

EFFECT OF CHLORPROMAZINE (LARGACTIL) ON SCHIZOPHRENIC PATIENTS AND GENETIC ASPECTS OF THE CONDITION

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Introduction. Schizophrenia is a group of mental disorders characterized by hallucinations, illusion and delusions that affect persons social and occupational functioning and should last not less than a period of six months. People with schizophrenia requires lifelong treatment. Early treatment may help get symptoms under control before serious complications develop and may help improve the long-term outlook. Chlorpromazine is one of the most common drugs that are used for the treatment of people with schizophrenia worldwide. It is also used for the treatment of other diseases like bipolar disorder, attention deficit hyperactivity disorder etc.

Aim. The aim of the study was to collect world literature as to whether chlorpromazine (Largactil) has effect on schizophrenic patients and early treatment of schizophrenia. Studies have shown that the diagnosis is a heritable trait that passed down through DNA and about 1 percent of the general population suffer from schizophrenia.

Material and methods. Accordingly to studies conducted by groups of researches individuals under the study were randomly assigned on chlorpromazine and placebo for collection of data. To avoid bias, the test drug was named as Alpha (A) and Beta (B) and only the prescribing psychiatrist knew about the drug treatment. The dose of chlorpromazine used in the study was 100-200 mg per day and the dose of placebo was 5-20 mg per day in divided doses. Data was analyzed using risk ratio (RR), estimated confidence interval (CI), the number needed to treat (NNT) was calculated statistically to get results.

Results and discussion. The examination for positive, negative and general effect of 5276 patients over a period of years. The scores of 2638 individuals taking either of chlorpromazine or placebo for positive, negative and general effect were added separately for each visit and the mean was taken. Analysis of trials shows that, Chlorpromazine promotes a global improvement although placebo response was also seen. People that were given Chlorpromazine did not leave trials early both short term effects such as neuroleptic malignant syndrome, low blood pressure, permanent movement disorder were many.

Conclusion. The Chlorpromazine was found to be more effective than placebo in treatment negative symptoms and positive effects of schizophrenia.

ARTIFICIAL INTELLIGENCE IN PREVENTATIVE MEDICINE AND FUNCTIONAL FOOD

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Introduction. Substances with therapeutic potential have existed within nature for hundreds of millions of years. However, humans have not been able to identify, access and harness the potential of those substances with the necessary speed and accuracy but with the growing implementation of the AI there is a better scope for the production of highest quality of nutraceuticals.

Peptides that trigger biological responses in vivo beyond nutrition are called bioactive peptides. The peptides trigger physiologic responses that are important for human health and therefore constitute a growing research area of interest to the functional food and pharmaceutical industries.

In order to streamline the production of these peptides, bioinformatics tools have been proposed to be useful for predicting the types, physicochemical characteristics, as well as biological properties of these peptides.

Aim. A breakthrough in significantly improving human health by harnessing the power of artificial intelligence to create a bioactive ingredient which will help preventing diseases from happening

and also curing them in one hand, in the other hand AI will minimize time and fee cost of mining of bioactive targeted molecules.

Materials and methods. Scientists are now saying that there are ingredients, which can be added to sports products (energy drinks and nutrition bars), may improve post-exercise recovery by reducing inflammation. This is not only beneficial to those who frequent the gym, but for professional athletes who rely on their bodies for their livelihood.

This recently discovered ingredient is called «PeptAIde» it comprises a unique peptide network unlocked from rice protein developed to alleviate inflammation, the body's response to injury.

Research demonstrates that the consumption of PeptAIde leads to anti-inflammatory responses by modulating cytokine responses and immune activity. As a result of the breakthrough, biopharma giant BASF will bring to the market this product called PeptAIde, which is a patented network of anti-inflammatory bioactive peptides discovered by Nuritas's proprietary AI platform.

The product is being launched commercially in the US with additional launches in Asia Pacific and Europe in 2019.

Founded in 2014, Nuritas combines IT and life sciences expertise to mine DNA and protein data from plant materials in the hope of discovering new food components to help prevent, manage and possibly even cure disease.

The tools used in molecule mining are adequate sets of software which combine the artificial intelligence sorting algorithms, matrixes and the bimolecular, drug technology theories, many types of mining are available to application on a ready bioactive compounds database such as ChEMBL data base, but what makes Nuritas special is their unique mining software which targets the only wanted bioactive element with the specific properties they want in any natural food, in less time possible.

Results and discussion. «Harnessing the power of AI to significantly improve human health through new discovery is no longer a vision for the distant future», Dr Emmet Browne, chief executive officer of Nuritas.

So actually, the AI has opened a new era in drug technology. One of the company's most exciting developments is the discovery of a peptide for the prevention of diabetes. The peptide has the potential to maintain blood sugar levels and prevent the onset of the condition. The drug-candidate is currently undergoing clinical trials to evaluate safety and efficacy in pre-diabetes.

Siliconrepublic.com reported that Nuritas secured 16m € in Series A funding led by Chicago-based Cultivian Sandbox Ventures, bringing its total investment at the time to approximately €25m. Earlier last year, Nuritas started working with food giant Nestlé to discover bioactive peptide networks within natural food sources. Nestlé is the world's largest food and beverage company, with a presence in 191 countries and 328,000 global employees.

Conclusion. In terms of the latest breakthrough, PeptAIde is the first product from a deep collaboration between Nuritas and BASF, which aims to discover and commercially develop food-derived, natural bioactive peptides for health benefit.

Historically, AI has been associated with significant hype but has to lead to the discovery of a healthcare product. With the launch of PeptAIde, Nuritas has delivered on that promise for the first time in human history by demonstrating AI's true potential to improve health. AI has enabled what was previously considered impossible.

DIABETES: GENETIC AND OTHER FACTORS

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Introduction. A disease in which the body's ability to produce or respond to the hormone insulin is impaired, resulting in abnormal metabolism of carbohydrates and elevated levels of glucose in the blood. Glucose is the main type of sugar in the blood and is the major source of energy for the body's cells.