

# Equianalgesic doses of opioids

The basic comparative parameter is analgesia induced by 10 mg morphine in s. c. The conversion has an indicative value and numerous inter-individual differences must be taken into account (age, nature and intensity of pain, side effects, sensitivity or tolerance to opioids, method of administration, opioid to which it is rotated). Accordingly, the appropriate dose is still adjusted.

Morphine s. c. (i. m.)	10	20	30	40	50	60	80	100	200
Morphine p. o.	30	60	90	120	150	180	240	300	600
TTS fentanyl v µg / h ( <i>Durogesic</i> )	12.5	25	—	50	—	75	100	125	250
TTS fentanyl mg/24 hours	0.3	0.6	—	1.2	—	1.8	2.4	3.0	6.0
Oxycodone p. o. ( <i>Oxycontin</i> )	20 (15)	40 (30)	60 (45)	80 (60)	100 (75)	120 (90)	160 (120)	200 (150)	400
Buprenorphine i.m.	0.3	0.6	0.9	1.2	1.5	1.8	2.4	—	—
Buprenorphine s. l. in mg / 24 h ( <i>Temgesic</i> )	0.4	0.8	1.2	1.6	2.0	2.4	3.2	—	—
TDS Buprenorphine v mg / 24 h ( <i>Transtec</i> )	—	0.84	1.26	1.68	2.1	2.52	3.36	—	—
TDS Buprenorphine v µg / h ( <i>Transtec</i> )	—	35	52.5	70	87.5	105	140	—	—
Hydromorphone i. m. ( <i>Dilaudid</i> )	1.5	—	—	—	—	—	—	—	—
Hydromorphone p. o. ( <i>Jurnista, Palladone</i> )	4	8	12	16	20	24	32	—	—
Pethidine - meperidine i. m. ( <i>Dolsin</i> )	100 (75)	—	—	—	—	—	—	—	—
Pethidine p. o.	300	—	—	—	—	—	—	—	—
Piritramide i. m. ( <i>Dipidolor</i> )	15	30	45	—	—	—	—	—	—
Nalbuphine ( <i>Nubain</i> )	20	—	—	—	—	—	—	—	—
Tramadol p. o.	150	300	450	600	—	—	—	—	—
Tramadol i.m./i.v.	100	200	300	400	—	—	—	—	—
Dihydrocodeine p. o.	120	240	320	—	—	—	—	—	—

## Recalculation of doses and calculation of additional doses

MediaWiki:Medical Calculator/Opioids

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### Source

- Methodological guidelines for pain pharmacotherapy. In *Pain - a journal for the study and treatment of pain*. Volume 9, Supplement 3, 2006.