

REFLECTIONS ON USING THE BAUSCH + LOMB INFUSE® LENS IN PRACTICE



BRADLEY D. MIDDAGH, OD

Founder of Fort Myers Eye Center, which recently joined with Center For Sight

A CLEAR DIFFERENCE

When I learned about the Bausch + Lomb INFUSE® contact lenses, I was convinced that they would be a healthy choice based on the material—a highly oxygen-permeable silicone hydrogel—and the daily disposable replacement frequency. However, I wondered how they would perform in terms of wettability and comfort. Historically, selecting a lens material often involved choosing between high oxygen permeability and wettability.⁵

To assess the lenses, I tried them first in existing contact lens wearers who had complained of dryness and discomfort, and the reports were exceptionally positive. Noticing this, I began to offer Bausch + Lomb INFUSE® lenses to a wider variety of patients, including existing contact lens wearers who had not reported contact lens dryness, as well as new wearers. My experience has demonstrated that this lens is more than just a problem-solver—it has become my first-choice lens in all patients

INNOVATIVE TECHNOLOGY

Bausch + Lomb INFUSE® lenses perform so well because they were purposefully designed to help maintain ocular surface homeostasis. The Tear Film and Ocular Surface Society (TFOS) point to the importance of tear film homeostasis in the landmark DEWS II report, and we know that lens wear can put a strain on the tear film and ocular surface, altering the homeostatic balance and leading to symptoms of discomfort¹.

To limit the lenses' potential effect on ocular surface homeostasis, Bausch + Lomb INFUSE® was developed with ProBalance Technology™, a proprietary blend of ingredients providing osmoprotection and electrolyte balance that are retained in the lens matrix and released during wear. The lens material itself is also composed of humectants integrated into the flexible silicone matrix, resulting in high water content². My patients know me as an eyecare provider who advocates for advances in technology that will benefit them. I love learning about new contact

lens technologies, but for me, the proof is always in the patient response. It wasn't long before my patients and I realized how the technology in Bausch + Lomb INFUSE® lenses contribute to an exceptional wearing experience.

CLINICAL IMPACT

Being in South Florida, many of my patients are active older adults, who often complain of dryness symptoms and struggle to find contact lenses that meet their needs. Indeed, many contact lens wearers come to me ready to give up on contact lenses entirely, dissatisfied with their vision quality and/or comfort⁴. Recently, I had one of these patients try Bausch + Lomb INFUSE® lenses in my office, and her initial response was that she could hardly feel them in her eyes. At her follow-up visit 1 week later, she requested a year's supply.

For other patients, who have been wearing the same contact lenses for years without complaints, there may still be room for an improved wearing experience. I find it helpful to ask these patients whether there is anything they would change about their lenses, and how they perform at the beginning vs the end of the day. This opens up a conversation in which the patient may reveal that they wish they could wear their lenses for longer, or that they find themselves with ocular discomfort at the end of a long workday. It has been rewarding to offer Bausch + Lomb INFUSE® lenses to these patients—and to have them tell me that they weren't aware contact lenses could be this comfortable.

CONCLUSIONS

The Bausch + Lomb INFUSE® lens balances a combination of material properties I would not previously have thought possible—high oxygen permeability, exceptional moisture content, and low modulus—combined with breakthrough technology designed with ocular surface homeostasis in mind. In practice, the impact of these innovations is clear: the Bausch + Lomb INFUSE® lenses reliably deliver an exceptional wearing experience to a wide variety of patients.

NEXT-GENERATION SILICONE HYDROGEL MATERIAL²

Balances exceptional moisture with 55% water content, comfortable wearing and handling with low modulus 0.5 MPa, and high oxygen 134 Dk/t for breathability

BREAKTHROUGH PROBALANCE™ TECHNOLOGY^{2,3}

Proprietary combination of ingredients inspired by the TFOS DEWS II Report that are infused into the lens material and released to help maintain ocular surface homeostasis

➤ OSMOPROTECTANTS

Erythritol and Glycerin:
Help maintain ocular surface homeostasis under hyperosmotic stress

➤ ELECTROLYTES

Potassium: Plays an important role in ocular homeostasis

➤ MOISTURIZERS

Poloxamine 1107 & Poloxamer 181:
Help retain hydration, provide a smooth wettable surface, and maintain tear proteins in their healthy state

1. Craig JP, Nelson JD, Azar DT, et al. TFOS DEWS II Report Executive Summary. *Ocul Surf.* 2017;5(4):802-812. 2. Data on file. Bausch & Lomb Incorporated, Rochester NY. 3. Jones L, Downie L, Korb D, et al. TFOS DEWS II Management and Therapy Report. *Ocul Surf.* 2017;15(3):575-628. 4. Miller J, Giedd B, Subbaraman LN. Clinical comparison of a silicone hydrogel and a conventional hydrogel daily disposable contact lens. *Clin Ophthalmol.* 2021;15:4339-4345. 5. Keir N, Jones L. Wettability and silicone hydrogel lenses: a review. *Eye Contact Lens.* 2013;39(1):100-8.