1st August 2018

Ground-breaking Discovery in Medicinal Cannabis Research

The Board of Queensland Bauxite (ASX: QBL or "the Company") is pleased to announce **a materially positive update** regarding the company's research into the use of medical cannabis in autoimmune disease treatment. (Although the company went into a trading halt pending the release of this announcement, due to the recompliance currently underway as announced earlier, this announcement will not lift the suspension of the company's securities).

On the 26th of February 2018, QBL announced a Sponsored Research Agreement between Medical Cannabis Limited ("MCL")'s subsidiary Medical Cannabis Research Group ("MCRG") and Professor David Meiri and his research team at the Technion Institute, Haifa, Israel. Professor Meiri's team is known to be of the leading Cannabis research labs in the world. The purpose of the Agreement was for Professor Meiri to research and find a use for medical cannabis in the treatment of the auto-immune disease multiple sclerosis.

Autoimmune disease is on the rise worldwide and the American Autoimmune Related Diseases Association says that auto-immune disease currently affects over 50 million Americans.

There are over 80 autoimmune diseases, including: Rheumatoid Arthritis, Systemic Lupus Erythematosus (lupus), Inflammatory Bowel Disease (IBD), Multiple Sclerosis (MS), Type 1 Diabetes, Mellitus, Guillain-Barre Syndrome, Celiac, Chronic Inflammatory Demyelinating Polyneuropathy, Psoriasis, Graves' Disease, Hashimoto's Thyroiditis, Myasthenia Gravis and Vasculitis.

An autoimmune disease is a condition in which your immune system mistakenly attacks your body.

The immune system normally guards against germs like bacteria and viruses. When it senses these foreign invaders, it sends out an army of fighter cells to attack them. Normally, the immune system can tell the difference between foreign cells and your own cells. In an autoimmune disease, the immune system mistakes part of your body — like your joints or skin — as foreign. It releases proteins called autoantibodies that attack healthy cells.

To date, medicinal cannabis formulae have been shown to be effective in the treatment of many diseases including treatment of epilepsy in children, pain of multiple sclerosis, nausea from cancer chemotherapy, poor appetite and weight loss caused by chronic illness, such as HIV, or nerve pain, seizure disorders and Crohn's disease.

A ground-breaking discovery - Prof. David (Dedi) Meiri Ph.D.

Professor Meiri is 'thrilled' to report that his research has <u>made a ground-breaking discovery</u> in the lab long before anticipated, and that during laboratory testing from the hundreds of strains that he has available to research, he has discovered cannabinoids from a unique cannabis strain that has the capacity to inhibit dendritic-dependent T-cells proliferation, which is vital to finding the right cannabis extracts to make a product formulation that can regulate immune function and treat the MS disease.

Following the success of this research in the lab, trials on mice are immediately commencing this week. Professor Meiri has the support of the Israeli Government and the leading hospitals in Israel for immediate access to human trials to fast track product development as soon as the results of the current trials on mice will support this, which may be as soon as early 2019.

As announced on 26 February 2018, MCL through its Medical Cannabis Research group (MCRG) agreed to fund Research into Dr. Meiri's study in return for an exclusive license for the commercialisation of any product derived from the Research. The Technion Israel Institute of Technology will receive 4 percent royalty of the net sales revenues generated by MCRG from the products resulted from the Research.

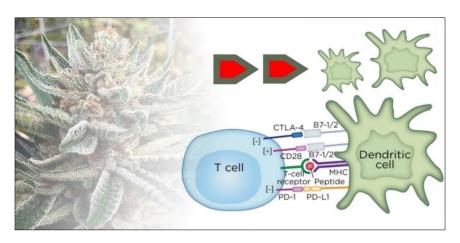
Professor Meiri tells of his significant discovery as follows:

"Millions of people worldwide are afflicted with multiple sclerosis (MS). MS is a chronic disease of the brain and spinal cord and is a common cause of serious physical disability in young adults, especially women. MS has a heterogeneous presentation that can include sensory and visual disturbances, motor impairments, fatigue, pain and cognitive deficits.

In the past year the laboratory for cannabinoid research at the Technion- The Technology Institute of Israel, **initiated a research program funded by MCL**. The overall objective of this study is to match effective cannabis extracts that regulate/modulate immune function, specifically, autoimmunity in MS, in order to optimize treatment for MS patients."

The group at the Technion headed by Prof David (Dedi) Meiri established the novel ability to analyze the metabolites present within the cannabis plants and their specific chemical composition. Using this novel method the team screened tens of different strains which were fully characterized by their LC-MS/MS (liquid chromatography—tandem mass spectrometry) methods. Using an in vitro system of mononuclear cells which they have differentiated dendritic cells and mimic the MS disease, the team has identified unique strain that has a robust capacity to inhibit dendritic-dependent T-cells proliferation.

These findings of a specific cannabis strain that has deleterious effect on dendritic-dependent T-cell proliferation, highlights the potential of cannabinoids as part of the arsenal for MS therapy.



Professor Meiri together with Andrew Kavasilas, Founding Director of MCL, further agreed to cooperate in exchanging information. Andrew Kavasilas has a unique seed bank, useful for research into the benefits of cannabis for medicinal purposes. This seed bank is an accumulation of selectively chosen strains and chemovar varieties within a period of approximately two decades. Professor Meiri and his team of over 40 researchers at the Technion have isolated over 600 cannabinoids as a basis for his research. Cannabinoids are the chemicals which give the cannabis plant its medical properties.

Management at Queensland Bauxite have had the good fortune and privilege of being able to organise this alliance between Professor Meiri and MCL. The task at hand was to research whether any of the isolated cannabinoids from the cannabis plant is able to treat autoimmune disease with special emphasis on multiple sclerosis. MS is an obvious target, as cannabis has been proven to help with multiple sclerosis pain. Moreover, any success in research done on the autoimmune disease of MS, will likely benefit research in other autoimmune diseases where proliferation of cells needs to be halted.





(left photo) QBL CEO Sholom Feldman with Professor Meiri, Dr Igal Louria-Hayon PhD and Dr Gil Lewitus PhD who are heading the cannabis research on behalf of MCL/MCRG. (right photo) Andrew Kavasilas with one of his research plants.

Andrew Kavasilas said, "This news is fantastic, we understand how broad and complex the entire medical Cannabis issue is. If we're already finding specific cannabinoids of interest that we're capable of producing in vast quantities to treat identifiable medical conditions, product development could happen much sooner than I thought."

Meiri's group at the Technion, have already started to screen for the immunoregulatory properties of many other cannabis strains/extracts that are available to them on immune cell function and MS immunopathology by applying their above developed method. After finding these strains they will isolate the specific compounds or combinations of compounds from the strains that were effective and will prove that these compounds or combinations of compounds are responsible for the observed effect.



Next, they will demonstrate the immunomodulatory properties of specific cannabis extracts on various MS rodent models and identify specific compounds or combinations of compounds that can then be used in clinical trials as potential treatment for MS.

Prof. Meiri commented, "These exciting results are a great foundation for our collaborative work. The Technion group finished establishing all the necessary systems for this work and we are thrilled with the preliminary results."

MCL's medical cannabis research team, headed by Andrew Kavasilas and John Easterling, is currently building a local Australian research team to include representatives of conventional medical and scientific research. This team is intended to include the local Australian research and medical community in the leading research being undertaken in Israel. MCL intends to build a substantial presence being at the forefront of bringing cannabis solutions for today's most pressing health care concerns.



MCL Director, John Easterling with Prof. David (Dedi) Meiri

Pnina Feldman Executive Chairperson of QBL concludes: "This discovery validates the potential value creation of our management's strategy to invest in cannabis genetics and medical research. According to Oristep Consulting, the size of the Autoimmune Disease Treatment Market was US\$36bn in 2016. Following successful human trials which Professor Meiri believes can potentially be completed in Israel within 18 months, the expected outcome is for the specific product formulation to be patented and marketable by QBL/MCRG. The Board anticipates that this research could form the basis of an entirely new approach for autoimmune disease treatment. As the medicinal cannabis market propels into the next decade, MCL intends being at the forefront of life altering research and profit."





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About Queensland Bauxite

Queensland Bauxite Ltd is an Australian listed company focused on the exploration and development of its bauxite tenements in Queensland and New South Wales. The Company's lead project is the South Johnstone Bauxite Deposit in northern Queensland which has rail running through the project area and is approximately 15-24 kilometres from the nearest deep water port. The Company intends to become a bauxite producer with a focus on commencing production at South Johnstone as early as possible. The Company also pursues additional investment opportunities, and has agreed to acquire a 100% shareholding in Medical Cannabis Limited, an Australian leader in the hemp and Cannabis industries, and a 100% shareholding in Medcan Australia Pty Ltd, a company with an ODC cultivation and production License, ODC Cannabis import and export Licenses, and a DA approved Cannabis production and manufacturing facility.