



MAXIMUM CONCENTRATIONS AND DAILY DOSES OF INTRATHECAL AGENTS AS RECOMMENDED BY PACC

DRUG	MAXIMUM CONCENTRATION	MAXIMUM DOSE PER DAY
Morphine	20 mg/mL	15 mg
Hydromorphone	15 mg/mL	10 mg
Fentanyl	10 mg/mL	1000 mcg
Sufentanil	5 mg/mL	500 mcg
Bupivacaine	30 mg/mL	15 – 20 mg*
Clonidine	1000 mcg/mL	600 mcg
Ziconotide	100 mcg/mL	19.2 mcg

*May be exceeded in end-of-life care and complicated cases as determined by medical necessity.

Deer TR, Pope JE, Hayek S, et al. *Neuromodulation*. 2017;20(2):133-154.