

# P T L I A t A t T R -B C t C

...,<sup>1</sup> C...,<sup>1</sup> A...,<sup>2</sup> D...,<sup>2</sup> C...,<sup>1</sup>  
<sup>1</sup>D..., DG/ G..., B..., k..., C..., k...  
 2..., C..., B<sup>k</sup>, C...

C..., k,  
 D..., 5, B...,  
 100871, C...; k  
 @...  
 C, k, D..., 5,  
 B... 100871, C...;  
 @...  
 : D... 10, 2013  
 A... : F... 10, 2014  
 C... : C..., A,  
 D..., C...  
 Invest Ophthalmol Vis Sci.  
 2014;55:2020-2030. D...  
 10.1167/...13-13739

**P RPOSE.** ...

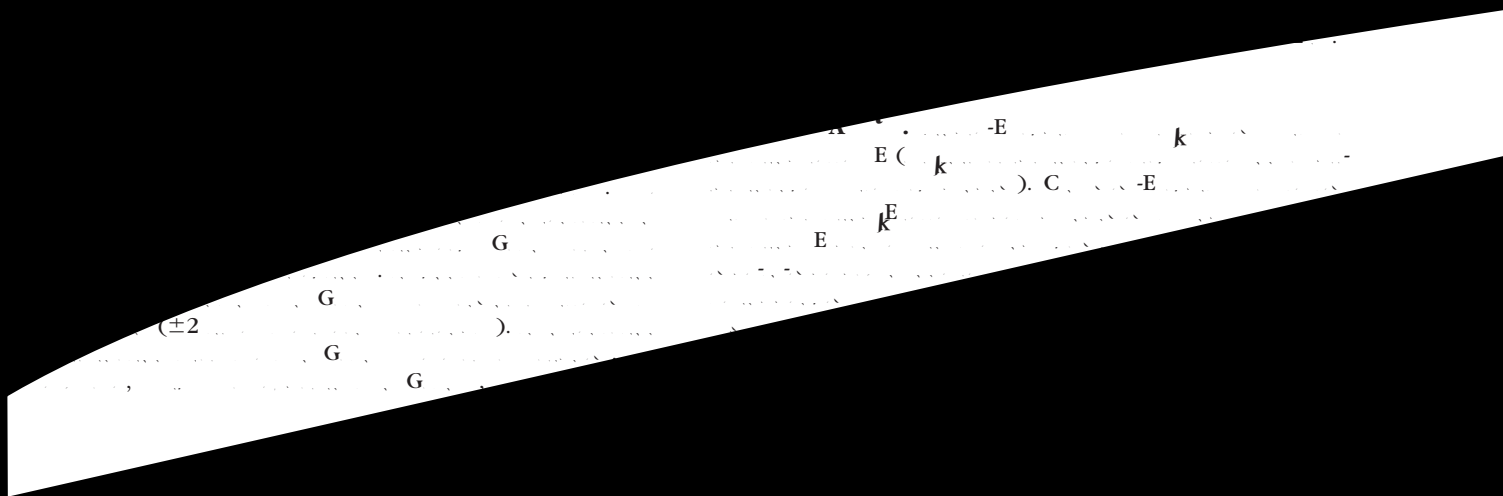
**METHODS.** ... ( 22.5 ) / ... ( E) ...  
 k ... ( E), F...

**RES LTS.** ... F ... F ...  
 F ... 1.5, 1.6 ... (P < 0.001) ... E ...  
 53% (P < 0.001).

**CONCL SIONS.** k ...

**A** ... ( ... ) ...  
 ... 6, 7 ... ( ... )<sup>1</sup> ...  
 ...<sup>2, 8</sup> ...  
 ...<sup>9, 11</sup> k ...  
 ...<sup>3, 12, 13</sup> (k ... F... 2, 4, ... )  
 ...<sup>14, 16</sup> ...  
 ...<sup>17, 18</sup> ...  
 ...<sup>19, 21</sup> ...  
 ...<sup>22</sup> ... ( E) ...  
 ...<sup>23</sup> k ...  
 ...<sup>24, 26</sup> ...  
 ... D ...  
 ... ? ...





(±2)

G

G

G

G

E

E (

k<sup>E</sup>

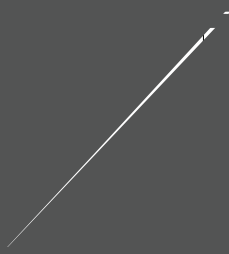
-E

k

)

C

-E



... C., ... C., ... A) ... C., ... 30. / 2).

G (σ 0.9°, ±45° 1/16, 1/8, 1/4, 1/2, 3/4, k

**I** ... k

**D** ... A ... 400 ... 200- ... A ... G ... G

G k -G G k A k

G 400

200- 500- k G k

E k k

A E ( ) 3c -1- 79.4% E

( ) 40 50 0.05 (0.03 E

E ) k

g t t A ( ) ; 100% × ( ) /

A ( ) /

; 1 ; 0

t

A A

F. 1

19

A (N = 12)

A

RESULTS

T T A I P t L E I I TPE t L S t F

(2.4 ± 0.7 ; F. 5 , ) , 2.7

19 k (N = 6) 8 10 2-

G 0° 90° (F. 2 )

(ΔC. 1, 1; F. 2 ), 16.1 ± 1.8% , 10.7 ± 1.0% . 32.5 ± 3.2% (P < 0.001), 21.5% , 44.7% .

90° (ΔC. 2, 1.5 ± 5.9%, P = 0.41; , 19.1% , 18.1%),

F. E k

(ΔC. 2, 33.6 ± 5.4%, P < 0.001; , 14.4% 53.1%). A

14.9 ± 1.4% , 10.4 ± 0.9% (ΔC. 2, 29.3 ± 3.8%, P < 0.001; , 18.6% 44.9%). 28.6 ± 4.5% ( , 15.0% 47.4%), (P = 0.50, - t

E , 0.04 ± 0.18. , 0.94 ± 0.20, 1 (P 0.39),

(N = 6)

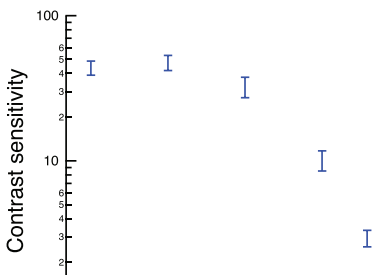
11.5 ± 1.0% , 8.1 ± 0.9% (ΔC. 1, 29.0 ± 2.7%, P < 0.001; , 18.9% 38.2%; F. 2 ) .

11.3 ± 0.7% , 10.3 ± 0.5% (ΔC. 2, 8.5 ± 3.0%, P = 0.018; , 1.5% 20.1%, 0.31 ± 0.09).

(ΔC. 2, 26.7 ± 4.9%, P = 0.001; , 10.4% 42.5%). 8.9 ± 1.0% (ΔC. 2, 14.9 ± 5.6%, P = 0.023; , 3.1% 32.9%). 22.7 ± 3.8% ( , 7.3% 35.2%), (P = 0.11, - t ) .

$0.81 \pm 0.15$ ,  $\Delta C_{\text{eff}} = 2$ ,  $40.4 \pm 4.7\%$ ,  $P < 0.001$ );  $\Delta C_{\text{eff}} = 2$ ,  $6.7 \pm 3.3\%$ ,  $P = 0.044$ ;  $\Delta C_{\text{eff}} = 2$ ,  $13.7 \pm 1.3\%$ ,  $P = 0.044$ ;  $\Delta C_{\text{eff}} = 2$ ,  $40.4 \pm 4.7\%$ ,  $P < 0.001$ ;  $\Delta C_{\text{eff}} = 2$ ,  $24.3\% - 55.0\%$ ; F(1,3),  $13.7 \pm 1.3\%$ ,  $12.6 \pm 1.0\%$ ;  $\Delta C_{\text{eff}} = 2$ ,  $6.7 \pm 3.3\%$ ,  $P = 0.044$ ;





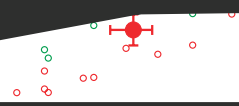
$13.1 \pm 1.5$  (  $16.7 \pm 3.2\%$ ,  $P$ 
  
 $4.0 \pm 4.8$   $19.5 \pm 3.8$  (
  
 $< 0.001$ ;  $F_{1,6}$  ). A
  
 $(15$  ),
  
 $10.7 \pm$ 
  
 $14.9 \pm 2.8\%$ ,  $P < 0.001$   $15.6 \pm 2.6$ 
  
 $14.5 \pm 2.9\%$ ,  $P < 0.001$ ),
  
 $29.0 \pm 3.8\%$  (  $13.8\%$  ,  $52.8\%$  )
  
 $11.5\%$  ,  $69.4\%$ ), (  $F_{1,6}$  ,
  
 B,
  
 $12$ 
  
 $(P = 0.62$ ,  $t$  ).
  
 $1.5 \pm 0.2$ 
  
 $\pm 2.0\%$  ( $0.4$  )
  
 $(F_{1,18} = 6.37, P = 0.021)$ ,
  
 $(F_{1,18} = 3.56, P = 0.075)$ .
  
 $(r = 0.33, P = 0.19$ 
  
 $0.09$ , )
  
 $0.003$  ,  $r = 0.69, P = 0.001$ , )
  
 $4.1\%$  (  $n = 8$  )
  
 $35.4\%$  (  $n = 11$  )
  
 $53$ ,  $t$  ),
  
 $6$ 
  
 $415.3 \pm 44.1$ 
  
 $\pm 32.3$  (  $39.2 \pm 5.2\%$ ,  $P < 0.001$  )
  
 $E$ ,  $190.0$



$\pm 30.7$  (  $22.8\% \pm 5.8\%$ ,  $P < 0.001$ ) ...  
 E. ...  
 $53.4\% \pm 5.1\%$ , ...  $20.0\%$  ,  $92.5\%$  (F. . 6 ,  
 6 ). ... E. 6 , ...  
 ( ...  
 $500$  ... ),  
 $600$  ... A ...  
 12

## DISCUSSION

...  
 E. ... k ... E ...



**A** <sup>7,8</sup>

**E** <sup>5,30</sup>  
 (F. 5). <sup>5</sup>

(F. 6, 6). <sup>k</sup>

**k** “ ” **E**

**S M M A R**

**k** **E**

**A c n i t y i f**  
**k**

**F** **C** **G**  
 331000459 (- ) 1230030 (C ),  
**G** 1E 04776 (A ) 1E 01728  
 01E 020976 (D ).

**D** **J.-** **L.-J. C** **S.A. K** **D.M. L** **C.**

**R e f e r e n c e s**

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