

SATuRN: Preliminary report 2011

Southern Africa Treatment and Resistance Network

SATuRN and Life Technologies (ABI) partnership provide a discounted HIV resistance genotyping system.

Introduction:

Antiretroviral (ARV) drugs are becoming increasingly available to treat HIV-1 infected individuals in the developing world. The goal of many governments and non-governmental organizations is to sustain the effective ARV treatment of > 5 million people in Africa. Pharmaceutical companies are reducing both prices and international trade restrictions on patented drugs to allow more equitable access to essential medicines for AIDS, TB and Malaria. However, the widespread increase of treatment is threatened by the appearance of drug resistance.

Public health and patient benefit may be limited by the increase in selection and transmission of broadly ARV resistant viruses. Drug resistance viruses can currently be identified with genetic sequencing of two HIV-1 genes. However, the price of an individual test using commercial methods (ZAR 2,500 – US\$ 300) makes it too expensive for public health implementation in southern Africa.

SATuRN HIV Resistance Genotyping

We have developed an in-house HIV resistance genotyping system in collaboration with the Stanford HIV Drug Resistance Database team and it has been internationally validated by the French AIDS Research (French acronym: ANRS).

Our in-house sequences are generated with the Sanger ABI sequencing technology. This process involves the production of cDNA, which is reverse transcribed from the viral RNA. Our in-house genotyping test reagents currently costs around ZAR 750 (US\$ 100) per sample, a great part of the cost of which ZAR560/ZAR750 (US\$80/US\$100) is due to the cDNA synthesis and the ABI sequencing process. SATuRN members would like to ask ABI to reduce the price of the reagents needed for HIV drug resistance genotyping for the members of our network.

Life Technologies (ABI) and SATuRN partnership:

Life Technologies has agreed to provide a 25% discount for reagents for HIV genotyping to SATuRN members. This partnership aims to produce a 'discounted genotypic test kit' to southern African partners that will be available soon. For the moment, partners can request discounted reagents from ABI (Seshnee Pillay, Seshnee.Pillay@lifetech.com) and the protocol and validation samples from SATuRN partners at the UFS (Dr. Dominique Goedhals, gnvrdg@ufs.ac.za) and Africa Centre (Justen Manasa, jmanasa@africacentre.ac.za).