Evidence Table D-20. Length of hospital 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 stay in hospital (days) | 13.5 (2) | 15.5 (2.5) | -2 (-3.15 to -0.85) |
| Girard, 2010[4](#_ENREF_4) | > 18 years MV medical and surgical ICU patients | Haloperidol (Planned dose: 5mg Median dose: 15mg (10.8-17mg), 35 | Placebo (Planned dose: 5ml), 36 | Oral | Length of stay, days in hospital | Median 13.8 (IQR 9.4 to NA) | Median 15.4 (IQR 8.9 to NA) | NA |
| Kalisvaart, 2005[6](#_ENREF_6) | Acute or elective hip surgery patients ≥ 70 years is at risk of delirium: MMSE between less than or equal to 24; dehydration=BUN/creatinine> or = to 18, low visual acuity and/or increased severity of illness on APACHE II of 16 or greater. | Haloperidol (Planned dose: 0.5mg), 32 | Placebo (Not applicable), 36 | Oral | Hospital Days | 17.1 (11.1) | 22.6 (16.7) | -5.5 (-12.24 to 1.24) |
| 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 | Hospital length of stay, median, days | Median: 10 (IQR 8 to 11.5) | Median: 10 (IQR 8 to 12) | p=0.4 |
| Page, 2013[10](#_ENREF_10) | ICU patients needing MV within 72 hours of admission were enrolled | Haloperidol (Planned dose: 2.5mg), 42 | Placebo (Planned dose: 0.5ml), 47 | Intravenous | Length of hospital stay, Excluding patients who died in hospital | 20.5 (14.9) | 27 (19.8) | -6.5 (-13.78 to 0.78) |
| Schrijver, 2018[12](#_ENREF_12) | Medical and surgical patients | Haloperidol (Planned dose: 1mg), 118 | Placebo, 124 | Oral | Not applicable | 7.1 (4.9) | 7.93 (5.4) | -0.83 (-2.13 to 0.47) |
| 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 | 18.67 (17.3) | 16.67 (13.5) | 2 (0.13 to 3.87) |
| 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 | 17.33 (14.9) | 16.67 (13.5) | 0.66 (-0.81 to 2.13) |

| 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) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 hospital after surgery, in patients who developed post-operative delirium in days | 14 (5.3) | 12 (2.5) | 2 (0.27 to 3.73) |
| 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 hospital after surgery for all the patients in the group | 11 (1.4) | 11 (1.3) | 0 (-0.25 to 0.25) |
| **Second-generation antipsychotic vs. placebo** |  |  |  |  |  |  |  |  |
| Girard, 2010[4](#_ENREF_4) | > 18 years MV medical and surgical ICU patients | Ziprasidone (Planned dose: 40mg Median dose: 113mg (81-140mg) | Placebo (Planned dose: 5ml),  | Oral | Length of stay, days in Hospital | Not reported | Not reported | Median 15.4 (IQR 8.9 to NA) |
| 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 | 6 (1.6) | 6.33 (2.4) | -0.33 (-1.13 to 0.47) |
| 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 | 10.5 (6.1) | 10.3 (4.4) | 0.2 (-1.66 to 2.06) |
| **First-generation antipsychotic vs. second-generation antipsychotic** |  |  |  |  |  |  |  |  |
| Girard, 2010[4](#_ENREF_4) | > 18 years MV medical and surgical ICU patients | Ziprasidone (Planned dose: 40mg Median dose: 113mg (81-140mg) | Haloperidol (Planned dose: 5mg Median dose: 15mg (10.8-17) | Oral | Length of stay, days in Hospital | Median 13.5 (IQR 9.3 to Not reported) | Median 13.8 (IQR 9.4 to Not reported) | p=0.68 |

| 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. other |  |  |  |  |  |  |  |  |
| Abdelgalel, 2016[1](#_ENREF_1) | Adult intensive care patients of ASA physical status III and IV aged between 26 and 70 years | Dexmedetomidine (Planned dose: 0.2–0.7 ug/kg/h preceded by a loading dose of 1.0 ug/kg intravenously over 10 min if needed (if RASS > 2+)), 30 | 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 | Intravenous | Length of stay in hospital (days) | 6.2 (0.9) | 13.5 (2) | -7.3 (-8.08 to -6.52) |

APACHE II= Acute Physiology and Chronic Health Evaluation 2; BUN=blood urea nitrogen ratio; ICU=intensive care unit; ICU=intensive care unit; Mg/hr=milligram per hour; Ml/hr=milliliter per hour; MV=mechanical ventilation; NaCl=sodium chloride; RASS=Richmond Agitation and Sedation Scale; SD=standard deviation; Ug/kg/h=microgram per kilogram per hour