Bwrdd Iechyd Prifysgol Cwm Taf Morgannwg University Health Board

More Than Meets The Eye:

GLP-1 Receptor Agonists and Ocular Adverse Drug Reactions

Strengthening Pharmacovigilance in Optometry

Keeping an Eye on GLP-1s

Background and Emerging Concerns

Use of GLP-1 receptor agonists (GLP-1RAs) including semaglutide and tirzepatide is rapidly increasing for type 2 diabetes (T2DM) and weight management.

Growing access via private prescribing, online supply and circulating counterfeit GLP-1RAs raises concerns regarding monitoring, safety and awareness of adverse drug reactions (ADRs).

Optometry on the Front Line

Why Optometrists are Key to Detecting ADRs

Optometrists are often the first health care professionals to detect visual changes.

The eye is highly susceptible to drug toxicity, second only to the liver as a site of drug toxicity. (1)

THE COLLEGE OF OPTOMETRISTS

From Weight Loss to Vision Loss

MHRA Drug Safety Update

The MHRA issued a Drug Safety Update in February 2026 highlighting the risk of non-arteritic anterior ischaemic optic neuropathy (NAION) with semaglutide use after a review of literature and Yellow Card reports. (2)

NAION typically causes sudden, painless vision loss in one eye, which may present as blurring or cloudiness of vision.

Privately prescribed or illegally obtained semaglutide may not appear on the patient's health record, therefore MHRA and College of Optometrists recommend asking about semaglutide use. (2,3)

Ask the question: Do you take a GLP-1?

MHRA Regulating Medicines and Medical Devices

Ocular ADRs in Focus

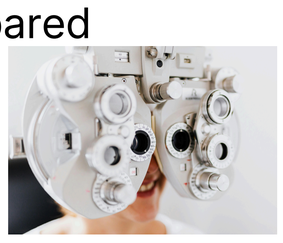
Research and Evidence

Murray (Swansea University) et al. (2026) analysed the FDA Adverse Event Reporting System (FAERS) to investigate ocular adverse events associated with GLP-1RAs. (4)

Research: A retrospective disproportionality analysis of FAERS compared semaglutide, liraglutide and tirzepatide with metformin and with each other in patients with and without T2DM.

Conclusion: Findings provided a signal of increased reporting of various eye disorders with GLP-1RA use compared with metformin in patients with and without T2DM, with semaglutide showing the strongest reporting signals overall. Causality is not proven but supports the need for further research and clinical awareness in optometry practice.

Swansea University Prifysgol Abertawe



Training Eyes to Spot ADRs

Building Pharmacovigilance in Optometry

A CPD-accredited training session has been developed and will be delivered in CTMUHB. This session will support optometrists in recognising and reporting ADRs, with a focus on medications with emerging ocular risks such as GLP-1RAs. The session has been approved for 2 interactive CPD points by Health Education and Improvement Wales (HEIW).

The training highlights the key role of optometrists in detecting ocular ADRs and provides practical guidance on use of the MHRA Yellow Card Scheme, supporting the integration of pharmacovigilance into routine optometric practice.

As part of the training session, Murray et al. will present the findings of their article to the optometrists.

A National Opportunity for Optometry

National Rollout of Training

Following initial delivery within CTMUHB, this training will be rolled out nationally via Health Education and Improvement Wales (HEIW), embedding pharmacovigilance into routine optometric practice across Wales.

See It. → Suspect It. → Report It.

References:
(1) The College of Optometrists. Systemic drugs and ocular side effects. 30 November 2018. Available from: https://www.college-optometrists.org/professional-development/college-journals/acuity/all-issues/autumn-2018/2018-11-systemicdrugsandocularsideeffects
(2) Medicines and Healthcare products Regulatory Agency. Drug Safety Update. Semaglutide (Wegovy, Ozempic and Rybelsus): risk of Non-arteritic Anterior Ischemic Optic Neuropathy (NAION). 5 February 2026. Available from: https://www.gov.uk/drug-safety-update/semaglutide-wegovy-ozempic-and-rybelsus-risk-of-non-arteritic-anterior-ischemic-optic-neuropathy-naion
(3) The College of Optometrists. GLP-1 weight loss drugs and vision: what clinicians need to know. 27 March 2026. Available from: https://www.college-optometrists.org/news/2026/march/glp-1-weight-loss-drugs-and-vision
(4) Murray, M., Schifano, F., Chiappini, S., Corkery, J.M., Guirguis, A. Potential Eye Disorders in People With and Without Type 2 Diabetes Mellitus Exposed to GLP-1 Receptor Agonists: An Examination of the FAERS (FDA Adverse Event Reporting System) Database. American Journal of Ophthalmology 2026; 283: 279-290. doi.org/10.1016/j.ajo.2025.12.015

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