



Source: Checkmate Capital

April 06, 2020 12:00 ET

# Monarch Biosciences Closes Seed Round Financing

Led by Checkmate Capital Group

**Development of Biomaterial-based Neurovascular Stent and Platform for Local Delivery of Cell Therapies**

LOS ANGELES, April 06, 2020 (GLOBE NEWSWIRE) -- Monarch Biosciences, Inc. ("**MonarchBio**") is pleased to announce completion of its seed round financing of more than \$1 million led by Checkmate Capital Group of Pasadena, California.

MonarchBio is an advanced life sciences company that is developing a pipeline of products based on its proprietary thin-film nitinol (TFN) biomaterial. MonarchBio's lead product – the **Titan Flow Diverter™** - offers potentially superior and more rapid occlusion of cerebral aneurysms compared with current leading neurovascular products in the market. Approximately 30,000 cerebral aneurysms rupture annually in the United States, and the market for flow diverting stents is approximately \$300 million annually. The second product in its pipeline, the **Engineered Lymph Node™ (ELN)**, is a TFN-based device for local delivery of cell therapies treating solid tumors.

The seed funding, which supplemented several million dollars of NIH funding, has been pivotal for the development of MonarchBio's **Titan Flow Diverter**. In preparation for first-in-human trials expected later this year, MonarchBio completed preclinical animal and human simulator testing conducted by a team headed by David Kallmes, M.D., Professor of Radiology, at Mayo Clinic's campus in Rochester, Minnesota.

"We welcome Checkmate Capital's investment," said MonarchBio's CEO, Leon Ekchian, Ph.D. "MonarchBio has enjoyed significant momentum recently based on its Mayo Clinic animal trials as well as its presentation at the MedTech Innovator Conference, a global competition and accelerator for companies focused on medical devices, digital health and diagnostics. We are grateful for this capital infusion and appreciate the collaborative working relationship we have developed with the Checkmate Capital team. We view Checkmate Capital as both a strategic and financial partner going forward as we prepare for our Series A financing," added Ekchian.

Checkmate Capital's CEO, Tom Paschall, will join the MonarchBio Board of Directors. "This investment reflects our confidence in MonarchBio's success with the applications of its unique and patented TFN biomaterial technology for a wide spectrum of advanced products," said Tom Paschall. "MonarchBio's pipeline of products such as the **Titan Flow Diverter** and **ELN** are groundbreaking advances in each area of application. Checkmate believes that MonarchBio's **Titan Flow Diverter** could become the new industry standard for aneurysm treatments based on its superior testing performance observed on-site by our team. Moreover, the **ELN** technology offers a novel approach to solid tumor therapy, enabling application of unique targeted immunotherapies (including CAR-T cells) to tumors, potentially increasing efficacy and avoiding or reducing adverse side effects associated with systemic treatments," added Paschall.

## **Titan Flow Diverter:**

The **Titan Flow Diverter** is a flow diverting stent used for the treatment of intracranial aneurysms. The TFD is an advanced medical device that uses an omni-direction thin film mesh to cover a neurovascular support stent. Once in place, the **Titan Flow Diverter** serves a dual purpose: (1) it restricts blood flow into the aneurysm which in turn causes the aneurysm to stagnate, and (2) it acts as a scaffold for rapid re-endothelialization of the vessel wall. In animal studies performed to date at Mayo Clinic, the TFN technology implemented via the **Titan Flow Diverter** has created a robust occlusion effect not observed with competing devices.

## **About Monarch Bio**

MonarchBio is a Los Angeles-based biotechnology company focused on its unique Thin Film Nitinol (TFN) biomaterial platform for use in advanced medical device, biotechnology, and regenerative medicine products. TFN is fabricated using techniques adapted from the electronics industry. An ultra-pure film of Nitinol, 1-20 micrometers thick (for comparison, the average human hair is approximately 50 micrometers thick), is deposited on a silicon wafer with a specially designed micropatterned surface. When the film is removed from the wafer, it maintains the shape or pattern on the wafer surface. MonarchBio has thirteen issued U.S. patents in addition to having exclusively licensed a portfolio of patents from UCLA and the Fred Hutchinson Cancer Research Center related to various applications of TFN technology. For more information, please visit [www.monarch-bio.com](http://www.monarch-bio.com).

## **About Checkmate Capital**

Checkmate Capital is an investment group managing family office assets and Asian-Pacific institutional funds. Checkmate's primary areas of investment are agricultural bioscience, waste technology, energy and energy technology, biomedical and biotechnology, and diversified special situation opportunities. With offices in Los Angeles and Beijing, Checkmate has a team of professionals able to provide seasoned expertise in Checkmate's focused industries, leveraging a powerfully efficient international ecosystem of strategic partners, business talent and resources. Checkmate's strategic oversight facilitates relationships among its investees as well as technology licensing in territories instrumental to the success of its portfolio companies. For more information please see [www.checkmatecapital.net](http://www.checkmatecapital.net)

## **Contact**

Ken Alcazar  
[ken@checkmatecapital.net](mailto:ken@checkmatecapital.net)