Sunir J. Garg, MD, FACS, FASRS
Paul Hahn, MD, PhD, FASRS; Susan Raef, MSMC; Candice Bradley, PhD, Jennifer Carstens Schiller
43 societies accepted our invitation; 782 of their members answered the 2023 Global Trends in Retina Survey.
GLOBAL TRENDS in Retina

Hahn P, Garg SJ, eds.

2023 Global Trends in Retina Survey:
Chicago, IL.

American Society of Retina Specialists; 2023.
The Global Trends in Retina Survey includes 15 clinical questions from the ASRS PAT Survey.

Responses are grouped into 4 geographic regions and compared with US ASRS members’ answers to the same 15 questions in the PAT Survey.

The following graphs show the highlights of the Global Trends Survey responses.
GLOBAL TRENDS in Retina

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GLOBAL TRENDS in Retina

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GLOBAL TRENDS in Retina

International Liaison Leaders

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Africa/Middle East

Arab African Society of Retina Specialists (AASRS)

Emirates Society of Ophthalmology

Gulf Retina Group

Iranian Vitreoretinal Society

Israel Vitreoretinal Society

The Jordan Vitreoretinal Society

Nigerian Vitreoretinal Society

Saudi Ophthalmological Society

Syrian Ophthalmological Society
Asia/Pacific

Association of Vitreo-Retina Specialists of Sri Lanka
Australian and New Zealand Society of Retina Specialists
Chinese Fundus Ocular Diseases Society
Indonesia Vitreoretinal Society
Japanese Retina and Vitreous Society
The Korean Retina Society
Malaysian Society of Ophthalmology
Singapore Society of Ophthalmology, Retina Section
Taiwan Retina Society
The Thai Retina Society
Vitreo Retina Society of India
The Vitreo Retina Society of The Philippines
Americas

Argentine Retina and Vitreous Society
Brazilian Retina and Vitreous Society
Canadian Retina Society
Colombian Retina and Vitreous Association
Mexican Retina Association
Pan-American Retina & Vitreous Society (PRVS)
Peruvian Society of Ophthalmology
Salvadoran Retina and Vitreous Association
Central American Retina and Vitreous Society (SCRV)
Uruguayan Association of Ophthalmology
Europe

Austrian Ophthalmological Society
British and Eire Association of Vitreoretinal Surgeons (BEAVRS)
Dutch Society of Vitreoretinal Surgery
Dutch Medical Retina Society
European Vitreoretinal Society
French Society of Retina Specialists
Greek Vitreo-Retinal Society (GVRS)
Italian Vitreoretinal Surgery Society
Rosengren Club—Swedish Vitreoretinal Society
Spanish Retina and Vitreous Society (SERV)
Turkish Ophthalmological Society
Ukrainian Alliance of Ophthalmologists
How do you manage pachychoroid neovasculopathy with persistent IRF despite chronic anti-VEGF therapy?

- **Africa/Middle East**  
  - A: 35.9%  
  - B: 51.7%

- **Asia/Pacific**  
  - A: 44.2%  
  - B: 44.2%

- **Americas**  
  - A: 51.9%  
  - B: 38.5%

- **Europe**  
  - A: 31.0%  
  - B: 53.1%

- **United States**  
  - A: 42.0%  
  - B: 46.0%

IRF = Intraretinal fluid
A = Continue anti-VEGF therapy
B = Continue anti-VEGF therapy + photodynamic therapy
How would you treat DME with an inadequate response to 3 monthly injections of a branded anti-VEGF agent?

Africa/Middle East (n = 145)
- 42.1% B
- 24.1% D

Asia/Pacific (n = 318)
- 38.4% B
- 29.2% C

Americas (n = 156)
- 25.0% B
- 38.5% C

Europe (n = 145)
- 25.5% A
- 28.3% B
- 30.3% C

United States (n = 746)
- 37.1% B
- 31.6% D
Which laser treatment strategies do you use for patients with DME? (Choose all that apply.)

- Africa/Middle East (n = 145): 62.8% A
- Asia/Pacific (n = 319): 66.8% A
- Americas (n = 156): 52.6% A, 46.8% B
- Europe (n = 145): 66.2% A
- United States (n = 746): 72.1% A

A = Focal laser
B = Subthreshold/micropulse grid laser
What is the greatest socioeconomic challenge you face in treating patients with DME?

- Africa/Middle East (n = 145)
  - A: Frequent loss to follow-up (31.7%)
  - B: Limited resources to achieve systemic disease control
  - C: Limitations of patient access to retina care
  - D: Administrative/insurance burdens on the physician/practice

- Asia/Pacific (n = 318)
  - A: Frequent loss to follow-up (26.1%)
  - B: Limited resources to achieve systemic disease control
  - C: Limitations of patient access to retina care

- Americas (n = 156)
  - A: Frequent loss to follow-up (25.0%)
  - B: Limited resources to achieve systemic disease control
  - C: Limitations of patient access to retina care

- Europe (n = 145)
  - A: Frequent loss to follow-up (44.1%)
  - C: Limitations of patient access to retina care

- United States (n = 745)
  - A: Frequent loss to follow-up (34.6%)
  - D: Administrative/insurance burdens on the physician/practice
When do you consider using steroids to manage RVO with ME?

- **Africa/Middle East**
  - (n = 145)
  - As second-line therapy in cases of inadequate anti-VEGF response: 68.3%

- **Asia/Pacific**
  - (n = 319)
  - 68.7%

- **Americas**
  - (n = 156)
  - 84.0%

- **Europe**
  - (n = 145)
  - 74.5%

- **United States**
  - (n = 746)
  - 69.3%

**Notes:**
- ME = Macular edema
- RVO = Retinal vein occlusion
What is your treatment approach for peripheral neovascularization with sickle cell (hemoglobin SC) disease (no VH or traction)?

- **Africa/Middle East** (n = 145):
  - Peripheral scatter laser in the area of ischemia: 60.6%

- **Asia/Pacific** (n = 319):
  - Peripheral scatter laser in the area of ischemia: 57.4%

- **Americas** (n = 156):
  - Peripheral scatter laser in the area of ischemia: 56.3%

- **Europe** (n = 145):
  - Peripheral scatter laser in the area of ischemia: 57.6%

- **United States** (n = 745):
  - Peripheral scatter laser in the area of ischemia: 62.0%

*VH = Vitreous hemorrhage*
How would you treat a Friday afternoon, *pseudophakic*, superior, fovea-on RD with a small flap tear at 11:00 OD?

- **Africa/Middle East**
  - (n = 112)
  - 46.4% A
  - 33.0% B

- **Asia/Pacific**
  - (n = 290)
  - 26.6% A
  - 46.6% B

- **Americas**
  - (n = 136)
  - 41.9% A
  - 38.2% B

- **Europe**
  - (n = 110)
  - 35.5% A
  - 45.5% B

- **United States**
  - (n = 668)
  - 55.8% A
  - 30.4% B

**Legend**
- OD = Right eye
- RD = Retinal detachment
- A = Pneumatic retinopexy (with laser or cryotherapy)
- B = Vitrectomy and/or scleral buckle within 24 hours
What is your anesthesia of choice for scleral buckle surgery?

- **Africa/Middle East**
  - (n = 113)
  - 76.1% C

- **Asia/Pacific**
  - (n = 290)
  - 26.2% A
  - 26.2% B
  - 33.8% C

- **Americas**
  - (n = 136)
  - 44.9% A
  - 30.1% B

- **Europe**
  - (n = 110)
  - 72.7% C

- **United States**
  - (n = 668)
  - 31.6% B
  - 51.7% C

A = Peribulbar injection
B = Retrobulbar injection
C = General anesthesia
How do you manage trace nuclear sclerosis in a 45-yo eye requiring vitrectomy for macula-off TRD?

Africa/Middle East (n = 112)
- 68.8% A
  - 29.5% B

Asia/Pacific (n = 290)
- 53.8% A
  - 39.7% B

Americas (n = 136)
- 63.2% B
  - 31.6% A

Europe (n = 110)
- 57.3% A
  - 38.2% B

United States (n = 667)
- 90.4% A
  - 3.2% B

TRD = Tractional retinal detachment

A = Cataract extraction after vitrectomy as needed
B = Cataract extraction at time of vitrectomy
How do you manage endophthalmitis in a 20/200 eye 5 days after anti-VEGF injection?

<table>
<thead>
<tr>
<th>Region</th>
<th>A: After tap/inject in the office, I follow and do not routinely recommend initial vitrectomy</th>
<th>B: Tap/inject in office, then vitrectomy within ~6 hours</th>
<th>C: Tap/inject in office, then vitrectomy within 1-2 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa/Middle East</td>
<td>48.2%</td>
<td>22.3%</td>
<td>B</td>
</tr>
<tr>
<td>n = 112</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>25.5%</td>
<td>27.2%</td>
<td>24.5%</td>
</tr>
<tr>
<td>n = 290</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td>23.0%</td>
<td>29.4%</td>
<td>24.6%</td>
</tr>
<tr>
<td>n = 126</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>40.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>78.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n = 668</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
What type of IOL would you place in a 35-year-old aphakic patient with no capsular support?

<table>
<thead>
<tr>
<th>Region</th>
<th>Option A</th>
<th>Option B</th>
<th>Option C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa/Middle East</td>
<td>47.3%</td>
<td>23.2%</td>
<td></td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td></td>
<td>24.1%</td>
<td>63.8%</td>
</tr>
<tr>
<td>Americas</td>
<td>52.9%</td>
<td></td>
<td>34.6%</td>
</tr>
<tr>
<td>Europe</td>
<td></td>
<td>33.6%</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td>30.0%</td>
<td>34.0%</td>
</tr>
</tbody>
</table>

IOL = Intraocular lens
A = Sutureless scleral fixation of a 3-piece IOL
B = Sutured scleral fixation
C = Iris-claw IOL
What infection prophylaxis do you use for intravitreal injections?

- A = Betadine for all of my patients
- B = Primarily Betadine, with chlorhexidine for select patients

Betadine = Povidone-iodine, Avrio Health, LP

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa/Middle East</td>
<td>92.4%</td>
<td>A</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>82.1%</td>
<td>A</td>
</tr>
<tr>
<td>Americas</td>
<td>76.1%</td>
<td>A</td>
</tr>
<tr>
<td>Europe</td>
<td>64.6%</td>
<td>A</td>
</tr>
<tr>
<td>United States</td>
<td>80.5%</td>
<td>A</td>
</tr>
</tbody>
</table>
What are your most important success metrics when treating with anti-VEGF agents? (Check all that apply.)

- **Africa/Middle East**
  - **(n = 145)**
  - A: 45.5%
  - B: 89.0%
  - D: 46.9%

- **Asia/Pacific**
  - **(n = 318)**
  - A: 51.6%
  - B: 83.0%
  - C: 50.6%
  - D: 55.3%
  - E: 47.8%

- **Americas**
  - **(n = 155)**
  - A: 56.8%
  - B: 77.4%
  - D: 41.9%

- **Europe**
  - **(n = 146)**
  - A: 54.8%
  - B: 74.7%
  - D: 53.4%

- **United States**
  - **(n = 745)**
  - A: 63.1%
  - B: 80.7%
  - D: 49.2%
  - E: 50.8%

(A = Lack of fluctuation in vision or anatomy
B = Improved vision
C = Longer treatment duration
D = Fewer injections
E = Decreased treatment burden)
Does your practice currently require masking by physicians and/or patients?

Africa/Middle East  
(n = 145)  

A = Yes—both physicians and patients  
B = Yes—physicians only  
C = Neither physicians nor patients need to mask

Asia/Pacific  
(n = 318)

A = Yes—both physicians and patients
B = Yes—physicians only
C = Neither physicians nor patients need to mask

Americas  
(n = 155)  

A = Yes—both physicians and patients  
B = Yes—physicians only  
C = Neither physicians nor patients need to mask

Europe  
(n = 147)  

A = Yes—both physicians and patients  
B = Yes—physicians only  
C = Neither physicians nor patients need to mask

United States  
(n = 745)  

A = Yes—both physicians and patients  
B = Yes—physicians only  
C = Neither physicians nor patients need to mask

Bar graph showing the distribution of responses across different regions.
At what age do you plan to retire from clinical practice?

- **Africa/Middle East (n = 140)**
  - Age 56-65: 21.4%
  - Age 66-75: 48.6%

- **Asia/Pacific (n = 316)**
  - Age 56-65: 26.3%
  - Age 66-75: 38.9%

- **Americas (n = 154)**
  - Age 56-65: 19.5%
  - Age 66-75: 42.9%

- **Europe (n = 145)**
  - Age 56-65: 24.1%
  - Age 66-75: 54.5%

- **United States (n = 744)**
  - Age 56-65: 36.4%
  - Age 66-75: 48.1%

A = Age 56-65
B = Age 66-75
C = Age 76 or older
Thank You!