THE OKLAHOMA AGENT ORANGE FOUNDATION
P.O. Box 849
Lexington, OK 73051
April 27, 1988

Gary Null

Dear Gary Null,

In 1985, the Oklahoma Agent Orange Foundation learned that contaminated vaccines were used to inoculate U.S. military recruits after these same vaccines were removed from civilian use. However, it was only recently in the fall of 1987, that we realized the full significance of this viral contamination. These vaccines became contaminated with an African green monkey virus during the manufacturing process. This Africa green monkey virus has been designated by the scientific community as Simian Virus 40 or SV40. It was a contaminant of many vaccines, including: polio, influenza, common cold, measles and smallpox.

The influenza and cold vaccines "were voluntarily taken off the market around 1966 and were never manufactured again, it was not until April 1980 that the Bureau of Biologics got around to revoking the licenses for these vaccines 'because there are compelling reasons to assume a lack of safety or effectiveness and an unsatisfactory benefit-risk ratio for this product(s).'" [Chase, Allan, Magic Shots: A human and scientific account of the long and continuing strugle to eradicate infectious disease by vaccination, NY: Morrow, 1982, p. 345-346.] "Vaccines tested at the Division of Biologic Stardard after June 30, 1961, were required to be free of SV40, but vaccine lots previously cleared were not withdrawn from the market." [Shah, Keerti, and Neal Nathanson, Human Exposure to SV40: Review and Comment, American J. of Epidemiology, Vol. 103:3, 1976.] The previous two quotes show that polio, influenza, and cold vaccines on the civilian market, from 1954-1963, were known to be contaminated with SV40. The key words are 'civilian market' because this meant that the military versions of these vaccines were not removed from use.

The military developed their version of a common cold vaccine (adenovirus vaccine) in the mid-1950s. Maurice Hilleman directed the virus laboratories of the Walter Reed Army Institute of Research (WRAIR) during the development of this Type 4 adenovirus vaccine. This military, human adenovirus ("flu") vaccine "cannot be cultivated in the monkey kidney cultures unless SV40 virus is present." [Beardmore et al., Interrelationship of adenovirus (Type 4) and papovavirus (SV40) in monkey kidney cell cultures, J. Immunology 95:422-435, 1965.] The Type 4, live, oral, "flu" vaccine was made in the WI-38, HDC (human diploid cell) line. This live oral vaccine was given to military recruits at Paris Island, S.C., 1964-1966, Great Lakes

Naval Training Center, Great Lakes, Ill., 1965 and Fort Dix, N.J. 1965, 1966. [National Cancer Institute Monograph #29, Conference on Cell Cultures for Virus Vaccine Production, Clinical Center , NIH, November, 6-8, 1967, page 478.] "Dr. E.L. Buescher: 'The number probably is of the order of 250,000 to 300,000. I still have about 200,000 doses in my freezer.'" [NCI #29, page 499.] These SV40 contaminated "flu" vaccines are still in use today. [Personal communication with Eva L. Snead.] "For example, all military recruits receive live-virus vaccines against such diseases as vaccinia, rebella, measles, adenovirus infection, and poliomyelitis and may fall victim to the attenuated virus itself (Redfield RR, et al.: unpublished data); all military personnel receive multiple vaccines to which they may respond suboptimally;...". [Redfield et al., Special Report: The Walter Reed Staging Classification for HTLV-III/LAV Infection, NEJM 314:131, 1986.]

Simian Virus 40 is a DNA virus with similarities to other animal papovaviruses which include "a slow growth cycle, with multiplication inside the cell nucleus, an ability to cause chronic and latent infections in their natural hosts, and a capacity to induce tumors in their natural and/or other host species." [Fraumeni et al., An Evaluation of the Carcinogenicity of Simian Virus 40 in Man, JAMA 185:715, 1963.] In fact, Table 1. - Animal tumor viruses - shows that SV40's other host(s) include man. [NCI #29, page 320.] Thus, after the SV40 virus enters the human body it may become incorporated into the DNA (genetic material) of the cell. These SV40 viral DNA sequences apparently can become activated by chemicals, hormones, immunosuppression, radiation, and other viruses. With respect to viruses, SV40 might combine with other viral sequences to form a type that is oncogenic (causes cancer). [S.S. Kalter and R.L. Heberling, Primate Endogenous Viruses: Their role in oncogenesis and as biohazards, Develop. biol. Standard., 37:219.] SV40 viral sequences have been found in human brain cancer cells [Geissier et al., Further studies on the relationship of SV40-like viruses to human tumors, In: Essex, Myron et al., Viruses in Naturally Occurring Cancers, Cold Spring Harbor, 1980, page 343, and Kreig et al., Episomal simian virus 40 genomes in human brain tumors, Proc. Natl. Acad. Sci., USA, 78:6446, 1981.], statistically significant excesses of leukemias and brain cancers were found in humans exposed to SV40 in utero [Heinonen et al., Immunization during pregnancy against poliomyelitis and influenza in relation to childhood malignancy, International J. of Epidemiology 2:231, 1973], (lymphomas are also in excess) [Eva L. Snead, AIDS - Immunization Related Syndrome, Health Freedom News, July 1987, page 44], and in animal experiments SV40 has caused leukemias, lymphomas, and sarcomas. [Diamandopoulos, George, Induction of lymphocytic leukemia, lymphosarcoma, reticulum cell sarcoma, and osteogenic sarcoma in the Syrian golden hamster by oncogenic DNA simian virus 40, JNCI 50:1347, 1973.] I think it is interesting that these are some the same cancers that are found in excess within the Vietnam Veteran population who would have been immunized with SV40 contaminated vaccines. In fact, the CDC

Vietnam Experience Study describes, "...more death among Vietnam veterans from brain cancer, leukemia, and non-Hodgkins lymphomas,...". [Bolye et al., Postservice Mortality Among Vietnam Veterans, CDC Vietnam Experience Study, HHS: PHS; CDC Monograph, February 1987, page 42.] There are other studies which have found similar excess cancers. [See the attached list compiled by The Oklahoma Agent Orange Foundation, 1988.]

Perhaps, these excess cancers in Vietnam Veterans are actually due to a combination of chemical and viral factors. "Chemical Corps receives authority to conduct experiments on humans. A plan drawn up at Camp Detrick, for a quantative assessment of biological warfare agents and vaccines has been approved by the Surgeon General and the Secretary of the Army." The "(f)ourteenth Tripartite Conference agrees to 'conduct combat development exercises to determine problems of living and fighting in a toxic environment.' (United Kingdom, Canada, and The United States)" [Joe Cole, What's Evidence, A brief history of the Agent Orange issue, manuscript submitted to Carlton Press, Inc., NY, April 1988.] Recently, researchers at the National Cancer Institute have found that dioxin interacts with part of the SV40 DNA sequence.[Neuhold et al., Dioxin-inducible enhancer region upstream from the mouse P1450 gene and interaction with a heterologous SV40 promoter, DNA 5:403, 1986.] Apparently, dioxin enhances the action of the SV40 "promotor" sequence. I BELIEVE THIS CHEMICALLY ACTIVATED VIRUS MAY BE RESPONSIBLE FOR THE EXCESS CANCERS IN THE VIETNAM VETERAN POPULATION. [See the enclosed Agent Orange Report 26 - Chemical Induction of Viral Disease, see especially study N, which describes the Veterans Administration knowledge of SV40 contamination.]

The "bottom line" is that the contamination of vaccines with SV40 was, and possibly still is, the way in which the human population became "infected" with the African green monkey virus. "With the exception of viral vaccines, no pharmaceutical product intented for human use requires the use of simian tissues." [Shah et al., Am. J. Epidem. 103:3, 1976.]

Sincerely,

Michael N. Sovick,
Research Director

ID	Author	Title	Journal/Book	Year	#
1	CANAH	F.O.I. Request		1987	
2	Chase	Magic shots	Book	1982	
3	Fraumeni	An evaluation of the carcin	JAMA 185:713	1963	
4	Heinonen	Immunization during pregnan	IntJEpid2:229	1973	
5	Martin	New findings are raising co	NYT News Serv	1986	
6	Peters	Brain tumors in children an	Sci 213:235	1981	
7	Gold	Risk factors for brain tumo	AmJEpi109:309	1979	
8	Geissier	Further studies on the rela	Essex/seeID26	1980	
9	Scarlett	Brain cancers remain myster	Houston Post	1984	
10	Krieg	Episomal simian virus 40 ge	PNAS 78:6446	1981	
11	Blair	Leukemia among nebraska far	AmJEpi110:264	1979	
12	Zahm	Kid's leukemia from parents	Sci News 132:	1987	
13	Diamandopo	Induction of lymphocytic le	JNCI 50:1347	1973	
14	Bernstein	The birth of the US Biologi	Scient Am Jun	1987	
15	Kalter	Primate endogenous viruses:	DevBioS37:219	1977	
16	Neuhold	Dioxin-inducible enhancer r	DNA 5:403	1986	
17	OK.A.O.F.	List of cancers	A.O.Report 22	1987	
18	Claxton	VVA Resolution	R-3-87	1987	
19	Snead	AIDS-Immunization related s	HlthFreNews 7	1987	
20	Seligmann	Malaise of the '80s: the pu	Newsweek10/27	1986	
21	Anon.	The Africa monkey's revenge	ChemWeek11/11	1967	
22	Wright	Smallpox vaccine 'triggered	LondonTimes 5	1987	
23	Mendelsohn	World Health Organization l	Columb Feat 7	1987	
24	Giunta	The primate trade and the o	Nature 329:22	1987	
25	Anon.	Teen-ager's 1969 death link	AP 10/26/87	1987	
26	Essex et a	Viruses in naturally occurr	See ID 8	1980	

This list of references goes with the following SV40 packet.