## COMPARISON OF AGENTS USED TO INDUCE ANESTHESIA

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| Ketamine | IV | 1.2 m/kg (0.5 – 4.5 mg/kg) | IV | 50 – 100 % induction dose PRN OR infusion 0.1 – 0.5 mg/min | - Analgesic effect, bronchodilation  
- Hypertension, tachycardia; rare hypotension, bradycardia  
- Respiratory depression esp. with high doses, rapid administration  
- As single agent, CV stimulation, emergence reactions (hallucinations, vivid dreams, or delirium). Can be prevented / treated with haloperidol, BZDs |
|       | IM | 5 – 10 mg/kg (4 – 13 mg/kg) | IM | 50 – 100 % induction dose PRN | |
| Etomidate | IV | 0.2 – 0.6 mg/kg over 30-60 seconds | IV | (5 – 20 mcg/kg/min) but continuous IV infusion not recommended due to risk of adrenal suppression | - Minimal CV, respiratory effects  
- Cortisol production decreased for 6-8 hours after induction  
- Transient mild to moderate myoclonus – can be minimized with IV fentanyl 0.1 mg immediately before etomidate administration  
- Burning at administration site  
- Higher incidence of nausea |
| Propofol | IV | 40 mg every 10 seconds until induction onset (usual total 2 – 2.5 mg/kg) Elderly, debilitated, ASA III-IV: 20 mg every 10 seconds (total 1 – 1.5 mg/kg) | IV | 0.1 – 0.2 mg/kg/min by infusion (6 – 12 mg/kg/hr) OR 25 – 50 mg PRN Elderly, debilitated, ASA III-IV: one-half of above dose. | - Short recovery time, 10 – 30 minutes  
- Lower incidence of nausea, vomiting  
- Hypotension (10 - 30 %)  
- Bradycardia (4 %)  
- Apnea esp. with doses > 2.5 mg/kg (12 – 24 %) |
References:

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