

Appendix 1

Literature search strategies, 24th September 2015

Ovid MEDLINE(R) <1946 to September Week 2 2015>

Ovid MEDLINE(R) Daily Update <September 22, 2015>

- 1 exp Asthma/
- 2 Cough/
- 3 Dyspnea/
- 4 (asthma* or cough* or dyspne* or dyspnoe* or wheeze* or wheezing).ti,ab.
- 5 (difficult* adj3 breath*).ti,ab.
- 6 or/1-5
- 7 exp Nitric Oxide/
- 8 Breath Tests/
- 9 (nitr* adj2 oxid*).ti,ab.
- 10 niox*.mp.
- 11 (ENO or FENO).mp.
- 12 or/7-11
- 13 6 and 12
- 14 limit 13 to systematic reviews
- 15 limit 13 to meta analysis
- 16 (systemat* adj2 review*).ti,ab.
- 17 (meta-analys* or metaanalys* or meta analys*).ti,ab.
- 18 13 and (16 or 17)
- 19 14 or 15 or 18
- 20 remove duplicates from 19

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations <September 22, 2015>

- 1 (asthma* or cough*).ti,ab,kw.
- 2 (dyspne* or dyspnoe*).ti,ab,kw.
- 3 (difficult* adj3 breath*).ti,ab,kw.
- 4 (wheeze or wheezing).ti,ab,kw.
- 5 or/1-4
- 6 nitric oxide.ti,ab,kw.
- 7 (eno or feno).ti,ab,kw.
- 8 niox.af.
- 9 or/6-8
- 10 5 and 9
- 11 (systemat* adj2 review*).ti,ab.
- 12 (meta-analys* or metaanalys* or meta analys*).ti,ab.
- 13 10 and (11 or 12)
- 14 limit 10 to systematic reviews
- 15 limit 10 to meta analysis
- 16 13 or 14 or 15

Cochrane Database of Systematic Reviews <2005 to August 2015>

1 (asthma* or cough*).ti,ab,kw.

2 (dyspnea* or dyspnoe*).ti,ab,kw.

3 (difficult* adj3 breath*).ti,ab,kw.

4 (wheeze or wheezing).ti,ab,kw.

5 1 or 2 or 3 or 4

6 nitric oxide.ti,ab,kw.

7 (eno or feno).ti,ab,kw.

8 niox.af.

9 6 or 7 or 8

10 5 and 9

Centre for Reviews and Dissemination

Line	Search
1	MeSH DESCRIPTOR asthma EXPLODE ALL TREES
2	MeSH DESCRIPTOR cough EXPLODE ALL TREES
3	MeSH DESCRIPTOR dyspnea EXPLODE ALL TREES
4	(asthma*)
5	(cough*)
6	(wheeze OR wheezing)
7	(difficult* NEAR3 breath*)
8	(dyspne* OR dyspnoe*)
9	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8
10	MeSH DESCRIPTOR nitric oxide EXPLODE ALL TREES
11	(nitric oxide)
12	(feno OR eno)
13	(niox)
14	#10 OR #11 OR #12 OR #13
15	#9 AND #14

NLM PubMed

Search	Query
#8	Search (#6 AND #7)
#7	Search publisher[sb]
#6	Search (#4 AND #5)
#5	Search (asthma*[Title/Abstract] OR cough*[Title/Abstract] OR dyspn*[Title/Abstract] OR wheeze[Title/Abstract] OR wheezing[Title/Abstract] OR difficult* breath*[Title/Abstract] OR difficult* in breathing[Title/Abstract] OR breathing difficult*[Title/Abstract])
#4	Search (asthma OR cough OR dyspnea[MeSH Terms])
#3	Search (#1 AND #2)
#2	Search (ENO[Title/Abstract] OR FENO[Title/Abstract] OR nitric oxide[Title/Abstract] OR niox[Title/Abstract])
#1	Search nitric oxide[MeSH Terms]

NLM PubMed

Search	Query
#18	Search (#8 AND #17)
#17	Search (#9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16)
#16	Search placebo*
#15	Search treatment outcome[MeSH Terms]
#14	Search usefulness[Title]
#13	Search ((response[Title/Abstract] OR responding[Title/Abstract])) AND (therapy[Title/Abstract] OR therapies[Title/Abstract] OR treat*[Title/Abstract] OR treatm*[Title/Abstract] OR treati*[Title/Abstract])
#12	Search (predict*[Title/Abstract] AND value*[Title/Abstract])
#11	Search (prospect* OR cross-over OR control group* OR healthy control*)
#10	Search (random* OR clinical trial* OR clinicaltrial* OR multicen*)
#9	Search (random*[Title/Abstract] OR clinical trial*[Title/Abstract] OR clinicaltrial*[Title/Abstract] OR multicen*[Title/Abstract])
#8	Search (#3 AND #7)
#7	Search (#4 OR #5 OR #6)
#6	Search (exhalation OR breath tests[MeSH Terms])
#5	Search (nitric[Title/Abstract] OR feno[Title/Abstract] OR eno[Title/Abstract] OR "exhaled NO"[Title/Abstract])
#4	Search nitric oxide[MeSH Terms]
#3	Search (#1 AND #2)
#2	Search (asthma*[Title/Abstract] OR cough*[Title/Abstract] OR dyspn*[Title/Abstract] OR wheeze*[Title/Abstract] OR wheezing[Title/Abstract] OR breathing difficulty[Title/Abstract] OR breathing difficulties[Title/Abstract] OR difficult to breathe[Title/Abstract])
#1	Search (dyspnea OR asthma OR cough[MeSH Terms])