




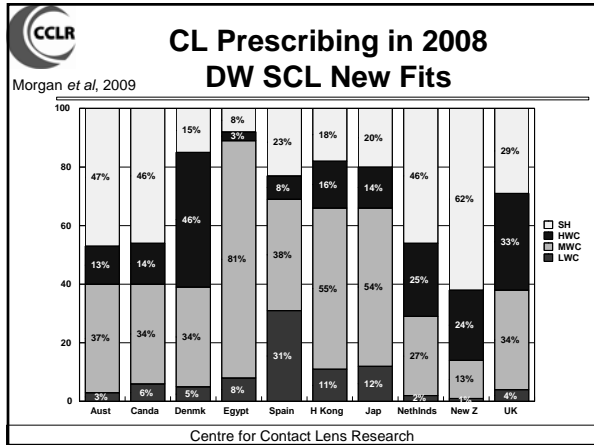
## SH Developments

1999



**Current Fitting Situation?**

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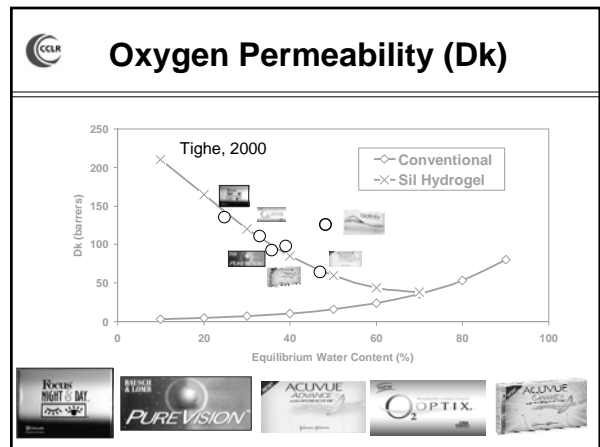
**SH Developments:  
What's New & What's Changed in 10 Years?**

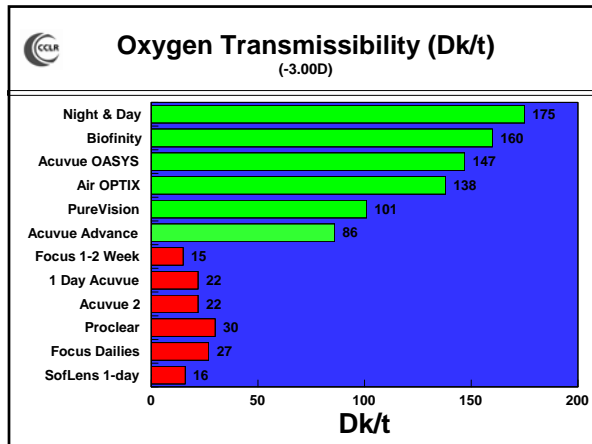
- **Bulk properties**
  - Dk & Dk/t ?
  - modulus?
  - dehydration?
- **Surface properties**
  - surface treatments?
  - deposits?
  - wettability?

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# Bulk Properties

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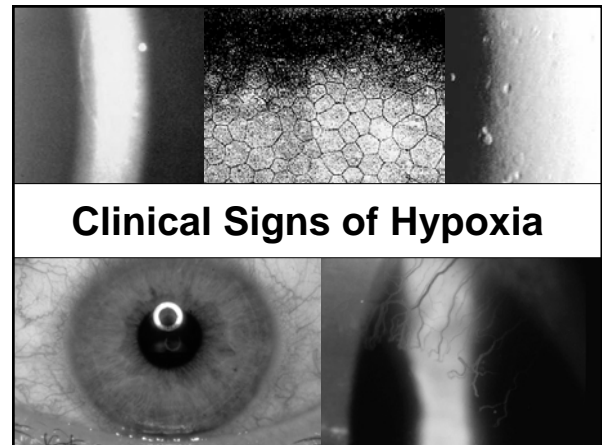




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*“You only need to fit SH if patients wear their lenses overnight”*

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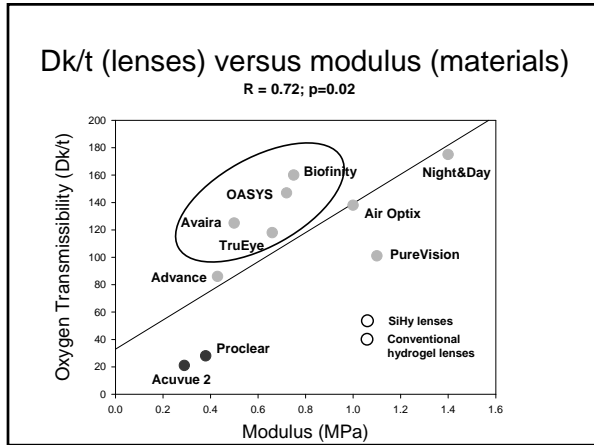
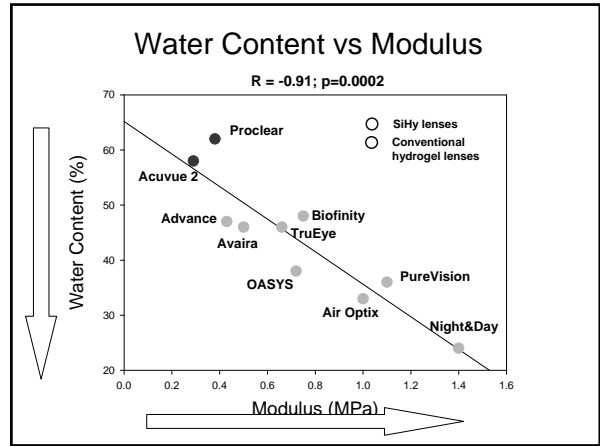
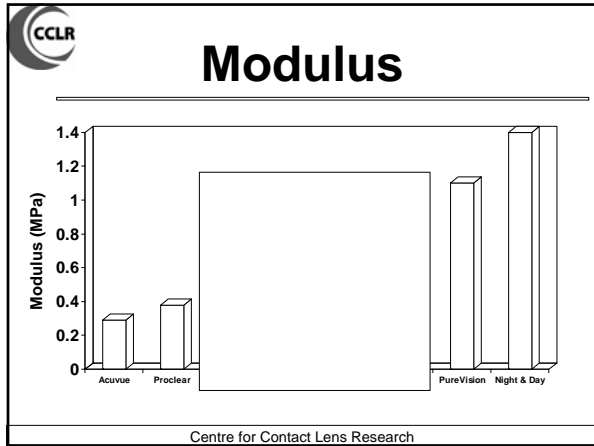
**Clinical Results With SH**

- Hypoxia is historic!
- Reduced
  - corneal swelling
    - equivalent to no lens wear
  - microcysts
  - limbal hyperemia
  - neovascularisation
  - endothelial changes

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*Are SH stiffer than conventional hydrogels?*

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## Dehydration Properties

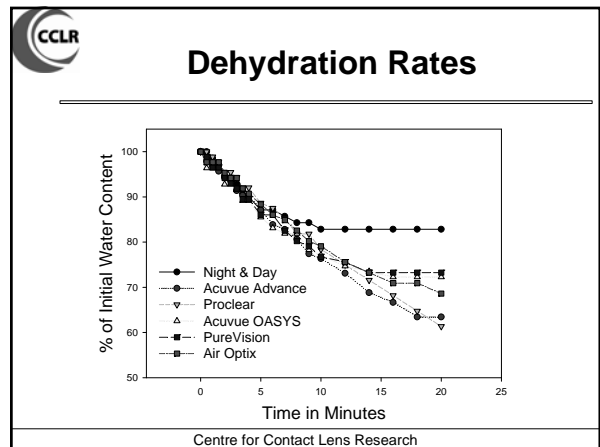
- Dehydration may be involved in development of dry eye symptoms
- SH are LWC materials
  - dehydration rates reduced?
- How rapidly do SH dehydrate compared with other SCL materials?

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## Dehydration Study

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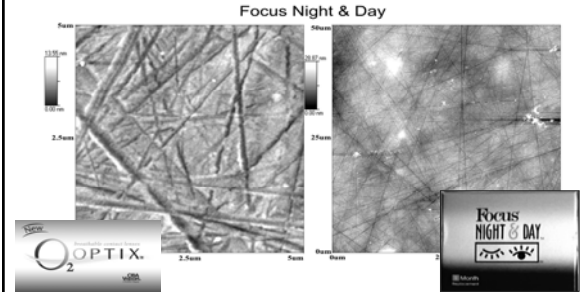




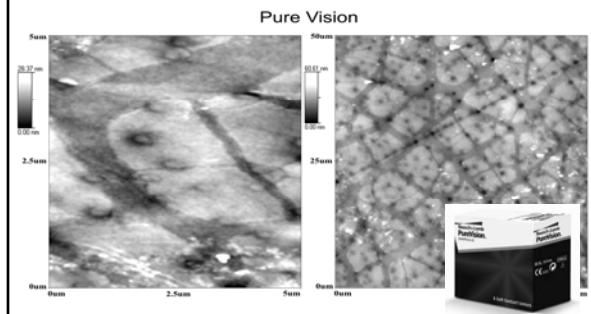
# Surface Properties

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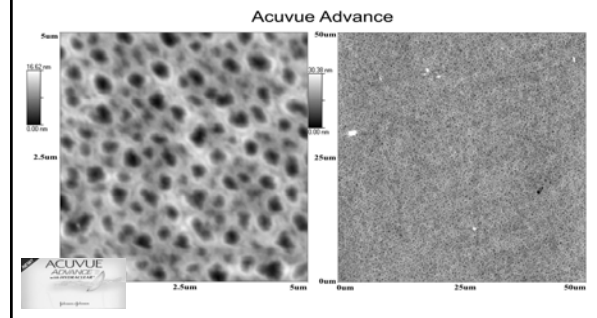
## CIBA Vision: Plasma Coating SH Surface Treatment



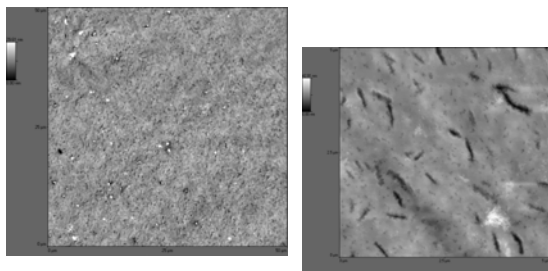
## Bausch & Lomb: Plasma Treated SH Surface Treatment



## Johnson & Johnson: "Surface Enhancement"

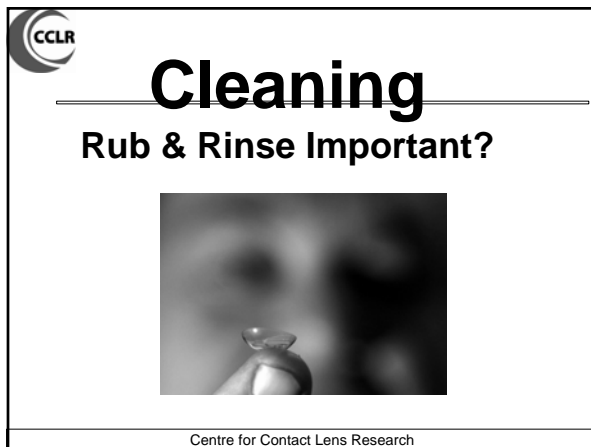
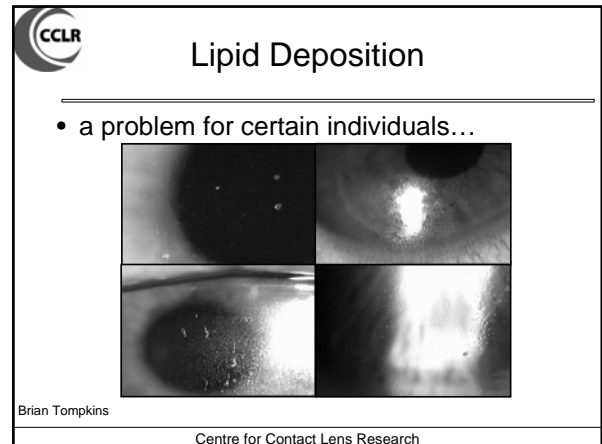
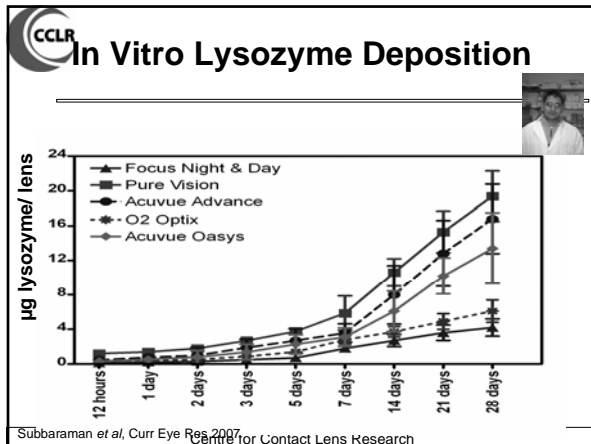


## CooperVision: No "Surface Treatment"



*Do SH exhibit lots of deposition?*

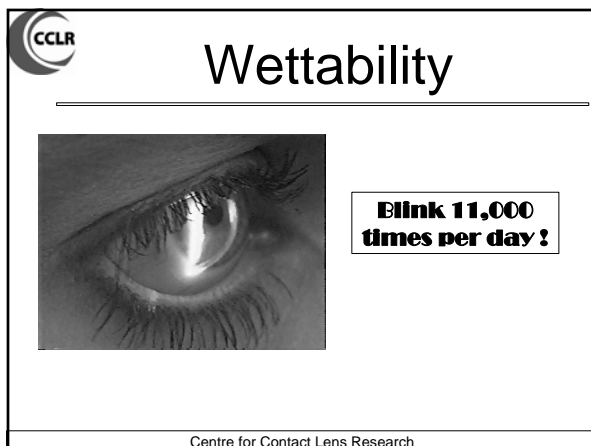
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*Do SH exhibit poor wettability?*

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- CCLR**
- Methods to Measure Wettability?
- In vivo
    - Slit lamp biomicroscope
    - Tearscope™
    - Interferometry
  - In vitro / ex vivo
    - Sessile drop
    - Captive bubble
    - Wilhelmy plate
- Centre for Contact Lens Research

**CCLR** **In Vivo Slit Lamp Wettability**

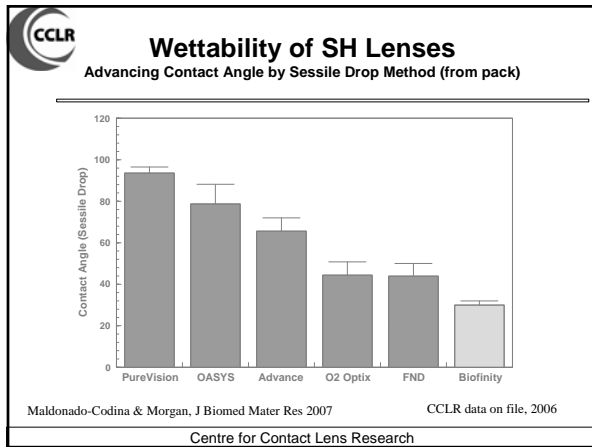


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**CCLR** **“Poor” vs “Good” Wettability**




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**CCLR**

**What's New From CIBA Vision?**



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**CCLR** **Aqua System SH Materials**



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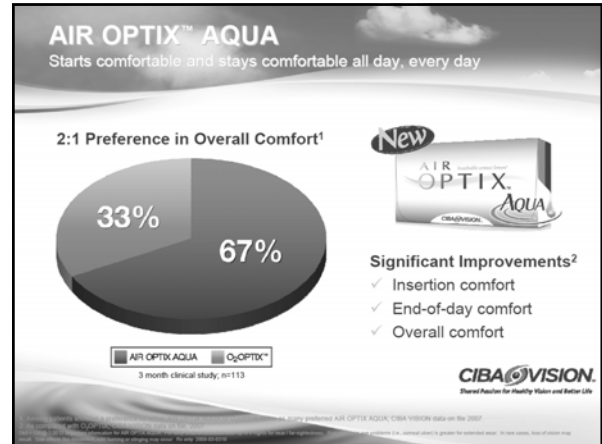
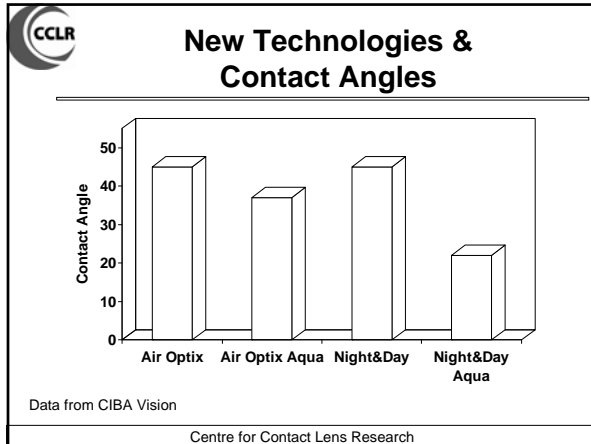
Introducing the AQUA Moisture System

**FOR COMFORT** **On Contact All Day Every Day**



**CIBA VISION**

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## Summary....

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- CCLR**
- ### New Technologies
- New materials present huge benefits for CL patients
  - Stay aware of new developments
  - Use new technology products on “satisfied” patients
    - they don’t know what they are missing!
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**CCLR**

## Thanks for your attention!!

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