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Faculty of Health Sciences

Institution: The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 18 March 2022 and Expires 18 March 2027.
- IORG #: IORG0001762 OMB No. 0990-0278 Approved for use through August 31, 2023.

Faculty of Health Sciences Research Ethics Committee

12 August 2022

Approval Certificate Annual Renewal

Dear Ms DCA Omoga,

Ethics Reference No.: 568/2020 – Line 2

Title: Assessment of Bunyavirales activity and circulation in humans, livestock and peri-domestic rodents in diverse ecologies in Kenya, 2020-2022

The Annual Renewal as supported by documents received between 2022-07-26 and 2022-08-10 for your research, was approved by the Faculty of Health Sciences Research Ethics Committee on 2022-08-10 as resolved by its quorate meeting.

Please note the following about your ethics approval:

- Renewal of ethics approval is valid for 1 year, subsequent annual renewal will become due on 2023-08-12.
- Please remember to use your protocol number (568/2020) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, monitor the conduct of your research, or suspend or withdraw ethics approval.

Ethics approval is subject to the following:

- The ethics approval is conditional on the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely



ie FHS REC, Dr R Sommers

MBChB, MMed (Int), MPharmMed, PhD

Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes, Second Edition 2015 (Department of Health)

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Fakulteit Gesondheidswetenskappe
Lefapha la Disaense tsa Maphelo

S segment

Distance matrix of the nucleoprotein showing representative viruses and samples sequenced in this study. Light grey to dark shades indicates nucleotide distances.

	NRIV_JK...	NRIV_A...	NRIV_JK...	NRIV_A...	NRIV_JK...	NRIV_A...	NRIV_JK...	NRIV_A...	NRIV_JK...	BUNV_...	BUNV_...	NRIV_M...	NRIV_M...	KE-093...	KE-C16...	KE-B35...	KE-B02...	NRIV_KJ...	BUNV_...	BUNV_...	BUNV_...	BUNV_...	BATV_K...	BATV_J...	BATV_F...	BATV_A...	BATV_N...	Bozo vir...
NRIV_JK857325.1(Soma...	100%	99.9%	99.8%	99.6%	99.6%	99.1%	99.0%	99.0%	99.0%	99.0%	99.0%	98.3%	98.4%	98.1%	98.1%	98.1%	98.1%	97.9%	98.3%	97.9%	86.6%	85.6%	85.6%	84.9%	85.3%	85.3%	87.0%	86.0%
NRIV_AF398346.1(Som...	100%	99.8%	99.8%	99.6%	99.6%	98.9%	98.7%	98.5%	98.5%	98.5%	97.6%	97.8%	97.6%	97.6%	97.6%	97.6%	97.6%	97.3%	97.3%	96.9%	83.0%	81.6%	81.6%	81.4%	81.6%	81.6%	81.6%	82.3%
NRIV_JK857328.1(Kenya...	99.9%	99.8%	100%	99.7%	99.8%	99.3%	99.1%	99.1%	99.1%	99.1%	98.4%	98.6%	98.3%	98.3%	98.3%	98.3%	98.0%	98.4%	98.0%	86.5%	85.8%	85.8%	85.0%	85.5%	85.5%	86.9%	85.9%	
NRIV_AF398345.1(Keny...	99.8%	99.8%	100%	99.8%	99.8%	99.1%	98.9%	98.7%	98.7%	98.7%	97.8%	98.0%	97.8%	97.8%	97.8%	97.8%	97.6%	97.6%	97.1%	82.7%	81.9%	81.9%	81.6%	81.9%	81.9%	81.4%	82.1%	
NRIV_JK857316.1(Sene...	99.6%	99.6%	99.7%	99.8%	100%	99.3%	99.1%	99.1%	99.1%	99.1%	98.7%	98.9%	98.6%	98.6%	98.6%	98.6%	98.3%	98.4%	98.0%	86.8%	86.0%	86.0%	85.0%	85.5%	85.5%	86.6%	85.9%	
NRIV_VY593729.1(Sene...	99.6%	99.6%	99.8%	99.8%	100%	99.3%	99.1%	99.1%	99.1%	99.1%	98.4%	98.6%	98.2%	98.2%	98.2%	98.0%	98.2%	97.7%	84.8%	83.9%	83.9%	83.2%	83.6%	83.6%	84.3%	84.1%		
NRIV_JK857322.1(Suda...	99.1%	98.9%	99.3%	99.1%	99.3%	99.3%	99.6%	99.0%	98.7%	98.7%	98.0%	98.1%	97.9%	97.9%	97.9%	97.9%	98.1%	98.0%	97.6%	86.9%	86.2%	86.2%	85.3%	85.8%	85.5%	86.5%	85.3%	
NRIV_JK857319.1(Suda...	99.0%	98.7%	99.1%	98.9%	99.1%	99.1%	99.6%	98.6%	98.6%	98.6%	98.1%	98.3%	98.0%	98.0%	98.0%	98.0%	98.3%	97.9%	97.4%	86.9%	85.8%	85.8%	85.3%	85.8%	85.2%	86.5%	85.6%	
NRIV_KMS57341.1(Ken...	99.0%	98.5%	99.1%	98.7%	99.1%	99.0%	98.6%	98.6%	98.6%	98.1%	98.3%	98.0%	98.0%	98.0%	98.0%	97.7%	97.9%	98.0%	87.3%	86.5%	86.5%	85.3%	85.5%	85.2%	86.8%	85.9%		
BUNV_MW314032.1(K...	99.0%	98.5%	99.1%	98.7%	99.1%	98.7%	98.6%	98.6%	100%	97.9%	98.0%	97.7%	97.7%	97.7%	97.7%	97.4%	98.1%	97.7%	86.5%	85.6%	85.6%	84.3%	84.8%	84.8%	86.3%	85.5%		
BUNV_MW314023.1(Ke...	99.0%	98.5%	99.1%	98.7%	99.1%	98.7%	98.6%	98.6%	100%	97.9%	98.0%	97.7%	97.7%	97.7%	97.7%	97.4%	98.1%	97.7%	86.5%	85.6%	85.6%	84.3%	84.8%	84.8%	86.3%	85.5%		
NRIV_MT747977.1(Mau...	98.3%	97.6%	98.4%	97.8%	98.7%	98.4%	98.0%	98.1%	97.9%	97.9%	99.9%	99.6%	99.6%	99.6%	99.6%	99.0%	97.4%	97.3%	86.6%	85.6%	85.6%	84.9%	85.9%	85.3%	86.3%	85.6%		
NRIV_MT747974.1(Mau...	98.4%	97.8%	98.6%	98.0%	98.6%	98.1%	98.3%	98.3%	98.0%	99.9%	99.7%	99.7%	99.7%	99.7%	99.1%	97.6%	97.4%	86.6%	85.8%	85.8%	85.0%	85.8%	85.5%	86.3%	85.8%			
KE-093_NRIV_S	98.1%	97.6%	98.3%	97.8%	98.6%	98.2%	97.9%	98.0%	97.7%	97.7%	99.6%	99.7%	100%	100%	100%	100%	99.1%	97.3%	97.2%	86.3%	85.8%	85.8%	85.0%	85.8%	85.5%	86.0%	85.8%	
KE-C166_NRIV_S	98.1%	97.6%	98.3%	97.8%	98.6%	98.2%	97.9%	98.0%	97.7%	97.7%	99.6%	99.7%	100%	100%	100%	99.1%	97.3%	97.2%	86.3%	85.8%	85.8%	85.0%	85.8%	85.5%	86.0%	85.8%		
KE-B35_NRIV_S	98.1%	97.6%	98.3%	97.8%	98.6%	98.2%	97.9%	98.0%	97.7%	97.7%	99.6%	99.7%	100%	100%	100%	99.1%	97.3%	97.2%	86.3%	85.8%	85.8%	85.0%	85.8%	85.5%	86.0%	85.8%		
KE-B02_NRIV_S	98.1%	97.6%	98.3%	97.8%	98.6%	98.2%	97.9%	98.0%	97.7%	97.7%	99.6%	99.7%	100%	100%	100%	99.1%	97.3%	97.2%	86.3%	85.8%	85.8%	85.0%	85.8%	85.5%	86.0%	85.8%		
NRIV_KJ716848.1(Mauri...	97.9%	97.3%	98.0%	97.6%	98.3%	98.0%	98.1%	98.3%	97.7%	97.4%	99.0%	99.1%	99.1%	99.1%	99.1%	97.0%	97.0%	96.9%	86.8%	85.5%	85.5%	85.0%	85.8%	85.2%	86.0%	85.3%		
BUNV_MH484290.1(Ke...	98.3%	97.3%	98.4%	97.6%	98.4%	98.2%	98.0%	97.9%	97.9%	98.1%	97.4%	97.6%	97.3%	97.3%	97.3%	97.3%	97.0%	97.0%	99.3%	86.5%	86.2%	86.2%	84.0%	85.2%	84.9%	86.9%	85.8%	
BUNV_KM507345.1(Ke...	97.9%	96.9%	98.0%	97.1%	98.0%	97.7%	97.6%	97.4%	98.0%	97.7%	97.7%	97.3%	97.4%	97.2%	97.2%	97.2%	97.2%	96.9%	99.3%	86.9%	86.0%	86.0%	84.3%	84.8%	84.5%	87.0%	86.0%	
BUNV_XP063900.1(Arg...	86.6%	83.0%	86.5%	82.7%	86.8%	84.8%	86.9%	86.9%	87.3%	86.5%	86.5%	86.6%	86.6%	86.3%	86.3%	86.3%	86.3%	86.8%	86.5%	86.9%	89.0%	89.0%	88.5%	88.2%	87.6%	85.0%	85.5%	
BUNV_AF325122.1(Aus...	85.6%	81.6%	85.8%	81.9%	86.0%	83.9%	86.2%	85.8%	86.5%	85.6%	85.6%	85.8%	85.8%	85.8%	85.8%	85.8%	85.5%	86.2%	86.0%	89.0%	100%	89.6%	89.9%	90.2%	84.0%	84.9%		
BATV_KU661980.1(Aus...	85.6%	81.6%	85.8%	81.9%	86.0%	83.9%	86.2%	85.8%	86.5%	85.6%	85.6%	85.8%	85.8%	85.8%	85.8%	85.5%	86.2%	86.0%	89.0%	100%	89.6%	89.9%	90.2%	84.0%	84.9%			
BATV_JK846595.1(Mala...	84.9%	81.4%	85.0%	81.6%	85.0%	83.2%	85.3%	85.3%	85.3%	84.3%	84.3%	84.9%	85.0%	85.0%	85.0%	85.0%	85.0%	84.0%	84.3%	88.5%	89.6%	89.6%	97.4%	97.3%	83.5%	83.3%		
BATV_FJ436806.1(India...	85.3%	81.6%	85.5%	81.9%	85.5%	83.6%	85.8%	85.8%	85.5%	84.8%	84.8%	85.9%	85.8%	85.8%	85.8%	85.8%	85.8%	85.2%	84.8%	88.2%	89.9%	89.9%	97.4%	97.6%	83.9%	83.3%		
BATV_AB257762.1(Japa...	85.3%	81.6%	85.5%	81.9%	85.5%	83.6%	85.5%	85.2%	85.2%	84.8%	84.8%	85.3%	85.5%	85.5%	85.5%	85.5%	85.2%	84.9%	84.5%	87.6%	90.2%	90.2%	97.3%	97.6%	83.6%	83.5%		
BATV_NC_043581.1(Ma...	87.0%	81.6%	86.9%	81.4%	86.6%	84.3%	86.5%	86.5%	86.8%	86.3%	86.3%	86.3%	86.3%	86.0%	86.0%	86.0%	86.0%	86.0%	86.9%	87.0%	85.0%	84.0%	84.0%	83.5%	83.9%	83.6%	84.2%	
Bozo virus DakArB 734...	86.0%	82.3%	85.9%	82.1%	85.9%	84.1%	85.3%	85.6%	85.9%	85.5%	85.5%	85.6%	85.8%	85.8%	85.8%	85.8%	85.8%	85.3%	85.8%	86.0%	85.5%	84.9%	84.9%	83.3%	83.3%	83.5%	84.2%	