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Nota di contenuto	Animal model studies on viral infections --Animal models for human Herpesvirus 6 infection --Animal models for Ebola and Marburg virus infections --Hepatitis C virus infection and related liver disease: the quest for the best animal model --Can non-human primates serve as models for investigating Dengue disease pathogenesis? --A transgenic mouse model of human T cell Leukemia virus type-1 associated diseases --Mechanisms of pathogenesis induced by bovine leukemia virus as a model for human T-cell leukemia virus --Macaques as model hosts for studies of HIV-1 infection --Macaque-tropic Human Immunodeficiency Virus type 1: breaking out of the host restriction factors --Genetic similarity of circulating and small intestinal virus at the end stage of acute pathogenic Simian-Human Immunodeficiency Virus infection --A novel but simple method for generation of human dendritic cells from unfractionated peripheral blood mononuclear cells within 2 days: its application for induction of HIV-1-reactive CD4 T cells in the hu-PBL SCID mice --Growth potentials of CCR5-Tropic/CXCR4-Tropic HIV-1mt clones in macaque cells --Sensitive detection of measles virus infection in the blood and tissues of

humanized mouse by one-step quantitative RT-PCR --Quantification of viral infection dynamics in animal experiments --Transgenic expression of the human LEDGF/p75 gene relieves the species barrier against HIV-1 infection in mouse cells --Increased infectivity in human cells and resistant to antibody-mediated neutralization by truncation of the SIV gp41 cytoplasmic tail --Natural infection of murine novovirus in conventional and specific pathogen free laboratory mice --HPV18 E1^{E4} is assembled into aggresome-like compartment and involved in sequestration of viral oncoproteins.

Sommario/riassunto

Understanding viral replication and pathogenicity properties in infected individuals is a major mission of animal virology. Animal models are essential to analyze the in vivo viral characteristics and to develop countermeasures against viruses. To fight against a wide variety of viruses, basic studies with specific and/ or common approaches are required. This Research Topic collects articles that describe studies on numerous virus species at various stages toward animal experiments: (i) description/evaluation/ new challenges of animal model studies; (ii) experimental material/methods for animal model studies; (iii) observations for upcoming animal model studies. Numbers of DNA and RNA viruses such as HHV-6, HPV, Ebola virus, HCV, dengue virus, HTLV-1, HIV-1, SIV, and measles virus are covered by this special issue consisting of original research, methods, review, mini-review, and opinion articles. All readers would understand, we believe and hope, that animal model studies are critical for current virology as always.
