## [336] BIONANOSIM LTD-INNOVATIVE NANO-CARRIERS FOR IMPROVED CANNABIS-BASED DERMAL AND OCULAR THERAPEUTICS

# <u>Taher Nassar</u>, The Institute of Drug Research , The Hebrew University of Jerusalem, Ein Karem, Jerusalem, Israel

#### o Investment Rational

Based on decades of research by its founder and chairman, Prof. Simon Benita, inventor of IkervisTM -a leading ophthalmological anti-inflammatory nano-emulsion, BNS has developed a proprietary technology for nano-encapsulation of existing drugs. Generating revenues from various collaborations and out-licensing agreements, BNS represents a balanced risk investment profile, management proven track record both on the technological and commercial aspects and a diversified product portfolio.

### o Business Strategy

In February 2018, BNS established a joint venture with Breath of Life (BOL) Pharma to develop original and performant topical and ocular cannabis-based products using BNS nano-encapsulation technologies. BNS is engaged with a few out-licensing and collaboration agreement alliances with biopharma companies in which BNS is responsible for Drug Substance nano-carrier development while the partner is responsible for other product development activities as well as commercialization. At the same time, BNS is independently developing some of its portfolio products, thereby a blend of short, mid and long-term revenues and milestones are used to reduce risk and generate technological and business flexibility.

### • Core Technology

Proprietary nano-encapsulation of drugs with PLGA polymers capable of improving the delivery profiles and drug performance of small molecules and peptide-based drugs as well as nano-carriers manufacturing upscaling skills and GMP Infrastructure are at the core competence of BNS.

### • Product Profile/Pipeline

BNS – BOL joint venture is developing topical CBD (medical device track) for dermal inflammatory conditions, ocular CBD (medical device track) for dry eye syndrome, topical CBD (pharma track). BNS is also developing peripherally restricted Cannabinoid Receptor Type 1 (CB1) blockers without causing CNS-mediated side-effects, for the treatment of the metabolic syndrome such as obesity, type 2 diabetes mellitus and non-alcoholic fatty liver disease (NAFLD).

### • What's Next?

Topical CBD (Medical Device) clinical testing and regulatory approval 2019-2020, distribution activities to be initiated in 2021-2022.