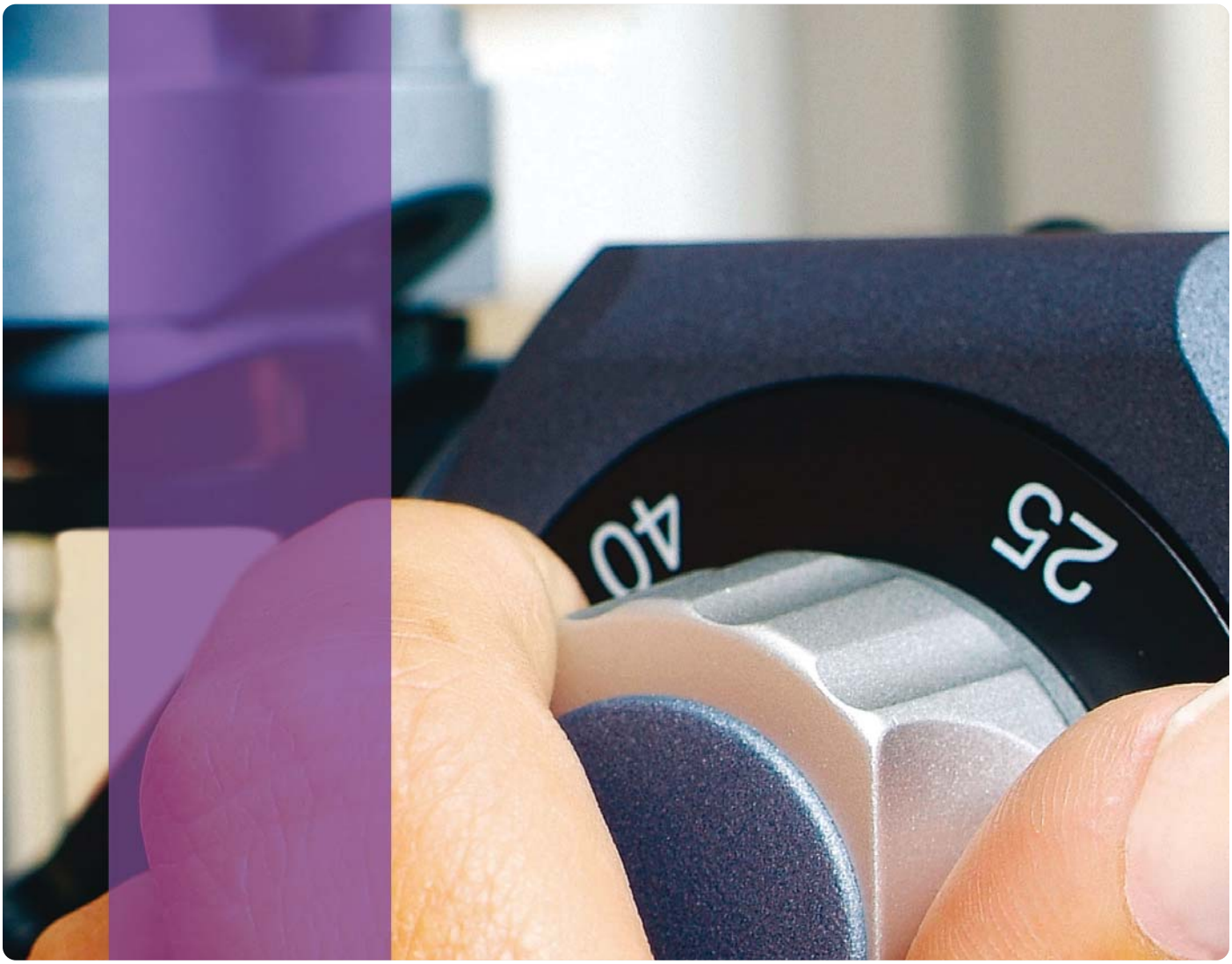
CIBA VISION™

Shared Passion for Healthy Vision and Better Life



Contact Lenses
Grading Scales

JENVS VISION RESEARCH JENA

ACADEMY FOR EYECARE EXCELLENCE

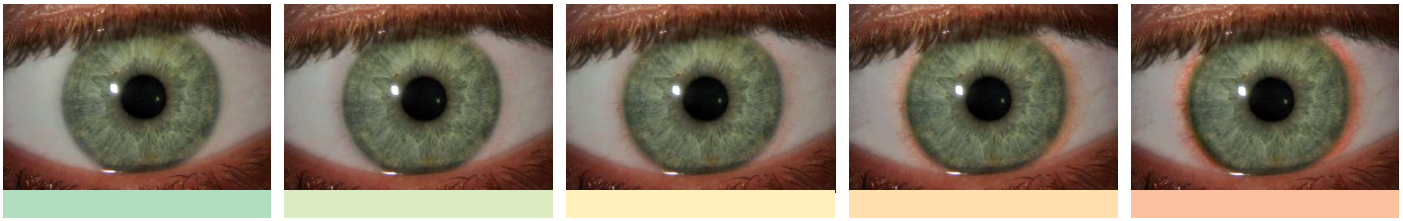
GRADE 0	GRADE 1	GRADE 2	GRADE 3	GRADE 4

Bulbar redness

Cause	Dilation of bulbar vessels, e.g. by mechanical stimulation
Normal condition	Grade 1 to 2, younger people grade 0 found more often
Advice	Evaluate always with the same magnification

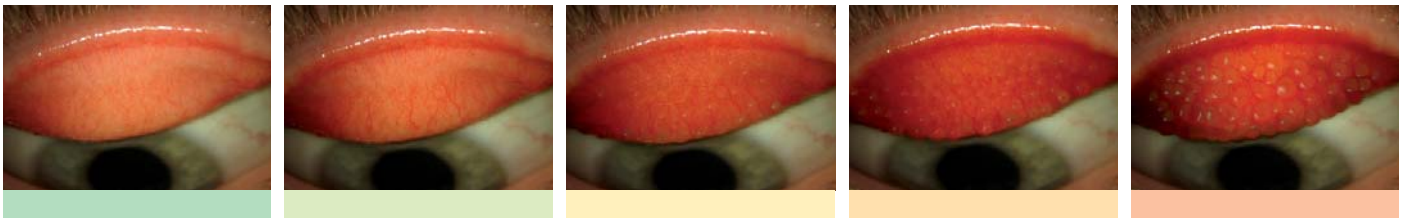
Limbal redness

Cause	Dilation of bulbar vessels, e.g. by hypoxia
Normal condition	Up to grade 2
Advice	Often combined with bulbar redness



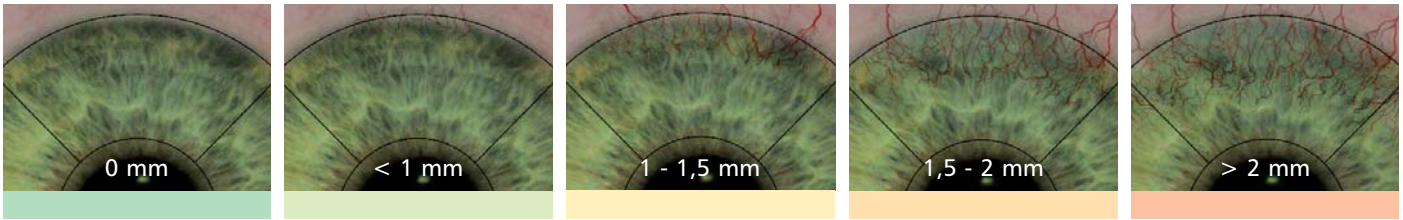
Tarsal redness

Cause	Dilation of tarsal vessels, e.g. by preservatives in lens care products
Normal condition	Up to grade 2
Advice	Roughness of the tarsal conjunctiva would also be increased



Corneal neovascularisation

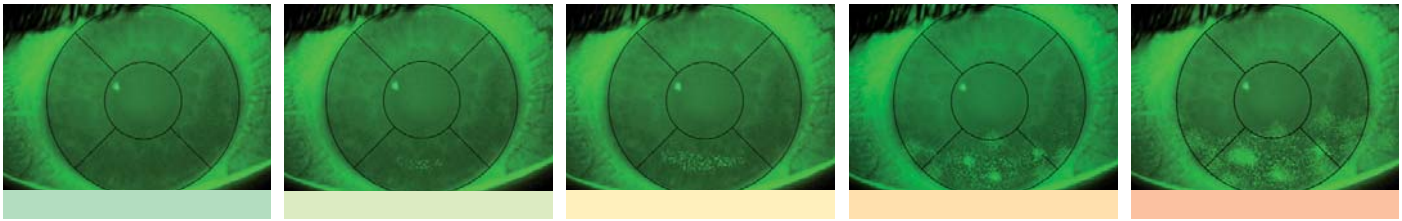
Cause	Mostly due to corneal hypoxia
Normal condition	Grade 0
Advice	Classification based on the length of vessels grown into the cornea



GRADE 0	GRADE 1	GRADE 2	GRADE 3	GRADE 4

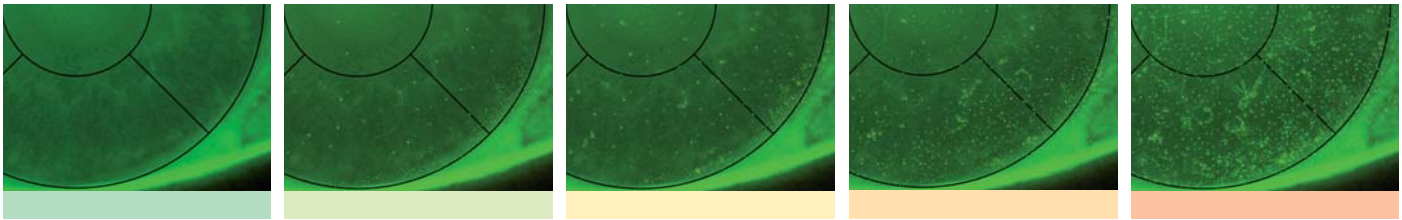
Corneal staining

Cause	Superficial cells of the corneal epithelium are damaged
Normal condition	Grade 0 and grade 1 if blink is incomplete
Advice	Stain with fluorescein, monitor with blue light and a yellow filter



SICS – Solution induced corneal staining

Cause	Toxic reaction to contact lens solution
Normal condition	Grade 0
Advice	Stain with fluorescein, monitor with blue light and a yellow filter



Polymegethism

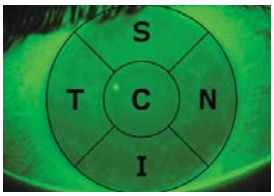
Cause	Alteration of the endothelial cell size; normally age related, in CL wear due to hypoxia
Normal condition	Regular hexagonal cells of equal size
Advice	Observe with a specular microscope in high magnification

Tips for upgrading to silicone hydrogel lenses

- Wearing comfort can be different during the first fit.
- Changing to an aspheric lens design can cause a slight over-refraction of 0.25D in spite of the same back vertex power. Check whether the lens is right sided if you got a higher over-refraction.
- Preservative free lens care solution should be preferred. If the contact lens wearer wants to retain the habitual lens care solution check the cornea with fluorescein for SICS.

Location: Cornea

Purpose	To specify corneal slit lamp finding
Criteria	Central zone extends 2/5 and para-central zone 4/5 of the HVID
Advice	Useful for precise documentation e.g. place of an infiltrate

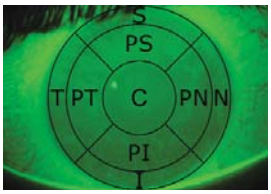


C – central
S – superior
I – inferior
N – nasal
T – temporal

P – para-central

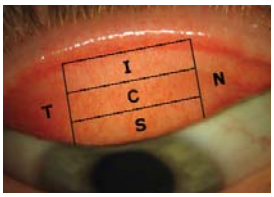
Practice orientated

Scientific/research



Location: Tarsal conjunctiva

Purpose	To grade tarsal slit lamp findings exactly if there are local differences
Criteria	Central zone extends 1/3 of the height and 2/5 of the width of the lid area
Advice	Tilt of the inverted lid can differ from eye to eye



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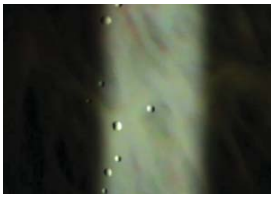
Striae and descemet folds

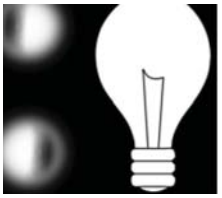
Cause	Sign of corneal oedema, e.g. by hypoxia
Normal condition	Striae often seen a few minutes after awakening, no folds
Advice	High magnification and illumination, note the number of folds

0 % corneal oedema:	no striae
5 % corneal oedema:	very few striae
7 % corneal oedema:	more striae
12 % corneal oedema:	striae and folds
16 % corneal oedema:	striae, folds, microcysts and vacuoles

Microcysts and vacuoles

Cause	Sign of corneal oedema, e.g. by hypoxia
Normal condition	No microcysts and vacuoles
Advice	High magnification, monitor in the reflected light, note the quantity





→ Vacuoles (refraction with the light)

→ Microcysts (refraction against the light)

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