Supplementary Material A

Search Strategy

**Database: PubMed**

Search strategy:

```
("lactoferrin"[MeSH Terms] OR "lactoferrin"[All Fields]) AND
(preterm[All Fields] OR "premature birth"[MeSH Terms] OR "premature"[All Fields] AND "birth"[All Fields]) OR
"premature birth"[All Fields] OR "premature"[All Fields] OR
("infant, low birth weight"[MeSH Terms] OR "infant"[All Fields] AND "low"[All Fields] AND "birth"[All Fields] AND "weight"[All Fields]) OR "low birth weight"[All Fields]) OR
"infant, newborn"[MeSH Terms] OR "infant"[All Fields] AND "newborn"[All Fields]) OR "newborn infant"[All Fields] OR "newborn"[All Fields] OR "newborn infant"[All Fields] OR "newborn"[All Fields] OR
"infant"[All Fields]) AND (("clinical trials as topic"[MeSH Terms] OR "clinical"[All Fields] AND "trials"[All Fields] AND "topic"[All Fields]) OR "clinical trials as topic"[All Fields] OR "trial"[All Fields]) OR randomly[All Fields] OR randomized[All Fields] OR "random allocation"[MeSH Terms] OR "random"[All Fields] AND "allocation"[All Fields] OR "random allocation"[All Fields] OR "randomized"[All Fields])
```

**Database: Web of Science**

Search strategy:

```
# 1163 ALL FIELDS: ((lactoferrin) AND ((preterm) OR (premature) OR (low birth weight) OR (neonate) OR (newborn) OR (infant)) AND ((trial) OR (randomly) OR (randomized) OR (randomized)))
```

**Database: Cochrane Central**

Date Run: February 10, 2019

Search strategy:

```
ID Search Hits
#1 ("infant"):ti,ab,kw (Word variations have been searched) 48869
#2 MeSH descriptor: [Infant] this term only 386
#3 ("newborn"):ti,ab,kw OR (neonate):ti,ab,kw OR (premature):ti,ab,kw OR (preterm):ti,ab,kw OR ("low birth weight"):ti,ab,kw (Word variations have been searched) 40388
#4 MeSH descriptor: [Infant, Newborn] this term only 14662
#5 MeSH descriptor: [Infant, Premature] this term only 3284
#6 MeSH descriptor: [Infant, Low Birth Weight] this term only 966
#7 (lactoferrin):ti,ab,kw (Word variations have been searched) 438
#8 MeSH descriptor: [Lactoferrin] this term only 208
#9 (randomly):ti,ab,kw OR (randomized):ti,ab,kw OR (randomized):ti,ab,kw OR (trial):ti,ab,kw (Word variations have been searched) 883170
#10 MeSH descriptor: [Random Allocation] this term only 20547
#11 MeSH descriptor: [Randomized Controlled Trial] this term only 125
#12 #1 OR #2 OR #3 OR #4 OR #5 OR #6 65243
#13 #7 OR #8 438
#14 #9 OR #10 OR #11 883170
#15 #12 AND #13 AND #14 87
```
**Supplementary Table 1** List of excluded studies and reason for exclusion

<table>
<thead>
<tr>
<th>Study author, year</th>
<th>Reason for exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manzoni et al, 2008¹</td>
<td>Duplicate data (published study included²)</td>
</tr>
<tr>
<td>Manzoni, et al, 2009³</td>
<td>Duplicate data published as conference abstract (published study included²)</td>
</tr>
<tr>
<td>Manzoni, et al, 2010⁴</td>
<td>Review article</td>
</tr>
<tr>
<td>Manzoni, et al, 2011⁵</td>
<td>Duplicate data published as conference abstract (published study included²)</td>
</tr>
<tr>
<td>Alexander and Meyer, 2012⁶</td>
<td>Duplicate data (part of multicenter trial) published as conference abstract published study included²</td>
</tr>
<tr>
<td>Sherman et al, 2016⁷</td>
<td>Duplicate data published in another journal subset study evaluating effect of lactoferrin on fecal microbiome (published study included⁸)</td>
</tr>
<tr>
<td>Griffiths et al, 2019⁹</td>
<td>Same trial published in another journal (one¹⁰ of the two studies included)</td>
</tr>
</tbody>
</table>

**References**