Vanessa Research
Medical Division

925 Sherman Avenue
Hamden, CT 06514, USA

Ludmila I. Kvochina

Industry:
Diagnostic tests

Project Leadership
Ludmila I. Kvochina, MD, PhD, Leadership of MIDA, 25 years in Life Science, 6 years in R&D of commercial companies

Scientific Advisory Board
Dmitry Kravtsov
Norman Gray

Seeking
Connections for manufacturing and marketing

Financing to Date
$1M – Private.

Company
Founded: Jan 2015
C-corporation

IP:
Unique antibodies and peptides

Executive Summary:
MIDA is a rapid, simple screening test for secretory diarrhea to justify the expensive confirmation-test that is available at only seven centers in the world. In particular, the first MIDA diagnostic kit will target the rare genetic secretory diarrhea called microvillus inclusion disease (MVID). The MIDA kit includes a dipstick (similar to a pregnancy-strip test) that when inserted into the stool provides a positive or negative reading. The test will be instantaneous. The novel test kit will primarily be available in the areas where MVID is common, as well as at hospitals or medical centers with a pediatric gastroenterology department. It is anticipated that the test will retail for approximately $250 per kit.

Market Opportunity / Unmet Need:
Genetic diseases often lack fast and simple detection methods. This is especially true in the case of MVID, where the "golden standard" diagnostic method is the electron microscopy of intestinal biopsy material. MVID is immediately life-threatening soon after birth, presenting with the highest mortality rates within the first month of life. Contributing to the mortality rates is the absence of rapid diagnostic procedure for patients with MVID. Therefore, the introduction of an in-hospital/clinic bedside test to indicate the possible genetic nature of the diarrhea is a perfect and timely opportunity.
Easy and timely deployment makes our test a "life-saving" diagnostic modality for patients with MVID.

Product - Pipeline:

The MIDA™ dipstick is a small non-invasive test, that is inserted into a sample of the patient's stool. The core technology of the first MIDA test is identification of MVID biomarker(s) with our own proprietary antibodies which are being developed in-house. Test results are very visual and easy to read, relying on the appearance of colored bands in the display window of the device (similar to the pregnancy-strip test).

Technical Milestones:
2018 Proof of concept performed. Shown feasibility of specific reaction.
Q2-2019 Development of antibodies, development in progress.
Q3-2019 Start alliances with international gastroenterology (pediatric society) for update of a new standard of care protocol, governmental health departments and health insurances
Q4-2019 Manufacturing first-run of stable test dipstick.
Q3-2020 Distribution begins

Competition:
Currently, there is no method for screening newborns for genetic diarrheas such as MVID. MIDA test is a unique solution in the field of neonatal diarrheas.
The standard of care now is to hydrate and provide nutrition through a 24/7 IV infusion; if genetic diarrhea is suspected, intestinal biopsies are sent for electron microscopy and genetic testing. These tests are slow (weeks to month), expensive and are available only in large medical research-type facilities.

Financial Projections (Unaudited):
Break-even point: end of 2021 **gross profit** – up to $7M – 2021; $9.2M – 2022;
$11 M – 2023; $17.5M – 2024. Then 10%/year increase by lowering costs of manufacturing.