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Appendix A

Capital Cost

Table A.1: Calculation of General Capital Cost of Autograft at Burn Unit in 1998.

Items	Making/Buying (year)	Original Cost (Bt.)	Current Cost (Bt.)	Life time (year)	Annualization factor	Depreciation	Proportion for burn unit 1.)	Depreciation for burn unit	Depreciation for Autograft 2.)
1	2	3	3	5	6	7	8	9	10
Building (1 building)	1979	39,000,000.00	238,520,452.75	50	9.915	24,056,525.74	12.56	3,021,499.63	1,696,874.19
Equipments (54 types)									
(1)Dinamap plus v/s monitor	24-May-93	65,000.00	104,683.15	10	6.145	17,035.50	100	17,035.50	9.567.14
(2)Dinamap omega	27-May-93	65,000.00	104,683.15	10	6.145	17,035.50	100	17,035.50	9.567.14
(3)Escort Dinamap monitor	7 Dec. 1994	80,000.00	117,128.00	10	6.145	19,060.70	100	19,060.70	10.704.49
(4)Infusion pump model STG 503	Aug. 1989	65,000.00	153,400.00	10	6.145	24,963.38	100	24,963.38	14.019.44
(5)Infusion pump	29-Aug-92	65,000.00	115,151.47	10	6.145	18,739.05	100	18,739.05	10.523.85
(6)Infusion pump	27-Sep-92	67,000.00	118,590.00	10	6.145	19,298.62	100	19,298.62	10.838.10
(7)Alfa bed	1998	26,000.00	26,000.00	10	6.145	4,231.08	100	4,231.08	2.376.18
(8)Alfa bed sum ken mat	22 Oct. 1993	52,000.00	83,720.00	10	6.145	13,624.08	100	13,624.08	7.651.29
(9)Alfa bed sum ken mat	7 Dec. 1994	26,000.00	37,960.00	10	6.145	6,177.38	100	6,177.38	3.469.22
(10)Low pressure suction	5 Feb. 1987	25,710.00	73,353.63	10	6.145	-	100	-	-
(11)Syringe pump STC 5234	1998	126,000.00	126,000.00	10	6.145	20,504.48	100	20,504.48	11.515.31
(12)Ambu bag adult-black	1998	9,000.00	9,000.00	10	6.145	1,464.61	100	1,464.61	822.52
(13)Ambu bag adult	27-Sep-93	9,000.00	14,490.00	10	6.145	2,358.01	100	2,358.01	1.324.26
(14)Ambu bag with mask (child)	1998	9,000.00	9,000.00	10	6.145	1,464.61	100	1,464.61	822.52
(15)Hematocrit(centrifuge)	8-May-92	15,200.00	26,904.00	10	6.145	4,378.19	100	4,378.19	2.458.79

Table A.1 (Continued)

Items	Making/Buying (year)	Original Cost (Bt.)	Current Cost (Bt.)	Life time (year)	Annualization factor	Depreciation	Proportion for burn unit 1.)	Depreciation for burn unit	Depreciation for Autograft 2.)
1	2	3	4	5	6	7	8	9	10
(16)Atago(urinesp.gr)	1998	4,500.00	4,500.00	10	6.145	732.30	100	732.30	411.26
(17)Apollon Diana	1998	14,000.00	14,000.00	10	6.145	2,278.28	100	2,278.28	1,279.48
(18)Lamp for wound	Sep.1995	25,710.00	34,220.01	10	6.145	5,568.76	100	5,568.76	3,127.41
(19)Arjo shower	4 Nov. 1994	350,000.00	511,000.00	10	6.145	83,157.04	100	83,157.04	46,700.99
(20)Film X-ray box	Aug. 1993	2,150.00	3,461.50	10	6.145	563.30	100	563.30	316.35
(21)Sphgmomanometer (adult)	1998	5,340.00	5,340.00	10	6.145	869.00	100	869.00	488.03
(22)Stetoscope	1998	1,250.00	1,250.00	10	6.145	203.42	100	203.42	114.24
(23)Set Resuscitate	1998	4,500.00	4,500.00	10	6.145	732.30	100	732.30	411.26
(24)Mayo	1998	4,000.00	4,000.00	10	6.145	650.94	100	650.94	365.57
(25)Forcep	1998	532.00	532.00	15	7.606	69.94	100	69.94	39.28
(26)Forcep 12 "+ bomel	9 Aug.1993	4,440.00	7,148.40	15	7.606	939.84	100	939.84	527.81
(27)Tray (large)	1998	940.00	940.00	15	7.606	123.59	100	123.59	69.41
(28)Tray (middle)	9 Aug.1993	2,080.00	3,348.80	15	7.606	440.28	100	440.28	247.26
(29)Tray (small)	1998	1,530.00	1,530.00	15	7.606	201.16	100	201.16	112.97
(30)Set suction	1998	48,000.00	48,000.00	10	6.145	7,811.23	100	7,811.23	4,386.79
(31)Kidney tray	1998	360.00	360.00	15	7.606	47.33	100	47.33	26.58
(32)Bowl stainless	1998	3,400.00	3,400.00	10	6.145	553.30	100	553.30	310.73
(33)Urinal stainless stand	1994	38,250.00	55,845.00	10	6.145	9,087.88	100	9,087.88	5,103.75

Table A.1 (Continued)

Items	Making/Buying (year)	Original Cost (Bt.)	Current Cost (Bt.)	Life time (year)	Annualization factor	Depreciation	Proportion for burn unit 1.)	Depreciation for burn unit	Depreciation for Autograft 2.)
1	2	3	4	5	6	7	8	9	10
(34)Stainless stand	1998	1,500.00	1,500.00	10	6.145	244.10	100	244.10	137.09
(35)Bath-tub stainless	1998	6,200.00	6,200.00	10	6.145	1,008.95	100	1,008.95	566.63
(36)Barrow (large)	24Aug.1993	16,200.00	26,082.00	10	6.145	4,244.43	100	4,244.43	2,383.67
(37)Barrow (small)	Aug.1993	4,200.00	6,762.00	10	6.145	1,100.41	100	1,100.41	617.99
(38)Barrow (small)	24Aug.1993	11,700.00	18,837.00	10	6.145	3,065.42	100	3,065.42	1,721.54
(39)Emergency Barrow	1998	6,600.00	6,600.00	10	6.145	1,074.04	100	1,074.04	603.18
(40)Boiler	1998	8,600.00	8,600.00	10	6.145	1,399.51	100	1,399.51	785.97
(41)Boiler	1998	8,200.00	8,200.00	10	6.145	1,334.42	100	1,334.42	749.41
(42)Refrigerator	Aug.1993	11,200.00	18,032.00	10	6.145	2,934.42	100	2,934.42	1,647.97
(43)Cooler	1998	6,000.00	6,000.00	10	6.145	976.40	100	976.40	548.35
(44)Ambu stand	1997	2,000.00	2,200.00	10	6.145	358.01	100	358.01	201.06
(45)Weight machine (child)	1998	3,200.00	3,200.00	15	7.606	420.72	100	420.72	236.28
(46)Weight machine (adult)	1998	395.00	395.00	15	7.606	51.93	100	51.93	29.17
(47)Fowler's bed	Aug.1993	60,000.00	96,600.00	10	6.145	15,720.10	100	15,720.10	8,828.41
(48)Table (wool)	17Jun.1994	6,500.00	9,490.00	15	7.606	1,247.70	100	1,247.70	700.71
(49)Table (stainless)	17Jun.1994	2,250.00	3,285.00	15	7.606	431.90	100	431.90	242.55
(50)Over bed (stainless)	1998	5,400.00	5,400.00	10	6.145	878.76	100	878.76	493.51
(51)Over bed (wool)	1998	8,000.00	8,000.00	10	6.145	1,301.87	100	1,301.87	731.13

Table A.1 (Continued)

Items	Making/Buying (year)	Original Cost (Bt.)	Current Cost (Bt.)	Life time (year)	Annualization factor	Depreciation	Proportion for burn unit 1.)	Depreciation for burn unit	Depreciation for Autograft 2.)
1	2	3	4	5	6	7	8	9	10
(52)Arm chair	1998	4,000.00	4,000.00	10	6.145	650.94	100	650.94	365.57
(53)Arm chair	1998	7,200.00	7,200.00	10	6.145	1,171.68	100	1,171.68	658.02
(54)Fan	Jul-98	4,400.00	4,400.00	10	6.145	716.03	100	716.03	402.12
Total Cost of equipment		1,399,646.00	2,074,434.11						182,349.73
Total Capital Cost		40,399,646.00	240,594,886.86						1,879,223.92

Note: Discount rate = 10%

1.) Proportion of allocation of building for burn unit = 12.56 % (273.6 sq.m. of 2,178 sq.m.)

Proportion of allocation of equipment of each unit = 100%

2.) Proportion of capital cost for Autograft in Burn Unit = 56.16% (1,230 days of 2,190 days)

Cost of Autograft used in 45.55 days

Proportion of capital cost used for Cultured Graft in Burn Unit = 65.86% of Autograft (30 days of 45.55 days)

Depreciation of building for Cultured Graft in Burn Unit is 1,117,590.03 Baht.

Depreciation of equipment for Cultured Graft in Burn Unit is 120,098.61 Baht.

Total Capital Cost for Cultured Graft in Burn Unit is 1,237,688.64 Baht.



Table A.2: Calculation of Capital Cost related to Autograft at Operation Room (OR.) in 1998.

Items	Making / Buying (year)	Original Cost (Bt.)	Current Cost (Bt.)	Life time (year)	Annualization factor	Depreciation	Proportion for OR. 1.)	Depreciation for OR.	Depreciation for Autograft 2.)
1	2	3	4	5	6	7	8	9	10
Building (1 building)	1979	39,000,000.00	238,520,452.75	50	9.915	24,056,525.74	2.41	579,762.27	325,594.49
Equipments (12 types)									
(1)Plastic set	1998	108,000	108,000	10	6.145	17,575.26	100	17,575.26	9,870.27
(2)Brown dermatone	1998	16,000	16,000	10	6.145	2,603.74	100	2,603.74	1,462.26
(3)Mask Graft	1998	16,000	16,000	10	6.145	2,603.74	100	2,603.74	1,462.26
(4)Anesthetic machine	1998	487,000	487,000	10	6.145	79,251.42	100	79,251.42	44,507.60
(5)Sphgmomanometer machine	1998	368,000	368,000	10	6.145	59,886.09	100	59,886.09	33,632.03
(6)Oxygen sat machine	1998	49,500	49,500	10	6.145	8,055.33	100	8,055.33	4,523.87
(7)Standless stand	1998	2,200	2,200	10	6.145	358.01	100	358.01	201.06
(8)Anesthetic barrow	1998	6,600	6,600	10	6.145	1,074.04	100	1,074.04	603.18
(9)Laryngoscope	1998	6,400	6,400	10	6.145	1,041.50	100	1,041.50	584.90
(10)Magill's forcep	1998	532	532	10	6.145	86.57	100	86.57	48.62
(11)Cotton box	1998	110	110	10	6.145	17.90	100	17.90	10.05
(12)Stetoscope	1998	2,500	2,500	10	6.145	406.83	100	406.83	228.48
Total Cost of equipment	1998	1,062,842.00	1,062,842.00						97,134.59
Total Capital Cost		40,062,842	239,583,295						422,729.08

Note: Discount rate = 10 %, 1.) Proportion of allocation of building for OR. = 2.41% (52.5 sq.m. of 2,178 sq.m.), 2.) Proportion used for Autograft = 56.16% (1,230 days of 2,190 days)

Table A.3: Calculation of Capital Cost related to Cultured Skin Graft at Operation Room (OR.) in 1998.

Items	Making / Buying (year)	Original Cost (Bt.)	Current Cost (Bt.)	Life time (year)	Annualization factor	Depreciation	Proportion for OR. 1.)	Depreciation for OR.	Depreciation for Cultured graft 2.)
1	2	3	4	5	6	7	8	9	10
Building (1 building)	1979	39,000,000.00	238,520,452.75	50	9.915	24,056,525.74	2.41	579,762.27	325,594.49
Equipments (7 types)									
(1)Plastic set	1998	108,000	108,000	10	6.145	17,575.26	100	17,575.26	9,870.27
(2)Sphgmomanometer machine	1998	368,000	368,000	10	6.145	59,886.09	100	59,886.09	33,632.03
(3)Oxygen sat machine	1998	49,500	49,500	10	6.145	8,055.33	100	8,055.33	4,523.87
(4)Standless stand	1998	2,200	2,200	10	6.145	358.01	100	358.01	201.06
(5)Anesthetic barrow	1998	6,600	6,600	10	6.145	1,074.04	100	1,074.04	603.18
(6)Cotton box	1998	110	110	10	6.145	17.90	100	17.90	10.05
(7)Stetoscope	1998	2,500	2,500	10	6.145	406.83	100	406.83	228.48
Total Cost of equipment		536,910.00	536,910.00						49,068.94
Total Capital Cost		39,536,910	239,057,363						374,663.43

Note: Discount rate = 10 %

1.) Proportion of allocation of building for OR. is the same Autograft = 2.41 % (52.5 sq.m.of 2,178 sq.m.)

Proportion of allocation of equipment of each unit = 100%

2.) Proportion of capital cost for Cultured skin graft in OR. is the same Autograft = 56.16 % (1,230 days of 2,190 days)

Table A.4: Calculation of Capital Cost at laboratory room in 1998.

Items	Making/Buying (year)	Original Cost (Bt.)	Current Cost (Bt.)	Life time (year)	Annualization factor	Depreciation	Proportion for Lab.room 1.)	Depreciation for Laboratory rom	Depreciation for Cultured Graft
Building (1 building)	1993	219,700,000.00	353,829,047.00	50	9.915	35,686,237.72	0.35	126,668.42	126,668.42
Equipments (14 types)									
(1)Laminar Flow Safety Cabinet	1996	320,000.00	387,200.00	10	6.145	63,010.58	100	63,010.58	63,010.58
(2)CO2 incubator	1996	300,000.00	363,000.00	10	6.145	59,072.42	100	59,072.42	59,072.42
(3)Liquid Nitrogen Vessel	1997	125,190.00	137,709.00	10	6.145	22,409.93	100	22,409.93	22,409.93
(4)Electronic Analytical Balance	1996	77,000.00	93,170.00	10	6.145	15,161.92	100	15,161.92	15,161.92
(5)Electronic Precision Balance	1996	38,500.00	46,585.00	10	6.145	7,580.96	100	7,580.96	7,580.92
(6)pH. meter	1997	37,383.18	41,121.50	10	6.145	6,691.86	100	6,691.86	6,691.96
(7)Rotor bucket for test plates#2	1997	47,080.00	51,788.00	10	6.145	8,427.66	100	8,427.66	8,427.66
(8)Ultrasonic Cleaner	1996	19,360.00	23,425.60	10	6.145	3,812.14	100	3,812.14	3,812.14
(9)Apple Video/TV System (PAL)	1996	7,500.00	9,075.00	10	6.145	1,476.81	100	1,476.81	1,476.81
(10)Transferpette Digital,10-100ml.#2	1996	14,200.00	17,182.00	10	6.145	2,796.09	100	2,796.09	2,796.09
(11)Transferpette Digital,100-1000ml.#2	1996	14,200.00	17,182.00	10	6.145	2,796.09	100	2,796.09	2,796.09
(12)Transferpette Digital,2-20ml.	1996	7,100.00	8,591.00	10	6.145	1,398.05	100	1,398.05	1,398.05
(13)Autopipette 1-5ml. + TIP	1997	5,700.00	6,270.00	10	6.145	1,020.34	100	1,020.34	1,020.34
(14)Medi-pump#1132,220V THO	1997	8,000.00	8,800.00	10	6.145	1,432.06	100	1,432.06	1,432.06
Total Cost of equipment		1,021,213.18	1,211,099.10						197,086.97
Total Capital Cost		220,721,213.18	355,040,146.10						323,755.39

Note: Discount rate = 10%, 1.) Proportion of allocation of building for laboratory room = 0.35% (50.62 sq.m. of 14,261.15 sq.m.), Proportion of allocation of equipment of each unit = 100%

Appendix B

Labor Cost

Table B.1: Allocation of Annual Autograft Recurrent Cost of Personnel at Burn Unit in 1998.

Personnel	Salary / year (Bt.)	Fringe benefit / year (Bt.)	Total salary / year (Bt.)	Total working hour / year	Unit cost (Baht / hour)	Time spent for burn patient (hour)	Cost / year for burnt patient (Bt.)	Cost / year for Autograft (Bt.)
1	2	3	4	5	6	7	8	9
Doctor 1	192,000.00	0.00	192,000.00	1,722	111.50	1,722	192,000.00	94,252.80
Doctor 2	108,000.00	21,600.00	129,600.00	1,722	75.26	1,722	129,600.00	63,620.64
Nurse 1	234,360.00	45,772.50	280,132.50	1,722	162.68	1,722	280,132.50	137,517.04
Nurse 2	133,440.00	45,772.50	179,212.50	1,722	104.07	1,722	179,212.50	87,975.42
Nurse 3	127,200.00	45,772.50	172,972.50	1,722	100.45	1,722	172,972.50	84,912.20
Nurse 4	114,720.00	45,772.50	160,492.50	1,722	93.20	1,722	160,492.50	78,785.77
Nurse 5	98,280.00	45,772.50	144,052.50	1,722	83.65	1,722	144,052.50	70,715.37
Nurse 6	98,280.00	45,772.50	144,052.50	1,722	83.65	1,722	144,052.50	70,715.37
Nurse 7	98,280.00	45,772.50	144,052.50	1,722	83.65	1,722	144,052.50	70,715.37
Nurse 8	93,360.00	45,772.50	139,132.50	1,722	80.80	1,722	139,132.50	68,300.14
P.N. 1	157,800.00	36,866.00	194,666.00	1,722	113.05	1,722	194,666.00	95,561.54
P.N. 2	157,800.00	36,866.00	194,666.00	1,722	113.05	1,722	194,666.00	95,561.54
P.N. 3	61,200.00	36,866.00	98,066.00	1,722	56.95	1,722	98,066.00	48,140.60
P.N. 4	104,880.00	36,866.00	141,746.00	1,722	82.31	1,722	141,746.00	69,583.11
P.N. 5	100,800.00	36,866.00	137,666.00	1,722	79.95	1,722	137,666.00	67,580.24
Aid	104,880.00	13,260.00	118,140.00	1,722	68.61	1,722	118,140.00	57,994.93

Table B.1 (Continued)

Personnel	Salary / year (Bt.)	Fringe benefit / year (Bt.)	Total salary / year (Bt.)	Total working hour / year	Unit cost (Baht / hour)	Time spent for burn patient (hour)	Cost / year for burnt patient (Bt.)	Cost / year for Autograft (Bt.)
1	2	3	4	5	6	7	8	9
Worker	87,360.00	20,480.00	107,840.00	1,722	62.62	1,722	107,840.00	52,938.66
Total Cost of personnel	2,072,642.00	605,850.00	2,678,494.00				2,678,498.00	1,314,870.74

Note: Column 4 = Column 2 + Column 3

Column 5 = 246 days * 7 hours; 246 working days in a year, and 7 working hours per day

Column 6 = Column 4 / Column 5

Column 8 = Column 6 * Column 7

Column 9 = Column 8 * 49.09%; 49.09% proportion of labor cost used for Autograft

Labor cost of Autograft in Burn Unit used in 45.55 days

Proportion of labor cost used for Cultured Graft in Burn Unit = 65.86% of Autograft (30 days of 45.55 days)

Labor cost for Cultured Graft in burn unit is 865,996.10 Baht.

Table B.2: Allocation of Annual Autograft Recurrent Cost of Personnel at Operation Room (OR.) in 1998.

Personnel	Salary / year (Bt.)	Fringe benefit / year (Bt.)	Total salary / year (Bt.)	Total working hour / year	Unit cost (Baht / hour)	Time spent for burn patient (hour)	Cost / year for burnt patient (Bt.)	Cost / year for Autograft (Bt.)
1	2	3	4	5	6	7	8	9
Doctor 1	192,000.00	-	192,000.00	1,722	111.50	1,722	192,000.00	94,252.80
Doctor 2	108,000.00	21,600.00	129,600.00	1,722	75.26	1,722	129,600.00	63,620.64
Doctor 3	108,000.00	21,600.00	129,600.00	1,722	75.26	1,722	129,600.00	63,620.64
Nurse 1	168,756.00	10,800.00	179,556.00	1,722	104.27	1,722	179,556.00	88,144.04
Nurse 2	168,756.00	10,800.00	179,556.00	1,722	104.27	1,722	179,556.00	88,144.04
Nurse 3	168,756.00	10,800.00	179,556.00	1,722	104.27	1,722	179,556.00	88,144.04
Aid	100,296.00	36,864.00	137,160.00	1,722	79.65	1,722	137,160.00	67,331.84
Worker	80,691.00	20,480.00	101,171.00	1,722	58.75	1,722	101,171.00	49,664.84
Total Cost of personnel	1,095,255.00	132,944.00	1,228,199.00				1,228,199.00	602,922.89

Note: Column 4 = Column 2 + Column 3

Column 5 = 246 days * 7 hours; 246 working days in a year, and 7 working hours per day

Column 6 = Column 4 / Column 5

Column 8 = Column 6 * Column 7

Column 9 = Column 8 * 49.09%; 49.09% proportion of labor cost used for Autograft

Proportion of labor cost used for Cultured Graft is the same Autograft; **labor cost for Cultured Graft in Operation Room is 602,922.89 Baht.**

Table B.3: Allocation of Annual Recurrent Cost of Personnel at laboratory room in 1998.

Personnel	Salary / year / year (Bt.)	Fringe benefit / year (Bt.)	Total salary / year (Bt.)	Total working hour / year	Unit cost (Baht / hour)	Time spent for Cultured Graft (hour)	Cost / year for Cultured Graft (Bt.)
1	2	3	4	5	6	7	8
Researcher	598,880	0	598,880	1,722	347.78	1,722	598,880.00
Assistant 1	270,000	0	270,000	1,722	156.79	1,722	270,000.00
Assistant 2	69,600	0	69,600	1,722	40.42	1,722	69,600.00
Worker	69,600	0	69,600	1,722	40.42	344	13,920.00
Total Cost of personnel	1,008,080	0	1,008,080				952,400.00

Note: Column 4 = Column 2 + Column 3

Column 5 = 246 days * 7 hours; 246 working days in a year, and 7 working hours per day

Column 6 = Column 4 / Column 5

Column 8 = Column 6 * Column 7

Appendix C

Material Cost

Table C.1: Calculation of General Material Cost of Autograft at Burn Unit in 1998.

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for burn patients	Cost of Autograft l.)
Medical costs (84)					
1	PGS.5mu	16 vial	22	352	172.80
2	PGS.1MU	35 vial	8.5	297.5	146.04
3	KCl 20mEq.	85 amp.	5.14	436.9	214.47
4	Vit.B co. 10ml.	14 amp.	0.92	12.88	6.32
5	Vit.C 500mg.	30 vial	2	60	29.45
6	Adrenaline 1:1000	10 amp.	3	30	14.73
7	NaHCO ₃ 50ml.	10 amp.	18	180	88.36
8	Paracet (500)	3,000 tabs.	0.15	450	220.91
9	CPM.	100 tabs.	0.04	4	1.96
10	Fersolate	100 tabs.	0.1	10	4.91
11	MTV.	800 tabs.	0.18	144	70.69
12	Vit. B co.	500 tabs.	0.12	60	29.45
13	Dopamine (250)	2 amp.	82	164	80.51
14	Dopamine(200)	5 amp.	82	410	201.27
15	Morphine	22 amp.	8	176	86.40
16	Aspirin	100 tabs.	0.26	26	12.76
17	Phenobarb	100 amp.	0.13	13	6.38
18	Vit.C	400 tabs.	0.68	272	133.52
19	50%Glucose 20ml.	43 amp.	4.8	206.8	101.52
20	Fleet enema	4 bot.	30.25	121	59.40
21	Chloralhydrate 120ml.	2 bot.	9	18	8.84
22	Terramycin ointment	7 tubes	7	49	24.05
23	Kayexalate 30gm.	3 cans	100	300	147.27
24	Solcoseryl ointment 20gm.	1 tube	54	54	26.51
25	Zine ointment	1 tube	8	8	3.93
26	Fucidin	3 tubes	71.5	214.5	105.30
27	Daktarin	2 tubes	93.5	187	91.80
28	Pividine 30ml.	2 bot.	4.35	8.7	4.27
29	Cotton wool	64 rolls	53	3392	1,665.13

Table C.1 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for burn patients	Cost of Autograft 1.)
30	Gauze 4*8	14 rolls	8	112	54.98
31	Roll Gauze	104	8	832	408.43
32	IV.set	75	9	675	331.36
33	Microdrip	60	14.75	885	434.45
34	Soluset	10	89.6	896	439.85
35	Extension tube	30	6	180	88.36
36	Irrigate no.22	70	68	4760	2,336.68
37	Irrigate no.24	20	52	1040	510.54
38	Irrigate no.20	40	49	1960	962.16
39	Irrigate no.18	10	44	440	216.00
40	NG.tube no.5	10	9	90	44.18
41	NG.tube no.8	10	9	90	44.18
42	NG.tube no.10	10	9	90	44.18
43	NG.tube no.12	10	9	90	44.18
44	NG.tube no.14	5	9	45	22.09
45	NG.tube no.16	6	9	54	26.51
46	Foley's cath no.16	2	20.9	41.8	20.52
47	Foley's cath no.14	4	20.9	83.6	41.04
48	Foley's cath no.12	8	20.9	167.2	82.08
49	Foley's cath no.6	2	190	380	186.54
50	Urine Bag	15	22	330	162.00
51	E.T. tube no.8	2	165	330	162.00
52	E.T. tube no.7.5	2	165	330	162.00
53	E.T. tube no.7	2	165	330	162.00
54	E.T. tube no.6	2	165	330	162.00
55	E.T. tube no.5	5	160	800	392.72
56	Tracheostomy tube no.7.5	2	475	950	466.36
57	Tracheostomy tube no.7	2	475	950	466.36
58	Tracheostomy tube no.6	2	475	950	466.36
59	Tracheostomy tube no.9	1	475	475	233.18

Table C.1 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for burn patients	Cost of Autograft l.)
60	Tracheostomy tube no.8	2	475	950	466.36
61	Insyte no.22	13	17	221	108.49
62	Insyte no.20	30	17	510	250.36
63	Insyte no.24	10	30	300	147.27
64	Insyte no.18	34	17	578	283.74
65	Spinal needle no.20	1	29	29	14.24
66	Plaster (transpore)	10	300	3000	1,472.70
67	Blade no.11	7	3.9	27.3	13.40
68	Blade no.23	14	2.5	35	17.18
69	Thermometer oral	10	32.08	320.8	157.48
70	Silk 2/0	10	27.83	278.3	136.62
71	Silk 3/0	20	27.5	550	270.00
72	Silk 4/0	14	29.17	408.38	200.47
73	Nylon 2/0	20	33.33	66.66	32.72
74	Nylon 3/0	20	29.17	583.7	286.54
75	Nylon 4/0	13	29.17	379.21	186.15
76	Three way	37	13.2	488.4	239.76
77	Capillary tube	5	0.34	1.7	0.83
78	Chromic 3/0	10	45.83	458.3	224.98
79	Chromic 4/0	8	39.42	315.36	154.81
80	Condom	50	2.5	125	61.36
81	Blood set	51	14.5	739.5	363.02
82	Connector (large)	3	50	150	73.64
83	Connector (small)	4	26.5	106	52.04
84	Needle no.22	2 boxes	58	116	56.94
	Total Cost of medical			37,081.49	18,203.30

Table C.1 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for burn patients	Cost of Autograft 1.)
	Non-medical costs (46)				
1	Tissue	166	8	1328	651.92
2	Soap	52	5.3	277	135.98
3	Sun-light soap	67	5	335	164.45
4	Battery (large)	4	20.5	82	40.25
5	Battery (small)	6	6	36	17.67
6	Scot-brite	22	11	242	118.80
7	Glue	2	8.5	17	8.35
8	Black bag - 28*28	80 kg.	62	4960	2,434.86
9	Black bag - 20*25	30 kg.	46	1380	677.44
10	Black bag - 12*20	20 kg.	70	1400	687.26
11	Red bag - 28*28	11 kg.	62	682	334.79
12	Red bag - 12*20	1 kg.	70	70	34.36
13	Sponge	8	11	88	43.20
14	Tube	8 packs	9	72	35.34
15	Soap box	4	13	52	25.53
16	Comb	2	9	18	8.84
17	Envelop (small)	1 packs	11	11	5.40
18	Envelop (large)	1 packs	11	11	5.40
19	Scot tape	6	13	78	38.29
20	Paper tape	8	16	128	62.84
21	Shaver	230	27.2	6256	3,071.07
22	Thick note book (long)	3	60	180	88.36
23	Thick note book (short)	3	48.5	145.5	71.43
24	Thin note book	3	6	18	8.84
25	Permanent pen	17	20	340	166.91
26	White board pen	6	23	138	67.74
27	Paper clip	7 boxes	8	56	27.49
28	Boshtch stapper	3	52	156	76.58
29	Wire	7 boxes	5	35	17.18

Table C.1 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for burn patients	Cost of Autograft 1.)
30	Folder	5 doz.	90	450	220.91
31	Scissors	2	62	124	60.87
32	Paper	288	0.4	115.2	56.55
33	Shaver holder	1	86	86	42.22
34	Powder	6	17	102	50.07
35	Coppy paper	5	1	5	2.45
36	Small note book	1	9	9	4.42
37	Fire	8	1.1	8.8	4.32
38	Small cloth	20	20	400	196.36
39	Pencil	11	4	44	21.60
40	Pen	5	4	20	9.82
41	Ruler	2	7	14	6.87
42	Eraser (pen)	8	8	64	31.42
43	Eraser (pencil)	4	4	16	7.85
44	Toothpick	8	10	80	39.27
45	Slipper	7	43	301	147.76
46	Dustbin	2	35	70	34.36
	Total Cost of Non-medical			20,500.50	10,063.70

Note: 1.) Proportion of material cost used for Autograft in Burn Unit = 49.09% (27 cases of 55 cases)

Cost of Autograft used in 45.55 days

Proportion of material cost used for Cultured Graft in Burn Unit = 65.86% of Autograft (30 days of 45.55 days)

Medical Cost of Autograft is 18,203.30 Baht (45.55 days)

Medical Cost of Cultured Graft is 11,989.00 Baht (65.86% of medical cost of Autograft)

Non-medical Cost of Autograft is 10,063.70 Baht (45.55 days)

Non-medical Cost of Cultured Graft is 6,628.12 Baht (65.86% of non-medical cost of Autograft)

Table C.2.1: Material Medical Cost for Autograft at Operation Room in 1998.

Unit: Baht

Patient	Operative debridement	Anesthesia activities	Total
1	1,200.00	9,000.00	10,200.00
2	1,200.00	9,000.00	10,200.00
3	400.00	3,000.00	3,400.00
4	400.00	3,000.00	3,400.00
5	400.00	3,000.00	3,400.00
6	400.00	3,000.00	3,400.00
7	400.00	3,000.00	3,400.00
8	800.00	6,000.00	6,800.00
9	800.00	6,000.00	6,800.00
10	400.00	800.00	1,200.00
11	400.00	3,000.00	3,400.00
12	1,200.00	9,000.00	10,200.00
13	1,200.00	9,000.00	10,200.00
14	2,800.00	21,000.00	23,800.00
15	800.00	6,000.00	6,800.00
16	1,600.00	12,000.00	13,600.00
17	3,600.00	27,000.00	30,600.00
18	800.00	6,000.00	6,800.00
19	800.00	6,000.00	6,800.00
20	1,600.00	12,000.00	13,600.00
21	800.00	6,000.00	6,800.00
22	1,600.00	12,000.00	13,600.00
23	400.00	3,000.00	3,400.00
24	800.00	6,000.00	6,800.00
25	400.00	3,000.00	3,400.00
26	400.00	3,000.00	3,400.00
27	800.00	6,000.00	6,800.00
Total Cost	26,400.00	195,800.00	222,200.00

Note: Material Cost for Autograft in Operation Room used charge price per visit

Operative debridement = 400 Baht per visit

Anesthesia activities (general anesthesia) = 3,000 Baht per visit

Table C.2.2: Material Medical Cost for Cultured Graft in Operation Room

Unit: Baht

Patient	Operative debridement	Anesthesia activities	Total
1	1,200.00	3,000.00	4,200.00
2	1,200.00	3,000.00	4,200.00
3	400.00	1,000.00	1,400.00
4	400.00	1,000.00	1,400.00
5	400.00	1,000.00	1,400.00
6	400.00	1,000.00	1,400.00
7	400.00	1,000.00	1,400.00
8	800.00	2,000.00	2,800.00
9	800.00	2,000.00	2,800.00
10	400.00	800.00	1,200.00
11	400.00	1,000.00	1,400.00
12	1,200.00	3,000.00	4,200.00
13	1,200.00	3,000.00	4,200.00
14	2,800.00	7,000.00	9,800.00
15	800.00	2,000.00	2,800.00
16	1,600.00	4,000.00	5,600.00
17	3,600.00	9,000.00	12,600.00
18	800.00	2,000.00	2,800.00
19	800.00	2,000.00	2,800.00
20	1,600.00	4,000.00	5,600.00
21	800.00	2,000.00	2,800.00
22	1,600.00	4,000.00	5,600.00
23	400.00	1,000.00	1,400.00
24	800.00	2,000.00	2,800.00
25	400.00	1,000.00	1,400.00
26	400.00	1,000.00	1,400.00
27	800.00	2,000.00	2,800.00
Total Cost	26,400.00	65,800.00	92,200.00

Note: Material Cost for Cultured Graft in Operation Room used charge price per visit

Operative debridement = 400 Baht per visit

Anesthesia activities (analgesic injection) = 1,000 Baht per visit

Table C.3: Calculation of Material Cost at Biomaterial Laboratory in 1998.

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for Cultured Graft
Chemical (50)				
1	Hydrochloric acid	1	360.00	360.00
2	Dimethyl sulfoxide (DMSO)	1	1,512.00	1,512.00
3	Acetic acid	1	470.00	470.00
4	Sodium bicarbonate solution, 7.5% (W/V)	1	1,050.00	1,050.00
5	Keratinocyte-SFM, (1X), Liquid	4	2,470.00	9,880.00
6	Trypsin 2.5% (10x), lyophilized	3	400.00	1,200.00
7	L-glutamine-200 nM (100x),liquid	1	950.00	950.00
8	Penicilin-Streptomycin,liquid	5	950.00	4,750.00
9	Trypan blue solution	1	440.00	440.00
10	Sodium chloride (NaCl)	1	220.00	220.00
11	Phenol red	1	420.00	420.00
12	D-(+)-Glucose	1	990.00	990.00
13	Dipotassium hydrogen phosphate trihydrate (K ₂ HPO ₄)	1	1,176.00	1,176.00
14	Sodium hydroxide (NaOH)	1	250.00	250.00
15	Potassium dihydrogen phosphate (KH ₂ PO ₄)	1	640.00	640.00
16	Potassium chloride (KCl)	1	384.00	384.00
17	Disodium hydrogen phosphate (NaH ₂ PO ₄)	1	600.00	600.00
18	Sodium dihydrogen phasphatemonohydrate(NaH ₂ PO ₄)	1	400.00	400.00
19	Methanol dried GR	2	730.00	1,460.00
20	Hoechst Stain Solution	1	500.00	500.00
21	Chlorine Water	5	100.00	500.00
22	NIH 3T3 Cell line	1	4,000.00	4,000.00
23	Dispase	2	1,600.00	3,200.00
24	Hepes	1	2,100.00	2,100.00
25	7X Cleanning solution	4	1,600.00	6,400.00
26	bisbenzimid (Hoechst33258)	1	800.00	800.00
27	Cholera	1	4,400.00	4,400.00
28	Nutrient Mix F-12 (HAM)	1	1,400.00	1,400.00
29	Hydrocortisone	1	950.00	950.00

Table C.3 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for Cultured Graft
30	Calcium Chloride Dihidrate Cell	1	1,720.00	1,720.00
31	Magnesium Chloride Hexahydrate	1	1,470.00	1,470.00
32	Magnesium Sulfate Anhydrous	1	2,750.00	2,750.00
33	Ethylendiaminetetraacetic (EDTA)	1	950.00	950.00
34	Kanamycin Sulfate	1	1,900.00	1,900.00
35	Trypsin inhibitor	1	3,000.00	3,000.00
36	Acetone	2	410.00	820.00
37	Liquid Nitrogen	348 kg.	45 Bt. / kg.	15,660.00
38	Fetal Calf Serum	1	7,500.00	7,500.00
39	Sodium Choride cell culture	1	1,500.00	1,500.00
40	Epidermal Growth Factor, Human	1	6,900.00	6,900.00
41	DMEM.	1	1,500.00	1,500.00
		1	1,350.00	1,350.00
42	Insulin from bovine pancreas	1	2,350.00	2,350.00
43	Fetal bovine Serum	1	6,000.00	6,000.00
		1	6,500.00	6,500.00
44	Carbon-di-oxide	1	900.00	900.00
45	Mitomycin-c & Fungizone	1	611.00	611.00
46	Mitomycin-C	3	206.00	618.00
47	Mitomycin-C	1	1,727.27	1,727.27
48	Genta Sulfate	5	6.00	30.00
49	Chlorox	6	150.00	900.00
		7	130.00	910.00
		7	135.00	945.00
		13	140.00	1,820.00
50	Antiseptic Solution	1	31.50	31.50
		3	124.24	372.72
	Total Cost of Chemical			122,137.49

Table C.3 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for Cultured Graft
Medical (81)				
1	Weighing Paper	2	100.00	200.00
2	Autoclave Tape	6	155.00	930.00
3	Gauze roll 4*6YDS	2	7.00	14.00
4	Blade handle # 3	6	100.00	600.00
5	Alcohol Lamp	3	72.00	216.00
6	T.C.Dish 60*15 mm. Airvent	4	2,800.00	11,200.00
7	T.C.Flask 50 ml. Canted Neck	7	2,880.00	20,160.00
8	T.C.Flask 260 ml. Canted Neck	4	2,250.00	9,000.00
9	Parafilm M 4*125	2	580.00	1,160.00
10	TPX funnel dia 70 mm.	2	100.00	200.00
		4	130.00	520.00
11	PE Retriever 1 2	1	280.00	280.00
12	Magnetic stirrer bar 20*8 mm.	3	60.00	180.00
13	Magnetic stirrer bar 10*6 mm.	3	55.00	165.00
14	Pasteur pipette 5 3 / 4	400	1.25	500.00
15	Pipette box	14	250.00	3,500.00
16	Semken forceps 15 cm	1	290.00	290.00
17	Filter funnel short stem dia 100 mm	1	250.00	250.00
18	Funnel glass soda-lime	1	90.00	90.00
19	Spoon set	2	40.00	80.00
20	Spatula double blade 125*4 mm	4	40.00	160.00
21	Sterring rod 6	2	10.00	20.00
22	Sterring rod 8	2	15.00	30.00
23	Sterring rod 10	2	18.00	36.00
24	Pipette filler up to 10 ml	1	300.00	300.00
25	Stainless round basket for pipette	4	330.00	1,320.00
26	Stainless basket (small)	1	1,350.00	1,350.00
27	Stainless basket (big)	1	2,250.00	2,250.00
28	Sample Vial 20 ml	144	28.00	4,032.00

Table C.3 (Continued)

				Unit: Baht
No.	Items	Volume for used	Cost per volume	Total cost for Cultured Graft
29	Filter membrane, 0.2 mm, 25 mm	1	1,200.00	1,200.00
30	Easy Pressure Holder	1	2,100.00	2,100.00
31	Reusable bottle top filter	2	4,500.00	9,000.00
32	Polypropylene beaker 600 ml	4	140.00	560.00
33	Polypropylene beaker 100 ml	12	50.00	600.00
34	Polypropylene beaker 50 ml	12	50.00	600.00
35	Supor 200, 0.2mm, 47mm	1	1,600.00	1,600.00
36	Test Tube 16*125	100	7.50	750.00
37	Thermometer 0-200	1	300.00	300.00
38	Thermometer 0-100	1	290.00	290.00
39	Stainless rack for vial 20 ml	6	240.00	1,440.00
40	Stainless rack for test tube	2	200.00	400.00
41	Cover slips	10	18.00	180.00
42	Pipette 10 ml	50	23.00	1,150.00
43	Pipette 5 ml	22	50.00	1,100.00
44	Forcep	6	310.00	1,860.00
45	Spatula with spoon	3	75.00	225.00
46	Blue tip	2	720.00	1,440.00
47	White tip 200 ml	3	560.00	1,680.00
48	Pipet jars 18*16	1	2,200.00	2,200.00
49	Serological pipette 5 ml	50	23.00	1,150.00
50	Serological pipette 10 ml	30	25.00	750.00
51	Latex Examination Glove Size S	2	105.00	210.00
52	Ruler for nitrogen level	1	600.00	600.00
53	Comply steam indicator	2	475.30	950.60
54	Cylinder 25 ml, Witeg	3	110.00	330.00
55	Cylinder 50 ml, Witeg	3	115.00	345.00
56	Beaker 250 ml, Pyrex	6	75.00	450.00
57	Beaker 50 ml, KImble	6	62.00	372.00
58	Beaker 100 ml, KImble	6	62.00	372.00

Table C.3 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for Cultured Graft
59	Glove (L)	1	140.00	140.00
60	Glove (S)	4	140.00	560.00
61	Glove (M)	5	140.00	700.00
62	Glove	1	61.75	61.75
63	Uni container label	10	335.00	3,350.00
64	Syringe 20 cc. (glass)	2	63.00	126.00
65	Syringe 20 ml.	4	6.00	24.00
66	Glass tray	1	300.00	300.00
67	Disposable needle	2	95.00	190.00
68	Tissue culture Flask 26 ml.	5	2,500.00	12,500.00
69	Blade # 10	100	6.50	650.00
70	Blade # 10	2	400.00	800.00
71	Sofra-tulle	5	12.00	60.00
72	Needle No. 22-1"	1	65.00	65.00
73	Needle No. 22-1"	2	65.00	130.00
74	Tissue culture Dish with Airvent	0.50	2,250.00	1,125.00
75	Tissue culture Dish with Airvent	12	150.00	1,800.00
76	Unicontainer lable	400	12.50	5,000.00
77	Forcep 6"	3	100.00	300.00
78	Forcep 12.5 cm.	5	60.00	300.00
79	Forcep 15 cm.	5	70.00	350.00
80	Secier 14 cm.	2	160.00	320.00
81	Gauze	1	150.00	150.00
		1	225.00	225.00
		1	140.00	140.00
Total Cost of Medical				122,604.35

Table C.3 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for Cultured Graft
	Non-medical (53)			
1	Lab coat	1	260.00	260.00
		2	30.38	60.76
2	Electric cord	1	265.00	265.00
3	Marker pen	1	100.00	100.00
4	Aluminium foil	1	44.00	44.00
5	Aluminium foil 12*200F	1	188.00	188.00
6	Teepol50 (multi-purpose liquid detergent)	1	235.00	23.50
7	Plastic box (small)	1	41.12	41.12
8	Soap box	3	14.33	42.99
9	Plastic file (box type)	2	35.05	70.10
10	Tissue paper M&K (big)	6	10.75	64.50
11	Hotbag 14*22 (2kg)	1	77.57	77.57
12	Plastic Basket	1	52.34	52.34
13	Round Plastic Basket	1	52.34	52.34
14	Tools (52 pcs.)	1	728.04	728.04
15	Emergency Lamp	1	535.00	535.00
		1	700.93	700.93
16	Water Tap Adaptor	1	107.48	107.48
17	Liter jar	2	65.42	130.84
18	Film Develop	1	275.00	275.00
19	Thick Plastic	5	25.50	127.50
20	Thin Plastic	2	22.01	44.20
21	Slide pen # 4	2	95.20	190.40
22	Photograph	1	463.00	463.00
23	Album	2	112.15	224.30
24	Magnet for whiteboard	1	39.25	39.25
25	Joint for faucet	1	107.48	107.48
26	Plug	2	199.00	398.00
		1	99.00	99.00

Table C.3 (Continued)

				Unit: Baht
No.	Items	Volume for used	Cost per volume	Total cost for Cultured Graft
27	Filter of water	2	22.00	44.00
28	Paper	24	10.20	244.80
29	Cutter stand	1	44.86	44.86
30	Tissue paper box	2	8.41	16.82
31	Gallon 2.2	1	82.24	82.24
32	iron ruler	1	27.10	27.10
33	Key	1		30.00
34	Tray for glass	1	53.00	53.00
35	Inner folder	1	93.00	93.00
36	(School supplier)	2	5.50	11.00
37	Thin book	1	5.00	5.00
		1	7.00	7.00
38	Brown paper	1	700.00	700.00
39	Wheel of nitrogen tank	1	1,500.00	1,500.00
40	Sponge	12	5.12	61.44
41	Film	3	150.00	450.00
42	Slide film	3	195.00	585.00
43	Cloth	12	11.74	140.88
44	Bin 1 gallon	2	25.91	51.82
		2	40.00	80.00
		1	55.00	55.00
45	Shipper	2	150.00	300.00
		4	180.00	720.00
		1	150.00	150.00
		1	300.00	300.00
		1	100.00	100.00
46	Plastic paper	4	33.00	132.00
47	Foam tape	1	51.00	51.00
48	Folder	3	36.00	108.00
49	Soap	1	39.00	39.00

Table C.3 (Continued)

Unit: Baht

No.	Items	Volume for used	Cost per volume	Total cost for Cultured Graft
50	Transportation	1	10.50	10.50
		1	31.50	31.50
		1	159.00	159.00
		1	50.50	50.50
		1	64.50	64.50
51	Scot brite	3	13.00	39.00
52	Sponge	1	61.75	61.75
		1	43.25	43.25
53	Brush	1	10.25	10.25
	Total Cost of Non-medical			12,165.85

Table C.4: Total Cost of Facilities (Electricity and Water) of Autograft at Burn Unit in 1998.

	Total facilities cost per year (Bt.)	Total working space (sq.m.)	Cost per sq.m. (Bt.)	Burn unit area (sq.m.)	Cost for burn unit (Bt.)	Cost for Autograft (Bt.)
1	2	3	4	5	6	7
Electricity	50,519,921	411,412.50	122.80	273.6	33,597.06	16,492.80
Water	3,640,708	411,412.50	8.85	273.6	2,421.17	1,188.55
Total					36,018.23	17,681.35

Note: Column 4 = Column 2 / Column 3

Column 6 = Column 4 * Column 5

Column 7 = Column 6 * 49.09%; 49.09% proportion of facilities cost used for Autograft (27 cases of 55 cases)

Cost of facilities for Autograft used in 45.55 days

Proportion of facilities cost used for Cultured Graft = 65.86% of Autograft (30 days of 45.55 days)

Cost of facilities used for Autograft is 17,681.35 Baht.

Cost of facilities used for Cultured Graft in Burn Unit is 11,645.24 Baht (65.86% of facilities cost of Autograft)

Table C.5: Total Cost of Facilities (Electricity and Water) of Autograft at Operation Room in 1998.

	Total facilities cost per year (Bt.)	Total working space (sq.m.)	Cost per sq.m. (Bt.)	Operation room area (sq.m.)	Cost for Operation Room (Bt.)	Cost for Autograft (Bt.)
1	2	3	4	5	6	7
Electricity	50,519,921	411,412.50	122.80	52.5	6,446.80	3,164.74
Water	3,640,708	411,412.50	8.85	52.5	464.59	228.07
Total					6,911.39	3,392.80

Note: Column 4 = Column 2 / Column 3

Column 6 = Column 4 * Column 5

Column 7 = Column 6 * 49.09%; 49.09% proportion of facilities cost used for Autograft (27 cases of 55 cases)

Proportion of facilities cost used for Cultured Graft is the same proportion of facilities cost used for Autograft

Cost of facilities used for Cultured Graft in OR. is 3,392.80 Baht

Table C.6: Total Cost of Facilities (Electricity and Water) at Biomaterial Laboratory in 1998.

	Total facilities cost per year (Bt.)	Total working space (sq.m.)	Cost per sq.m. (Bt.)	Laboratory room area (sq.m.)	Cost for Laboratory room (Bt.)
1	2	3	4	5	6
Electricity	7,435,446	14,261.15	521.38	50.62	26,392.14
Water	270,175	14,261.15	18.94	50.62	958.99
Total					27,351.13

Note: Column 4 = Column 2 / Column 3

Column 6 = Column 4 * Column 5

Proportion of facilities cost used for Cultured Graft = 100%

Biography

Name : Captain Natee Sirisom

Sex : Female

Date of Birth : July 12, 1968

Nationality : Thai

Marital Status : Single

Educational : Diploma in Nursing Science
(Equivalent to Bachelor of Science in Nursing)
at College of Nursing Songkhla in 1990.

Present Occupation : Instructor, Logistical School, Bangkok

Address : 43 / 400 Amarinnivate 1 Village, Paholyotin
Road, Anusawaree District, Bang Khen,
Bangkok, 10220, Thailand

