

**Report from the Molecular Epidemiology Section of the Dept. of Exotic Disease Control to
the Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O		Report date: 06/02/2003					
Virus isolate: PAK/45/2003							
Material used: 10% epith. susp.							
Region sequenced: VP1		Topotype: ME-SA					
RT-PCR primers: O-1C272F/NK61		Genotype/strain: PanAsia					
No. of nt determined: 632		Seq. filename: PAK03-45					
No. nt in gene: 639		Date sequence last updated: 19/01/2004					
No. of ambiguities: 1		Total no. of comparisons made: 1323					
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/AFG/16/2003	AFG03-16	632	629	1	99.53	0.47
2	O/AFG/55/2003	AFG03-55	533	530	2	99.44	0.56
3	O/AFG/50/2003	AFG03-50	632	628	1	99.37	0.63
4	O/AFG/49/2003	AFG03-49	631	626	2	99.21	0.79
5	O/AFG/56/2003	AFG03-56	514	509	2	99.03	0.97
6	O/IND/287/99*	IND99-AP	157	154	2	98.09	1.91
7	O/UAE/7/99	UAE99-07	254	249	4	98.03	1.97
8	O/UAE/2/99	UAE99-02	224	218	7	97.32	2.68
9	O/IRN/1/99	IRN99-01	269	261	7	97.03	2.97
10	O/BAR/1/99	BAR99-01	319	309	1	96.87	3.13
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	632	609	1	96.36	3.64
2	O/IND/53/79	IND79A53	632	565	1	89.40	10.60
3	O1/Manisa/TUR/69	TUR69--E	632	560	1	88.61	11.39
4	O/IND/R2/75*	IND75--A	632	557	1	88.13	11.87
5	O/TAI/189/87*	TAI87--B	525	453	4	86.29	13.71
6	O/MOR/1/91	MOR91-01	200	172	4	86.00	14.00
7	O/ISR/1/88	ISR88-01	186	159	6	85.48	14.52
8	O/PHI/5/95	PHI95-05	509	424	7	83.30	16.70
9	O/HKN/6/83	HKN83-06	630	514	3	81.59	18.41
10	O1/BFS 1860/UK/67	UKG67--A	632	504	1	79.75	20.25
nt, nucleotides							
*, not a WRLFMD reference number							

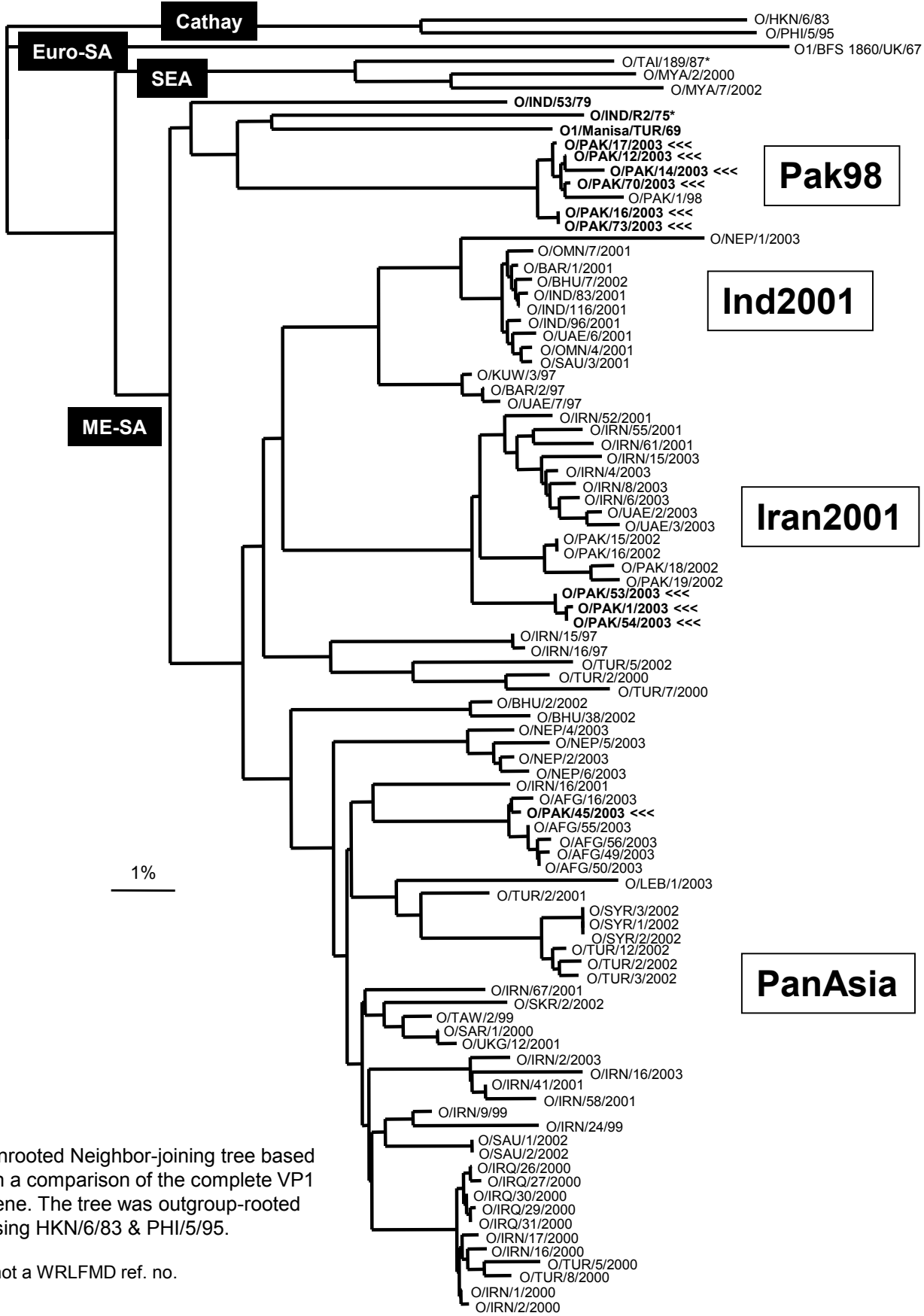
**Report from the Molecular Epidemiology Section of the Dept. of Exotic Disease Control to
the Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O		Report date: 06/02/2004					
Virus isolate: PAK/53/2003							
Material used: 10% epith. susp.							
Region sequenced: VP1		Topotype: ME-SA					
RT-PCR primers: O-1C272F/NK61		Genotype/strain: Iran2001					
No. of nt determined: 633		Seq. filename: PAK03-53					
No. nt in gene: 639		Date sequence last updated: 22/01/2004					
No. of ambiguities: 0		Total no. of comparisons made: 1323					
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/PAK/54/2003	PAK03-54	601	601	0	100.00	0.00
2	O/PAK/1/2003	PAK03-01	633	631	0	99.68	0.32
3	O/IRN/18/2001	IRN01-18	425	417	11	98.12	1.88
4	O/PAK/15/2002	PAK02-15	633	618	0	97.63	2.37
5	O/PAK/16/2002	PAK02-16	633	618	0	97.63	2.37
6	O/UAE/2/2003	UAE03-02	551	537	1	97.46	2.54
7	O/IRN/6/2003	IRN03-06	632	615	1	97.31	2.69
8	O/IRN/4/2003	IRN03-04	631	614	2	97.31	2.69
9	O/IRN/8/2003	IRN03-08	633	615	0	97.16	2.84
10	O/IRN/55/2001	IRN01-55	597	580	0	97.15	2.85
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	633	580	0	91.63	8.37
2	O/IND/53/79	IND79A53	633	568	0	89.73	10.27
3	O1/Manisa/TUR/69	TUR69--E	633	562	0	88.78	11.22
4	O/IND/R2/75*	IND75--A	633	561	0	88.63	11.37
5	O/ISR/1/88	ISR88-01	187	164	5	87.70	12.30
6	O/MOR/1/91	MOR91-01	201	175	3	87.06	12.94
7	O/TAI/189/87*	TAI87--B	526	451	3	85.74	14.26
8	O1/BFS 1860/UK/67	UKG67--A	633	522	0	82.46	17.54
9	O/HKN/6/83	HKN83-06	631	511	2	80.98	19.02
10	O/PHI/5/95	PHI95-05	510	409	6	80.20	19.80
nt, nucleotides							
*, not a WRLFMD reference number							

**Report from the Molecular Epidemiology Section of the Dept. of Exotic Disease Control to
the Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O		Report date: 06/02/2004					
Virus isolate: PAK/54/2003							
Material used: 10% epith. susp.							
Region sequenced: VP1		Topotype: ME-SA					
RT-PCR primers: O-1C272F/NK61		Genotype/strain: Iran2001					
No. of nt determined: 601		Seq. filename: PAK03-54					
No. nt in gene: 639		Date sequence last updated: 22/01/2004					
No. of ambiguities: 0		Total no. of comparisons made: 1323					
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/PAK/1/2003	PAK03-01	601	601	0	100.00	0.00
2	O/PAK/53/2003	PAK03-53	601	601	0	100.00	0.00
3	O/IRN/18/2001	IRN01-18	394	387	10	98.22	1.78
4	O/PAK/15/2002	PAK02-15	601	587	0	97.67	2.33
5	O/PAK/16/2002	PAK02-16	601	587	0	97.67	2.33
6	O/IRN/4/2003	IRN03-04	600	584	1	97.33	2.67
7	O/IRN/6/2003	IRN03-06	600	584	1	97.33	2.67
8	O/UAE/2/2003	UAE03-02	519	505	1	97.30	2.70
9	O/IRN/8/2003	IRN03-08	601	584	0	97.17	2.83
10	O/IRN/61/2001	IRN01-61	600	583	1	97.17	2.83
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	601	550	0	91.51	8.49
2	O/IND/53/79	IND79A53	601	540	0	89.85	10.15
3	O1/Manisa/TUR/69	TUR69--E	601	534	0	88.85	11.15
4	O/IND/R2/75*	IND75--A	601	532	0	88.52	11.48
5	O/MOR/1/91	MOR91-01	170	147	2	86.47	13.53
6	O/ISR/1/88	ISR88-01	155	134	5	86.45	13.55
7	O/TAI/189/87*	TAI87--B	495	423	2	85.45	14.55
8	O1/BFS 1860/UK/67	UKG67--A	601	494	0	82.20	17.80
9	O/HKN/6/83	HKN83-06	599	484	2	80.80	19.20
10	O/PHI/5/95	PHI95-05	478	384	6	80.33	19.67
nt, nucleotides							
*, not a WRLFMD reference number							

Report on: FMDV O Pakistan 2003



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using HKN/6/83 & PHI/5/95.

* not a WRLFMD ref. no.