

Dinner with the experts

Around 80 invited guests attended two CET-approved presentations on developments in lens design and materials at a meeting hosted by CIBA Vision. **Alison Ewbank** reports

New toric soft designs and improved materials for daily disposable lenses are close to the top of most contact lens practitioners' wish list. So it was welcome news for guests at last week's 'Dinner with the experts', hosted by CIBA Vision in London, that two new products soon to be released in the UK fell into these categories.

CIBA had enlisted the help of **Professor Des Fonn** of the University of Waterloo, Canada and **Associate Professor Carol Morris** of Southern Cross University, Australia to describe the development of the new products and the technology on which they are based. Around 80 invited guests heard the two CET-approved presentations on developments in lens design and materials before the new products were unveiled.

For Professor Fonn, toric soft 'success' was a lens that settled quickly, worked almost every time and had good stability. It would provide excellent vision and comfort and a low rate of complications. No one toric design would work for everyone and the choice of silicone or conventional hydrogel for the lens material depended on factors such as wearing schedule and convenience as well as ocular health.

Air Optix for Astigmatism, launched this week, combines the high-Dk lotrafilcon B material with a new prism ballasted, back surface design CIBA has called 'Precision Balance 8|4'. The thickest points of the lens are at 8 and 4 o'clock to minimise interaction with the lower lid and maximise oxygen transmission at 6 o'clock. The lens is approved for daily use and up to six nights' overnight wear.

Professor Fonn described a three-month extended wear trial that compared the lens with the PureVision Toric. Performance was similar but preference data for overall and end-of-day comfort favoured the new lens. In this study, 87 per cent of subjects were successfully fitted with the first lens trialled when using the two cyl powers currently available. Fitting should



Pictured at the dinner are (l-r) CIBA Vision contact lens consultant Jayne Schofield, Professor Des Fonn, head of professional affairs Marcella McParland, Associate Professor Carol Morris and guests

become easier as more axes and powers were introduced, he said.

A biochemist by training, Carol Morris's interest is in materials and coatings, and the interaction of the tear film with the lens. The challenge for daily disposable lens manufacturers was to achieve a comfortable lens at a competitive price, she said. Current products in this sector used different approaches to maximising comfort, some more effective than others.

The first approach, where the real purpose was to increase oxygen permeability, was to include additives that held water within the lens. The second approach was to include additives in the packaging solution in order to achieve one of three possible objectives: to provide comfort on insertion and then have the additive wash away; to ensure that the additive stayed bound to the lens material; or to allow the additive to be slowly released into the eye over time.

The latest approach, adopted for CIBA's next daily disposable, was to use three different additives that acted at different periods of the day during wear. The new Dailies product uses HPMC (hydroxypropyl methylcellulose) to coat the lens, for ease of insertion and comfort at the start of the day. This cushioning lubricant is removed with the saline

after about 20 minutes of wear.

The second additive, wetting agent PEG (polyethylene glycol), attracts water molecules then releases moisture from the lens matrix to keep the lens moisturised during the day. Release of this agent can be detected for around four hours.

The final additive is a new version of PVA (polyvinyl alcohol), a high molecular weight 'blink-activated' moisturising agent in the lens matrix, designed to maintain comfort until the end of the day. PVA is already used in the current version of the lens, Focus Dailies with AquaComfort.

Dr Morris ended her presentation with the comment that this approach could also be applied to re-usable lenses. In the discussion session that followed, she was inevitably questioned about the possibility of the first silicone hydrogel daily disposable lens reaching the market, which one member of the audience described as 'surely the gold standard' for the future. 'All these innovations we're talking about will inevitably come to the same lens,' she said. 'I don't think that a high oxygen [daily disposable] lens is that far away.'

With that, the event moved on to Madrid and Moscow, among eight venues where the experts will deliver their presentations at similar events across Europe. ●