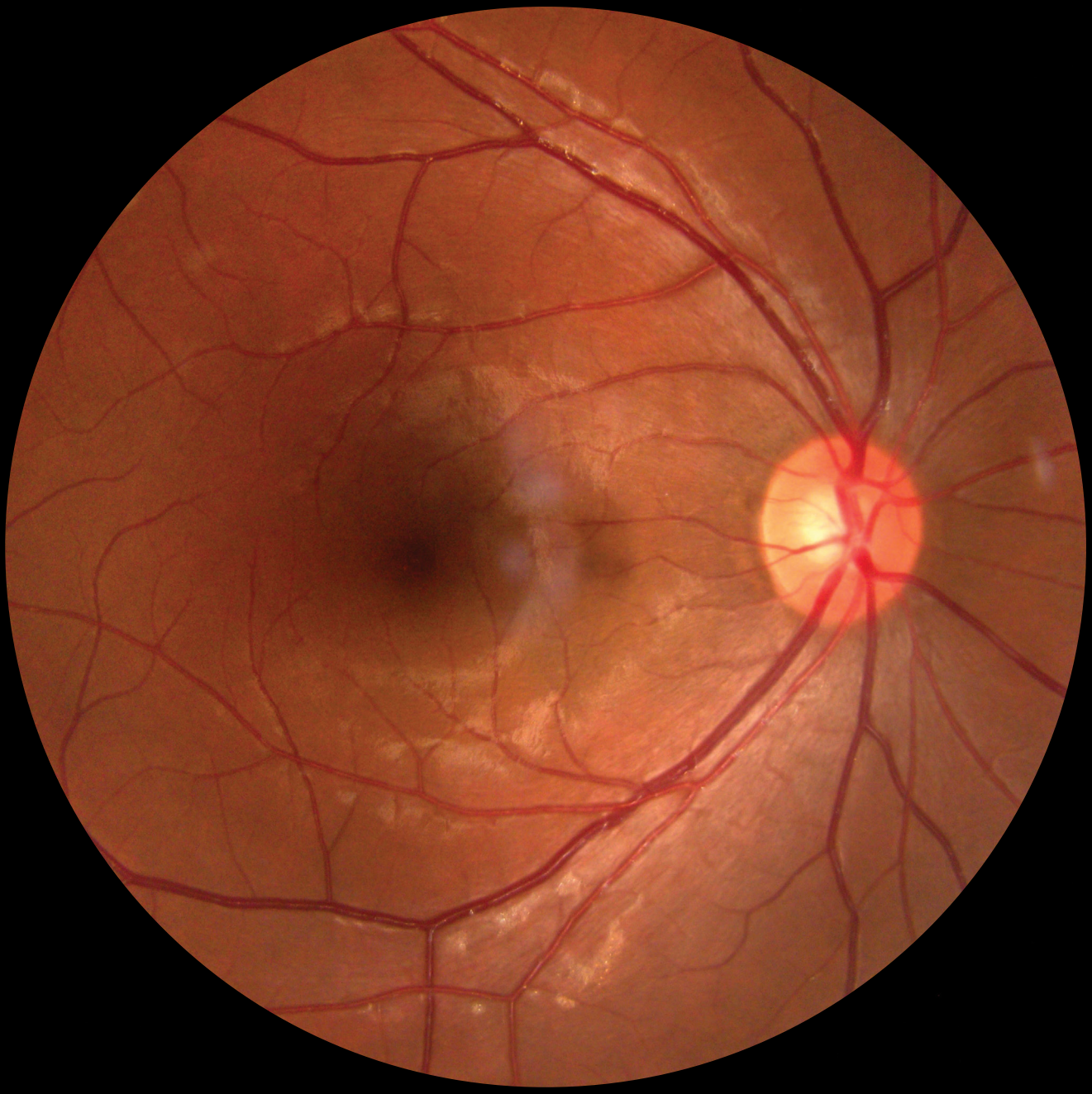
ESCRS SURVEY REPORT | MARCH/APRIL 2026

EUROTIMES



ESCRS CLINICAL TRENDS SERIES:

Retina

ESCRS Clinical Trends Series: Retina

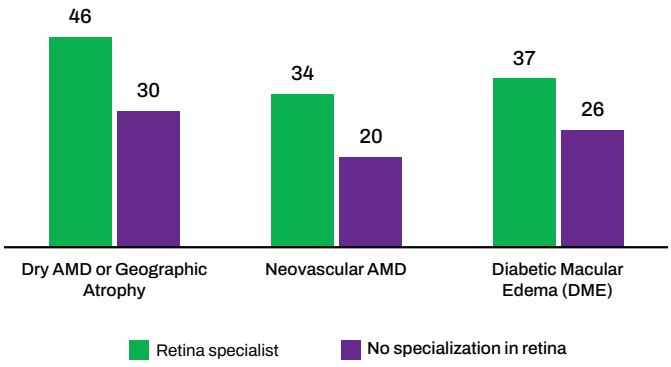
In this edition of the ESCRS Clinical Trends Series, ESCRS President Prof. Burkhard Dick draws on findings from the 2025 ESCRS Clinical Trends Survey to present an anterior as well as posterior segment surgeon's perspective on current and emerging trends in retina care.

Prevalence of Patients with Retinal Conditions

Survey findings indicated that ESCRS clinicians manage a substantial volume of patients with retinal conditions (**Figure 1A**). Notably, 70% of respondents who reported performing intravitreal injections for age-related macular degeneration (AMD) and diabetic macular edema (DME) did not identify retina as their subspecialty (**Figure 1B**), highlighting how retinal care is delivered across Europe and beyond.

A

How many patients do you see monthly who have _____?



B

ESCRS clinicians performing intravitreal injections

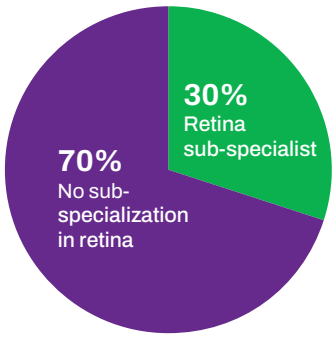


FIGURE 1. A) ESCRS clinicians manage a high number of retinal diseases. B) 70% of those performing intravitreal injections are not retina subspecialists.

The finding that the majority of respondents performing intravitreal injections do not identify as retina subspecialists is consistent with broader clinical trends. Anti-VEGF intravitreal therapy is now the mainstay of treatment for conditions such as AMD and DME, and demand continues to grow with an ageing population. In many regions, the number of retina specialists alone is insufficient to meet this need, necessitating broader participation by general ophthalmologists and anterior segment surgeons.

Whether intravitreal injections are performed exclusively by retina specialists or by a broader group of clinicians varies considerably by country and healthcare system. In some regions, injections are restricted to retina specialists in hospital settings; in others, general ophthalmologists are permitted, or even encouraged, to administer intravitreal therapy, particularly for cost-effective treatments such as off-label bevacizumab. In still other systems, including parts of the UK, injections may be administered by trained nursing staff under strict protocols. These regulatory differences significantly influence who delivers care and explain regional variation in practice patterns.

"Intravitreal therapy is increasingly being delivered by clinicians who are not retina specialists."

Referral patterns play an important role in determining which clinicians ultimately manage patients. In some cases, patients with complex retinal diseases are referred directly to a retina specialist; in others, referrals are made to a general ophthalmologist (including anterior segment specialists), even when a retinal subspecialty service is available. Retina specialists most commonly receive referrals for complex cases of AMD or severe diabetic retinopathy (DR), particularly when these conditions were initially managed in general ophthalmology practices without dedicated retinal expertise.

In my own experience, referrals typically involve unusual cases or surgical cases involving retinal detachment (RD). This referral pattern creates a functional balance: university-based retina departments manage cases that tend to be better handled in a tertiary setting, whereas similar cases may not be adequately managed if they initially present to a general ophthalmology department.

Dry AMD and Geographic Atrophy

Survey respondents estimated that approximately 23% of their patients with dry AMD have GA. This figure aligns reasonably well with my clinical experience, though it may be slightly high for general practice. Published estimates range from 11-20% for GA in the dry form, with higher rates reported in subspecialty settings, reflecting referral of more advanced cases.

In my practice, most dry AMD patients present with early or intermediate disease, such as drusen or pigmentary changes, while those with established GA are often co-managed or referred for specialist care. The referral pattern may lower the apparent prevalence of GA within my active clinic population. When considering the broader cohort, however, a prevalence of around 23% is consistent with published reports indicating that approximately one quarter of patients with advanced AMD present with GA.

With emerging therapies for GA and increased clinical scrutiny, GA is being identified more frequently and is now recognized as a common manifestation of late-stage AMD. This reinforces the importance of early diagnosis, appropriate imaging, and proactive patient engagement, particularly as treatment options continue to expand.

Diagnostic Tools for Dry AMD

The survey found that optical coherence tomography (OCT), fundus photography, and OCT angiography (OCTA) are the most widely used imaging modalities for diagnosing dry AMD (**Figure 2**).

My Diagnostic Approach for Dry AMD

I always begin with a detailed dilated fundus examination, often supplemented by colour fundus photography, to assess macular drusen and pigmentary changes typical of dry AMD. Fundus photographs are valuable for monitoring progression and for patient education, allowing me to show patients visible changes such as drusen or areas of atrophy.

OCT is by far the most important technology for diagnosing and managing dry AMD. It enables detailed assessment of drusen burden, and, most importantly, detection of outer retinal and retinal pigment epithelium (RPE) thinning or atrophy. In cases of GA, OCT clearly demonstrates loss of the outer retinal and RPE layers, while the presence of intraretinal or subretinal fluid serves as a red flag for neovascular conversion.

OCTA is used selectively as an adjunct, particularly when symptoms worsen or OCT findings are equivocal. It allows non-invasive visualisation of the choriocapillaris and can identify subclinical or quiescent neovascularisation, as well as areas of capillary ischemia in pure dry AMD and GA.

I also routinely employ fundus autofluorescence in patients with suspected GA, as it highlights areas of RPE loss and can help predict disease progression. Fluorescein angiography, however, is not part of routine dry AMD evaluation and is reserved for cases where OCT or OCTA indicates the development of neovascularity or because the patient presents with spontaneous deterioration of visual acuity without other apparent cause.

"Each modality provides unique diagnostic information."

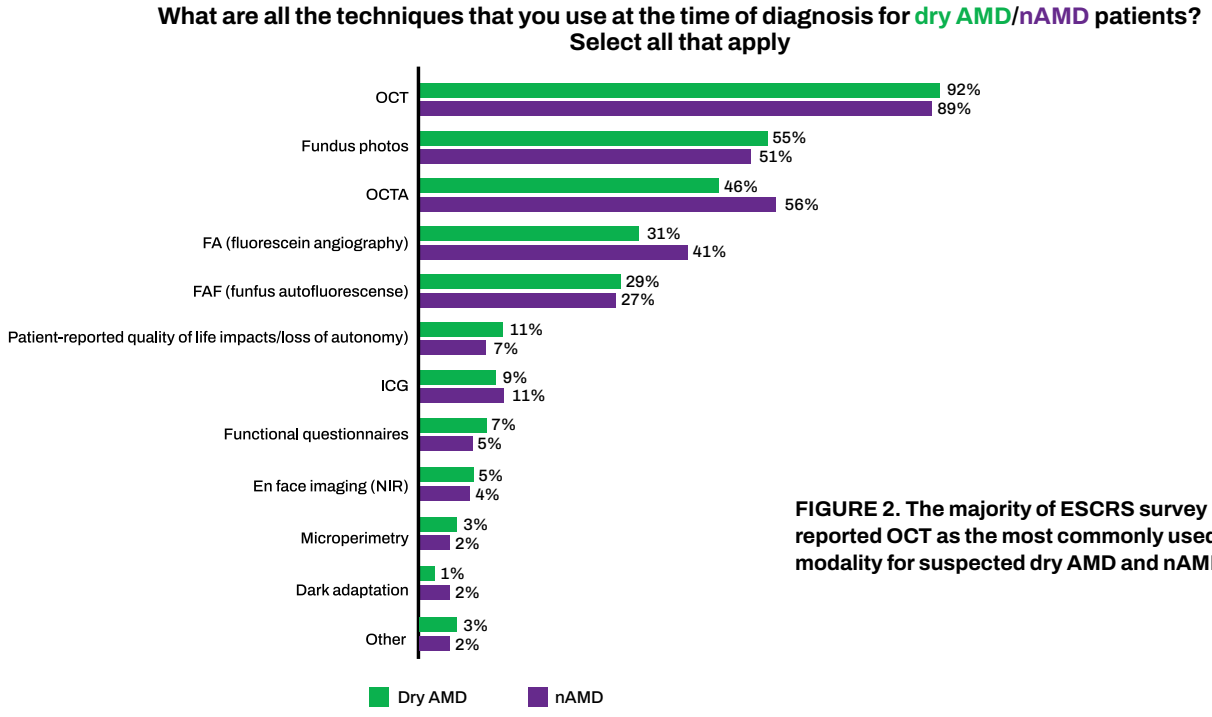


FIGURE 2. The majority of ESCRS survey respondents reported OCT as the most commonly used imaging modality for suspected dry AMD and nAMD.

Neovascular AMD and DME

Diagnostic Tools for Neovascular AMD

Interestingly, according to the survey findings (**Figure 2**), OCT, OCTA, and fundus photography are also the most widely used modalities for diagnosing nAMD. In my own practice, OCT remains the primary foundation of evaluation, with other imaging techniques used selectively.

"When there is a suspicion of nAMD, I like to extend the repertoire of investigations beyond routine, although OCT remains my primary tool."

My Diagnostic Approach for nAMD

When nAMD is suspected, such as in patients with new visual distortion or acute changes in intermediate AMD, my first step is a high-resolution OCT scan. OCT reliably identifies hallmark signs of active choroidal neovascularisation, including intraretinal or subretinal fluid, subretinal hyperreflective material, and pigment epithelial detachment. Beyond diagnosis, OCT guides real-time treatment decisions and longitudinal monitoring, often allowing therapy to begin immediately.

Colour fundus photography is useful for documenting baseline findings such as subretinal hemorrhage or macular exudates and for tracking their resolution, but it does not establish the diagnosis of nAMD.

OCTA has proven to be a very useful addition to my practice in nAMD, although it has not completely replaced fluorescein angiography. It allows direct, non-invasive visualisation of the choroidal neovascularisation (CNV) network, often revealing reticular, sea-fan, or tree-root patterns in the outer retina or sub-RPE space, suggestive of Type 1, Type 2, or mixed CNV lesions.

OCTA is particularly useful in two situations: (1) diagnostically, to confirm the presence of a CNV lesion and assess its size and location; and (2) during follow-through when a patient is not responding as expected. In these cases, OCTA can show whether the vascular network remains perfused or has enlarged, suggesting ongoing disease activity despite minimal fluid on OCT.

A major advantage of OCTA is that it can be repeated frequently, as it requires no dye. It also allows accurate visualisation of non-leaking, "quiescent" CNV, which may be missed on FA, because it highlights only leaking vessels. However, OCTA cannot completely replace dye-based examinations.

Overall, OCTA serves as an important supplement to structural OCT by providing detailed anatomic information about the CNV vascular network. In many cases, the combination of OCT and OCTA alone allows a confident diagnosis, negating the need for an initial dye-based angiographic examination.

I continue to use fluorescein angiography in the management of nAMD, but far more selectively than in the past. In newly diagnosed nAMD, I usually obtain an FA at least once at baseline, sometimes supplemented by indocyanine green angiography when polypoidal or Type 3/Polypoidal CNV is suspected, to characterize lesion type (classic/Occult vs Type 1 & 2 CNV) and assess the extent and pattern of leakage. FA allows visualisation of the dynamic disease process, including CNV-related hyperfluorescence and leakage into the adjacent retina.

Although this information can be helpful for documentation and treatment planning, the widespread adoption of OCT-driven, "treat and extend" protocols means that empiric treatment often proceeds based on OCT findings alone. As a result, I no longer perform FA routinely at every visit, as was common during earlier clinical trials.

I now reserve its use for situations in which the clinical picture does not quite add up. For example, when visual acuity worsens without corresponding fluid on OCT follow-ups, or when reassessing therapy and considering whether apparent changes may reflect missed vascular leakage or another treatable alternative diagnosis.

In many straightforward cases of neovascular AMD, treatment can be initiated on OCT findings alone when the clinical presentation is clear. However, I readily recommend FA as part of the initial workup or when the diagnosis is unclear.

Overall, the survey findings align closely with my approach: relying primarily on OCT and fundus photography, using OCTA as an increasingly useful adjunct, and reserving FA for problem-solving or reference testing.

Choice of Pharmaceutical Agents for Intravitreal Therapy

Survey findings identified aflibercept (Eylea) as the most commonly used pharmaceutical for intravitreal injections in nAMD and DME (**Figure 3**), which aligns closely with my own clinical experience. When selecting an intravitreal therapy, I weigh a combination of factors, with drug efficacy as the primary consideration, followed by durability, safety, cost, reimbursement, and individual patient response.

All approved anti-VEGF agents are effective for nAMD and DME, but important clinical differences influence choice.

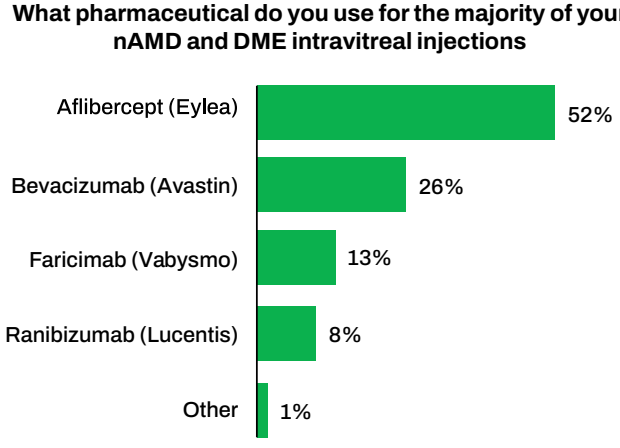


FIGURE 3. Aflibercept is the most commonly used agent for nAMD and DME intravitreal injections.

Aflibercept is frequently favoured because of its established safety profile, potency, and relatively longer duration of effect, which can allow extension of treatment intervals. When retinal drying is suboptimal with one agent, switching to an alternative, such as aflibercept or faricimab (Vabysmo), may improve outcomes. Reducing injection frequency is an important goal for both patients and clinicians, and agents that support treat-and-extend protocols (aflibercept 8mg) can improve adherence and quality of life.

Safety considerations generally do not differentiate anti-VEGF agents in routine practice. Although some clinicians perceive differences in systemic exposure, these distinctions remain largely theoretical, and if a patient is responding well to a given therapy, there is little justification to switch without a clear clinical reason.

In real-world practice, cost, insurance, and reimbursement play a major role in treatment decisions. Bevacizumab (Avastin), despite its off-label status, remains widely used as a first-line therapy in many healthcare systems due to its substantial cost advantage and proven effectiveness. When insurance coverage permits and reduced injection burden is a priority, other agents such as ranibizumab (Lucentis) or aflibercept may be preferred.

The choice between originator drugs and biosimilars continues to evolve. Biosimilars offer potential cost savings and are increasingly supported by comparative data, although uptake has been gradual, in part due to clinician familiarity with established agents and the availability of bevacizumab as a trusted alternative. In practice, I am willing to use biosimilars when supported by robust evidence or mandated by reimbursement policies, but in the absence of cost constraints, I tend to favour agents with which I have the greatest clinical experience.

Ultimately, treatment decisions are individualised. Some patients prioritise stability with a therapy that has worked well over time, while others seek fewer injections or improved outcomes. Balancing optimal visual results with practical considerations of access, cost, and patient preference remains central to intravitreal treatment selection.

Intravitreal Injections

Who is Performing the Injections?

Survey data showed that 63% of respondents performed intravitreal injections, and notably, 70% of these clinicians do not have formal retina subspecialty training. Nevertheless, 88% reported confidence in incorporating intravitreal therapy into their practice, and 71% administered injections daily.

As a result of a growing demand, intravitreal therapy has become the most common surgical procedure in ophthalmology, driven by the high incidence of AMD and Diabetic maculopathies. Consequently, injection therapy has become a shared responsibility across the profession. Many anterior segment and comprehensive ophthalmological practices now perform injections, and even cataract surgeons commonly maintain dedicated injection operating rooms. The survey finding that only 30% of the injectors had a retina background mirrors what I see in practice.

Although intravitreal injections were once considered the exclusive domain of retina specialists, a paradigm shift occurred over the past decade.

Medical retina training is now embedded within ophthalmology training programmes, enabling most ophthalmologists to safely perform injections. Additionally, widespread adoption of anti-VEGF therapy has motivated primary eye care specialists to ensure timely treatment of their patients, particularly when access to retina specialists is limited.

“It is surprising how quickly and confidently non-retina clinicians have embraced the adoption of anti-VEGF therapy.”

The reported confidence reflects appropriate training and increasing experience, and with sustained exposure, the procedure does indeed become routine. In regions with limited access to retina specialists, this adaptation has been essential to meeting growing patient demand. Based on the level of reported competence, there appears to be little cause for concern regarding the quality of patient care in these practices.

Overall, these data support the conclusion that intravitreal injections are now a community effort within ophthalmology. This model has improved timely access to care, strengthened collaboration among eye care providers, and allowed clinicians to manage routine injections while appropriately referring more complex cases.

Retina Care Beyond the Subspecialty

Taken together, the findings suggest that intravitreal injections should not be the exclusive domain of retina specialists. With appropriate training, experience, and safeguards, these procedures can be safely and effectively performed by comprehensive ophthalmologists and anterior segment surgeons.

Image credit: Soni Eye Care, “Intravitreal Injections” sonieyecare.com

The demand for anti-VEGF therapy continues to rise with an ageing population. Restricting intravitreal injections solely to retina specialists risks creating bottlenecks in care and unnecessary treatment delays, particularly in regions with limited retina specialists. Enabling qualified non-retina ophthalmologists to deliver intravitreal therapy allows patients to receive timely treatment closer to home, which is critical for preserving vision in conditions such as nAMD.

"As doctors we want the best outcome for our patient to be achieved expeditiously and efficiently."

Intravitreal injection is a standardised, minimally invasive procedure that can be taught without the need for lengthy fellowship training. It is routinely covered during ophthalmology residency and reinforced through continuing medical education, wet labs, and structured protocols. When these protocols are followed, outcomes achieved by non-retina specialists have been shown to be comparable to those of retina subspecialists.

This model exemplifies collaborative care rather than competition. Retina specialists remain essential for managing complex disease and performing vitreoretinal surgery, while routine intravitreal therapy can be safely decentralised. Such an approach allows retina specialists to focus on advanced and innovative treatments, while increasing overall system capacity.

The suitability of non-retina specialists to perform intravitreal injections also reflects the shared medical education. Anterior segment surgeons often manage patients with overlapping retinal pathology, including DR and AMD, and are well positioned to provide continuity of care within limits. Quality assurance, clear referral pathways, and ongoing education remain essential to this model.

Ultimately, the goal is straightforward: to deliver timely, high-quality care that optimises patient outcomes. When standards are upheld, the subspecialty label of the injector matters far less than the quality, safety, and efficiency of the care provided.

"If quality of care and the physician's skill caring for these individuals is evident, the specialist title becomes irrelevant."

Practice Setting

Survey data suggests that intravitreal injections are more commonly performed in hospital-based practices (both private and public), whereas respondents who do not perform injections are more likely to work in corporate-owned or academic institutions (**Figure 4**).

Several factors may explain this pattern. Hospitals are often structurally and logistically equipped to support intravitreal injection services. Hospital pharmacies can manage ordering, storage, and compounding of medications, which is particularly relevant for off-label or biosimilar therapies such as bevacizumab. This reduces administrative burden and financial risk for individual clinicians, especially in comparison with private practices where clinicians may need to purchase medications upfront and await reimbursement.

Some healthcare systems mandate that intravitreal injections be performed only in approved centres, which are frequently hospital- or specialty facility-based. Hospitals are likely to meet sterility requirements through dedicated procedure rooms, established protocols, and trained support staff, making it easier to integrate injection services into routine clinical workflows.

Patient diversity also differs by practice setting. Large public hospitals and referral centres naturally see a higher volume of patients with retinal pathology, including AMD and DR, making intravitreal therapy a routine part of care. By contrast, ophthalmologists working in corporate refractive centres or purely academic roles may encounter fewer patients requiring injections and may instead refer retinal disease to subspecialist services.

Institutional philosophy further influences practice patterns. Hospitals often operate under a "treat what you diagnose" model, encouraging comprehensive in-house care when resources allow. In contrast, corporate or insurance-driven environments may favour referral to external retina groups, particularly when reimbursement structures prioritise other procedures.

Finally, staffing and workflow considerations are critical. Many hospitals operate dedicated injection clinics or designated procedure days supported by multidisciplinary teams, improving efficiency and patient flow. In some regions, such as the UK, injections may even be delegated to trained nurse practitioners under strict protocols.

Taken together, these factors make hospital-based settings particularly conducive to intravitreal therapy, which helps explain why a greater proportion of injection providers are based in these environments.

Training Background

The survey found that clinicians who performed injections were more likely to have some retina training, although only 30% formally specialised in retina. Many reported subspecialty training in cornea/anterior segment (**Figure 5**).

Modern ophthalmology training programmes now include substantial experience with intravitreal injections. During residency, residents routinely rotate through retina clinics, manage patients with AMD and DME, and perform intravitreal injections under supervision. As a result, intravitreal therapy has become a familiar, standardised procedure rather than a subspecialty-exclusive skill.

In many practice settings, anterior segment surgeons initially integrate injections with guidance from retina colleagues, particularly in group or hospital environments. Mentorship, shared clinics, and clear referral pathways provide both practi-

How many intravitreal injections do you perform for AMD or DME monthly?

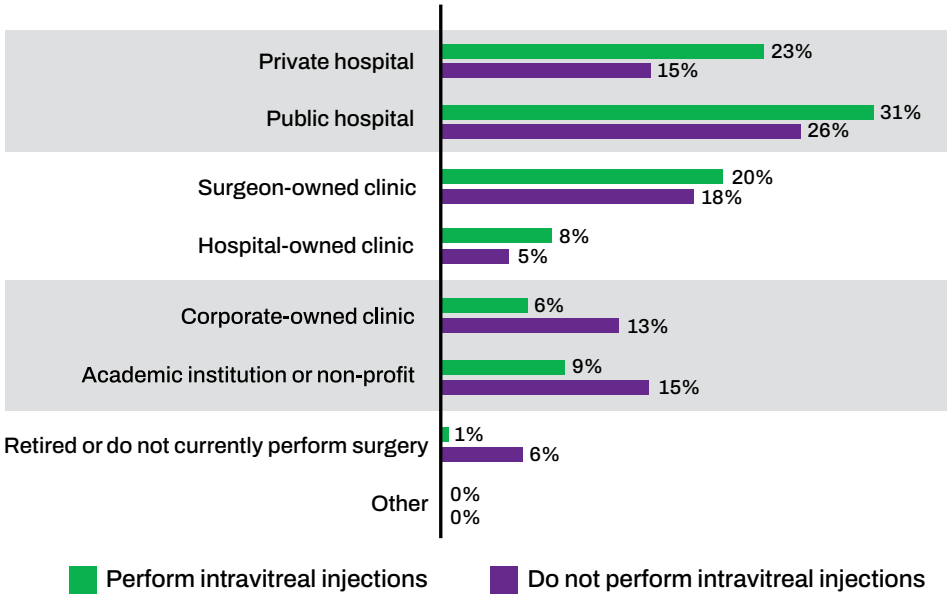


FIGURE 4. Intravitreal injections are most commonly performed in hospital-based practices and least commonly performed in corporate-owned clinics and academic institutions or non-profits.

cal support and reassurance when complexity increases.

Continuing education further strengthens competence. Wet labs, focused courses, and dedicated sessions at major congresses such as ESCRS and AAO increasingly address medical retina topics for non-retina specialists. These opportunities reinforce best practices, complication management, and evolving treatment strategies.

Structured clinical protocols also play a key role. Stan-

"Nothing creates a sense of familiarity and comfort quite like experience."

Which of the following areas of subspecialty training have you completed? (Select all that apply.)

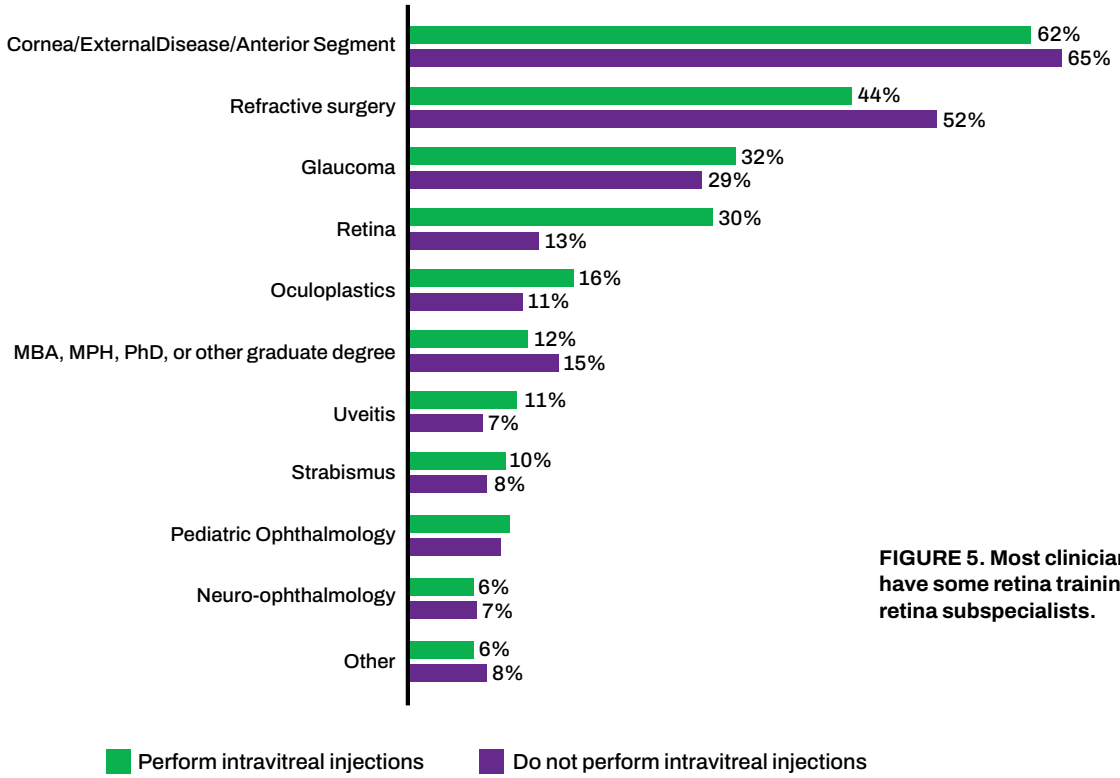


FIGURE 5. Most clinicians performing injections have some retina training, although few are retina subspecialists.

dardised pathways for conditions such as nAMD and DME allow non-retina specialists to deliver evidence-based care confidently, while clearly defined escalation criteria ensure appropriate referral.

Experience remains a central factor. As injection numbers increase, procedural confidence grows. The survey finding that non-retina specialists perform an average of approximately 50 injections per month suggests that many acquire substantial hands-on experience. Combined with imaging access, mentorship, and protocols, this supports safe and effective practice.

"Modern anterior segment surgeons are "hybrid" in their own right—in that they can manage common retinal conditions medically."

Injection Volume

Retina specialists reported performing an average of 90 intravitreal injections per month, compared with about 50 per month among respondents without retina subspecialisation (**Figure 6**).

This disparity reflects differences in case mix and practice patterns. Retina specialists generally manage more complex, bilateral, or refractory disease requiring frequent treatment. Their clinics are, therefore, structured around high-volume injection workflows.

Comprehensive and anterior segment ophthalmologists generally integrate intravitreal therapy alongside other clinical activities, often concentrating injections into specific sessions. While volumes are lower, quality of care can remain high with appropriate organisation.

High-volume injection services require streamlined processes, including dedicated procedure rooms, trained staff, efficient patient preparation, and robust scheduling systems. Lower-volume practices may initially function with shared resources but often adopt similar efficiency strategies as demand increases.

Ultimately, both high- and moderate-volume models can deliver excellent outcomes. The survey findings reflect organisational realities rather than differences in care quality.

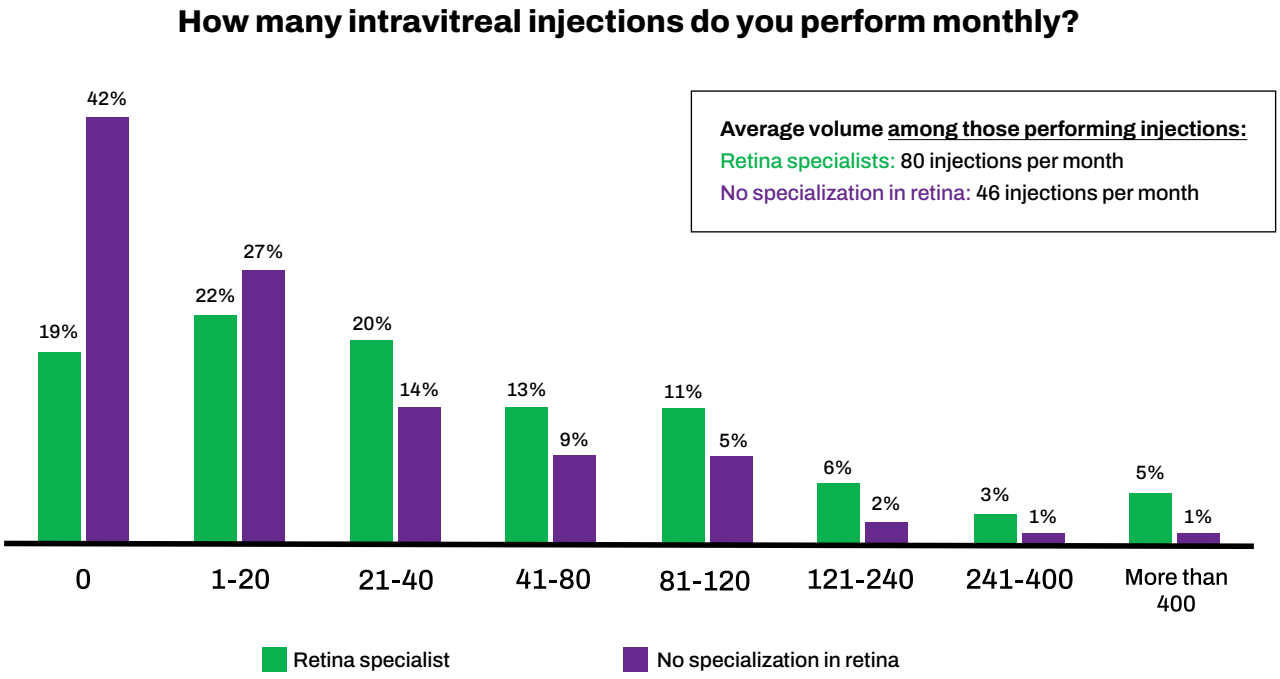


FIGURE 6. Retina specialists perform higher monthly injection volume than non-retina subspecialists.

Confidence in Delivering Retina Care

According to the survey, 88% of clinicians performing injections felt confident incorporating intravitreal therapy into their practice, and 81% reported confidence in making treatment decisions for nAMD and DME. It is encouraging to see the high levels of confidence, likely attributable to key supporting practice-level supports.

Many practices now standardise pathways for common retinal disorders, providing non-retina specialists clear, evidence-based guidance, for example, initiating anti-VEGF in new-onset nAMD diagnosis or criteria for dose interval extension. In my practice, we have established a DME management flow diagram, outlining when to use anti-VEGF, consider laser, or introduce steroids, which ensures consistent and confident decision-making.

Access to the best imaging technology puts the non-retina specialist on comparable informational footing as the retina specialist. High-quality OCT imaging at each visit enables confident treatment decisions, by clearly revealing the fluid status, while an angiogram can confirm atypical findings. This

prevents the non-retina specialist from "flying blind," and further strengthens confidence.

Some larger practices and hospitals also train the workforce and junior doctors in retina care through a few weeks in the medical retina clinic. At our hospital, we hold lectures on such topics as advances in AMD or diabetic eye disease. When the entire workforce is kept up to date, surgeons tend to feel confident in their use of this knowledge. Streamlined injection logistics allow the doctor to focus on clinical decision-making rather than setup-related activities, indirectly reinforcing confidence.

In addition, nothing reinforces confidence better than positive outcomes. When non-retina specialists manage nAMD and DME patients and observe favourable responses, that success alone builds their confidence.

The high levels of confidence among survey respondents likely reflects practice environments with standardised care pathways, access to high-quality imaging, advanced training, and a track record of successful outcomes.

Compliance with Intravitreal Injections

On average, respondents estimated that 15% of their patients receiving intravitreal injections are not fully compliant with their treatment regimen. In my clinical experience, compliance/adherence is a persistent challenge, and based on both experience and clinical research, I believe the true rate is somewhat higher than 15%. One explanation is that this 15% figure may cover those who fully drop out or miss visits frequently. When broader criteria are applied, such as patients who stretch out visits or who drop out after the initial injections, the true rate of non-compliance may be closer to 20%-30%.

Retina specialist publications have repeatedly linked poor adherence and undertreatment to poor visual outcomes in many real-world patients. These studies cite factors such as treatment burden and systemic barriers, for patients falling off treatment. There are a few methods to optimise compliance/adherence, all focused on reducing patient burden:

Patient education: From the outset, ensure patients or their caregivers understand that anti-VEGF therapy is a long-term commitment rather than a one-time intervention, similar to chronic conditions such as hypertension or diabetes, but that it is critical in preserving vision.

To reinforce this message, use visual aids, such as OCT images taken before and after treatment, to demonstrate the tangible benefits of adherence. Emphasize that missed appointments can lead to permanent vision loss, a consequence that some patients may not fully appreciate. Establishing early that this will be a long-term therapeutic relationship helps align expectations. While some clinicians formalize this with "treatment agreements", I typically ask patients for a verbal commitment.

Scheduling: Implement structured scheduling practices such as booking the next appointment immediately after each injection and leaving patients with a written reminder. Support this with phone calls or automated text reminders a few days in advance. In my experience, involving family members—predominantly the older patients—can improve attendance, and we often send reminders to a designated relative. Some practices actively follow up on missed appointments with calls to reschedule and, importantly, to remind them of the value of continued care.

Flexible treatment regimens: The primary driver of non-compliance is visit frequency. When safe, I use treat-and-extend regimens to manage this, lengthening intervals up to 8, 10, or even 12 weeks if the patient responds well. Another option is a steroid implant, such as dexamethasone, although these implants carry potential side effects and must be evaluated on a case-by-case basis. Newer, longer-acting agents such as faricimab and emerging port-delivery systems may further reduce treatment burden by extending dosing intervals and improving long-term adherence.

Individualised care: Many patients do not drive, and in these cases, we work with families or social services as needed, including writing letters on behalf of patients to obtain assistance services. Consolidating multiple visits to a hospital on the same day is also very helpful.

A patient's emotional state is another factor, as some get discouraged, especially by perceived lack of progress or discomfort. Acknowledge these concerns and emphasize that positive outcomes, such as disease stabilisation or maintenance of vision, are meaningful successes. For select patients, a low-dose anxiolytic prior to injection may improve tolerability and improve willingness to continue therapy.

Accordingly, by reducing treatment burden, we may prevent some patients from abandoning treatment. Nonetheless, despite our best efforts, some will still fall through due to real life barriers. Encouragingly, emerging therapies—such as long-acting injectables and gene-based treatments—may help ease adherence challenges in the future.

Understanding of Emerging Retina Treatments

The survey highlighted gaps in clinical understanding of emerging retina treatments (**Figure 7**). Indeed, keeping pace with advances in retina care can be very challenging for anterior segment surgeons who are less immersed in the retinal literature. There are, however, many excellent resources that can help fill this gap.

Large meetings remain one of the best ways to learn about advances in retina. The recent EURETINA meeting in Paris, for example, showcased the latest developments in retina care. Retina-focused content is also increasingly available at general ophthalmology congresses. In recent years, ESCRS has included joint symposia with EURETINA on retinal topics for non-retina specialists, covering topics such as AMD biomarkers and new therapies. Many meetings, like ESCRS, now offer access to recorded sessions, further improving accessibility.

Professional societies often offer subscriptions to newsletters, publications, and email alerts for the most up-to-date developments. EURETINA gives its members full access to

its online resources. Additionally, as new treatments become established, organisations often produce guidelines or consensus statements, such as recommendations for steroid implants in DME. Many also offer podcasts or webinars, which I recently discovered as a great way to learn while travelling or multitasking.

Self-directed networking within the retina community is another important resource. Platforms such as the EURETINA website, its Case Club, the AAO's ONE Network, and the ASRS Retina Image Bank offer case-based learning and updates on new therapeutic approaches. Broader free access to these resources would further support education for anterior segment surgeons.

Regular engagement with the literature is also essential. Journals such as Ophthalmology, Retina, Ophthalmology Retina, and AJO publish trials, long-term safety studies, and reviews. I make it a point to review new major studies at a minimum, as summaries, digests or editorials, which place these studies into context. Specialty retina-focused publications and magazines also publish regular supplements on emerging therapies, offering an efficient way to stay current.

Lastly, there is value in simply talking to retina specialists about your shared patient base. When referring a patient for retina care that is outside one's scope, ask the specialist for insight into their clinical reasoning and outcomes. Retina specialists are generally aware that non-specialists may lack full context, so written feedback explaining key decisions can be helpful. Organized activities such as "lunch-and-learn" featuring retina specialists are great ways to open up this dialogue.

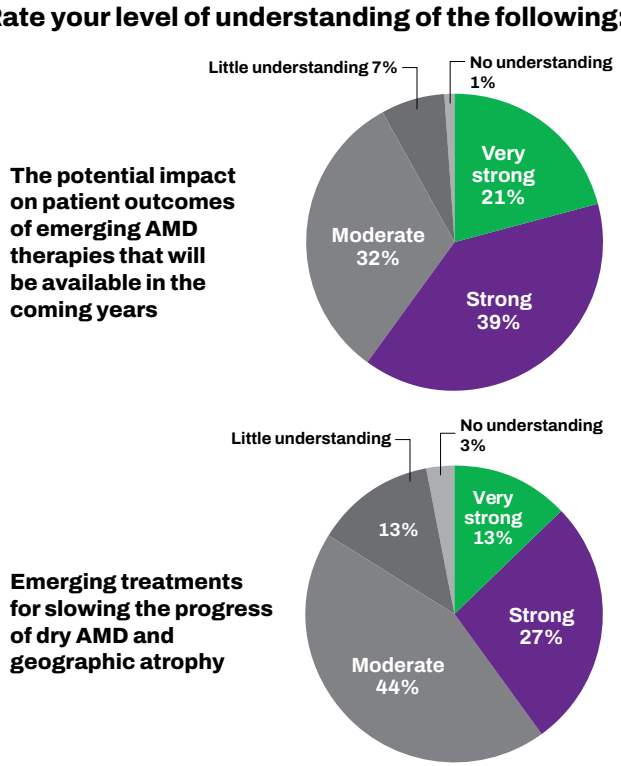


FIGURE 7. Knowledge gaps remain regarding emerging AMD treatments, with 40% and 60% of the respondents lacking a strong understanding of the potential impact of emerging AMD therapies on patient outcomes and their ability to slow the progress of dry AMD and geographic atrophy, respectively.

Vitreoretinal Surgery

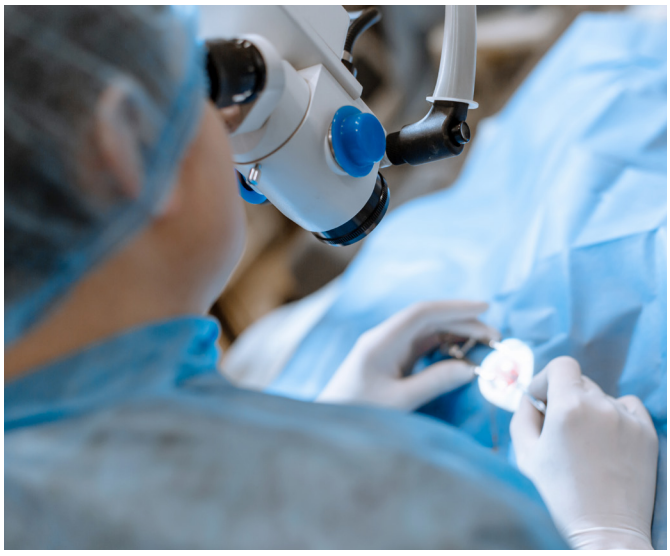
Survey data indicated that 19% of respondents performed primary RD procedures monthly, and 29% performed vitrectomy procedures within the past year. At first glance, these numbers gave me pause, given that ESCRS members primarily identify as cataract and refractive surgeons rather than retina specialists and vitreoretinal surgery is generally regarded as the domain of fellowship-trained retina specialists.

The data becomes more understandable when one considers the considerable variability in European practice environments, as well as the international composition of ESCRS membership. Particularly in rural areas, access to fellowship-trained vitreoretinal surgeons may be limited or nonexistent, and general ophthalmologists are often required to manage many retinal surgical procedures.

Another likely factor is the "old school" ophthalmologists of my generation, trained in a less subspecialised era to manage all aspects of ophthalmic care, retinal laser procedures, and even retinal surgery. Many have maintained a wide scope of practice, and although they might not identify as retina specialists, they possess the skills and confidence to perform VR surgery. In my own practice, I perform vitrectomies and RD surgeries, as do many similarly trained colleagues.

That said, among younger subspecialists practicing in high-resource settings, it has become increasingly uncommon for anterior segment surgeons to perform VR surgery, which explains why the reported 19% monthly rate of RD surgery initially struck me as unusually high.

Interpretation of the term "vitreoretinal surgery" may also play a role, as some respondents likely included limited or office-based interventions, such as anterior segment vitrectomy, floaterectomies, or macular pucker peels, which they reasonably considered to be vitrectomies. The survey did not clearly differentiate between complex retinal surgery and simpler vitrectomy cases. Office-based vitrectomy for floaters, using small-gauge systems, has increasingly been adopted by non-retina surgeons in community settings.



Even with these caveats, the number of respondents who report performing RD surgery monthly is surprising. This may reflect ongoing exposure to a diverse range of posterior segment pathologies and suggests that some respondents hold dual training backgrounds, having completed fellowships in both anterior and posterior segment surgery.

These findings underscore the ongoing need for flexibility and breadth of skill in certain situations. VR surgery remains technically challenging and requires a high level of experience and training. Nevertheless, the data demonstrate that even within a predominantly anterior segment-focused membership, a substantial proportion of surgeons continue to perform posterior segment procedures.

The Future of Retina Care

Current infrastructure and demographic trends strongly argue for training as many young ophthalmologists as possible to meet future demand. The need for retina specialists is substantial and will continue to grow, driven by the ongoing ageing of the European population and increasing prevalence of retinal disorders, most notably AMD, which currently affects more than 34 million patients in the EU. Compounding this challenge, in 12 EU countries, more than 40% of the medical workforce is over 55, suggesting an impending wave of retirements that current training pipelines are unlikely to offset.

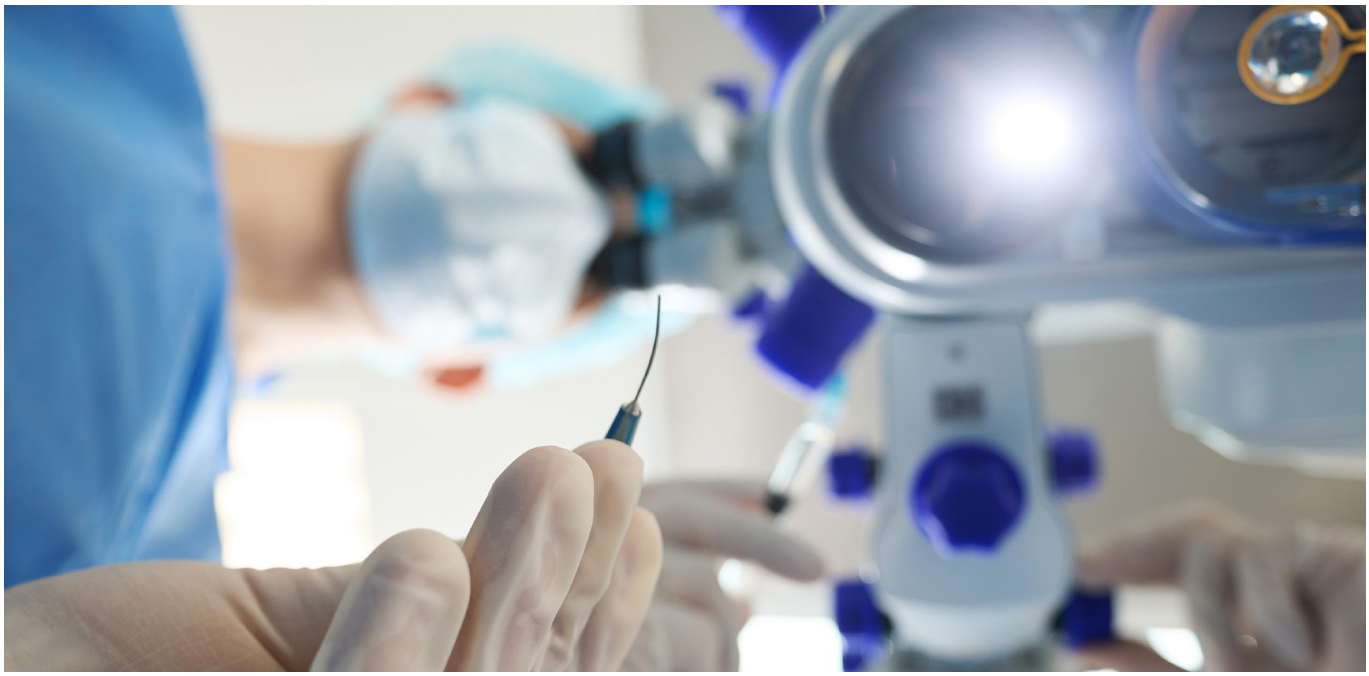
At the same time, clinical capacity per retina specialist is decreasing, in part due to evolving expectations around work-life balance. Retina training pathways remain largely hospital-based, while the real-world demand extends far beyond tertiary centres. As a result, core components of retina care, especially intravitreal injection therapy, cannot become the exclusive domain of retina specialists.

In contrast, outcomes for complex retinal pathologies, such as proliferative vitreoretinopathy-related RD and macular hole surgery, are clearly optimised when performed by experienced retina surgeons. This is especially true as surgical complexity and technology continue to advance, including 3D heads-up visualisation, ultra-widefield imaging, ultra-minimally invasive vitrectomy, and emerging subretinal gene therapies. Accordingly, healthcare systems are centralizing complex VR surgery within designated Centres of Excellence, reinforcing that advanced VR surgery should remain the domain of subspecialists.

Comprehensive and anterior segment surgeons will, however, continue to play a critical role in the management of patients receiving intravitreal therapy. They must also retain the ability to handle emergencies, such as performing an anterior chamber tap for acute ocular hypertension following vitrectomy or undertaking an anterior vitrectomy for retained lens fragments after cataract surgery. These VR skills remain essential. Encouragingly, communication and referral pathways between comprehensive surgeons and retina specialists are improving, allowing for smoother transitions of care and a better patient experience.

Overall, this evolving model supports patient safety, enhances subspecialty excellence, and promotes sustainable workforce planning within ophthalmology. The continued shift toward greater subspecialisation, structured co-management, and dedicated retina specialty care represents the most patient-centered and resilient strategy for the future.

The era of the do-it-all surgeon appears increasingly obsolete, and that, in my view, reflects meaningful progress within our profession.



About the Survey

The 2025 ESCRS Clinical Trends Survey was conducted during the 43rd Congress of the ESCRS in Copenhagen, Denmark, with members and congress attendees able to participate in-person and online through the ESCRS website. The survey addressed several areas of clinical practice, including general cataract surgery, astigmatism and toric IOLs, presbyopia correction, glaucoma and MIGS, corneal refractive surgery, and retina.

More than 2,300 ophthalmologists responded to the 120 questions, which were developed and reviewed in collaboration with ESCRS leadership and substantiated by a data scientist. To better understand the educational needs of its members, ESCRS leadership continually references these annual surveys and the feedback they elicit. The insights collected inform and enhance educational opportunities featured at the Annual Congress of the ESCRS, the ESCRS Winter Meeting, as well as the ongoing ESCRS Clinical Trends Series.

About the Expert

Dr. Burkhard Dick is Professor and Medical Director at Ruhr University Eye Hospital Knappschaft Kliniken, Bochum, Germany, where he leads one of Europe's most technologically advanced centres for cataract, glaucoma, vitreoretinal and refractive surgery. His clinical and research interests span cataract, presbyopia, simultaneous vision IOL technology, and laser-assisted surgical techniques, with a particular focus on optimising visual outcomes and advancing precision in anterior segment surgery.

He is the current President of the European Society of Cataract and Refractive Surgeons (ESCRS) and has long played a leading role in the organisation's educational and scientific activities. In addition to his work with the ESCRS, he serves as the General Secretary of the German Society of Cataract and Refractive Surgery (GSCRS, DGII), promoting scientific excellence and global collaboration in the field.