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# Treatment outcomes for XDR TB and HIV co-infections

Study shows that ARVs are a good predictor of XDR TB survival among HIV co-infected patients.

he paper published in *Emerging Infectious Diseases* describes the treatment outcomes, adverse events, and risk factors for demise among patients in South Africa with extremely drug resistant tuberculosis (XDR-TB), most of whom were co-infected with HIV.

The authors concluded that the risk factors for XDR TBrelated death among HIV coinfected patients were reduced by half if the patient was taking early antiretrovirals (ARVs) and receiving aggressive TB treatment.

However, ARVs did not improve XDR -TB culture conversation (a negative TB test), demonstrating the urgent need for new generations of TB drugs.

In previously conducted research, high mortality rates have been reported for patients co-infected with XDR-



Co–authors, Dr Max O'Donnell (left), Division of Pulmonary Medicine—Albert Einstein College of Medicine and Dr Nesri Padayatchi, Deputy Director of CAPRISA.

TB and HIV, but treatment outcomes have not been reported.

Data from 114 adult XDR-TB patients from the King George V Hospital in Kwa-Zulu-Natal Province were obtained retrospectively, and outcomes were obtained prospectively during 24 months of treatment. Most of the patients (57%) were female, significantly younger than male patients and were more likely to be coinfected with HIV.

### In this issue...

Our front page story covers the findings of treatment outcomes for coinfected XDR TB and HIV patients.

Prof Salim Abdool Karim is appointed to the Global Virus Network board of directors on page 2.

On page 3, a US health policy think tank visits CA-PRISA's clinics.



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# Global Virus Network announces new board of directors

GLOBAL VIRUS NETWORK On 16 January 2013, the *Global Virus Network* (GVN) announced the addition of Professor Salim Abdool Karim, together with nine other members, to the GVN Board of Directors.

Commenting on the new appointments, Dr C Gallo, co-founder of the GVN and Chair of GVN's Scientific Leadership Board, said: "The addition of these new Board members will add valuable resources to the GVN and will greatly enhance GVN's global visibility."

In response to the announcement, new board member, Salim Abdool Karim, said: "By increasing its reach in Africa, GVN is well-placed to make an impact with innovative solutions to a number of human viral diseases that threaten Africa and beyond."

The new GVN board appointees will join founding board of directors mem-

bers Tim Moynahan (previously served as founding Chair), Mathew Evins, Terry Lierman, Dr. Tony Cernera, along with Dr. Robert Gallo, Dr. Reinhard Kurth of Germany and Dr. William Hall of Ireland, who co-founded GVN.

GVN is a coalition of the world's leading medical virology research centres working to prevent illness and death from viral diseases.

Comprising international medical virologists, the GVN's mission is to combat emerging pandemic viral threats and current viral killers through international collaborative research, training the next generation of medical virologists, education and advocacy.

For further reading: http://globalvirusnetwork.org



### **KEY DATES**

**14 February 2013** Early registration closes

**15 February 2013** Regular registrations open

5 March 2013 Scholarship notifications

13 March 2013 Abstract notifications

03 June 2013 Pre-conference registrations close

**18th – 21st June 2013** 6th South African AIDS Conference

#### Continued from front page:

The patients were treated with between three to nine TB medications. Almost three quarters of the study group were HIV-positive and six out of ten were receiving antiretroviral therapy.

After receiving treatment for 24 months, almost half of the 114 patients died.

Just over one fifth of patients were cured or successfully completed treat-

ment, 19 defaulted, and 22 showed treatment failure.

The global epicentre of the XDR-TB and HIV syndemic is KwaZulu-Natal, South Africa, where nearly 400 XDR-TB patients, 70 per cent co-infected with HIV, were admitted to a provincial TB referral hospital for initiation of therapy during 2003—2008.

Of all XDR-TB cases reported to

the World Health Organization globally during 2002-2009, 73 per cent were from South Africa.

#### For further reading:

O'Donnell MR, Padayatchi N, Werner L, Kvasnovsky C, Master) I, Horsburgh, Jr CR). Treatment Outcomes for Extensively Drug-Resistant Tuberculosis and HIV Co-infection. Emerging Infectious Diseases. DOI: http:// dx.doi.org/10.3201/eid1903.120998



## US health think tank visit

The new year at CAPRISA kicked off with a high profile visit by US congressional health advisors led by a Dr Sharon Stash from the Center for Strategic & International Studies (CSIS) and Ms Alisha Kramer, Global Health Policy Center. The fact-finding tour was initiated by CSIS.

The main aim of the visit was to hold discussions on prevention and treatment services addressing South Africa's dual HIV/AIDS and TB epidemic, and to understand how these programmes aligned with the five pillars of the *AIDS-Free Generation* blueprint unveiled by Hillary Clinton.

Discussions were also held on the important partnerships with US funding institutions and future collaborations. One of the areas discussed concerned the ongoing technical exchange between the USA and South Africa, which have contributed to strengthening South Africa's programmes in combatting HIV/AIDS and TB.



Back row, left to right: Mrs Annatjie Peters (CDC), Dr Kogie Naidoo, Dr Sharon Stash (CSIS), Ms Alisha Kramer (CSIS), Prof Salim Abdool Karim, Ms Anne Oswalt (Health Advisor to Senator Bob Corker), Ms Sally Canfield (Deputy Chief of Staff to Senator Marco Rubio), Ms Christy Gleason (Advisor to Senator Chris Coons), Dr Tom Warne (CDC).

Front row, right to left: Mr Tom Walsh (Bill and Melinda Gates Foundation), Ms Heidi Ross (Policy Analyst with Senator Eliot Engel), Mr Todd Summers (CSIS), Ms Gethwana Mahlase (Zimnandi Zonke), Prof Quarraisha Abdool Karim, Dr Nesri Padayatchi.



Commencing the tour



Briefing by the PCZCDC laboratory staff, where the waiting time for TB results has been reduced from 6 to 2 hours.



CAPRISA staff provided overwhelming support to school children in the Vulindlela by donating monies and gifts for the annual Christmas Gift Box Initiative.

In additional to raising close to R9000, which was used to purchase essential school and personal items, staff also provided age-appropriate gifts which were handed to about 70 youngsters.

A special thanks goes out to Tanuja Gengiah and Michele Upfold for coordinating the massive effort, as well as to the staff who supported the initiative with their generosity.



Gift packs for a toddler (left) and a teenage girl.

CAPRISA's official *Facebook* page was launched in January

2013 to share developments on our programmes, as well as postings on HIV/TB issues, events and achievements with our stakeholders and the wider community.

"Like" us at

http://www.facebook.com/ #!/caprisaofficial 1

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## Scientific papers published in 2013

UNIVERSITY OF INYUVESI YAKWAZULU-NATALI

Naranbhai V, Altfeld M, Abdool Karim SS, Ndung'u T, Abdool Karim Q, Carr WH. Changes in Natural Killer Cell Activation and Function during Primary HIV-1 Infection. PLoS ONE 2013 8(1): e53251. doi:10.1371/ journal.pone.0053251

Naidoo K, Baxter C, Abdool Karim SS. When to start antiretroviral therapy during tuberculosis treatment? Current Opinion in Infectious



O'Donnell MR, Padayatchi N, Werner L, Kvasnovsky C, Master) I, Horsburgh, Jr CR). Treatment Outcomes for Extensively Drug-Resistant Tuberculosis and HIV Co-infection. Emerging Infectious Diseases. DOI: http://dx.doi.org/10.3201/eid1903.120998



### **Scientific Reviews**

Diseases 2013;(26)1:35-42.

Abstracts submitted for review		Manuscripts submitted for review		Ancillary studies submitted for review		
Total <sup>#</sup>	Cumulative	Total <sup>#</sup>	Cumulative	Total <sup>#</sup>	Cumulative	
4	283	2	222	1	41	



#### *# for month, ^ since committee initiation*



## **Conference & Workshop Reminders**

	Deadlines						
	Conference	Dates	Abstracts	Registration	Website		
CAPRISA is an official research	Keystone Symposium: HIV Vaccines Colorado, USA	10-15 Feb 2013		10 Dec 2012 (early)	https://www.keystonesymposia.org/index.cfm? e=web.Meeting. Program&meetingid=1223		
institute of the Uni- versity of KwaZulu-Natal and	<b>CROI</b> Atlanta, USA	3-7 Mar 2013		1 Feb 2013	http://retroconference.org		
Columbia University. CAPRISA was established in 2002 through a CIPRA grant from the NIH,	Keystone Symposia: Host Response in Tuberculosis Tuberculosis - Understanding the Enemy Whistler, Canada	13-18 Mar 2013		14 Jan 2013	http://www.keystonesymposia.org/index.cfm? e=web.Meeting.Program&meetingid=1227		
as a multi- institutional collabo- ration, incorporated as an independent non-profit AIDS	Keystone Symposia: Immune Activation in HIV Infection: Basic Mechanisms and Clinical Implications Colorado, USA	3-8 Apr 2013		29 Jan 2013 (early)	http://www.keystonesymposia.org/index.cfm? e=web.Meeting.Program&meetingid=1226		
Research Organiza- tion Registration Number:	6th SA AIDS Conference Durban, South Africa	18-22 Jun 2013	19 Sep 2012	From 2 Sep 2012	www.saaids.co.za		
2002/024027/08 www.caprisa.org	7th IAS Conference Kuala Lumpur, Malaysia	30 Jun-3 Jul 2013	ТВА	14 Feb 2013 (early)	http://www.ias2013.org/		

Board of Control: AC Bawa (Chair) SS Abdool Karim R Bharuthram D Clark • LP Fried (US) NM ljumba S Madhi S Naidoo DP Visser PN Langa Scientific Advisory Board: C Hankins (Chair) SM Dhlomo HL Gabelnick • R Hoff Y Shao FG Handley Y Lo Executive Committee: SS Abdool Karim Q Abdool Karim G Churchyard HM Coovadia H Dawood J Fröhlich CM Gray NJ Garret A Kharsany CT Montague D Moodley L Morris K Naidoo G Nair N Padayatchi J-A Passmore JCM Swart C Williamson