



A BLOOD TEST THAT DETECTS CHRONIC INFLAMMATION ENABLING THE EARLY DETECTION OF CANCER

Company Name: Improdia Ltd.

Country of Registration: Israel.

Key Stake Holders: Goldman Bio; Dr. Raphael Nir; Mr. Shamir Kaminisky; Citrine-8 Limited Partnership. Yissum Technology Transfer Company of the Hebrew University Ltd.

Fields of Activity: Diagnostics/Immunology.

Investment Opportunity:

Website	www.improdia.co.il
Included in the prospectus of Goldman Bio Limited Partnership	✓
Estimated Valuation (External, July 2020)	USD 8.2 Million
Planned Investment Multiple	12
Planned ROI	3 Years
Estimated Risk	Medium
LinkedIn	www.linkedin.com/company/improdia

The Product: A blood test that measures the immune status of patients suffering from diseases associated with chronic inflammation. The Company is presently focusing on diabetes, inflammatory diseases and cancer treatments.

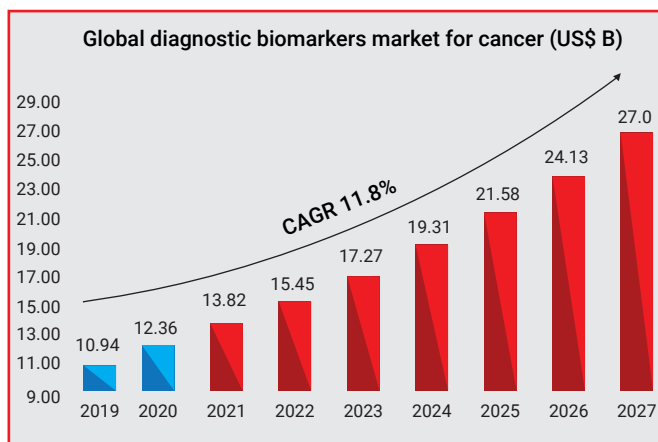
Business Opportunity: The value of the Global Biomarkers Market is expected to be around USD 79.0 billion by 2025, growing at around 13% CAGR (Market Research Engine, January 2020). The Global Cancer Diagnostics Market size is expected to reach USD 249.6 billion by 2026, exhibiting a 7% CAGR (Grand View Research, February 2020).

The estimated global direct health expenditure on diabetes in 2019 was USD 760 billion and is expected to grow to a projected USD 825 billion by 2030. In 2019, it was estimated that 463 million people have diabetes and this number is projected to reach 578 million by 2030 (IDF Diabetes Atlas, 9th Edition 2019).

From the beginning of 2019 until mid-June 2020, there have been 97 successful IPOs from the biotech sector on the Nasdaq, out of a total of 254 IPOs (approximately 38%). A company in the same field as Improdia went public (IPO) in June 2019, and its shares are currently trading at 2.4 times their issue price.

According to a report by Allied Market Research, in 2019 the cancer biomarkers market totaled about \$ 10.94 Billion and by 2027 is expected to reach about \$ 27 Billion. Accordingly, the CAGR for the years 2019-2027 is expected to amount to about 11.8%. The main causes of market growth are the increase in cancer incidence, the increasing importance of biological and targeted therapies, technological progress, and the greater precision and reliability of cancer biomarkers and cancer detection. In addition, an increase in investment by governments and by private and public organizations in favor of biological research and technological advances in cancer diagnosis has a positive effect on the market. The main regions for this market are Europe, North America

and the Asia-Pacific Region. The major players in the diagnostic biomarker market for cancer are: F. Hoffmann-La Roche AG, Abbott Laboratories, GlaxoSmithKline plc, Novartis AG, Merck & Co, Inc., Bristol-Myers Squibb Co., Eli Lilly and Company, Pfizer Inc., Qiagen Co., and Genomic Health Inc.



The Need: Acute Inflammation is a beneficial reaction that enables the body to combat infection or injury. Chronic inflammation, associated with a wide range of diseases such as cancer, diabetes, and rheumatic, degenerative, heart and pulmonary diseases, is known as the “silent killer”. This is a harmful reaction that suppresses the immune system’s natural ability to defend the body. Current tests for measuring inflammation cannot distinguish between acute and chronic inflammation and are unable to measure the status of the immune system. Therefore, there is a tremendous need for new tools that evaluate the immune status and inflammatory stage of patients suffering from diseases associated with chronic inflammation. Monitoring an individual’s immune status will predict treatment response, identify possible complications, and enable the early detection of cancer.

The Solution: Improdia’s blood test distinguishes between acute and chronic inflammation, by unique biomarkers that hold different levels of sensitivity to the inflammatory environment. Improdia’s blood test gives quick and accurate results in real time, identifying those patients that are most likely to benefit from a therapeutic treatment, and predicting possible complications before they become evident. This allows for personalized and efficient treatments according to the patient’s immune status. Improdia’s novel technology has enormous potential both as a prognostic and diagnostic test and as a key tool for pharmaceutical companies in the development of new drugs for a wide range of diseases associated with chronic inflammation. The technology is based on wide research performed under the supervision of Professor Michal Baniyash, from the Center for Immunology and Cancer Research at the Hebrew University of Jerusalem.

Status:

- **Present Status:** Ongoing clinical trials in rheumatic diseases at one medical center.
- **Forthcoming Milestones:** Expand clinical trials to further diseases in several medical centers.
- **IP:** 20 granted patents, 4 further patents under review.
License Agreement with Yissum Technology Company of the Hebrew University.

Business Model:

- **Sales Strategy:** Sales through distributors, medical insurance companies, and health maintenance organizations.
- **Exit:** IPO/M&A.

The Team:



Miriam Lerner, Co-CEO & CTO;

Ms. Lerner received her MSc in applied microbiology from the Hebrew University of Jerusalem. For over 20 years she has been involved in the R&D of diagnostic technologies, previously holding senior management positions in two companies from their establishment stage. She is experienced in leading project and research teams, as well as in QA Management. Miriam has co-authored several scientific publications relating to her research.



Dr. Raphael Nir, Co-Founder;

Received his PhD in Biotechnology at Tel-Aviv University. A scientist, entrepreneur and angel investor with over 27 years of experience commercializing recombinant cytokines and pre-clinical contract research services. He is the co-founder of two pre-clinical contract research organizations: SBH Sciences and Woodland Biosciences; and three biotechnology companies: Karyopharm Therapeutics (NASDAQ: KPTI), Galectin Sciences and Alma Bio Therapeutics.



Dr. Roy Eldor, Medical Advisor;

Dr. Eldor is the Director of the Diabetes Unit in the institute for Endocrinology, Metabolism and Hypertension, in the Tel Aviv Sourasky Medical Center, Israel, the Director of the Central District Diabetes Clinic at the Leumit HMO, Israel, and a Principal Scientist in Clinical Research on Diabetes & Endocrinology at the Merck Research Laboratories, USA. He is an endocrinologist, internist and researcher with over twenty years of clinical, academic and scientific experience; and a recognized international expert and speaker with over 40 peer reviewed publications.



Prof. Michal Baniyash, Inventor;

Prof. Baniyash received her Ph.D. in Immunology from the Weizmann Institute of Science and is currently a lecturer and principle investigator in the Department of Immunology and Cancer Research at the Hebrew University of Jerusalem. She has more than 20 years of experience leading immunological research on the mechanisms and clinical implications of chronic inflammation and suppression of the immune system in various diseases; and has over 50 publications in prestigious medical journals and numerous inventions on biomarkers in her field.



Prof. Dedi Meiri, Member of the Scientific Advisory Board;

Prof. Meiri is medical cannabis specialist, a lecturer, researcher and faculty member at the Technion Institute of Technology, in the fields of Cancer Biology and Cannabinoid Research. He holds a master’s degree in biochemistry, a doctorate in plant biotechnology from Tel Aviv University and a post-doctorate from the Cancer Institute in Toronto. He has published five articles on pancreatic cancer, ovarian cancer, and cancerous metastasis.

