

SA mom's super cells spark hope in war on HIV

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IN what could be a major breakthrough in the prevention of HIV infection, South African and US scientists will begin human trials next year using an antibody first detected in a mystery HIV-positive KwaZulu-Natal woman.

Acclaimed HIV/Aids expert Professor Salim Abdool Karim told the Sunday Times this week that his University of KwaZulu-Natal-based Centre for the Aids Programme of Research in South Africa had partnered with the US National Institute of Health to manufacture the antibody.

The human studies will start in the middle of next year following promising results when the antibody from the 27-year-old woman was successfully tested on monkeys.

The mother of two — known as CAP 256 to protect her identity — tested HIV-positive in 2005.

“We have taken the antibody that she was making and genetically engineered it and now it’s a much better antibody. We tested it in monkeys and the results were terrific. We now know that this antibody can protect monkeys from getting an HIV-like virus,” said Karim.

He said the big question was whether this would work in humans, “because what happens in monkeys does not always translate to humans”.

If the trials are successful, “the idea is to give this antibody as an injection every four to six months to protect someone from getting HIV. If that works we can change the course of this epidemic,” said Karim.

A study published in the prestigious Nature journal in April found that a single injection of antibodies that target HIV can protect monkeys from contracting the virus for nearly six months.

Karim said the woman’s cells that produced the



TRIALS: Professor Salim Abdool Karim

antibody — regarded as among the most potent in the world against HIV infection — were being grown in the laboratory in preparation for the human trials next year.

The Durban-based professor, who bagged the Kwame Nkrumah Scientific Award last year in recognition of his research on HIV prevention and treatment in Africa, could not speculate on the cost of the antibody.

The world has committed to ending the HIV/Aids epidemic by 2030 and next week the UN is hosting a high-level meeting in New York that will set the global agenda for the 21st International Aids Conference in Durban the week after that.

The latest UNAIDS data released this week, covering 60 countries, show that in the past two years the number of people living with HIV on antiretroviral therapy has increased by about a third, reaching 17 million people — two million more than the target of 15 million by 2015 set by the UN General Assembly.

South Africa alone had nearly 3.4 million people on treatment, more than any other country in the world.