

Appendix 1. Search syntaxes for MEDLINE, PubMed, Scopus, Web of Science and Cochrane databases.

Concepts:

1. Condition: refractive error and its sub-types.
2. Management: refractive error correction types (glasses, contact lenses, refractive surgery).
3. Instrument, techniques and outcomes.

Search date: June 22, 2016.

MEDLINE

Database(s): Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present

Search Strategy:

#	Searches	Results
1	refractive errors/ or astigmatism/ or hyperopia/ or myopia/ or presbyopia/	26653
2	(refractive error* or astigmati* or hyperopi* or hypermetropi* or myopi* or presbyopi* or short sighted* or near sighted* or long sighted* or far sighted*).tw,kw.	29916
3	1 or 2	37681
4	Eyeglasses/	6934
5	(eyeglasses or spectacles or glasses).tw,kw.	12231
6	contact lenses/ or contact lenses, hydrophilic/ or contact lenses, extended-wear/	11561
7	(contact lens* or orthokeratology or silicone hydrogel or iotrafalcon or rigid-gas permeable or disposable len*).tw,kw.	13173
8	corneal surgery, laser/ or keratectomy, subepithelial, laser-assisted/ or keratomileusis, laser in situ/ or photorefractive keratectomy/ or keratotomy, radial/ or lens implantation, intraocular/	17274
9	(Refractive surg* or lasik or lasek or epi-lasik or epi lasik or prk or rk or iol or implant* or inlay* or intacs or intracorneal ring segment* or icr or artiflex or keratotomy or epikeratoplasty or thermokeratoplasty or Keratectomy or keratomileusis or keratotomy or laser*).tw,kw.	548582
10	lenses, intraocular/ or phakic intraocular lenses/	13442
11	(Lens* adj3 (exchange* or replace* or extract* or intra-ocular or intra ocular or intraocular or foldable)).tw,kw.	15827
12	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11	584137
13	Self Report/	15142
14	(questionnaire* or patient reported outcome* or pro or pros or rasch analys* or self report*).tw,kw.	598722
15	13 or 14	602525
16	3 and 12 and 15	611
17	limit 16 to english language	549

Translation for other Databases

PubMed (52)

((("refractive error"[tiab] OR astigmati*[tiab] OR hyperopi*[tiab] OR hypermetropi*[tiab] OR myopi*[tiab] OR presbyopi*[tiab] OR "short sighted"[tiab] OR "near sighted"[tiab] OR "long sighted"[tiab] OR "far sighted"[tiab]) AND (eyeglasses[tiab] OR spectacles[tiab] OR glasses[tiab] OR "contact lens"[tiab] OR orthokeratology[tiab] OR "silicone hydrogel"[tiab] OR iotraficon[tiab] OR "rigid-gas permeable"[tiab] OR "disposable len"[tiab] OR "Refractive surg"[tiab] OR lasik[tiab] OR lasek[tiab] OR "epi-lasik"[tiab] OR "epi lasik"[tiab] OR prk[tiab] OR rk[tiab] OR iol[tiab] OR implant*[tiab] OR inlay*[tiab] OR intacs[tiab] OR "intracorneal ring segment"[tiab] OR icr[tiab] OR artiflex[tiab] OR keratotomy[tiab] OR epikeratoplasty[tiab] OR thermokeratoplasty[tiab] OR Keratectomy[tiab] OR keratomileusis[tiab] OR keratotomy[tiab] OR laser*[tiab] OR (Lens*[tiab] AND (exchange*[tiab] OR replace*[tiab] OR extract*[tiab] OR "intra-ocular"[tiab] OR "intra ocular"[tiab] OR intraocular[tiab] OR foldable[tiab])) AND (questionnaire*[tiab] OR "patient reported outcome"[tiab] OR pro[tiab] OR pros[tiab] OR "rasch analys"[tiab] OR "self report"[tiab])) NOT medline[sb]))

Scopus (780)

(TITLE-ABS-KEY ("refractive error" OR astigmati* OR hyperopi* OR hypermetropi* OR myopi* OR presbyopi* OR "short sighted" OR "near sighted" OR "long sighted" OR "far sighted")) AND ((TITLE-ABS-KEY (eyeglasses OR spectacles OR glasses OR "contact lens" OR orthokeratology OR "silicone hydrogel" OR iotraficon OR "rigid-gas permeable" OR "disposable len" OR "Refractive surg" OR lasik OR lasek OR "epi-lasik" OR "epi lasik" OR prk OR rk OR iol) OR TITLE-ABS-KEY (implant* OR inlay* OR intacs OR "intracorneal ring segment" OR icr OR artiflex OR keratotomy OR epikeratoplasty OR thermokeratoplasty OR keratectomy OR keratomileusis OR keratotomy OR laser*) OR TITLE-ABS-KEY (lens* W/3 (exchange* OR replace* OR extract* OR "intra-ocular" OR "intra ocular" OR intraocular OR foldable)))) AND (TITLE-ABS-KEY (questionnaire* OR "patient reported outcome" OR pro OR pros OR "rasch analys" OR "self report")))

Web of Science (452)

("refractive error" OR astigmati* OR hyperopi* OR hypermetropi* OR myopi* OR presbyopi* OR "short sighted" OR "near sighted" OR "long sighted" OR "far sighted") AND TOPIC: (eyeglasses OR spectacles OR glasses OR "contact lens" OR orthokeratology OR "silicone hydrogel" OR iotraficon OR "rigid-gas permeable" OR "disposable len" OR "Refractive surg" OR lasik OR lasek OR "epi-lasik" OR "epi lasik" OR prk OR rk OR iol OR implant* OR inlay* OR intacs OR "intracorneal ring segment" OR icr OR artiflex OR keratotomy OR epikeratoplasty OR thermokeratoplasty OR Keratectomy OR keratomileusis OR keratotomy OR laser* OR (Lens* NEAR/3 (exchange* OR replace* OR extract* OR "intra-ocular" OR "intra ocular" OR intraocular OR foldable))) AND TOPIC: (questionnaire* OR "patient reported outcome" OR pro OR pros OR "rasch analys" OR "self report")

Cochrane (221)

((("refractive error" OR astigmati* OR hyperopi* OR hypermetropi* OR myopi* OR presbyopi* OR "short sighted" OR "near sighted" OR "long sighted" OR "far sighted") AND (eyeglasses OR spectacles OR glasses OR "contact lens" OR orthokeratology OR "silicone hydrogel" OR iotraficon OR "rigid-gas permeable" OR "disposable len" OR "Refractive surg" OR lasik OR lasek OR "epi-lasik" OR "epi lasik" OR prk OR rk OR iol OR implant* OR inlay* OR intacs OR "intracorneal ring segment" OR icr OR artiflex OR keratotomy OR epikeratoplasty OR thermokeratoplasty OR Keratectomy OR keratomileusis OR keratotomy OR laser* OR (Lens* NEAR/3 (exchange* OR replace* OR extract* OR "intra-ocular" OR "intra ocular" OR intraocular OR foldable))) AND (questionnaire* OR "patient reported outcome" OR pro OR pros OR "rasch analys" OR "self report"))