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(54) Title: METHODS FOR PREVENTING REOVIRUS RECOGNITION FOR THE TREATMENT OF CELLULAR PROLIFERATIVE DISORDERS

(57) Abstract: The present invention pertains to methods for preventing reovirus recognition in the treatment of cellular proliferative disorders, and particularly ras-mediated cellular proliferative disorders, in mammals. The mammal may be selected from dogs, cats, sheep, goats, cattle, horses, pigs, mice, humans and non-human primates. The method comprises suppressing or otherwise inhibiting the immune system of the mammal and, concurrently or subsequently, administering to the proliferating cells an effective amount of one or more reoviruses under conditions which result in substantial lysis of the proliferating cells. In particular, the methods provide for reovirus treatment of immunosuppressed or immuno-deficient mammals to treat the proliferative disorders. Immunosuppression,immunoinhibition or otherwise inducing an immunodeficient state in a mammal renders the reovirus more effective. The methods may include the selective removal of immune constituents that may interfere with the systemic delivery of the virus; preventing reovirus recognition by the host immune system; and removal of the virus from an immune suppressed or immune incompetent host following treatment with reovirus. Alternatively, reovirus may be administered to a mammal with a diminished immune response system under conditions which result in substantial lysis of the proliferating cells. Immune systems may be compromised by one or more of the following: an HIV infection; as a side effect of chemotherapy or radiation therapy; by selective removal of B and/or T cell populations; by removal of antibodies (anti-antireovirus antibodies or all antibodies), and the like.

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