IN THE HIGH COURT OF SOUTH AFRICA

GAUTENG DIVISION, PRETORIA

In the matter between -

CASE NO. 3623 / 2021

SOLIDARITY	First Applicant
AFRIFORUM NPC	Second Applicant
and	
MINISTER OF HEALTH	First Respondent
PRESIDENT OF THE REPUBLIC OF SOUTH AFRICA	Second Respondent
MINISTER OF COOPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS	Third Respondent
CHAIRPERSON OF THE COVID-19 SCIENTIFIC MINISTERIAL ADVISORY COMMITTEE	Fourth Respondent
MEC FOR HEALTH, WESTERN CAPE	Fifth Respondent
MEC FOR HEALTH, GAUTENG	Sixth Respondent
MEC FOR HEALTH, FREE STATE	Seventh Respondent
MEC FOR HEALTH, EASTERN CAPE	Eighth Respondent
MEC FOR HEALTH, NORTHERN CAPE	Ninth Respondent
MEC FOR HEALTH, LIMPOPO	Tenth Respondent
MEC FOR HEALTH, MPUMALANGA	Eleventh Respondent
MEC FOR HEALTH, NORTH WEST	Twelfth Respondent
MEC FOR HEALTH, KWA-ZULU NATAL	Thirteenth Respondent
PHARMACEUTICAL SOCIETY OF SOUTH AFRICA	Fourteenth Respondent
COUNCIL FOR MEDICAL SCHEMES	Fifteenth Respondent
SOUTH AFRICAN MEDICAL ASSOCIATION PHARMACEUTICAL INDUSTRY ASSOCIATION OF	Sixteenth Respondent
SOUTH AFRICA	Seventeenth Respondent

FOURTH RESPONDENT'S AFFIDAVIT

I, the undersigned,

SALIM SAFURDEEN ABDOOL KARIM

do hereby make oath and say that:

- 1 I am an adult male clinical epidemiologist who has been undertaking research and working in the field of infectious disease control for the past 30 years.
- 2 The facts contained in this affidavit are true and, save where the contrary appears from the context or is otherwise stated, are within my personal knowledge.
- 3 I am currently employed as the Director of the Centre for the Aids Programme of Research in South Africa (CAPRISA) at the Doris Duke Medical Research Institute of the Nelson R Mandela School of Medicine, University of KwaZuluNatal. I am also the Pro Vice-Chancellor (Research) at the University of KwaZuluNatal.
- 4 In addition, I hold the following positions internationally:
 - 4.1 CAPRISA Professor in Global Health in the Department of Epidemiology at Columbia University, New York, USA;
 - 4.2 Adjunct Professor in Immunology and Infectious Diseases at Harvard University, USA; and

- 4.3 Adjunct Professor of Medicine at Cornell University, New York, USA.
- 5 The credentials and expertise I have in the prevention, control. and treatment of infectious and communicable diseases are outlined in detail in my curriculum vitae and annexed hereto as **"SSAK 1**".
- 6 I respectfully submit I am properly qualified as an expert to express the opinions contained in this affidavit.

MY APPROACH TO THE PRESENT MATTER

- 7 During March 2020, I was appointed as Chair of the Ministerial Advisory Committee on the COVID-19 epidemic in South Africa. I refer to it as "the MAC".
- In this capacity, I provide expert technical advice to the Department of Health on measures to control the spread and impact of the novel coronavirus, SARS-CoV(severe acute respiratory syndrome coronavirus 2), including treatment protocols and infection control within health facilities. The Committee is a body comprised of 21 people, mostly academics, from a wide range of disciplines.
- 9 In this capacity, I also sit as an observer on the Ministerial Advisory Committee on Vaccines ("the VMAC"), a multi-disciplinary collective of experts that was tasked to advise on the development of the national Covid-19 vaccine strategy. The VMAC is chaired by Professor Barry Schoub.

- 10 The applicants have cited me as the fourth respondent in this matter though they wrongly suggest that Professor Schoub is the chair of the MAC, when he is in fact the chair of the VMAC.
- 11 I have given consideration to the appropriate response by me in respect of this application.
 - 11.1 As I explain in what follows, I have very serious misgivings about the approach of the applicants as set out in their papers and the effects that such an approach, if adopted, would have.
 - 11.2 However, it does not seem appropriate that an independent expert in my position should be drawn into formally opposing litigation of this kind.
 - 11.3 I therefore abide the relief sought, but set out my views in this affidavit for the assistance of the Court.

THE PROCUREMENT OF VACCINES

12 The novel coronavirus has spread globally and the COVID-19 pandemic poses a clear threat to human life in South Africa. Over the past year our knowledge and understanding of the nature of the novel coronavirus, the methods of transmission, and ways that transmission and contraction of the virus may be slowed and/or prevented has increased.

- 13 One of the most important elements of the global Covid-19 response is that safe and effective vaccines have been developed and tested and now are starting to be approved for international distribution and use outside of clinical trials.
- 14 The question that arises is whether, from a policy and public health perspective, Covid-19 vaccines:
 - 14.1 should be procured exclusively by national governments, as is currently the case in all countries that I am aware of; or
 - 14.2 should also be procured by individuals or organisations independently of national governments, such as private persons and provincial governments, as the applicants contend.
- 15 In my considered view, the applicants' approach:
 - 15.1 is out of step with the prevailing practice in all countries that I am aware of;
 - 15.2 is entirely impractical and unrealistic at present given the approach of vaccine manufacturers; and
 - 15.3 most importantly, if it came to fruition, would seriously imperil the extensive efforts made by the South African government and other governments to ensure that Covid-19 vaccines are efficiently and expeditiously procured and made available first to those in greatest need, in manner that seeks to protect the public as whole.

THE DANGERS OF VACCINE NATIONALISM, VACCINE PROVINCIALISM AND VACCINE ELITISM

- 16 In this regard, what is critical to understand is that Covid-19 is not a local epidemic or even a national epidemic. It is a global pandemic. The spread of SARS-CoV-2 in one part of South Africa will almost certainly affect other parts of the South Africa. In the same way, the spread of SARS-CoV-2 in neighbouring countries or countries which have extensive relations with South Africa will almost certainly affect South Africa itself.
- 17 For example:
 - 17.1 If one province (Province A) were to rapidly achieve high-levels of vaccination including herd immunity, this would not ultimately be of assistance if other provinces do not themselves achieve high-levels of vaccination and immunity in a similar timeframe.
 - 17.2 Instead, what would result in such a scenario is that Province A might achieve protection against the existing SARS-CoV-2 variants, but the high levels of viral replication in the other provinces would increase the risk of new variants, particularly variants that can bypass vaccine immunity, emerging and spreading.
 - 17.3 This would mean that Province A would be well-protected against the existing Covid-19 virus and existing variants but would be acutely vulnerable to the spread of new SARS-CoV-2 variants from those other provinces.

- 17.4 This is especially the case as there is no guarantee that a vaccine designed to be effective against the existing SARS-CoV-2 variants would be effective at all or as effective against new variants that develop. Some vaccines have markedly lower efficacy in South Africa due to the 501Y.V2 variant. The recent clinical trial results regarding the AstraZeneca vaccine and the variant highlight this problem. As a result of the 501Y.V2 variant, the efficacy of the AstraZeneca vaccine was 3.2-fold lower dropping from 70% in the UK and Brazil to 22% in South Africa. Similarly, the efficacy of the Novovax vaccine dropped from 89% in the UK to 49% in South Africa.
- 18 The same is true of the position viewed from a broader perspective, for the same reasons. If South Africa were to rapidly achieve high-levels of vaccination including herd immunity, this may ultimately be of limited benefit if other countries, particularly those with close connections to South Africa, do not also receive vaccine doses to vaccinate their citizens and achieve immunity.
- 19 The same is also true from a narrower perspective. It would be of little value if one business or one trade union were to rapidly achieve high levels of vaccination for its employees or members, if the rest of the persons who interact with those employees or members were not also to receive vaccine doses.
- 20 It is therefore critical to effectively combat the pandemic that widespread vaccination of the population across economic class, age, and geographical setting is achieved. This approach is known as vaccine equity, a campaign declared by the World Health Organisation (WHO) in January 2021.

- I emphasise that this is not only a moral or ethical imperative though it certainly is that as well. It is a question of self-preservation. If the aim is to protect the health and lives of South Africans via vaccines, this can only be effectively done by ensuring that other countries also receive their due supply of vaccines. Similarly, if the aim is to protect the health and lives of people in Province A or a particular trade union, this can only be effectively done by ensuring that other provinces and other persons receive their due supply of vaccines as well.
- 22 To do otherwise, would amount to what may be termed vaccine nationalism or vaccine provincialism or vaccine elitism. This may be described as a system whereby vaccines are procured and distributed primarily based on market factors and the ability of financially-resourced countries or provinces or persons to purchase vaccines on a demand basis, and to ignore the epidemiological imperative of ensuring mass vaccination regardless of financial means.
- 23 The Director-General of the WHO, Tedros A. Ghebreyesus, has said on this point:

"... the world is on the brink of a catastrophic moral failure ... Even as they speak the language of equitable access, some countries and companies continue to prioritize bilateral deals, going around Covax, driving up prices and attempting to jump to the front of the queue. This is wrong."

24 Where countries or provinces or private persons engage in unilateral vaccine procurement, this has the effect of redirecting the limited supply of vaccines that exists away from programmes which foster global equity (such as COVAX) and national equity (such as the South African Government's vaccine strategy). It results in those buying small quantities with deep pockets pushing up vaccine prices and so jumping ahead of the queue. It undermines the effective management and control of the pandemic.

- 25 This concern is not hypothetical or theoretical. It is demonstrated by what occurred in the United States in March 2020 regarding personal protective equipment (PPE) and ventilators.
 - 25.1 During that period, the absence of a centralised federal government procurement strategy for PPE and ventilators mean that US states were competing against each other, against the federal government and even against cities to procure PPE and ventilators.
 - 25.2 This was a disastrous situation as it resulted in prices being driven up and PPE and ventilators being distributed on the basis of resources available, rather than need, and failing to ensure an equitable and effective distribution of the sorely-needed PPE and ventilators. Such maldistribution of essential Covid-19 resources leads to the loss of lives.
 - I attach in this regard an article from Forbes Magazine dated 3 March2020 as annexure "SSAK2".
- 26 Precisely the same is true of vaccines. At present there is a fixed number of vaccines on the market. As such, supply is fixed. Where private entities (or provincial governments) independently seek to acquire vaccines, it is not in a situation of limitless product. Such entities are in fact, taking vaccines allocated to the South African government or other governments and thus undermining the

objective of systematically vaccinating the highest number of people in order of priority in the shortest period of time.

27 It is for this reason, that the present approach to vaccine acquisition and roll out in this country is to get the vaccine out as soon as possible to as many people as possible. In so doing, and in the words of Pope Francis, head of the Catholic Church:

> "To come out of this crisis better, we have to recover the knowledge that as a people we have a shared destination. The pandemic has reminded us that no one is saved alone. What ties us to one another is what we commonly call solidarity. Solidarity is more than acts of generosity, important as they are; it is the call to embrace the reality that we are bound by bonds of reciprocity. On this solid foundation we can build a better, different, human future"

In my view, should any corporate entity or provincial department independently procure and administer vaccines based on the recipient's ability to pay, this would deeply undermine, or even destroy, our country's national approach to control Covid-19.

THE PRACTICAL CONTEXT

- 29 I emphasise five practical considerations in this regard.
- 30 First, the supply and demand of the market:

- 30.1 If multiple corporate entities or multiple provinces buy vaccines directly then it would directly benefit and feed into the hands of the pharmaceutical companies. The increased demand, should multiple entities from one country seek to buy vaccines it creates competition for scarce goods, smaller quantities of purchases amongst the various corporate entities and ultimately higher prices.
- 30.2 Pharmaceutical companies have not adopted a single exit price for their SARS-CoV-2 vaccines. The prices are therefore open to market forces
 especially as the use of non-disclosure agreements means that they can prevent differential pricing from become public. More demand, especially from countries under significant pressure to buy vaccines, means higher prices for the product.
- 30.3 In South Africa, this it means that our government will have to compete with its own provincial governments and corporate entities and this will result in the country paying higher prices. This will significantly undermine the vaccine equity model in that fewer people will be vaccinated for the same purchase price.
- 31 Second, the limited supply of vaccines internationally:
 - 31.1 Vaccines are in limited supply and, in my view, will likely to be so until at least the end of 2021.
 - 31.2 In this limited market supply, South African corporate entities or provincial governments buying vaccines removes from the available

pool, stock that our government (or other national governments) could be buying.

- 31.3 Such an approach means that the intended systematic vaccine roll-out plan of who gets vaccines and when they get them for maximum benefit of the country, is jeopardised.
- 32 Third, it would be unethical, immoral and damaging to our vaccination program if young low risk people are being vaccinated before those in phase 1 or 2 ie. health care workers, the elderly, patients with co-morbidities, essential workers and those in congregate settings.
 - 32.1 Under vaccine equity, no government responsibly or ethically can allow an outcome that means failing to protect the most vulnerable of its people.
 - 32.2 If the organisation, trade union or province concerned contends that it is buying vaccines for those who are most vulnerable, then its approach makes no sense. Government has already prioritised those at high risk and is working on securing doses for those who are most vulnerable.
- 33 Fourth, all countries that I know are managing their vaccination roll-outs through central government for at least the following three important reasons.
 - 33.1 Firstly, this is to ensure that there is only one certifying authority providing a vaccine certificate, which can be verified online.

- 33.2 A vaccinating authority will need to certify each person as vaccinated. Allowing multiple authorities to certify vaccinations would create chaos with multiple unofficial databases, leaving the door open to counterfeit certifications and the national Department of Health with inadequate data on who has and has not been vaccinated. Incomplete or inadequate data is unreliable and would undermine any national monitoring and evaluation process adopted.
- 33.3 Secondly, the national vaccination strategy is carefully planned for a mix of at least two or three of the different vaccine technology platforms (mRNA, vectors, protein sub-units or whole killed viruses) with at least two vaccines from each technology platform. This vaccine diversity is critically important in the event that safety, efficacy or production problems occur with one or more different vaccines or vaccine platforms over the course of time. If individual entities are allowed to independently buy vaccines, this vaccine diversity approach may be severely compromised placing the whole country at risk.
- 33.4 Thirdly, central government has to carefully balance the mix of vaccines to achieve its current target of 67% immune protection for herd immunity. This means that when low efficacy vaccines are used, these have to be balanced with high efficacy vaccines so that the overall target can still be achieved. If an individual organisation, trade union or province can independently procure vaccines, it may choose to buy only a low efficacy vaccine (as its demand and price may be lower), which may derail efforts to achieve immune protection targets.

- 33.5 These risks, which could be substantial, must be anticipated and avoided.
- 34 Finally, and the most urgent imperative, is that we have to reach the national goal to bring this epidemic to a point where South Africans can return to social and economic normality.
 - 34.1 The reason why it is imperative for national government to procure vaccines is that it requires a systematic and organised roll-out of vaccines in line with the strategy to achieve population-level benefit for epidemic control. This is very different from individual benefit and different considerations apply.
 - 34.2 The VMAC comprising medical experts in consultation with relevant stakeholders considered and planned the vaccine rollout and concluded that the three-phased approach is the best option given the varied factors at play.
 - 34.3 In contrast, those purchasing vaccines outside of national government may be buying it for private goals and interests, that are unlikely to be consonant with vaccine equity. Vaccinating individuals outside of the three-phase plan may provide individual benefit for those who can afford it, employees only, or even prioritise urban residents over rural communities. But their individual benefit may undermine the country's progress towards population benefit.
 - 34.4 If I am mistaken in this view of private interests in vaccine procurement, and these entities and trade unions are actually seeking to buy

vaccines for the country's national goal of population benefit, then they should donate their vaccine procurement funds to government for this specific purpose as it is only the government that has an overall strategy and constitutional obligation of population benefit. This far exceeds the sum of any individual benefits, which would, in all likelihood, be short lived where population benefit is not achieved.

SALIM SAFURDEEN ABDOOL KARIM

I hereby certify that the deponent knows and understands the contents of this affidavit and that it is to the best of the deponent's knowledge both true and correct. This affidavit was signed and sworn to before me at on this the day of FEBRUARY 2021, and that the Regulations contained in Government Notice R.1258 of 21 July 1972, as amended by R1648 of 19 August 1977, and as further amended by R1428 of 11 July 1989, having been complied with.

> COMMISSIONER OF OATHS Full names: Address: Capacity:

SSAK 1

Curriculum Vitae: Salim Abdool Karim

1. DATE OF PREPARATION OF CV

27 November 2020

2. PERSONAL DATA

Name		ō.	Salim S. Abdool Karim
Birthdate			July 29, 1960
Birthplace		÷.	Durban, South Africa
Citizenship			South African
Residency		2	South Africa and USA
Work Address	s:	8	Department of Epidemiology, Mailman School of Public Health, Columbia University, 722 West 168 th Street, New York, NY 10032 or (in South Africa) CAPRISA, Doris Duke Medical Research Institute (2nd Floor), Nelson R Mandela School of Medicine, University of KwaZulu-Natal, 719 Umbilo Road, Durban 4001, South Africa
Telephone	(work) (home) (mobile)		
E-mail addres	SS	-	

3. ACADEMIC TRAINING

01/1992-12/1999: PhD, University of Natal, South Africa
01/1989-12/1992: MMed(Community Health), University of Natal, South Africa.
01/1989-12/1991: FFCH(Community Medicine), College of Medicine, South Africa.
01/1985-12/1989: Diploma in Datametrics(Computer Science), University of South Africa.
09/1987-08/1988: MS(Epidemiology), School of Public Health, Columbia University, New York.
01/1978-12/1983: MBChB, University of Natal, South Africa.

4. PROFESSIONAL ORGANIZATIONS AND SOCIETIES

2019-Present	:	Fellow, Royal Society
2018-Present	5	Member, US National Academy of Medicine
2017-Present		Member, Association of American Physicians
2016-Present	4	Fellow, University of KwaZulu-Natal
2013-Present	:	Fellow, American Academy of Microbiology (AAM)
2012-2017	:	Foreign Associate Member, US National Academy of Medicine (previously Institute of Medicine (IOM) of the US National Academy of Sciences)
2011-Present	:	Fellow, African Academy of Sciences (AAS)
2009-Present	:	Fellow, The World Academy of Sciences (TWAS)
2003-Present	:	Fellow, Royal Society of South Africa (RSSAf)
2001-Present	- 21	Member, Academy of Science of South Africa (ASSAf)
2000-Present	:	Member, International Society for Infectious Diseases
1996-Present	2	Member, International AIDS Society
1996-2000	- 31	Member, Society for Epidemiological Research, USA
1996-1999	the second	Councillor for Africa, International Epidemiological Association
1996-1998	1	Chairperson, Epidemiological Society of Southern Africa
1995	1	Member, New York Academy of Sciences
N-SALL	- 8	Member, American Association for the Advancement of Science.
1994-Present	- 91	Member, Sexually Transmitted Diseases Society of South Africa (now FIDSSA).
1989-Present		Member, International Epidemiological Association.
ACTA CORPORT	1	Member, Epidemiological Society of Southern Africa (and subsequently FIDSSA).
1989-1991	- 8	Executive Committee Member, Epidemiological Society of Southern Africa.

	2	Member, Community Health Association of Southern Africa.
1986-1987	1.5	Chairperson, National Emergency Services Groups.
1986-1987	2	Assistant General Secretary, National Medical and Dental Association (NAMDA).
1985-1986	14	Member, South African Society for Occupational Medicine.
1982-1986	3	Member, Phoenix Child Welfare Society and David Landau Community Centre.

.....

5. PROFESSIONAL / BOARD QUALIFICATIONS:

1992-Present	Registered with the South African Health Professions as a Community Health Specialist.	
1992-Present	Registered Fellow in the Faculty of Community Health of the South African College of Medicine.	
1985-Present	Registered as Medical Practitioner with Health Professions Council of South Africa (0271047MP)	

6. ACADEMIC APPOINTMENTS

Current appointments:

2019-Present	1.2	Adjunt Professor in Immunology and Infectious Diseases, Harvard University
2016-Present	1	CAPRISA Professor of Global Health, Department of Epidemiology, Columbia University
		(Professor with tenure)
2016-Present		(Honorary) Pro Vice-Chancellor (Research), University of KwaZulu-Natal
2015-Present	1	(Honorary) Director: DST-NRF Centre of Excellence in HIV Prevention (hosted by CAPRISA)
2014-Present	1	(Honorary) Director: MRC HIV-TB Pathogenesis and Treatment Research Unit (hosted by
	-	CAPRISA)
2011-Present	d, 1	(Honorary) Associate, Ragon Institute of Massachusetts General Hospital (MGH),
		Massachusetts Institute of Technology (MIT) and Harvard University
2005-Present	14	Adjunct Professor, Clinical Epidemiology and Health Services Research, Graduate School of
		Medical Sciences, Cornell University, New York
2002-Present	- G -	Director: Centre for the AIDS Programme of Research in South Africa (CAPRISA)
2000-Present	3	Adjunct Professor of Medicine, Weill Medical College, Cornell University, New York
Previous positi	ions h	eld:
2012-2014		President, South African Medical Research Council
2008-2011	1	Honorary Professor in Public Health, Nelson R. Mandela School of Medicine, University of
2000-2011		KwaZulu-Natal
2007-2008	3	Interim Director, KwaZulu-Natal Research Institute for TB and HIV (K-RITH) of the Howard
		Hughes Medical Institute
2005-2015	3	Pro Vice-Chancellor (Research), University of KwaZulu-Natal (as an employee)
2003-2006		Honorary Professor in Community Health, Nelson R. Mandela School of Medicine, University
april dian.		of KwaZulu-Natal
2001-2004	14	Deputy Vice-Chancellor (Research), University of Natal
2000-2015		Professor of Clinical Epidemiology, Mailman School of Public Health, Columbia University,
2000 2010		New York
2000-2001		Director, HIV Prevention and Vaccine Research Unit, Medical Research Council.
1999-2001	-	Honorary Associate Professor, School of Infectious Diseases, University of Natal, Durban.
1998-2000	- 3	Visiting Professor, Weill Medical College, Cornell University, New York
1997		Interim Director, Africa Centre for Population Studies and Reproductive Health of the
1337	-	Wellcome Trust
1996-2000	1.1	Adjunct Associate Professor, Division of Epidemiology, Mailman School of Public Health,
1449.9414		Columbia University, New York
1993-2000	1.1	Director, CERSA: Centre for Epidemiological Research in South Africa, Medical Research
1000 2000	0	Council (MRC).
1992-1998		Honorary Lecturer, Department of Paediatrics and Child Health, Faculty of Medicine,
1002-1000		University of Natal.
1992-1997		Honorary Senior Lecturer, Department of Family Medicine, Medical University of South Africa.
1994	-	Accompanied Health Minister Dlamini-Zuma as her Technical Advisor for the Afro Region of
1004		World Health Organisation's Annual Ministers of Health Meeting in Brazzaville, Congo.
1994	100	Visiting Professor, Division of Epidemiology, School of Public Health, Columbia University.
1992-1995	8	Part-time Senior Lecturer, Department of Optometry, University of Durban-Westville.
1242 1222		and and the second s

010-318



1992-1993	Senior Epidemiologist, Medical Research Council (Natal).
1989-1992	Resident/Registrar, Department of Community Health, Faculty of Medicine, Natal University
1989	Part-time Researcher: Centre for Epidemiological Research in South Africa, Medical Research Council.
1987-1988	Post-doctoral Fellow, Gertrude H. Sergievsky Center, Columbia University, New York. Also studied health economics at London School of Hygiene and Tropical Medicine and methods of epidemic investigations at the Centers for Disease Control, USA during this Fellowship.
1986-1987	Resident/Registrar, Department of Virology, Faculty of Medicine, University of Natal.
1985	Post-Intern Research Fellow, Research Institute for Diseases in Tropical Environment of MRC.
1984	Internship, King Edward VIII Hospital Durban. Worked in the Departments of Obstetrics and Gynaecology, Medicine, Surgery & Orthopaedics.

7. HONORS

7a Awards

2020 :	:	John Dirks Canada Gairdner Health Award from the Gairdner Foundation
	4	John Maddox Prize for Standing up for Science (Awarded jointly to Dr Anthony Fauci and Professor Salim S. Abdool Karim by Nature and Sense about Science)
	a	500 Years of the Straits of Magellan Award from the Chilean Government

- 2018 : Al-Sumait Prize from the Amir of Kuwait and the Kuwait Foundation for the Advancement of Science
- 2017 Lifetime Achievement Award from the Institute of Human Virology
- 2015 : African Union's Kwame Nkrumah Continental Scientific Award
 - Platinum Lifetime Achievement Award from the Medical Research Council
 - KwaZulu-Natal Department of Health "MASEA Award"
- 2014 DSc (Medicine) (Honoris causa), University of Cape Town
 - : US Science and Technology Pioneers Prize (to the CAPRISA 004 trial team) from the United States Agency for International Development
 - : Mayor's Award, eThekwini Metro, Durban.
- 2013 : John F. W. Herschel Medal in recognition of Highly Distinguished Multidisciplinary Contributions to the furtherance of Science from the Royal Society of South Africa
 - Distinguished Scholar Award from the Biomedical HIV Prevention Forum of Nigeria
- 2012 N'Galy-Mann Award (to Quarraisha and Salim S. Abdool Karim) for global contributions in HIV clinical research and epidemiology of AIDS
 - Minara recognition award for Academic Excellence (to Quarraisha and Salim S. Abdool Karim)
- 2011 : President's Award for Outstanding Achievement in World Health (to the CAPRISA 004 Leadership Team) from DIA (Drug Information Association) for research on the tenofovir gel microbicide
 - Research leading to Innovation Award (to Quarraisha and Salim S Abdool Karim on behalf of the CAPRISA 004 Leadership Team) from the South African National Science & Technology Forum (NSTF) jointly with BHP Billiton in recognition of the contributions to HIV prevention through the CAPRISA 004 study

- Allan Rosenfield Alumni Award for Excellence (to Quarraisha and Salim S. Abdool Karim) from Columbia University's Alumni Association in recognition for excellence in AIDS research
- Medicine Award Fellowship in Art & Science of Medicine (Gold) from the South African Medical Association in recognition for excellence in research on microbicides, vaccines and TB-HIV treatment
- Science-for-Society Gold Medal Award from the Academy of Science in South Africa (ASSAf) in recognition of excellence in the application of outstanding scientific thinking in the service of society.
- Outstanding Senior African Scientist Award from the European and Developing Countries Clinical Trials Partnership (EDCTP)
- Olusegun Obasanjo Prize for Scientific Discovery and Technological Innovation from the African Academy of Sciences
- 2009 TWAS Prize in Medical Sciences from The World Academy of Sciences (TWAS)
 - Outstanding Leadership Award from the Microbicide Trials Network (MTN) for the HPTN 035 trial
- 2008 : Hero in Medicine Award from the International Association of Physicians for AIDS Care (IAPAC)
- 2005 Best Man Award in the Science & Technology category from the Men's Health Magazine
- 1988 Reebok Human Rights Award from the Reebok Foundation the award was dedicated to the work of NAMDA (The National Medical and Dental Association) in the field of health and human rights.

7b Post-graduate Fellowships

- 1987 : Rockefeller Fellowship for special interests and explorations at Columbia University, New York, USA.
- 1986 Post-doctoral Fellowship by the South African Medical Research Council.
- 1985 : Post-intern scholarship by the Medical Research Council to study the epidemiology of hepatitis B.
- 1981 Denmark Clerkship by the Natal University Medical Students' Representative Council, Durban, South Africa. Hosted by the International Medical Co-operation Committee and spent two months in Denmark learning about the Danish Health Care System.

7c Committee and other professional activities

2020-present		Member, Lancet Commission on COVID-19 Chair, COVID-19 Ministerial Advisory Committee Member of the Steering Committee, Africa Task Force for Coronavirus (AFCOR)
2019-present	÷	Member, Scientific Advisory Board of the Consortium for HIV/AIDS Vaccine Development (CHAVD)
2017-present		Chair, World Health Organisation (WHO) Strategic and Technical Advisory Committee for HIV and Viral Hepatitis (STAC-HIVHEP) Member, Board of the Population Council, New York Chair, Grant review committee for the US Department of Defense's Medical Research and Development Program
2016-2017	î	Member, International Advisory Group (IAG) for the India TB research Consortium
2015-present	5	Member, WHO HIV/TB Task Force
2015	:	Co-Chair, WHO Pre-exposure Prophylaxis (PrEP) Technical Advisory Group
2014-present	÷	Member, International Society for Infectious Diseases (ISID)

		Member, Scientific Advisory Committee of the South African National Institute for Communicable Diseases Member, 2015 Gen-Probe Joseph Public Health Award Nominations Committee of the American Academy of Microbiology
2014-2015	÷	Member, WHO Consolidated Antiretroviral Guidelines Steering Committee
2014		Member, WHO expert committee drafting 2014 WHO Consolidated Antiretroviral guidelines
2013-present	÷	Chair, UNAIDS Scientific Expert Panel
2013-2015	1	Member, UNAIDS - Lancet Commission on AIDS
2012-present	- (Member, Scientific Advisory Board for Global Health, Bill and Melinda Gates Foundation
2012		Member, Scientific Program Committee (SPC) of the international symposium to celebrate the 30th anniversary of the discovery of HIV
2011		Member, The team writing South Africa's National Strategic Plan for HIV/AIDS, STIs and TB (2012-2016)
2011-2013	e.	Member, Academy of Science in South Africa - Standing Committee on Health
2010-2014		Member, Scientific Advisory Board, US President's Emergency Plan for AIDS Relief (PEPFAR)
2010	Ş	Member, Scientific Committee, UNAIDS Declaration on HIV Prevention Member, Expert Review Panel, Fogarty International Research Scientist Career Development Grant
2009	- WOULD -	Member, Institute of Medicine's Committee on "Envisioning a strategy to prepare for the long- term burden of HIV/AIDS" Member, Review Panel of the US Military Infectious Diseases Research Program Member, Strategic Advisory Board, Global HIV Vaccine Enterprise Member, Global Health Award Advisory Committee, Gairdner Foundation Member, WHO Expert Advisory Panel on Sexually Transmitted Infections and HIV Member, Population Council Microbicide Advisory Board
2008	а	Chair, WHO, Scientific and Technical Advisory Group for Reproductive Health Member Scientific Committee, AIDS 2008 Vaccine Conference
2007	*** ** **	Member, AIDS Accountability International Scientific Review Panel Co-Chair of the Planning Group for Research in International Settings, National Institutes of Health's Office of AIDS Research Review panel member, US Centers for Disease Control and Prevention intramural AIDS Research Program Member, International AIDS Vaccine Initiative (IAVI) Scientific Advisory Committee
2006	10 10 10 10 10 10 10 10 10 10 10 10 10 1	Member, International Scientific Advisory Committee for the 17 th International Society for STD Research (ISSTDR) Member, The International Center for Indigenous Phytotherapy Studies (TICIPS) External Advisory Panel Member, Council of South African Association for Marine Biological Research (SAAMBR) Trustee of the South African Centre for Epidemiological Modelling of AIDS (SACEMA) trust Member, Scientific Advisory Committee, Aurum Health Research Member, External Review Panel for NIAID funded activities of the U.S. Military HIV Research Program

010-321

2005	 Member, Scientific Advisory Board, International Partnership for Microbicides Member, South African Higher Education AIDS Programme Scientific Advisory Committee Vice-Chair, Scientific and Technical Advisory Group (STAG), Department of Reproductive Health and Research, World Health Organisation, Geneva, 2002. Member, International Planning Committee, Office of AIDS Research, National Institutes of Health Member, Advisory Council for the Harvard AIDS Initiative (HAI) Vaccine Think Tank Series
2004	Member, Scientific Committee for the Prevention Science concentration, 3rd IAS Conference on HIV Pathogenesis and Treatment
2003	Member, Board of the Oceanographic Research Institute, Durban. Member, Scientific Committee, AIDS Vaccine 2004, Paris Member, Scientific Committee, Microbicide Conference 2004, London Member, Scientific Committee, 8th World STI/AIDS Congress, Uruguay, 2003
2002	 Member, Global HIV Prevention Working Group of the Gates Foundation. Member, Program Committee, AIDS Vaccines 2003, New York Member, Scientific and Technical Advisory Group (STAG), Department of Reproductive Health and Research, World Health Organisation, Geneva, 2002. Drafting sub-committee, Council of International Organisations of Medical Societies (CIOMS) Conference on 1992 CIOMS Guidelines Revision, World Health Organisation, Geneva, 2002. Chairman, Scientific Basis for Regulatory Decisions on Microbicides, UNDP/UNFPA/WHO/ WORLD BANK Special Programme of Research Development and Research Training in Human Reproduction, World Health Organisation, Villars-sur-Ollon, Switzerland, 2002. Member, Scientific Committee, International Congress of Chemotherapy, Durban, 2003.
2001	 Member, Program Committee, AIDS Vaccines 2001, Philadelphia 2001 Member of the Advisory Board, International Leadership Award program of the Elizabeth Glaser Pediatric AIDS Foundation Member, International Scientific Advisory Board, XIV International AIDS Conference, Barcelona, 2002 Member, Board of Directors, Sugar Milling Research Institute, Durban.
2000	Chairperson, Scientific Programme Committee, XIIIth International AIDS Conference, Durban, July 2000. Member, KwaZulu-Natal Provincial AIDS Council. Member, Scientific Steering Committee, HIV Vaccine Trials Network Chairperson, International Working Group, HIV Vaccine Trials Network
1999	Member of the International Advisory Committee of the Second International Conference on AIDS India 2000, India, December 1999. Member of Review Panel Focus Group on the Centers for AIDS Research, Office of AIDS Research, National Institutes for Health.
1998	Chairperson, Health Sector Working Group, National Research and Technology Foresight Project, Department of Arts, Culture, Science and Technology, South Africa. Chairperson, Data, Safety and Monitoring Board, Vitamin A and vertical HIV transmission trial, University of Natal, Durban. Chairperson, Safety Monitoring Committee, Pneumococcal Vaccine Trial, University of Witwatersrand, Johannesburg.
1997	 Chairperson, National Advisory Group of Immunisation, South Africa. Member, International Scientific Committee of the 3rd International Conference on AIDS Impact: Biopsychosocial aspects of HIV infection, Melbourne, Australia, June 1997. Member, Organising Committee and Scientific Committee of the 18th African Health Sciences Congress, Cape Town, April 1997. Member, Scientific Programme Committee, 12th World AIDS Conference, Geneva, June 1998.

010-322 B



1996	 Chairperson of the South African Polio Expert Committee Adviser, Educational Programmes on Psychological Problems in General Health Care, WHO. Elected to Governing Council as Councillor for Africa, International Epidemiological Association. Board Member, Centre for Health Policy, University of Witwatersrand, South Africa. Board Member, Institute for Urban Primary Health care, Johannesburg. Board Member, Dental Research Institute, University of Witwatersrand, South Africa. Member, Selection Committee of Oxford Nuffield Medical fellowships in South Africa. Scientific Advisory Panel, Poliomyelitis Research Foundation, South Africa.
1995	 Technical team for the National Health Insurance Commission of the Department of Health. Board Member, Pneumococcal Research Unit, University of Witwatersrand, South Africa. International Review Panel for AIDS Research in the areas of natural history, epidemiology and prevention, National Institutes for Health, USA. Viral Hepatitis Advisory Board HIV/AIDS and STD Advisory Group, Department of Health, South Africa. International Scientific Committee, XI International Conference on AIDS, Vancouver, July 1996. Scientific Programme Committee, HELINA '96, Second International Working Conference on Health Informatics in Africa, Johannesburg.
1994	 Health Advisory Committee and Management Committee of the Valley Trust, a socio-medical project in the Valley of Thousand Hills. South African Department of Health Committee to develop a National Health Information System
1993	Board of the National Centre for Occupational Health, South Africa. Expert Panel for a Sanitation Decision Support System for Umgeni Water. Steering Committee on Water supply and quality and health in developing communities of the Water Research Commission. National Advisory Group on Immunisation, the government's expert committee on vaccination. Strategy Drafting Committee of NACOSA (The National AIDS Co-ordinating Committee of South Africa).
1992	Scientific Review Committee of the Human Sciences Research Council project to evaluate the government-initiated Food Aid Programme in Natal-KwaZulu. Evaluation Panel of the Progressive Primary Health Care Network's National AIDS Programme.

8. FELLOWSHIP AND GRANT SUPPORT

Received grants as Principal Investigator in excess of \$100million, including grants from the National Institutes for Health, Wellcome Trust, USAID, US Centers for Disease Control and Prevention, South African Department of Science and Technology and the Howard Hughes Medical Institute.

Agency	Title	Type & #	Period	Total Direct Costs	Role	
2016						
USAID/FHI 360	DREAMS Initiative - Prep Demonstration Research Study- CAPRISA 084	Prime Award No. AID-674- A-14-00009 FHI 360 - Project No 100312.001. 001	06/01/2016 05/31/2018	R64,669,114	Co- Investigator	
EDCTP	CAPRISA 018: A randomised controlled trial to assess the safety, acceptability and pharmacokinetics of sustained-release tenofovir	SRIA2015- 1061	02/01/17- 12/31/22	£9,869,514	Principal Investigator	

010-323

	alafenamide sub-dermal implant for HIV prevention in women				
2015					Det and
South African Medical Research Council (SAMRC)	MRC-CAPRISA HIV-TB Pathogenesis and Treatment Research Unit	Cooperative Agreement	04/01/2015	R3,290,066 To Date	Principal Investigator
National Research Foundation (NRF)/DST	DST-NRF Centre of Excellence in HIV Prevention	UID 96354	03/01/2015	R10,000,000 per annum	Principal Investigator
Crucell Holland B.V - Janssen Pharmaceuti ca (Pty) Ltd	A Phase 1/2a Trial to Evaluate the Safety/Tolerability and Immunogenicity of Homologous Ad26 Mosaic Vector Regimens or Ad26 Mosaic and MVA Mosaic Heterologous Vector Regimens, with High-Dose, Low-Dose or no Clade C gp140 Protein Plus Adjuvant for HIV Prevention	Crucell - HIV-V-A004	03/26/2015 - 05/31/2018	R3,245,090 To Date	Co- Investigator
VIIV	Collaboration for the development and testing of an injectable antiretroviral agent, cabotegravir long- acting (LA), for HIV prevention in women – CAPRISA 014		04/16/2015 - 12/31/2018 Terminated - 08/18/2016	\$3,000,000	Principal Investigator
USAID	Collaboration for the development and testing of an injectable antiretroviral agent, cabotegravir long- acting (LA), for HIV prevention in women – CAPRISA 014	AID-OAA-A- 15-00040	07/24/2015 - 07/23/2019 Terminated - 06/30/2017	\$3,000,000	Principal Investigator
Tides Foundation / MAC AIDS	Stopping new HIV infections in young women: A community-based program for ARV-based prevention	Grant # TFR15- 01788	09/11/2015 - 09/10/2016	\$1,000,000	Principal Investigator
2014	A second s			1272222222	1.6
Centers for Disease Control and Prevention	The CAPRISA Regional Centers for Advanced Clinical Management of HIV/AIDS and TB	5 U2GGH0011 42	04/01/2014 03/31/2019	\$12,600,000 To Date	Co- Investigator
National Institutes of Health (NIH)/NIAID	Inflammation and HIV risk: understanding partial Tenofovir efficacy in CAPRISA004	1R01Al1119 36	07/10/2014 - 06/30/2018	\$2,102,402 To Date	Co- Investigator
2013			Linkerster	040 407 500	Co Detester
National Institutes of Health (NIH)/NIAID	CAPRISA Clinical Trials Unit for AIDS/Tuberculosis Prevention and Treatment	2UM1AI0694 69	12/10/2013 - 30/11/2020	\$19,407,596 To Date	Co-Principa Investigator
UNAIDS	Chair of the UNAIDS Scientific Expert Panel at CAPRISA	2015/587455	05/22/2013 - 08/31/2016	\$271,028	Principal Investigator
2012	A			(
CONRAD /USAID	CAPRISA 008: Phase IIIb Open-Label Randomized Controlled Trial to	Subproject No.: PPA-12-	03/01/2012	\$5,787,387	Co-Principa Investigator

010-324

	Assess the Implementation Effectiveness and Safety of 1% Tenofovir Gel Provision through Family Planning Services in KwaZulu- Natal, South Africa	143 / Cooperative Agreement GPO-A00- 08-00005-00	11/30/2014		
		Subproject No.: MAPS1- 14-002 / Cooperative Agreement AID-OAA-A- 14-00011	06/15/2014 	\$2,905,438	
Family Health Internationa I - FHI 360	HPV Infection, Genital Inflammation and HIV Acquisition in Women in CAPRISA 004	FHI 360 ID: 0437.0197/8 05288	12/01/2012 - 03/31/2014	\$573,208	Co-Principal Investigator
NIH	Mary E. Charlson training grant	AHRQ T32			Co-
2011					Investigator
Technology Innovation Agency/DS T	CAPRISA 008: Phase IIIb Open-Label Randomized Controlled Trial to Assess the Implementation Effectiveness and Safety of 1% Tenofovir Gel Provision through Family Planning Services in KwaZulu- Natal,SA		11/28/2011 - 11/27/2012	R14,000.000	Co-Principal Investigator
Department of Science and Technology (DST)	To Conduct CAPRISA 009 as an open label randomized controlled trial to assess the impact of prophylactic exposure to Tenofovir Gel	Project Funding: DST/CON 0216/2011		R9,808,758	Principal Investigator
Technology Innovation Agency/DS T	Post CAPRISA 004 Activities		03/01/2011 - 02/29/2012	R12,500,000	Co-Principal Investigator
Technology nnovation Agency	HIV Vaccine Immunogen Design: Identification of T Cell epitopes associated with control of viral replication in Indian and South African HIV-1 infected individuals		01/04/2011 - 31/03/2013	R1,500,000	Co- Investigator
Fides Foundation MAC AIDS	Research preparing for the scale-up implementation of tenofovir gel for HIV prevention	Grant#TFR11 01545	12/07/2011	\$500,000	Co-Principal Investigator
Fechnology nnovation Agency	Identification of neutralizing antibody epitopes on Indian and South African HIV-1 subtype C viruses for HIV vaccine design		01/04/2011 - 31/03/2013	R1,500,000	Co- investigator
2008					
Centers for Disease Control and Prevention	CAPRISA AIDS TREATMENT PROGRAMME (CAT)	5U2 GPS001350	09/30/08 - 09/30/14	\$26,922,692	Principal Investigator
Howard Hughes Medical nstitute HHMI)	TB Recurrence upon Treatment with HAART (TRuTH) Study	HHMI 55007065	09/01/2008 08/31/2012	\$1,348,731	Principal Investigator

010-325 B

National Research	Acute HIV Infection	UID 67385	04/01/2008	R7,500,000	Principal Investigator
Foundation 2007			03/31/2011		
National Institutes of Health (NIH)/NIAID	UKZN-CAPRISA HIV/AIDS Clinical Trials Unit Description: To conduct clinical trials of HIV prevention and treatment	UI01 AI069469	01/01/2007	\$35,535,855	Principal Investigator
2006		1104	04/07/0000	0110 070	1.0
NIH	Microbicide Trial Network Leadership – Executive Committee Member	U01 Al068633	01/07/2006 - 30/06/2013	\$149,372 per annum	Co- investigator (PI: Sharon Hillier)
Family Health Internationa I	CAPRISA 004: Phase IIb trial to assess the safety and effectiveness of vaginal microbicide, 1% Tenofovir gel, for the prevention of HIV infection in women in South Africa	co operative agreement # GPO-A-00- 05-00022-00, contract # 132119	01/07/2006 - 31/03/2011	\$8,940,544	Co-Principal Investigator (Co-PI: Quarraisha Abdool Karim)
NIH	Center for HIV/AIDS Vaccine Immunology (CHAVI)	U01 A1067854	01/10/2006 - 30/06/2009	\$2,650,556	Co- Investigator (PI: B Haynes)
NIH	Evaluation of HIV-specific immunological and virological responses of HIV-1 multiply-exposed seronegative individuals (HEPS)	R01 AI 047086	01/06/2006 - 31/05/2009	\$373,329	Co- investigator (Pl:Juliana McElrath)
2005					
NIH, Fogarty International Center	International Training Program in Epidemiology of AIDS Description: The goal of the Program is to impact on the spread and control of AIDS and tuberculosis by developing a group of well-trained South African researchers in these fields	D43 TW00231	01/06/2005 - 31/05/2010	\$816,000 per annum	Co- Investigator (PI: Quarraisha Abdool Karim)
LIFElab (EcoBio)	Training Programme for CAPRISA 004: Phase II trial to assess the safety and effectiveness of the vaginal microbicide 1% Tenofovir for the prevention of HIV infection in young women in South Africa		01/07/2005 - 30/06/2008	R8,500,000	Co- Investigator (PI: Quarraisha Abdool Karim)
2004		5		100000000000000000000000000000000000000	Terr a terr
NIH	CAPRISA AIDS Treatment (CAT) Programme: Supplement to Collaborative AIDS Programme of Research in South Africa	U19A105179 4-02S1	01/06/2004 - 31/05/2008	\$2,000,000 per annum	Principal Investigator
2003			1 2	1	
Medical Research Council	South African AIDS Vaccine Initiative (SAAVI) HIV Vaccine Trials Unit		01/04/2003 - 31/03/2006		Co-Principal Investigator (PI: Gavin Churchyard)
2002				2000000000	
NIH	Collaborative AIDS Programme of Research in South Africa (CAPRISA)	U19 A151794-01	01/07/2002 - 31/05/2007	\$10,685,048	Principal Investigator
NIH	Adult AIDS Clinical Trials Group (AACTG)		01/06/2002	\$250,000	Co- investigator

010-326 B

Fogativ	Note O Local and		31/05/2006		(PI: Scott Hammer)	
Fogarty Internationa Center, NIH		PA-02-022	01/01/2002 - 30/08/2003	1	Principal Investigato	
2001		-		_		
NIH	HIV Vaccine Trials Unit (HVTN)		01/06/2001 - 30/06/2004	\$17,500	Co- investigator (PI: Scott Hammer)	
	The Frevention Thais Unit	U01A146749 -03	01/06/2001 - 31/05/2004	\$35,000	Co- investigator (PI: Wafaa	
2000			-		El-Sadr)	
NIH	South African MRC HIV Prevention Trials Unit		01/06/2000 - 31/05/2005	\$6,216,050	Principal Investigator (until 30 June 2001)	
NIH	New York – Southern Africa HIV Vaccine Trials Unit		01/06/2000 - 31/05/2005	\$9,996,270	Principal Investigator (until 30 June 2001)	
Fogarty International Center, NIH	AIDS International Training and Research Program	D43 TW00231	01/10/2000	\$3,153,399	Principal Investigator	
NIH	Studies on acceptability of vaginal microbicides		01/10/2000 - 30/09/2004	\$700,000	Co- investigator (until 30 June 2001) (PI: Gita	
1999	Standard States	-	-	-	Ramjee)	
NIH	HIVNET 023: Phase I study to assess the safety and plasma concentrations of nevirapine given daily, twice per week or weekly as prophylaxis in breastfeeding infants from birth to six months		01/01/1999 - 31/12/2000	\$439,955	Co-Principal Investigator	
VIH	Phase I multi-centre dose escalation safety and acceptability study of the		01/01/1999 - 31/05/2000	\$163,623	Co-Principal Investigator	
ЛН	Virological and immunological studies of HIV infection in newly infected individuals in Southern Africa		01/01/1999 - 31/05/2000	\$116,222	Co- Investigator (PI: Haynes	
998					Sheppard)	
IIH – ogarty nternational enter	International training programme in medical informatics for African nationals		01/06/1998 - 31/05/2002	\$664,228	Co- Investigator (PI: Michael	
he Vellcome rust	Migration and the spread of sexually transmitted diseases in southern Africa		01/01/1998 31/12/2001	R2,389,540	Bennish) Co- Investigator (PI: Mark Lurie)	

010-327 0

The Wellcome Trust	Syphilis in pregnancy: a health systems intervention trial	01/04/1998 - 30/09/2000	R952,350	Co-Principal Investigator (PI: David Wilkinson)
NIH	International training programme in the epidemiology of AIDS	01/06/1998 - 31/05/2000	\$815,799	Principal Investigator
NIH – Fogarty International Cente	Supplementary grant: International TB training programme	01/10/1998 - 31/05/2000	\$250,854	Principal Investigator
World Health Organisation	COL-1492 in the prevention of transmission of STDs and HIV: a multi-centre phase II/III study among commercial sex workers participating in a 100% condom programme	01/10/1998 - 30/04/2000	\$409,338	Co-Principal Investigator
1997				
The Wellcome Trust	Africa Centre for Population Studies and Reproductive Health	01/07/1997 - 30/06/2002	£5,000,000	Principal Investigator (until end of 1997)
NIH	Establishing a South African HIV vaccine trial site through intervention trials for HIV prevention among high risk rural women in Hlabisa (Core HIVNET grant)	30/10/1997 - 01/06/2000	\$784,082	Principal Investigator
Department of Health	Development of surveillance systems for the HIV/AIDS and STD Programme	01/02/1997	R1,500,000	Principal Investigator
Department of Health	Development of monitoring tools and evaluation of the HIV/AIDS and STD Programme	01/02/1997 - 31/12/1999	R1,000,000	Principal Investigator
1995				
World Health Organisation	A multi-centre, randomized, double- blind, placebo-controlled clinical trial to evaluate efficacy, tolerance and effectiveness of three drug regimens using zidovudine in combination with lamivudine for the prevention of mother-to-child transmission of HIV (PETRA).	15/12/1995 - 30/06/1998	\$90,234	Co- Investigator (PI: Joseph Saba)

9. TEACHING EXPERIENCE AND RESPONSIBILITIES

9a. Teaching

2002-Preser	nt :	Teach a course on "Cluster randomized control trials" in the Department of Medicine, Weill Medical College, Cornell University
1996-Present :		Teach a course entitled "Advanced epidemiology of infectious diseases" in the Division of Epidemiology, Columbia University.
1992-Preser	nt :	Occasional lectures to post-graduate students in the University of KwaZulu-Natal, University of Witwatersrand, University of Cape Town, University of Western Cape and the Medical University of South Africa.
1995-2002		External examiner, Masters in Epidemiology, University of Cape Town, South Africa. External examiner, Department of Community Health, University of Witwatersrand. Examiner for the South African College of Medicine, Faculty of Community Health.
		External examiner for M.Med.Sc. (Social Work) degree at the University of Durban-Westville and

010-328

B



		M.Soc.Sc. Degree at University of Natal
1989	1	Post-graduate teaching in Biostatistics - Departments of Medicine and Paediatrics, Natal University
1988	17	Lectured in epidemiology in the College of Physicians and Surgeons, and in comparative health
		systems in the School of Public Health, Columbia University.
1987-1988	1.2	Teaching Assistant in MPH core epidemiology course, School of Public Health, Columbia University.
1986-1987	:	Lectured in Virology and Microbiology at University of Natal Medical School.

9b. Post-graduate Supervision

Doctoral degrees:

- 2016 : Kogieleum Naidoo, Challenges in the integration of TB and HIV care: Evidence for improving patient management and health care policy, PhD, University of KwaZulu-Natal
- 2015 : Cheryl Baxter, Impact of intermittent tenofovir 1% gel on hepatitis B virus (HBV) infection, PhD, University of KwaZulu-Natal
- 2014 . Vivek Naranbhai, The role of natural killer cells in preventing HIV-1 acquisition and controlling disease progression, PhD, University of KwaZulu-Natal
- 2008 : Eleanor Gouws, Incidence of HIV infection in rural KwaZulu-Natal. PhD, University of KwaZulu-Natal

2001 : Cassandra Seethal. Evaluation of a teacher vision awareness programme for teachers to detect vision problems in preschool children. PhD, University of Durban-Westville

- 1999 : David Wilkinson. Epidemiology, treatment and control of tuberculosis in the HIV era in Hlabisa, South Africa. MD, University of Natal
- 1998 : Colin Pillai. Pharmocokinetic and pharmacodynamic characteristics of isoniazid and rifampicin in patients with multi drug-resistant tuberculosis. PhD, University of Durban-Westville

Masters degrees:

- 2015 : Nivashnee Naicker. Predictors of HIV Acquisition in High Risk Women in Durban, South Africa. MPH, University of KwaZulu-Natal
- 1998 : Nirupa Shah. The impact of dispensing restrictions, generic substitution and professional fees on the cost of medicines to the patient. M.B.A., University of Wales.
- 1997 : Roxana Rustomjee. A randomised control trial of nonoxynol 9 among sex workers in South Africa. M.S.(Epi), Columbia University.
- 1995 : David McCoy. Assessment of the quality of sexually transmitted disease care in a rural health district. M.Phil., University of Cape Town.

Supervision of US K-awardees:

- Mark Lurie, Brown University (K-award)
- Donnie McGrath, Tufts University (K-award)
- Ingrid Bassett, Harvard University (K-award)
- William Carr, Harvard University (K-award)

9c. CU-SA Fogarty AITRP Trainee Supervision

As past Principal Investigator of the Columbia University – Southern African Fogarty AIDS International Training and Research program (CU-SA Fogarty AITRP) for several years, I have been involved in building capacity in South Africa to undertake AIDS research for more than a decade. Over 200 Fellows have been trained in this program.

10. OTHER PROFESSIONAL ACTIVITIES

10a. Editorial responsibilities

2017		Editorial Board Member: Journal of Acquired Immunodeficiency Syndrome (JAIDS)
2016	1	Editorial Board Member: mBio
2015	2	Editorial Board Member: New England Journal of Medicine
	1.1	Editorial Board Member: Indian Journal of Medical Research
2014	:	Editorial Board Member: AIDS Research and Human Retroviruses
	-	Editorial Board Member: AIDS Reviews
	1	International Advisory Board Member: Lancet HIV

010-329 k

2013	8	International Advisory Board member, The Lancet Global Health
2012-2013		Board of Reviewing Editors, eLife Journal
2011	1	Reviewer, Science
	2	Reviewer, AIDS Research and Human Retroviruses
		Editorial Board Member: HIV and Infectious Diseases
	8	Reviewer, Indian Journal of Medical Research
		Reviewer, BioMedCentral (BMC) International Health and Human Rights
2010		Reviewer, New England Journal of Medicine
1000	- 2	Reviewer, HIV Medicine
	2	Reviewer, Drugs
		Reviewer, Clinical Infectious Diseases
	- 3	Reviewer, Pan African Medical Journal
	- 9	Reviewer, Journal of the American Medical Association
	- 21	Reviewer, Journal of Infection in Developing Countries
2009	- 8	Reviewer, Lancet
		Reviewer, Science (Translational Medicine)
	- 2	Reviewer, Fertility and Sterility
	5	Reviewer, International Journal of Tuberculosis and Lung Diseases
	191	Reviewer, Global Public Health
	1.1	Reviewer, Journal of Infectious Diseases
2008	3	Reviewer, Expert Review of Vaccines
2007-2013	3	Editorial Board Member: The Open Journal of Virology
2006	12	Reviewer, PLoS Medicine
2005	16	Reviewer: Journal of Acquired Immunodeficiency Syndrome (JAIDS)
2004	1	Reviewer, Bulletin of the World Health Organization
		Reviewer, Journal of Health, Population and Nutrition
	2	Reviewer, Tropical Medicine and International Health
2001-2014	1	Associate Editor, AIDS Clinical Care
2001-2003	1.1	Member - Editorial Board, Sexually Transmitted Infections
2001-2006	- E	Corresponding Editor, International Journal of Infectious Diseases
2000-2010	ŝ.	Member - Editorial Board, Southern African Journal of HIV Medicine
1999	1	Reviewer, Social Science and Medicine
1998	- X.	Reviewer, AIDS
1998-2008	4	Member - Editorial Board, Southern African Journal of Epidemiology and Infection
1997	1	Reviewer, Journal of Family and Community Medicine
1996	3	Reviewer, Southern African Journal of Food Science and Nutrition
1995-1998	4	Editor, Southern African Journal of Public Health.
1993		Reviewer, South African Medical Journal.
1992	1	Reviewer, American Journal of Public Health.
1989		Reviewer, Southern African Journal of Epidemiology and Infection.

11. PUBLICATIONS

11a. Peer-reviewed journal articles

- Abdool Karim Q, Abdool Karim SS. COVID-19 affects HIV and tuberculosis care. Science 2020 July; 369(6502):366-368
- Abdool Karim SS. The South African response to the pandemic. New England Journal of Medicine 2020 June; 382(24):e95. doi: 10.1056/NEJMc2014960.
- Brault MA, Spiegelman D, Abdool Karim SS, Vermund SH. Integrating and Interpreting Findings from the Latest Treatment as Prevention Trials. Current HIV/AIDS Reports. <u>https://doi.org/10.1007/s11904-020-00492-4</u>
- 4. Naidoo K, Hassan-Moosa R, Mlotshwa P, Yende-Zuma N, Govender D, Padayatchi N, Abdool Karim SS. High rates of drug-induced liver injury in people living with HIV coinfected with tuberculosis (TB) irrespective of antiretroviral therapy timing during antituberculosis treatment: results from the starting antiretroviral therapy at three points in TB trial. *Clinical Infectious Diseases* 2019; pii: ciz732. doi: 10.1093/cid/ciz732
- Molatihegi RP, Liebenberg LJ, Leslie A, Noel-Romas L, Mabhula A, Mchunu N, Perner M, Birse K, Ngcapu S, Adamson JH, Govender K, Garrett NJ, Samsunder N, Burgener AD, Abdool Karim SS, Abdool Karim Q, Passmore JS, McKinnon LR. Plasma concentration of injectable contraceptive correlates with reduced.

010-330 D

cervicovaginal growth factor expression in South African women. Mucosal Immunology 2020; doi:10.1038/s41385-019-0249-y.

- Singh R, Ramsuran V, Mitchev N, Niehaus AJ, Han KSS, Osman F, Ngcapu S, Abdool Karim SS, Rompalo A, Garrett N, Mlisana K. Assessing a diagnosis tool for bacterial vaginosis. European Journal of Clinical Microbiology & Infectious Diseases. 2020; doi: 10.1007/s10096-020-03862-3. [Epub ahead of print]. https://www.ncbi.nlm.nih.gov/pubmed/32193689
- Drain PK, Dorward J, Violette LR, Quame-Amaglo J, Thomas KK, Samsunder N, Ngobese H, Mlisana K, Moodley P, Donnell D, Barnabas RV, Naidoo K, Abdool Karim SS, Celum C, Garrett N. Point-of-care HIV viral load testing combined with task shifting to improve treatment outcomes (STREAM): findings from an open-label, non-inferiority, randomised controlled trial. Lancet HIV 2020 April; 7(4):e229-e237.
- Fisher KL, Mabuka JM, Sivro A, Ngcapu S, Passmore J-AS, Osman F, Ndlovu B, Abdool Karim Q, Abdool Karim SS, Chung AW, Baxter C, Archary D. Topical Tenofovir Pre-exposure Prophylaxis and Mucosal HIV-Specific Fc-Mediated Antibody Activities in Women. Frontiers in Immunology 2020 July; 11(1274).
- Mahomed S, Garrett N, Baxter C, Abdool Karim Q, Abdool Karim SS. Clinical trials of broadly neutralizing monoclonal antibodies for HIV Prevention: A Review. J Infect Dis. 2020 Jun 30;jiaa377. doi: 10.1093/infdis/jiaa377

- Abdool Karim SS. HIV-1 Epidemic Control Insights from Test-and-Treat Trials. New England Journal of Medicine 2019: 381;3: 286-288.
- Abdool Karim SS, Baxter C, Passmore JS, McKinnon LR, Williams BL. The genital tract and rectal microbiomes: their role in HIV susceptibility and prevention in women. *Journal of the International AIDS Society* 2019; 22(5):e25300. doi: 10.1002/jia2.25300
- Abdool Karim SS, Baxter C. HIV incidence rates in adolescent girls and young women in sub-Saharan Africa. Lancet Global Health 2019; 7(11):e1470-e1471. doi: 10.1016/S2214-109X(19)30404-8.
- Abrahams MR, Joseph SB, Garrett N, Tyers L, Moeser M, Archin N, Council OD, Matten D, Zhou S, Doolabh D, Anthony C, Goonetilleke N, Abdool Karim SS, Margolis DM, Pond SK, Williamson C, Swanstrom R. The replication-competent HIV-1 latent reservoir is primarily established near the time of therapy initiation. Science Translational Medicine 2019; 11(513): eaaw5589. doi: 10.1126/scitranslmed.aaw5589.
- Liebenberg L*, McKinnon L*, Yende-Zuma N*, Garrett N, Baxter C, Kharsany A, Archary D, Rositch A, Samsunder N, Mansoor L, Passmore J-A, Abdool Karim S, Abdool Karim Q. HPV infection and the genital cytokine milieu in women at high risk of HIV acquisition. Nature Communication 2019; 10: 5227
- Chimukangara B, Kharsany AB, Lessells RJ, Naidoo K, Rhee SY, Manasa J, Gräf T, Lewis L, Cawood C, Khanyile D, Diallo K, Ayalew KA, Shafer R, Hunt G, Pillay D, Abdool Karim SS, de Oliveira T. Moderate-to-High Levels of Pretreatment HIV Drug Resistance in KwaZulu-Natal Province, South Africa. *AIDS Research and Human Retroviruses*. 2019; 35(2):129-138.
- Mabvakure BM, Scheepers C, Garrett N, Abdool Karim SS, Williamson C, Morris L, Moore PL. Positive selection at key residues in the HIV Envelope distinguishes broad and strain-specific plasma neutralizing antibodies. *Journal of Virology* 2019; 93(6): e01685-18.
- Chimukangara B, Lessells RJ, Rhee S-Y, Giandhari J, Kharsany ABM, Naidoo K, Lewis L, Cawood C, Khanyile D, Ayalew KA, Diallo K, Samuel R, Hunt G, Vandormael A, Stray-Pedersen B, Gordon M, Makadzange T, Kiepiela P, Ramjee G, Ledwaba J, Kalimashe M, Morris L, Parikh UM, Mellors JW, Shafer RW, Katzenstein D, Moodley P, Gupta RK, Pillay D, Abdool Karim SS, de Oliveira T. Trends in pretreatment HIV-1 drug resistance in antiretroviral therapy-naive adults in South Africa, 2000–2016: a pooled sequence analysis. *EClinicalMedicine* 2019; 9:26-34.
- Mabvakure BM, Lambson BE, Ramdayal K, Masson L, Kitchin D, Allam M, Abdool Karim SS, Williamson C, Passmore J, Martin DP, Scheepers C, Moore PL, Harkins GW, Morris L. Evidence for both intermittent and persistent compartmentalization of HIV-1 in the female genital tract. *Journal of Virology* 2019; 93(10): e00311-19.
- Mahomed S, Garrett N, Capparelli E, Baxter C, Yende Zuma N, Gengiah T, Archary D, Moore P, Samsunder N, Barouch DH, Mascola J, Ledgerwood J, Morris L, Abdool Karim SS. Assessing the safety and pharmacokinetics of the monoclonal antibodies, VRC07-523LS and PGT121 in HIV negative women in South Africa: study protocol for the CAPRISA 012A randomised controlled phase I trial. *BMJ Open* 2019; 9: e030283. doi:10.1136/bmjopen-2019-030283.
- Baxter C, Ngcapu S, Blackard JT, Powell EA, Penton PK, Abdool Karim SS. Frequency of Hepatitis B Virus Resistance Mutations in Women Using Tenofovir Gel as Pre-Exposure Prophylaxis. *Viruses* 2019; 11(6): E569. doi: 10.3390/v11060569.
- 21. Darboe F, Mbandi SK, Naidoo K, Yende-Zuma N, Lewis L, Thompson E, Duffy F, Fisher M, Filander E, van Rooyen M, Bilek N, Mabwe S, McKinnon L, Chegou NN, Loxton AG, Walzl G, Tromp G, Padayatchi N, Govender

010-331

D, Hatherill M, Abdool Karim SS, Zak D, Penn-Nicholson A, Scriba T. Detection of tuberculosis recurrence, diagnosis and treatment response by a blood transcriptomic risk signature in HIV-infected persons on antiretroviral therapy. *Frontiers in Microbiology* 2019; 10:1441. doi: 10.3389/fmicb.2019.01441

- Cromarty R, Sigal A, Liebenberg LJ, McKinnon LR. Abdool Karim SS, Passmore JS, Archary D. Diminished HIV infection of target CD4+ T cells in a Toll-Like Receptor 4 stimulated in vitro model. Frontiers in Immunology 2019; 10:1705. doi: 10.3389/fimmu.2019.01705
- van den Berg FT, Makoah NA, Ali SA, Scott TA, Mapengo RE, Mutsvunguma LZ, Mkhize NN, Lambson BE, Kgagudi PD, Crowther C, Abdool Karim SS, Balazs AB, Weinberg MS, Ely A, Arbuthnot PB, Morris L. AAV-Mediated Expression of Broadly Neutralizing and Vaccine-like Antibodies Targeting the HIV-1 Envelope V2 Region. Molecular Therapy: Methods & Clinical Development 2019; 14: 100-112. doi: 10.1016/ j.omtm.2019.06.002
- Mwatelah R, McKinnon LR, Baxter C, Abdool Karim Q, Abdool Karim SS. Mechanisms of sexually transmitted infection-induced inflammation in women: implications for HIV risk. *Journal of the International AIDS Society* 2019; 22 (Suppl 6): e25346. doi: 10.1002/jia2.25346.
- Naidoo K, Rampersad S, Abdool Karim SS. Improving survival with tuberculosis & HIV treatment integration: a mini review. Indian Journal of Medical Research 2019; 150(2):131-138.
- Kharsany ABM, Cawood C, Lewis L, Yende-Zuma N, Khanyile D, Puren A, Madurai S, Baxter C, George G, Govender K, Beckett S, Samsunder N, Toledo C, Ayalew KA, Diallo K, Glenshaw M, Herman-Roloff A, Wilkinson E, de Oliveira T, Abdool Karim SS, Abdool Karim Q. Trends in HIV Prevention, Treatment, and Incidence in a Hyperendemic Area of KwaZulu-Natal, South Africa. JAMA Network Open 2019; 2: e1914378-e1914378.
- 27. Naidoo K, Hassan-Moosa R, Mlotshwa P, Yende-Zuma N, Govender D, Padayatchi N, Abdool Karim SS. High rates of drug-induced liver injury in people living with HIV coinfected with tuberculosis (TB) irrespective of antiretroviral therapy timing during antituberculosis treatment: results from the starting antiretroviral therapy at three points in TB trial. *Clincial Infectious Diseases* 2019; pii: ciz732. doi: 10.1093/cid/ciz732
- Mielke D, Bandawe G, Pollara J, Abrahams M-R, Nyanhete T, Moore P, Thebus R, Yates NL, Kappes JC, Ochsenbauer C, Garrett N, Abdool Karim SS, Tomaras GD, Montefiori D, Morris L, Ferrari G, Williamson C. Antibody-dependent cellular cytotoxicity (ADCC)-mediating antibodies constrain neutralizing antibody escape pathway. Frontiers in Immunology 2019: in press

- 29. Abdool Karim SS. Optimising the accuracy of HIV drug resistance assays. Lancet HIV 2018; 5(11): e68-e69.
- Abdool Karim SS, Jo-Ann Passmore, Cheryl Baxter. The Microbiome and HIV Prevention Strategies in Women. Current Opinion in HIV and AIDS 2018; 13(1):81–87.
- 31. Abdool Karim Q, Abdool Karim SS. HIV-no time for complacency. Science 2018; 360: 1153.
- 32. Sivro A, Schuetz A, Sheward D, Joag V, Yegorov S, Liebenberg LJ, Yende-Zuma N, Stalker A, Mwatelah RS, Selhorst P, Garrett N, Samsunder N, Balgobin A, Nawaz F, Cicala C, Arthos J, Fauci AS, Anzala AO, Kimani J, Bagaya BS, Kiwanuka N, Williamson C, Kaul R, Passmore JS, Phanuphak N, Ananworanich J, Ansari A, Abdool Karim Q, Abdool Karim SS, McKinnon LR; CAPRISA004 and RV254 study groups. Integrin α4β7 expression on peripheral blood CD4+ T cells predicts HIV acquisition and disease progression outcomes. *Science Translational Medicine* 2018 24;10(425). pii: eaam6354.
- McKinnon LR, Liebenberg LJ, Yende-Zuma N, Archary D, Ngcapu S, Sivro A, Nagelkerke N, Garcia Lerma JG, Kashuba AD, Masson L, Mansoor LE, Abdool Karim Q, Abdool Karim SS, Passmore JS. Genital inflammation undermines the effectiveness of tenofovir gel in preventing HIV acquisition in women. *Nature Medicine* 2018; 24(4):491-496. doi: 10.1038/nm.4506. doi: 10.1038/nm.4506.
- Johnson EL, Doria-Rose NA, Gorman J, Bhiman JN, Schramm CA, Vu AQ, Law WH, Zhang B, Bekker V, Abdool Karim SS, Ippolito GC, Morris L, Moore PL, Kwong PD, Mascola JR, Georgiou G. Sequencing HIV-neutralizing antibody exons and introns reveals detailed aspects of lineage maturation. *Nature Communications* 2018; 9(1):4136.
- Sheward DJ, Marais J, Bekker V, Murrell B, Eren K, Bhiman JN, Nonyane M, Garrett N, Woodman ZL, Abdool Karim Q, Abdool Karim SS, Morris L, Moore PL, Williamson C. HIV Superinfection Drives De Novo Antibody Responses and Not Neutralization Breadth. *Cell Host & Microbe* 2018; 24(4): 593-599.
- Setliff I, McDonnell WJ, Raju N, Bombardi RG, Murji AA, Scheepers C, Ziki R, Mynhardt C, Shepherd B, Mamchak AA, Garrett N, Abdool Karim SS, Mallal SA, Crowe JE, Morris L, Georgiev IS. Multi-Donor Longitudinal Antibody Repertoire Sequencing Reveals the Existence of Public Antibody Clonotypes in HIV-1 Infection. *Cell Host & Microbe* 2018; 23(6): 845-854.
- 37. van Eeden C, Wibmer CK, Scheepers C, Richardson SI, Nonyane M, Lambson B, Mkhize NN, Vijayakumar B, Sheng Z, Stanfield-Oakley S, Bhiman JN, Bekker V, Hermanus T, Mabvakure B, Ismail A, Moody MA, Wiehe K, Garrett N, Abdool Karim SS, Dirr H, Fernandes MA, Sayed Y, Shapiro L, Ferrari G, Haynes BF, Moore PL,

Morris L. V2-Directed Vaccine-like Antibodies from HIV-1 Infection Identify an Additional K169-Binding Light Chain Motif with Broad ADCC Activity. Cell Reports 2018; 25(11):3123-3135.

- Dorward J, Lessells R, Drain PK, Naidoo K, de Oliveira T, Pillay Y, Abdool Karim SS, Garret N. Dolutegravir for first-line antiretroviral therapy in low-income and middle-income countries: uncertainties and opportunities for implementation and research. Lancet HIV 2018; 5(7): e400-e404.
- Garrett N, Norman E, Leask K, Naicker N, Asari V, Majola N, Abdool Karim Q, and Abdool Karim SS. Acceptability of early antiretroviral therapy among South African women. AIDS and Behavior 2018; 22(3):1018-1024.
- Moosa Y, Tanko RF, Ramsuran V, Singh R, Madzivhandila M, Yende-Zuma N, Abrahams MR, Selhorst P, Gounder K, Moore PL, Williamson C, Abdool Karim SS, Garrett NJ, Burgers WA. Case Report: Mechanisms of HIV Elite Control in two African Women. BMC Infectious Diseases 2018; 18(1): 54. doi: 10.1186/s12879-018-2961-8.
- Richardson RI, Chung AW, Natarajan H, Mabvakure B, Mkhize NN, Garrett N, Abdool Karim S, Moore PL, Ackerman ME, Alter G, Morris L. HIV-specific Fc effector function early in infection predicts the development of broadly neutralizing antibodies. *PLoS Pathogens* 2018; 14(4): e1006987.
- Garrett NJ, Osman F, Maharaj B, Naicker N, Gibbs A, Norman E, Samsunder N, Ngobese H, Mitchev N, Singh R, Abdool Karim SS, Kharsany ABM, Mlisana K, Rompalo A, Mindel A. Beyond Syndromic Management: Opportunities for Diagnosis-based Treatment of Sexually Transmitted Infections in Low- and Middle-Income Countries . PLoS One 2018; 13(4): e0196209.
- 43. Barre-Sinoussi F, Abdool Karim SS, Albert J, Bekker LG, Beyrer C, Cahn P, Calmy A, Grinsztejn B, Grulich A, Kamarulzaman A, Kumarasamy N, Loutfy MR, El Filali KM, Mboup S, Montaner JS, Munderi P, Pokrovsky V, Vandamme AM, Young B, Godfrey-Faussett P. Expert consensus statement on the science of HIV in the context of criminal law. *Journal of the International AIDS Society* 2018; 21(7): e25161. doi: 10.1002/jia2.25161.
- Tanko RF, Soares AP, Masson L, Garrett NJ, Samsunder N, Abddol Karim Q, Abdool Karim SS, Riou C, Burgers WA. Residual T cell activation and skewed CD8+ T cell memory differentiation despite antiretroviral therapyinduced HIV suppression. *Clinical Immunology* 2018; 195:127-138. doi: 10.1016/j.clim.2018.06.001.
- Joag V, Sivro A, Yende-Zuma N, Imam H, Samsunder N, Abdool Karim Q, Abdool Karim S, McKinnon L, Kaul R. Ex vivo HIV entry into blood CD4+ T cells does not predict heterosexual HIV acquisition in women. PLoS One 2018; 13(7): e0200359. doi: 10.1371/journal.pone.0200359.

- Abdool Karim SS. Assessing progress with HIV incidence in national cohorts. Lancet HIV 2017;4(2): e56-e58. doi: 10.1016/S2352-3018(16)30187-4.
- 47. Abdool Karim SS, Abdool Karim Q, Abimiku A, Linda-Gail Bekker L-G, Bukusi EA, Deschamps MMH, Derbew M, Garcia PJ, Gray G, Moses R Kamya, Swaminathan S, Wu Z. Closing the NIH Fogarty Center threatens US and global health. The Lancet 2017; 390(10093): 451. doi: 10.1016/S0140-6736(17)31912-8.
- Singh JA, Abdool Karim SS. Trump's "global gag rule": implications for human rights and global health. The Lancet Global Health 2017; 5(4): e387–e389.
- de Oliveira T, Kharsany ABM, Gräf T, Cawood C, Khanyile D, Grobler A, Puren A, Madurai S, Baxter C, Abdool Karim Q, Abdool Karim SS. Transmission networks and risk of HIV infection in KwaZulu-Natal, South Africa: a community-wide phylogenetic study. *Lancet HIV* 2017; 4(1): e41-e50.
- Klatt NR, Cheu R, Birse K, Zevin AS, Perner M, Noël-Romas L, Grobler A, Westmacott G, Xie IY; Butler J; Mansoor J, McKinnon LR, Passmore J-AS, Abdool Karim Q, Abdool Karim S, Burgener AD. Vaginal bacteria modify HIV tenofovir microbicide efficacy in African women. *Science* 2017; 356(6341): 938-945.
- 51. Alam SM, Aussedat B, Vohra Y, Meyerhoff RR, Cale EM, Walkowicz WE, Radakovich NA, Anasti K, Armand L, Parks R, Sutherland L, Scearce R, Joyce MG, Pancera M, Druz A, Georgiev IS, Von Holle T, Eaton A, Fox C, Reed SG, Louder M, Bailer RT, Morris L. Abdool Karim SS, Cohen M, Liao H-X, Montefiori DC, Park PK, Fernández-Tejada A, Wiehe K, Santra S, Kepler TB, Saunders KO, Sodroski J, Kwong PD, Mascola JR, Bonsignori M, Moody MA, Danishefsky S, and Haynes BF. Mimicry of an HIV broadly neutralizing antibody epitope with a synthetic glycopeptide. *Science Translational Medicine* 2017; 9(381): eaai7521. DOI: 10.1126/scitranslmed.aai7521.
- 52. Julg B, Tartaglia LJ, Keele B, Wagh K, Pegu A, Sok D, Abbink P, Schmidt SD, Wang K, Chen X, Joyce MG, Georgiev IS, Choe M, Kwong PD, Doria-Rose NA, Le K, Louder MK, Bailer RT, Moore PL, Korber B, Seaman MS, Abdool Karim SS, Morris L, Koup RA, Mascola JR, Burton DR, Barouch DH. Broadly neutralizing antibodies targeting the HIV-1 envelope V2 apex confer robust protection against a clade C SHIV challenge. *Science Translational Medicine* 2017; 9(406): eaal1321. DOI: 10.1126/scitransImed.aal1321
- Wibmer CK, Gorman J, Ozorowski G, Bhiman JN, Sheward DJ, Elliott DH, Rouelle J, Smira A, Joyce MG, Ndabambi N, Druz A, Asokan M, Burton DR, Connors M, Abdool Karim SS, Mascola JR, Robinson JE, Ward

AB, Williamson C, Kwong PD, Morris L, Moore PL. Structure and Recognition of a Novel HIV-1 gp120-gp41 Interface Antibody that Caused MPER Exposure through Viral Escape. *PLOS Pathogens* 2017; 13(1): e1006074.

- Tanko RF, Soares AP, Müller TL, Garrett NJ, Samsunder N, Abdool Karim Q, Abdool Karim SS, Riou C, Burgers WA. Effect of Antiretroviral Therapy on the Memory and Activation Profiles of B Cells in HIV-Infected African Women. Journal of Immunology 2017; 198(3):1220-1228.
- Chopera DR, Ntale R, Ndabambi N, Garrett N, Gray CM, Matten D, Abdool Karim Q, Abdool Karim SS, Williamson C. Early evolution of human leucocyte antigen-Associated escape mutations in variable Gag proteins predicts CD4R decline in HIV-1 subtype C-infected women. AIDS 2017; 31(2):191-197.
- Selhorst P, Masson L, Ismail SD, Samsunder N, Garrett N, Mansoor LE, Abdool Karim Q, Abdool KarimSS, Passmore Jo-AS, Williamson C. Cervicovaginal inflammation Facilitates Acquisition of less infectious HIV variants. *Clinical Infectious Diseases* 2017; 64(1):79-82.
- Thobakgale C, Naidoo K, McKinnon LR, Werner L, Samsunder N, Abdool Karim SS, Ndung'u T, Altfeld M, Naidoo K. Interleukin 1-beta (IL-1β) production by innate cells following TLR stimulation correlates with TB recurrence in ART-treated HIV infected patients *Journal of Acquired Immune Deficiency Syndrome* 2017; 74(2):213-220.
- Doria-Rose NA, Altae-Tran HR, Roark RS, Schmidt SD, Sutton MS, Louder MK, Chuang GY, Bailer RT, Cortez V, Kong R, McKee K, O'Dell S, Wang F, Abdool Karim SS, Binley JM, Connors M, Haynes BF, Martin MA, Montefiori DC, Morris L, Overbaugh J, Kwong PD, Mascola JR, Georgiev IS. Mapping Polyclonal HIV-1 Antibody Responses via Next-Generation Neutralization Fingerprinting. *PLoS Pathogens* 2017; 13(1):e1006148.
- Liebenberg LJ, Masson L, Arnold KB, McKinnon LR, Werner L, Proctor E, Archary D, Mansoor LE, Lauffenburger DA, Abdool Karim Q, Abdool Karim SS, Passmore Jo-AS. Genital-systemic chemokine gradients and the risk of HIV acquisition in women. *Journal of Acquired Immune Deficiency Syndrome* 2017; 74(3):318-325.
- Selhorst P, Combrinck C, Ndabambi N, Ismail SD, Abrahams M-R, Lacerda M, Samsunder N, Garrett N, Abdool Karim Q, Abdool Karim SS, Williamson C. Replication capacity of viruses from acute infection drives HIV-1 disease progression. *Journal of Virology* 2017; 91(8): e01806-16.
- Naicker N, Naidoo A, Werner L, Garrett N, Majola N, Asari V, Baxter C, Grobler A, Abdool Karim Q, Abdool Karim SS. Efficacy and safety of tenofovir-containing antiretroviral therapy in women who acquired HIV while enrolled in tenofovir gel prophylaxis trials. *Antiviral Therapy* 2017; 22(4):287-293.
- Sivro A, Naidoo K, McKinnon L, Yende-Zuma N, Abdool Karim SS. Plasma cytokine predictors of TB recurrence in antiretroviral-treated HIV-infected individuals from Durban, South Africa. *Clinical Infectious Diseases* 2017; 65(5): 819-826.
- Ngandu NK, Carlson JM, Chopera DR, Ndabambi N, Abdool Karim Q, Abdool Karim S, Williamson C. Brief Report: Selection of HIV-1 Variants with Higher Transmission Potential by 1% Tenofovir Gel Microbicide. *Journal* of Acquired Immune Deficiency Syndrome 2017; 76(1):43-47
- Naidoo K, Hassan-Moosa R, Yende-Zuma N, Govender N, Padayatchi N, Dawood H, Adams RN, Govender A, Chinappa S, Abdool Karim SS, Abdool Karim Q. High mortality rates in men initiated on anti-retroviral treatment in KwaZulu-Natal, South Africa. PLoS One 2017; 12(9):e0184124
- Anthony C, York T, Bekker V, Matten D, Selhorst P, Ferreria RC, Garrett NJ, Abdool Karim SS, Morris L, Wood NT, Moore PL, Williamson C. Cooperation between strain-specific and broadly neutralizing responses limited viral escape and prolonged exposure of the broadly neutralizing epitope. *Journal of Virology* 2017; 91(18): e00828-17. doi: 10.1128/JVI.00828-17.
- Dorward J, Garrett N, Quame-Amaglo J, Samsunder N, Ngobese H, Ngomane N, Moodley P, Mlisana K, Schaafsma T, Donnell D, Barnabas R, Naidoo K, Abdool Karim SS, Celum C, Drain PK. Protocol for a randomised controlled implementation trial of point-of-care viral load testing and task shifting: the Simplifying HIV TREAtment and Monitoring (STREAM) study. *BMJ Open* 2017; 7(9): e017507. doi:10.1136/bmjopen-2017-017507.
- Scheepers C, Chowdhury S, Wright WS, Campbell CT, Garrett NJ, Abdool Karim Q, Abdool Karim SS, Moore PL, Gildersleeve JC, Morris L. Serum glycan-binding IgG antibodies in HIV-1 infection and during the development of broadly neutralizing responses. AIDS 2017; 31(16):2199-2209.

- 68. Abdool Karim SS. Is the UNAIDS target sufficient for HIV control in Botswana? Lancet HIV 2016; 3(5):e195-6.
- Doria-Rose NA, Bhiman JN, Roark RS, Schramm CS, Gorman J, Pancera M, Cale EM, Ernandes MJ, Louder MK, Asokan M, Bailer RT, Druz A, Frascilla IR, Garrett NJ, Jarosinski M, Lynch RM, McKee K, O'Dell S, Pegu A, Schmidt SD, Staupe RP, Sutton MS, Wang K, Wibmer CK, Haynes BF, Abdool Karim S, Shapiro L, Kwong PD, Moore PL, Morris L, Mascola JR. A new member of the V1V2-directed CAP256-VRC26 lineage that shows increased 2 breadth and exceptional potency. *Journal of Virology* 2016; 90(1): 76-91.
- Arnold KB, Burgener A, Birse K, Romas L, Dunphy LJ, Shahabi K, Abou M, Westmacott GR, McCorrister S, Kwatampora J, Nyanga B, Kimani J, Masson L, Liebenberg LJ, Abdool Karim SS, Passmore J-AS,

Lauffenburger DA, Kaul R, McKinnon LR. Increased levels of inflammatory cytokines in the female reproductive tract are associated with altered expression of proteases, mucosal barrier proteins, and an influx of HIV-susceptible target cells. *Mucosal Immunology* 2016: 9(1):194-205.

- Rademeyer C, Korber B, Seaman M, Glorgi EE, Thebus R, Robles A, Sheward DJ, Wagh K, Garrity J, Carey BR, Gao H, Greene KM, Tang H, Bandawe GP, Marais JC, Diphoko TE, Hraber P, Tumba N, Moore PL, Gray GE, Kublin J, McElrath JM, Vermeulen J, Middelkoop K, Bekker L-G, Hoelscher M, Maboko L, Makhema J, Robb ML, Abdool Karim S, Abdool Karim Q, Kim JH, Hahn BH, Gao F, Swanstrom R, Morris L, Montefiori DC, Williamson C. Features of Recently Transmitted HIV-1 Clade C Viruses that Impact Antibody Recognition: Implications for Active and Passive Immunization. *PLoS Pathogens* 2016; 12(7): e1005742. doi:10.1371/journal.ppat.1005742
- 72. Bradley T, Fera D, Bhiman J, Eslamizar L, Lu X, Anasti K, Zhang R, Sutherland LL, Scearce RM, Bowman CM, Stolarchuk C, Lloyd KE, Parks R5, Eaton A, Foulger A, Nie X, Abdool Karim SS, Barnett S, Kelsoe G, Kepler TB, Alam SM, Montefiori DC, Moody MA, Liao HX, Morris L, Santra S, Harrison SC, Haynes BF. Structural Constraints of Vaccine-Induced Tier-2 Autologous HIV Neutralizing Antibodies Targeting the Receptor-Binding Site. *Cell Reports* 2016; 14(1):43-54.
- Kløverpris HN, Kazer SW, Mjösberg J, Mabuka JM, Wellmann A, Ndhlovu Z, Yadon MC, Nhamoyebonde S, Muenchhoff M, Simoni Y, Andersson F, Kuhn W, Garrett N, Burgers WA, Kamya P, Pretorius K, Dong K, Moodley A, Newell EW, Kasprowicz V, Abdool Karim SS, Goulder P, Shalek AK, Walker BD, Ndung'u T, Leslie A. Innate Lymphoid Cells Are Depleted Irreversibly during Acute HIV-1 Infection in the Absence of Viral Suppression. *Immunity* 2016; 44(2):391-405.
- Balkus JE, Brown ER, Hillier SL, Coletti A, Ramjee G, Mgodi N, Makanani B, Reid C, Martinson F, Soto-Torres L, Abdool Karim SS, Chirenje ZM. Oral and injectable contraceptive use and HIV acquisition risk among women in four African countries: a secondary analysis of data from a microbicide trial. *Contraception* 2016; 3(1): 25-31.
- 75. Masson L, Arnold KB, Little F, Mlisana K, Lewis DA, Mkhize N, Gamieldien H, Ngcapu S, Johnson L, Lauffenburger DA, Abdool Karim Q, Abdool Karim SS, Passmore JS. Inflammatory cytokine biomarkers to identify women with asymptomatic sexually transmitted infections and bacterial vaginosis who are at high risk of HIV infection. Sexally Transmitted Infections 2016; 92(3):186-93.
- Mkhize N, Durgiah R, Archary D, Garrett N, Moore P, Abdool Karim, Q, Abdool Karim SS, Passmore JS, Tomaras G, Ashley V, Yates N, Morris, L. Broadly neutralizing antibody specificities detected in the genital tract of HIV-1 infected women. AIDS 2016; 30(7): 1005-1014.
- Archary D, Seaton KE, Passmore JS, Werner L, Deal A, Dunphy LJ, Arnold KB, Yates NL, Lauffenburger DA, Bergin P, Liebenberg LJ, Samsunder N, Mureithi MW, Altfeld M, Garrett N, Abdool Karim Q, Abdool Karim S, Morris L, Tomaras GD. Distinct genital tract HIV-specific antibody profiles associated with tenofovir gel. *Mucosal Immunology* 2016; 9(3):821-33.
- Naranbhai V, de Assis Rosa D, Werner L, Moodley R, Hong H, Kharsany A, Mlisana K, Sibeko S, Garrett N, Chopera D, Carr WH, Abdool Karim Q, Hill AV, Abdool Karim SS, Altfeld M, Gray CM, Ndung'u T. Killer-cell Immunoglobulin-like Receptor (KIR) gene profiles modify HIV disease course, not HIV acquisition in South African women. BMC Infectious Diseases 2016;16(1):27. doi: 10.1186/s12879-016-1361-1.
- Gray GE, Laher F, Doherty T, Abdool Karim S, Hammer S, Mascola J, Beyrer C, Corey L. Which new health technologies do we need to achieve an end to HIV/AIDS? PLoS Biology 2016; 14(3): e1002372. doi:10.1371/journal.pbio.1002372.
- Wagh K, Bhattacharya T, Williamson C, Robles A, Bayne M, Garrity J, Rist M, Rademeyer C, Yoon H, Lapedes A, Gao H, GreeneK Louder MK, KongR, Abdool Karim SS, Burton DR, Barouch DH, Nussenzweig MC, Mascola JR, Morris L, Montefiori DC, Korber B, Seaman MS. Optimal Combinations of Broadly Neutralizing Antibodies for Prevention andTreatment of HIV-1 Clade C Infection. *PLoS Pathogens* 12(3): e1005520.
- MacQueen KM, Dlamini S, Perry B, Okumu E, Sortijas S, Singh C, Pillay D, Majors A, Jerome S, Watson S, Abdool Karim SS, Abdool Karim Q, Mansoor LE. Social Context of Adherence in an Open-Label 1 % Tenofovir Gel Trial: Gender Dynamics and Disclosure in KwaZulu-Natal, South Africa. AIDS & Behavior 2016; 20(11): 2682-2691.
- Shey MS, Maharaj N, Archary D, Ngcapu S, Garrett N, Abdool Karim SS, Jo-Ann S. Passmore J-AS. Modulation of Female Genital Tract-Derived Dendritic Cell Migration and Activation in Response to Inflammatory Cytokines and Toll-Like Receptor Agonists. PLoS ONE 2016 May; 11(5): e0155668. doi:10.1371/journal.pone.0155668.
- Madlala P, Singh R, An P, Werner L, Mlisana K, Abdool Karim SS, Winkler CA, Ndung'u T. Association of polymorphisms in the regulatory region of the cyclophilin A gene (PPIA) with gene expression and HIV/AIDS disease progression. *Journal of Acquired Immune Deficiency Syndrome* 2016; 72(5):465-473
- Garrett NJ, Drain PK, Werner L, Samsunder N, Abdool Karim SS. Diagnostic accuracy of the point-of-care xpert HIV-1 viral load assay in a South African HIV Clinic. Journal of Acquired Immune Deficiency Syndrome 2016; 72(2): e45-e4.





- Baxter C, Abdool Karim SS. Combination HIV prevention options for young women in Africa. African Journal of AIDS Research 2016; 15:2, 109-121.
- Sobieszczyk ME, Werner L, Mlisana K, Naicker N, Feinstein A, Gray CM, Masson L, Passmore J-AS, Williamson C, Abdool Karim Q, Abdool Karim SS, Garrett NG. Metabolic syndrome after HIV acquisition in South African women. Journal of Acquired Immune Deficiency Syndrome 2016; 73(4): 438-445.
- Wibmer K, Gorman J, Anthony C, Mkhize N, Druz A, York T, Schmidt S, Labuschagne P, Louder M, Bailer R, Abdool Karim S, Mascola J, Williamson C, Moore P, Kwong P, Morris L. Structure of an N276-dependent HIV-1 Neutralizing Antibody Targeting a Rare V5 Glycan Hole adjacent to the CD4 Binding Site. *Journal of Virology* 2016; 90(22): 10220-10235.
- 88. Bradley T, Trama A, Tumba N, Gray E, Lu X, Madani N, Jahanbakhsh F, Eaton A, Xia S-M, Parks R, Lloyd KE, Sutherland LL, Scearce RM, Bowman CM, Barnett S, Abdool-Karim SS, Boyd SD, Melillo B, Smith III AB, Sodroski J, Kepler TB, Alam SM, Gao F, Bonsignori M, Liao H-X, Moody MA, Montefiori D, Santra S, Morris L, Haynes BF. Amino Acid Changes in the HIV-1 gp41 Membrane Proximal Region Control Virus Neutralization Sensitivity. *EBioMedicine* 2016; 12: 196-207.

- Abdool Karim SS. Overcoming Impediments to Global Implementation of Early Antiretroviral Therapy. New England Journal of Medicine 2015; 373: 875-876.
- Abdool Karim SS, Abdool Karim Q, Kharsany ABM, Baxter C, Grobler AC, Werner L, Kashuba A, Mansoor LE, Samsunder N, Mindel A, Gengiah TN, for the CAPRISA 004 Trial Group. Tenofovir Gel for the Prevention of Herpes Simplex Virus Type 2 Infection. New England Journal of Medicine 2015; 373: 530-9.
- Piot P, Abdool Karim SS, Hecht R, Legido-Quigley H, Buse K, Stover J, Ryckman T, Resch S, Mogedal S, Dybul M, Goosby E, Watts C, Kilongo N, McManus J, Sidibe M on behalf of the Lancet- Unaids Commission on HIV/AIDS. The UNAIDS-Lancet Commission: Defeating AIDS—advancing global health. Lancet 2015; 386: 171–218.
- Bhiman JN, Anthony C, Doria-Rose NA, Karimanzira O, Schramm CA, Khoza T, Kitchin D, Botha G, Gorman J, Garrett NJ, Abdool Karim SS, Shapiro L, Williamson C, Kwong PD, Mascola JR, Morris L, Moore PL. Viral variants that initiate and drive maturation of V1V2-directed HIV-1 broadly neutralizing antibodies. Nature Medicine 2015; 21(11): 1332-6.
- 93. Gornalusse G, Mummidi S, Gaitan AA, Jimenez F, Ramsuran V, Picton ACP, Rogers K, Manoharan M, Avadhanam N, Murthy KK, Martinez H, Murillo AM, Chykarenko ZA, Hutt R, Daskalakis D, Shostakovich-Koretskaya L, Abdool Karim SS, Martin JN, Deeks SG, Hecht F, Sinclair E, Clark RA, Okulicz J, Valentine FT, Martinson N, Tiemessen CT, Ndung'u T, Hunt PW, He W, Ahuja SK. Epigenetic mechanisms, T-cell activation, and CCR5 genetics interact to regulate T-cell expression of CCR5, the major HIV-1 coreceptor. *Proceedings of the National Academy of Sciences* 2015; 112(34): E4762-71.
- van Loggerenberg F, Grant AD, Naidoo K, Murrman M, Gengiah S, Gengiah TN, Fielding K, Abdool Karim SS. Individualised Motivational Counselling to Enhance Adherence to Antiretroviral Therapy is not Superior to Didactic Counselling in South African Patients: Findings of the CAPRISA 058 Randomised Controlled Trial. AIDS & Behavior 2015; 19: 145–156
- Garrett N, Werner L, Naicker N, Naranbhai V, Sibeko S, Samsunder N, Gray C, Williamson C, Morris L, Abdool Karim Q, Abdool Karim SS. HIV Disease Progression in Seroconvertors from the CAPRISA 004 Tenofovir Gel Pre-exposure Prophylaxis Trial. *Journal of Acquired Immune Deficiency Syndrome* 2015; 68(1): 55-61
- Bandawe G, Moore PL, Werner L, Gray ES, Sheward DJ, Madiga M, Nofemela A, Thebus R, Marais JC, Maboko L, Abdool Karim SS, Hoelscher M, Morris L, Williamson C. Differences in HIV type 1 neutralization breadth in 2 geographically distinct cohorts in Africa. *Journal of Infectious Diseases* 2015; 211: 1461–1466
- Abdool Karim Q, Dellar RC, Bearnot B, Werner L, Frohlich JA, Kharsany AB, Abdool Karim SS. HIV-Positive Status Disclosure in Patients in Care in Rural South Africa: Implications for Scaling up Treatment and Prevention Interventions. AIDS & Behavior 2015; 19(2): 322-9
- Gengiah TN, Botha JH, Yende-Zuma N, Naidoo K, Abdool Karim SS. Efavirenz dosing: influence of drug metabolizing enzyme polymorphisms and concurrent tuberculosis treatment. *Antiviral Therapy* 2015; 20(3): 297-306.
- Laeyendecker O, Redd AD, Nason M, Longosz AF, Abdool Karim Q, Naranbhai V, Garrett N, Eshleman SH, Abdool Karim SS, Quinn TC. Antibody Maturation in Women who Acquire HIV Infection While Using Antiretroviral Pre-Exposure Prophylaxis. *Journal of Infectious Diseases* 2015; 212: 754–759
- Abdool Karim SS Abdool Karim Q, Baxter C. Antibodies for HIV prevention in young women. Current Opinion in HIV & AIDS 2015; 10(3): 183-189.
- Naicker N, Kharsany ABM, Werner L, van Loggerenberg F, Mlisana K, Garrett N, Abdool Karim SS. Risk factors for HIV acquisition in high risk women in a generalised epidemic setting. AIDS & Behavior 2015; 19 (7): 1305-1316

- Sheward DJ, Ntale R, Garrett NJ, Woodman ZL, Abdool Karim SS, Williamson C. HIV-1 superinfection resembles primary infection. Journal of Infectious Diseases 2015; 212: 904-908.
- 103. *Masson L, Passmore JA, Liebenberg LJ, Werner L, Baxter C, Arnold KB, Williamson C, Little F, Mansoor LE, Naranbhai V, Lauffenburger DA, Ronacher K, Walzl G, Garrett NJ, Williams BL, Couto-Rodriguez M, Hornig M, Lipkin WI, Grobler A, Abdool Karim Q, Abdool Karim SS. Genital inflammation and the risk of HIV acquisition in women. *Clinical Infectious Diseases* 2015; 61(2): 260-269.
- Ngcapu S, Masson L, Sibeko S, Werner L, McKinnon LR, Mlisana K, Shey M, Samsunder N, Abdool Karim SS, Abdool Karim Q, Passmore J-AS. Lower concentrations of chemotactic cytokines and soluble innate factors in the lower female genital tract associated with the use of injectable hormonal contraceptive. *Journal of Reproductive Immunology* 2015; 110 (2015) 14–21.
- 105. Kashuba ADM, Gengiah T, Werner L, Yang K-H, White N, Karim Q, Abdool Karim SS. Genital tenofovir concentrations correlate with protection against HIV infection in the CAPRISA 004 trial: Importance of adherence for microbicide effectiveness. *Journal of Acquired Immune Deficiency Syndrome* 2015, 69(3): 264–269.
- 106. Naidoo K, Grobler AC, Deghaye N, Reddy T, Gengiah S, Gray A, Abdool Karim SS. Cost-effectiveness of initiating antiretroviral therapy at different points in TB treatment in HIV-TB co-infected ambulatory patients in South Africa. Journal of Acquired Immune Deficiency Syndrome 2015; 69(5): 576–584.
- 107. Madan RP, Masson L, Tugetman J, Werner L, Grobler A, Mlisana K, Lo Y, Che D, Arnold KB, Karim Abdool S, Passmore JA-S, Herold B. Innate antibacterial activity in female genital tract secretions is associated with increased risk of HIV acquisition. AIDS Research and Human Retroviruses 2015: 31(11): 1153-1159.
- 108. Richardson SI, Gray ES, Mkhize NN, Sheward DJ, Lambson BE, Wibmer CK, Masson L, Werner L4, Garrett N, Passmore J-AS, Abdool Karim Q, Abdool Karim SS, Williamson C, Moore PL, Morris L. South African HIV-1 subtype C transmitted variants with a specific 1 V2 motif show higher dependence on α4β7 for replication. *Retrovirology* 2015; 12:54. doi: 10.1186/s12977-015-0183-
- Scheepers C, Shrestha RK, Lambson BE, Jackson KJ, Wright IA, Naicker D, Goosen M, Berrie L, Ismail A, Garrett N, Abdool Karim Q, Abdool Karim SS, Moore PL, Travers SA, Morris L. Ability To Develop Broadly Neutralizing HIV-1 Antibodies Is Not Restricted by the Germline Ig Gene Repertoire. *Journal of Immunology* 2015; 194(9): 4371-8.
- 110. Archary D, Liebenberg LJ, Werner L, Tulsi S, Majola N, Naicker N, Dlamini S, Hope TJ, Samsunder N, Abdool Karim SS, Morris L, Passmore J-AS, Garrett NJ. Randomized Cross-Sectional Study to Compare HIV-1 Specific Antibody and Cytokine Concentrations in Female Genital Secretions Obtained by Menstrual Cup and Cervicovaginal Lavage. PLoS One 2015: 10(7): e0131906.
- 111. Kharsany AB, Frohlich JA, Yende-Zuma N, Mahlase G, Samsunder N, Dellar RC, Zuma-Mkhonza M, Abdool Karim SS, Abdool Karim Q. Trends in HIV prevalence in pregnant women in rural South Africa. Journal of Acquired Immune Deficiency Syndrome 2015; 70(3): 289–295.
- 112. Riou C, Tanko RF, Soares AP, Masson L, Werner L, Garrett NJ, Samsunder N, Abdool Karim Q, Abdool Karim SS, Burgers WA. Restoration of CD4+ responses to co-pathogens in HIV-infected individuals on antiretroviral therapy is dependent on T cell memory phenotype. *Journal of Immunology* 2015; 195(5): 2273-2281.
- Masson L, Salkinder AL, Olivier AJ, McKinnon LR, Gamieldien H, Mlisana K, Scriba TJ, Lewis DA, Little F, Jaspan HB, Ronacher K, Denny L, Abdool Karim SS, Passmore JS. Relationship between female genital tract infections, mucosal IL-17 production and local Th17 cells. *Immunology*. 2015; 146(4): 557-567.

- 114. Abdool Karim SS. Retrospective: Nelson R. Mandela (1918-2013). Science 2014; 343: 150.
- 115. Abdool Karim SS, Baxter C. Microbicides for Prevention of HIV Infection: Clinical Efficacy Trials. Current Topics in Microbiology and Immunology 2014; 383: 97-116.
- Abdool Karim S. Mervyn W. Susser His Contributions to the Acquired Immune Deficiency Syndrome Response in South Africa. Paediatric and Perinatal Epidemiology, 2014; 28(6): 473-5.
- 117. *Doria-Rose NA, Schramm CA, Gorman J, Moore PL, Bhiman JN, DeKosky BJ, Ernandes MJ, Georgiev IS, Kim HJ, Pancera M, Staupe RP, Altae-Tran HR, Bailer RT, Crooks ET, Cupo A, Druz A, Garrett NJ, Hoi KH, Kong R, Louder MK, Longo NS, McKee K, Nonyane M, O'Dell S, Roark RS, Rudicell RS, Schmidt SD, Sheward DJ, Soto C, Wibmer CK, Yang Y, Zhang Z, NISC Comparative Sequencing Program, Mullikin JC, Binley JM, Sanders RW, Wilson IA, Moore JP, Ward AB, Georgiou G, Williamson C, Abdool Karim SS, Morris L, Kwong PD, Shapiro L, Mascola JR. Developmental pathway for potent V1V2-directed HIV-1-neutralizing antibodies. Nature 2014; 509(7498): 55-62.
- Piot P, Barré-Sinoussi F, Abdool Karim Q, Abdool Karim SS, Beyrer C. Appeal to global donors to save the Treatment Action Campaign. Lancet 2014; 384: e62. DOI: 10.1016/S0140-6736(14)62045-6
- 119. Wei X, Hunt G, Abdool Karim SS, Naranbhai V, Sibeko S, Abdool Karim Q, Li J-F, Kashuba ADM, Werner L, Passmore J-AS, Morris L, Heneine W, Johnson JA. Sensitive Tenofovir Resistance Screening of HIV-1 from the

Genital and Blood Compartments of Women with Breakthrough Infections in the CAPRISA 004 Tenofovir Gel Trial. Journal of Infectious Diseases 2014; 209: 1916-1920.

- Masson L, Misana K, Little F, Werner L, Mkhize NN, Ronacher K, Gamieldien H, Williamson C, Mckinnon LR, Walzl G, Abdool Karim Q, Abdool Karim SS, Passmore JA-S. Defining genital tract cytokine signatures of sexually transmitted infections and bacterial vaginosis in women at high risk of HIV infection: a cross-sectional study. Sexually Transmitted Infections 2014; 90:580–587.
- Padayatchi N, Abdool Karim SS, Naidoo K, Grobler A, Friedland G. Improved survival in multidrug-resistant tuberculosis patients receiving integrated tuberculosis and antiretroviral treatment in the SAPiT Trial. International Journal of Tuberculosis and Lung Disease 2014; 18(2):147–154.
- Naranbhai V, Hill AVS, Abdool Karim SS, Naidoo K, Abdool Karim Q, Warimwe GM, Mc Shane H, Fletcher H. Ratio of monocytes to lymphocytes in peripheral blood identifies adults at risk of incident tuberculosis among HIVinfected adults initiating antiretroviral therapy. *Journal of Infectious Diseases* 2014; 209(4): 500-509.
 Balkus JE, Richardson BA, Rabe LK, Taha TE, Mgodi N, Kasaro MP, Ramjee G, Hoffman IF, Abdool Karim S.S.
- 123. Balkus JE, Richardson BA, Rabe LK, Taha TE, Mgodi N, Kasaro MP, Ramjee G, Hoffman IF, Abdool Karim S.S. Bacterial Vaginosis and the Risk of Trichomonas vaginalis Acquisition Among HIV-1 Negative Women. Sexually Transmitted Diseases 2014; 41(2): 123-128.
- Riou C, Burgers W, Mlisana K, Koup R, Roederer M, Abdool Karim S, Williamson C, Gray C. Differential impact of magnitude, polyfunctional capacity and specificity of HIV-specific CD8+ T cell responses on HIV viral set point. *Journal of Virology* 2014; 88:3: 1819-1824.
- 125. Singh R, Patel V, Mureithi M, Naranbhai V, Ramsuran D, Tulsi S, Hiramen K, Werner L, Mlisana K, Altfeld M, Luban J, Kasprowicz V, Dheda K, Abdool Karim S, Ndung'u T. TRIM5α and TRIM22 are differentially regulated according to HIV-1 infection phase and compartment. *Journal of Virology* 2014; 88(8): 4291-303.
- Naidoo K, Abdool Karim Q, Bhushan A, Naidoo K, Yende-Zuma N, McHunu PK, Frohlich J, Karim F, Upfold M, Kocheleff P, Abdool Karim SS. High rates of Tuberculosis in patients accessing HAART in rural South Africa. Journal of Acquired Immune Deficiency Syndrome 2014; 65: 438–446.
- 127. Maman S, van Rooyen H, Stankard P, Chingono A, Muravha T, Ntogwisangu J, Phakathi Z, Srirak N, Morin SF, the NIMH Project Accept (HPTN 043) study team*. NIMH Project Accept (HPTN 043): Results from In-Depth Interviews with a Longitudinal Cohort of Community Members. *PLoS ONE* 2014; 9(1): e87091. doi:10.1371/journal.pone.0087091 (*study team includes Salim S. Abdool Karim)
- Naidoo A, Naidoo K, Yende-Zuma N, Gengiah TN, Padayatchi N, Gray AL, Bamber S, Nair G, Abdool Karim SS. Changes to antiretroviral drug regimens during integrated TB-HIV treatment: Results of the SAPIT trial. Antiviral Therapy 2014; 19(2): 161-169.
- Tomita A, Garrett N, Werner L, Burns J, Mpanza L, Mlisana K, van Loggerenberg F, Abdool Karim SS. Healthrelated Quality of Life Dynamics of HIV-positive ART-naïve South African Women: Evidence from the CAPRISA 002 Acute Infection Cohort Study. AIDS & Behaviour 2014; 18(6): 1114-23.
- Mansoor LE, Abdool Karim Q, Yende-Zuma N, MacQueen KM, Baxter C, Madlala B, Grobler A, Abdool Karim SS. Adherence in the CAPRISA 004 tenofovir gel microbicide trial. AIDS & Behavior 2014; 18(5): 811-819.
- Mansoor LE, Abdool Karim Q, Werner L, Madlala B, Ngcobo N, Cornman DH, Amico KR, Fisher J, Fisher WA, MacQueen KM, Abdool Karim SS. Impact of an Adherence Intervention on the Effectiveness of Tenofovir Gel in the CAPRISA 004 Trial. AIDS & Behavior 2014; 18: 841–848.
- Gengiah TN, Mansoor LE, Upfold M, Naidoo A, Yende-Zuma N, Kashuba ADM, Abdool Karim Q, Abdool Karim SS. Measuring Adherence by Visual Inspection of Returned Empty Gel Applicators in the CAPRISA 004 Microbicide Trial. AIDS & Behavior 2014; 18: 820–825.
- Gengiah TN, Upfold M, Naidoo A, Mansoor LE, Feldblum PJ, Abdool Karim Q, Abdool Karim SS. Monitoring microbicide gel use with real-time notification of the container's opening events: results of the CAPRISA Wisebag study. AIDS & Behavior 2014; 18: 833–840.
- Mngadi KT, Maarschalk S, Grobler AC, Mansoor LE, Frohlich JA, Madlala B, Ngcobo N, Abdool Karim SS, Abdool Karim Q. Disclosure of microbicide gel use to sexual partners: influence on adherence in the CAPRISA 004 Trial. AIDS & Behavior 2014; 18: 849–854.
- MacQueen KM, Weaver MA, van Loggerenberg F, Succop S, Majola N, Taylor D, Abdool Karim Q, Abdool Karim S. Assessing adherence in the CAPRISA 004 tenofovir gel HIV prevention trial: Results of a nested case-control study. AIDS & Behavior 2014; 18: 826–832.
- Dellar RC, Abdool Karim Q, Mansoor LE, Grobler A, Humphries H, Werner L, Ntombela F, Luthuli L, Abdool Karim SS. The Preventive Misconception: Experiences from CAPRISA 004. AIDS & Behavior 2014; 18:1746-1752.
- 137. Guffey MB, Richardson B, Husnik M, Makanani B, Chilongozi D, Yu E, Ramjee G, Mgodi N, Gomez K, Hillier SL, Abdool Karim S, on behalf of the HIV Prevention Trials Network (HPTN) 035 Study Team. HPTN 035 phase II/IIb randomised safety and effectiveness study of the vaginal microbicides BufferGel and 0.5% PRO 2000 for the prevention of sexually transmitted infections in women. Sexually Transmitted Infections 2014; 90:363-369.

010-338

- Redd AD, Mullis CE, Wendel SK, Sheward D, Martens C, Bruno D, Werner L, Garrett NJ, Abdool Karim Q, Williamson C, Porcella SF, Quinn TC, Abdool Karim SS. Limited HIV-1 superinfection in seroconverters from the CAPRISA 004 microbicide trial. *Journal of Clinical Microbiology* 2014; 52(3): 844-8.
- Tomita A, Garrett N, Werner L, Burns JK, Ngcobo N, Zuma N, Mlisana K, van Loggerenberg F, Abdool Karim SS. Impact of Antiretroviral Therapy on Health-Related Quality of Life among South African Women in the CAPRISA 002 Acute Infection Study. AIDS & Behavior 2014; 18(9): 1801-1807
- Mlisana K, Werner L, Garrett NJ, McKinnon LR, van Loggerenberg F, Passmore J-AS, Gray CM, Morris L, Williamson C, Abdool Karim SS and the CAPRISA 002 Study Team. Rapid disease progression in HIV-1 subtype C infected South African women. *Clinical Infectious Diseases* 2014; 5(9): 1322-1331.
- 141. Abdool Karim Q, Kharsany ABM, Leask K, Ntombela F, Humphries H, Frohlich JA, Samsunder N, Grobler A, Dellar R, Abdool Karim SS. Prevalence of HIV, HSV-2 and pregnancy amongst high school students in rural KwaZulu-Natal: a bio-behavioral cross-sectional survey. Sexually Transmitted Infections 2014; 90: 620-626.
- 142. Penrose KJ, Richardson B, Besson G, Dezzutti CS, Herold B, Abdool Karim S, Levy L, Marrazzo J, Mellors JW, Hillier SL, Urvi PM. Y chromosome and HIV DNA Detection in Vaginal Swabs as Biomarkers of Semen and HIV Exposure in Women. Sexually Transmitted Diseases 2014; 41(11): 674-679.
- 143. Abdool Karim Q, Baxter C, Abdool Karim S. Microbicides and their potential as a catalyst for multipurpose sexual reproductive health technologies. British Journal of Obstetrics and Gynecology 2014; 121(Suppl 5): 53–61.
- Abdool Karim SS, Baxter C, Frohlich J, Abdool Karim Q. The need for multipurpose prevention technologies in sub-Saharan Africa. British Journal of Obstetrics and Gynecology 2014; 121 (Suppl 5): 27–34.
- 145. Succop SM, MacQueen KM, van Loggerenberg F, Majola N, Abdool Karim Q, Abdool Karim SS. Trial participation disclosure and gel use behavior in the CAPRISA 004 tenofovir gel trial. AIDS Care 2014; 26(12):1521-5.
- Kharsany ABM, Buthelezi TJ, Frohlich JA, Yende-Zuma N, Samsunder N, Mahlase G, Williamson C, Travers S, Marais JC, Dellar RC, Abdool Karim Q, Abdool Karim SS. HIV infection in rural South African high schools: Role of transmissions among students. AIDS Research and Human Retroviruses 2014; 30(10):956-65.
- Gengiah T, Botha J, Soowamber D, Naidoo K, Abdool Karim SS. Low rifampicin concentrations in tuberculosis patients with HIV infection. Journal of Infection in Developing Countries 2014; 8(8):987-993.
- 148. Kepler TB, Liao HX, Alam SM, Bhaskarabhatla R, Zhang R, Yandava C, Stewart S, Anasti K, Kelsoe G, Parks R, Lloyd KE, Stolarchuk C, Pritchett J, Solomon E, Friberg E, Morris L, Abdool Karim SS, Cohen MS, Walter E, Moody MA, Wu X, Altae-Tran HR, Georgiev IS, Kwong PD, Boyd SD, Fire AZ, Mascola JR, Haynes BF. Immunoglobulin Gene Insertions and Deletions in the Affinity Maturation of HIV-1 Broadly Reactive Neutralizing Antibodies. *Cell Host & Microbe* 2014; 16(3):304-313
- 149. Seaton KE, Ballweber L, Lan A, Donathan M, Hughes, Vojtech L, Moody MA, Liao H-X, Haynes BF, Galloway CG, Richardson BA, Abdool Karim S, Dezzutti CS, McElrath J, Tomaras GD, Hladik F. HIV-1-specific IgA detected in vaginal 1 secretions of HIV uninfected women participating in a microbicide trial in Southern Africa are primarily directed toward gp120 and gp140 specificities. *PLoS One* 2014; 9(7): e101863. doi:10.1371/journal.pone.0101863.
- 150. Mansoor LE, Abdool Karim Q, Mngadi KT, Dlamini S, Montague C, Nkomonde N, Mvandaba N, Baxter C, Gengiah TN, Samsunder N, Dawood H, Grobler A, Frohlich JA, Abdool Karim SS. Assessing the Implementation Effectiveness and Safety of 1% Tenofovir Gel Provision through Family Planning Services in KwaZulu-Natal, South Africa: Study Protocol for an Open-Label Randomized Controlled Trial. *Trials* 2014; 15:496.
- 151. Mann JK, Chopera D, Omarjee S, Kuang XT, Le AQ, Anmole G, Danroth R, Mwimanzi P, Reddy T, Carlson J, Radebe M, Goulder P, Walker BD, Abdool Karim S, Novitsky V, Williamson C, Brockman MA, Brumme ZL, Ndung'u T. Nef-mediated down-regulation of CD4 and HLA class I in HIV-1 subtype C infection: association with disease progression and influence of immune pressure. *Virology* 2014; 468-470C:214-225.
- Ritchie AJ, CaiF, Smith NMG, Chen S, Song H, Brackenridge S, Abdool Karim SS, Korber BT, McMichael AJ, Gao F, Goonetilleke N. Recombination-mediated escape from primary CD8+ T cells in acute HIV-1 infection. *Retrovirology* 2014 11:69. DOI: 10.1186/s12977-014-0069-9

- 153. Abdool Karim SS. HIV pre-exposure prophylaxis in injecting drug users. Lancet 2013; 381(9883): 2060-2062
- Abdool Karim Q, Baxter C, Abdool Karim S. Topical Microbicides—What's New? Journal of AIDS 2013; 63: S144-S149.
- Naidoo K, Baxter C, Abdool Karim SS. When to start antiretroviral therapy during tuberculosis treatment? Current Opinion in Infectious Diseases 2013; (26)1: 35-42.
- Naranbhai V, Altfeld M, Abdool Karim SS, Ndung'u T, Abdool Karim Q, Carr W. 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

010-339

- Abrahams MR, Treurnicht FK, Ngandu NK, Goodier SA, Marais JC, Bredell H, Thebus R, de Assis Rosa D, Mlisana K, Seoighe C, Abdool Karim S, Gray CM, Williamson C. Rapid, complex adaptation of transmitted HIV-1 full-length genomes in subtype C-infected individuals with differing disease progression. *AIDS*; 2013; 27: 507-518.
- Richardson BA, Kelly C, Ramjee G, Fleming T, Makanani B, Roberts S, Musara P, Mkandawire N, Moench T, Coletti A, Soto-Torres L, Abdool Karim SS for the HPTN 035 Study Team. Appropriateness of hydroxyethylcellulose gel as a placebo control in vaginal microbicide trials: A comparison of the two control arms of HPTN 035. Journal of AIDS 2013; 63(1): 120–125.
- Moore PL, Sheward D, Nonyane M, Ranchobe N, Hermanus T, Gray ES, Abdool Karim SS, Williamson C, Morris L. Multiple Pathways of Escape from HIV Broadly Cross-Neutralizing V2-Dependent Antibodies. *Journal of Virology* 2013; 87(9): 4882-4894.
- Naranbhai V, Samsunder N, Sandler NG, Roque A, Abdool Karim Q, Ndung'u T, Carr WH, Altfeld M, Douek DC, Abdool Karim SS; and The CAPRISA004 Trial Team. Neither microbial translocation nor TLR responsiveness are likely explanations for pre-existing immune activation in women who subsequently acquired HIV in CAPRISA004. Journal of AIDS 2013; 63(3): 294-298.
- Koff WC, Russell ND, Walport M, Feinberg MF, Shiver JW, Abdool Karim S, Walker BD, McGlynn MG, Nweneka CV, Nabel GJ. Accelerating the Development of a Safe and Effective HIV Vaccine: HIV Vaccine Case Study for the Decade of Vaccines. Vaccine 2013; 31(supplement 2): B204-B208.
- 162. Ping L-H, Joseph SB, Anderson JA, Abrahams M-R, Salazar-Gonzalez JF, Kincer LP, Treurnicht FK, Arney L, Ojeda S, Zhang M, Keys J, Potter EL, Chu H, Moore P, Salazar-Gonzalez M, Iyer S, Jabara C, Kirchherr J, Mapanje C, Ngandu N, Seoighe C, Hoffman I, Gao F, Tang Y, Labranche C, Lee B, Saville A, Vermeulen M, Fiscus S, Morris L, Abdool Karim S, Haynes BF, Shaw GM, Korber BT, Hahn BH, Cohen MS, Montefiori D, Williamson C, Swanstrom R, for the CAPRISA Acute Infection Study and the Center for HIV-AIDS Vaccine Immunology Consortium. Comparison of Viral Env Proteins from Acute and Chronic Infections of Subtype C Human Immunodeficiency Virus Type 1 Identifies Differences In Glycosylation and CCR5 Utilization and Suggests A New Strategy For Immunogen Design. Journal of Virology 2013; 87(13): 7218-7223.
- Baxter C, Yende-Zuma N, Tshabalala P, Abdool Karim Q, Abdool Karim SS. Safety of coitally administered tenofovir 1% gel, a vaginal microbicide, in chronic hepatitis B virus carriers: Results from the CAPRISA 004 trial. Antiviral Research 2013; 99(3): 405–408.
- 164. Sokal D, Abdool Karim Q, Sibeko S, Yende-Zuma N, Mansoor LE, Baxter C, Grobler A, Frohlich J, Kharsany A, Mlisana K, Maarshalk S, Abdool Karim SS. Safety of Tenofovir Gel, a Vaginal Microbicide, in South African Women: Results of the CAPRISA 004 Trial. Antiviral Therapy 2013; 18(3): 301-310.
- 165. Liu MKP, Hawkins N, Ritchie AJ, Ganusov VV, Whale V, Brackenridge S, Li H, Pavlicek JW, Cai F, Rose-Abrahams M, Treurnicht F, Hraber P, Riou C, Gray C, Ferrari G, Tanner R, Ping LH, Anderson JA, Swanstrom R, Cohen M, Abdool Karim SS, Haynes B, Borrow P, Perelson AS, Shaw GM, Hahn BH, Williamson C, Korber BT, Gao F, Self S, McMichael A, Goonetilleke N, Vertical T cell immunodominance and epitope entropy determine HIV-1 escape. *Journal of Clinical Investigation* 2013; 123(1): 380-393.
- 166. Chopera DR, Mann JK, Mqimanzi P, Omarjee S, Kuang XT, Ndabambi N, Goodier S, Martin E, Naranbhai V, Abdool Karim SS, Abdool Karim Q, Brumme ZL, Ndung'u T, Williamson C, Brochman MA. No evidence for selection of HIV-1 with enhanced Gag-Protease or Nef function among breakthrough infections in the CAPRISA 004 tenofovir microbicide trial. *PLoS One* 2013; e71758. doi:10.1371/journal.pone.0071758.
- Wibmer CK, Bhiman JN, Gray ES, Tumba N, Abdool Karim SS, Williamson C, Morris L, Moore PL. Viral Escape from HIV-1 Neutralizing 1 Antibodies 2 Drives Increased Plasma Neutralization Breadth through Sequential recognition of Multiple Epitopes and Immunotypes. *PLoS Pathogens* 2013; 9(10): e1003738. doi:10.1371/journal.ppat.1003738
- Lacerda M, Moore PL, Ngandu NK, Seaman M, Gray ES, Murrell B, Krishnamoorthy M, Nonyane M, Madiga M, Wibmer CK, Sheward D, Bailer RT, Gao H, Greene KM, Abdool Karim SS, Mascola JR, Korber BTM, Montefiori DC, Morris L, Williamson C, Seoighe C, the CAVD-NSDP Consortium. Identification of Broadly Neutralizing Antibody Epitopes in 1 the HIV-1 Envelope Glycoprotein using Evolutionary Models. *Virology Journal* 2013; 10(1): 347.

- 169. Abdool Karim SS. An AIDS-Free Generation? Science 2012; 337: 133.
- Abdool Karim SS Gray GE, Martinson N. Clinical decisions Preexposure prophylaxis for HIV prevention Recommend initiating PrEP. New England Journal of Medicine 2012; 397: 1-2.
- Abdool Karim SS, Abdool Karim Q. Antiretroviral prophylaxis for HIV prevention reaches a key milestone. Lancet 2012; 379(9831): 2047–2048.
- Abdool Karim SS, Baxter C. Overview of microbicides. Best Practice & Research Clinical Obstetrics & Gynaecology 2012; 26: 427-439.

010-340

- 173. Moore PL, Gray ES, Wibmer CK, Bhiman JN, Nonyane M, Sheward DJ, Hermanus T, Bajimaya S, Tumba NL, Abrahams M-R, Lambson BE, Ranchobe N, Ping L, Ngandu N, Abdool Karim Q, Abdool Karim SS, Swanstrom RH, Seaman MS, Williamson C, Morris L. Evolution of an HIV glycan-dependent broadly 1 neutralizing antibody 2 epitope through immune escape. Nature Medicine 2012 18(11): 1688-92.
- Naranbhai V, Abdool Karim Q, Naidoo K, Yende-Zuma N, Abdool Karim SS. Sustainability of task-shifting for antiretroviral treatment. Lancet 2012; 380(9857): 1907-1908.
- 175. Naidoo K, Yende-Zuma N, Padayatchi N, Naidoo K, Nair G, Bamber S, Gengiah S, El-Sadr WM, Friedland G, Abdool Karim SS. The Immune Reconstitution Inflammatory Syndrome After Antiretroviral Therapy Initiation in Patients With Tuberculosis: Findings From the SAPIT Trial. Annals in Internal Medicine 2012; 157: 313-324.
- Mayosi BM, Lawn JE, van Niekerk A, Bradshaw D, Abdool Karim SS, Coovadia HM. Health in South Africa: changes and challenges since 2009. Lancet 2012; 380(9858): 2029-2043.
- Naranbhai V, Abdool Karim SS, Altfeld M, Samsunder N, Durgiah R, Sibeko S, Abdool Karim Q, Carr WH. Innate Immune activation enhances HIV acquisition in women, diminishing the effectiveness of tenofovir microbicide gel. Journal of Infectious Diseases 2012; 206(7): 993-1001.
- Roberts L, Passmore J-A S, Milsana K, Williamson C, Little F, Bebell LM, Walzi G, Abrahams M-R, Woodman Z, Abdool Karim Q, Abdool Karim SS. Genital Tract Inflammation During Early HIV-1 Infection Predicts Higher Plasma Viral Load Set Point in Women. *Journal of Infectious Diseases* 2012; 205(2): 194-203.
- Grobler AC, Abdool Karim SS. Design challenges facing clinical trials of the effectiveness of new HIV prevention technologies. AIDS 2012; 26(5): 529–532.
- Mureithi MW, Poole D, Naranbhai V, Reddy S, Mkhwanazia NP, Sibeko S, Werner L, Abdool Karim Q, Abdool Karim S, Ndung'u T, Altfeld M and the CAPRISA004 Trial Group. Preservation HIV-1-specific IFNγ+ CD4+ T cell responses in breakthrough infections following exposure to Tenofovir Gel in the CAPRISA 004 microbicide trial. *Journal of AIDS* 2012; 60(2): 124–127.
- Gengiah TN, Holford NH, Botha JH, Gray AL, Naidoo K, Abdool Karim SS. The influence of tuberculosis treatment on efavirenz clearance in patients co-infected with HIV and tuberculosis. European Journal of Clinical Pharmacology 2012; 68: 689–695.
- Gengiah TN, Baxter C, Mansoor LE, Kharsany ABM, Abdool Karim SS. A drug evaluation of 1% tenofovir gel and tenofovir disoproxil fumarate tablets for the prevention of HIV infection. Expert Opinion on Investigational Drugs 2012; 21(5): 695-715
- Kharsany AMB, Mlotshwa M, Frohlich JA, Yende Zuma N, Samsunder N, Abdool Karim SS, Abdool Karim Q, HIV prevalence among high school learners - Opportunities for schools-based HIV testing programmes and sexual reproductive health services. World Health Population 2012; 13(4):43-50.
- Lynch R, Tran L, Louder M, Cohen M, DerSimonian R, Euler Z, Gray E, Abdool Karim S, Kirchherr J, Montefiori D, Sibeko S, Soderberg K, Tomaras G, Yang Z-Y, Nabel G, Schuitemaker H, Morris L, Haynes B, Mascola J. The Development of CD4 Binding Site Antibodies During HIV-1 Infection. *Journal of Virology* 2012; 86 (14): 7588-7595.
- Mlisana K, Naicker N, Werner L, Roberts L, van Loggerenberg F, Baxter C, Passmore J-AS, Grobler AC, Sturm W, Williamson C, Ronacher K, Walzl G, Abdool Karim SS. Symptomatic Vaginal Discharge Is a Poor Predictor of Sexually Transmitted Infections and Genital Tract Inflammation in High-Risk Women in South Africa. *Journal* of Infectious Diseases; 2012; 206: 6-14
- Abdool Karim Q, Kharsany ABM, Frohlich JA, Werner L, Mlotshwa M, Madlala BT, Abdool Karim SS. HIV Incidence in Young Girls in KwaZulu-Natal, South Africa-Public Health Imperative for Their inclusion in HIV Biomedical Intervention Trials. AIDS & Behaviour 2012; 16(7): 1870-1876.
- Valley-Omar Z, Sibeko S, Anderson J, Goodier S, Werner L, Arney L, Naranbhal V, Treurnicht F, Abrahams M-R, Bandawe G, Swanstrom R, Abdool Karim Q, Abdool Karim SS, Williamson C. CAPRISA 004 Tenofovir Microbicide Trial: No Impact of Tenofovir Gel on the HIV Transmission Bottleneck. *Journal of Infectious Diseases* 2012; 206(1): 35-40.
- 188. Dezzutti CS, Richardson BA, Marrazzo JM, Tugetman J, Ramjee G, Taha T, Chirenje ZM, Abdool Karim SS, Hillier SL, Herold BC, on behalf of the MTN Biomedical Sciences Working Group and the HPTN 035 Protocol Team. Mucosal E. coli bactericidal activity and immune mediators are associated with HIV-1 seroconversion in women participating in the HPTN 035 trial. *Journal of Infectious Disease* 2012; 206(12): 1931-1935.
- 189. Grobler A, Abdool Karim S. Declining adherence is a more likely explanation than frailty of the apparent decline in efficacy in the CAPRISA 004 trial: response to O'Hagan et al. AIDS 2012; 26(17): 2261.
- Naranbhai V, Altfeld M, Abdool Karim Q, Ndung'u T, Abdool Karim SS, Carr WH; on behalf of the Centre for the AIDS Programme of Research in South Africa (CAPRISA) Tenofovir gel Research for AIDS Prevention Science (TRAPS) Team. Natural killer cell function in women at high risk for HIV acquisition: insights from a microbicide trial. AIDS 2012; 26(14): 1745-1753.

010-341

- 191. Wecker M, Gilbert P, Russell N, Hural J, Allen M, Pensiero M, Chulay J, Chiu Y-L, Abdool Karim S, Burke D. Phase I safety and immunogenicity evaluations of an alphavirus replicon HIV-1 subtype C gag vaccine (AVX101) in healthy HIV-1 uninfected adults. *Clinical and Vaccine Immunology* 2012; 19(10): 1651-60.
- 192. Chirenje ZM, Masse BR, Maslankowski LA, Ramjee G, Coletti AS, Tembo TN, Magure TM, Soto-Torres L, Kelly C, Hillier S, Abdool Karim S. Utility of colposcopy in a phase 2 portion of a microbicide clinical trial of BufferGel and 0.5% PRO 2000 Gel. Journal of the International AIDS Society 2012, 15: 17376.
- 193. Chopera DR, Cotton LA, Zawaira A, Mann JK, Ngandu NK, Ntale R, Carlson JM, Mlisana K, Woodman Z, Assis Rosa DD, Martin E, Miura T, Pereyra F, Walker BD, Gray CM, Martin DP, Ndung'u T, Brockman MA, Abdool Karim S, Brumme ZL, Williamson C, the CAPRISA 002 Study Team. Intersubtype 1 differences in the effect of a rare p24 Gag mutation on HIV-replicative fitness. *Journal of Virology* 2012; 86(24): 13423-13433.
- 194. Riou C, Abrahams M-R, Mlisana K, Liu M, Goonetilleke N, Treurnicht F, Koup R, Roederer M, Abdool Karim S, De Bruyn G, Williamson C, Gray C. Increased memory differentiation is associated with decreased polyfunctionality for HIV but not for CMV-specific CD8+ T cells. *Journal of Immunology* 2012; 189(8): 3838-3847.
- Ntale R, Chopera D, Ngandu N, Assis de Rosa D, Mlotshwa M, Werner L, Woodman Z, Mlisana K, Abdool Karim S, Gray C, Williamson C, and the CAPRISA 002 Study Team. Temporal association of HLA-B*81:01 and B*39:10 mediated HIV-1 p24 sequence evolution with disease progression. *Journal of Virology* 2012; 86(22): 12013– 12024
- 196. Taylor DJ, Grobler A., Abdool Karim SS. An adaptive design to bridge the gap between Phase 2b/3 microbicide effectiveness trials and evidence required for licensure. *Clinical Trials* 2012; 9 (4): 377–384

- 197. Abdool Karim SS, Naidoo K, Grobler A, Padayatchi N, Baxter C, Gray AL, Gengiah T, Gengiah S, Naidoo A, Jithoo N, Nair G, El-Sadr WM, Friedland G, Abdool Karim Q. Integration of Antiretroviral Therapy with Tuberculosis Treatment. New England Journal of Medicine 2011; 365(16): 1492-1501.
- 198. Abdool Karim SS, Kashuba A, Werner L, Abdool Karim Q. Drug concentrations following topical and oral antiretroviral pre-exposure prophylaxis: Implications for HIV prevention in women. *Lancet* 2011; 378: 279-281.
- 199. Abdool Karim SS, Richardson BA, Ramjee G, Hoffman IF, Chirenje ZM, Taha T, Kapina M, Maslankowski L, Coletti A, Profy A, Moench TR, Piwowar-Manning E, Mâsse B, Hillier SL, Soto-Torres L on behalf of the HPTN 035 Study Team. Safety and Effectiveness of BufferGel and 0.5% PRO2000 Gel for the Prevention of HIV Infection in high-risk Women. AIDS 2011, 25(7): 957-966.
- 200. Abdool Karim SS. Stigma impedes AIDS prevention. Nature 2011; 474: 29-31.
- Abdool Karim SS, Abdool Karim Q. Antiretroviral prophylaxis: a defining moment in HIV control. Lancet 2011; 378(9809):e23-5
- Abdool Karim Q, Kharsany ABM, Naidoo K, Yende N, Gengiah T, Omar Z, Arulappan N, Mlisana KP, Abdool Karim SS. Co-enrollment in multiple HIV prevention trials — Experiences from the CAPRISA 004 Tenofovir gel trial. Contemporary Clinical Trials 2011; 32(3): 333-338.
- Padian NS, McCoy SI, Abdool Karim S, Hasen N, Kim J, Bartos M, Katabira E, Bertozzi S, Schwartländer B, Cohen MS. HIV prevention transformed: the new prevention research agenda. *Lancet* 2011; 378: 269–278.
- 204. Singh R, Gaiha G, Werner L, McKim K, Mlisana K, Luban J, Walker BD, Abdool Karim SS, Brass AL, Ndung'u T,. and the CAPRISA 002 Study Team. Association of TRIM22 with the type 1 interferon response and viral control during primary HIV-1 infection. *Journal of Virology* 2011; 85(1): 208-216.
- 205. Abdool Karim Q, Kharsany ABM, Frohlich JA, Baxter C, Yende N, Mansoor LE, Mlisana KP, Maarschalk S, Arulappan N, Grobler A, Sibeko S, Omar Z, Gengiah TN, Mlotshwa M, Samsunder N, Abdool Karim SS. Recruitment of high risk women for HIV prevention trials: baseline HIV prevalence and sexual behavior in the CAPRISA 004 tenofovir gel trial. Trials 2011; 12: 67.
- 206. Gray ES, Madiga MC, Hermanus T, Moore PL, Wibmer CK, Tumba NL, Werner L, Mlisana K, Sibeko S, Williamson C, Abdool Karim SS, Morris L and the CAPRISA 002 Study Team. The Neutralization Breadth of HIV-1 Develops Incrementally over Four Years and Is Associated with CD4 T Cell Decline and High Viral Load during Acute Infection. Journal of Virology 2011; 85(10): 4828–4840.
- Ramsuran V, Kulkarni H; He W; Mlisana K; Wright E, Werner L, Castiblanco-Quinche J, Dhanda R, Le T, Dolan M, Guan W, Weiss R, Clark R, Abdool Karim S, Ahuja SK, Ndung'u T. Duffy-Null-Associated Low Neutrophil Counts Influence HIV-1 Susceptibility in High-Risk South African Black Women. *Clinical Infectious Diseases* 2011; 52(10): 1248–1256.
- 208. Gray ES, Moody MA, Wibmer CK, Chen X, Marshall D, Amos J, Moore PL, Foulger A, Yu J, Lambson B, Abdool Karim SS, Whitesides J, Tomaras GD, Haynes BF, Morris L, and Liao H. Isolation of a monoclonal antibody targeting the alpha-2 helix of gp120 representing the initial autologous neutralizing antibody response in an HIV-1 subtype C infected individual. *Journal of Virology* 2011, 85: 7719-7729.
- 209. Williams BG, Abdool Karim SS, Gouws E, Abdool Karim Q. Epidemiological impact of tenofovir gel on the HIV epidemic in South Africa. Journal of AIDS 2011; 58: 207–210

010-342 B

210. Abdool Karim, SS. Microbicides: New Hope for HIV Prevention. UN Chronicle, 2011 XLVIII(1):14-15. Available from

http://www.un.org/wcm/content/site/chronicle/cache/bypass/home/archive/issues2011/hivaidsthefourthdecade/ microbicides?ctnscroll_articleContainerList=1_0&ctnlistpagination_articleContainerList=true

- 211. Moore PL, Gray ES, Sheward D, Madiga M, Ranchobe N, Lai Z, Honnen WJ, Nonyane M, Tumba N, Hermanus T, Sibeko S, Mlisana K, Abdool Karim SS, Williamson C, Pinter A, Morris L; and the CAPRISA 002 study. Potent and broad neutralization of HIV-1 subtype C viruses by plasma antibodies targeting a quaternary epitope including residues in the V2 loop. Journal of Virology 2011; 85(7): 3128-3141
- 212. Chopera DR, Mlotshwa M, Woodman Z, Mlisana K, de Assis Rosa D, Martin DP, Abdool Karim S, Gray CM, Williamson C; the CAPRISA 002 Study Team. Virological and Immunological Factors Associated with HIV-1 Differential Disease Progression in HLA-B*58:01 Positive Individuals. *Journal of Virology* 2011; 85(14): 7070-7080.
- 213. Sibeko S, Baxter C, Yende N, Abdool Karim Q, Abdool Karim SS, on behalf of the Centre for the AIDS Programme of Research in South Africa (CAPRISA) 004 Trial Group. Contraceptive Choices, Pregnancy Rates, and Outcomes in a Microbicide Trial. Obstetrics & Gynecology 2011; 118(4): 895–904
- Morris L, Chen X, Alam M, Tomaras G, Zhang R, Marshall D, Chen B, Parks B, Foulger A, Jaeger F, Donathan M, Bilska M, Gray ES, Abdool Karim SS, Kepler TB, Whitesides J, Montefiori D, Moody AM; Liao H-X, Haynes BF. Isolation of a Human Anti-HIV gp41 Membrane Proximal Region Neutralizing Antibody by Antigen-Specific Single B Cell Sorting. *PLoS One* 2011; 6(9): e23532 doi:10.1371/journal.pone.0023532.
- Abdool Karim O, Kharsany ABM, Frohlich JA, Werner L, Mashego M, Mlotshwa M, Madlala BT, Ntombela F, Abdool Karim SS. Stabilizing HIV prevalence masks high HIV incidence rates amongst rural and urban women in KwaZulu-Natal, South Africa. International Journal of Epidemiology 2011, 40: 922-930.
- 216. Tomaras GD, Binley JM, Gray ES, Crooks ET, Osawa K, Moore PL, Tumba N, Tong T, Shen X, Yates NL, Decker J, Wibmer CK, Gao F, Alam SM, Easterbrook P, Abdool Karim S, Kamanga G, Crump JA, Cohen M, Shaw GM, Mascola JR, Haynes BF, Montefiori DC, Morris L. Polyclonal B Cell Responses to Conserved Neutralization Epitopes in a Subset of HIV-1-Infected Individuals. *Journal of Virology*, 2011; 85(21): 11502–11519.
- Madlala P, Gijsbers R, Christ F, Hombrouck A, Werner L, Mlisana K, An P, Abdool Karim SS, Winkler CA, Debyser Z, Ndung'u T. Association of Polymorphisms in the LEDGF/p75 Gene (PSIP1) with Susceptibility to HIV-1 Infection and Disease Progression. AIDS 2011; 25(14):1711-9.
- Boily MC, Dimitrov D, Abdool Karim SS, Masse B. The future role of rectal and vaginal microbicides to prevent HIV infection in heterosexual populations: implications for product development and prevention. Sexually Transmitted Diseases 2011; 87(7):646-53.
- Woodman Z, Mlisana K, Treurnicht F, Abrahams M-R, Thebus R, Abdool Karim S, Williamson C for the CAPRISA Acute Infection Study Team. Decreased Incidence of Dual Infections in South African Subtype C-Infected Women Compared to a Cohort Ten Years Earlier. AIDS Research and Human Retroviruses 2011; 27(11): 1167-1172.

- 220. Abdool Karim SS, Abdool Karim Q, AIDS research must link to local policy. Nature 2010; 463: 733-734.
- 221. Abdool Karim SS, Naidoo K, Grobler A, Padayatchi N, Baxter C, Gray A, Gengiah T, Nair G, Bamber S, Singh A, Khan M, Plenaar J, El-Sadr W, Friedland G, Abdool Karim Q. Timing of Initiation of Antiretroviral Drugs during Tuberculosis Therapy. New England Journal of Medicine 2010; 362: 697-706.
- 222. Abdool Karim Q[‡], Abdool Karim SS[‡], Frohlich JA, Grobler AC, Baxter C, Mansoor LE, Kharsany ABM, Sibeko S, Mlisana KP, Omar Z, Gengiah TN, Maarschalk S, Arulappan N, Mlotshwa M, Morris L, Taylor D, on behalf of the CAPRISA 004 Trial Group. Effectiveness and Safety of Tenofovir Gel, an Antiretroviral Microbicide, for the Prevention of HIV Infection in Women. *Science* 2010; 329: 1168-1174 ([‡]joint first authors).
- Abdool Karim SS. Results of effectiveness trials of PRO 2000: Lessons for future microbicide trials. Future Microbiology 2010; 5(4): 527-529. http://www.futuremedicine.com/doi/full/10.2217/fmb.10.29
- 224. Reddy K, Winkler CA, Werner L, Mlisana K, Abdool Karim SS, Ndung'u T; CAPRISA Acute Infection Study Team; APOBEC3G expression is dysregulated in primary HIV-1 infection and polymorphic variants influence CD4+ T-cell counts and plasma viral load. AIDS 2010; 24(2): 195-204.
- 225. Treurnicht FK, Seoighe C, Martin DP, Wood N, Abrahams MR, de Assis Rosa D, Bredell H, Woodman Z, Hide W, Mlisana K, Abdool Karim S, Gray CM and Williamson C, Adaptive changes in HIV-1 subtype C proteins during early infection are driven by changes in HLA-associated immune pressure. *Virology* 2010; 396(2): 213-225.
- 226. Khurana S, Norris PJ, Busch mp, Haynes BF, Park S, Sasono P, Mlisana K, Abdool Karim S, Hecht FM, Mulenga J, Chomba E, Hunter E, Allen S, Nemo G, Rodriguez-Chavez IR, Women's Interagency HIV Study, The Multicenter AIDS Cohort Study, and Golding H. HIV-selectest EIA and rapid test: ability to detect seroconversion following HIV-1 infection. *Journal of Clinical Microbiology* 2010; 48(1): 281-285.

010-343 A

- Roberts L, Passmore J-AS, Williamson C, Little F, Bebell LM, Mlisana K, Burgers WA, van Loggerenberg F, Walzlf G, Djoba Siaway JF, Abdool Karim Q, Abdool Karim SS. Plasma cytokine levels during acute HIV-1 infection predict HIV disease progression. AIDS 2010; 24(6): 819-31.
- Alexandre KB, Gray ES, Lambson BE, Moore PL, Choge IA, Mlisana K, Abdool Karim SS, McMahon J, O'Keefe B, Chikwamba R, Morris L. Mannose-rich glycosylation patterns on HIV-1 subtype C gp120 and sensitivity to the lectins, Griffithsin, Cyanovirin-N and Scytovirin. Virology 2010; 402: 187–196.
- Kharsany ABM; Abdool Karim Q; Abdool Karim SS. Uptake of Provider Initiated HIV Testing and Counseling among women attending an urban Sexually Transmitted Disease Clinic in South Africa- missed opportunities for early diagnosis of HIV Infection. AIDS Care 2010; 22(5): 533-537.
- Kharsany AB, Hancock N, Frohlich JA, Humphries HR, Abdool Karim SS, Abdool Karim Q. Screening for 'window-period' acute HIV infection among pregnant women in rural South Africa. HIV Medicine 2010; 11:661-665
- Abdool Karim Q, Abdool Karim SS, Baxter C, Friedland G, Gengiah T, Gray A, Grobler A, Naidoo K, Padayatchi N, El-Sadr W. The SAPIT trial provides essential evidence on risks and benefits of integrated and sequential treatment of HIV and tuberculosis. South African Medical Journal 2010; 100(12): 808-809.
- Abdool Karim SS, Baxter C. Microbicides and their implications in HIV prevention. Indian Journal of Medical Research 2010; 132: 656-659.
- 233 Mlotshwa M, Riou C, Chopera D, De Assis Rosa D, Ntale R, Treunicht F, Woodman Z, Werner L, Van Loggerenberg, Mlisana K, Abdool Karim S, Williamson C, Gray CM. Fluidity of HIV-1-specific T-cell responses during acute and early subtype C HIV-1 infection and associations with early disease progression. *Journal of Virology* 2010; 84(22): 12018-12029.

- 234. Abdool Karim SS, Churchyard GJ, Abdool Karim Q, Lawn SD. HIV infection and tuberculosis in South Africa: an urgent need to escalate the public health response. *Lancet* 2009; 374 (9693): 921-933.
- Abdool Karim SS, Coovadia HM, Makgoba MW. Scientists stand by decision to join Mbeki's AIDS panel. Nature 2009; 457: 379.
- 236. Abdool Karim SS. South Africa needs an HIV/AIDS truth commission. http://www.scidev.net/en/opinions/southafrica-needs-an-hiv-aids-truth-commission.html 15 October 2009.
- Abdool Karim SS, Baxter C. Antiretroviral prophylaxis for the prevention of HIV infection: Future implementation challenges. HIV Therapy 2009; 3(1): 3-6.
- Abdool Karim SS. Spatial clustering of HIV infection: providing clues for effective HIV prevention. International Journal of Epidemiology 2009; 38: 1016-1017.
- 239. Gray CM, Mlotshwa M, Riou C, Mathebula T, de Assis Rosa D, Mashishi T, Seoighe C, Ngandu N, van Loggerenberg F, Morris L, Mlisana K, Williamson C, Abdool Karim S on behalf of the CAPRISA 002 Acute Infection Study Team. Human Immunodeficiency Virus-Specific Gamma Interferon Enzyme-Linked Immunospot Assay Responses Targeting Specific Regions of the Proteome during Primary Subtype C Infection Are Poor Predictors of the Course of Viremia and Set Point. *Journal of Virology* 2009; 83(1): 470–478.
- Sewram S, Singh R, Kormuth E, Werner L, Mlisana K, Abdool Karim SS, Ndung'u T and the CAPRISA Acute Infection Study. Human TRIM5alpha Expression and Reduced Susceptibility to Human Immunodeficiency Virus Type 1 Infection. *Journal of Infectious Diseases* 2009; 199(11): 1657-1663.
- Nalcker DD, Werner L, Kormuth E, Passmore J-A, Mlisana K, Abdool Karim S, Ndung'u T. Interleukin-10 Promoter Polymorphisms Influence HIV-1 Susceptibility and Primary HIV-1 Pathogenesis. *Journal of Infectious Diseases* 2009; 200(3): 448-452.
- 242. Abrahams M-R, Anderson JA, Giorgi EE, Seoighe C, Mlisana K, Ping L-H, Athreya GS, Treurnicht FK, Keele BF, Wood N, Salazar-Gonzalez JF, Bhattacharya T, Chu H, Hoffman I, Galvin S, Mapanje C, Kazembe P, Thebus R, Fiscus S, Hide W, Cohen MS, Abdool Karim S, Haynes BF, Shaw GM, Hahn BH, Korber BT, Swanstrom R, Williamson C. Quantitating the multiplicity of infection with HIV subtype C reveals a non-Poisson distribution of variants. *Journal of Virology* 2009; 83(13): 69-74.
- Burgers WA, Riou C, Mlotswha M, de Assis Rosa D, Mlisana K, Koup R, Roederer M, Abdool Karim S, Williamson C, Gray CM, and the CAPRISA 002 Acute Infection Study Team. Association of HIV-specific and total CD8+ T memory phenotypes in subtype C HIV-1 infection with viral set point. *Journal of Immunology* 2009, 182(8): 4751-61.
- Chopra M, Lawn JE, Sanders D, Barron P, Abdool Karim SS, Bradshaw D, Jewkes R, Abdool Karim Q, Flisher AJ, Mayosi BM, Tollman SM, Churchyard GJ, Coovadia H. Achieving the health Millennium Development Goals for South Africa: challenges and priorities. *Lancet* 2009; 374(9694): 1023-31.
- Moore PL, Ranchobe N, Lambson B, Gray ES, Cave E, Abrahams M, Bandawe G, Mlisana K, Abdool Karim SS, Williamson C and Morris L, the CAPRISA 002 study and the CHAVI. Limited Neutralizing Antibody

010-344 A

Specificities Drive Neutralization Escape in Early HIV-1 Subtype C Infection. PLoS Pathogens 2009; 5(9): e1000598. doi:10.1371/journal.ppat.1000598

- 246. Gray ES, Madiga MC, Moore PL, Mlisana K, Abdool Karim SS, Binley JM, Shaw GM, Mascola JR, Morris L. Broad Neutralization of Human Immunodeficiency Virus Type 1 Mediated by Plasma Antibodies against the gp41 Membrane Proximal External Region. Journal of Virology 2009; 83: 11265–11274.
- McCormack S, Taylor D, Richardson B, Darbyshire J, Sattentau Q, Abdool Karim Q, Abdool Karim S, Kharsany A, Lacey C, Nunn A, Weber J, In Reply: Enhancement of HIV infection by cellulose sulfate. AIDS Research and Human Retroviruses 2009; 25(3): 373.
- Abdool Karim SS, Baxter C. PRO 2000: next steps for microbicide development. Future Virology 2009; 4(4): 317-320.
- Naidoo S, Chikte U, Gouws E, Abdool-Karim S. Oral mucosal lesions and HIV status in a rural household survey in South Africa. Journal of the South African Dental Association 2009; 64(10): 466-469.

- Bebell LM, Passmore J, Williamson C, Mlisana K, Iriogbe I, van Loggerenberg F, Abdool Karim Q, Abdool Karim SS. Relationship Between Levels of Inflammatory Cytokines in the Genital Tract and CD4 Cell Counts in Women with Acute HIV-1 Infection. *Journal of Infectious Diseases* 2008; 198: 710-714.
- 251. Chopera DR, Woodman Z, Mlisana K, Mlotshwa M, Martin DP, Seoighe C, Treurnicht F, de Rosa DA, Hide W, Abdool Karim S, Gray CM, Williamson C and the CAPRISA 002 Study Team. Transmission of HIV-1 CTL Escape Variants Provides HLA-Mismatched Recipients with a Survival Advantage. *PLoS Pathogens* 2008; 4(3): e1000033. doi:10.1371/journal.ppat.1000033.
- 252. Alam SM, Scearce RM, Parks RJ, Plonk K, Plonk SG, Sutherland LL, Gorny MK, Zolla-Pazner S, VanLeeuwen S, Moody M.A, Xia SM, Montefiori DC, Tomaras GD, Weinhold KJ, Abdool Karim SS, Hicks CB, Liao HX, Robinson J, Shaw GM and Haynes BF. 2008. Human immunodeficiency virus type 1 gp41 antibodies that mask membrane proximal region epitopes: Antibody binding kinetics, induction, and potential for regulation in acute infection. *Journal of Virology* 2008; 82: 115-125.
- Abdool Karim Q, Meyer-Weitz A, Mboyi L, Carrara H, Mahlase G, Frohlich J, Abdool Karim SS. The influence of AIDS stigma and discrimination and social cohesion on HIV testing and willingness to disclose HIV in rural KwaZulu-Natal, South Africa. *Global Public Health* 2008; 3(4): 351-365.
- 254. van Loggerenberg F, Mlisana K, Williamson C, Auld S.C., Morris L, Gray C.M., Abdool Karim Q, Grobler A, Barnabas N, Iriogbe I, Abdool Karim SS. for the CAPRISA 002 Acute Infection Study Team. Establishing a Cohort at High Risk of HIV Infection in South Africa: Challenges and Experiences of the CAPRISA 002 Acute Infection Study. Plos One 2008; 3(4): e1954.
- Moore PL, Gray ES, Choge IA, Ranchobe N, Mlisana K, Abdool Karim SS, Williamson C, Morris L. The C3-V4 region is a major target of autologous neutralizing antibodies in HIV-1 subtype C infection. *Journal of Virology* 2008; 82(4): 1860–1869.
- Mlisana K, Auld SC, Grobler A, van Loggerenberg F, Williamson C, Iriogbe I, Sobieszczyk ME, Abdool Karim SS, and the CAPRISA Acute Infection Study Team. Anaemia in acute HIV-1 subtype C infection. PLoS One 2008; 3(2): e1626.
- 257. Tomaras GD, Yates NL, Liu P, Qin L, Fouda GG, Chavez LL, Decamp AC, Parks RJ, Ashley VC, Lucas JT, Cohen M, Eron J, Hicks CB, Liao HX, Self SG, Landucci G, Forthal DN, Weinhold KJ, Keele BF, Hahn BH, Greenberg ML, Morris L, Abdool Karim S, Blattner WA, Montefiori DC, Shaw GM, Perelson AS, Haynes BF. Initial B cell responses to transmitted HIV-1: Virion binding IgM and IgG antibodies followed by plasma anti-gp41 antibodies with ineffective control of initial viremia. *Journal of Virology* 2008; 82(24): 12449-63.
- 258. Bandawe GP, Martin DP, Treurnicht F, Mlisana K, Abdool Karim SS, Williamson C and The CAPRISA 002 Acute Infection Study Team. Conserved positive selection signals in HIV-1 gp41 across multiple subtypes and difference in selection signals detectable in gp41 sequences sampled during acute and chronic HIV-1 subtype C infection. Virology Journal 2008; 5: 141.
- Cooper PA, Madhi SA, Hubner RE, Mbelle N, Abdool Karim SS, Kleinschmidt I, Forrest BD, Klugman KP. Apnea and its possible relationship to immunization in ex-premature infants. Vaccine 2008; 26(27-28): 3410-3413.
- 260. Harrison P, Mellors JW, Richardson B, Masse BR, Abdool Karim Q, Abdool Karim SS, Cates W, Coletti AS, Darbyshire J, Dorflinger LJ, Feldblum P, Gabelnick H, Halpern VG, Hillier SL, Jespers V, Kharsany ABM, McCormack S, Nunn A, McGowan I, Omar RF, Padian NS, Pedneault L, Robbiani MP, Sailer J, Taylor D, Tolley EE, Van Damme L, Vermund SH, van de Wijgert J. Challenges in HIV-Prevention Microbicide Research. Published E letter 17 December 2008 in response to: Grant RM, et al. Whither or Wither Microbicides? Science 2008; 321: 532-534.
- 261. Khumalo-Sakutukwa G, Morin SF, Fritz K, Charlebois ED, van Rooyen H, Chingono A, Modiba P, Mrumbi K, Visrutaratna S, Singh B, Sweat M, Celentano DD, Coates TJ; NIMH Project Accept Study Team Project Accept (HPTN 043): a community-based intervention to reduce HIV incidence in populations at risk for HIV in sub-



Saharan Africa and Thailand. Journal of Acquired Immune Deficiency Syndrome 2008; 49(4): 422-31 (contributor of group publication)

2007

- 262. Abdool Karim SS, Abdool Karim Q. Diverse approaches useful for microbicide trials. Nature 2007; 449: 24
- 263 Abdool Karim SS, Misana K, Kharsany ABM, Williamson C, Baxter C, Abdool Karim Q. Utilising nucleic acid amplification to identify acute HIV infection. AIDS 2007; 21(5): 653-655.
- Abdool Karim SS, Abdool Karim Q. Gouws E, Baxter C. Global Epidemiology of HIV. Infectious Disease Clinics of North America 2007; 21(1): 1-18.
- Abdool Karim SS. HIV incidence estimates are key to understanding the changing HIV epidemic in South Africa. South African Medical Journal 2007; 97: 190.
- 266. Dilraj A, Abdool Karim SS, Pillay S. Challenging racial stereotyping of AIDS in South Africa with prevalence of HIV in pregnant women. South African Medical Journal 2007; 97(1): 42.
- 267. Gray ES, Moore PL, Choge IA, Decker JM, Bibollet-Ruche F, Li H, Leseka N, Treurnicht F, Mlisana K, Shaw GM, Abdool Karim SS, Williamson C, Morris L. and the CAPRISA 002 study team. Neutralizing antibody responses in acute HIV-1 subtype C infection. *Journal of Virology* 2007; 81(12): 6187–6196.
- Coetzer M, Cilliers T, Papathanasopoulos M, Ramjee G, Abdool Karim S, Williamson C, Morris L. Longitudinal analysis of HIV-1 subtype C envelope sequences from South African patients. AIDS Research and Human Retroviruses 2007; 23(2): 316-321.
- Williams BG; Gouws E; Ramjee G; Abdool Karim S. Response to Brown et al., Incident and prevalent herpes simplex virus type 2 infection increases risk of HIV acquisition among women in Uganda and Zimbabwe. AIDS 2007; 21(17): 2356-7.
- Frohlich J, Abdool Karim Q, Mashego MM, Abdool Karim S. Opportunities for treating sexually transmitted infections and reducing HIV risk in Primary Health Care Settings in rural South Africa. *Journal of Advanced Nursing* 2007; 60(4): 377-383.

2006

- 271. Gray A, Abdool Karim SS, Gengiah TN. Ritonavir/Saquinavir safety concerns curtail ART options for TB-HIV co-infected patients in resource-constrained settings. AIDS 2006; 20(2); 302-303.
- 272 Kharsany ABM, Connolly C, Olowalogba A, Abdool Karim SS, Abdool Karim Q. Tuberculosis treatment outcomes following Directly Observed Treatment at a South African Primary Health Care Facility: Opportunities for strengthening Tuberculosis case management. *Tropical Doctor* 2006; 36: 23-25.
- Singh JA, Abdool Karim SS, Abdool Karim Q, Mlisana K, Williamson C, Gray C, Govender M, Gray A. Enrolling Adolescents in Research on HIV and Other Sensitive Issues: Lessons from South Africa. *PLoS Medicine* 2006; 3(7): e180 DOI: 10.1371/journal.pmed.0030180.
- 274. Kharsany ABM, Connolly C, Olowalogba A, Abdool Karim SS, Abdool Karim Q. Increasing burden of pulmonary TB in young women. South African Medical Journal 2006; 96: 524-525.
- Amirfar S, Hollenberg JP, Abdool Karim SS. Modeling the impact of a partially effective HIV vaccine on HIV infection and death among women and infants in South Africa. Journal of AIDS 2006; 43(2): 219-225.
- Abdool Karim SS. Durban 2000 to Toronto 2006: The evolving challenges in implementing AIDS treatment in Africa. AIDS 2006; 20: N7–N9.
- 277. Li M, Salazar-Gonzalez JF, Derdeyn CA, Morris L, Williamson C, Robinson J, Decker JM, Li Y, Salazar M, Mlisana K, Abdool Karim S, Hong K, Greene KM, Bilska M, Zhou J, Allen S, Chomba E, Mulenga J, Vwalika C, Gao F, Zhang M, Korber B, Hunter E, Hahn BH, Montefiori DC. Neutralization Properties of Acute and Early Subtype C Human Immunodeficiency Virus Type 1 env Clones from Heterosexually Acquired Infections in Southern Africa. Journal of Virology 2006; 80(23): 11776-11790.
- 278. Gray A, Abdool Karim SS. In reply: Saquinavir and rifampicin for tuberculosis and AIDS: new considerations. International Journal of Tuberculosis and Lung Disease 2006; 10(11): 1302–1303.

- 279. Gray CM. Williamson C, Puren A, Xia X, Filter R, Zijenah L, Cao H, Morris L, Vardas E, Colvin M, Gray G, McIntyre J, Musonda R, Allen S, Katzenstein D, Mbizo M, Kumwemda N, Taha T, Abdool Karim S, Flores J and Sheppard HW. Viral dynamics and CD4(+) T cell counts in subtype C human immunodeficiency virus type 1-infected individuals from southern Africa. AIDS Res. Hum. Retro. 2005, 21: 285-291
- Ramjee G, Williams B, Gouws E, Van Dyck E, De Deken B, Abdool Karim S. The impact of incident and prevalent HSV-2 infection on the incidence of HIV-1 infection among commercial sex workers in South Africa. *Journal of* AIDS 2005; 39(3): 333-339.
- Abdool Karim SS. Microbicides for the Prevention of HIV Infection. In: HIV Sequence Compendium 2005, Leitner T, Foley B, Hahn B, Marx P, McCutchan F, Mellors J, Wolinsky S, and Korber B, editors. 2005. Published by

010-346

Theoretical Biology and Biophysics Group, Los Alamos National Laboratory, LA-UR number 06-0680. pp30-40. Available at http://hiv.lanl.gov/content/hiv-db/COMPENDIUM/2005/parti/karim.pdf

2004

- 282 Abdool Karim SS, Abdool Karim Q, Friedland G, Lalloo U and El Sadr WM on behalf of the START project. Implementing Antiretroviral Therapy in Resource Constrained Settings: opportunities and challenges in integrating HIV and TB care. AIDS 2004; 18: 1-5.
- 283. Abdool Karim S. Medical Education after the first decade of democracy in South Africa. Lancet 2004; 363:1395.
- Gottlieb GS, Nickle DC, Jensen MA, Wong KG, Grobler J, Li F, Liu S-L, Rademeyer C, Learn GH, Abdool Karim SS, Williamson C, Corey L, Margolick JB, Mullins JI. Dual HIV-1 infection associated with rapid disease progression. *Lancet* 2004; 363: 619–22.
- Friedland G, Abdool Karim SS, Abdool Karim Q, Lalloo U, Jack C and El Sadr W. The Utility of Tuberculosis Directly Observed Therapy (DOT) programs as sites for access and provision of antiretroviral therapy in resource limited settings. *Clinical Infectious Diseases* 2004; 38(suppl5): S421-428.
- Jack C, Lalloo U, Abdool Karim Q, Abdool Karim S, El-Sadr W, Cassol S, Friedland G. A Pilot Study of once daily antiretroviral therapy with tuberculosis directly observed therapy (TBDOT) in a resource limited setting. *Journal of AIDS* 2004; 36(4): 929-934.
- Rademeyer C, van Harmelen JH, Ramjee G, Abdool Karim SS, Williamson C. Heretrosexual transmission of multiple highly conserved variants in HIV-1 subtype C-infected seronegative women. AIDS 2004; 18(15): 10-12.
- 288. Masemola A, Mashishi T, Khoury G, Mohube P, Mokgotho P, Vardas E, Colvin M, Zijenah L, Katzenstein D, Musonda R, Allen S, Kumwenda N, Taha T, Gray G, McIntyre J, Abdool Karim S, Sheppard HW, Gray CM and the HIVNET 028 Study team. Hierarchical targeting of subtype C HIV-1 proteins by CD8+ T cells: Correlation with viral load. *Journal of Virology* 2004; 78(7): 3233–3243.
- 289. Masemola AM, Mashishi TN, Khoury G, Bredell H, Paximadas M, Mathebula T, Barkhan D, Puren A, Vardas E, Colvin M, Zijenah L, Katzenstein D, Musonda R, Allen S, Kumwenda N, Taha T, Gray G, McIntyre J, Abdool Karim S, Sheppard HW, Gray CM, and the HIVNET 028 Study team. Novel and Promiscuous Cytotoxic T Lymphocyte Epitopes in Conserved Regions of Gag Targeted by Individuals with Early Subtype C Human Immunodeficiency Virus Type-1 Infection from Southern Africa. CTL epitopes in conserved regions of subtype C Gag. Journal of Immunology 2004; 173: 4607–4617.
- Grobler J, Gray CM, Rademeyer C, Seoighe C, Ramjee G, Abdool-Karim SS, Morris L, Williamson C. The incidence of HIV-1 dual infection and its association with increased viral load set point in a cohort of subtype C infected female sex-workers. *Journal of Infectious Diseases* 2004; 190(7): 1355-9.
- Myer L, Abdool Karim SS, Lombard C, Wilkinson D. Treatment of maternal syphilis in rural South Africa: effect of multiple doses of benzathine penicillin on pregnancy loss. *Tropical Medicine and International Health* 2004; 9(11): 1216–1221.

2003:

- Lurie MN, Williams BG, Zuma K, Mkaya-Mwamburi D, Garnett GP, Sturm AW, Sweat MD, Gitteksohn J, Abdool Karim SS. The impact of migration on HIV-1 transmission in South Africa: A study of migrant and nonmigrant men and their partners. Sexually Transmitted Diseases 2003; 30: 149- 156.
- 293. Williamson C, Morris L, Maughan MF, Ping L, Dryga SA, Thomas R, Reap EA, Cilliers T, van Harmelen J, Pascual A, Ramjee G, Gray G, Johnston R, Abdool Karim SS, Swanstrom R. Characterisation and selection of HIV-1 subtype C isolates for use in vaccine development. AIDS Research and Human Retroviruses 2003; 19: 133-144.
- Abdool Karim SS, Baxter C. HIV vaccines and immunity. Current Opinion in Allergy & Clinical Immunology 2003; 16(2): 67-69.
- Myer L, Wilkinson D, Lombard C, Zuma K, Rotchford K, Abdool Karim SS. Impact of on-site testing for maternal syphilis on treatment delays, treatment rates, and perinatal mortality in rural South Africa: a randomized controlled trial. Sexually Transmitted Infection 2003; 79: 208–213.
- Abdool Karim SS, Abdool Karim Q, Baxter C. Antiretroviral therapy: challenges and options for South Africa. Lancet 2003; 362: 1499.
- Frohlich JA, Abdool Karim Q, Biyela D, Abdool Karim SS. Developing partnerships in preparing communities for HIV prevention and vaccine efficacy trials: experiences from rural South Africa. *Retroviruses of Human AIDS and Related Animal Diseases* 2003; 191-197.
- Morrow K, Rosen R, Richter L, Emans A, Forbes A, Day J, Morar N, Maslankowski L, Profy AT, Kelly C, Abdool Karim SS, Mayer KH. The acceptability of an investigational vaginal microbicide, PRO 2000 gel, among women in a Phase I clinical trial. *Journal of Women's Health* 2003; 12(7): 655-666.
- 299. Mayer KH, Abdool Karim S, Kelly C, Maslankowski L, Rees H, Profy A, Day J, Welch J, Rosenberg Z, for the HPTN 020 Protocol team. Safety and tolerability of vaginal PRO 2000 gel in sexually active HIV-uninfected and abstinent HIV infected women. AIDS 2003; 17: 221-229.

- *Lurie MN, Williams BG, Khangelani Z, Mkaya-Mwamburi D, Garnett GP, Sweat MD, Gittelsohn J, Abdool Karim SS. Who infects who? HIV-1 concordance and discordance among migrant and non-migrant couples in South Africa. AIDS 2003; 17: 2245-2252.
- 301. Shetty AK, Coovadia HM, Mirochnick MM, Maldonado Y, Mofenson LM, Eshleman SH, Fleming T, Emel L, George K, Katzenstein DA, Wells J, Maponga CC, Mwatha A, Adeniyi Jones S, Abdool Karim SS, Bassett MT, HIVNET 023 Study Team. Safety and Trough Concentrations of Nevirapine Prophylaxis Given Daily, Twice Weekly, or Weekly in Breast-Feeding Infants From Birth to 6 Months. *Journal of AIDS* 2003; 34(5): 482-490.

- Abdool Karim SS, Abdool Karim Q, Adhikari M, et al. Vertical HIV transmission in South Africa: translating research into policy and practice. *Lancet* 2002; 359: 992-993.
- 303. Bures R, Morris L, Williamson C, Ramjee G, Deers M, Fiscus SA, Abdool Karim S, Montefiori DC. Regional clustering of shared neutralization determinants of primary isolates of clade C human immunodeficiency virus type 1 from South Africa. *Journal of Virology* 2002; 76: 2233-2244.
- 304. Abdool Karim Q, Abdool Karim SS. The evolving HIV epidemic in South Africa. International Journal of Epidemiology 2002; 31: 37-40.
- 305. Gouws E, Williams BG, Sheppard HW, Enge B, Abdool Karim SS. High incidence of HIV-1 in South Africa using a standardized algorithm for recent HIV seroconversion. Journal of AIDS 2002; 29: 531-535.
- Rustomjee R, Kharsany AB, Connolly C, Abdool Karim SS. A randomized controlled trial of azithromycin versus doxycycline/ciprofloxacin for the syndromic management of sexually transmitted infections in a resource-poor setting. Journal of Antimicrobial Chemotherapy 2002; 49: 875-878.
- Abdool Karim SS. Conducting HIV vaccine trials in South Africa. Continuing Medical Education 2002; 20: 588-592.
- Connolly C, Ramjee G, Sturm W, Abdool Karim SS. Incidence of sexually transmitted infections among HIV positive sex workers in KwaZulu-Natal, South Africa. Sexually Transmitted Diseases 2002; 29: 721-724.
- 309. Van Damme L, Ramjee G, Alary M, Vuylsteke B, Chandeying V, Rees H, Sirivongrangson P, Mukenge-Tshibaka L, Ettlegne-Traore V, Uaheowitchai C, Abdool Karim SS, Masse B, Perriens J, Laga M, on behalf of the COL-1492 study group. Effectiveness of COL-1492, a nonoxynol-9 vaginal gel, on HIV-1 transmission in female sex workers: a randomized controlled trial. *Lancet* 2002; 360: 971-977.

2001:

- 310. Abdool Karim SS. Clinical testing of microbicides: a global research priority. AIDS 2001; 15: 929-930.
- Myer L, Mathews C, Little F, Abdool Karim SS. The fate of male condoms distributed to the public in South Africa. AIDS 2001; 15: 789-793.
- Williams B, Gouws E, Wilkinson D, Abdool Karim SS. Estimating HIV incidence rates from age prevalence data in epidemic situations. Statistics in Medicine 2001; 20: 2003-2016.
- Wilkinson D, Gouws E, Sach M, Abdool Karim SS. Effect of removing user fees on attendance for curative and preventive primary health care services in rural South Africa. Bulletin of the World Health Organisation 2001; 79: 665-671.
- Wilkinson D, Abdool Karim SS, Lurie M, Harrison A. Public-private health sector partnerships for STD control in South Africa: perspectives from the Hlabisa experience. South African Medical Journal 2001; 91: 517-520.
- van Harmelen J, Williamson C, Kim B, Morris L, Carr J, Abdool Karim SS, McCutchan F. Characterization of full-length HIV type 1 subtype C sequences from South Africa. AIDS Research and Human Retroviruses 2001; 17: 1527-1531.
- 316. Mashishi T, Loubser S, Hide W, Hunt G, Morris L, Ramjee G, Abdool Karim SS, Williamson C, Gray CM. Conserved domains of subtype C nef from South African HIV-1 infected individuals include cytotoxic T lymphocyte epitope-rich regions. AIDS Research and Human Retroviruses 2001; 17: 1681-7.
- 317. Coutsoudis A, Pillay K, Kuhn L, Spooner E, Tsai W, Coovadia HM, for the South African Vitamin A Study Group (group publication including Abdool Karim SS). Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: prospective cohort study from Durban, South Africa. AIDS 2001; 15: 379-387.

2000:

- 318. Abdool Karim SS. Globalization, ethics and AIDS vaccines. Science 2000; 288: 2129.
- Williams BG, Gouws E, Colvin M, Sitas F, Ramjee G, Abdool Karim SS. Patterns of Infection: using age prevalence data to understand the epidemic of HIV in South Africa. South African Journal of Science 2000; 96: 305-312.
- 320. Williams BG, Gouws E, Abdool Karim SS. Where are we now? Where are we going? The demographic impact of HIV/AIDS in South Africa. South African Journal of Science 2000; 96: 297-300.

010-348 &

- Dorrington R, Bradshaw D, Bourne D, Abdool Karim SS. HIV surveillance results little grounds for optimism yet. South African Medical Journal 2000, 90: 452–453.
- Abdool Karim SS. Rising to the challenge of the AIDS epidemic. South African Journal of Science 2000; 96: 262.
- Gilmour E, Abdool Karlm SS, Fourie HJ. Availability of condoms in urban and rural areas of KwaZulu-Natal, South Africa. Sexually Transmitted Diseases 2000; 27: 353-357.
- Wilkinson D, Abdool Karim SS, Williams B, Gouws E. High HIV incidence and prevalence among young women in rural South Africa: developing a cohort for Intervention Trials. *Journal of AIDS* 2000; 23: 405-409.
- Morris L, Bredell H, van Harmelen J, Ping L-H, Pasqual A, Ramjee G, Abdool Karim SS, Gray G, McIntyre J, Maartens G, Swanstrom R, Williamson C. No evidence for naturally occurring mutations resistant to HIV-1 reverse transcriptase inhibitors among South African HIV-1 subtype C isolates. South African Journal of Science 2000; 96: 369-370.
- 326. Harrison A, Abdool Karim SS, Floyd K, Lombard C, Lurie M, Ntuli N, Wilkinson D. Syndrome packets and health worker training improve quality of sexually transmitted disease management in rural South Africa: results of a randomised controlled trial. AIDS 2000; 14: 2769-2779.
- 327. Van Damme L, Chandeying V, Ramjee G, Rees H, Sirivongrangson P, Laga M, Perriens J, on behalf of COL-1492 Phase II Study Group (group publication including Abdool Karim SS). Safety of multiple daily applications of COL-1492, a nonoxynol-9 vaginal gel, among female sex workers. AIDS 2000; 14: 85-88.
- 328. Ramjee G, Morar N, Alary M, Tshibaka LM, Vuylsteke B, Traore VE, Chandeying V, Abdool Karim SS, Van Damme L. on behalf of the COL 1492 study group. Challenges in the conduct of vaginal microbicide effectiveness trials in the developing world. AIDS 2000; 14: 2553-2557.

- 329. Wilkinson D, Abdool Karim SS, Coovadia HM. Short course antiretroviral regimens to reduce maternal transmission of HIV: May be effective but shouldn't be allowed to strangle research that might help Africans. British Medical Journal 1999; 318: 479-480.
- 330. Abdool Karim Q, Abdool Karim SS. Epidemiology of HIV infection in South Africa. AIDS 1999; 13: S4-S7.
- Abdool Karim SS. Making AIDS a notifiable disease is it an appropriate policy for South Africa. South African Medical Journal 1999; 89: 609-611.
- Wilkinson D, Harrison A, Lurie M, Abdool Karim SS. STD syndrome packets: Improving syndromic management of sexually transmitted diseases in developing countries. Sexually Transmitted Diseases 1999; 26: 152-156.
- 333. Abdool Karim Q, Abdool Karim SS. South Africa: host to a new and emerging HIV epidemic. Sexually Transmitted Infections 1999; 75: 139-140.
- Ramjee G, Abdool Karim SS, Morar NS, Gwamanda Z, Xulu G, Ximba T, Gouws E. Acceptability of a vaginal microbicide among female sex workers. South African Medical Journal 1999, 89: 673-676.
- Rotchford K, Abdool Karim SS, Rollins N. Prevention of vertical transmission of HIV in South Africa. British Medical Journal 1999; 319: 1431-1432.
- Wilkinson D, Abdool Karim SS, Harrison A, Lurie M, Colvin M, Connolly C, Sturm AW. Unrecognised sexually transmitted infections in rural South African women: a hidden epidemic. Bulletin of the World Health Organisation 1999; 77: 22-28.
- 337. Rustomjee R, Abdool Karim Q, Abdool Karim SS, Laga M, Stein ZA. Phase 1 trial of nonoxynol-9 film among sex workers in South Africa. AIDS 1999; 13: 1511-1515.
- 338. Connolly AM, Wilkinson D, Harrison A, Lurie M, Abdool Karim SS. Inadequate treatment of sexually transmitted diseases in the South African private sector. International Journal of STD & AIDS 1999; 10: 324-327.
- Perinatal HIV intervention research in developing countries workshop participants (group publication including Abdool Karim SS). Science, ethics, and the future of research into maternal infant transmission of HIV-1. Lancet 1999; 353: 832-835.
- Coutsoudis A, Pillay K, Spooner E, Kuhn L and Coovadia HM for the South African Vitamin A Study Group (group publication including Abdool Karim SS). Randomized trial testing the effect of vitamin A supplementation on pregnancy outcomes and early mother-to-child HIV-1 transmission in Durban, South Africa. AIDS 1999; 13: 1517-1524.
- Coutsoudis A, Pillay K, Spooner E, Kuhn L and Coovadia HM for the South African Vitamin A Study Group (group publication including Abdool Karim SS). Influence of infant-feeding patterns on early mother-to-child transmission of HIV-1 in Durban, South Africa: a prospective cohort study. Lancet 1999; 354: 471-476.

1998:

 Abdool Karim SS. Placebo controls in HIV perinatal transmission trials: A South African's viewpoint. American Journal of Public Health 1998; 88: 564-566.

010-349 Q

- Abdool Karim Q. Abdool Karim SS, Coovadia HM, Susser M. Informed consent for HIV testing in a South African hospital: Is it truly informed and truly voluntary? *American Journal of Public Health* 1998; 88: 637-640.
- Wilkinson D, Connolly A, Harrison A, Lurie M, Abdool Karim SS. Sexually transmitted disease syndromes in rural South Africa: Results from health facility surveillance. Sexually Transmitted Diseases 1998; 25: 20-23.
- Morar NS, Ramjee G, Abdool Karim SS. Vaginal insertion and douching practices among sex workers at truck stops in KwaZulu-Natal. South African Medical Journal 1998; 88: 470.
- Colvin M, Abdool Karim SS. HIV infection among patients with tuberculosis in KwaZulu/Natal, South Africa. International Journal of Tuberculosis and Lung Disease 1998; 2: 172.
- 347. Abdool Karim SS. Hospital inpatient audit information for action. South African Medical Journal 1998; 88: 781.
- 348. Abdool Karim SS. What is the best hepatitis B vaccination strategy for South Africa? South African Medical Journal 1998, 88: 693-694.
- Abdool Karim SS, Ramjee G. Anal sex and HIV transmission in women. American Journal of Public Health 1998; 88: 1265-1266.
- 350. Ramjee G, Abdool Karim SS, Sturm AW. Sexually transmitted infections among sex workers in KwaZulu-Natal, South Africa. Sexually Transmitted Diseases 1998; 25: 346-349.
- Colvin M, Abdool Karim SS, Connolly C, Hoosen AA, Ntuli N. HIV infection and asymptomatic sexually transmitted infections in a rural South African community. *International Journal of STD & AIDS* 1998; 9: 548-550.
- Harrison A, Wilkinson D, Lurie M, Connolly AM, Abdool Karim SS. Improving quality of sexually transmitted disease case management in rural South Africa. AIDS 1998; 12: 2329-2335.

- 353. Abdool Karim SS. South Africa: HIV and tuberculosis. Lancet 1997; 349: 1542-1543.
- 354. Rustomjee R, Abdool Karim SS. Underreporting and overreporting of hepatitis B at a tertiary hospital. South African Medical Journal 1997; 87: 249-251.
- 355. Kay BJ, Katzenellenbogen J, Fawcus S, Abdool Karim SS. An analysis of the cost of incomplete abortion to the public health sector in South Africa 1994. South African Medical Journal 1997; 87: 442-447.
- Wilkinson D, Cutts F, Ntuli N, Abdool Karim SS. Maternal and child health indicators in a rural South African health district. South African Medical Journal 1997; 87: 456-460.
- 357. Lurie M, Wilkinson D, Harrison A, Abdool Karim SS. Migrancy and HIV/STDs in South Africa a rural perspective. South African Medical Journal 1997; 87: 908-909.
- Abdool Karim SS. Measuring effectiveness of tuberculosis control programmes. South African Medical Journal 1997; 87: 1040-1041.
- 359. Wilkinson D, Sach ME, Abdool Karim SS. Examination of attendance patterns before and after introduction of South Africa's policy of free health care for children aged under 6 years and pregnant women. British Medical Journal 1997; 314: 940-941.
- Abdool Karim SS. Promoting health and human rights in South Africa. South African Medical Journal 1997; 87: 240.
- Anastasis D, Pillai G, Rambiritch V, Abdool Karim SS. A retrospective study of human immunodeficinecy virus infection and drug-resistant tuberculosis in Durban, South Africa. International Journal of Tuberculosis and Lung Disease 1997; 1: 220-224.
- Lurie M, Harrison A, Wilkinson D, Abdool Karim SS. Circular migration and sexual networking in rural KwaZulu/Natal: implications for the spread of HIV and other sexually transmitted diseases. *Health Transition Review* 1997; 7(Suppl 3): 15-24

1996:

- Abdool Karim SS, Pillai G, Ziqubu-Page TT, Cassimjee MH, Morar NS. Potential savings from generic prescribing and generic substitution in South Africa. *Health Policy and Planning* 1996; 11: 198-205.
- Abdool Karim SS, Dilraj A. Reasons for under-reporting of notifiable conditions. South African Medical Journal 1996; 86: 834-836.
- Fawcus S, Moodley J, Bradshaw D, Theron GB, Abdool Karim SS. Measuring maternal mortality in South Africa. South African Medical Journal 1996; 86: 403-406.
- Abdool Karim SS, Chapman A, Shapiro JB. Rationalisation of data collection for a child health service. South African Medical Journal 1996; 86: 837.
- Anastasis D, Pillai G, Rambiritch V, Abdool Karim SS. Multidrug-resistant tuberculosis in patients without HIV infection. South African Medical Journal 1996; 86: 1294-1296.
- 368. Abdool Karim SS. A new voice for public health. South African Medical Journal 1996; 86: 1474.
- Abdool Karim SS, Abdool Karim Q. Is there a cure for AIDS? South African Medical Journal 1996; 86(9): 1058, 1063

- Abdool Karim Q, Abdool Karim SS, Soldan K, Zondi M. Reducing the risk of HIV infection among South African sex workers: socio-economic and gender barriers. *American Journal of Public Health* 1995; 85: 1521-1525.
- 371. Colvin M, Abdool Karim SS, Wilkinson D. Migration and AIDS. Lancet 1995; 346: 1303-1304.
- Katzenellenbogen JM, Abdool Karim SS, Fawcus S. Putting the records straight a plea for improved abortion data. South African Medical Journal 1995; 85: 135-136.

1994:

- Kirsch RE, Abdool Karim SS, Prozesky W. Why viral hepatitis? South African Medical Journal 1994; 84: 523-524.
- Robson SC, Schoub B, Abdool Karim SS. Viral hepatitis B an overview. South African Medical Journal 1994; 84: 530-535.
- Buchel E, Hift RH, Wilson T, Abdool Karim SS. The prevention of hepatitis. South African Medical Journal 1994; 84: 578-583.
- 376. Abdool Karim SS, Ziqubu-Page TT, Arendse R. Bridging the Gap: Potential for a health care partnership between African traditional healers and biomedical personnel in South Africa. South African Medical Journal acc1994; 84: s1-s16.
- Dilraj A, Abdool Karim SS. Sex difference in measles fatality after introduction of new measles vaccine. Lancet 1994; 343: 1366-1367.
- Abdool Karim SS. Challenges to the control of sexually transmitted diseases in Africa. American Journal of Public Health 1994; 84: 1891-1893.

1993:

- 379. Abdool Karim SS, Tait DR. Hepatitis C virus in urban and rural Natal/KwaZulu. South African Medical Journal 1993; 83: 191-193.
- 380. Abdool Karim SS, Abdool Karim Q, Dilraj A, Chamane M. Unsustainability of a measles immunization campaign - Rise in measles incidence within 2 years of the campaign. South African Medical Journal 1993; 83: 322-323.
- 381. Abdool Karim SS. Traditional healers and AIDS prevention. South African Medical Journal 1993; 83: 423-425.
- Soni PN, Abdool Karim SS, Coovadia HM, Hurribunce AC, Jinabhai CC, Mokoena T, Moodley J, Seedat MA. Academic health complexes - Ivory towers or national resources? South African Medical Journal 1993; 83: 464-465.
- 383. Abdool Karim SS. Traditional healers and AIDS prevention. South African Medical Journal 1993; 83: 691.
- Colvin MSE, Abdool Karim SS, Gouws E. Occupational disease in a chormate producing factory. South African Medical Journal 1993; 83: 857-858.
- Soni PN, Abdool Karim SS, Coovadia HM, Hurribunce AC, Jinabhai CC, Mokoena T, Moodley J, Seedat MA. Academic health complexes. South African Medical Journal 1993; 83: 860.
- Abdool Karim SS, Coutsoudis A. Sero-epidemiology of hepatitis A in black South African children. South African Medical Journal 1993; 83: 748-750.

1992:

- Abdool Karim SS, Abdool Karim Q, Preston-Whyte E, Sankar N. Reasons for lack of condom use among high school students. South African Medical Journal 1992; 82: 107-110.
- 388 Abdool Karim SS. Measles control: A public health challenge. Southern African Journal of Epidemiology & Infection 1992; 7: 63-64.
- Abdool Karim SS, Abdool Karim Q. Changes in HIV seroprevalence in a rural black community in KwaZulu. South African Medical Journal 1992; 82: 484.
- Abdool Karim Q, Preston-Whyte E, Abdool Karim SS. Teenagers seeking condoms at family planning services: Part I. A user's perspective. South African Medical Journal 1992; 82: 356-359.
- Abdool Karim Q, Abdool Karim SS, Preston-Whyte E. Teenagers seeking condoms at family planning services: Part II. A provider's perspective. South African Medical Journal 1992; 82: 360-362.
- Seedat YK, Abdool Karim SS. Primary health care in South Africa. Advances in Medical Science 1992; 20: 362-373.
- Abdool Karim Q. Abdool Karim SS, Singh B, Short R, Ngxongo S. Seroprevalence of HIV infection in rural South Africa. AIDS 1992; 6: 1535-1539.

1991:

394. Abdool Karim SS. Should AIDS be made notifiable? South African Medical Journal 1991; 79: 179-181.

010-352²

- 395. Kiepiela P, Coovadia HM, Loening WEK, Coward P, Abdool Karim SS. Loss of maternal measles antibody in black South African infants in the first year of life - implications for age of vaccination. South African Medical Journal 1991; 79: 145-148.
- Abdool Karim SS, Abdool Karim Q. Under-reporting in hepatitis B notifications. South African Medical Journal 1991; 79: 242-244.
- Abdool Karim SS, Windsor IM, Gopal W. Low prevalence of Delta hepatitis virus infection among blacks in Natal. South African Medical Journal 1991; 80: 193-194.
- 398. Abdool Karim Q, Abdool Karim SS, Nkomokazi J. Sexual behaviour and knowledge of AIDS among black mothers: Implications for AIDS intervention programmes. South African Medical Journal 1991; 80: 340-343.
- 399. Abdool Karim SS, Abdool Karim Q, Chamane M. Impact of a measles immunisation campaign on measles admissions to a Natal hospital. South African Medical Journal 1991; 80: 579-581.
- Abdool Karim SS, Andelman R. Impact of the political violence in Natal on emergency surgical services of a tertiary hospital. South African Medical Journal 1991; 80: 134–138.
- 401. Abdool Karim SS, Thejpal R, Coovadia HM. Household clustering and intra-household transmission patterns of hepatitis B virus infection in South Africa. International Journal of Epidemiology 1991; 20: 495-503.

1990:

- Fouche A, Crewe RM, Windsor IM, Abdool Karim SS. Persistence of hepatitis B antigen in Culex quinquefasciatus (Diptera:Culicidae). Journal of Medical Entomology 1990; 27: 697-700.
- Rutkove S, Abdool Karim SS, Loening WEK. Patterns of care in an overburdened tertiary hospital outpatients department. South African Medical Journal 1990; 77; 476-478.
- 404. Coovadia YM, Abdool Karim SS. A community-based seroprevalence survey of syphilis in black children. Genitourinary Medicine 1990; 66: 124.

1989:

- 405. Abdool Karim SS, Thejpal R, Singh B. High prevalence of hepatitis B virus infection in rural black adults in Mseleni, South Africa. American Journal of Public Health 1989; 79: 893-894.
- Kiepiela P, Coovadia HM, Coward P, Woodhead R, Abdool Karim SS, Becker P. Age-related lymphocyte subpopulation changes among healthy Africans from birth to adulthood. *Annals of Tropical Paediatrics* 1989; 9: 199-205.

1988:

407. Abdool Karim SS, Coovadia HM, Windsor IM, Thejpal R, van den Ende J, Fouche A. The prevalence and transmission of hepatitis B virus infection and urban, rural and institutionalized black children of Natal/KwaZulu, South Africa. International Journal of Epidemiology 1988; 17: 168-173.

1986:

- Jinabhai CC, Coovadia HM, Abdool Karim SS. Socio-medical indicators of health in South Africa. International Journal of Health Services 1986; 16: 163-176.
- 409. Fouche A, Abdool Karim SS, Windsor IM, van den Ende J. Hepatitis B virus in a Culicine mosquito species in the Republic of South Africa. South African Medical Journal 1986; 70: 302.

11b. Books & Book Chapters and Reports

- Abdool Karim Q, Abdool Karim SS, Baxter C (eds). The CAPRISA Clinical Trials: HIV Treatment and Prevention. 2017. Springer, Switzerland
- Vermund, S.H., Abdool Karim, S. Governmental Support of Research. In: Robertson, D. and Williams, G.H. (eds). Clinical and Translational Science: Principles of Human Research. Second Edition, 2016. Elsevier Inc., London. pp.680-705
- Abdool Karim SS, Baxter C. Translating Pre-exposure Prophylaxis Evidence into Practice and Public Health Impact. In: Eaton LA, Kalichman SC (eds). Biomedical Advance in HIV Prevention. 2013. Springer, New York. pp 29-40.
- Abdool Karim SS. HIV Prevention. In: Volberding, Green, Lange & Gallant (eds). Sande's HIV & AIDS Medicine 2012
- Abdool Karim SS and Abdool Karim Q (eds). HIV/AIDS in South Africa. 2010 (second edition). Cambridge University Press, Cape Town South Africa
- Abdool Karim SS, Abdool Karim Q, Detels R. Acquired Immunodeficiency Syndrome. Chapter 9.13. In: Detels R, Beaglehole R, Lansang MA, Gulliford M. Oxford Textbook of Public Health, fifth edition. 2009. Oxford University

Press, New York. Pp1193-1212

- Hankins C, Strathdee S, Abdool Karim SS. Chapter 49: HIV Transmission and its Prevention in Africa. Pg 565 576 In: Global HIV/AIDS Medicine. Edited by; Volberding PA, Sande MA, Lange J, Greene WC. Associate editor; Gallant J. Saunders Elsevier. Philadelphia, USA. 2008.
- Myer L, Abdool Karim SS. Chapter 12: Precision and validity in epidemiological studies: error, bias and confounding. In: Joubert G and Ehrlich R (eds). Epidemiology: A research manual for South Africa. 2nd Edition. Oxford University Press; Cape Town. 2007
 - Joubert G, Ehrlich R (ed). Katzenellenbogen J, Abdool Karim SS (contributing ed). EPIDEMIOLOGY A Research Manual for South Africa, 2nd edition. Oxford University Press Southern Africa, Cape Town, South Africa. 2007.
 - Abdool Karim SS. Voluntary counseling and testing: is it time to opt out? Actualizaciones en sida 2007; 15(55):37-40.
 - Abdool Karim SS. The African Experience. In: Kenneth Mayer and HF Pizer (eds) The AIDS Pandemic: Impact on science and society. 2006. pp 351-373
 - Abdool Karim SS and Abdool Karim Q (eds). HIV/AIDS in South Africa. 2005. Cambridge University Press, Cape Town South Africa
 - Katzenellenbogen J, Joubert G, Abdool Karim SS (eds). Epidemiology: A manual for South Africa. Johannesburg: Oxford University Press, 1997.
 - Metcalf CA, Abdool Karim SS, Yach D. Infectious disease hazards associated with travel to and from South Africa. Durban: Medical Research Council, 1994.
 - Nell and Shapiro Consulting cc, Abdool Karim SS, Matjila MJ. Fighting AIDS: Evaluation of the National AIDS programme of the National Progressive Primary Health Care Network. Report submitted to the National AIDS Programme of the National Progressive Primary Health Care Network, 1993.
 - Abdool Karim Q, Abdool Karim SS. Epidemiology of HIV infection in Natal/KwaZulu. In: AIDS and your response. Coventry (UK): Institute of World Concerns, 1993: 43-51.
 - Soldan K, Abdool Karim Q, Abdool Karim SS. Home-based care for HIV/AIDS: Evaluation of the KwaZulu pilot programme. Report submitted to the KwaZulu Department of Health, 1993.
- Abdool Karim SS, Ziqubu-Page TT, Arendse R. Bridging the Gap: Potential for a health care partnership between African Traditional Healers and biomedical personnel in South Africa. Report submitted to the Medical Association of South Africa, 1992.
- Yach D, Abdool Karim SS, Ramphele M. Evaluation of the National Progressive Primary Health Care Network. Cape Town: PPHC Network 1989.
- Abdool Karim SS (ed). Health and Human Rights: 1986 Conference Proceedings of the National Medical and Dental Association. Durban: NAMDA, 1987.
- 21. Abdool Karim SS (ed). Primary Health Care. Durban: NAMDA, 1987.
- Jinabhai CC, Coovadia HM, Abdool Karim SS. Socio-medical indicators for monitoring progress towards health for all in southern Africa. Second Carnegie inquiry into poverty and development in southern Africa (Paper 165). Cape Town: SALDRU, 1984.

11c. Patents

1. Patent 2003/0996. Application number: 12/357,099 (Publication date: 22 Mar 2011, Filing date: 21 Jan 2009, Priority date: 7 Jul 2000)

Nucleic acids encoding modified South African HIV-1 subtype C gag proteins

Process of selection of HIV-1 subtype C isolates, selected HIV-1 subtype C isolates, their genes and modifications and derivatives thereof

Inventors: Robert Edward Johnston, Salim Abdol Karim, Lynn Morris, Ronald Swanstrom, Carolyn Williamson Countries: South Africa, India, USA, ARIPO, Germany, Italy, France, United Kingdom and Namibia

 Patent: 2004/4205. Application number: PCT/IB02/04550 (Publication date: 20 Jan 2009, Filing date: 31 Oct 2002, Priority date: 31 Oct 2001)

HIV-1 subtype isolates, regulatory/accessory genes and modifications and derivatives thereof (Based on ZA20001/8978)

Inventors: Carolyn Williamson, Joanne Heidi van Harmelen, Clive Maurice Gray, William Bourn, Salim Abdool Karim Countries: South Africa. USA, ARIPO, United Kingdom, France, Germany

3. Patent: EP 2 579 871 B1. Application number: 11726022.4 (Publication date: 26 August 2015 Bulletin 2015/35, Filing date: 07 June 2011)

Topical antiviral formulations for prevention of transmission of HSV-2

Inventors: Salim S. Abdool Karim, Quarraisha Abdool Karim, Ayesha Kharsany, Jim Rooney and Thomas Cichlar

37

Countries: South Africa and USA

4. Application number 1403613.1: Provisional Patent (PA159593/P) (filled 28 February 2014) Novel Broadly Neutralizing Monoclonal Antibodies Against HIV-1 Inventors: Lynn Morris, Penny Moore, Salim Abdool Karim, John Mascola, Nicole Doria-Rose, Peter Kwong and Larry Shapiro Countries: South Africa and USA

 Patent: US 10,519,222 B2 / EP 3 110 844 B1 / WO2015/128846 A1. Application number PCT/IB2015/051465 (Publication date: 3 Sept 2015, Filing date: 27 Feb 2015, Priority date: 19 Dec 2014; Date of patent 31 Dec 2019)
 Broadly neutralizing monoclonal antibodies against HIV-1 V1V2 env region

Inventors: Chaim Aryeh Schramm, Jason Gorman, John Mascola, Lawrence Stewart Shapiro, Lynn Morris, Nicole Amy Doria-Rosa, Penelope Linda Moore, Peter Dak Pin Kwong, Salim Safurdeen Abdool Karim

Countries: South Africa and USA

6. Pending Patent: CU17009 Application number 62/533,229 (Publication date: , Filing date: 17 July 2017, Priority date:)

Methods of assessing risk of and preventing infection by sexually transmitted disease including human immunodeficiency virus

Inventors: W. Ian Lipkin;Brent Williams;Mara Couto-Rodriguez;Salim Abdool Karim Countries: South Africa and USA

11d. Abstracts and conference presentations 2019

Young Scientist Symposium on Infectious Diseases, 27 May 2019, Durban, South Africa

· Abdool Karim SS. HIV Prevention in Women in Africa: Challenges and Opportunities

South African AIDS Conference, 11 June 2019, Durban, South Africa

Abdool Karim SS. HIV: No time for complacency (Plenary)

Epic Course, 26 June 2019, Columbia University, New York, New York

- Abdool Karim SS. Ending the HIV epidemic in the USA
- Abdool Karim SS. Sensitivity vs specificity and reliability vs validity

Royal Society lecture, 12 July 2019, London, UK

Abdool Karim SS. HIV Prevention in Women in Africa: Challenges and Opportunities

KRISP Business Breakfast - Decoding the SA Indian Genome for Health Risk, 19 July 2019, Durban South Africa
 Abdool Karim SS. Diabetes: A scourge in South Africa

Phoenix Child Welfare AGM, 21 July 2018, Durban South Africa

Abdool Karim SS. The HIV Epidemic In South Africa: Challenges & Prospects

2018

WHO Consultation, February 28th - March 1st, 2018, Geneva

Abdool Karim SS. Reaching robust policy recommendation

37th Medicine Update Symposium, 15th April 2018

Abdool Karim SS. The HIV Epidemic in South Africa: Challenges & Prospects

EECAAC, Moscow, Russia, 19-20 April 2018

- Abdool Karim SS. Specific HIV Prevention technologies for PWID
- Abdool Karim SS. Global achievements in HIV prevention

010-35

Fogarty at 50 Symposium, Washington D.C., 1 May 2018

- · Abdool Karim SS. Multigenerational models of long-term capacity building: the trainees become the trainers
- IAVI, New York, USA, 2 May 2018
 - Abdool Karim SS. Preventing HIV in young women in Africa: challenges and prospects

Tackling Infections to Benefit Africa (TIBA) AGM, Durban, South Africa 29 May 2018

· Abdool Karim SS. A research journey to unravel why young women havethe highest rates of HIV in S. Africa

Vaccine Reseach Center Seminar, NIH, Bethesda, Maryland, 12 June 2018
 Abdool Karim SS. CAPRISA-VRC collaborative passive immunisation studies with bnAb combinations

Population Council, Center for Biomedical Research, New York, USA, 13 June 2018

Abdool Karim SS. Preventing HIV in young women in Africa: A decade of trials and tribulations

IAPAC Adherence Conference, Miami, USA, 8 June 2018

 Abdool Karim SS. Connecting the dots from 90-90-90 to HIV Epidemic Control: Milestones for the climb up Mt. Everest

BRICS Health Representatives Meeitng, Durban, South Africa, 18 July 2018

- Abdool Karim SS. CAPRISA's contributions to Excellence in Research in South Africa
- Abdool Karim SS. HIV and TB: A focus on BRICS health priorities

Phoenix Child Welfare AGM, Durban, South Africa21 July 2018

Abdool Karim SS. The HIV Epidemic in South Africa: Challenges & Prospects

Pathology Research and Development (PathReD) Innovation Summit, Johannesburg, 2 August 2018

 Abdool Karim SS. Driving scientific research and innovation for social benefit: Examples from CAPRISA's HIV-TB research

AFREHealth Symposium, Durban, South Africa, 6 August 2018

Abdool Karim SS. Research capacity building and partnerships

UKZN Research Flagships Launch, 5 September 2018

Abdool Karim SS. Health in South Africa: Trends, Challenges & Opportunities

DoH KwaZulu-Natal Research Day, Durban, South Afriuca, 5 September 2018

Abdool Karim SS. HIV in South Africa: An update with recent research findings

2017

USAID, 9 January 2017

Abdool Karim SS. HIV prevention challenges in sub-Saharan Africa: HIV infection in young women in Africa.

MIT course, Durban 19 January 2017

Abdool Karim SS. HIV prevention: Prospects & Challenges

University of KwaZulu-Natal research Selectives, Durban, South Africa, 30 January 2017

- Abdool Karim SS. Study designs and levels of evidence
- Abdool Karim SS. Experimental studies

HIV Workshop for Specialists in all Disciplines Advanced Clinical Care Program, February 2017

Abdool Karim SS. Epidemiology of HIV in South Africa

HPTN Meeting, Johannesburg, South Africa 28 February 2017

Abdool Karim SS. CAP256-VRC26.25.LS mAb HIV prevention research plan

Conference on Retroviruses and Opportunistic Infections (CROI), Seattle, Washington, February 13-16, 2017

 McKinnon L, Liebenberg L, Yende N, Masson L, Kashuba A, Archary D, Abdool Karim Q, Abdool Karim S, Passmore J-A. Mucosal inflammation abrogates tenofovir-gel-mediated protection from HIV infection. [Abstract Number: 949]

International AIDS Conference, 23-26 July 2017, Paris, France

- Fisher K, Mabuka J, Baxter C, Cromarty R, Mansoor L, Abdool Karim Q, Abdool Karim S, Garrett N, Yende N, Morris L, Passmore J-A, Archary D. Antibody dependent cell-mediated phagocytic activity is increased in the genital tract mucosae of HIV-infected women with prior tenofovir gel exposure. (Abstract: WEPE)
- Klatt N, Birse K, Zevin A, Cheu R, Perner M, Romas L, Grobler A, Westmacott G, Xie I, Butler J, Mansoor L, McKinnon L, Passmore J-A, Abdool Karim Q, Abdool Karim S, Burgener A. Vaginal bacteria modify HIV preexposure prophylaxis efficacy in African women. (Abstract: MOPE)
- Mhlungu S, Yende-Zuma N, Ngcapu S, Mansoor L, Abdool Karim S, Abdool Karim Q, Passmore J, Liebenberg L. Sexually transmitted infections (STIs) increase levels of cytokine and cellular biomarkers of HIV risk. (Abstract: TUEP)
- Jewanraj J, Rositch A, Mhlungu S, Mtshali A, Leask K, Mansoor L, Abdool Karim S, Abdool Karim Q, Passmore J-A, Liebenberg L. Potential Immune Mechanism for the Relationship between HIV Risk and Multiple Concurrent HPV Infections. (Abstract: TUPE)
- Cicala C, Sivro A, Schuetz A, Nawaz F, Arthos J, Williamson C, Paul R, Passmore J-A, Ananworanich J, Ansari A, Abdool Karim S, McKinnon L, Fauci A. HIV transmission and disease progression are linked to the frequency of α4β7* CD4+ T cells. (Abstract: MOPE)

18th International Congress of Mucosal Immunology, 20 July 2017, Washington DC

· Abdool Karim SS. Vaginal microbiome in HIV

St Lukes School of Public Health, 23 August 2017, Tokoyo, Japan

Abdool Karim SS. The Global HIV epidemic: Successes, Challenges & Prospects

IFCC Worldlab Conference, 22 October 2017, Durban, South Africa

· Abdool Karim SS. HIV in women in Africa: new evidence from phylogenetic, genomic and protein research

KwaZulu-Natal Department of Health Research Day, 31 October 2017, Durban, South Africa

 Abdool Karim SS. CAPRISA 012 – SAMBA Trial - Phase I safety and PK trial of Subcutaneous Administration of Monoclonal Broadly-neutralizing Antibodies

Maternal Health Summit, 10 November 2017, Johannesburg, South Africa

Abdool Karim SS. HIV and women: Challenges & Prospects

2016

National Institutes of Health, VRC meeting, Washington, D.C., 4 February 2016

S Abdool Karim. Product Development Plan for CAP256-VRC26.25

CROI 2015, Boston, Massachusetts, 22-25 February 2016

 Singh R; Naranbhai V; Jamieson L; Garrett N; Abdool Karim S, Ndungu TP, BST-2, TRIM22, and RAD51 in Host Susceptibility to HIV-1 Infection and Virus Control.

5th Eastern Europe and Central Asia AIDS Conference, Russia, 23 March 2016

- S. Abdool Karim. Approaching the end of the epidemic: Review of advanced trends in HIV prevention
- · S. Abdool Karim. Treatment as prevention: History and achievements

AVAC Press conference, Durban, 14 July 2016

S. Abdool Karim. New HIV prevention options including PrEP what does it mean for South Africa?

AIDS 2016, Durban, South Africa, 19-22 July 2016

 S.S. Abdool Karim. Understanding high rates of HIV in young women in Africa: Implications of new epidemiological, phylogenetic, genomic and proteomic evidence.

- S.S. Abdool Karim. What have we learned from studies of topical agents: interpreting clinical results. THSY0802
- N. Naicker, A. Naidoo, L. Werner, N. Garrett, S.S. Abdool Karim. Safety and tolerability of tenofovir-containing antiretroviral therapy in women who acquired HIV in two tenofovir gel trials. THPEB058
- Y. Moosa, N. Garrett, C. Gray, V. Naranbhai, C. Williamson, S. Abdool Karim. HIV virological controllers in an African cohort. TUPEA013
- N. Garrett, E. Norman, V. Asari, N. Naicker, N. Majola, K. Leask, Q. Abdool Karim, S. Abdool Karim. Acceptability of early HIV treatment among South African women. WEAB0101
- T. de Oliveira, P. Khumalo, C. Cawood, R. Dellar, F. Tanser, G. Hunt, A. Grobler, A. Kharsany, L. Madurai, Q. Abdool Karim, S. Abdool Karim. HIV phylogenetic analysis sheds light on transmission linkages in young women in high HIV burden districts in KwaZulu-Natal, South Africa. THAX0104
- B. Mabvakure, B. Lambson, K. Ramdayal, L. Masson, P. Moore, S. Abdool Karim, C. Scheepers, C. Williamson, D. Martin, J.-A. Passmore, G. Harkins, L. Morris. Analysis of HIV-1 subtype C envelope sequence diversity in the female genital tract from early infection reveals no evidence for compartmentalization. TUPEC219
- N. Ngcobo, L. Mansoor, S. Mkhize, C. Montague, M. Tshabalala, S. Abdool Karim, Q. Abdool Karim. Integration of HIV prevention and sexual reproductive health services using a quality improvement intervention: experiences from rural KwaZulu-Natal, South Africa. WEPEE572
- S. Ngcapu, A.M. Carias, L.J. Liebenberg, L. Werner, G.C. Cianci, M. McRaven, S. Sibeko, N.J. Garrett, J.-M. Kriek, L.R. McKinnon, S. Abdool Karim, Q. Abdool Karim, J.-A.S. Passmore, T.J. Hope. Effect of injectable hormonal contraceptives on vaginal epithelium thickness and genital HIV target cell density in women recently infected with HIV. WEAA0102
- C. Baxter, L. Mansoor, K. Mngadi, N. Ngcobo, N. Yende-Zuma, T. Gengiah, Q. Abdool Karim, S. Abdool Karim. Expanding the contraceptive method mix for women at high-risk of HIV: experiences from the CAPRISA 008 Tenofovir Gel Implementation trial. TUPEE556
- N. Ngandu, J. Carlson, D. Chopera, N. Ndabambi, S. Goodier, N. Garrett, N. Samsunder, Q. Abdool Karim, S. Abdool Karim, C. Williamson. Selection of HIV-1 variants with higher transmission potential by 1% tenofovir gel microbicide. TUPDA0101
- L. Liebenberg, L.R. McKinnon, K. Leask, A. Rositch, N. Garrett, N. Samsunder, A. Kharsany, A. Grobler, A. Singh, J.-A. Passmore, S.S. Abdool Karim, Q. Abdool Karim. The mechanisms and role of HPV in enhancing HIV transmission in women in South Africa
- L.E. Mansoor, Q. Abdool Karim, K.T. Mngadi, C. Montague, N. Yende-Zuma, H. Dawood, T.N. Gengiah, N. Samsunder, C. Baxter, J.L. Schwartz, G.F. Doncel, F. Ntombela, A. Grobler, S.S. Abdool Karim. Good adherence in trial of topical pre-exposure prophylaxis integrated into family planning services. FRAE0102

- Victor Daitz Foundation presentation, 18 February 2015
 - Abdool Karim SS. CAPRISA: Research for impact on the global HIV epidemic

CROI 2015, Boston, Massachusetts, 24-26 February 2015

Abdool Karim SS. Use of empiric TB treatment for people living with HIV HIV/TB Research Meeting.

University of KwaZulu-Natal, Research Strategy Group Meeting, 7 May 2014

· Abdool Karim SS. Research productivity rewards: Thoughts on the journal article criterion

KZNDOH CCMT Symposium, 7 May 2015

Abdool Karim SS. AIDS in South Africa: Prospects and challenges for KwaZulu-Natal

NIH-MRC IPPCR Course, Cape Town, South Africa, 11 May 2015

Abdool Karim SS. Clinical and translational research in practice

FHI360 meeting, North Carolina, USA 18 May 2015

Abdool Karim SS. HIV/AIDS in South Africa: Opportunities for research collaborations with CAPRISA

Ragon Institute Scienctific Advisory Board Meeting, Boston, USA, 19 May 2015

Abdool Karim SS. Clinical trial designs to expedite proof-of-concept and efficacy estimation

010-358×

KwaZulu Natal Doctors Healthcare Coalition (KZNDHC) Healthcare Institute Conference, 6 June 2015

Abdool Karim SS. The Global HIV epidemic: Progress, Prospects and challenges

SA AIDS Conference - Symposium: From Results to Roll-out - Accelerating Access of Biomedical Products after Clinical Trial Results, Durban, South Africa, -7-10 June 2015

Abdool Karim SS. Advances in biomedical prevention research: Preparing for Success

Launch of the UNAIDS-Lancet Commission Report, London, UK, 25 June 2015

Abdool Karim SS. Defeating AIDS: Advancing global health

HIV Center Strategic Advisory Committee Meeting, 2 July 2015

Abdool Karim SS. The Global HIV Epidemic: Prospects and Challenges

8th IAS Conference on HIV Pathogenesis, Treatment & Prevention, Vancouver, Canada, 15 July 2015

Abdool Karim SS. Clinical trials in young women Clinical Trial Literacy among Vulnerable Populations

Lifeline AGM, Kingspark Growthpoint Stadium, Durban, South Africa, 5 August 2015

Abdool Karim SS. The HIV epidemic – an update.

PrEP meeting, Johannesburg, South Africa, 13 August 2015

Abdool Karim SS. Biological plausibility for PREP use in women

Faculty Day, Faculty of Health Sciences, University of Pretoria, Pretoria, South Africa, 19 August 2015
 Abdool Karim SS. Partnering for research success: Lessons from CAPRISA

Institute for Human Virology Meeting, Boston, USA, 9 September 2015

Abdool Karim SS. Advancing Global Health: Lessons from the response to the HIV epidemic

Gilead Sciences Lecture, California, USA, 23 September 2015

Abdool Karim SS. Young women & HIV in South Africa: Risks, vulnerability and prevention strategies

Bernard Pimstone Lecture, University of Cape Town, Cape Town, South Africa, 1 October 2015

Abdool Karim SS. Young women & HIV in South Africa: Risks, vulnerability and prevention strategies

2nd meeting of the Organising Committee of the 5th Eastern Europe and Central Asia HIV/AIDS Conference, Moscow, Russia, October 2016

Abdool Karim SS. HIV prevention: Prospects and challenges

2014

Animal and Human Vaccine Development in South Africa: University of Pretoria, 30 January 2014

Abdool Karim SS. Microbicides: State of the field & next challenges

CROI 2014, Boston, Massachusetts at the Hynes Convention Center, 3-6 March

- Garrett NJ, Werner L, Naicker N, Mthembu T, Naranbhai V, Sibeko S, Samsunder N, Williamson C, Abdool Karim Q, Abdool Karim S. Does Tenofovir Gel Alter HIV Disease Progression in CAPRISA 004 Trial Seroconvertors?
- Garrett NJ, Werner L, Mlisana K, McKinnon L, van Loggerenberg F, Ndung'u T, Gray C, Morris L, Williamson C, Abdool Karim S. Rapid Disease Progression in HIV-1 Subtype C Infected South African Women
- Redd A, Mullis C, Sheward D, Williamson C, Werner L, Garrett N, Porcella S, Abdool Karim Q, Quinn T, Abdool Karim S, TRAPS Study Team. Limited HIV-1 Superinfection in Seroconvertors from the CAPRISA 004 Microblcide Trial.

The John Ring La Montagne Memorial Lecture, NIAID, NIH - 13 March 2014

- Abdool Karim SS. Envisioning "The End of AIDS": Challenges and Prospects
- Gilead Sciences, California, 14 March 2014

Abdool Karim SS. Preventing HIV: CAPRISA's microbicide & vaccine research

- HIV Congress 2014, Taj Lands End Hotel, Mumbai, India, March 2014
 - Abdool Karim SS. New WHO recommendations and its impact on resource limited countries
- 16th ICID, Cape Town, 3 April 2014
 - Abdool Karim SS. Antiretrovirals for HIV prevention: new hope and opportunity
- Treatment as Prevention in Africa: Botswana April 30 May 3, 2014
 - Abdool Karim SS. Microbicides: State of the field & next challenges
- Gates Foundation Meeting, New York, 3 June 2014
 - Abdool Karim SS. Genital inflammation: a significant sub-clinical risk mechanism for HIV acquisition in young women in SA

BIA Spring meeting, 13th June 2014, SOAS, London

Abdool Karim SS. Integrating HIV and TB treatment: Challenges and Opportunities.

20th International AIDS Conference, 21-25 July, 2014 Melbourne, Australia

Abdool Karim SS. State of the art: Epidemiology and access

SAMA Conference 2014: Healthcare in South Africa and the millennium development goals: yesterday, today & tomorrow 29-31 August 2014

Abdool Karim SS. Health in South Africa: changes and challenges since 2009

16th Annual International Meeting of the Institute of Human Virology September 14, 2014

Abdool Karim SS. The Global HIV Epidemic: Prospects and Challenges

PATH IX meeting, 19 September 2014, Sydney, Australia

Abdool Karim SS. Antiretrovirals for HIV prevention

Southern African HIV Clinicians Society Conference 24 - 27 September 2014, Cape Town

- Abdool Karim SS. The HIV Epidemic: Progress & Challenges
- Abdool Karim SS. Is HIV incidence going down?

HIV Prevention Workshop, 24 October 2014, Hermanus, South Africa

Abdool Karim SS. The HIV epidemic: Past, Present & Future...

HIV Research for Prevention (HIV R4P), 28-31 October, Cape Town, South Africa

- Wibmer CK, Sheward DJ, Bhiman JN, Ndabambi N, Elliot DH, Rouelle J, Smira A, Abdool Karim SS, Robinson JE, Morris L, Williamson C, Moore PL. Viral Escape Pathways from Broadly Neutralising Antibodies Targeting the HIV Envelope Cleavage Site Enhance MPER Mediated Neutralisation. [Oral presentation Abstract number: OA06.05]
- Kløverpris HN, Noorbhai A, Kuhn W, Yadon M, Ramsuran D, Nhamoyebonde S, Kasprowicz V, Walker B, Ndung'u T, Goulder P, Abdool Karim S, Mjösberg J, Leslie A. Innate Lymphoid Cells are Depleted in HIV Infection [Oral presentation Abstract number: OA04.02
- Bhiman JN, Doria-Rose NA, Wibmer CK, Sheward DJ, Williamson C, Abdool Karim SS, Kwong PD, Mascola JR, Morris L, Moore PL. Maturation of Broadly Neutralizing V1V2 directed Antibodies in the Context of Autologous Viral Escape. [Oral presentation Abstract number: OA12.01]
- Richardson SI, Gray E, Mkhize N, Sheward D, Lambson B, Wibmer K, Masson L, Werner L, Garett N, Passmore J-A, Abdool Karlm S, Williamson C, Moore P, Morris L. The Sequence of the α4β7-binding Motif on Gp120 of Transmitted/Founder Viruses Contributes to the Dependence on the Integrin for HIV Infection. [Oral presentation Abstract number: OA21.02]

010-360+

- Mkhize NN, Madiga M, Durgiah R, Gray ES, Moore PL, Sibeko S, Abdool Karim S, Morris L, CAPRISA Acute Infection Study Team. The Impact of Antiretroviral Treatment on HIV-1-Specific Broadly Neutralizing Antibody Responses. [Oral presentation Abstract number: OA30.03]
- Doria-Rose NA, Roark RS, Moore P, Ernandes MJ, Bhiman JN, Schramm CA, McKee K, O'Dell S, Louder M, Abdool Karim SS, Shapiro L, Morris, Mascola JR. Variable Dependence on Glycan Recognition within a Lineage of V1V2-directed HIV Neutralizing Antibodies. [Poster discussion Abstract number: PD05.02]
- Gengiah TN, Werner L, Abdool Karim Q, Salim S. Abdool Karim SS. Tenofovir Gel Use in Women at High Risk of HIV Infection: A Retrospective Analysis of the Sex Worker Sub-group within the CAPRISA 004 Cohort. [Poster Abstract number: P13.05]
- Scheepers C, Naicker D, Schramm C, Sheng Z, Ismail A, Abdool Karim SS, Lambson B. Strain Specific Anti-HIV Antibody Evolution during Acute Infection and Viral Escape. [Poster Abstract number: P34.08]
- Baxter C, Ngcapu S, Blackard JT, Powell EA, Penton PK, Abdool Karim Q, Abdool Karim SS. Impact of Tenofovir 1% Gel on Hepatitis B Virus Resistance in CAPRISA 004. [Poster Abstract number: P38.02]
- Archary D, Liebenberg LJ, Werner L, Tulsi S, Majola N, Naicker N, Dlamini S, Samsunder N, Abdool Karim SS, Passmore J-AS, Morris L, Garrett N. Softcup Compared to Cervicovaginal Lavage Sampling: Determining Total and HIVspecific IgGs in the Female Genital Tract – A Randomized Study. [Poster Abstract number: P40.03]
- Liebenberg LJ, Garrett N, Werner L, Majola N, Naicker N, Samsunder N, Dlamini S, Passmore J-AS, Abdool Karim SS, Archary D. A Randomized Study Comparing Softcup and Cervicovaginal Lavage Sampling to Measure Genital Cytokine Concentrations in HIV infected Women. [Poster Abstract number: P40.17]
- Arnold K, BurgenerA, Birse K, DunphyL, Shahabi K, Abou M, Kwatampora J, Nyanga B, Kimani J, Liebenberg L, Masson L, Abdool Karim SS, Passmore7 J-AS, Lauffenburger DA, Kaul R, McKinnon LR. Mucosal Proteomic Profiles Associated with Female Genital Tract Inflammation. [Poster Abstract number: P40.19]
- Ngcapu S, Meiring T, Masson L, Werner L, Liebenberg L, Garrett N, Milsana K, Williamson C, Abdool Karim Q, Abdool Karim S, Passmore J-AS. Presence of Male Partner Semen Influences the Inflammatory and Innate Cytokine Environment in the Female Genital Tract. [Poster Abstract number: P40.21]

Institute of Infectious Disease & Molecular Medicine (IDM) Ten-Year Anniversary Symposium, 3 November 2014, Cape Town South Africa

Abdool Karim SS. The HIV Epidemic: Progress & Challenges

Commonwealth Science Conference, 25-28 November 2014, Bangalore India

· Abdool Karim SS. HIV in young women in Africa: Imperatives for prevention science

African Society for Laboratory Medicine Conference, 30 November – 4 December 2014, Cape Town, South Africa

Abdool Karim SS. Laboratory Science: Sanctuary of Scientific and Clinical Research Discovery

2013

FACTS Meeting, 4 February 2013

 Abdool Karim SS. How South African science helped the world respond to AIDS: South African scientific breakthroughs

Keystone, Colorado, 10-15 February 2013

 Chopera D, Cotton L, Zawaira A, Mann J, Ngandu N, Ntale R, Carlson J, Mlisana K, Woodman Z, Rosa D, Martin E, Miura T, Pereyra F, Walker B, Gray C, Martin D, Ndung'u T, Brockman M, Abdool Karim S, Brumme Z, Williamson C. Intersubtype differences in the effect of a rare p24 Gag mutation on HIV-1 replicative fitness

NHLS Research Summit, 21-22 February 2013

Abdool Karim SS. Enabling research: enriching health through research

KZN specialist Network, 27 February 2013

Abdool Karim SS. The search for an AIDS vaccine and cure: Prospects and Challenges

CROI 2013, Atlanta, USA, March 3-6, 2013

 Sobieszczyk ME, Werner L, Garrett N, Mlisana K, Feinstein A, Naicker N, Gray C, Passmore J-A, Williamson C, Abdool Karim S and the CAPRISA 002 Acute Infection Study Team. Prevalence and Predictors of Metabolic Abnormalities and Metabolic Syndrome in South African Women with Acute and Early HIV-1 Subtype C Infection.

 Chopera D, Mann J, Martin E, Ndabambi N, Naranbhai V, Abdool-Karim S, Brumme Z, Ndung'u T, Brockman M, Williamson C and the CAPRISA 004 study team. No impact of 1% Tenofovir Gel on HIV-1 Gag-Protease or Nef Function in Break-through Viruses from the CAPRISA 004 Trial

South African HIV Clinicians Society CME - 18 June

Abdool Karim SS. 30 years since the discovery of HIV: remaining challenges and future science

6th SA AIDS Conference ICC Durban, South Africa 18-21 June 2013

- Abdool Karim S. Building on success: The role of South African science in the AIDS response [Plenary]
- Abdool Karim S. The clinical trials landscape against a South African backdrop. Symposium: Linking HIV
 prevention research in South Africa to the realities of women's lives
- Mngadi K, Maarschalk SN, Grobler A, Mansoor LE, Frohlich J, Madlala B, Ngcobo N, Abdool Karim SS, Abdool Karim Q. Adherence to the use of microbicides and partner disclosure.
- Shey M, Maharaj N, Liebenberg L, Archary D, Ngcapu S, Samsunder N, Garrett N, Abdool-Karim Q, Abdool-Karim S, Passmore J-A. Role of inflammatory cytokines and TLR ligands in modulating genital tract-derived dendritic cell activation
- Naicker N, Werner L, van Loggerenberg F, Mlisana K, Garrett N, Kharsany A, Abdool Karim S. Predictors of HIV Acquisition in High Risk Women in Durban, South Africa.
- Thebus R, Moore P, Gray E, Werner L, Bandawe G, Ngandu N, Mlisana K, Abdool-Karim SS, Morris L, Williamson C for the CAPRISA Acute Infection Study Team. Broadly cross-neutralizing antibodies are associated with changes in V1V2 variable loop length
- Tomita A, van Loggerenberg F, Werner L, Mpanza L, Mlisana K, Garrett N, Abdool-Karim S. Impact of Antiretroviral Therapy on Quality of Life among South African Women in the CAPRISA 002 Acute Infection study
- Archary D, Werner L, Yates N, Abdool-Karim S, Abdool-Karim Q, Passmore J-A, Morris L, Tomaras G. HIV-1 specific binding IgGs in the female genital tract correlate with systemic IgGs and sexually transmitted infections in the CAPRISA 004 Cohort.
- Shey M, Maharaj N, Liebenberg L, Archary D, Ngcapu S, Samsunder N, Garrett N, Abdool-Karim Q, Abdool-Karim S, Passmore J-A. Role of inflammatory cytokines and TLR ligands in modulating genital tract-derived dendritic cell activation
- Shey M, Maharaj N, Liebenberg L, Archary D, Ngcapu S, Samsunder N, Garrett N. Abdool-Karim Q, Abdool-Karim S, Passmore J-A. Cervical Tissue Explant Model to Study the Role of Inflammatory Cytokines and TLR Agonists on Dendritic Cell Migration and Activation

7th IAS Conference on HIV Pathogenesis and Treatment, 30 June- 3 July 2013

- Naidoo K, Abdool Karim Q, Bhushan A, Naidoo K, Yende-Zuma Y, Mchunu PK, Frohlich J, Karim F, Upfold M, Kocheleff P, Abdool Karim SS. High rates of unmasking tuberculosis in patients accessing HAART in rural South Africa: implications for HIV and TB treatment programs Abstract no. TUPDB0101
- Shey MS, Maharaj NR, Liebenberg LJ, Archary D, Ngcapu S, Samsunder N, Garrett N, Abdool-Karim Q, Abdool-Karim S, Passmore J-A. Role of inflammatory cytokines and TLR ligands in modulating genital tractderived dendritic cell activation [Abstract TUPE228]
- Reddy K, Ooms M, Mlisana K, Abdool Karim S, Simon V, Ndung'u T, CAPRISA Acute Infection Team. Association of APOBEC3G genetic variants with HIV-1vif sequence variation and impact on HIV-1 pathogenesis [MOPDA0103]

Preparing for success: Social marketing and ARV-based prevention - September 2013 Think Tank

Abdool Karim S. ARV-based prevention

AIDS Vaccine 2013: Progress, Partnership, and Preservation. Barcelona, 7-10 October 2013

- Bhiman JN, Doria-Rose N, Moore PL, Nonyane M, Abdool Karim SS, Kwong PD, Mascola JR, Morris L. Interplay between broadly cross-neutralizing V2 monoclonal antibodies and autologous viral evolution. [Oral abstract: OA05.03]
- Richardson SI, Mkhize N, Abdool Karim SS, Gray E, Morris L. Role of integren α4β7 in HIV transmission and pathogenesis. [Oral abstract: OA07.02]

010-362¹

- Doria-Rose NA, Moore P, Staupe R, Bhiman J, Ernandes M, Georgiev I, Bailer R, Louder M, O'Dell S, McKee K, Crooks E, Schimdt S, Abdool Karim S, Gorman J, Schramm C, Longo N, Pancera M, Rudicell R, Yang Y, Zhang Z, Zhu J, Binley J, Shapiro L, Kwong P, Morris L, Mascola J. A family og broad and highly potent V1V2-directed HIV-1 neutralizing antibodies with long CDRH3s from a South African seroconevertor. (Abstract: P03.20)
- Schramm C, Doria-Rose NA, Gorman J, Moore PL, Staupe RP, Zhang Z, Yang Y, Bhiman J, Georgiev I, Longo NL, Pancera M, Mullikin JC, Abdool Karim S, Morris L, Kwong PD, Mascola JR, Shapiro L. Long CDR H3 of a broadly-neutralizing antibody is present at recombination. [Abstract: P03.38]
- Wimber CK, Bhiman JN, Gray ES, Tumba NL, Abdool Karim SS, Morris L Moore PL. Escape from HIV-1
 neutralising antibodies drives an increase in plasma neutralization breadth through recognition of multiple
 epitopes and immunotypes. [Abstract: P03.52].
- Chopera DR, Mann J, Mwimanzi P, Omarjee S, Kuang X, Ndabambi N, Goodier S, Martin E, Naranbhai V, Abdool Karim SS, Abdool Karim Q, Brumme Z, Ndung'u T, Williamson C, Brockman M. No evidence for selection of HIV-1 with enhanced Gag-Pro or Nef function among breakthough infections in the CAPRISA 004 tenofovir microbicide trial. [Abstract: P05.19]
- Reddy K, Winkler C, Werner L, Mlisana K, Abdool Karim SS, Ndung'u T. APOBEC3G and -3F induced cytidine deamination and association with viral control in a population with high frequency of the APOBEC3G H186R variant. [Abstract: P0.13]
- Lambson B, Mitchell C, Gray E, Abdool Karim SS, Morris L. Copy number variation of the immunoglobulin heavy chain variable gene 1-69 in HIV-1 Infected individuals. [Abstract: P06.14]
- Archary D, Seaton K, Yates NL, Werner L, Bergin PJ, Liebenberg LJ, Samsunder N, Garrett N, Abdool Karim Q, Abdool Karim SS, Liao H, Passmore J-A, Morris L, Tomaras GD. HIV-1 specific binding antibody fitres in blood predict detection in the female genital tract in women who become infected in the CAPRISA 004 microbicide. [Abstract: P08.02]
- Mkhize NN, Garrett N, Archary D, Hermanus T, Majola N, Samsunder N, Williamson C, Shattock R, Passmore J-A, Abdool Karim SS, Morris L. Potent neutralizing antibodies can be recovered from genital tract using the non-invasive Softcup® technique. [Abstract: P08.03]
- Barnabas SL, Mkhize NN, Masson L, Werner L, Archary D, Mlisana K, Williamson C, Abdool Karim S, Morris L. Levels of HIV gp120-specific binding antibodies in the female genital tract are correlated with genital inflammation. [Abstract: P08.06]
- Ngcapu S, Masson L, Sibeko S, Shey M, Samsunder, Abdool Karim SS, Abdool Karim Q, Passmore J. Hormonal contraception use and HIV-1 risk in the context of prevention research: DMPA and NET-EN dampen immunity in the femal genital tract. [Abstract: P08.17]

HASA Quality Improvement Summit Cape Town, 28-30 Oct 2013

- Ngcobo N, Mansoor LE, Mkhize S, Matlala R, Montague C, Tshabalala M, Abdool Karim S, Abdool Karim Q. Enhancing Access to Sexual Reproductive Health Services in a Public Sector Primary Care Clinic in Rural KwaZulu-Natal, using a Quality Improvement Intervention
- Mvandaba N, Mansoor LE, Tshabalala M, Mngadi K, Abdool Karim SS Abdool-Karim Q. Increasing Cervical Cancer Screening in a Family Planning Clinic using a Quality Improvement Approach

HVTN Conference, Cape Town, South Africa, 25 October

. Abdool Karim S. The End of AIDS: Challenges & Prospects. Closing Plenary

Ragon-CAPRISA-HPP HIV Prevention Workshop, Drakensberg, KwaZulu-Natal, 12-14 November 2013

- Abdool Karim S. Microbicides: State of the field & next challenges
- Abdool Karim S. Recent developments in HIV prevention: Prospects & challenges for ending AIDS

2013 Biomedical HIV Prevention Forum, Abuja, Nigeria, 18th - 20th November, 2013

 Abdool Karim S. Antiretrovirals for HIV prevention: new hope and opportunity. Distinguished Scholar Award Lecture

2012

USAID Microbicide Research & Development Cooperating Agencies' Meeting, FHI 360 Conference Center, Washington, DC, February 7-8, 2012

Abdool Karim SS. Microbicide research at CAPRISA

Howard Hughes Medical Institute, 22 February 2012

Abdool Karim SS. New hope for HIV prevention...

Harvard Global Health Institute, 2 March 2012

Abdool Karim SS. New hope for HIV prevention...

Harvard CFAR Symposium, Boston, 1 March 2012,

- Abdool Karim SS. State of the art: ART and Prevention: local and systemic PrEP and treatment for prevention
- Abdool Karim SS. Adherence, drug exposure & genital tract inflammation impact on HIV prevention: Insights from CAPRISA 004

CROI 2012, Seattle, USA, March 5-8, 2012

- Abdool Karim Q, Abdool Karim SS. Partnering for scientific innovation in HIV prevention and treatment. N'Galy-Mann Lecture. Invited Oral
- Johnson JA, Wei X, Morris L, Abdool Karim SS, Sibeko S, Abdool Karim Q, Kashuba ADM, Passmore J, Hunt G, Heneine W. Sensitive Tenofovir Resistance Screening of HIV-1 from the Genital Tract of Women with Breakthrough Infections in the CAPRISA 004 Tenofovir Gel Trial
- Naranbhai V, Altfeld M, Abdool Karim Q, Abdool Karim S, Carr W, CAPRISA004 TRAPS Team. Natural Killer Cells Targeted Against Autologous in vitro HIV-infected Cells Correlate with HIV Protection in South African Women
- Fischer W, Hunt G, Sibeko S, Naranbhai V, Abdool Karim Q, Abdool Karim S, Morris L, Korber B. Tenofovir Resistance Mutation Frequencies Assessed by Deep Pyrosequencing of Plasma Virus from Breakthrough HIV Infections: CAPRISA 004 Microbicide Trial
- Mkhize N, Gray E, Moore P, Sibeko S, Abdool Karim S, Passmore J-A, Morris L. Broadly Neutralizing
 Plasma Immunoglobulin G Antibodies Transduce to the Female Genital Tract in HIV Infection
- Moore P, Gray E, Wibmer C, Bhiman J, Hermanus T, Madiga M, Nonyane M, Abdool Karim S, Williamson C, Morris L. Evolution of Broadly Neutralizing Antibodies during HIV-1 Infection

Microbicides 2012, Sydney, Australia, 15-18 April 2012

- Abdool Karim SS. CAPRISA 004 two years on: What were the lessons, what are the implications? Opening plenary
- Abdool Karim SS. Biological mechanisms and efficacy. In Symposium Making sense of the PrEP trial results.
- Baxter C, Yende-Zuma N, Tshabalala P, Mansoor L, Abdool Karim Q, Abdool Karim SS. 1% Tenofovir gel use in chronic hepatitis B virus carriers: Results from the CAPRISA 004 trial.
- Buthelezi TJ, Mlangeni MC, Samsunder N, Yende N, Kharsany ABM, Abdool Karim Q, Abdool Karim SS.
 Baseline prevalence of Human Papillomavirus Infection in Women participating in the CAPRISA 004 Tenofovir gel trial in KwaZulu-Natal, South Africa.

Alan Berkman Lecture Columbia University, New York, 25 April 2012

Abdool Karim SS. New hope for HIV prevention...

6th International workshop on HIV treatment, pathogenesis and prevention research in resource-limited settings, Mombasa, Kenya, 8 May 2012

 Abdool Karim SS. Antiretrovirals for HIV prevention: Topical PrEP, Systemic PrEP and Treatment for Prevention

International Workshop on HLA and Immunogenetics. Liverpool, UK May 2012.

 Naranbhai V, de-Assis Rosa D, Qi Y, Altfeld M, Werner L, Ndung'u T, Abdool Karim S, Gram CM, Carrington M. KIR haplotype BB is associated with lower HIV-1 viral loads and higher CD4+ T-cell counts in the first two years after HIV-acquisition in South African women: early findings from the CAPRISA Acute Infection Team.

XIX International AIDS Conference, Washington DC, USA, 22-27 July 2012

Bearnot B, Werner L, Kharsany ABM, Abdool Karim S, Frohlich JA, Abdool Karim Q. Impact of antiretroviral therapy initiation on HIV-positive status disclosure in rural South Africa

MacQueen K, Albert L, Soccop S, van Loggerenberg F, Majola N, Kashuba A, Abdool Karim S, Abdool Karim Q.

AIDS Vaccine 2012, Boston, USA, September 9-12, 2012

- Abdool Karim SS. Current state of microbicides for HIV prevention
- Riou C, Mlisana K, Koup R, RoedererM, Abdool Karim S, de Bruyn G, Williamson C, Gray CM, BurgersWA, on behalf of the CAPRISA 002 Study Team. Increased differentiation coincides with decreased polyfunctionality for HIV but not CMV-specific CD8+ T cell responses.
- Ntale R, Chopera DR, Ngandu NK, Abrahams MR, Assis de Rosa D, Mlotshwa M, Werner L, Woodman Z, Mlisana K, Abdool Karim S, Gray CM, Williamson C, the CAPRISA 002 Study Team. Beneficial HLAmediated viral polymorphisms on the transmitted virus additively influence disease progression in HIV-1 subtype C infection
- Madiga M, Mkhize NN, Moore PL, Gray ES, Sibeko S, Abdool Karim S, Morris L, for the CAPRISA Acute Infection Study Team. The impact of antiretroviral treatment on HIV-1-specific broadly neutralizing antibody responses.
- Tumba NL, Gray ES, Lambson BE, Abdool-Karim SS, Liao H-X, Haynes BF, Alam M, Morris L. Affinity maturation pathway of an anti-MPER neutralizing mAb - CAP206-CH12
- Burgers WA, Muller TL, Kiravu A, Naranbhai V, Sibeko S, Werner L, Abdool Karim Q and Abdool Karim SS. Infrequent, low magnitude HIV-specific T cell responses in HIV-uninfected participants in the 1% Tenofovir microbicide gel trial (CAPRISA004). AIDS Vaccine in Boston, September 2012

SANAC Plenary Meeting, 4 October 2012

 Abdool Karim SS. How South African science helped the world respond to AIDS: South African scientific breakthroughs

IDWeek 2012 (TM), San Diego, CA, October 17- 21, 2012

 Pellett Madan R, Abdool Karim et al. Activity in Female Genital Tract Secretions as a Biomarker of HIV Progression and Acquisition Risk

Mucosal Immunology Conference, Ubizane, South Africa, 14-16 November 2012

 Abdool Karim SS. CAPRISA 004 two years on: Key obstacles, lessons & priority research areas for a higher efficacy microbicide

SA HIV Clinicians Society Conference, Cape Town, 26-28 November 2012

Abdool Karim S A history of HIV research in South Africa: What's next? (Plenary)

2011

Joint Civil Society and MTN CWG meeting, 7 October, Cape Town, South Africa

- SS Abdool Karim. What's happening with tenofovir gel? Access and product availability
 - SS Abdool Karim. Setting the stage: year in review and looking ahead

IRMA and AVAC presentation, 27 September 2011, International teleconference

SS Abdool Karim. Does Africa need a rectal microbicide?

Embury College, 7 September 2011, Durban, South Africa

. SS Abdool Karim. HIV and women in South Africa: New hope in antiretroviral microbicides to prevent HIV

Parliamentary Portfolio Committee Meeting, July, Durban, South Africa

. SS Abdool Karim. HIV and women in South Africa: New hope in antiretroviral microbicides to prevent HIV

National Health Research Summit

 SS Abdool Karim. South African research in HIV/AIDS and TB: Strengths, weaknesses, opportunities and threats

48

6th International Workshop on HIV Transmission, 5-6 July 2011, Rome

SS Abdool Karim. Tenofovir gel and HIV transmission: Insights from the CAPRISA 004 trial



5th SA AIDS Conference, 8 June 2011, Durban, South Africa

- SS Abdool Karim. Future directions in ARV-based prevention: Research agendas, timely opportunities and data caps
- SS Abdool Karim. HIV prevention: the latest biomedical tools
- SS Abdool Karim. What level of research evidence is needed for policy and practice?

Aaron Diamond AIDS Research Center, June 2011, New York

- SS Abdool Karim. Four key lessons from CAPRISA 004: Implications for future PrEP research
- 9th Conference on Research Advances in Clinical Research, ANRS, Paris, 5-6 May 2011
 - SS Abdool Karim. Combination HIV prevention: New opportunities and technologies

Sub-Saharan Africa CFAR Conference, Kampala, 26 May 2011

SS Abdool Karim. HIV and women in Africa: New hope in antiretroviral microbicides to prevent HIV

Keystone Symposia X8, 21 March 2011, Whistler, British Columbia

SS Abdool Karim. Update on microbicide and pre-exposure prophylaxis trials

HIV Center, New York, 24 March 2011

SS Abdool Karim. Microbicides: A new hope for HIV prevention

Merck HIV Chemoprevention Scientific Input Engagement Meeting, 14 March 2011

. SS Abdool Karim. Four key lessons from CAPRISA 004: Implications for future PrEP research

ARV-based prevention: a community and research forum on recent results and what happens next, 1 March 2011, Boston

- SS Abdool Karim. CAPRISA 004 trial update and follow-up steps
- EMBO course, Stellenbosch University, 1 February 2011, Stellenbosch, South Africa
 - SS Abdool Karim. Microbicides: A new hope for HIV prevention

MTN Meeting on next steps for ARV-based prevention, 17 January 2011, Johannesburg

 SS Abdool Karim. Tenofovir gel: Preparing for implementation in the health service: The CAPRISA 008 & 009 trials

2010

HIV Workshop, Durban, South Africa, 15 November 2010

SS Abdool Karim. Topical antiretrovirals for HIV prevention

Microscopy Society of Southern Africa, November 2010

 Naicker T, Sibeko S, Kharsany ABM, Naranbhai V and Abdool Karim SS (2010). HIV-1 passage through the human cervico-vaginal mucosa. 40:13.

HIV Cliniclan's Society Meeting, Durban, South Africa, 15 September 2010

. SS Abdool Karim. Tenofovir gel for HIV and HSV-2 prevention: challenges to implementation

SANAC Workshop, Glenburn Lodge, 23 August 2010

SS Abdool Karim. HIV Prevention Research in South Africa

WHO / UNAIDS Meeting on Next Steps for tenofovir gel, Johannesburg, August 2010

- SS Abdool Karim. CAPRISA 004 Effectiveness & safety of vaginal microbicide 1% tenofovir gel for prevention of HIV infection in women
- SS Abdool Karim. Impact of tenofovir gel on Herpes Simplex Virus Type-2 infection

SANAC Workshop, Glenburn Lodge, 23 August 2010

SS Abdool Karim. HIV Prevention Research in South Africa

XVIII AIDS Conference Vienna, Austria, 20 July 2010

- SS. Abdool Karim, Q Abdool Karim, JA Frohlich, A Grobler, ABM Kharsany, LE Mansoor, C Baxter, S Sibeko, KP Mlisana, L Mtongana, Z Omar, S Maarschalk, N Arulappan, M Mlotshwa, D Taylor on behalf of the CAPRISA 004 Trial Group. Impact of 1% Tenofovir Gel on Resistance, Pregnancy and Hepatitis B
- SS Abdool Karim. Overview of the HIV epidemic in sub-Saharan Africa ٠
- ADM Kashuba, SS Abdool Karim, E Kraft, N White, S Sibeko, L Werner, L Mansoor, T Gengiah, S Sidhoo, V Naranbhai, Q Abdool Karim on behalf of the CAPRISA 004 Team. Do systemic and genital tract tenofovir concentrations predict HIV seroconversion in the CAPRISA 004 tenofovir gel trial?
- BG Williams, SS. Abdool Karim, EG, Q Abdool Karim. Potential impact of tenofovir gel on the HIV epidemic in South Africa
- SS Abdool Karim. Current and planned HIV prevention trials: microbicides and PrEP

Microbicides 2010 Conference, Pittsburg, May 23, 2010

- SS. Abdool Karim. Does Africa need a rectal microbicide?
- SS. Abdool Karim. HIV Prevention Research. The Global Picture. 6
- SS. Abdool Karim. Current and planned HIV prevention trials: microbicides and PrEP
- Gengiah T, Mansoor L, Naidoo A, Upfold M, Naidoo K, Maharaj B, Moodley B, Abdool Karim Q, Abdool Karim S on behalf of the CAPRISA 004 Wisebag study team. The "Wisebag": an innovative strategy for enhancing measurement of microbicide gel use in clinical trials. [Oral Abstract 57]
- Sibeko S, Baxter C, Yende N, Mthongana L, Abdool Karim Q, Abdool Karim S, on behalf of the CAPRISA 004 Team. Improving contraceptive uptake and reducing pregnancy rates in a microbicide trial. [Oral Abstract 5]
- Mansoor L, Abdool Karim Q, Yende N, Abdool Karim SS on behalf of the CAPRISA 004 study team. Measuring Adherence in the CAPRISA 004 Tenofovir Microbicide Gel Trial. [Poster Abstract 260]
- Mtongana L, Omar Z, Miya N, Mansoor L, Yende N, Abdool Karim SS, Abdool Karim Q, on behalf of the CAPRISA 004 Team. Does exclusion of study volunteers for renal, hepatic and bone related safety concerns impact the representativeness of the study population in a tenofovir trial: Experiences of the CAPRISA 004 trial? [Poster Abstract 280]
- Kharsany A, Abdool Karim Q, Abdool Karim SS, Frohlich JA, Mlisana K, Grobler A, Yende N, on behalf of the CAPRISA 004 Team. Urban - rural differences in baseline characteristics of CAPRISA 004 trial participants. [Poster Abstract 286]
- Maarschalk S, Frohlich J, Ntombela F, Mlotshwa M, Abdool Karim SS, Abdool Karim Q, on behalf of the CAPRISA 004 team. Structured tools for assessing literacy levels and comprehension assessment in the informed consent process: Experiences from a Microbicide trial in rural KwaZulu Natal, South Africa. [Poster Abstract 281]
- Frohlich J, Maarschalk S, Ntombela F, Abdool Karim Q, Abdool Karim SS, on behalf of the CAPRISA 004 Recruitment and Retention Team. Innovative strategies in a Phase IIb microbicide trial results in high retention: Experiences from CAPRISA 004. [Poster Abstract 285]

MMCI Annual Meeting, Crystal City Marriot, Arlington, VA, Friday, 19 March 2010

SS Abdool Karim. Plans for communicating the results of CAPRISA 004

World Health Organisation, Geneva Switzerland, 17 February 2010

SS Abdool Karim. The evolution of the HIV epidemic in South Africa.

Mini-symposium: HIV Epidemic in Africa: learning from cohorts, Durban, South Africa 10 March 2010 SS Abdool Karim. Twenty years experience in establishing cohorts for HIV studies: Lessons learnt

2nd National Conference on HIV/AIDS Therapy: Current practice and future options Mumbai, India, 10 January 2010

SS Abdool Karim. Research Agenda for Resource Limited Settings: Lessons Learnt & Directions for the Future ŵ

Council on Foreign Relations Global Health Meeting, Cape Town, 21 January 2010

SS Abdool Karim. HIV prevention in South Africa: Is the NSP target of 50% reduction in HIV incidence feasible? A response

2009

5th IAS Conference on Pathogenesis, Treatment and Prevention Cape Town, South Africa, 19-22 July 2009

010-366



- Abdool Karim S. Microbicide Trials: Current and Future Strategies
- M.C. Madiga, E. Gray, P. Moore, K. Mlisana, S.Abdool Karim, C. Williamson, L. Morris. Development of intra- and inter-subtype cross-neutralizing antibodies in HIV-1 subtype C infection (Abstract MOPEA003)
- K.B. Alexandre, B. Lambson, E. Gray, R. Chikwamba, K. Mlisana, S.Abdool Karim, J. McMahon, B. O'keefe, L. Morris. Entry inhibition of HIV-1 subtype C from blood and vaginal mucosa by the lectins griffithsin, cyanovirin-N and scytovirin: potential HIV microbicides (Abstract WEPDC206)
- Naidoo, K. Naidoo, S. Abdool Karim, N. Padayatchi, T. Gengiah, A. Singh, M. Khan, N. Yende, M. Murrman, G. Friedland. Impact of integrating TB and HIV care on adherence to anti-TB therapy and antiretroviral therapy, results from the Starting Tuberculosis and Anti-Retroviral Therapy - START study (Abstract WEPED189)

Harvard Initiative for Global Health (HIGH), 22 May 2009

Abdool Karim S. Microbicides: A glimmer of hope for HIV prevention

MTN Annual Meeting, Arlington, Virginia, USA, 21 April 2009

 Salim Abdool Karim, Pamina Gorbach, Lisa Maslankowski, Irving Hoffman, Tom Moench, Al Profy, Barbra Richardson on behalf of the HPTN 035 Study Team. HPTN 035: Safety and Effectiveness of the Vaginal Microbicides BufferGel and 0.5% PRO 2000 Gel for the Prevention of HIV Infection in Women

Conference on Retroviruses and Opportunistic Infections Montreal, February 2009

- Salim S Abdool Karim on behalf of: Anne Coletti, Barbra Richardson, Gita Ramjee, Irving Hoffman, Michael Chirenje, Taha Taha, Muzala Kapina, Lisa Maslankowski, Estelle Piwowar, Benoit Masse, Sharon Hillier, Lydia Soto-Torres and the HPTN 035 Team. Safety and Effectiveness of Vaginal Microbicides BufferGel and PRO 2000 Gel for the Prevention of HIV Infection in Women. Results of the HPTN 035 Trial
- Salim S. Abdool Karim on behalf of : Kogieleum Naidoo, Anneke Grobler, Nesri Padayatchi, Andrew Gray, Jacqueline Plenaar, Tanuja Gengiah, Gonasagrie Nair, Sheila Bamber, Aarthi Singh, Munira Khan, Wafaa El-Sadr, Gerald Friedland and Quarraisha Abdool Karim. Addressing challenges in treating TB-HIV coinfected patients. The SAPiT Trial: Starting Antiretroviral therapy at three Points in TB

Highway Hospice Annual General Meeting, Durban South Africa 29 April 2009

Salim S. Abdool Karim. HIV/AIDS and TB in South Africa

Harvard Center for AIDS Research Conference Series, Boston, USA, 22 May 2009

- Salim S. Abdool Karim. Challenges in treating TB and HIV
- Salim S. Abdool Karim. Challenges in treating HIV-TB co-infection

2008

AIDS Vaccine Initiative (IAVI) Opening of the new AIDS Vaccine Design and Development Laboratory, Brooklyn Army Terminal, New York, 12 November 2008

Abdool Karim S. AIDS pandemic and HIV prevention strategies

UNAIDS Workshop – The future of UNAIDS, Durban, South Africa, 17th November 2008

Abdool Karim S. AIDS Research: Contributions to controlling HIV: Role of UNAIDS in Research

World Health Organization/University of Nanjing Symposium, Scientific, regulatory and public health aspects of microbicide research and development, Nanjing, China, 3-6 November 2008

- Abdool Karim S. Research design: Why undertake clinical trials
- Abdool Karim S. Microbicide regulation in South Africa
- Abdool Karim S. Microbicides and the community

Bio2Biz, Johannesburg, South Africa, 15th September 2008

 Abdool Karim S. Clinical development and testing of Tenofovir microbicide gel: A South African biotech initiative

AIDS 2008 Vaccine Meeting, Cape Town, South Africa, 13-15 October 2008

· Abdool Karim S. Antiretroviral Prophylaxis: Point of convergence in the scientific agendas for pre- and post-

10-367

exposure prophylaxis, microbicides & perinatal HIV prevention

- Treumicht FK, Mlotshwa M, Mlisana K, Woodman Z, Abrahams M-R, Bredell W, Bandawe G, Martin D, Abdool Karim SS, Gray C, Williamson C and the CAPRISA 002 Acute Infection Study Team. HIV-1 subtype C superinfection associated with a shift in CTL responses and transient increase in viral load.
- Bandawe G, Martin D, Treurnicht F, Mlisana K, Abdool Karim S, Williamson C and the CAPRISA Acute Infection Study team. Positive selection in HIV-1 subtype C gp41 in acute and chronic infection.
- Mlotshwa M, Riou C, van Loggerenberg F, Mlisana K, Williamson C, Abdool Karim S and Gray CMand the CAPRISA 002 study team. Rapid evolution of HIV specific T cell responses within the first six months of subtype C infection
- Moore PL, Ranchobe N, Lambson BE, Gray ES, Abrahams M-R, Mlisana K, Abdool Karim SS, Williamson C, Morris L, the CAPRISA Acute Infection Study Team and CHAVI. Analysis of Neutralization Escape Suggests Limited Neutralizing Antibody Specificities in Early HIV-1 Subtype C infection.
- Riou C, Burgers WA, Mlotshwa M, de Assis Rosa D, Mlisana K, Koup R, Roederer M, Abdool Karim SS, Williamson C, Gray CM and the CAPRISA 002 Study Team. Less Differentiated and more long-lived CD8+ T memory cells during early subtype C HIV-1 infection Correlates with Lower Viral Set Point.
- Lambson BE, Moore PL, Abrahams M-R, Mlisana K, Abdool Karim SS, Williamson C and Morris L. Generation
 of multiple HIV-1 subtype C envelope single-genome amplification (SGA) products from cervico-vaginal lavage
 samples from the CAPRISA Acute Infection cohort
- Roberts L, Passmore J, Bebell L, Iriogbe I, Williamson C, Mlisana K, Van Loggerenberg F, Abdool Karim Q, Abdool Karim S. Elevated inflammatory cytokines in the female genital tract during acute HIV-1 infection correlate with enhanced CD4 and T-cell decline and higher viral load at set point.

Center for HIV/AIDS Vaccine Immunology (CHAVI) Clinical Site Meeting, Cape Town, South Africa, 11-12October 2008

Abdool Karim S. Identifying acute HIV infection: Interim results from CHAVI 001

AIDSXVII Conference, Mexico City, 3-8 August 2008

- · Abdool Karim S.S including: ART containing vaginal microbicides in the clinical pipeline: status of the studies
- Milsana K; Feinstein A; Sobieszczyk M; Werner L; Williamson C; van Loggerenberg F and Abdool Karim S. Clinical features of Acute Subtype C HIV-1 Infection associated with disease progression in South African Women
- Abdool Karim Q, Meyer-Weitz A, Mboyi L, Carrara H, Mahlase G, Frohlich JA, Abdool Karim SS. The influence
 of AIDS stigma and discrimination and social cohesion on HIV testing and willingness to disclose HIV in rural
 KwaZulu-Natal, South Africa
- Sobieszczyk M; Mlisana K; Feinstein A; Werner L; Auld S; Williamson C; van Loggerenberg F and Abdool Karim S. Metabolic Abnormalities in South African Women Acutely Infected with HIV-1 Subtype C.

Keystone Workshop, Fairmont Banff Springs, Canada, 27 March-01 April 2008

- Burgers WA, Williamson C, Mlisana K, Abdool Karim S, Roederer M, Koup R, Gray C and the CAPRISA 002 study team. Function and phenotype of T cell responses in acute HIV-1 subtype C infection
- Mlotshwa M, Riou C, Khoury G, van Loggerenberg F, Mlisana K, Williamson C, Abdool Karim S and Gray CM and the CAPRISA 002 study team. IL-2+ CD4+ T cell responses, but not INF-g+ CD8+ T cell responses, predict HIV-1 disease progression in subtype C acutely infected subjects.

3rd International Conference on HIV Treatment Adherence, Jersey City, New Jersey, 17-18 March 2008

 van Loggerenberg F, Murrman M, Naidoo K, Abdool Karim SS and Grant A, for the CAPRISA 058 study team. CAPRISA 058: Development of an enhanced adherence support programme (E-ASP) for Highly Active Antiretroviral Therapy (HAART) in Durban, South Africa

Microbides 2008 Conference, New Delhi, India, 25 February 2008

- Abdool Karim S. Opportunities & Challenges of Microbicide Research in Africa
- Frohlich JA, Ntombela F, Abdool Karim Q, Abdool Karim SS on behalf of the CAPRISA 004 team. Multidimensional Approach to Community Preparedness – Experiences. From Rural KwaZulu-Natal, South Africa.
- Kharsany ABM, Frohlich JA, Mlisana KP, Abdool Karim SS, Abdool Karim Q on behalf of the CAPRISA 050/051 team. High HIV incidence rates in young women in urban and rural KwaZulu-Natal: Experiences in preparation for the CAPRISA 004 Phase IIb Tenofovir Gel Trial

- Maarschalk SN, Kharsany ABM, Frohlich J, Mlothswa M, Mbambo S, Ndimande C, Phungula B, Manyoni N, Ngwenya P, Zwane P, Luthuli L, Mkhize Z, Ngobeni P, Abdool Karim Q, Abdool Karim SS on behalf of the CAPRISA 004 team. A structured tool for assessing Literacy Levels and Linguistic Preferences in preparation for the informed consent process: Experiences from the CAPRISA 004 Phase IIb Tenofovir Gel Trial
- Baxter C, Frohlich JA, Kharsany ABM, Sibeko S, Maarschalk S, Arulappan N, Abdool Karim SS, Abdool Karim Q on behalf of the CAPRISA 004 Team. Contraceptive provision and choices among women participating in the CAPRISA 004 Phase IIb Tenofovir Gel Trial in urban and rural KwaZulu-Natal, South Africa
- Mansoor LE, Abdool Karim Q, Madlala B, MacQueen K, Mlotshwa M, van Loggerenberg F, Abdool Karim SS on behalf of the CAPRISA 004 team. Development of Materials and Tools for the Adherence Support Program in CAPRISA 004 Phase IIb Tenofovir Gel Trial

CROI 2008, Boston, United States, 3-7 February 2008

- Chopera DR, Woodman Z, Mlotshwa M, Martin DP, Seoighe C, Assis de Rosa D, Mlisana K, Abdool Karim S, Gray CM, Williamson C. Transmission of HIV-1 CTL escape variants provides HLA-mismatched recipients with a survival advantage
- Williamson C, Abrahams M, Treurnicht F, Seioghe C, Wood N, Passmore J, Bebell L, Mlisana K, Hahn B, Abdool Karim S. The Majority HIV-1 Subtype C Infections are a Result a Single HIV-1 Variant Transmission, with Multiple Variant Transmission Associated with Increased Inflammatory Cytokines in Genital Secretions
- Moore PL, Gray ES, Choge IA, Ranchobe N, Mlisana K, Abdool Karim SS, Williamson C, Morris L, the CAPRISA 002 study and the CHAVI Consortium. The C3-V4 Region Is A Major Target Of Autologous Neutralizing Antibodies In HIV-1 Subtype C Infection

2007

IOM Committee on Methodological Challenges in HIV Prevention Trials, Washington, United States, 6-7 February 2007

- Abdool Karim S. HIV incidence estimation for prevention trials
- Abdool Karim S. Phase IIb trial to assess the safety & effectiveness of the vaginal microbicide 1% Tenofovir gel for the prevention of HIV infection in women in South Africa

UN Country Representatives HIV/AIDS Workshop for Southern Africa, Johannesburg, South Africa, 19-21 March 2007

Abdool Karim S. Why is HIV hyper-endemic in South Africa?

HIV Infection and the Central Nervous System: Developed and Resource-Limited Settings, Venice - San Servolo, Italy, 14-16 April 2007

Abdool Karim S. Evolving challenges in treatment implementation in resource poor countries

Biomedical Research Ethics Forum, Durban, South Africa , 11 April 2007

Abdool Karim S. Ethics challenges in testing new interventions for HIV prevention and reproductive health

Centers for Disease Control and Prevention, Atlanta, United States, 1 May 2007

Abdool Karim S. HIV incidence estimation for prevention trials

Royal Society of South Africa, Pietermaritzburg, South Africa, 9 May 2007

Abdool Karim S. HIV/AIDS in South Africa

3rd South African AIDS Conference, Durban, South Africa, 5-8 June 2007

- Abdool Karim S. Progress in developing technologies for HIV prevention: HIV vaccines and microbicides
- Abdool Karim S. Research design 101:An update on current HIV prevention studies in South Africa
- Abdool Karim S. TB and HIV treatment evolving challenges
- van Loggerenberg F, Mlisana K, Williamson C, Auld SC, Morris L, Gray C, Abdool Karim Q, Grobler A, Barnabas N, Iriogbe I, Abdool Karim SS, for the CAPRISA 002 Acute Infection Study Team. HIV incidence rates and challenges in establishing a cohort at high risk of HIV infection in KwaZulu-Natal, South Africa: Experiences of the CAPRISA Acute Infection Study
- Choge I, Gray ES, Moore PL, Mlisana K, Abdool Karim SS, Williamson C, Morris L and the CAPRISA 002 study teamGeneration of functional envelope HIV-1 subtype C V1/V2 chimeras for use in pseudovirion neutralization assays

- Ranchobe N, Choge IA, Bandawe G, Abrahams M, Gray ES, Woodman Z, Mlisana K, Abdool Karim SS, Williamson C, Morris L, Moore PL and the CAPRISA 002 study team Cloning functional HIV-1 subtype C envelope genes from single viral RNA genomes for the investigation of neutralization escape in HIV-1 subtype C infected individuals
- Leseka N, Gray ES, Moore PL, Decker JM, Mlisana K, Shaw GM, Abdool Karim SS, Williamson C, Morris L and the CAPRISA 002 study team.CD4i and Anti-MPER Antibody Responses in Subtype C Acute HIV-1 Infection
- Moore PL, Gray ES, Choge IA, Decker JM, Bibollet-Ruche F, Li H, Leseka N, Treurnicht F, Mlisana K, Shaw Gm, Abdool Karim SS, Williamson C and Morris L and the CAPRISA 002 study team Neutralizing antibody responses in acute HIV-1 subtype C infection
- Maarschalk S, Abdool Karim Q; Alsi P; Frohlich J; Werner L; Abdool Karim S. Impact of ARVs on positive HIV status disclosure and Anti-Retroviral treatment outcomes in patients in a rural AIDS treatment project in KwaZulu-Natal
- Wood N, Bandawe, G, Mlisana K, Abdool Karim S, Williamson C, Seoighe C. Re-evaluating the evidence for a reduced length of the HIV-1 envelope variable loops in acute infection
- Mlotshwa M, Khoury G, van Loggerenberg F, Mlisana K, Williamson C, Abdool Karim S, Gray CM and the CAPRISA 002 study team. HIV specific T cell responses at the acute stage of HIV-1 subtype C infection
- Chopera DR, Woodman Z, Mlotshwa M, Hide W, Gray C, Mlisana K, Abdool Karim S, Williamson C. Characterisation of CTL escape mutations in gag and nef in early HIV-1 infection.
- Treurnicht FK, Wood N, Woodman ZL, Mlisana K, Abdool Karim SS, Seoighe C, Williamson C and the CAPRISA 002 Study Team. Genetic signatures in full-length genomes from acute infection HIV-1 subtype C from KwaZulu Natal, South Africa
- Woodman Z, Nofemele A, Grobler J, Morris L, Abdool Karim S, Williamson C. Investigation of the role of HIV-1 Env viral entry efficiency on transmission and disease progression in individuals infected with more than one strain of HIV-1

AIDS Vaccine conference, in Seattle, Washington, USA, 20-23 August 2007

 Moore PL, Choge IA, Gray ES, Ranchobe N, Mlisana K, Abdool Karim SS, Williamson C and Morris L and the CAPRISA 002 study team. Role of Anti-V1V2 Antibodies in Autologous Neutralization of Acute HIV-1 Subtype C viruses.

IAVI Board Meeting Southern Africa, 19-22 June 2007

- Abdool Karim SS. Overview of clinical trials of HIV/AIDS prevention in Southern Africa
- Royal Society of Tropical Medicine & Hygiene Conference, London, UK, 13 September 2007
 - Abdool Karim SS. Trials and tribulations of TB HIV co-infection

MTN VOICE study, Community Working Group. 20 October 2007

Abdool Karim SS. What is Pre-Exposure Prophylaxis? (PrEP)

HIV Advisory Board Meeting, Royal Windsor Hotel, Brussels, 27-21 October 2006

Abdool Karim SS. Incidence and prevalence of HIV/AIDS

2006

AIDS Vaccine 2006, Amsterdam, 29 August – 1 September 2006

 Burke D, Abdool Karim SS, Russel N, Wecker M, Allen M, Tomaras G, Ferarri G, Gray C, Gilbert P, Chulay J. Safety and Immunogenicity of an Alphavirus Replicon HIV Gag Vaccine (AVX101) in Healthy HIV-uninfected Adults

International AIDS Conference, Toronto, Canada, 12- 17 August 2006

- Abdool Karim SS. Integrating TB and HIV programs and services: the dilemma. WHO Workshop
- Burke D, Abdool Karim SS, Russel N, Wecker N, Allen M, Ferarri G, Gray C, Gilbert P and Chulay J. Safety and Immunogenicity of an Alphavirus Replicon HIV Gag Vaccine (AVX101) in Healthy HIV-uninfected Adults
- Mlisana K, Williamson C, van Loggerenberg F, Iriogbe I, Auld S, Grobler A, Morris L, Gray C, Abdool Karim SS for the CAPRISA 002 Acute Infection Study Team. CAPRISA 002 Acute Infection Study: early clinical and laboratory parameters including CD4+ cell counts and viral load measurements in acute HIV-1 subtype C infection. [abstract number CDA0047]

010-370

- Bebell L, Passmore J, Williamson C, Mlisana K, Iriogbe I, Abdool Karim S. Clinical Correlations of Inflammatory Cytokines in the Female Genital Tract during Acute HIV-1 Infection. [Abstract number: MOAX0102]
- Mashego M, Abdool Karim Q, Sayana S, Carrara H, Frohlich J, Sobieszczyk M, Mlotswa M, Mbambo S, Abdool Karim SS. Use of a Clinical Evaluation Tool to identify early and acute HIV infection in a cohort of HIV negative women in rural South Africa. [Abstract number: CDBO140]
- Kharsany ABM, Carrara H, Ncama BP, Abdool Karim SS, Abdool Karim Q. Feasibility of Establishing Cohorts for Phase IIB/III HIV Prevention Trials in Sexually Transmitted Diseases (STD) Primary Care Clinics in Durban, South Africa. [Abstract number: TUPE0449]
- Wiseman RC, Padayatchi N, Carrara H, Naidoo, Singh A, Nair G, Khan M, Abdool Karim SS. Response to ARV therapy among patients with CD4 counts below 50 cells/mm3 in a resource-constrained setting in South Africa
- Carrara H, Abdool Karim Q, Frohlich J, Mashego M, Mlotswa M, Mbambo S, Abdool Karim SS. Comparing HIV incidence rates derived from modeling cross-sectional HIV prevalence data to that obtained from longitudinal studies of HIV negative persons – implications for sample size and accrual in HIV prevention efficacy trials [Abstract number: CDCO354]
- Kharsany ABM, Cele Z, Coetzee K, Carrara H, Ncama BP, Abdool Karim SS, Abdool Karim Q. Use of a stepwise pooling algorithm for the detection of HIV RNA for screening for Acute HIV-1 infection in a STI clinic Population in Durban, South Africa. [Abstract number: MOPE0132]
- Mlotshwa M, Khoury G, van Loggerenberg F, Mlisana K, Williamson C, Abdool Karim S, Gray C. Breadth and Magnitude of HIV-specific T cell recognition at the acute stage of subtype C infection does not correlate with vireamia
- Mlisana K, Auld S, Iriogbe I, Sobieszczyk M, Grobler A, Williamson C, Abdool Karim SS, and the CAPRISA Acute HIV Infection Study Team
- Bandawe GP, Treunricht F, Woodman Z, Mlisana K, Morris L, Loggerenberg F, Abdool Karim SS, Williamson C for the CAPRISA 002 Acute Infection Study Team. Genetic characteristics of GP160 in acute HIV-1 subtype C infection that may impact disease progression

8th Brazilian Congress of Collective Health and 11th World Congress of Public Health- Public Health in a Globalized World: Breaking down /Political, Social and Economic Barriers in Rio de Janeiro, Brazil, 21-25 August 2006

Abdool Karim SS. AIDS in Africa: impacts on health and demographic patterns. (Invited speaker)

PACT conference, Cape Town, South Africa, 3 October 2006

Abdool Karim SS. The State of the HIV epidemic in South Africa. (Invited keynote speaker)

SARETI, Senegal, 11-12 October 2006

Abdool Karim SS. HIV counseling and testing: demands and dilemmas for opting out. (Invited speaker)

Bio2Biz, Durban, South Africa, September 2006

Abdool Karim SS. Microbicides and their role in HIV prevention. (Invited speaker)

Congressional Briefing: Capitol Hill, Washington, USA, 18 July 2006

Abdool Karim SS. Microbicide Clinical Trials: Needs and Challenges. (Invited speaker)

HIV Prevention Workshop, St George's Hotel Cape Town, South Africa, 22 April 2006

Abdool Karim SS. Microbicides & their role in the prevention agenda. (Invited speaker)

Office of AIDS Research Advisory Council (OARAC) Meeting, Durban South Africa, 6 April 2006 • Abdool Karim SS. Microbicide Clinical Trials: Current Status and Challenges. (Invited speaker)

GlaxoSmithKline HIV Advisory Board Meeting, Royal Windsor Hotel, Brussels, 25 October 2006 • Abdool Karim SS. HIV epidemiology relevant to HIV vaccine design & trials. (Invited speaker)

IAVI 2006 Global Team Meeting, 18 September 2006

Abdool Karim SS. Engaging Innovative Developing Countries' Research Engine. (Invited speaker)

SIDA 2006, Buenos Aires, 8th September 2006

010-371

- Abdool Karim SS. Voluntary counseling and testing: is it time to opt out? (Invited keynote speaker)
- Abdool Karim SS. Microbicides for the Prevention of HIV. (Invited keynote speaker)

European & Developing Countries Clinical Trials Partnership (EDCTP) Conference, 3 October 2005

 Abdool Karim SS. Global progress on the development of HIV vaccines and microbicides. (Invited keynote address)

2nd South African AIDS Conference Durban, South Africa 9 June 2005

- Abdool Karim SS. New Generation Microbicides. Invited Plenary
- Carrara H, Mashego M, Mlotswa M, Mbambo S, Frohlich J, Abdool Karim SS, Abdool Karim Q. Coital frequency, condom use and HIV incidence rates in a cohort of young women in rural KwaZulu Natal: the need for additional HIV prevention strategies.
- van Loggerenberg F, Mlisana K, Grobler A, Abdool Karim SS. Self-reported anal sex: Perceptions of risk and preferences for practise in a cohort of female sex workers.
- Barkhan D, Paximadis M, Mathebula T, Mohube P, Makgotho P, Mashiloane M, Cutler E, Magooa P, Puren A, van Loggerenberg F, Misana K, Williamson C, Abdool Karim S, Gray CM. Associations between Class I HLA types and disease status in individuals from southern Africa infected with HIV-1 subtype C
- Iriogbe I, Dube T, Grobler A, Cheune J, Khan M, Burst J, Edward D, Nadioo K, Abdool Karim SS. The role of a Non-governmental organization (NG O) in an HIV-1 endemic region.

3rd IAS Conference on HIV Pathogenesis and Treatment, Rio de Janeiro, 24-25 July 2005

- Abdool Karim SS. Impact of antiretroviral therapy on HIV prevention. (Invited plenary address)
- Williamson C, Grobler J, Seoighe C, Ramjee G, Morris L, Abdool Karim SS. Lower rates of adaptive evolution in HIV-1 dual infections compared to single infections

Presidents Emergency Plan for AIDS Relief (PEPFAR) Planning Meeting, Pretoria, South Africa, 4 May 2005

Abdool Karim SS. PEPFAR-funded CAPRISA AIDS Treatment (CAT) Programme

2004

National Institutes of Health, Washington, USA, 26 March 2004

Abdool Karim SS. AIDS Research in South Africa: Trials and Tribulations (Invited talk)

2nd International Workshop on Acute HIV-1 Infection, Bethesda, Washington, USA, 3-4 May 2004

Abdool Karim SS. Acute HIV infection in high prevalence settings: Opportunities and constraints (Invited talk)

Clinical Conference, Nelson R Mandela School of Medicine, Durban, South Africa, 12 May 2004

 Abdool Karim SS. Impact of HAART on HIV prevention and mortality – implications for the ART rollout programme (Invited talk)

Aurum Health Research - VTN visit, Orkney, South Africa, 18 May 2004

Abdool Karim SS. The role of HIV vaccines in fighting the HIV epidemic (Invited talk)

XV International AIDS Conference, Bangkok, Thailand, 11-16 July 2004

- Kharsany, ABM, Frohlich J, Mashego M, Makhaye GM, Abdool Karim SS. Epidemiology of STDs among rural women in Vulindlela, South Africa: Challenges for HIV prevention
- Churchyard GJ, Charalambous S, Smit J, Sefuthi C, Calver A, Pemba AD, Corbett EL, Fielding K, Chiasson R, Abdool Karim SS. The clinical spectrum of mycobacterial disease occurring early in antiretroviral therapy among gold miners in South Africa.
- Frohlich J, Makhaye GM, Kharsany, ABM, Abdool Karim SS, Abdool Karim Q. Temporal trends in HIV infection in rural South Africa: Implications for HIV prevention research.
- Harrison AD, Cleland J, Gouws E, Frohlich J, Abdool Karim SS. Sexual networking and partner choice: contextual determinants of high risk partnerships among rural South African youth.

AIDS Vaccine 2004, Lausanne, Switzerland, 30th August – 1st September 2004.

- Morafo V, Singh B, Khoury G, Masemola A, Mashishi T, Paximadis M, Barkhan D, Puren A, Williamson C, Abdool Karim S, Gray C. Immunological reactivities of subtype B-derived CTL epitopes in subtype C HIV-1 infected individuals.
- School of Development Studies Conference, Durban, South Africa, 21-22 October 2004
 Abdool Karim SS. Biomedical Perspectives on HIV/AIDS
 - Abdool Karim SS. biomedical Perspectives on HIV/AIDS
- HIV Pathogenesis Programme, Durban, South Africa, 1-2 October 2004
 - Abdool Karim S. Addressing the challenges of rolling out AIDS treatment in South Africa
- IASO 1st Regional Congress Sun City, 28-31 October 2004
 - Abdool Karim SS. The evolving HIV epidemic in South Africa

8th World STI/AIDS Congress Uruguay, 4 December 2003

- Abdool Karim SS. Microbicides for HIV and STI prevention. Plenary address
- International ethical guidelines for research involving human subjects, Santiago, Chile, 15-17 October 2003 • Abdool Karim S. Global inequities: implications for developing country research
- International Academic Workshop on emerging Diseases, China, 26 October 2003
 - Abdool Karim SS. CAPRISA: an overview of a South African CIPRA

FDA Antiviral Advisory Committee (AVAC), 20 August 2003

· Abdool Karim SS. HIV/AIDS and STIs in Women: the urgent need for an efficacious microbicide

23rd Medicine Update, Durban, South Africa, 17 August 2003

Abdool Karim S, Vinodh Gathiram Memorial Lecture: HIV - an evolving epidemic in KwaZulu-Natal

Conference on Retrovirus and Opportunistic Infections, Boston, USA< 10-14 February 2003

Jack C, Friedland G, Lalloo U, El-Sadr W, Cassol S, Murrman M, Abdool Karim Q, Abdool Karim S. Integration
of Antiretroviral Therapy into an existing tuberculosis directly observed therapy program in a resource
constrained setting (START study) [Abstract # 783]

SA AIDS Conference, Durban, South Africa, 3-6 August 2003

- Abdool Karim Q, Jack C, Friedland G, Lalloo U, El-Sadr W, Abdool Karim SS on behalf of the START team. Integrating TB and AIDS care – a feasible option for resource constrained settings?
- Frohlich J, Abdool Karim Q, Abdool Karim SS. Missed opportunities for treating STI's at a rural primary health care setting in South Africa.
- Frohlich J, Abdool Karim Q, Gouws E, Abdool Karim SS. Community willingness to participate in HIV
 prevention research experiences from rural KwaZulu Natal
- Kharsany A, Abdool Karim Q, Olowolagaba A, Connolly C, Biam K, Abdool Karim SS. Tuberculosis treatment adherence and outcomes within a public health facility in Central Durban.
- Makhaye G, Abdool Karim Q, Abdool Karim SS. HIV Seroprevalence and incidence rates in pregnant women attending antenatal clinics in Vulindlela
- Mashego M, Frohlich J, Makhaye G, Abdool Karim Q, Abdool Karim SS. Community Health Workers key informants in establishing AIDS-related mortality.
- Mlisana KP, van Loggerenberg F, Mkhize M, Morris L, Gray C, Ramjee G, Abdool Karim S. Clinical investigations and natural history of HIV-1 subtype C infection in a female sex worker cohort

2002:

The 25th Biennial Congress of the South African Paediatric Association and the South African Association of Paediatric Surgeons, Wild Coast Sun, South Africa, October 2002

Abdool Karim SS. HIV/AIDS in South Africa (Plenary Address)

010-373

Annual Congress of the Dermatological Society of South Africa, Durban, South Africa, April 2002

Abdool Karim SS. Opening Address

Microbicides 2002, Antwerp, Belgium, 12-15 May 2002

- Morrow K, Rosen R, Richter L, Forbes A, Emans A, Day J, Profy A, Abdool Karim SS, Mayer K. The acceptability of an investigational vaginal microbicide agent, PRO2000 gel. (Abstract C-181).
- Day J, Morrow K, Rosen R, Abdool Karim SS, Emans A, Maslankowski L, Mayer K and the HPTN 020 Protocol Team. How to find out what men think? Lessons learned from a microbicide clinical trial. (Abstract C-248).

2001:

2nd Biannual Molecular & Cell Biology Symposium, Pretoria, South Africa, November 2001

Abdool Karim SS. Epidemiology of HIV/AIDS in South Africa (Invited address)

Allergy Society of South Africa (ALLSA) Congress, Durban, South Africa, October 2001

Abdool Karim SS. The challenge of AIDS (Opening address)

2nd All Africa Anaesthesia Congress: SASA 2001, Durban, South Africa, September 2001

Abdool Karim SS. The epidemiology of HIV/AIDS in South Africa. (Invited address)

AIDS Vaccine 2001, Philadelphia, USA, 5-8 September 2001

- Mashishi T, Hunt G, Loubser S, Nyoka S, Hide W, Williamson C, Ferrari G, Puren A, Ramjee G, Abdool Karim SS, Cao H, Sheppard H, Gray C. Immune recognition of conserved regions within Nef from HIV-1 subtype C infected individuals from southern Africa. (Abstract no: 32)
- Grobler J, Rademeyer C, Morris L, Gray CM, Ramjee G, Abdool Karim SS, Williamson C. Evidence of dual infection with two distinct subtype C viral populations in a female sex worker from KwaZulu-Natal, South Africa. (Abstract no: 93)
- Coetzer M, Cilliers T, Papathanasopoulos MA, Ramjee G, Abdool Karim SS, Williamson C, Morris L. Analysis
 of coreceptor usage among sequential HIV-1 subtype C isolates from acutely infected sex workers in South
 Africa. (Abstract no: 110)
- Papathanasopoulos MA, Morris L, Abdool Karim SS, Williamson C, Ehrenberg PK, McCutchan F. Construction and biological characterization of an infectious HIV-1 subtype C molecular clone. (Abstract no: 269).
- Bures R, Morris L, Williamson C, Ramjee G, Deers M, Fiscus SA, Abdool Karim SS, Montefiori DC. Antibodymediated neutralization of subtype C HIV-1. (Abstract no: S1).

Keystone Symposium: AIDS Vaccines in the New Millennium, March 2001

- Abdool Karim SS. Perspectives from the Developing World on AIDS Vaccine Trials. (Invited Address)
- Williamson C, Malaza AL, Puren AJ, Morris L, Ramjee G, Abdool Karim SS, Gray CM. Investigation of host factors associated resistance to HIV-1 infection in multiply exposed, persistently seronegative sex workers from KwaZulu-Natal, South Africa. (Abstract no: 135)

2000:

2nd National Conference of People Living with HIV/AIDS, Durban, South Africa, March 2000

Abdool Karim SS. Opening Plenary Address

XIII International AIDS Conference, Durban, South Africa, 9 – 14 July 2000

- Puren AJ, Ramjee G, Abdool Karim SS, Gray CM. HLA associations with HIV-1 seronegative sex workers from KwaZulu-Natal, South Africa. (Abstract No: MoOrA228).
- Van Harmelen J, Carr JK, Williamson C, Morris L, Abdool Karim SS, Kim B, McCutchan FE. Analysis of the first full-length genome sequences of South African HIV-1 subtype C isolates. (Abstract No: MoPpA1004).
- Papathanasopoulos M, Cilliers T, van Harmelen J, Abdool Karim SS, Ramjee G, Williamson C, Morris L. Cloning and characterization of HIV-1 subtype C envelope proteins. (Abstract No: MoPeA2018).
- Gouws E, Williams B, Abdool Karim SS, Abdool Karim Q, Lurie M, Harrison A, Colvin M, Sitas F, Ramjee G. Patterns of infection: using age prevalence and incidence data to understand the epidemic of HIV in South Africa. (Abstract No: MoPeC2467).
- Lurie M, Williams B, Sturm AW, Garnett G, Zuma K, Gittlesohn J, Abdool Karim SS. Migration and the spread

010-374

of HIV in Southern Africa: prevalence and risk factors among migrants and their partners, and non-migrants and their partners. (Abstract No: MoPpD1049).

- Hughes G, Hoyo C, Puoane T, Stein Z, Abdool Karim SS. Rural South African women and their risk for undetected sexually transmitted diseases and HIV infection. (Abstract No: MoPeD2779).
- Williamson C, Swanstrom R, Morris L, Thomas R, Ping L-H, Pascual A, Johnston RE, Abdool Karim SS. Selection of a representative HIV-1 subtype C isolate for use in the development of candidate vaccines for Southern Africa. (Abstract No: TuOrA415).
- Malaza AL, Morris L, Ramjee G, Nyoka S, Gray CM, Abdool Karim SS, Williamson C. Studies on multiply exposed but persistently HIV seronegative sex workers from KwaZulu/Natal, South Africa. (Abstract No: TuPpA1228).
- Mashishi T, Hunt G, Bredell H, Morris L, Ramjee G, Abdool Karim SS, Gray C. Conservation of South African HIV-1 subtype C Nef sequences at different stages of disease progression: implications for vaccine strategies. (Abstract No: WeOrA598).
- Connolly C, Ramjee G, Sturm W, Abdool Karim SS. Incidence of sexually transmitted infections among HIV positive sexworkers in KwaZulu/Natal, South Africa. (Abstract No: WePpC1387).
- Rustomjee R, Abdool Karim SS, Kharsany A. A randomized control trial of azitromycin versus doxycycline/ciprobay in the treatment of sexually transmitted chlamydia trachomatis and concomitant neisseria gonorrhoea infections. (Abstract No: WePeC4334).
- Hughes G, Hoyo C, Stein Z, Abdool Karim SS. The effect of oscillating male migration on rural South African women's health: implications for sexually transmitted diseases and HIV/AIDS. (Abstract No: WeOrD518).
- Lurie M, Williams B, Sturm AW, Garnett G, Mkaya-Mwamburi D, Abdool Karim SS. HIV discordance among migrant and non-migrant couples in South Africa. (Abstract No: WeOrD519)
- Gouws E, Abdool Karim Q, Frohlich J, Abdool Karim SS. Preparing for Phase III HIV Vaccine trials: Experiences from rural South Africa. (Abstract No: ThOrD678).

1999:

University of Natal Clinical Conference - 1999.

Abdool Karim SS. HIV/AIDS in South Africa. (Keynote Address)

AIDS vaccine evaluation group meeting, Washington, USA, November 1999

Abdool Karim SS. HIV/AIDS in South Africa: HIV vaccine research opportunities (Invited Address)

13th Meeting of the International Society of Sexually Transmitted Disease Research, Denver, Colorado, USA, July 1999

- Harrison A, Abdool Karim SS, Floyd K, Lombard C. Lurie M. Ntuli N. Wilkinson D, Syndrome packets and health worker training improve quality of sexually transmitted disease case management in rural South Africa: results of a randomised controlled trial.
- Lurie M, Abdool Karim SS, Sturm AW. Migration and the spread of HIV/STD in South Africa: Preliminary data
 on the prevalence of HIV/STD among male migrants and their partners, and non migrant couples.
- Lurie M, Abdool Karim SS, Sturm AW. HIV and STD discordance among migrant and non-migrant couples in South Africa.

1998:

16th Epidemiological Society of Southern Africa Conference, Midrand, South Africa, October 1998.

- Abdool Karim SS. HIV in South Africa: From description to intervention. (Keynote address)
- Wilkinson D, Gouws E, Sach M, Abdool Karim SS. Does removing user fees encourage attendance for curative services at the expense of preventive services?
- Harrison A, Wilkinson D, Lurie M, Abdool Karim SS. Improving quality of sexually transmitted disease (STD) case management: Results of a clinic-randomized intervention trial.
- Harrison A, Jackson E, Ntuli N, Wilkinson D, Lurie M, Abdool Karim SS. Gender, risk perception and protective practices in prevention of sexually transmitted diseases: Impact of rural community health education programme.

4th Reproductive Health Research Priorities Conference, August 1998.

Harrison A, Wilkinson D, Lurie M, Abdool Karim SS. Toward better reproductive health services: Results of a

010-375¢

randomized intervention trial to improve quality of sexually transmitted disease case management.

 Harrison A, Jackson E, Ntuli N, Wilkinson D, Lurie M, Abdool Karim SS. Gender, risk perception and protective practices in prevention of sexually transmitted diseases: Impact of rural community health education programme.

12th World AIDS Conference, Geneva, June-July 1998.

- Panelist: NIAID Satellite symposium on the Rakai Control of STDs for AIDS Prevention Study.
- Abdool Karim SS. Should less developed countries be involved in vaccine development. Global action for an AIDS Vaccine Symposium.
- Ramjee G, Abdool Karim SS. Acceptability of a vaginal microbicide among sex workers in KwaZulu-Natal, South Africa.
- Ramjee G, Abdool Karim SS. Prevalence of sexually transmitted infections including HIV among sex workers in KwaZulu-Natal midlands, South Africa.
- Morar NS, Ramjee G, Wilkinson D, Abdool Karim SS. Intravaginal substance use and douching practices among sex workers in South Africa: implications for microbicide use.
- Morar NS, Ramjee G, Abdool Karim SS. Safe sex practices among sex workers at risk of HIV infection.

1997:

HIV and the Lung Guidelines Meeting, CHEST: Southern Africa '97 Conference, Windhoek, Namibia, August 1997.

Abdool Karim SS. HIV and the Lung. (Opening Address)

3rd Reproductive Health Priorities Conference, Wilderness, South Africa, August 1997.

Abdool Karim SS. Reproductive Health Research Priorities for South Africa. (Keynote Address)

18th African Health Sciences Congress, Cape Town, South Africa, April 1997.

- Harrison A, Wilkinson D, Lurie M, Abdool Karim SS. "Mystery patient" evaluation of quality of care in syndromic management of STDs.
- Wilkinson D, Sach ME, Abdool Karim SS. In search of equity: impact of the policy of free care for children under six and for pregnant women attending rural mobile clinic services in Hlabisa.
- Connolly AM, Wilkinson D, Abdool Karim SS. Management of STDs in private general practice in a rural health district.
- Lurie M, Harrison A, Wilkinson D, Abdool Karim SS. Migration patterns in northern KwaZulu-Natal and their implications for the spread, treatment and prevention of HIV and other STDs.
- Ramjee G, Abdool Karim SS, Morar NS, Gwamanda Z, Xulu G, Ximba T, Gouws E. Acceptability of a vaginal microbicide among sex workers in KwaZulu-Natal, South Africa.
- Wilkinson D, Connolly A, Harrison A, Lurie M, Abdool Karim SS. STD syndromes in rural South Africa: results of health facility surveillance.
- Morar NS, Ramjee G, Gwamanda Z, Abdool Karim SS. Safe sex practices among sex workers at risk of HIV infection.
- Morar NS, Ramjee G, Abdool Karim SS, Vaginal insertion and douching practices among sex workers at truck stops in KwaZulu-Natal.

Joint Congress of the Infectious Diseases and Sexually Transmitted Diseases Society in Southern Africa, Cape Town, South Africa, September 1997

- Connolly AM, Wilkinson D, Harrison A, Lurie M, Abdool Karim SS. Management of sexually transmitted diseases in the private health sector in a rural district.
- Harrison A, Wilkinson D, Lurie M, Abdool Karim SS. Rural adolescents seeking care for STDs: Results from surveillance in primary care facilities.
- Harrison A, Wilkinson D, Lurie M, Abdool Karim SS. Methods for measuring quality of care: Baseline results from an intervention study to improve syndromic management of STDs.
- Lurie M, Harrison A, Wilkinson D, Abdool Karim SS. Health seeking behaviours for STDs in rural South Africa.
- Lurie M, Harrison A, Wilkinson D, Abdool Karim SS. Migration and HIV/STD in rural South Africa: Implications for future study and interventions.
- Wilkinson D, Abdool Karim SS, Harrison A, Lurie M, Colvin M, Connolly C. Unrecognised sexually transmitted diseases among women in rural South Africa - the Hidden Epidemic.

10-37.6*

1996:

XIV International Scientific Meeting of the International Epidemiological Association, Nagoya, Japan, August 1996.

- Abdool Karim SS, Abdool Karim Q. Migration, migrant labour and HIV infection in South Africa.
- Dilraj A, Ramjee G, Abdool Karim SS. Timely reporting and accurate diagnosis of measles in schoolchildren for control of outbreaks.

Pan African Federation for Mother and Child Health (PAFMACH) Conference, South Africa, September 1996.

 Ramjee G, Abdool Karim SS, Morar N, Bechan S. Acceptability of a vaginal microbicide for the prevention of HIV and STD transmission among commercial sex workers.

2nd International working conference on Health Informatics in Africa (Helina '96), Johannesburg, South Africa

- Abdool Karim SS, Abdool Karim Q, Dilraj A, Rustomjee R. Epidemiological Surveillance in South Africa: Strengths, weaknesses and lessons for the future.
- Dilraj A, Ramjee G, Abdool Karim SS. Effectiveness of the school reporting system of communicable diseases for the control of measles.

1994:

The 1994 Annual Conference of the National Occupational Safety Association, Durban, South Africa

Abdool Karim SS. HIV/AIDS: Time to act now. (Keynote address).

1993:

12th Epidemiological Conference, Durban, South Africa, 18-20 August 1993

- Dilraj A, Abdool Karim SS. Gender differences in measles deaths.
- Ziqubu-Page T, Abdool Karim SS, Pillai G, Cassimjee MH. Morar N. Reducing drug costs.

Natal/KwaZulu Hospital Infection Control Society Annual Conference, Durban, South Africa, 1993.

Abdool Karim SS. Epidemiology in Local Authority Health Care Services.

South African Institute of Public Health Annual Conference, Durban, South Africa, 1993.

Abdool Karim SS. Epidemiology in Local Authority Health Care Services.

International Epidemiological Association Conference in Sydney, Australia, 1993.

- Abdool Karim SS, Abdool Karim Q, Dilraj A, Chamane M. Evaluation of a mass measles campaign in South Africa.
- Abdool Karim Q, Abdool Karim SS, Singh B, Ngzongo S, Short R. HIV infection in rural South Africa: Findings
 of an anonymous population-based seroprevalence survey.

1992:

(VIII Journada de Saude) The Mozambican National Institute for Health Conference, Maputo, Mozambique. • Abdool Karim SS, Abdool Karim Q, HIV infection in rural Natal/KwaZulu.

1991:

10th Annual Conference of the Epidemiological Society of Southern Africa, Cape Town, South Africa.

 Abdool Karim SS, Abdool Karim Q, Chamane M. Impact of a mass Measles immunisation campaign on measles admissions to a tertiary hospital.

1990:

9th Annual Conference of the Epidemiological Society of Southern Africa, East London, South Africa.

Abdool Karim SS. Impact of political violence in Natal on emergency surgical services of a tertiary hospital.

10-377 L

The National Emergency Services Group Conference, Port Elizabeth, South Africa.

- · Abdool Karim SS. Impact of the political violence in Natal on emergency surgical services of a tertiary hospital.
- · Abdool Karim SS. Health care of refugees The Durban experience.

1989:

7th Annual Conference of the Epidemiological Society of Southern Africa.

 Abdool Karim SS, Thejpal R, Coovadia HM, van den Ende J, Windsor IM. Household clustering and intrahousehold transmission patterns of Hepatitis B virus infection in South Africa.

1988:

Physicians for Human Rights seminar, New York Academy of Sciences.

- Abdool Karim SS. Health and Human Rights in South Africa.
- "Ten Years after Alma Ata" Conference, National Council for International Health, Washington, USA.
 - Abdool Karim SS. Primary Health Care in South Africa.

1987:

Joint New York Academy of Sciences, America's Watch and the Columbia University Center for the Study of Medicine and Society conference, New York, USA.

Abdool Karim SS. Health and Human Rights in South Africa.

115th Annual Meeting of the American Public Health Association, New Orleans, USA.

- Abdool Karim SS. Health and politics in the current South African scene
- Abdool Karim SS. Public Health in South Africa.

1986:

Seventh Biennial Congress of the South African Paediatric Association, Cape Town, South Africa.

- Abdool Karim SS, Coovadia YM, Windsor IM. The prevalence and transmission of hepatitis B virus infection in urban, rural and institutionalised South African Black Children.
- Abdool Karim SS, Thejpal R, Coovadia HM, van den Ende J, Windsor IM. Familial Clustering of Hepatitis B virus infection in black families from Umlazi, Durban.



"SSAK a





Enquiries: Prof S Abdool Karim E-mail: salim.abdoolkarim@caprisa.org

INTERNAL	MEMO
INTERNAL	IAITIAIC

Date:	e: 11 December 2020		
To:	The Honorable Dr ZL Mkhize, Minister of Health	From:	Ministerial Advisory Committee (MAC) on Covid-19

RECOMMENDATIONS ON DECEMBER PERIOD PROPOSAL

Proposal from the National Department of Health

The National Department of Health (NDoH) as requested guidance on their proposal for the Decemer period. The proposal is outlined below:

It is recommend that as from 21 December 2020 to 08 January 2020 nationally:

1. Gatherings

(1.1) Restrictions on gatherings (religious and sporting events): maximum of 100 people indoors and 250 outdoors – including religious gatherings.

(1.2) After Funeral Parties or any gathering relating to the deceased that has occurred after the deceased has been buried or cremated-are prohibited.

2. Movement of Persons

(2.1) Curfew 22H00-04H00.

(2.2) Commercial/non-essential (including restaurants and bars) establishments to be closed at 21H00 to allow for sufficient time for transit home before enforcement of the curfew.

3. Alcohol Sales and Consumption

(3.1) Alcohol sales restricted to Monday-Thursday 10H00-18H00.

(3.2) On-site consumption of alcohol up until 21H00.

(3.3) No consumption of alcohol in public spaces (including parks and beaches).

(3.4) Registered wineries and wine farms may continue to offer tasting of wines and sale of wine to the public for consumption off site.

4. Controlled access to public entertainment areas (recreational/municipal parks and beaches)

(4.1) All beaches and recreational parks to close between 21 December 2020 to 08 January 2020.
(4.2) On the other dates, municipalities need to manage the numbers on the beaches and recreational parks to avoid overcrowding.

(4.3) Shopping malls and other privately owned venues must define the maximum number of persons permitted to achieve social distancing. If the maximum number is exceeded the owner of the establishment will be liable to a fine.

5. Publication of hotspots

(5.1) All municipalities must publish on their websites and local media, areas considered to be hotspots in their municipalities.

Page 1 of 3

Recommendations

The following considerations were made by the MAC on Covid-19:

- 1. Gatherings:
 - The festive season generally starts from 16 December, and thus proposed that consideration that this period be defined as 16 December 2020 to 8 January 2021.
 - (1.1) Maximum capacity will be an important consideration. It is proposed that point 1.1 be amended a follows: Restictions on gatherings (including but not limited to religious and sporting events): maximum 50% of maximum capacity, to a maximum of 50 people indoors and 250 outdoors.
 - One option for consideration is that larger gatherings (ie. >50 indoors or >250 outdoors) can apply for local government approval and thereby be registered with the police services for appropriate management.

2. Movement of persons

 (2.2) It was proposed that emphasis on NPIs in restaurants/bars/shebeens particularly social distancing and masks (nose and mouth) for staff and clients will be important. Consideration should be given to limiting the number of people in restaurants/bars/shebeens to 50% of their capacity.

3. Alcohol sales and consumption

 Need to emphasize that sale rules apply to shebeens (Eastern Cape previously made an agreement for off site sale of alcohol by shebeens on weekends which is causing problems). Proposed to include as point 3.5

4. Controlled access to public entertainment areas

- Three different views were expressed by MAC members, with no consensus for (4.1). It was suggested that the current 4.1 be considered to be replaced by one of following options, noting that there is no right or wrong view, just a matter of perspective:
 - Close all beaches for duration of the holiday period starting from the date of the anticipated first mass beach attendance to last mass beach attendance (e.g. 16 December to 3 January).

Rationale:

- The scientific rationale for keeping indoor and outdoor mass gatherings small to reduce risk of transmission applies to beaches too. However, it is difficult to control the numbers expected, particularly at certain beaches, which could lead to overcrowding and increase risk of transmission.
- It will be almost impossible to cap the beach attendance at 250 (as for outdoor gatherings). If over-crowding in the tens of thousands of people is allowed on the beach, the clear consistent message on mass gatherings may be lost.
- It is expected that mask wearing and social distancing will not take place, because this is difficult to do on the beach and will be hard to enforce.
- We are now in the second wave with cases doubling by the day. As a result, there is
 a high likelihood that there will be infected individuals within the crowd. Spending long
 period in the midst of infectious individuals under crowded conditions with no masks,
 even if it is in the open, carries a high risk warranting drastic measures.
- Hospitals in areas of the Eastern Cape and KwaZulu-Natal are already quite full, and there will not be capacity to manage extra burden of more potential patients.
 - Close beaches only on certain dates where large crowds are anticipated (16, 24, 25, 26, 31 December 2020, 1 January 2021) with or without the additional option to open the beaches for a few hours only (eg. From 4am to noon) on the remaining days from 16 December to 3 January.

Page 2 of 3

Ration	ale:
	It is expected that particular days around Christmas and New Year's. As seen in previous years, overcrowding at the beaches on these days can be expected.
	high a could be have a few and the baceb aroos which could
	contribute to SARS-CoV-2 spread.
	Instead of closing beaches for the entire holiday period, a compromise of only closing
	on those expected days could be made.
	Closing the beaches completely may lose the public's support. Focusing on targeted
	days may reduce this problem
	 Since beach over-crowding over the holidays may not be a problem at even beach, to allow Municipalities to decide and manage specific beach closure (place and dates) as necessary.
Ration	ale
	A one-size fits all approach may be inappropriate as some beaches may not have an over-crowding problem. Hence, each municipality should undertake as assessment of the risk and make decisions on each beach.
14	Public support will be lost with the closing of all beaches.
ľ	The scientific rationale applied to indoor and outdoor mass gatherings may not be directly applicable to beaches and parks. Outdoor activities with masking and social distancing should be allowed. Hence, beaches that can ensure beach attendance with social distancing and masks should be allowed to open. This could help reinforce the message that it is more important to ensure appropriate behavior through the use of NPIs.
	Will be important to reinforce the laws around the consumption of alcohol in public.
	Not all beaches are equal in terms of expected numbers. Certain beaches, e.g. Durban beachfronts, are expected to have overcrowding, however this may not be the case for all beaches and parks.
	Closing all beaches will have a negative impact on the economy, as those that have booked a holiday at the coast may no longer consider doing this.
	Generally, the closing of beaches may be hard to enforce particularly on specific days with large crowds.
	If beaches/park are closed, there may be increased crowding in other indoor areas
	such as malls.
	 (4.2) Hard to enforce and manage.
Publi	cation of hotspots
1	No changes.

Thank you for consideration of this request.

Kind regards,

Maccash Smith?

PROFESSOR SALIM S. ABDOOL KARIM PROF MARIAN JACOBS CO-CHAIRPERSONS: MINISTERIAL ADVISORY COMMITTEE ON COVID-19 DATE: 11 December 2020

CC:

- » Dr S Buthelezi (Director-General: Health)
- » Dr T Pillay (Deputy Director-General)
- » Incident Management Team

Page 3 of 3 15

010-382

"SSAK 2

Mar 28, 2020, 06:00am ED | 13,051 views

States Are Being Forced Into Bidding Wars To Get Medical Equipment To Combat Coronavirus



Clary Estes Former Contributor ③ 🕀 Healthcare



White House rade and Manufacturing Policy adviser Peter Navarro (R) speaks alongside US President ... [] AFP V A GETTY MAGES

It is no secret that medical supplies needed to combat the Coronavirus (COVID-19) are in critically short supply everywhere. "Every state is vying for the resources." Said Rhode Island Governor, Gina Raimondo. "Frankly, every country. Most countries are vying for the same resources, so it's a challenge." However, the Trump administration had been tentative to invoke his powers under the Defense Production Act, 010-382 which allows him almost unilateral authority to mobilise private industry to product goods in the public interest. It was not until March 27th that Trump ordered General Motors to start producing ventilators under the act despite the fact that "General Motors and Ventec Life Systems on Friday reiterated their plans to make desperately needed ventilators at a GM plant in Indiana."

Before his order, Trump highlighted his frustration with GM industry in a tweet saying, "As usual with 'this' General Motors, things just never seem to work out. They said they were going to give us 40,000 much needed Ventilators, 'very quickly'. Now they are saying it will only be 6000, in late April, and they want top dollar. Always a mess with Mary B. Invoke 'P'." The last sentence being a reference to invoking the Defense Production Act.



New York Governor Andrew Cuomo speaks to the press at the Jacob K. Javits Convention Center in New ... [] AFP V A GETTY MAGES

The effects of this situation have found states in bidding wars amongst each other and the federal government to get critical medical supplies. New York Governor, Andrew Cuomo, has been an outspoken critic of the situation saying, "This is not the way to do it, this is ad hoc, I'm competing with other states, I'm bidding up other states on the prices."

His frustration is understandable as New York City has become the epicenter of COVID-19 cases in the US,

if not the world, and the city has already seen 38,977 COVID-19 cases (as of March 27th) since the crisis started. President Trump stated that he did not believe New York City hospitals really needed "40,000 to 30,000 ventilators," later going on to say, "It's a two-way street. They 010-383 have to treat us well also. They can't say, 'Oh gee, we should get this, we 010-384 should get that.' We're doing a great job."

MORE FOR YOU

What Do You Call A Country Where 5.6% Of The People Can Control The Government? The United States

Walgreens To Expand Covid-19 Vaccination To Pharmacies In 23 States

Should You Get Covid-19 Coronavirus Vaccines While Pregnant?

Similarly, Kentucky Governor, Andy Beshear, admitted that his state lost out to the Federal Emergency Management Agency when bidding to get protective equipment saying, "It is a challenge. The federal government says 'states, you need to go find your supply chain' and then the federal government ends up buying from that supply chain."

Detroit Mayor, Mike Duggan, has also been frustrated with the bidding wars saying, "I shouldn't be trying to out-negotiate the Mayor of Chicago or the Mayor of Houston. There needs to be a federal response."

As the bidding wars between states drive the prices of medical equipment ever upward, it is hard to not see the entire situation as a form of federal and private industry price gouging in a time when cooperation is paramount.

The effects of these bidding wars are damaging to all parties involve, but they leave poorer rural states without options when they are forced to compete with the federal government and states that have more financial resources. As Oregon Governor Kate Brown's press secretary, Charles Boyle explains, "Both in our requests for personal protective equipment from the national stockpile and our conversations with private suppliers, we find ourselves competing with larger states with more immediate needs due to the size and scope of their COVID-19 010-384 outbreaks: New York, California, Washington, and others."

010-385

Beshear has been dogged in his search for medical equipment. "I am willing to pay whatever it takes to protect the people of Kentucky to the maximum extent that we can," Beshear said. "At the moment, folks — and some will take this the wrong way — I'm not concerned about money, I'm



FILE - In this March 13, 2020 file photo, Kentucky Gov. Andy Beshear discusses developments in ... [] ASSOC ATED PRESS

to do everything we can to protect them." As of March 26th, Beshear has said that the state of Kentucky has spent about 8 million dollars on COVID-19 response.

"Yes, it would be better if we were living at a time when we weren't competing with other states and, in fact, the federal government who often buys it out from under us," said Beshear, "but that's our reality on the ground."

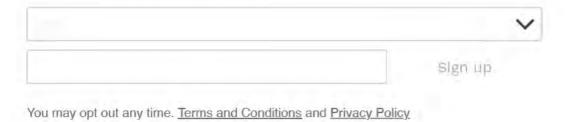
The effects of these bidding wars across the board find state healthcare and hospital systems receiving less resources at a higher cost at a much delayed pace. Franky, it is shocking that in the midst of the worst health crisis that the United States has seen in decades that states are being reduced to bidding wars with each other and the federal government.

Additionally, these bidding wars do nothing to help shore up the already shuttered economic situation in the US. As many manufacturers have been forced to shut down production, further driving up unemployment numbers, it would surely help support the economy if these workers and companies could both safely get back to work, as well as contribute to the COVID-19 crisis in a way that would undoubtably speed up healthcare response, help save lives, and finally put an end to the pandemic. 010-385

Hopefully, with the Trump administration's order for General Motors to 010-386 start producing ventilators is a sign of things to come and there will be further orders for manufacturers to start making medical supplies that will fill the national supply chain and ease the pressure on states and healthcare systems.

Navigating The Coronavirus Pandemic

Sign up for Forbes Coronavirus daily news alerts with expert analysis on all aspects of the global pandemic.



Follow me on Twitter or LinkedIn. Check out my website.



Clary Estes

Clary Estes is a journalist born and raised in Central Kentucky who works on a variety of stories globally.

Print

ADVERTISEMENT



Reprints & Permissions