



UNIVERSITÄTS
AUGENKLINIK BONN

Anti-VEGF-Therapie: Lucentis

Frank G. Holz

AAD 2006
23. März 2006
Minisymposium 175

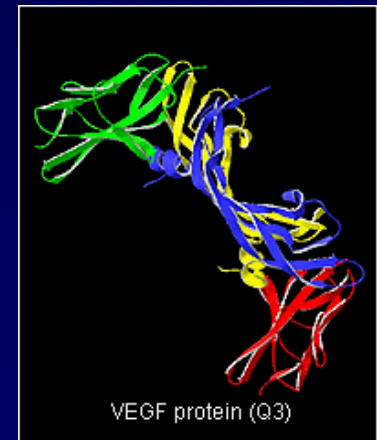
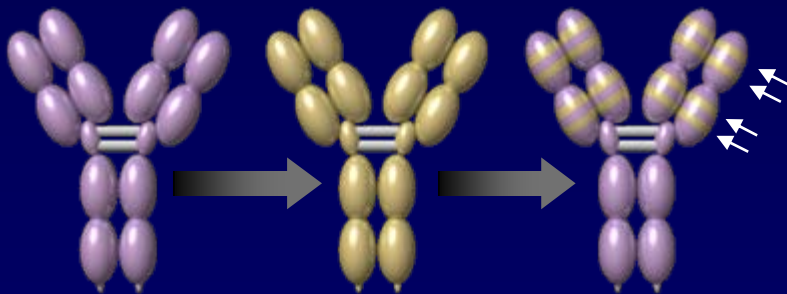
Universitäts-Augenklinik Bonn
www.augenklinik.uni-bonn.de

Neutralisierung von VEGF

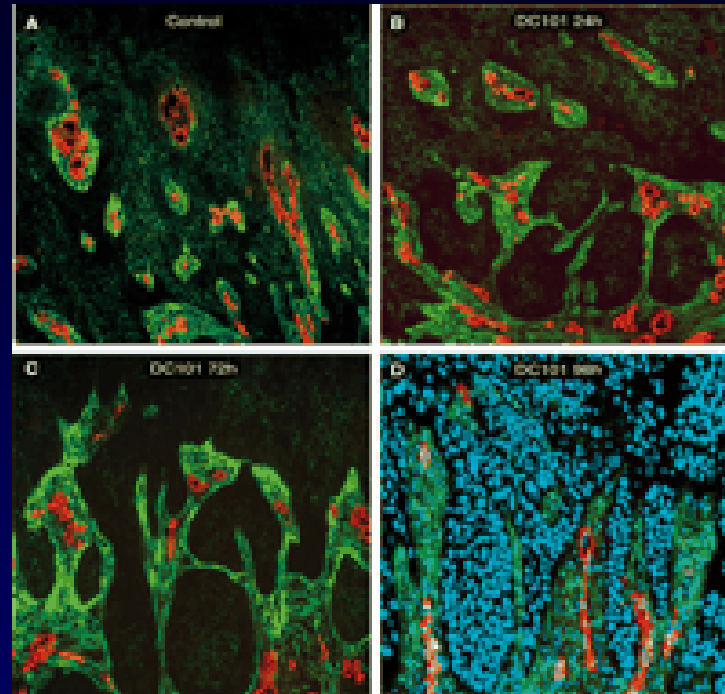
Antikörperfragment: Ranibizumab = Lucentis

Antikörper: Bevacizumab = Avastin

Aptamer: Ranibizumab = Macugen



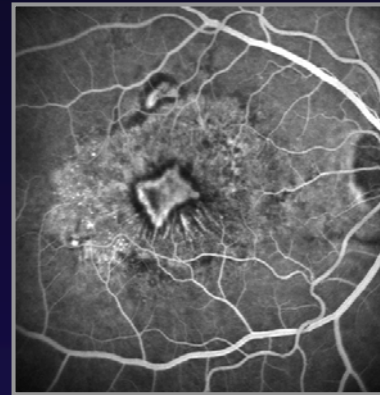
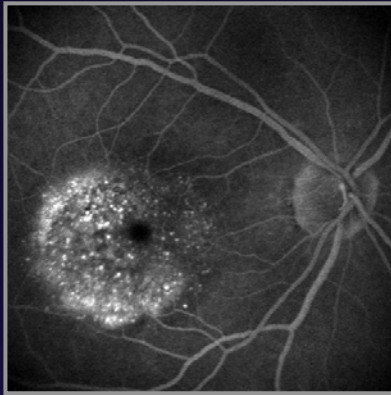
Blockade of VEGF receptor 2 (VEGFR-2) with the monoclonal antibody DC101



Daniel W. Miller, Silvia Vosseler, Nicolae Mirancea, Daniel J. Hicklin, Peter Bohlen, Frank G. Holz, Norbert E. Fusenig. Rapid Vessel Regression, Protease Inhibition, and Stromal Normalization upon Short-Term Vascular Endothelial Growth Factor Receptor 2 Inhibition in Skin Carcinoma Heterotransplants. *American Journal of Pathology* 2005;167:1389-1403

Lucentis

MARINA-Studie okkulte und minimal klassische CNV

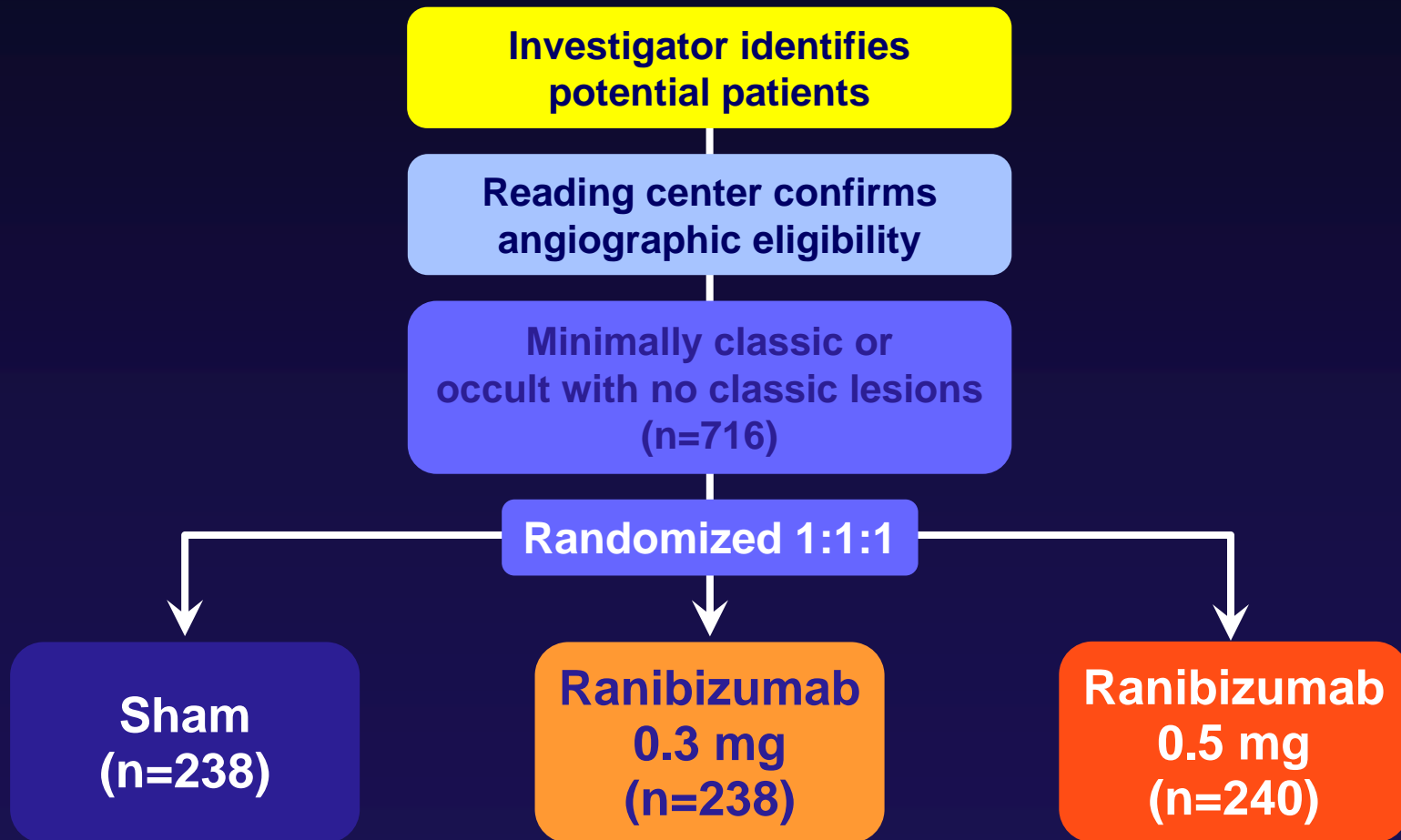


ANCHOR-Studie überwiegend klassische CNV

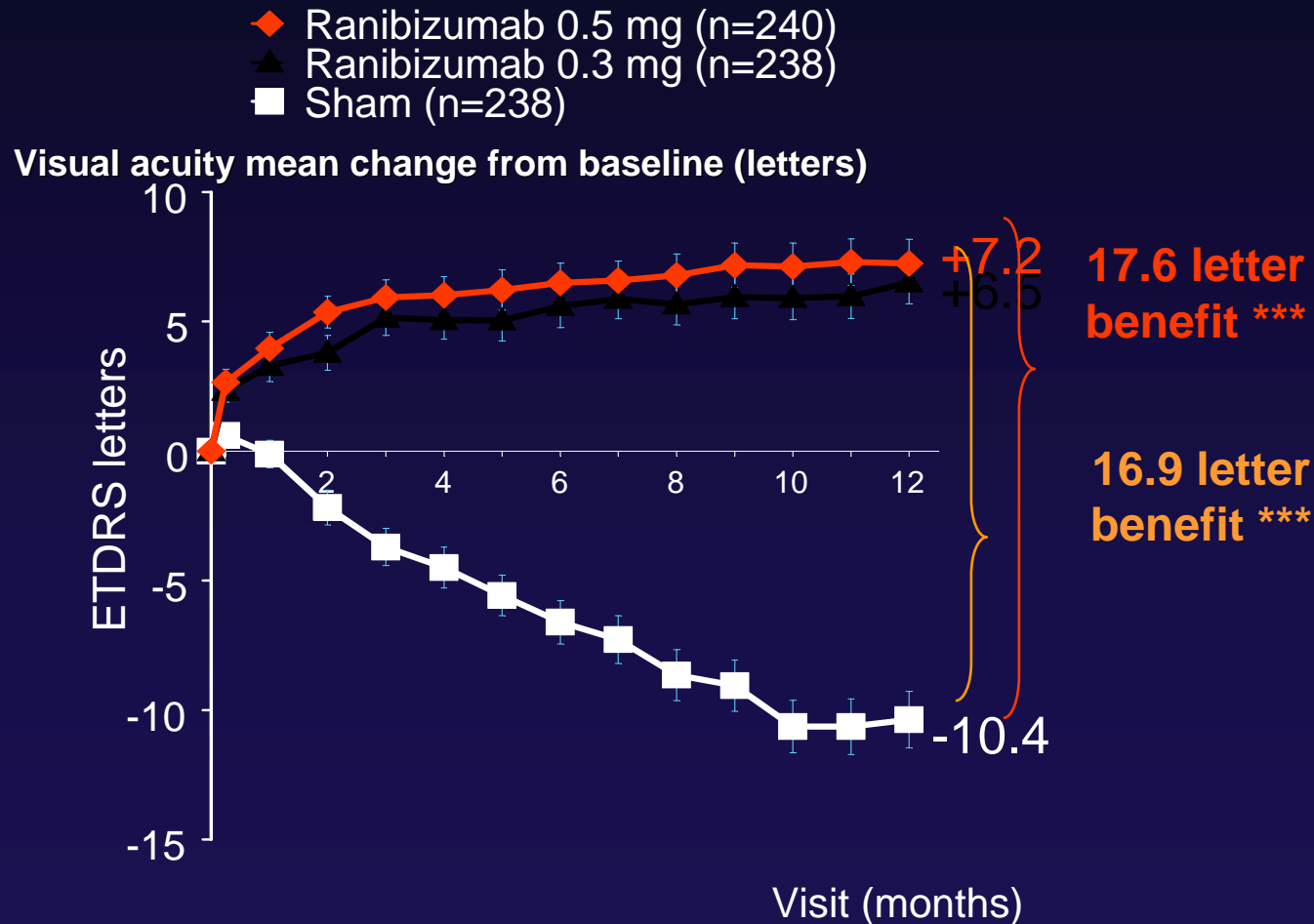


Lucentis: MARINA-Studie

Okkulte + minimal klassische CNV

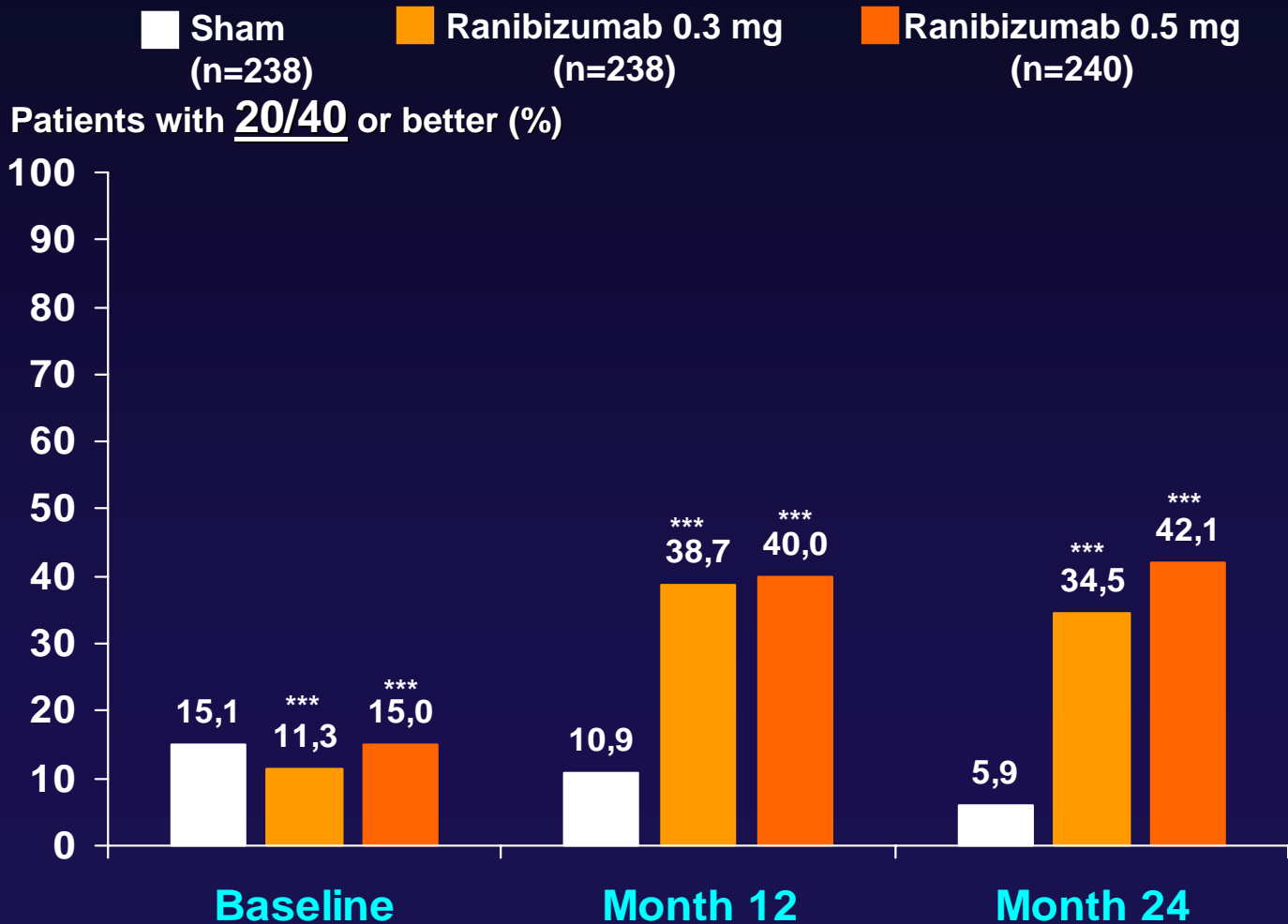


Lucentis: MARINA-Studie 1 Jahr



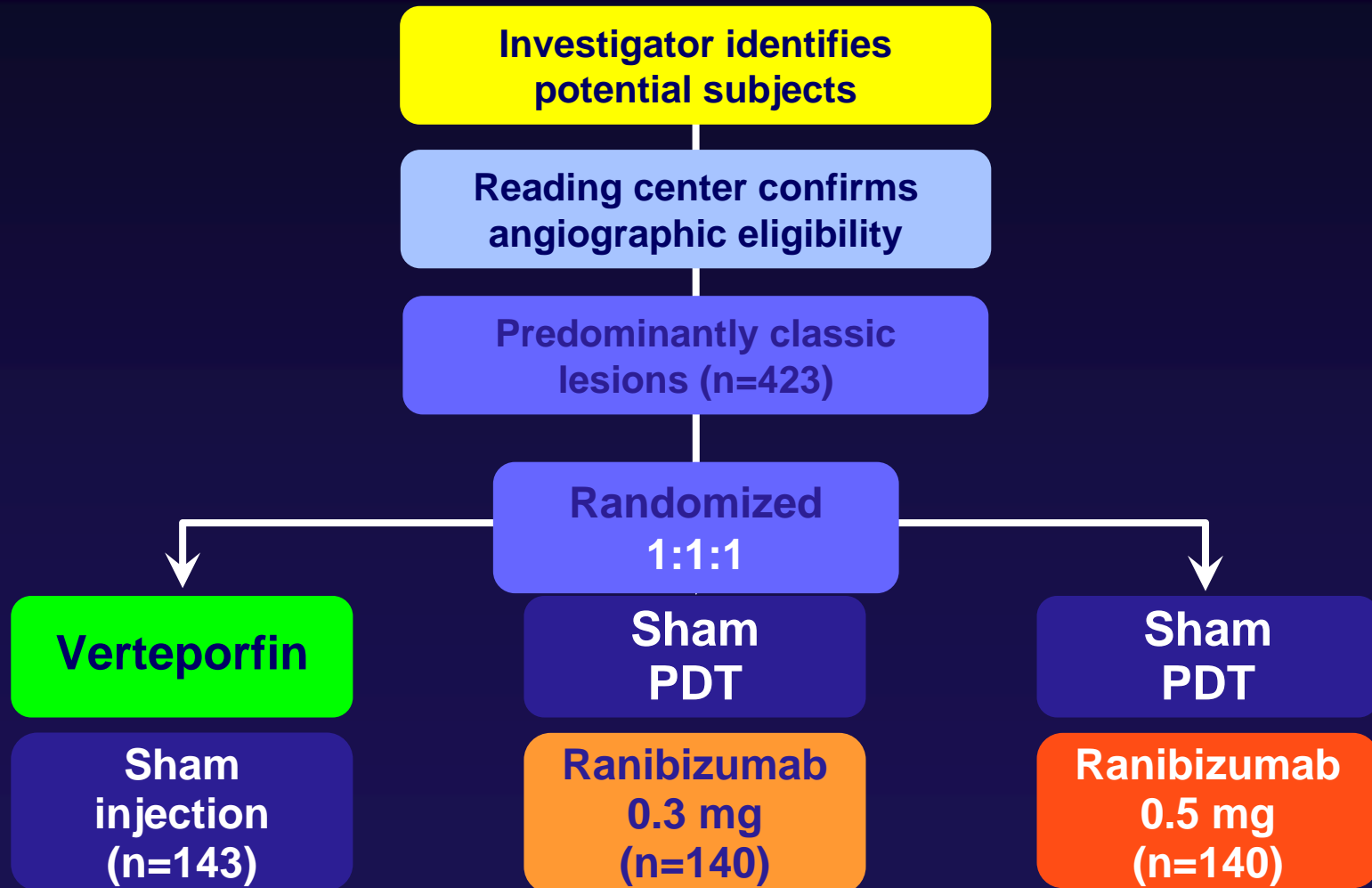
*** $P < 0.0001$ for all ranibizumab comparisons vs Sham from month 1 to month 24

Lucentis: MARINA-Studie



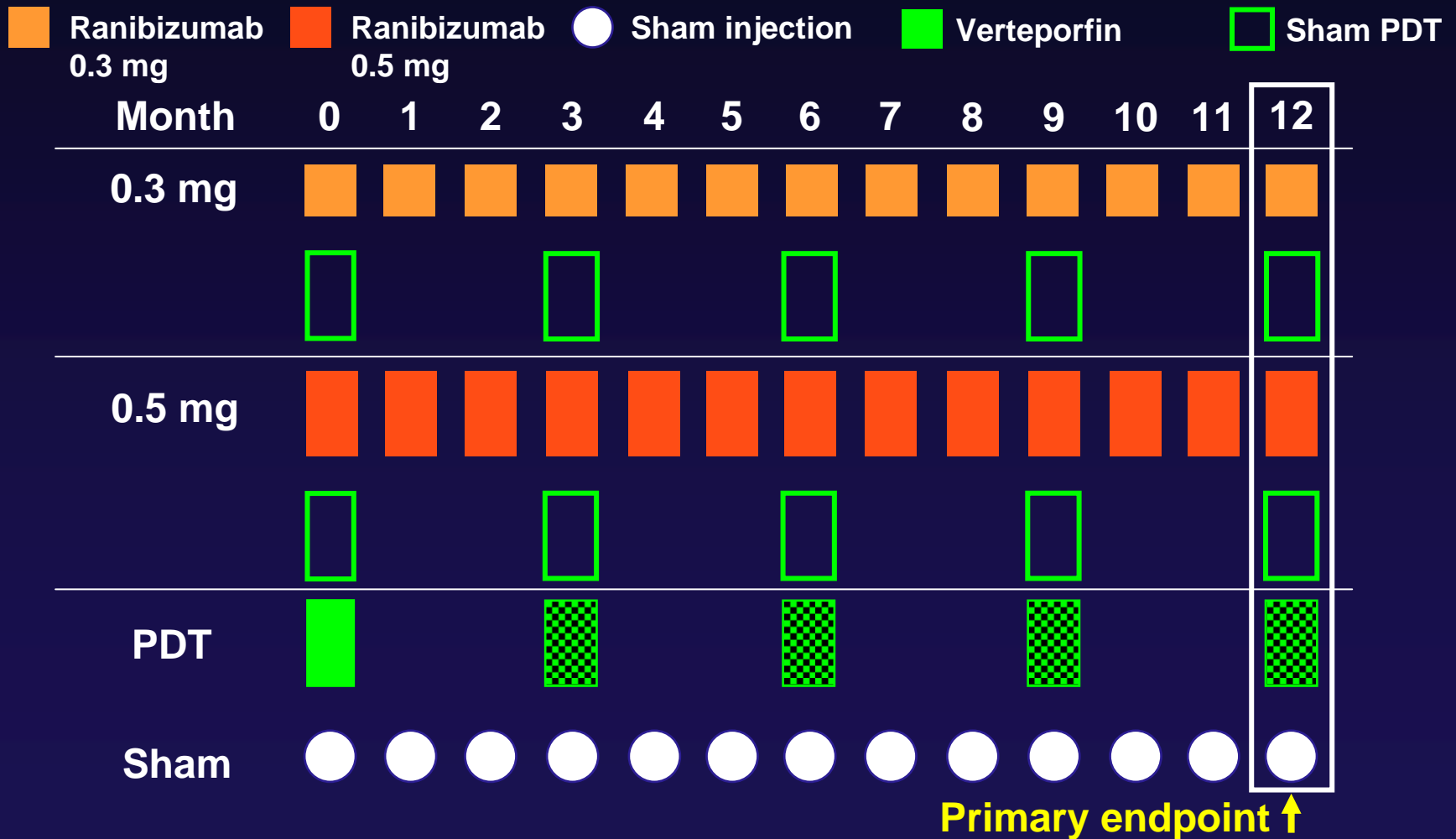
Lucentis ANCHOR-Studie

Überwiegende klass. CNV: Lucentis vs. PDT



Lucentis ANCHOR-Studie

Überwiegende klass. CNV: Lucentis vs. PDT

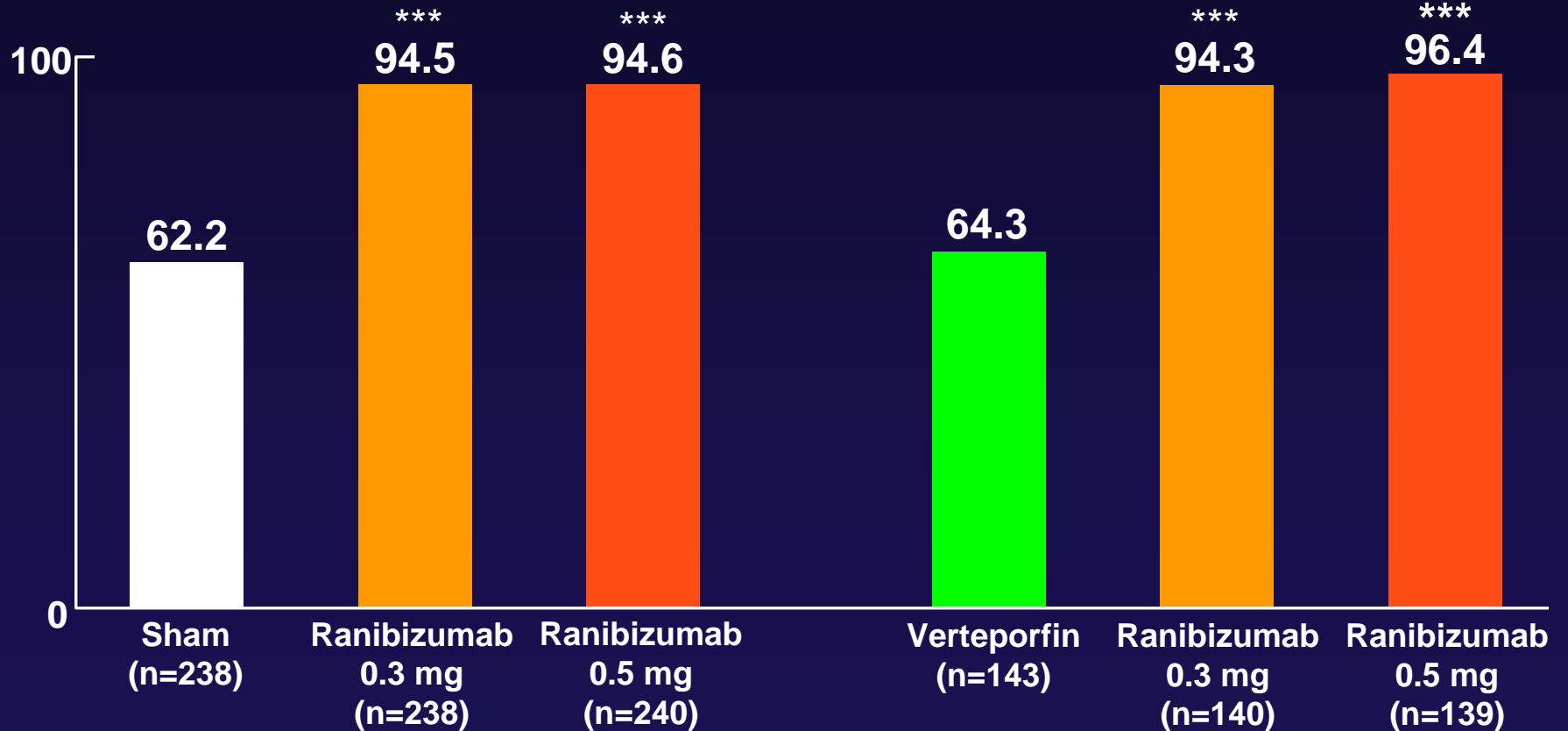


Lucentis

MARINA

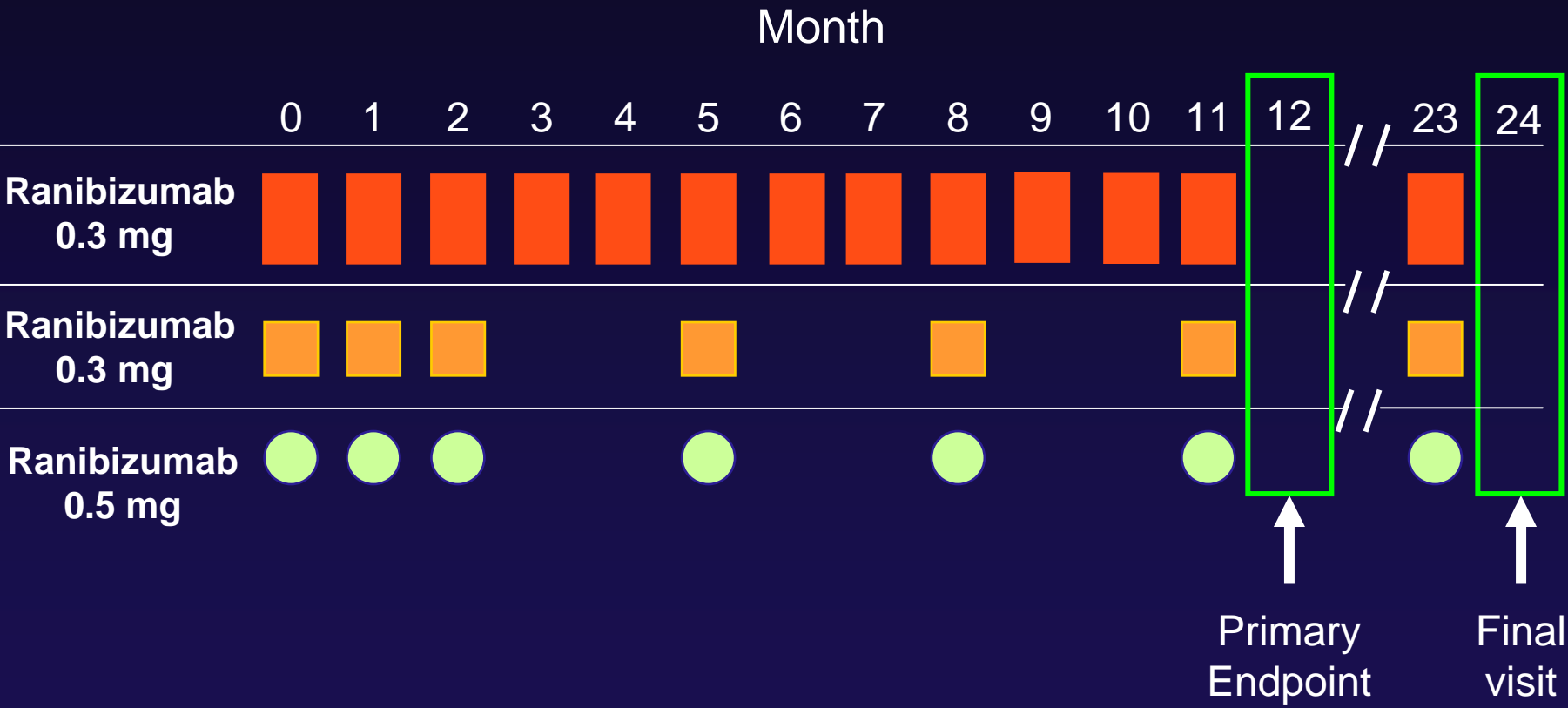
ANCHOR

Patients losing <15 letters (%)



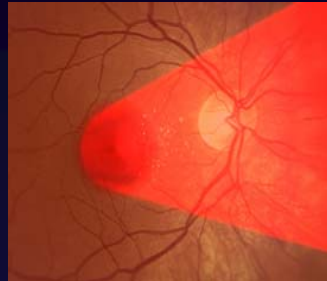
***p<0.0001 vs control

EXCITE-Studie

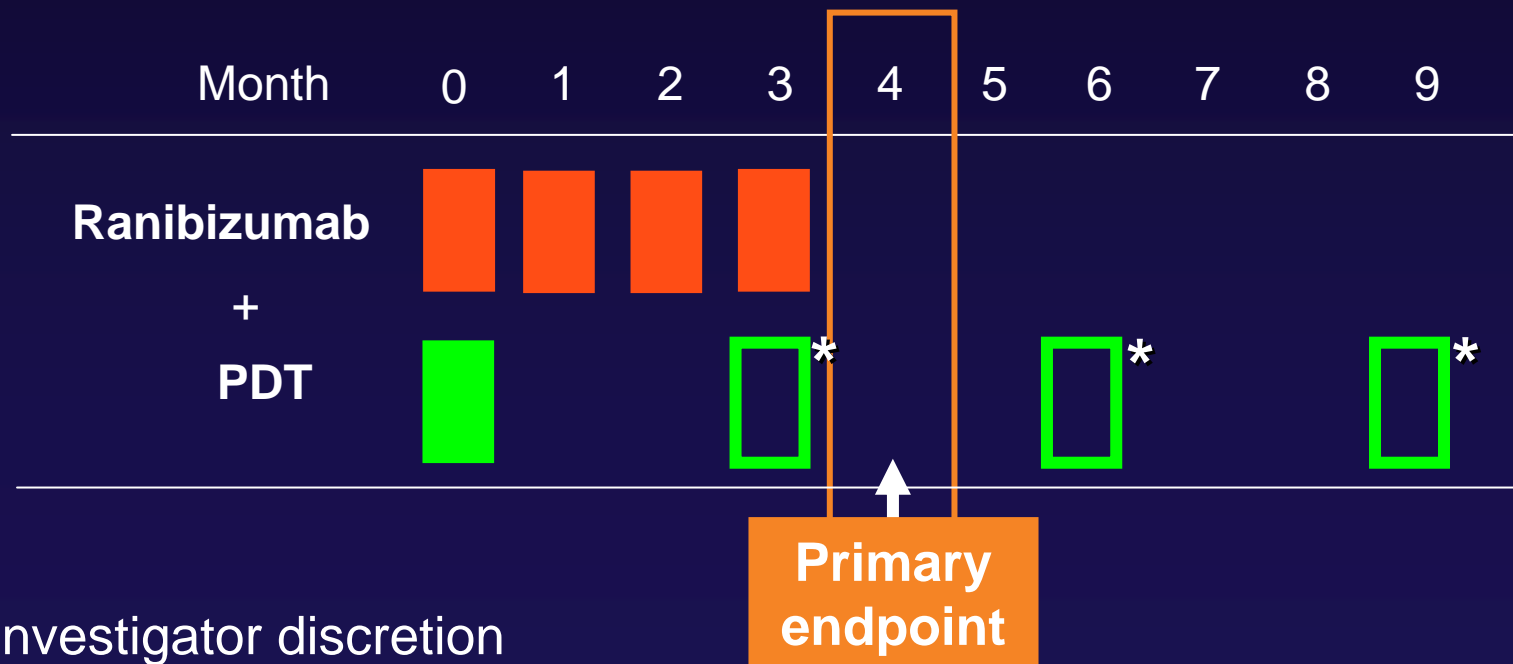
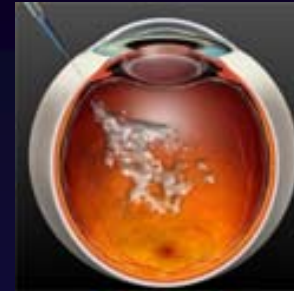


Lucentis PROTECT-Studie

Lucentis + PDT



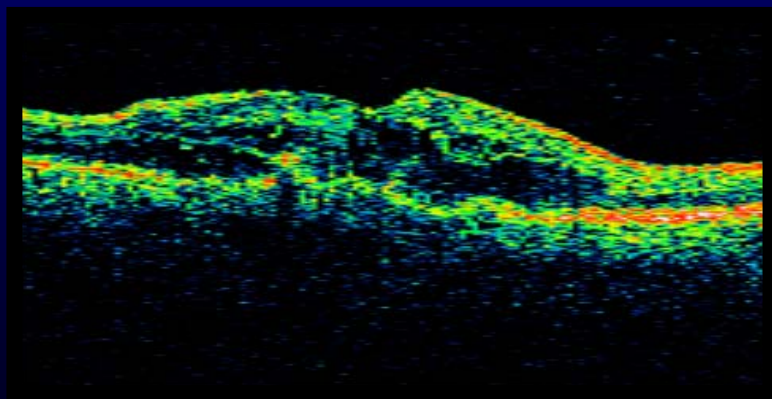
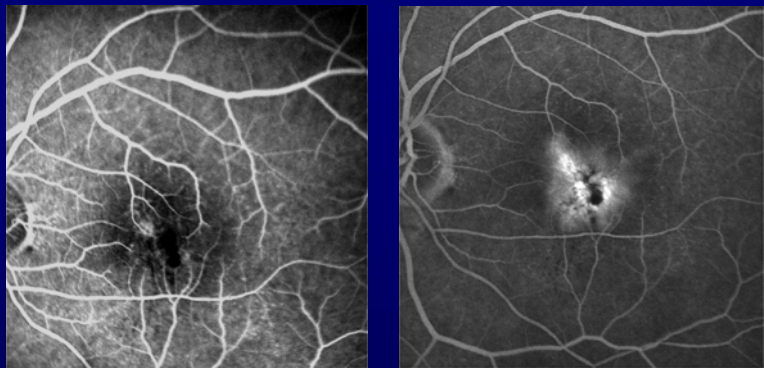
+



- Investigator discretion
- Ranibizumab administered 1 hr after verteporfin PDT

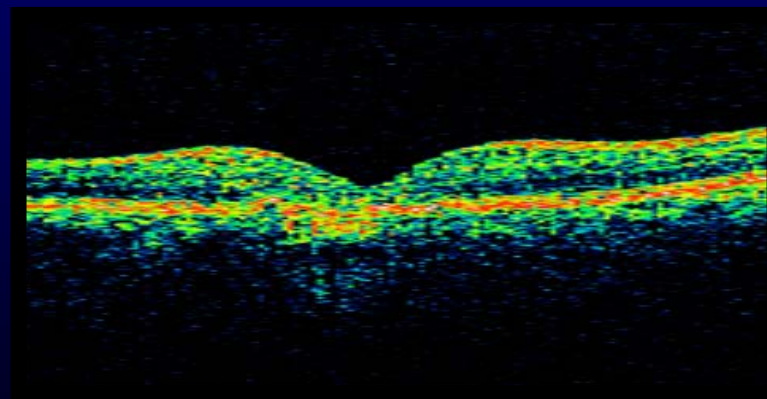
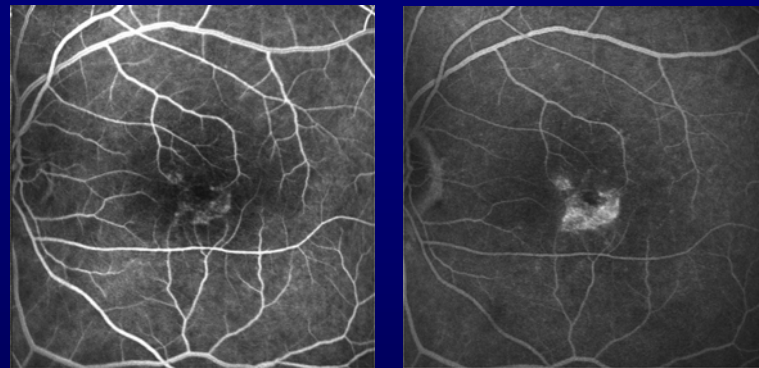
Lucentis + PDT (PROTECT-Studie)

Vorher



0,4

Nach 9 Monaten



0,6

Intraokulare Entzündung

MARINA

ANCHOR

MedDRA preferred terms	Sham (n=236)	Ranibizumab 0.3 mg (n=238)	Ranibizumab 0.5 mg (n=239)	Verteporfin (n=143)	Ranibizumab 0.3 mg (n=137)	Ranibizumab 0.5 mg (n=140)
Intraocular inflammation	0	2 (0.8%)	2 (0.8%)	0	0	1 (0.7%)
Iritis	0	1 (0.4%)	0	0	0	0
Iridocyclitis	0	1 (0.4%)	1 (0.4%)	0	0	0
Uveitis	0	0	1 (0.4%)	0	0	1 (0.7%)
Vitritis	0	0	0	0	0	0

APTC arterial thromboembolic events: Pooled ANCHOR and MARINA

APTC* classification	Sham or vertaporphin (n=379)	Ranibizumab 0.3 mg (n=375)	Ranibizumab 0.5 mg (n=379)
Vascular death	1 (0.3%)	2 (0.5%)	3 (0.8%)
Non-fatal myocardial infarction	2 (0.5%)	2 (0.5%)	4 (1.0%)
Non-fatal ischemic stroke	2 (0.5%)	2 (0.5%)	4 (1.0%)
Non-fatal hemorrhage stroke	0	0	0
TOTAL	5 (1.3%)	6 (1.6%)	11 (2.9%)

*Used during FDA COX-2 inhibitor advisory panel meetings Feb'05

Integrated safety summary

**Antiplatelet Trialists' Collaboration, BMJ 1994 Jan 8; 308(6921): 81*

Schlußfolgerungen

- **Wirksamkeit**
 - Anti-VEGF-Therapiestrategie bestätigt
 - Wirksamkeit über 2 Jahre
 - Zunahme des Benefits gegenüber Placebo über 2 Jahre
- **Sicherheit**
 - Sicherheitsprofil okuläre Nebenwirkungen +
 - Extraokuläres Sicherheitsprofil +
 - Keine Evidenz für systemische VEGF-Inhibition
- **Ausblick**
 - Reduzierte Applikationsfrequenz?
 - Abbruchkriterien?
 - Andere Applikationssysteme