Virus Name: Caninde	Abbreviation: CANV

Status	Select Agent	SALS Level
Possible Arbovirus	**No**	**3**

SALS Basis
Isufficient experience with virus; i.e., experience factor from SALS surveys was less than 500 in laboratory facilities with low biocontainment.

Other Information

Antigenic Group
Changuinola

SECTION I - Full Virus Name and Prototype Number

Prototype Strain Number / Designation	Accession Number	Original Date Submitted
BeAr 54342		10/12/1984

Family	Genus
Reoviridae	**Orbivirus**

Information From	Address
F. Pinheiro and Amelia P.A.T. Rosa	**Instituto Evandro Chagas, FSESP, Ministry of Health, CP-621, 66.000, Belem, Para, Brazil**

Information Footnote
Reviewed by editor

Section II - Original Source

Isolated By (name)	Isolated at Institute
Belem Virus Laboratory	**Inst. Evandro Chagas**

Host Genus	Species	Host Age/Stage
Lutzomyia sp. (1)		**Adult**

Sex
Female

Isolated From	Isolation Details

Signs and Symptoms of Illness	Arthropod

Time Held Alive before Inoculation
25-50 hours

Collection Method	Collection Date
Unknown	**3/15/1963**

Place Collected (Minimum of City, State, Country)
Belem-Brasilia highway, km 87, Para, Brazil

Latitude	Longitude
3° S	**48° W**

Macrohabitat	Microhabitat	Method of Storage until Inoculated
Virgin forest	**Ground level**	**-60dC**

Footnotes

Section III - Method of Isolation

Inoculation Date
4/17/1963

Animal (Details will be in Section 6)
nb mice

Route Inoculated
Intracerebral

Reisolation
No

Other Reasons
First virus of this type isolated in this laboratory

Homologous Antibody Formation by <u>Source Animal</u>

Test(s) Used

Footnotes

Section IV - Virus Properties

Physicochemical

Pieces (number of genome segments)	Infectivity	Sedimentation Coefficients(s) (S)
Percentage wt, of Virion Protein	Lipid	Carbohydrate
Virion Polypeptides: Number	Details	
Non-virion Polypeptides: Number	Details	
Virion Density	Sedimentation Coefficients(s) (S)	
Nucleocapsid Density	Sedimentation Coefficients(s) (S)	

<u>Stability of Infectivity (effects)</u>

pH (infective range)

Lipid Solvent (ether - % used to test)	After Treatment Titer	Control Titer
Lipid Solvent (chloroform)	After Treatment Titer **5.8 dex**	Control Titer **6.3 dex (2)**
Lipid Solvent (deoxycholate) **1:1000**	After Treatment Titer **5.5 dex**	Control Titer **5.3 dex**
Other (formalin, radiation)		

<u>Virion Morphology</u>

Shape	Dimensions	
Mean nm	Range nm	
Measurement Method	Surface Projections/Envelope	Nucleocapsid Dimensions, Symmetry

Morphogenesis

Site of Constituent Formation in Cell	Site of Virion Assembly	Site of Virion Accumulation
Inclusion Bodies	Other	

Hemagglutination

Hemaggiutination **No**	Antigen Source **SMB ext. by sucrose-acetone, sonicated**	Erythrocytes (species used) **Goose **
pH Range **5.8-7.0**	pH Optimum	
Temperature Range **37dC**	Temperature Optimum	

Remarks
**** Green monkey erythrocytes also tested**

Serologic Methods Recommended
CF and NT

Footnotes
**** Green monkey erythrocytes also tested**

Section V - Antigenic Relationship and Lack of Relationship to Other Viruses

Related by CF to Irituia virus (BeAn 28873) of the Changuinola group as follows [2] :

	Serum or Ascitic Fluid				
Antigen	Irituia [3i]	Gurupi [6i]	Ourem [4i]	Caninde [5i]	Control
Irituia	16/64 [a]	32/64	64/16	128/64	0
Gurupi	32/64	32/64	64/16	128/64	0
Ourem	8/16	32/16	>256/64	64/64	0
Caninde	32/64	64/64	64/16	128/64	0
Control	0	0	0	0	0

[a] Antibody titer/antigen titer; 0 = <1:4

Results of neutralization tests performed in infant mice (ic route) at the Evandro Chagas Institute were as follows [3] :

	Ascitic fluid			
Virus	Irituia	Gurupi	Ourem	Caninde

Irituia	2.8+	1.0	0.8	1.2
Gurupi	0.8	2.3	0.7	0.5
Ourem	0.2	0.9	2.1	0
Caninde	0.5	0.3	0.9	2.8

	Ascitic Fluid or Serum					
Virus	Irituia [5i] [b]	Gurupi [5i] [b]	Ourem [4i] [b]	Caninde [5i] [c]	Jamanxi [3i] [c]	Altamira [4i] [c]
Irituia	3.0 [d]				<1.0	0.8
Gurupi		2.5			<0.3	<0.3
Ourem			3.9		<1.0	<0.9
Caninde				3.0	0.8	0.4
Jamanxi	0.2	0.3	0	0.5	3.0	0
Altamira	1.1	1.2	1.0	1.0	0.9	> 3.1

[b] Ascitic fluid

[c] Serum

[d] LNI in dex

Section VI - Biologic Characteristics

Virus Source (all VERTEBRATE isolates)

Lab Methods of Virus Recovery (ALL ISOLATIONS)
Newborn mice

Cell system (a)	Virus passage history (b)	Evidence of Infection						Growth Without CPE	
		CPE			PLAQUES				
		Day (c)	Extent (d)	Titer TCD50/ml (e)	Day (c)	Size (f)	Titer PFU/ml (e)	+/- (g)	
Vero (CL)	SMB 5	3	4+	6.75 (e)					

(e) Expressed in dex

Section VII - Natural Host Range (Additional text can be added below table)

Vertebrate (species and organ) and arthropod	No. isolations/No. tested	No. with antibody/No. tested Test used	Country and region
Lutzomyia sp.	1/128 (8,535 insects)		Belem-Brasilia highway, km 85-107, Para, Amazon region of Brazil

Section VIII - Susceptibility to Experimental Infection (include viremia)

Experimental host and age	Passage history and strain	Inoculation Route-Dose	Evidence of infection	AST (days)	Titer log10/ml
Mice (nb)	SMB 2	ic	Death	3.0	
Mice (nb)		ip	None		
Mice (nb)		sc			
Mice (wn)		ic	Irregular deaths		
Mice (wn)		ip	None		
Mice (nb)	SMB 5	ic	Death		7.2

Section IX - Experimental Arthropod Infection and Transmission

Arthropod species & virus source(a)	Method of Infection log10/ml (b)		Incubation period (c)		Transmision by bite (d)		Assay of arthropod, log10/ml (e)		
	Feeding	Injected	Days	ºC	Host	Ratio	Whole	Organ	System

Section X - Histopathology

Character of lesions (specify host)

<u>Inclusion Bodies</u>   <u>Intranuclear</u>

Organs/Tissues Affected

Category of tropism

Section XI - Human Disease

In Nature   Residual   Death

Subclinical   Overt Disease

Clinical Manifestations

Number of Cases   Category (i.e. febrile illness, etc.)

Section XII - Geographic Distribution

Known (Virus detected)
Para State, Amazon region ofBrazil

Suspected (Antibody only detected)

Section XIII - References

1. Travassos da Rosa, A.P.A., et al. 1984. Intervirology 21:38-49.
2. Director, Belem Virus Laboratory. Personal communication. 1966.
3. Director, Belem Virus Laboratory. Personal communication. 1965.

Remarks