

ALFENTANIL

The main differences between fentanyl and alfentanil are lower potency (about 25% of fentanyl), more rapid onset of action (within 1 minute), and shorter duration of action (5-10 minutes). It is therefore well-suited to administration by continuous infusion, because it has no active metabolites and low risk of accumulation. As for fentanyl, there is a risk of respiratory depression.

ALFENTANIL			
RECEPTOR TYPE	Gaba Receptors	α_2 -Receptors	Opioid Receptors
Receptor type			✓
ONSET	Rapid (< 1 minute)	Intermediate (1-3 minutes)	Slow (> 3 minutes)
Rate of Onset	✓		
Rate of Offset		✓	
EFFECT	Strong	Weak	None
Sedative effect (hypnosis and anxiolysis)		✓	
Amnesic effect			✓
Analgesic effect	✓		
RISKS	None	Lower Risk	Higher Risk
Cardiovascular effects (low pulse and/or blood pressure)		✓	
Respiratory depression			✓
Potential to cause delirium	✓		
Active metabolites and/or accumulation	✓		
Potential toxic effects		✓	
COST	Low	Intermediate	High
Cost		✓	