

# Initial Experience with an enhanced monofocal IOL: A perspective from Portugal



**Dr. António Friande**

Hospital Lusfadas Porto;  
Santo António Hospital,  
Centro Hospitalar do Porto,  
Porto, Portugal.

## KEY TAKEAWAYS

- 1 Promising outcomes were reported in the first 20 patients who received RayOne EMV.
- 2 Patients have been surprised and pleased with the results, and many remain independent from spectacles.
- 3 Patients with macular degeneration have maintained adequate distance, intermediate and near vision with this lens.

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There have been multiple intraocular lenses (IOLs) launched in recent years that offer excellent distance vision at the expense of near vision, as well as the possibility of dysphotopsia phenomena. This has not been an issue for many of my older patients who do not plan to work or drive at night and have a high tolerance of spectacles for near vision.

Meanwhile, I continue to see many younger cataract surgery patients in my practice, from 60 to 70 years of age, who are still quite active and are therefore not as tolerant of dysphotopsia. Likewise, they are not interested in outcomes that require them to be dependent on spectacles for near vision. For these patients, I have found the RayOne EMV (Rayner Intraocular Lenses Ltd, Worthing, UK) to be a great solution and have so far had promising outcomes in the first 20 of my patients who have received this lens.

I started considering that an enhanced monofocal lens could be a good alternative to standard monofocal lenses as it provides an extended range of vision, with very good distance vision and acceptable near vision that allows many of my patients to remain independent from spectacles, with their near vision being good enough for most daily activities. Ultimately, both my patients and I have been consistently happy with the outcomes we have seen so far.

It is important to stress that we have been happy with these outcomes because I have set expectations with my patients prior to surgery, explaining that they will have good distance vision with an improvement in near vision as well, but do not give them the expectation of spectacle independence for near vision. Nevertheless, they have been both surprised and pleased with the results and do not require near vision spectacles so far. I have even had success with RayOne EMV in patients with sight in only one eye due to accidents or other trauma. They have achieved good vision and have remained free of spectacles.

I continue to use premium bifocal and trifocal IOLs in some patients, explaining that they may achieve excellent distance vision but run the risk of dysphotopsia effects. In fact, I do not typically propose these lenses and only consider these with my patients if they specifically ask for them, indicating that they no longer want to wear spectacles. Nevertheless, the decision to consider these lenses, especially trifocal IOLs, depends on specific properties of the eye such as pupil size and other factors.

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A few of my patients with macular degeneration have also received RayOne EMV. While their vision is obviously not as good as others without macular disease, they have maintained adequate distance, intermediate and near vision with this lens, and I have found RayOne EMV to be a good alternative to other monofocal lenses in these patients so far.

For surgeons who have not yet considered RayOne EMV, I would advise that patient expectations be adequately managed before considering this option. In other words, I would not set out with the idea of good distance vision and great near vision, with total independence from spectacles. Instead, I usually tell patients that they will have good spectacle independence but will not be entirely free of them. Patients are then pleasantly surprised with the better vision that they obtain after surgery, which is a big plus in terms of overall satisfaction.

While bifocal and trifocal lenses will always have their place with some patients who come in with specific expectations, I think that RayOne EMV is a sign of the future of IOLs and represents a considerable advancement from standard monofocal lenses.