

2. Negredo A, Palacios G, Vázquez-Morón S, et al. Discovery of an ebolavirus-like filovirus in europe. *PLoS Pathog.* 2011;7(10):e1002304.
3. Sanchez A, Yang ZY, Xu L, et al. Biochemical analysis of the secreted and virion glycoproteins of Ebola virus. *J Virol.* 1998;72(8):6442–7.
4. Mehedi M, Falzarano D, Seebach J, et al. A new Ebola virus nonstructural glycoprotein expressed through RNA editing. *J Virol.* 2011;85(11):5406–14.
5. Bharat TA, Riches JD, Kolesnikova L, et al. Cryo-electron tomography of Marburg virus particles and their morphogenesis within infected cells. *PLoS Biol.* 2011;9(11):e1001196.
6. Bharat TA, Noda T, Riches JD, et al. Structural dissection of Ebola virus and its assembly determinants using cryo-electron tomography. *Proc Natl Acad Sci U S A.* 2012;109(11):4275–80.
7. Warfield KL, Swenson DL, Olinger GG, et al. Gene-specific countermeasures against Ebola virus based on antisense phosphorodiamidate morpholino oligomers. *PLoS Pathog.* 2006;2(1):e1.
8. Geisbert TW, Lee AC, Robbins M, et al. Postexposure protection of non-human primates against a lethal Ebola virus challenge with RNA interference: a proof-of-concept study. *Lancet.* 2010;375(9729):1896–905.
9. Thi EP, Mire CE, Ursic-Bedoya R, et al. Marburg virus infection in nonhuman primates: therapeutic treatment by lipid-encapsulated siRNA. *Sci Transl Med.* 2014;6(250):250ra116. *This study demonstrated that lipid nanoparticle-delivered small interfering RNA could protect nonhuman primates from marburgvirus infection.*
10. Dye JM, Herbert AS, Kuehne AI, et al. Postexposure antibody prophylaxis protects nonhuman primates from filovirus disease. *Proc Natl Acad Sci U S A.* 2012;109(13):5034–9. *This is the first report showing that passive immunization with antibodies provides protection against ebolavirus and marburgvirus infections in nonhuman primates.*
11. Marzi A, Yoshida R, Miyamoto H, et al. Protective efficacy of neutralizing monoclonal antibodies in a nonhuman primate model of Ebola hemorrhagic fever. *PLoS One.* 2012;7(4):e36192.
12. Olinger Jr GG, Pettitt J, Kim D, et al. Delayed treatment of Ebola virus infection with plant-derived monoclonal antibodies provides protection in rhesus macaques. *Proc Natl Acad Sci U S A.* 2012;109(44):18030–5.
13. Pettitt J, Zeitlin L, Kim Do H, et al. Therapeutic intervention of Ebola virus infection in rhesus macaques with the MB-003 monoclonal antibody cocktail. *Sci Transl Med.* 2013;5(199):199ra113.
14. Qiu X, Wong G, Audet J, et al. Reversion of advanced Ebola virus disease in nonhuman primates with ZMapp. *Nature.* 2014 [Epub ahead of print]. *This study showed that ZMapp, a cocktail of monoclonal antibodies, rescued 100 % of monkeys when treatment was initiated up to 5 days post-inoculation.*
15. Changula K, Kajihara M, Mweene AS, Takada A. Ebola and Marburg virus diseases in Africa: increased risk of outbreaks in previously unaffected areas? *Microbiol Immunol.* 2014;58(9):483–91.
16. Takada A, Robison C, Goto H, et al. A system for functional analysis of Ebola virus glycoprotein. *Proc Natl Acad Sci U S A.* 1997;94(26):14764–9.
17. Groseth A, Marzi A, Hoenen T, et al. The Ebola virus glycoprotein contributes to but is not sufficient for virulence in vivo. *PLoS Pathog.* 2012;8(8):e1002847.
18. Martínez O, Ndungo E, Tantral L, et al. A mutation in the Ebola virus envelope glycoprotein restricts viral entry in a host species- and cell-type-specific manner. *J Virol.* 2013;87(6):3324–34.
19. Volchkov VE, Feldmann H, Volchkova VA, Klenk HD. Processing of the Ebola virus glycoprotein by the proprotein convertase furin. *Proc Natl Acad Sci U S A.* 1998;95(10):5762–7.
20. Volchkov VE, Volchkova VA, Ströher U, et al. Proteolytic processing of Marburg virus glycoprotein. *Virology.* 2000;268(1):1–6.
21. Maruyama J, Miyamoto H, Kajihara M, et al. Characterization of the envelope glycoprotein of a novel filovirus, Iloivi virus. *J Virol.* 2014;88(1):99–109.
22. Neumann G, Feldmann H, Watanabe S, Lukashevich I, Kawaoka Y. Reverse genetics demonstrates that proteolytic processing of the Ebola virus glycoprotein is not essential for replication in cell culture. *J Virol.* 2002;76(1):406–10.
23. Neumann G, Geisbert TW, Ebihara H, et al. Proteolytic processing of the Ebola virus glycoprotein is not critical for Ebola virus replication in nonhuman primates. *J Virol.* 2007;81(6):2995–8.
24. Feldmann H, Will C, Schikore M, Slenczka W, Klenk HD. Glycosylation and oligomerization of the spike protein of Marburg virus. *Virology.* 1991;182(1):353–6.
25. Feldmann H, Nichol ST, Klenk HD, Peters CJ, Sanchez A. Characterization of filoviruses based on differences in structure and antigenicity of the virion glycoprotein. *Virology.* 1994;199(2):469–73.
26. Lee JE, Fusco ML, Hessel AJ, et al. Structure of the Ebola virus glycoprotein bound to an antibody from a human survivor. *Nature.* 2008;454(7201):177–82.
27. Nanbo A, Imai M, Watanabe S, et al. Ebolavirus is internalized into host cells via macropinocytosis in a viral glycoprotein-dependent manner. *PLoS Pathog.* 2010;6(9):e1001121.
28. Shimajima M, Takada A, Ebihara H, et al. Tyro3 family-mediated cell entry of Ebola and Marburg viruses. *J Virol.* 2006;80(20):10109–16.
29. Brindley MA, Hunt CL, Kondratowicz AS, et al. Tyrosine kinase receptor Axl enhances entry of Zaire ebolavirus without direct interactions with the viral glycoprotein. *Virology.* 2011;415(2):83–94.
30. Hunt CL, Kolokoltsov AA, Davey RA, Maury W. The Tyro3 receptor kinase Axl enhances macropinocytosis of Zaire ebolavirus. *J Virol.* 2011;85(1):334–47.
31. Morizono K, Xie Y, Olafsen T, et al. The soluble serum protein Gas6 bridges virion envelope phosphatidylserine to the TAM receptor tyrosine kinase Axl to mediate viral entry. *Cell Host Microbe.* 2011;9(4):286–98.
32. Kondratowicz AS, Lennemann NJ, Sinn PL, et al. T-cell immunoglobulin and mucin domain 1 (TIM-1) is a receptor for Zaire Ebolavirus and Lake Victoria Marburgvirus. *Proc Natl Acad Sci U S A.* 2011;108(20):8426–31. *The authors identified TIM-1 as a candidate receptor of filoviruses.*
33. Jemielity S, Wang JJ, Chan YK, et al. TIM-family proteins promote infection of multiple enveloped viruses through virion-associated phosphatidylserine. *PLoS Pathog.* 2013;9(3):e1003232.
34. Moller-Tank S, Kondratowicz AS, Davey RA, Rennert PD, Maury W. Role of the phosphatidylserine receptor TIM-1 in enveloped-virus entry. *J Virol.* 2013;87(15):8327–41. *This study shows that TIM-1 mediates ebolavirus entry through interaction with PtdSer on the viral envelope.*
35. Becker S, Spiess M, Klenk HD. The asialoglycoprotein receptor is a potential liver-specific receptor for Marburg virus. *J Gen Virol.* 1995;76(Pt 2):393–9.
36. Alvarez CP, Lasala F, Carrillo J, et al. C-type lectins DC-SIGN and L-SIGN mediate cellular entry by Ebola virus in cis and in trans. *J Virol.* 2002;76(13):6841–4.
37. Simmons G, Reeves JD, Grogan CC, et al. DC-SIGN and DC-SIGNR bind ebola glycoproteins and enhance infection of macrophages and endothelial cells. *Virology.* 2003;305(1):115–23.
38. Takada A, Fujioka K, Tsuiji M, et al. Human macrophage C-type lectin specific for galactose and N-acetylgalactosamine promotes filovirus entry. *J Virol.* 2004;78(6):2943–7.

39. Gramberg T, Hofmann H, Möller P, et al. LSECtin interacts with filovirus glycoproteins and the spike protein of SARS coronavirus. *Virology*. 2005;340(2):224–36.
40. Matsuno K, Kishida N, Usami K, et al. Different potential of C-type lectin-mediated entry between Marburg virus strains. *J Virol*. 2010;84(10):5140–7.
41. Marzi A, Möller P, Hanna SL, et al. Analysis of the interaction of Ebola virus glycoprotein with DC-SIGN (dendritic cell-specific intercellular adhesion molecule 3-grabbing nonintegrin) and its homologue DC-SIGNR. *J Infect Dis*. 2007;196 Suppl 2:S237–46.
42. Matsuno K, Nakayama E, Noyori O, et al. C-type lectins do not act as functional receptors for filovirus entry into cells. *Biochem Biophys Res Commun*. 2010;403(1):144–8.
43. Michelow IC, Lear C, Scully C, et al. High-dose mannose-binding lectin therapy for Ebola virus infection. *J Infect Dis*. 2011;203(2):175–9.
44. Takada A, Feldmann H, Ksiazek TG, Kawaoka Y. Antibody-dependent enhancement of Ebola virus infection. *J Virol*. 2003;77(13):7539–44.
45. Takada A, Ebihara H, Feldmann H, Geisbert TW, Kawaoka Y. Epitopes required for antibody-dependent enhancement of Ebola virus infection. *J Infect Dis*. 2007;196 Suppl 2:S347–56.
46. Nakayama E, Tomabechi D, Matsuno K, et al. Antibody-dependent enhancement of Marburg virus infection. *J Infect Dis*. 2011;204 Suppl 3:S978–85.
47. Chandran K, Sullivan NJ, Felbor U, Whelan SP, Cunningham JM. Endosomal proteolysis of the Ebola virus glycoprotein is necessary for infection. *Science*. 2005;308(5728):1643–5.
48. Dube D, Brecher MB, Delos SE, et al. The primed ebolavirus glycoprotein (19-kilodalton GP1,2): sequence and residues critical for host cell binding. *J Virol*. 2009;83(7):2883–91.
49. Schomberg KL, Shoemaker CJ, Dube D, et al. Alpha5beta1-integrin controls ebolavirus entry by regulating endosomal cathepsins. *Proc Natl Acad Sci U S A*. 2009;106(19):8003–8.
50. Takada A, Watanabe S, Ito H, et al. Downregulation of beta1 integrins by Ebola virus glycoprotein: implication for virus entry. *Virology*. 2000;278(1):20–6.
51. Gnirss K, Kühl A, Karsten C, et al. Cathepsins B and L activate Ebola but not Marburg virus glycoproteins for efficient entry into cell lines and macrophages independent of TMPRSS2 expression. *Virology*. 2012;424(1):3–10.
52. Misasi J, Chandran K, Yang JY, et al. Filoviruses require endosomal cysteine proteases for entry but exhibit distinct protease preferences. *J Virol*. 2012;86(6):3284–92.
53. Marzi A, Reinheckel T, Feldmann H, Cathepsin B. L are not required for ebola virus replication. *PLoS Negl Trop Dis*. 2012;6(12):e1923.
54. Carette JE, Raaben M, Wong AC, et al. Ebola virus entry requires the cholesterol transporter Niemann-Pick C1. *Nature*. 2011;477(7364):340–3. *This study used a haploid genetic screen to demonstrate that NPC1 is required for GP-mediated virus infection.*
55. Côté M, Misasi J, Ren T, et al. Small molecule inhibitors reveal Niemann-Pick C1 is essential for Ebola virus infection. *Nature*. 2011;477(7364):344–8. *This study shows that NPC1 is an essential factor for ebolavirus infection by using small molecule inhibitors.*
56. Miller EH, Obernosterer G, Raaben M, et al. Ebola virus entry requires the host-programmed recognition of an intracellular receptor. *EMBO J*. 2012;31(8):1947–60. *This study indicates that NPC1 is an essential endosomal receptor for filovirus infection.*
57. Shoemaker CJ, Schomberg KL, Delos SE, et al. Multiple cationic amphiphiles induce a Niemann-Pick C phenotype and inhibit Ebola virus entry and infection. *PLoS One*. 2013;8(2):e56265.
58. Sanchez A, Kiley MP. Identification and analysis of Ebola virus messenger RNA. *Virology*. 1987;157(2):414–20.
59. Mühlberger E, Lötfering B, Klenk HD, Becker S. Three of the four nucleocapsid proteins of Marburg virus, NP, VP35, and L, are sufficient to mediate replication and transcription of Marburg virus-specific monocistronic minigenomes. *J Virol*. 1998;72(11):8756–64.
60. Mühlberger E, Weik M, Volchkov VE, Klenk HD, Becker S. Comparison of the transcription and replication strategies of marburg virus and Ebola virus by using artificial replication systems. *J Virol*. 1999;73(3):2333–42.
61. Volchkov VE, Volchkova VA, Mühlberger E, et al. Recovery of infectious Ebola virus from complementary DNA: RNA editing of the GP gene and viral cytotoxicity. *Science*. 2001;291(5510):1965–9.
62. Takahashi K, Halfmann P, Oyama M, et al. DNA topoisomerase I facilitates the transcription and replication of the Ebola virus genome. *J Virol*. 2013;87(16):8862–9.
63. Takahashi H, Sawa H, Hasegawa H, et al. Binding and dissociation of human topoisomerase I with hairpin-loop RNAs: implications for the regulation of HIV-1 replication. *Biochem Biophys Res Commun*. 2002;297(3):593–9.
64. Kubota T, Matsuoka M, Chang TH, et al. Ebolavirus VP35 interacts with the cytoplasmic dynein light chain 8. *J Virol*. 2009;83(13):6952–6.
65. Hoenen T, Jung S, Herwig A, Groseth A, Becker S. Both matrix proteins of Ebola virus contribute to the regulation of viral genome replication and transcription. *Virology*. 2010;403(1):56–66.
66. Groseth A, Charton JE, Sauerborn M, et al. The Ebola virus ribonucleoprotein complex: a novel VP30-L interaction identified. *Virus Res*. 2009;140(1–2):8–14.
67. Hoenen T, Shabman RS, Groseth A, et al. Inclusion bodies are a site of ebolavirus replication. *J Virol*. 2012;86(21):11779–88.
68. Nanbo A, Watanabe S, Halfmann P, Kawaoka Y. The spatio-temporal distribution dynamics of Ebola virus proteins and RNA in infected cells. *Sci Rep*. 2013;3:1206.
69. Modrof J, Mühlberger E, Klenk HD, Becker S. Phosphorylation of VP30 impairs ebola virus transcription. *J Biol Chem*. 2002;277(36):33099–104.
70. Martínez MJ, Biedenkopf N, Volchkova V, et al. Role of Ebola virus VP30 in transcription reinitiation. *J Virol*. 2008;82(24):12569–73.
71. Biedenkopf N, Hartlieb B, Hoenen T, Becker S. Phosphorylation of Ebola virus VP30 influences the composition of the viral nucleocapsid complex: impact on viral transcription and replication. *J Biol Chem*. 2013;288(16):11165–74. *This study demonstrates that the phosphorylation status of ebolavirus VP30 determines the composition of the viral polymerase complex and mode of RNA synthesis.*
72. Ilinykh PA, Tigabu B, Ivanov A, et al. Role of protein phosphatase 1 in dephosphorylation of Ebola virus VP30 protein and its targeting for the inhibition of viral transcription. *J Biol Chem*. 2014;289(33):22723–38.
73. DiCarlo A, Biedenkopf N, Hartlieb B, Klussmeier A, Becker S. Phosphorylation of Marburg virus NP region II modulates viral RNA synthesis. *J Infect Dis*. 2011;204 Suppl 3:S927–33.
74. Oestereich L, Lüdtke A, Wurr S, et al. Successful treatment of advanced Ebola virus infection with T-705 (favipiravir) in a small animal model. *Antivir Res*. 2014;105:17–21.
75. Warren TK, Wells J, Panchal RG, et al. Protection against filovirus diseases by a novel broad-spectrum nucleoside analogue BCX4430. *Nature*. 2014;508(7496):402–5. *BCX4430 is the first synthetic molecule that provides full protection against filovirus infection in nonhuman primates.*
76. Hartlieb B, Weissenhorn W. Filovirus assembly and budding. *Virology*. 2006;344(1):64–70.
77. Harty RN, Brown ME, Wang G, Huibregtse J, Hayes FP. A PPxY motif within the VP40 protein of Ebola virus interacts physically

- and functionally with a ubiquitin ligase: implications for filovirus budding. *Proc Natl Acad Sci U S A*. 2000;97(25):13871–6.
78. Neumann G, Ebihara H, Takada A, et al. Ebola virus VP40 late domains are not essential for viral replication in cell culture. *J Virol*. 2005;79(16):10300–7.
 79. Yamayoshi S, Noda T, Ebihara H, et al. Ebola virus matrix protein VP40 uses the COPII transport system for its intracellular transport. *Cell Host Microbe*. 2008;3(3):168–77.
 80. Yamayoshi S, Neumann G, Kawaoka Y. Role of the GTPase Rab1b in ebolavirus particle formation. *J Virol*. 2010;84(9):4816–20.
 81. Ruigrok RW, Schoehn G, Dessen A, et al. Structural characterization and membrane binding properties of the matrix protein VP40 of Ebola virus. *J Mol Biol*. 2000;300(1):103–12.
 82. Dolnik O, Kolesnikova L, Stevermann L, Becker S. Tsg101 is recruited by a late domain of the nucleocapsid protein to support budding of Marburg virus-like particles. *J Virol*. 2010;84(15):7847–56.
 83. Kolesnikova L, Bohil AB, Cheney RE, Becker S. Budding of Marburgvirus is associated with filopodia. *Cell Microbiol*. 2007;9(4):939–51.
 84. Ruthel G, Demmin GL, Kallstrom G, et al. Association of ebola virus matrix protein VP40 with microtubules. *J Virol*. 2005;79(8):4709–19.
 85. Adu-Gyamfi E, Digman MA, Gratton E, Stahelin RV. Single-particle tracking demonstrates that actin coordinates the movement of the Ebola virus matrix protein. *Biophys J*. 2012;103(9):L41–3.
 86. Schudt G, Kolesnikova L, Dolnik O, Sodeik B, Becker S. Live-cell imaging of Marburg virus-infected cells uncovers actin-dependent transport of nucleocapsids over long distances. *Proc Natl Acad Sci U S A*. 2013;110(35):14402–7.
 87. Welsch S, Kolesnikova L, Krähling V, et al. Electron tomography reveals the steps in filovirus budding. *PLoS Pathog*. 2010;6(4):e1000875.
 88. Lu J, Qu Y, Liu Y, et al. Host IQGAP1 and Ebola virus VP40 interactions facilitate virus-like particle egress. *J Virol*. 2013;87(13):7777–80.
 89. García M, Cooper A, Shi W, et al. Productive replication of Ebola virus is regulated by the c-Ab1 tyrosine kinase. *Sci Transl Med*. 2012;4(123):123ra24.
 90. Kolesnikova L, Mittler E, Schudt G, Shams-Eldin H, Becker S. Phosphorylation of Marburg virus matrix protein VP40 triggers assembly of nucleocapsids with the viral envelope at the plasma membrane. *Cell Microbiol*. 2012;14(2):182–97.
 91. Becker S, Huppertz S, Klenk HD, Feldmann H. The nucleoprotein of Marburg virus is phosphorylated. *J Gen Virol*. 1994;75(Pt 4):809–18.
 92. Becker S, Mühlberger E. Co- and posttranslational modifications and functions of Marburg virus proteins. *Curr Top Microbiol Immunol*. 1999;235:23–34.
 93. Kinch MS, Yunus AS, Lear C, et al. FGI-104: a broad-spectrum small molecule inhibitor of viral infection. *Am J Transl Res*. 2009;1(1):87–98.
 94. Han Z, Lu J, Liu Y, et al. Small-molecule probes targeting the viral PPxY-host Nedd4 interface block egress of a broad range of RNA viruses. *J Virol*. 2014;88(13):7294–306.
 95. Kajihara M, Marzi A, Nakayama E, et al. Inhibition of Marburg virus budding by nonneutralizing antibodies to the envelope glycoprotein. *J Virol*. 2012;86(24):13467–74. *This study demonstrated that non-neutralizing monoclonal antibodies against marburgvirus GP reduced the budding and release of progeny viruses from infected cells.*
 96. Cárdenas WB, Loo YM, Gale Jr M, et al. Ebola virus VP35 protein binds double-stranded RNA and inhibits alpha/beta interferon production induced by RIG-I signaling. *J Virol*. 2006;80(11):5168–78.
 97. Leung DW, Prins KC, Borek DM, et al. Structural basis for dsRNA recognition and interferon antagonism by Ebola VP35. *Nat Struct Mol Biol*. 2010;17(2):165–72.
 98. Basler CF, Wang X, Mühlberger E, et al. The Ebola virus VP35 protein functions as a type I IFN antagonist. *Proc Natl Acad Sci U S A*. 2000;97(22):12289–94.
 99. Basler CF, Mikulasova A, Martinez-Sobrido L, et al. The Ebola virus VP35 protein inhibits activation of interferon regulatory factor 3. *J Virol*. 2003;77(14):7945–56.
 100. Prins KC, Cárdenas WB, Basler CF. Ebola virus protein VP35 impairs the function of interferon regulatory factor-activating kinases IKKepsilon and TBK-1. *J Virol*. 2009;83(7):3069–77.
 101. Chang TH, Kubota T, Matsuoka M, et al. Ebola Zaire virus blocks type I interferon production by exploiting the host SUMO modification machinery. *PLoS Pathog*. 2009;5(6):e1000493.
 102. Luthra P, Ramanan P, Mire CE, et al. Mutual antagonism between the Ebola virus VP35 protein and the RIG-I activator PACT determines infection outcome. *Cell Host Microbe*. 2013;14(1):74–84. *This study shows that ebolavirus VP35 interacts with PACT and inhibits PACT-mediated RIG-I activation, and that the PACT-VP35 interaction impairs polymerase complex formation, thereby diminishing viral RNA synthesis.*
 103. Haasnoot J, de Vries W, Geutjes EJ, et al. The Ebola virus VP35 protein is a suppressor of RNA silencing. *PLoS Pathog*. 2007;3(6):e86.
 104. Fabozzi G, Nabel CS, Dolan MA, Sullivan NJ. Ebolavirus proteins suppress the effects of small interfering RNA by direct interaction with the mammalian RNA interference pathway. *J Virol*. 2011;85(6):2512–23.
 105. Feng Z, Cerveny M, Yan Z, He B. The VP35 protein of Ebola virus inhibits the antiviral effect mediated by double-stranded RNA-dependent protein kinase PKR. *J Virol*. 2007;81(1):182–92.
 106. Reid SP, Leung LW, Hartman AL, et al. Ebola virus VP24 binds karyopherin alpha1 and blocks STAT1 nuclear accumulation. *J Virol*. 2006;80(11):5156–67.
 107. Reid SP, Valmas C, Martinez O, Sanchez FM, Basler CF. Ebola virus VP24 proteins inhibit the interaction of NPI-1 subfamily karyopherin alpha proteins with activated STAT1. *J Virol*. 2007;81(24):13469–77.
 108. Mateo M, Reid SP, Leung LW, Basler CF, Volchikov VE. Ebolavirus VP24 binding to karyopherins is required for inhibition of interferon signaling. *J Virol*. 2010;84(2):1169–75.
 109. Zhang AP, Bornholdt ZA, Liu T, et al. The ebola virus interferon antagonist VP24 directly binds STAT1 and has a novel, pyramidal fold. *PLoS Pathog*. 2012;8(2):e1002550. *This is the first report showing the crystal structure of ebolavirus VP24, and also demonstrates that ebolavirus VP24 directly binds to STAT1.*
 110. Valmas C, Grosch MN, Schumann M, et al. Marburg virus evades interferon responses by a mechanism distinct from ebola virus. *PLoS Pathog*. 2010;6(1):e1000721.
 111. Volchikov VE, Chepurinov AA, Volchkova VA, Ternovoj VA, Klenk HD. Molecular characterization of guinea pig-adapted variants of Ebola virus. *Virology*. 2000;277(1):147–55.
 112. Ebihara H, Takada A, Kobasa D, et al. Molecular determinants of Ebola virus virulence in mice. *PLoS Pathog*. 2006;2(7):e73.
 113. Lofts LL, Ibrahim MS, Negley DL, Hevey MC, Schmaljohn AL. Genomic differences between guinea pig lethal and non-lethal Marburg virus variants. *J Infect Dis*. 2007;196 Suppl 2:S305–12.

114. Lofts LL, Wells JB, Bavari S, Warfield KL. Key genomic changes necessary for an in vivo lethal mouse marburgvirus variant selection process. *J Virol*. 2011;85(8):3905–17.
115. Edwards MR, Johnson B, Mire CE, et al. The Marburg virus VP24 protein interacts with Keap1 to activate the cytoprotective antioxidant response pathway. *Cell Rep*. 2014;6(6):1017–25.
116. Page A, Volchkova VA, Reid SP, et al. Marburgvirus hijacks nrf2-dependent pathway by targeting nrf2-negative regulator keap1. *Cell Rep*. 2014;6(6):1026–36.
117. Yasuda J. Ebolavirus replication and tetherin/BST-2. *Front Microbiol*. 2012;3:111.
118. Jouvenet N, Neil SJ, Zhadina M, et al. Broad-spectrum inhibition of retroviral and filoviral particle release by tetherin. *J Virol*. 2009;83(4):1837–44.
119. Kaletsky RL, Francica JR, Agrawal-Gamse C, Bates P. Tetherin-mediated restriction of filovirus budding is antagonized by the Ebola glycoprotein. *Proc Natl Acad Sci U S A*. 2009;106(8):2886–91.
120. Radoshitzky SR, Dong L, Chi X, et al. Infectious Lassa virus, but not filoviruses, is restricted by BST-2/tetherin. *J Virol*. 2010;84(20):10569–80.
121. Gnirß K, Fiedler M, Krämer-Kühl A, et al. Analysis of determinants in filovirus glycoproteins required for tetherin antagonism. *Viruses*. 2014;6(4):1654–71.
122. Francica JR, Varela-Rohena A, Medvec A, et al. Steric shielding of surface epitopes and impaired immune recognition induced by the ebola virus glycoprotein. *PLoS Pathog*. 2010;6(9):e1001098.
123. Noyori O, Nakayama E, Maruyama J, Yoshida R, Takada A. Suppression of Fas-mediated apoptosis via steric shielding by filovirus glycoproteins. *Biochem Biophys Res Commun*. 2013;441(4):994–8.
124. Noyori O, Matsuno K, Kajihara M, et al. Differential potential for envelope glycoprotein-mediated steric shielding of host cell surface proteins among filoviruses. *Virology*. 2013;446(1–2):152–61.
125. Ito H, Watanabe S, Takada A, Kawaoka Y. Ebola virus glycoprotein: proteolytic processing, acylation, cell tropism, and detection of neutralizing antibodies. *J Virol*. 2001;75(3):1576–80.
126. Mohan GS, Li W, Ye L, Compans RW, Yang C. Antigenic subversion: a novel mechanism of host immune evasion by Ebola virus. *PLoS Pathog*. 2012;8(12):e1003065.

