

# Cure for HIV/AIDS with Medicinal Synthetic Aluminum-Magnesium Silicate $\{Al_4(SiO_4)_3 + 3Mg_2SiO_4 \rightarrow 2Al_2Mg_3(SiO_4)_3\}$ —A Case Report

M. C. O. Ezeibe<sup>1\*</sup>, N. K. Aneke<sup>2</sup>, T. N. Obarezi<sup>2</sup>, F. Onyeachonam<sup>1</sup>, M. E. Sanda<sup>1</sup>,  
I. J. Ogbonna<sup>1</sup>, E. Kalu<sup>1</sup>, U. N. Njoku<sup>1</sup>, M. Udobi<sup>1</sup>, O. E. Ekundayo<sup>3</sup>,  
O. I. O. Ifenkwe<sup>2</sup>, M. C. Igwe<sup>2</sup>, T. O. Ogbodo<sup>4</sup>, U. C. Agu<sup>5</sup>

<sup>1</sup>College of Veterinary Medicine, Michael Okpara University of Agriculture, Umudike, Nigeria

<sup>2</sup>Medical Centre, Michael Okpara University of Agriculture, Umudike, Nigeria

<sup>3</sup>Centre for Molecular Biology and Biotechnology, Michael Okpara University of Agriculture, Umudike, Nigeria

<sup>4</sup>College of Applied Food Science and Technology, Michael Okpara University of Agriculture, Umudike, Nigeria

<sup>5</sup>Directorate of Information Computer Technology, Michael Okpara University of Agriculture, Umudike, Nigeria

Email: \*madiukeezeibe@yahoo.com

**How to cite this paper:** Ezeibe, M.C.O., Aneke, N.K., Obarezi, T.N., Onyeachonam, F., Sanda, M.E., Ogbonna, I.J., Kalu, E., Njoku, U.N., Udobi, M., Ekundayo, O.E., Ifenkwe, O.I.O., Igwe, M.C., Ogbodo, T.O. and Agu, U.C. (2019) Cure for HIV/AIDS with Medicinal Synthetic Aluminum-Magnesium Silicate  $\{Al_4(SiO_4)_3 + 3Mg_2SiO_4 \rightarrow 2Al_2Mg_3(SiO_4)_3\}$ —A Case Report. *World Journal of AIDS*, 9, 161-166.

<https://doi.org/10.4236/wja.2019.93012>

**Received:** August 16, 2019

**Accepted:** September 21, 2019

**Published:** September 24, 2019

Copyright © 2019 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

HIV/AIDS is an immune deficiency disease, caused by an RNA virus (positively charged pathogen). It is still being regarded as mysteriously incurable but in Nigeria many patients have been cured (they became HIV-antibody and antigen negative) by exploiting electrostatic attraction between pathogens and opposite electrical charges that are on *Nanoparticles* of Medicinal synthetic Aluminum-magnesium silicate (MSAMS) and by using antioxidants to relieve oxidative stress. To confirm the cure, as permanent, a patient (adult male) whose CD4 count increased ( $P < 0.05$ ) from 685 to 820 while his viral load became undetectable ( $<20$ ) and he became HIV-negative (antibody and antigen) following the treatment, was tested, every month, post treatment, for HIV-antibody. He has remained HIV-negative for 10 months without being on any antiretroviral medicine (ARV). Longest window period (period HIV-infected person may test antibody-negative) is only 6 months. These results confirm that treatment with the MSAMS and antioxidants normalizes immunity and terminates HIV-infections.

## Keywords

MSAMS Antiviral/Anticancer Features/Mechanisms, Size (Smaller than Viruses/Cancer-Cells), Electrostatic-Bonding, Immune-Stimulation, Efficacy-Enhancing

## 1. Introduction

Inhibition of attachment to cells is one of the already known mechanisms of actions for antiviral medicines [1] and molecules of Aluminum-magnesium silicate (AMS) consist of *Nanoparticles* which have negative electrical charges on their surfaces and positive charges on their edges [2] [3] while every virus has either positive electrical charges or negative electrical charges [4]. So, AMS inhibits attachment of viruses to cells of their hosts by electrostatic attraction between its electrical charges and opposite charges on viruses. It is a medicine already being used in treating gastro-enteritis and results of its toxicity tests show that it is a very safe medicine [5].

What limits the use of AMS for treatment of systemic infections is that it is poorly absorbed. Since simple sugars carry charged molecules across mucous membranes of the gastro-intestinal tract into blood, by active transport [6], incorporating dextrose monohydrate into formulations of a *Medicinal synthetic Aluminum-magnesium silicate* makes the MSAMS good as a broad spectrum antiviral medicine.

Not every antiviral medicine is good for the treatment of infections of the *Human immune deficiency virus* (HIV) because it multiplies rapidly and attacks many cell-types. It also destroys lymphocytes which complement effects of medicines. For the invasiveness, cure for HIV/AIDS requires prolonged treatment. Prolonged medication with antiviral medicines that inhibit biochemistry of viruses causes toxicity to patients because of similarity between viral biochemistry and biochemistry of animal-cells while medicines that act physically need to reach every infected cell, individually, before total or permanent cure can be achieved.

Since viruses ( $\geq 14$  nm) are so small [7] that they cross physiological barriers to reach some cells found in the brain, bone marrow and testes which big molecules cannot reach and in HIV/AIDS-patients, there is not enough immunity to complement medicines, existing antiretroviral medicines ( $\geq 100$  nm) cannot completely terminate HIV infections. That is the reason HIV/AIDS has remained “incurable”. Those cells that are inaccessible to antiretroviral medicines are the “sanctuary cells” or “HIV-reservoirs”.

AMS *Nanoparticles* are 0.96 nm thick [3]. That is, they are smaller than any known virus. For their small size, they reach every HIV-infected cell in every organ or tissue. Since HIV is positively charged [8] and abnormal (infected/cancer) cells are negatively charged [9], they use their surfaces to mop HIV while they bond to HIV-infected cells with their edges. The infected cells are destroyed by the mechanism with which AMS disintegrates drugs-dosage forms [3]. The “HIV-sanctuary cells” or “reservoirs” are also destroyed because they are electrically charged, too. So, “hidden” HIV-infections are unmasked. When 100% of HIV infection-load in a patient is mopped out, the infection terminates.

Silicates are immune stimulants [10] and AMS is a stabilizing agent [3]. Stabilizing medicines prolongs their bioavailability and prolonging bioavailability improves efficacy of antimicrobials [11]. With improved efficacy, lower doses achieve desired effects. Use of lower doses of antimicrobials for treatment of secondary

infections minimizes side effects of the medicines. Minimizing side effects of medicines adds to improvement of immune responses of patients so that anti-viral medicines get more complementation from immunity.

Synergy between the antiviral effects of AMS; enhanced immune responses of patients and enhanced efficacy of antimicrobials is mechanism by which the MSAMS cures HIV/AIDS. To be sure that the cure is permanent, one of the patients who became HIV-negative (antigen and antibody) was subjected to the usual HIV-test (for HIV-antibody) every month for 10 months after he stopped taking any antiretroviral medicine.

## 2. The Case-History

A Nigerian, male (28 years old) who was confirmed HIV positive by antibody test, started antiretroviral treatment with the MSAMS, one month after the confirmation. Before commencement of the treatment, he was retested for HIV-antibody. Number of CD4-lymphocytes per ml of his blood was also counted (CD4 count). In the first month, he was placed on a formulation of MSAMS (63%) and 10% Ampicilin trihydrate (Antivirt<sup>®</sup> A). From second month, the treatment was changed to a formulation of 73.50% of the MSAMS alone (Antivirt<sup>®</sup> B). In addition, he was given Immunace extra protection<sup>®</sup> (for anti-oxidants) every day. The Antivirt<sup>®</sup> treatment was in empty stomach ( $\geq 2$  hours after dinner) while the Immunace extra protection<sup>®</sup> was taken in full stomach (immediately after breakfast). Once the Antivirt<sup>®</sup> was taken, he did not eat any other thing (except water) till following morning. Whenever he had need to take any other oral medicine for other conditions he was advised to take such other medicine at least two hours before the Antivirt<sup>®</sup> or two hours after. He was also advised to sleep under insecticide-treated mosquito bed-net (to prevent malaria) and to run the HIV/AIDS status tests (CD4 counts, viral loads, HIV-antibody and HIV-antigen) every month and submit the results. When he became negative for both HIV-antibody and HIV-antigen, he was asked to stop the treatment but continue testing his blood for HIV-antibody, every month.

## 3. Results

After being on the MSAMS-treatment for 20 months the patient became HIV-negative (both antibody and antigen) while his CD4 count improved from 685 to 820. Following cessation of the treatment, he has continued to test negative to HIV-antibody for 10 consecutive months and he has not been complaining of symptoms of HIV/AIDS. Results of his HIV/AIDS status tests are as on **Table 1**.

## 4. Discussion

Immune deficiency is defined by deficit of blood lymphocytes [12]. It is not a clinical abnormality. Some animals or human-beings can have low blood lymphocytes-counts from birth (genetic defect) but when a person or an animal that

**Table 1.** Results of HIV/AIDS-status tests of a patient, following treatment with medicinal synthetic aluminum-magnesium silicate.

Treatment-duration (Months)	CD4	Viral load	Antibody	Antigen
0	685	ND	+ve	ND
2	512	ND	ND	ND
4	676	ND	ND	ND
6	672	ND	ND	ND
7	673	ND	ND	ND
14	373	ND	ND	ND
15	710	ND	ND	ND
16	ND	<20	ND	ND
17	ND	ND	ND	-ve
18	ND	ND	-ve	ND
20 (Treatment stopped)	820	ND	ND	ND
21 - 30	ND	ND	-ve	ND

ND = Not done.

was born with normal blood lymphocytes-counts develops significantly low lymphocytes-counts the disease is termed acquired immune deficiency syndrome (AIDS).

AMS-*Nanoparticles* displace HIV from its hosts' cells, by electrostatic bonding of their surfaces to positive charges on the virus. Thus the first stage in the viral replication is inhibited [1]. They also bond to negative charges on HIV-infected cells, with their positively charged edges and destroy them by the same mechanism with which AMS disintegrates drug-capsules [3]. Thus "hidden" HIV-infections are unmasked. As *Nanoparticles*, they have access to all HIV-infected cells in all organs/tissues including the "sanctuary cells".

Reason existing ARVs do not achieve permanent cure of HIV/AIDS could be that their molecules are too large to cross physiological barriers. For that limitation, they do not reach HIV infections "hidden" in some cells. So, even when viral loads in blood of patients whom they are used to treat become undetectable, the infection remains "hidden". When such patients stop taking ARVs the hidden infections multiply and viremia reoccurs. For that reason, HIV/AIDS is said to be incurable.

Since the MSAMS (Antivirt®) is made of *Nanoparticles*, it crosses physiological barriers and reaches HIV and HIV-infected cells in every organ/tissue. And since it acts by a physical effect (mopping electrically charged pathogens), it is safe for prolonged treatment. So, it is only a matter of time for HIV-infection, in each treated patient, to get terminated.

In an earlier clinical trial [13] of the MSAMS, CD4 counts of HIV-positive patients ( $663.60 \pm 45.43$ ) increased ( $P = 0.00$ ) to  $1461.78 \pm 339.84$  within 10 months but in this patient, even after 20 months on the treatment, his CD4 increased to only 820. That failure of CD4 counts to rise very high delayed asking the patient to go for cure-confirmatory tests even when his clinical state suggested he had recovered. Some individuals have genetic defects in blood lymphocytes-counts. This patient may be one of such people.

That a HIV/AIDS patient with CD4 count of only 820 tested HIV-negative for both antibody and antigen suggests that our insistence that people on the MSAMS' clinical trial must have  $\geq 1500$  CD4 before they can be considered for HIV-status tests may not be right in every case.

Longest window period for HIV is only six months. So, for a person who was HIV-positive to remain HIV-negative for 10 months without being on any ARV confirms our earlier observation that-treatment with the MSAMS terminates HIV infections [14]. If the patient does not get exposed again, he may remain HIV-negative for life.

### Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

### References

- [1] Brooks, G.F. (1998) Medical Microbiology. 21st Edition, McGraw Hill Education Inc., San Francisco.
- [2] Cristina, E., Ivan, P. and Kevin, R. (2007) Nanomaterials and Nanoparticles: Sources and Toxicity. *Biointerphases*, **2**, MR17-MR71. <https://doi.org/10.1116/1.2815690>
- [3] Vanderbilt Report (2012) Technical Information: VEEGUM—The Versatile Ingredient for Pharmaceutical Formulations. R.T. Vanderbilt Company Bulletin No. 91R. R.T. Vanderbilt Company, Inc., Norwalk.
- [4] Cann, A.J. (1993) Principles of Molecular Biology. Academic Press, San Diego.
- [5] Schils, S. (2002) The Use of Montmorillonite in the Fight against Harmful Effects of Ammonia. *Journal of Renal Nutrition*, **4**, 32-36.
- [6] Murray, K.R. (2000) Harpers Biochemistry. McGraw Hill, New York.
- [7] Gentile, M., Adrian, T., Scheidler, A., Ewald, M., Dianzani, F., Pauli, G. and Gelderblon, H.R. (1994) Determination of the Size of HIV Using Adenovirus Type 2 as an Internal Length Marker. *Journal of Virological Methods*, **4**, 43-52. [https://doi.org/10.1016/0166-0934\(94\)90087-6](https://doi.org/10.1016/0166-0934(94)90087-6)
- [8] Yokoyama, M. (2011) Structural Mechanisms of Immune Evasion of HIV 1 gp 120 by Genomic Computational and Experimental Science. *Virusu*, **61**, 49-57. <https://doi.org/10.2222/jsv.61.49>
- [9] Chen, B.D., Le, W.J., Wang, Y.L., Li, Z.Q., Wang, D., Ren, L., Lin, L., Cui, S.B., Hu, J.J., Hu, Y.H., Yang, P.Y., Ewing, R.C., Shi, D.L. and Cui, Z. (2016) Targeting Negative Surface Charges of Cancer Cells by Multifunctional Nanoprobos. *Theranostics*, **6**, 1887-1898. <https://doi.org/10.7150/thno.16358>
- [10] Suni, L., Hiroaki, H., Megumi, M., Hidenori, M., Aoko, K.T., Ying, C., Kozo, U., Masayasu, K., Yasumitsu, N. and Takemi, O.T. (2014) Immunostimulation by Silica Particles and the Development of Autoimmune Dysregulation. InTechOpen, London.
- [11] Brent, W., Gunderson Gigi, H., Ross, K.H.I. and John, C.R. (2001) What Do We Really Know about Antibiotics Pharmacodynamics? *Pharmacotherapy*, **21**, 28-31. <https://doi.org/10.1592/phco.21.18.302S.33905>
- [12] Ezeibe, M.C.O. and Ogbonna, I.J. (2015) Acquired Immune Deficiency Syndrome

in Man and Animals—A Review. *World Journal of AIDS*, **5**, 50-57.

<https://doi.org/10.4236/wja.2015.51006>

- [13] Ezeibe, M.C.O., Aleeyu, D., Aneke, N.K., Obarezi, T.N., Ogbonna, I.J., Kalu, E. and Njoku, N.U. (2017) Effective Treatment of HIV/AIDS with the Medicinal Synthetic Aluminum-Magnesium Silicate:  $[Al_4(SiO_4)_3 + 3Mg_2SiO_4 \rightarrow 2Al_2Mg_3(SiO_4)_3]$ . *SciFed Journal of AIDS & HIV Research*, **1**, 1.
- [14] Ezeibe, M.C.O., Olamide, Y.U., Aneke, N.K., Obarezi, T.N., Sanda, M.E., Ogbonna, I.J., Kalu, E., Njoku, U.N., Udobi, M., Ekundayo, O.E., Ifenkwe, O.I.O., Igwe, M.C. and Ogbodo, T.O. (2019) Medicinal Synthetic Aluminum-Magnesium Silicate  $[Al_4(SiO_4)_3 + 3Mg_2SiO_4 \rightarrow 2Al_2Mg_3(SiO_4)_3]$  Normalizes Immunity and Terminates HIV-Infections. *Journal of Retrovirology and Anti-Retro Virology*, **1**, Article ID: 180001.