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Breakthrough reported in malaria drug trial

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Canadian scientists working with Ugandans at Makerere University have reported that their novel drug candidates to treat malaria have demonstrated good safety in their first toxicity tests in animals.

This was announced on Monday in a press release by the Canada-based Upstream Biosciences Inc. The institute was founded in 2004 in the Canadian province of British Columbia.

"Researchers reported that Upstream's anti-malarial candidates were well tolerated, with no signs of serious toxicity at likely healing dosages," the release reads in part.

According to the researchers, activity in this range in a new class of anti-malarial drugs has the potential to represent an important advance in the treatment of a resistant form of the disease.

The release said the new data represents the third set of positive toxicity results in animals obtained by researchers at Makerere University for Upstream's drug candidates for malaria, trypanosomiasis and leishmaniasis, all diseases caused by related parasites.

"These first positive toxicity results in animals for our anti-malarial candidates mark an important step in our programme to develop safe and effective drugs to fight this pervasive condition," Mr Joel Bellenson, CEO Upstream was quoted as saying.

However, in a follow-up interview with Daily Monitor, Mr Bellenson said researchers can now move on to testing the drugs in sick animals, "and we know how high a dosage ceiling we can use for this testing."

Asked how soon human trials would begin, he said it was hard to make precise predictions about the timing of trials.

He added: "Drug development has several stages and sometimes requires taking one step back to make two steps forward. When we get the animal efficacy data, it will tell us whether we need to use our artificial intelligence software to make the drugs more potent or less toxic."

Mr Bellenson explained that the current malaria drugs have a similar mode of action and the parasites become resistant to chemicals related to these older drugs quite easily.

"Our compounds are a completely different chemical structure and are therefore likely to work by blocking different proteins activities," he added.

"In addition, our compounds may have another advantage to work against sleeping sickness, Nagana and kala azar as well as malaria.

This would simplify drug stocking logistics and administration to sick patients.” Malaria is the leading cause of illness and death in Uganda, accounting for 25-40 per cent of all outpatient visits at healthcare facilities.

Up to 20 per cent of all hospital admissions and 15 per cent of in-patient deaths are due to malaria.

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