

(19)
(12)

(KR)
(A)

(51) 。 Int. Cl.⁷
A61K 31/66

(11)
(43)

2003-0097611
2003 12 31

(21)	10-2002-7013595 ()		
(22)	2002 10 10		
(62)	2000-7000680		
	: 2000 01 21		2001 04 04
	2002 10 10		
(86)	PCT/US1998/14796	(87)	WO 1999/04773
(86)	1998 07 17	(87)	1999 02 04

(30)	60/053,351	1997 07 22	(US)
	60/053,535	1997 07 23	(US)
	9717590.5	1997 08 20	(GB)
	9717850.3	1997 08 22	(GB)

(71)	07065	126
	168 SK	11

(72)	07065	126
	2	
	07065	126
	07065	126

(74)	:
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(54)

가

H2

1

， ， ， ， H2 ，

- 1 5 50ml 5 (270X) . (
- 2 5 0.20mg/ml 50ml 5 (270X) . (
- 3 0.80mg/ml 50ml 1 24 (270X) .
- 4 0.80mg/ml 50ml 1 7 (270X) .
- 5 1 , 7 1 0.80mg/ml 50ml 4 (270X) .
- 6 2 , 3 4 1 0.40mg/ml 50ml 8 (270X) .
- 7 5 0.20mg/ml 50ml 5 (270X) .
- 8 5 4.0mg/ml 50ml 5 (270X) .

， 1 1 ， 1 2 ， 2 1 ， 1 2

· ，

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， ， (periprosthetic) ， ，

가

가

가

가

[: H.

Fleisch, Bisphosphonates In Bone Disease, From The Laboratory To The Patient, 2nd Edition, Parthenon Publishing(1995):].

가
가
가

(mineralization)

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mber 3, pp.288-298 (September 1995):].

가

가

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[: Fleisch, Id].

[: E.G. Lufki

n et al., Pamidronate: An Unrecognized Problem in Gastrointestinal Tolerability, Osteoporosis International,

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ophagitis - - The Case of Alendronate, New England Journal of Medicine, vol. 335, no, 124,pp. 1058 -1059(1

996), and U.A. Liberman et al., Esophagitis and Alendronate, New England Journal of Medicine, vol. 335, no,

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ostmenopausal Osteoporotic Woman: Effect of Multiple Dosages on Bone Mass and Bone Remodeling, The A

merican Journal of Medicine, vol.99, pp. 144 -152, (August 1995):].

가

가 : (1)

(2)

, , , 가

, 30 , 가

가 , 4,

761,406 (Flora et al. 1988 8 2) - ,

가
[: L. Morthensen, et al., Prevention Of Early Postmenopausal Bone Loss By Risedronate, Journal of Bone and Mineral Research, vol. 10, supp. 1, p.s 140(1995):].

가 가
5,366,965 (Strein. 1994 11 22) ,
WO 95/30421 (Goodship et al. 1995 11 16)
가

가
1 2 , 1 1 , 1 2 , 2 1
(, 'GERD': gastrointestinal reflux disease), (, 가)

30
가

(, 'GERD'), (, 가)

1 1 , 1 2 , 2 1 , 1 2

3 1 16 1

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가

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, 1 1 , 1 2 , 2 1

, 1 2

가

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, 3 1 16 1

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, 8.75mg 140mg

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, 8.75mg 140mg

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%

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1 1

, 1 2 , 2 1 , 1 2

3 1 16 1 가

, 'GERD', , , .

), (,) GERD, , , , , 가 , .

$$\left(\begin{array}{c} \text{ } \\ \text{ } \\ \text{ } \end{array} \right)$$

가

가

가 . , 가

2
10, 가 2 20, 1 20, 6
1 10 .

가 , ,

$$1 \quad 1 \quad , \quad 1 \quad 2 \quad , \quad 2 \quad 1 \quad 1 \quad 2$$

1 1 1 1 , 7 1 , 1 1
 . 1 1 , 7 . 1 1
 , 1 1 2 2

1 2 1 2 , 7 2 , 3 4
 . 1 2 , 1 2 1
 . 1 2 1 2

2 1 2 1 , 14 1 , 2 . 2
 . 2 1 , 14 . 2
 1 , 2 1 2 2 2

1 2 1 2 , 1 2 2
 1 2 . 1 2 1 ,
 14 16 . 1 2 1
 15 , 1 2 1 2
 , 1 2 2 1 가 , 2 1
 , 1 , 1 2 24 (1 12) , 2 1
 26 (1 52)
 , 3 1 16 1

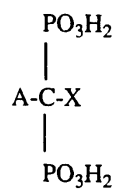
가
 , , 2 ,
 (,) ,
 (,)

가 (turnover); ; ;

WO 95/30421(Goodship et al. 1995 11 16
 ())

•

•



,

A	X	H, OH,	, NH ₂ , SH,	, C1-C30	, C1-C30	, C1-C10
NH ₂ ,	C1-C10		, C1-C10		, C1-C10	

가

. C1-C30 , , NH₂, C1-C10 , NH₂, OH, SH C1-C10 , 가

, A X , X A , 가

A ()X 가 , , , 가 .

A가 H, OH, X, C1-C30, C1-C30
C1-C10 :

A가 H, OH, Cl, X, C1-C30, C1-C30, Cl

가 A가 OH, X 3- 4- -1-

-C1 -C30 -

가 , 가 , 가

%

70mg

•

, 4- -1- -1,1- .

1,1- (, 4- -1- -

[illegible]

1.5 6000µg/kg() 10
2000µg/kg()
8.75mg 140mg
17.5mg 70mg
35mg
70mg
8.75mg 35mg
17.5mg
35mg
140mg 70mg
35mg
140mg

H2 ()
H2 (, pH) ()
H2
[: L.J. Hixson, et al., Current Trends in the Pharmacotherapy for Peptic Ulcer Disease, Arch. Intern. Med., vol. 152, pp.726-732(April 1992);]. H2 ()

H2 ()
30 24
H2 () 30 12
H2 ()
H2 ()

(blister pack)
가,

H2 ()

< >

가

1

가

: (1), 1

(2), 5

4), 4 1 1 (5), 4 1 2

(6), 5 (8).

:

(1) (pH 2),

(2) , 0.20mg/ml (pH 2).

(3) , 0.80mg/ml (pH 2).

(4) , 0.40mg/ml (pH 2).

(5) , 0.20mg/ml (pH 2).

(6) , 0.40mg/ml (pH 2).

0.90(%) NaCl() 147ml (L-585, 228000B003, Fisher Chemical) 960mg , 1.

0M HCl() 3ml 가 300ml ,

pH , 1.0M HCl() 1.0M NaOH() pH 2 .

30 5

0ml . :

1: 4 [(1)] 50ml 5

2: 4 0.20mg/ml [

(2)] 50ml 5 .

3: 5 0.80mg/ml [

(3)] 50ml 1 . 1 24 .

4: 5 0.80mg/ml [

(3)] 50ml 1 . 1 7 .

5: 6 0.80mg/ml [(3)] 50ml 4 1 1 , 7 4 7

6: 6 0.40mg/ml [(4)] 50ml 4 1 2 , 3 4 4 8

7: 8 0.20mg/ml [(5)] 50ml 5

8: 4 4.0mg/ml [(5)] 50ml 5

1

1 () , 가 가 1 1

2 , 2 2

3 , 3 3

4 , 가 (5 2) (5 3) 4 4

5 , 가 가 5

6 , 6 6

7 , 7 7

8 , 8 8

(2) , 1 (3 4) 가 (1 (5) 1 2 (6) , 가 (7) 2) (8) 가 ,

[1]

mg/ml				
1 (n=4)	0	5 1		

2 (n=4)	0.20	5 1		
3 (n=5)	0.80	1	24	
4 (n=5)	0.80	1	7	(5 2) (5 3)
5 (n=6)	0.80	1 1 4 ,	7	
6 (n=6)	0.40	4 1 2		
7 (n=8)	0.20	5 1		(8 4)
8 (n=4)	4.0	5 1	24	(4 3 ,)

_____2
1 _____1

7 (7 8). , 70mg 1 1 1 ,
(,) 1 . ,
.

_____35mg 1 1 1 , 7
(7 8). ,
(,) 1 . ,
.

_____3
1 _____2

_____35mg 1 1 2 , 3
(7 8). ,
4 (,) 1 . ,
.

(7 8). , 17.5mg 1 1 2 , 3
4 (,) 1 . ,
.

4
2 1

(7 8). , 140mg 1 2 1 , ,
14 (,) 1 . ,
.

(7 8). , 70mg 1 2 1 , , 1
4 (,) 1 . ,
.

5
1 2

(7 8). , 140mg 1 1 2 , ,
14 16 (, 1 15) 1 . ,
.

(7 8). , 70mg 1 1 2 , ,
14 16 (, 1 15) 1 . ,
.

6
 , 2 5
 ,
 , 2 5
 , ,

7

0 24)

8.75, 17.5, 70 140mg.

8

75ml

75ml 70mg

8.75, 17.5, 35, 140mg.

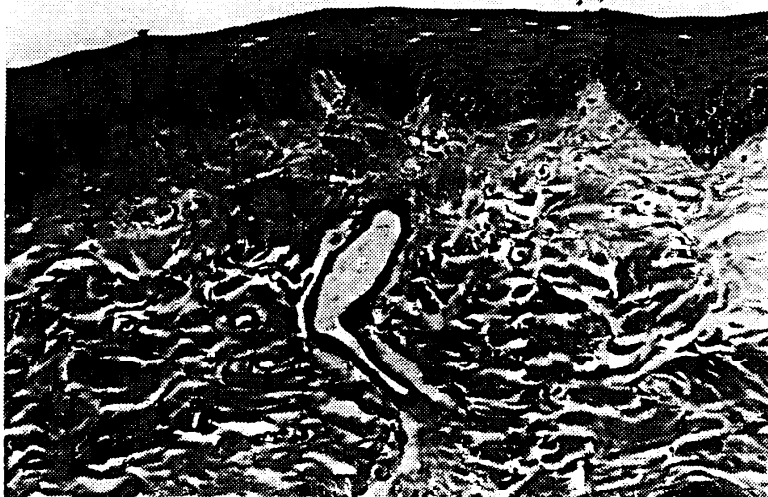
가
가
가
(, 'GERD': gastrointestinal reflux disease),
(, 가
,
가
30
가
.

(57)

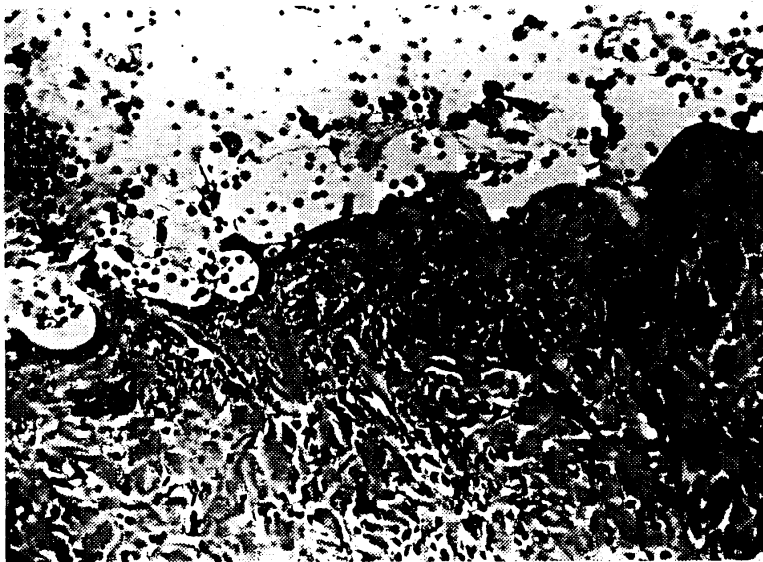
1.
H2
16 1
H2
3 1
2.
H2
2 , 2 1 1 2
H2
1 1 , 1
3.
3 1 16 1
H2
H2
4.
1 1 , 1 2 , 2 1 1 2
H2
H2
5.
(a) 1
(b) 1 H2
6.
5
가

5 7. 6 , H2 가 , , , ,

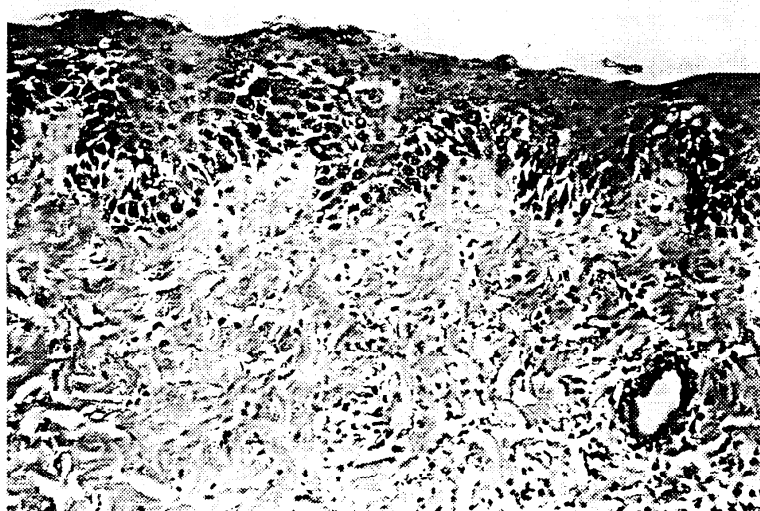
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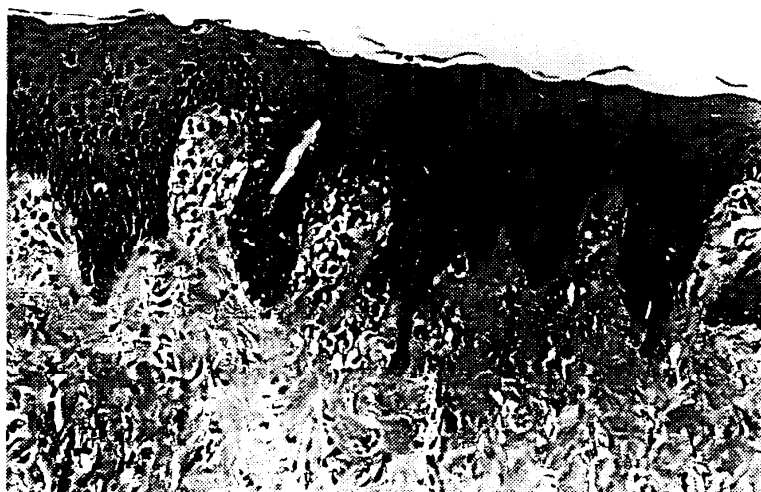
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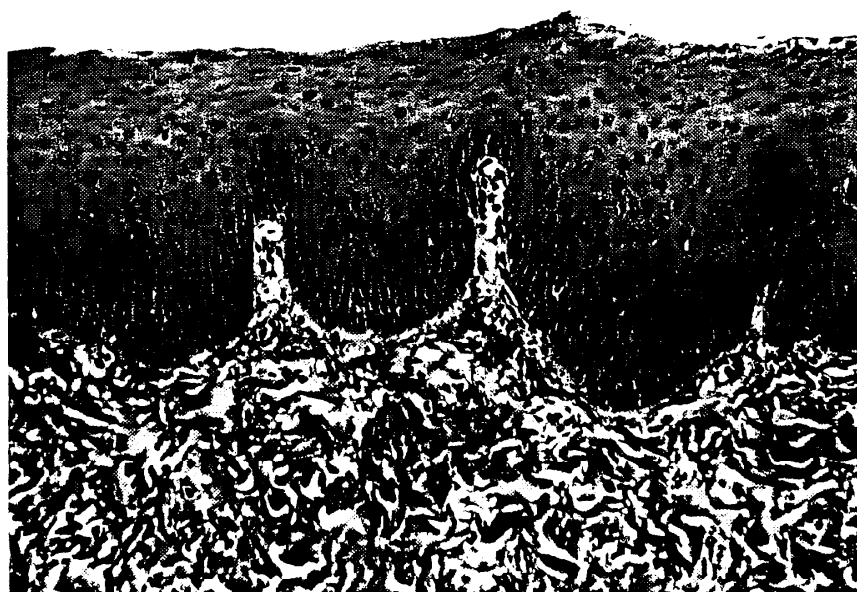
3



4



5



6



7



8

