

TABLES

TABLE 1 : PERCENTAGE OF T CELLS AND NK CELLS IN NYLON WOOL PURIFIED SPLEEN CELLS POPULATION, DETERMINED BY MONOCLONAL ANTIBODIES.

MONOCLONAL ANTIBODY	PERCENTAGE OF LYSIS	CELL TYPE
Anti Thy 1.2 (J.I.J. -10)	45 ± 0.05	T cells
Anti NK (PK- 136)	16 ± 0.06	NK cells
Control (Normal Guineapig Serum)	2 ± 0.03	-

TABLE 2 : CYTOTOXIC EXPRESSION OF NATURAL KILLER CELLS AGAINST FIBROSARCOMA CELLS BEFORE AND AFTER ACTIVATION WITH IL - 2

Percent cytotoxicity \pm SD at different Target: Effector cells.

ACTIVATION SCHEDULE	EXP NO.	NORMAL MICE			TUMOUR BEARING MICE		
		1: 100	1:50	1:25	1: 100	1: 50	1: 25
1. NK Cells only	I	11.1 \pm 2.0	6.9 \pm 0.7	2.2 \pm 0.7	19.7 \pm 1.5	17.0 \pm 1.9	16.2 \pm 1.1
	II	9.0 \pm 0.0	5.2 \pm 0.9	2.0 \pm 0.2	15.3 \pm 0.3	12.5 \pm 2.8	12.8 \pm 1.1
	III	6.0 \pm 3.0	4.5 \pm 1.1	4.8 \pm 1.9	22.6 \pm 4.9	11.9 \pm 0.4	12.8 \pm 6.2
	IV	-	6.2 \pm 0.2	0.5 \pm 0.9	21.3 \pm 4.0	17.7 \pm 2.7	8.2 \pm 2.7
2. NK Cells +IL2 (16 Hrs)	I	13.9 \pm 0.7	8.5 \pm 0.5	12.5 \pm 0.5	22.4 \pm 4.1	17.4 \pm 2.1	13.2 \pm 3.8
	II	18.2 \pm 0.9	7.5 \pm 1.0	6.7 \pm 1.3	25.9 \pm 1.0	22.1 \pm 2.5	15.2 \pm 2.8
	III	18.9 \pm 0.8	10.5 \pm 0.2	5.1 \pm 0.2	26.1 \pm 3.1	20.9 \pm 1.9	19.3 \pm 1.6
3. NK Cells +IL2 (24 Hrs)	I	41.2 \pm 1.6	37.3 \pm 3.5	32.7 \pm 6.6	30.1 \pm 2.8	27.1 \pm 2.5	26.2 \pm 1.9
	II	44.6 \pm 1.0	39.5 \pm 3.1	27.1 \pm 1.2	34.0 \pm 1.0	27.2 \pm 0.1	20.6 \pm 1.1
	III	42.8 \pm 3.1	35.2 \pm 2.3	29.0 \pm 1.7	27.3 \pm 5.8	22.3 \pm 2.1	21.8 \pm 3.8

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The spontaneous response of NK cells from tumour bearing mice is statistically significant at $p < 0.001$.

TABLE 3 : EXPRESSION OF ADCC OF NK^N CELLS BEFORE AND AFTER ACTIVATION WITH IL- 2

Percent cytotoxicity \pm SD at different Target: Effector cells.

ACTIVATION SCHEDULE	EXP NO.	1:100	1: 50	1: 25
1. NK Cells + anti TAA	I	62.1 \pm 5.1	45.1 \pm 1.4	19.2 \pm 0.0
	II	59.0 \pm 6.1	44.5 \pm 7.5	17.7 \pm 9.1
	III	56.0 \pm 3.3	41.0 \pm 3.9	26.1 \pm 1.3
2. NK Cells + IL - 2 (16 Hrs) + anti TAA	I	62.7 \pm 0.52	36.2 \pm 2.6	22.5 \pm 0.0
	II	51.6 \pm 1.6	27.6 \pm 1.06	16.1 \pm 0.2
	III	47.9 \pm 2.54	20.4 \pm 13.2	22.6 \pm 1.7
3. NK Cells + IL - 2 (24 Hrs) + anti TAA	I	57.3 \pm 7.9	47.3 \pm 2.1	24.5 \pm 0.8
	II	59.8 \pm 2.4	46.2 \pm 5.7	35.4 \pm 4.1
	III	48.3 \pm 1.7	40.6 \pm 3.3	32.1 \pm 0.5

NK^N cells - NK cells from normal mice.

TABLE 4 : EXPRESSION OF ADCC OF NK^T CELLS BEFORE AND AFTER ACTIVATION WITH IL- 2

Percent cytotoxicity \pm SD at different Target: Effector cells.

ACTIVATION SCHEDULE	EXP NO.	1:100	1: 50	1: 25
1. NK Cells + anti TAA	I	25.1 \pm 5.9	20.9 \pm 5.7	23.5 \pm 0.4
	II	24.0 \pm 0.0	18.3 \pm 1.6	20.0 \pm 2.1
	III	31.1 \pm 2.1	25.2 \pm 0.4	19.4 \pm 2.5
2. NK Cells + anti TAA + IL- 2 (16 Hrs)	I	35.6 \pm 2.4	30.8 \pm 1.7	26.7 \pm 1.5
	II	30.7 \pm 4.6	26.9 \pm 6.4	15.7 \pm 0.7
	III	33.2 \pm 6.7	25.6 \pm 4.5	18.3 \pm 5.7
3. NK Cells + anti TAA + IL - 2 (24 Hrs)	I	42.5 \pm 1.6	24.9 \pm 6.2	23.3 \pm 4.9
	II	43.1 \pm 4.9	29.6 \pm 6.4	28.2 \pm 4.4
	III	47.6 \pm 5.7	30.1 \pm 4.6	29.6 \pm 7.8

NK^T - NK cells from tumour bearing mice.

TABLE 5: CYTOTOXICITY AND ADCC EXPRESSION OF NK^N AND NK^T CELLS AGAINST FIBROSARCOMA CELLS AFTER 48 HRS OF IL- 2 ACTIVATION.

Percent cytotoxicity \pm SD at different Target: Effector cells.

TARGET: EFFECTOR	NK ^N CELLS		NK ^T CELLS	
	-anti TAA ^{a)}	+ anti TAA ^{b)}	-anti TAA ^{a)}	+ anti TAA ^{b)}
1: 100	19.0 \pm 9.0	23.5 \pm 3.5	14.2 \pm 2.0	21.8 \pm 6.0
1: 50	14.0 \pm 0.2	14.0 \pm 0.0	2.7 \pm 2.5	14.8 \pm 1.4
1: 25	5.3 \pm 3.7	6.8 \pm 6.0	7.3 \pm 5.1	11.7 \pm 1.2

- a) Actually Indicates spontaneous cytotoxicity or NK cells.
- b) Indicates NK cells' activity in ADCC, in presence of anti- TAA antibodies, raised in Rabbit.

TABLE 6 : CYTOTOXICITY OF ANTI TAA SERUM^{a)}, AFTER HEAT INACTIVATION AND ADSORPTION

Percent cytotoxicity \pm SD

EXP. NO.	TUMOUR TARGET + NORMAL RABBIT SERUM	TUMOUR TARGET + ANTI TAA + COMPLEMENT	TUMOUR TARGET + ANTI TAA
I	4.4 \pm 3.07	46.6 \pm 11.5	3.2 \pm 1.3
II	5.3 \pm 6.80	52.1 \pm 1.2	5.1 \pm 2.9
III	3.3 \pm 3.04	42.9 \pm 3.8	6.6 \pm 0.4

a) Raised in rabbit against the murine fibrosarcoma cells.

TABLE 7 : DETECTION OF ANTI TAA ANTIBODY IN SERUM OF TUMOUR BEARING MICE, IN COURSE OF ADCC ASSAY WITH NK^N CELLS

Percent cytotoxicity \pm SD at different Target: Effector cells.

EXPERIMENTAL SCHEDULE	EXP. NO.	1: 100	1: 50	1: 10
1. NK Cells + Serum from tumour bearing mice (C not inactivated)	I	28.1 \pm 1.6	19.6 \pm 0.1	10.0 \pm 3.0
	II	35.0 \pm 2.0	25.3 \pm 4.0	21.3 \pm 3.1
	III	26.6 \pm 3.9	22.9 \pm 2.5	16.8 \pm 2.1
2. NK Cells + Serum from tumour bearing mice (C inactivated)	I	13.2 \pm 3.2	16.8 \pm 1.4	9.02 \pm 2.1
	II	17.9 \pm 1.8	18.4 \pm 2.6	-
	III	18.0 \pm 0.9	15.7 \pm 1.7	11.4 \pm 0.9
3. NK Cells + Serum from tumour bearing mice (C inactivated + guineapig complement)	I	37.1 \pm 4.2	26.1 \pm 1.9	8.06 \pm 3.3
	II	31.6 \pm 1.03	24.2 \pm 5.2	19.3 \pm 3.8
	III	29.3 \pm 0.0	20.3 \pm 2.6	17.7 \pm 1.7
4. NK Cells + Serum from normal mouse (not inactivated) (Control)	I	8.01 \pm 0.5	5.3 \pm 0.2	4.2 \pm 0.7
	II	15.4 \pm 3.2	7.3 \pm 0.7	6.9 \pm 1.5
	III	8.4 \pm 1.7	9.5 \pm 2.4	5.2 \pm 0.3

C - complement