Dear Tony:

Thank you very much for the inquiry contained in your letter of 4 November regarding current plans for tests with my attenuated poliovirus vaccine in accord with the recommendations of the WHO expert committee. To begin with I can tell you that at a meeting on November 16th of the Vaccine Advisory Committee of the National Foundation for Infantile Paralysis attended by O'Connor, Rivers, as well as the members of the Committee, the decision was reached that the Foundation fully endorses the recommendations of the WHO expert committee on poliomyelitis with reference to trials of my attenuated poliovirus vaccine. Dr. Fred Soper had formally requested on behalf of the Pan American Sanitary Bureau and the Regional Office for the Americas of the WHO, one million doses of each of the 3 types for trials in Latin America during the forthcoming year. I have been authorized by the National Foundation to release this amount of vaccine to Dr. Soper and also to any other qualified investigators from other countries provided I receive in writing a statement that the tests will be carried out in accord with the stipulations set down by the WHO expert committee and provided that no other live poliovirus vaccine will be tested concurrently in the same region or country.

Thus far, I have had a letter dated 30 September 1957 from Dr. Kitaoka in which he stated: "Your avirulent vaccine will be used at some selected area in the next December, because the authorities of the Welfare Ministry already gave me permission in application of such vaccine under the condition of agreement with the local health authorities. Where is the best in the field trial of such attenuated vaccine is not yet selected. According to my opinion Hachinoe may be the best for this purpose because about 20 cases were reported in every year under 3 years old and the number of children under 3 years old can be estimated roughly to be 5,000. At any rate I am writing a letter for you more in detail when the local authorities agree with my proposal in near future."
In addition to the above the following investigators now have aliquots of the same lot of each of the 3 types of tested poliovirus vaccine for certain studies that they are planning in their own countries:

- Dr. James Gear, South Africa
- Dr. James Hale, Singapore, Malaya
- Dr. M. P. Chumakov, Moscow.
- Dr. A. A. Smorodintsev, Leningrad.
- Dr. J. D. Verlinde, Holland.

Dr. Verlinde in Holland has already completed a study of 8 families comprising 40 individuals, and I do not know the nature of his next step. Dr. Ramos and Dr. Gomez in Mexico City completed tests on 73 children and are now in the process of testing an additional 227 children as a preliminary to a much larger trial in Mexico for which they have already obtained permission. Dr. Smorodintsev in Leningrad wrote me that having carried out satisfactory tests on a preliminary group of 100 children that he was now awaiting permission to carry out tests on a larger group comprising 10,000 or more children. In Chile, Dr. Contreras (an excellent virologist) and Professor Scroggie (an excellent pediatrician who is an honorary member of the American Pediatric Society) have already made plans for a study next April (this is after their current polio season is over) to carry out studies in an institution of 600 children in which only 300 will be fed and the others will be observed simultaneously for the extent of virus spread.

In the United States the following studies are in progress with aliquots of the same lots of vaccine:

1) I am about to feed the type 1 and type 3 viruses to a group of children in an institution who have been followed for more than a year, in order to determine the multiplication of the virus in children who had no homotypic antibody prior to vaccination with Salk vaccine and then received the 3 doses at optimum intervals.

2) Dr. John Fox is to carry out a study in a number of families in Louisiana in which the vaccine will be fed to some members of the families and its spread to others will be studied. I am cooperating with Dr. Fox to the extent of testing the neurotropism of virus after secondary and tertiary spread.
3) Dr. Paul and his associates have proposed a study in an open community in the United States in which the vaccine will be given to one child in a family and its spread to other members and contacts will be traced and its characteristics studied.

This, to the best of my knowledge, represents the current plans for the forthcoming year. I did not mention the studies by Dr. Giovanardi because I do not know just how much he will be in a position to do.

Now, with regard to the trials of the Lederle strains in Minnesota, I know that Dr. Fred Soper is being kept informed but neither Koprowski nor I have any information with regard to what is going on. Koprowski and I had a meeting in Philadelphia last week and he informed me that the type 1 strain virus with which he carried out most of his previous studies and which the Lederle people are now using is not the strain with which he himself proposes to carry out further studies. In his recent test in the Belgian Congo he used the CHAT strain. This is a strain which Koprowski reported in Geneva had a very limited capacity for multiplication in the alimentary tract and thus far there is yet insufficient data to indicate whether or not it would fulfill the requirements set down by the WHO expert committee. As regards the type 2 strain, a plaque purified derivative of the MEF_1 virus propagated in chick embryos, now being used by the Lederle people, Koprowski informed me that it is unsuitable for further trials because it does not multiply adequately in the alimentary tract of babies. As regards the type 3 strain which both Koprowski and the Lederle people are using in their tests there also is yet insufficient data to fulfill the requirements of the WHO committee. Nevertheless, Koprowski now has certain plans for tests in the Belgian Congo as well as elsewhere and he made a formal application to the Vaccine Advisory Committee of the NFIP for enough of my type 2 vaccine for use in 200,000 children in Africa, in conjunction with his type 1 and type 3 strains. The Vaccine Advisory Committee did not approve this request in line with its policy that at the present time my strains shall not be used in large scale tests concurrently with other live poliovirus vaccines in the same area. However, there was no objection to my giving some of the type 2 vaccine to Dr. Koprowski for small scale detailed tests which he proposes to carry out in children in an institution in the United States and I expect to turn over to Koprowski enough vaccine for that particular purpose.
I deeply appreciate your interest in this problem. In all of these studies I regard myself simply as the source of tested vaccine and as a technical consultant regarding its properties and the best way to use it in large scale tests. The actual policy decisions and responsibility for the studies in each country belong to the qualified investigators in each country who are undertaking these studies. I hope that in due time the accumulated information may tell us what to expect in the future.

Personally, I am now engaged in studies designed to determine whether or not rabbit cells which can be maintained in continuous culture and which are susceptible to polioviruses are actually rabbit cells. I think that some decision on this will be possible in the near future. The National Foundation for Infantile Paralysis is calling a conference for November 27th to bring all the people together who have data bearing on this subject. I have already established the 3 attenuated vaccine strains in the British line of rabbit cells and if we finally decide that they actually are rabbit cells I shall be ready to go ahead with the necessary tests to determine whether an attenuated poliovirus vaccine prepared in the rabbit cell medium can be used.

With best wishes and kindest personal regards.

Sincerely yours,

Albert B. Sabin, M. D.

ABS:meh