Appendix Table C6-LQ-c. Quality ratings for SSI which do not control for secular trend or confounding

| **Study** | **Infection** | **All\_Vary** | **All\_Valid** | **All\_Consist** | **All\_PrimOut** | **All\_ImpOut** | **All\_FundSource** | **Adherence Reported** | **Infection CDC** | **Device Adju** | **Postsurveillance** | **QE\_IndependentQI** | **QE\_DataTimePoint** | **UnivarYN** | **UnivarModel** | **MultivarYN** | **MultivarModel** | **MultivarControl** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Carles, France - 2006 | SSI | No | Yes | Yes | No | Yes | No |   |   |   | No | Uncertain | No | TRUE | student t-test, fisher exact test | FALSE |   |   |
| Forbes, Canada - 2008 | SSI | No | Yes | Yes | No | No | No | Yes | Uncertain |   | No | Uncertain | No | TRUE | Student t-test, Wilcoxon sum-rank test, chi-square | FALSE |   |   |
| Takahashi, Japan - 2010 | SSI | No | Yes | Uncertain | No | No | No | Yes | Uncertain |   | Uncertain | No | Yes | TRUE | Chi-square, student’s t test, Mann-Whitney test | FALSE |   |   |
| Wax, United States - 2007 | SSI | No | Yes | Yes | No | Yes | No |   |   |   |   | No | No | TRUE | Chi-square, Wilcoxon’s signed rank test | FALSE |   |   |
| Whitman, United States - 2008 | SSI | No | Yes | Yes | Yes | Yes | No |   |   |   |   | Uncertain | No | TRUE | z-test for independent proportions | FALSE |   |   |
| Ichikawa, Japan - 2007 | SSI | No | No | Yes | Yes | No | Yes | Yes | Uncertain |   | No | Uncertain | No | TRUE | Chi-square | FALSE |   |   |
| Ozgun, Turkey - 2010 | SSI | No | Yes | Yes | No | Yes | Yes |   |   |   |   | Yes | No | TRUE | t-test for continuous; chi-sq or Fisher exact for categorical | FALSE |   | demographics, wound type, surgery branch |
| Gomez, Argentina - 2006 | SSI | No | Yes | Yes | Yes | No | No | Yes | Yes |   | Yes | Yes | No | TRUE | chi-sq, RR (95% CI) | FALSE |   | by surgery unit |
| Willemsen, Netherlands - 2007 | SSI | No | Yes | Yes | No | Yes | Yes |   |   |   |   | Yes | No | TRUE | Fisher’s Exact or chi-sq | FALSE |   |   |
| Parker, United States - 2007 | SSI | No | Yes | Yes | No | Yes | Yes |   |   |   |   | Yes | No | TRUE | chi-square test | FALSE |   |   |
| Zvonar, Canada - 2008 | SSI | Yes | Yes | Yes | Yes | Yes | No |   |   |   |   | Yes | No | TRUE |   | FALSE |   |   |
| Graf, Germany - 2009 | SSI | No | Yes | Yes | Yes | Yes | No | No | Yes |   | Uncertain | Yes | No | TRUE | Wilcoxon signed rank test, McNemar’s test | TRUE | conditional logistic regression |   |
| Acklin, Switzerland - 2011 | SSI | No | Yes | Yes | Yes | No | Yes | Yes | Yes |   | Yes | Yes | Yes | TRUE | chi-sq for categorical variables; t-test for continuous variables | TRUE | stepwise logistic regression | variables with p<.1 in univariate analysis (body weight, COPD, operation time, operation type, hematoma) |
| Awad, United States - 2009 | SSI | No | Yes | Yes | Yes | No | No | Yes | Uncertain |   | Uncertain | Yes | Yes | TRUE | chi-sq | FALSE |   |   |
| Berenguer, United States - 2010 | SSI | No | Yes | Yes | Yes | No | No | Yes | No |   | Yes | Yes | No | TRUE | Fisher’s Exact test | FALSE |   |   |
| Kable, Australia - 2008 | SSI | No | Yes | Yes | No | No | No | Yes | No |   | Uncertain | Yes | No | TRUE | percentages and 95% CI | FALSE |   |   |
| Suchitra, India - 2009 | SSI | No | No | Yes | Yes | Yes | No | No | Yes |   | Uncertain | Uncertain | No | TRUE | Chi-square, Fisher’s exact | FALSE |   |   |
| Liau, Singapore - 2010 | SSI | No | Yes | Yes | Yes | No | Yes | Yes | Yes |   | Yes | Yes | Yes | TRUE | Fischer exact test | FALSE |   |   |
| Berry, United States - 2009 | SSI | No | Yes | Yes | Yes | No | No | Yes | Uncertain |   | Uncertain | Yes | No | TRUE | chi-sq, Fisher exact, Wilcoxon | FALSE |   |   |
| Rauk, United States - 2010 | SSI | No | Yes | Yes | No | Yes | No | No | Uncertain |   | Uncertain |   |   | TRUE | chi-sq | FALSE |   |   |
| Shimoni, Israel - 2009 | SSI | No | Yes | Uncertain | Yes | No | Yes | Yes | Uncertain |   | No | No | No | TRUE | Chi-square, Taylor’s series used for Rel Risk confidence intervals | FALSE |   |   |
| Nemeth, United States - 2010 | SSI | No | Yes | Yes | No | Yes | No |   |   |   |   | No | No | TRUE | Chi-square | FALSE |   |   |
| Kramer, United States - 2008 | SSI | No | Yes | Yes | Yes | Yes | No | No | No |   | Yes | No | Yes | FALSE |   | FALSE |   |   |
| Kim, United States - 2010 | SSI | No | Yes | Yes | Yes | Yes | Yes | No | Yes |   | Yes | Yes | No | TRUE | chi-sq | FALSE |   |   |
| Potenza, United States - 2009 | SSI | No | Yes | Yes | Yes | Yes | No |   |   |   |   | No | No | TRUE | chi-sq | FALSE |   |   |
| Paull, United States - 2010 | SSI | No | Yes | Yes | Yes | Yes | Yes |   |   |   |   | No | No | FALSE |   | FALSE |   |   |
| Pastor, United States - 2010 | SSI | No | Yes | Yes | Yes | No | No | Yes | Yes |   | Yes | Yes | No | TRUE | Student t-test for continuous variables; chi-sq for categorical variables | FALSE |   |   |

All\_Vary Did the execution of the study vary from the original protocol?
All\_Valid Is the intervention assessed using valid and reliable measures, implemented consistently across all study participants?
All\_Consist Are outcomes assessed using valid and reliable measures, implemented consistently across all study participants?
All\_PrimOut Is the length of followup sufficient to support the evaluation of primary outcomes and harms?
All\_ImpOut Are any important primary outcomes missing from the results?
All\_FundSource Is the Source of funding Identified?
AdherenceReported If infection rates reported, did study also report adherence rates?
InfectionCDC If infection rates reported, was CDC/NNIS\* methodology used?
DeviceAdju For CLABSI, VAP, CAUTI: were infection rates adjusted for device utilization?
Postsurveillance For SSI: was post-discharge surveillance for infections performed?
QE\_IndependentQI Was the intervention performed independent of other QI efforts or other changes?
QE\_DataTimePoint Did the study report data at more than one time point both before and after the intervention?
QE\_InfectionRate If the study reported infection rates, were process measurements also reported?
CON\_Rand Were study subjects randomized
CON\_RandDesc was randomization process described?
CON\_NonRandRationale For non-randomized studies, was rationale for comparison group selection explained?
CON\_Assessor Were outcome assessor blinded to treatment group assignment?
CON\_Unit Was a unit of analysis error present?
CON\_Corrected Was a unit of analysis error present and corrected by appropriate statistical methods?
UnivarYN Was Univariate Analysis Conducted?
UnivarModel What model was used?
UnivarControl What variables were controlled for?
MultivarYN Was Multivariate Analysis Conducted?
MultivarModel What model was used?