

SUPPLEMENTARY

SEPPLEMENTARY 1. LIST OF RESEARCH SUBJECTS

No.	Nama Pasien	Tanggal Lahir	Alamat	Keterangan Pasien
1	Candra Ayu K. D	20 Mei 1988	Asrama Wiratama Jl. Teratai Blok-Kus No. 33 RT 05/ RW 09, Kel. Puduk Payung, Kec. Banyumanik	Biopsi DS DNA (+) ANA (+)
2	Nina Ayu Setyarini	13 Mei 1979	Perum Argamas Timur I / 89 Ledok, Argomulyo, Salatiga	Biopsi DS DNA
3	Hariyani	21 Januari 1979	Ngampin Kulon RT 04/ RW 02 Ambarawa	ANA (+) DS DNA (+)
4	Siti Rahayu	16 Mei 1975	Ngampin Krajan RT 01 / RW 01, Ambarawa	DS DNA ANA (+)
5	Ninik Susilowati	11 November 1982	Jl. Dr. Ismangil 2 RT 03/ RW IV, Bongsari, Semarang	DS DNA (-) ANA (+)
6	Lelia Fithri Hani	25 Maret 1979	Jl. Anjasmoro IV No. 21, Semarang	Biopsi (+) DS DNA ANA (+)
7	Siti Maesaroh	6 Mei 1981	Pedurungan, Semarang	DS DNA
8	Ratih Purwaningrum	8 September 1981	Kaliwungu, Kendal	DS DNA (+) ANA (+)
9	Erry Ika Witanti	16 Juli 1992	Perum Griya Buana, Bangetayu, E24	DS DNA (+) ANA (+)

10	Hidayatun Ni'mah	15 Juli 1981	Raguklampitan 17/04, Kec. Batealit, Kab. Pati	DS DNA ANA
11	Indah Islamiyah	2 September 1984	Pedurungan Kidul RT 01/ RW 07 No. 92	DS DNA (+) ANA (+)
12	Prima Dewi	8 April 1968	Ungaran	DS DNA (+) ANA (+)



SEPPLEMENTARY 2. STATISTICAL ANALYSIS

Tests of Normality

	Perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Th1	Sham	.269	3	.	.949	3	.567
	Control	.191	3	.	.997	3	.900
	T1	.356	3	.	.818	3	.157
	T2	.282	3	.	.936	3	.510
	T3	.314	3	.	.893	3	.363
Th17	Sham	.282	3	.	.936	3	.510
	Control	.211	3	.	.991	3	.817
	T1	.175	3	.	1.000	3	1.000
	T2	.189	3	.	.998	3	.908
	T3	.337	3	.	.855	3	.253
Th1likeTh17	Sham	.365	3	.	.797	3	.107
	Control	.178	3	.	.999	3	.952
	T1	.187	3	.	.998	3	.915
	T2	.191	3	.	.997	3	.900
	T3	.331	3	.	.865	3	.281

a. Lilliefors Significance Correction

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Th1	Sham	3	2.0333	1.02632	.59255	-.5162	4.5829	.90	2.90
	Control	3	2.5667	.55076	.31798	1.1985	3.9348	2.00	3.10
	T1	3	2.1000	.60828	.35119	.5890	3.6110	1.40	2.50
	T2	3	2.3333	.56862	.32830	.9208	3.7459	1.70	2.80
	T3	3	2.4000	.52915	.30551	1.0855	3.7145	2.00	3.00
	Total	15	2.2867	.61163	.15792	1.9480	2.6254	.90	3.10
Th17	Sham	3	2.6667	.56862	.32830	1.2541	4.0792	2.20	3.30
	Control	3	5.2333	.60277	.34801	3.7360	6.7307	4.60	5.80
	T1	3	2.9000	.80000	.46188	.9127	4.8873	2.10	3.70
	T2	3	4.2667	1.20139	.69362	1.2823	7.2511	3.10	5.50
	T3	3	5.2333	1.51438	.87433	1.4714	8.9953	3.50	6.30
	Total	15	4.0600	1.42368	.36759	3.2716	4.8484	2.10	6.30
Th1likeTh17	Sham	3	2.2667	.89629	.51747	.0402	4.4932	1.70	3.30
	Control	3	5.1333	1.15036	.66416	2.2757	7.9910	4.00	6.30
	T1	3	2.4333	.65064	.37565	.8171	4.0496	1.80	3.10

T2	3	5.0667	1.10151	.63596	2.3304	7.8030	4.00	6.20
T3	3	5.4333	1.02144	.58973	2.8959	7.9707	4.70	6.60
Total	15	4.0667	1.67659	.43289	3.1382	4.9951	1.70	6.60

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Th1	.848	4	10	.526
Th17	1.384	4	10	.307
Th1likeTh17	.266	4	10	.893

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Th1	Between Groups	.577	4	.144	.310	.865
	Within Groups	4.660	10	.466		
	Total	5.237	14			
Th17	Between Groups	18.249	4	4.562	4.505	.024
	Within Groups	10.127	10	1.013		
	Total	28.376	14			
Th1likeTh17	Between Groups	29.740	4	7.435	7.734	.004
	Within Groups	9.613	10	.961		
	Total	39.353	14			

Multiple Comparisons

Dependent Variable	(I) Perlakuan	(J) Perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Th1	LSD	Sham	Control	-.53333	.55737	.361	-1.7752	.7086
		T1	Control	-.06667	.55737	.907	-1.3086	1.1752
		T2	Control	-.30000	.55737	.602	-1.5419	.9419
		T3	Control	-.36667	.55737	.525	-1.6086	.8752
	Control	Sham	T1	.53333	.55737	.361	-.7086	1.7752
		T1	T2	.46667	.55737	.422	-.7752	1.7086
		T2	T3	.23333	.55737	.684	-1.0086	1.4752
		T3	T1	.16667	.55737	.771	-1.0752	1.4086
	T1	Sham	Control	.06667	.55737	.907	-1.1752	1.3086
		Control	T2	-.46667	.55737	.422	-1.7086	.7752
		T2	T3	-.23333	.55737	.684	-1.4752	1.0086
		T3	Sham	-.30000	.55737	.602	-1.5419	.9419
T2	Sham	Control	.30000	.55737	.602	-.9419	1.5419	
	Control	T3	-.23333	.55737	.684	-1.4752	1.0086	

			T1	.23333	.55737	.684	-1.0086	1.4752
			T3	-.06667	.55737	.907	-1.3086	1.1752
		T3	Sham	.36667	.55737	.525	-.8752	1.6086
			Control	-.16667	.55737	.771	-1.4086	1.0752
			T1	.30000	.55737	.602	-.9419	1.5419
			T2	.06667	.55737	.907	-1.1752	1.3086
Th17	LSD	Sham	Control	-2.56667*	.82165	.011	-4.3974	-.7359
			T1	-.23333	.82165	.782	-2.0641	1.5974
			T2	-1.60000	.82165	.080	-3.4308	.2308
			T3	-2.56667*	.82165	.011	-4.3974	-.7359
		Control	Sham	2.56667*	.82165	.011	.7359	4.3974
			T1	2.33333*	.82165	.018	.5026	4.1641
			T2	.96667	.82165	.267	-.8641	2.7974
			T3	.00000	.82165	1.000	-1.8308	1.8308
		T1	Sham	.23333	.82165	.782	-1.5974	2.0641
			Control	-2.33333*	.82165	.018	-4.1641	-.5026
			T2	-1.36667	.82165	.127	-3.1974	.4641
			T3	-2.33333*	.82165	.018	-4.1641	-.5026
		T2	Sham	1.60000	.82165	.080	-.2308	3.4308
			Control	-.96667	.82165	.267	-2.7974	.8641
			T1	1.36667	.82165	.127	-.4641	3.1974
			T3	-.96667	.82165	.267	-2.7974	.8641
		T3	Sham	2.56667*	.82165	.011	.7359	4.3974
			Control	.00000	.82165	1.000	-1.8308	1.8308
			T1	2.33333*	.82165	.018	.5026	4.1641
			T2	.96667	.82165	.267	-.8641	2.7974
Th1likeTh17	LSD	Sham	Control	-2.86667*	.80056	.005	-4.6504	-1.0829
			T1	-.16667	.80056	.839	-1.9504	1.6171
			T2	-2.80000*	.80056	.006	-4.5837	-1.0163
			T3	-3.16667*	.80056	.003	-4.9504	-1.3829
		Control	Sham	2.86667*	.80056	.005	1.0829	4.6504
			T1	2.70000*	.80056	.007	.9163	4.4837
			T2	.06667	.80056	.935	-1.7171	1.8504
			T3	-.30000	.80056	.716	-2.0837	1.4837
		T1	Sham	.16667	.80056	.839	-1.6171	1.9504
			Control	-2.70000*	.80056	.007	-4.4837	-.9163
			T2	-2.63333*	.80056	.008	-4.4171	-.8496
			T3	-3.00000*	.80056	.004	-4.7837	-1.2163
		T2	Sham	2.80000*	.80056	.006	1.0163	4.5837
			Control	-.06667	.80056	.935	-1.8504	1.7171
			T1	2.63333*	.80056	.008	.8496	4.4171

	T3	-.36667	.80056	.657	-2.1504	1.4171
T3	Sham	3.16667*	.80056	.003	1.3829	4.9504
	Control	.30000	.80056	.716	-1.4837	2.0837
	T1	3.00000*	.80056	.004	1.2163	4.7837
	T2	.36667	.80056	.657	-1.4171	2.1504



SEPPLEMENTARY 3. LETTER OF RESEARCH LISCENSE



Stem Cell and Cancer Research

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SURAT KETERANGAN

No.026/SCCR /I/2020

Yang bertanda tangan di bawah ini,

Nama : Assoc Prof. Dr. dr. Agung Putra, M.Si. Med.
NIK : 210199050
Jabatan : Kepala Labororium SCCR FK UNISSULA Semarang

Menerangkan bahwa mahasiswa yang bernama :

Nama : Azizah Retno Kustiyah
NIM : MBK1811010130
Fakultas : Magister Ilmu Biomedik Fakultas Kedokteran
Universitas : Universitas Islam Sultan Agung Semarang.
Judul Tesis : THE ROLE OF MESENCHYMAL STEM CELLS TO REGULATE TH1 AND TH17 CELLS IN SYSTEMIC LUPUS ERYTHEMATOSUS (IN VITRO STUDY OF CO-CULTURED PERIPHERAL BLOOD MONONUCLEAR CELLS AND MESENCHYMAL STEM CELLS)

Benar-benar telah selesai melakukan penelitian dengan menggunakan metode Flowcytometry di Labororium SCCR Fakultas Kedokteran UNISSULA Semarang pada Agustus - Oktober 2020.

Demikian surat keterangan ini dibuat untuk dipergunakan seperlunya.

Semarang, 27 Januari 2021
Mengetahui,
Kepala Labororium SCCR
Fakultas Kedokteran UNISSULA


SCCR
Stem Cell and Cancer Research
Assoc Prof. Dr. dr. Agung Putra, M.Si. Med.
NIK. 210199050

SEPPLEMENTARY 4. ETHICAL CLEARENCE

**KOMISI BIOETIKA PENELITIAN KEDOKTERAN/KESEHATAN
FAKULTAS KEDOKTERAN
UNIVERSITAS ISLAM SULTAN AGUNG SEMARANG**

Sekretariat : Gedung C Lantai I Fakultas Kedokteran Unissula
Jl. Raya Kaligawe Km 4 Semarang, Telp. 024-6583584, Fax 024-6594366

Ethical Clearance

No. 415/XII/2020/Komisi Bioetik

Komisi Bioetika Penelitian Kedokteran/Kesehatan Fakultas Kedokteran Universitas Islam Sultan Agung Semarang, setelah melakukan pengkajian atas usulan penelitian yang berjudul :

**THE ROLE OF MESENCHYMAL STEM CELLS TO
REGULATE TH1 AND TH17 CELLS IN SYSTEMIC LUPUS ERYTHEMATOSUS
(In vitro Study of Co-cultured Peripheral Blood Mononuclear Cells and Mesenchymal Stem
Cells)**

Peneliti Utama : dr. Azizah Retno Kustiyah, Sp.A
Pembimbing : Dr. dr. H. Agung Putra, M.Si.Med
Prof. Dr. dr. H. Taufiq R.Nasihun M.Kes, Sp.And
Tempat Penelitian : Laboratorium SCCR, Gedung IBL Lantai 2, UNISSULA

dengan ini menyatakan bahwa usulan penelitian diatas telah memenuhi prasyarat etik penelitian. Oleh karena itu Komisi Bioetika merekomendasikan agar penelitian ini dapat dilaksanakan dengan mempertimbangkan prinsip-prinsip yang dinyatakan dalam Deklarasi Helsinki dan panduan yang tertuang dalam Pedoman Nasional Etik Penelitian Kesehatan (PNEPK) Departemen Kesehatan RI tahun 2004.

Semarang, 30 Desember 2020

Komisi Bioetika Penelitian Kedokteran/Kesehatan
Fakultas Kedokteran Unissula

Ketua,



(dr. Sofwan Dahlan, Sp.F(K))

SEPPLEMENTARY 5. PICTURES OF RESEARCH DOCUMENTATION



The process of calculating the amount of MSC



PBMC centrifugation