

## DAFTAR PUSTAKA

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## LAMPIRAN 1. ETHICAL CLEARENCE

	<p><b>KOMISI ETIK PENELITIAN KESEHATAN (KEPK) FAKULTAS KEDOKTERAN UNIVERSITAS DIPONEGORO DAN RSUP dr KARIADI SEMARANG</b> Sekretariat : Kantor Dekanat FK Undip Lt.3 Jl. Dr. Soetomo 18. Semarang Telp.024-8311523/Fax. 024-8446905</p>	
<h3>ETHICAL CLEARANCE</h3> <p><b>No.136 /EC/FK/RSDK/2013</b></p>		
<p>Komisi Etik Penelitian Kesehatan Fakultas Kedokteran Universitas Diponegoro/RSUP Dr. Kariadi Semarang, setelah membaca dan menelaah Usulan Penelitian dengan judul :</p>		
<p><b>PERKEMBANGAN FIBROSIS MIOSIT PADA MENCIT DENGAN DIABETES MELLITUS YANG DIINDUKSI DENGAN STREPTOZOTOCIN</b></p>		
<p>Peneliti Utama : Rigar David S</p> <p>Pembimbing : dr. M. Ali Sobirin, Ph.D</p> <p>Penelitian : Dilaksanakan di Laboratorium Farmakologi Fakultas Kedokteran Undip Semarang</p>		
<p>Setuju untuk dilaksanakan, dengan memperhatikan prinsip-prinsip yang dinyatakan dalam Deklarasi Helsinki 1975, yang diamended di Seoul 2008 dan Pedoman Nasional Etik Penelitian Kesehatan (PNEPK) Departemen Kesehatan RI 2011</p> <p>Pada laporan akhir peneliti harus melampirkan cara pemeliharaan &amp; dekapitasi hewan coba.</p>		
<p>Semarang, 6 Mei 2013</p>		
<p>Komis Etik Penelitian Kesehatan Fakultas Kedokteran Undip/RSUP Dr. Kariadi Ketua</p> 		
 <p>Prof. Dr. dr. Suprihati, M.Sc., Sp.THT-KL(K) NIP. 19500621197703 2 00</p>		

## LAMPIRAN 2. IJIN PENELITIAN



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
UNIVERSITAS DIPONEGORO  
FAKULTAS KEDOKTERAN  
BAGIAN PARASITOLOGI

Jl. Prof. H. Soedarto, SH – Tembalang – Semarang Telepon 024-76928010 Fax 024-76928011  
email : parasitologi@undip.ac.id

Nomor : 15 /UN7.3.4/Lab. Par/PG/2013

Lamp :

Perihal : Ijin Penelitian

Yth.  
Pembantu Dekan I  
FK UNDIP  
Di Semarang

Sehubungan surat dari Pembantu Dekan I nomor 1549/UN7.3.4/D1/PP/2013 tanggal 8 April 2013 tentang Permohonan Ijin Penelitian :

Nama : 1. Muhammad Avicenna Abdul Syukur /G2A009036  
2. Rigar David S /G2A009051  
3. Edward Sutanto /G2A009089

Judul : 1. Pengaruh Kombinasi Exercise Training dan Curcumin terhadap Apoptosis Miosit Mencit dengan Diabetes Mellitus yang Diinduksi Streptozotocin.  
2. Perkembangan Fibrosis pada Mencit dengan Diabetes Mellitus yang Diinduksi Streptozotocin.  
3. Pengaruh Pemberian Curcumin dan Exercise Training Terhadap Fibrosis Miosit pada Mencit Dengan Diabetes Mellitus yang Diinduksi dengan Streptozotocin.

Kami selaku kepala Laboratorium Pasrasitologi FK UNDIP memberikan Ijin untuk melakukan penelitian tersebut diatas dan melakukan penelitian di laboratorium parasitologi FK UNDIP.

Atas perhatian dan kerjasamanya diucapkan terima kasih.



Semarang, 18 April 2013

Ketua

dr. Sudaryanto, MPd.Ked  
NIP. 1970004161997021001

Tembusan :

1. Ketua Tim Karya Tulis Ilmiah
2. Pembimbing

**LAMPIRAN 3. HASIL UJI LABORATORIUM**

Kode Sampel	Berat Badan (g)	Glukosa Darah (mg/dl)	Area Fibrosis (%)
Kontrol 1	32.5	85	4.293
Kontrol 2	28.3	130	4.978
Kontrol 3	31.7	79	3.894
Kontrol 4	30.2	146	6.022
Kontrol 5	27.9	107	4.900
P1 - 1	30.8	503	5.204
P1 - 2	31.8	420	5.082
P1 - 3	29.9	473	3.928
P1 - 4	30.4	347	5.106
P1 - 5	30.6	600	5.187
P2 - 1	31.7	550	6.561
P2 - 2	33	355	6.399
P2 - 3	34.2	462	6.182
P2 - 4	33.9	595	7.220
P2 - 5	29.9	368	6.280
P3 - 1	32.7	507	11.961
P3 - 2	33.1	463	10.984
P3 - 3	30.6	507	8.359
P3 - 4	36.4	540	9.891
P3 - 5	33.9	434	13.691



#### LAMPIRAN 4. HASIL ANALISIS (*OUTPUT PROGRAM STATISTIK*)

##### 1. Uji normalitas data pada setiap kelompok

#### Tests of Normality

	Kolmogorov -Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
GDK1	.203	5	.200*	.933	5	.616
GDP1	.158	5	.200*	.994	5	.992
GDP2	.221	5	.200*	.907	5	.449
GDP3	.257	5	.200*	.947	5	.713
BBK1	.216	5	.200*	.917	5	.508
BBP1	.243	5	.200*	.943	5	.686
BBP2	.203	5	.200*	.919	5	.526
BBP3	.195	5	.200*	.973	5	.895
FK1	.221	5	.200*	.956	5	.777
FP1	.241	5	.200*	.889	5	.351
FP2	.268	5	.200*	.847	5	.185
FP3	.113	5	.200*	.999	5	1.000

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

a. Lilliefors Significance Correction

##### 2. Uji *One Way ANOVA* untuk berat badan

#### ANOVA

Berat Badan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	34.446	3	11.482	3.787	.032
Within Groups	48.512	16	3.032		
Total	82.958	19			

### Multiple Comparisons

Dependent Variable: Berat Badan

LSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	3 hari	-.580000	1.101272	.606	-2.91459	1.75459
	7 hari	-2.420000*	1.101272	.043	-4.75459	-.08541
	21 hari	-3.220000*	1.101272	.010	-5.55459	-.88541
3 hari	Kontrol	.580000	1.101272	.606	-1.75459	2.91459
	7 hari	-1.840000	1.101272	.114	-4.17459	.49459
	21 hari	-2.640000*	1.101272	.029	-4.97459	-.30541
7 hari	Kontrol	2.420000*	1.101272	.043	.08541	4.75459
	3 hari	1.840000	1.101272	.114	-.49459	4.17459
	21 hari	-.800000	1.101272	.478	-3.13459	1.53459
21 hari	Kontrol	3.220000*	1.101272	.010	.88541	5.55459
	3 hari	2.640000*	1.101272	.029	.30541	4.97459
	7 hari	.800000	1.101272	.478	-1.53459	3.13459

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

### 3. Uji One Way ANOVA untuk glukosa darah

#### ANOVA

Glukosa Darah

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	502819.8	3	167606.583	29.312	.000
Within Groups	91487.200	16	5717.950		
Total	594307.0	19			

### Multiple Comparisons

Dependent Variable: Glukosa Darah

LSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	3 hari	-359.20000*	47.824471	.000	-460.58335	-257.81665
	7 hari	-356.60000*	47.824471	.000	-457.98335	-255.21665
	21 hari	-380.80000*	47.824471	.000	-482.18335	-279.41665
3 hari	Kontrol	359.20000*	47.824471	.000	257.81665	460.58335
	7 hari	2.600000	47.824471	.957	-98.78335	103.98335
	21 hari	-21.600000	47.824471	.658	-122.98335	79.78335
7 hari	Kontrol	356.60000*	47.824471	.000	255.21665	457.98335
	3 hari	-2.600000	47.824471	.957	-103.98335	98.78335
	21 hari	-24.200000	47.824471	.620	-125.58335	77.18335
21 hari	Kontrol	380.80000*	47.824471	.000	279.41665	482.18335
	3 hari	21.600000	47.824471	.658	-79.78335	122.98335
	7 hari	24.200000	47.824471	.620	-77.18335	125.58335

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

4. Uji *One Way ANOVA* untuk area fibrosis**ANOVA**

Fibrosis Miosit

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	125.293	3	41.764	32.047	.000
Within Groups	20.852	16	1.303		
Total	146.145	19			

**Multiple Comparisons**

Dependent Variable: Fibrosis Miosit

LSD

(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Kontrol	3 hari	-.083840	.722007	.909	-1.61443	1.44675
	7 hari	-1.711000*	.722007	.031	-3.24159	-.18041
	21 hari	-6.159800*	.722007	.000	-7.69039	-4.62921
3 hari	Kontrol	.083840	.722007	.909	-1.44675	1.61443
	7 hari	-1.627160*	.722007	.039	-3.15775	-.09657
	21 hari	-6.075960*	.722007	.000	-7.60655	-4.54537
7 hari	Kontrol	1.711000*	.722007	.031	.18041	3.24159
	3 hari	1.627160*	.722007	.039	.09657	3.15775
	21 hari	-4.448800*	.722007	.000	-5.97939	-2.91821
21 hari	Kontrol	6.159800*	.722007	.000	4.62921	7.69039
	3 hari	6.075960*	.722007	.000	4.54537	7.60655
	7 hari	4.448800*	.722007	.000	2.91821	5.97939

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

**LAMPIRAN 5. DOKUMENTASI PENELITIAN**

Persiapan Dosis *Streptozotocin*



Persiapan Injeksi *Streptozotocin*



Terminasi Mencit



Pemeriksaan Mikroskopis Area Fibrosis Jantung Mencit

**LAMPIRAN 6. DAFTAR RIWAYAT HIDUP****Identitas**

Nama : Rigar David Sungkono

NIM : G2A 009 051

Tempat/tanggal lahir : Trenggalek, 25 Oktober 1991

Jenis kelamin : Laki - laki

Alamat : Jalan Lemponsari Gang II No 507A, Semarang

Nomor Telepon/HP : 085790299920

Alamat email : rigardavid@ymail.com

**Riwayat Pendidikan Formal**

1. SD : SDN 1 SURODAKAN, lulus tahun : 2003
2. SMP : SMPN 1 TRENGGALEK, lulus tahun : 2006
3. SMA : SMAN 1 TRENGGALEK, lulus tahun : 2009
4. FK UNDIP : Masuk tahun : 2009

**Keanggotaan organisasi**

1. Staf Hublu BEM KU FK Undip (2010 s/d 2011)
2. Staf Energy Young On Top Chapter Semarang (2013 s/d sekarang)

**Pengalaman penelitian -****Pengalaman mengikuti lomba karya ilmiah**

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