HOW GcMAF WORKS.

Your body's own internal medicine
In a healthy person your GcMAF has 11 actions discovered so far, including two on cells, three excellent effects on the brain, and 6 on cancer. Amongst these it acts as a "director" of your immune system. But viruses and malignant cells like cancer send out an enzyme called Nagalase that prevents production of your GcMAF: that stops its 11 beneficial effects, and neutralises your immune system. So diseases become chronic, and cancer cells grow unchecked.

Minutes after a receiving a dose, 10 of the actions restart. In three weeks of two GcMAF 0.25ml doses a week, your immune system is rebuilt to above normal strength. You need two doses a week for typically 24 weeks for many diseases and early cancers, up to seven one ml doses a week and a year for stage 4 cancers. The disease is then taken down without side effects, and successfully in up to 80% of cases -depending upon how well you follow the protocol under "Treatment Protocol" on this website.

What is GcMAF?
It is a human protein. One week's GcMAF looks like a small raindrop. If properly produced it is perfectly sterile, and a most ethical course for doctors.
GcMAF is therefore a replacement therapy for those who can't make their own. Taking GcMAF replaces the missing part of the immune system, and also acts as the body's own internal medicine.
GcMAF is extracted and isolated; its a 24 step process, and at the end it must have tests to prove its sterility and activity. (If it does not come with published tests, its probably not GcMAF.) One GcMAF has been tested in universities, laboratories and clinics, where, as a result of the testing, consistent activity and sterility have always been found, and been the subject of 25 scientific research papers.

What does GcMAF do?
The GcMAF Conference 2013 showed GcMAF is a far more powerful molecule than thought, both in terms of the science, and doctors' results. In stage 4 cancer, some doctors who use the full protocol, listed on "Treatment Strategies," are saving every patient (if they have not had chemotherapy.) Success can be achieved with all tumour cancers including breast, lung, prostate, pancreatic and melanoma.
GcMAF can eradicate chronic inflammation and viral infections. It is better than antibiotics in many areas, and 25% successful with Autism, 50% or more with Chronic Herpes, Chronic Acne, Chronic cirrhosis of the liver, Chronic kidney disease, Chronic depression, Colitis, Crohn's, Fibromyalgia, Hepatitis, Herpes, LMBBS, ME/CFS, Osteoporosis, Periodontal disease, Psoriasis and various types of Immune dysfunction including allergies. Research shows GcMAF can halt deterioration in Parkinsons, multiple sclerosis (MS), dementia and ALS, and in its role of immune system regulator, can reverse diseases that attack the immune system like Lupus and Arthritis. And is effective with wound healing.

In addition to rebuilding a depressed immune system, GcMAF:
Inhibits angiogenesis – stops blood supply to tumours
Activates macrophages – phagocytosis and destruction of cancer cells
Apoptosis – suicide of cancer cells
Reverts the cancer cell phenotype to normal (Turns cancer cells into healthy cells)
Reduces the metastatic potential of human cancer cells in culture.
Increases energy production at the mitochondrial level – ME/CFS
Improves human neuronal metabolic activity through cAMP signaling – autism, ME/CFS, MS, ALS
Counters toxic effects including cadmium – ME/CFS

It abolishes neuropathic pain due to neuro-oxidative stress (stress due to the anti-cancer drug oxaliplatin) in the lab. (neurodegenerative diseases and autism that have oxidative stress as a pathogenetic mechanism)
It increases neuronal connectivity by promoting differentiation and the formation of dendrites and neuritis (autism and ME/CFS, where there is a lack of connectivity between neurons).
See the 25 research papers published, particularly Brescia, and the 60 published by others listed under “The science”.

80% of terminal stage four cases can be saved, but usually when they are closely monitored, which is why residential Treatment Centres are being run in Switzerland. If they have three months to live, no one needs to be lost.

1
2 GcMAF Products

As of February 2013, on the American National Library of Medicine alone, 142 eminent scientists from 8 nations have published 59 major GcMAF research papers. These can be viewed on the US Government’s Pubmed system.
Our GcMAF is the only publicly available GcMAF that is used in these research papers.
There are many papers published elsewhere, including:
Dr Bradstreet has added to his 30 papers with another on autism, with nagalase and improvements with our GcMAF:
“Initial Observations of Elevated Alpha-N-Acetylgalactosaminidase Activity Associated with Autism and Observed Reductions from GC Protein—Macrophage Activating Factor Injections”
By Dr James Jeffrey Bradstreet, Emar Vogelaar and Lynda Thyer. Libertas Academia 10th December 2012
At Immuno Biotech Ltd we wrote 16 research papers on GcMAF in 2013. All peer reviewed and published in prestigious scientific journals or immunology conferences.
Here is the list on the US Library of Medicine, http://www.ncbi.nlm.nih.gov/pubmed searching on:
GcMAF OR “vitamin D binding protein” AND “macrophage activating factor”
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In the autumn of 2014 our scientific team led by Prof Marco Ruggiero, Director of Science at Immuno Biotech, published and presented at prestigious conferences, 9 peer-reviewed scientific studies that demonstrate a plethora of effects of GcMAF in vivo and in vitro.

Many of these biological effects of GcMAF had not been described before and they represent an epochal breakthrough in the field of immunotherapy of cancer and other diseases.
1. Four peer-reviewed papers describing the results obtained in vitro as well as results of The Swiss Protocol by Marco Ruggiero in clinical cases, have been accepted for

publication and presentation at the 9th International Conference of Anticancer Research held at Porto Carras, Sithonia, Halkidiki, Greece, 6-10 October 2014.
These papers are published in a special issue of Anticancer Research, which is distributed to registrants during the Conference, as well as to all subscribing libraries and indexing services (print and online through the Stanford University HighWire Press).
The 9th International Conference of Anticancer Research is under the auspices of the major scientific societies involved in cancer research such as:
The Union for International Cancer Control (UICC)
The Asian and Pacific Federation of Clinical Biochemistry (APFCB)
The Asian Pacific Organization for Cancer Prevention (APOCP)
The Austrian Society for Radiation Oncology (ÖGRO)
The European Group on Tumor Markers (EGTM)
The Hungarian Society of Epidemiology
The International Cancer Microenvironment Society (ICMS)
The International Geriatric Radiotherapy Group (IGRG)
The International Institute of Anticancer Research (IIAR)
The International Society for Biological and Environmental Repositories (ISBER)
The International Society of Oncology and Biomarkers (ISOBM)
The Italian Society of Uro-Oncology (SIUrO)
The Latinamerican and Caribbean Society of Medical Oncology (SLACOM)
The Lithuanian Society of Radiation Oncology (LSRT)
The North-Eastern German Society of Gynecological Oncology (NOGGO)
The Polish Society of Radiation Oncology (PSTRO)
The Portuguese Society of Radiotherapy – Oncology (SPRO)
The Society of Biotherapeutic Approaches, Japan
The Szeged Foundation for Cancer Research, Hungary
The Turkish Society for Electron Microscopy (TSEM)
The International Institute of Anticancer Research.
The three clinical studies presented at the Conference and describing the effects of The Swiss Protocol in incurable breast, pancreas and brain cancers are:
Marco Ruggiero, Jacopo J.V. Branca, David Noakes, Massimo Gulisano, Gabriele Morucci, Lynda Thyer, and Stefania Pacini.
GLYCOSYLATED OLEIC ACID/VITAMIN D-BINDING PROTEIN SUPPRESSES HER2 ONCOGENE EXPRESSION IN HUMAN BREAST CANCER.
Anticancer Res. 34(10): 5845-5847, 2014.
Lynda Thyer, Jacopo J.V. Branca, Margit Taubmann.
CLINICAL EXPERIENCE OF IMMUNOTHERAPY BASED ON OLEIC ACID BOUND TO GLYCOSYLATED VITAMIN D-BINDING PROTEIN IN LOCALISED AND METASTATIC ADENOCARCINOMA OF THE PANCREAS.
Anticancer Res. 34(10): 5847-5849, 2014.
Jacopo J.V. Branca, Stefania Pacini and Marco Ruggiero.
FOCUSSED TRANSCRANIAL ULTRASOUNDS: APPLICATION TO THE DELIVERY OF GLYCOSYLATED OLEIC ACID/VITAMIN D-BINDING PROTEIN TO BRAIN TUMOURS AND METASTASES.
Anticancer Res. 34(10): 5844-5845, 2014.
In the first of these studies it is described for the first time in history the eradication of a major oncogene (HER-2) in a breast cancer patient whose breast cancer was eradicated following The Swiss Protocol.
In the second study, the successful approach to metastatic pancreatic cancer is described along with the molecular interaction between oleic acid-GcMAF (OA-GcAMF or Goleic) and a major tumor suppressor gene (p53).

In the third study, the successful approach to incurable brain cancer is described along with the the molecular interaction between Goleic and a major oncogene involved in brain cancer (BCl-6). In this study, The Swiss Protocol for brain cancer by Marco Ruggiero, a protocol that involves the use of transcranial ultrasonography, is revealed for the first time. It is worth noticing that this study was performed in collaboration with a major oncology hospital in central London, UK.
In all three studies, Prof. Ruggiero and colleagues demonstrate for the first time that the plethora of biological activities observed when treating patients with Goleic has to be ascribed to the presence of intrinsically disordered domains (IDD) in the molecular structure of GcMAF. An IDD is a domain that lacks a fixed or ordered three-dimensional structure.
Prof. Ruggiero discovered that GcMAF shows two IDDs, one in the first domain (IDD1), and one in the second domain (IDD2), in the proximity of the oleic acid-binding domain. As shown in the studies, the sequence of the IDD2 shows a peculiar arrangement of hydrophobic aminoacids in the region that binds oleic acid as well as an IDD composed by negatively- and positively- charged aminoacids.
Prof. Ruggiero and colleagues also demonstrate, at the molecular level, that the effects observed with Goleic cannot be reproduced with GcMAF alone. This in turn demonstrates that Goleic and not GcMAF is the most efficient molecule to treat cancer as well as a number of other chronic conditions.
Another study by our research group demonstrates the effects of Goleic in multiple myeloma cells in vitro.
Rodney Smith, Emma Ward, Jacopo J.V. Branca, Gabriele Morucci and Stefania Pacini.
THE EFFECT OF GcMAF COMPLEXED WITH OLEIC ACID ON MULTIPLE MYELOMA CULTURES.
Anticancer Res. 34(10): 6175-6177, 2014.
These data are consistent with clinical observation demonstrating a therapeutic effect of The Swiss Protocol in multiple myeloma patients.
It is worth noting that Anticancer Research, where these studies have been published, is an independent international peer-reviewed journal devoted to the rapid publication of high quality original articles and reviews on all aspects of experimental and clinical oncology. Anticancer Research was established in 1981 and the articles published in this journal are regularly indexed in all bibliographic services, including: Current Contents (Life Sciences), Science Citation Index Expanded (Web of Science), Index Medicus, Biological Abstracts, PubMed, Chemical Abstracts, Excerpta Medica, University of Sheffield Biomedical Information Service, Current Clinical Cancer, AIDS Abstracts, Elsevier Bibliographic Database, EMBASE, Compendex, GEOBASE, EMBiology, Elsevier BIOBASE, FLUIDEX, World Textiles, Scopus, Progress in Palliative Care, Cambridge Scientific Abstracts, Cancergram (International Cancer Research Data Bank), MEDLINE, Reference Update – RIS Inc., PASCAL-CNRS, Inpharma-Reactions (Datastar, BRS), CABS, Immunology Abstracts, Telegen Abstracts, Genetics Abstracts, Nutrition Research Newsletter, Dairy Science Abstracts, Current Titles in Dentistry, Inpharma Weekly, BioBase, MedBase, CAB Abstracts/Global Health Databases, Investigational Drugs Database, VINITI Abstracts Journal, Leeds Medical Information, PubsHub, Sociedad Iberoamericana de Información Cientifica (SIIC) Databases.
2. A clinical study in collaboration with a major Italian Hospital (the Hospital of Prato, Division of Nephrology) was accepted for presentation and publication at the annual meeting of the Italian Society of Nephrology in 2014. In this study, the effects of The Swiss Protocol by Marco Ruggiero in kidney disease and in kidney cancer are described. This study represents the very first conducted in collaboration with a major hospital of the Public Health Service.

This study is entitled:
– Clinical experience of renal carcinoma immunotherapy with oleic acid complexed with deglycosylated vitamin D-binding protein by Aterini et al.
3. Two clinical case reports describing the effects of the Swiss Protocol have been accepted for presentation and publication at the 68th Congress of the The Italian Society of Anatomy. This scientific society is one of the oldest in the world and it was founded in 1929 by Nello Beccari, Luigi Castaldi and Emerico Luna under the auspices of Giulio Chiarugi. The official organ of the Society is the “Italian Journal of Anatomy and Embryology”, in which the proceedings of the annual meeting as an ordinary supplement are published.
The Italian Journal of Anatomy and Embryology was founded in 1901 by Giulio Chiarugi, Anatomist at Florence University, and hence ever devoted to the progress and diffusion of science in the fields of Anatomy, Histology and Embryology.
The Italian Journal of Anatomy and Embryology, which is listed in major databases including PubMed, was made famous by publishing a seminal paper by Duesberg and Ruggiero debunking the AIDS fraud (Ital J Anat Embryol. 2011;116(2):73-92. AIDS since 1984: no evidence for a new, viral epidemic–not even in Africa. Duesberg PH, Mandrioli D, McCormack A, Nicholson JM, Rasnick D, Fiala C, Koehnlein C, Bauer HH, Ruggiero M.).
The two clinical case papers describing the effects of The Swiss Protocol by Marco Ruggiero and published in the Italian Journal of Anatomy and Embryology are:
– Gc-protein-derived Macrophage Activating Factor (GcMAF) induces ERBB2 shift in human breast cancer by Ruggiero et al. (It. J. Anat. Embryol. 119: 1S, 169, 2014).
Intra-tumoural nitric oxide release by macrophages activated by Gc-protein-derived Macrophage Activating Factor (GcMAF) by Ruggiero et al. (It. J. Anat. Embryol. 119: 1S, 170, 2014).
In addition to these 2 clinical case studies, 2 in vitro studies have been published in the Italian Journal of Anatomy and Embryology describing the effects of Goleic in human neurons and microglial cells. These studies demonstrate that Goleic eliminates the toxic side effects of chemotherapy.
– Human and murine microglial cells: to experimental models to deeply understand the mechanism of microglia involvement in human brain diseases by Branca et al. (It. J. Anat. Embryol. 119: 1S, 21, 2014).
Gc-protein derived macrophage activating factor (GcMAF) counteracts the neuronal damage induced by oxaliplatin by Morucci et al. (It. J. Anat. Embryol. 119: 1S, 135, 2014).
With these new 9 studies, we have published so far 15 studies in 2014.
In fact, in addition to the 9 studies mentioned above, we have published a seminal paper describing the lesions in the autistic brain:
– 2014. A New Methodology of Viewing Extra-Axial Fluid and Cortical Abnormalities in Children with Autism via Transcranial Ultrasonography. Bradstreet JJ1, Pacini S2, Ruggiero M3.
A paper in the American Journal of Immunology describing clinical cases treated with The Swiss Protocol:
– Ward, E., R. Smith, J.J.V. Branca, D. Noakes and G. Morucci et al., 2014. Clinical experience of cancer immunotherapy integrated with oleic acid complexed with de-glycosylated vitamin d binding protein. Am. J. Immunol., 10: 23-32.
A seminal paper in Anticancer Research:
– Oleic Acid, deglycosylated vitamin D-binding protein, nitric oxide: a molecular triad made lethal to cancer. Ruggiero M, Ward E, Smith R, Branca JJ, Noakes D, Morucci G, Taubmann M, Thyer L, Pacini S. Anticancer Res. 2014 Jul;34(7):3569-78.
A chapter on GcMAF in a best-seller book:
Healing the Symptoms Known as Autism – 2nd Edition Paperback – January 8, 2014 by Kerri Rivera (Author), Kimberly McDaniel (Contributor), Daniel Bender (Contributor), Jim

Humble (Contributor), Dr. Andreas Kalcker (Contributor), Dr. Marco Ruggiero (Contributor), Robert L. Sands (Contributor). ISBN-10: 0989289044. ISBN-13: 978-0989289047.
Two studies on the immunotherapy of cancer:
– Clinical experience of integrative immunotherapy centred on oleic acid complexed with deglycosylated vitamin D-binding protein by Ward et al. (Abstr. P5.16, pag. 88).
– Increased splenic blood flow following macrophage activation by oleic acid complexed with vitamin D-binding protein by Ward et al. (Abstr P4.20, pag. 81).
Two additional peer-reviewed papers are in press in “Anticancer Drugs” and in the “Italian Journal of Anatomy and Embryology”.
Prof. Ruggiero also wrote a chapter in a book that should be published by the end of the year

The many effects of GcMAF on cancer.

Abstract: Multifaceted immunotherapeutic effects of vitamin D-binding protein-derived macrophage activating factor (GcMAF) on human breast cancer cells

Thyer L**, Gulisano M* Published at the 5th Immunotherapeutics & Immunomonitoring Conference January 31st 2013 San Diego, CA, USA. And presented to the International PMTC Cancer Conference at the University of Sharjah UAE on the 1st February 2013.
Vitamin D-binding protein-derived macrophage activating factor (GcMAF) is a powerful stimulant of the immune system that has been proposed as an immunotherapeutic agent in the treatment a variety of conditions ranging from cancer to neurological disorders.
We previously demonstrated that GcMAF added to human breast cancer cells exerts multiple effects that concur to its antitumor potential; in fact, GcMAF inhibited cancer cell proliferation and metastatic potential, reverted the neoplastic phenotype and inhibited cancer cell-induced angiogenesis, a critical step in cancer progression.
In the present study, we describe for the first time the effects of GcMAF on the activation of macrophages that were added to a culture of the human breast cancer cell line MCF-7 (HPA Culture Collection). MCF-7 cells, incubated for 2 days, showed the anarchic morphology typical of carcinoma cells. They grouped in disordered cell masses extending above the cell monolayer that appeared as large lumps of cells protruding upwards.
Macrophages (cell line Raw 264.7, HPA Culture Collection) were activated by culturing them in the presence of 100 ng/ml GcMAF (Immuno Biotech Ltd) for 72 h prior to addition to the MCF-7 cell culture. The macrophages were added at a ratio of 1:1 to the MCF-7 cells. The cells were then allowed to settle for 1 h before time lapse photography. Photography was taken over a 60 h period using an Olympus CK2 microscope and a GXCAM-3 with NCH Debut capture software.

Results – Analysis of film

Un-stimulated macrophages appeared as round spherical cells that refract light. Once activated by GcMAF, macrophages sent out cytoplasmic protrusions that we interpreted as if the cells were trying to seek out and make contact with MCF-7 cancer cells. After about 60 h, it could be observed that the irregular growth of the breast carcinoma cells was arrested and the large protruding cell biomass was reduced. Carcinoma cells were phagocytised by the activated macrophages.
Taken together, these results support and reinforce the hypothesis that GcMAF is a molecule endowed with multiple biological activities relating to its antitumor properties.
It inhibits human breast cancer cell proliferation and metastatic potential; it reverts the neoplastic phenotype; it inhibits cancer cell-induced angiogenesis; and it stimulates tumoricidal macrophages that phagocytise cancer cells. It is foreseeable

that GcMAF will soon become part of an integrated immunotherapy approach to breast cancer.

Much more scientific resarch available on request