DAFTAR PUSTAKA

1. What Are Key Statistic For Breast Cancer. American cancer society. Cited 15 Sept 2009. Available from: www.cancer.org.com/.
2. Cancer facts and figures, 2009. American cancer society. Atlanta;cited 7 April 2009 Available from : www.cancer.org.com/ .
3. Khanna S . Implementation of cancer management in Indonesia, WHO representative to Indonesia, Presented at the national seminar on the implementation of cancer management in Indonesia, Ciawi, August 6-2002.
4. Blamey RW, Wilson ARM, Patrick J . screening for breast cancer in Dixon JM 2 nd ed A.B.C of breast disease . BMJ books London, 2006 : 33-7
5. Ryungsa Kim, Kazuaki Tanabe. The Molecular Mechanism Of Anticancer Drug Induced Apoptotic,3 oktober 2006.
6. Sugito H.Kanker di Indonesia tahun 1994 : Data Histopatologik Badan Registrasi Kanker Ikatan Ahli Patologi Indonesia Jakarta (INA) : Dirjen Yanmed Dep Kes RI : 1994. p. 3-6
7. Herberman RB, Santoni A. Regulation of Natural Killer Cell Activity. In : Mihich E, eds. Biological Respond in Cancer Progress Toward Potential Application Vol 2, New York : Plenum Press, 2004: 121-37.
8. Stites DP, Terr AI, Parslow TG. Medical Immunology 9th ed . International Edition London : Apleton and Lange A Simon Co ; 2002 : 65-9,147,631-7.
9. Disaia PJ, Creasman WT, Tumor Immunology, Host Defense Mechanism and Biologic Therapy. In : Clinical Gynecology Oncology, Ed IV, Philadelphia L: Mosby, 1997: 534-75.
10. Virginia KL, Colin AP, Raman Q, Edwin DS. Breast cancer. In: Philip R, Sandra M, Raman Q, editors. Clinical oncology. 7th ed. Philadelphia: WB Saunders Company, 1999: 187-94.
11. Lawrence HS, Borkowsky W.Tranfer factor Current Status and Future 2003:1-5.

12. A Study Summary Report : 4Life .*Transfer factor* advanced formula immune system effectiveness. August 2009: WWW.4Life.com.
13. The Wikipedia free encyclopedia. Apoptosis. Adelaide: Wikipedia Foundation Inc; 2007. p 1-10. Available from: URL: http//en.wikipedia.org/wiki/ Apoptosis.
14. See D. *Transfer Factor* Study With 20 Cancer Patients. The Journal of Immunology, 2002 : 64-70.
15. Letifov, MD, Khalturina, MD, Oganova, MD. *Transfer Factors* Use in Immunorehabilitation After Infectious-Inflammatory and Somatic Disease Clinical Immunology Department, Sechenov Medical Academy, Moscow 2004:4-20
16. Rosai J. Ackerman's surgical pathology. 8th ed. Missouri: Mosby-Year Book Inc, 2003: 1624-5.
17. Wunderlich JR, Restifo NP. Essentials Of Immunology . Cancer: Principles & Practice of Oncology, Fifth Edition Vincent T. DeVita, Jr. M.D, Samuel Hellman, M.D, Steven A. Rosenberg, M.D. Ph.D. Philadelphia, 2006; 3 : 47-75.
18. Harris JR, Lippman ME, Morrow M . Disease of the Breast, 2 nd ed . Lippincott William and Wilkins, Philadelpia, 2000.
19. Bast CR. Principles of Cancer Biology : Tumor Immunology. Dalam: Devita VT, Rosenberg SA, Hellman W. eds. Cancer Principles and Practice of Oncology, Ed V, Philadelphia : Lippincott-Reven, 2008: 267-83.
20. Sobin LH, Wittekind CH ed. Classification of Malignant Tumours TNM. International Union Against Cancer UICC ; 6th ed. A John Wiley & Sons Inc.2004 : 131-41.
21. Junqueira LC, Arneiro j, Kelley RO. Basic Histology. 8th ed. Prentice Hall International inc London,1999 : 423-46.
22. Robbin SL, Cotran RS, Kumar V.Dasar Patologik Penyakit. Jilid 1. Alih Yunti MR, Jakarta : Bina Rupa Aksara ,2004 : 135-66.

23. Montenarh M. Humoral Imun Response Against The Growth Suppresor P 53 In Shoenfeld Y. Editors. Human Malignancies In Cancer and Autoimmunity 1 st ed . Amsterdam : Elsevier Science B.V , 2000 : 193-4.

24. The Wikipedia free encyclopedia. Immune system. Adelaide: Wikipedia Foundation Inc; 2007. p 1-14. Available from: URL: http//en.wikipedia.org/wiki/ Immune system.

25. Whiteside TL, Haberman RB. Caracteristics of Natural Killer Cell and Lymphokine- activated killer cell. In : Oettgen HF editor . Human Cancer Immunology. Philadelphia : W B Saunders Company, 2003 : 718-44.

26. Thornthwaite JT . My Discovery of The Natural Killer Cell. Sept 2005 Available from URL ; //www. Cancer foundation .com/ NK Cell html.

27. Andrei I, Chapoval AI, Fuller JA, Kremlev SG, Kamda SJ and Evan R Combination Chemoteraphy and IL 15 Adsministration Induce Permanen Tumor Regression in a mouse lung tumor model : NK and T cell Mediated Effects Antagonized By B cell: The American Assotiation of Immunologist, 1998 August : 6978-6983.

28. Abbas A, Lichtman Ah, Pober JS. Cellular and Molecular Immunology. 5th ed. Philadelphia : WB Saunders, 2005 : 90-2,161,165-8,220-1,258-9,266-7, 348-80,349-5,383-405.

29. Michael C. Perry, Clay M , Anderson ed all : Companion Hand Book to The Chemotherapy Source Book , 2 ed,2004: 430.

30. The Wikipedia free encyclopedia. *Cyclophosphamide*. Adelaide: Wikipedia Foundation Inc; 2007. p 1-4. Available from: URL: http//en.wikipedia.org/wiki/ *Cyclophosphamide*.

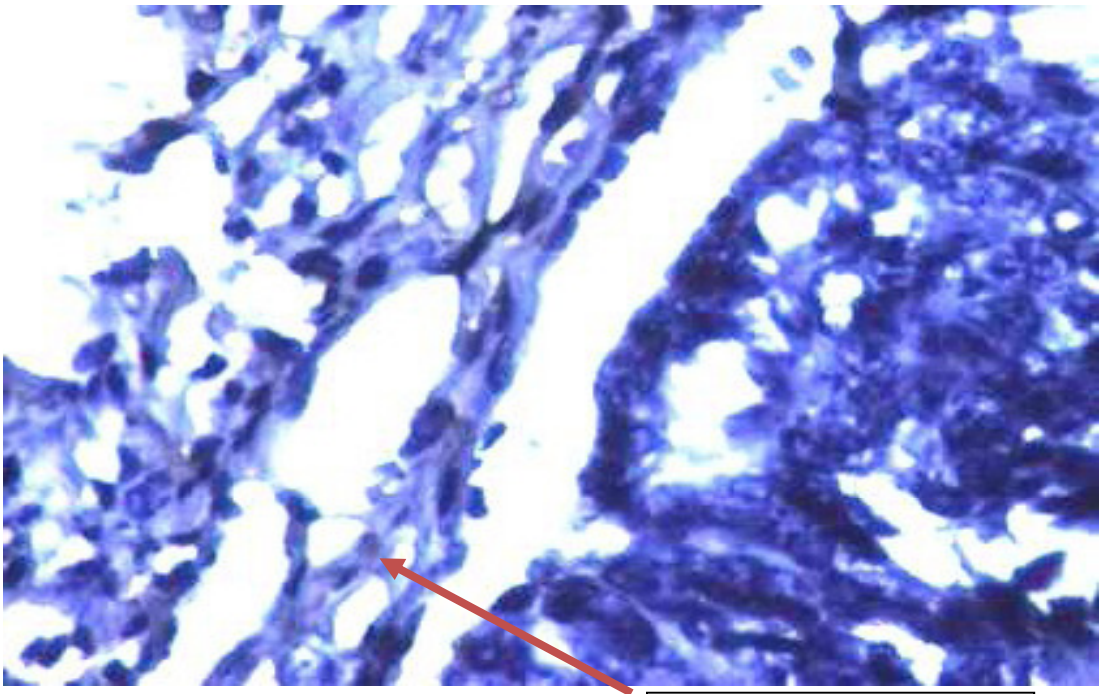
31. Beretta G . Cancer Treatment Medical Guide . 10 th ed Milan : Farmitalia Carlo Erba Erbamont , 1991 : 174-6.

32. Chapoval AI, Fuller JA, Kremlev SG, Kamda SJ and Evan R . Combination Chemoteraphy and IL 15 Adsministration Induce Permanen Tumor Regression in a mouse lung tumor model : NK and T cell Mediated Effects

Antagonized By B cell: The American Assotiation of Immunologist, 2005 August : 6978-83

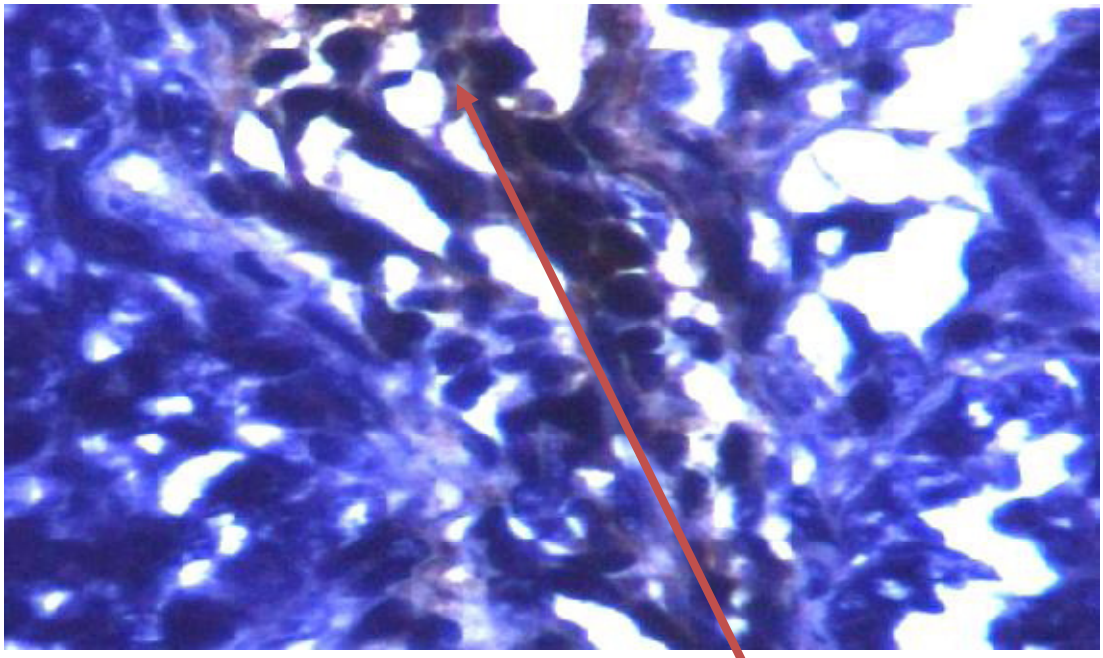
LAMPIRAN 1

HASIL PEMERIKSAAN Sel T $CD4^+$



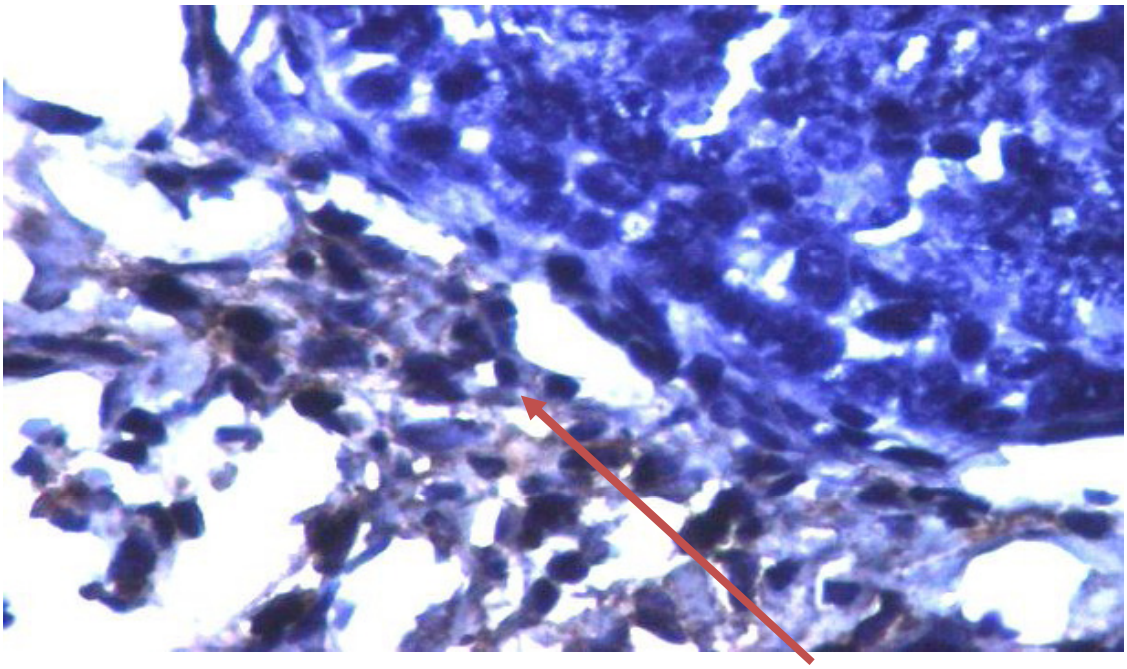
KONTROL

Gb 1. Ada 1 sel T $CD4^+$ pada 1 lap pandang



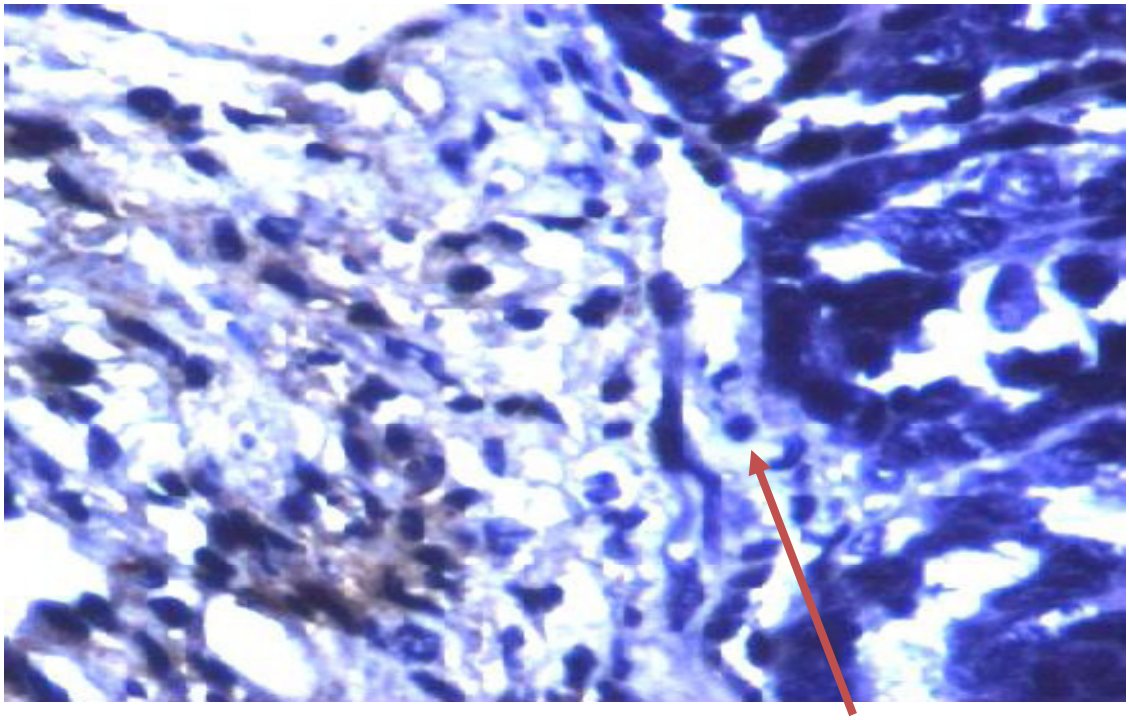
Cyclophosphamide (P1)

Gb 2. Ada 2 sel T $CD4^+$ pada 1 lap pandang



Transfer Factor (P2)

GB 3. Ada 2 sel T $CD4^+$ pada 1 lap pandang



Kombinasi (P3)

Gb 4. Ada 5 sel T $CD4^+$ pada 1 lap pandang

LAMPIRAN 2

Data

Kelompok	Lap 1	Lap 2	Lap 3	Lap 4	Lap 5	Jumlah
Kontrol	1	2	2	1	2	8
	0	1	2	1	2	6
	1	1	1	2	2	7
	2	1	1	1	1	6
	2	2	1	2	1	8
P1 (Cyclo)	4	2	2	2	3	13
	3	2	3	2	4	14
	4	4	3	3	4	18
	3	3	3	3	4	13
	2	4	2	4	3	15
P2 (TF)	3	3	2	3	3	14
	3	4	2	2	4	15
	3	3	2	4	2	14
	3	4	3	2	4	16
	4	2	4	3	3	16
P3 (Komb)	4	3	4	4	2	17
	4	4	5	2	5	20
	5	4	5	4	2	20
	5	5	3	5	4	22
	3	6	6	4	2	21

LAMPIRAN 3

ANALISIS STATISTIK

Descriptives

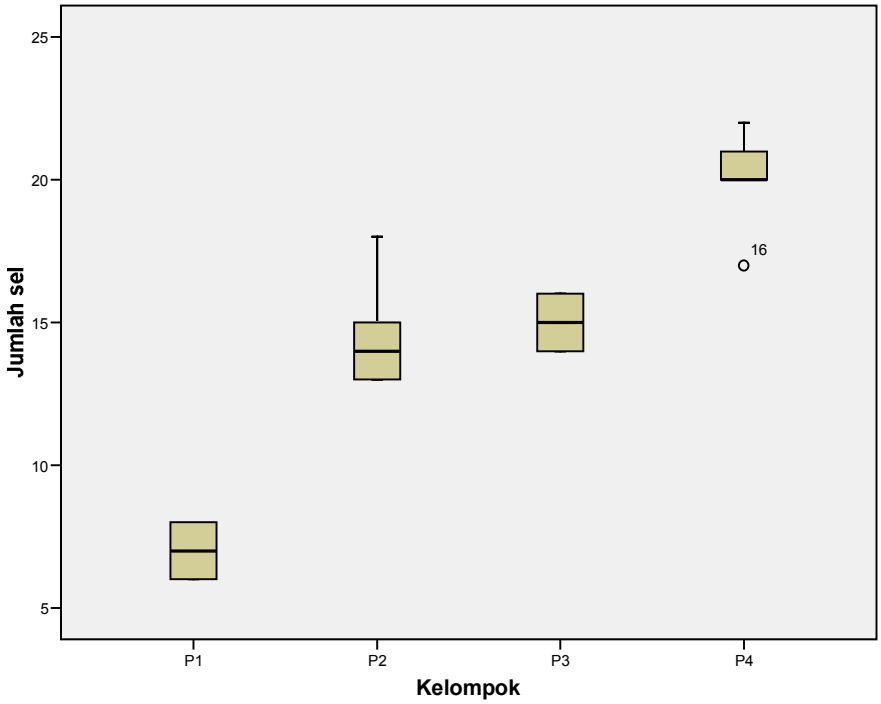
	Kelompok			Statistic	Std. Error
Jumlah sel	P1	Mean		7.00	.447
		95% Confidence Interval for Mean	Lower Bound	5.76	
			Upper Bound	8.24	
		5% Trimmed Mean		7.00	
		Median		7.00	
		Variance		1.000	
		Std. Deviation		1.000	
		Minimum		6	
		Maximum		8	
		Range		2	
		Interquartile Range		2	
		Skewness		.000	.913
		Kurtosis		-3.000	2.000
	P2	Mean		14.60	.927
		95% Confidence Interval for Mean	Lower Bound	12.03	
			Upper Bound	17.17	
		5% Trimmed Mean		14.50	
		Median		14.00	
		Variance		4.300	
		Std. Deviation		2.074	
		Minimum		13	
		Maximum		18	
		Range		5	
		Interquartile Range		4	
		Skewness		1.447	.913
		Kurtosis		1.931	2.000
	P3	Mean		15.00	.447
		95% Confidence Interval for Mean	Lower Bound	13.76	
			Upper Bound	16.24	
		5% Trimmed Mean		15.00	
		Median		15.00	
		Variance		1.000	
		Std. Deviation		1.000	
		Minimum		14	
		Maximum		16	
		Range		2	
		Interquartile Range		2	
		Skewness		.000	.913

		Kurtosis		-3.000	2.000
	P4	Mean		20.00	.837
		95% Confidence Interval for Mean	Lower Bound	17.68	
			Upper Bound	22.32	
		5% Trimmed Mean		20.06	
		Median		20.00	
		Variance		3.500	
		Std. Deviation		1.871	
		Minimum		17	
		Maximum		22	
		Range		5	
		Interquartile Range		3	
		Skewness		-1.145	.913
		Kurtosis		2.000	2.000

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk			
kelompok		Statistic	Df	Sig.		Statistic	df	Sig.
data	kontrol	.241	5	.200	kontrol	.231	5	.119
	cyclo	.224	5	.200	cyclo	.221	5	.171
	TF	.241	5	.200	TF	.273	5	.119
	Komb	.300	5	.161	Komb	.908	5	.453

a. Lilliefors Significance Correction


25
20
15
10
5
Jumlah sel
16
P1
P2
P3
P4
Kelompok

Oneway

Test of Homogeneity of Variances

Jumlah sel

Levene Statistic	df1	df2	Sig.
.692	3	16	.570

ANOVA

Jumlah sel

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	431.350	3	143.783	58.687	.000
Within Groups	39.200	16	2.450		
Total	470.550	19			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Jumlah sel

Tukey HSD

(I) Kelompok	(J) Kelompok	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
P1	P2	-7.600*	.990	.000	-10.43	-4.77
	P3	-8.000*	.990	.000	-10.83	-5.17
	P4	-13.000*	.990	.000	-15.83	-10.17
P2	P1	7.600*	.990	.000	4.77	10.43
	P3	-.400	.990	.977	-3.23	2.43
	P4	-5.400*	.990	.000	-8.23	-2.57
P3	P1	8.000*	.990	.000	5.17	10.83
	P2	.400	.990	.977	-2.43	3.23
	P4	-5.000*	.990	.001	-7.83	-2.17
P4	P1	13.000*	.990	.000	10.17	15.83
	P2	5.400*	.990	.000	2.57	8.23
	P3	5.000*	.990	.001	2.17	7.83

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

LAMPIRAN 4

1. jaringan tumor pada mencit.

    1. Alkohol Bahan transplantasi 70 %
    2. Larutan Garam fisiologik
    3. Es batu
    4. Mencit donor bertumor
    5. Mencit resipien

2. Bahan untuk pemeriksaan pengecatan Sel T $CD4^{+}$.

    1. Polinized slide
    2. Xylol
    3. Alkohol absolut
    4. Tris Hcl (pH 7,6)
    5. Periodic acid 0,5 %
    6. 0,3 % H2O2 dalam metanol
    7. Blok 1 % BSA – PBS
    8. Biotinylated Rabbit anti Mouse
    9. Ab Sekunder
    10. DAB
    11. Sel T $CD4^{+}$ mouse Ab
    12. Hematoksilin
    13. Entelan

LAMPIRAN 5

Prosedur transplantasi tumor

1. Mencit donor dimatikan dengan eter, kemudian diletakkan terlentang pada tatakan / alas fiksasi dan keempat kakinya difiksasi dengan jarum.
2. Kulit dibagian yang bertumor diusap dengan alkohol 70 %, kemudian dibuat sayatan dengan gunting lurus, untuk mengeluarkan tumor.
3. Tumor diletakkan di cawan petri kecil yang telah terlebih dahulu dicuci dengan garam fisiologis dan diletakkan diatas es.
4. Amati bentuk dan keadaan tumor, kemudian ambil/potong jaringan tumor yang masih baik yaitu bagian yang tanpa nekrosis (biasanya di daerah tepi jika tumor besar) sebanyak kira-kira yang dapat menghasilkan bubur tumor paling sedikit 1 ml dan taruh dicawan petri kecil lainnya. Bersihkan dari jaringan ikat (simpai), jaringan nekrotik dan darah, kemudian cacah/potong-potong sampai halus dengan gunting hingga akhirnya terbentuk “bubur tumor” yang partikelnya dapat melewati jarum trokar. Tambahkan garam fisiologis lebih kurang sama banyak dengan volume tumor.
5. Bubur tumor disuntikkan subkutan di aksila kanan mencit dengan dosis 0,2 ml.
6. Sisa tumor yang padat dimasukkan ke dalam botol formalin untuk dibuat sediaan mikroskopik histopatologi.
7. Masing-masing mencit diberi nomor ditelinganya (lihat bagan) dan dimasukkan ke dalam kandang berbeda yang diberi label berisi : jenis kelompok perlakuan, tanggal transplantasi .

LAMPIRAN 6

Prosedur pembuatan preparat blok paraffin

a. Fiksasi

Potongan adenokarsinoma dimasukkan dalam larutan formalin buffer (larutan formalin 10% dalam buffer Natrium asetat sampai mencapai pH 7,0). Waktu fiksasi jaringan 18-24 jam. Setelah fiksasi selesai, jaringan dimasukkan dalam larutan aquades selama 1 jam untuk proses penghilangan larutan fiksasi.

b. Dehidrasi

Potongan adenokarsinoma dimasukkan dalam alkohol konsentrasi bertingkat. Jaringan menjadi lebih jernih dan transparan. Jaringan kemudian dimasukkan dalam larutan alkohol-xylol selama 1 jam dan kemudian larutan xylol murni selama 2x2 jam.

c. Impregnasi

Jaringan dimasukkan dalam paraffin cair selama 2x2 jam.

d. Embedding

Jaringan ditanam dalam parafin padat yang mempunyai titik lebur 56-58°C, ditunggu sampai paraffin padat. Jaringan dalam paraffin dipotong setebal 4 mikron dengan mikrotom. Potongan jaringan ditempelkan pada kaca obyek yang sebelumnya telah diolesi polilisin sebagai perekat. Jaringan pada kaca obyek

dipanaskan dalam inkubator suhu 56-58°C sampai paraffin mencair.

LAMPIRAN 7

Prosedur Pengecatan Sel T $CD4^+$

1. Fiksasi dengan Polinized slide 3 menit
2. Deparafinisasi dengan Xylol dalam inkubator semalam
3. Rehidrasi dengan Alkohol absolut, kemudian dengan air murni
4. Cuci dengan 50 M Tris – HCl; selama 3 menit
5. Periodic Acid 0,5 % selama 10 menit
6. 0,3 % H2O2 dalam methanol selama 20 menit
7. Cuci dengan 50 M Tris – HCl selama 5 menit
8. Blok dengan 1 % BSA – PBS selama 30 menit
9. Inkubasi primer Ab $CD4^+$ selama 1 jam
10. Cuci dengan 50 M Tris HCl selama 5 menit, 2 X
11. Biotynilated Rabbit anti Mouse selama 1 jam
12. Cuci dengan 50 M Tris HCl selama 5 menit, 2 X
13. Inkubasi Ab Sekunder selama 30 menit
14. Cuci dengan 50 M Tris HCl selama 5 menit, 2 X
15. DAB dalam Tris _ HCl kurang dari 10 menit
16. Couterstain Hematoksilin
17. Dehidrasi
18. Cleaning
19. Mountain dengan Entelan