644 references identified via EMBASE and Cochrane databases' search using defined boolean expressions

777 references identified via MEDLINE database search using defined boolean expressions

1058 references were duplicated

363 unique abstracts downloaded for detailed review

314 references did not report any RCTs with antimicrobial central venous catheters

49 abstracts describing RCTs with antimicrobial central venous catheters extracted for analysis

13 RCTs excluded because of absense of microbiologic data
8 RCTs used a different definition of colonization
7 RCTs rejected because they had an inappropriate intervention

21 appropriate RCTs extracted for final analysis [5,7-26]