

Study	Type of PCR	Primers	Identified microorganisms
Portillo et al, 2012	Real-time multiplex PCR (SeptiFasta, Roche Diagnostics)	NA	<i>Escherichia coli</i> <i>Enterobacter spp.</i> <i>Klebsiella spp.</i> <i>Proteus spp.</i> <i>Coagulase-negative staphylococci</i> <i>S. aureus</i> <i>Enterococcus spp.</i> <i>P. acnes</i>
Marín et al, 2012	16S rRNA gene was amplified using conventional PCR. GeneAmp PCR system 9700 (Applied Biosystems Inc.)	fD1 (forward, 5=-AGAGTTTGATCCTGGCTCAG-3=) rP2 (reverse, 5=-ACGGCTACCTTGTTACGACTT-3=) GloF (forward, 5=-GAAGAGCCAAGGACAGGTAC-3=) GloR (reverse, 5=-GGAAAATAGACCAATAGGCAG-3=)	<i>S. aureus</i> <i>CoNSa/Staphylococcus epidermidis</i> <i>Enterococcus faecalis</i> <i>Streptococcus agalactiae</i> <i>Streptococcus viridans</i> <i>Escherichia coli</i> <i>Proteus mirabilis</i> <i>Pseudomonas aeruginosa</i> <i>Propionibacterium acnes</i> <i>Other anaerobes</i>
Jacovides et al, 2012	Deep 16S rRNA gene sequencing with use of a sequencing system from 454 Life Sciences (Branford, Connecticut).	NA	<i>Acinetobacter</i> <i>Campylobacter</i> <i>Candida</i> <i>Cladosporium</i> <i>Corynebacterium</i> <i>Enterococcus</i> <i>Klebsiella</i> <i>Mycoplasma</i> <i>Peptostreptococcus</i>

			<i>Propionibacterium</i> <i>Pseudomonas</i> <i>Staphylococcus</i> <i>Streptococcus</i> <i>Treponema</i> <i>Other</i>
Gomez et al, 2012	16S rRNA gene real-time PCR using the LightCycler 2.0 instrument (Roche Molecular Diagnostics, Indianapolis, IN)	16S rRNA gene V3-V4 region(forward- 5'-CGG-CCC-AGA-CTC-CTA-CGG-GAG-GCA140 GCA-3' and reverse - 5'-GCG-TGG-ACT-ACC-AGG-GTA-TCT-AAT-CC-3')	<i>Streptococcus sp</i> CNS <i>Enterococcus sp.</i> <i>Pseudomonas sp.</i> <i>F. magna</i> <i>P. acnes</i> <i>S.aureus</i> <i>P. melaninogenica</i> <i>Corynebacterium sp.</i> <i>Pandoraea norinbergensis</i> <i>E. faecalis</i> <i>Staphylococcus lugdunensis</i> <i>Actinomyces neuui</i> GPB <i>Serratia marcescens</i>
Esteban et al, 2012	PCR-based amplification of a fragment from the 16 rRNA gene using the GenoType commercial system BC Grampositive and BC Gramnegative (Hain Lifescience GmbH, Nehren, Germany)	NA	<i>S. aureus</i> <i>S. epidermidis</i> <i>S. warneri</i> <i>S. hominis</i> <i>S. lugdunensis</i> <i>S. pyogenes</i> <i>M. abscessus</i> <i>E. aerogenes</i> <i>B. fragilis</i>

			<i>P. acnes</i> <i>P. aeruginosa</i> <i>K. pneumoniae</i> <i>E. coli</i> <i>R. picketti</i> <i>Burkholderia sp.</i> <i>S. maltophilia</i> <i>Pasteurella sp.</i> <i>Prevotella sp.</i> <i>Candida sp.</i> <i>A. terreus</i>
Bergin et al, 2010	Conserved 16S rRNA primers were used as a universal screen for bacterial infection and iScript one-step RT-PCR Kit with SYBR Green on an iCycler Thermal Cycler (Bio-Rad, Hercules, California).	387-base-pair segment(forward 5'-ATTAGATACCCTGGTAGTCCACGCC- 3' and reverse 5'-CGTCATCCCCACCTTCCTCC-3') Group-A Streptococcus (forward 5'-AATACCGCATAAGAGAGACTAACG-3' and reverse 5'-CTCGCTAGAGTGCCCAACTTA-3') Group-B Streptococcus ((forward 5'-CTTTCTCTTCGGAGCAGAA-3' and reverse 5'-CTCGCTAGAGTGCCCAACTTA-3') Alpha-hemolytic Streptococcus (forward 5'-GTGAGAGTGGAAAGTTCACACTGT-3' and reverse 5'-AGCCTTTAACTTCAGACTTATCTAAC-3')	<i>Staphylococcus aureus</i> Methicillin-resistant <i>Staphylococcus aureus</i> <i>Staphylococcus epidermidis</i> <i>Staphylococcus saprophyticus</i> <i>Listeria monocytogenes</i> <i>Enterococcus faecalis</i> <i>Streptococcus pneumoniae</i> <i>Streptococcus pyogenes</i> <i>Streptococcus agalactiae</i> <i>Streptococcus oralis</i> <i>Escherichia coli</i> <i>Citrobacter freundii</i> <i>Proteus mirabilis</i> <i>Pseudomonas aeruginosa</i> <i>Acinetobacter baumannii</i>
Piper et al, 2009,	<i>Staphylococcal</i> and <i>P. acnes</i> rapid-cycle real-time LightCycler PCR.	<i>Staphylococcal</i> : targeting tuf <i>P. acnes</i> : PArA-1 (5'-AAGCG	<i>Staphylococcal</i> <i>P. acnes</i>

		TGAGTGACGGTAATGGGTA-3' and PArA-2 (5'-CCACCATAACGTGCTGGCAACAGT-3')	
Kobayashi et al, 2009	RT-PCR using the LightCycler system (Roche Diagnostics, Mannheim, Germany). Methicillin-resistant <i>Staphylococcus aureus</i> -specific detection kit (Roche Diagnostics) and broad range detection by universal PCR that targeted a part of the 16S rRNA gene.	NA	<i>Methicillin-resistant Staphylococcus aureus</i> <i>Staphylococcus epidermidis</i> <i>Escherichia coli</i>
Kobayashi et al, 2008	Universal PCR	<i>Staphylococcus</i> : regions of the <i>tuf</i> gene; <i>S. aureus</i> : (5'-GGCGATGCTCAATACGAAGAAAAA TC-FITC-3' and 5'-LCRed705-AGA ATCAATGGAAGCTGTAGATAC-phosphate-3')	<i>Staphylococcal P. acnes</i>
Gallo et al, 2008	PCR assay targeting the 16S rDNA gene	(forward primer RW01: 5' AACTGGAGGAAGGTGGGGAT 3'; reverse primer DG74: 5' TGCGGTTGGATCACCTCCT 3')	<i>Staphylococcal P. acnes</i>
Moojen et al, 2007	PCR of the 16S rRNA Gene	NA	NA
Panousis et al, 2005	PCR of the 16S rRNA Gene	NA	<i>Staphylococcus</i> <i>Streptococcus viridans</i> <i>Streptococcus mitis</i> <i>Streptococcus</i> <i>Candida</i> <i>Enterococcus</i> <i>Diphtheroids</i>
Tunney et al, 1999	PCR of the 16S rRNA Gene	D1(5'-GAGGAAGGTRGGGAYGACGT) D2 (5'-AGGCCC GGGAACGYATTYACCG)	<i>S. capitis</i> <i>S. epidermidis</i> <i>Staphylococcus haemolyticus</i> <i>P. acnes</i> <i>Micrococcus agilis</i>

			<i>B. fragilis</i> <i>E. coli</i> <i>Peptostreptococcus sp.</i>
Mariani et al, 1996	PCR of the 16S rRNA Gene	5' was CGGCAGGCCTAACACATGCAAGTCG; 3' was GGTTGCGGCCGTACTCCCCAGG.	NA

Table S1 The information of PCR.

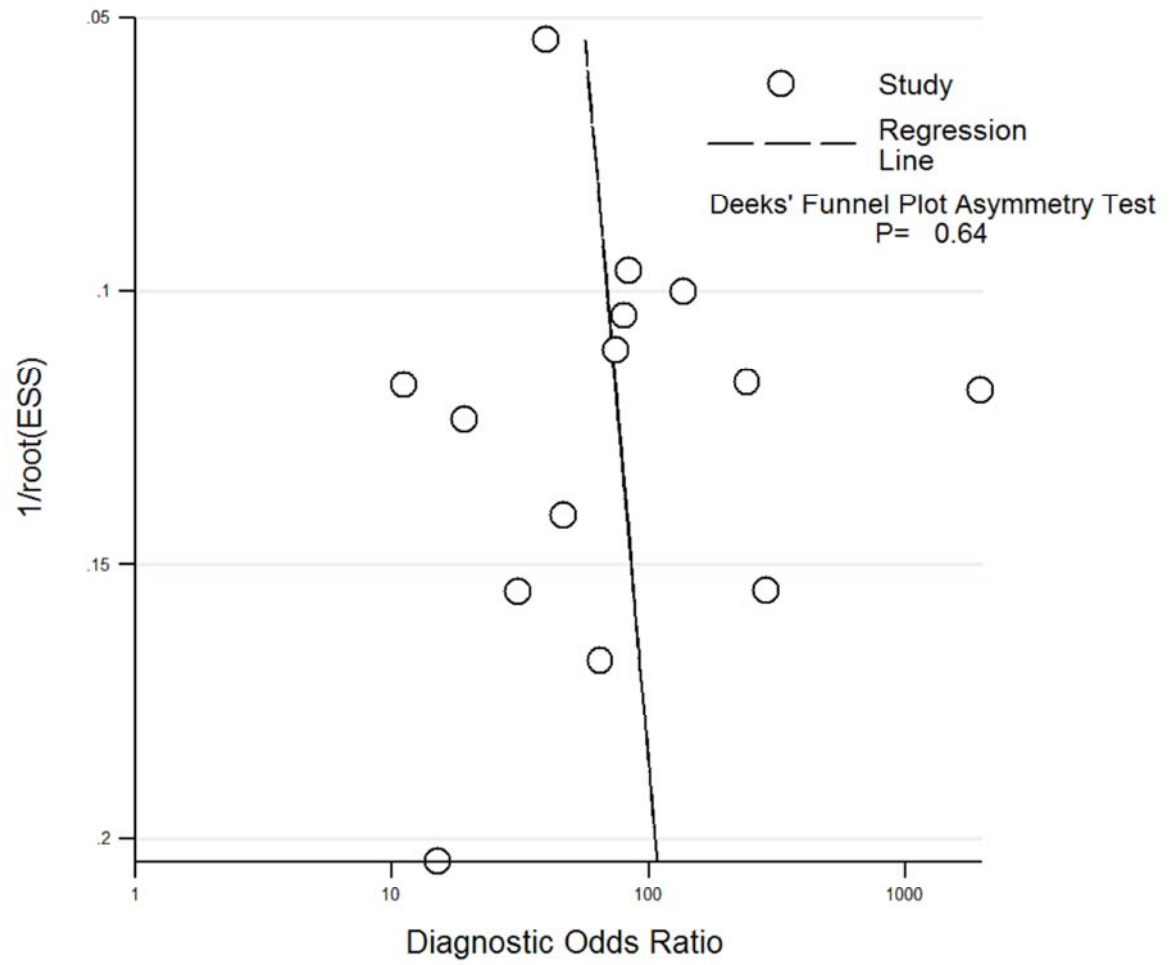


FIG. S1 Funnel plots for included studies