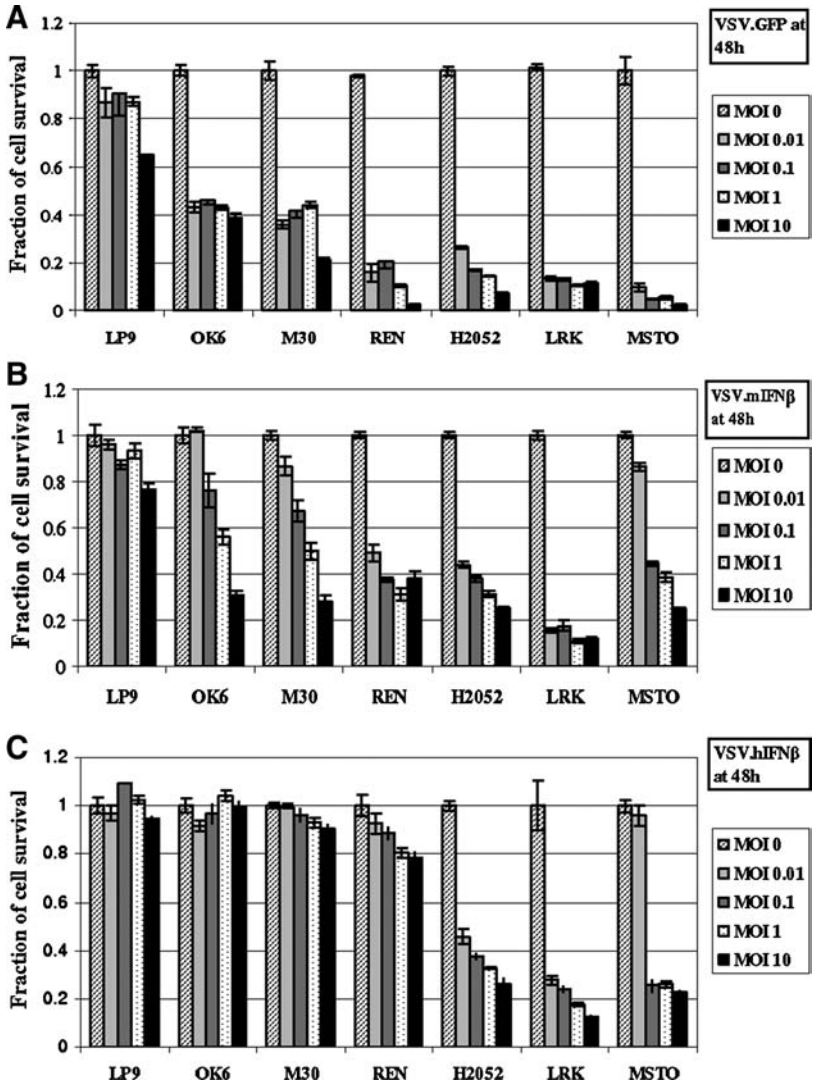
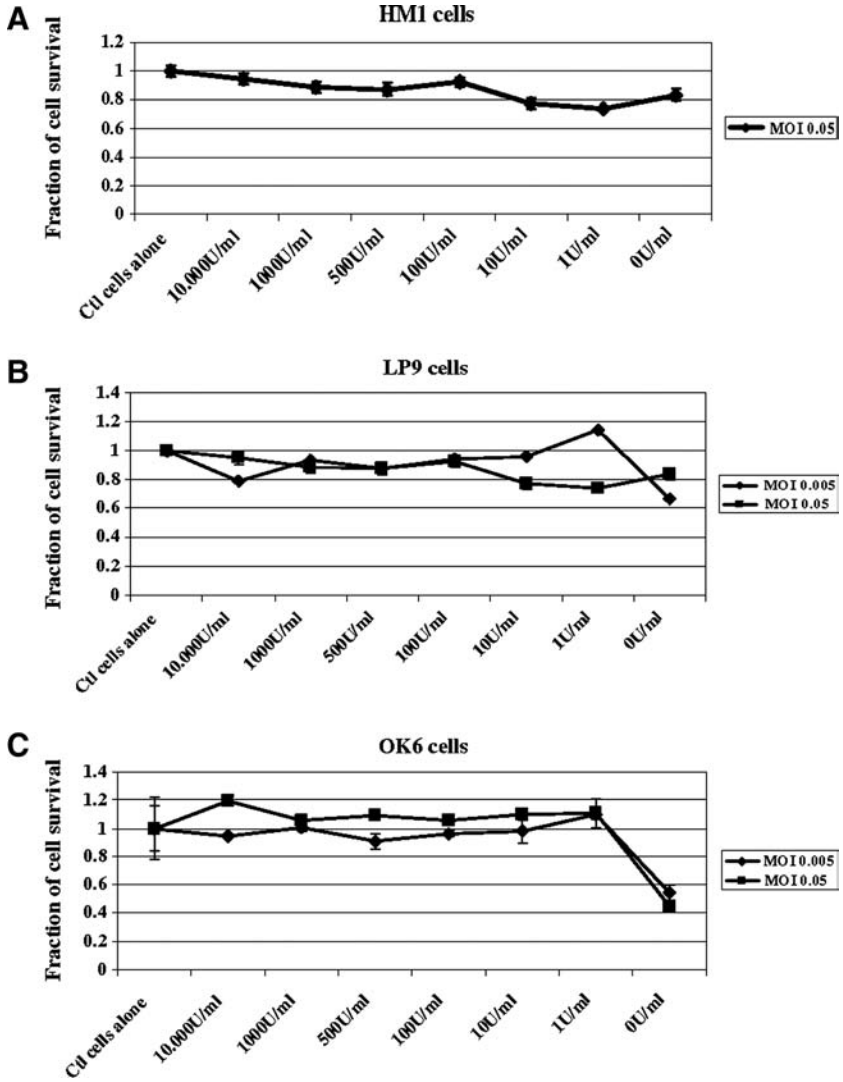
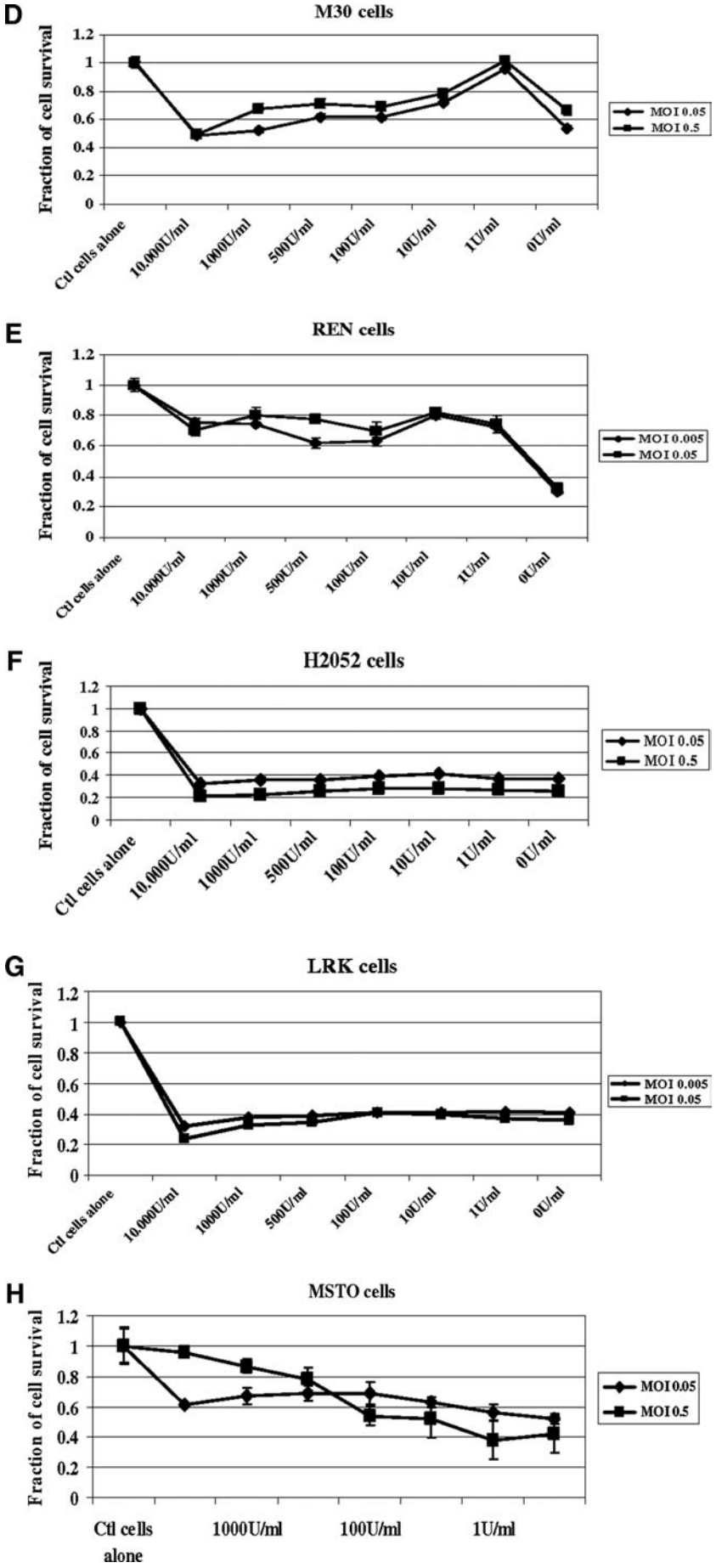


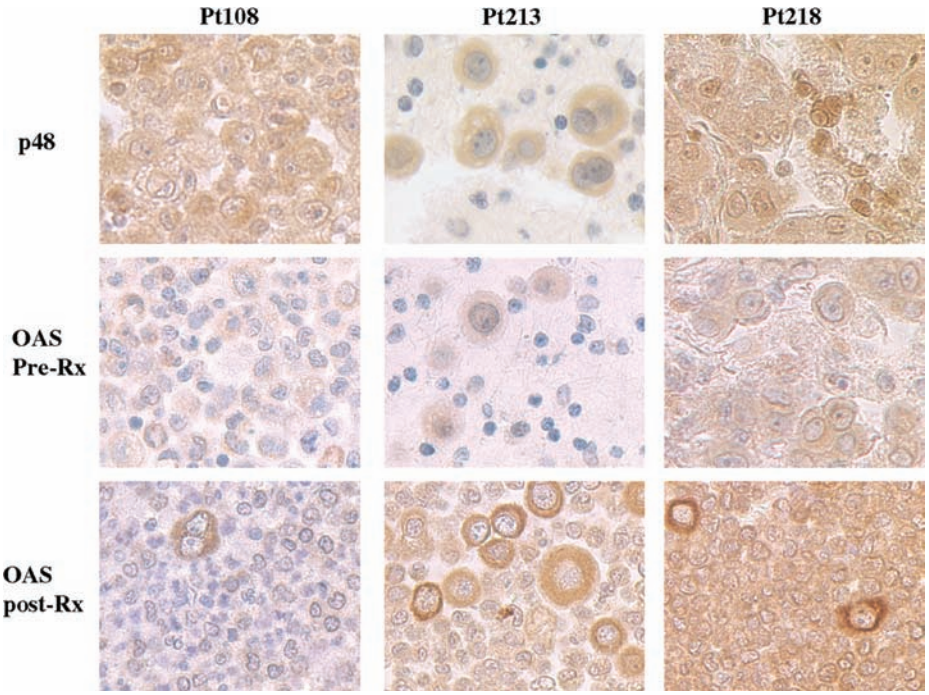
SUPPLEMENTAL FIG. S1. 3-(4,5-Dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide (MTT) assays showing the susceptibility of human mesothelioma cells to vesicular stomatitis virus expressing green fluorescent protein, murine interferon-β, or human interferon-β (VSV.GFP, VSV.mIFN-β, or VSV.hIFN-β) at varying doses of virus. Cells were plated at a density of 5000 per well in 96-well plates and incubated overnight before medium was replaced and virus was added at the appropriate dilution (100 μl/well). (**A**) Human mesothelioma OK6, M30, REN, LRK, MSTO, and H2052 cells were highly sensitive to oncolysis after 48 hr of exposure to VSV.GFP at an MOI of 0.1 (tested range: MOI = 0.01–10 viral particles (vp)/cell). The LP9 cells (normal mesothelial cells) were resistant. (**B**) Human mesothelioma OK6, M30, REN, LRK, and MSTO cells similarly show significant sensitivity to VSV.mIFN-β. LP9 cells are resistant to VSV.mIFN-β, as they are to VSV.GFP. (**C**) Human mesothelioma cell lines OK6, M30, and REN were, to the contrary, highly resistant to oncolysis by VSV.hIFN-β, whereas H2052, LRK, and MSTO cells showed sensitivity to lysis by VSV.hIFN-β. Viability was assessed at successive time points using an MTT assay. Optical density was read at 570 nm and corrected from a background control. Each condition was tested in quadruplicate.



SUPPLEMENTAL FIG. S2. Effect of IFN-β pretreatment on sensitivity to VSV.GFP lysis. Human mesothelioma and normal mesothelial cells were pretreated with hIFN-β at various concentrations for 24 hr and then exposed to VSV.GFP at two doses of virus for 48 hr. The human mesothelioma cells lines (**A**: HM1, **B**: LP9, **C**: OK6, **D**: M30, and **E**:REN) were protected from VSV.GFP-induced oncolysis at 48 hr even with very low concentrations of pretreatment hIFN-β (1 U/ml = 5 pg/ml). In contrast, H2052 (**F**) and LRK (**G**) were not protected at all. (**H**) MSTO cells were intermediate. Viability was assessed at successive time points using an MTT assay. Optical density was read at 570 nm and corrected from a background control. Each condition was tested in quadruplicate.



SUPPLEMENTAL FIG. S2. (*Continued*).



SUPPLEMENTAL FIG. S3. Pleural effusion cells of three patients from our Ad.IFN-β Phase I trial were collected prior to and 24 hr after receiving the vector. Cells were immunostained for p48 (upper panels) and the IFN-response protein OAS1 before vector (middle panels) and 24 hr after vector (lower panels) to evaluate their IFN responsiveness as assessed by upregulation of OAS1. Cells are shown at a magnification of 20× for a wide-field view (compared with Fig. 4). The large cells are mesothelioma cells, and the small cells macrophages. All three patients showed baseline p48 staining and an clear upregulation of OAS1 in the mesothelioma cells after exposure to IFN.