

« »

,

-

2012

3 10.01.2013. /

2012

2016 ,

, 720000  
90  
: : 51-17-50, 57-32-57, nco\_kg@mail.ru

			.....6
			.....8
	I.		.....10
1.1.			.....10
	II.		.....12
2.1.		?	.....12
2.2.			.....13
2.3.			.....13
2.4.			.....14
2.5.			.....15
2.6.			.....18
2.7.			.....19
2.7.1.	1.		.....22
2.7.2.	2.		.....24
2.7.3.	3.	(8-10 )	.....25
2.8.	-	-	.....26
2.9.			.....26
2.9.1.			.....27
2.9.2.			.....32
2.9.3.			.....33
2.9.4.			.....34
2.9.5.			.....38
2.9.6.			.....39
2.9.7.			.....40
2.9.8.			.....41
	III.	-	.....43
3.1.			.....43
3.2.			.....46
3.3.			.....47
3.4.			.....48
3.5.			.....52

3.6.	,	.....	56
3.7.		.....	59
3.8.		.....	61
3.9.		.....	63
3.10.		.....	66
IV.		.....	67
4.1.		.....	67
4.2.	( )	.....	71
4.3.		.....	72
5.		.....	74
5.1.		.....	74
5.2.		.....	75
5.3.		.....	76
5.4.	,	.....	76
5.5.		.....	77
1		.....	78
		.....	78
2		.....	81
		.....	81
3		.....	99
		.....	99

-2

PAINAD





» (1996). «

SIGN (Scottish Intercollegiate Guidelines Network)  
(Cochrane systematic reviews).

(SIGN).

( ),

1.

2.

87%

67%,

4,8

3.

2010

48.8%, 17578

9,0 %

2010 52 , 468 3267

(<http://book.pallcare.info>)

1 National cancer control programmes: policies and managerial guidelines, 2nd ed. Geneva, WHO, 2002

2 Elizabeth Davies Irene J. Higginson,

3 , 2007

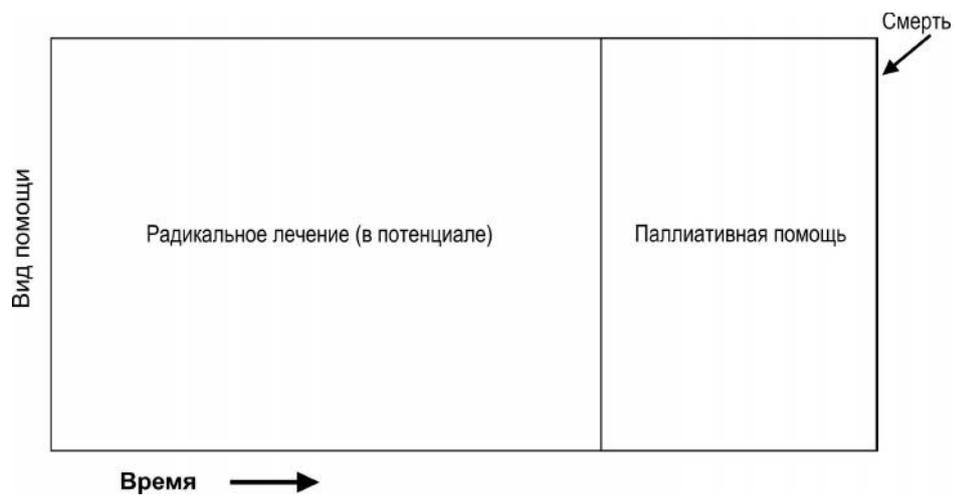
**1.1.**

**I.**

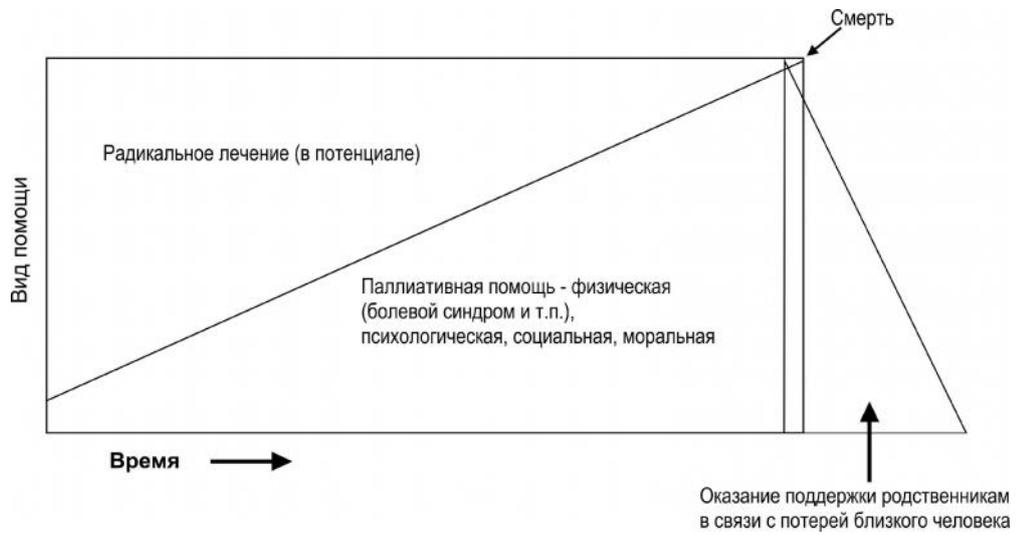
1987

1990

- 
- 
-



. 1



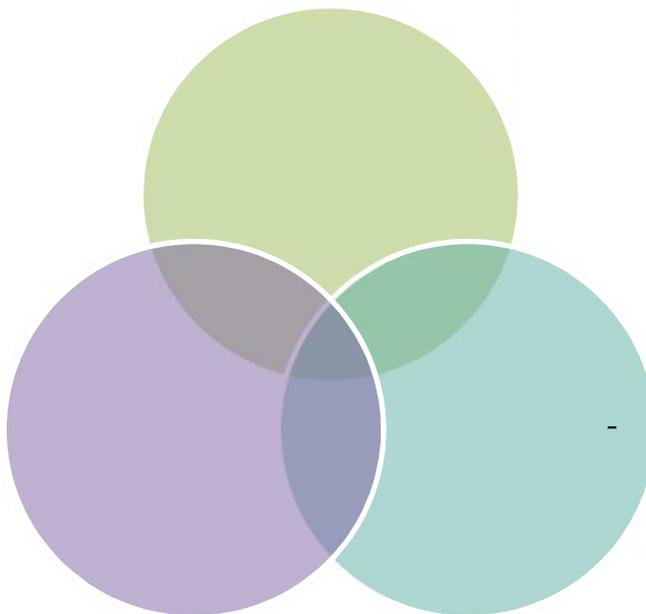
. 2

85%

48.8%, 17578  
( , , / , .)

5.

:



## II.

### 2.1.

?

( )

- «

» [2].

- « , , . » [3].

- , , « - , , ».

## 2.2.

## 2.3.



- « »

- « »

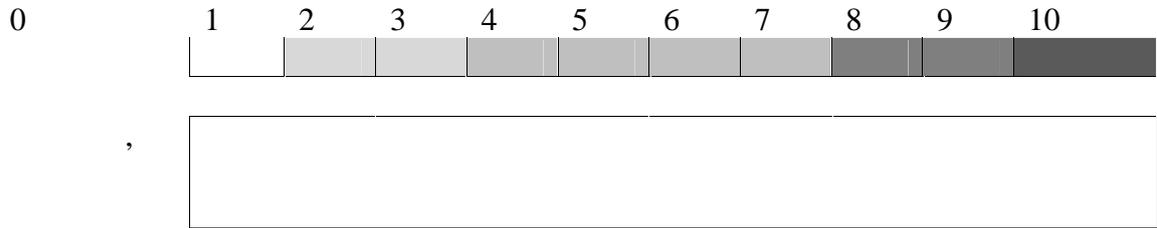
- « » , ( ) ,
- « » ( )
- « »

**2.4.**

— 12  
 « » ( ) —  
 ( ) .  
 :  
 — ,  
 :  
 - — ,  
 - ;  
 - — ,  
 ;  
 - , , .  
 (50-100% , 4 ).  
 ( ) , , 4 ,  
 12 .  
 « » — , , ,





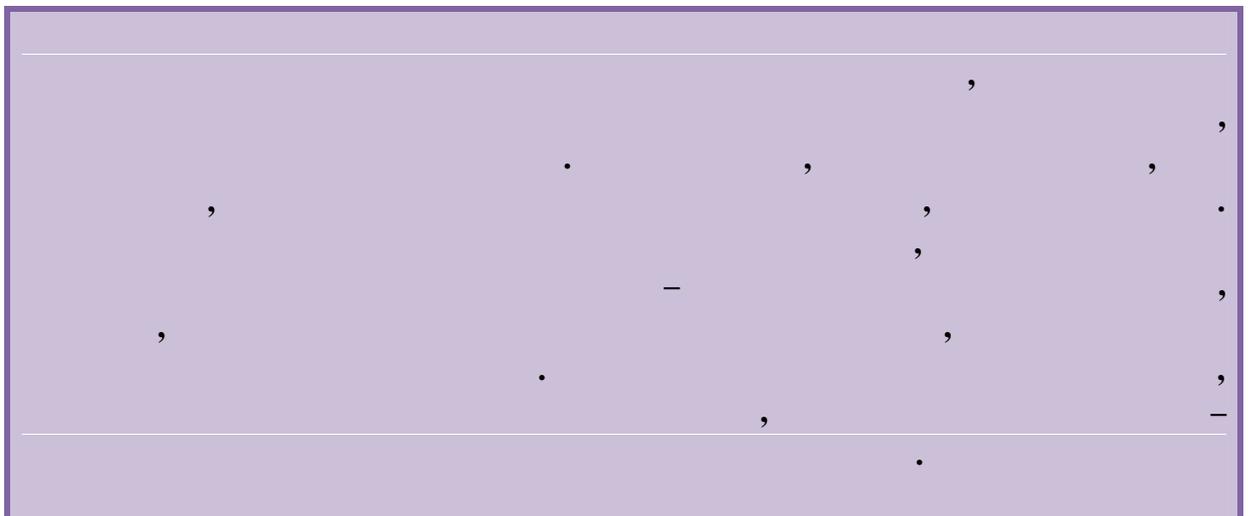


	0	1	2	3	4	5	6	7	8	9	10
Описание степени боли с помощью слов	боль отсутствует		лёгкая боль		умеренная боль		умеренная боль		сильная боль		невыносимая боль
Шкала лиц Вонга-Бекера											
Шкала переносимости боли	боль отсутствует		боль можно игнорировать		мешает деятельности		мешает концентрироваться		мешает основным потребностям		необходим постельный режим

.3. -

[1].

[2].



87%

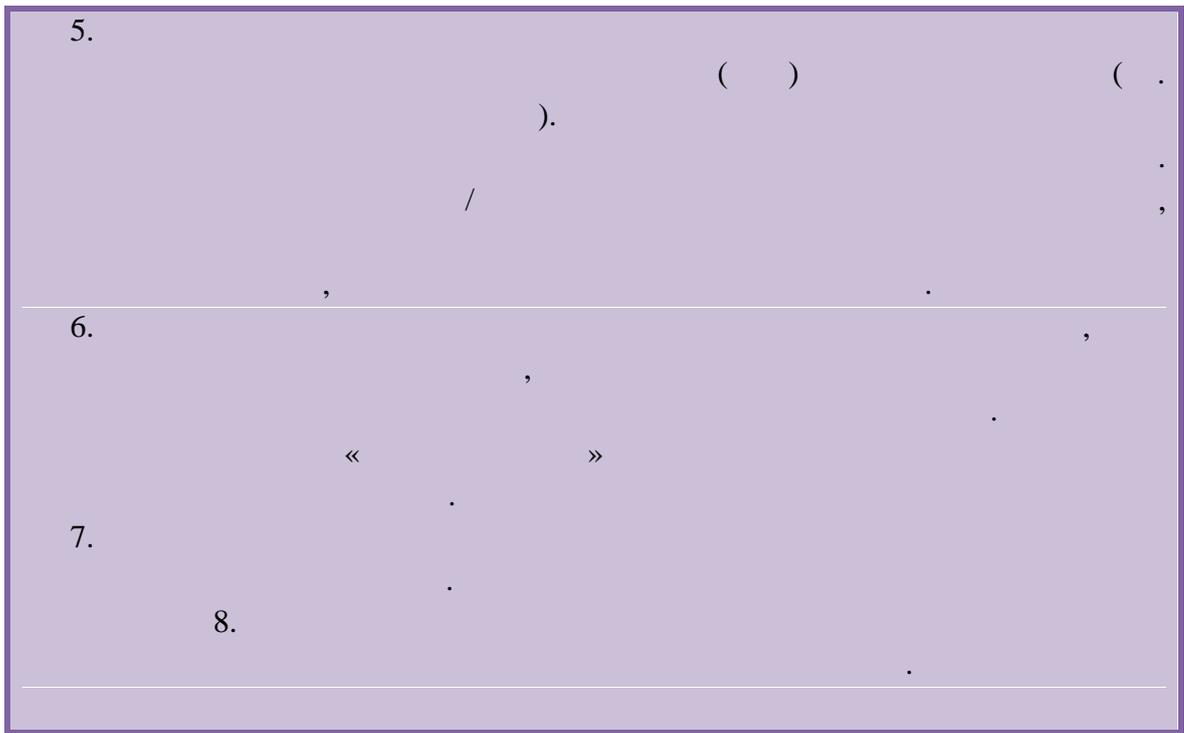
10%

90%

1. Snaith RP. The hospital anxiety and depression scale. Acta Psychiatr Scand 1983;67(6):361-70 [abstract]
2. Anandarajah G, Hight E. Spirituality and medical practice: using the HOPE questions as a practical tool for spiritual assessment. (review) Am Fam Physician 2001;63(1):81-9 [abstract]

## 2.6.

1.
2.
3.
4.



1. Scottish Intercollegiate Guidelines Network (SIGN). Control of pain in adults with cancer, No. 106. 2008. : [www.sign.ac.uk/guidelines/fulltext/106/index.html](http://www.sign.ac.uk/guidelines/fulltext/106/index.html) (accessed 18 Nov 2010)
2. International Association for the Study of Pain, Subcommittee on Taxonomy. Classification of chronic pain. Descriptions of chronic pain syndromes and definitions of pain terms. Pain 1986; (Suppl 3):S1-226
3. Stannard C, Booth S. Pain. Churchill Livingstone, 2004:183-

**2.7.**

- ( ),
- :
- - , .
  - - , .
  - - , .
  - - , .
  - - , .
  - - , .
  - - , .





- 
- 
- 
- 
- 
- 
- 

**2.7.1. 1.**

$$I \quad (1-3) \quad / \quad \pm$$

- . : 0,5-1 4-6  
 - 4 . ,  
 , ( ),  
 -2 (1 2).

[1] , [1].

[2].

$$-2 ( \quad ) .$$

ò

- 
- 
- 

-2,

«

»

[4].

(

),

2-

«

»

)

(

( 4 ).

O -2

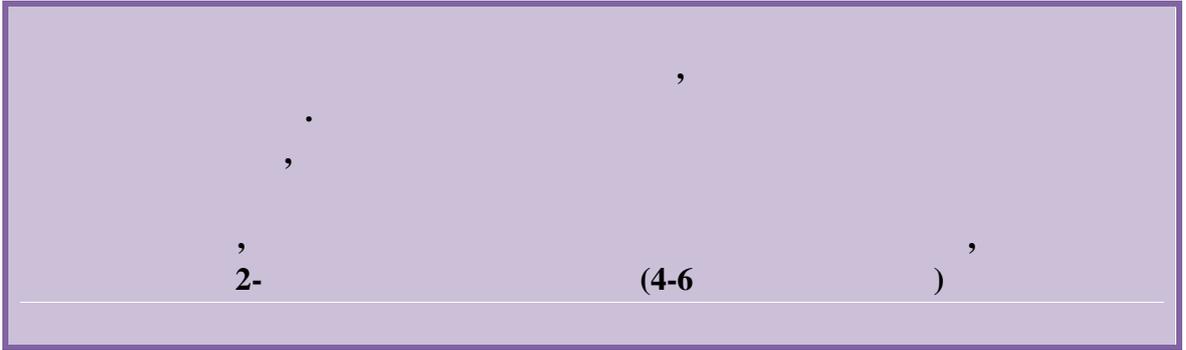
(5).

150 /

2400 /

( ) « »),

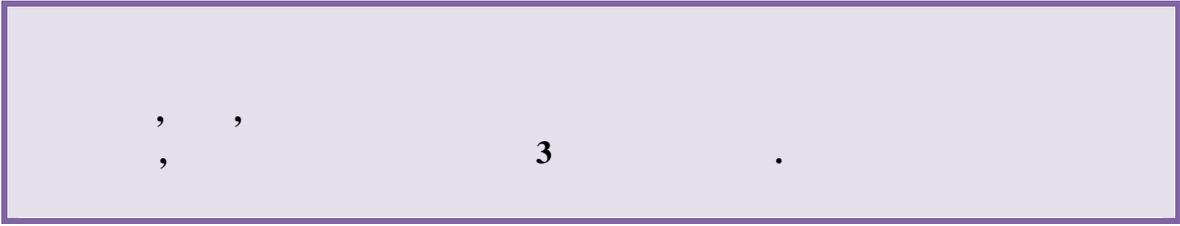
(Metamizol natrii,



2.7.2. 2.

+ ±

1/10  
 : 60  
 30 500 2 30/500  
 ( )  
 - 1/10 : 60  
 - 400 /24  
 5-10.



2.7.3.

3.

(8-10

)

±

±

,

.

:

,

,

,

,

:

,

,

.

.

,

.

,

,

.

,

.

«

»

,

,

.

,

5-7

,

,

.

,

,

,

,

.

,

!

,

,

.

(

2.

.

).

,

,

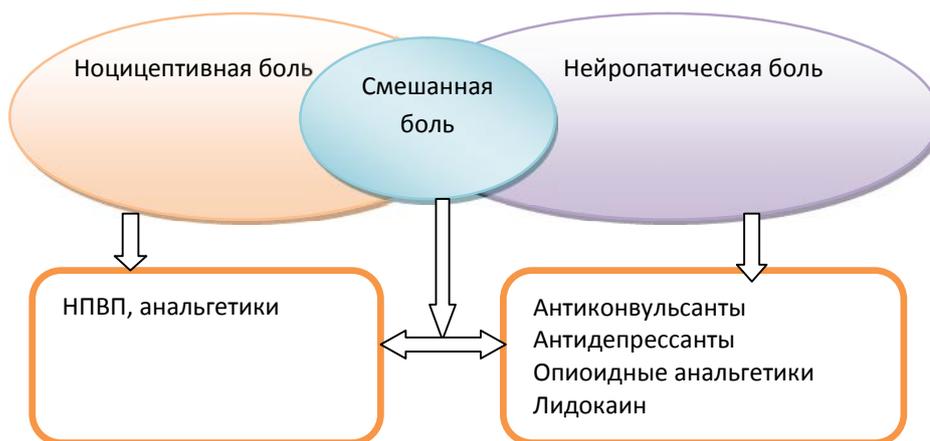
-3-

(M3G)

-6-



100%–



### 2.9.1.

5%

(90%),

300 600 / .

150 / . 2 .

300 / . 4  
(600 / .) 7-

( );

( ),



5%	-	,	1-3 12	12 3 12	,	,	
		,	10 / .. 12 ; 10-25 / .	75 / .	CYP450 2D6 ( : );	; ; ; ; ;	; ;
			150 / .. 2 .			,	

			3 300 600 / .	600 / .		,	,	-
		( . . . .)	50-100 / ., 4	400 / .	2D4; CYP450	,	,	,
: CYP450- P450, - , - ,								

- . , ,  
( ) . ,  
- . [4]

### 2.9.2.

(Breakthrough Cancer Pain (BTCP)). « ( )  
, , ,  
». [1]

,  
( ) ,  
( ) , ,

- 
- , , .
- / .
- 
- « ( )  
».

- “  
( )»
- ( ) .

- - ( ) , ,

- 
- 

( ), ( ) .

24

1-3

/

( : 20-30 ;

: 60-90 ) [1]

(3-6 )

( ) 60

( . . ) ( 30

[2].

( , ) .

1. Bailey F, Farley A. Oral opioid drugs. In: Davies A, ed. Cancer-related breakthrough pain. Oxford: Oxford University Press, 2006:43–55
2. Davies AN, Dickman A, Reid C, et al. The management of cancer-related breakthrough pain: recommendations of a task group of the Science Committee of the Association for Palliative Medicine of Great Britain and Ireland. (practice guideline) Eur J Pain 2009;13(4):331-8 [abstract] [full text subs]

### 2.9.3.

1. , ,
2. , , 50
3. ( )
- 4.
- 5.

• 90 / ( )  
 - 500 0.9% ( 375 )  
 - 4½ ( 1½ , )  
 • - / ( ) 1500  
 • ( )  
 • 14 [1,2]  
 • :  
 • ,  
 • 4-8 .  
 • , :  
 • 2 :  
 • :  
 • 90  
 • 4 :

1. Mannix K, Ahmedzai SH, Anderson H, et al. Using bisphosphonates to control the pain of bone metastases: evidence-based guidelines for palliative care. (review) Palliat Med 2000;14(6):455-61 [abstract] [full text subs]
2. Groff L, Zecca E, De Conno F, et al. The role of disodium pamidronate in the management of bone pain due to malignancy. (clinical trial) Palliat Med 2001;15(4):297-307 [abstract] [full text subs]

**2.9.4.**

- ;  
 - ;  
 ;



	(		.
	)		-
	.		,
			,
			.
			.

			-
			-
			-
			- ;
			- 6
/			





- , , ( );
  - : ,
- .
- .
- :

1. American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons. Pharmacological management of persistent pain in older persons. (practice guideline) J Am Geriatr Soc 2009;57(8):1331-46 [more] [full text subs]

### 2.9.6.

,

.

,

- ,

.

[1].

« »

.

-

,

,

,

-

,

,

( , )

[2].

,

- ,

,

.

(Doloplu)s-2 (PAINAD). (Abbey Pain Scale),

2 6

) (

),

2. National Patient Safety Agency. Understanding the patient safety issues for people with learning disabilities. London: NPSA, 2004. Available from: [www.npsa.nhs.uk](http://www.npsa.nhs.uk) (accessed 22 Nov 2010)
3. Gates B, Barr O. Oxford handbook of learning and disability nursing. Oxford: Oxford University Press, 2009

## 2.9.7.

### 2.9.7.1.

[1],

D

) ( 6-10% ).

<sup>6</sup> Warden V, Hurley AC, Volicer L. Development and psychometric evaluation of the Pain Assessment in Advanced Dementia (PAINAD) scale. J Am Med Dir Assoc. 2003;4 (1):9-15.





[8] -

[8] -

1. Wong R, Wiffen PJ. Bisphosphonates for the relief of pain secondary to bone metastases. (review) *Cochrane Database Syst Rev* 2002;(2):CD002068 [abstract]
2. Zeppetella G, Paul J, Ribeiro MD. Analgesic efficacy of morphine applied topically to painful ulcers. (clinical trial) *J Pain Symptom Manage* 2003;25(6):555-8 [abstract] [full text subs]
3. Abrams DI, Jay CA, Shade SB, et al. Cannabis in painful HIV-associated sensory neuropathy: a randomized placebo-controlled trial. (randomized controlled trial) *Neurology* 2007;68(7):515-21 [abstract] [full text subs]
4. Campbell FA, Tramèr MR, Carroll D, et al. Are cannabinoids an effective and safe treatment option in the management of pain? A qualitative systematic review. (review) *BMJ* 2001;323(7303):13-6 [abstract] [FULL TEXT FREE]
5. Nnoaham KE, Kumbang J. Transcutaneous electrical nerve stimulation (TENS) for chronic pain. (review) *Cochrane Database Syst Rev* 2008;(3):CD003222 [abstract]
6. Alimi D, Rubino C, Pichard-Léandri E, et al. Analgesic effect of auricular acupuncture for cancer pain: a randomized, blinded, controlled trial. (clinical trial) *J Clin Oncol* 2003;21(22):4120-6 [abstract] [full text subs]
7. College of Occupational Therapists HOPE (College of Occupational Therapist Specialist Section for HIV/AIDs, Oncology, Palliative Care and Education). Occupational therapy intervention in cancer. London: COT, 2004. Available from: [www.cot.co.uk](http://www.cot.co.uk)
8. NICE. Percutaneous cementoplasty for palliative treatment of bony malignancies (Interventional Procedure Guidance 179). London: National Institute for Health and Clinical Excellence 2006 No.IPG179. Available from: [www.nice.org.uk/guidance/IPG179](http://www.nice.org.uk/guidance/IPG179)

### III.

#### 3.1.

«

»

80%

[1].

[2]



3. - /

1.

30-90 /24  
10 (1 ) 3  
1 (2 = 10 ) 1-3

1.

•

[3] ( II).

/ / ( )

2.

•

8-16

•

I).

3.

•

•

5

14

— 5-15

±

30

4.

•

1-

:

100-150 ±

3-5

•

2-

:

5-25

5.

•

20

/

/

/

(60-180 /24

)

6.

•

/ .

7.

•

8.

2

( )

•

9.

•

50

/

8

10.

•

/

11.

• , ), , ( , \

[7].

**3.2.**

- /

•  
•  
•  
•

, ( ) - , ,

1. ,
2. .
3. 10 3
4. , , + ( ) 10 4
5. , , 0,02 ; , [1].

/ , - .

,

1. /
2. ( ), , 0,02 ; . [1]
3. .

-2.

•  
•  
•  
•

, , 70 ( - )

• 0,01 [1],

### 3.3.

« — ”  
« — ” [1]

[2,3], [4].

•  
• — [3]  
• ,  
• ,  
• ( ) ,  
• ,  
• ,  
• ,  
• (VC)

(CTZ), (CTZ)

( , )

	10 1 ) 1-2 1 25-50 6-12	- , . - , .
,	50 / ; 1 2 10 1	- , , , .

:

,

( ), 5HT<sub>3</sub>

- : I [6]
- : V [7]
- : 1 V [2,4]
- : V [8]
- 5 HT-3 : I [9]

**3.4.**

, 45%



5. - , ?
6. ? ,
7. ?
8. ?
9. ?

- , . , , . , , .
- , , , . , , .
- , , . , , .
- , , . , , . (

II) (1)

- , , . , , .
- , , . , , .
- , , . , , .
- , , . , , .

1. - ?
2. - ?
3. - ?

		- .

	.	-
	:	(
	-	)
	,	,
	:	.
	5-15	.
	,	.
	2	.
	(7,5 ) 2	-
	,	2
	4	,
	-	,
	.	.
	.	.
	:	.
	:	.
	(	,
	,	,
	.	.
	.	.
	.	.

	(	).
	,	,
	:	,
	,	.
	-	(
	,	,
	:	:
	,	,
	1,5	,



:

• ( , ).

,  
.  
,  
,  
.

:

• ,  
.

(steatorrhoea),

• ,  
.

100

• ( , ).

400 1000 / ,  
-

7

-  
,  
.

• " "

•

- 
- 
- 

:- « »

(steatorrhoea)

	-	-
	-	-
	-	-
5	4	3
	(	-
	10 3	;
	( 60 4	;
	);	;
	2,5-5	;
	4 (	5
		;



	4 3 [1]
1-	400 3
2-	125 4 .

**3.6.**

— ,

, ,

( ) ,

6 : ( 5-10% )

6 : 70%

« - ( ) ,

».

1. — : ; , - ,

2. - , , .

3. , , , .

4.  
5.

-	-	-
< 5%	<20 > 5% > 2%	<3 -
( ; ) ( ; )		, , , .

[1].

[2].

( )

[3],

80% . ,  
 ,  
 . ,  
 ,  
 : - 2 - 4  
 . ,  
 ,  
 7-10 , .

1- [4]  
 ,  
 ,  
 2 ,  
 ,  
 : ,  
 : 800 ) 160 -320 ( : 400  
 .

[5]. -2, -2  
 , ( 4 ),  
 ) / / MC4R ( 4 ),

( , ) ,  
 ( , ) . ,  
 , -



« » ( )  
 ( , )  
 .  
 - ,  
 .  
 , .  
 , , , 5-10 3-4 , -  
 10 4 , , 10 4  
 ( )  
 ( ) 150

	65-125 , 500 /	- 2 : ; ; ; ( ). :
	10-20 364 0,5-2 1-3 .	
	( 4-8 ) . : :	- : - (

	-	(5 3	,	
	-	)		
	-5	3		
	-3	,		
	-25		10-25	-
	-10	60		

**3.8.**

-

50 .

25%, .

4-5 / .

10% .

20% , .

1 4 .

90%

3 :

- 
- 
- 



II

( 25 150 , 450 ) . ( V).

( ) .

5

2-3

V).

**3.9.**

% ( =120)	
( )	78%
( )	46%
	44%
/	23%

- 
- 
-





	<p>1</p> <p>7 .</p> <p>.</p> <p>200</p> <p>100 , 1</p> <p>10-14</p>	<p>.</p> <p>2</p> <p>4</p> <p>.</p> <p>( .2).</p> <p>,</p> <p>.</p> <p>:</p> <p>-</p> <p>-</p> <p>-</p> <p>,</p> <p>.</p>
	<p>;</p> <p>.</p> <p>,</p>	
	<p><b>400</b></p> <p>,</p> <p>;2</p> <p>( )</p>	
,	<p>,</p> <p>;2</p> <p>( )</p>	,

**3.10.**

	.	- , - ,


IV.

4.1.

,  
 ,  
 ,  
 ,  
 ( )  
 ( )  
 -  
 50%  
 ,  
 ,  
 25%  
 ,  
 • ( / ), /  
 • /  
 •  
 •  
 •  
 •  
 • / - - ,  
 • / - - ,  
 • ,

•

,

•  
•  
•  
•  
•  
•

•  
•  
•  
•

•  
•  
•  
•

• ,

•  
•  
•  
•  
•  
•  
•  
•  
•  
•

-

±

-

-

-

-

-

-

±

-

,

,

,

,

-

•

•

-

,

,

•

-

•

-

•

-

•

-









- 
- /
- 

. ,  
 . ,  
 , ,  
 , . ,  
 , ,  
 . ,  
 ,

(2.25      2.5-5      4      )

, ,  
 , ,  
 , .      5 ( 5 ,  
 ) 4 .

15 /5      5-10      4  
 2,5-5      4  
 2 /5 (      )

(      )  
 100

	) 10 ( - 8	
30	- ( ) - , . . .	
- : / 3 ,	- , , , 2,5-5 , - , - , , , .	- ( ) ). : - , - . - . , .

## 5.

### 5.1.

	- . ,	:

	- - - - -	- - - - -
	- (2,5-5                      2                      ) - , , ( , ) - , .	
	/                      5-10	

**5.2.**

( , , , , , )	( , , ) , 5-10 , 0,5-1 , 4 .	- , , . - . - , .

)		
---	--	--

**5.3.**

	<p>;</p> <p>;</p> <p>10-25</p> <p>50 /</p> <p>200</p> <p>1-2</p>	<p>-</p> <p>,</p> <p>.</p> <p>,</p> <p>2</p> <p>:</p> <p>,</p> <p>,</p> <p>.</p> <p>,</p> <p>.</p> <p>,</p> <p>90</p> <p>ó</p> <p>,</p> <p>.</p>

**5.4.**

,	,	.







4. - . ,  
5. - ( ) ,

1. - ,

2. - ,  
, . ( )  
)

3. - ; , .

4. , - .

5. - , /  
/  
)

6. - ,

7. - .  
( )

8. - ,

9. , - , , , ,

1. - .

2. , ,

3. , ( , )

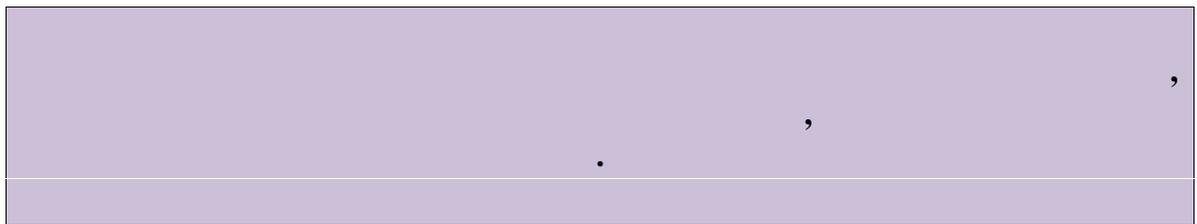


• , , 1 , 2  
1

• , , -  
(PCA- \_\_\_\_\_  
\_\_\_\_\_) , 24-

• , , 9 6 ,  
-2. 50

• , ,  
( . ).



2.

( ) , ,  
, ,  
• , ,  
• , , 50 ,

• 20 2 - , ,

- 
- 
- 

- 70 ( ) -

-  
:  
:

( )

, / ( )	( ) ( ) O -2
20	O -2
	, , - , O -2,
	, O -2 -2,
	O -2 , / / ,
( ) ( )	, ,

	( , ).
	( ).

:

- 60-90 /24 - 48
- 60-120 / , 11% - (
- 30-40 / , , ,
- 60 /24 /
- 48 ; , ,
- 40 90 /24
- , , 30 /24
- 30 /24 /

3.

( )

2,5-3  
4-6

240

10

30

:

30-60  
8-20

4-6

4-6

60

( )

4

:

8

30

μ-

300 / )

(

‘ ‘ ‘  
.

« »,

	, / , / . 6		
	4-6		
	,		
		/	(per os)
		10	28
		80	29 120
	50-100	4-6	

**4.**

**4.1.**

:  
30/500  
24 ( : 30  
240 . 240

10. , 2 o-  
24  
4 =  
= 60  
10 = 24

( )  
5 -10 4 .

, 1,25 - 2,5

( , , , )  
( ) 30% ( )  
50% ( )  
4-

24-

1/6 24-

( )  
 ( - 12 )  
 2.

( )	10 /5	100 , 300 , 500
	100 /5	30 , 120
	10 , 20 , 50	56
10 12-	30 , 60 , 100	60
	5 , 10 , 15 , 30 , 60 , 100 , 200	60
	20 , 30 , 60 , 100 , 200	30
	10 , 30 , 60 , 100 , 200	60
24-	30 , 60 , 90 , 120 , 150 , 200	30

∴ , , ,  
 ( ).  
 , , ,  
 .  
 , .  
 ( , 10 0,5 1,5 ).  
 .  
 ∴ , ,  
 , ,

:

;

,

,

),

/

(

,

1,5-3

8/

(

/

)

:

8/

(

)

/

(

)

(

American Pain Society (

).

•

<8/

/

/

•

:

400

10

0,9%

- 0.5 (20 ) 2
- ( ), [1]
- ( )

4.2.

,  
.  
.  
,  
,  
(  
).  
-  
,  
.  
:  
12-24 ,  
.  
:  
• ( , ( ),  
• ( , )  
• ( , )  
•

: 80	/24	40
/24	20	

1/6

<b>(Oxycodone)</b>	5 /5	250
	10 /1	120
	5 , 10 , 20	56
<b>12</b>	5 , 10 , 20 , 40 , 80	56 (5 , 28 .)

12 ( 4- ( μ- ) ) ,  
-3-

7,5

60	/	8	/
	30	(60 / ) =	
	4	(8 / ) .	

	1.3 , 2.6	56
<b>12</b>	5 /5 2 , 4 , 8 , 16 , 24	56
:		



$$24 \quad 60 / \quad 24 \quad 15 /$$

$$= 2,5$$

$$80 \quad / \quad / \quad 24 \quad 40$$

$$/ \quad 24$$

(1-2 ).

$$24 \quad 30 / \quad 24 \quad 1 /$$

,	500 / 2 10	10
,	5 /	10
( )		
:		

$\mu$ -

100-150

$$30 / 24 \quad 200 \quad / \quad 24$$

24-

24 .

1/6 24-

$$\frac{150}{24} - \frac{10}{24} = 1.5$$

$$8 \cdot \frac{1}{24} - 4 \cdot \frac{1}{24}$$

- .
- , :
- ;
- ;
- ;
- :
- , ( , ) ,
- , -
- , ( ) ,
- ,
- , , ,
- , ,

• ( ), , : , , , , .

μ- CYP3A4, , , , .

( ), .

72-96 .

72 .

12-24 ( 72 ).

24 .

4

8 .

12-

6

48

),  
 ,  
 .  
 ( ):  
 ( )  
 )  
 24- ( )  
 ( )  
 ,  
 ),  
 ,

•  
 •  
 :

12-25 / .  
 •  
 •

•  
 •

24 ( , ( )).  
 ( .  
 ):  
 •  
 •

•  
 30-50%  
 24

12 , 10-12

1  
1 -

2.  
12

24

12

2 -

50%

24

	24 ( )	30	60	120	180	240	360
	4 ( )	5	10	20	30	40	60
	24 ( )	10	20	40	60	80	120
	4 ( )	2.5	2.5-5	5-7.5	10	10-15	20
	24 ( )	15	30	60	90	120	180
	4 ( )	2.5	5	10	15	20	30
	24 ( )	7.5-10	15-20	30-40	45-60	60-80	90-120
	4 ( )	1.25-2.5	2.5-5	5-7.5	7.5-10	10-15	15-20
	24 ( )	4	8	16	24	32	48
	4 ( )	1.3	1.3	2.6	3.9	5.2	7.8
	24 ( )	2	4	8	12	16	24
	24 ( )	1	2	4	6	8	12
	24 ( )	15	30	60	90	120	180
4							
<ul style="list-style-type: none"> <li>• , . ,</li> <li>• .</li> <li>• 1/6 ( . . , 4 )</li> </ul>							

•  
•

• - 10  
 • - 10  
 • - 10 ( \*\*)  
 • , - 3  
 • - 2  
 • - 7,5  
 • - 2  
 • - 10  
 • \* - 60 /24  
 • \*\*\* - 2 1,5  
 • -  
 \*  
 1:1  
 \*\* , 5.  
 10 , ,  
 [1].  
 \*\*\* ;  
 2:1

24 , 180 360 ,

,

a • 4 ( )

24	( ) ( / )	4 ( ) ( a
----	-----------	-----------

<90	25	<15
90-134	37	15-20
135-189	50	25-30
190-224	62	35
225-314	75	40-50
315-404	100	55-65
405-494	125	70-80
495-584	150	85-95
585-674	175	100-110
675-764	200	115-125
765-854	225	130-140
855-944	250	145-155
945-1034	275	160-170
1035-1124	300	175-185

,

.

6. 3

7. 25 / 90 24

					-	-	-	-	
		V	V	V	V	V	V	C	V
	V		N	X	N	V	N	V	
	V	N		V	N	V	V	X	V
	V	X	V		V	C	V	X	X
	V	N	N	V		V	V	X	V
	V	V	V	X	V		V	X	V
- -	V	N	V	V	V	V			
	C	V	X	X	X	X			X
	V		V	X	V	V		X	

V -  
 X -  
 C -  
 N -

:  
 ( )