

## SiO2 receives strategic investment from world drug leader

19 November 2019 | News

**SiO2's innovative technology is expected to help deliver regulatory benefits, improved primary packaging and potential operating savings for multiple products**



SiO2 Medical Products has announced a strategic investment by Novartis to explore and possibly use its materials science in packaging technology across multiple products. SiO2 containers are formed of a molded plastic body with a thin layer of glass on the inner side. With SiO2's patented technology, several possible benefits are expected:

- improved packaging (low particles, silicone oil and tungsten free, no delamination, glass-like oxygen barrier, tighter dimensional control, no breakage);
- innovative material science technology to achieve possible improved standards of quality and safety for biological products. As health authorities are becoming more rigid about particulate contamination, especially in ophthalmic products, SiO2 technology offers a unique platform to help meet this requirement; and
- possible operational savings related to better dimensional control, allowing for more precise handling, filling, inspection, interface with mechanisms (eg auto injectors) and dosing.

It is hoped that after the first successful use in ophthalmology, the technology can be extended to several products.

SiO2, a privately held material science company, manufactures precision molded cyclic olefin (COP) polymer primary drug containers with a thin, transparent, silicon-based nano-coating system and silica. This innovative coating system uniquely combines the durability and dimensional consistency of plastics with the oxygen barrier properties, low extractables and pH stability of glass, ie quartz.

"We thank our investors Novartis and MPM Capital and look forward to collaborating with Novartis on various uses of our materials science technology," said Lawrence Ganti, Commercial Director. "Novartis shares our vision of advancing technology for better patient outcomes. We believe this collaboration is one of the first of its kind, where using advanced

material science in drug delivery can help improve life." patients, "said Dr. Robert Pangborn , retired director of research and development at Dow Chemical Corp., and Dr. Bob Langer , professor at MIT , in a joint statement., both leaders of the SiO<sub>2</sub> Scientific Council and with the collaboration of the world's leading scientists.

"SiO<sub>2</sub>'s leadership, coupled with Novartis' collaboration, positions the organization for success," said Tony Rosenberg , MPM Capital's executive partner and board director of SiO<sub>2</sub>. "SiO<sub>2</sub>'s innovative surface coating technology for primary drug packaging has the potential to facilitate the innovation of numerous products throughout the development cycle through to final market introduction."