**Supplemental Table 28. Characteristics of Single Intervention Non-Pharmacologic Studies Focusing on Delirium Reduction**

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| **Author**  **(year)** | **Design** | **Population** | **Intervention** | **Control** | **Summary delirium related Results (intervention vs control)** | **Limitations** | **Risk of bias** |
| Taguchi  (2007) [1] | RCT | Surgical ICU (esophageal cancer operation) | N=6  Bright Light Therapy (BLT of 5000Lux) | N=5  No BLT | -Delirium: 17% vs. 40%; *p=0.42* (using NEECHAM) | - small sample size  - no intention to treat analysis  - no clear inclusion/exclusion criteria reported  - significant loss to follow-up  -used a not recommended ICU delirium assessment tool | High risk |
| Ono  (2011) [2] | RCT | Surgical ICU (esophageal cancer operation) | N=10  Bright Light Therapy (BLT of 5000Lux) | N=12  No BLT | - Delirium: 10% vs. 42% (using NEECHAM) *= not significant*  - LOS-ICU: 5days vs. 4.1days; *p=0.22* | - small sample size  - no intention to treat analysis  - significant loss to follow-up  - no clear inclusion/exclusion criteria reported  -used a not recommended ICU delirium assessment tool | High risk |
| Simons  (2016) [3] | RCT | Mixed ICU | N=361  Dynamic Light Therapy (DLA of 1700Lux) | N=373  No DLA | - Delirium: 38% vs. 33%; *p=0.16* (using CAM-ICU)  -28-days delirium-coma-free days: 26days vs. 27days; *p=0.29*  - Duration of delirium: 2days vs. 2days; *p=0.87*  -Time to onset delirium: 3days vs. 2days; *p=0.61*  - LOS-ICU: 4days vs 4days;*p=0.82*  - LOS-Hospital: 15days vs 16days; *p=0.84*  *-* Hospital mortality: 18% vs 20%; *p=0.66* | - sufficient amount of light exposition in dose and exposure? | Low risk |
| Black  (2011) [4] | Before-after | Mixed ICU | N=69  Nurse-facilitated family participation | N=69  Usual care | - Delirium: 29% vs. 77% (using ICDSC); *p=NS*  - Psychological recovery scores (significant lower in intervention group at all 3 time points compared with control group)  - LOS-ICU: 10.2days vs 15.3days; *p=NS* | - before-after study  - no intention to treat analysis  - significant loss to follow-up  - intervention difficult to externally validate and extrapolate  - publication 6 years after data collection | High risk |
| Lee  (2013) [5] | Before-after | Cardiac surgery ICU | N=49  Perioperative Psycho-education | N=46  No psycho-education | - Delirium: 12% vs. 35%; *p=0.009* (using review of all patients’ medical records for signs of delirium)  - Duration of delirium: mean 7days vs. 15days; *p=0.09* | - before-after study  - delirium before inclusion was not an exclusion criterion  - delirium diagnose retrospectively using medical records | High risk |

**References**

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