APPENDIX: Clostridioides difficile in Neonatal Intensive Care Unit Patients: A Systematic Review

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1. Primary Search Strategies

Table 1. MEDLINE® Search Strategy

#	Search History	Results
1	exp Clostridium difficile/	6,719
2	exp Intensive Care Units, Neonatal/ or exp Intensive Care, Neonatal/	15,068
3	exp Infant, Newborn/	541,022
4	2 or 3	542,198
5	1 and 4	152
6	limit 5 to (English language and humans)	139

Table 2. EMBASE® Search Strategy

#	Search History	Results
1	'clostridium difficile'/exp or 'clostridium difficile infection'/exp	9,594
2	'newborn'/exp or 'newborn intensive care'/exp	351,852
3	1 and 2	68
4	Limit 3 to (English language and humans and EMBASE®)	59

Table 3. Cochrane Library Search Strategy

#	Search History	Results
1	MeSH descriptor Clostridium difficile explode all trees	186
2	MeSH descriptor Infant, Newborn explode all trees	14,329
3	MeSH descriptor Intensive Care Units, Neonatal explode all trees	559
4	MeSH descriptor Intensive Care, Neonatal explode all trees	307
5	2 or 3 or 4	14,370
6	1 and 5	1

Table 4. CINAHL® Search Strategy

#	Search History	Results
1	(MH "Infant, Newborn+") or (MH "Intensive Care Units, Neonatal") or (MH "Intensive Care, Neonatal+")	72,510
2	MH "Clostridium Difficile"	1,525
3	1 and 2	17
4	Limit 3 to (English language; exclude MEDLINE records)	2

2. Study Exclusion Criteria

- Meeting abstract only
- No full text available
- Not in English
- Not primary research
- Examines fewer than 10 *C. difficile*-infected infants
- Majority of study population not comprised of infants in NICUs
- Mixed patient population and study does not include subanalysis of NICU patients
- Only describes methods for surveillance of healthcare-associated infections
- Study conducted outside the US and only describes epidemiology of *C. difficile*
- Only describes molecular biology of *C. difficile*
- Only describes molecular epidemiology of *C. difficile* without any clinical information
- Does not include comparison group (e.g., case series of *C. difficile* infection)
- Does not provide a clear description of the intervention(s) and statistical analysis that compares time points before and after intervention
- Not relevant to any Question
    - **Question A**: What clinical, demographic, or other criteria have been shown to prompt diagnostic testing for *C. difficile* that results in identifying symptomatic *C. difficile*-infected NICU patients?
    - **Question B:** What tests or sequence of tests for *C. difficile* perform best in detecting CDI among NICU patients?
    - **Question C:** What is the significance of a positive *C. difficile* test in NICU patients?
- Addresses Key Question B but does not report test performance characteristics (sensitivity, specificity, positive predictive value, negative predictive value) or data that could be used to calculate these performance characteristics