What are we doing to this world?

How far astray have we been led by academics, the greens, the fixated, and for how long will we continue to pay for their impositions on world societies.

Zero population growth!

The world, including Australia is suffering from this nonsense. Look at the facts:

China:

- One child per family;
- State demanded abortions;
- State permission to have more than one child;
- Crowning of children about to be born;
- Abortion of female foetuses.

The whirlwind has been sown and the Chinese have reaped the disaster: males out number females, children are at risk of being kidnapped, an ageing population.

Australia

- Abortion on demand;
- No native Australians available for adoption;
- An ageing population;
- Multiple children families discouraged by a society made selfish by a *new culture* pushed by the advertising community with their inane and senseless promotions.

We already have population ratio problems, global warming is looming and what else should we fear?

To whom can we turn?

Can we ask those in government, they are the ones who have brought us to this pass! Kevin Rudd may well have seen the light. The late Pope John Paul II said in his encyclical ***The Splendour of Truth***[1]**, "Consequently no evil done with good intention can be excused".** Abortion is evil, modern advertising has created a society where people confuse wants for needs, and promote self to the detriment of their target audience, and now we have the sacrifice of embryos on a remote possibility of therapeutic rewards when adult stem cells are delivering results without killing human embryos.

[1] Veritatis Splendor Chapter Two Part IV No. 78

The government has a duty to promote a just, moral and ethical society. Do governments see this? Is it more important to be re-elected than to do good?

Stem Cell Research

It would appear that scientists are betting on the come! I have not found one reference that embryonic stem cells have delivered; cord blood cells and adult stem cell seem to have the runs on the board. The membership of the Lockhart inquiry was loaded with academics/medical researchers. Like Caesar's wife, Pompeia, the committee should be above suspicion, how can this stacked committee be above suspicion?

Research is their lifeblood putting moral/ethical barriers on them is like asking an alcoholic should we close the pub. All politicians have a duty to be sane and weigh the prospects for the future. It would seem that we are most likely to step into a dark place fraught with the possibility of disastrous consequences such as possible rejections and possible anaphylactic reactions and death.

Many great medical breakthroughs have been made inspite of the opposition of mainstream medical academics, classic cases are Banting & Best's fight to bring insulin to the world.

The clinical trial listed below is reminiscent of the tragedy of thalidomide, a drug that was promoted and thought of as safe, and of chloramphenicol it was the widest prescribed antibiotic in the late 1940s and early fifties in Australia, but it caused deadly aplastic anaemia.

Catastrophic immune response may have caused drug trial horror

14:22 17 March 2006
NewScientist.com news service
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A catastrophic over-stimulation of the immune system may have caused the horrific reactions suffered by six men taking part in the first human clinical trial of an experimental drug.

An investigation by **New Scientist** suggests the drug may have caused a super-immune response – sending white blood cells called T cells rampaging through the body destroying its own tissues.

Several experts contacted by **New Scientist** agree this is the most likely explanation for the terrible incident which put all six men in hospital intensive care in London, UK, with two in a critical condition. The victims, who were healthy, paid volunteers, are said to have suffered multiple organ failure.

The drug, called TGN1412 and made by German pharmaceutical company TeGenero, works by stimulating T cells, which could help treat leukaemia and auto-immune diseases such as rheumatoid arthritis. But this super-stimulation may have backfired. Indeed, a scientific article, highlighted on TeGenero's own website, may have presaged this.

"Indiscriminate attack"

TGN1412 is a monoclonal antibody but works slightly differently from other similar drugs. It is a "superagonist", causing a far greater immune cell response. It also does not require a second, specific trigger to kick-start this response, as do other monoclonal antibodies affecting the same T cell receptor.

"Fortunately, this [super-stimulation] does not occur naturally, because T cells activated in this way would lack any antigenic specificity and could indiscriminately attack normal tissues," wrote Peter Linsley, from Rosetta Inpharmatics in Seattle, US, in March 2005 in a commentary accompanying a paper in *Nature Immunology*, which involved TGN1412.

"One could certainly say that, based on what [TeGenero] has already said about TGN1412, the most plausible explanation would be the triggering of a non-specific activation of natural killer T cells leading to indiscriminate cell destruction," says Ken Campbell, clinical information officer at the Leukaemia Research Fund in London, UK. "This would be consistent with multiple organ failure."

An immunologist contacted by **New Scientist**, but who asked not to be named, says: "You don't need to be a rocket scientist to work out what will happen if you non-specifically activate every T cell in the body."

Regulatory response

Michael Ehrenstein, at University College London, UK, who works on regulatory T cells and rheumatoid arthritis, believes the drug was intended to activate regulatory T cells. This subgroup of T-cells actually suppresses the activation of the immune system and stops it from attacking a person's own body. TeGenero states that this is the strategy they hoped would ease the symptoms of rheumatoid arthritis patients.

"It's possible there was contamination" of the drugs the patients received, Ehrenstein notes, but he says it is just as possible that something unexpected happened. "Instead of damping down the immune system, it's activated it more. That's what it looks like to me," he told **New Scientist**.

Multiple attempts to contact TeGenero by **New Scientist** were unsuccessful. Previous experiments on immuno-deficient rats by the company indicated that the effect of the drug on regulatory T cells was disproportionately greater than on other T cells, leading to a normally functioning immune system. But it is unknown whether TGN1412 had been made more specific to regulatory T cells before the human trials.

Special status

Reports from friends and relatives describe the nightmarish symptoms suffered by the men. One man's head was said to have swollen massively and his limbs turned purple. Another was said to resemble the deformed "Elephant Man".

TGN1412 was being tested as a treatment for a range of illnesses, including autoimmune diseases, but it had been awarded special status as a possible treatment for a type of leukaemia called B-cell chronic lymphocytic leukaemia (B-CLL).

The drug is a type of monoclonal antibody. Antibodies are produced by the immune system in response to a foreign invader like a bacterium. It recognises the particular invader, or antigen, and neutralises it as well as kick-starting a wider immune response. A monoclonal antibody is one manufactured to be specific for one antigen only. These have been used safely in treatments for a variety of diseases, including lymphoma, experts stress.

Direct stimulation

But TGN1412 differs from other monoclonal antibodies because it is a superagonist – massively enhancing the body's immune response. It works by binding to a molecule, or receptor, on the surface of a T cell called CD28. Normally, binding to CD28 triggers the T cell response, but only when the T cell is also bound by another factor which is specific to the tissue designated for attack.

However, TGN1412 bypasses this so-called "co-stimulation". It binds in a different place on the molecule to natural antibodies and directly causes CD28 to provoke a strong T cell response, without needing the other antigen-specific molecule to bind.

This is what was highlighted by Linsley in his article accompanying the *Nature Immunology* paper (vol 6, p 271). In that paper, scientists had for the first time managed to crystallise and examine the structure of CD28.

"Completely unexpected"

Whatever the cause of the terrible side-effects seen in the UK trial, it is unusual not to have seen anything similar in animal testing, says Campbell: "CD28 is widely conserved across species. It's very, very strange if it does turn out to be some idiosyncratic case in humans," he told **New Scientist**.

The company insists animal testing gave no hint of these side effects. "These events were completely unexpected and do not reflect the results we obtained from initial laboratory studies which enabled us to progress investigations into human volunteers", said CEO Benedikte Hatz, in a statement.

The UK's regulatory body, the Medicines and Healthcare products Regulatory Agency, which halted the trial, is currently conducting an investigation which could take weeks to reach a conclusion.