

Appendix 1. Literature Search Strategy

On June 29th, 2017, a senior medical librarian (H.G.N.) searched the following databases for relevant studies: Ovid MEDLINE (1946-August Week 4 2017), NLM PubMed for unindexed material, Ovid Embase (1974-2017 September 6), clinicaltrials.gov and Cochrane Library (Wiley).

Since “Geographic atrophy” has been a Medical Subject Heading (MeSH) only from 2010, we also used other textwords with adjacency to capture articles that might have been missed by indexing. We found the combination of textwords and MeSH headings captured the concept comprehensively, so no additional synonym searching was needed. In each database, we ran scoping searches and used an iterative process to translate and refine the searches; the simplicity of the final strategies belies the thoroughness of the scoping process. We also identified key articles, which were also used for validating the success of the searches, and the search strategies were reviewed by the research team. Both English and foreign language articles were eligible for inclusion. No date limit was applied. The search strategy from OVID Medline is shown below. Strategies from other databases are available from the authors.

After references were retrieved in the final search, we pooled them in EndNote software (version X7; Clarivate Analytics, Philadelphia, PA, USA) and de-duplicated. This set was then uploaded to Covidence (Veritas Health Innovation, Melbourne, Australia)¹ for screening. 2 of 4 reviewers (L.L.S., F.L., M.S., and S.K.) independently evaluated the titles, abstracts and full text of the eligible articles. Any disparities were reconciled through discussions until consensus was reached. On May 3rd, 2019, we updated all searches and double-screened the additional unique articles.

Ovid MEDLINE(R) ALL <1946 to May 3, 2019>

#	Searches	Results
1	exp Geographic Atrophy/	600
2	(geograph* adj1 atroph*).tw.	1157
3	exp Macular Degeneration/	22442
4	3 and ga.tw.	402
5	1 or 2 or 4	1426
6	5 not ((exp animal/ or exp invertebrate/ or animal experiment/ or animal model/ or exp plant/ or exp fungus/) not exp human/)	1392

Reference:

1. Covidence systematic review software [computer program]. Veritas Health Innovation, Melbourne, Australia. Available at www.covidence.org.