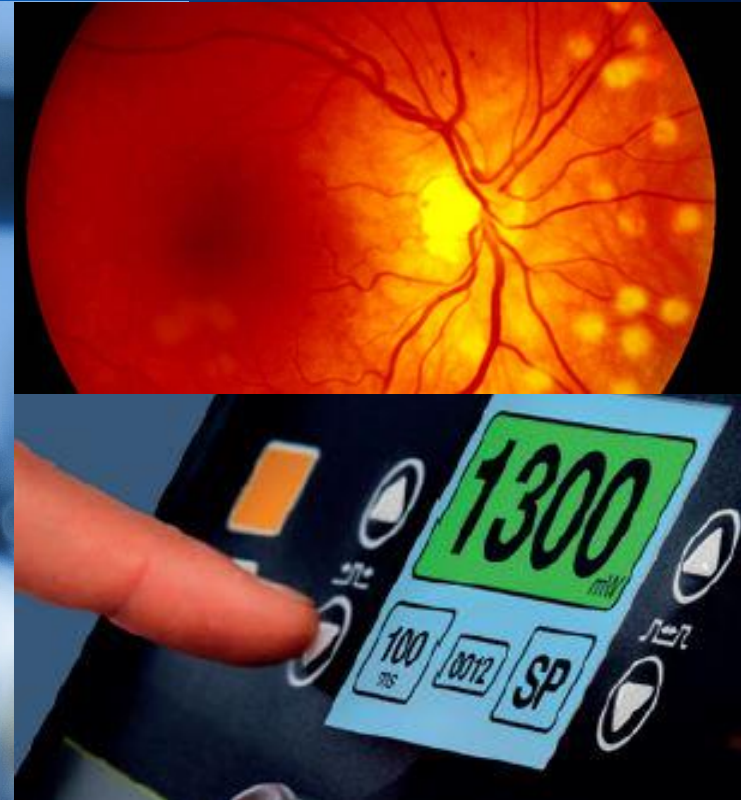


Classic 514  
Argon – the original retinal laser

# Classic 514 offers the superior argon wavelength for retina coagulation



A.R.C.  
LASER  
made in Germany



Slit lamp application with contact lens

# Classic 514 – the original retinal laser

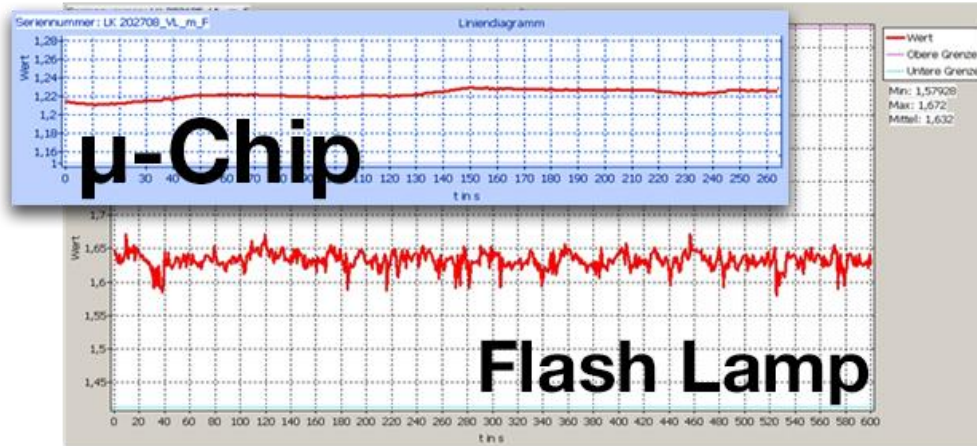


## Advantages

- Perfect optic for the posterior segment
  - Convergent binocular
  - Clear filter protection
    - Compact housing
- $\mu$ -Chip laser for stable beam characteristics

# Classic 514 – the original retinal laser

## Why $\mu$ -Chip technology?



Advantage: Energy stability

# Classic 514 – the original retinal laser

## Why Argon Green?



### In Retinal Coagulation

studies show evidence for same Visual outcome (VA) and OCT parameters for Green or Yellow



## Why Argon Green?



Published in final edited form as:

*Retina*. 2013 ; 33(10): 2080–2088. doi:10.1097/IAE.0b013e318295f744.

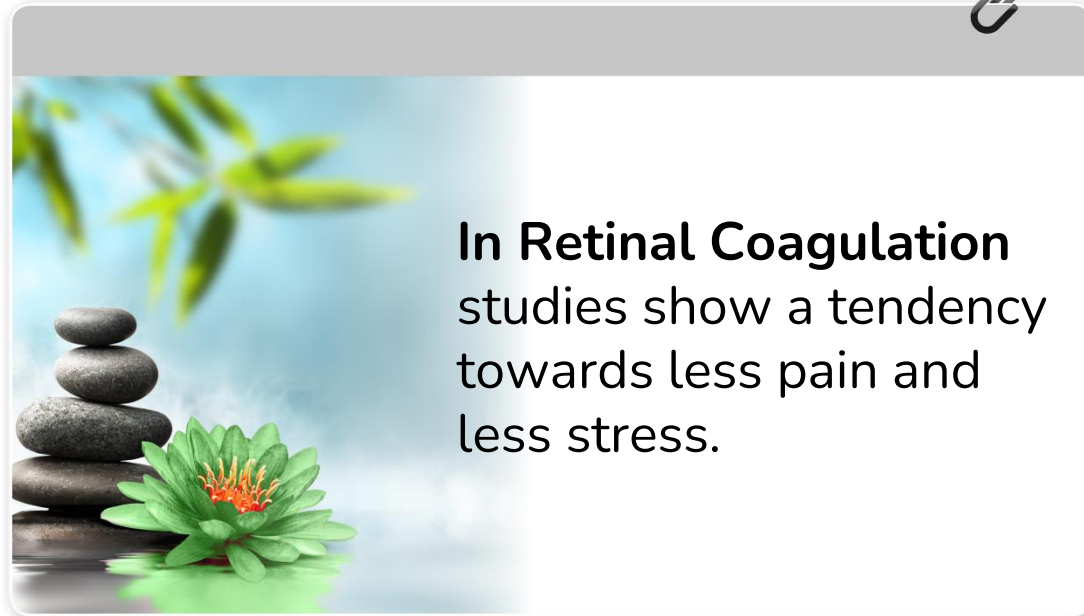
## **Green or Yellow Laser Treatment for Diabetic Macular Edema: Exploratory Assessment within the Diabetic Retinopathy Clinical Research Network**

**Susan B. Bressler, MD<sup>1</sup>, Talat Almuthtar, MBChB, MPH<sup>2</sup>, Lloyd Paul Aiello, MD<sup>3</sup>, Neil M. Bressler, MD<sup>1</sup>, Frederick L. Ferris III, MD<sup>4</sup>, Adam R. Glassman, MS<sup>2</sup>, and Craig M. Greven, MD<sup>5</sup> for the Diabetic Retinopathy Clinical Research Network**

<sup>1</sup>Wilmer Eye Institute, Johns Hopkins University School of Medicine

# Classic 514 – the original retinal laser

## Why Argon Green?



## Why Argon Green?



### The 514nm Coagulation Laser Shows Benefits over 532nm System

According to Dr. Udo Heuer, ophthalmologist at Medical Eye-Care in Hamburg, Germany, the majority of his diabetes patients suffered from stress when he performed a grid/pan-retinal coagulation. He says that the procedure could take up to 25 minutes, and because the patients were in pain they would close their eyes or blink before the target number of expositions was achieved.

"In former days, the argon gas lasers delivered 514nm wavelength which was less aggressive . . . many of the first-generation ophthalmologists remember the difference when changing their equipment to solid state

YAG lasers with 532nm," explained Dr. Heuer. "Patients complained more and the coagulation spots appeared somehow faster. Today, microchip technology allows us to overcome this hurdle."

This new Nano-Laser system – the 514nm endo FOX laser by A.R.C. Laser GmbH (Nuremberg, Germany) – is generating positive feedback from ophthalmologists, like Dr. Heuer. Perhaps the smallest and most compact coagulation laser in ophthalmology

today, this system has been shown to reduce patient stress, induce less pain and overall improve treatment success.

"The 514nm laser wavelength is

now offered to us, and I am quite happy about that," continued Dr. Heuer. "With the new 514nm laser, we performed more than 500 treatment spots on the retina on all of our latest diabetes patients, without the need of any additional paravulbar anesthesia."

He says that reducing the patients' pain enhances their cooperation, which leads to quicker treatments. "This success is a result of completed and uninterrupted coagulation, which is much more likely with lasers causing less pain," he added.

For more information about this, and other laser systems, visit [www.arclaser.de](http://www.arclaser.de).



## Why Argon Green?



### No Pain, No Gain?

Is argon-microchip technology for retinal photocoagulation really less painful than a frequency doubled Nd:YAG laser?

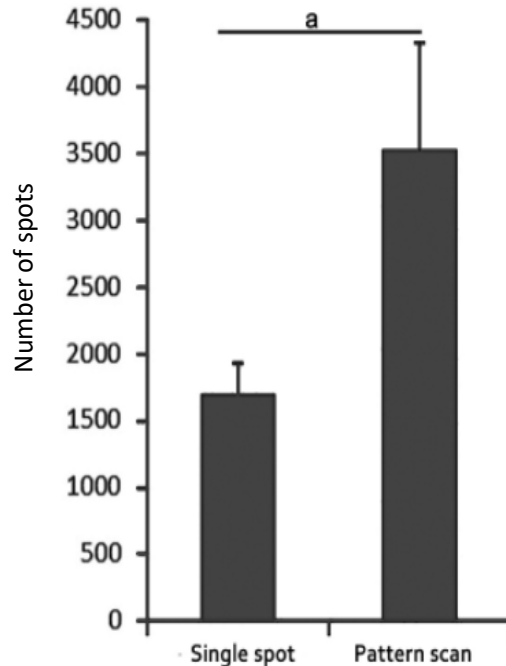
Norbert Schrage, Daniel Uthoff, Andreas Cordes | 04/15/2021 | Longer Read

- smoother, less „aggressive“ absorption causes less pain
- 514 has more pigment, but less blood absorption

<https://theophthalmologist.com/subspecialties/no-pain-no-gain>

# Classic 514 – the original retinal laser

## Why Single Spot?



**Advantage:**  
lower total energy

**Figure 4** Average total number of laser burns needed to complete pan-retinal photocoagulation. The pattern scan laser required more laser burns than the conventional single spot laser.  $^a P < 0.05$ .

\* Int. J Ophthalm Vol.7, No.4, Aug. 18, 2014  
**Multicolor pattern scan laser for diabetic retinopathy**  
Takao Hirano, Yasuhiro Iesato, Toshinori Murata

# Classic 514 – the original retinal laser

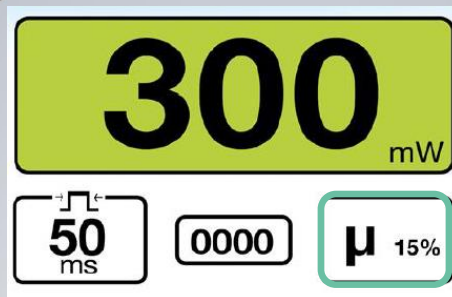


## APL OPTION

All Pulse Laser (APL) for sub threshold treatments

Reduced Energy to achieve safe but successful macula treatment for DME & RCS/CSCR with microsecond laser pulses

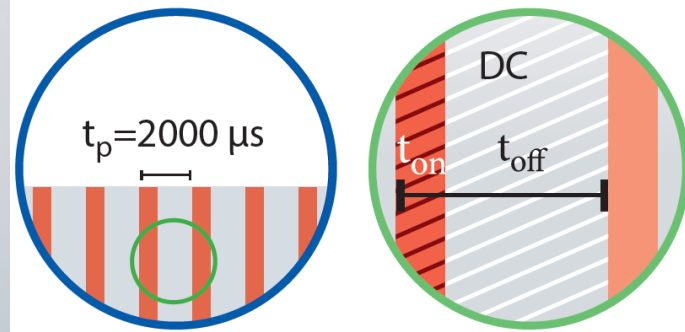
# Classic 514 – the original retinal laser



## APL OPTION

- $\mu_{5\%} = \text{DC } 5\%: 100 \mu\text{s on, } 1900 \mu\text{s off}$
- $\mu_{10\%} = \text{DC } 10\%: 200 \mu\text{s on, } 1800 \mu\text{s off}$
- $\mu_{15\%} = \text{DC } 15\%: 300 \mu\text{s on, } 1700 \mu\text{s off}$

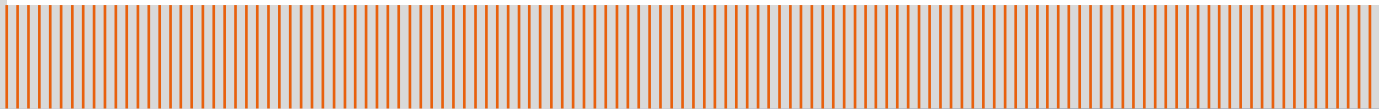
## APL $\mu\text{s,ms}$



# Classic 514 – the original retinal laser

## APL OPTION

Pulse duration 200 ms = 100 expositions in microsecond pulsing



Pulse duration	Expositions in microsecond pulsing
10 ms	5
50 ms	25
100 ms	50
200 ms	100



# Classic 514 – the original retinal laser



## Advantages

- All Pulse Laser technology (APL)
- Convergent binocular
- Perfect optic for posterior segment
- Spacious legroom
- Clear filter protection
- Coupling to third-party slit lamp with L-ord\*

\*compatibility need to be checked before order

# Classic 514 – the original retinal laser



## Combination system VARIO Combine Classic 514 with Nd:YAG or SLT

### Advantages

- Convergent / parallel binocular
  - Perfect optic for posterior / anterior segment
  - Spacious legroom

# Classic 514 – the original retinal laser



## L-ord

Standard:

Classic 514 is connected to PCL 5 slit lamp  
(A.R.C. Laser)

L-Ord offers the opportunity to connect  
Classic 514 to third-party slit lamps

# Classic 514 – the original retinal laser



## L-ord

Standard:

Classic 514 is connected to  
PCL 5 slit lamp (A.R.C. Laser)



PCL 5  
SuperView

L-Ord offers the opportunity  
to connect Classic 514 to  
third-party slit lamps



L-ord

# Classic 514 – the original retinal laser

## Classic 514 with L-ord





# Classic 514 – the original retinal laser

## L-ORD components



# Classic 514 – the original retinal laser

## L-ord



## Advantages

- Premium color neutral eye protection filter
  - Variable spot size (50 -500  $\mu\text{m}$ )
  - Simple setup
  - Fits for different Haag Streit compatible slit lamp models\*
  - Easily removed from the slit lamp, the L-ord does not change the diagnostic slit lamp
- (stand for L-ord included)

\*compatibility need to be checked before order

# Classic 514 – the original retinal laser

A.R.C.  
LASER  
made in Germany





A.R.C. Laser GmbH  
Bessemerstraße 14

90411 Nürnberg  
Deutschland

