

# Alternative Routes of Zoonotic Vaccinia Virus Transmission, Brazil

## Technical Appendix

**Technical Appendix Table 1.** Epidemiologic data for 5 family members regarding exposure to vaccinia virus, Brazil

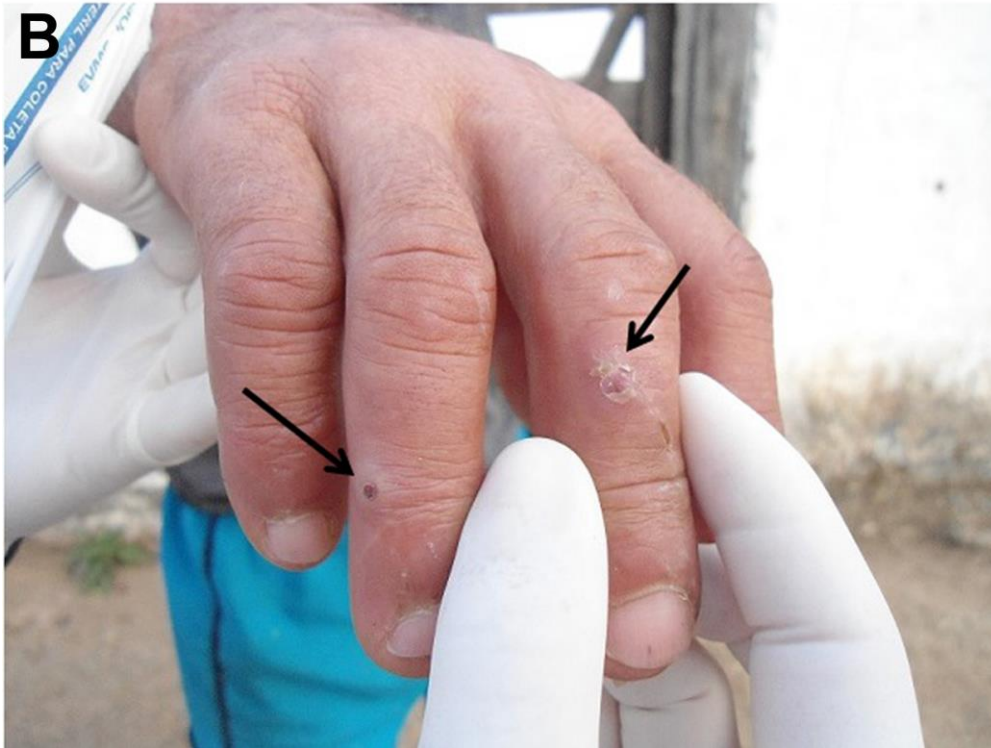
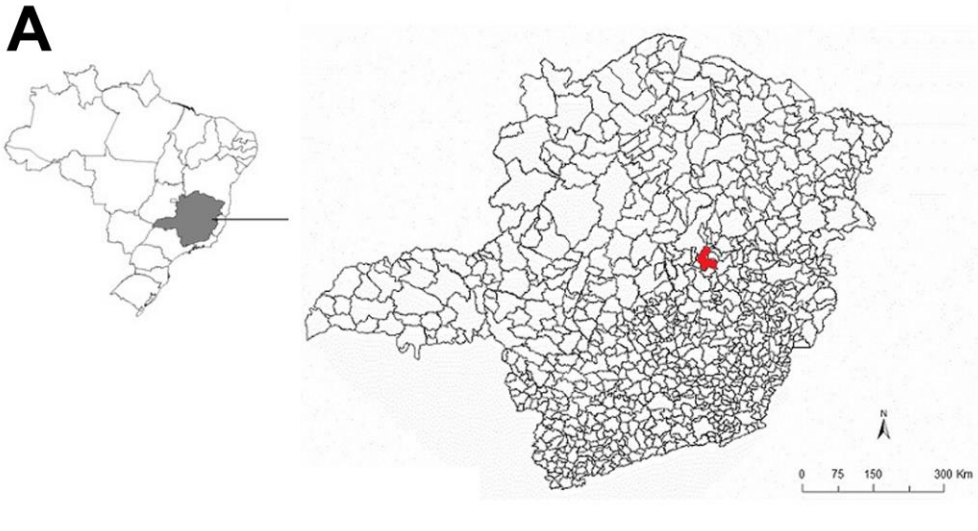
Characteristic	Patient				
	Father	Mother	Twin daughter	Twin daughter	Daughter
Occupation	Rural worker	Rural worker	Student	Student	Student
Contact with cows and horses	Yes	Yes	No	No	No
Contact with the environment	No	No	No	No	No
Vaccinated	Yes	Yes	No	No	No
Consumption of raw milk/cheese	Yes	Yes	Yes	Yes	Yes
Milked cows	Yes	No	No	No	No
Cheese production	Yes	Yes	No	No	No

**Technical Appendix Table 2.** Diagnostic results for 5 patients exposed to vaccinia virus, Brazil\*

Patient	Virus isolation	Serologic result (neutralizing units/mL)	Quantitative PCR result		Standard PCR result		
			<i>vgf</i>	<i>ha</i>	<i>vgf</i>	<i>ati</i> †	<i>ha</i>
Father	–	+ (800)	+	+	+	+	–
Mother	ND	+ (3,200)	+	+	–	–	–
Twin daughter	ND	–	–	+	–	+	–
Twin daughter	ND	–	+	–	–	–	–
Daughter	ND	+ (800)	–	–	–	+	–

\*PCR was performed with serum and swab samples from patient A. Other PCRs were performed only with serum samples. *vgf*, virus growth factor gene; *ha*, hemagglutinin gene; *ati*, A-type inclusion gene; –, negative; +, positive; ND, not done.

†By seminested PCR.



**Technical Appendix Figure.** A) Minas Gerais, Brazil (gray area) and Serro City (red area). B) Lesions (arrows) on the hands of a family member (father). These lesions were similar to those observed during outbreaks of bovine vaccinia, Brazil.