Should handrubbing or hand scrubbing be used to reduce SSI?

Quality assessment							№ of patients		Effect		
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	With handrubbing	With handscrubbing	Relative (95% CI)	Absolute (95% CI)	Quality
Surgical site infection											
3	RCTs	Not serious	Serious ¹	Not serious	Not serious	None	190/4061 (4.7%)	193/3959 (4.9%)	Not pooled	See comment	⊕⊕⊕○ MODERATE
SSI											
1	Observational studies, (before-after study)	Serious ²	Not serious	Not serious	Not serious	None	78/2175 (3.6%)	69/2084 (3.3%)	Not pooled	See comment	⊕○○○ VERY LOW
SSI											
2	Observational studies , (comparative cohorts)	Serious ³	Serious ⁴	Not serious	Not serious	None	15/1913 (0.8%)	30/2005 (1.5%)	Not pooled	See comment	⊕○○○ VERY LOW

- 1. Sampling technique, time and primary outcome measure are all extremely variable.
- 2. Marchand (2008): the data before the intervention were collected retrospectively and serious confounding was suspected.
- 3. Weight (2010): retrospective design and selection of groups based on availability of the product serious confounding suspected; no clear follow-up period. Adjoussou (2009): reporting bias suspected.
- 4. One study from the USA with a very low SSI rate, the other is from Africa with a higher SSI rate, but a very small sample size.

SSI: surgical site infection; RCT: randomized controlled trial; OR: odds ratio; CI: confidence interval.