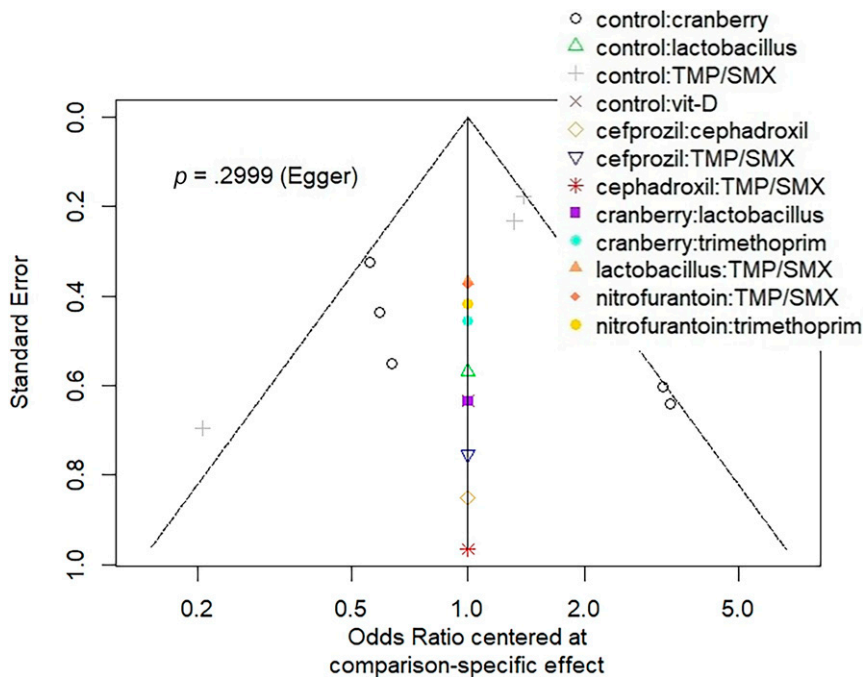


## Supplemental Information



**SUPPLEMENTAL FIGURE 8**

Comparison-adjusted funnel plot for the primary outcome. Different colors correspond to different comparisons.

<b>SUPPLEMENTAL TABLE 3</b> Literature Search in Major Medical Databases
<b>PubMed/Medline (26/11/2023)</b>
MESH((((((((Urinary tract infections) AND (children)) AND (vesicoureteral reflux)) OR (pediatric)) AND (prophylaxis)) AND (amoxicillin)) OR (nitrofurantoin)) OR (trimethoprim)) OR (sulfamethoxazole) OR (cranberry)) OR (d-mannose)) OR (probiotics)
Filters applied: Clinical Trial, Meta-Analysis, Randomized Controlled Trial, Systematic Review, English.
Results: 7541
<b>Scopus (26/11/2023)</b>
( "Urinary tract infections" ) AND ( "children" ) OR ( "pediatric" ) AND ( "vesicoureteral reflux" ) AND ( "prophylaxis" ) AND ( "amoxicillin" ) OR ( "nitrofurantoin" ) OR ( "trimethoprim" ) OR ( "sulfamethoxazole" ) OR ( "cranberry" ) OR ( "d-mannose" ) OR ( "probiotics" ) AND ( LIMIT-TO ( LANGUAGE, "English" ) )
Results: 3715
<b>Cochrane Library (26/11/2023)</b>
Urinary tract infections in Title Abstract Keyword AND d-mannose in Title Abstract Keyword OR antibiotic in Title Abstract Keyword OR cranberry in Title Abstract Keyword OR probiotic in Title Abstract Keyword
Results: 736

**SUPPLEMENTAL TABLE 4** Confidence Assessment in the Results of the NMA. The Contribution Matrix; NMA.

Symptomatic UTI Episodes During Prophylaxis									
Comparison	Number of Studies	Within-study Bias	Reporting Bias	Indirectness	Imprecision	Heterogeneity	Incoherence	Confidence Rating	Reason(s) for Downgrading
Cefprozil:TMP/SMX	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Cephadroxi:TMP/SMX	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Control:TMP/SMX	3	Some concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Lactobacillus:TMP/SMX	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Nitrofurantoin:TMP/SMX	1	Major concerns	Low risk	No concerns	No concerns	Major concerns	No concerns	Very low	["Within-study bias", "Heterogeneity"]
Cefprozil:cephadroxi	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Control:cranberry	5	Some concerns	Low risk	No concerns	No concerns	Major concerns	No concerns	Very low	["Within-study bias", "Heterogeneity"]
Control:lactobacillus	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Control:vit-D	1	Some concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Cranberry:lactobacillus	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Cranberry:trimethoprim	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Nitrofurantoin:trimethoprim	1	Some concerns	Low risk	No concerns	No concerns	Major concerns	No concerns	Very low	["Within-study bias", "Heterogeneity"]
Symptomatic UTI episodes after prophylaxis									
Cefprozil:TMP/SMX	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Cephadroxi:TMP/SMX	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Control:TMP/SMX	2	Some concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Nitrofurantoin:TMP/SMX	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Cefprozil:cephadroxi	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Control:nitrofurantoin	1	Major concerns	Low risk	No concerns	Some concerns	Some concerns	No concerns	Very low	["Within-study bias", "Imprecision", "Heterogeneity"]
Nitrofurantoin:trimethoprim	1	Some concerns	Low risk	No concerns	Major concerns	No concerns	No concerns	Very low	["Within-study bias", "Imprecision"]
Incidence of new scars during prophylaxis									
Control:TMP/SMX	3	Some concerns	Low risk	No concerns	Major concerns	No concerns	Major concerns	Very low	["Within-study bias", "Imprecision", "Incoherence"]
Lactobacillus:TMP/SMX	1	Major concerns	Low risk	No concerns	Major concerns	No concerns	Major concerns	Very low	["Within-study bias", "Imprecision", "Incoherence"]

**SUPPLEMENTAL TABLE 5** Studies Excluded From the NMA

Study ID	Intervention (prophylaxis)	Reasons of Exclusion	
<b>Antibiotics</b>			
1	Antachopoulos 2016	TMP/SMX versus cefuroxime axetil or cefprozil or cefaclor	No history of recurrent UTI episodes
2	Beiraghi Toosi 2011	TMP/SMX versus nalidixic acid	No history of recurrent UTI episode
3	Böse 1974	TMP/SMX versus ampicillin	Wrong study design
4	Braga 2014	TMP versus placebo	No history of recurrent UTI episodes
5	Carlsen 1985	Pivmecillinam versus nitrofurantoin	Children with underlying genitourinary anatomy disorders
6	Feldman 1975	SMX versus TMP/SMX	Wrong study design
7	Fennell 1979	no intervention	Wrong study design
8	Garin 2006	TMP/SMX versus nitrofurantoin	No history of recurrent UTI episodes
9	Gücük 2013	TMP/SMX versus TMP/SMX plus circumcision versus circumcision versus no intervention	Wrong study design
10	Hewitt 2008	Antibiotics versus no intervention	No history of recurrent UTI episodes
11	Holland 1982	TMP/SMX versus nitrofurantoin with or without anti-reflux surgery	No history of recurrent UTI episodes
12	Jodal 1989	Granulate versus pivmecillinam	Wrong study design
13	Johnson 1994	Nitrofurantoin and then placebo versus placebo and then nitrofurantoin	No history of recurrent UTI episodes
14	Kaneko 2003	Cefaclor	Wrong study design
15	Kincaid Smith 1969	Nitrofurantoin or ampicillin	Wrong study design or adult population
16	Lo 2011	N/A	Wrong publication type
17	Marget 1979	Nitrofurantoin, ampicillin, cephalexin, indanyl-carbenicillin or nalidixic acid with or without surgery versus TMP/SMX	Wrong study design
18	Montini 2008	No intervention versus TMP/SMX or co-amoxiclav	No history of recurrent UTI episodes
19	Morello 2023	Nitrofurantoin or co-amoxiclav or cefixime or TMP/SMX versus no intervention	No history of recurrent UTI episodes
20	Pennesi 2008	TMP/SMX versus no intervention	No history of recurrent UTI episodes
21	Rojas 2012	Probiotic versus placebo	No history of recurrent UTI episodes
22	Roussey-Kesler 2008	TMP/SMX versus no intervention	No history of recurrent UTI episodes
23	Savage 1973	N/A	No history of recurrent UTI episodes
24	Savage 1975	Ampicillin versus nitrofurantoin versus TMP/SMX	No history of recurrent UTI episodes
25	Schläger 1998	Nitrofurantoin versus placebo	No history of recurrent UTI episodes
26	Sher 1975	Internal urethrotomy, SMX, nitrofurantoin, ampicillin, mandelamine, or TMP/SMX	Wrong study design
27	Wald 2006	TMP/SMX or nitrofurantoin versus no intervention	No history of recurrent UTI episodes
28	Zegers 2017	NA	No history of recurrent UTI episodes
<b>Cranberry products</b>			
29	Avorn 1994	Cranberry versus placebo	Adult population
30	Foda 1995	Cranberry versus water	No history of recurrent UTI episodes
31	Hess 2008	Cranberry versus placebo	No history of recurrent UTI episodes
32	Howell 2010	Cranberry versus placebo	Adult population
33	Schläger 1999	Cranberry versus placebo	No history of recurrent UTI episodes
34	Mutlu 212	Cranberry versus placebo	No history of recurrent UTI episodes
<b>Methenamine hippurate</b>			
35	Elo 1978	Sulfafurazol versus nitrofurantoin versus methenamine hippurate	No history of recurrent UTI episodes
<b>Probiotics</b>			
36	Cetin 2014	Saccharomyces boulardii with antibiotics versus antibiotics	No history of recurrent UTI episodes
37	Dani 2002	<i>Lactobacillus</i> GG versus placebo	No history of recurrent UTI episodes
38	Honeycutt 2007	<i>Lactobacillus</i> rhamnosus strain GG versus placebo	No history of recurrent UTI episodes
39	Lee 2007	<i>Lactobacillus</i> acidophilus versus TMP/SMX	No history of recurrent UTI episodes
40	Lee 2016	<i>Lactobacillus</i> species versus TMP/SMX versus no intervention	No history of recurrent UTI episodes
41	Kumar 2013a	Probiotics versus no intervention	Wrong study design
42	Kumar 2013b	Probiotics versus placebo	No history of recurrent UTI episodes
43	Sadeghi-bojd 2020	Probiotics versus placebo	No history of recurrent UTI episodes

ID, identification; N/A, not applicable.