

### Metabolism of 1-Bromopropane

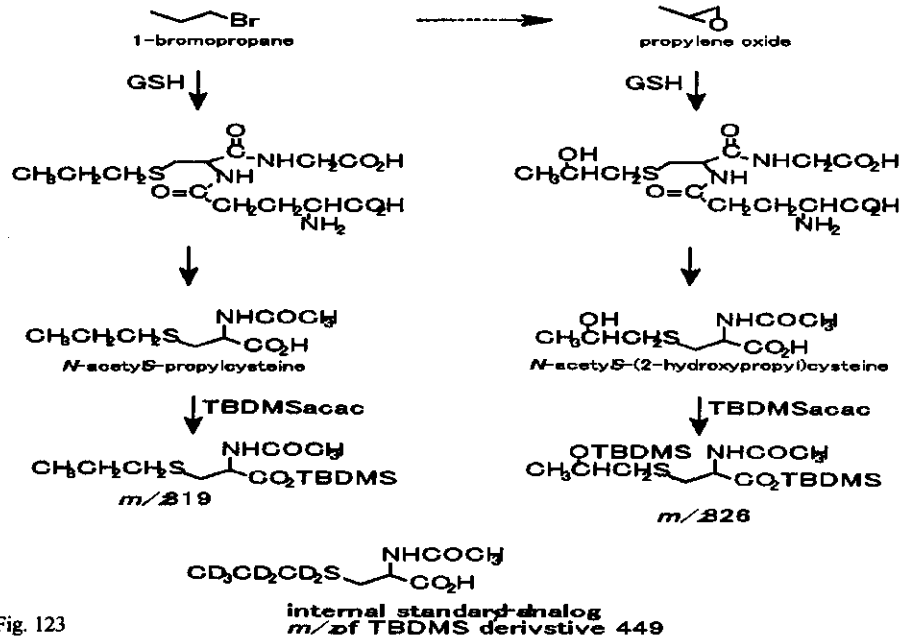


Fig. 123

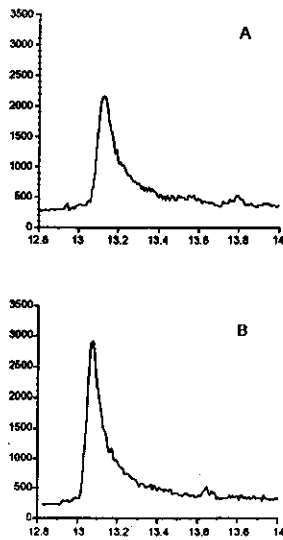


Fig. 124

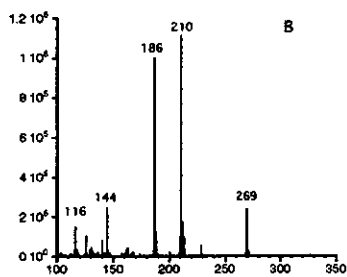
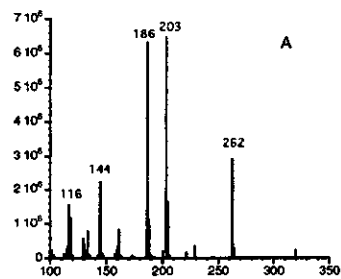
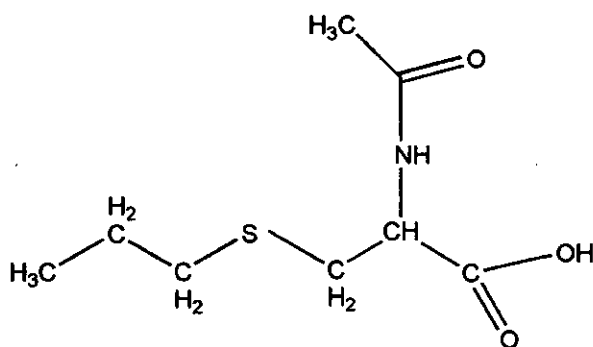
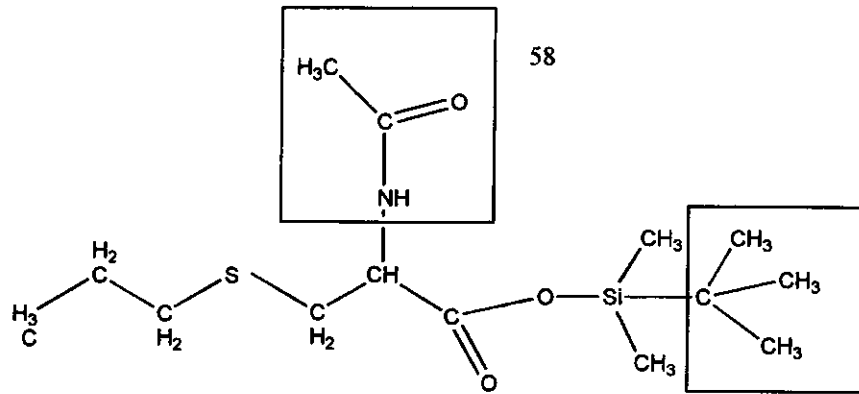


Fig. 125



N-acetyl S-propyl cysteine

Fig. 126



57

$$205 + 114 = 319 \quad 319 - 57 = 262$$

$$262 - 58 - 1 = 203$$

Fig. 127

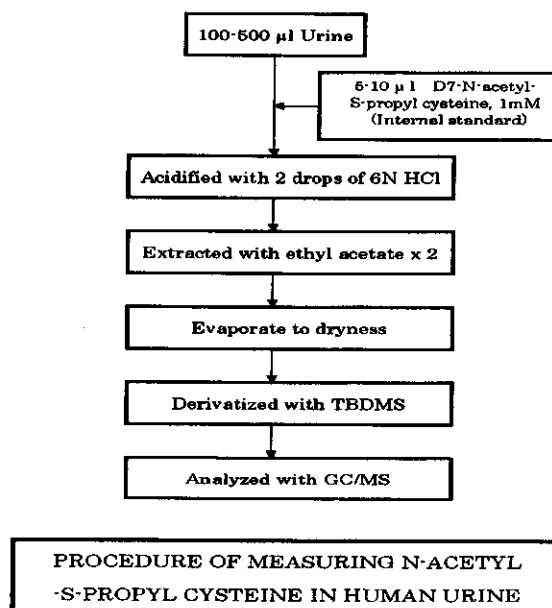


Fig. 128

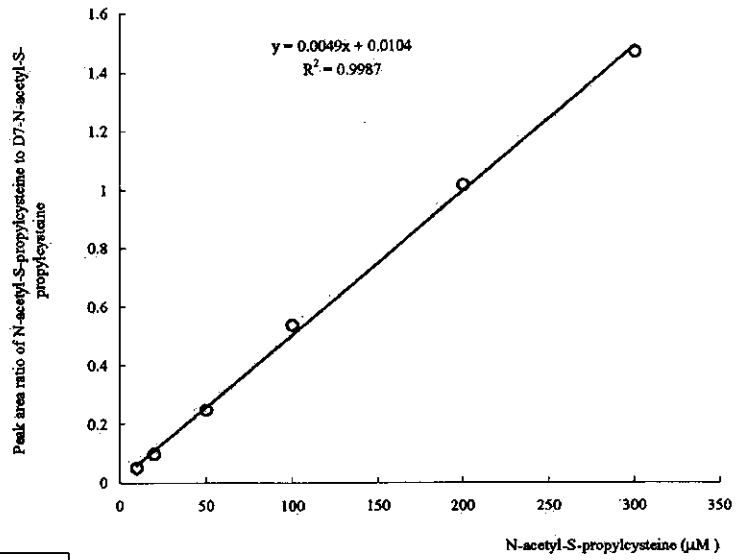


Fig. 129

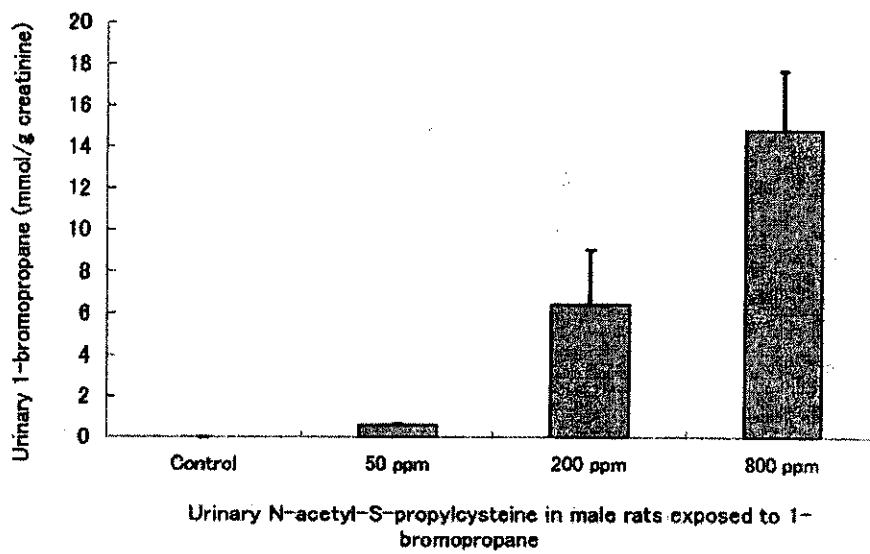


Fig. 130

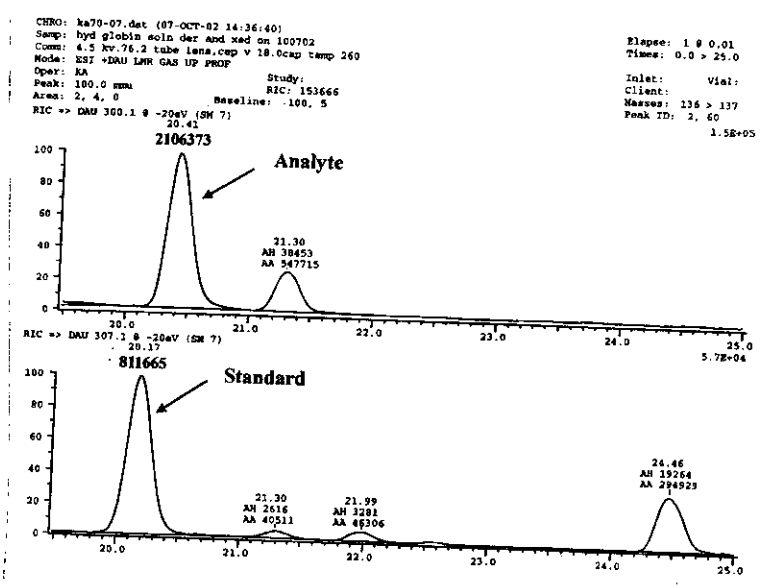


Fig. 131

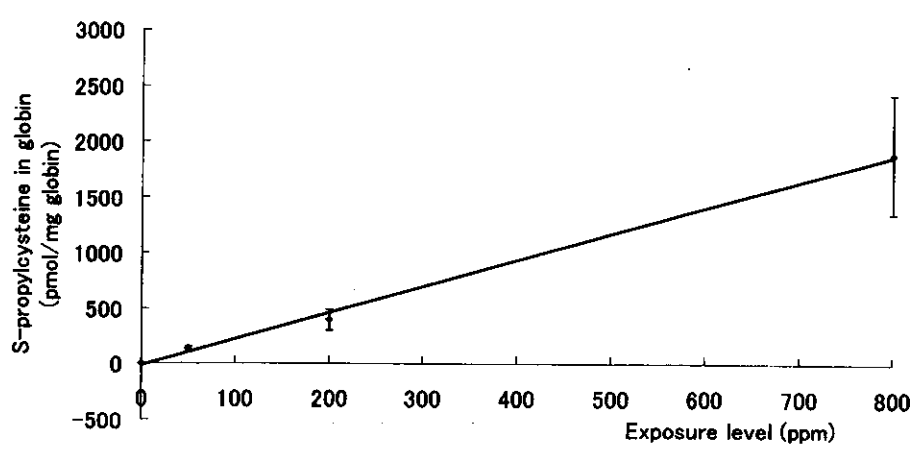


Fig. 132

## HNE assay

50microl of plasma + 250 microl of 0.05 M PEBHA HCl

For 30 min at room temperature

+0.5ml of Methanol

+2ml of hexane

+6 drops of conc. H<sub>2</sub>SO<sub>4</sub>

Mix and centrifuge at 1,900 g for 5 min

Transfer hexane layer to another glass tube

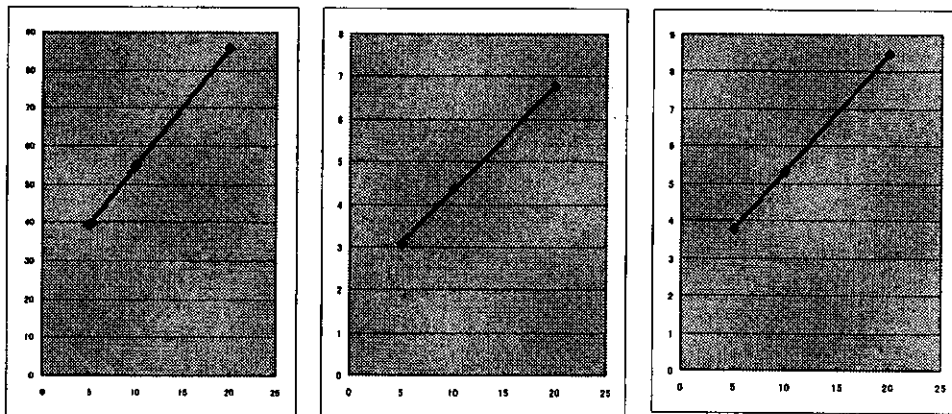
+Na<sub>2</sub>SO<sub>4</sub>, leave for 20min

Evaporate to dryness with nitrogen

+40 microl BFT, at 80 Cdegree for 1 hr

Introduce to GC-MS

Fig. 133



50ul中200ng, 100ng, 50ng 4-hydroxynonenal(4-HNE)使用
内部標準としては4-hydroxybenzaldehyde(4-HBA)3ng使用
図は左からイオン181、242、352で測定

Fig. 134

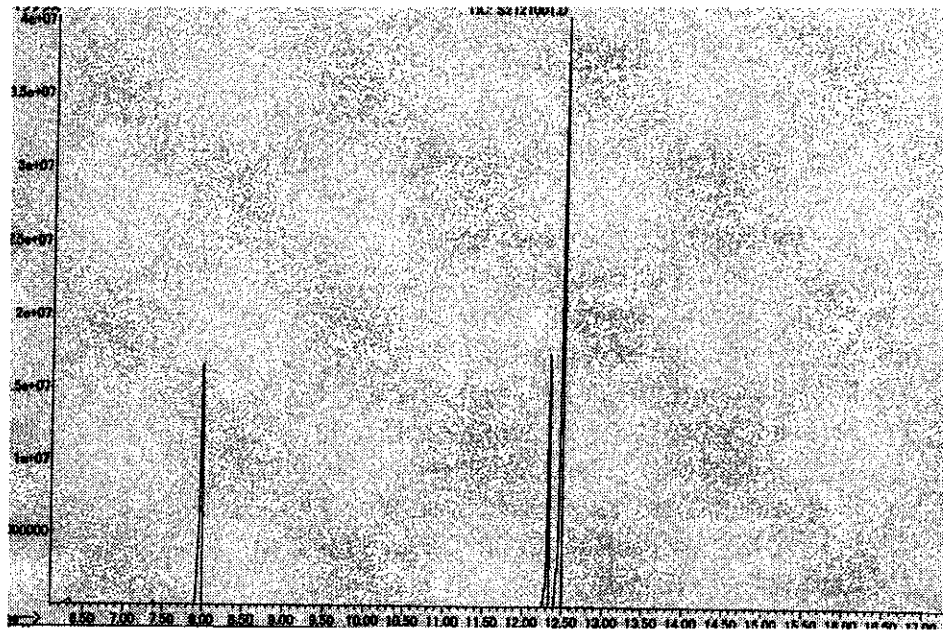


Fig. 135

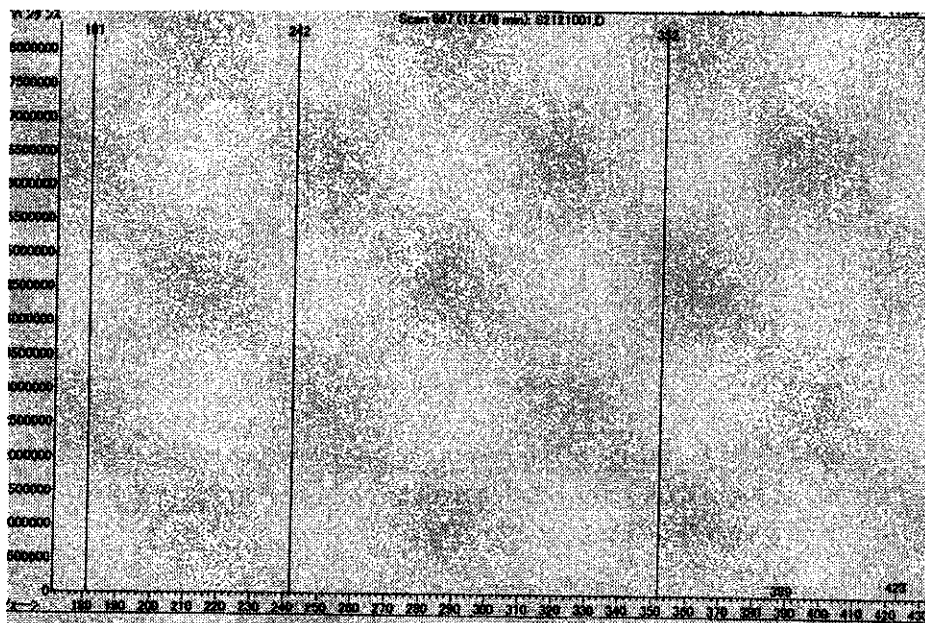


Fig. 136

## Assay of 1,2-propanediol

Sample 0.5 ml +(d6)propanediol (internal standard)

+ Acetonitrile 0.5 ml, mixed

Supernatant + Phenylborate 125 microl (1.2% in acetonitrile)

+Na<sub>2</sub>SO<sub>4</sub> 1g, Mix

Transfer supernatant to vial, evaporate to dryness with nitrogen

Resolve with acetonitrile

Introduce to GC/MS

Fig. 137

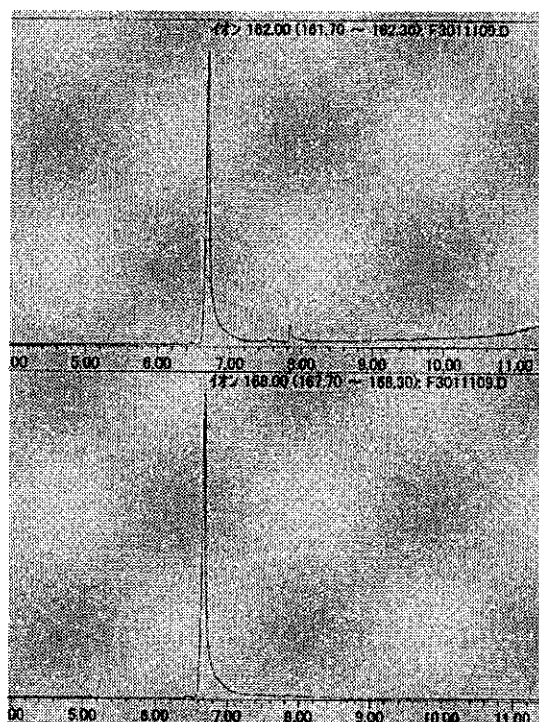


Fig. 138



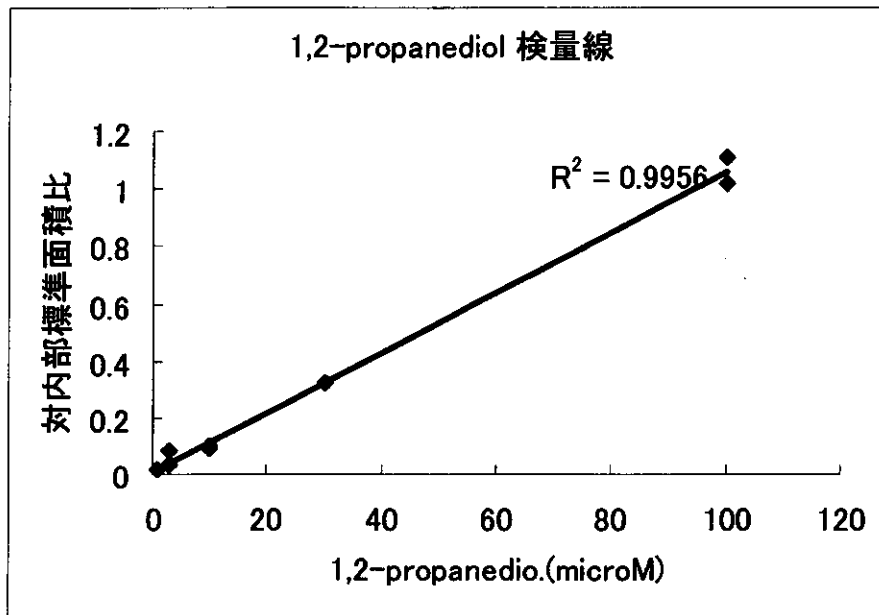


Fig. 139

Table V. 作業中の症状

仕事中の症状	女性 (N=23)		男性 (N=12)		全体 (N=35)	
変なおいがる	15	(65.2%)	6	(50.0%)	21	(60.0%)
鼻が刺激される	11	(47.8%)	6	(50.0%)	17	(48.6%)
喉の痛み	10	(43.5%)	3	(25.0%)	13	(37.1%)
目がいたい	10	(43.5%)	2	(16.7%)	12	(34.3%)
変な味がする	6	(26.1%)	2	(16.7%)	8	(22.9%)
めまいがする	8	(34.8%)	0	(0.0%)	8	(22.9%)
目がかすむ	3	(13.0%)	3	(25.0%)	6	(17.1%)
ふわふわする	4	(17.4%)	0	(0.0%)	4	(11.4%)
頭が重い	3	(13.0%)	1	(8.3%)	4	(11.4%)
頭痛	4	(17.4%)	0	(0.0%)	4	(11.4%)
顔がほてる	1	(4.3%)	0	(0.0%)	1	(2.9%)
酔った感じがする	1	(4.3%)	0	(0.0%)	1	(2.9%)

Table VI 労働者の血液検査、内分泌検査所見および月経異常の有無

No.	年齢	労働期間 (月)	1-BP 測定	RBC	Hb	Ht	Plt	WBC	LH	FSH	Estradio	異常
			(mm. TWA)	( $\times 10^4/\mu\text{l}$ )	(g/dl)	(%)	( $\times 10^4/\mu\text{l}$ )	( $\times 10^3/\mu\text{l}$ )	(IU/L)	(IU/L)	(pg/ml)	
1	49	115	106.5	4.71	13	41.1	171	5.6	49.1	100	10	
2	50	113	34.8	4.95	13.8	41.1	154	4.4	26	55	10	月経不調
3	42	102	48.8	4.12	15	40.5	113.1	5.3	59.1	30	229	月経不調
4	38	75	90.6	3.89.1	11.3.1	32.3.1	240	5.3	5.4	6.5	69.6	不調
5	29	48	40.9	3.59.1	10.9.1	31.7.1	175	5	4.5	9	22.9	
6	31	49	76.0	4.05	12	34.9	153	4.7	2.4	4.6	63.2	
7	43	24	66.9	3.97.1	10.4.1	32.1	219	4.5	3.1	5.7	64.7	
8	43	24	-	3.8.1	11.1	33.8.1	91.1	3.8.1	3.2	2.6.1	120	
9	35	39	47.0	4.28	13.6	36.3	188	6.1	6.8	4.2	76.2	
10	44	19	-	3.78.1	11.6	30.7.1	118.1	3.4.1	4.8	4.5	268.1	
11	20	18	41.3	4.17	12.1	36.9	118.1	4.3	3.2	3.1	61.9	
12	44	17	164.4	3.86.1	11.4	26.1	112.1	4	2.5	5	91.6	
13	48	15	80.7	2.99.1	10.3.1	30.1	134	4.3	13	40	38	
14	45	15	95.6	4.66	13.9	42.4	227.1	7.7	4.4	3.3	134	
15	38	15	100.3	3.73.1	10.2.1	30.4.1	119.1	3.9.1	7.3	8.2	95.2	
16	38	15	77.2	4.76	13.8	40.1	122	7.9	3.2	3.1	61.5	
17	31	15	9.9	4.95	11.2.1	34.2.1	135	4.5	18	6	66.2	
18	43	12	-	3.87.1	13.4	36.3	177	3.9.1	2.3	1.9.1	10	
19	31	12	-	4.02	13.1	39.5	124.1	3.7.1	6	3.5	124	
20	30	2	169.1	4.12	12.4	37	113.1	6.7	15	6.1	32.8	
21	45	2	170.5	3.17.1	10.1.1	29.3.1	114.1	3.5.1	42	74	10	
22	27	19	9.0	4.08	12.5	35.1	129	6.1	6.9	6.5	50.7	月経不調
23	27	23	-	4.16	13	38.1	135	6.5	17	3.5	106	
24	21	11	Reference	4.65	13.1	39.9	109	5.7	-	-	-	
				3.9-4.8	11.5-13.6	35-45	130-390	4-10	1-36	2.9-118.0	9-390	

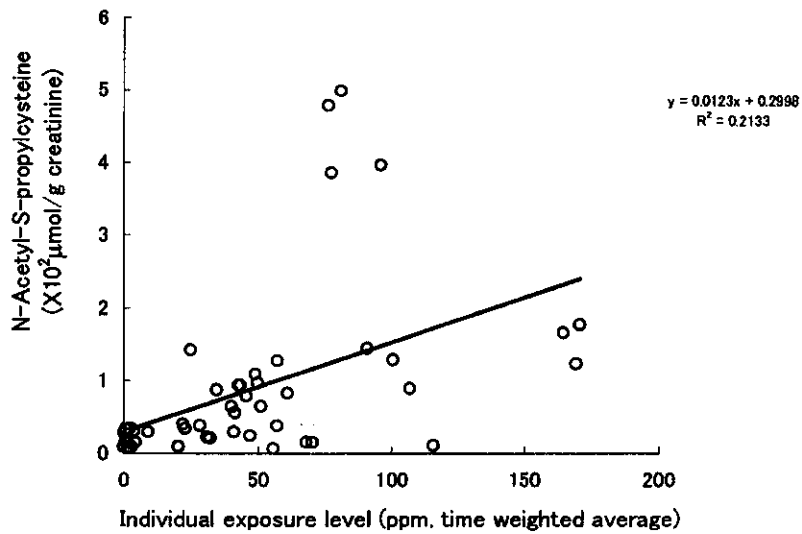


Fig. 140

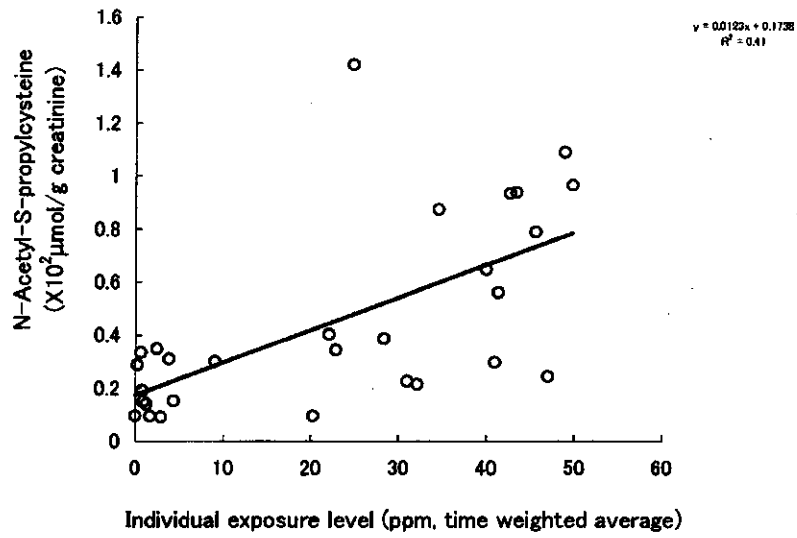


Fig. 141

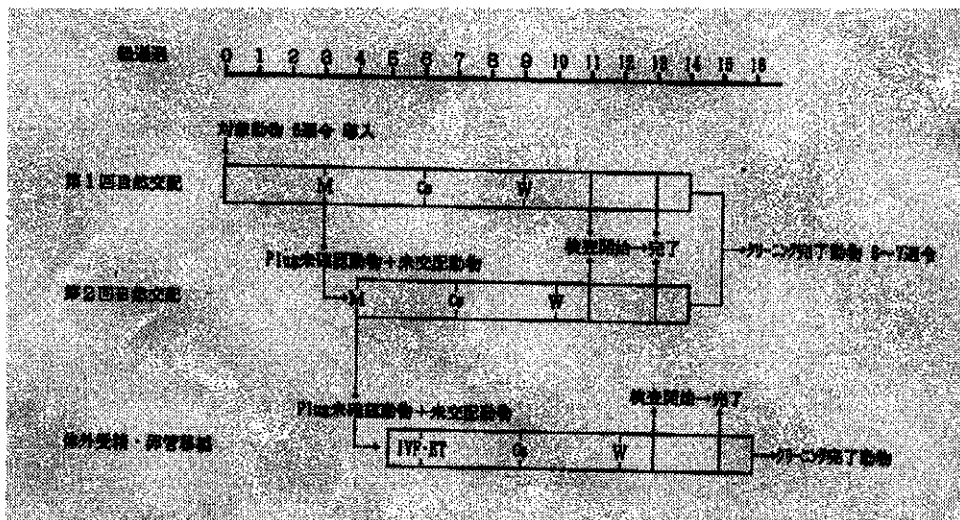


Fig. 142

発表者氏名	論文タイトル	発表誌名	巻号	ページ	出版年
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20021409

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P.90-P.91の「研究成果の刊行に関する一覧表」をご参照ください。