**Appendix 1.** Anesthetic monitoring in double-blind randomized controlled trials of intravenous ketamine infusions for chronic pain syndromes

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| **Study** | **Clinical setting** | **Ketamine infusion** | **Observation period** | **Depth of sedation** | **Arterial pressure** | **Pulse oximetry** | **ECG** | **Capnometry** | **Comments** |
| Backonja 1994195 | IP | 0.25 mg/kg over 5-min | Overnight | Sedation assessed, method NR | Yes | NR | NR | NR | HR monitored, specific method NR |
| Eide 1994156 | NR | 0.15 mg/kg over 10-min | NR | NR | NR | NR | NR | NR | HR changes reported but method of monitoring NR |
| Max 1995151 | NR | 0.75 mg/kg/hr for 2 hours | NR | Sedation assessed, method NR | NR | NR | NR | NR | - |
| Eide 1995153 | NR | 60 mcg/kg bolus over 1 min, then 6 mcg/kg/min (0.36 mg/kg/hr) for 17-21 min | NR | NR | NR | NR | NR | NR | HR changes reported but method of monitoring NR |
| Sorensen 1995157 | OP | 0.3 mg/kg over 10 minutes | 4 hours following infusion | NR | Yes | NR | Yes | NR | - |
| Felsby 1996196 | NR | 0.2 mg/kg over 10 minutes, then 0.3 mg/kg/hr for 1 hour |  | Sedation assessed, method NR | Yes | NR | NR | NR | HR assessed, method NR |
| Nikolajsen 1996155 | NR | 2 sessions of 0.1 mg/kg over 5 minutes, then 7 mcg/kg/min (0.42 mg/kg/hr) for up to 45 minutes | NR | NR | Yes | NR | Yes | NR | - |
| Sorensen 1997158 | NR | 0.3 mg/kg for 30 minutes | NR | NR | Yes | NR | Yes | NR | RR assessed, method of monitoring NR |
| Persson 1998162 | NR | 0.15, or 0.3, or 0.45 mg/kg over 5 minutes | NR | Sedation assessed, method NR | Yes | NR | Yes | NR | - |
| Graven-Nielsen 200021 | NR | 0.3 mg/kg over 30-min | NR | Sedation assessed by “reaction time” to audible stimuli | Yes | NR | Yes | NR | “Reaction time” increased following infusion |
| Leung 200144 | NR | 3 target serum concentrations of 50, 100, 150 ng/ml; infusion given for 20 minutes | NR | Sedation assessed, method NR | Yes | Yes | Yes | NR | Ketamine dose NR |
| Mitchell 2002161 | IP | 0.6 mg/kg over 4 hours | NR | NR | NR | NR | NR | NR | No information about monitoring |
| Jorum 2003197 | NR | 60 mcg/kg bolus over 5 minutes, then 6 mcg/kg/min (0.36 mg/kg/hr) for 20 minutes | NR | NR | NR | NR | NR | NR | No information about monitoring |
| Kvarnström 2003117 | NR | 0.4 mg/kg over 40 minutes | 4 hours | Sedation assessed, method NR | NR | NR | NR | NR | No information about monitoring |
| Kvarnström 2004118 | NR | 0.4 mg/kg over 40 minutes | 4 hours | Sedation assessed, method NR | NR | NR | NR | NR | No information about monitoring |
| Gottrup 2006152 | NR | 0.1 mg/kg bolus over 10 minutes, then 0.007 mg/kg/min (0.42 mg/kg/hr) for 20 minutes | NR | NR | Yes | NR | Yes | NR | - |
| Eichenberger 2008116 | NR | 0.4 mg/kg over 1 hour | NR | Assessed using 5-point Likert scale | Yes | Yes | Yes | NR | - |
| Schwartzman 2009122 | NR | 0.35 mg/kg/hr over 4 hours, daily for 10 days | NR | NR | Yes | Yes | Yes | NR | - |
| Sigtermans 2009160 | IP | Mean dose 22 mg/hr over mean of 4.2 days | 5-day IP | NR | Yes | NR | NR | NR | Blood pressured measured 3 times daily |
| Amr 2010154 | IP | 80 mg over 5-hours daily for 7 days | Not reported | Not reported | Yes | Yes | Yes | Not reported | - |
| Noppers 2011159 | OP | 0.5 mg/kg for 30 minutes | 2.5 hours | None | Yes | Yes | NR | NR | HR and RR were monitored but method NR |

ECG: Electrocardiography; HR: Heart rate; IP: Inpatient; NR: Not reported; OP: Outpatient; RR: Respiratory rate