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# ARTIFICIAL IRIS – PHOTO DIRECTIVES

# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

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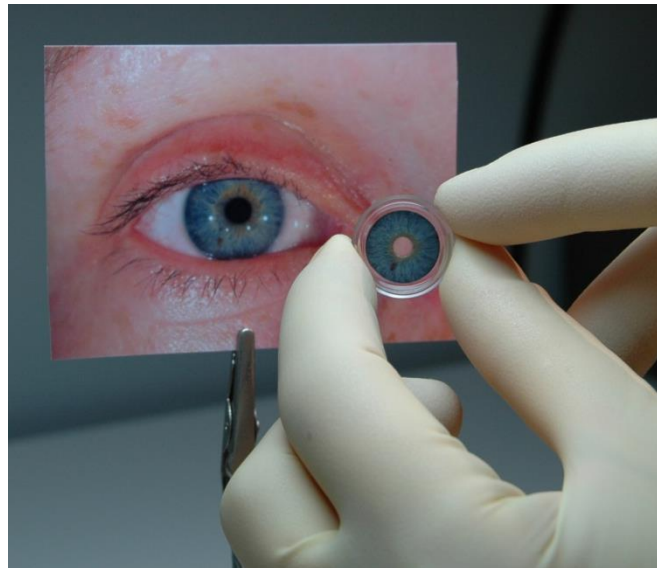
# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

## Why is the picture so important?

### Purpose:

Since the manufacturer is not able to see the patient's natural iris, it is necessary to rely on the pictures.

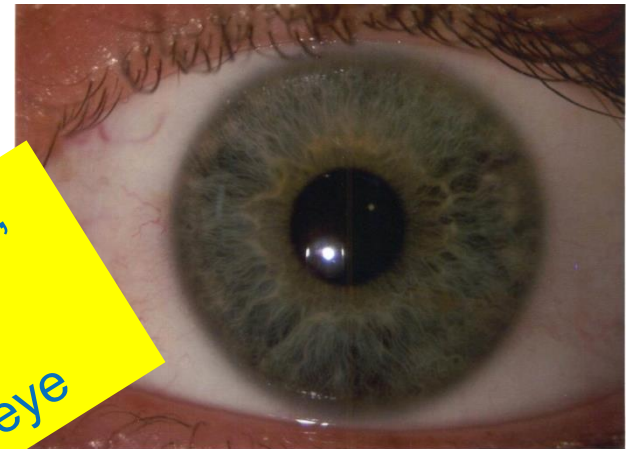
The color of every computer screen and printer appears different as a result on a photo. Therefore, it is always necessary to evaluate the print-out (hardcopies).



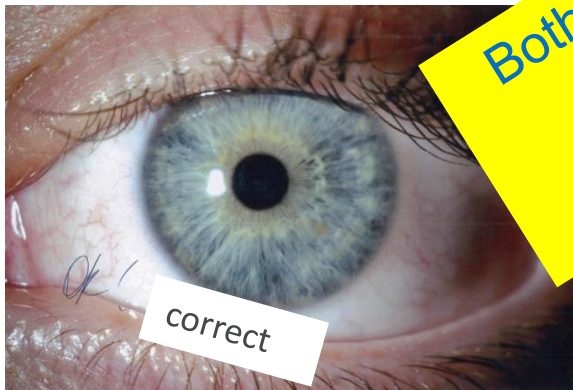
# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

Why is the picture so important?

- Conjunctiva has a reddish color
- Iris color is greenish
- Picture seems underexposed



Both times same patient,  
Difference:  
illumination of the eye



- Conjunctiva is white
- Iris color is bluish

# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

How to take a good picture?

What kind of pictures do we need?



It is best for production and the clinical discussion to have a picture of both eyes.



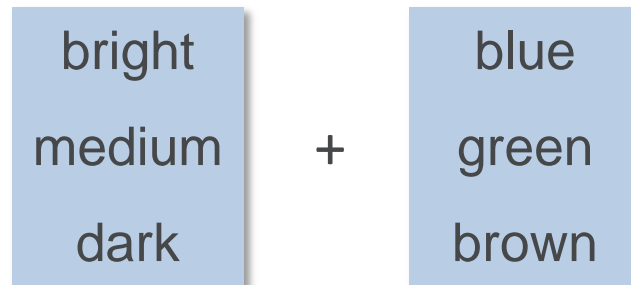
# ARTIFICIAL IRIS – PHOTO DIRECTIVES

## How to take a good picture?

Exception: Bilaterally no iris present (e.g. Congenital Aniridia)

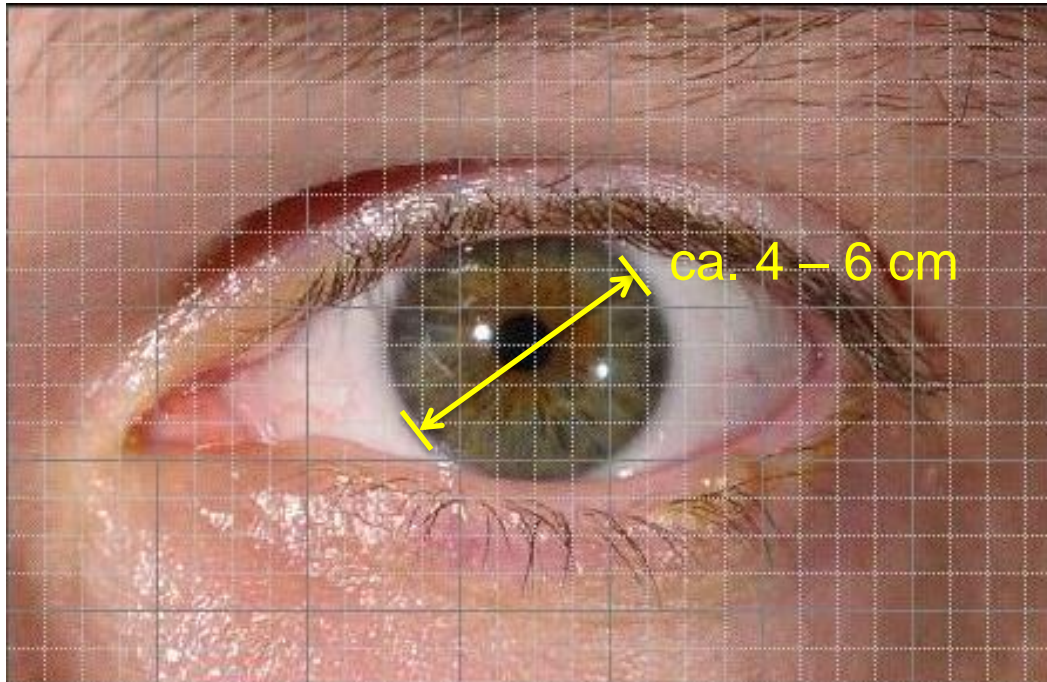
Since there are no iris remnants that can be copied in the production process, patients can choose their own target color by ...

- choosing a close-up picture of an iris from a magazine,
- choosing a close-up photo of e.g. a relative's eye(s),
- stating on the order form a description like “medium blue” by using the following components:



# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

## How to take a good picture?



Standardized picture:

- Size of photo 9 x 13 cm (3.5 x 5")
- Size of Iris approx. 4 – 6 cm (1.5 – 2.5")

# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

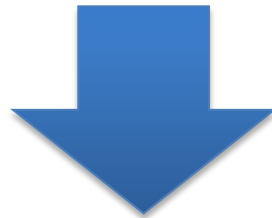
## How to take a good picture?

### Procedure:

1. Illuminate the eye of the patient evenly, not to produce shadows on the iris.



2. Make a white balance with your camera at the exact place where you want to take the photo of the patient's eye; a white or grey chart is necessary.



3. Ensure that the iris of the patient is completely visible and in focus.



# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

## How to take a good picture?

### Principles:

- Slit lamps, fundus cameras or video cameras are not suitable for taking good pictures
- Good, even illumination of the eye is essential

### Ideally use:

- Flash with softbox or ring flash

(Info: regular flash can overexpose the photo and cause reflexes)

*or:*

- Continuous light at approx. 3200 Kelvin

# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

## How to take a good picture?

### Principles:

- Laser printers are usually not as good as ink-jets
- Photo paper shows better results than usual copy paper

If not set up for high quality photography and photo printouts, it is recommended to send the patient to a professional photographer.

The evaluation process of the printouts still needs to be performed by the surgeon together with the patient!

# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

## How to evaluate pictures?

### Compare the printout with the natural iris

- Compare the natural iris to the print-out under the same light conditions.
- Hold the printout right next to the patient's eye.
- Compare if the conjunctiva is white on the printout.
- Do the color patterns of the natural iris match the printout's color composition?



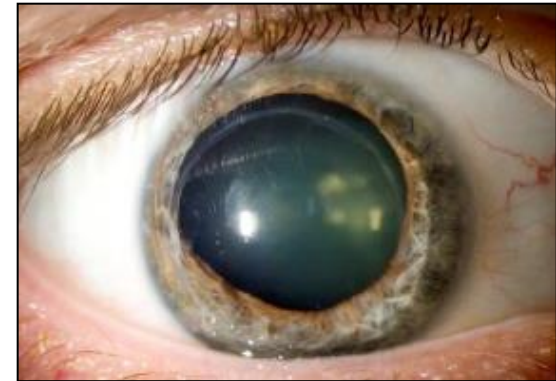
➡ Surgeon initials and signs the picture we should use for production.

# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

## How to evaluate pictures?

### Points to check:

- ✓ ☐ Pictures available from the right eye, the left eye and both eyes together?
- ✓ ☐ Does size of pictures and iris on the photo meet the specifications?
- ✓ ☐ Is conjunctiva white?  
→ Color tint **might** be an indicator of wrong iris color
- ✓ ☐ Pictures in focus?
- ✓ ☐ Are reflexes prevented?
- ✓ ☐ Is picture for production signed and dated by the surgeon?



# ARTIFICIAL/IRIS – PHOTO DIRECTIVES

## Summary

- A good printout is the key for the color-match of the *Artificial Iris*
- Appropriate equipment can assist in taking good pictures
- Only the surgeon on-site can check and verify if the printout matches the natural iris







# ARTIFICIAL *IRIS* – PHOTO DIRECTIVES