

Regarding your kind permission to use one Table from your published Article - AI in Diabetic Retinopathy (Published in IJO)

3 messages

Arvind Morya <bulbul.morya@gmail.com>  
To: atul56kumar@yahoo.com

Mon, Aug 22, 2022 at 12:18 PM

Respected Sir ,

Greetings of the day. I hope this mail finds you in great health. Sir , we need your kind permission to use one Table from your published Article - AI in Diabetic Retinopathy (Published in IJO). Padhy SK, Takkar B, Chawla R, Kumar A. Artificial intelligence in diabetic retinopathy: A natural step to the future. Indian J Ophthalmol 2019;67:1004-9. The details of the table are as follows

Table 1: A list of studies reported for screening of diabetic retinopathy using artificial intelligence devices

Volume 67 Issue 7



Name of the study

- Wong et al.[22]
- Imani et al.[23] Yazid et al.[24]
- Akyol et al.[25]
- Niemeijer et al.
- Rajalakshmi et al., Smart phone-based study[27]
- Eye Nuk study[28]
- Ting et al.[29]
- IRIS[8]

Disease Sensitivity, specificity or percentage studied accuracy of the study

DR Area under the curve were 0.97 and 0.92 for microaneurysms and hemorrhages respectively  
DR Accuracy range from 95.23-95.90% Sensitivity of 75.02-75.24%  
Specificity of 97.45-97.53%  
DR 97.8% in sensitivity, 99% in specificity and 83.3% in predictivity for STARE database  
90.7% in sensitivity, 99.4% in specificity and 74% in predictivity for the custom database  
DR Percentage accuracy of disc detection ranged from 90-94.38% using different

data set

DR Accuracy in 99.9% cases in finding the disc

DR 95.8% (95% CI 92.9-98.7) sensitivity and 80.2% (95% CI 72.6-87.8) specificity for detecting any DR

99.1% (95% CI 95.1-99.9) sensitivity and 80.4% (95% CI 73.9-85.9) specificity in detecting STDR

DR Sensitivity was 91.7% (95% CI: 91.3-92.1%) and specificity was

91.5% (95% CI: 91.2-91.7%)

DR Sensitivity and specificity for RDR was 90.5% (95% CI 87.3-93.0%) and

91.6% (95% CI 91.0-92.2%)

For STDR the sensitivity was

100% (95% CI 94.1-100.0%) and the specificity was 91.1% (95% CI 90.7- 91.4%)

DR Sensitivity of the IRIS algorithm in detecting STDR was 66.4% (95% CI 62.8-69.9) with a false-negative rate

of 2% and the specificity was 72.8% (95% CI 72.0-73.5)

Positive predictive value of

10.8% (95% CI, 9.6%-11.9%), and negative predictive value 97.8% (95% CI, 96.8%-98.6%)

#### **Total fundus images examined**

143 images

60 images 30 images

239 images

1000 images

Retinal images of 296 patients

40542 images

494661 retinal images

15015 patients

#### **Type of AI used**

A three-layer feed forward neural network

Morphological component analysis (MCA)

Inverse surface thresholding

Key point detection, texture analysis, and visual dictionary techniques

Combined k-nearest neighbor (kNN) and cues

Eye Art AI

DR screening software used

EyePACS telescreening system

Deep learning system

Intelligent Retinal Imaging System (IRIS)

**As you are the esteemed corresponding author ,so, kindly provide your kind permission to use it in our manuscript and publication .**

Best Regards ,

Dr . Arvind Kumar Morya  
MS(Gold Medalist) MNAMS  
Additional Professor & HOD  
Cataract, Glaucoma, Refractive , Squint  
Paediatric Ophthalmology and Medical Retina Services  
Associate Editor UKJOS, Section Editor IJO,GJCSRO  
Editorial Board Member IJOVS, WJCC, EC-Ophthalmology, DOS Times,  
Journal of HOS . Reviewer Elsevier, AIMDR and IJO  
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Atul Kumar <atul56kumar@yahoo.com>

Tue, Aug 23, 2022 at 10:45 AM

Reply-To: Atul Kumar <atul56kumar@yahoo.com>

To: Arvind Morya <bulbul.morya@gmail.com>, Atul Kumar <atul56kumar@yahoo.com>, "Dr Santosh G. Honavar" <santosh.honavar@gmail.com>

Dear Dr Arvind ,

Good day . Kindly do not panic and worry with so many calls to me since yesterday ,I was just busy with my clinical work and had agreed on your phone call to me yesterday. .

Yes you have permission to reproduce one table as mentioned below and published in IJO in 2019 .\, subject to writing below the table as legend ,the following "

" Reproduced from the article by Kumar A et al ;Indian J Ophthalmol 2019;67:1004-9. "

I am marking the mail to the IJO Editor for information and any advise for you.

Kind regards,

Atul Kumar, MD, FAMS, FRCS(Ed)  
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&  
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Padma Shri & Dr BC Roy Awardee

Vitreo-Retinal Fellow ,Univ. of Maryland, Baltimore

[Quoted text hidden]

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**Santosh G Honavar** <santosh.honavar@gmail.com>  
To: Atul Kumar <atul56kumar@yahoo.com>  
Cc: Arvind Morya <bulbul.morya@gmail.com>

Tue, Aug 23, 2022 at 11:12 AM

Perfect.

Arvind - Please follow what Prof Atul Kumar Sir has suggested.

On 23-Aug-2022, at 10:45 AM, Atul Kumar <atul56kumar@yahoo.com> wrote:

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