In reply please refer to:

Prière de rappeler la référence:

23 November 1959

Dear Albert,

I have been surprised by a third hand report to the effect that you have accepted as a fact that viraemia frequently occurs following the administration of live poliovirus vaccine and the implication that you do not consider that undesirable.

I was under the impression that viraemia had never been demonstrated with your types 1 and 3, and that only minute traces for a single day had been found with your type 2. I also understood that your data showed that at least with your type 1 strain (I am not sure about the others) the site of multiplication was the intestinal mucosa and that the capacity to invade and multiply in lymphoid tissue had been largely or completely lost so that the deeper lymphatic tissues were not invaded and the risk of spill-over into the blood no longer present. I recall that Professor Smorodintsev emphasized the importance of this finding although I do not think he had any new data of his own.

In my own view these were very important characteristics of your strains.

Following the finding of viraemia on vaccination with the SM strain, Bauer has expressed the belief that viraemia is almost mandatory for good immunity. I cannot follow this argument. Unless there are data of which I am ignorant, your types 1 and 3 do not cause viraemia and yet according to all known tests produce at least as good and consistent immunity, both serological and alimentary, as any other strain.

On general principles I would regard viraemia as undesirable and not acceptable unless it could be proved essential for effective immunization. Furthermore even though the circulating strain is highly attenuated, I
would hesitate to produce viraemia during the early weeks of pregnancy because of possible unknown dangers to the foetus. Also I would fear that provocative agents such as certain injections might, in the presence of viraemia, even with these strains provoke symptoms by, in effect, introducing the virus directly into the spinal cord through reflexly dilated blood vessels. I do not know how real these risks are but I can see no excuse for taking them unnecessarily.

I would be most grateful for your views on the subject.

With kind regards,

Yours sincerely,

[Signature]

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