Light-adjustable IOL
The light-adjusted IOL (LAL) is a photo-sensitive silicone IOL whose power can be adjusted post-operatively using a digital light delivery device (565 nm). Profiles developed to correct residual cylindrical and spherical errors were tested on five patients, with postoperative toric refractive errors of 1.25–1.75 D. Toric error was reduced in each of the patients and refractions remained stable for the follow-up period (9 months). Achieved spherical equivalent manifest refraction was within 0.25 D of targeted emmetropia. See page 690.

Visual findings in children born to mothers using methadone
Twenty patients, all of whom had been exposed to methadone in utero and were referred to visual electrophysiology service because of concerns regarding visual function were evaluated. Ophthalmic abnormalities included reduced acuity (95%), nystagmus (70%), delayed visual maturation (50%), strabismus (50%), refractive errors (30%), and cerebral visual impairment (25%). Visual electrophysiology was abnormal in 60%. A quarter of the children had associated neurodevelopmental abnormalities. The majority of children with nystagmus (79%) had been treated for neonatal abstinence syndrome (NAS). The authors conclude that infants born to drug-misusing mothers prescribed methadone in pregnancy are at risk of a range of visual problems. See page 696.

Anti-VEGF monotherapy for retinal angiomatous proliferation
Twenty eyes (15 patients) with retinal angiomatous proliferation (RAP) were treated by anti-VEGF agents. Nine eyes were treated with bevacizumab alone, and three eyes were treated with intravitreal ranibizumab treated by anti-VEGF agents. Nine eyes were treated with intravitreal ranibizumab. Twenty eyes (15 patients) with retinal angiomatous proliferation (RAP) were treated by anti-VEGF agents.

Cardiff visual ability questionnaire for children
The authors report on Cardiff Visual Ability Questionnaire for Children (CVAGQ) a short, psychometrically robust and a self-reported instrument for the assessment of the visual ability in children and young people with a visual impairment. From a list of 121 items generated from focus groups, a long 89-item questionnaire was piloted. Rasch analysis was used to facilitate item removal. Finally, the validity and reliability of the 25-item questionnaire was assessed on a group of 109 visually impaired children (median age 15 years). See page 730.

Subconjunctival triamcinolone for non-necrotising scleritis
Twelve patients who had failed systemic therapy for non-necrotising anterior scleritis, were treated with subconjunctival injections of triamcinolone (2 mg in 0.5 ml). Complete resolution of symptoms and signs of scleral inflammation occurred after 23 out of the 25 injections administered. For the remaining two patients, it was necessary to increase oral corticosteroids to obtain complete resolution. No treated eye lost vision or developed scleral necrosis after subconjunctival therapy. Four patients developed a rise in IOP. Scleritis relapsed in 38% of eyes requiring repeat subconjunctival triamcinolone therapy. See page 743.

Macular pigment screener-MPS 9000
The MPS 9000 uses a psychophysical technique known as heterochromatic flicker photometry to measure macular pigment optical density (MPOD). Forty normal sighted participants (age range; 18–50 years), were evaluated by two operators in two sessions separated by 1 week in order to assess test repeatability and reproducibility. The overall mean MPOD for the cohort was 0.35±0.14. There was no correlation between MPOD readings and age. Coefficients were 0.55 and 0.28 for repeatability, and 0.25 and 0.26 for reproducibility. The authors conclude any change less than 0.53 units should not be considered clinically significant as it is very likely to be due to measurement noise. See page 753.

RNFL thickness measurement
Thirty-six healthy subjects and 76 glaucoma subjects were imaged with Stratus OCT (fast RNFL mode, RNFL3) and RTVue-100 OCT (NHM4 (RNFL1) and RNFL3,45 (RNFL2) modes). Agreement between different RNFL measurements was analysed by Bland-Altman plot. RNFL thicknesses by two different modes of the RTVue-100 OCT, and by the Stratus OCT, were correlated in all sectors, including average. RNFL thicknesses determined by the two different modes of RTVue-100 OCT were in excellent agreement. However, RNFL thickness in glaucomatous eyes by the RTVue-100 OCT was significantly greater than that measured by Stratus OCT. All three RNFL measurements showed good glaucoma discrimination ability. These findings should be considered when a patient is followed-up using different types of OCT. See page 763.

In vivo movement of host keratocytes into donor tissue
Four explanted sex-mismatched human corneal buttons were studied using chromosomal in situ hybridisation (CISH) technique to identify corneal epithelial and keratocyte cells containing the Y chromosome. The sex mismatch of donor (XX) and host (XY) suggested any identified Y chromosomes cells were of host origin having migrated into the donor tissue. Keratocyte identity and lack of infiltrating inflammatory cells were confirmed by immunohistochemistry. The authors were able to demonstrate in vivo centripetal movement of corneal stromal keratocytes and epithelial cells using CISH technique. See page 790.