

VEGF trap-eye for diabetic macular oedema

VEGF Trap is a human recombinant fusion protein consisting of the binding domains of VEGF receptors and Fc domain of IgG. Compared with ranibizumab, VEGF Trap has a longer half-life after intraocular injection, a higher binding affinity to VEGF-A, and binds other members of the VEGF family. Do *et al* assessed the safety and bioactivity of a single intravitreal injection of VEGF Trap-Eye (4.0 mg) in five subjects with diabetic macular oedema. No ocular toxicity was observed. At 6 weeks, four of the five patients showed improvement in foveal thickness (31% reduction from baseline) and improvement in BCVA (three letters). **See page 144**

Intravitreal bevacizumab for myopic choroidal neovascularisation

Choroidal neovascularisation is one of the significant sight-threatening complications in pathological myopia. Chan *et al* performed a prospective study to examine the 1-year results of intravitreal bevacizumab in 29 patients with myopic CNV. The patients received 3 initial monthly injections; additional monthly injections were performed in eyes with persistent or recurrent CNV. 16 eyes had previous PDT. Following the 3 initial injections, 93% eyes had angiographic closure with the mean visual improvement of 2.9 lines. This 1-year outcome study confirmed the results of previous short-term studies. **See page 150**

Infrared features of neovascular AMD

IR photography of a homogeneous subgroup of classic neovascular AMD in 22 eyes revealed a whitish ring surrounding the neovascular lesion in all eyes. The whitish ring (O-shape or U-shape) corresponded to the borders of the CNV defined on the early phase of FA and ICG. Semoun *et al* conclude that IR photography is a sensitive non-invasive method of imaging the macula which needs to be investigated in larger studies. **See page 183**

Fibrin glue versus conjunctival sutures

Srinivasan *et al* performed a prospective, observer masked, clinical trial on 40 eyes undergoing primary pterygium surgery with conjunctival autograft to compare the degree of conjunctival autograft inflammation, subconjunctival haemorrhage and graft stability following the use of sutures (n = 20) or fibrin glue (FG, n = 20). Standardised digital slit-lamp photographs were taken at 1 week, 1 month and 3 months postoperatively and the sutures were masked by photoediting software. Two masked observers graded the digital photographs. With FG, the degree of inflammation was significantly less than with sutures. No significant differences were found for subconjunctival haemorrhage and graft stability. **See page 215**

Conjunctival effect of latanoprost and timolol

Chronic topical antiglaucoma medications may induce conjunctival changes leading to the increased the likelihood of fibrosis and subsequent bleb failure. Terai *et al* investigated the long-term effects of latanoprost and timolol on the extracellular matrix organisation, inflammatory infiltration and expression of matrix metalloproteinases (MMPs) and their inhibitors (TIMPs) in the conjunctiva. They obtained conjunctival specimen from the inferior fornix during routine cataract surgery in patients with POAG (n = 20) and controls (n = 10). A moderate infiltration with inflammatory cells was observed in timolol treated eyes. Latanoprost-treated conjunctival specimens showed decreased stromal collagen density and less pronounced inflammatory infiltration suggesting a favourable effect of pretreatment with latanoprost on the outcome of glaucoma filtering surgery. **See page 219**

Comparison between CSLT, polarimetry, and OCT in glaucoma

Newer imaging technologies have been developed in glaucoma specifically to

evaluate the RNFL. Windisch *et al* compared the ability of confocal scanning laser tomography (CSLT), scanning laser polarimetry (SLP) and optical coherence tomography (OCT) in recognising localised retinal nerve fibre layer (RNFL) defects which were visible on colour optic disc photographs of 51 eyes with POAG. 51 eyes of 32 normal subjects were used as controls. Three masked observers evaluated the images. Approximately 20–40% of localised RNFL defects identified by colour optic disc photographs were not detected by CSLT, SPL or OCT. SLP showed a higher number of false-positive results than the other techniques, but also had a higher proportion of correctly identified RNFL defects in the glaucoma population. **See page 225**

HIV-1-mediated delivery of RNA targeting VEGF in RPE

Selective inhibition of pathological angiogenesis may be a promising method of treating neovascular AMD. Lombardi *et al* developed HIV-1 vector expressing shRNA targeting VEGF in RPE cell cultures, in both normoxic and hypoxic conditions. At least 90% of RPE cells were successfully transduced by HIV-1 virions and VEGF expression was reduced by 95% in the transduced cells. Moreover, shRNA-VEGF effectively and specifically prevented hypoxia-induced VEGF upregulation. **See page 244**

Rapid detection and quantification of propionibacteriaceae

Current methods of diagnosis for Propioni are unsatisfactory due to a lack of sensitivity of culture, time required for culture results (3–14 days) and difficulties in interpreting SYBR Green real-time PCR results. Goldschmidt *et al* validated a new rapid and sensitive test based on rapid real-time PCR TaqMan technology. The new test detected as few as 0.01 Eq CFU/ml Propioni in phosphate-buffered saline, aqueous humour, vitreous or cell suspensions in less than 1.30 hours. **See page 258**