

New classes of glaucoma medications

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PURPOSE OF REVIEW: To discuss recent advances in the medical management of glaucoma and to highlight future medical therapies currently in development.

RECENT FINDINGS: In 1996, latanoprost (Xalatan) was approved in the United States as a new chemical entity and new class (prostaglandin analogs) for the topical treatment of ocular hypertension and glaucoma. In the period from the late 1990s-2010s, while there were additional new chemical entities, fixed dose combinations, and formulation improvements, there were no new classes of ocular hypotensive medications approved worldwide. We summarize new pharmacological treatments that are currently in clinical trials - new classes, new molecules and new delivery systems.

SUMMARY: Although challenges in medical treatment of glaucoma exist, particularly in patient adherence, medical therapy remains the first line treatment for almost all glaucoma patients. Few new medications for glaucoma therapy are currently available for our patients, but multiple drugs with novel mechanisms of action, new formulations, and new delivery mechanisms are currently in development.

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