

**LAMPIRAN 1.**

**Tabel 1. Data Berat Badan Tikus, Derajat Fibrosis, dan Kadar IL-17 Serum Tikus  
Tiap Kelompok Perlakuan**

Kelompok	Nomor Sampel	Berat Badan Saat Datang (gram)	Berat Badan Sebelum Didedah (gram)	Dera jat Fibro sis	Kadar IL-17 Serum (pg/ml)	Mean	Standar Deviasi
K- Negatif	1 (KP1-1)	180	225	F0	146,5	168,12	15,39
	2 (KP2-1)	218	264	F0	174		
	3 (KP3-1)	190	253	F0	182,5		
	4 (KP4-1)	157	213	F1	169,5		
K-Positif	1 (KN1-1)	179	213	F3	320,5	238,75	60,19
	2 (KN2-1)	207	287	F3	196		
	3 (KN3-1)	170	243	F2	247,5		
	4 (KN4-1)	193	286	F3	191		
KP-2	1 (KP2.1)	188	247	F2	132	160,87	43,04
	2 (KP2.2)	168	212	F2	137,5		
	3 (KP2.3)	168	245	F1	149,5		
	4 (KP2.4)	202	253	F1	224,5		
KK-2	1 (KK2.1)	178	224	F2	115	122,50	9,88
	2 (KK2.2)	188	240	F3	118		
	3 (KK2.3)	191	250	F2	137		
	4 (KK2.4)	183	248	F2	120		
KP-5	1(HKP5.1)	174	189	F2	147,5	139,25	16,59
	2(HKP5.2)	198	277	F2	139,5		
	3(HKP5.3)	175	214	F3	116		



	4(HKP5.4)	164	197	F2	154		
KK-5	1(HKK5.1)	173	208	F3	194	191,37	17,99
	2(HKK5.2)	169	184	F2	199,5		
	3(HKK5.3)	180	208	F1	165,5		
	4(HKK5.4)	193	258	F3	206,5		
KP-9	1(HKP6.1)	174	219	F0	249,5	240,75	7,12
	2(HKP6.2)	173	206	F1	233		
	3(HKP6.3)	169	195	F0	237,5		
	4(HKP6.4)	153	171	F1	243		
KK-9	1(HKK9.1)	216	325	F0	402	327,62	69,05
	2(HKK9.3)	169	176	F1	347		
	3(HKK9.4)	186	217	F1	325,5		
	4(HKK9.5)	184	209	F1	236		

Tabel 2. Mean dan Standar Deviasi

Kelompok = Kontrol Negatif

Kelompok = Kontrol Positif

Statistics<sup>a</sup>

IL17Serum

N	Valid	4
	Missing	0
Mean		168,1250
Std. Deviation		15,39142

a. Kelompok = Kontrol Negatif

Statistics<sup>a</sup>

IL17Serum

N	Valid	4
	Missing	0
Mean		238,7500
Std. Deviation		60,18652

a. Kelompok = Kontrol Positif

**Kelompok = K.Kontrol 2**

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

IL17Serum

N	Valid	4
	Missing	0
Mean		122,5000
Std. Deviation		9,88264

a. Kelompok = K.Kontrol 2

**Kelompok = K.Perlakuan 5**

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

IL17Serum

N	Valid	4
	Missing	0
Mean		139,2500
Std. Deviation		16,59568

a. Kelompok = K.Perlakuan 5

**Kelompok = K.Perlakuan 2**

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

IL17Serum

N	Valid	4
	Missing	0
Mean		160,8750
Std. Deviation		43,04140

a. Kelompok = K.Perlakuan 2

**Kelompok = K.Kontrol 9**

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

IL17Serum

N	Valid	4
	Missing	0
Mean		327,6250
Std. Deviation		69,05719

a. Kelompok = K.Kontrol 9

**Kelompok = K.Kontrol 5**

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

IL17Serum

N	Valid	4
	Missing	0
Mean		191,3750
Std. Deviation		17,99248

a. Kelompok = K.Kontrol 5

**Kelompok = K.Perlakuan 9**

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

IL17Serum

N	Valid	4
	Missing	0
Mean		240,7500
Std. Deviation		7,12390

a. Kelompok = K.Perlakuan 9

**Tabel 2. Uji Normalitas Data**

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
LogL17Serum	,096	32	,200*	,958	32	,242



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

a. Lilliefors Significance Correction

**Tabel 3. Uji Homogenitas Data**

Test of Homogeneity of Variances			
LogL17Serum			
Levene Statistic	df1	df2	Sig.
2,048	7	24	,090

**Tabel 4. Uji One Way ANOVA**

ANOVA					
LogL17Serum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,544	7	,078	15,764	,000
Within Groups	,118	24	,005		
Total	,662	31			

**Tabel 5. Uji Post hoc LSD**

Multiple Comparisons						
Dependent Variable: LogL17Serum						
LSD						
(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol Negatif	Kontrol Positif	-,14397*	,04965	,008	-,2464	-,0415
	K.Kontrol 2	,13708*	,04965	,011	,0346	,2396
	K.Perlakuan 2	,02802	,04965	,578	-,0745	,1305
	K.Kontrol 5	-,05616	,04965	,269	-,1586	,0463
	K.Perlakuan 5	,08287	,04965	,108	-,0196	,1853
	K.Kontrol 9	-,28330*	,04965	,000	-,3858	-,1808
Kontrol Positif	K.Perlakuan 9	-,15722*	,04965	,004	-,2597	-,0547
	Kontrol Negatif	,14397*	,04965	,008	,0415	,2464
	K.Kontrol 2	,28105*	,04965	,000	,1786	,3835
	K.Perlakuan 2	,17199*	,04965	,002	,0695	,2745
	K.Kontrol 5	,08781	,04965	,090	-,0147	,1903

	K.Perlakuan 5	,22684*	,04965	,000	,1244	,3293
	K.Kontrol 9	-,13933*	,04965	,010	-,2418	-,0369
	K.Perlakuan 9	-,01325	,04965	,792	-,1157	,0892
K.Kontrol 2	Kontrol Negatif	-,13708*	,04965	,011	-,2396	-,0346
	Kontrol Positif	-,28105*	,04965	,000	-,3835	-,1786
	K.Perlakuan 2	-,10906*	,04965	,038	-,2115	-,0066
	K.Kontrol 5	-,19325*	,04965	,001	-,2957	-,0908
	K.Perlakuan 5	-,05422	,04965	,286	-,1567	,0483
	K.Kontrol 9	-,42038*	,04965	,000	-,5229	-,3179
	K.Perlakuan 9	-,29430*	,04965	,000	-,3968	-,1918
K.Perlakuan 2	Kontrol Negatif	-,02802	,04965	,578	-,1305	,0745
	Kontrol Positif	-,17199*	,04965	,002	-,2745	-,0695
	K.Kontrol 2	,10906*	,04965	,038	,0066	,2115
	K.Kontrol 5	-,08418	,04965	,103	-,1867	,0183
	K.Perlakuan 5	,05485	,04965	,280	-,0476	,1573
	K.Kontrol 9	-,31132*	,04965	,000	-,4138	-,2088
	K.Perlakuan 9	-,18524*	,04965	,001	-,2877	-,0828
K.Kontrol 5	Kontrol Negatif	,05616	,04965	,269	-,0463	,1586
	Kontrol Positif	-,08781	,04965	,090	-,1903	,0147
	K.Kontrol 2	,19325*	,04965	,001	,0908	,2957
	K.Perlakuan 2	,08418	,04965	,103	-,0183	,1867
	K.Perlakuan 5	,13903*	,04965	,010	,0366	,2415
	K.Kontrol 9	-,22714*	,04965	,000	-,3296	-,1247
	K.Perlakuan 9	-,10106	,04965	,053	-,2035	,0014
K.Perlakuan 5	Kontrol Negatif	-,08287	,04965	,108	-,1853	,0196
	Kontrol Positif	-,22684*	,04965	,000	-,3293	-,1244
	K.Kontrol 2	,05422	,04965	,286	-,0483	,1567
	K.Perlakuan 2	-,05485	,04965	,280	-,1573	,0476
	K.Kontrol 5	-,13903*	,04965	,010	-,2415	-,0366
	K.Kontrol 9	-,36617*	,04965	,000	-,4686	-,2637
	K.Perlakuan 9	-,24009*	,04965	,000	-,3426	-,1376
K.Kontrol 9	Kontrol Negatif	,28330*	,04965	,000	,1808	,3858
	Kontrol Positif	,13933*	,04965	,010	,0369	,2418
	K.Kontrol 2	,42038*	,04965	,000	,3179	,5229
	K.Perlakuan 2	,31132*	,04965	,000	,2088	,4138
	K.Kontrol 5	,22714*	,04965	,000	,1247	,3296
	K.Perlakuan 5	,36617*	,04965	,000	,2637	,4686

	K.Perlakuan 9	,12608*	,04965	,018	,0236	,2286
K.Perlakuan 9	Kontrol Negatif	,15722*	,04965	,004	,0547	,2597
	Kontrol Positif	,01325	,04965	,792	-,0892	,1157
	K.Kontrol 2	,29430*	,04965	,000	,1918	,3968
	K.Perlakuan 2	,18524*	,04965	,001	,0828	,2877
	K.Kontrol 5	,10106	,04965	,053	-,0014	,2035
	K.Perlakuan 5	,24009*	,04965	,000	,1376	,3426
	K.Kontrol 9	-,12608*	,04965	,018	-,2286	-,0236

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

**Tabel 6. Modus dan Standar Deviasi Derajat Fibrosis**

Statistics			
DerajatFibrosis			
Kontrol Negatif	N	Valid	4
		Missing	0
		Mode	,00
Kontrol Positif	N	Valid	4
		Missing	0
		Mode	3,00
K.Kontrol 2	N	Valid	4
		Missing	0
		Mode	2,00
K.Perlakuan 2	N	Valid	4
		Missing	0
		Mode	1,00 <sup>a</sup>
K.Kontrol 5	N	Valid	4
		Missing	0
		Mode	3,00
K.Perlakuan 5	N	Valid	4
		Missing	0
		Mode	2,00
K.Kontrol 9	N	Valid	4
		Missing	0
		Mode	1,00
K.Perlakuan 9	N	Valid	4
		Missing	0

Mode	,00 <sup>a</sup>
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a. Multiple modes exist. The smallest value is shown

**Tabel 7. Mean dan Standar Deviasi Kadar IL-17 Serum Berdasarkan Pemberian**

Statistics			
KadarIL17			
F0Kurkumin	N	Valid	2
		Missing	0
	Mean		243,5000
	Std. Deviation		8,48528
F0Placebo	N	Valid	1
		Missing	0
	Mean		402,0000
	Std. Deviation		42,67513
F1Kurkumin	N	Valid	4
		Missing	0
	Mean		212,5000
	Std. Deviation		42,67513
F1Placebo	N	Valid	4
		Missing	0
	Mean		268,5000
	Std. Deviation		83,81826
F2Kurkumin	N	Valid	5
		Missing	0
	Mean		142,1000
	Std. Deviation		8,67035
F2Placebo	N	Valid	4
		Missing	0
	Mean		142,8750
	Std. Deviation		38,90667
F3Kurkumin	N	Valid	1
		Missing	0
	Mean		116,0000
	Std. Deviation		172,8333
F3Placebo	N	Valid	3
		Missing	0
	Mean		172,8333
	Std. Deviation		172,8333

Std. Deviation	47,89659
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**Tabel 8. Mean dan Standar Deviasi Kadar IL-17 Serum Berdasarkan Derajat Fibrosis**

**Statistics**  
KadarIL17Serum

Group	N	Valid	Missing	Mean	Std. Deviation
F0		6	0	232,0000	92,04455
F1		9	0	232,6111	68,27599
F2		10	0	152,9500	40,51917
F3		7	0	191,7143	68,30682

**Tabel 9. Uji Normalitas Data Derajat Fibrosis**

**Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Reciprocal	,126	24	,200*	,940	24	,164

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

a. Lilliefors Significance Correction





**Tabel 10. Uji Homogenitas Data Derajat Fibrosis**

Test of Homogeneity of Variances			
Reciprocal			
Levene Statistic	df1	df2	Sig.
2,305	3	20	,108
Test of Homogeneity of Variances			
LogL17Serum			
Levene Statistic	df1	df2	Sig.
,513	3	28	,677

**Tabel 11. Uji One Way Anova Derajat Fibrosis**

ANOVA					
Reciprocal					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,000	3	,000	9,339	,000
Within Groups	,000	20	,000		
Total	,000	23			
ANOVA					
LogL17Serum					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	,183	3	,061	3,551	,027
Within Groups	,480	28	,017		
Total	,662	31			

**Tabel 12. Uji Post Hoc LSD Derajat Fibrosis**

**Multiple Comparisons**

Dependent Variable: Reciprocal

LSD

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
DerajatFibrosis	1,00	-,00090	,00090	,329	-,0028	,0010
	2,00	-,00361*	,00089	,001	-,0055	-,0018



	3,00		-,00320*	,00102	,005	-,0053	-,0011
1,00	,00		,00090	,00090	,329	-,0010	,0028
	2,00		-,00271*	,00065	,000	-,0041	-,0014
	3,00		-,00230*	,00082	,011	-,0040	-,0006
2,00	,00		,00361*	,00089	,001	,0018	,0055
	1,00		,00271*	,00065	,000	,0014	,0041
	3,00		,00041	,00080	,617	-,0013	,0021
3,00	,00		,00320*	,00102	,005	,0011	,0053
	1,00		,00230*	,00082	,011	,0006	,0040
	2,00		-,00041	,00080	,617	-,0021	,0013

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

Multiple Comparisons

Dependent Variable: LogIL17Serum

LSD

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
,00 DerajatFibrosis	1,00 DerajatFibrosis	-,00952	,06900	,891	-,1509	,1318
	2,00	,16778*	,06760	,019	,0293	,3063
	3,00	,08103	,07283	,275	-,0682	,2302
1,00	,00	,00952	,06900	,891	-,1318	,1509
	2,00	,17730*	,06015	,006	,0541	,3005
	3,00	,09055	,06598	,181	-,0446	,2257
2,00	,00	-,16778*	,06760	,019	-,3063	-,0293
	1,00	-,17730*	,06015	,006	-,3005	-,0541
	3,00	-,08675	,06452	,190	-,2189	,0454
3,00	,00	-,08103	,07283	,275	-,2302	,0682
	1,00	-,09055	,06598	,181	-,2257	,0446
	2,00	,08675	,06452	,190	-,0454	,2189

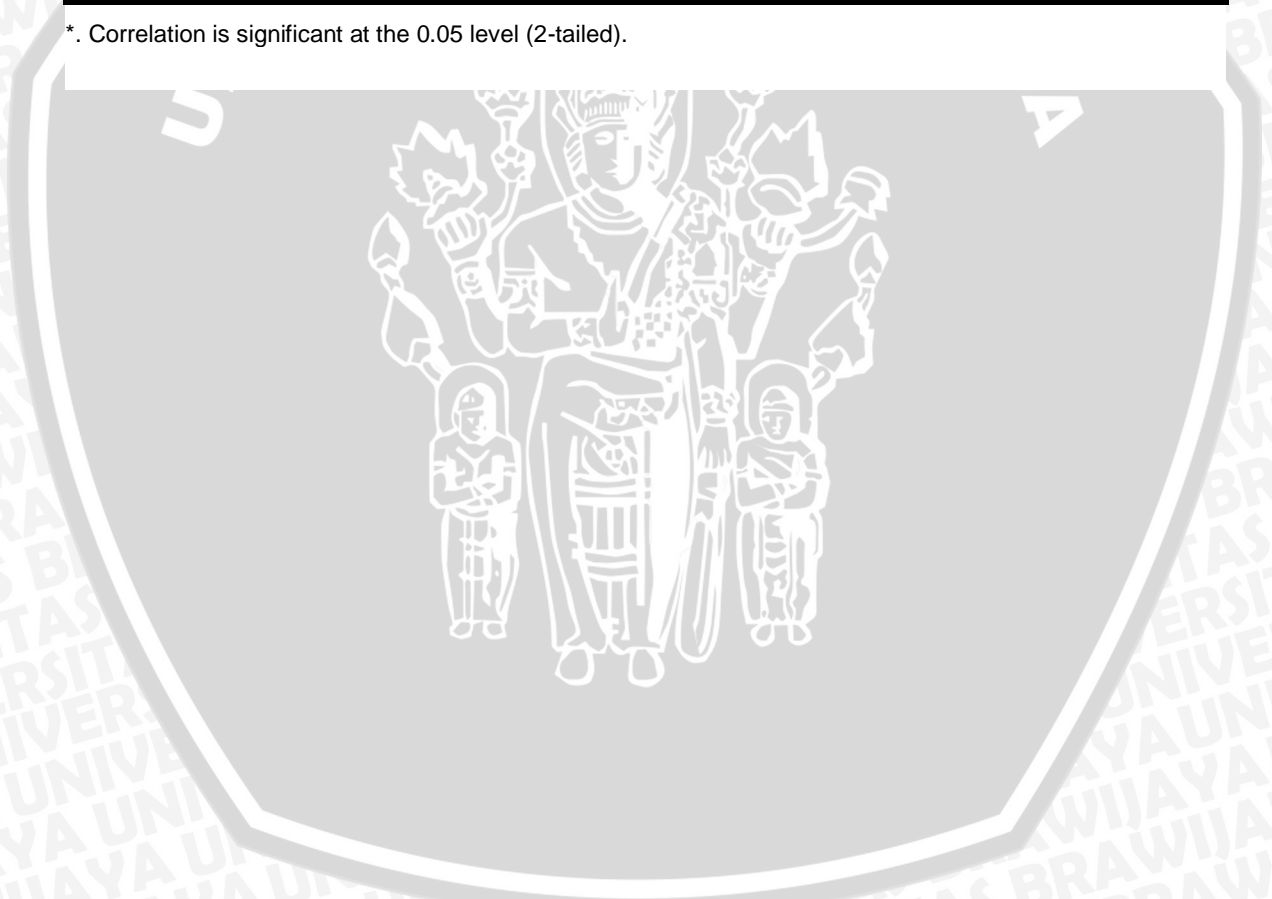
\*. The mean difference is significant at the 0.05 level.



Tabel 13. Uji Korelasi Spearman

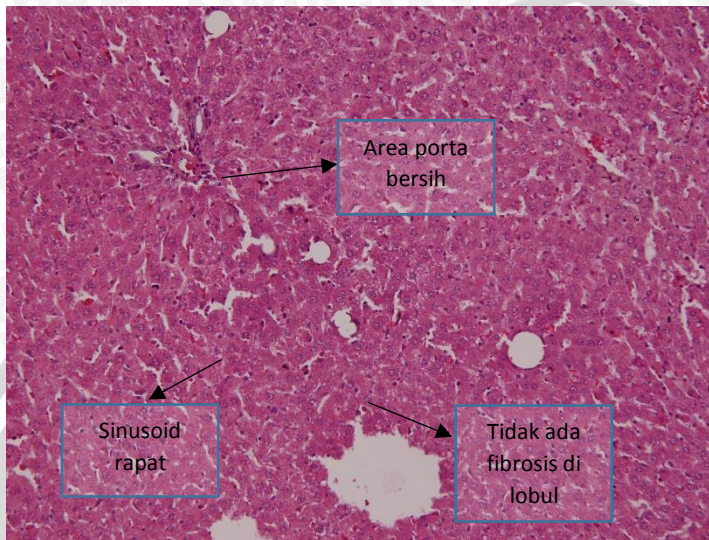
Correlations				
			LogIL17Serum	DerajatFibrosisH ati
Spearman's rho	LogIL17Serum	Correlation Coefficient	1,000	-,353*
		Sig. (2-tailed)	.	,047
		N	32	32
	DerajatFibrosisHati	Correlation Coefficient	-,353*	1,000
		Sig. (2-tailed)	,047	.
		N	32	32

\*. Correlation is significant at the 0.05 level (2-tailed).



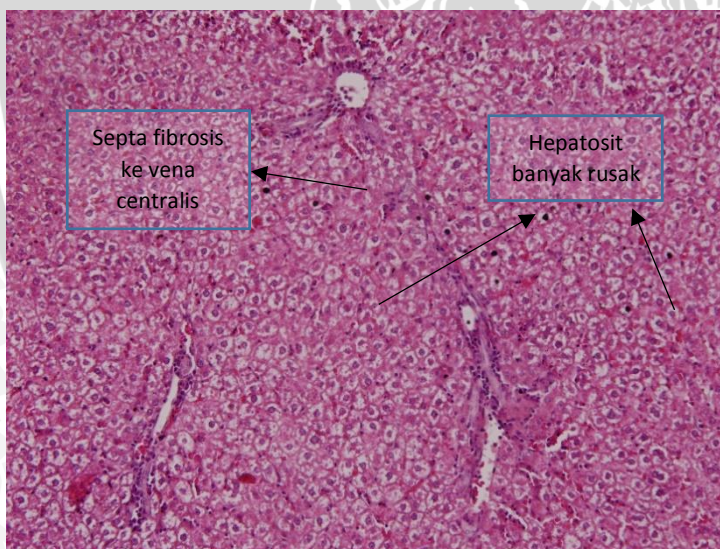
**LAMPIRAN 2. Hasil Pembacaan Fibrosis Hati**

**Gambar 1. Kontrol Negatif (F0)**



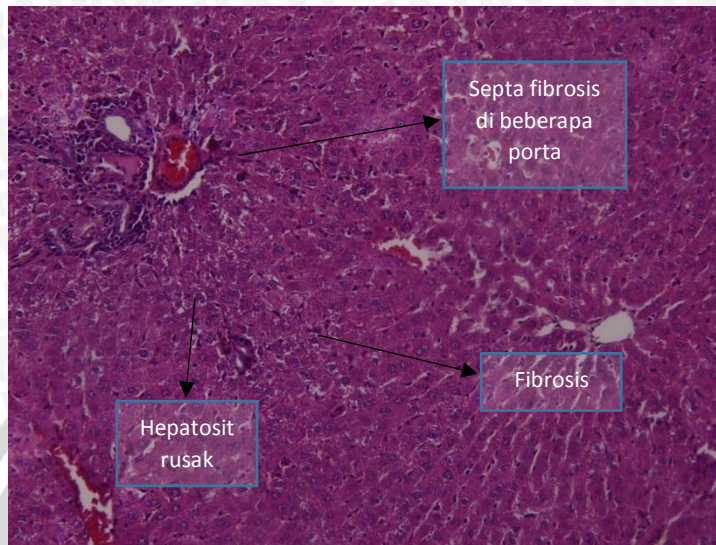
F0 : Hepatosit terlihat jelas, tidak ada tanda-tanda fibrosis, tidak ada perubahan struktur lobul.

**Gambar 2. Kontrol Positif (F3)**



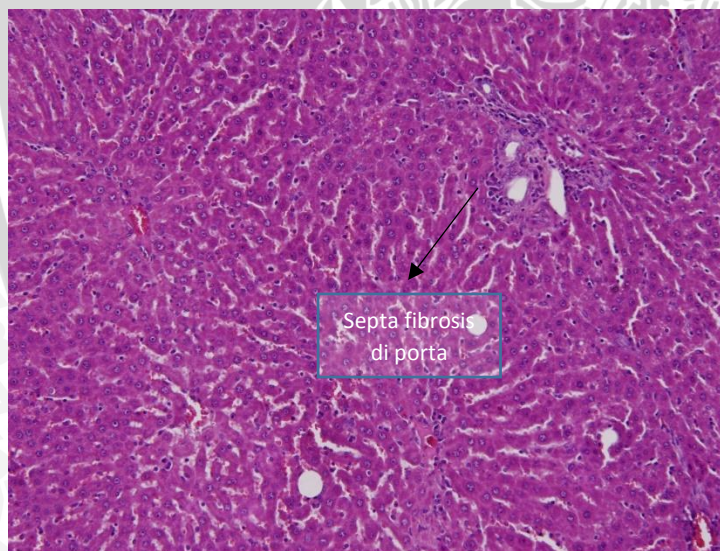
F3 : Terbentuk beberapa septum fibrosa disertai kerusakan struktur intralobular.

Gambar 3. Kelompok Kontrol 2 Minggu (F2)



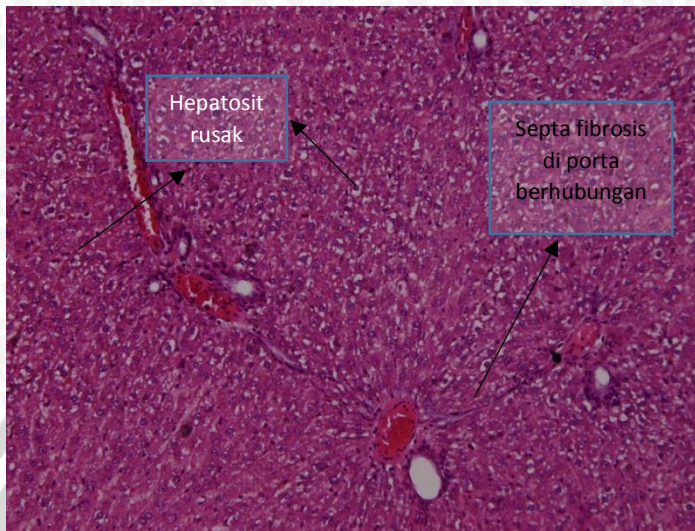
F2 : Beberapa fibrosis perifer di area porta, terbentuk septum fibrosa.

Gambar 4. Kelompok Perlakuan 2 Minggu (F2)



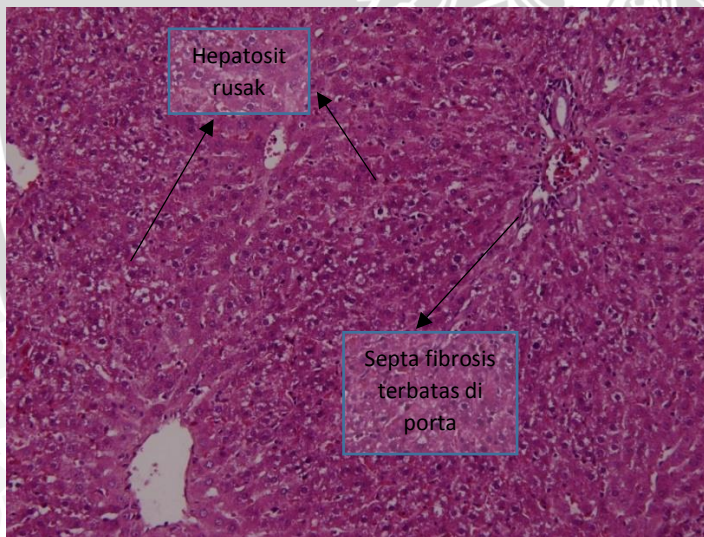
F2 : Beberapa fibrosis perifer di area porta, terbentuk septum fibrosa.

**Gambar 5. Kelompok Kontrol 5 Minggu (F3)**



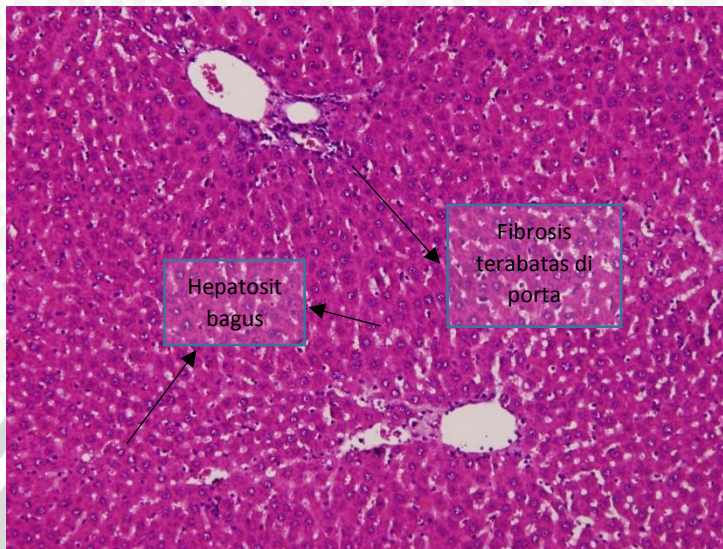
F3 : Terbentuk beberapa septum fibrosa disertai kerusakan struktur intralobular.

**Gambar 6. Kelompok Perlakuan 5 Minggu (F2)**



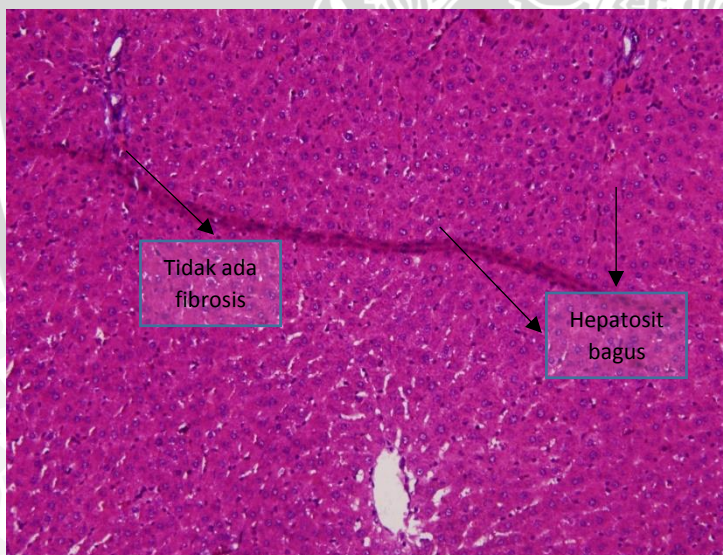
F2 : Beberapa fibrosis perifer di area porta, terbentuk septum fibrosa.

Gambar 7. Kelompok Kontrol 9 Minggu (F1)



F1 : Ada fibrosis terbatas di area porta, perisinusoidal atau intralobular

Gambar 8. Kelompok Perlakuan 9 Minggu (F1)



F1 : Ada fibrosis terbatas di area porta, perisinusoidal atau intralobular

### LAMPIRAN 3. Dokumentasi Kegiatan



Kandang tikus



Pakan untuk makanan tikus



Pembuatan makanan tikus



Minuman tikus



Menyonde tikus

Pembedahan dan pengambilan darah tikus





Lembar Kelaikan Etik



**KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI  
UNIVERSITAS BRAWIJAYA**

**FAKULTAS KEDOKTERAN  
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**KETERANGAN KELAIKAN ETIK  
("ETHICAL CLEARANCE")**

No. 76A / EC / KEPK – S1 - PD / 03 / 2016

**KOMISI ETIK PENELITIAN KESEHATAN FAKULTAS KEDOKTERAN UNIVERSITAS BRAWIJAYA, SETELAH MEMPELAJARI DENGAN SEKSAMA RANCANGAN PENELITIAN YANG DIUSULKAN, DENGAN INI MENYATAKAN BAHWA PENELITIAN DENGAN**

- JUDUL** : Peran Kurkumin Terhadap Perbaikan Fibrosis Hati Pada Tikus Model Fibrosis Akibat Induksi Karbon Tetraklorida (CC14).
- PENELITI** : Akhmad Ikbal Purnawarman Marselina Loisa Holly Ayamiseba  
Ayu Novita Kartikaningtyas Muhammad Abduh  
Eka Pratiwi Muhammad Rizky Putra Adi  
Ifa Febriana Noerdian Syah  
Indra Sutanto Vivi Herdiana Fatmasari  
Lazuardi Fadhullah Wahyu Yoga Septian
- UNIT / LEMBAGA** : S1 Pendidikan Dokter – Fakultas Kedokteran - Universitas Brawijaya Malang
- TEMPAT PENELITIAN** : Laboratorium Farmakologi, Laboratorium FAAL, dan Laboratorium Patologi Anatomi Fakultas Kedokteran Universitas Brawijaya Malang.

**DINYATAKAN LAIK ETIK.**

Malang, 11 MAR 2016  
An Rejwa  
Koordinator Divisi I  
  
Prof. Dr. Teguh W. Sardjono, DTM&H, MSc, SpPark  
NIP. 19520410 198002 1 001

**Catatan :**  
Keterangan Laik Etik Ini Berlaku 1 (Satu) Tahun Sejak Tanggal Dikeluarkan Pada Akhir Penelitian, Laporan Pelaksanaan Penelitian Harus Diserahkan Kepada KEPK-FKUB Dalam Bentuk Soft Copy. Jika Ada Perubahan Protokol Dan / Atau Perpanjangan Penelitian, Harus Mengajukan Kembali Permohonan Kajian Etik Penelitian (Amandemen Protokol).