

Centre-Involving Diabetic Macular Oedema Treatment Strategies: A Validated NHS England Wide Delphi Approach

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Aims

- To establish a validated, clinician-led consensus on the optimal use of anti-VEGF and corticosteroid therapies in CI-DMO
- To ensure patients receive the right treatment at the right time, in line with NHSE commissioning priorities for high-quality, cost-effective care
- To update and standardise care pathways using clear, evidence-based guidance

Introduction

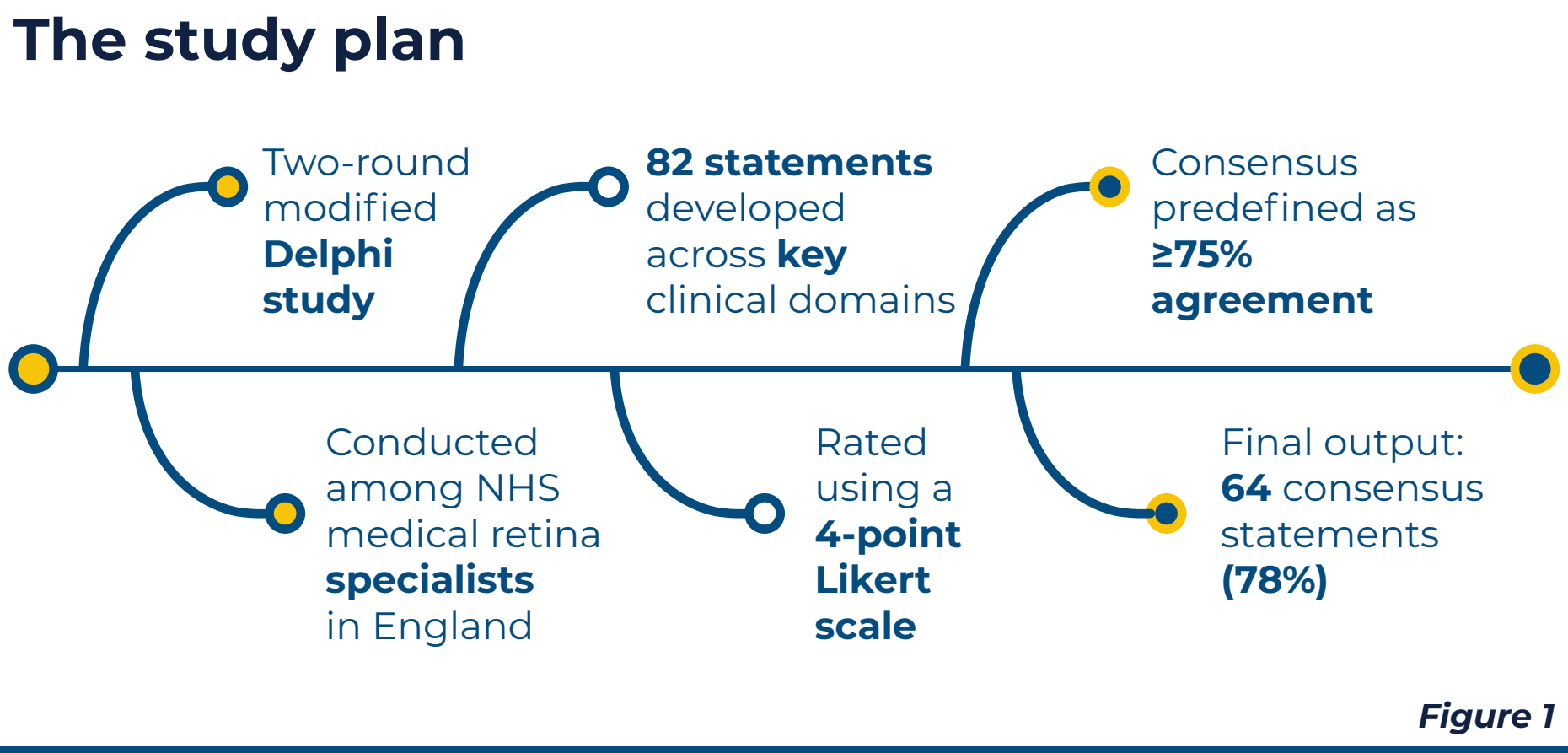
Disease burden & economic impact of CI-DMO

- Diabetic macular oedema (DMO) is the most prevalent form of diabetic retinopathy¹, a complication of diabetes, with an estimated 27 million people world-wide affected - representing 6.8% of people with diabetes.
- A large proportion of the costs of managing DMO are made up of hospital clinic treatment and related costs with £65.6 million spent on this secondary care activity in the UK in 2011 including investigations, assessments and treatment injections.¹

Evolving treatment strategies & commissioning priorities in CI-DMO

- The treatment landscape for centre-involved diabetic macular oedema (CI-DMO) is evolving rapidly, with longer-acting anti-VEGF agents, biosimilars, and updated NICE recommendations supporting the use of corticosteroids in phakic patients.
- NHSE commissioning prioritises high-quality, cost-effective care that ensures patients receive the most appropriate therapy at the right time.
- In DMO treatment, pharmaceutical alternatives exist that are less burdensome for both patients and the health system than monthly anti-VEGF injections – NICE and the SMC identified that long-acting intravitreal steroids as useful in those insufficiently responsive to available therapies.^{2,3,4}

Methods



What did the clinicians want to find out from this study?

- How should response to treatment in CI-DMO be defined, including non-response and sub-optimal response?
- When should anti-VEGF treatment be evaluated to decide whether it is working or failing?
- When and to what should treatment be switched, including anti-VEGF agents and corticosteroids?
- When should treatment burden alone prompt a change in therapy?

Results

- Consensus was achieved for 64/82 statements (78%), supporting a shared, consensus-based clinical approach to CI-DMO management.
- Selected statements are displayed in three groups:

Treatment evaluation

- Personalised treatment strategies were strongly supported by clinicians (90-100% agreement).
- Standard definitions of treatment response were validated:
- Non-response defined as a ≤10% reduction in central retinal thickness (CRT) (100% agreement).
- Sub-optimal response defined as a 10-20% reduction in CRT (87% agreement).
- Early assessment of anti-VEGF response was recommended at 3-6 months:
- Evaluation at 3-6 months after treatment initiation (83% agreement).
- Assessment after trialling two different anti-VEGF agents (79-85% agreement, depending on IOP status).



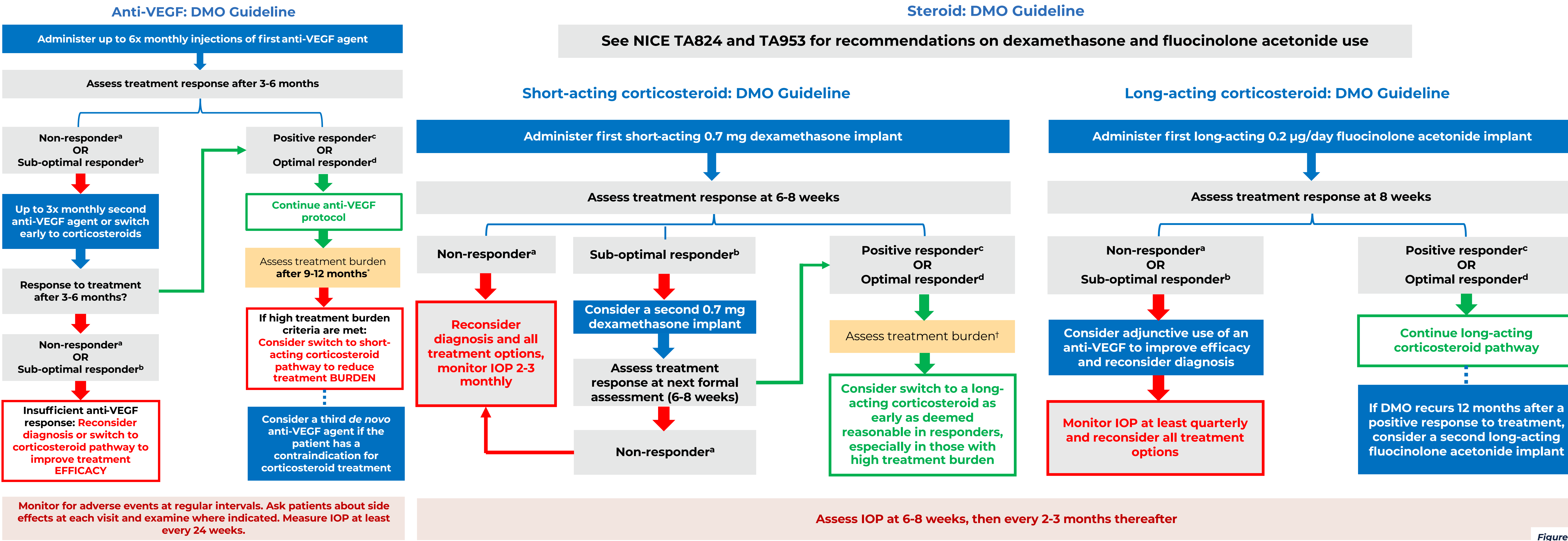
Treatment switching

- Early switching to corticosteroids at 9-12 months if response remains sub-optimal (97% agreement).
- Patients demonstrating a positive response after 1-2 short-acting corticosteroid injections should be switched early to a sustained-release, long-acting corticosteroid (90% agreement).

Monitoring

- Comprehensive baseline assessment recommended prior to treatment initiation, including: (i) best-corrected visual acuity (BCVA), intraocular pressure (IOP), and OCT-derived CRT (100% agreement).
- Regular safety monitoring was supported, including (i) monitoring for IOP elevation every 3 months for long-acting corticosteroids (93% agreement) (ii) surveillance for cataract development and other adverse events (90–97% agreement, depending on event).
- An updated consensus-based CI-DMO treatment pathway was developed based on guideline created by Downey et al. in 2021.4 and is designed to guide treatment evaluation, treatment switching, and long-term monitoring and management of CI-DMO (see Figure).

DMO Consensus Pathway



Conclusion

- This validated Delphi consensus provides clear guidance on optimising anti-VEGF and corticosteroid use in CI-DMO, supporting timely treatment switching and improved clinical outcomes.
- The recommendations align with NHSE commissioning priorities by promoting high-quality, cost-effective, patient-centred pathways that enable consistent, nationally aligned care for people with DMO.
- These two points are broadly in line with the NHS England guidelines and provide more detail on the management of CI-DMO with corticosteroid.

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