

Table S1. Example Serology Assays

(Accessed from source: <https://www.finndx.org/tools-and-resources/dxconnect/test-directories/>, site accessed on 25th May 2023)

	Continent	Type	Test	Regulatory Status
MPXV IgM/IgG Antibody Rapid Test	Asia	MPX IgG; MPX IgM	Rapid diagnostic test (strip or cassette)	Regulatory Achieved
MPXV IgG/IgM Rapid Test Cassette	USA	MPX IgG; MPX IgM	Rapid diagnostic test (strip or cassette)	Regulatory Achieved
NG-Test MPXV	Europe	Other	Rapid diagnostic test (strip or cassette)	Research Use Only (RUO)
MPXV - LightMix Modular Assay	Europe	Unknown	NAT reagent kit	Research Use Only (RUO)
MPXV by LAMP	Asia	MPX ATI gene	Cartridge-based processing	Validation

Table S2. Known MPXV / Host Exit Cell Protein Interactions

Accessed from source (Readapted from <https://viralzone.expasy.org/>, site accessed on 23 February 2023)

ND= No Data

MPXV Gene	Viral Protein	Host Protein
M1R	Protein L	Unknown host receptor
E8L	Cell Binding Protein	Glycan chondroitin sulphate
H3L	Envelope protein	Heparan sulphate
A26	ND	Binds laminin
A27	ND	Binds heparan
D8	ND	Binds chondroitin
H2	ND	Binds heparan

Table S3. Known MPXV / Host Exit Cell Protein Interactions. Accessed from source (Readapted from <https://viralzone.expasy.org/>, site accessed on 23 February 2023)

ND= No Data

MPXV Gene	Viral Protein	Host Protein
A38R	Phosphoprotein F17	NCK1, KLC1, ITSN1 and EPS15
C23R	Phosphoprotein F17	RICTOR and RPTOR
C18L	Protein F12	KLC2

Table S4. Potential MPXV / Host Immunomodulatory Proteins. (Readapted from <https://viralzone.expasy.org/>), site accessed on 23 February 2023)

ND= No Data

MPXV Gene	Viral Protein	Host Protein
J3R	Chemokine binding	ND
J2L	TNFR (Crmb)	TNFR, LTA, CCL28, CXCL12/13/14, CCL25
D3R	Viral EGF	EGFR
D9L	IFN evasion protein	SCF Complex
ND	IL-18 binding protein	IL-18
D11L	Protein C6	TANK, TBKBP1, STAT2
P1L	Protein N1	BAD and Bcl-2 antagonist BAX
C1L	IFN antagonist K1L	ND
C6R	Protein K	DDX3
C7L	Protein F1	BCL2L11, NLRP1, BAK

F3L	RNA BP E3	ISG15, eIF2 α /PKR/ZBP1
H1L	Protein phosphatase H1	STAT1 dephosphorylation
A37R	MHC modulating protein	ND
A41L	Protein A41	CCL21, CCL25, CCL26, CCL28
A47R	TLR/IL-1 like protein	MyD88, TRAM
B9R	sIFN γ B8	IFN- γ
B13R	Protein B13	IKK β
B16R	sIFN- α / β receptor	IFN- α

Table S5. Clinical trials registered, awaiting, or in progress since 2017, expected completed 2026. Accessed/Adapted from source (Data as accessed on 23 February 2023 from www.clinicaltrials.gov) O=Observational, I=Investigational

NCT Number	Abbreviated NCT Title	Cohort	Type	Country
NCT05522296	Break-through infection following MPXV vaccine	4638	O	Peru
NCT05559099	Tecovirimat for treatment of MPXV	450	I	DRC
NCT05476744	Viral clearance with MPXV	75	O	Spain
NCT05629299	Pilot study to detect MPXV in sperm:	30	I	France
NCT05562323	Characterization of vaccine-responses against MPXV	100	O	Various
NCT05627713	Clinical and biological aspects of the MPXV disease	330	I	France
NCT05443867	Asymptomatic shedding: Evaluation	140	O	Belgium
NCT05534984	Study of tecovirimat for human MPXV	530	I	USA
NCT05534165	Tecovirimat in patients with MPXV	120	I	Canada
NCT05651581	Efficacy and acceptability of a MPXV curriculum	150	I	USA
NCT05543577	Assessing the preparedness and knowledge of pharmacists	380	O	Egypt
NCT05567939	Clinical, virological, and immunological study.	300	O	Holland
NCT05438953	MPXV infection	300	I	France
NCT02977715	IMVAMUNE [®] Smallpox vaccine in adult healthcare	1600	I	DRC
NCT05058898	A one health study of MPXV human infection	280	O	CAR
NCT05512949	Evaluating immunogenicity of MVA-BN dose reduction	229	I	USA
NCT05597735	Assessment of the efficacy and safety of Tecovirimat	150	I	Brazil
NCT03745131	Cohort study of healthcare workers receiving Imvanex [®]	120	O	UK
NCT05734508	Safety profile of MVA-BN Vaccines in DRC	500	I	DRC
NCT05654883	New York City observational study of MPXV immunity	300	O	USA