WHY DO PRESIDENT MBEKI AND DR TSHABALALA-MSIMANG WARN AGAINST THE USE OF ARV DRUGS LIKE AZT?

DO THEY KEEP PEOPLE HEALTHY?

DO THEY MAKE SICK PEOPLE BETTER?

OR ARE THEY DEADLY POISONOUS AND COMPLETELY USELESS?

A presentation by Adv Anthony Brink, Chairman of the **Treatment Information Group**, to the 'Provincial Interactive Strategic Conference on a Holistic Approach to the Treatment and Management of HIV and AIDS' convened by the KwaZulu-Natal Department of Health at Pietermaritzburg on 22-24 November 2006

Appendix: African death rates on ARVs – reports in 2007

TREATMENT INFORMATION GROUP
thinking about AIDS drugs

"Concerned to respond appropriately to [AIDS in South Africa], many in our country have called on the government to make the drug AZT available in our public health system. … There … exists a large volume of scientific literature alleging that, among other things, the toxicity of this drug is such that it is in fact a danger to health. These are matters of great concern to the government as it would be irresponsible for us not to heed the dire warnings which medical researchers have been making. I have therefore asked the Minister of Health, as a matter of urgency, to go into all these matters so that, to the extent that is possible, we ourselves, including our country's medical authorities, are certain of where the truth lies."

– President Thabo Mbeki, Parliament, 28 October 1999

"[Dr Tshabalala-Msimang confirmed that there was indeed] a body of scientific research and information which indicated that AZT was a dangerous drug, and had not been designed for the treatment of HIV/AIDS. Because it was unable to target only the human immunodeficiency virus when it went to work in the body, it further weakened the immune system. There was also a danger that ... mothers taking the drug might produce children with disabilities [*]. Tshabalala-Msimang said her ministry would not like to look back ten or fifteen years down the line and find it had exposed the vast majority of historically disadvantaged people in South Africa to a dangerous drug. … there was no data proving that AZT was of any use to rape victims."

– SAPA report of Dr Manto Tshabalala-Msimang's statement outside Parliament immediately after President Mbeki's warning about AZT, 28 October 1999

"The antiretroviral drugs currently licensed in the United Kingdom are zidovudine (azidothymidine) [*AZT*], zalcitabine (ddC) and didanosine (ddI). … All are very toxic. Suppression of bone marrow elements can occur with any of the three, as can peripheral neuropathy."

– *Adverse Drug Reaction Bulletin*, No.178 (1996)

"AZT is a drug that was developed for use in chemotherapy for cancer patients. It was, however, never used in cancer patients because it was regarded as too toxic to use. Tests have clearly shown that rats that were exposed to … AZT [*in the womb during gestation*], developed vaginal cancer [*]. This is a very serious finding. Other toxicological data exists with respect to AZT, including damage to nerves, muscles and bone marrow. All of this data needs to be assessed very thoroughly. As the Minister of Health I have a responsibility for ensuring that South Africans get appropriate and affordable healthcare. This responsibility extends to ensuring that no healthcare intervention has a long-term negative effect on people."

– **Dr Tshabalala-Msimang, Parliament, 16 November 1999**

"… for AIDS patients, it is urgently necessary to develop a remedy substituting this toxic substance, AZT."

– **Hayakawa et al. *Biochemical and Biophysical Research Communications* 176:87-93 (1991)**

"AZT is a confirmed carcinogen. ... The fact is that some of the mice [*exposed to AZT in the womb*] have contracted cancer [*]. It attacks bone marrow. It is very toxic."

– **Dr Tshabalala-Msimang, *Mail&Guardian*, 1 December 1999**

"It is self-evident that ANAs [*antiretroviral nucleoside analogues, such as AZT*], like all drugs, have side-effects. However, the prevalent and at times serious ANA mitochondrial toxic side-effects are particularly broad ranging with respect to their tissue target and mechanisms of toxicity: Haematological [*blood*]; Myopathy [*muscles*]; Cardiotoxicity [*heart*]; Hepatic toxicity [*liver*]; Peripheral neuropathy [*nerves*]."

– **Lewis and Dalakas, *Nature Medicine* 5:417-22 (1995)**

"[AZT and other nucleoside analogue drugs] are much more toxic than we considered previously. … The layer of fat-storing cells directly beneath the skin, which wastes away … is loaded with mitochondria … other common side effects of [AZT and similar drugs are] nerve and muscle damage, pancreatitis and decreased production of blood cells … all resemble conditions caused by inherited mitochondrial diseases."

– Brinkman et al. *Lancet* 354(9184):1112-5 (1999)

"What we are trying to do is to put on the table information so that [if] the citizens of the country … get hold of AZT they do so knowingly, so that tomorrow nobody should say we were not told."

– Dr Tshabalala-Msimang, 'The Truth on AZT', e.tv documentary, 12 December 1999

"AZT underwent clinical trials and was introduced as a specific anti-HIV drug many years before there were any data proving that the cells of patients are able to triphosphorylate the parent compound to a level considered sufficient for its putative pharmacological action. Notwithstanding, from the evidence published since 1991 it has become apparent that no such phosphorylation takes place and thus AZT cannot possess an anti-HIV effect. However, the scientific literature does elucidate … a number of biochemical mechanisms which predicate the likelihood of widespread, serious toxicity from use of this drug. … Based on all these data it is difficult if not impossible to explain why AZT was introduced and still remains the most widely recommended and used anti-HIV drug. [The continued administration of AZT] either alone or in combination … to HIV sero-positive or AIDS patients warrants urgent revision."

– Papadopulos-Eleopulos et al. *Current Medical Research and Opinion* 15, Supplement 1: 'A Critical Analysis of the Pharmacology of AZT and its Use in AIDS' (1999)

"RETROVIR (ZIDOVUDINE) MAY BE ASSOCIATED WITH HEMATOLOGIC TOXICITY INCLUDING GRANULOCYTOPENIA AND SEVERE ANEMIA [*massive destruction of white (immune) and red blood cells respectively*]. … ANTIRETROVIRAL NUCLEOSIDE ANALOGUES, INCLUDING RETROVIR … ARE POTENTIALLY FATAL."

– GlaxoSmithKline: AZT 'Product Information'

"What it does, it suppresses the immune system. The very system we want to boost. … I wouldn't take AZT, I would not."

– Dr Tshabalala-Msimang, 'The Truth on AZT', 12 December 1999

"[Due to their] potent immunosuppressive properties … profound immunosuppression … often accompanies therapy with nucleoside analog drugs. … they have a number of associated toxicities, some of what may be severe. Of particular concern is immunosuppression which is uniform with standard treatment programs. Each of the nucleoside analogs is associated with a profound lymphocytopenia [depletion of immune cells], with a reversal of the CD4/CD8, and opportunistic infections."

– Cheeson, Keating and Plunkett, *Nucleoside Analogs in Cancer Therapy* (New York: Marcel Dekker Inc., 1997)

"In your letter to me of June 19, you make the extraordinary statement that AZT boosts the immune system. Not even the manufacturer of this drug makes this profoundly unscientific claim. The reality is the precise opposite of what you say, this being that AZT is immuno-suppressive. Contrary to the claims you make in promotion of AZT, all responsible medical authorities repeatedly issue serious warnings about the toxicity of antiretroviral drugs, which include AZT."

– President Mbeki, letter to DA leader Tony Leon, 1 July 2000

"The drug [*AZT*] can inhibit the production of red blood cells and may reduce white blood cell counts to the point where the drug has to be discontinued to avoid infections."

– **US Food and Drug Administration press release, 5 March 1990**

"I think AZT can only hasten the demise of the individual. It's an immune disease and AZT only further harms an already decimated immune system."

– **Professor Jay Levy, Director of the Laboratory for Tumor and AIDS Virus Research, University of California at San Francisco, *Newsday*, 12 June 1990**

"Extended follow-up of patients in one [major AZT] trial, the Concorde study, has shown a significantly increased risk of death among the patients treated early."

– **Phillips et al. *New England Journal of Medicine* 336: 958-959 (1997)**

"I don't want to be pushed or pressurized by a target of three million people on antiretrovirals by 2005. WHO set that target themselves. They didn't consult us. … It is not about chasing numbers. It is about the quality of health care we provide for our people. … I will also continue to advise people on the side effects of ARVs. I cannot stand on a pedestal and say everything is hunky-dory. … It is absolutely critical that our people know about the side effects, particularly because these are new medicines and not much is known about them. When we were being pressured to use ARVs we did warn about the side effects and, when I get reports about the people on ARVs, nobody presents to me how many people have fallen off the programme or died because of the side effects. I don't know what happens to those who started on antiretrovirals. … There was a time when we were told to give everyone ARVs and we resisted. We were right, I think. … When it comes to talking about the side effects I will always do

it. … We must be upright and frank about informing citizens about the use of ARVs. … I'm not happy [with reports of how many people are being treated with them, and will] interrogate [the statistics to establish how many people had died of ARV toxicity]. I will continue to educate the people in this country about the side effects of ARVs … you know me, I tell the truth."

– Dr Tshabalala-Msimang, media briefing at Union Buildings in Pretoria, 5 May 2005

"The results of this collaborative study, which involved … over 20 000 patients with HIV-1 from Europe and North America, show that the virological response after starting HAART [*Highly Active Antiretroviral Therapy*] has improved steadily since 1996. However, there was no corresponding decrease in the rates of AIDS, or death, up to 1 year of follow-up. Conversely, there was some evidence for an increase in the rate of AIDS in the most recent period. [We noted a] discrepancy between the clear improvement we recorded for virological response and the apparently worsening rates of clinical progression."

– The Antiretroviral Therapy (ART) Cohort Collaborative, *Lancet* 368:451-458 (2006)

"The major findings are that, despite improved initial HIV virological control … there were no significant improvements in early immunological response as measured by CD4-lymphocyte count, no reduction in all-cause mortality, and a significant increase in combined AIDS/AIDS-related death risk in more recent years."

– *Lancet* editorial commenting on 'these somewhat paradoxical trends' reported in the above-cited study

"The Western Cape report showed that: – Out of a total of 4251 patients enrolled in 3 months, a total of 207 (4.8%) patients died. Out of the total of 2715 patients enrolled in 6 months, a total of 196 (7.2%) patients died. Out of the 914 patients enrolled in 12 months, a total of 114 patients

(12.2%) patients died." (Plotted on a graph as X and Y values, these data reveal a perfect linear relationship between the death rate of people taking ARVs and the duration of their treatment; and they predict that within seven years everyone on ARVs will be dead. The high treatment dropout rate reflected by these data are consistent with numerous published reports on the unendurable toxicity of ARVs for most people prescribed them.)

– Information per Department of Health Media Liaison Officer Maupi Monyemangene, 6 October 2005

"United Nations Special Envoy for HIV/AIDS in Africa Stephen Lewis expressed concern on Tuesday over Malawi's rising number of deaths among people receiving HIV/AIDS treatment in the country. Lewis was speaking at the end of his three-day visit to the impoverished southern African country when he was briefed by Malawian government officials that the country was grappling with an 11 percent death rate of people who were receiving free antiretroviral (ARV) drugs in public hospitals. Malawi has managed to increase the number of people receiving free ARVs from about 4,000 two years ago to 70,000 at present."

– 'UN concerned about Malawi's rising deaths of AIDS patients on ARVs', China *People's Daily Online*, 1 November 2006

"South Africa's Ministry of Health has confirmed that close to 6,000 HIV-positive people had died while receiving antiretroviral (ARV) drugs since the government rollout began in 2004 … just below 3 percent of the number of HIV-positive people accessing treatment at government ARV sites during the same period. Health department spokesman Sibani Mngadi said … 'The number of people being treated with antiretroviral therapy through our "Comprehensive Plan on HIV and AIDS" has increased [by] 60,000 in the past year to 235,378 by the end of September 2006.'"

– 'SOUTH AFRICA: Govt AIDS programme on course but people still dying', Reuters Foundation (Source: IRIN), 14 Nov 2006

"We have not been able to discover why doctors prescribe a toxic drug called AZT (Zidovudine) to people who have no other complaint than the presence of antibodies to HIV in their blood. In fact, we cannot understand why humans would take that drug for any reason."

– Dr Kary Mullis PhD, 1993 Chemistry Nobel Laureate, in his foreword to *Inventing the AIDS Virus* by Professor Peter Duesberg (Washington: Regnery, 1996)

"Look, there's no sociological mystery here … It's just people's income and position being threatened … That's why they're so nasty. In the AIDS field, there is a widespread neurosis among scientists … there's just so much slowly accumulating evidence against them. It's really hard for them to deal with it. They made a really big mistake and they're not ever going to fix it. They're still poisoning people."

– Dr Kary Mullis in 'Out of Control: AIDS and the corruption of medical science' by Celia Farber, *Harper's Magazine*, March 2006

"In my heart I believe it is not right to hand them [*AZT and other ARV drugs*] out to my people."

– Dr Tshabalala-Msimang, launching an anti-TB campaign, c.15 March 2003

"… you are justified in sounding a warning against the long-term therapeutic use of AZT, or its use in pregnant women, because of its demonstrated toxicity and side effects. Unfortunately, the devastating effects of AZT emerged only after the final level of experiments were well underway, that is, the experiments which consisted of giving AZT to large numbers of human patients over a long period of time. Your effort is a worthy one … I hope you succeed in convincing your government not to make AZT available."

– Professor Richard Beltz, inventor of AZT in autumn 1961, to Adv Brink, 11 May 2000

"We have seen colonization, we have seen imperialism, we have seen apartheid ... and all of them used against us as a people. [Africans have] won their liberation and now they are fighting another war and they are being psychologically terrorised once more because people want to sell [ARV drugs] and make profits. And there is no benefit in those products. The only thing that can really happen is that once you touch the antiretrovirals you can go one way."

– **Peter Mokaba MP, the *Star*, 4 April 2002**

APPENDIX:
African death rates on ARVs - reports in 2007

"[A] distressingly high loss-to-follow up rates [was] reported by some large ART-dispensing facilities … at the 3rd South African AIDS Conference. … For instance, 27% of the first tranche of patients enrolled at King Edward VIII Hospital in Durban starting after April 2004 were 'non-persistent' (defined as having failed to return for prescription refills for 90 days or more) within 12 months of starting ART. … Dr Helen Schneider of the Centre for Health Policy at the University of Witwatersrand … concluded about a third of these 'drop-outs' were deaths."

– **AIDSmap.com, 'Patient retention difficulties for South Africa's public sector' in *HIV & AIDS Treatment in Practice #90*, 31 August 2007**

"… Felege Hiwat hospital in Bahir Dar, in the northern Amhara region [Ethiopia] … started over 3600 patients on ART by the end of 2006. However 22% of those patients were lost to follow-up … Home visits and other enquiries were able to locate just 6% of patients, with a further 44% of the LTFUs discovered to be dead, and the remainder still missing. In South Africa, Klerksdorp Hospital in the North-West province … the loss to follow-up rate … reached 21%. The vast majority of those lost to follow-up defaulted during the first six months of treatment, but an audit of 300 patients lost to follow-up could only identify 126 deaths from local death records. The remainder were still out there somewhere,

but, said Dr Ebrahim Variava [*without saying how he knew*], either their address details weren't complete, or they weren't answering their mobile phones.❞

– AIDSmap.com, *HIV & AIDS Treatment in Practice #92*, 26 September 2007

❝ … we conducted a systematic search of the English-language published literature, gray literature (project reports available online), and conference abstracts between 2000 and 2007. … We included 32 publications reporting on 33 patient cohorts totaling 74,289 patients in 13 countries in our analysis. … Under the worst-case scenario, 76% of patients would be lost by 2 y [*years*]. The midpoint scenario predicted patient retention of 50% by 2 y. … losing up to half of those who initiate ART within two years is cause for concern. From the data as reported, attrition averaged roughly 22% at 10 mo [*months*] of follow-up. This average comprised mainly deaths (40% of attrition) and losses to follow-up (56%). … we believe that actual attrition is higher than … we report … The midpoint scenario suggests that approximately half of all patients started on ART were no longer on treatment at the end of two years. … A recent attempt to trace lost-to-follow-up patients in Malawi determined that 50% had died, 27% could not be found, and most of the rest had stopped ART ... those reporting on these cohorts do not know what ultimately happened to patients categorized as lost to follow-up … our analysis is necessarily limited to publicly available reports and thus potentially subject to publication bias. Researchers may be less inclined to publish long-term outcomes from cohorts that have experienced very high early attrition. … Better information on those who are lost to follow-up is urgently needed.❞

– Rosen S et al. 'Patient retention in antiretroviral therapy programs in sub-Saharan Africa: A systematic review'. *PLoS Med* 4(10): e298, October 2007

***The extensive research literature reporting the foetal toxicity and transplacental carcinogenicity of AZT, to which Dr Tshabalala-Msimang has referred, is canvassed in depth in *Poisoning our Children: AZT in Pregnancy*, and in a brief overview: *Why do Zackie Achmat, Nathan Geffen and Mark Heywood want pregnant African women and their babies to be given AZT? What AZT does to unborn and newly born children* – accessible online in the 'Quick links' column of the Treatment Information Group website, www.tig.org.za. See further: *Introducing AZT*; *Inventing AZT*; *Licensing AZT*; *Debating AZT: Mbeki and the AIDS drug controversy*; and *The trouble with nevirapine*, also posted there.**

25 mg AZT supplied by Sigma-Aldrich Chemie Gmbh to research laboratories (GlaxoSmithKline recommends a daily dose of between 500-1500 mg). The label warns:

TOXIC Toxic by inhalation, in contact with skin and if swallowed. Target organ(s): Blood Bone marrow. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wear suitable protective clothing.

(The latest version of the label also carries a cancer warning.)

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