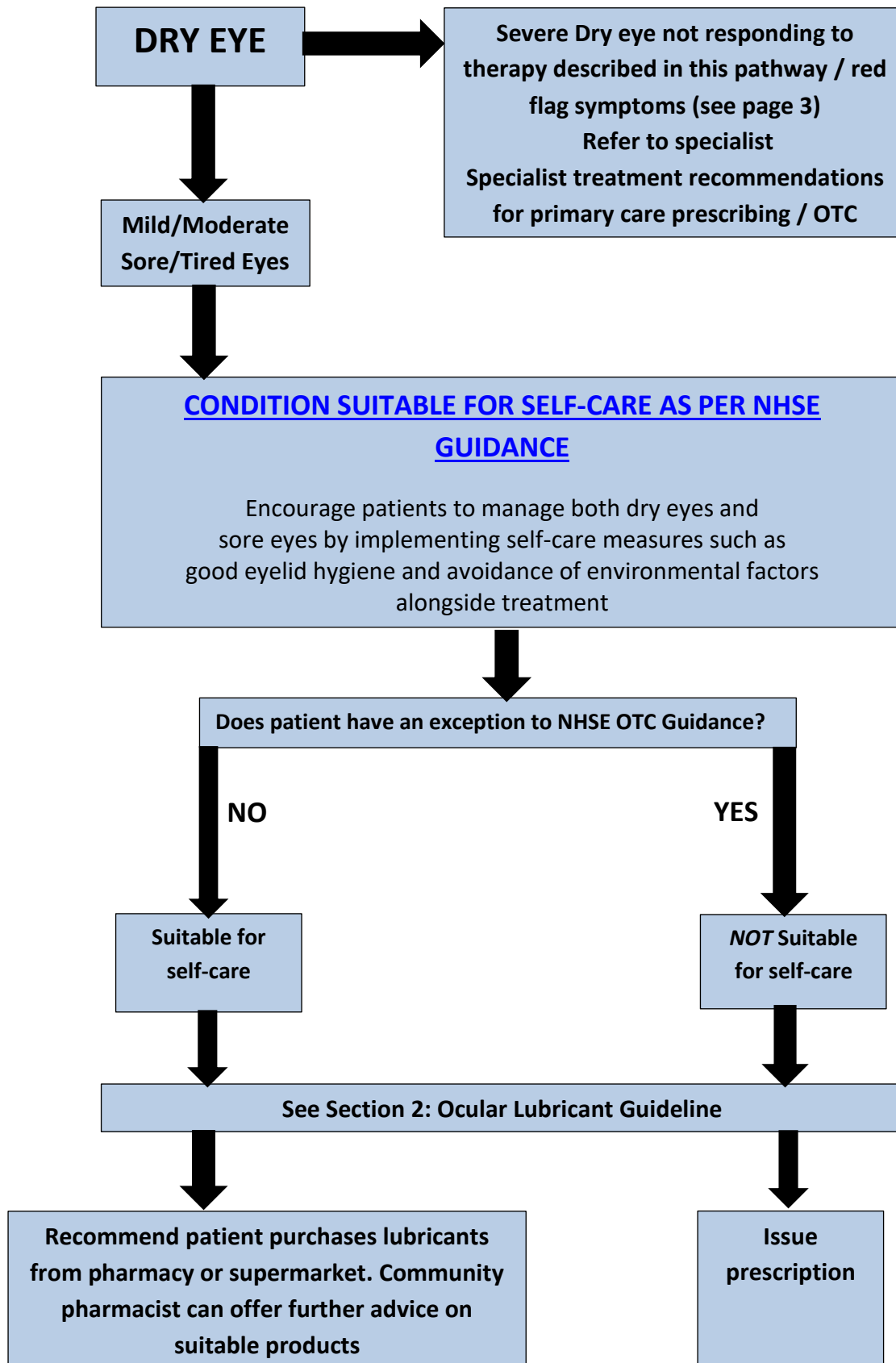


**Section 1: Primary Care Treatment Pathway for Adult & Paediatric Patients
Presenting with Dry Eye**



Section 2: Ocular Lubricant Guideline

- Prescribe products by brand name to ensure continuity for the patient, except where generic is stated (e.g. hypromellose 0.3%). Note some suggested products may not be available for OTC use. Community pharmacists can advise on equivalent alternative products which can be purchased
- Contact lens wearers can use any preservative free products or polyvinyl alcohol e.g. SnoTears®

Place in Therapy		Active ingredient	Prescribe as	Preservative Free	Single Use	Comment	
MILD: Can usually be managed satisfactorily with PRN use lubricant and lipid tear supplement eye drops and lifestyle changes	1 st line	Hypromellose	Evolve 0.3% Expiry 3 months once opened	✓		Preservative containing eye drops are suitable for short term ad hoc courses of treatment. Preservative free should be used for long term management. more frequent administration and/or intolerance of preservatives. If no improvement, switch to carbomer or carmellose or add paraffin ointment at night.	
			Artelac 0.32% SDU	✓	✓		
	2 nd line	Carmellose sodium 0.5%	Evolve Carmellose 0.5%	✓			
			Celluvisc 0.5% SDU	✓	✓		
	2 nd line	Carbomer 980 0.2% (polyacrylic acid)	Carbomer				Cling to the eye surface so require less frequent application (3 to 4 times daily) but may be less well tolerated.
			Evolve carbomer 0.2%	✓			
		Viscotears® UDV	✓	✓			
MODERATE: Symptoms may include some blurred vision and light sensitivity - may restrict activities. May require more frequent use of tear supplements and/or use of a more viscous product.	1 st line	Sodium Hyaluronate 0.1% or 0.2%	Eyeaze 0.1%	✓		There is no evidence of any difference in efficacy between 0.1% and 0.2% sodium hyaluronate.	
			Hylo-Forte 0.2%	✓			
			Clinitas unit dose 0.4%	✓	✓		
	2 nd line	Carmellose sodium 1%	Ocu-lube 1%	✓			
		Celluvisc 1% SDU	✓	✓			
SEVERE: More pronounced symptoms as a result of desiccation of the corneal epithelium. Regular use of tear supplements and more viscous and gel lubricants should still be beneficial. Additional treatments may be required.	1 st line	Sodium Hyaluronate 0.2%	Eyeaze 0.2%	✓		Expiry: 3 month once opened	
			Hylo-Forte 0.2%	✓		Expiry: 6 month once opened	
			Clinitas unit dose 0.4%	✓	✓		
	2 nd line	Hydroxypropyl gum multidose	Systane Ultra®	✓		Expiry: 6 months once opened	
2 nd line	Paraffin based ointments	As below	✓		Can cause blurred vision after administration. Do not use with contact lenses in place. May be used during day.		
NIGHT TIME TREATMENT Can be added to other options as a night time treatment.	1 st line	Retinol palmitate with white soft paraffin, light liquid paraffin & wool fat	Hylo Night® eye ointment Expiry: 60 days once opened	✓		Blurs vision - better to use at night but can be useful during in the day in severe cases. Paraffin based products are flammable. Care should be taken to avoid burns e.g. smoking, close contact with naked flames.	
	2 nd line	White soft paraffin and mineral oil	Xailin Night® ointment Expiry: 60 days once opened	✓		Do not use with contact lenses in place. Hydrated night sensitive when lanolin sensitive	
SPECIALIST INITIATION ONLY		Filamentary keratitis - Ilube (Acetylcysteine with hypromellose) Severe keratitis unresponsive to other treatments in adults per NICE TA369 – Ikervis®(Ciclosporin 0.1%) Sodium Chloride 5% ointment / drops - Fuch's dystrophy, or recurrent erosion syndrome					

Guideline for the Treatment of Dry Eyes in Primary Care

Product selection

- There is no evidence to support that any one ocular lubricant is superior to another; least costly options have been chosen in this guideline. Ocular lubricants should be prescribed by BRAND where stated to ensure the least costly preparations are used.
- Products are available in a variety of containers therefore always check that the patient can administer the drops if this is a new product for them.
- Use one product for 4 - 6 weeks before considering treatment failure and moving on to alternatives.
- Please be aware the expiry dates of products vary; dependent on use, it may be more cost effective to issue higher cost products with a longer expiry date from opening (see table above for information regarding specific products).
- Preservative free products are preferred when:
 - True preservative allergy
 - Evidence of epithelial toxicity from preservatives
 - Moderate to severe dry eye disease
 - Drops needed >4 to 6 times per day for longer than 3 months
 - Multiple treatments needed
 - The patient is using soft or hybrid contact lens

Other products

- Pharmaceutical companies are constantly developing new products with specific ingredients, or a combination of active ingredients. Whilst these have not demonstrated definitive superiority to standard products, they may be helpful and preferred by patients, and may mean reducing the need for more expensive or higher risk options (such as steroids or ciclosporin drops). Prescription of alternative products could be considered if there is definite symptomatic and/or clinical improvement beyond other products, (usually on the advice from secondary care).

Follow up and referral

- Arrange follow up within 4 - 6 weeks of initiating treatment to assess treatment response
- Consider referring patients with severe dry eye who have failed to respond to treatment in primary care. Treatments in the moderate to severe category above should be trialled before referral unless patient displays any red flag symptoms
- Red Flag symptoms:
 - Additional dry mouth and other mucosal tissues
 - Signs of ulcers or corneal damage
 - Significant pain/ soreness on waking with recent history of injury
 - Urgent referral to an ophthalmologist is required for children with any corneal change (e.g. staining or vascularisation).

Consider other diagnosis

- One eye affected much more than the other consider other diagnosis e.g. infection
- Systemic conditions such as allergy, connective tissue disorders or cancer treatment
- Symptoms including severe pain, or significant photophobia
- Short- term symptoms with a sudden onset
- Reduction of vision that doesn't return after each blink
- Stickiness, crusting discharge of the eye
- Marked redness of the eye
- Regular attendance to A&E for eye associated problems

Guideline for the Treatment of Dry Eyes in Primary Care

Patient factors

Patients may use an individual product or use a combination of products alongside each other:

- If putting in more than one drop or more than one type of eye drop, patients should wait 5 or more minutes before putting the next drop in. This will stop the first drop from being washed out by the second before it has had time to work.
- Use drops first before ointment if both are prescribed to be used together.
- Ointments are more suitable used before bed as they can cause temporary blurring of vision
- Eye ointments are used to protect the eyes at night, particularly if the lids do not close fully. If they are used during the day, they will have a longer duration of action than drops, requiring less frequent administration (useful if patients rely on others to put drops).

Self-care to improve symptoms

- Treatment of mild to moderate disease is appropriate for self-care with purchased over the counter treatments.
- Eye hygiene and eyelid compression can reduce dry eye symptoms, especially when combined with warm compresses (such as microwavable eye masks). This can be helpful in blepharitis or meibomian gland dysfunction, although vigorous or stretching movements can cause stretching of the eyelids and worsening of symptoms.
- Cleaning of the eyelids should be with cooled boiled water, or products designed for lid use – baby shampoo should NOT be recommended (although good for cleansing, it dissolves eye surface oils and can cause irritation itself)
- Consider precipitating or environmental factors before prescribing/recommending e.g. allergy, medications, long sessions of “screen time”, smoking, extended contact lens use.
- Modification of contact lens wear: Contact lens wear should be limited to shorter periods and lenses removed when dry eye symptoms appear — changing lens type or solution may help.

Environmental modification to improve symptoms

- Increase relative humidity and avoid prolonged periods in air-conditioned environments.
- Lower computer screens to below eye level, take regular breaks and increase blink frequency with computer use and reading. This also applies to mobile phone use.

Patient Information

- <https://www.nhs.uk/conditions/dry-eyes/>
- The Royal College of Ophthalmologists. [Understanding dry eye Information for patients 2017](#)

Further information

- NICE Clinical Knowledge Summaries: <https://cks.nice.org.uk/dry-eye-syndrome>
- [All Wales Medicines Strategy Group, Dry Eye Syndrome Guidance December 2016:](#)

Acknowledgements

- Based with permission on Sunderland CGG Guideline for the Treatment of Dry Eyes Feb 2019 and also adapted from Herfordshire CCGs Dry Eye Treatment Guideline.
- PrescQIPP cic bulletin 202 Eye preparations [Bulletin 202: Eye preparations | PrescQIPP C.I.C](#)