

PREFERRED PRACTICE PATTERN®



Primary Open-Angle Glaucoma

 **AMERICAN ACADEMY
OF OPHTHALMOLOGY**
The Eye M.D. Association

**Prepared by the American Academy of
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September 11, 2010

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This document should be cited as:
American Academy of Ophthalmology
Glaucoma Panel. Preferred Practice Pattern®
Guidelines. Primary Open-Angle Glaucoma.
San Francisco, CA: American Academy of
Ophthalmology; 2010. Available at:
www.aao.org/ppp.

As a service to its members and the public, the American Academy of Ophthalmology has developed a series of guidelines called Preferred Practice Patterns that **identify characteristics and components of quality eye care.** (See Appendix 1.)

The Preferred Practice Pattern® guidelines are based on the best available scientific data as interpreted by panels of knowledgeable health professionals. In some instances, such as when results of carefully conducted clinical trials are available, the data are particularly persuasive and provide clear guidance. In other instances, the panels have to rely on their collective judgment and evaluation of available evidence.

Preferred Practice Pattern guidelines provide the pattern of practice, not the care of a particular individual. While they should generally meet the needs of most patients, they cannot possibly best meet the needs of all patients. Adherence to these PPPs will not ensure a successful outcome in every situation. These practice patterns should not be deemed inclusive of all proper methods of care or exclusive of other methods of care reasonably directed at obtaining the best results. It may be necessary to approach different patients' needs in different ways. The physician must make the ultimate judgment about the propriety of the care of a particular patient in light of all of the circumstances presented by that patient. The American Academy of Ophthalmology is available to assist members in resolving ethical dilemmas that arise in the course of ophthalmic practice.

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Innovation in medicine is essential to assure the future health of the American public, and the Academy encourages the development of new diagnostic and therapeutic methods that will improve eye care. It is essential to recognize that true medical excellence is achieved only when the patients' needs are the foremost consideration.

All PPPs are reviewed by their parent panel annually or earlier if developments warrant and updated accordingly. To ensure that all PPPs are current, each is valid for 5 years from the "approved by" date unless superseded by a revision. Preferred Practice Pattern guidelines are developed by the Academy's H. Dunbar Hoskins Jr., M.D. Center for Quality Eye Care without any external financial support. Authors and reviewers of PPPs are volunteers and do not receive any financial compensation for their contributions to the documents. The PPPs are externally reviewed by experts and stakeholders before publication.



FINANCIAL DISCLOSURES

The panel and committee members have disclosed the following financial relationships occurring from January 2009 to September 2010:

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Emily Y. Chew, MD: No financial relationships to disclose.

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Young H. Kwon, MD, PhD: Allergan, Inc. – Consultant/Advisor; Free Educational Publications, Inc. – Equity owner; Pfizer, Inc. – Consultant/Advisor

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Bruce E. Prum Jr., MD: Alcon Laboratories, Inc. – Grant support; Allergan, Inc. – Consultant/Advisor

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Lisa F. Rosenberg, MD: No financial relationships to disclose.

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INTRODUCTION

The Preferred Practice Pattern® (PPP) guidelines have been written on the basis of three principles.

- ◆ Each PPP should be clinically relevant and specific enough to provide useful information to practitioners.
- ◆ Each recommendation that is made should be given an explicit rating that shows its importance to the care process.
- ◆ Each recommendation should also be given an explicit rating that shows the strength of evidence that supports the recommendation and reflects the best evidence available.

In the process of revising this document, a literature search of the Cochrane Library and PubMed was conducted on December 3, 2008 and April 28, 2009 on the subject of primary open-angle glaucoma (POAG) for the years 2004 to the date of the search. In addition, the evidence synthesis¹ prepared by the British National Collaborating Centre for Acute Care for the National Institute for Health and Clinical Excellence clinical guideline on Glaucoma: diagnosis and management of chronic open-angle glaucoma and ocular hypertension clinical guideline was reviewed.² Details of the literature search are available at www.aaio.org/ppp. The results were reviewed by the Glaucoma Panel and used to prepare the recommendations, which they rated in two ways. The panel first rated each recommendation according to its importance to the care process. This “importance to the care process” rating represents care that the panel thought would improve the quality of the patient’s care in a meaningful way. The ratings of importance are divided into three levels.

- ◆ Level A, defined as most important
- ◆ Level B, defined as moderately important
- ◆ Level C, defined as relevant but not critical

The panel also rated each recommendation on the strength of evidence in the available literature to support the recommendation made. The “ratings of strength of evidence” also are divided into three levels.

- ◆ Level I includes evidence obtained from at least one properly conducted, well-designed, randomized, controlled trial. It could include meta-analyses of randomized controlled trials.
- ◆ Level II includes evidence obtained from the following:
 - ◆ Well-designed controlled trials without randomization
 - ◆ Well-designed cohort or case-control analytic studies, preferably from more than one center
 - ◆ Multiple-time series with or without the intervention
- ◆ Level III includes evidence obtained from one of the following:
 - ◆ Descriptive studies
 - ◆ Case reports
 - ◆ Reports of expert committees/organizations (e.g., PPP panel consensus with peer review)

Evidence is that which supports the value of the recommendation as it relates to the quality of care. The committee believes that it is important to make available the strength of the evidence underlying the recommendation. In this way, readers can appreciate the degree of importance the committee attached to each recommendation, and they can understand what type of evidence supports the recommendation.

The ratings of importance and the ratings of strength of evidence are given in bracketed superscripts after each recommendation. For instance, “[A:II]” indicates a recommendation with high importance to clinical care [A], supported by sufficiently rigorous published evidence, though not by a randomized controlled trial [II].

The sections entitled “Orientation” and “Background” do not include recommendations; rather they are designed to educate and provide summary background information and rationale for the recommendations that are presented in the Care Process section. A summary of the major

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