

EYETRONIC® - Restoring Vision in Glaucoma

Glaucoma 360 New Horizons Forum 2022

San Francisco, February 13, 2022



Standard-of-Care is treating Visual Field (VF) loss by focussing on elevated IOP

- Treating elevated IOP is necessary but not sufficient when loss of VF progresses.
- In addition, 40% of all patients are Normal Tension Glaucoma (NTG) patients who do not present with elevated IOP.

Therapies


Medication



Possible side effects

- Itching and inflammation
- Need for several types of eye drops

Surgery

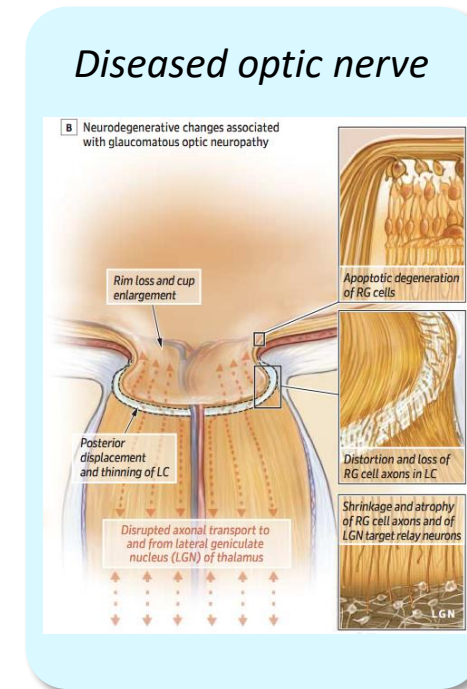
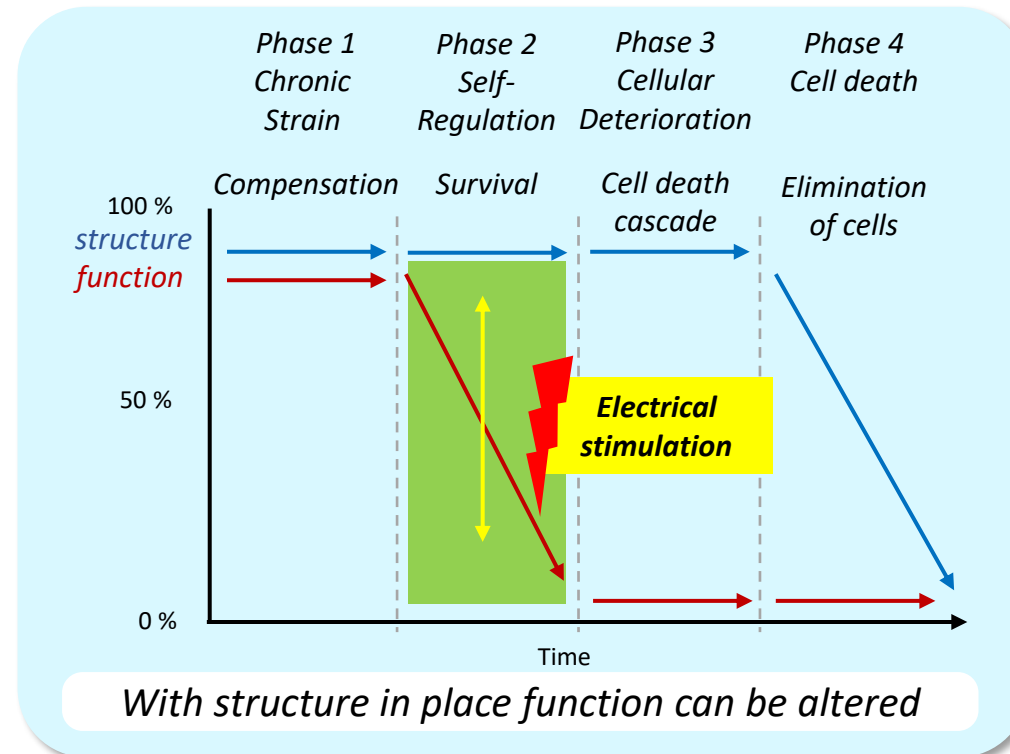
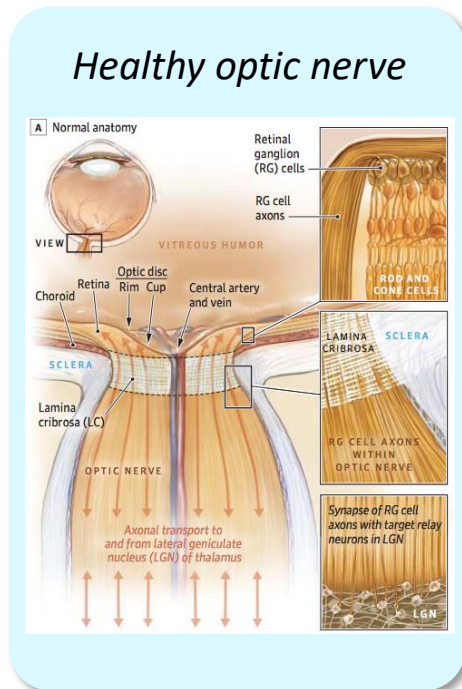


- Risk of bleeding and infection
- Possible follow-on surgery

Glaucoma - focus on the optic nerve

New treatments of VF loss need to focus on the neuropathy of the optic nerve

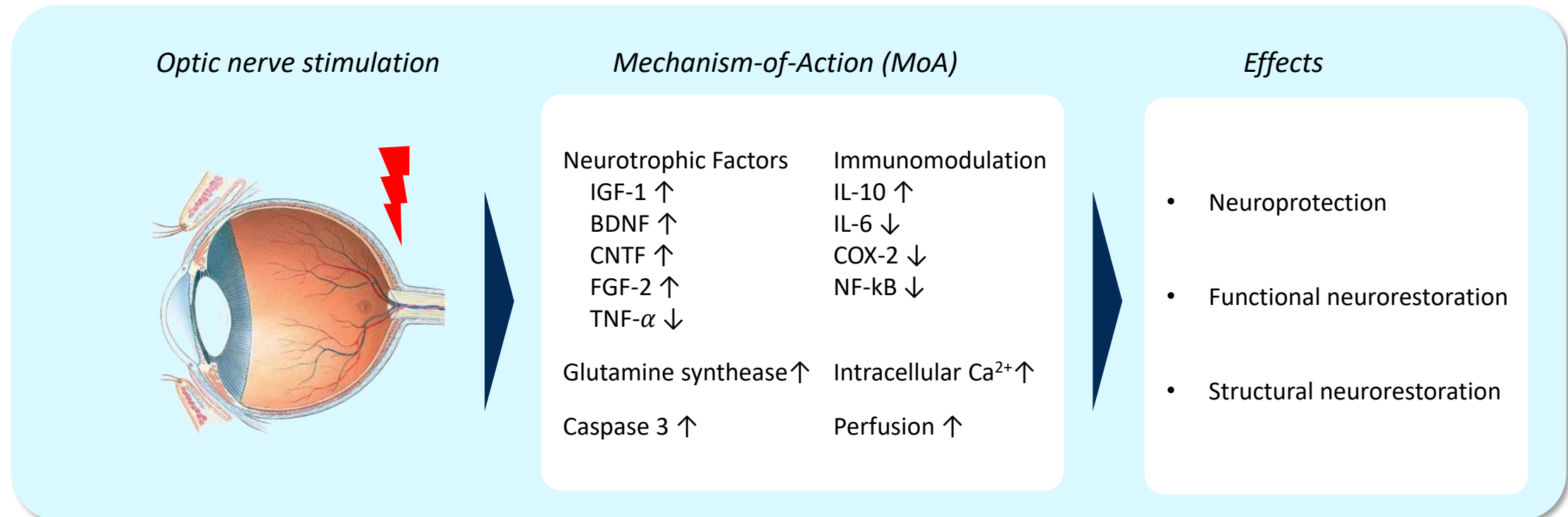
- Retinal ganglion cells and nerve fibers are damaged by factors that terminate cellular metabolism.
- This leads to inactivity of the nerve cells so that their function – and VF – are lost.
- Subsequently, nerve cells die causing deterioration of the optic nerve.



Optic nerve stimulation MoA and effects

Preclinical results of electrical optic nerve stimulation

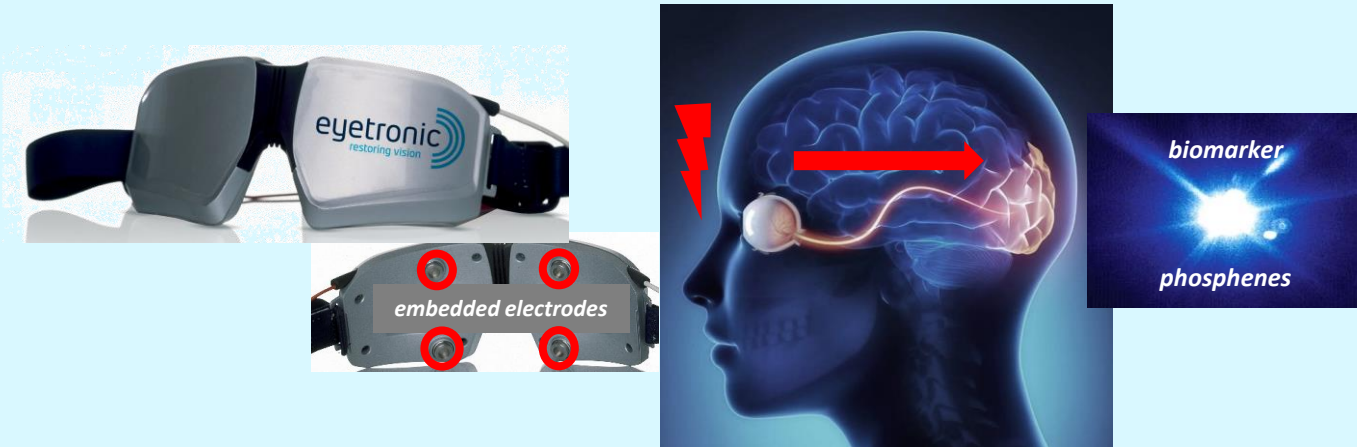
- Reactivation of nerve cells prevents further deterioration: neuroprotection.
- Function is restored: functional neurorestoration.
- Degenerated nerve fibers sprout and restore: structural neurorestoration.



Optic nerve stimulation in humans with EYETRONIC®

External electrical stimulation triggers neuronal activity in the optic nerve

- Both eyes are treated non-invasively via stimulation goggles with four embedded electrodes.
- Neuronal signals are again transmitted from the retina along the optic nerve to the visual cortex causing phosphenes.



10 sessions for 60 minutes each

1,300 eyes treated in 6,500 sessions

CE mark granted based on 3 RCTs

No SAEs, only temporary, benign side effects

EYETRONIC® long-term effectiveness in clinical routine use

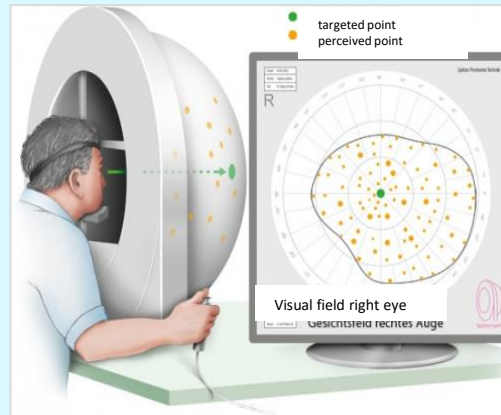
Results at 12-month follow-up of 70 patients in 5 centers

- Patients had continued VF loss despite being treated with SoC for elevated IOP.
- Halt in disease progression observed in 64 of 101 eyes treated (63.4%).
- Improved Mean Defect (MD) and partial visual field restoration in 60 eyes treated (59%).

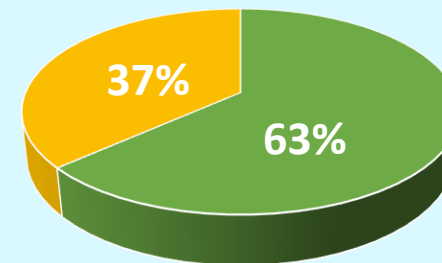
EYETRONIC® treatment



Standard perimetry diagnosis

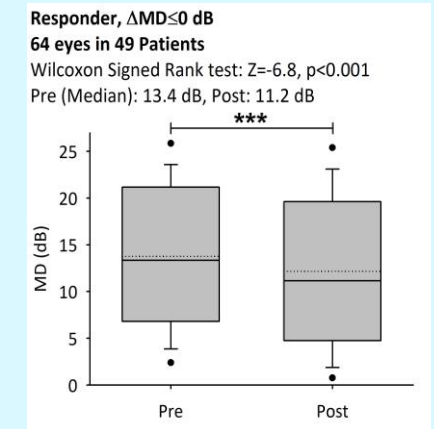


Halt in VF loss in eyes treated (n=101)



■ Non Responder ■ Responder

MD responders @ 12 months



MD improved by -2.2dB

One year PMCF trial with NTG patients in Germany

- Normal Tension Glaucoma (NTG) patients.
- Perimetry before optic nerve stimulation (baseline).
- At least one perimetry follow-up about 1 year after optic nerve stimulation.

- Assessment by same perimetry method at baseline and follow-up (30-2 static threshold perimetry).
- Reliability factor max. 20%.
- Only one optic nerve stimulation treatment cycle.
- IOP of max. 18 mmHg before ONS.

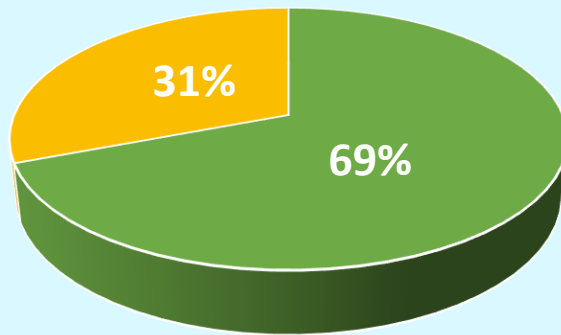
- Patients
 - n=7
 - 4 ♀, 3 ♂
 - 62±13.8 y (Mean±SD), Range: 46 to 80 y
- 13 eyes.
- 3 centers.

EYETRONIC® long-term effectiveness in NTG patients

Results at 12-month follow-up of 7 NTG patients in 3 centers

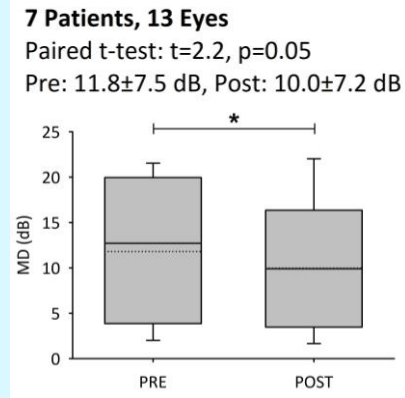
- Halt in loss of VF progression observed in 9 of 13 eyes treated (69.2%).
- Even small sample size shows significant improvement in VF.

Halt in VF loss in eyes treated (n=13)



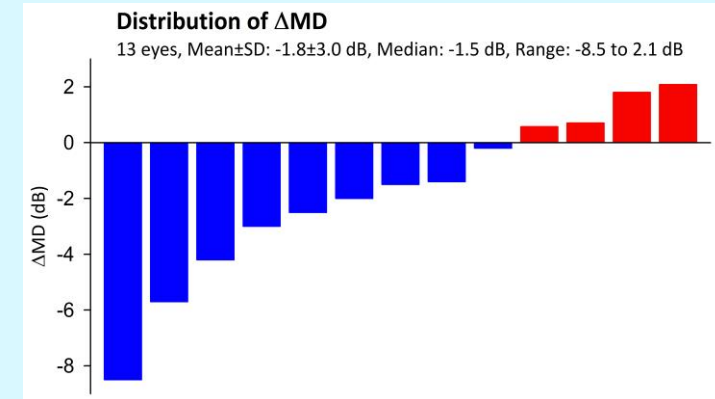
■ Non Responder ■ Responder

MD all patients @ 12 months



MD improved by -1.8 dB

MD change stronger in responders

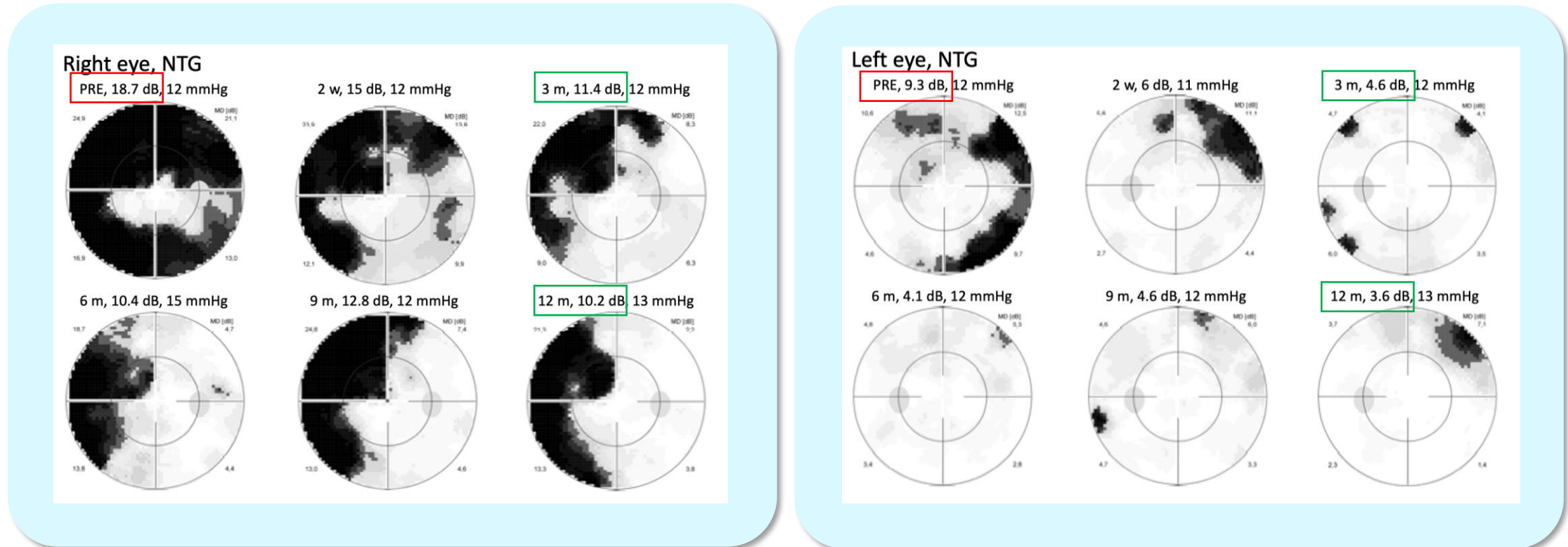


MD responders improved by up to -8.2 dB

EYETRONIC® long-term results in NTG patients

VF examples from one NTG patient

- Perimetries of both eyes at base-line; at 2 weeks; and at 3, 6, 9 and 12 months.



Use of proceeds for US market access RCT

- Adding international glaucoma RCT to three existing RCTs and two PMCF trials.

SafEty and Efficacy of Optic Nerve Stimulation in Glaucoma “SEEING” Trial

- *300 patient multi-center study in Europe and the US.*
- *Double blind, randomized trial.*
- *Primary endpoint VF progression after 12 months.*
- *Visual field measurement with SoC perimetry.*



Thank You for Your attention!



Prevalence of glaucoma

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