

Cancer Options Newsletter

January 2010

Dear Friends, a belated happy and I hope healthy New Year to you all.

I have so much news to put into this newsletter that I had to leave some out and the next one is half ready, so you may even get it on time! I guess keeping one New Year's resolution is not bad.

I start this newsletter with a bit of blatant advertising for the seminar kindly sponsored by Biocare and supporting Yes to Life with whom I work closely.

It looks like being a very good day so would be great to see lots of people there.

What I don't have is a quote of the month as nobody has said anything daft, ridiculous or insulting to me for ages, I obviously need to get out more!

January Newsletter Contents

Page 5 Mistletoe, a review of effectiveness

Page 8 Soy protein Lunasin nutritional cancer treatment

Page 10 Not good news for HRT

Page 16 Breakthrough therapy reduces mastectomies

Page 18 On-the-spot DNA test could boost effectiveness of cancer therapies

Page 21 Cancer doctors begin prescribing vitamin D as part of cancer therapy

Page 23 The 'false dawn' of genetics in medicine

Page 27 The Pathway Programme

BioCare®



0121 433 3727

www.biocare.co.uk

NEW! Yes to Life seminar - proudly supported by BioCare



NEW! Yes to Life Seminar Series

Cancer: Building an Integrated Treatment Programme

Saturday, 20th February 2010

Park Crescent Conference Centre, 229 Great Portland Street, London W1

On behalf of Yes to Life, we have great pleasure in inviting you to their first seminar. They have assembled no less than four top speakers from the world of integrated cancer care to make this a thoroughly stimulating day.

Patricia Peat RGN - Founder, Cancer Options
Dr Damien Downing - President, British Society for Ecological Medicine
Dr Maurice Orange - Medical Director, Park Attwood Clinic
Rebecca Edwards - Naturopath

Ticket price: £75 (£20 of ALL ticket sales go directly to Yes to Life)

EARLY BIRD SPECIAL OFFER

PAY ONLY £60 if you book before 1.2.10

This is planned to be the first of many such events throughout the UK.

To find out more, and to book your place, [email us](mailto:info@yestolife.org.uk), or call 0121 433 8774.

And to find out about Yes to Life, visit www.yestolife.org.uk.

This event is proudly supported by;

For anyone not familiar with mistletoe treatment, it is the most widely used natural compound in Europe. Here it is the best kept secret that you can get it on the NHS, but that is constantly under threat as doctors try to prevent funding for it. Also available in this country at Park Attwood clinic, they supply a wonderful holistic service with intravenous mistletoe. They recently had to close their in-patient facility due to lack of funding so we hope they will soon be open and running again. If you have never visited there, take a look at www.parkattwood.org, a wonderful place with wonderful staff, if you can support them please do, we need more not less of these types of clinics.

Survival of cancer patients treated with mistletoe extract (Iscador): a systematic literature review

Thomas Ostermann* , Christa Raak and Arndt Büssing*

Center for Integrative Medicine, Faculty of Medicine, University of Witten/Herdecke, Gerhard-Kienle-Weg 4, 58239 Herdecke, Germany

In Europe, extracts from *Viscum album* (VA-E), the European white-berry mistletoe, are widely used to treat patients with cancer.

Methods

We searched several databases such as Cochrane, EMBASE, NCCAM, NLM, DIMDI, CAMbase, and Medline. Inclusion criteria were controlled clinical studies on parameters associated with survival in cancer patients treated with Iscador. Outcome data were extracted as they were given in the publication, and expressed as hazard ratios (HR), their logarithm, and the respective standard errors using standard formulas.

Results

We found 49 publications on the clinical effects of Iscador usage on survival of cancer patients which met our criteria. Among them, 41 studies and strata provided enough data to extract hazard ratios (HR) and their standard errors (Iscador versus no extra treatment). The majority of studies reported positive effects in favour of the Iscador application. Heterogeneity of study

results was moderate ($I^2 = 38.3\%$, $p < 0.0001$). The funnel plots were considerably skewed, indicating a publication bias, a notion which is corroborated by statistical means ($AC = -1.3$, $CI: -1.9$ to -0.6 , $p \leq 0.0001$). A random effect meta-analysis estimated the overall hazard ratio at $HR = 0.59$ ($CI: 0.53$ to 0.66 , $p < 0.0001$). Randomized studies showed less effects than non-randomized studies (ratio of HRs: 1.24 , $CI: 0.79$ to 1.92 , $p = 0.35$), and matched-pair studies gave significantly better results than others (ratio of HRs: 0.33 ; $CI: 0.17$ to 0.65 , $p = 0.0012$).

Background

Complementary and alternative medicine (CAM) has become increasingly popular over the last decades. According to Bausell et al. [1], especially patients with chronic diseases increasingly seek for CAM-therapies. With a growing amount of health information in the internet, physicians and therapists and patients are often not prepared to judge provided information of CAM-health care approaches properly. Information dissemination of published evidence about the effectiveness of remedies and therapies therefore forms a necessary basis for shared-decision making for patients and practitioners.

In Europe, extracts from *Viscum album* (VA-E), the European white-berry mistletoe, are widely used to treat patients with cancer, but also with arthrosis, hypertension, arteriosclerosis, diabetes etc. [2]. Historically, the intentions of mistletoe uses were manifold and conflicting in several cases (i.e., swellings or tumours, epilepsy, diseases of spleen and liver, labour-pains, 'weakness of the heart' and oedema, eczema, ulcers of the feet, burns, and granulating wounds) [3]. In 1920, mistletoe extracts were introduced for the first time as a cancer treatment by Rudolf Steiner (1861-1925) [4], founder of anthroposophy. He recommended a drug extract produced in a complicated manufacturing process combining sap from mistletoe harvested in the winter and summer [5]. Based on his recommendations, several Anthroposophic doctors have treated their cancer patients with these extracts within the last century, but published - if at all - just some field reports. Moreover, pharmacological studies on the suggested anti-tumour effects of were completely lacking.

Meanwhile, clinical evaluations of mistletoe as an adjuvant cancer treatment have expanded. During the 1960s, Vester and Nienhaus isolated carcinostatic protein fractions which were recognized later as the cytotoxic viscotoxins and mistletoe lectins [6]. Recent scientific research has confirmed the folklore with evidence that mistletoe extracts (1) induce apoptosis, (2) stimulate immunocompetent cells, and (3) protect the DNA of

mononuclear cells (for review see [7,8]). Several experiments using tumour-bearing animals showed impressive reduction of tumour growth and/or increased survival with the application of mistletoe therapy (for review see [7-9]). The cytotoxic effects were clearly related to the viscotoxins and cytotoxic mistletoe lectins, while the immuno-modulating effects were ascribed to the mistletoe lectins, poly-/oligosaccharides, viscotoxins and several other components (reviewed in [7-10]).

Results

We found 52 publications on the clinical effects of Iscador usage on survival of cancer patients (descriptive details and references in the additional file 1). Some reports describe data on different sets of patients and/or tumour stages or localization (strata), or different study designs within the same report

Conclusions

Pooled analysis of clinical studies suggests that adjuvant treatment of cancer patients with the mistletoe extract Iscador is associated with a better survival. Despite obvious limitations, and strong hints for a publication bias which limits the evidence found in this meta-analysis, one can not ignore the fact that studies with positive effects of VA-E on survival of cancer patients are accumulating. Future studies evaluating the effects of Iscador should focus on a transparent design and description of endpoints in order to provide greater insight into a treatment often being depreciated as ineffective, but highly valued by cancer patients.

Soy Protein Lunasin, Potential Nutritional Cancer Treatment

(NaturalNews) A little-known soy protein known as lunasin could become a novel nutritional cancer treatment, according to research carried out at the University of Illinois. Studies revealed that lunasin, a peptide discovered accidentally by scientists at the University of California, Berkeley more than ten years ago, may fight cancers such as leukemia and may also dampen down the inflammation that contributes to heart disease, diabetes and stroke.

A team at U Of I headed by Dr Elvira de Mejia conducted new cancer-related trials on lunasin, which was demonstrated to block key enzymes that contribute to the development of cancer, with a dose-dependent effect against leukemia cells.

It was also found to block NFkB, one of the body's most important inflammatory factors, that has been linked not only to cancer, but also to diseases as far ranging as obesity and Alzheimer's disease. [1]

Writing in the journal *Molecular Nutrition and Food Research*, Dr de Mejia expressed her belief that the compound would have similar effects when consumed by humans and may become an important nutritional cancer treatment and preventative.

"We confirmed lunasin's bioavailability in the human body by doing a third study in which men consumed 50 grams of soy protein--one soy milk shake and a serving of soy chili daily--for five days. Significant levels of the peptide in the participants' blood give us confidence that lunasin-rich soy foods can be important in providing these health benefits."

"We can see that daily consumption of lunasin-rich soy protein may help to reduce chronic inflammation", she added.

Ironically, it is the protein digestion inhibitors in soy, much derided by soy opponents, that appear to allow lunasin to avoid digestion and become absorbed into the body.

Until recently lunasin, which has also been found in small quantities in barley and rye grains, had been discarded as a waste product at soy processing plants. It was discovered in 1999 by Dr. Ben O. de Lumen, Ph.D, a professor at the Department of Nutritional Sciences and Toxicology, University of California at Berkeley, California. Dr de Lumen and colleagues named the protein lunasin, which comes from the Tagalog word for "cure", and the compound soon lived up to its name after the Berkeley team was quickly able to establish a skin cancer-fighting effect in mice. [2]

Many researchers believe that the compound may also be responsible for soy's long-discussed cholesterol lowering properties. One of these researchers is Alfredo F. Galvez, Ph.D., a lead scientist at the Center of Excellence for Nutritional Genomics, University of California, Davis.

"The presence of the lunasin peptide in soy protein preparations provides a plausible mechanism of action to explain the cholesterol-lowering effect attributed to soy protein and paves the way for optimizing soy protein ingredients to maximize its heart-healthy benefits", wrote Dr Gonzalez in a not-yet-published abstract. [3]

Researchers in the Phillipines now plan to conduct clinical trials in the Phillipines on lunasin as a nutritional cancer treatment for cervical tumours.

Not Good News for HRT

New results suggest that hormone therapy increases the risk for ovarian cancer. The findings held true regardless of the duration of use, dose, formulation, or route of administration, according to a study published in the July 15 issue of *JAMA*.

However, the risk declines quickly once the therapy is discontinued, said first author Lina S. Mørch, MSc, from the Gynaecological Clinic, Rigshospitalet, Copenhagen, Denmark.

"For women having concerns about their risk because they are on hormone therapy or have been taking hormones, our data suggest their risk of ovarian cancer is similar to never users after 2 years' cessation," said Ms. Mørch. "That is, women currently taking hormones seem to reduce their risk of ovarian cancer by quitting hormone use."

In a nationwide prospective cohort study, Danish researchers found that women who have taken hormone therapy are at higher risk for epithelial ovarian cancer (range, 30% to 58%) than those who have not used them.

Ovarian cancer is still a rare disease, Ms. Mørch told *Medscape Oncology*. "So despite a 40% increased risk of ovarian cancer among current hormone-therapy users, each woman will still have a very low absolute risk of developing cancer [because of] her hormone use."

Indeed, the absolute risk increase was 0.12 per 1000 years, and if the association was causal, then hormone use resulted in approximately an extra 140 cases of ovarian cancer in Denmark over a mean follow-up time of 8 years. This averaged out to about 5% of the ovarian cancers in this study. But even though this number seems low, the authors note, ovarian cancer remains a highly lethal disease, so this risk should be considered when deciding whether or not to use hormone therapy.

Higher Risk Even With Short-Term Use

Their data show an increased risk for ovarian cancer even with short durations of hormone use (from 0 to 4 years), but this result differed from findings of previous studies that were unable to identify an increased risk when hormone therapy was used for less than 5 years.

"Our short-term users included women with a few months' use and women with more than 3 years' use," said Ms. Mørch. "Some previous studies defined short-term use as use less than 1 year or so. These differences in categories may explain some of the difference between this and previous studies."

"In addition, some previous studies did not distinguish sharply between current and previous use," she added. "Women who were current users at the start of a study were often classified as current users, even though they had become previous users during the follow-up period. In our study, the duration analyses were conducted only among women currently taking hormones."

As previously reported by *Medscape Oncology*, studies have suggested that there is an increased risk for ovarian cancer among women taking postmenopausal hormone therapy. However, data are limited as far as the differential effects of formulations, regimens, and routes of administration.

Risk Declines Over Time With Therapy Cessation

In the current trial, Ms. Mørch and colleagues evaluated the risk for ovarian cancer in perimenopausal and postmenopausal women receiving a variety of hormone therapies using data from the Danish Sex Hormone Register Study, which identified all Danish women 50 to 79 years who used hormone therapy from 1995 to 2005. Overall, the cohort was comprised of 909,946 women without hormone-sensitive cancer or bilateral oophorectomy. Prescription data were obtained from the National Register of Medicinal Product Statistics, and the National Cancer Register and Pathology Register provided ovarian cancer incidence data.

After an average follow-up of 8 years, 3068 incident ovarian cancers, of which 2681 were epithelial cancers, were detected. Compared with women who had never used hormone therapy, current users had incidence rate ratios for all ovarian cancers of 1.38 (95% confidence interval [CI], 1.26 - 1.51) and for epithelial ovarian cancer of 1.44 (95% CI, 1.30 - 1.58). The risk declined as the number of years since hormone therapy was last used increased.

Risk After Discontinuation of Hormone Therapy

Number of Years Since Last Use	Relative Risk (95% CI)
0 - 2	1.22
More than 2 - 4	0.98
More than 4 - 6	0.72

More than 6	0.63
--------------------	------

The incidence rate was 0.52 in current hormone therapy users and 0.40 in never users. Ovarian cancer risk did not differ significantly with duration of use among current users, and risk did not differ according to the dose, route of administration, or type of therapy. Compared with women who had never used hormone therapy, the risk for estrogen-only therapies was 1.31 (95% CI, 1.11 - 1.54), and the risk for combined estrogen-plus-progestin therapy was 1.50 (95% CI 1.34-1.68). The difference between them was not statistically significant.

The authors do not recommend screening for ovarian cancer at this time on the basis of hormone therapy use. "Unfortunately, we have no reliable or effective screening technique for ovarian cancer," said Ms. Mørch. "Even the combination of CA125 and ultrasound examination gives many false-positive cases, with unnecessary surgery as a consequence."

This study was supported by the Danish Cancer Society. Coauthor Øjvind Lidegaard, MD, DrMSci, from the Gynaecological Clinic, Rigshospitalet in Copenhagen, Denmark,

Hormone Replacement Therapy Linked to Risk for Death From Lung Cancer

News Author: Laurie Barclay, MD

Clinical Professor, Family Medicine, University of California, Orange;
Director, Division of Faculty Development, UCI Medical Center, Orange,
California

September 29, 2009 — Hormone replacement therapy (HRT) using estrogen and progestin is associated with an increased risk for death from lung cancer, according to the results of an analysis of data from the Women's Health Initiative (WHI) trial reported in the September 20 Online First issue of *The Lancet*. These results were initially presented at the American Society of Clinical Oncology 45th Annual Meeting as reported by *Medscape Oncology*.

"In the post-intervention period of the...WHI trial, women assigned to treatment with oestrogen plus progestin had a higher risk of cancer than did those assigned to placebo," write Rowan T. Chlebowski, from Los Angeles Biomedical Research Institute at Harbour-University of California, Los Angeles, Medical Center, Torrance, California, and colleagues from the WHI Investigators. "Results also suggested that the combined hormone therapy might increase mortality from lung cancer. To assess whether such an association exists, we undertook a post-hoc analysis of lung cancers diagnosed in the trial over the entire follow-up period."

The WHI study, which was a randomized, double-blind, placebo-controlled trial performed at 40 US centers, was stopped early when health risks of HRT were found to exceed benefits. With use of a computerized, stratified, permuted block algorithm, 16,608 postmenopausal women aged 50 to 79 years with an intact uterus were randomly assigned to receive a once-daily tablet of 0.625-mg conjugated equine estrogen plus 2.5-mg medroxyprogesterone acetate (n = 8506) or matching placebo (n = 8102). Data from treatment and postintervention follow-up periods allowed determination of incidence and mortality rates for all lung cancer, small-cell lung cancer, and non-small-cell lung cancer, with analysis by intent-to-treat. Mean treatment duration was 5.6 ± 1.3 years, and mean additional follow-up duration was 2.4 ± 0.4 years.

Lung cancer was diagnosed in 109 women in the combined hormone therapy group vs 85 in the placebo group (incidence per year, 0.16% vs 0.13%; hazard ratio [HR], 1.23; 95% CI, 0.92 - 1.63; P = .16). Non-small-cell lung cancer was diagnosed in 96 women in the HRT group vs 72 in the placebo group (0.14% vs 0.11%; HR, 1.28; 95% CI, 0.94 - 1.73; P = .12).

Mortality rate from lung cancer was greater in the combined hormone therapy group vs the placebo group (73 vs 40 deaths; 0.11% vs 0.06%; HR, 1.71; 95% CI, 1.16 - 2.52; P = .01). This excess mortality rate in the HRT group was primarily attributed to more deaths from non-small-cell lung cancer (62 vs 31 deaths; 0.09% vs 0.05%; HR, 1.87; 95% CI, 1.22 - 2.88; P = .004). Both groups had similar incidence and mortality rates of small-cell lung cancer.

"Although treatment with oestrogen plus progestin in postmenopausal women did not increase incidence of lung cancer, it increased the number of deaths from lung cancer, in particular deaths from non-small-cell lung cancer," the study authors write. "These findings should be incorporated into risk-benefit discussions with women considering combined hormone therapy, especially those with a high risk of lung cancer."

Limitations of this study include post hoc analysis, small number of lung cancers and small-cell lung cancers, and absence of information on treatment after diagnosis. In addition, the results cannot be extrapolated to other oral or topical hormone treatments or other treatment durations.

"There were significantly more poorly differentiated cancers and cancers with metastatic spread in the combined hormone therapy group than in the placebo group," the study authors conclude. "These findings, together with the substantial increase in mortality after a diagnosis of non-small-cell lung cancer, suggest that the main effect of combined hormone therapy might be on stimulating growth of already established non-small-cell lung cancers."

In an accompanying comment, Apar Kishor Ganti, MD, from the University of Nebraska Medical Center in Omaha, discusses the clinical implications of these findings for women considering use of HRT for perimenopausal symptoms.

"Because the optimum safe duration of hormone-replacement therapy in terms of lung-cancer survival is unclear, such therapy should probably be avoided in women at a high risk of developing lung cancer, especially those with a history of smoking," Dr. Ganti writes. "These results, along with the findings showing no protection against coronary heart disease, seriously question whether hormone-replacement therapy has any role in medicine

today. It is difficult to presume that the benefits of routine use of such therapy for menopausal symptoms outweigh the increased risks of mortality, especially in the absence of improvement in the quality of life."

Lancet. Published online September 20, 2009. Abstract

Breakthrough Breast Cancer Therapy Reduces Mastectomies, Saves Breast

This is obviously great news and another example of an orthodox breakthrough based on work that CAM therapists have done for years with hyperthermia that is claimed as an orthodox breakthrough.
Patricia

ScienceDaily (Jan. 19, 2010) — A new treatment developed and tested by University of Oklahoma researchers not only killed large cancer tumors, but reduced the need for mastectomies by almost 90 percent. The latest results appear in an upcoming issue of the Annals of Surgical Oncology.

Building on this success, researchers at the OU Health Sciences Center, plan to start the next phase of clinical trials this year to test the therapy on even larger tumors.

"This therapy is a major advancement for women with later stage breast cancer. Right now, most patients with large tumors lose their breast. With this treatment along with chemotherapy, we were able to kill the cancer and save the breast tissue," said William Dooley, M.D., a researcher at the OU Cancer Institute and the director of surgical oncology at OU Medicine.

Dr. Dooley is leading a group of researchers from OU, the Massachusetts Institute of Technology, the Los Angeles Biomedical Research Institute, the Comprehensive Breast Center in Florida and St. Joseph's Hospital in California.

They are working on a treatment called Focused Microwave Thermoablation. The technique, which was approved by the U.S. Food and Drug Administration, uses a modified version of the microwave technology behind the "Star Wars" defense system.

In the most recent study, researchers tested the therapy on tumors that were an inch to an inch and a half in size. These large tumors usually require mastectomies. When researchers used the heating therapy within two hours of patients receiving chemotherapy, the tumor was more susceptible to the chemotherapy and shrunk rapidly. The percentage of patients needing mastectomies was reduced from 75 percent to 7 percent.

"The trial was very successful. We were able to completely reverse those odds," Dooley said. "We redesigned the machine and will begin clinical trials this year to determine whether the therapy works on tumors that are larger than one and a half inches and smaller than 5 inches in size."

In theory, Dooley said the technique could be used on any organ that could be "held relatively still." Scientists are now working to integrate heat-sensitive nanotechnology that would more precisely target cancer cells. They also plan to study a byproduct of the rapid disintegration of the tumor -- a boosted immune system. Dooley said it looks like the rapid release of cancer proteins into the blood stream is causing an immune response that could reduce the chance of cancer recurrence

Elastic Scattering Spectroscopy

More good news for breast cancer, would be great to see biopsies become a thing of the past

Breast cancer is one of the most common cancers in women, particularly in Europe and North America. Just above 40,000 new breast cancers are diagnosed every year in the UK. The life time risk of being diagnosed with breast cancer in women is 1 in 9.

Detection of abnormalities in the breast requires the removal of tissue from the patient, followed by processing of the material and expert pathological interpretation. There are situations in the management of breast neoplasia which requires removal and immediate microscopic examination of tissue. These include assessing surgical resection margins, the status of sentinel lymph nodes and interpreting the findings during endoscopic examination of mammary ducts (ductoscopy). The conventional techniques currently used are expensive, labour intensive, and time consuming.

Elastic scattering spectroscopy (ESS) is a technique that is showing considerable promise for the immediate detection of cancer and pre-malignant changes in breast and other tissues. ESS is an optical biopsy technique which uses differential light absorption and scattering properties to detect cellular and subcellular changes that occur in malignancy. The result is produced by interrogating tissue with short pulses of white light and obtaining spectra from the light scattered. Statistical techniques and analyses performed by a computer are used to discriminate between the spectra of normal and abnormal tissue. This technique does not require tissue preparation or result in tissue destruction. No expert interpretation is needed and the result can be made available almost immediately.

Currently at the National Medical Laser Centre, in collaboration with the Department of Surgery, ESS is being tested to obtain rapid intra-operative diagnosis of sentinel lymph node in breast cancer. The results have been comparable with the conventional techniques for intra-operative diagnosis with a sensitivity of 74% and specificity of 96.5%.

On-the-spot DNA test could boost effectiveness of cancer therapies

A handheld device to predict whether patients will respond adversely to medication is one step closer to the market, thanks to a new partnership announced today.

Imperial College London and its spinout company DNA Electronics have developed a prototype healthcare device that assesses whether patients are genetically predisposed to suffering adverse reactions to prescription drugs. They are now carrying out trials to test its effectiveness, thanks to a new partnership with the pharmaceutical company Pfizer.

Dr Leila Shepherd, Chief Technology Officer of DNA Electronics says that the introduction of the device could improve the effectiveness of cancer drugs.

"At the moment, some cancer fighting drugs are deemed uneconomical because they only work for a certain subset of patients," Shepherd says. "If doctors had a method of screening patients to see whether these drugs work, then suddenly these therapies would be more cost effective to use."

Each year, the National Health Service spends £460 million (\$654 million US) to treat 250,000 patients who are admitted to hospital suffering adverse reactions to prescribed medications. These reactions can vary in severity, from dizziness and nausea to heart palpitations or unconsciousness.

A test to identify people who are likely to react badly to prescribed medication such as anti depressants or drugs to lower cholesterol could enable doctors to tailor dosages and drugs to the individual needs of each patient.

The device undergoing trials is the Single Nucleotide Polymorphism Doctor, or SNP Dr (pronounced 'snip doctor'). It is a portable technology that gives fast accurate spot test results for specific DNA sequences that indicate how we are likely to respond to certain drugs.

The SNP Dr works by analyzing genetic variations found in DNA called

Single Nucleotide Polymorphisms (SNPs). SNPs are the parts of human DNA that make us all respond differently to disease, bacteria, viruses, toxins or medication.

In particular, researchers are exploring how the SNP Dr might detect genetic sequences linked with metabolism. A slow metabolism can make drugs stay in the body longer, causing adverse side effects, while a fast metabolism can process medication too quickly for it to have any effect.

The SNP Dr works by analyzing the DNA in saliva or cheek swab samples, which are placed in a cartridge and exposed to the silicon chip sensors inside the device. A copy of the fast or slow metabolic SNPs is contained in the chip. If they detect a match, a message is displayed on the SNP Dr's console. The doctor can then assess their patient in the GP surgery, without a lengthy and costly laboratory analysis, and prescribe dosages and treatments accordingly.

"Nothing can replace the expert advice your GP gives you," says Dr. Chris Toumazou FRS, principal investigator at Imperial, "however, the SNP Dr could provide another layer in the treatment process that could help GPs to personalize treatments according to the genetic requirements of each patient."

The £1.2 million (\$1.7 million) project is part-funded by the Government's Technology and Strategy Board. The partnership will see Imperial and DNA Electronics providing the scientific and product development team with Pfizer providing expertise on SNPs, clinical samples, pharmaceutical sector knowledge and feedback as a potential end user of the product.

Nutrition victory: Cancer doctors begin prescribing vitamin D as part of cancer therapy

Coming to a doctor near you – we hope! Patricia

(NaturalNews) Resounding evidence proving the effectiveness of vitamin D in slowing the onset of breast, colon, and other cancers is convincing a growing body of doctors and physicians to utilize the sunshine vitamin in their arsenal of cancer treatment weapons.

In the last several years, numerous epidemiological studies have illustrated the correlation between vitamin D deficiency and serious disease, including cancer. Researchers are now focusing attention on elevated levels of "therapeutic" vitamin D, far above the government's daily recommended amounts, for use in disease treatment and prevention.

Oncologist Tracey O'Connor from the Roswell Park Cancer Institute in Buffalo has stated that she is now having all her patients supplement with vitamin D. Since vitamin D carries no risk unless taken at enormously high amounts above and beyond what any normal person would ingest, it can only benefit those who are already healthy by preventing disease, as well as those who are sick.

Recent studies have also shown that the general public is grossly deficient in vitamin D. Those with debilitating diseases have been found to be the most deficient, indicating a clear correlation between deficiency and the onset of disease. O'Connor pointed out that among women with breast cancer, about 80 percent of them are vitamin D-deficient.

Current research is suggesting that healthy doses of vitamin D require a several-thousand IU daily intake rather than the two- to six-hundred IU dose that has typically been recommended. While these lower levels may prevent rickets, they do little or nothing to prevent the development of many common ailments that have become prevalent in modern society.

Natural sunlight is the best way to obtain vitamin D throughout the warm months of the year. The precursor to vitamin D, ultraviolet light from the sun is absorbed into the skin where it is converted into this life-giving vitamin. The body knows when it has received enough for the day and shuts off production at the proper time, eliminating the risk of generating too much.

Vitamin D3 is the next best option as it is a natural plant form of vitamin D that is readily absorbed by the body. Advocacy groups and physicians recommend anywhere from 1,000 to 50,000 IU a day of vitamin D3 depending upon a person's condition. Healthy individuals typically do well taking between 2,000 and 10,000 IU a day while someone with cancer might be prescribed as much as 50,000 IU a day as part of a cancer treatment plan.

The False Dawn of Genetics

One of Britain's leading scientists today warns that the hope genetic research could provide a cure for a host of common illnesses has proved a "false dawn".

Professor Steve Jones, one of Britain's top geneticists, said the belief that a few genes held the key to ridding the world of conditions such as cancer and diabetes has proved to be "plain wrong".

In most cases hundreds of genes are responsible, and often they have less effect than other factors such as diet, lifestyle and the environment people live in.

Genetic research has led to an 'extraordinary flowering of knowledge', claims criticised charity

The genetic 'cures' that have proved 'false dawns' Writing in the Daily Telegraph, the academic and author led calls for a complete overhaul of the "scattergun" approach, which is backed up by millions of pounds in funding by governments and medical charities such as the Wellcome Trust.

He said he was one of a number of "renegade" scientists who were beginning to question such research: "It's not done to kill the goose that lays the golden eggs, nor to bite the hand that feeds you - nor, in my own profession, to criticise the research programme of the Wellcome Trust, an enormously rich charity that paid much of the bill to read the message written in human DNA.

"Not done, perhaps: but a pack of renegade biologists has turned on that source of nutrition to claim that what it is doing is welcome, but plain wrong."

"We thought it [genetic research] was going to change our lives but that has turned out to be a false dawn."

Professor Jones, who does not name the other scientists, said that the idea that the research would be a "cure all" for many common illnesses such as cancer and diabetes has led scientists down a "blind alley" and they must now rethink their approach.

His intervention is likely to trigger a debate into the usefulness of genetic research in Britain and the world, and on whether the hundreds of millions invested would be better off spent elsewhere.

Professor Jones, author and head of the biology department at University College London, said that there had been "too much optimism" surrounding gene research and there is a danger it has become "largely unfounded".

"Just a couple of years ago, there was real optimism that a new era of understanding was around the corner," he said.

"That did not last long, for hubris has been replaced with concern: like Macavity the Mystery Cat, the evidence of genetic inheritance is clear, but the genes themselves are just not there.

"Of course there have been some successes, but it is the 'cure all' aspect of the work that has proved unfounded.

"It is the nature of the business that occasionally you go down the wrong road and that pretty much is what looks like has happened now."

Hundreds of millions of pounds' worth of research into genetics was kick-started after scientists successfully mapped the entire human genome in 2003 and there were some early successes with rare inherited diseases such as haemophilia.

Scientists embarked on a search for rogue genes responsible for just about every modern malady, hoping such conditions could be blamed on a small set of genes - which could then lead to a cure.

But the more they investigated, the more complicated they realise finding a cure would be.

Many individual genes say very little about the real risk of illness, and they found diet and the environment still has an enormous influence on whether we develop a disease, they have found.

The DNA of a person's height has been examined in some 30,000 people - but, he said, of the 50 different genes associated with being tall, it is only one-twentieth of the variation needed to explain the similarity of children to parents.

Even when they have identified common genes such as in diabetes and Crohn's disease they have discovered they only account for less than 10 per cent of inherited influence.

Professor Jones said it may be time to "stop throwing good money after bad".

"Whatever the panjandrum of science decide to do with their Everest of cash, it is time to turn to one of the few genetical proverbs, for their mountain has laboured and brought forth not much more than a mouse.

"And what was that old adage about throwing good money after bad?"

"Genetics has been a series of revolutions of diminished expectations. It doesn't look very optimistic," he said.

"We have wandered into a blind alley and it might be better that we come out of it and start again."

He also turned his focus on the thousands "wasting their money" on genetic tests - an industry to be examined by The Nuffield Council on Bioethics. They have warned that expensive private health "MOTs", including the use of DNA profiles to predict the risk of developing deadly diseases, could be doing "more harm than good".

But it is the main thrust of Prof Jones' argument which has sparked debate among his fellow scientists.

Professor Marcus Pembrey, clinical geneticist and chairman of the Progress Education Trust, a think tank on genetics, denied "it was a waste of time or money".

"The expectations were probably a bit high but they had a go and it was a long shot that has only come off a bit," he said.

"Drug companies and academic groups like the Wellcome Trust wanted a short cut to a cure and I am afraid that they just do not exist.

"There is nothing wrong with genetic research and it had some breakthroughs but it has not turned out to be the panacea that it was first hoped."

Professor Pembrey, who is currently part of a study following the lives of 10,000 children, said that the focus now should be on studying human genes and how they are affected by and interact with the environment – especially when people are young.

Professor George Ebers, professor of clinical neurology at Oxford University and an expert on genes and MS, said: "There has been disappointment in this field.

"The expectation was that there would be a lot of important things found and that has not panned out. "However, there were small things uncovered which do have important significance.

"One gene found for MS, for instance, does not give you the disease but it does tell us more about how it is caused in the body.

"These are things we would not know had we not gone through this process."

Professor John Burn, professor of clinical genetics at the University of Newcastle, said genetic research into colon cancer had been a success but it was "the exception that proved the rule".

"People have now a very simplistic leap to the idea that everything that is genetic can be traced back to a simple genetic mistake," he said.

"We have seen already with the example of height that yes there are genes that influence how tall someone is but there is also environment and diet.

"Very large studies have shown that a two per cent variation in height can be controlled by 17 different genes. "But we must not throw the baby out with the bath water.

"Although genetic disorders are rare, with more than 6,000 different genetic disorders they affect an awful lot of people. "

Professor Peter Donnelly, Director of the Wellcome Trust Case Control Consortium which funds a number of genetic studies, said: "The pace of genetic findings is changing at an immense rate and we are now able to analyse human variation in health and disease on a scale unimaginable even just a few years ago.

"It may be years – decades, even – before this knowledge is translated into new treatments, but such research is essential if we are to make progress."

The Pathway Programme

This is a holistic support programme set within a goal orientated framework where progress should be measurable. Based on the six major challenges faced with chronic illness:

Trauma - coping with the impact and trauma of the diagnosis

Goal setting – setting short term goals for successful treatments and long term goals for the return to health

Treatment - how to achieve positive treatment experiences by lessening side effects and making treatment decision based on the individuals needs

Relationships – family and friend dynamics; building a positive support team. Relationships with the medical team; strategies for empowerment

Self esteem - focus on the impact, adapting and tools for successful recovery

Immune system building – a personal strategy of nutrition, exercise, and lifestyle elements for the pathway to long term health

The programme is devised for each individual so if a practitioner is covering an area such as nutrition we shall obviously leave well alone.

As well as emotional support we shall be using the following:

Relaxation

Meridian energy work

Exercise and nutrition

Visualisation techniques

Positive goal setting

We have a Pathway CD to support the meditation and relaxation exercises.

The programme is designed around six sessions, though both less or more can be accessed and is designed to be carried out over the phone, or in person if preferred in Nottingham or Surrey at the moment. They shall shortly be available in London.

We have an introductory offer of the whole programme for the excellent price of £300.

The programme is applicable for anybody dealing with a chronic illness, not just cancer. Full details are available on www.pathwayforhealth.co.uk

Or Tel me on **0800 999 8002**.

Relaxation For Health



Track

- 1 Introduction to relaxation
- 2 Gentle relaxation - relax!
- 3 Gentle relaxation – letting go
- 4 Gentle relaxation - breathing
- 5 Advancing meditation - energy
- 6 Advancing meditation – health and well being
- 7 Advancing meditation – healing light
- 8 Visualisation – the beach
- 9 Visualisation – the forest
- 10 Visualisation – energizing colour

One hour of easy to use and effective relaxing techniques
of mediation and visualisations to guide the way back to
good health

www.pathwayforhealth.co.uk

© Patricia Peet 2009



**Available from Cancer Options for £8.95 plus postage tel: 084500992041 email
patricia@canceroptions.co.uk**