

### How to use Research evidence to Source appropriate Contact Lenses for your Patients

Prof James S Wolffsohn

Deputy Dean for Life and Health Sciences

BSc(Hons) PgCertHE PgDipAdvClinOptom MBA PhD MCOptom FHEA FSB FAAO FIACLE FBCLA





### **AIMS**

- to highlight the differences between individual patients with regards to contact lens needs such as . . .
- to examine what drives your choices on what lenses you would fit?





### **OBJECTIVES**

### By the end of this workshop you should

- be able to conduct an appropriate history and symptoms to assess individual patient contact lens needs
- be able to perform a search of the research literature with appropriate search terms
- be able to use the information identified by the search to refine your clinical practice to enhance your contact lens management of patients





### Questions

Some thorny practice 'every-day' questions

- What is the safest type of contact lenses to wear
- Is a lens which claims a higher oxygen permeability than another worth the extra expense?
- I have hayfever will this prevent me from wearing contact lenses
- Can I swim/shower in contact lenses
- Which lenses give the best all day comfort?





### Evidence-Basis – select an order

- a) Heresay
- b) Peer reviewed article
- c) Journal article
- d) Web article
- e) Magazine article
- f) Lecture handout
- g) Optometry in Practice
- h) Wikipedia





### **History and Symptoms – contact lenses**

### Usual plus:

- Dry eyes
- Allergy
- Previous wear
  - Oxygen requirements
  - Comfort
- Lifestyle
  - Contact sports
  - Critical vision
  - UV exposure



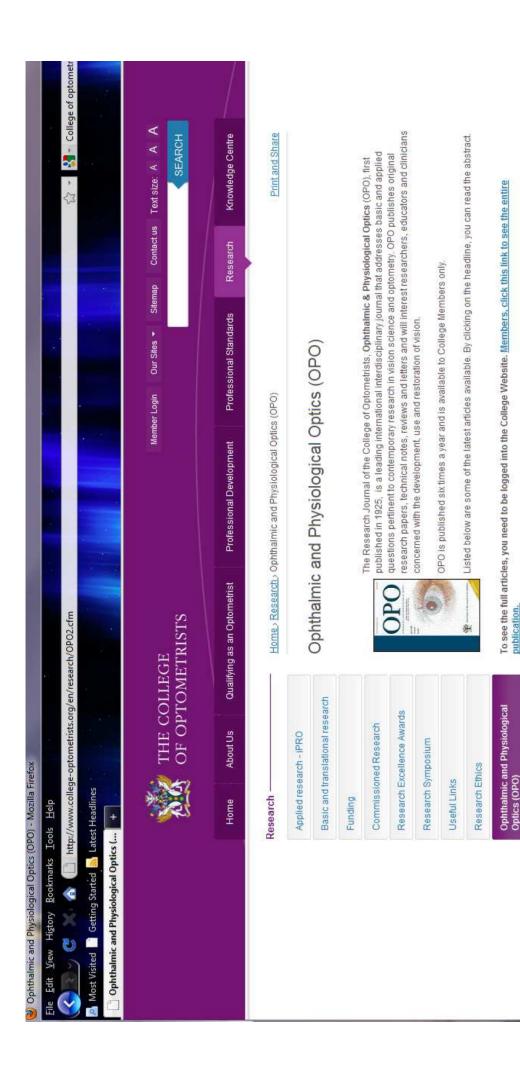


- Search Engine
  - Journal Website
  - Pub Med
  - Science Direct
  - CCLR Reference Sight http://cclr.uwaterloo.ca/ReferenceSight/References.htm
  - Web of Knowledge
  - Authors / repositories





- Search Engine
  - Journal Website
  - Pub Med
  - Science Direct
  - CCLR Reference Sight http://cclr.uwaterloo.ca/ReferenceSight/References.htm
  - Web of Knowledge
  - Authors / repositories



# Ophthalmic and Physiological Optics - Latest Articles

Plans for the development of the journal by David B Elliott - 01 Mar 2011

 Plans for the development of the journal Potential hazards of viewing 3-D stereoscopic television, cinema and computer games; a review Statistical quidelines for clinical studies of human vision

Effect of near adds on the variability of accommodative response in myopic children

A novel instrument for logging nearwork distance

Spectacle prescribing II: practitioner experience is linked to the likelihood of suggesting a partial prescription.

Decision making in chronic glaucoma – optometrists vs ophthalmologists in a shared care service.

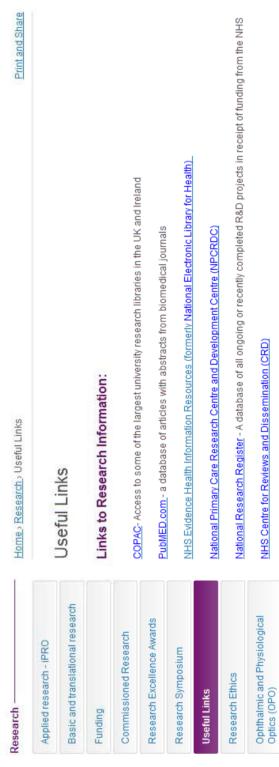
A comparison of the NCT Reichert R7 with Goldmann applanation tonometry and the Reichert ocular response analyzer.





- Search Engine
  - Journal Website
  - Pub Med
  - Science Direct
  - CCLR Reference Sight http://cclr.uwaterloo.ca/ReferenceSight/References.htm
  - Web of Knowledge
  - Authors / repositories





intute - Organising Medical Networked Information The UK's gateway to high quality biomedical internet resources

Nuffield Institute of health sciences





Effect of light-emitting diode colour temperature on magnifier reading performance of the visually impaired.

Results: 1 to 20 of 107

<< First < Prev Page 1 of 6 Next > Last >>

- Wolffsohn JS, Palmer E, Rubinstein M, Eperjesi F.
  - Clin Exp Optom. 2012 Feb 29. doi: 10.1111/j.1444-0938.2011.00702.x. [Epub ahead of print]
    PMID: 22372735 [PubMed as supplied by publisher]
    Related citations
- Development of a questionnaire to assess the relative subjective benefits of presbyopia correction. J 2
  - Buckhurst PJ, Wolffsohn JS, Gupta N, Naroo SA, Davies LN, Shah S.
     J Cataract Refract Surg. 2012 Jan;38(1):74-9. Epub 2011 Nov 10.
     PMID: 22078121 [PubMed indexed for MEDLINE]
     Related citations
- How effective is low vision service provision? A systematic review
   Rinns AM Runce C Dickinson C Harner R Tudor-Edwards R World
- Binns AM, Bunce C, Dickinson C, Harper R, Tudor-Edwards R, Woodhouse M, Linck P, Suttie A, Jackson J, Lindsay J, Wolffsohn J, Hughes L, Margrain TH.

Surv Ophthalmol. 2012 Jan 2;57(1):34-65. Epub 2011 Oct 21. Review.

PMID: 22018676 [PubMed - indexed for MEDLINE]

Related citations

- A review of non-pharmacological and pharmacological management of seasonal and perennial allergic conjunctivitis.
- Bilkhu PS, Wolffsohn JS, Naroo SA.

Cont Lens Anterior Eye. 2012 Feb;35(1):9-16. Epub 2011 Sep 16.

PMID: 21925924 [PubMed - in process]

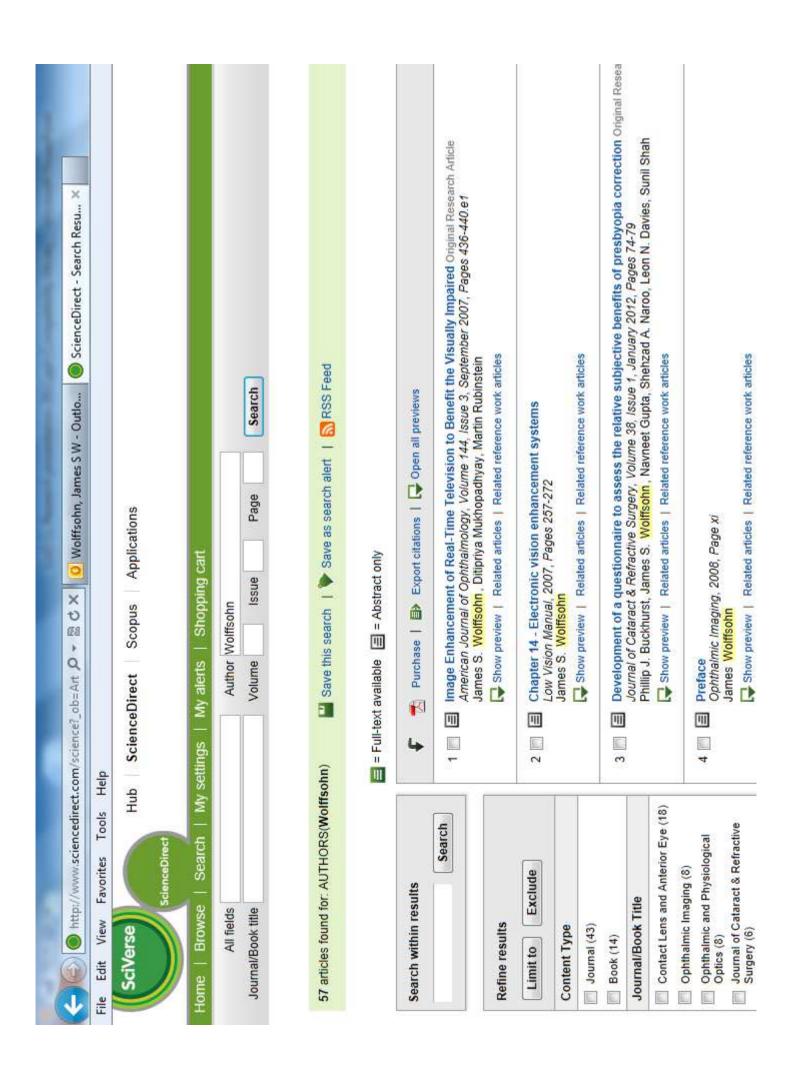
Related citations





- Search Engine
  - Journal Website
  - Pub Med
  - Science Direct
  - CCLR Reference Sight http://cclr.uwaterloo.ca/ReferenceSight/References.htm
  - Web of Knowledge
  - Authors / repositories









- Search Engine
  - Journal Website
  - Pub Med
  - Science Direct
  - CCLR Reference Sight http://cclr.uwaterloo.ca/ReferenceSight/References.htm
  - Web of Knowledge
  - Authors / repositories

×





Contact Us

Links

Search Now

Reference Search





comprehensive database of current references relating to contact lenses, The Reference Sight reference database provides free access to a refractive surgery and external ocular disease.

abstracts and links to e-text are included where possible, as well as links to periodicals, many of which are not listed by any other database. Full Search #,0. references from 2296 refereed journals and professional publishers and reprint sites. References are updated daily.

Registration is not required to access this free resource, but provides site visitors with significantly more options.

### **Basic Features**

- Search the database
- Cross-reference your search by author, journal and keywords

Search Now

# Advanced Features (registration and sign-in required):

- Personalized reference lists
- Historical list of previous searches
- Monitor and receive notification of reference updates
- Export references for use within documents or bibliographic software

Register Sign In



0







Sign In For Full Functionality SIGN IN

	-
	Ē
	0
	fs.
	Ξ
	5
	š
	5
,	

Advanced Search

New Search

0

Reference List: Contains wolffsohn

References 1 to 10 of 56 4 5 Page: 1 of 6 1 NEXT 3

A review of non-pharmacological and pharmacological management of seasonal and perennial allergic conjunctivitis.

Bilkhu, P.S. Wolffsohn, J.S. Naroo, S.A.

Contact Lens and Anterior Eye 2012;35(1):9-16

Development of a questionnaire to assess the relative subjective benefits of presbyopia correction.

Buckhurst, P.J. Wolffsohn, J.S. Gupta, N. Naroo, S.A. Davies, L.N. Shah, S.

Accommodative amplitude required for sustained near work. Journal Of Cataract And Refractive Surgery 2012;38(1):74-79

Ophthalmic & Physiological Optics 2011;31(5):480-486 Wolffsohn, J.S. Sheppard, A.L. Vakani, S. Davies, L.N.

The influence of corneoscleral topography on soft contact lens fit. Hall, L.A. Young, G. Wolffsohn, J.S. Riley, C.

Investigative Ophthalmology & Visual Science 2011;52(9):6801-6806

Role of contact lenses in relieving ocular allergy.

Wolffsohn, J.S. Emberlin, J.C.

Contact Lens and Anterior Eye 2011;34(4):169-172

A novel, dynamic, in vivo, non-contact method of measuring oxygen depletion rate of the anterior eye.

Cardall, M. Naroo, S.A. Wolffsohn, J.S.

Contact Lens and Anterior Eye 2011;34(3):121-127

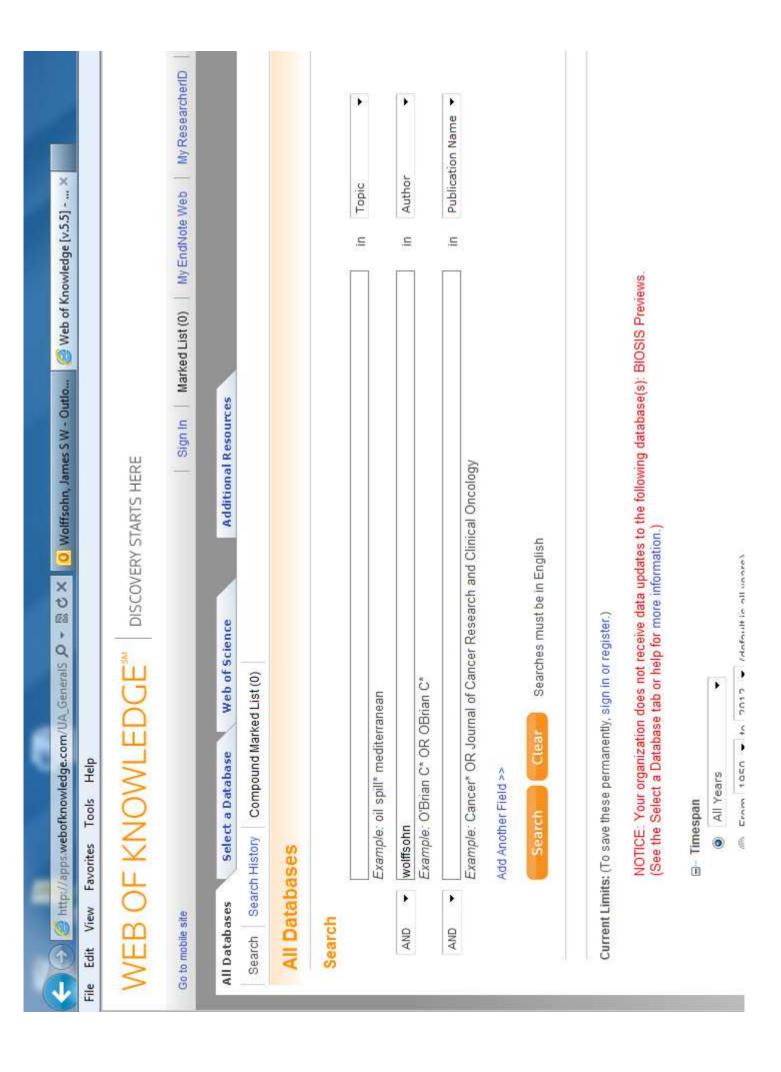
Clinical evaluation of the Softec HD aberration-free aspheric intraocular lens. Craig, J.P. Shah, S. Wolffsohn, J.S.

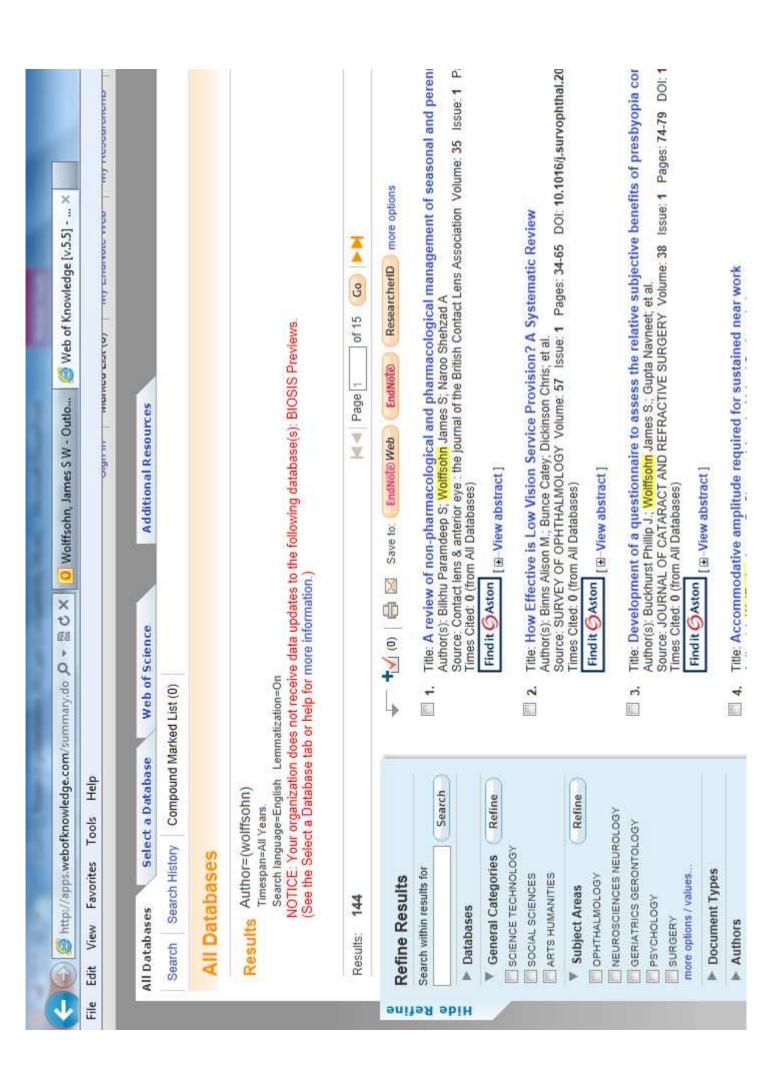
Clinical & Experimental Ophthalmology 2011;39(3):281-283





- Search Engine
  - Journal Website
  - Pub Med
  - Science Direct
  - CCLR Reference Sight http://cclr.uwaterloo.ca/ReferenceSight/References.htm
  - Web of Knowledge
  - Authors / repositories







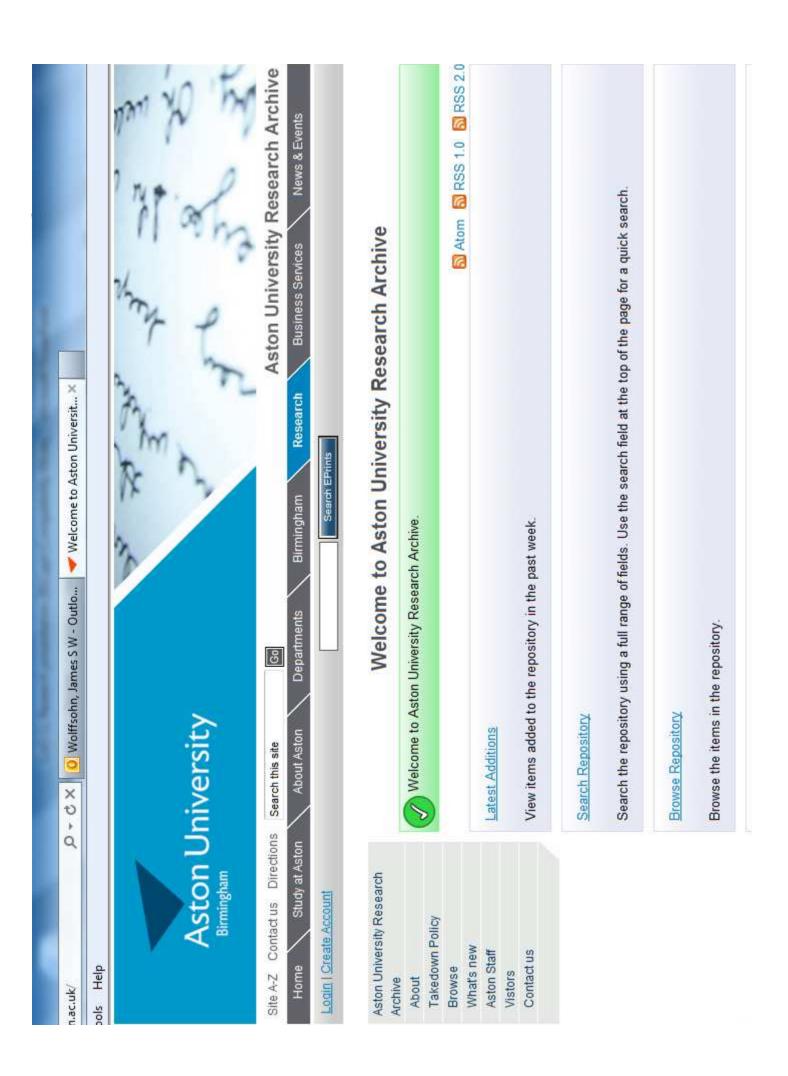
followed by perennial allergic conjunctivitis (PAC; 5%). Both are type 1 IgE mediated hypersensitivity reactions where mast cells occurs year round. Despite being a relatively mild condition, the effects on the quality of life can be profound and therefore they demand attention. Primary management of SAC and PAC involves avoidance strategies depending on the responsible allergen involves ophthalmic assessment. Seasonal allergic conjunctivitis (SAC) is the most common form of allergic eye disease (90%) prevalence is increasing. It is estimated to affect 8% of patients attending optometric practice but is poorly managed and rarely play an important role in pathophysiology. The signs and symptoms are similar but SAC occurs periodically whereas PAC Allergic eye disease encompasses a group of hypersensitivity disorders which primarily affect the conjunctiva and its (s) to prevent the hypersensitivity reaction. Cooled tear supplements and cold compresses may help bring relief.

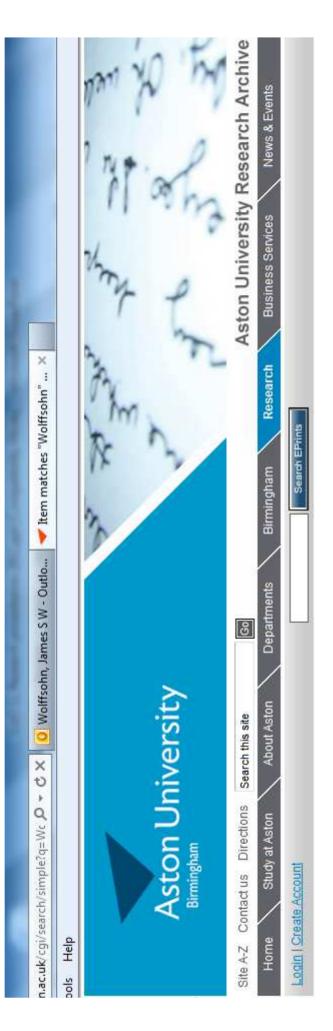






- Search Engine
  - Journal Website
  - Pub Med
  - Science Direct
  - CCLR Reference Sight http://cclr.uwaterloo.ca/ReferenceSight/References.htm
  - Web of Knowledge
  - Authors / repositories





### Aston University Research Takedown Policy What's new Aston Staff Contact us Browse Vistors About Archive

## Item matches "Wolffsohn"

Displaying results 1 to 20 of 24

Refine search | New search | 1 | 2 | Next

Order the results: by year (most recent first) . Reorder

Export 24 results as ASCII Citation

Export

RSS 1.0 N Atom N RSS 2.0



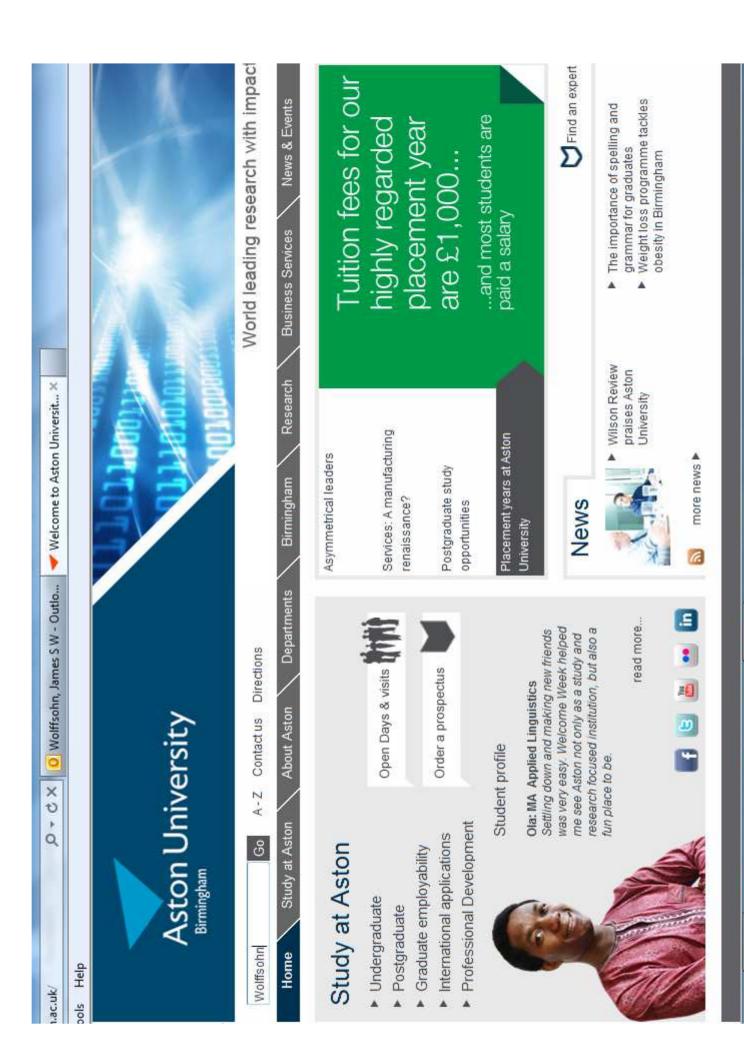
- Patel, Hetal (2011). Biomechanical aspects of the anterior segment in human myopia. PhD thesis, UNSPECIFIED
- Sheppard, A.L. (2010). IN VIVO analysis of ocular morphological changes during phakic accommodation. PhD thesis, UNSPECIFIED

guidelines for clinical studies of human vision. Ophthalmic and Physiological Optics, 31 (2), pp. 123-136. Armstrong, Richard A.; Davies, Leon N.; Dunne, Mark C.M. and Gilmartin, Bernard (2011). Statistical

d

Nagra, Manbir K. (2010). Myopia: structural and functional correlates. PhD thesis, UNSPECIFIED. 4







ols Help



# Professor James Wolffsohn

Life & Health Sciences

Staff directory A-Z Index

### Deputy Executive Dean

Prof Stephen J Anderson

Dr Richard Armstrong

Dr Eduard Badarau

School of Life and Health Sciences

Aston University

Dr Raj K, Singh Badhan

Prof Clifford J Bailey

Dr Daniel Baker Dr Zita Balklava

Birmingham B4 7ET

7

email: j.s.w.wolffsohn@aston.ac.uk

telephone: +44 (0) 121 204 4140

fax: +44 (0) 121 204 4048

Dr Hannah Bartlett

Dr Dev Banerjee Dr Gareth Barnes Ms Dawn Belcher Dr Srikanth Bellary

Dr Roslyn M Bill

Member of the Undergraduate Optometry Programme

Member of the Ophthalmic Research Group

Dr Alexis Boukouvalas

Prof Adrian Burgess

Dr Julia Y Brown Dr Joseph Bush

Dr Luc Boutsen

Mrs Amanda Casey

Member of research strand: 'Development of novel drugs, formulations and tissues to support healthy ageing' - Aston Research Centre for Healthy Ageing







- Search Engine
  - Journal Website
  - Pub Med
  - Science Direct
  - CCLR Reference Sight http://cclr.uwaterloo.ca/ReferenceSight/References.htm
  - Web of Knowledge
  - Authors / repositories





### Search Strategy

- Key words
- Unambiguous
- Wildcard
- Review abstracts
- Select
- More from references cited



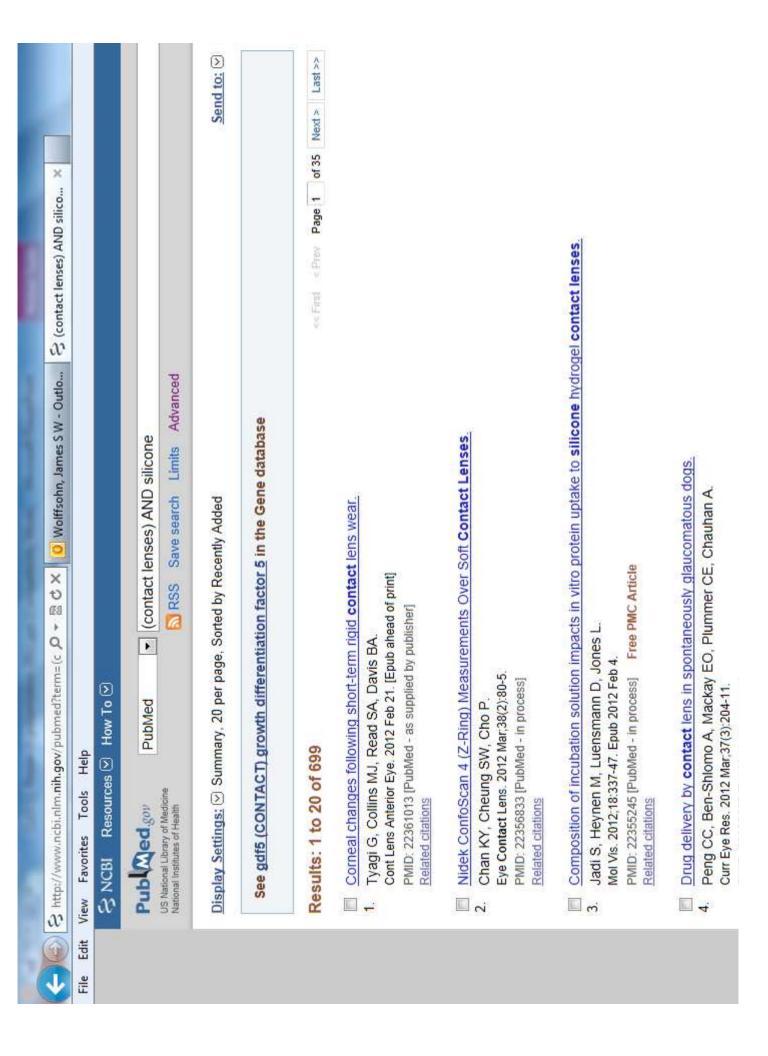
Contact Lens Materials, Mucin Fragmentation and Relation to Symptoms.

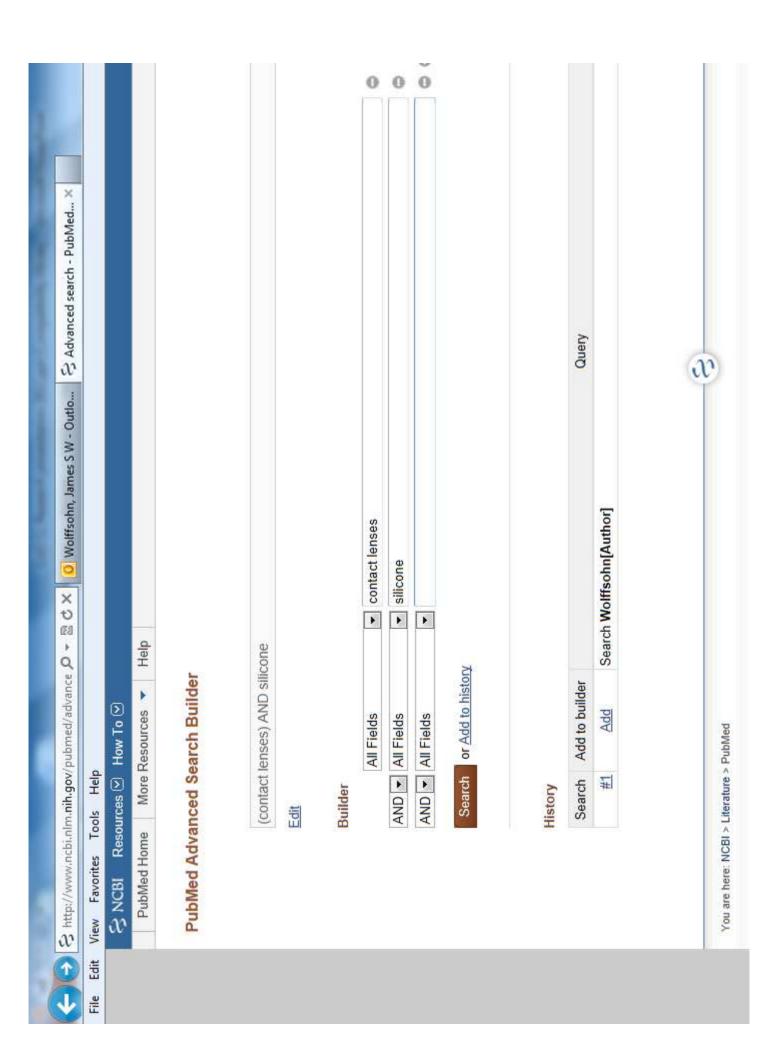
PMID: 22378117 [PubMed - as supplied by publisher]

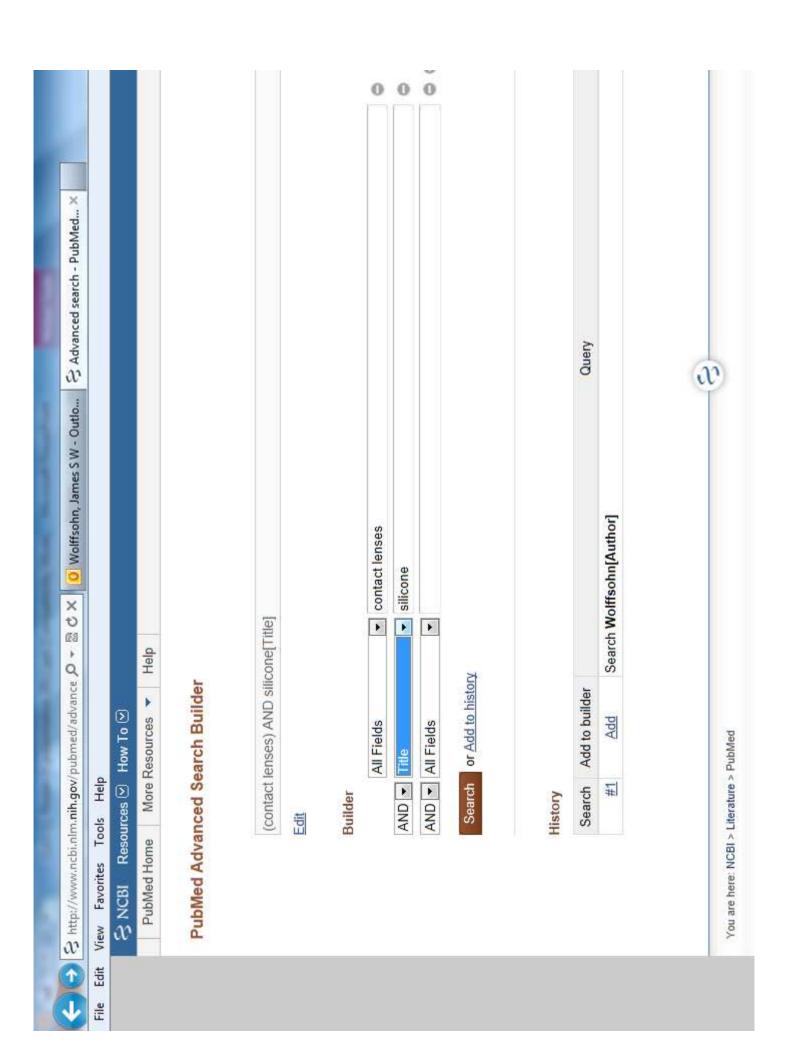
Related citations

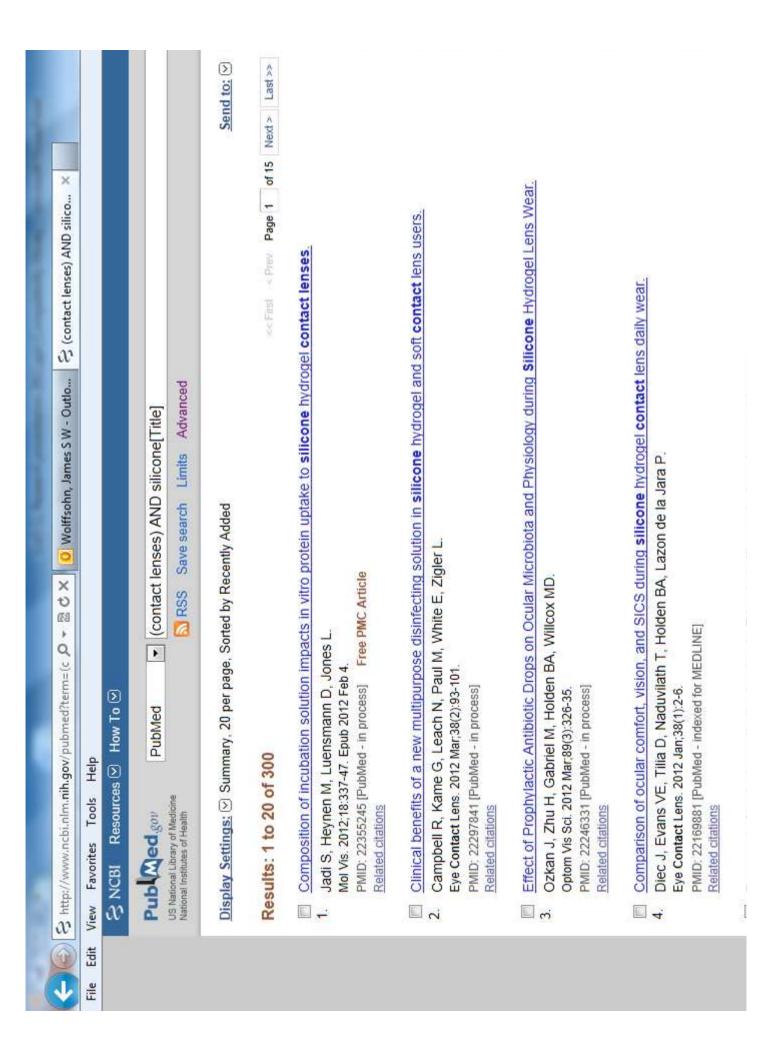
- Berry M, Purslow C, Murphy PJ, Pult H.
   Cornea. 2012 Feb 28. [Epub ahead of print]
   PMID: 22378108 [PubMed as supplied by publisher]
   Related citations
- Analysis of optical side-effects of fs-laser therapy in human presbyopic lens simulated with modified contact lenses. <u></u> ⊞
  - Peter M, Kammel R, Ackermann R, Schramm S, Seifert BU, Frey K, Blum M, Nolte S, Kunert KS Graefes Arch Clin Exp Ophthalmol. 2012 Feb 29. [Epub ahead of print] PMID: 22371023 [PubMed - as supplied by publisher] Related citations
- Fluid-Filled Scleral Contact Lenses in Vernal Keratoconjunctivitis.

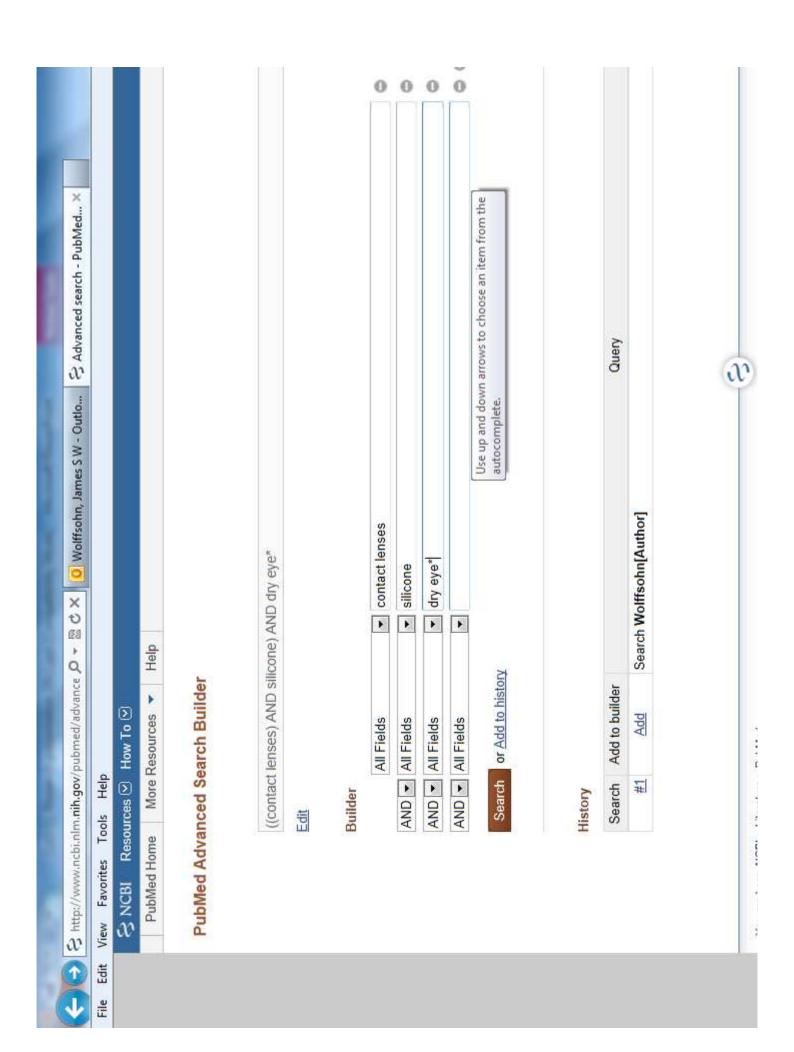
  4. Rathi VM. Sudharman Mandathara P. Vaddavalli PK. Dumpati S. Chak
- Rathi VM, Sudharman Mandathara P, Vaddavalli PK, Dumpati S, Chakrabarti T, Sangwan VS. Eye Contact Lens. 2012 Feb 23. [Epub ahead of print]

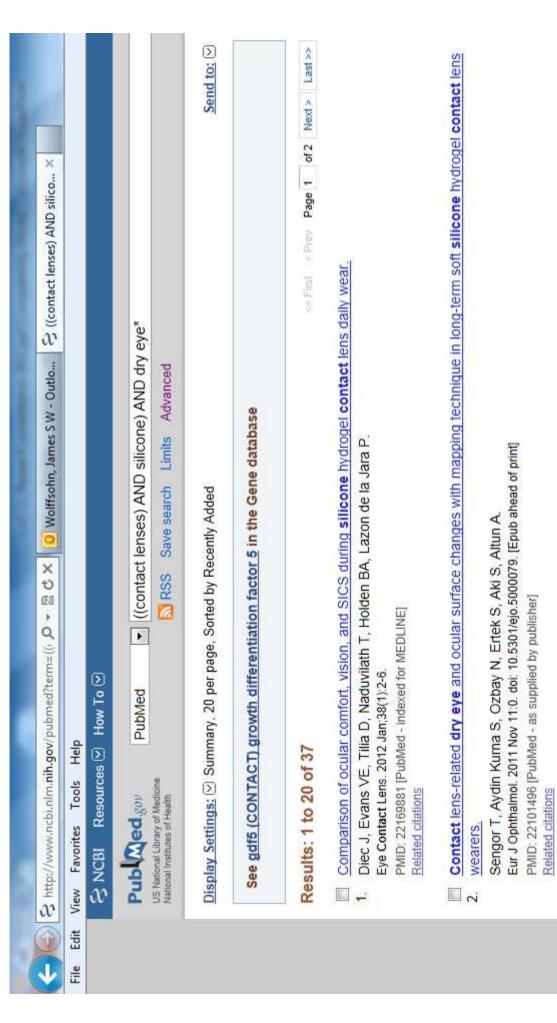












Combined application of autologous serum eye drops and silicone hydrogel lenses for the treatment of persistent epithelial defects.

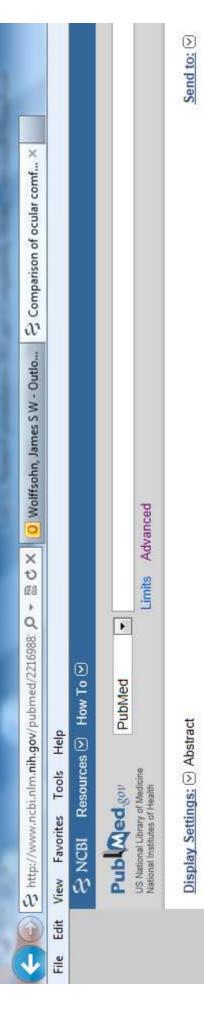
Effect of controlled adverse chamber environment exposure on tear functions in silicon hydrogel and hydrogel soft contact lens

Kojima T, Matsumoto Y, Ibrahim OM, Wakamatsu TH, Uchino M, Fukagawa K, Ogawa J, Dogru M, Negishi K, Tsubota K.

nvest Ophthalmol Vis Sci. 2011 Nov 11;52(12):8811-7. Print 2011.

Wearers

... ... PMID: 21989724 [PubMed - indexed for MEDLINE]



Eye Contact Lens, 2012 Jan;38(1):2-6.

# Comparison of ocular comfort, vision, and SICS during silicone hydrogel contact lens daily wear.

Diec J, Evans VE, Tilia D, Naduvilath T, Holden BA, Lazon de la Jara P.

Brien Holden Vision Institute, Sydney, NSW, Australia, j.diec@brienholdenvision.org

#### bstract

OBJECTIVES: The aim of this study was to investigate the relationship between solution-induced corneal staining (SICS) and silicone hydrogel contact lens comfort and vision. METHODS: A retrospective analysis of a series of open-label studies were conducted with 24 groups of approximately 40 participants, each wearing 1 of 6 silicone hydrogel contact lenses with 1 of 4 lens care products bilaterally for 3 months of daily wear. The presence of SICS and subjective ocular ratings were collected at 2 weeks and at 1 and 3 months.

SICS for comfort during the day (7.9±1.7 vs. 8.5±1.4, P=0.03), comfort at the end of the day (6.6±2.1 vs. 7.4±1.9, P=0.03), overall dryness (7.4±1.9 vs. RESULTS: A total of 1,051 participants were enrolled. The participants with SICS rated significantly less favorably than did the participants without 8.0±1.7, P=0.04), dryness at the end of the day (6.7±2.2 vs. 7.5±2.1, P=0.01), feelings of burning and stinging (8.5±2.0 vs. 8.9±1.8, P=0.02), and overall vision (8.2±1.6 vs. 8.7±1.3, P<0.001).

CONCLUSIONS: The participants with SICS had lower subjective comfort and vision compared with those who did not experience SICS.

PMID: 22169881 [PubMed - indexed for MEDLINE]

- Dublication Types, MeSH Terms, Substances
- + LinkOut more resources





#### **Evaluating the Research**

- Review
- Quantitative measuring
- Qualitative exploring, describing, explaining
- In vivo / In vitro
- Bilateral / Contralateral
- Sample size
- Population
- Randomised controlled trial
- Masked
- Independence

## Evaluating clinical research for your practice



Birmingham

Aston University

Marketing fluff or scientific stuff? Jane Veys and Dr Cristina Schnider provide a guide to the essential elements of clinical research and how to critically evaluate study results

s consumers, we're used to marketing claims for all manner of consumer products; the food that Teight out of 10 owners say their cats prefer or the beer that reach. But in our professional lives, we expect to see more substantial evidence to back up claims for new healthcare products and treatments. The move products and treatments. The move that healthcare professionals increasingly host for particular means that healthcare professionals increasingly host for evidence based medicine means

Each subject receives configuration of C. type core C. type core different periods (Appears of Corp company to a sec different periods (Appears of Corp company to a sec different periods (Appears of Corp company (Appears

- Comp comparison have a text - Comp comparison have a text - Surface pairs carbon deport in matrixed by stated cutoria with another subject. The successor test and the other control

- Higher ander

Pros.

Simple and casy to impliment

Less complicated analysis

be To see if the addition of a feature influences an aspect of performance in a particular patient group'.

• The hypotheses are the individual

 The hypotheses are the individual questions that the study seeks to answer.
 These should be carefully selected based on prior research, very clearly defined, stated prior to the start of the study and not changed once the protocol has been finalised. An example of a study hypothesis might be "That the addition of a feature

### Checklist for clinical studies

Other higher order such

- Estant's optimized 2-period (AR, BA, AR, BB)

4	What is the study objective and hypotheses?
N	is the study design and randomisation appropriate?
100	Have all variables been controlled?
	Are subjects/investigators unbiased/masked & trained?
W)	Has an appropriate number an composition of subjects been used?
ø	Has multiplie testing occurred and been adjusted for?
1	Are performance differences meaningfu?
80	Are the condustons relevant and accurate based on the results?
on.	Are the recommendations appropriate?
10	Have the data been published and where?





- What is the safest type of contact lenses to wear
- Is a lens which claims a higher oxygen permeability than another worth the extra expense?
- I have hayfever will this prevent me from wearing contact lenses
- Can I swim/shower in contact lenses
- Which lenses give the best all day comfort?





- · What is the safest type of contact lenses to wear
- Is a lens which claims a higher oxygen permeability than another worth the extra expense?
- I have hayfever will this prevent me from wearing contact lenses
- Can I swim/shower in contact lenses
- Which lenses give the best all day comfort?



Send to: (>)

#### Results: 11

See gdf5 (CONTACT) growth differentiation factor 5 in the Gene database

Display Settings: Summary, 20 per page, Sorted by Recently Added

- A survey of UK practitioner attitudes to the fitting of rigid gas permeable lenses.
- Ophthalmic Physiol Opt. 2010 Nov;30(6);731-9. doi: 10.1111/j.1475-1313.2010.00790.x. PMID: 21205258 [PubMed - indexed for MEDLINE] Gill FR, Murphy PJ, Purslow C. Related citations
- The role of **contact** lens type, oxygen transmission, and care-related solutions in mediating epithelial homeostasis and pseudomonas binding to comeal cells: an overview 2

Eye Contact Lens. 2007 Nov;33(6 Pt 2):394-8; discussion 399-400. Review. Robertson DM, Petroll WM, Jester JV, Cavanagh HD

PMID: 17975430 [PubMed - Indexed for MEDLINE] Related citations

Infectious keratitis: what have we learned? ... ... Eye Contact Lens. 2007 Nov, 33(6 Pt 2): 418-20; discussion 424-5. Review. PMID: 17975437 [PubMed - indexed for MEDLINE] Related citations

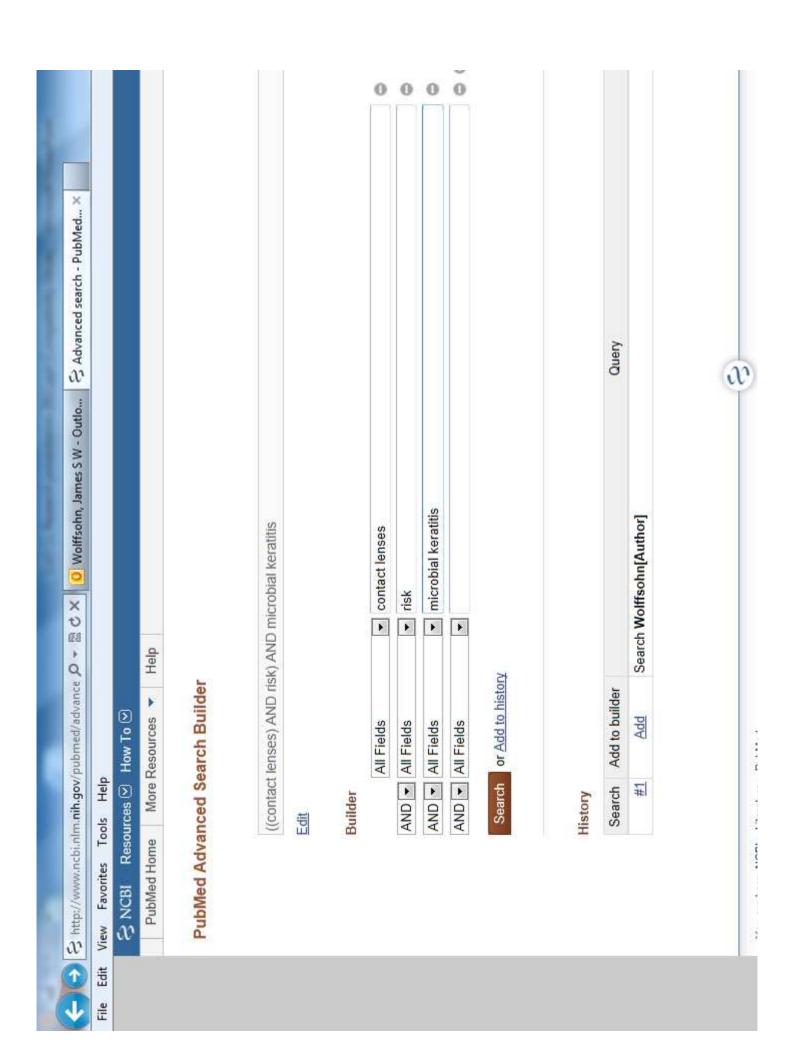
- Diagnosis and management of Acanthamoeba keratitis. **4** 
  - Hammersmith KM

S (contact lenses) AND safest ... ×

O Wolffsohn, James S W - Outlo...

a.gov/pubmed?term=(c D + 图 C X

Help





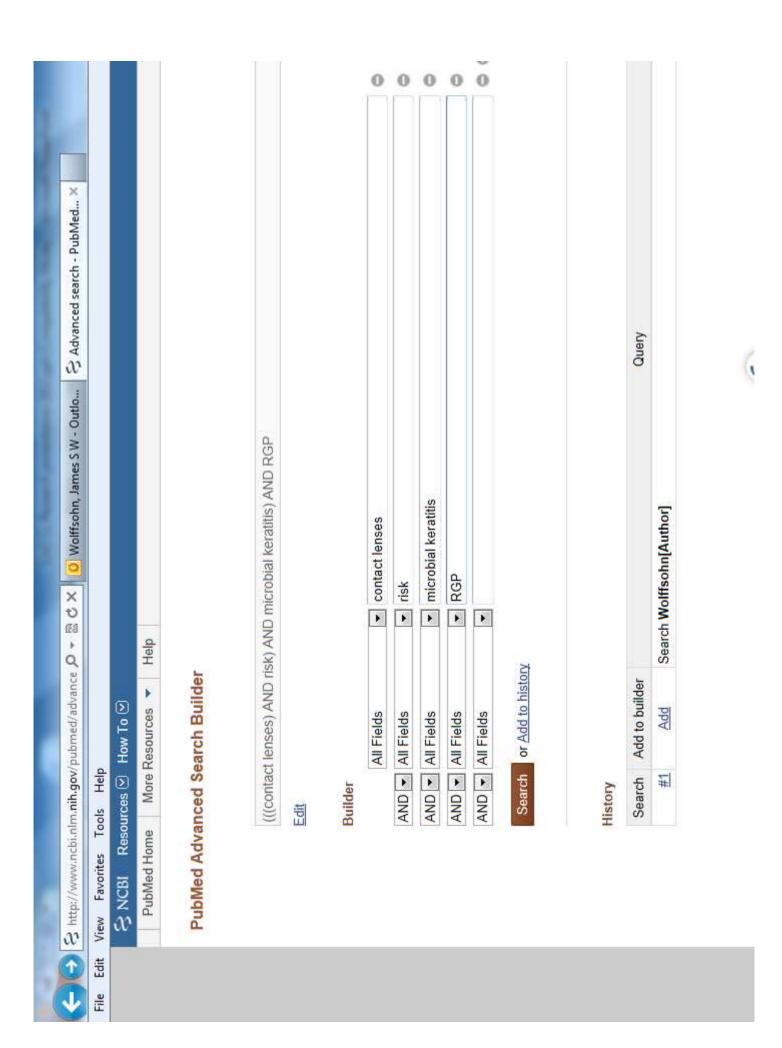
See gdf5 (CONTACT) growth differentiation factor 5 in the Gene database

Results: 1 to 20 of 119

<< First < Pres Page 1 of 6 Next > Last >>

- Contact lens complications in an urgent-care population: the University of California, Los Angeles, contact lens study
- Lee SY, Kim YH, Johnson D, Mondino BJ, Weissman BA.
   Eye Contact Lens. 2012 Jan;38(1):49-52.
   PMID: 22157395 [PubMed indexed for MEDLINE]
   Related citations
- Contact lens-related microbial keratitis: how have epidemiology and genetics helped us with pathogenesis and prophylaxis.
  - Stapleton F, Carnt N.
     Eye (Lond). 2012 Feb;26(2):185-93. doi: 10.1038/eye.2011.288. Epub 2011 Dec 2. PMID: 22134592 [PubMed - in process] Related citations
- An international analysis of **contact** lens compliance.

  3. Morran PB. Ffron N. Toshida H. Nichols .....
- Morgan PB, Efron N, Toshida H, Nichols JJ.
  Cont Lens Anterior Eye. 2011 Oct;34(5):223-8. doi: 10.1016/j.clae.2011.08.001. Epub 2011 Aug 24.
  PMID: 21868279 [PubMed indexed for MEDLINE]
  Related citations
- Impact of lens case hygiene guidelines on contact lens case contamination.
  4. Will YT Tend Y.I Nicholas M Harmis N Zhu H Willcox MD Stanleton F
  - Wu YT, Teng YJ, Nicholas M, Harmis N, Zhu H, Willcox MD, Stapleton F. Optom Vis Sci. 2011 Oct;88(10):E1180-7.

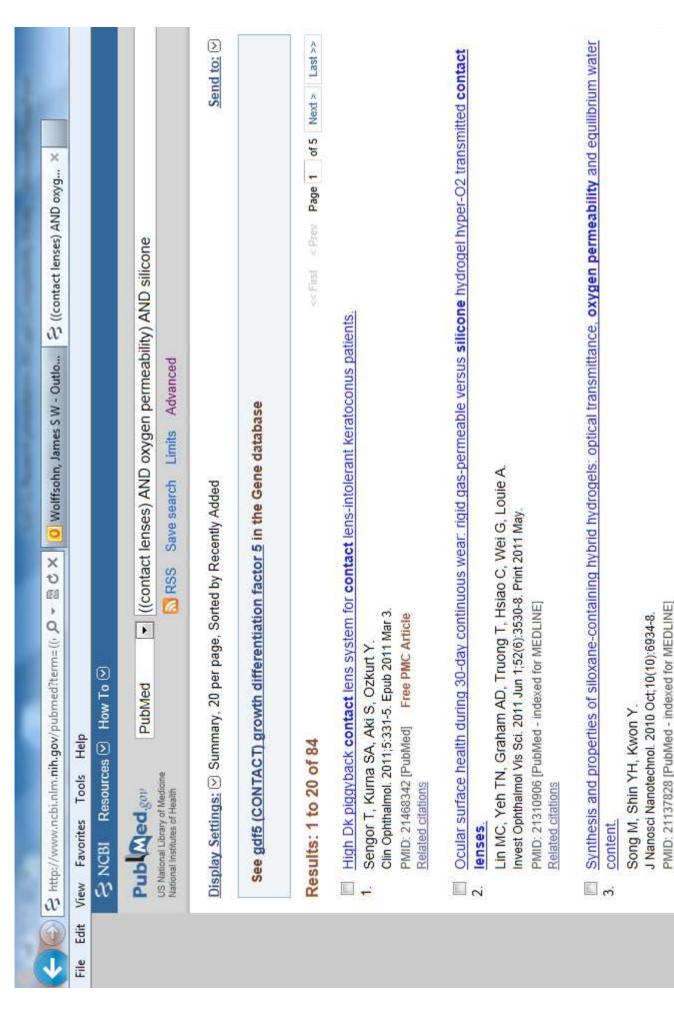








- What is the safest type of contact lenses to wear
- Is a lens which claims a higher oxygen permeability than another worth the extra expense?
- I have hayfever will this prevent me from wearing contact lenses
- Can I swim/shower in contact lenses
- Which lenses give the best all day comfort?



Corneal epithelial cell biocompatibility to silicone hydrogel and conventional hydrogel contact lens packaging solutions.



View Favorites Tools Help Edit

ℜ NCBI Resources ♥ How To ♥

US National Library of Medicine Pub Med gov

National Institutes of Health

PubMed

(((contact lenses) AND oxygen permeability) AND silicone) AND \*edema

Save search Limits Advanced N RSS

Display Settings: Summary, 20 per page, Sorted by Recently Added

Send to: (>)

# See gdf5 (CONTACT) growth differentiation factor 5 in the Gene database

#### Results: 14

- Central and peripheral oxygen transmissibility thresholds to avoid comeal swelling during open eye soft contact lens wear.
- Morgan PB, Brennan NA, Maldonado-Codina C, Quhill W, Rashid K, Efron N. J Biomed Mater Res B Appl Biomater. 2010 Feb;92(2):361-5.

PMID: 19904816 [PubMed - indexed for MEDLINE]

Related citations

- The impact of silicone hydrogel materials on overnight corneal swelling.
- Steffen RB, Schnider CM. 5

Eye Contact Lens. 2007 May;33(3):115-20.

PMID: 17502744 [PubMed - indexed for MEDLINE]

Related citations

- A review of the Holden-Mertz criteria for critical oxygen transmission.
- Fonn D, Bruce AS 3

Eye Contact Lens. 2005 Nov;31(6):247-51. Review.

PMID: 16284501 [PubMed - indexed for MEDLINE]

Related citations

- Will higher-Dk materials give better comeal refractive therapy results and fewer complications?
- Sakamoto R, Sugimoto K. 4

Eye Contact Lens. 2004 Oct;30(4):252-3; discussion 263-4.



View Favorites Tools Help Edit

ℜ NCBI Resources ♥ How To ♥

US National Library of Medicine National Institutes of Health Pub Med gov

PubMed

((contact lenses) AND oxygen permeability) AND flux

N RSS

Save search Limits Advanced

Display Settings: Summary, 20 per page, Sorted by Recently Added

Send to: (>)

See gdf5 (CONTACT) growth differentiation factor 5 in the Gene database

#### Results: 13

The meaning of oxygen permeability in different materials for optimalization of contact lenses function].

Grzech A, Misiuk-Hojło M.

Polim Med. 2007;37(3):67-71. Review. Polish.

PMID: 18251206 [PubMed - indexed for MEDLINE]

Related citations

Corneal oxygen distribution with contact lens wear. 

Alvord LA, Hall WJ, Keyes LD, Morgan CF, Winterton LC. 7

Cornea, 2007 Jul;26(6):654-64.

PMID: 17592312 [PubMed - indexed for MEDLINE]

Related citations

Biological oxygen apparent transmissibility of hydrogel contact lenses with and without organosilicon moieties. <u></u> ⊞

Compañ V, López-Alemany A, Riande E, Refojo MF.

Biomaterials. 2004 Jan;25(2):359-65.

PMID: 14585724 [PubMed - indexed for MEDLINE]

Related citations

A model of oxygen flux through contact lenses.

Brennan NA. 4

Cornea, 2001 Jan;20(1):104-8.





- What is the safest type of contact lenses to wear
- Is a lens which claims a higher oxygen permeability than another worth the extra expense?
- I have hayfever will this prevent me from wearing contact lenses
- Can I swim/shower in contact lenses
- Which lenses give the best all day comfort?



View Favorites Tools Help Edit

ℜ NCBI Resources ♥ How To ♥

US National Library of Medicine National Institutes of Health Pub Med gov

PubMed

(contact lenses) AND hayfever

N RSS

Save search Limits Advanced

Send to: (>)

Display Settings: Summary, 20 per page, Sorted by Recently Added

See gdf5 (CONTACT) growth differentiation factor 5 in the Gene database

#### Results: 12

[Different clinical forms of conjunctival allergy].

Creuzot-Garcher C.

PMID: 17417156 [PubMed - indexed for MEDLINE] Free Article J Fr Ophtalmol. 2007 Mar;30(3):288-91. Review. French.

Related citations

The Dundee University Scottish Keratoconus study: demographics, corneal signs, associated diseases, and eye rubbing.

Weed KH, MacEwen CJ, Giles T, Low J, McGhee CN. Eye (Lond). 2008 Apr, 22(4):534-41. Epub 2007 Jan 19. 7

PMID: 17237755 [PubMed - indexed for MEDLINE]

Related citations

A review of olopatadine for the treatment of ocular allergy. <u></u> ⊞

Abelson MB.

Expert Opin Pharmacother. 2004 Sep;5(9):1979-94. Review.

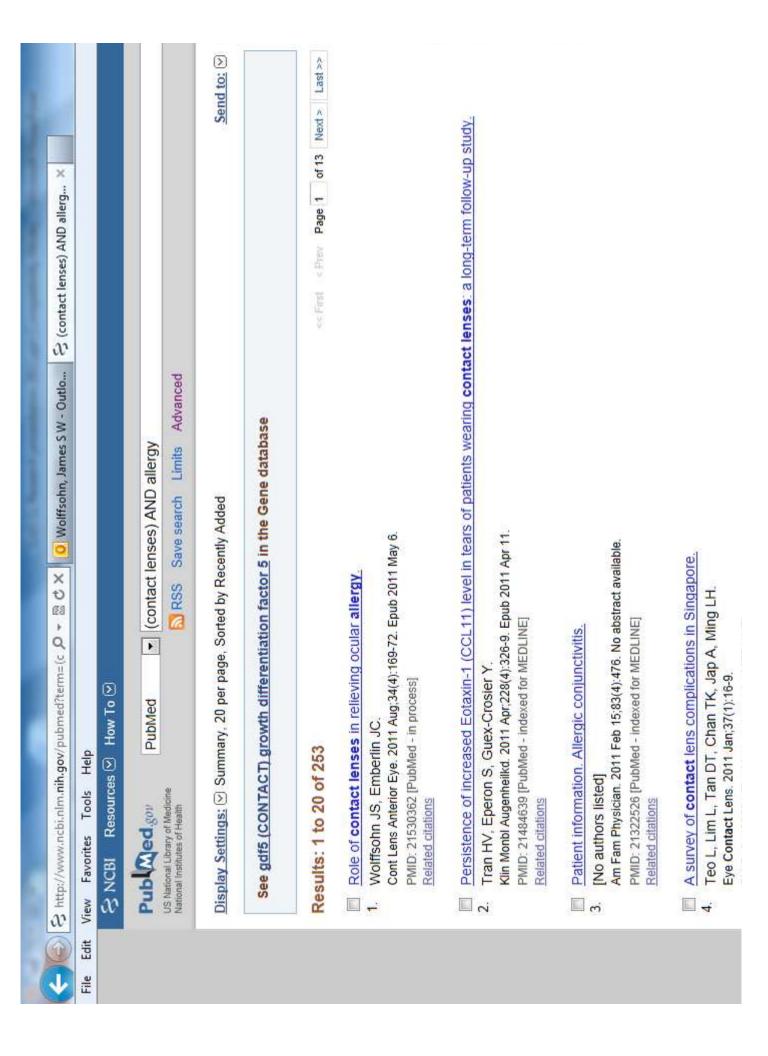
PMID: 15330735 [PubMed - indexed for MEDLINE]

Related citations

Allergic eye disease--a clinical challenge.

Buckley RJ.

Clin Exp Allergy, 1998 Dec;28 Suppl 6:39-43.

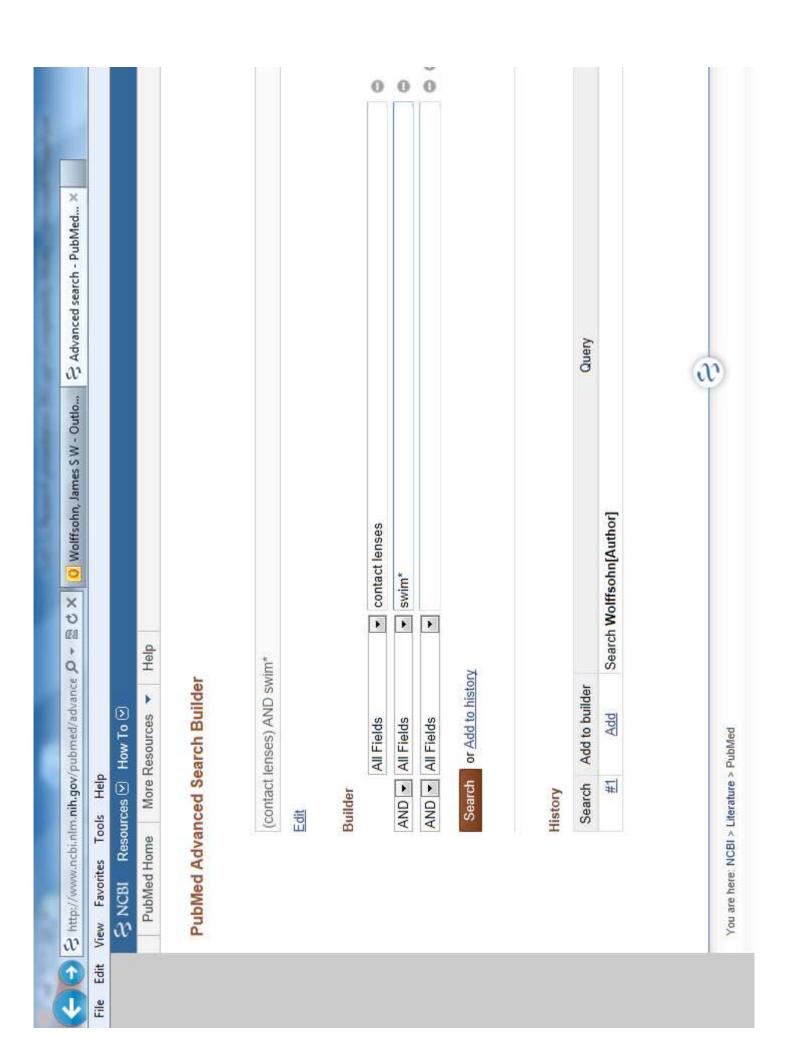






- What is the safest type of contact lenses to wear
- Is a lens which claims a higher oxygen permeability than another worth the extra expense?
- I have hayfever will this prevent me from wearing contact lenses
- Can I swim/shower in contact lenses
- Which lenses give the best all day comfort?







Dynamics of flagellum- and pilus-mediated association of Pseudomonas aeruginosa with contact lens surfaces. Free PMC Article Appl Environ Microbiol. 2011 Jun;77(11):3644-52. Epub 2011 Apr 15. PMID: 21498762 [PubMed - indexed for MEDLINE] Tran VB, Fleiszig SM, Evans DJ, Radke CJ. Related citations 7

- Cornea and contact lenses have our attention.

  3. Adams A.I.
  - Adams AJ.
     Optom Vis Sci. 2011 Apr;88(4):453. No abstract available.
     PMID: 21430500 [PubMed indexed for MEDLINE] Related citations
- Protozoa: Structure, Classification, Growth, and Development.

  4. Vagget P.G.
- In: Baron S, editor. Medical Microbiology. 4th edition. Galveston (TX): University of Texas Medical Branch at Galveston; 1996. Chapter 77. Yaeger RG.



- PMID: 21297511 [PubMed indexed for MEDLINE] Related citations

Optom Vis Sci. 2011 Apr;88(4):456-60.

Swimming with soft contact lenses: danger of acanthamoeba keratitis. Lancet Infect Dis. 2005 Jun;5(6):392. No abstract available. PMID: 15919625 [PubMed - Indexed for MEDLINE] Kaji Y, Hu B, Kawana K, Oshika T. 2

Related citations

- Bacterial populations on silicone hydrogel and hydrogel **contact lenses** after **swimming** in a chlorinated pool. Choo J, Vuu K, Bergenske P, Burnham K, Smythe J, Caroline P. PMID: 15711460 [PubMed - indexed for MEDLINE] Optom Vis Sci. 2005 Feb;82(2):134-7. Related citations 1 m
- Amoeba of the Acanthamoeba species in swimming pools and lakes of the Lublin area and in people using contact lenses]. Toczołowski J, Gieryng H, Gieryng R, Wróblewska E. Klin Oczna, 2000;102(3);207-8. Polish. 4

http://www.ncbi.nlm.nih.gov/pubmed?db=pubmed&cmd=link&linkname=pubmed\_pubmed&uid=15919...

PMID: 11126179 [PubMed - indexed for MEDLINE]



# Do swimming goggles limit microbial contamination of contact lenses?

Wu YT, Tran J, Truong M, Harmis N, Zhu H, Stapleton F.

Optom Vis Sci. 2011 Apr;88(4):456-60.

Brien Holden Vision Institute, Sydney, New South Wales, Australia. y.wu@brienholdenvision.org.au

#### bstract

PURPOSE: Wearing goggles over contact lenses while swimming is often recommended by eye care professionals. Limited data are available to assess this recommendation. The purpose of this study was to examine whether wearing goggles while swimming limits bacterial colonization on contact lenses and whether the type of lens worn affects contamination rates. METHODS: Twenty-three subjects underwent two swimming sessions at an ocean (saft water) pool (Maroubra beach Rock Pool, Sydney, Australia). sessions, and subjects used modified goggles to mimic goggled and non-goggled conditions. At the end of each session, lenses were collected for Silicone hydrogel (Ciba Focus Night and Day) or hydrogel lenses (Ciba Focus Daily) were inserted into subjects' eyes before 30 min of swimming microbial investigation. Viable bacterial colonies were classified as gram positive and gram negative and enumerated. The level of bacterial colonization on contact lenses between goggled and non-goggled conditions and between the two lens materials were compared

lenses (p > 0.6) irrespective of wearing goggles. Water samples had consistently higher numbers of bacterial counts than those adhered to the lenses; majority of subjects (16/23) had more microorganisms in the non-goggled condition than when wearing goggles (p = 0.03). Gram negative organisms were found in three non-goggled lenses. No significant difference was shown in the number of bacteria isolated from silicone hydrogel and hydrogel RESULTS: The range of colony forming units recovered from goggled lenses were 0 to 930 compared with 0 to 1210 on non-goggled lenses. The however, no association was found between the number of bacteria in the water sample and those found on the contact lenses. CONCLUSIONS: Consistently, fewer bacterial colonies were found on the goggled contact lens, thus suggesting goggles offer some protection against bacterial colonization of contact lenses while swimming. These data would support the recommendation encouraging lens wearers to use goggles while swimming.

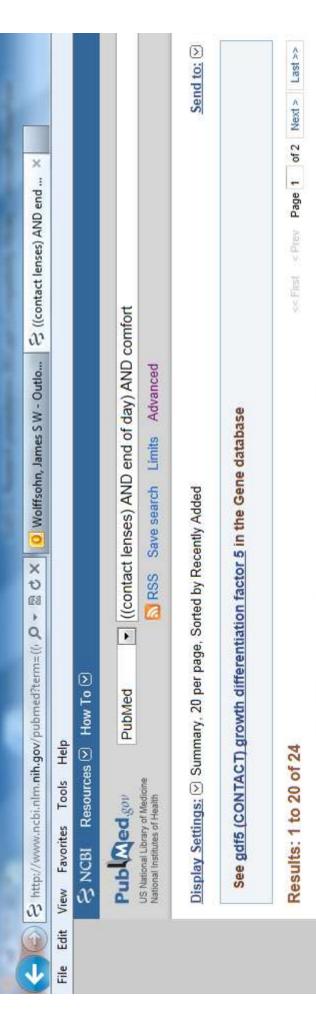
PMID: 21297511 [PubMed - indexed for MEDLINE]

+ Publication Types, MeSH Terms, Substances





- What is the safest type of contact lenses to wear
- Is a les which claims a higher oxygen permeability than another worth the extra expense?
- I have hayfever will this prevent me from wearing contact lenses
- Can I swim/shower in contact lenses
- Which lenses give the best all day comfort?



PMID: 22169881 [PubMed - indexed for MEDLINE] Eye Contact Lens. 2012 Jan;38(1):2-6. Related citations

Comparison of ocular comfort, vision, and SICS during silicone hydrogel contact lens daily wear.

Diec J, Evans VE, Tilia D, Naduvilath T, Holden BA, Lazon de la Jara P.

Comfort and vision scores at insertion and removal during 1 month of wear of Paragon CRT for corneal reshaping. González-Méijome JM, Carracedo G, González-Pérez J, Peral A, Jorge J, Peixoto-de-Matos SC. PMID: 21808197 [PubMed - indexed for MEDLINE] Eye Contact Lens. 2011 Sep;37(5):302-6. 7

- Randomised controlled study comparing **comfort**-related outcomes between two rigid gas permeable (RGP) lenses with different Ophthalmic Physiol Opt. 2011 Mar;31(2):190-9. doi: 10.1111/j.1475-1313.2010.00812.x. Fortuin MF, Schilperoort J, Evans BJ, Edgar DF, Manon HM, Kiers H. PMID: 21309806 [PubMed - indexed for MEDLINE] sessile drop contact angles. Related citations <u></u> ⊞
- Characterizing contact lens-related dryness symptoms in a cross-section of UK soft lens wearers.
- Young G, Chalmers RL, Napier L, Hunt C, Kern J.

×

S ((contact lenses) AND end ...

σοιπιεσπολυποποι εχοι εστηγημηση(ε), σή του ερφα εστο σορ το Favorites Tools Help View Edit

PMID: 20832350 [PubMed - indexed for MEDLINE]

Related citations

Comfort and vision with silicone hydrogel lenses: effect of compliance. ري اي

Dumbleton K, Woods C, Jones L, Richter D, Fonn D.

Optom Vis Sci. 2010 Jun;87(6):421-5.

PMID: 20386353 [PubMed - indexed for MEDLINE]

Related citations

Objective clinical performance of 'comfort-enhanced' daily disposable soft contact lenses. ی 🔲

Wolffsohn JS, Hunt OA, Chowdhury A.

Cont Lens Anterior Eye. 2010 Apr;33(2):88-92. Epub 2010 Feb 9.

PMID: 20149716 [PubMed - indexed for MEDLINE]

Related citations

Ocular surface comfort during the day assessed by instant reporting in different types of contact and non-contact lens wearers.

Santodomingo-Rubido J, Barrado-Navascués E, Rubido-Crespo MJ

Eye Contact Lens. 2010 Mar;36(2):96-100.

PMID: 20145542 [PubMed - indexed for MEDLINE]

Related citations

Subjective comparison of 2 daily disposable contact lenses: Focus Dailies with AquaRelease and Proclear 1-Day. 

Scott WL, Rein MJ, Pack LD.

Optometry, 2010 Jan;81(1):40-6.

PMID: 20004877 [PubMed - indexed for MEDLINE]

Related citations

Contact lenses in pediatrics study in Singapore.

Li L, Moody K, Tan DT, Yew KC, Ming PY, Long QB. 6

Eye Contact Lens. 2009 Jul;35(4):188-95.

PMID: 19516144 [PubMed - indexed for MEDLINE]

Related citations

Expanding your use of silicone hydrogel contact lenses: using lotrafilcon A for daily wear.





- What is the safest type of contact lenses to wear
- Is a les which claims a higher oxygen permeability than another worth the extra expense?
- I have hayfever will this prevent me from wearing contact lenses
- Can I swim/shower in contact lenses
- Which lenses give the best all day comfort?





#### Developing Research Evaluation Skills

- reading
- short courses
- Masters degree, PhD or professional doctorate
- iPRO





#### Cycles of Research Aston University Question Development

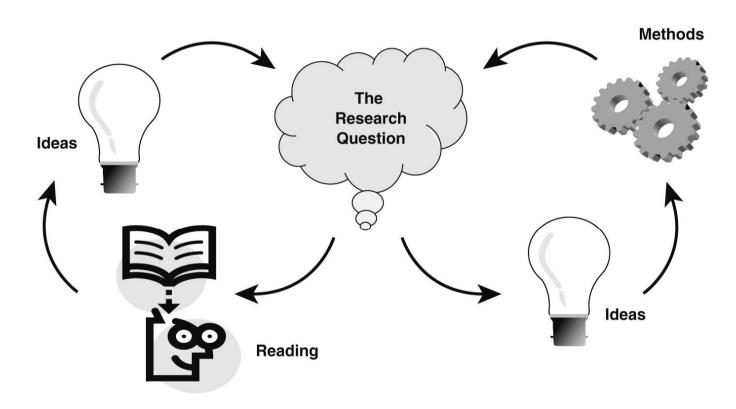


FIGURE 3.4 CYCLES OF RESEARCH QUESTION DEVELOPMENT

O'Leary, Z. (2004) The Essential Guide to Doing Research. London: Sage. **Chapter Three** 





#### **OBJECTIVES**

#### By the end of this workshop you should

- be able to conduct an appropriate history and symptoms to assess individual patient contact lens needs
- be able to perform a search of the research literature with appropriate search terms
- be able to use the information identified by the search to refine their clinical practice to enhance their contact lens management of patients



### How to use Research evidence to Source appropriate Contact Lenses for your Patients

Prof James S Wolffsohn

Deputy Dean for Life and Health Sciences

BSc(Hons) PgCertHE PgDipAdvClinOptom MBA PhD MCOptom FHEA FSB FAAO FIACLE FBCLA

