

Krank zurück aus dem Urlaub



Detlev Schultze MD, MSc

Zentrum für Labormedizin
St. Gallen



Urlaub auf Malta (Gozo)



Symptome
Urlaub Tag 7

Stationäre Aufnahme - Tag 17

AZ ↓↓

KS ↑

Erbrechen

∅ Meningismus

38.4°C

Rash → Gesicht/Rumpf

Exanthem → Arme

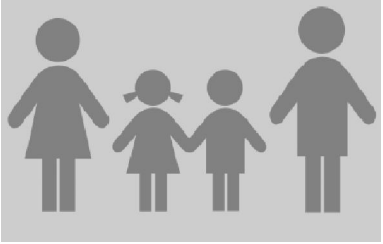
Lymphos ↓

CRP ⇔

Zahlreiche **Insektenstiche**



Reisegruppe



Exanthem

Symptome

m, 48

+

ausgeprägt

f, 50

+

milde

f, 14

+

∅

f, 13

+

∅

m, 49

+

∅

f, 13

+

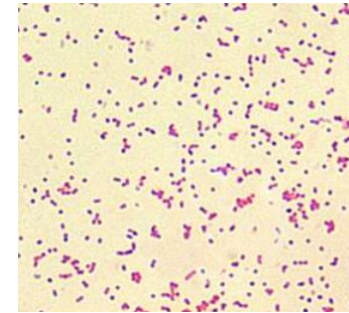
∅

Differentialdiagnose

Inkubationszeit

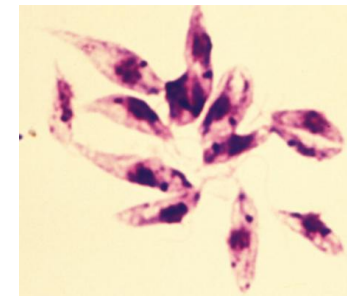
Malta-Fieber

14-21 T



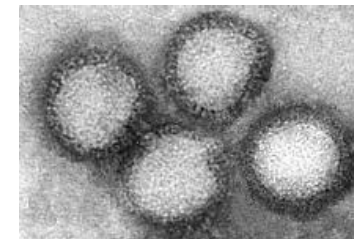
Leishmaniose

6 W- 6 M



Pappataci Fieber

3-5 T



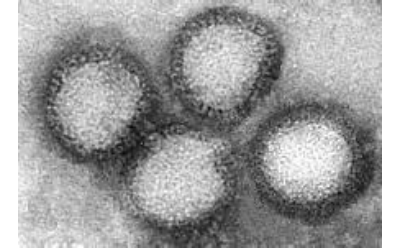
Pappataci-Fieber = „Sandfly Fever“ = Sandmückenfieber



- Sandmücke = Vektor
- Sandfly Fever Viren

Sandfly Fever Viren (SFV) Labordiagnose

- Virus Nachweis (PCR) o/u Isolierung
Blut / CSF 1-2 dpos









- SFV - IgM
Persistenz \geq 1 Jahr
Kreuzreaktivität

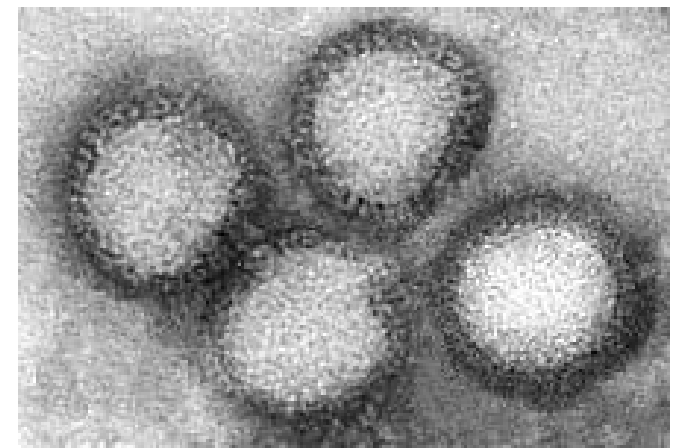
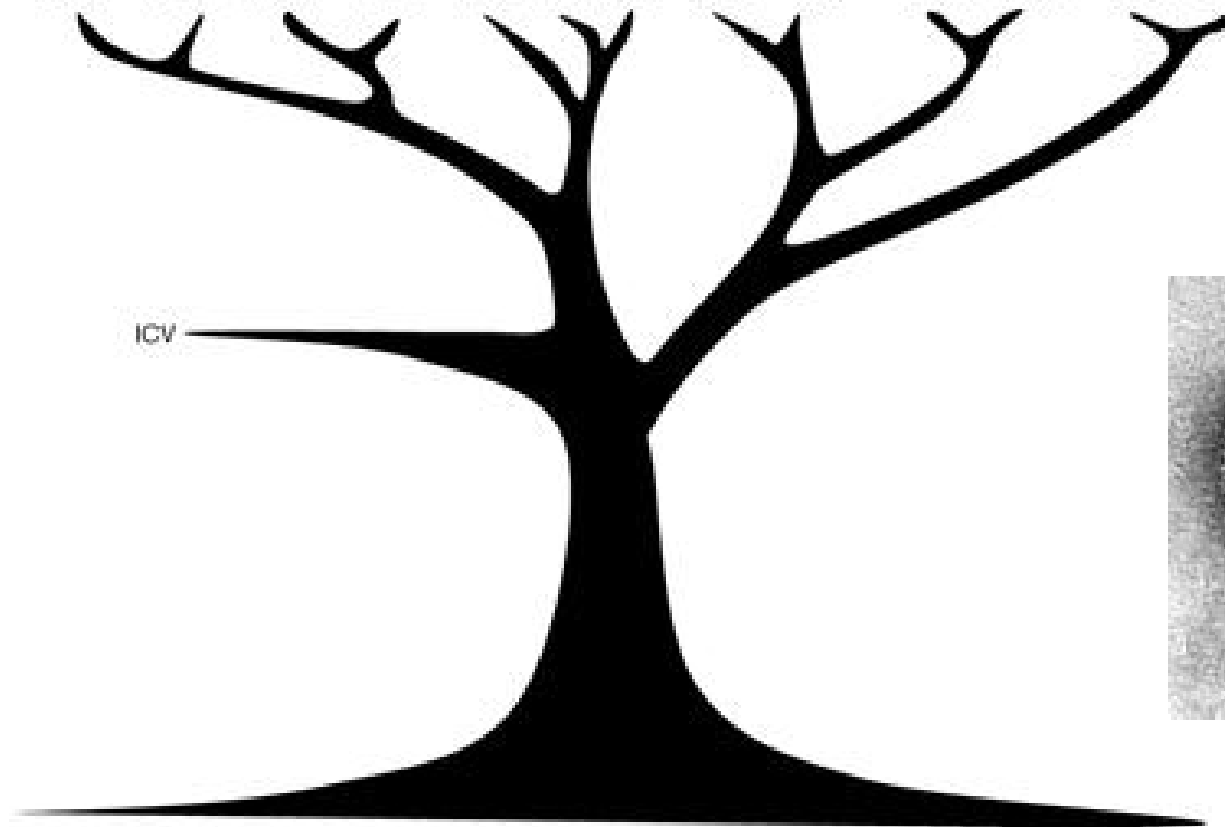


- SFV - IgG Titeranstieg



Bunyaviridae - Phlebovirus -> SFV

Vector						
Prototype	Bunyamvera virus	Tomato spotted wilt virus	Hantaan virus	Rice stripe virus	Rift Valley fever virus	Dugbe virus
Genus	Orthobunyavirus	Tospovirus	Hantavirus	Tenuivirus	Phlebovirus	Nairovirus
Species	BUNV LACV	INSV TSWV	AND HTN DOB	RGSV RSV	UUKV RVFV	DUGV GCHFV

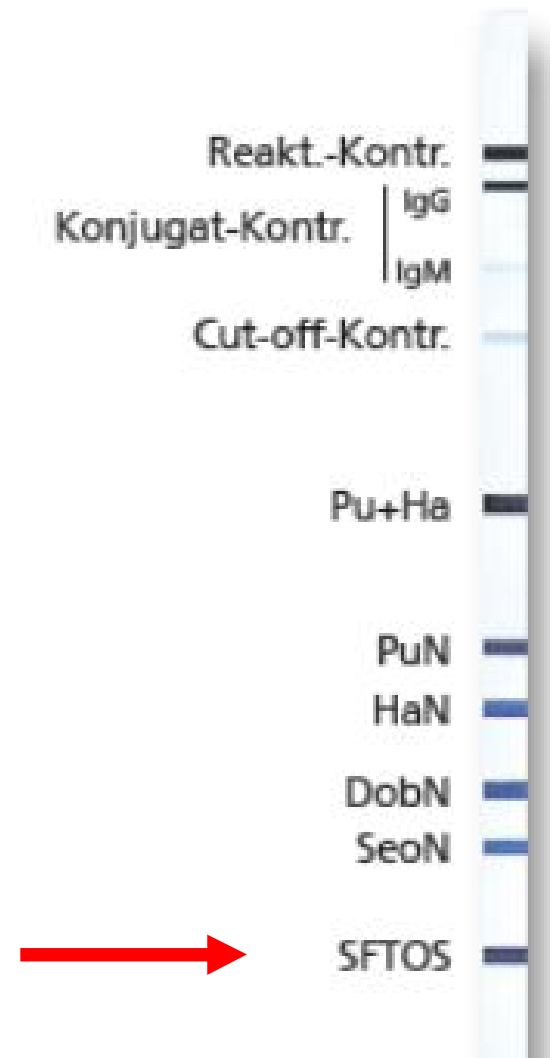


Walter_Recent advances in the molecular and cellular biology of bunyaviruses_JGV_2011

Serologie → Sandfly Fever Viren (SFV)

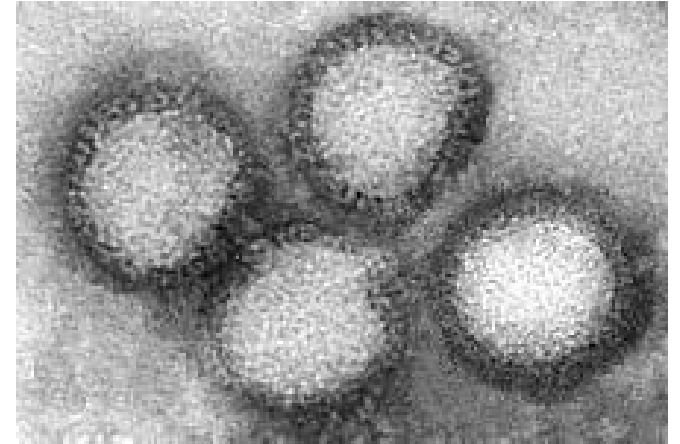
recomLine Bunyavirus IgG/IgM
(Fa. Mikrogen)

SFV Toscana **IgM/G**



Phlebovirus

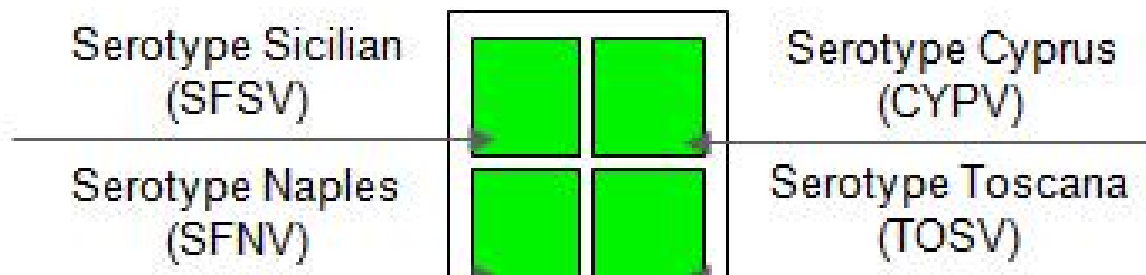
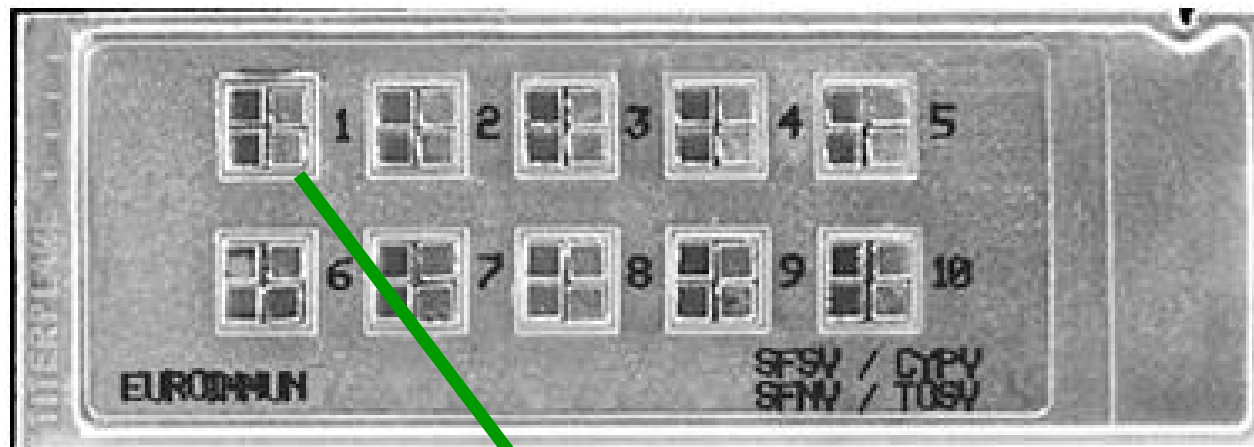
- Phlebovirus
> 60 Serotypen
- Sandfliegen Fieber Gruppe
13 Serokomplexe
- Serokomplex SF Naples virus
Serologische **Kreuzreaktionen**



Liu et al J Gen Virol 2003

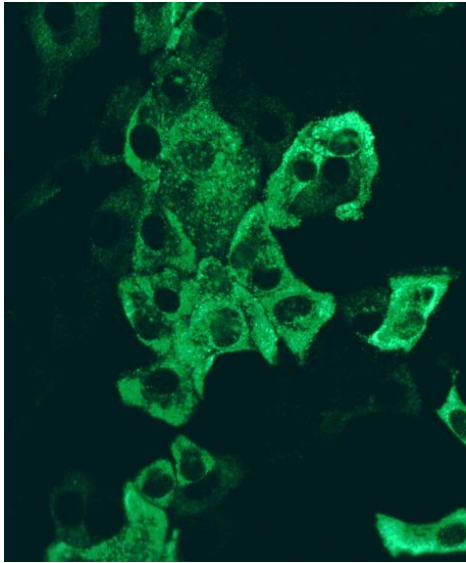
SFV Serologie IIFT

Sandfly Fever Virus Mosaik **IgG/IgM**
(Fa. Euroimmun, Lübeck)

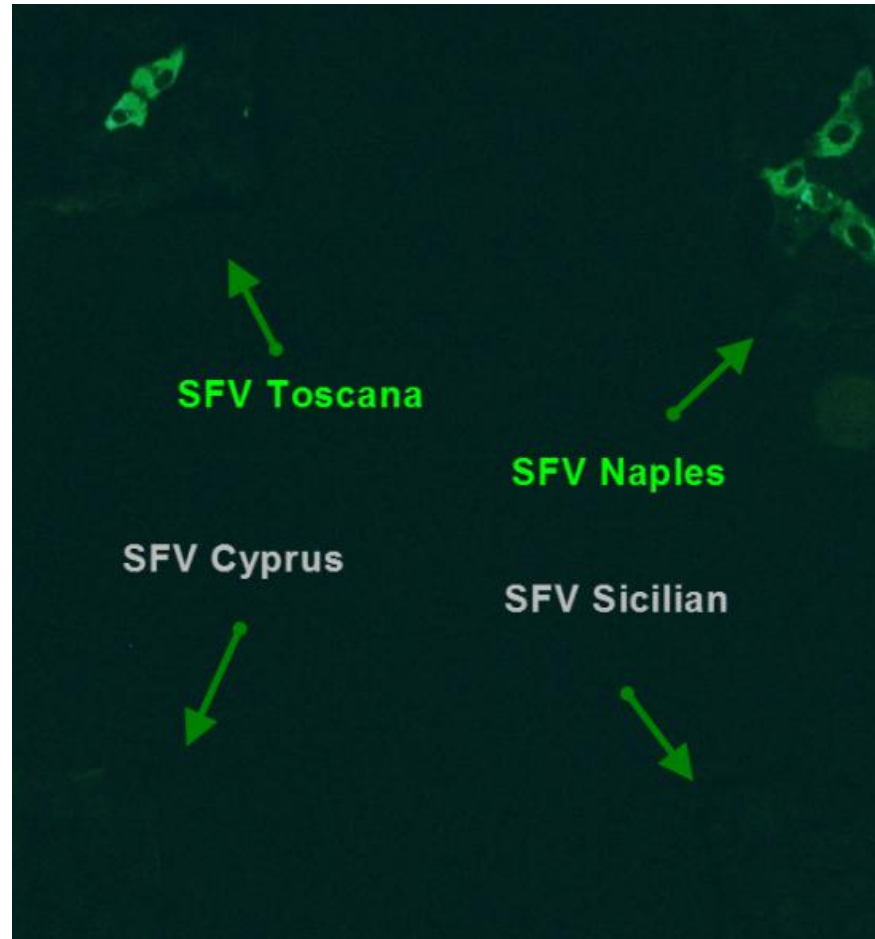


SFV Serologie I I FT

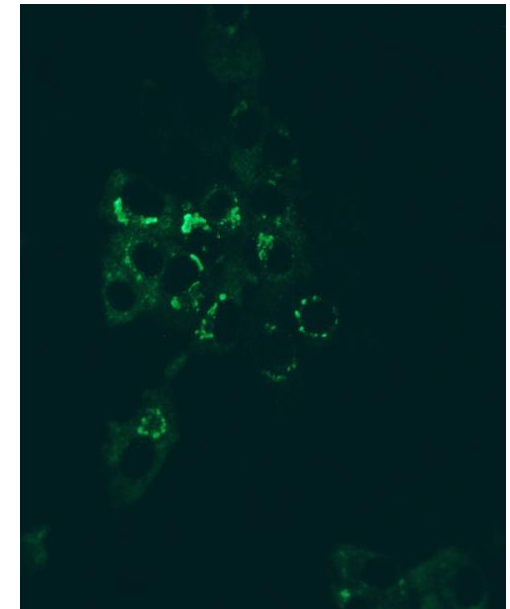
m, 48



SF Toscana IgM
1:100v 40x

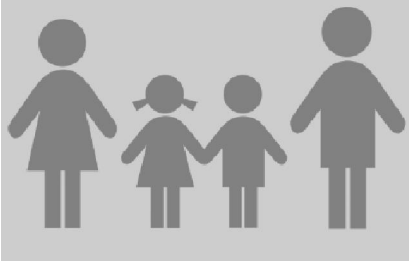


SFV Mosaik IgM
1:10v 10x



SFV Naples IgM
1:10v 40x

Reisegruppe



m, 48

Exanthem

+

Symptome

ausgeprägt

Serol.

++

f, 50

+

milde

+

f, 14

+

∅

∅

f, 13

+

∅

∅

m, 49

+

∅

∅

f, 13

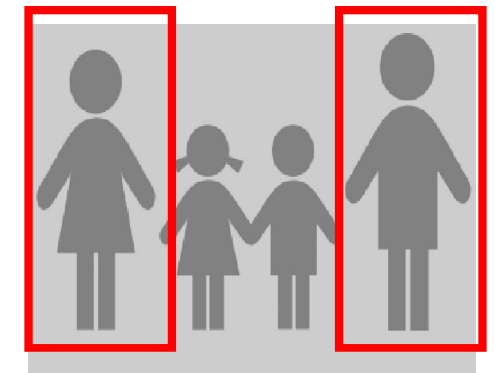
+

∅

∅

Zusammenfassung SFV Serologie

Alter, Geschlecht		48, m		50, f	
Serologie	Tage n. Symp.	10	52	11	52
	SFTOSV	IgM IB	++	++	+/-
	IgG IB	++	++	-	++
SFTOSV	IgM IIFT	400	3'200	100	1'000
	IgG IIFT	2'000	10'000	-	1'000
SFNaplesV	IgM IIFT	400	1'000	100	320
	IgG IIFT	1'000	1'000	-	100
SFSicilianV	IgM IIFT	-	-	-	-
	IgG IIFT	-	-	-	-
SFCyprusV	IgM IIFT	-	-	-	-
	IgG IIFT	-	-	-	-



Akute
Sandfly Fever
Virus
Infektion

Verteilung Vektoren – *Phlebotomus papatasi*

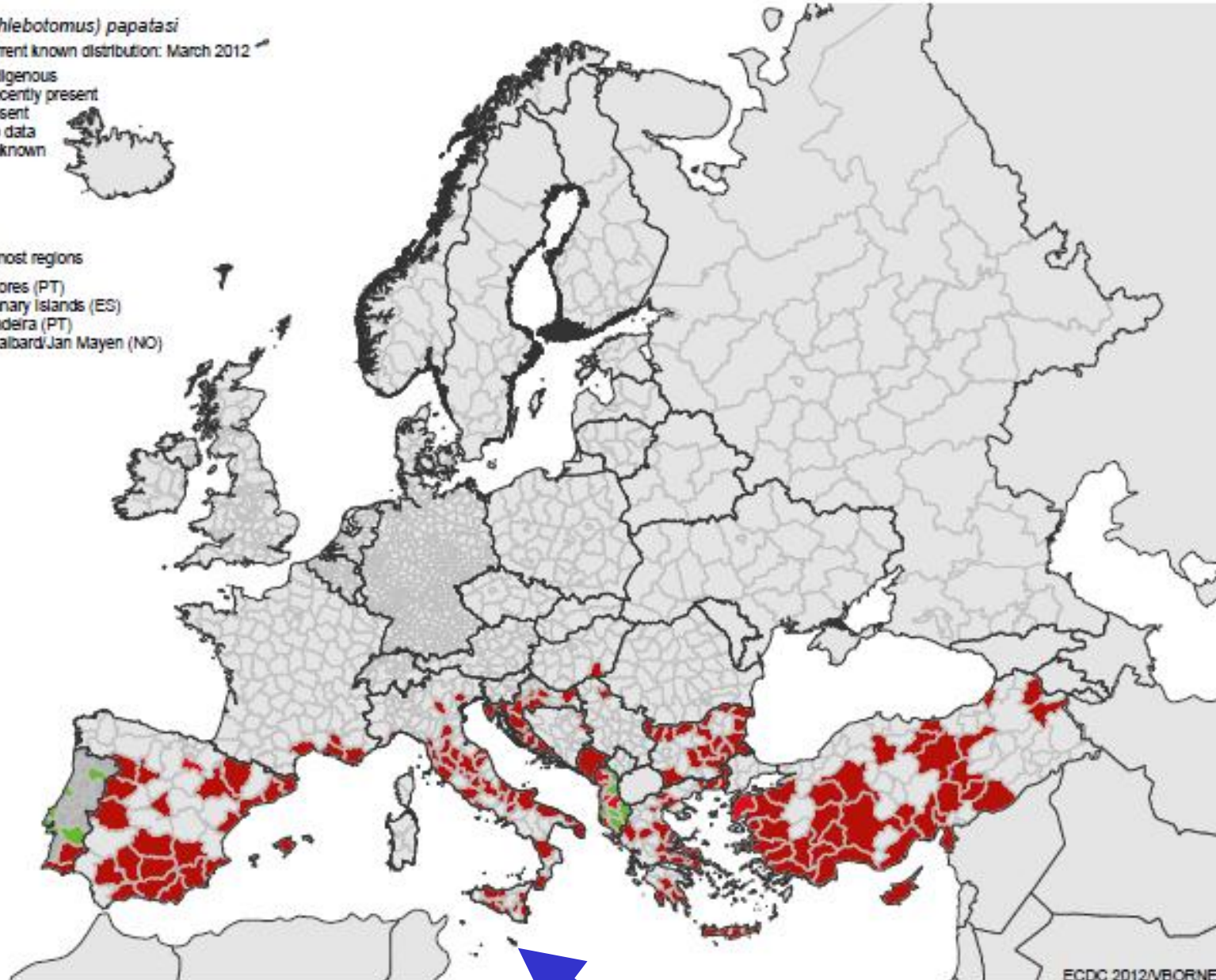
P. (Phlebotomus) papatasi

Current known distribution: March 2012

- Indigenous
- Recently present
- Absent
- No data
- Unknown

Outermost regions

- Azores (PT)
- Canary Islands (ES)
- Madeira (PT)
- Svalbard/Jan Mayen (NO)



ECDC 2012/VBORNET

Epidemiologie – SFV Toscana Serotyp



Depaquit et al. Euro Surveill. 2010

Beitrag der Labordiagnostik

Abkürzung Differentialdiagnose

Prognose

Epidemiologischer Hinweis

SFV-Infektionen
auf Malta



Danksagung

Wolfgang Korte

Philippe Rafeiner

Matthias Niedrig

Annette Teichmann

Susanne Vetsch