Bézier curves as a total approach to measure the upper lid contour: redefining clinical outcomes in palpebral surgery (see page 6)
Reducing the eyelid contour to a central value underestimates the importance of contour anomalies. Variables derived from Bézier curves are promising alternatives. Hence, we studied a novel software in healthy subjects for this purpose.

Psychosocial and mental health disorders among a population-based, case-controlled cohort of patients with congenital upper eyelid ptosis (see page 12)
In this population-based, case-controlled study, children with congenital ptosis were found to have a significantly increased risk of developing mental illness and psychosocial morbidity compared to age- and sex-matched controls.

Rebubbling and graft failure in Descemet membrane endothelial keratoplasty: a prospective Dutch registry study (see page 17)
This national registry study examined risk factors for graft detachment requiring rebubbling and early graft failure following DMEK in the Netherlands.

Factors predictive of cystoid macular oedema following endothelial keratoplasty: a single-centre review of 2233 cases (see page 24)
Rates of postoperative cystoid macular edema are presented from a series of 2233 endothelial keratoplasty procedures using multivariate regression to identify associated risk factors.

Effectiveness of community outreach screening for glaucoma in improving equity and access to eye care in Nigeria (see page 30)
Outreach screening improved equity of access, though not all these equity gains persisted when only participants accepting referral from outreach screenings were considered. Successful interventions to improve referral uptake would maximize screening impact.

Population-based associations between progression of normal-tension glaucoma and Yang-deficient constitution among Chinese persons (see page 37)
The authors found Yang-deficient constitution (characterised by decreased temperature of the extremities, chills, or cold-induced discomfort) was a high risk factor for normal-tension glaucoma progression during long-term follow-up (HR: 4.63, 95% CI: 1.77-12.09, P = 0.002).

Expansion of patient eligibility for virtual glaucoma clinics: a long-term strategy to increase the capacity of high-quality glaucoma care (see page 43)
Expanding the eligibility criteria for virtual glaucoma clinics can provide a safe, long-term solution to increase capacity for the delivery of high-quality glaucoma care to a growing ageing population with high patient satisfaction.

Wide-Field optical coherence tomography deviation map for early glaucoma detection (see page 49)
We constructed a wide-field deviation map depicting the fovea-disc relationship. The proposed wide-field deviation map showed a wider scanned area, higher diagnostic power, and better spatial continuity compared to conventional deviation maps.

Laser goniopuncture after deep sclerectomy: incidence, long-term outcomes and risk factors for failure (see page 56)
Laser goniopuncture (LGP) is required in approximately two-thirds of patients with previous deep sclerectomy (DS) at 5 years. Although LGP may rescue failing DS, it is unlikely to maintain low target pressure.

Direct selective laser trabeculoplasty in open angle glaucoma study design: a multicentre, randomised, controlled, investigator-masked trial (GLAUrious) (see page 62)
The GLAUrious trial is designed to test the hypothesis that automated, non-contact, translimbal direct selective laser trabeculoplasty is effective and non-inferior to conventional selective laser trabeculoplasty in reducing intraocular pressure in open angle glaucoma.

Association between statin use and the risks of glaucoma in Australia: a 10-year cohort study (see page 66)
In a cohort of middle-aged and elderly Australians, we found that long-term statin use was associated with a higher risk of glaucoma onset. As to specific statins, the increased risk was only found in rosuvastatin users.

Dexamethasone intravitreal implant in treatment-naïve diabetic macular oedema: findings from the prospective, multicentre, AUSSIEDEX study (see page 72)
In a large prospective, real-world study (AUSSIEDEX) of dexamethasone intravitreal implant monotherapy for diabetic macular oedema, 2.5 injections (mean) significantly improved visual acuity and central retinal thickness from baseline at week 52 in treatment-naïve patients.

Five-Year outcomes of eyes initially enrolled in the two-year BEVORDEX trial of bevacizumab or dexamethasone implants for diabetic macular oedema (see page 79)
Five-year outcomes of eyes with diabetic macular oedema initially enrolled in a 2-year clinical trial comparing intravitreal bevacizumab with dexamethasone implant. More eyes converted to proliferative diabetic retinopathy in the group initially treated with dexamethasone.

Deep learning-based signal-independent assessment of macular avascular area on 6x6-mm OCTA in diabetic retinopathy: a comparison with instrument-embedded software (see page 84)
A deep learning-based macular extrafoveal avascular area on a 6x6-mm OCT angiogram is less dependent on the signal strength and shadow artefacts, providing better diagnostic accuracy for diabetic retinopathy severity than the extrafoveal vessel density measured by commercial software.

Accuracy of automated machine learning in classifying retinal pathologies from ultra-widefield pseudocolour fundus images (see page 90)
An automated machine learning model developed by ophthalmologists without coding experience provided diagnosis of retinal vein occlusion and retinitis

Frank Larkin , Editor in Chief

Highlights from this issue

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pigmentosa from ultra-widefield pseudo-colour fundus images that was comparably accurate with bespoke deep-learning models.

Does real-time artificial intelligence-based visual pathology enhancement of three-dimensional optical coherence tomography scans optimise treatment decision in patients with nAMD? Rationale and design of the RAZORBILL study (see page 96)

Retinal fluids are important biomarkers for disease activity in neovascular age-related macular degeneration (nAMD). We describe how the RAZORBILL study investigates the influence of advanced, fluid quantifying artificial intelligence (AI) segmentation-algorithms on the disease activity assessment by supporting treating physicians.

Widefield swept-source optical coherence tomography angiography in the assessment of retinal microvasculature and choroidal thickness in myopia patients (see page 102)

This study found reductions in vessel density and chorioretinal thickness on widefield swept-source optical coherence tomography angiography with progressive myopia. Using wider fields of view, this study suggests there may be regional preferences to alterations.

Development and validation of a deep learning system to classify etiology and predict anatomical outcomes of macular hole (see page 109)

Our deep learning-based models can accurately classify the macular hole aetiology and reliably predict the postoperative status of macular hole. The models are potentially useful in automated diagnosis and surgical planning of macular hole procedures.

Rhegmatogenous retinal detachment presentation and surgery in uveitic eyes (see page 116)

The rate of retinal detachment is high in uveitis patients. Although anatomical outcomes following surgery are high, the visual results were disappointing, primarily secondary to prior uveitis sequelae.

MR imaging signs helpful in the differentiation of patients with anterior ischaemic optic neuropathy and optic neuritis (see page 121)

Specific MRI characteristics like optic nerve enhancement pattern and distribution of white matter lesions can aid in the diagnosis and differentiation between AION and ON where the clinical diagnosis is equivocal.

Retinoblastoma seeds: impact on American Joint Committee on cancer clinical staging (see page 127)

This international, multicentre global retinoblastoma registry found that retinoblastoma seed type and intraocular distribution affected the success of local treatment. The AJCC-RB staging can be improved by accounting for focal vs diffuse seeds.

The association of time outdoors and patterns of light exposure with myopia in children (see page 133)

Reported time outdoors and light levels were low among Singaporean children. Lower reported time outdoors was associated with myopia. No associations were found between light levels or specific light exposure measures with myopia.

5-Year change in refractive error and its risk factors: results from the Gutenberg health study (see page 140)

Refractive error in the population-based Gutenberg Health Study showed a parabolic shift during the observation period of 5 years. Smoking was linked to a hyperopic shift, and baseline myopic refractive error to a myopic shift.

Metagenomics of the lacrimal sac in primary acquired nasolacrimal duct obstruction: the Lacriome paper 1 (see page 147)

Microbial metagenomics provides significant insights into the microbial world within the lacrimal sac in patients with PANDO.