Integral BioSystems to Present NanoM-Wafer™ Artificial Tear Film Ocular Insert at ARVO 2026

Details will be disclosed May 5, 2026

Bedford, MA-based Integral BioSystems will present data on its flagship innovation, the NanoM-Wafer™ ocular insert, at the ARVO May 3-May 7, 2026 at Denver, Colorado.

The NanoM-Wafer™ Artificial Tear Film Ocular Insert is currently designed to be placed under the lower eyelid space (conjunctival fornix). The product being presented is a form of the NanoM-Wafer insert containing a mixture of polymers, lipids and a hydration-enhancing excipient that interacts with cells to produce tear mucin, thereby replacing key components of the tear film in dry eye disease. The design of the wafer is such that the placement of the 200-micron dry wafer results in rapid hydration and transformation into a transparent, tissue-interlocking, tissue-conforming hydrogel that slowly dissolves on the ocular surface. The release of the hydrating excipient in question, resists further depletion of aqueous fluid and encourages the formation of a highly hydrated microenvironment. This product is being developed as a medical device to treat symptoms of dry eye, to be initially introduced in Europe, followed by other countries.

The NanoM-Wafer Artificial Tear Film Insert can be thought of the next generation version of Lacrisert, an ocular insert that was commercialized as a slow dissolving insert to treat severe dry eye symptoms. The NanoM-Wafer Artificial Tear Film Insert takes it into an advanced level of sophistication, into biomimetics and considerations of tissue-biomaterial interactions. The tissue-interlocking and conformal characteristics of the NanoM-Wafer Artificial Tear Film enable high biocompatibility and retention at the site.

The NanoM-Wafer Artificial Tear Film Insert is one of many ocular products in consideration, using this platform, from products from presbyopia, cystinosis and glaucoma. Prototypes of the product has been tested in rabbit eye models for safety and tolerability.

Title: Development of an *In-Situ* Forming Lubricating Ocular Bandage to Alleviate Symptoms of Dry Eye

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Session Number: 341
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Session Date/Times: May 5, 2026 from 1:15 PM to 3:00 PM
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Integral BioSystems is a specialty drug delivery contract research firm focused on formulation and analytical development of both small molecule and biologics. Integral's hybrid business model has enabled the development of its own proprietary innovations. In particular, scientific experts at Integral have conceptualized and designed both the OcuHeal™ and NanoM-Wafer™ technologies. Both technologies have been fully patented in 14 global jurisdictions, including Europe, US, Canada, India, China and Japan. Additionally, the evolving nature of the technologies have resulted in additional PCT applications.

If interested in partnering with Integral BioSystems, please reach out to the business development team at info@integralbiosystems.com.