

Five Minutes with Professor James McCarthy **Interview Transcript**

Is Tafenoquine a safe drug?

Well all the available evidence from clinical trials indicates that Tafenoquine is a very safe drug, it's been tested in more than 4000 people. And aside from a few uncommon side effects that have been seen with this drug, which is commonly seen with many other drugs in clinical trials, it is shown to be quite safe.

Do you believe the individuals who served in the Australian Army are suffering neuropsychiatric side effects from taking Tafenoquine?

Well it's a complicated matter. Certainly the other drug mefloquine which they some of them did take has been associated with this problem. But it's always very difficult in these situation to distinguish the occurrence of post-traumatic stress disorder (PTSD) or some other psychological problem. Also people who have a mental health condition that becomes unmasked while they working in a military environment and is that during the antimalarial drugs or is it or would that have occurred anyhow and that's the fundamental question that can we say that people who have got these side effects are those side effects caused by the Mefloquine or the Tafenoquine or would they have occurred anyhow and that that really fundamental problem that we are unable to, in my mind, make a definitive association of the problems they're complaining of with the administration of this drug.

Now you mentioned Mefloquine there and Mefloquine and Tafenoquine are similar, right?

No, they're not similar at all and that part of the problem. They've probably got a misleading name, they've got 'quine' at the end of them. But if you look at the chemical structure of the two drugs, they're very different. It's like comparing dogs and cats or apples and oranges because they've got the same 'quine' name at the end that everybody thinks they look the same behave the same their chemical properties and they start fixing experimental animals and all of their properties in the human body are entirely different.

But are they both Quinolines?

Well quinolines is a class of drugs determined by the chemical structure, it's like saying oranges left with about fruit.

I'd like you to listen listen to this. This is Dr Remington Nevin of The Quinine Foundation on the programme all but a few days ago. This is what he had to say about quinolines

This is a class of drug with inherent CNS toxicity users very likely contributing significantly to the global burden of mental illness and neuropsychiatric disability.

Is he right?

I don't believe he is right for two reasons. First of all as I said before these are two different classes of drugs albeit with a very similar known. And the second reason is that there's been a lot of toxicity tests done. So for example in the rat model that's being used to characterize the problems with Mefloquine that we have recently discussed. In the rat when you give red high doses of mefloquine may all show these all the retros neuro neurologic side effect and when you examine the brains of the rats their distinctive features when you test Tafenoquine in the same model there are no side effects of the same order. So I believe it's very misleading to class two drugs together and I don't believe that there's any scientific evidence that Tafenoquine has neurotoxicity of the same characteristic as mefloquine does.

Given the negative press attention that they've been given, do you think soldiers will be willing to take the drug.

Well, I can't comment on whether people will. It's always very hard to counteract adverse publicity. I personally would be very [prepared to take Tafenoquine]. I have taken Mefloquine and I would certainly be prepared to take Tafenoquine as well. I think Tafenoquine in the doses that it's been approved by the Food and Drug Administration will be an extremely safe drug and will be a drug that will be very useful for controlling malaria in populations where it occurs. And I also think that on the proviso that this adverse publicity doesn't inappropriately tarnish the drug it will be an extremely useful drug for prevention of more error in travellers in military populations and also in things where the population is exposed to malaria epidemic. So, for example, this drug could be deployed in a population to prevent transmission of malaria where there's been an epidemic.

Dr James McCarthy, thank you so much.

My pleasure, thank you.