

From: [Ivins Bruce E USAMRIID](#)
To: (b) (6)
Subject: RE: Anthrax, mice, and CpG
Date: Friday, November 19, 1999 3:14:15 PM

You are correct, (b) (6) We are going into guinea pigs next, and we most certainly will when we finally get some funds. Right now, we don't have enough money to pay for housing the animals, much less for purchasing them. Just as soon as they release some money for this fiscal year, we will order the animals. I'll then contact you about getting the oligos. As I have calculated the needs should be as follows:

Non-CpG oligonucleotides (control) - 2.2 ml, at 100 micrograms per ml
CpG oligonucleotides - 12 ml, at 100 micrograms per ml.

The groups include: 1) non-CpG control; 2) CpG 6 days before challenge; 3) CpG 10 days before challenge; 4) vaccine (2 doses - 0 and 4 weeks); 5) vaccine + CpG (2 doses - 0 and 4 weeks); 6) vaccine (2 doses - 0 and 4 weeks), then CpG 6 days before challenge. I think that we should come up with data which will indicate whether (in the guinea pig model), Cpg provides either antigen-specific or non-antigen-specific enhancement of immunity to anthrax. If we get some positive results, I'll write an animal protocol for rhesus monkeys.

Have a fine Thanksgiving,

- Bruce

-----Original Message-----

From: (b) (6)
Sent: Friday, November 19, 1999 11:35 AM
To: 'Ivins Bruce E'
Subject: RE: Anthrax, mice, and CpG

Dear Bruce,

I'm not sure where we stand on the next anthrax experiments. I thought we were moving onto guinea pigs. Are you waiting for me, or vice-versa?

(b) (6)

-----Original Message-----

From: Ivins Bruce E [SMTP:Bruce.Ivins@DET.AMEDD.ARMY.MIL]
Sent: Thursday, October 07, 1999 8:40 AM
To: (b) (6)
Subject: Anthrax, mice, and CpG

Hi, (b) (6)

As you remember, in our first experiment with the mice, we got some time-to-death extension with CpG for mice challenged with virulent B. anthracis spores. In the second experiment, we demonstrated not only time-to-death extension, but also protection from death with the CpG. In this last experiment which we just concluded, we strangely got no protection at all, in terms of either survival or increased time-to-death. I believe that the main problem is that the mouse is such a generally poor and unpredictable model for anthrax. The guinea pig is a MUCH better

model for anthrax infection/protection, and our guinea pig protocol for CpG has been approved, so I think the next step should be (when we get the funds released) to go into the guinea pigs. We'll be able to look at specific as well as non-specific protection, and if we get some promising results, we can head into non-human primates. Hopefully we'll get some money released within a few weeks and we can get started then. I'll let you know. I'm sure that mice are an excellent animal model for a number of diseases, but anthrax isn't one of them.

- Bruce