



# Dr Filomena Ribeiro & Dr Tiago Ferreira | ESCRS 2022 & 2023

17:15 - 18:45 JCRS Symposium  
Hall 9 Chairs : Thomas Kohnen, Sathish Srinivasan



**Filomena Ribeiro**  
Newer IOLs: Patient selection and outcomes: Enhanced monofocal's vs. EDOF - EDOF's

**Enhanced monofocal's vs. EDOF**



**It is a new World to discover!**

Filomena Ribeiro, MD, PhD, FEBO  
HOSPITAL DA LUZ

39<sup>th</sup> Congress of the ESCRS

13:00 - 14:00 Challenges in cataract surgery and advanced technology IOL solutions

**Blue 2** CHAIR : OLIVER FINDL



**Tiago Ferreira**  
Addressing spectacle independence and visual quality demands considering different advanced technology IOLs' dysphotopsia profiles

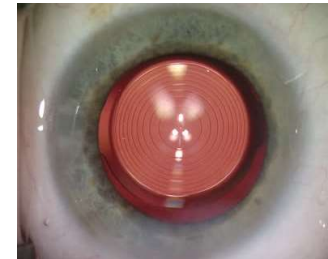
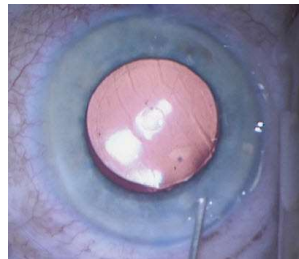
**ADDRESSING SPECTACLE INDEPENDENCE AND VISUAL QUALITY DEMANDS CONSIDERING DIFFERENT ADVANCED TECHNOLOGY IOLs' DYSPHOTOPSIA PROFILES**



Tiago B Ferreira MD, FEBOS-CR, PhD  
Hospital da Luz Lisboa, Lisbon, Portugal

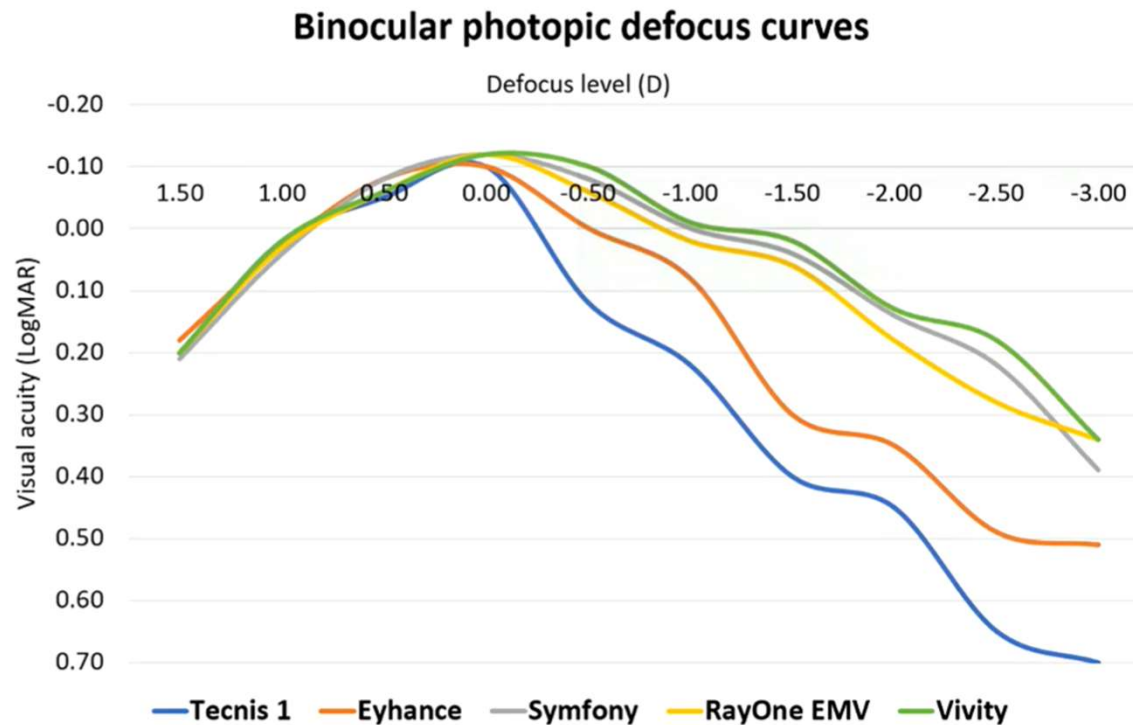
Rayner ESCRS satellite symposium

40<sup>th</sup> Congress of the ESCRS  
16-20 September 2022



<https://escrs.conference2web.com/#/resources/newer-iols-patient-selection-and-outcomes-enhanced-monofocal-s-vs-edof-edof-s>

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**n (Patients)**

Tecnis 1	= 30
Eyhance	= 30
Symfony	= 30
RayOne EMV	= 30
Vivity	= 30



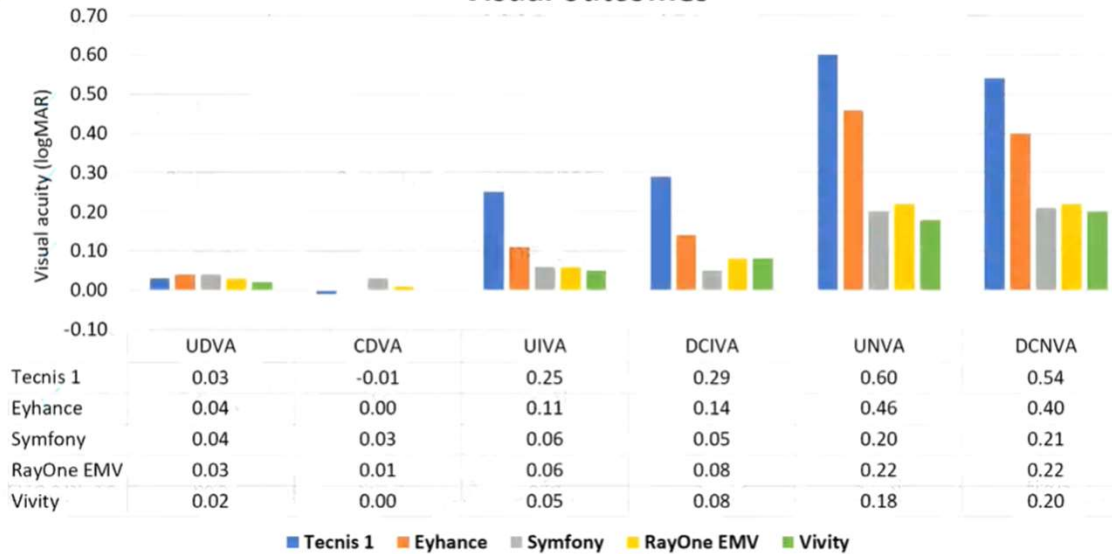
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## COMPARISON OF MONOFOCAL, ENHANCED MONOFOCAL AND EDOF IOLS

### RESULTS

#### Visual outcomes



UDVA, uncorrected distance visual acuity; CDVA, corrected distance visual acuity; UIVA, uncorrected intermediate visual acuity;  
DCIVA, distance-corrected intermediate visual acuity; UNVA, uncorrected near visual acuity; DCNVA, distance-corrected near visual acuity

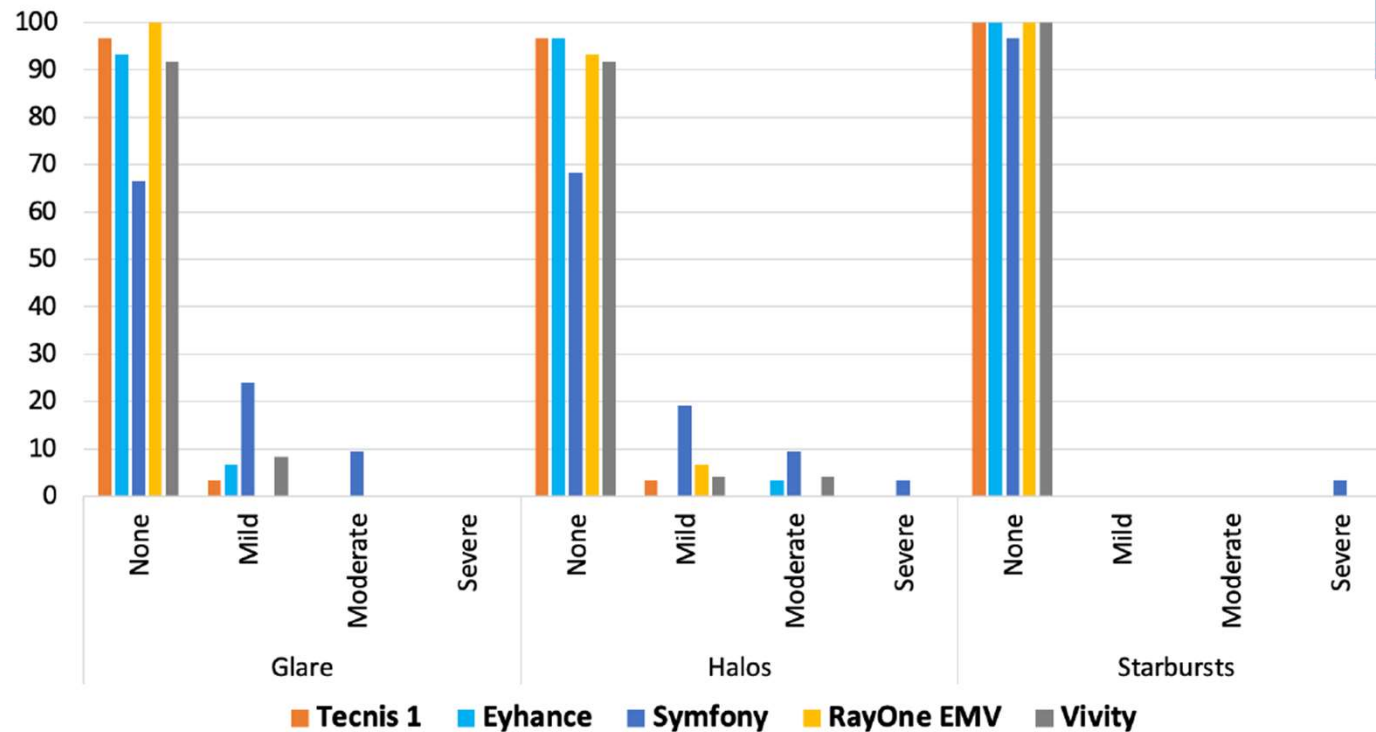
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COMPARISON BETWEEN MONOFOCAL, ADVANCED MONOFOCAL AND EDOF IOLs



## RESULTS

### Photoc phenomena



Glare = 100% None  
 Starburst = 100% None  
 Halos = 94% None

Similar profile to monofocal

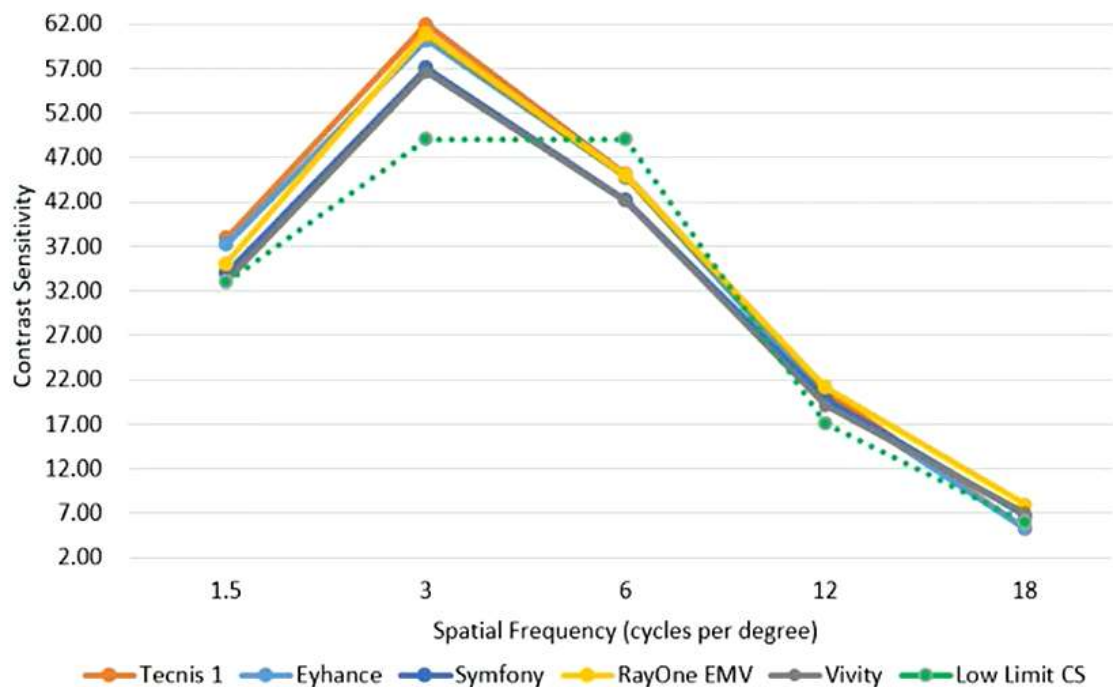
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## COMPARISON BETWEEN MONOFOCAL, ADVANCED MONOFOCAL AND EDF OF IOLs



### RESULTS

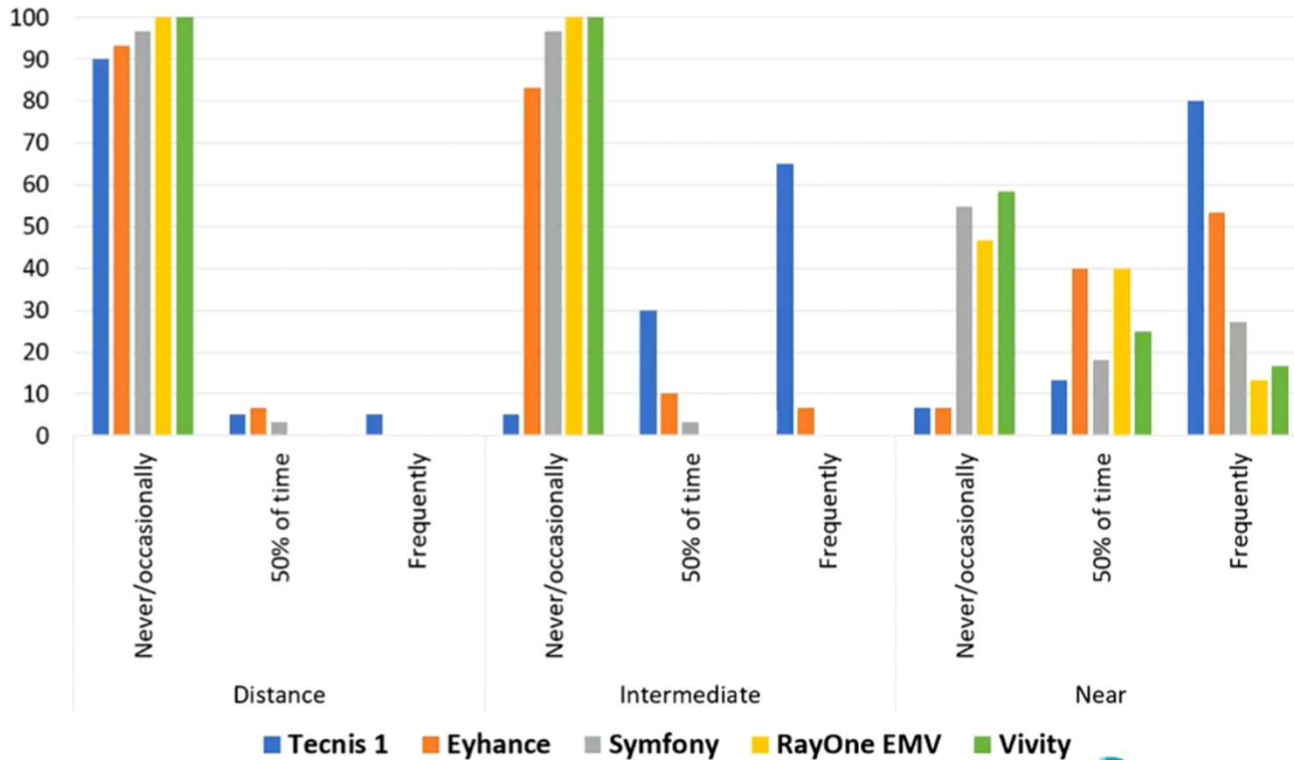
Contrast sensitivity function (CSF) (photopic conditions)





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## How often do you wear spectacles?



Tiago B Ferreira | 2022



Spectacle independence:

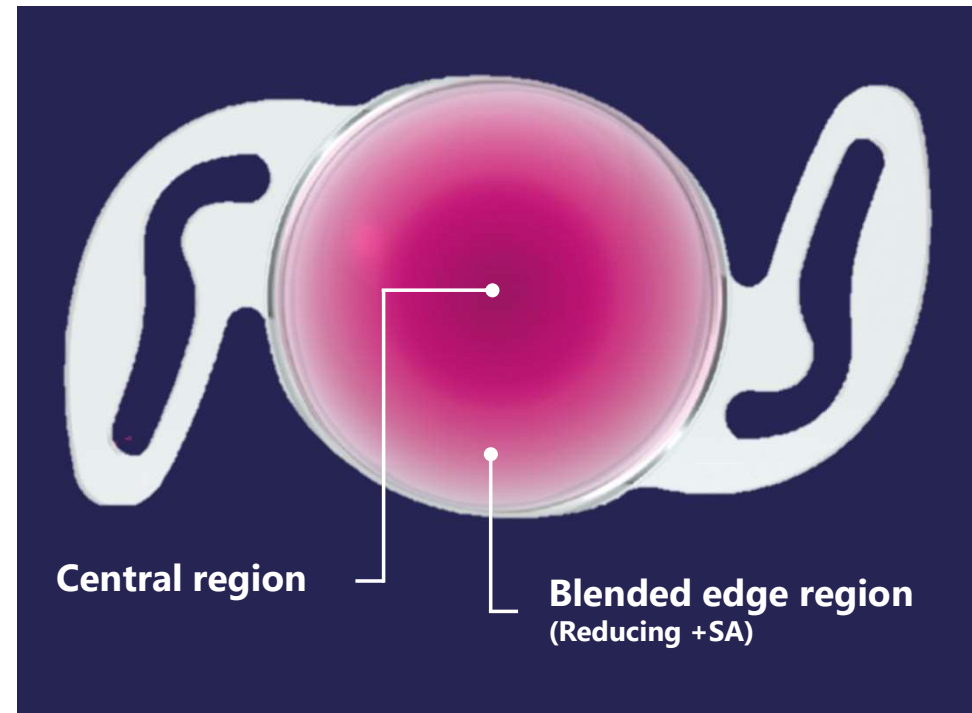
Tecnis 1	– 3.3%	←
Eyhance	– 26.7%	←
Symfony	– 63.3 %	←
RayOne EMV	– 66.7%	←
Vivity	– 70.8%	←

## RayOne EMV | Optic

Aspheric anterior surface inducing **controlled positive spherical aberration**

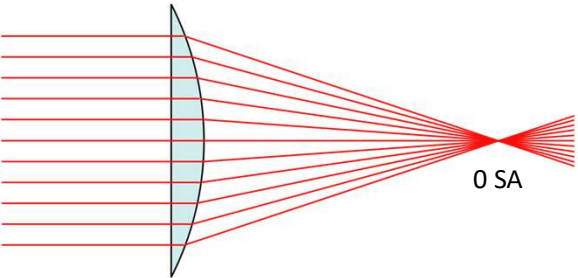
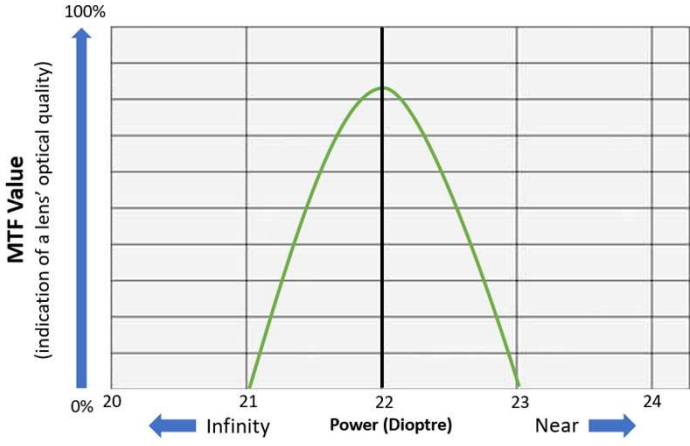
**Increased range of focus** without compromising visual acuity under low-light conditions

- ✓ Increased range of functional vision
- ✓ Minimal dysphotopsia
- ✓ High patient satisfaction

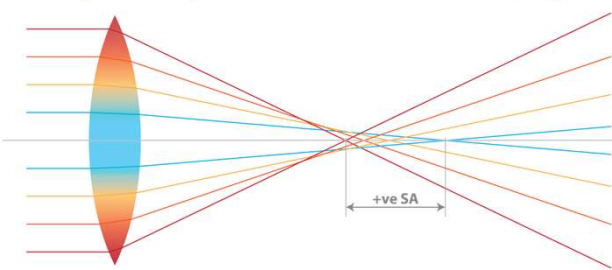
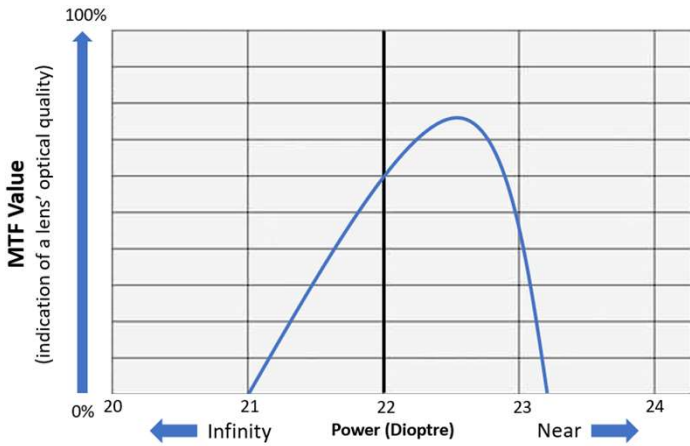


# RayOne EMV | Spherical Aberration

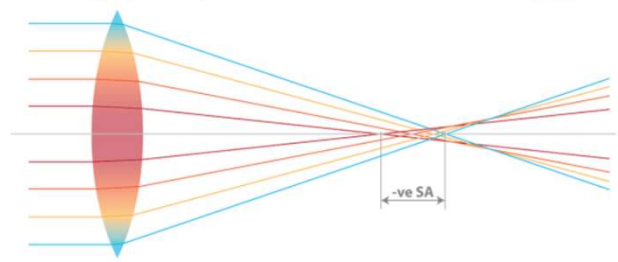
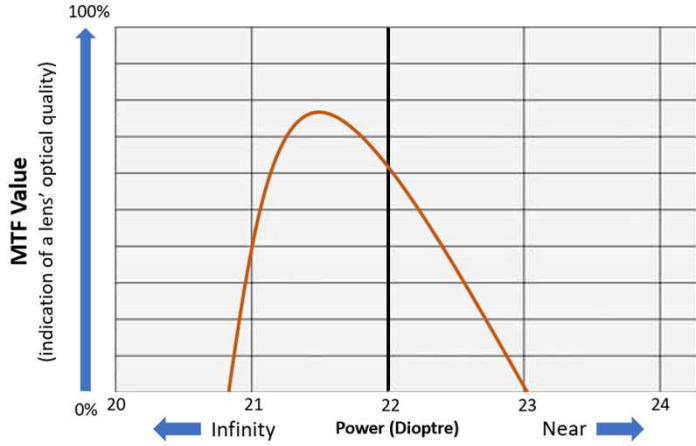
## Negative Aspheric Monofocal



## Positive Spherical Aberration



## Negative Spherical Aberration



References 12, 13, 14