Evidence Table D-21. Length of intensive care unit stay outcomes in studies comparing interventions to prevent development of delirium

| Author, year | Population | Intervention group, n | Control group, n | Route of administration | Outcome definition | Mean (SD) days, intervention group | Mean (SD) days, control group | Mean between-group difference (95% CI) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| First-generation antipsychotic vs. placebo |  |  |  |  |  |  |  |  |
| Abdelgalel, 2016[1](#_ENREF_1) | Adult intensive care patients of ASA physical status III and IV aged between 26 and 70 years | Haloperidol (Planned dose: 0.5– 2 mg/h preceded by a loading dose of 2.5 mg intravenously over 10 min if needed (if RASS > 2+), 30 | Placebo (Planned dose: 2-8ml, loading dose 10ml over 10 min if needed (if RASS > 2+)), 30 | Intravenous | Length of ICU stays (days) | 6.5 (1) | 6.9 (1.2) | -0.4 (-0.96 to 0.16) |
| Al-Qadheeb, 2016[2](#_ENREF_2) | MV patients with subsyndromal delirium | Haloperidol (Planned dose: 1mg), 34 | Placebo (Planned dose: 5% dextroseml), 34 | Intravenous | Duration of ICU stay in days | 6.17 (3.1) | 6.67 (4) | -0.5 (-2.2 to 1.2) |
| Girard, 2010[4](#_ENREF_4) | > 18 years MV medical and surgical ICU patients | Haloperidol (Planned dose: 5 Median dose: 15 (10.8-17), 35 | Placebo (Planned dose: 5ml), 36 | Oral | Length of stay, days in ICU | 10.67 (8.7) | 8.1 (6) | 2.57 (-0.91 to 6.05) |
| Khan, 2018[8](#_ENREF_8) | English speaking individuals undergoing thoracic surgery | Haloperidol (Planned dose: 0.5mg, Planned duration: 4 days (11 doses total)), 68 | Placebo (Planned dose: NR, Planned duration: 4 days (11 doses total)), 67 | Intravenous | ICU length of stay, median, days | Median: 2.2 (IQR 1 to 3.3) | Median: 2.3 (IQR 1 to 4) | p=0.29 |
| Page, 2013[10](#_ENREF_10) | ICU patients needing MV within 72 hours of admission were enrolled | Haloperidol (Planned dose: 2.5mg), 50 | Placebo (Planned dose: 0.5ml), 52 | Intravenous | Length of critical care stay, excluding patients who died in ICU | 9.5 (7.1) | 10.67 (10.3) | -1.17 (-4.6 to 2.26) |
| van den Boogaard, 2018[15](#_ENREF_15) | ICU patients at high risk of delirium | Haloperidol (Planned dose: 2mg), 732 | Placebo (Planned dose: 0.9% NaCl), 707 | Intravenous | Length of stay, median (IQR), days | 5.33 (5.5) | 5 (5.6) | 0.33 (-0.24 to 0.9) |
| van den Boogaard, 2018[15](#_ENREF_15) | ICU patients at high risk of delirium | Haloperidol (Planned dose: 1mg), 350 | Placebo (Planned dose: 0.9% NaCl), 707 | Intravenous | Length of stay, median (IQR), days | 5 (5.5) | 5 (5.6) | 0 (-0.67 to 0.67) |
| Wang, 2012[16](#_ENREF_16) | Patients 65 or older admitted to the ICU after noncardiac surgery | Haloperidol (Planned dose: 0.5 mg followed by continuous infusion at a rate of 1 mL/hr (0.1 mg/hr haloperidol)), 229 | Placebo (Planned dose: Normal saline), 228 | Intravenous | Median Length of stay in ICU for all the patients in the group in hours | 0.89 (0.06) | 0.96 (0.14) | -0.07 (-0.09 to -0.05) |
| Wang, 2012[16](#_ENREF_16) | Patients 65 or older admitted to the ICU after noncardiac surgery | Haloperidol (Planned dose: 0.5 mg followed by continuous infusion at a rate of 1 mL/hr (0.1 mg/hr haloperidol)), 35 | Placebo (Planned dose: Normal saline), 53 | Intravenous | Median Length of stay in ICU, in patients who developed post-operative delirium, in hours | 0.82 (0.22) | 1.73 (0.14) | -0.91 (-0.99 to -0.83) |

| Author, year | Population | Intervention group, n | Control group, n | Route of administration | Outcome definition | Mean (SD) days, intervention group | Mean (SD) days, control group | Mean between-group difference (95% CI) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Second-generation antipsychotic vs. placebo |  |  |  |  |  |  |  |  |
| Girard, 2010[4](#_ENREF_4) | > 18 years MV medical and surgical ICU patients | Ziprasidone (Planned dose: 40 Median dose: 113 (81-140), 30 | Placebo (Planned dose: 5ml), 36 | Oral | Length of stay, days in ICU | 9.3 (8.4) | 8.1 (6) | 1.2 (-2.32 to 4.72) |
| Hakim, 2012[5](#_ENREF_5) | Patients 65 years or older experiencing subsyndromal delirium after on-pump cardiac surgery | Risperidone (Planned dose: 0.5mg), 51 | Placebo (Planned dose: given every 12 hours), 50 | Oral | In study group | 2.33 (0.8) | 2.67 (0.8) | -0.34 (-0.65 to -0.03) |
| Prakanrattana, 2007[11](#_ENREF_11) | Elective Cardiac Surgery with cardiopulmonary bypass | Risperidone (Planned dose: 1mg), 63 | Placebo (Not applicable), 63 | Orally disintegrating tablet | Not applicable | 3.3 (2.3) | 3.2 (1.9) | 0.1 (-0.64 to 0.84) |
| First-generation antipsychotic vs. second-generation antipsychotic |  |  |  |  |  |  |  |  |
| Girard, 2010[4](#_ENREF_4) | > 18 years MV medical and surgical ICU patients | Ziprasidone (Planned dose: 40 Median dose: 113 (81-140), 30 | Haloperidol (Planned dose: 5 Median dose: 15 (10.8-17), 35 | Oral | Length of stay, days in ICU | 9.3 (8.4) | 10.67 (8.8) | -1.37 (-5.55 to 2.81) |
| First-generation antipsychotic vs. other |  |  |  |  |  |  |  |  |
| Abdelgalel, 2016[1](#_ENREF_1) | Adult intensive care patients of ASA physical status III and IV aged between 26 and 70 years | Haloperidol (Planned dose: 0.5– 2 mg/h preceded by a loading dose of 2.5 mg intravenously over 10 min if needed (if RASS > 2+), 30 | Dexmedetomidine (Planned dose: 0.2–0.7 mcg/kg/h preceded by a loading dose of 1.0 ug/kg intravenously over 10 min if needed (if RASS > 2+)), 30 | Intravenous | Length of ICU stays (days) | 3.1 (0.4) | 6.5 (1) | -3.4 (-3.79 to -3.01) |

ASA=American Society of Anesthesiologists; CI=confidence interval; ICU=intensive care unit; Mg/hr=milligram per hour; mg=milligram; MV=mechanical ventilation; n=sample size; NaCl=sodium chloride; RASS=Richmond Agitation and Sedation Scale; SD=standard deviation