

Vaccine Selection

EuFMD WestEurasia Meeting

Istanbul March 2012

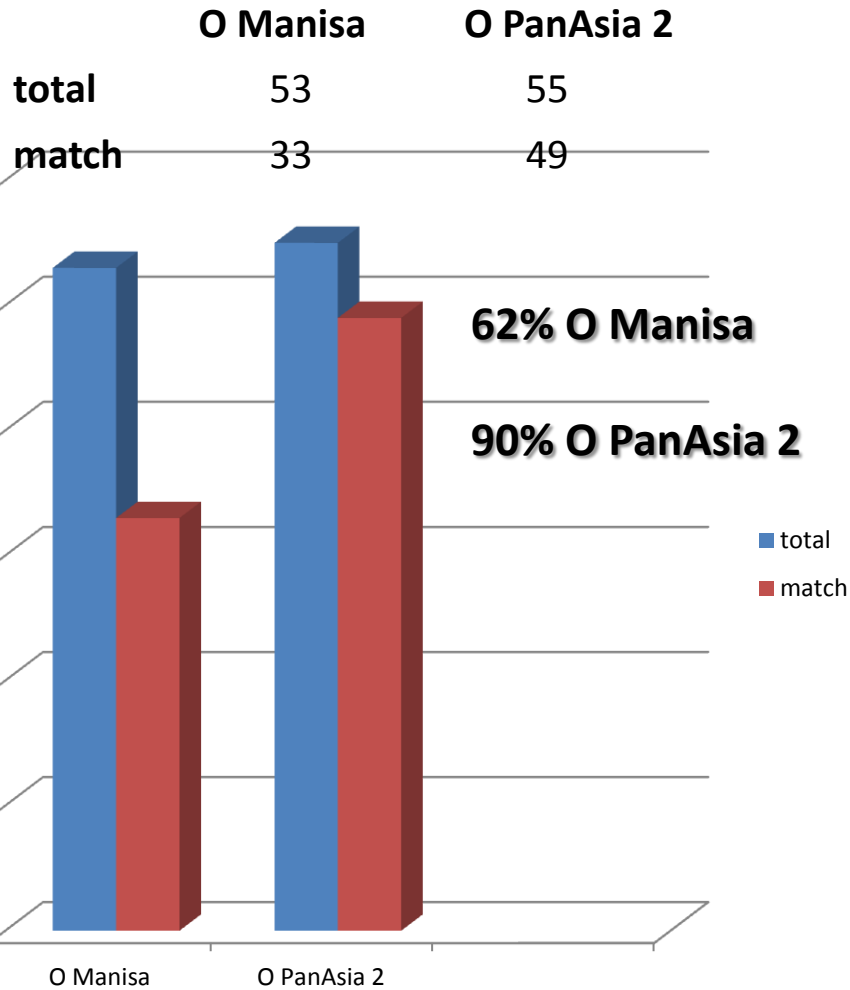
Dr Jef Hammond



- WRLFMD/EURLFMD
- OIE/FAO FMD Reference Laboratory Network
- FMD Vaccine Strategic Reserves Network

Vaccine matching by VNT 2011

O Manisa vs O PanAsia 2



What if O Manisa fails to match by VNT?

O Vaccines

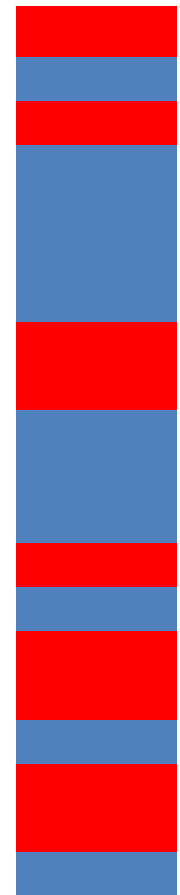
WRLFMDV ID	Country of Origin	Serotype	Topotype	Lineage/strain	Sub Lineage
AFG/110/2010	Afghanistan	O	ME-SA	PanAsia-2	ANT-10
BUL/3/2010	Bulgaria	O	ME-SA	PanAsia-2	ANT-10
CAM/8/2010	Cambodia	O	ME-SA	PanAsia	-
DRK/31/2011	Dem. People's Rep Korea	O	SEA	Mya-98	-
IRN/50/2011	Iran	O	ME-SA	PanAsia-2	ANT-10
IRQ/4/2010	Iraq	O	ME-SA	PanAsia-2	ANT-10
ISR/1/2011	Israel	O	ME-SA	PanAsia-2	ANT-10
KUW/1/2011	Kuwait	O	ME-SA	PanAsia-2	ANT-10
LAO/1/2011	Laos	O	ME-SA	PanAsia	-
LIB/4/2010	Libya	O	ME-SA	PanAsia-2	ANT-10
PAK/116/2010	Pakistan	O	ME-SA	PanAsia-2	ANT-10
PAK/62/2011	Pakistan	O	ME-SA	PanAsia-2	ANT-10
SKR/6/2010	Republic of Korea	O	SEA	Mya-98	-
SKR/3/2011	Republic of Korea	O	SEA	Mya-98	-
TAI/2/2011	Thailand	O	SEA	Mya-98	-
TAI/7/2011	Thailand	O	ME-SA	PanAsia	-
TUR/25/2011	Turkey	O	ME-SA	PanAsia-2	ANT-10
VIT/16/2010	Vietnam	O	ME-SA	PanAsia	-
VIT/3/2011	Vietnam	O	ME-SA	PanAsia	-
VIT/18/2010	Vietnam	O	SEA	Mya-98	-

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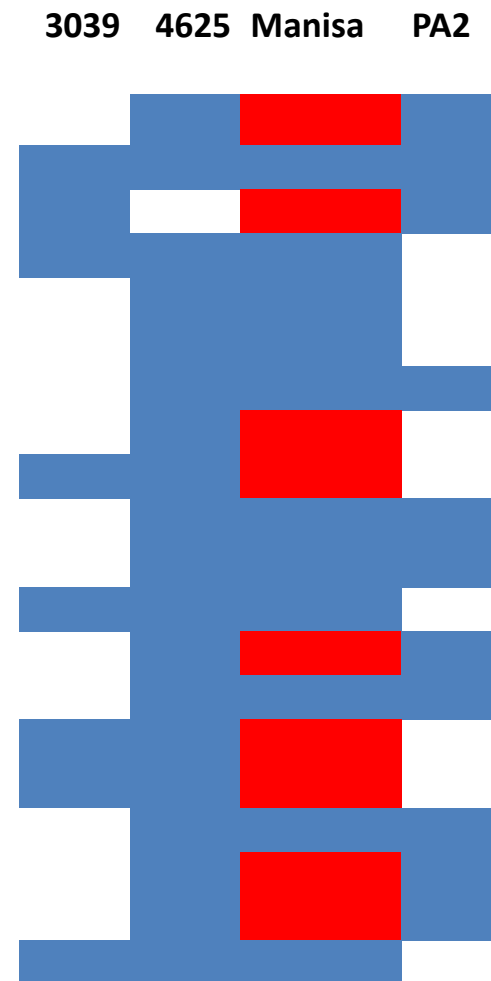
Manisa



If O Manisa fails there is another vaccine to compensate

O Vaccines

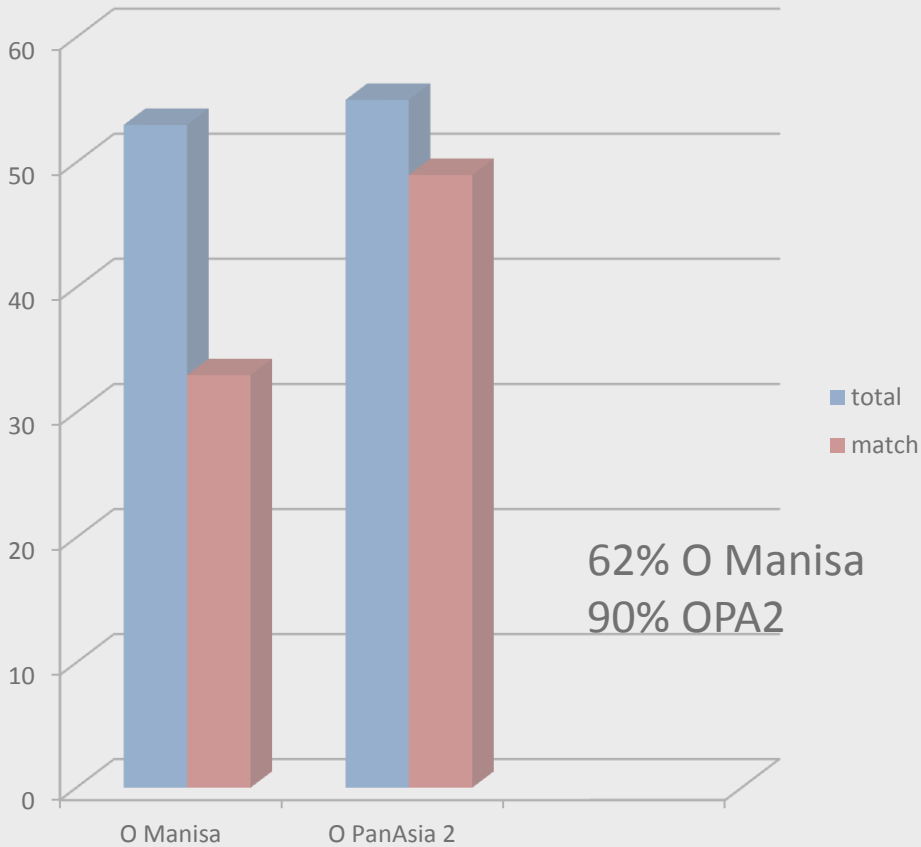
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Vaccine matching by VNT 2011

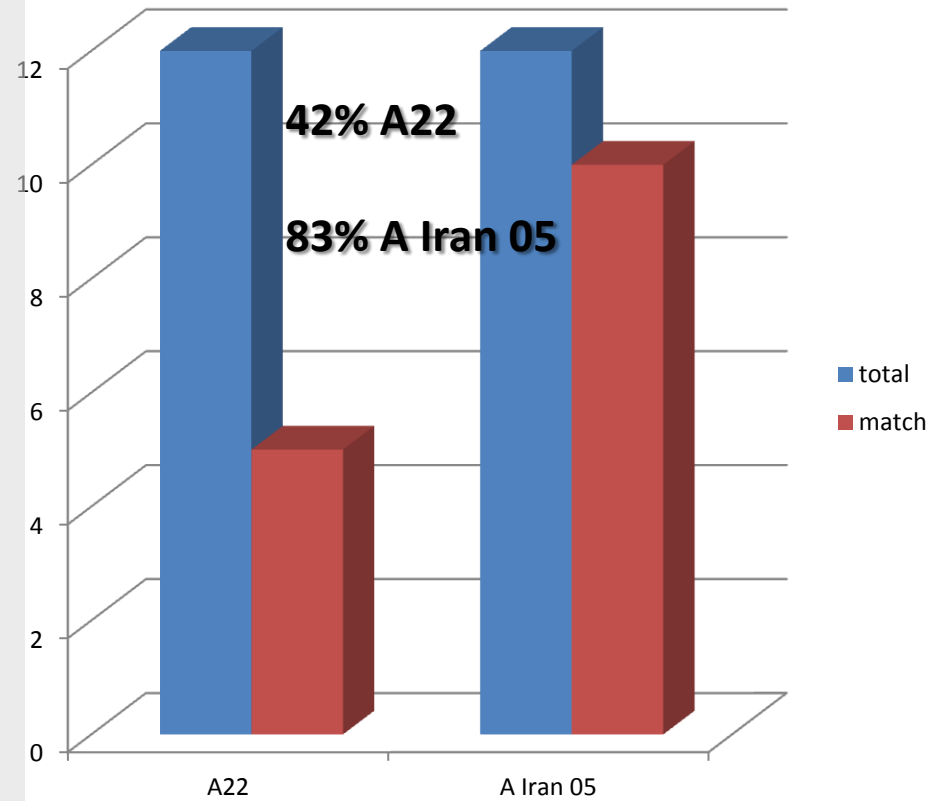
O Manisa vs O PanAsia 2

	O Manisa	O PanAsia 2
total	53	55
match	33	49



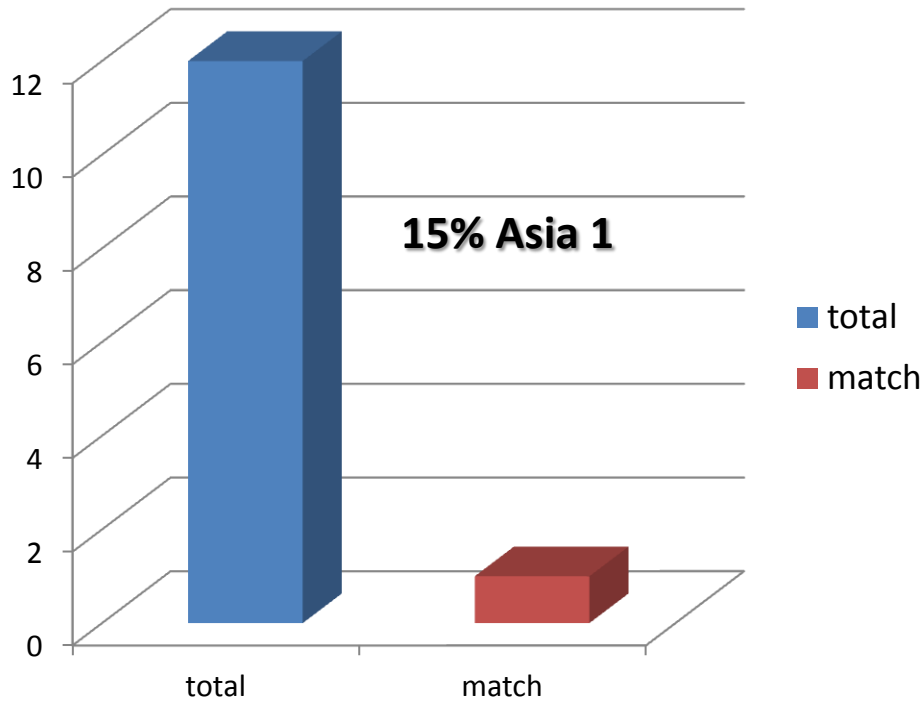
A22 vs A Iran 05

	Total	match
A22	12	5
A Iran 05	12	10



Vaccine matching by VNT 2011

Asia 1 Shamir



Asia 1 Shamir	Total	match
	12	2

Vaccine matching for type Asia 1 FMDV by VNT-WRL FMD			
Isolates	Ind 8/79	Shamir	WBN
Bar 03/11	N	N	N
Bar 04/11	N	N	N
Pak 108/10	N	N	N
Pak 50/11	N	N	N

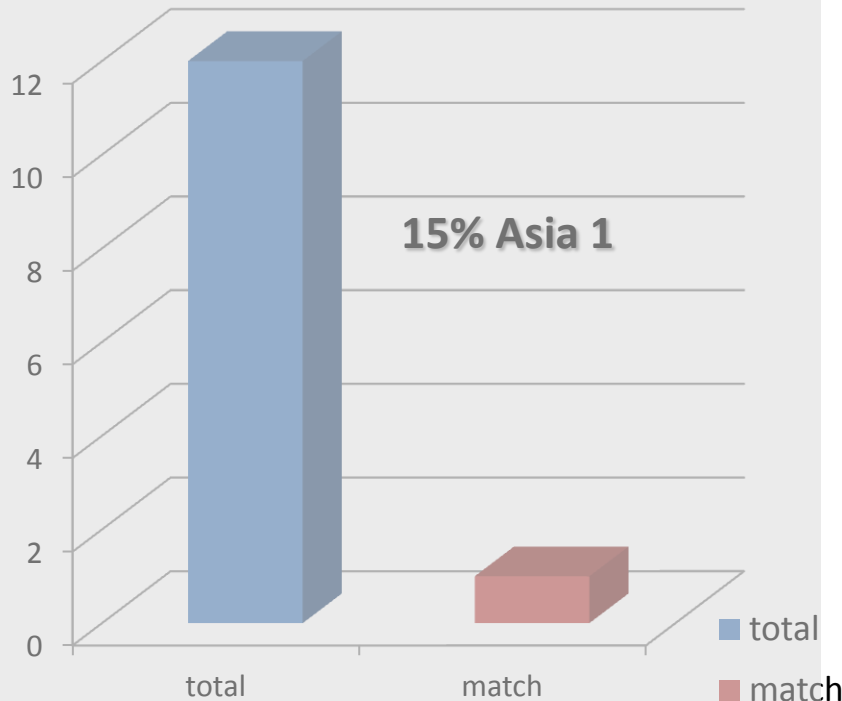
Vaccine matching studies for type Asia 1 FMDV by VNT-WRL FMD				
SAMPLE WRL REF	SEROTYPE	Asia1 IND 8/79	Asia1 Shamir	Asia1 WBN 117/85
PAK 51/2011	ASIA1	N	N	N
PAK 89/2011	ASIA1	N	M	N
IRN 33/2011	ASIA1	N	N	N
IRN 38/2011	ASIA1	N	N	N
IRN 43/2011	ASIA1	N	N	N
IRN 46/2011	ASIA1	N	N	N

Type Asia 1:

Vaccine matching studies for type Asia 1 FMDV by VNT-WRL FMD				
SAMPLE REF	SEROTYPE	Asia 1 IND 8/79	Asia 1 SHAMIR	Asia 1 WBN 117/85
AFG 39/2011	ASIA1	N	M	N
AFG 45/2011	ASIA1	N	N	N

Vaccine matching by VNT 2011

Asia 1 Shamir



Asia 1 Shamir	Total	match
	12	2

Needs

- Pre-vaccination monitoring
 - Quality
 - Potency/antigen payload/antigen content
- Delivery chain
 - Cold chain/vaccination training/ensure animals are not already exposed
- Post vaccination monitoring
 - Serology
 - Outbreak reporting

Vaccine Recommendations (National & European antigen banks)

HIGH
PRIORITY

O Manisa*
O PanAsia -2*
O BFS or Campos
A-Iran-05
A24 Cruzeiro
A22 Iraq
Asia 1 Shamir*
SAT 2 Saudi Arabia (or equivalent)

* or additional
strain

MEDIUM
PRIORITY

A Argentina 01
A Iran 96
A Iran 99
A Eritrea
A Iran 87 or A Saudi Arabia 23/86 (or equivalent)
A Malaysia 97 (or Thai equivalent such as A/Sak/97)*
O Taiwan 97 (pig-adapted strain or Philippine equivalent)*
SAT 1 South Africa
SAT 2 Zimbabwe

LOW
PRIORITY

A15 Bangkok related strain
A Kenya
A87 Argentina related strain
SAT 1 Kenya
SAT 2 Kenya
SAT 3 Zimbabwe
C Noville

Within category: not in order of importance

SAT 2 in Egypt 2012

Date Received: 12th March 2012
Country of Origin: Egypt
Date Reported: 26th March 2012

Report no:	2dmVNT		
Vaccine:	2dmVNT	Sat2 Eri	Sat2 Zim
Field Isolate:	test ref:		
Sat2 Egy 6/2012	mean	0.62	0.20
Sat2 Egy 9/2012	mean	0.46	0.15

Vaccine Recommendations (National & European antigen banks)

HIGH
PRIORITY

O Manisa*
O PanAsia -2*

* or additional
strain

A-Iran-05

A22 Iraq

Asia 1 Shamir*

SAT 2 Saudi Arabia (or equivalent = SAT 2 Eritrea)

MEDIUM
PRIORITY

A Argentina 01

A Iran 96

A Iran 99

A Eritrea

A Iran 87 or A Saudi Arabia 23/86 (or equivalent)

A Malaysia 97 (or Thai equivalent such as A/Sak/97)*

O Taiwan 97 (pig-adapted strain or Philippine equivalent)*

SAT 1 South Africa

SAT 2 Zimbabwe

LOW
PRIORITY

A15 Bangkok related strain

A Kenya

A87 Argentina related strain

SAT 1 Kenya

SAT 2 Kenya

SAT 3 Zimbabwe

C Noville

Within category: not in order of importance