

MAINTAINING PERSPECTIVE IN WET AMD THERAPY



Treating age-related macular degeneration (AMD) ranks among the noblest work of a retina subspecialist. Practically, AMD represents reduced quality of life and increased stress for our patients. Existentially, it reminds them of the uglier parts of aging, as it creeps forward like a choking vine. If not for our intervention, many of these patients would slide quietly into blindness as the darkness drops—as they routinely did before anti-VEGF therapies were developed.

The gains (both scientific and visual) of the anti-VEGF era cannot be exaggerated. Doctors and the researchers who support them have saved and restored sight for millions of people, allowing octogenarians to witness weddings and births and other happy moments they may otherwise have missed. Anti-VEGF drugs have been in our clinics for more than a decade, and yet we cannot help but feel that something better must be on the horizon.

Our field has been hard at work finding ways to improve the already impressive therapies we offer. Researchers have strived to improve efficacy and drug duration—and it appears that our efforts may soon begin to yield dividends for our patients.

An issue rehashing familiar clinical trial data wouldn't have served you, our readers, very well. You know what works and what doesn't. Instead, we wanted to focus on the future. The era of anti-VEGF therapy isn't coming to a close so much as it is expanding, and we think that this issue offers a preview of what may come.

On page 20, Natalie Huang, MD, and Patrick Oellers, MD, kick off the issue with a thorough evaluation of the AMD therapy pipeline. They leave no stone unturned—their summary includes reviews of studies in phases 1, 2, and 3—and it would be impossible to finish their article without a renewed sense of optimism and an appetite whetted for the future.

A team of doctors—Samir N. Patel, MD; Thomas L. Jenkins, MD; Dante J. Pieramici, MD; and Carl D. Regillo, MD—dives deep into the phase 2 LADDER study and previews the phase 3 ARCHWAY study on page 34. If the technology they describe is indeed able to extend treatment intervals for patients with wet

AMD, then everyone in the treatment spectrum will benefit.

Patients may be lost to follow-up for any number of reasons; it is a risk we all take when initiating therapy. Anthony Obeid, MD, MPH; and Jason Hsu, MD, discuss data from a study examining risk factors related to losing these patients. A few data points—particularly the percentage of patients who were lost to follow-up—surprised the authors. You can read their findings starting on page 29.

Perhaps the biggest breakthrough in AMD treatment will come from within the body itself—after some intervention, of course. On page 23, we (Allen C. Ho, MD, and Robert L. Avery, MD) tackle a review of the complexities of gene therapy for wet AMD. By inducing cells to administer their own therapeutic response to disease activity, we may be able to shift the patterns and avenues of treatment altogether.

This issue would be incomplete without a larger perspective on what all of this means for our field and our patients. Starting on page 27, Peter A. Campochiaro, MD, ties together this issue's cover focus with a think piece on what all of this clinical trial data means in the context of treatment and investigation. Ever the scientist, Dr. Campochiaro is as excited by the answers offered by clinical data as he is by the questions they raise. He writes:

We are on the brink of a paradigm shift in our management of neovascular AMD and retinal vascular diseases, and we must be open to new observations and new learnings that will shape our treatment. These new learnings may stem from the answers to questions such as those presented [in some of the latest clinical trial data].

We share Dr. Campochiaro's optimism and call for critical thinking. We hope you will, too, after finishing this issue. ■

Handwritten signatures of Samir N. Patel and Thomas L. Jenkins.

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