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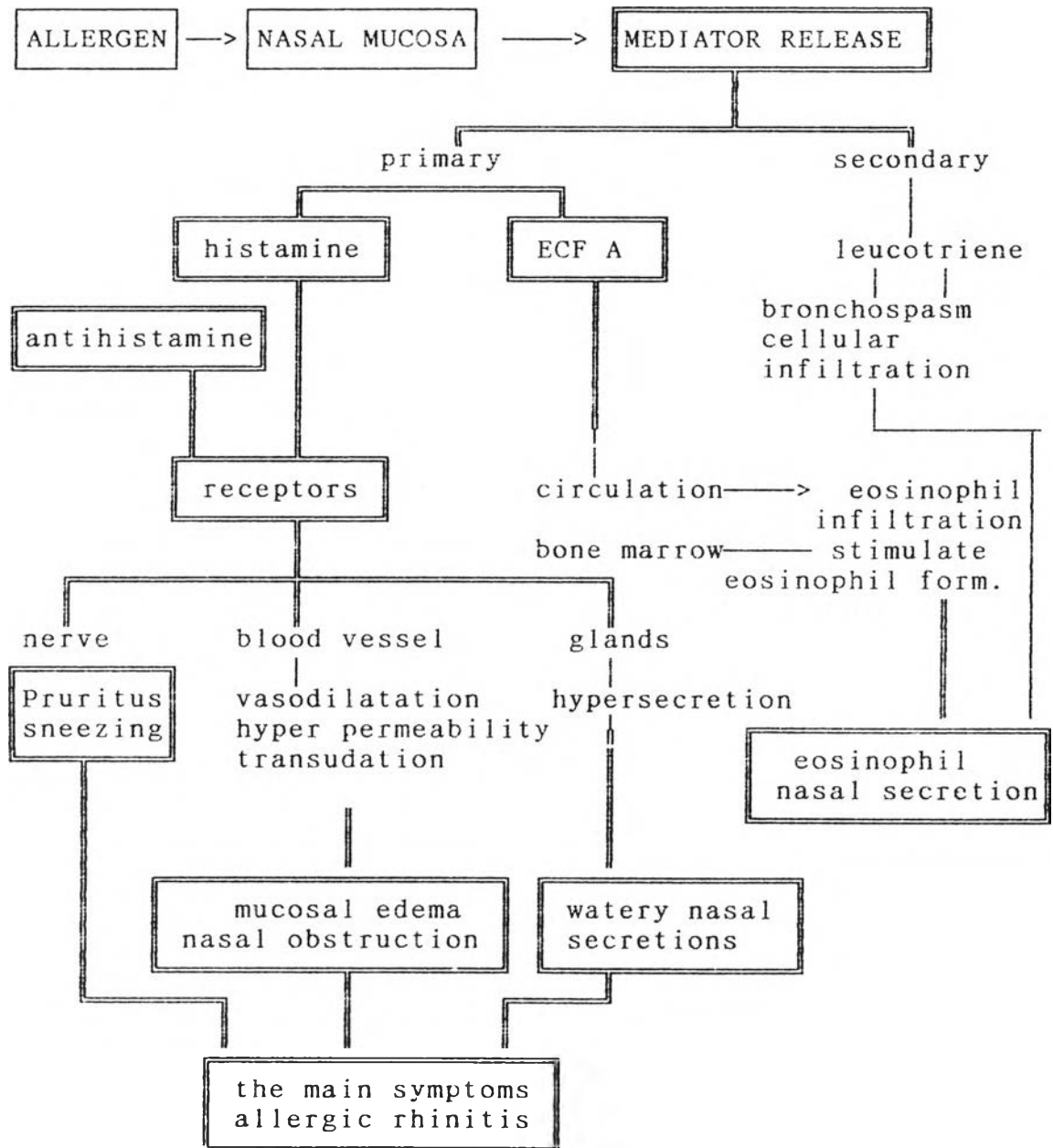
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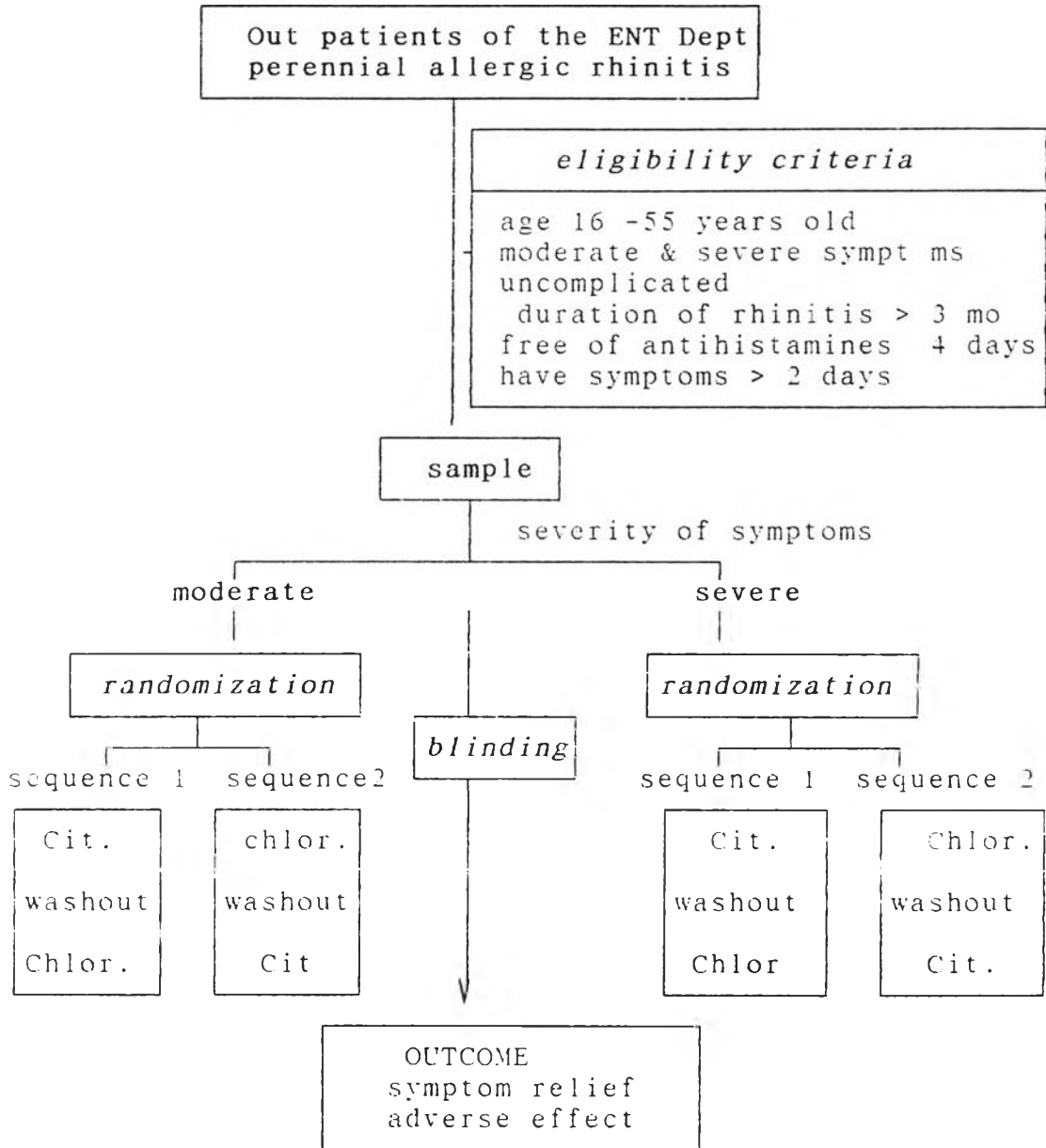
Appendix 1.

PATHOGENESIS OF PERENNIAL ALLERGIC RHINITIS



Appendix 2.

Overview of the study design



Appendix 3.

Calculation of Kappa

6.1. During Cetirizine treatment

		Physician 1		total
		success	failure	
Physician 2	success	58	2	60
	failure	1	11	12
total		59	13	72

1. Total observed agreement = $58 + 11 / 72 = 0.95$
2. Positive by chance = $59 \times 60 / 72 = 49.16$
3. Negative by chance = $13 \times 12 / 72 = 2.16$
4. proportion of the chance agreement = $(49.16 + 2.16) / 72 = 0.71$
5. Agreement beyond chance = $0.95 - 0.71 = 0.24$
6. Potential agreement beyond chance = $1 - 0.71 = 0.29$
7. Kappa = $0.24 / 0.29 = 0.82$

6.2. During Chlorpheniramine treatment

		Physician 1.		total
		success	failure	
Physician 2.	success	60	1	61
	failure	1	7	8
total		61	8	69

1. Total observed agreement = $60 + 7 / 69 = 0.97$
2. Positive by chance = $61 \times 61 / 69 = 53.92$
3. Negative by chance = $8 \times 8 / 69 = 0.92$
4. Proportion for chance agreement = $(53.92 + 0.92) / 69 = 0.79$
5. Agreement beyond chance = $0.97 - 0.79 = 0.18$
6. Potential agreement beyond chance = $1 - 0.79 = 0.21$
7. Kappa = $0.18 / 0.21 = 0.85$

Appendix 4.

The adverse effects event during the treatment:

1. Dry mouth

Excluding dropouts and confounders

		10 mg Cetirizine		
		positive	negative	total
8 mg Chlorpheniramine	pos.	6	12	18
	neg.	8	41	49
	total	14	53	67

$$\text{Mc Nemar stat.} = \frac{\{ |12-8|-1 \}^2}{12+8} = 0.45 \rightarrow \text{not significant}$$

The 90% confidence interval was $0.054 < 0.059 < 0.06$

2. Visual disturbance

Excluding dropouts and confounders

		10 mg Cetirizine		
		pos.	neg.	total
8 mg Chlorpheniramine	pos.	3	5	8
	neg.	7	52	59
	total	10	57	67

$$\text{Mc Nemar stat.} = \frac{\{ |5-7|-1 \}^2}{5+7} = 0.08 \rightarrow \text{not significant}$$

90% Confidence interval = $-0.098 < 0.03 < 0.068$

3. Headache

Excluding dropouts and confounders

		10 mg Cetirizine		
		pos.	neg.	total
8mg Chlorpheniramine	pos.	7	15	22
	neg.	8	37	45
total		15	42	67

$$\text{Mc Nemar stat.} = \frac{\{ |15-8| - 1 \}^2}{15 + 8} = 1.56 \rightarrow \text{not significant}$$

$$90\% \text{ Confidence interval} = -0.24 < 0.10 < 0.23$$

4. Urinary problem

Excluding dropouts and confounders

		10 mg Cetirizine		
		pos.	neg.	total
8 mg Chlorpheniramine	pos.	0	4	4
	neg.	3	60	63
total		3	64	67

$$\text{Mc Nemar stat.} = \frac{\{ |5-3| - 1 \}^2}{5 + 3} = 0.08 \rightarrow \text{not significant}$$

$$90\% \text{ Confidence interval} = -0.064 < 0.015 < 0.094$$

Variation of symptoms

VII. How many times do you sneeze during your worse symptoms ? less than 3 times
 3 to 5 times
 6 to 8 times
 more than 8 / uncountable

VIII. How many times do you blow out your nasal secretion during that time ? no secretion
 1 or 2 times
 repeated blowing
 profuse nasal secretion

IX. Do you have nasal obstruction during your worse symptoms ? no obstruction
 partial obstruction
 total nasal obstruction

X. Do you have other symptom during that time ?
 yes
 no

The symptoms are : headache
 smell disturbance
 taste disturbance
 fatigue
 sedation
 difficult to concentrate

XI. How long is your worse symptoms happen everyday ?
 less than half hour
 30 min. to 1 hour
 more than 1 hour

XII. Physical examinations

The ear : normal
 abnormal, record:.....

The Nose :

Nasal mucosa : pink (normal)
 hyperemia
 pale/ bluish
 secretion : no secretion
 positive
 profuse
 concha : no edema
 partial edema
 severe (total obstruction)

Paranasal sinuses : N
 abN

Sinus X Ray :

The throat :
 Pharynx :
 Tonsils :

XIII. Cytologic nasal secretion :
 1. eosinophil
 2. neutrophil

XIV. Renal F.T. : Creatinine clearance ()
 Liver F.T. : SGPT ()

XV. Allergic Skin prick testing
 house dust
 dust mite
 human dander
 dog dander
 cat dander
 milk
 egg

Appendix 6.

Patient's symptom scores during treatment.

Symptom score

sequence	patient number	Cetirizine DAY							Chlorpheniramine DAY						
		1	2	3	4	5	6	7	1	2	3	4	5	6	7
Cet/CTM	3	1	1	2	2	1	1	1	1	1	1	1	1	1	2
	4	0	1	2	2	0	0	0	1	1	1	1	1	1	0
	5	1	1	1	1	1	1	1	2	2	1	1	1	1	1
	7	1	1	1	1	1	1	0	1	1	1	1	1	1	1
	9	1	1	1	so sleepy stop				the drug						
	31	0	2	2	2	2	2	2	1	1	0	0	1	1	1
	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	33	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	36	0	1	0	1	1	2	2	1	0	1	1	1	0	0
	38	2	2	2	2	2	2	2	1	1	1	1	1	1	1
	54	1	1	1	1	1	1	1	address cannot be found						
	55	3	3	3	3	3	3	3	2	2	2	2	2	2	2
	57	2	2	1	1	1	0	0	0	0	0	0	0	0	0
	59	0	0	0	1	2	1	0	1	0	0	1	0	1	0
	60	1	1	1	1	0	0	0	address cannot be found						
	72	1	2	1	1	1	1	1	2	1	0	0	0	0	0
	74	0	0	0	0	0	0	0	1	1	1	1	1	1	1
	75	2	2	2	2	3	3	3	2	2	2	1	1	1	1
	78	1	2	1	1	1	2	1	3	3	3	2	2	2	2
79	2	0	1	1	0	0	1	0	0	0	0	0	0	0	
11*	- patient didn't come since the first sequence														
14	- and the address was difficult to be														
15	- found														
17	1	1	1	1	1	1	1	1	0	1	1	1	1	1	
mod	18	0	0	0	0	0	1	2	1	1	2	1	1	2	2
	23	2	2	2	headche				stop the drug						
	24	1	1	1	2	2	2	2	1	2	2	2	2	2	2
	25	1	2	2	2	2	1	1	2	1	2	1	2	1	1
	26	0	1	1	0	0	1	1	1	1	1	1	1	1	1
	29	2	1	1	1	1	1	1	0	0	0	0	0	0	0
	41	1	1	2	2	2	2	2	2	2	2	3	3	2	2
	44	1	0	0	0	0	0	0	0	0	0	0	0	1	1
	46	1	0	0	0	0	0	0	address can't be found						
	47	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49	2	2	1	2	2	3	3	3	3	2	2	2	2	1	
63	1	1	0	0	0	0	2	0	0	0	0	0	0	0	
64	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
66	patient couldn't come for control														
67	2	2	2	2	2	2	2	1	0	1	0	0	1	0	
70	patient couldn't come for control														

continoud		symptom score													
sequence	patient number	Cetirizine DAY							Chlorpheniramine DAY						
		1	2	3	4	5	6	7	1	2	3	4	5	6	7
CTM/ Cet	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2
	2	1	2	1	1	1	2	1	2	2	1	1	1	2	1
	6	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	8	1	1	1	1	1	1	1	1	0	1	0	0	0	0
	10	0	0	1	0	0	0	0	2	2	2	2	2	3	3
	34	3	3	2	0	0	0	0	2	3	3	2	0	3	3
	35	1	1	1	1	1	1	1	2	1	1	1	1	1	0
	37	1	0	1	1	1	1	1	1	0	1	1	1	1	1
	39	1	1	1	1	1	2	2	1	1	1	1	1	1	1
	40	1	1	1	1	1	0	1	1	1	1	0	0	0	1
	51	1	1	0	2	2	2	2	2	2	2	2	2	2	2
	52	2	1	2	2	1	1	1	2	1	2	2	1	1	2
	53	1	1	1	1	1	1	1	1	1	1	2	1	1	1
	56	1	0	0	0	1	1	1	0	0	0	0	0	0	0
	58	2	2	2	2	2	2	2	2	2	2	2	1	1	1
	71	2	3	3	2	2	2	2	0	0	0	0	0	0	0
	73	1	1	1	1	1	1	1	2	2	1	1	1	1	1
	76	1	1	3	1	1	1	1	1	0	1	1	1	1	1
	77	1	1	2	2	2	2	2	1	1	1	1	1	1	1
	80	no case													
12 *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	1	0	0	0	0	3	1	0	1	1	1	1	1	1	
16	0	0	0	0	0	1	0	1	1	1	1	1	1	1	
19	0	0	0	0	0	0	0	0	0	1	1	1	0	0	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	0	0	0	0	1	0	0	1	0	0	0	
22	2	1	1	2	1	0	0	1	1	1	1	1	1	1	
27	0	0	0	0	0	0	0	0	2	2	1	1	0	0	
28	0	0	0	0	0	0	0	1	1	1	0	0	0	0	
30	2	0	0	0	0	0	0	2	2	2	2	3	3	3	
42	1	0	2	0	1	1	1	1	2	2	2	2	1	1	
43	1	1	0	0	0	1	0	0	0	0	0	0	0	0	
45	1	0	0	0	0	0	0	1	1	0	0	0	0	0	
48	0	1	0	0	0	1	1	2	2	2	2	2	2	2	
50	1	1	1	1	0	0	0	1	2	1	2	2	1	1	
61	0	1	0	1	1	1	1	1	0	0	0	0	0	0	
62	0	0	0	0	0	0	0	1	1	1	2	2	2	1	
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
68	1	0	0	0	0	0	0	2	1	1	1	1	1	1	
69	0	0	0	0	0	0	0	1	0	0	0	0	0	0	

Appendix 7. Patient's sedation side effect score
Sedation score

sequence	patient number	Cetirizine DAY							Chlorpheniramine DAY						
		1	2	3	4	5	6	7	1	2	3	4	5	6	7
Cet/CTM	3	1	1	1	1	1	1	1	6	6	6	6	6	6	6
	4	5	1	1	1	1	1	1	1	6	6	2	6	1	1
	5	-	2	4	6	4	6	4	3	5	5	6	6	-	5
	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9	6	6	6	stop	...	...	...	.....	.....	.....	.....	.....	.....	.....
	31	-	3	3	5	5	5	4	1	1	1	1	6	6	6
	32	-	-	-	-	-	-	-	3	3	3	3	3	3	4
	33	1	1	5	5	5	5	5	1	1	1	1	6	6	6
	36	6	6	6	6	6	6	6	-	-	-	-	-	-	-
	38	2	2	2	2	2	2	2	-	-	-	-	-	-	-
	54	5	5	1	5	1	5	1	address could not be found						
	55	5	5	5	5	5	5	5	4	4	5	5	5	5	5
	57	6	6	6	6	1	1	1	6	6	6	1	1	1	1
59	2	2	4	5	2	2	2	2	2	2	2	2	2	2	
60	-	-	-	-	-	-	-	address could not be found							
72	6	6	6	3	3	3	3	-	-	-	-	-	-	-	
74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
75	-	-	-	-	-	-	-	3	3	3	2	2	2	2	
78	-	-	-	-	-	-	-	1	1	1	2	2	2	2	
79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
11	- patient didn't come since the first period														
14	- and the address was difficult to be														
15	- found														
17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
mod	18	-	-	-	-	-	-	-	7	7	5	4	5	2	2
	23	-	-	-	headache	stop	.....	.....	.....	.....	.....	.....	.....	.....
	24	2	2	2	2	2	2	2	-	-	-	-	-	-	
	25	-	-	-	-	-	-	-	7	1	7	1	5	1	
	26	-	-	-	-	-	-	-	-	-	-	-	-	-	
	29	3	2	2	2	2	2	2	-	-	-	-	-	-	
	41	6	5	4	-	-	-	-	6	5	1	5	5	1	1
	44	5	5	5	5	5	5	5	-	-	-	-	-	-	
	46	-	-	-	-	-	-	-	address could not be found						
	47	-	-	-	-	-	-	-	3	3	3	3	3	3	3
49	6	6	4	4	4	6	4	-	-	-	-	-	-		
63	1	1	6	1	1	1	1	-	-	-	-	-	-		
64	5	1	4	4	4	4	4	-	6	6	6	6	4	-	
66	patient did not come for control														
67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
70	patient did not come for control														

continued

sedation score

sequence	patient number	Cetirizine DAY							Chlorpheniramine DAY						
		1	2	3	4	5	6	7	1	2	3	4	5	6	7
severe	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	6	6	1	1	-	5	5
	6	-	-	-	6	6	6	6	-	-	6	6	6	6	6
	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	-	-	-	-	-	-	-	1	1	3	3	3	3	3
	34	-	-	-	-	-	-	-	-	-	-	6	6	6	6
	35	-	-	-	-	-	-	-	6	6	4	4	4	4	4
	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	39	1	-	3	4	6	-	5	-	-	-	-	-	-	-
	40	-	-	-	-	-	-	-	3	3	3	3	3	-	3
	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	52	-	4	-	-	-	-	-	6	4	-	2	-	-	2
	53	-	-	-	-	-	-	-	3	4	3	3	3	3	3
	56	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	58	6	5	5	5	5	5	5	6	6	6	6	6	6	6
	71	-	-	-	-	5	5	5	3	3	3	-	-	-	-
	73	-	-	-	-	-	-	-	2	2	2	2	2	2	2
	76	-	-	-	-	-	-	-	1	-	5	-	-	-	-
	77	-	-	-	-	-	-	-	6	4	-	-	-	-	-
	80	no case													
12	-	-	-	-	-	-	-	2	2	-	-	-	-	-	
13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
moderate	16	-	-	-	-	-	-	6	-	-	6	6	-	-	
	19	-	-	-	-	-	-	4	3	3	1	2	3	3	
	20	-	4	6	6	6	6	4	6	6	6	6	6	6	6
	21	-	-	-	-	-	-	-	2	-	-	-	-	-	-
	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	28	-	-	-	-	-	-	-	3	3	3	3	2	2	3
	30	-	-	-	-	-	-	-	6	6	6	6	6	6	4
	42	3	3	3	3	-	-	-	-	-	-	-	-	-	-
	43	-	-	-	-	-	-	-	-	-	5	5	5	5	5
45	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
50	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
62	-	-	-	-	-	-	-	-	-	-	6	-	-	-	
65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
68	-	-	-	-	-	-	-	-	-	-	-	-	6	-	
69	4	4	4	4	4	4	4	-	-	-	-	-	-	-	

Appendix 8.

Data of the physician assessment,

Cetirizine/Chlorpheniramine

 Periode I Periode II

Number

3	S	S
4	S	S
5	S	S
6	S	S
7	S	S
8	D. O.	-
31	F	S
32	S	S
33	S	S
36	S	S
38	S	F
44	S	D. O.
55	S	S
57	S	S
59	S	S
60	S	D. O.
72	S	S
74	S	S
75	F	S
76	S	F
79	S	S
17*	F	S
18	F	F
23	D.O.	-
24	S	F
25	S	S
26	S	S
29	S	S
41	F	F
44	S	S
46	S	D.O.
47	F	S
49	F	S
63	S	S
64	S	S
66	D.O.	-
67	S	S
70	D.O.	-

note: 2 to 79 : severe cases

17 to 70 : moderate cases

Continued : Chlorpheniramine/ Cetirizine
 Periode I Periode II

Number	Periode I	Periode II
1	S	S
2	F	S
6	S	F
8	S	S
10	S	S
34	S	S
35	S	S
37	S	S
39	S	S
40	S	S
51	S	S
52	S	S
53	S	S
56	F	F
58	S	S
71	S	S
73	S	S
76	S	F
77	S	F
80	no case	
12*	S	S
13	S	S
14	D.O.	-
15	D.O.	-
16	S	S
19	S	S
20	S	S
21	S	S
22	S	S
27	S	S
28	S	S
30	S	S
42	S	S
43	S	S
45	S	S
48	S	S
50	S	F
61	S	S
62	S	S
65	S	F
68	S	S
69	S	S

VITAE

Mrs Suprihati Asmuni was born on June 21, 1950 in Banjarnegara, Indonesia. She graduated as General Physician from Faculty of Medicine, Diponegoro University, Semarang in 1976 and further study in Otolaryngology and got the Diploma in 1983.

She has been enrolled in the Master's degree in Health Development at Faculty of Medicine, Chulalongkorn University Bangkok under The THAI CERTC Consortium since June 1994. She is now in charge of the Rhinology Subdivision, department of Otolaryngology, Faculty of Medicine Diponegoro University in Semarang, Indonesia.

