Working Group

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Objective

The purpose of the AGS 100 is to identify the "top 100" articles with the largest impact on the clinical care of patients with glaucoma. The AGS 100 is designed to be an educational resource for ophthalmologists both in training and in practice.

Methodology

The AGS 100 was developed using a combination of methods, including a bibliometric analysis (i.e., number of citations), an expert panel (i.e., the American Academy of Ophthalmology [AAO] Preferred Practice Pattern [PPP] Glaucoma Panel), and two surveys of the American Glaucoma Society (AGS) membership.

First, we conducted a Scopus search to identify the 100 most frequently cited English-language original articles using the search term "glaucoma" under the field "Article Title, Abstract, Keyword" (i.e., excluding review articles, book chapters, and editorials).

Second, the AAO PPP Glaucoma Panel identified and reviewed a list of 100 additional articles, including "classic" and more recently published papers, with care to avoid duplicating topics that were already well-represented. Members of the expert panel were not permitted to nominate articles for which they had been authors.

Third, after receiving approval from the AGS Research Committee, the list of 200 articles was included in an anonymous SurveyMonkey survey of the AGS membership (posted on April 22, 2020) in which participants were asked to rate the impact of each article on the clinical care of glaucoma patients using a 4-point Likert scale as follows: minimal impact (1 point), moderate impact (2 points), high impact (3 points), and very high impact (4 points). Survey respondents were given the option of indicating that they were not familiar with a given article, as well as an option to provide "write-in" responses if they felt that any impactful papers were not represented among the 200 articles in the survey. The order of articles was randomized in each survey to avoid biasing respondents in favor of the most frequently cited articles. A total of 108 responses were received over a period of 8 weeks.

Subsequently, a similarly designed, anonymous follow-up survey (posted on July 1, 2020) was conducted of the AGS membership which included the "write-in" responses from the original survey. Participants rated each article using the same 4-point Likert scale and were able to indicate that they were not familiar with a given article. The order of articles was again randomized in each survey. A total of 63 responses were received over a period of 8 weeks.

Finally, the AGS 100 was created by ranking the top 100 articles based on mean Likert scores from the initial and follow-up surveys of the AGS membership. The number of citations for each article was updated using Scopus on August 29, 2020.