

DAFTAR PUSTAKA

- Adesunkanmi AR, Oseni SA, Adejuyigbe O, Agbakwuru EA. 2003. Acute generalized peritonitis in African children : assessment of severity of illness using modified APACHE II score. ANZ J. Surg., 73 : 275-9.
- Andersson R, Poudsen HE, Ahren B. 1991. Effect of bile on liver function test in experimental E. Coli peritonitis in the rat. Department of Surgery Hepatogastrointerol; 38: 388-90.
- Bryant J, Clegg A, Milne R. 2001. Systemic review of immunomodulatory drugs for the treatment of people with multiple sclerosis : is there good quality evidence on effectiveness and cost?. J Neurol Neurosurg Psychiatry; 70: 574-9.
- Burtz CP, Dupont H, Marmuse JP, Chosidow D, Malek L, Desmonts JM, et al. 2002. Daily organ-system failure for diagnosis of persistent intra-abdominal sepsis after postoperative peritonitis. Intensive Care Med.; 28: 594-8
- Cavalli, Z. et al., 2016. Clinical Presentation, Diagnosis, and Bacterial Epidemiology of Peritoneal Tuberculosis in Two University Hospitals in France. Infectious Diseases and Therapy, 5(2) : 193–199.
- Chalifour A, Jeannin P, Gauchat JF, et al. 2004. Direct bacterial protein PAMP recognition by human NK cells involves TLRs and triggers alfa defensin production. Blood. Volume 4, number 6. 1778-83.
- Chaudhry H, Zhou J, Zhong Y, et al. 2013. Role of cytokines as a double-edged sword in sepsis. In Vivo. 27. 669-84.

- Chung Lin H, Sheeng Lee, et al. 2015. Histopathological assessment of inflammation and expression of inflammatory markers in patients with ketamine-induced cystitis. *Molecular Medicine Reports*.11 : 2421-8.
- Conti F, Orlandini A. 2004. Treatment of allergic manifestations with *transfer factor* (TF). *La Medicina Biologica*: 29-33.
- Couper, K.N., Blount, D.G., Riley, E.M., 2008. IL-10: The Master Regulator of Immunity to Infection. *J Immunol* 180, 5771–5777.
- Daley BJ. 2014. Peritonitis and abdominal sepsis. Medscape reference. Tersedia dari : <http://emedicine.medscape.com/article/180234-overview>.
- Di Loreto VE, Rigalli A. 2009. Antibiotics. experimental surgical models in The Laboratory Rat. Edited: Rigalli A, Di Loreto VE. CRC Press.USA : 33.
- Devuyst O, Margetts PJ, Topley N. 2010. The pathophysiology of the peritoneal membrane. *J. Am. Soc. Nephrol.*; 21: 1077-85.
- Didem B, Huseyin B, Osman Y, Yasemin B, Necati G, Canan T. 2008. Early effects of laparotomy and laparoscopy on bacterial behavior and proinflammatory cytokines on bacterial peritonitis in rats I: *Escherichia coli*. *J. Ped. Surg.*; 43: 1494-501.
- Elkins R. 2000. Transfer factors nature's state-of-the-art immune fortifiers in Natural Immune Booster *Transfer Factor*. *Molecular Medicine*. Tersedia dari : http://justaskshirley.com/tfbooks/tfbookwc.htm#_Toc27133335.
- Echinacea. 2013. University of Maryland Medical Center. Tersedia dari : <http://umm.edu/health/medical/altmed/herb/echinacea>.

- El-Moety AAA, El-Moety AA, Zaki SA, Mourad Z, Farhat N. 2008. *Transfer factor* activation of the natural killer cell in patients with chronic hepatitis c infection. Bull Alex Fac Med.; 44(3): 1-3.
- Firdaus GI. 2010. Uji toksisitas akut ekstrak meniran (*phyllanthus niruri*) terhadap hepar mencit balb/C. Karya Tulis Ilmiah. UNDIP. Semarang : 4 – 12.
- Fabre RA, Perez TM, Aguilar LD, Rangel MJ, Garcia IE, Pando RH, et al. 2004. Transfer factors as immunotherapy and supplement of chemotherapy in experimental pulmonary tuberculosis. Clin. Exp. Immunol.; 136: 215-23.
- Gee K, Guzzo C, Mat NFC, et all. 2009. The IL-12 Family of cytokines in infection, inflammation and autoimmune disorders. Inflammation and drugs targets. 8. 40-52.
- Gupta S, Kaushik R. 2006. Peritonitis-the eastern experience. World J Surg. 1(13) : 1-6.
- Hamza T, 2010. Interleukin 12 a Key Immunoregulatory Cytokine in Infection Applications. Int. J. Mol. Sci.(11) : 789-806.
- Han ST. 1993. Experimental Animals. Research Guidelines for Evaluating the Safety and Efficacy of Herbal Medicines. 41-5.
- Hasugian AR, Wibowo H, Tjitra E. 2012. Hubungan Kadar Hemoglobin dengan Respon Sitokin Proinflamasi dan Antiinflamasi pada Penderita Infeksi Plasmodium falciparum dan Plasmodium vivax di Timika, Papua tahun 2010. Media Litbang Kesehatan. Vol. 22.6-17.
- Immune system. Tersedia dari : http://en.wikipedia.org/wiki/Immune_system

- Kimber CP, Hutson JM. 2008. Primary peritonitis in children. ANZ J. Surg., 66 : 169-170.
- Khan PS, Dar LA, Hayat H. 2013. Predictors of mortality and morbidity in peritonitis in a developing country. Ulusal Cer. Derg.; 29: 124-30.
- Khalfin RA. 2004. *Transfer factor* use in immunorehabilitation after infectious-inflammatory and somatic diseases. Ministry of Health and Social Development of the Russian Federation. Moscow: 1-24.
- Kirkpatrick CH. 2000. *Transfer Factors*: identification of conserved sequences in *transfer factors* molecules. Molecular Medicine; 6(4): 332-41.
- Knapp S, De Vos AF, Florquin S, Golebbock DT, Poll TVD. 2003. Lipopolysaccharide binding protein is an essential component of the innate immune response to *escherichia coli* peritonitis in mice. Infect. and Immunity; 71(12): 6747-53.
- Laurence DR, Bacharach AL. 1964. Evaluation of drug activities. Pharmacometrics. Volume 1. Academic Press.
- Li C, Huang L, Wang Y, Li X, Liang S, Zheng Y. 2010. Preparation and properties of the specific anti-influenza virus *transfer factor*. Bio. Med. Central; 6(22) : 1-7.
- Viza D. 2011. *Transfer factor* in virus-associated malignancies : an underestimated weapon in prevention and treatment of cancer. Advances in Tumor Vitology: 7-20.
- Manohar A, et all, 1990. Symtoms and investigative findings in year period. Gut :1130-2

- Malangoni MA, Inui T. 2006. Peritonitis-the western experience. *World J. Surg.*; 1(25) : 1-5.
- Marshall JB, 1993. Tuberculosis of the gastrointestinal tract and peritoneum. *AMJ Gastroenterol.* (88) : 989-99
- Masihi KN, Schafer H. 2011. Overview of biological response modifiers in infectious disease. *Infect. Dis. Clin. North America*; 25(4): 1 – 22.
- Pachman LM, Kirkpatrick CH, Kaufman DH, Rothberg RM. 1974. The lack of effect of *transfer factor* in thymic dysplasia with immunoglobulin synthesis. *J. of Ped.*; 84 : 681-8.
- Riche F, Gayat E, Collet C, Mateo J, Laisne MJ, Launay JM, et al. 2013. Local and systemic innate immune response to secondary human peritonitis. *Bio.Med. Central*; 17: 1-6.
- Romani L, Puccetti P, Bistoni F. 1997. Interleukin – 12 in Infectious Diseases. *Clinical Microbiology Reviews.* Vol.10. 611-36.
- Sandikci MU, Colacoglus, Ergun Y.1992. Presentation and role of peritonoscopy and diagnosis of tuberculous peritonitis. *J Gastroenterol hepato.* 298-301
- Setiawan H, Nugraha J, 2016. Analisis kadar IFN- γ dan IL-10 pada PBMC penderita tuberkulosis aktif, laten dan orang sehat, setelah distimulasi dengan antigen ESAT-6. *Jurnal Biosains Pascasarjana.* 18.50-65.
- Sibuea WH, et al. 1978. Peritonitis tuberculosa di RS DGI Tjikini (abstrak) *KOPAPDI IV.* Medan : 131
- Sjahrurrachman. 2004. Pemberian terapi imunomodulator herbal. *Publikasi Health Technology Assessment.* Indonesia. 1 – 40.

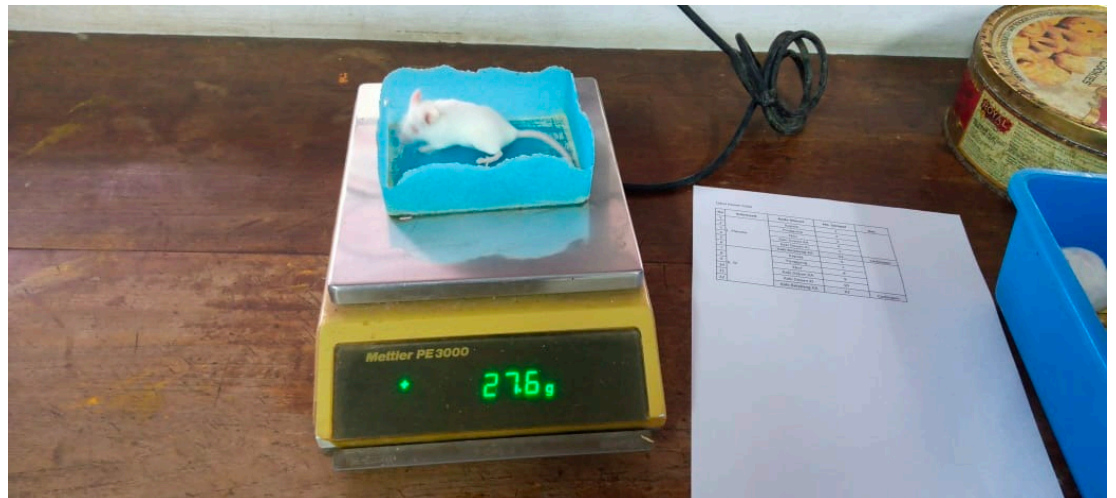
- Stoff JA. 1998. The use of dialyzable bovine colostrum extract in conjunction with a holistic treatment model for natural killer cell stimulation in chronic illness. Solstice Clinical Associates. Tucson. Arizona. 1-9.
- Speer AL, Grikscheit TC, Upperman JS, Ford HR. 2012. Sepsis and related considerations. Dalam Coran AG, Adrick NS, Krummel TM : Pediatric surgery. Seventh Ed; 1. New York: 141-51.
- Slater BJ, Krummel TM. 2010. Surgical infectious disease. Dalam Ashcraft I, Holcomb KW : Pediatric Surgery. Fifth Ed. Philadelphia: 117-24.
- Sharma S, Jagdev S, Coleman RE, Hancock BW, Lorigan PC, et al. 1999. Serosal complications of single-agent low dose methotrexate used in gestational trophoblastic diseases : first reported case of methotrexate-induced peritonitis. Br. J. Cancer; 81(6): 1037-41.
- Spiro HM, 1993. Peritoneal Tuberculosis in clinical gastroenterologi. 4th ed New York ; Mc Graw hill INC : 551-2
- Srivastava U, et al, 2014. Tuberculous Peritonitis. Radiology Case Reports. Vol 9, Issue 3. 1 – 3.
- Sudiana, 2014. Imunopatobiologi Molekuler. Airlangga University Press (AUP). Surabaya.
- Sulaiman A, 1990. Peritonitis Tuberkulosa in Buku Ajar Gastroenterologi Hepatologi. Infomedika. Jakarta. 456-61.
- Transfer factor*. Tersedia dari : <http://en.wikipedia.org/wiki/File:TransferFactors.jpg>

- Upperman JS, Ford HR. 2006. Sepsis and related considerations. Dalam Grosfeld JL, O'Neill JA, Fonkalsrud EW : *Pediatric Surgery. Sixth Ed.*; 1. Philadelphia : 156-177.
- Viza D, Fudenberg HH, Palareti A, Ablashi D, De Vinci C, Pizza G. 2013. *Transfer Factor* : an overlooked potential for the prevention and treatment of infectious diseases. *Folio Biologica (Praha)*; 59: 53-67.
- West KW. 2006. Primary peritonitis in *Pediatric Surgery. Sixth Ed.*; 1. Philadelphia: 1475-7.
- Weigelt JA. 2007. Empiric treatment options in the management of complicated intra-abdominal infections. *Cleveland Clin. J. Med.*; 74 (4) : 829-37.
- Wittmann, D. H., 2010. Intra-abdominal infections. Available from URL : <http://antibioticsfor.com/pdf/Intra-Abdominal-Infection.pdf> diakses pada tanggal : 10 Maret 2017
- Yeap SK, Rahman MA, Alitheen NNB, Ho WY, Omar AR, Beh BK, et al. 2011. Evaluation of immunomodulatory effect; selection of the correct targets for immunostimulation study. *Am. J. Immunol.*; 7(2): 17-23.
- Zain LH, 1996. Tuberculosis peritoneal in *Buku ajar Ilmu Penyakit Dalam*. Balai Penerbit FKUI. Jakarta. 403-6.
- Zhan L, Tang J, Sun M, Qin C, 2017. Animal Models for Tuberculosis in Translational and Precision Medicine. *Fronyiers in Microbiology*. Vol. 8. 1-12.

LAMPIRAN

a. Pemeliharaan Hewan Coba

Hewan coba yang dipilih adalah mencit strain Balb/C yang berumur 8 – 10 minggu dengan berat badan 20 - 40 gram dan dipelihara di Laboratorium Biologi Molekuler dan Imunologi Fakultas Kedokteran Universitas Hasanuddin. Kandang mencit dipilih yang besar untuk memperluas ruang gerak mencit dan menghindari stress. Mencit diberi makan dan minum yang sama.



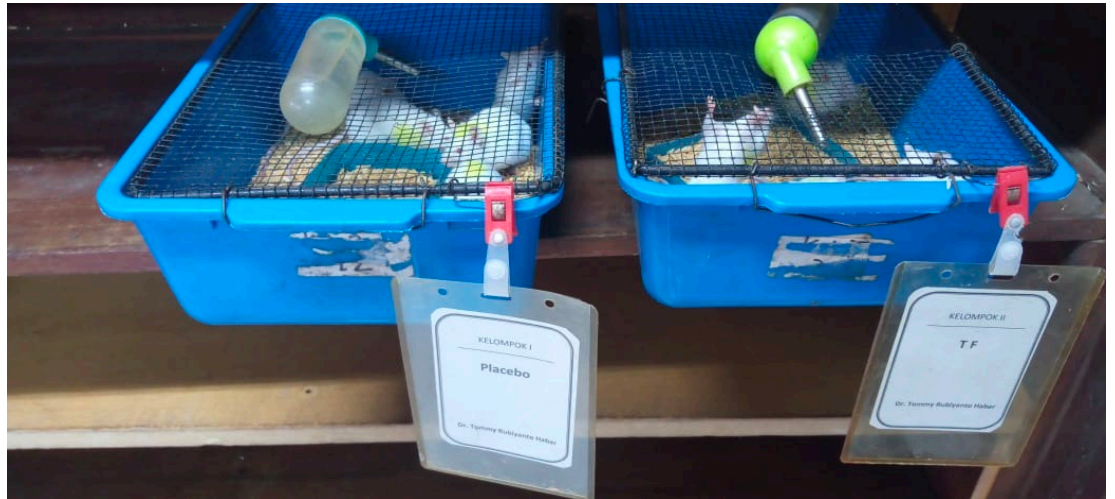


b. Cara Memegang Mencit

Pengambilan mencit dari kandang harus pelan-pelan karena mencit akan menggigit apabila ditarik keras-keras. Pengambilan mencit dari kandang dipegang ekornya kemudian diletakkan di kawat kasa dan ekornya ditarik sedikit. Cubit kulit bagian belakang kepala dan jepit ekornya.



Pemeliharaan dan pengelompokan mencit berdasarkan perlakuan





Penyuntikan kuman *Mycobacterium TB* ke dalam intra peritoneal

c. Cara Penyuntikan

Cubit kulit bagian belakang kepala kemudian penyuntikan dilakukan pada bagian perut yang sebelumnya diusap dengan kapas yang dibasahi alkohol.



d. Pemberian transfer factor dan placebo sesuai dosis.



e. Pengambilan sample darah pada ekor mencit.



f. Bulu abdomen mencit dicukur sebelum pengambilan cairan intra peritoneal



g. Euthanasea

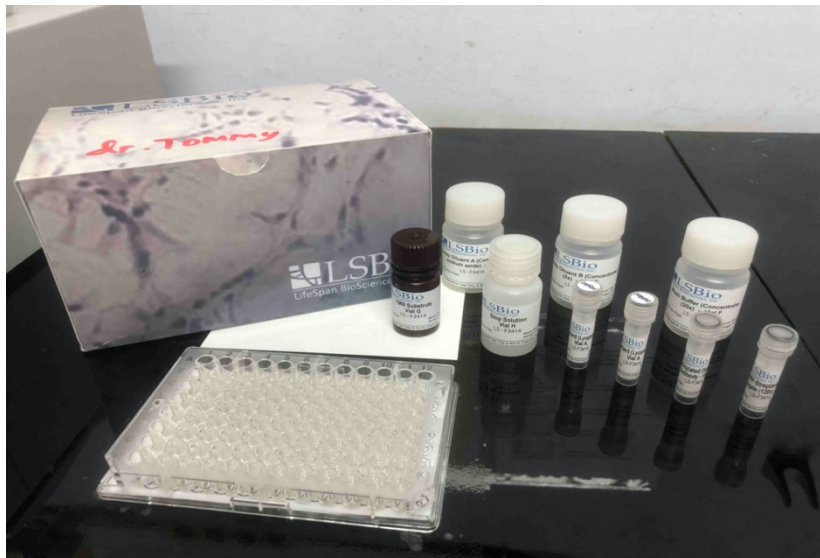
Mencit dibunuh dengan melakukan dislokasi pada tulang leher dengan cara menaruh mencit pada permukaan rata kemudian sebuah benda keras dan tumpul diletakkan di kuduk mencit. Ekor ditarik kuat-kuat sambil menekan benda tersebut di kuduk mencit hingga mati.



Kit Elisa Mouse IFN Gamma, IL-10 dan IL12.



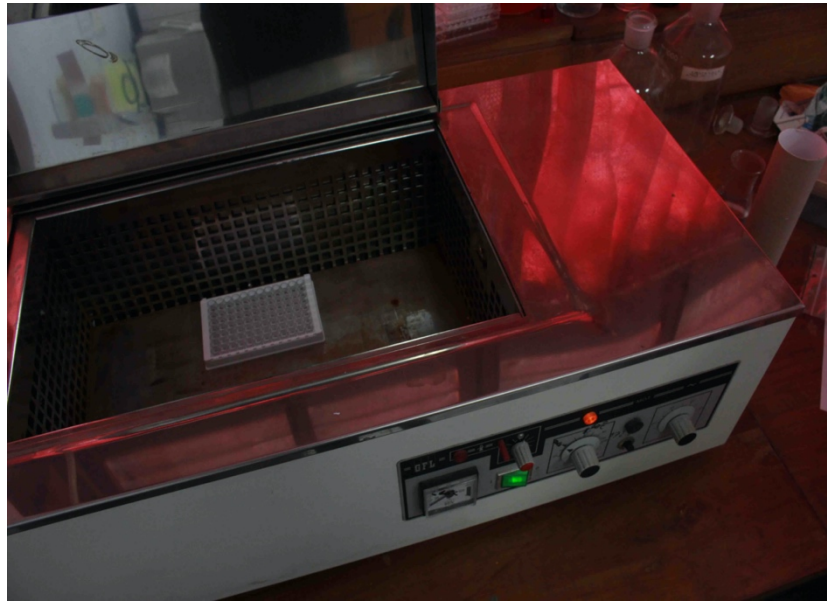
Kit Mouse IFN Gamma / Interferon Gamma ELISA Kit Catalog No. LS-F3414



Kit Mouse IL12 ELISA Kit Catalog No. LS-F9981



Kit Mouse IL10 ELISA Kit Catalog No. LS-F5080



Inkubasi Plate kewaterbath 37°C selama 90 menit alukosongkan plate

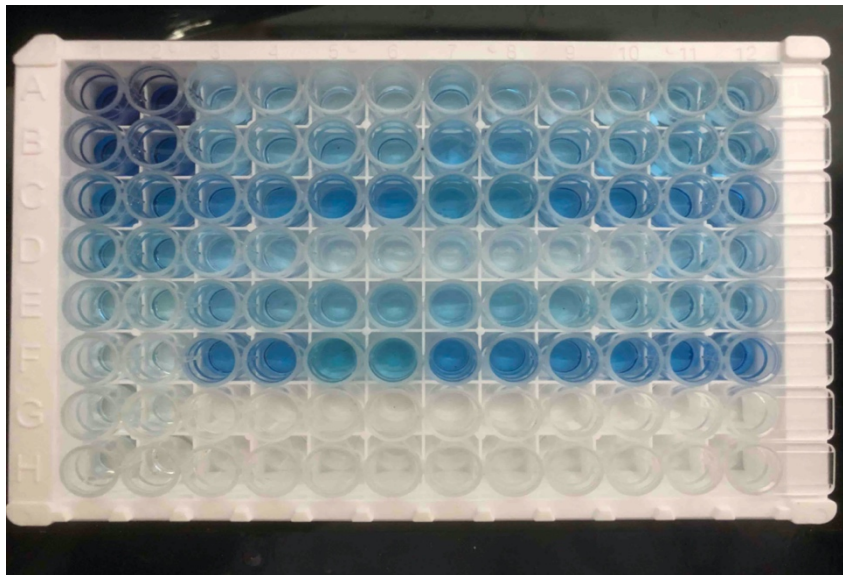


Plate setelah pengisian substrate.

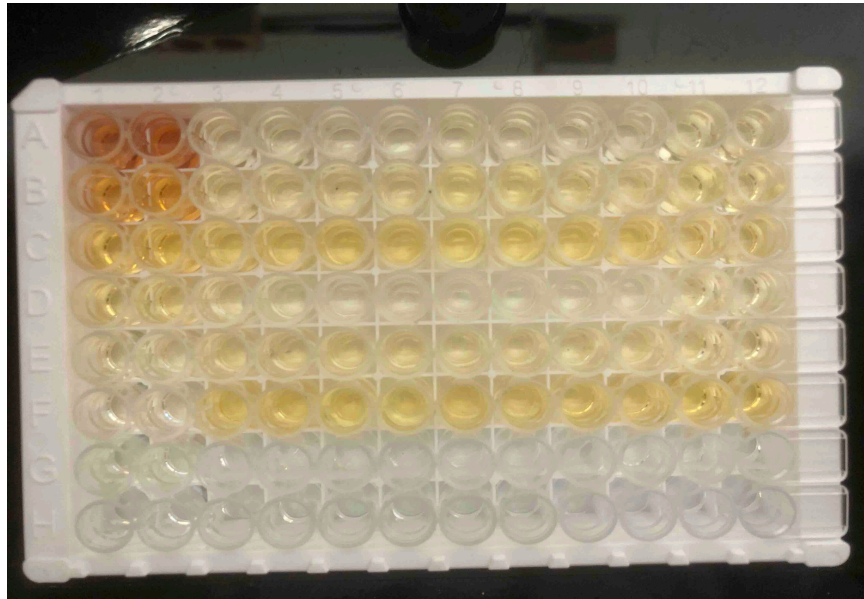


Plate setelah stop reaksi



Baca plate kedalam mesin elisa dengan filter 450 nm

Lampiran Output SPSS Explore

Uji Normalitas IFN gamma

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IFN G Placebo	,178	5	,200 [*]	,980	5	,935
Transfer Factor	,161	5	,200 [*]	,971	5	,879

Uji Homogenitas IFN gamma

Test of Homogeneity of Variance

	Levene Statistic	df1	df2	Sig.
IFN G Based on Mean	,280	1	8	,611
Based on Median	,143	1	8	,715
Based on Median and with adjusted df	,143	1	7,226	,716
Based on trimmed mean	,272	1	8	,616

Independent Sample T-Test IFN gamma

Group Statistics

Kelompok	N	Mean	Std. Deviation	Std. Error Mean
IFN G Placebo	5	1792,80	131,412	58,769
Transfer Factor	5	2021,00	105,894	47,357

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
IFN G Equal variances assumed	,280	,611	-3,024	8	,016	-228,200	75,475	-402,247	-54,153
Equal variances not assumed			-3,024	7,654	,017	-228,200	75,475	-403,626	-52,774

Uji Normalitas IL 10

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
IL 10 Placebo	,287	5	,200 [*]	,856	5	,214
Transfer Factor	,215	5	,200 [*]	,936	5	,640

Uji Homogenitas IL 10

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
IL 10	Based on Mean	,295	1	8	,602
	Based on Median	,020	1	8	,892
	Based on Median and with adjusted df	,020	1	6,551	,893
	Based on trimmed mean	,246	1	8	,633

Independent Sample T-Test IL 10

Group Statistics

Kelompok		N	Mean	Std. Deviation	Std. Error Mean
IL 10	Placebo	5	372,60	72,803	32,559
	Transfer Factor	5	382,00	64,579	28,881

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
IL 10	Equal variances assumed	,295	,602	-,216	8	,834	-9,400	43,522	-109,762	90,962
	Equal variances not assumed			-,216	7,888	,834	-9,400	43,522	-110,011	91,211

Uji Normalitas IL 12

Tests of Normality

Kelompok		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
IL 12	Placebo	,210	5	,200 [*]	,883	5	,324
	Transfer Factor	,201	5	,200 [*]	,932	5	,609

Uji Homogenitas IL 12

Test of Homogeneity of Variance

	Levene Statistic	df1	df2	Sig.
IL 12 Based on Mean	1,375	1	8	,275
Based on Median	,760	1	8	,409
Based on Median and with adjusted df	,760	1	5,876	,418
Based on trimmed mean	1,447	1	8	,263

Independent Sample T-Test IL 12

Group Statistics

Kelompok	N	Mean	Std. Deviation	Std. Error Mean
IL 12 Placebo	5	2703,80	295,362	132,090
Transfer Factor	5	3321,00	511,868	228,914

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
IL 12 Equal variances assumed	1,375	,275	-2,335	8	,048	-617,200	264,290	-1226,655	-7,745
Equal variances not assumed			-2,335	6,398	,056	-617,200	264,290	-1254,271	19,871

Uji Normalitas Bakteri

Tests of Normality

Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Bakteri Placebo	,398	5	,009	,781	5	,057
Transfer Factor	,293	5	,187	,759	5	,036

Uji Homogenitas Bakteri

Test of Homogeneity of Variance

	Levene Statistic	df1	df2	Sig.
Bakteri Based on Mean	34,092	1	8	,000
Based on Median	3,495	1	8	,098
Based on Median and with adjusted df	3,495	1	4,453	,128
Based on trimmed mean	31,080	1	8	,001

Independent Sample T-Test

Group Statistics

Kelompok	N	Mean	Std. Deviation	Std. Error Mean
Bakteri Placebo	5	-1,80	11,278	5,044
Transfer Factor	5	56,40	52,885	23,651

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
Bakteri	Equal variances assumed	34,092	,000	-2,407	8	,043	-58,200	24,183	-113,965	-2,435
	Equal variances not assumed			-2,407	4,363	,069	-58,200	24,183	-123,195	6,795

CROSSTABULATION

Metode * Infiltrasi Sel-sel Radang Kronik Crosstabulation

Count

		Infiltrasi Sel-sel Radang Kronik		Total
		<25%	25-50%	
Metode	Placebo	5	0	5
	Transfer Factor	4	1	5
Total		9	1	10

Metode * Diskontinuitas Jaringan Ikat Submukosa/Jaringan Ikat Kolagenisasi

Crosstabulation

Count

		Diskontinuitas Jaringan Ikat Submukosa/Jaringan Ikat Kolagenisasi		Total
		Tidak Ada	Ada	
Metode	Placebo	2	3	5
	Transfer Factor	1	4	5
Total		3	7	10

Metode * Adanya Pembentukan Folikel Limfoid Crosstabulation

Count

		Adanya Pembentukan Folikel Limfoid		Total
		Tidak Ada	Ada	
Metode	Placebo	5	0	5
	Transfer Factor	4	1	5
Total		9	1	10

BINOMIAL Tests

Binomial Test

		Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Infiltrasi Sel-sel Radang Kronik	Group 1	<25%	9	.90	.50	.021
	Group 2	25-50%	1	.10		
	Total		10	1.00		

Binomial Test

		Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Diskontinuitas Jaringan Ikat Submukosa/Jaringan Ikat Kolagenisasi	Group 1	Tidak Ada	3	.30	.50	.344
	Group 2	Ada	7	.70		
	Total		10	1.00		

Binomial Test

		Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Adanya Pembentukan Folikel Limfoid	Group 1	Tidak Ada	9	.90	.50	.021
	Group 2	Ada	1	.10		
	Total		10	1.00		

Mann-Whitney Test

Ranks				
	Metode	N	Mean Rank	Sum of Ranks
Infiltrasi Sel-sel Radang Kronik	Placebo	5	5.00	25.00
	Transfer Factor	5	6.00	30.00
	Total	10		

Test Statistics ^a	
	Infiltrasi Sel-sel Radang Kronik
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^b

a. Grouping Variable: Metode

b. Not corrected for ties.

Ranks				
	Metode	N	Mean Rank	Sum of Ranks
Diskontinuitas Jaringan Ikat	Placebo	5	5.00	25.00
Submukosa/Jaringan Ikat	Transfer Factor	5	6.00	30.00
Kolagenisasi	Total	10		

Test Statistics ^a	
	Diskontinuitas Jaringan Ikat Submukosa/Jarin gan Ikat Kolagenisasi
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.690 ^b

Ranks

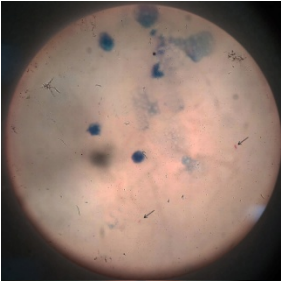
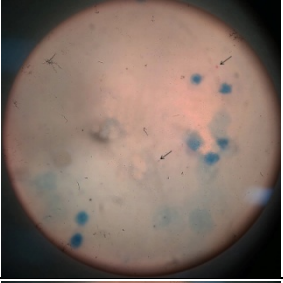
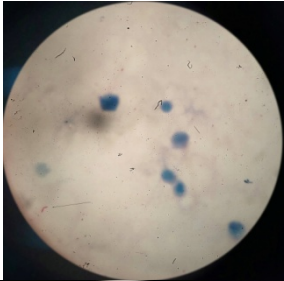
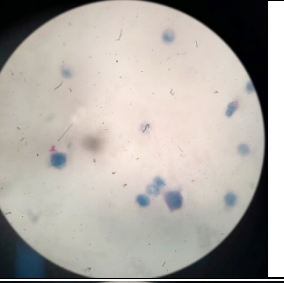
	Metode	N	Mean Rank	Sum of Ranks
Adanya Pembentukan Folikel	Placebo	5	5.00	25.00
Limfoid	Transfer Factor	5	6.00	30.00
	Total	10		

Test Statistics^a

	Adanya Pembentukan Folikel Limfoid
Mann-Whitney U	10.000
Wilcoxon W	25.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.690 ^b

a. Grouping Variable: Metode

b. Not corrected for ties.

KLP	BTA	
	1	2
I. Placebo	 	 
II. TF	