The Government of China acknowledges that organs for transplants done in China come overwhelmingly from Chinese prisoners. The claim of the Government of China is that these prisoners who are the sources of organs harvested for transplants are convicted criminals sentenced to death and then executed who consented before execution to the use of their organs for transplants. 1234. I and David Kilgour, in a study released in report form in July 2006 and then January 20075 and in book form in November 2009 under the title Bloody Harvest: The Killing of Falun Gong for their Organs, concluded that the bulk of prisoners who are the source of organs for transplants are Falun Gong practitioners who do not consent, who are killed by the organ harvesting operation and who are not sentenced to death.

The Government of China acknowledges that sourcing of organs from prisoners is wrong and has committed itself eventually to ending the practice. Deputy Health Minister Mr. Huang, at the time of the announcement of an organ donor pilot project in August 2009, stated that executed prisoners "are definitely not a proper source for organ transplants"6. This acknowledgement stands regardless what position one takes in the debate between the Government of China, on the one hand, and me and David Kilgour, on the other hand, about which prisoners are sources of organs for transplants.

I. Sales
Organ transplant anti-rejection drug trials and sales in China are conducted by multi-national pharmaceutical companies. The drug company Roche in 2006 opened a factory in Shanghai producing the immunosuppressive drug CellCept. Asked by a newspaper why Roche produces this particular drug in China the former Roche CEO and present Chairman of the Board of Directors Franz Humer:
"... gave as reason that, contrary to Japan, in China there were no ethical or cultural stoppages for transplant medicine"7

Canadian company Isotechnika and Chinese company 3SBio in 2010 entered into a cooperation contract on the immunosuppressive drug voclosporin. The drug was developed by Isotechnika. A co-founder of 3SBio, Jing Lou, recently became a board member of Isotechnika.

Bloomberg Businessweek reported on August 25, 2010:

“3SBio..., a China-based biotechnology firm, and Isotechnika Pharma..., a Canadian biopharmaceutical company focused on the discovery and development of immune modulating therapeutics, said they have signed a development and commercialization agreement for voclosporin, a next generation calcineurin inhibitor being developed for use in the prevention of organ rejection following transplantation and the treatment of autoimmune diseases. Under the terms of the agreement, Isotechnika will grant 3SBio exclusive rights to all transplant and autoimmune indications of voclosporin in China, including Hong Kong and Taiwan,... 3SBio will be responsible for the clinical development, registration and commercialization of voclosporin in China. Isotechnika will provide, under separate agreement, commercial supply to 3SBio on a cost-plus basis. Isotechnika will receive an upfront non-refundable licensing payment of $1.5 million. Isotechnika will also receive ongoing royalties based on sales of voclosporin by 3SBio.... 3SBio will also nominate one member to Isotechnika's board of directors...."9

In 2008, the pharmaceutical company Roche decided against invoking a contract option to cooperate with Isotechnika in marketing the drug for transplants10. Isotechnika decided to go ahead without an international partner, in cooperation with the Chinese company 3SBio.
The cooperation contract makes Isotechnika complicit in the unethical organ transplantation system of China. Immunosuppressive drugs are used on organ transplant patients to prevent rejection of transplanted organs. The contract, by bringing the drug to the Chinese market, would facilitate organ transplantations in China.

II. Trials
One trail of evidence on which David Kilgour and I relied was telephone calls of Mandarin speaking investigators. These investigators telephoned a number of hospitals and transplant doctors to ask about transplants. The callers presented themselves as potential recipients or relatives of potential recipients. Phone numbers were obtained from the internet. These calls resulted in a number of admissions that Falun Gong practitioners are the sources of organ transplants.

This is an excerpt of the transcript of the call made by caller M to Shanghai Jiaotong University Hospital's Liver Transplant Centre on 16 March 2006:

"M: I want to know how long [the patients] have to wait [for a liver transplant].
Dr. Dai: The supply of organs we have, we have every day. We do them every day.

M: We want fresh, alive ones.
Dr. Dai: They are all alive, all alive...

M: How many [liver transplants] have you done?
Dr. Dai: We have done 400 to 500 cases... Your major job is to come, prepare the money, enough money, and come.

M: How much is it?
Dr. Dai: If everything goes smoothly, it's about RMB 150,000... RMB 200,000.

M: How long do I have to wait?
Dr. Dai: I need to check your blood type... If you come today, I may do it for you within one week.

M: I heard some come from those who practise Falun Gong, those who are very healthy.
Dr. Dai: Yes, we have. I can't talk clearly to you over the phone.

M: If you can find me this type, I am coming very soon.
Dr. Dai: It's ok. Please come.

M: ... What is your last name?...
Dr. Dai: I'm Doctor Dai.11"

**a) Roche**

International registries for clinical trials12 show that drug company Hoffmann-La Roche or Roche was engaged since 2008 in research in transplanted livers and kidneys in 19 hospitals in China13. For research location, the registries give Chinese zip codes only.

The China Liver Transplant Registry lists contact information of hospitals where liver transplants are being done14. Most of the hospitals in which Roche is doing its research can be identified because, for most of the Roche Zip codes, there is only one Chinese liver transplant registry hospital.

One of the Roche Zip codes is 20008015. For Zip code 200080, the only China Liver Transplant Registry hospital is the Shanghai Jiaotong University Hospital's Liver Transplant Centre. It is also called Affiliated No. 1 People's Hospital at Jiaotong University in Shanghai
and the Shanghai First People's Hospital\textsuperscript{16}. This is the place where the investigator talked to Dr. Dai. The phone number the investigator called is the same as the phone number of the hospital in the China Liver Transplant Registry\textsuperscript{17}.

So there is compelling evidence that Roche is engaged in clinical trials in a hospital in Shanghai which is sourcing organs from Falun Gong practitioners. Roche itself gives no indication of the source of organs.

\textbf{b) Novartis}

For the 2005-2006 trial, Novartis gave hospital names for the trial locations. One location was Shanghai No 1 Hospital, Shanghai. "Shanghai No 1 Hospital" must mean "Shanghai First People's Hospital" of China Liver Transplant Registry where the phone call with Dr. Dai was recorded. No other No 1 Hospital in Shanghai doing transplants could be found.

\textbf{c) Astellas}

The Second Artillery General Hospital in Beijing which is running the trial for the Astellas drug Prograf, mentioned earlier, has as a trial location Shanghai First People's Hospital with the ZIP code 200080\textsuperscript{18}. This, again, is the hospital where we have the tape recording of Dr. Dai.

\textbf{d) Wyeth/Pfizer}

An article in the British Journal of Clinical Pharmacology discusses the Wyeth/Pfizer kidney trial with 122 subjects mentioned earlier in this talk and says: "The source of organs was mostly cadavers (93\%)." One trial location listed in the article is "Shanghai No.1 People's Hospital of Jiaotong University, Shanghai"\textsuperscript{19}. Again, this is the hospital where Dr. Dai was recorded.

\textbf{III. Transplant tourism}
A website offers to foreigners transplants at The Tianjin Oriental Organ Transplant Center. The website of the Omar Health Care Service:

"We, Omar Healthcare Service (OHS), are here to assist the overseas patients who intend to be treated in China by those world-famous specialists, or who are seeking a help of getting a kidney, liver or heart transplant in China. Please browse through our website to find out more information about the service we provide and contact us for more customized items. We are cooperating directly, as a service provider, with the most qualified two hospitals concerning transplantation in China:

Tianjin First Central Hospital
International Cardiovascular Hospital

Those above-mentioned hospitals of which the First Central is famous for liver & kidney treatment/transplant while the International Cardiovascular for heart, with the license issued by the Ministry of National Health of the People's Republic of China, are surely where the dying patients reborn."20

After clicking on "Organ transplant in China", you see this:

"As a sector of modern medical system, Chinese doctors and scientists in line with organ transplantation have been winning satisfactory achievements worldwide recognized. More and more dying patients from all directions of the world are coming to China to seek for rebirth, of which most are survived successfully. It is true that the source of organ supply are fairly abundant in China compared with that in western countries (italics added), but the excellent skill in performing such demanding operations is no doubt an important factor for them to make decisions before leaving home for China."21

The website languages are English and Arabic.

One and a half million Chinese need transplants. The Chinese Ministry of Health, under the
supervision of the Chinese Red Cross, in March 2010 set up an organ donation system in 11 provinces and municipalities.

The newspaper Beijing Today reported in March 2011, one year later, "In Nanjing, the capital of Jiangsu Province, [one of the eleven sites], the not one person has elected to be a donor." Liu Wenhua, a member of the Red Cross of Nanjin and one of 12 donation counselors sent by the city government to five hospitals said "only three people in Nanjing have donated organs in the past 20 years". The story goes on to note: "Success was equally absent in other regions. As of last Thursday, only 37 people nationwide had registered to donate their organs."22

Chinese patients are supposedly given priority access to organ transplants, taking precedence over foreigners. The Ministry of Health of the Government of China announced that change on June 26, 200723. Yet, the website posting of the Omar Health Care Service suggests the contrary. Like much else in China, what the Chinese Government/Communist Party says and what the Government/Party does about transplant tourism and ending organ transplant abuse diverge considerably.

**IV. Standards**

World Health Organization principle 11 for organ transplantation says that donation of organs "...must be transparent and open to scrutiny, while ensuring that the personal anonymity and privacy of donors and recipients are always protected." Principle 10 requires traceability of organs to the donor24.

Some country transplantation laws allow communication of the contents of medical records to the authorities, including to foreign authorities and international organizations, in order to bring to light illegal organ trafficking or other grave infringements of its transplantation laws. Every country's transplantation laws should allow this form of disclosure and
traceability. The Swiss transplantation law, for example, gives its Federal Council power to enact regulations to that effect25.

An article in the 2011 edition of the American Journal of Transplantation states:

"Pharmaceutical companies must ensure that no executed prisoners are the sources of organs used in their studies"26

The word "must" indicates that the onus rests on the pharmaceutical companies. The word "ensure" indicates that what counts is the result, not just the effort.

**V. Reaction**

The Swiss NGOs Declaration of Berne and Greenpeace Switzerland in January 2010 gave the Public Eye Swiss Award 2010 for irresponsible company practices to Roche. Roche also got the Public Eye People's Award for irresponsible company practices by an internet vote of 5,723 people worldwide. The awards were granted for conducting research on transplant patients in China without knowing the origin of the organs donated27.

Amnesty International in August 2010 issued an appeal which stated:

"Companies should exercise due diligence to ensure that they are not directly or indirectly implicated in the taking or use of organs from executed prisoners."

It called on pharmaceutical companies

"to collectively:

• declare their commitment to respecting human rights;
• condemn the practice of sourcing organs from executed prisoners; and
• undertake to carry out human rights due diligence, including throughout their value chains, so as to become aware of, prevent and address adverse human rights impacts, and to ensure that they do not directly or indirectly assist, encourage or support the sourcing of organs from executed prisoners."28
Drug company Novartis stated in August 2010 that it was observing a moratorium for its clinical immunosuppressive drug trials in China. Its spokesman, Satoshi Sugimoto, declared that Novartis supported the public statement of Amnesty International and would work on bringing together the stakeholders for the next steps.29

The Dutch bank Triodo disinvested from Roche stating in September 2010:

"Recent controversies show that Roche's clinical trials with transplanted organs in China do not meet Triodos criteria for selection....in January this year, Roche received the Public Eye Award that is sponsored by the Berne Declaration and Greenpeace... Naturally, we decided to investigate the case... Roche received the award because of its clinical trials in China for the drug CellCept, which prevents the rejection of transplanted organs. Since a large part of transplanted organs in China originate from executed prisoners and Roche does not verify the origins of the organs in its China-based trials, its position is questionable.

Roche's response to our enquiries pointed out that the responsibility for obtaining organs lies with the trial centres that perform the transplants. The company claims it is not entitled in any country to learn where the transplanted organs originate from. Up to 90 percent of all transplanted organs in China come from executed prisoners... even when a prisoner supposedly consents to an organ donation, such consent while imprisoned cannot be considered of free will. Consultations with experts and NGO's such as Amnesty International and Dutch based medical industry watchdog Wemos all pointed in the same direction: Roche does not take full responsibility for its clinical trials in China. In our final assessment we balanced the gathered information and concluded that Roche's approach to clinical trials in China is not acceptable. The company's size and influence warrant a much clearer position on the origin of transplanted organs. Since the company no longer meets our human rights minimum standard, it has been excluded from the Triodos sustainable investment universe and will be removed from all Triodos investments within the short term.30
The Dutch ASN bank followed suit. According to information posted on the internet in March 2011, they removed Roche from their portfolio because of its clinical transplant trials in China31.

VI. Remedies

Both sales of anti-rejection drugs to China and clinical trials of anti-rejection drugs in China are problematic. The sale of anti-rejection drugs facilitates an illicit transplant industry. Clinical trials have been performed on patients who may have received organs from improper sources.

Pharmaceutical companies should not be participating in clinical trials in China unless they are satisfied beyond a reasonable doubt that the organs transplanted to the patients on whom the drugs are used are received from a proper source. Doctors should not participate in clinical trials in China unless the doctors themselves ensure beyond a reasonable doubt that the organs transplanted to the patients on whom the trials are conducted are received from a proper source. Regulatory authorities should not approve drugs based on data from clinical trials in China.

Sales though present a more nuanced issue. Some sales keep alive patients who have already received organs from improper sources. Drugs should be provided to patients who might die without them. Killing patients who received organs from improper sources is not an answer to unethical organ sourcing.

Yet, anti-rejection drugs should not be so freely available that they induce further improper organ sourcing. One has to distinguish between past transplants and future transplants. Drug companies should announce a policy that they would sell anti-rejection drugs to existing patients but not to future patients.
The question then becomes how to implement such a policy. If tracing donors and patients were possible, implementation would be easy. However, the Chinese transplantation system does not have the transparency which makes that sort of tracing possible.

A simpler way of making the distinction between past and future transplants would be to freeze sales at the level necessary to meet the needs of the existing patient volume at the time of the freeze. That sort of freeze may allow for some slippage, because patients who die and no longer need the drugs could be replaced by new ones. Nonetheless, the freeze would curtail abuse and put the drug companies on record as combatting it.

We should not turn a blind eye to ethical abuse. Given the high proportion of organs sourced from prisoners, many if not most of the organs used in clinical trials likely came from prisoners. Until China respects the World Health Organization principle that organ donations are to be transparent, traceable and open to scrutiny, neither pharmaceutical companies nor transplant professionals should cooperate in Chinese transplantation activities.

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4 "Tomorrow's Organ Transplantation Program in China". Presentation delivered at the Madrid Conference on Organ Donation and Transplantation, Madrid 2010, by Prof. Huang Jiefu, Vice Minister of Health, P.R.C.

5 At www.organharvestinvestigation.net


7 http://www.handelsblatt.com/unternehmen/industrie/transplantationsbank-china%3B985748


9 http://www.isotechnika.com/for_investors/media_coverage/?article_id=397&back=%2F

10 Arne Schwarz, "Why is the cooperation contract on the immunosuppressive drug voclosporin between Canadian company Isotechnika and Chinese company

11 The original recording can be found at


The phone number called was 011862163240090. The English translation is Telephone Message 4. For Bloody Harvest, David Kilgour and I retranslated the original Chinese
rather than rely on the translation on the web and identified different callers with different initials.

12 http://clinicaltrials.gov ; http://centerwatch.com
( up to February 2010).

13 Arne Schwarz, "Chinese hospitals presumably used by Hoffmann-La Roche for transplantation trials" April 30, 2009

14 http://cltr.org/en/transplantcenters.jsp Go to "English" and then “Transplant centers".


The website given at Chinese Liver Transplant Registry for Shanghai First People's Hospital is that of the Liver Transplant Centre where the correct full name is found with Google translate: Shanghai Jiaotong University Affiliated First People's Hospital liver transplant center.


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23 Jim Warren China moving rapidly to change transplant system Transplant News, September 2007


26 G.M. Danovitch, M.E. Shapiro, and J. Lavee "The Use of Executed Prisoners as Sources of Organ Transplants in China Must Stop" Volume 11 pages 426-428.

27 http://www.swissinfo.ch/eng/specials/World_economic_forum/Roche_vilified_in_Davos_for_transplant_drug.html?cid=8185350

29 "Appel à clarifier les prélèvements d'organes sur des prisonniers en Chine" Frédéric Koller/Le Temps  http://www.infosud.org/spip.php?article8664

30 Pharmaceutical giant removed from investment universe
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31 http://www.asnbank.nl/index.asp?nid=9415 (in Dutch). Click under the header "Afgekeurd/ verwijderd" the internal link "Roche".