

3B: Observational studies with SSI outcome

Authors, year, reference	Country/ study period	Type of study/ setting	Intervention	Comparator	Primary outcome - SSI rate	Difference between groups	Cost analysis
Weight 2010 ⁽²²⁾	USA Study period not stated	Retrospective comparative study in a paediatric urology clinic	Handrubbing protocol with Avagard®* for 2 minutes (n=1800)	Hand scrubbing with antiseptic-impregnated hand brush for 6 minutes (n=1800)	0.11% handrub group; 0.17% hand scrub group	NS difference (P>.99)	Avagard® costs US\$ 0.59 per application; antiseptic-impregnated hand brushes cost US\$ 1.04 per application.
Marchand 2008 ⁽²³⁾	Canada 2 years	Retrospective observational before/after study in a heart institute, cardiovascular surgery patients	Handrubbing with ethyl alcohol 70%/ CHG 0.5% hand rub rinse (n=2174)	Hand scrubbing with antiseptic detergent (n=2084)	3.59% handrub group 3.33 % hand scrub group	NS difference**	Standard hand scrub = Can\$ 6000/year for 2000 surgical procedures Handrub = Can\$ 2531/year for an annual saving of approximately Can\$ 3500.
Adjoussou 2009 ⁽²⁴⁾	Côte d'Ivoire 5 months	Comparative study in a university hospital, gynaecology patients	Handrubbing with Sterilium® (n=113)	Hand scrubbing with PVP-I (n=205)	11.5% handrub group 13.2% traditional hand scrub group	NS difference (P=0.8)	1 dose of PVP-I= € 0.2, 1 dose of ABHR= € 0.1

* Avagard®: 61% ethanol and 1% CHG ; ** P not provided.

SSI: surgical site infection; CHG: chlorhexidine gluconate; PVI: povidone iodine. ABHR: alcohol-based handrub; NS: not significant.