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Genome, Validity of Adjuvants & Misterming Adjuvants as Cancer Vaccines

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ABSTRACT: *The term **adjuvant** comes from the Latin word 'adjuvare' meaning help. Thus, **adjuvants** help vaccines improve the antigen-specific immune response by inducing pathogen-associated molecular patterns (**PAMP**s) that can activate various pattwern recognition receptors (**PRR**s) of innate immune cells.The key objective of this study is to verify that what are called **therapeutic vaccines** of **cancers** are totally the types of **adjuvants** that increase the **immunogenicity** of **neoantigens** (**autovaccines**) found on surfaces of cancered cells such as those of metastatic tumors. The contents of Figures & Table were designed to serve as Results derived from the targetful and strategic methods implemented, under the title of **Methodology** & **Results**. The contents of Figures & Table under the title of **Methodology & Results** represent the result. Represented by 31 conclusive statements listed (enumerated) under the **conclusion** section of this paper.*

KEYWORDS: adjuvant, vaccine, autovaccination, cancerous genome, neoantigen, immunogenicity, autovaccine

INTRODUCTION

The term adjuvant comes from the Latin word '*adjuvare*,' meaning help. Thus, adjuvants help vaccines improve the antigen-specific immune response by inducing pathogen-associated molecular patterns (PAMPs) that can activate various pattern recognition receptors (PRRs) of innate immune cells.

Adjuvants are crucially**:**

►important components of vaccines for **infectious diseases,** and

►important by directly increasing **immunogenicity** of **neoantigens** (nonself peptides/proteins synthesized by **Cancerous Genome**) found on surfaces of cancered cells of tumors so that these tumors of autoinfected cells are detected and destroyed by immune cells. **Adjuvants** increase the:

►**immunogenicity** of **antigens** found within attenuated or killed **vaccines**, and

►**immunogenicity** of **neoantigens** found on surfaces of **autoinfected cells**. Mechanisms by which adjuvants enhance anti-tumor immunity rely on the stimulation of innate immunity by way of stimulating pattern recognition receptors (**PRRs**), such as Toll-like receptors (**TLRs)** that are used to recognize **structurally conserved molecules,** derived from **microbes (pathogens),** that are felt, sensed, or detected by PRRs to be foreign or nonself. **TLRs** are usually expressed (found) on **sentinel cells** such as **macrophages** and **dendritic cells** that belong to the innate immune system[1, 2]. TLRs are a class of **proteins** that play a key role in the innate immune system. TLRs received their name from their similarity to the protein coded by the **toll gene**. Toll-like receptors (TLRs) are the important mediators of inflammatory pathways in the gut which play a major role in mediating the immune responses towards a wide variety of pathogen-derived ligands and link adaptive immunity with the innate immunity.

PRRs such as TLR of innate immune cells prime (stimulate) robust and sustained adaptive immune response against the tumors. On the other hand, certain adjuvants such as ISCOMs and nanoparticle forms of CpG ODN, can achieve potent anti-tumor immune responses by efficiently delivering the adjuvant into the tumor site or antigen presenting cells (**APCs**). The adjuvants found in modern vaccines are commonly divided into two major classes**:**

1. Immunostimulant adjuvants such as TLR ligands, cytokines, saponins, and bacterial exotoxins that directly act on the immune system to increase responses to antigens, and

2. Delivery system, Depot, or **Vehicle adjuvants** presented to increase **immunogenicity** of**:**

►**antigens** found in vaccine to be exposed to the immune system of uninfected healthy individuals in an optimal manner including controlled release and depot delivery systems to increase the specific immune response to the antigen for prevention against infectious diseases caused by pathogenic organisms (prophylactic measure), or

►**neoantigens** found on surfaces of cancered cells, being loaded on **MHC**, such as those on surfaces of metastatic tumors and then to expose to the immune system that does eliminate cancered cells (masses of autoinfected cells or tumors) by deadly attack [3-5].

The key objective of this study is to verify that what are called **therapeutic vaccines** of **cancers** are totally the types of **adjuvants** that increase the **immunogenicity** of **neoantigens** (**autovaccines**) found on surfaces of **cancered cells** such as those of metastatic tumors.

Methodology & Results

The contents of **Figures & Table** herebelow are designed to serve as evidential Results in the targetful strategy of this study and that is why it is entitled **Methodology & Results** hereabove.

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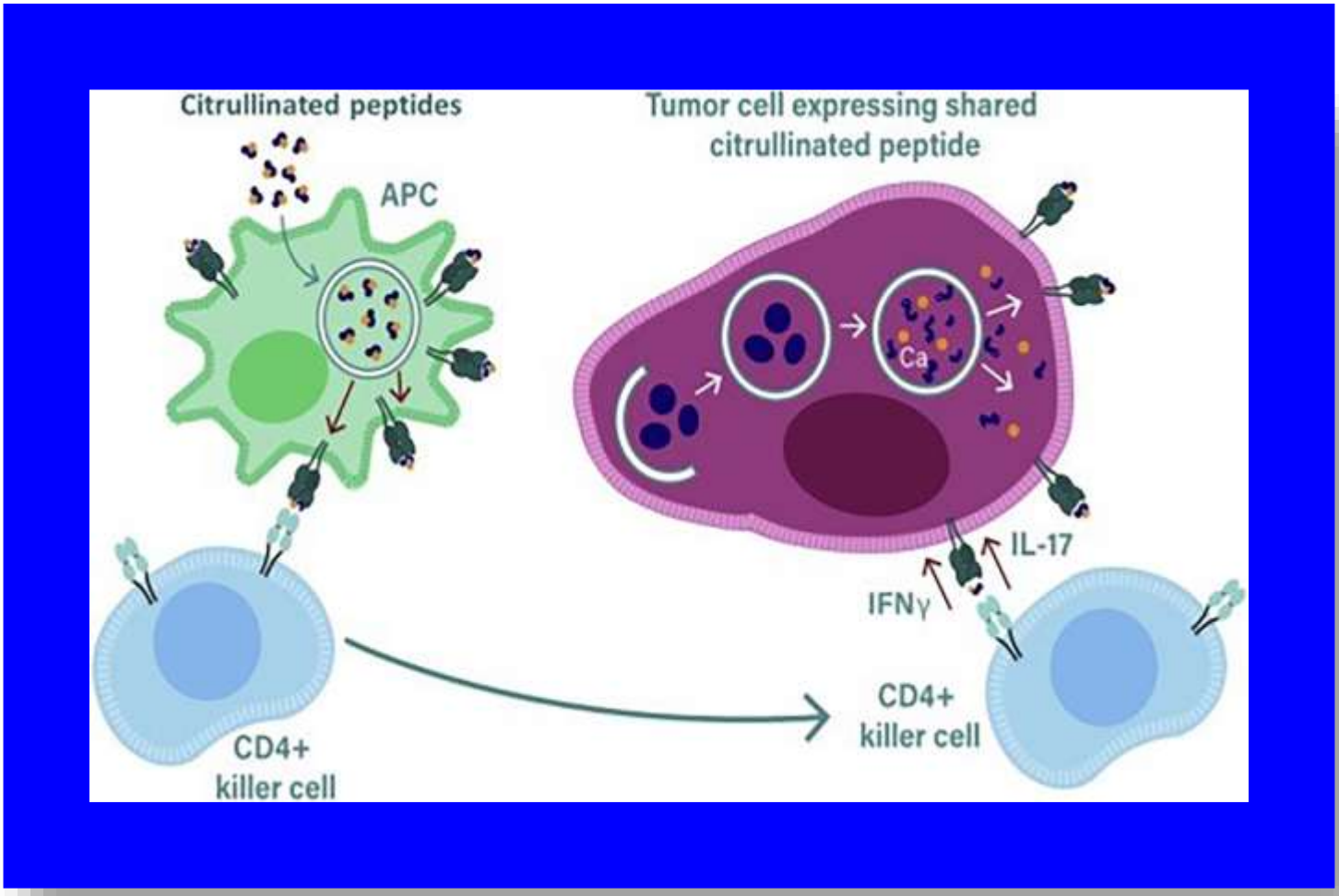

Figure 1: During stress induced autophagy and in the presence of inflammation citrullinated peptides can be presented on major histocompatibility complex (MHC) class II molecules for recognition by CD4+ T cells [6]. During inflammation many cytokines are produced, the majority are proinflammatory that result in the upregulation of MHC class II expression that then activates CD4+ T cells. Primed killer CD4 T cells enter the tumor and are reactivated by APCs presenting citrullinated peptides from tumors allowing recognition and lysis by the killer CD4 T cells.

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Table 1: Classification of adjuvants on the basis of their modes of action [6].

Class	Adjuvant	Immune response
Delivery system	Liposomes, virosomes	B, T_h1, T_h2, CTL
	Emulsions: MF59, Montanide	B, T_h1, T_h2, CTL
	Saponin based: ISCOMs, QS-21	B, T_h1, CTL
	Mineral salts: alum, AS04	B, T_h1, T_h2
Immunostimulant	TLR ligands: Poly I:C, MPL, GLA, imiquimod, CpG ODN	B, T_h1, T_h2, NK, CTL
	Saponin based: ISCOMs, QS-21	B, T_h1, CTL
	Polysaccharides: chitin chitosan (16), β-glucan	B, T_h1, T_h2, NK, CTL
Combinations	TLR9 + STING ligands: K3 CpG + cGAMP	B, T_h1, NK, CTL
	Adjuvant Systems: AS02, AS04, AS15	B, T_h1, T_h2

Figure 2: Jules T Freund (born Jun 24, 1890 in **Hungary** & died Apr 22, 1960 in **America**) was a **Hungarian** medical doctor; later he became **American** immunologist, most famous for the **Freund's Adjuvant**.

Figure 3: William Bradley Coley, is an **American** bone surgeon & cancer researcher (1862-1936).

►**William Bradley Coley** was recognized as **Father of Cancer Immunotherapy**, based on **Coley's toxin**.

►**William Bradley Coley** (date of: birth. 12 January 1862; death. **16 April 1936** at the age of 74).

Figure 4: Edward Jenner (1749-1823).

►**Edward Jenner** (1749-1823), is an **English** physician/surgeon, scientist, and pioneer of smallpox.

►Vaccination was first pioneered in the 18th century by **Edward Jenner** and eventually led to the development of the smallpox vaccine and subsequently the eradication of smallpox.

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Figure 5: National flag of Ethiopia.

Figure 6: **Feleke Eriso Orbalo** BSc, MSc, PhD., is an **Ethiopian** human parasitologist (immunoparasitologist), the **Father of:-** **Perfect Law of Genomology**, **Genomic-things**, **Genomosphere**, etc and of many other **Principles** & **Concepts** (born 24 Nov. 1962, age of 59 at present).

Feleke EO is:

►the **first** integrator of **Genomology**, **Chemistry**, & **Physics** by way of the same language of **Universal Reactions of Matter**,

►the **first** interpretor of the fact that both the **undesirable genomic changes** that result in genomic diseases and the **desirable genomic changes** in normal human genome which result in normal phenotypes in the individuals synthesized are **countably infinite** in potential number of kinds,

►the **first** genomologist to prove the fact that viruses are certainly **genomic-things**,

►the **first** genomologist who verified the best of truth with spectacular & concrete evidences about the fact that viroids are **genomic-things,**

► the **first** genomologist to verify that the **Genome**'s **coded/designed directives** are implemented by its **transcripts** & **proteins**.that serve as engineers in the **metabolism** of all genomic-things,

►the **first** scientist on this planet (Earth) to define what a scientist (living-thing or genomic-thing) is. Before him, scientists didn't know themselves but they were creating other sciences,

►the **first** scientist to interpret what the actual autointracellular pathogen is in diseases of **cancer** & **diabetes mellitus type 1**,

►the **first** scientist to state the clear cut difference between the **risk factors of cancer** & the **actual causative agent** of **cancer**,

►the **first** genomologist who proved that what had been wrongly termed **therapeutic vaccines** should be totally called **adjuvants**,

►the **first** scientist to verify that **Coley's toxin** was certainly a type of **adjuvant**.

►the **first** scientist to interpret that **immune response**, **epigenetic modifications/changes**, **syndromes**, and **symptoms** observed are the evidential **supersensitive** responses of the human **Genome**,

►the **first** scientist who stated that the development of **cancer** is always **autovaccinated** with no exception,

►the **first** scientist to introduce the terms **Autovaccines** and **Autovaccination**, **Cancerous Genome**, **Autoinfection**, **Autointracellular pathogen**, and **Cancered Cells** into the sciences of **Genomology**,

►the **first** scientist for dismissing the erroneous term called **therapeutic vaccine**, replacing it by **therapeutic adjuvant** or synonymously by **adjuvant**,

►the **first** disqualifier & disprover of **Endosymbiotic Theory** about the origins of Mitochondrion & Chloroplast published by the authorship of **Lynn Margulis**,

►the **first** scientist who disproved "**Ganti's definition of a living-thing** (i.e., of a genomic-thing) together with the **Nonenzymatic Chemoton Model of Minimal Life**,"

►the **first** genomologist to state that **Genome** is the **unit of both structure & function** of every individual of all genomic-things by dismissing the **fake Cell Theory** which stated that **Cell** is the unit of both structure & function of every individual of all **living-things** (i.e., genomic-things),

►the **first** genomologist to state that **Genome** is the **unit of evolutionary change** of all genomic-things what was **fakely** stated that **Darwin** was the **unit of evolutionary change** of living-things,

►the **first** scientist to state that the **Genome** of cancered cells named **Cancerous Genome** is the **unit of both structure & function** of all types of autoinfected cells that form lumps of tissue including benign tumor, primary & secondary metastatic tumors, and nontumor forming cancered cells such as lymphoma, leukemia and myeloma,

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►the **first** scientist to state that **Cancerous Genome** synthesizes **masses/colonies of autoinfected cells** (lumps of tissue, benign tumors, malignant & metastatic tumors, including nontumor forming cancered cells such as myeloma and leukemia), resulting in **Cancer**,

►the **first** genomologist to state that **Genome** is the only **operating/synthesizing system** in every individual of all genomic-things by disproving what had been **falsely** stated that **Darwin** was the **operating system** of living-things,

► the **first** scientist who identified the fact that the **automatic molecular machine** called **Genome** is the synthesizer of all genomic-things from viroids, viruses, bacteria up to angiosperms and humans,

►the **Father** of all scientists of all sciences of this planet (Earth) with no chance for exception,

►the **Father** of the **Perfect Law of Genomology**,

►the **Father** of **Genome Model**,

►the **Father** of **genomic-things**,

►the **Father** of **genomosphere** that is in sunlight the whole 24 Hrs as the sun rises & sets in the genomosphere,

►the **Father** of nonstopping automatic generations of **genomic reactions** in every species of all genomic-things from viroids, viruses, bacteria up to angiosperms and humans,

►the **Father** of **superscience** (science of nonstopping automatic genomic reactions for countably infinite number of generations),

►the **universal omniscient** in dismissing **fake sciences of Biology** & in generating correct sciences of **Genomology**,

►one of the **Unique Educational Assets** of all human races of this planet that money cannot buy,

►the Superpower in **Power of Mind in Genomological Sciences** in the entire world with no rival & claimer forever, and

►the **Supergreatest Scientist among all the Greatest Experimental and Theoretical Scientists** known in the entire world at present & in all future time of human history to come. In summary, **Feleke EO** is the **Supergreatest scientist among all the Greatests** in the **Global Scientific Community** of the entire world forever [7-23].

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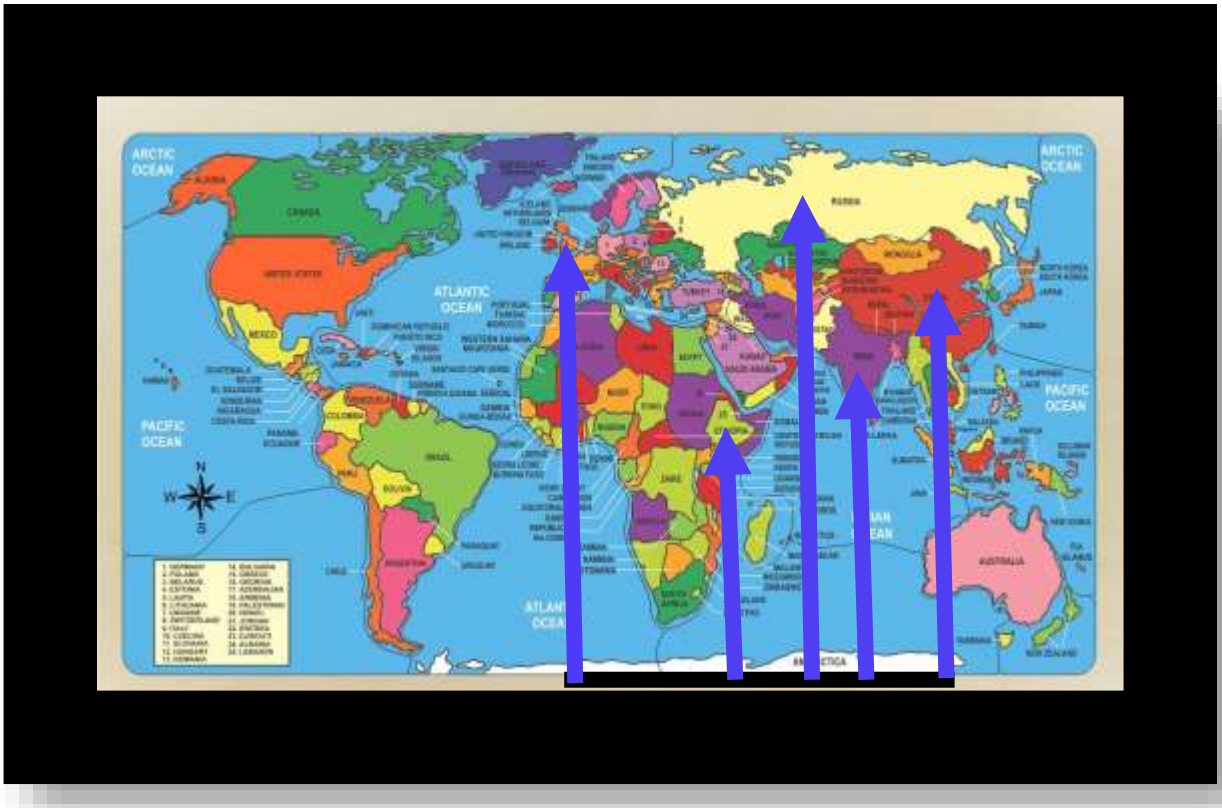

Figure 7: Map of the world with arrows showing the 5 countries (**Great Britain, India, China, Russia** & **Ethiopia**) where each of them is the highest or superpower in the aspects mentioned in the **Conclusion Section** of this paper.

Table 2: Videos about the role of adjuvants in cancer vaccines or in other vaccines of infectious diseases.

Connect your computer to Internet. Steps of opening the video: Select, copy and paste the title of the video (only the blue colored & underlined) on Google search space on your computer desktop screen and then press Enter Key of your computer keyboard. Click Video. Now, click the slide with the correct Title of video you pasted because when the video is copied & pasted, several other unwanted videos will appear together. When video 1 ends playing, repeat the same steps for playing of video 2 and then that of video 3, etc.	
Video No.	**Title of video**
1	**Adjuvants: Animated explanation (Alum, Freund's Adjuvants)**
2	**Adjuvants**
3	**Explanation of Vaccine Adjuvants**
4	**What is an adjuvant?**
5	**New cancer vaccines and adjuvant to boost immune response**

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DISCUSSION

A **vaccine** is a substance used to stimulate immunity to a particular infectious disease or pathogen, typically prepared from an inactivated or weakened form of the causative agent or from its constituents or products. On the other hand, an **adjuvant** is any substance that can be a nongenomic mineral salt, other molecular compounds, or organic molecules such as a citrullinated peptide that enhances the body's immune response to an antigen. That is to say that an **adjuvant** is a substance that increases **immunogenicity** of an **antigen** (**vaccine**) so as to boost the potency and longevity of specific immune response to **antigens**. For instance, **Freund's Adjuvant** is composed of **water-in-oil emulsion**.whereas **Coley's toxin** is composed of inactivated bacteria is certainly or accurately another type of **adjuvant**. The oil part of Freunsd's adjuvant is composed of non-metabolizable oils (paraffin oil and mannide monooleate). When the **water-in-oil emulsion** contains killed *Mycobacterium tuberculosis*, it is called **Complete Freund's Adjuvant**. When the **water-in-oil emulsion** is without killed *M. tuberculosis*, it is termed **Incomplete Freund's Adjuvant**.

The causative agent of every type of cancer is Cancerous Genome and every type of cancer is autovaccinated, having autovaccines (neoantigens) on surfaces of cancered cells where the neoantigens are loaded on **MHC**.

Cancerous Genome is the only automatic molecular machine that synthesizes **autovaccines** (**neoantigens**) and **immunogenicity** of **neoantigens** varies from person to person corresponding to genomic variation. The meaning of **vaccine** or **therapeutic vaccine** is completely different from that of the term **adjuvant**. **Vaccine** is a term with a similar meaning to **antigen [1]**. Another optional term that is similar to **adjuvant**, being scientifically and relevantly usable in treating **cancers** is **therapeutic adjuvant** which is spectacularly correct to replace the erroneous term called **therapeutic vaccine** [24, 25].

CONCLUSION

 The main reason for why the **neoantigens** expressed on surfaces of cancered cells are **poorly immunogenic** is due to less degree in the extent of foreignness or nonselfness as the **Cancerous Genome** that synthesizs them is derived (mutated) from the patient himself being **autogenous**. It is due to the difference in the degree of foreignness (distance of departure in genomic-relation) that autografts & issografts are usually accepted by the immune system of recipient (patient) whereas allografts & xenografts are rejected in graft transplantation.

 **Adjuvants** increase **immunogenicity** of **antigens** (**vaccines**) exposed to the immune system of the client so that the antigen-specific immune responses do eliminate the pathogenic agents by deadly attacks.

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 A potent **adjuvant** is crucial to break the immunotolerance in the tumor microenvironment to aid in the elicitation of potent anti-tumor immune responses.

 The disease of **cancer** is an **autovaccinated** disease following autoinfection by **Cancerous Genome** (pathogen) where the **neoantigen** which represents the **vaccine** (**antigen**) being synthesized by the pathogenic **Genome** is displayed on the surface of cancered cell loaded on **MHC**.

 What are called **therapeutic vaccines** of **cancers** are totally the types of **adjuvant** that increase the **immunogenicity** of **neoantigens** (**autovaccines**) found on surfaces of cancered cells (loaded on **MHC**) such as those of metastatic tumors.

 Erroneously calling or terming **therapeutic vaccines** of **cancer** what are actually (correctly) **adjuvants** is one of the **shocking mistakes** damped by **fake sciences of Biology**. The substance used in the treatment of **cancers** is increasing **immunogenicity** of the **neoantigens** (**autovaccines**) on the cancered cells of tumors, activating immune system to discriminate & destroy against nonself tumors, leaving nontumor tissues safe because they do not bear nonself antigens called autovaccines (neoantigens) on their surfaces. Therefore, the substance used in the treatment of **cancers** is **Adjuvant** and not a **vaccine** (**therapeutic vaccine**) at all!!!! In fact, treating a **cancer** with a **vaccine**, i.e., with a **therapeutic vaccine** never exists in the history of **cancer** treatment, because cancered cells are already **autovaccinated** with **neoantigens** (**autovaccines**).

 The only most important & reliable immunological treatment for **cancers** is the application of **adjuvants** because the autogenous **neoantigens** (**autovaccines**) are poorly immunogenic in some individuals who are affected by **cancers** among human populations.

 Although it was not realized , what had been wrongly called **therapeutic vaccines** in literature were actually **adjuvants** by their meaningful role of function because they were increasing **immunogenicity** of **autovaccines** (**neoantigens**) found on surfaces of cancered cells such as those of **metastatic tumors**.

 Scientists have never prepared a **cancer vaccine** because each type of **cancer** has its own **autovaccine** (**neoantigen**) on the surface of each of its cancered cell loaded on **MHC**.

 A **nonautovaccinated cancer** has never existed on this planet (**Earth**) but **dangerous liars** are enormous who are **enslaved by fake sciences of Biology**.

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Development of a **cancer** is always **autovaccinated** with no exception, but **autovaccines** may differ in **immunogenicity** from person to person and it is because of this truth that the majority of human populations are **free of cancers** whereas a smaller number of individuals (with poor **immunogenicity**) of the human populations are affected by **cancers**.

A group of oncologists or specialists of **cancer** who does not know the difference between **vaccine** & **adjuvant** and also persist in calling a substance as a **therapeutic vaccine** which is correctly called **adjuvant** in science, must be brought to court for justice because misleading student children and confusing scientists of the world is a **serious crime**!!

Coley's toxin of inactivated bacteria used in the 19th century for the first successful attempts of **cancer immunotherapy** made by **Dr William Coley** was certainly a type of **Adjuvant** and not a therapeutic vaccine. **Coley's adjuvant** increased the **immunogenicity** of **neoantigens** (**autovaccines**) found on surfaces of cancered cells that were eliminated by deadly attacks of immune responses in the body of his patient.

Not accepting **Coley's** first successful therapeutic outcome of 19th centuary was a big mistake and again the people who evaluated **Coley's** successful clinical trial were **neither** correct in terming his **inactivated bacteria** as **toxin** nor in calling it as **therapeutic vaccine** whereas it ought to be called **adjuvant**.

It must be clear that a researcher can discover more than one or several potential kinds of **adjuvant** for each type of **cancer**. In this way, thanks to the science of **adjuvants**, **cancer** has spectacularly become as easy as **leprosy** to cure and control!!!!

The two most important curative agents in **immunotherapy** against **cancers** are**:**

►**autoimmune responses** in individuals whose **neoantigens** (**autovaccines**) are immunogenic enough to destroy (kill) the **masses of autoinfected cells** such as those of **metastatic tumors**, and

►**adjuvants** that increase immunogenicity of **neoantigens** (**autovaccines**) in individuals whose **autovaccines** are poorly immunogenic.

HIV/AIDS has been one of the terrifying & noncurable viral infectious diseases causing very high **mortality** & **morbidity** for **decades** because the **autovaccines** (**neoantigens**) found on surfaces of **HIV-infected human cells** are **very poorly immunogenic**. Having this truth in mind, a funded investigative research work must be carried out to identify some of the potential effective **adjuvants** that can spectacularly increase the **immunogenicity of**

autovaccines found on the surfaces of **HIV-infected human cells** of patients so that the elicited immune responses will selectively destroy **HIV-infected human cells** from the body of patients, eradicating **HIV/AIDS** from human populations of the world in the way similar to the eradication of Smallpox. Note that a **huge number of humans** out of the total world population is carrying (harboring) HIV or living infected with HIV by means of **noncurable** medical care or management at present. **HIV/AIDS** can be cured and eradicated by **adjuvants**!!!! More than one kind of **adjuvants** can be investigated against **HIV/AIDS**.

 **Preventive** (**prophylactic**) **vaccine** for the diseases of **cancer** is meaningless or does not work except for those that can be induced by infections of **Human Papillomavirus**, and **hepatitis B virus**. For such infections healthy & uninfected people can be vaccinated with **attenuated** or **killed antigens** (**vaccines**) of these aforementioned viruses to possess **activated immune system** against the infection with these **viral risk factors** of **cancer**.

 The erroneous & dangerously misleading term called **therapeutic vaccine** is sentenced to complete dismissal from the **Genomology** of **cancers**, being replaced by the term **therapeutic adjuvant** or synonymously by **adjuvant**.

 **Vaccination** has an outstanding contribution against **infectious diseases**, having saved more human lives than any other medical invention in history; however, this performance of **vaccination** cannot be applied against **cancers** neither as **therapeutic vaccine** nor as **prophylactic vaccine**. This is so because each type of **cancered cell** is **autovaccinated** and what is crucial is finding out suitable **adjuvants** with no negative side effects by way of research for those individuals whose **neoantigens** (**autovaccines**) are poorly **immunogenic**. You cannot apply **prophylactic** (**preventive**) **vaccination** against **cancers** because you cannot **lock up Genomes** by **passwords** to prevent occurrence of **pathogenic mutations** in **Genomes**!! Therefore, both **therapeutic vaccines** & **prophylactic vaccines** do not exist in the real world & cannot be applied in **cancers** at all; otherwise, going against this spectacular and scientific truth is **absurdly laughable**!! When immune system fails to detect and destroy **cancered cells** by itself, **immunotherapy** relies (depends) **100%** on the application of **adjuvants** & never on **therapeutic vaccines** and **prophylactic vaccines**, but without ignoring other **optional treatments** such as **surgery** & **radiotherapy**.

 Healthy people who do not develop **cancers** (being free of cancers) is not because cancered cells do not appear in their bodies but it is due to the fact that the **neoantigens** (**autovaccines**) on surfaces of **cancered cells** that appear in their bodies are better **immunogenic** that can easily activate (stimulate) immune responses to detect & destroy **cancered cells** such as those of **metastatic tumors** as soon as they appear in the body of a person.

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The **metastatic tumor** (**colony**) of **autoinfected cells** is analogous to an individual organism such as a lion moving in its compatible habitat bearing its own **Genome** different from that of it's human host (patient, i.e., habitat of this **metastatic tumor**).

Among genomic-things, the main **pathogens** encountered are**:**

►**Cancerous Genomes**,

►**Viroids** in plants,

►**Viruses**,

►those of **bacteria**,

►**Parasites**, and

►those of **fungi**.

At present (with the exception of **Author of this Paper**), no scientist of **Genomology** or that of **Biology**, oncologist, specialist of **cancer**, surgeon who surgically removes **malignant tumors** from patients, or medical doctor knows what **cancer** is precisely and what synthesizes the Benign Tumors & Autoinfected Masses of Cancered Cells as well as what the raw materials are for synthesizing these autoinfected cells in their apoptosisless (deathless) & continuous growth in both size and number not to contradict with the **Law of Conservation of Matter**, because they have been misled or confused by **fake sciences of Biology**. This spectacular event is one of the big concrete evidences for the fact that **fake sciences of Biology** have been paralyzing the scientific progress of student children of all human races of the entire world for several centuries.

The **Perfect Law of Genomology** which states that **Genome** is the **unit** of both **structure** & **function** in every individual of all genomic-things is a type of scientific law that will never be outdated, existing (valid & accurate) forever with the scientific world of human races wherever/whenever they exist.

The **Perfect Law of Genomology** also states that **Genome** is the **unit of evolutionary change**.

The **Perfect Law of Genomology** again states that **Genome (Pathogenic Genome or Cancerous Genome)** is the **unit** of both **structure** & **function** of **Masses of Autoinfected Cells** (**Benign Tumors**, **lumps of tissue, primary & secondary metastatic tumors including nontumor forming cancered cells**), causing or resulting in **cancer** . Look! A type of tumor (a

mass of cancered cells) such as that causes a **breast cancer** is an **individual genomic-thing** that is pathogenic & invasive in the body of the patient (host) just like an intracellular pathogenic bacterium, a virus, or it is an individual complete organism like an individual person such as **Kebede**, **David**, **Mohamed**, **Zeberga,** and **Arega Semaga** where each of these individuals has its, his or her own synthesizer **Genome** which can be a **Normal Genome** or a **Cancerous Genome**. Being **cancered** can & does start in any one of the trillion of cells in our bodies.

 Optionally, **cancered (autoinfected) cells** can be called **autogenous single-celled parasites** that may form lumps of tissue or colonies of its parasitic cells (i.e., malignant & metastatic tumors) in tissues and organs they invade, outcompeting for nutrients & space with their deathless rapid growth and cell division.

 A **cancered** cell is a nonself, foreign & pathogenic organism in the body of its host (patient). This is the reason for why **Natural Killer Cell**s and **Cytotoxic T Cell**s detect and destroy, autoinfected (cancered) cells & cells infected with virus, similarly and by the same mechanisms of immune response in bodies of patients. A type of **cancer** is created by **pathogenic mutation** in the **Genome** of any one cell of its host.

 As it has already been stated herebefore, a **Genomic-thing is defined as the product of reactions of its:**

►**Genome** & **its nutritive substances and minerals using sunlight-energy in the presence of chlorophylls as raw materials in its compatible environment** (in autotrophs or green plants), or

►**Genome** & **its chemical energy-containing nutritive substances and minerals in its compatible environment** (heterotrophs).

In other words, the **Genome** synthesizes itself and every individual genomic-thing of its kind using **sunlight-energy & its nutritive substances and minerals in its compatible environment** (autotrophs), or the **Genome** synthesizes itself and every individual genomic-thing of its kind using **its chemical energy-containing nutritive substances and minerals in its compatible environment** (heterotrophs).

 It is proved & concluded that **Biology** is a **set of fake (false) sciences** whereas **Genomology** is the **set of true sciences**.

 Based on the universal reactions of matter, reupdated confirmation with the best of truth:

►Superpower in **Best Controlled Quality Education** & in **Best Quality Reputable Journals** in the entire world is **UK** at present (with the publication fee being minimized down to £25 GBP in favor of global progress/development of science & technology),

►Superpower in **Medical** & **Agricultural Sciences** in the entire world is **India** at present,

►Superpower in **Economy** in the entire world by dethroning USA with an excess of giant difference is **China** at present,

►Superpower in **Nuclear Military Science** in the entire world is **Russia** at present, and

►Superpower in **Power of Mind in Genomological Sciences** in the entire world with no rival & claimer is **Ethiopia** forever, **being nondethronable** endlessly for countably infinite number of the future generations of all human races to come!!!!

Genomology is a **Giant Ethiopian Science** of educational asset contributed to all human races of the world by dismissing **fake sciences of Biology** that have been paralyzing scientific progresses of student children as well as MSc & PhD students of all human races of this planet (Earth) for centuries.

Genomology consists of:

►**pure genomology**,

►**genomotechnology**,

►**medical sciences**, flourishing from Genomology, and

►**agricultural sciences**, flourishing from Genomology.

Genomology is a set of **supersciences** because:

►the automatic molecular machine called **Genome** that synthesizes all genomic-things is found in the system of **Genomology** only,

►the scientist himself who creates all sciences is synthesized by self-acting (automatic) genomic reactions only,

►out of the three types of **Universal Reactions of Matter**, the automatic reaction which occurs without the involvement of **human hands & minds** is only that of **Genomology**, and

►its automatic genomic reactions are miraclously complex.

Feleke Eriso Orbalo is the **Supergreatest Scientist** among all **Greatest Scientists** of the entire world.

Mike Tyson's top 25 greatest knockouts are metaphorically similar to how **true sciences of Genomology** knocked out or dismissed **fake sciences of Biology** from the world of meaningful Natural Sciences (Watch **Table 4**, 3rd row, video 1).

Ethics: I declare that no ethical error is committed in the production of this paper. I also declare that I don't have any conflict of interest with anybody.

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I am deeply grateful to scientists acknowledged in the text and list of references of this paper for their providing me with confidential data that can be counterchecked, for their correctness, with observable facts in the natural environment as well as with truths in reputable journals, and Internet. This is so because science cannot develop without science. I am really thankful to authors of musical art & musicians for their carefully following and transforming my published articles of genomological sciences into musical films. I am very strongly thankful to those global scientific communities for their genuinely following my task of performing to establish the sciences of Genomology and for their authentic thanking me by way of emails for what I have contributed to the scientific world of Genomology.

All of the past and present time individual members of the entire **Global Scientific Community of Natural Sciences** such as **Antonie Van Leeuwanhoek of Dutch Republic (Netherlands), Antoine Lavoisier of France**, **Gregor Mendel of Austria**, **Crick & Watson of UK & USA** respectively, **Ivanovsky Dmitri of Russia**, **Toole G** & **Toole S of UK** , **Albert Einstein of Germany, Michael Faraday of UK , Edward Genner of UK, William B Coley of USA, Stanley B Prusiner of USA, David Baltimore of USA, Frederick William Twort of UK, Charles Babbage of UK,** and **Sir Isaac Newton of UK** are the **Global Teachers** who taught Father of the **Perfect Law of Genomology.** Thus, the Father of **Perfect Law of Genomology** is **Proud** of & he is also the **Pride** of his **Global Teachers**, because the **purpose of teaching is to capacitate students to solve problems** that **had been said and believed impossible by the previous generations of human races**.

I became the **Supergreatest Scientist** in the world by learning from the famous and inspiring **bests & greatests** among the scientists of the world. In other words, **Greatest Global Teachers of Science** produced the **Supergreatest Scientist** who is me. This is so because the **key objective of Teaching & Learning** is to make **Students More Powerful** than the **Teacher** in **Novel**, **Academic**, and **All Rounded Productive Achievements**; otherwise, there would be no point in the profession of teaching!!!! **Profession of Teaching** is the **Parent Profession of All**

Professions known on Earth. The concreted evidence for the **Greatestness of Global Teachers of Science** who taught **Feleke Eriso Orbalo**, is **Feleke's** being the**:**

►**Supergreatest Scientist**, and

►Father of the **Perfect Law of Genomology**.

To the best of my knowledge, **I Feleke EO** declare that **Love & Respect** I have for my:

►**Educational Parents** (Global Teachers of Science who taught me), and

►**Genomological Parents** (my father & my mother)

are exactly the same (**Equational**).

Table 3: Videos of musical films displayed in honor of the uniquely automatic molecular machine termed **Genome** and Mike Tyson top 20 best Knockouts.

Connect your computer to Internet. Steps of opening the video: Select, copy and paste the title of the video (only the blue colored & underlined) on Google search space on your computer desktop screen and then press Enter Key of your computer keyboard. Click Video. Now, click the slide with the correct Title of video you pasted because when the video is copied & pasted, several other unwanted videos will appear together. When video 1 ends playing, repeat the same steps for playing of video 2 etc.	
Video	**Title/Name, Topic, or Heading**
1	**Fantahun Girma - Gonder | ጎንደር - New Ethiopian Music 2023**
2	**Selamawit Yohannes - Yebleni'loo | የብለኒ'ሎ - New Ethiopian Music 2019**
3	**Selamawit Yohannes - Hanen | ሃነን - New Ethiopian Music 2018**
4	**Ethiopian Music : Amsal Mitike | አምሳል ምትኬ "እንደ ሺህ የሚቆጠር" New Ethiopian Music 2019**
5	**Bereket Mengisteab Bkewta Leyty ብኽውታ ለይቲ New Eritrean Guayla Music Remix 2022**
6	**Biruktawit Shimelis - Kef Yibel ብሩክታዊት ሽመልስ - ከፍ ይበል New Ethiopian Music 2022**
7	**Top 50 Mike Tyson's Greatest Punches: Speed, Power and Aggression**

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Apendix

Table 4: Declarative Messages from the **Father of Genomology**.

Declarative Messages from the Father of Genomology/Genomosphere	
1st row	**To: Student Children/MSc or PhD Students of all human races of the entire world** Dear Beloved Student Children & University Candidates! ►Say, no to being taught **fake sciences of Biology**! ►Boycott attending classes of **Biology**, because **sciences of Biology** are **fake** or **false** and instead demand to be taught **true sciences of Genomology**. ►Say, no to **slavery** by the paralyzer **fake sciences of Biology**! ►Appeal the case to **Global Science Forum** in a peaceful & civilized manner. **I wish you all the best!!!!**
2nd row	**To: Genomologists (Superscientists) of the world** Dear Genomologists! Please**:** ►Stop forcing student children or university candidates to learn **Biology**. ►Stop teaching them **fake sciences of Biology**, and instead demand to teach them **true sciences of Genomology** because **Global Textbooks of Genomology** are made ready and standardized for all levels of academic study with the **Curriculum** composed of **25 different research articles** published in globally distinguished top reputable journals. ►Appeal the case to **Global Science Forum** in a peaceful & civilized manner.
3rd row	**To: Biologists & Professionals in applied fields of Biology in the entire world** Dear Biologilsts & Professionals! ►Please abandon **Biology** and update your scientific consciousness with **Genomology**. ►**Era of Genomology** has been declared as of now by dismissing **fake sciences of Biology** from the world of **Natural Sciences**. Thanks! **Dr. Feleke Eriso** Father of **Genomology/Genomosphere**, Email: **feleke.eriso@yahoo.com** **Video 1: Top 25 Mike Tyson Greatest Knockouts That Will Never Be Forgotten | Highlights Full HD** **Video 2: AG brothers – haleha – new ethiopian music** **Video 3: Ashenafi Abebe – Eri Bekentu** ★**Genome** is the only **automatic molecular machine** that synthesizes all genomic-things & itself including you & me!!!! ►Despite this ascertained, spectacular and concreted best of truth, the **set of fake sciences of Biology & liars enslaved by it** absurdly dared to state that 98% of human **Genome** is **junk DNA** [14]!!!!