mean                   | Lower Bound | 20.1587   |            |          |
|   |  | Upper Bound | 36.6813   |            |          |
|   | 5% Trimmed Mean                                    |             | 28.4217   |            |          |
|   | Median   |             | 30.3150   |            |          |
|   | Variance   |             | 61.971    |            |          |
|   | Std. Deviation                                     |             | 7.87216   |            |          |
|   | Minimum  |             | 18.90     |            |          |
|   | Maximum  |             | 37.91     |            |          |
|   | Range  |             | 19.01     |            |          |
|   | Interquartile Range                                |             | 16.1225   |            |          |
|   | Skewness   |             | -.403     |            | .845     |
|   | Kurtosis   |             | -1.618    |            | 1.741    |
|   | Kadar AST akhir penelitian pd kelompok Kontrol (K) | Mean        |           |            | 873.0317 |
| 95% Confidence Interval for Mean                  |  | Lower Bound | 645.2078  |            |          |
|   |  | Upper Bound | 1100.8555 |            |          |
| 5% Trimmed Mean                                   |  |             | 878.2596  |            |          |
| Median  |  |             | 881.5600  |            |          |
| Variance  |  |             | 47128.828 |            |          |
| Std. Deviation                                    |  |             | 217.09175 |            |          |
| Minimum   |  |             | 540.06    |            |          |
| Maximum   |  |             | 1111.90   |            |          |
| Range   |  |             | 571.84    |            |          |
| Interquartile Range                               |  |             | 378.5575  |            |          |
| Skewness  |  |             | -.501     | .845       |          |
| Kurtosis  |  |             | -.788     | 1.741      |          |

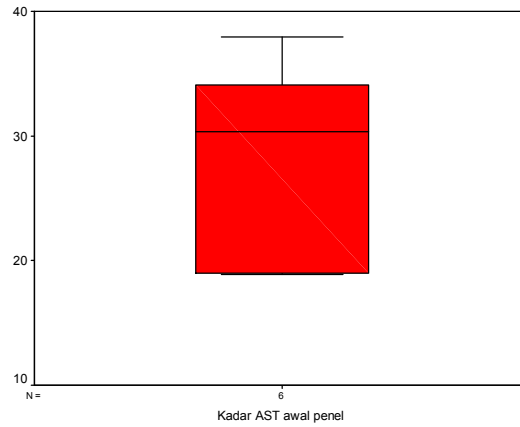
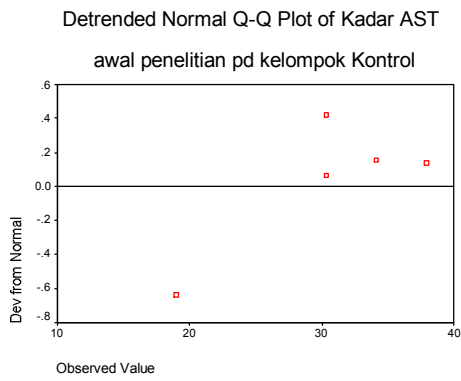
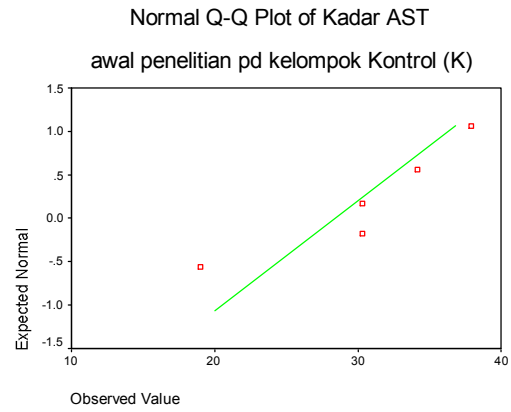
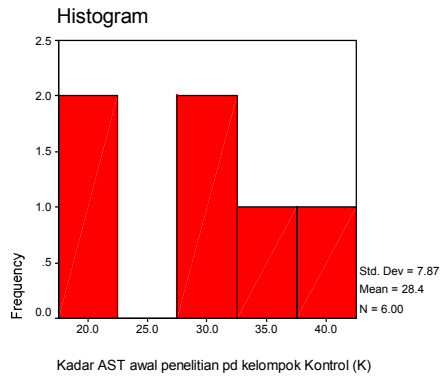
#### Tests of Normality

|  | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|--|---------------------------------|----|-------|--------------|----|------|
|  | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Kadar AST awal penelitian pd kelompok Kontrol (K)  | .261                            | 6  | .200* | .877         | 6  | .254 |
| Kadar AST akhir penelitian pd kelompok Kontrol (K) | .171                            | 6  | .200* | .943         | 6  | .680 |

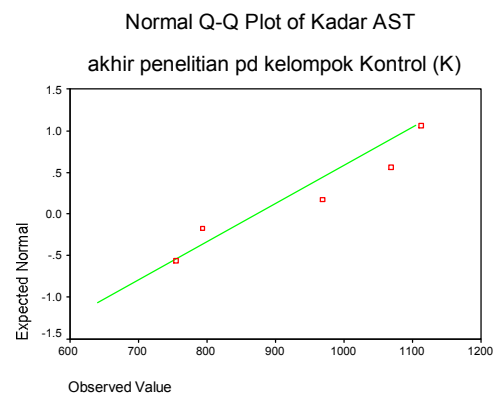
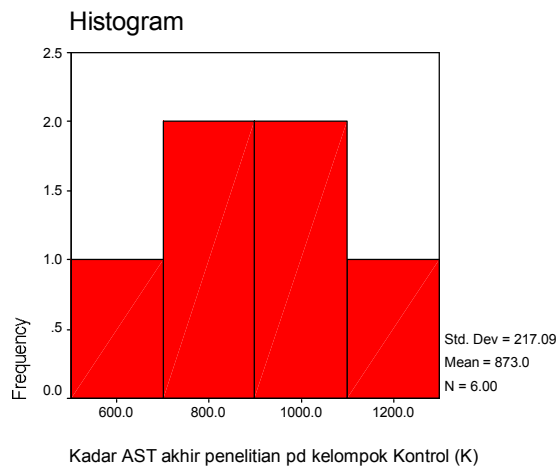
\*. This is a lower bound of the true significance.

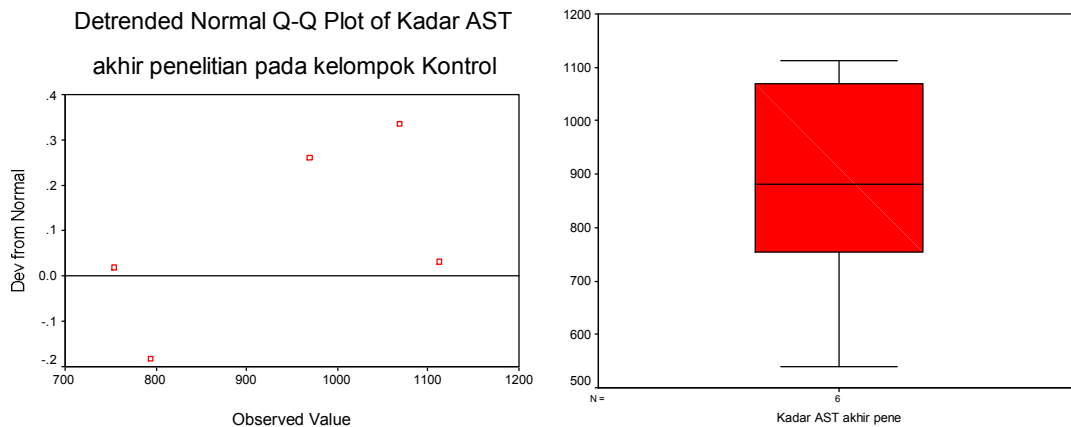
a. Lilliefors Significance Correction

## Kadar AST awal penelitian pd kelompok Kontrol (K)



## Kadar AST akhir penelitian pd kelompok Kontrol (K)





## Distribusi frekuensi kadar ALT awal dan akhir penelitian pada kelompok kontrol

### Explore

#### Case Processing Summary

|  | Cases |         |         |         |       |         |
|--|-------|---------|---------|---------|-------|---------|
|  | Valid |         | Missing |         | Total |         |
|  | N     | Percent | N       | Percent | N     | Percent |
| Kadar ALT awal penelitian pd kelompok Kontrol (K)  | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |
| Kadar ALT akhir penelitian pd kelompok Kontrol (K) | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |

#### Descriptives

|   |  |                 | Statistic | Std. Error |
|---|--|-----------------|-----------|------------|
| Kadar ALT awal penelitian pd kelompok Kontrol (K) | Mean   |                 | 78.7583   | 6.98572    |
|   | 95% Confidence Interval for Mean                   | Lower Bound     | 60.8010   |            |
|   |  | Upper Bound     | 96.7157   |            |
|   |  | 5% Trimmed Mean | 78.9054   |            |
|   | Median   |                 | 79.4200   |            |
|   | Variance   |                 | 292.802   |            |
|   | Std. Deviation                                     |                 | 17.11146  |            |
|   | Minimum  |                 | 55.59     |            |
|   | Maximum  |                 | 99.28     |            |
|   | Range  |                 | 43.69     |            |
|   | Interquartile Range                                |                 | 34.7425   |            |
|   | Skewness   |                 | -.167     | .845       |
|   | Kurtosis   |                 | -1.400    | 1.741      |
|   | Kadar ALT akhir penelitian pd kelompok Kontrol (K) | Mean            |           | 1119.8167  |
| 95% Confidence Interval for Mean                  |  | Lower Bound     | 693.1082  |            |
|   |  | Upper Bound     | 1546.5252 |            |
|   |  | 5% Trimmed Mean | 1131.5063 |            |
| Median  |  |                 | 1099.9500 |            |
| Variance  |  |                 | 165329.7  |            |
| Std. Deviation                                    |  |                 | 406.60758 |            |
| Minimum   |  |                 | 448.72    |            |
| Maximum   |  |                 | 1580.50   |            |
| Range   |  |                 | 1131.78   |            |
| Interquartile Range                               |  |                 | 667.1100  |            |
| Skewness  |  |                 | -.676     | .845       |
| Kurtosis  |  |                 | .646      | 1.741      |

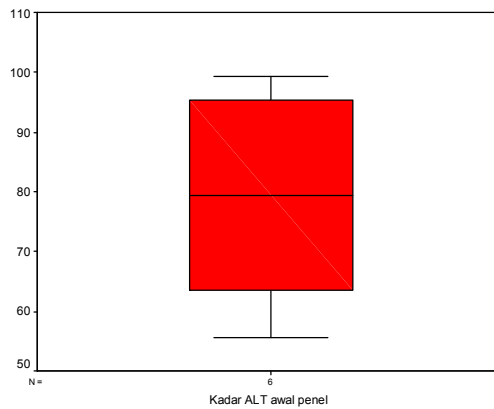
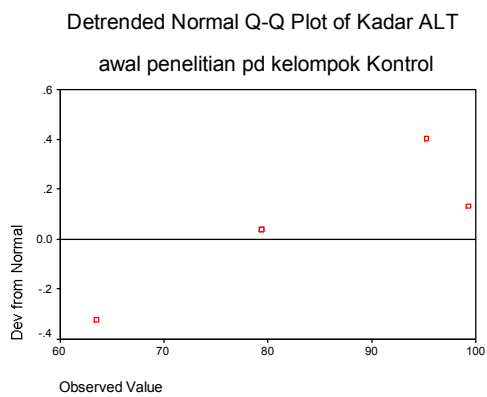
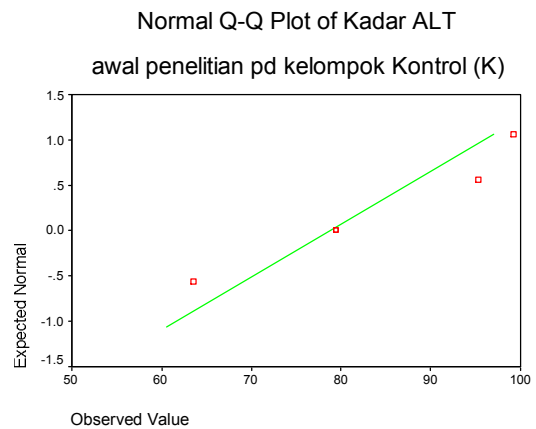
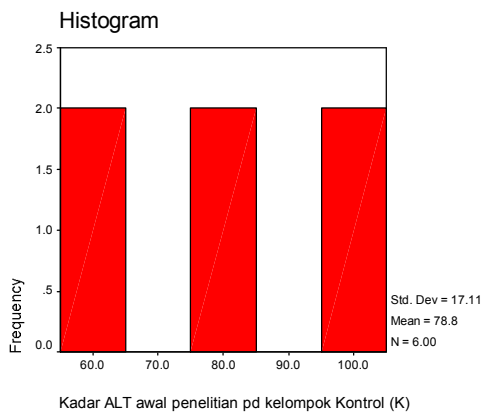
### Tests of Normality

|  | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|--|---------------------------------|----|-------|--------------|----|------|
|  | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Kadar ALT awal penelitian pd kelompok Kontrol (K)  | .182                            | 6  | .200* | .935         | 6  | .623 |
| Kadar ALT akhir penelitian pd kelompok Kontrol (K) | .207                            | 6  | .200* | .926         | 6  | .551 |

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

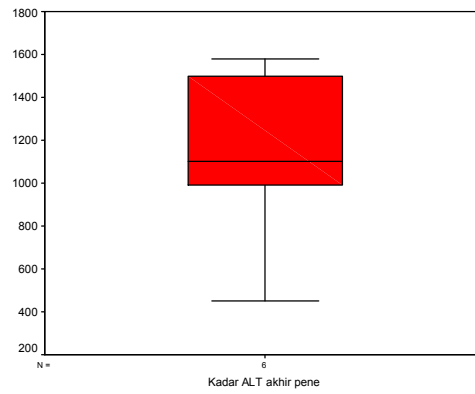
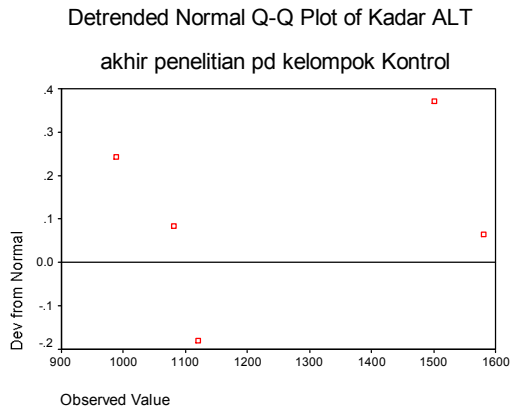
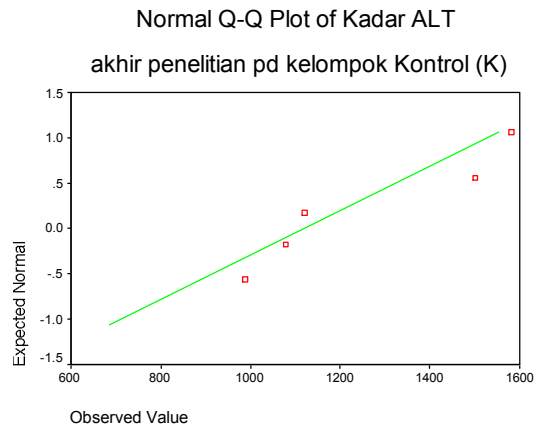
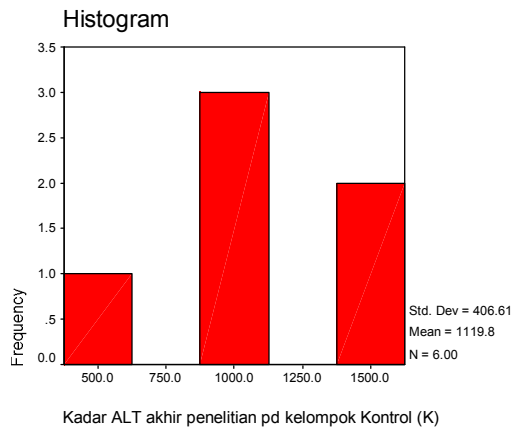
a. Lilliefors Significance Correction

### Kadar ALT awal penelitian pd kelompok Kontrol (K)





## Kadar ALT akhir penelitian pd kelompok Kontrol (K)



## Distribusi frekuensi kadar AST awal penelitian, 1 hari setelah *pretreatment* dan akhir penelitian pada kelompok kontrol

### Explore

#### Case Processing Summary

|  | Cases |         |         |         |       |         |
|--|-------|---------|---------|---------|-------|---------|
|  | Valid |         | Missing |         | Total |         |
|  | N     | Percent | N       | Percent | N     | Percent |
| Kadar AST awal penelitian pd kelompok Perlakuan (P)                    | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |
| Kadar AST 1 hari setelah <i>pretreatment</i> pd kelompok Perlakuan (P) | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |
| Kadar AST akhir penelitian pd kelompok Perlakuan (P)                   | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |

**Descriptives**

|   |                                  |             | Statistic | Std. Error |
|---|----------------------------------|-------------|-----------|------------|
| Kadar AST awal penelitian pd kelompok Perlakuan (P)             | Mean                             |             | 25.9083   | 2.27751    |
|   | 95% Confidence Interval for Mean | Lower Bound | 20.0538   |            |
|   |                                  | Upper Bound | 31.7629   |            |
|   |                                  |             |           |            |
|   | 5% Trimmed Mean                  |             | 25.8381   |            |
|   | Median                           |             | 24.6450   |            |
|   | Variance                         |             | 31.122    |            |
|   | Std. Deviation                   |             | 5.57873   |            |
|   | Minimum                          |             | 18.96     |            |
|   | Maximum                          |             | 34.12     |            |
|   | Range                            |             | 15.16     |            |
|   | Interquartile Range              |             | 9.4750    |            |
|   | Skewness                         |             | .418      | .845       |
|   | Kurtosis                         |             | -.859     | 1.741      |
| Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P) | Mean                             |             | 348.7867  | 118.63237  |
|   | 95% Confidence Interval for Mean | Lower Bound | 43.8325   |            |
|   |                                  | Upper Bound | 653.7409  |            |
|   |                                  |             |           |            |
|   | 5% Trimmed Mean                  |             | 339.2269  |            |
|   | Median                           |             | 264.0750  |            |
|   | Variance                         |             | 84441.830 |            |
|   | Std. Deviation                   |             | 290.58876 |            |
|   | Minimum                          |             | 79.42     |            |
|   | Maximum                          |             | 790.23    |            |
|   | Range                            |             | 710.81    |            |
|   | Interquartile Range              |             | 555.9425  |            |
|   | Skewness                         |             | .751      | .845       |
|   | Kurtosis                         |             | -1.136    | 1.741      |
| Kadar AST akhir penelitian pd kelompok Perlakuan (P)            | Mean                             |             | 606.2350  | 110.26122  |
|   | 95% Confidence Interval for Mean | Lower Bound | 322.7995  |            |
|   |                                  | Upper Bound | 889.6705  |            |
|   |                                  |             |           |            |
|   | 5% Trimmed Mean                  |             | 596.8233  |            |
|   | Median                           |             | 516.2300  |            |
|   | Variance                         |             | 72945.217 |            |
|   | Std. Deviation                   |             | 270.08372 |            |
|   | Minimum                          |             | 345.48    |            |
|   | Maximum                          |             | 1036.40   |            |
|   | Range                            |             | 690.92    |            |
|   | Interquartile Range              |             | 500.3375  |            |
|   | Skewness                         |             | .943      | .845       |
|   | Kurtosis                         |             | -.519     | 1.741      |

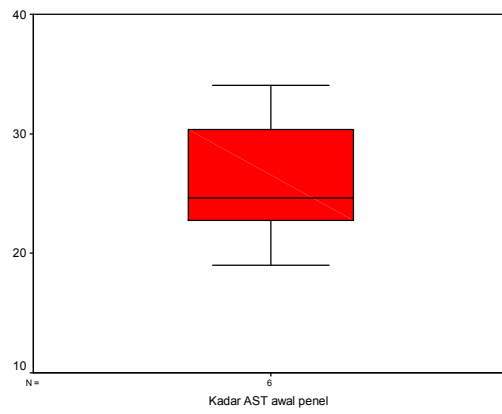
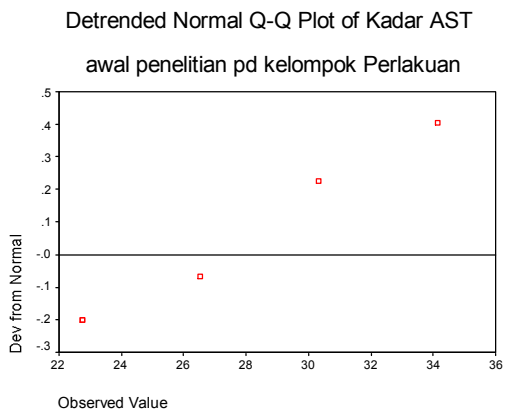
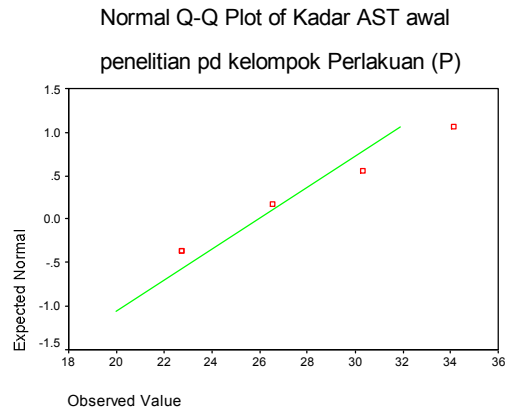
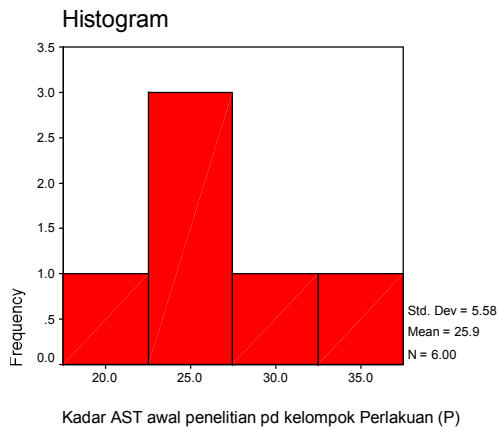
**Tests of Normality**

|   | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|---|---------------------------------|----|-------|--------------|----|------|
|   | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Kadar AST awal penelitian pd kelompok Perlakuan (P)             | .214                            | 6  | .200* | .958         | 6  | .804 |
| Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P) | .216                            | 6  | .200* | .890         | 6  | .318 |
| Kadar AST akhir penelitian pd kelompok Perlakuan (P)            | .292                            | 6  | .121  | .883         | 6  | .284 |

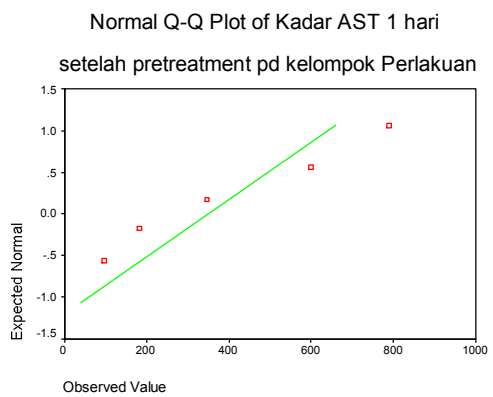
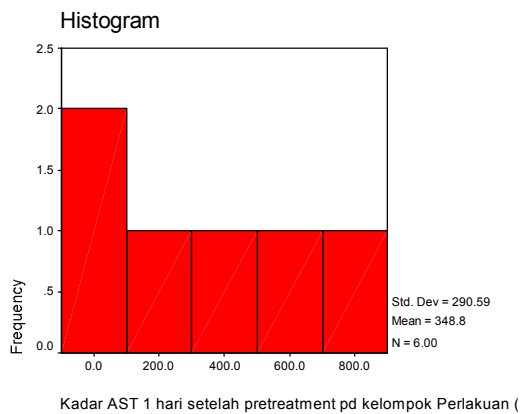
\*. This is a lower bound of the true significance.

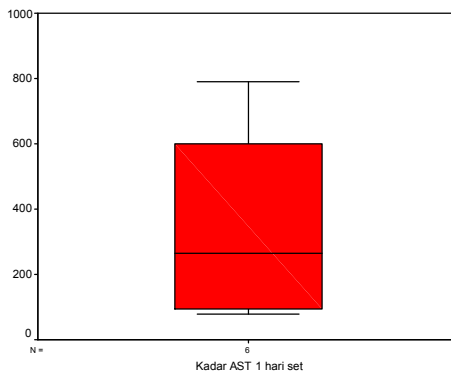
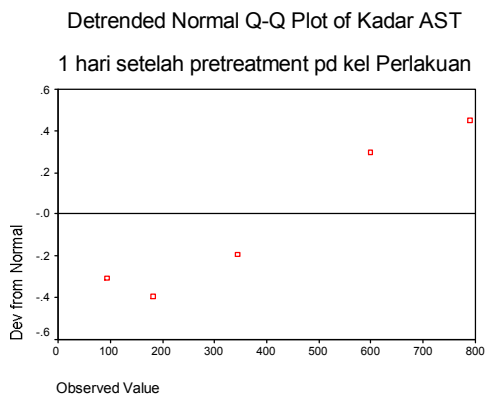
a. Lilliefors Significance Correction

## Kadar AST awal penelitian pd kelompok Perlakuan (P)

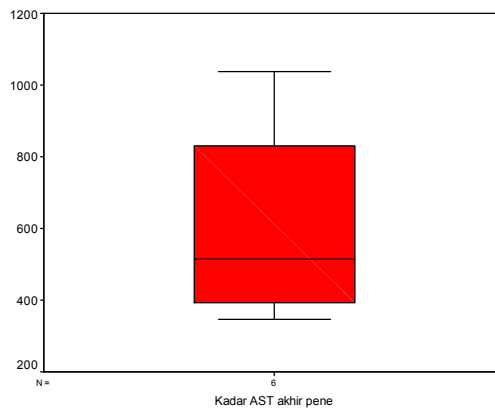
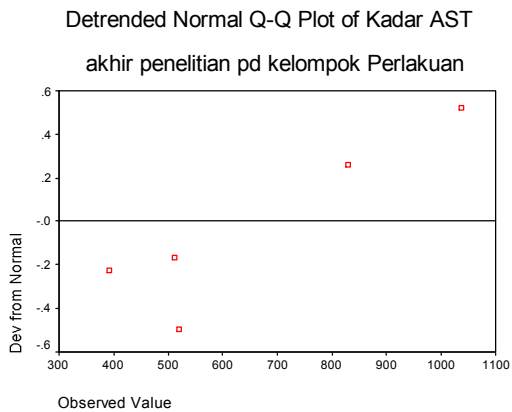
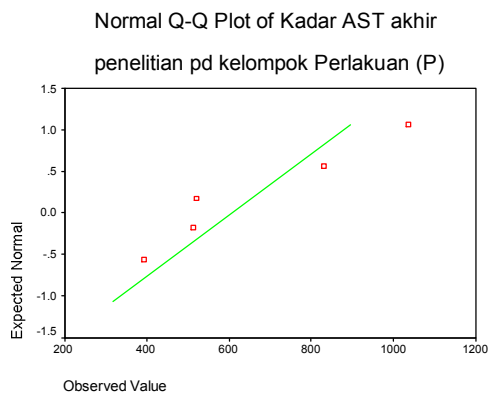
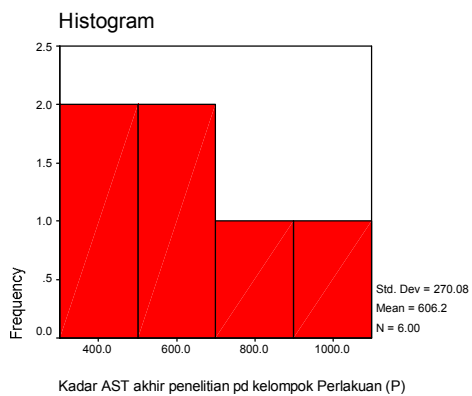


## Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P)





### Kadar AST akhir penelitian pd kelompok Perlakuan (P)



**Distribusi frekuensi kadar ALT awal penelitian, 1 hari setelah *pretreatment* dan akhir penelitian pada kelompok kontrol**  
**Explore**

**Case Processing Summary**

|   | Cases |         |         |         |       |         |
|---|-------|---------|---------|---------|-------|---------|
|   | Valid |         | Missing |         | Total |         |
|   | N     | Percent | N       | Percent | N     | Percent |
| Kadar ALT awal penelitian pd kelompok Perlakuan (P)             | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |
| Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P) | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |
| Kadar ALT akhir penelitian pd kelompok Perlakuan (P)            | 6     | 50.0%   | 6       | 50.0%   | 12    | 100.0%  |

**Descriptives**

|  |   |             | Statistic | Std. Error |
|--|---|-------------|-----------|------------|
| Kadar ALT awal penelitian pd kelompok Perlakuan (P)  | Mean  |             | 65.4217   | 6.27399    |
|  | 95% Confidence Interval for Mean                                | Lower Bound | 49.2939   |            |
|  |   | Upper Bound | 81.5495   |            |
|  | 5% Trimmed Mean   |             | 65.4441   |            |
|  | Median  |             | 67.5100   |            |
|  | Variance  |             | 236.177   |            |
|  | Std. Deviation  |             | 15.36806  |            |
|  | Minimum   |             | 47.05     |            |
|  | Maximum   |             | 83.39     |            |
|  | Range   |             | 36.34     |            |
|  | Interquartile Range   |             | 32.9125   |            |
|  | Skewness  |             | -.269     | .845       |
|  | Kurtosis  |             | -1.778    | 1.741      |
|  | Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P) | Mean        |           | 1154.6167  |
| 95% Confidence Interval for Mean                     |   | Lower Bound | -109.7635 |            |
|  |   | Upper Bound | 2418.9969 |            |
| 5% Trimmed Mean                                      |   |             | 1089.9880 |            |
| Median   |   |             | 907.5650  |            |
| Variance   |   |             | 1451589   |            |
| Std. Deviation                                       |   |             | 1204.819  |            |
| Minimum  |   |             | 99.28     |            |
| Maximum  |   |             | 3373.27   |            |
| Range  |   |             | 3273.99   |            |
| Interquartile Range                                  |   |             | 1697.0775 |            |
| Skewness   |   |             | 1.511     | .845       |
| Kurtosis   |   |             | 2.483     | 1.741      |
| Kadar ALT akhir penelitian pd kelompok Perlakuan (P) |   | Mean        |           | 1043.0483  |
|  | 95% Confidence Interval for Mean                                | Lower Bound | 521.5218  |            |
|  |   | Upper Bound | 1564.5749 |            |
|  | 5% Trimmed Mean   |             | 1068.0520 |            |
|  | Median  |             | 1209.1500 |            |
|  | Variance  |             | 246968.3  |            |
|  | Std. Deviation  |             | 496.95909 |            |
|  | Minimum   |             | 146.93    |            |
|  | Maximum   |             | 1489.10   |            |
|  | Range   |             | 1342.17   |            |
|  | Interquartile Range   |             | 767.4225  |            |
|  | Skewness  |             | -1.441    | .845       |
|  | Kurtosis  |             | 1.830     | 1.741      |

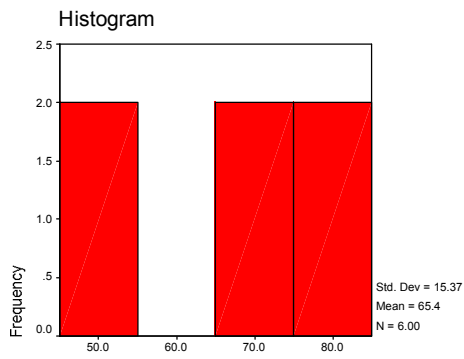
**Tests of Normality**

|   | Kolmogorov-Smirnov <sup>a</sup> |    |       | Shapiro-Wilk |    |      |
|---|---------------------------------|----|-------|--------------|----|------|
|   | Statistic                       | df | Sig.  | Statistic    | df | Sig. |
| Kadar ALT awal penelitian pd kelompok Perlakuan (P)             | .221                            | 6  | .200* | .883         | 6  | .281 |
| Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P) | .251                            | 6  | .200* | .853         | 6  | .167 |
| Kadar ALT akhir penelitian pd kelompok Perlakuan (P)            | .259                            | 6  | .200* | .865         | 6  | .206 |

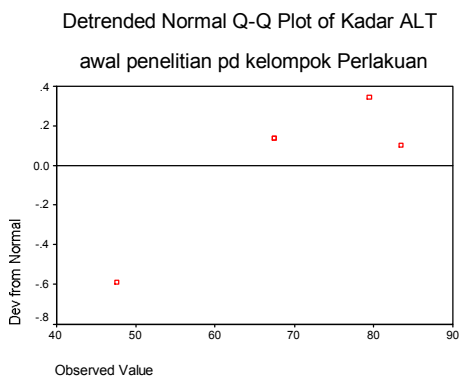
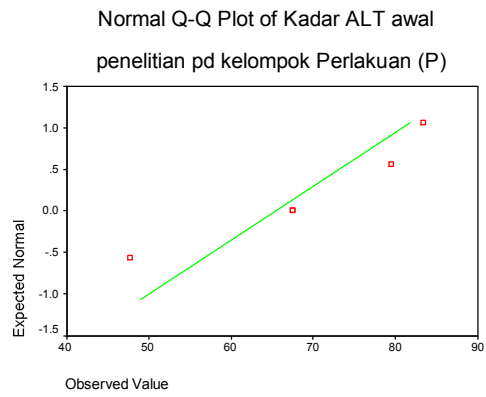
\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

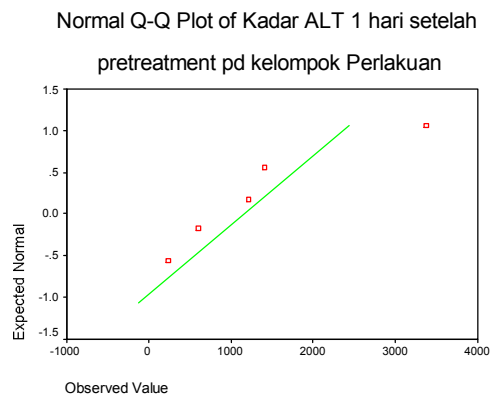
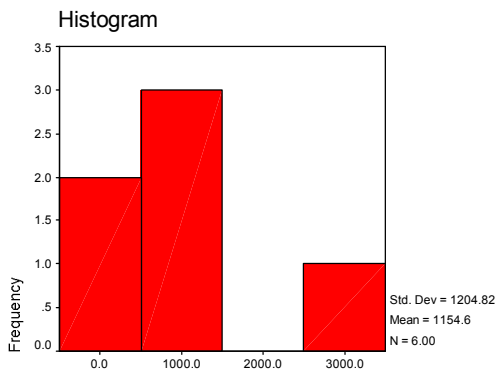
**Kadar ALT awal penelitian pd kelompok Perlakuan (P)**



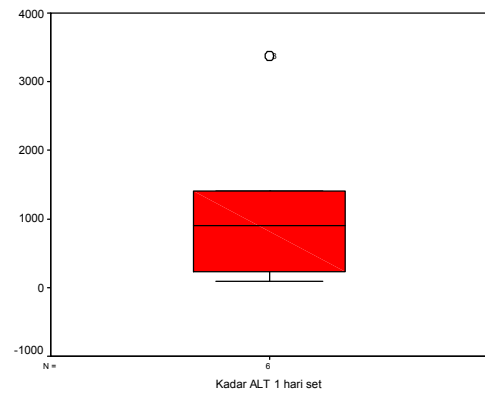
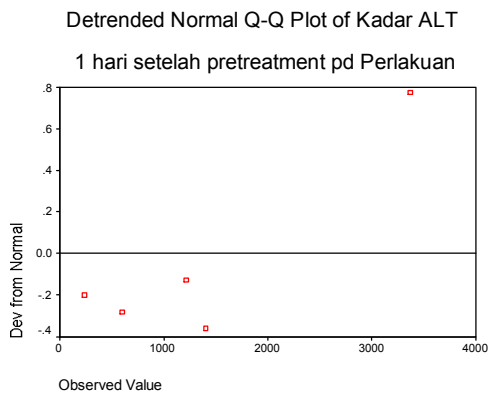
Kadar ALT awal penelitian pd kelompok Perlakuan (P)



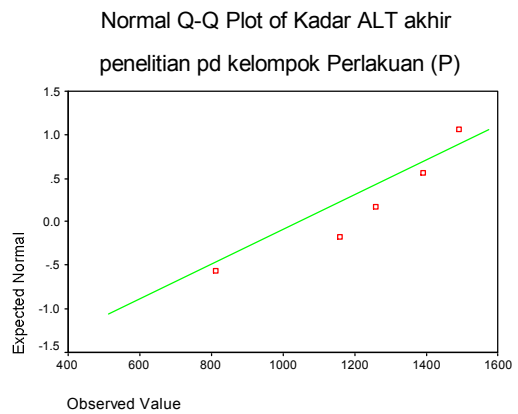
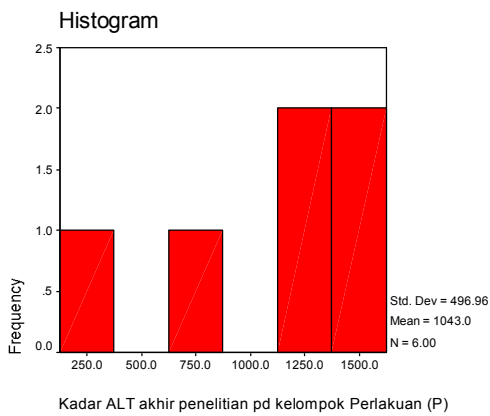
## Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P)

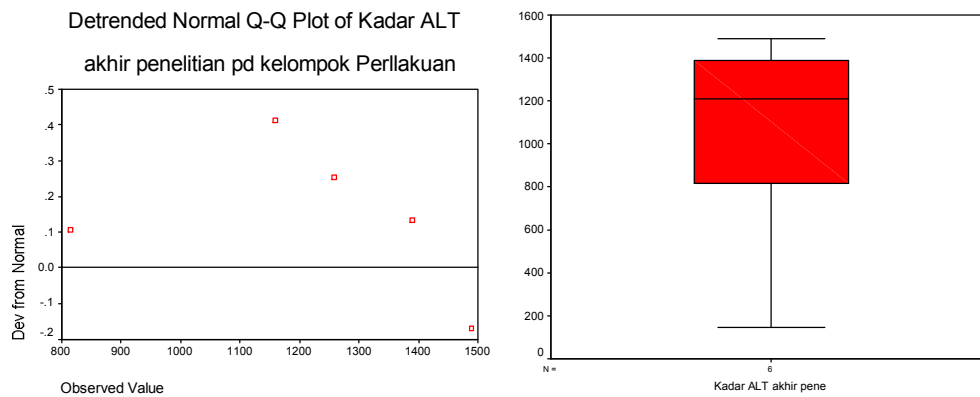


Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (



## Kadar ALT akhir penelitian pd kelompok Perlakuan (P)





**Uji t berpasangan kadar AST awal dan akhir penelitian pada kelompok kontrol.**

**T-Test**

**Paired Samples Statistics**

|        |  | Mean     | N | Std. Deviation | Std. Error Mean |
|--------|--|----------|---|----------------|-----------------|
| Pair 1 | Kadar AST awal penelitian pd kelompok Kontrol (K)  | 28.4200  | 6 | 7.87216        | 3.21380         |
|        | Kadar AST akhir penelitian pd kelompok Kontrol (K) | 873.0317 | 6 | 217.09175      | 88.62734        |

**Paired Samples Correlations**

|        |  | N | Correlation | Sig. |
|--------|--|---|-------------|------|
| Pair 1 | Kadar AST awal penelitian pd kelompok Kontrol (K) & Kadar AST akhir penelitian pd kelompok Kontrol (K) | 6 | -.655       | .158 |

**Paired Samples Test**

|        |  | Paired Differences |                |                 |   | t        | df     | Sig. (2-tailed) |      |
|--------|--|--------------------|----------------|-----------------|---|----------|--------|-----------------|------|
|        |  | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |          |        |                 |      |
|        |  |                    |                |                 | Lower                                     | Upper    |        |                 |      |
| Pair 1 | Kadar AST awal penelitian pd kelompok Kontrol (K) - Kadar AST akhir penelitian pd kelompok Kontrol (K) | -844.6117          | 222.33110      | 90.76629        | -1077.93                                  | 611.2895 | -9.305 | 5               | .000 |



## Uji t berpasangan kadar AST pada kelompok perlakuan

### T-Test

**Paired Samples Statistics**

|        |   | Mean     | N | Std. Deviation | Std. Error Mean |
|--------|---|----------|---|----------------|-----------------|
| Pair 1 | Kadar AST awal penelitian pd kelompok Perlakuan (P)             | 25.9083  | 6 | 5.57873        | 2.27751         |
|        | Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P) | 348.7867 | 6 | 290.58876      | 118.63237       |
| Pair 2 | Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P) | 348.7867 | 6 | 290.58876      | 118.63237       |
|        | Kadar AST akhir penelitian pd kelompok Perlakuan (P)            | 606.2350 | 6 | 270.08372      | 110.26122       |

**Paired Samples Correlations**

|        |  | N | Correlation | Sig. |
|--------|--|---|-------------|------|
| Pair 1 | Kadar AST awal penelitian pd kelompok Perlakuan (P) & Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P)  | 6 | -.600       | .208 |
|        | Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P) & Kadar AST akhir penelitian pd kelompok Perlakuan (P) | 6 | .303        | .560 |

**Paired Samples Test**

|        |  | Paired Differences |                |                 |   |          | t      | df | Sig. (2-tailed) |
|--------|--|--------------------|----------------|-----------------|---|----------|--------|----|-----------------|
|        |  | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |          |        |    |                 |
|        |  |                    |                |                 | Lower                                     | Upper    |        |    |                 |
| Pair 1 | Kadar AST awal penelitian pd kelompok Perlakuan (P) - Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P)  | -322.8783          | 293.97013      | 120.01280       | -631.3811                                 | -14.3756 | -2.690 | 5  | .043            |
| Pair 2 | Kadar AST 1 hari setelah pretreatment pd kelompok Perlakuan (P) - Kadar AST akhir penelitian pd kelompok Perlakuan (P) | -257.4483          | 331.46819      | 135.32132       | -605.3029                                 | 90.4062  | -1.902 | 5  | .115            |

## Uji t berpasangan kadar ALT pada kelompok kontrol

### T-Test

#### Paired Samples Statistics

|        |  | Mean      | N | Std. Deviation | Std. Error Mean |
|--------|--|-----------|---|----------------|-----------------|
| Pair 1 | Kadar ALT awal penelitian pd kelompok Kontrol (K)  | 78.7583   | 6 | 17.11146       | 6.98572         |
|        | Kadar ALT akhir penelitian pd kelompok Kontrol (K) | 1119.8167 | 6 | 406.60758      | 165.99685       |

#### Paired Samples Correlations

|        |  | N | Correlation | Sig. |
|--------|--|---|-------------|------|
| Pair 1 | Kadar ALT awal penelitian pd kelompok Kontrol (K) & Kadar ALT akhir penelitian pd kelompok Kontrol (K) | 6 | -.626       | .184 |

#### Paired Samples Test

|        |  | Paired Differences |                |                 |   | t         | df     | Sig. (2-tailed) |       |
|--------|--|--------------------|----------------|-----------------|---|-----------|--------|-----------------|-------|
|        |  | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |           |        |                 |       |
|        |  |                    |                |                 | Lower                                     |           |        |                 | Upper |
| Pair 1 | Kadar ALT awal penelitian pd kelompok Kontrol (K) - Kadar ALT akhir penelitian pd kelompok Kontrol (K) | -1041.06           | 417.53293      | 170.45710       | -1479.23                                  | -602.8844 | -6.107 | 5               | .002  |

## Uji t berpasangan kadar ALT pada kelompok perlakuan

### T-Test

#### Paired Samples Statistics

|        |   | Mean      | N | Std. Deviation | Std. Error Mean |
|--------|---|-----------|---|----------------|-----------------|
| Pair 1 | Kadar ALT awal penelitian pd kelompok Perlakuan (P)             | 65.4217   | 6 | 15.36806       | 6.27399         |
|        | Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P) | 1154.6167 | 6 | 1204.81920     | 491.86538       |
| Pair 2 | Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P) | 1154.6167 | 6 | 1204.81920     | 491.86538       |
|        | Kadar ALT akhir penelitian pd kelompok Perlakuan (P)            | 1043.0483 | 6 | 496.95909      | 202.88270       |

**Paired Samples Correlations**

|        |  | N | Correlation | Sig. |
|--------|--|---|-------------|------|
| Pair 1 | Kadar ALT awal penelitian pd kelompok Perlakuan (P) & Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P)  | 6 | .442        | .381 |
| Pair 2 | Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P) & Kadar ALT akhir penelitian pd kelompok Perlakuan (P) | 6 | -.022       | .968 |

**Paired Samples Test**

|        |  | Paired Differences |                |                 |   | t         | df     | Sig. (2-tailed) |       |
|--------|--|--------------------|----------------|-----------------|---|-----------|--------|-----------------|-------|
|        |  | Mean               | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |           |        |                 |       |
|        |  |                    |                |                 | Lower                                     |           |        |                 | Upper |
| Pair 1 | Kadar ALT awal penelitian pd kelompok Perlakuan (P) - Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P)  | -1089.20           | 1198.11310     | 489.12762       | -2346.54                                  | 168.1476  | -2.227 | 5               | .076  |
| Pair 2 | Kadar ALT 1 hari setelah pretreatment pd kelompok Perlakuan (P) - Kadar ALT akhir penelitian pd kelompok Perlakuan (P) | 111.5683           | 1313.12852     | 536.08247       | -1266.48                                  | 1489.6122 | .208   | 5               | .843  |

**Uji t independen kadar AST awal penelitian pada kedua kelompok**

**T-Test**

**Group Statistics**

|   | kelompok perlakuan     | N | Mean    | Std. Deviation | Std. Error Mean |
|---|------------------------|---|---------|----------------|-----------------|
| Kadar AST awal penelitian pd kedua kelompok | kelompok Kontrol (K)   | 6 | 28.4200 | 7.87216        | 3.21380         |
|   | kelompok Perlakuan (P) | 6 | 25.9083 | 5.57873        | 2.27751         |

**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    |
| Kadar AST awal penelitian pd kedua kelompok | Equal variances assumed     | 1.008                                   | .339 | .638                         | 10    | .538            | 2.5117          | 3.93897               | -6.26492                                  | 11.28825 |
|   | Equal variances not assumed |   |      | .638                         | 9.011 | .540            | 2.5117          | 3.93897               | -6.39732                                  | 11.42066 |

## Uji t independen kadar AST akhir penelitian pada kedua kelompok

### T-Test

#### Group Statistics

| kelompok perlakuan                           |                        | N | Mean     | Std. Deviation | Std. Error Mean |
|--|------------------------|---|----------|----------------|-----------------|
| Kadar AST akhir penelitian pd kedua kelompok | kelompok Kontrol (K)   | 6 | 873.0317 | 217.09175      | 88.62734        |
|  | kelompok Perlakuan (P) | 6 | 606.2350 | 270.08372      | 110.26122       |

#### 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     |
| Kadar AST akhir penelitian pd kedua kelompok | Equal variances assumed     | .398                                    | .542 | 1.886                        | 10    | .089            | 266.7967        | 141.46498             | -48.40695                                 | 582.00029 |
|  | Equal variances not assumed |   |      | 1.886                        | 9.558 | .090            | 266.7967        | 141.46498             | -50.39322                                 | 583.98655 |

## Uji t independen kadar ALT awal penelitian pada kedua kelompok

### T-Test

#### Group Statistics

| kelompok perlakuan                          |                        | N | Mean    | Std. Deviation | Std. Error Mean |
|---|------------------------|---|---------|----------------|-----------------|
| Kadar ALT awal penelitian pd kedua kelompok | kelompok Kontrol (K)   | 6 | 78.7583 | 17.11146       | 6.98572         |
|   | kelompok Perlakuan (P) | 6 | 65.4217 | 15.36806       | 6.27399         |

#### 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    |
| Kadar ALT awal penelitian pd kedua kelompok | Equal variances assumed     | .021                                    | .887 | 1.420                        | 10    | .186            | 13.3367         | 9.38953               | -7.58451                                  | 34.25784 |
|   | Equal variances not assumed |   |      | 1.420                        | 9.887 | .186            | 13.3367         | 9.38953               | -7.61705                                  | 34.29038 |

## Uji t independen kadar ALT akhir penelitian pada kedua kelompok

### T-Test

#### Group Statistics

|  |  | N | Mean      | Std. Deviation | Std. Error Mean |
|--|--|---|-----------|----------------|-----------------|
| kelompok perlakuan                                 |  |   |           |                |                 |
| Kadar ALT akhir penelitian pd kelompok Kontrol (K) |  | 6 | 1119.8167 | 406.60758      | 165.99685       |
| kelompok Perlakuan (P)                             |  |   |           |                |                 |
| Kadar ALT akhir penelitian pd kedua kelompok       |  | 6 | 1043.0483 | 496.95909      | 202.88270       |

#### 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    |
| Kadar ALT akhir penelitian pd kedua kelompok | .359                                    | .562 | .293                         | 10    | .776            | 76.7683         | 262.13802             | -507.312                                  | 60.84825 |
| Equal variance assumed                       |   |      | .293                         | 9.623 | .776            | 76.7683         | 262.13802             | -510.431                                  | 63.96728 |
| Equal variance not assumed                   |   |      |                              |       |                 |                 |                       |   |          |

## Uji korelasi Pearson kadar AST dan ALT

#### Correlations

|  |                     | Kadar AST akhir penelitian pd kelompok Kontrol (K) | Kadar ALT akhir penelitian pd kelompok Kontrol (K) |
|--|---------------------|--|--|
| Kadar AST akhir penelitian pd kelompok Kontrol (K) | Pearson Correlation | 1  | .587   |
|  | Sig. (2-tailed)     | .  | .221   |
|  | N                   | 6  | 6  |
| Kadar ALT akhir penelitian pd kelompok Kontrol (K) | Pearson Correlation | .587   | 1  |
|  | Sig. (2-tailed)     | .221   | .  |
|  | N                   | 6  | 6  |

#### Correlations

#### Correlations

|  |                     | Kadar AST akhir penelitian pd kelompok Perlakuan (P) | Kadar ALT akhir penelitian pd kelompok Perlakuan (P) |
|--|---------------------|--|--|
| Kadar AST akhir penelitian pd kelompok Perlakuan (P) | Pearson Correlation | 1  | .412   |
|  | Sig. (2-tailed)     | .  | .417   |
|  | N                   | 6  | 6  |
| Kadar ALT akhir penelitian pd kelompok Perlakuan (P) | Pearson Correlation | .412   | 1  |
|  | Sig. (2-tailed)     | .417   | .  |
|  | N                   | 6  | 6  |

#### Correlations

**Correlations**

|  |                     | Kadar AST akhir penelitian pd kedua kelompok | Kadar ALT akhir penelitian pd kedua kelompok |
|--|---------------------|--|--|
| Kadar AST akhir penelitian pd kedua kelompok | Pearson Correlation | 1  | .459   |
|  | Sig. (2-tailed)     | .  | .134   |
|  | N                   | 12   | 12   |
| Kadar ALT akhir penelitian pd kedua kelompok | Pearson Correlation | .459   | 1  |
|  | Sig. (2-tailed)     | .134   | .  |
|  | N                   | 12   | 12   |

**Uji kolmogorov-smirnov**

**NPar Tests**

**Two-Sample Kolmogorov-Smirnov Test**

**Frequencies**

| kelompok perlakuan    |                        | N  |
|-----------------------|------------------------|----|
| derajat histopatologi | kelompok Kontrol (K)   | 6  |
|                       | kelompok Perlakuan (P) | 6  |
|                       | Total                  | 12 |

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

|                          |          | derajat histopatologi |
|--------------------------|----------|-----------------------|
| Most Extreme Differences | Absolute | .833                  |
|                          | Positive | .000                  |
|                          | Negative | -.833                 |
| Kolmogorov-Smirnov Z     |          | 1.443                 |
| Asymp. Sig. (2-tailed)   |          | .031                  |

a. Grouping Variable: kelompok perlakuan

**Nonparametric Correlations**

**Correlations**

|                |  |                         | Kadar AST akhir penelitian pd kedua kelompok | derajat histopatologi |
|----------------|--|-------------------------|--|-----------------------|
| Spearman's rho | Kadar AST akhir penelitian pd kedua kelompok | Correlation Coefficient | 1.000  | .427                  |
|                |  | Sig. (2-tailed)         | .  | .166                  |
|                |  | N                       | 12   | 12                    |
|                | derajat histopatologi                        | Correlation Coefficient | .427   | 1.000                 |
|                |  | Sig. (2-tailed)         | .166   | .                     |
|                |  | N                       | 12   | 12                    |

**Nonparametric Correlations**

**Correlations**

|                |  |                         | Kadar ALT<br>akhir<br>penelitian<br>pd kedua<br>kelompok | derajat<br>histopatologi |
|----------------|--|-------------------------|--|--------------------------|
| Spearman's rho | Kadar ALT akhir<br>penelitian pd kedua<br>kelompok | Correlation Coefficient | 1.000  | .205                     |
|                |  | Sig. (2-tailed)         | .  | .524                     |
|                |  | N                       | 12   | 12                       |
|                | derajat histopatologi                              | Correlation Coefficient | .205   | 1.000                    |
|                |  | Sig. (2-tailed)         | .524   | .                        |
|                |  | N                       | 12   | 12                       |