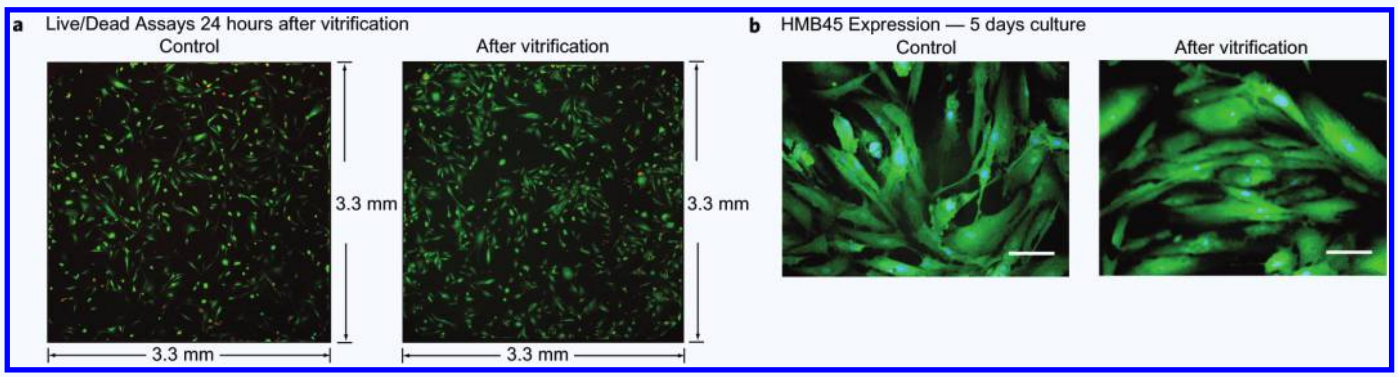
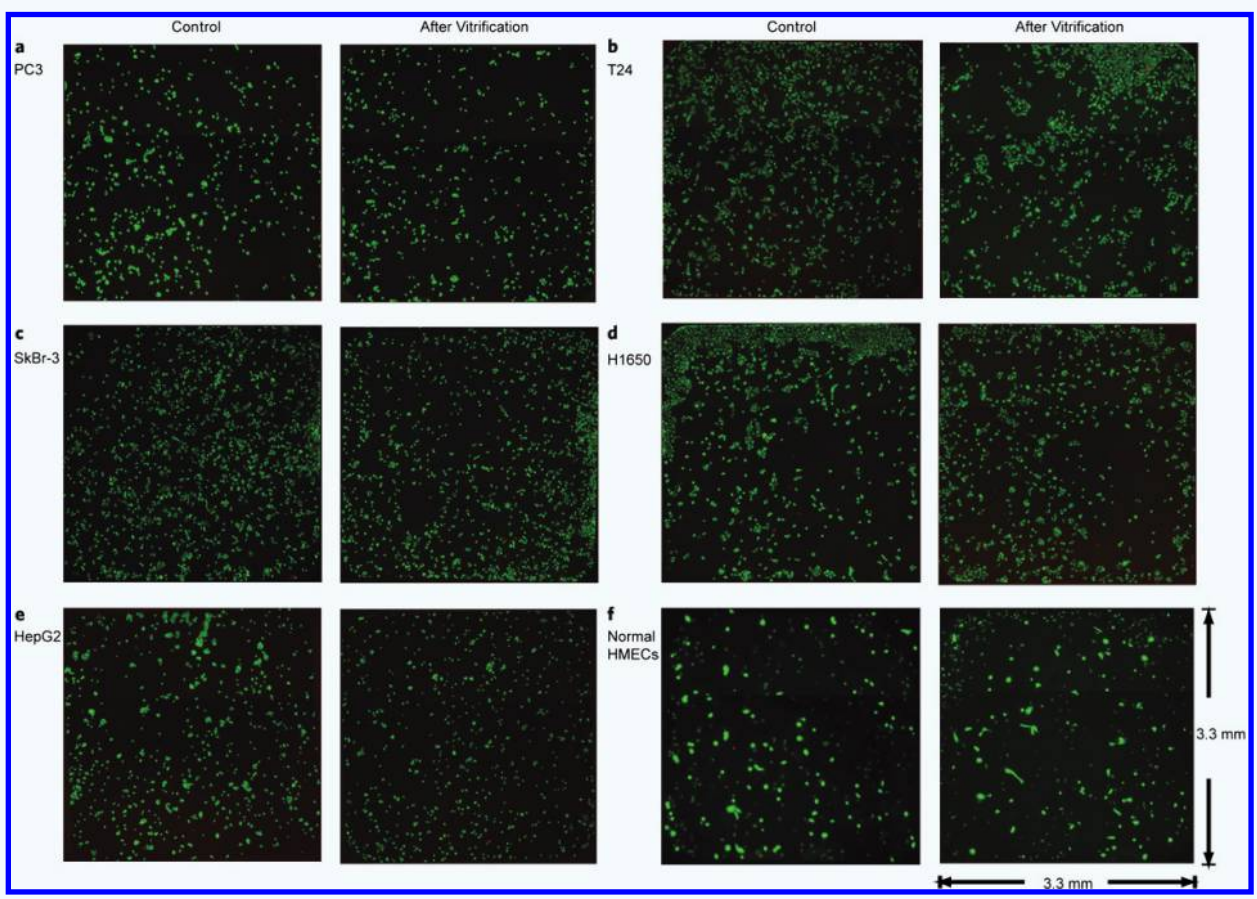
SUPPLEMENTARY FIGURES



Supplementary Figure 1 Images of viability and HMB 45 expression. (**a**) Viability of cells from LAM patient pleural effusion at 18 hours after vitrification using 200 μm(ϕ)–20 μm(t) fused silica capillary. (**b**) HMB45 expression in cells from a LAM patient pleural effusion. On Day 5 of growth rate experiments, the wells of control and experiment groups were fixed with 4% paraformaldhyde (PFA, Electron Microscopy Sciences) diluted in 1× PBS and were permeabilized with 0.2% Triton-X (Sigma) diluted in 1× PBS. After the permeabilization solution was removed, the cells were washed with 1× PBS and the cell membranes were blocked for 30 minutes in 2% normal goat serum (Vector Laboratories) and 3% bovine serum albumin (Sigma) in 1× PBS. Blocking agents were replaced by a primary antibody solution containing a 1:20 dilution of HMB45 antibody in 3% BSA in 1× PBS (w/o Ca^{2+}, Mg^{2+}). Following the primary antibody incubation, the patient samples were washed in 1× PBS before applying secondary antibodies (AlexaFluor488 IgG1) diluted at 1:500 in 3% bovine serum albumin in 1× PBS with 1:500 4′, 6-diamidino-2-phenylindole, dihydrochloride (DAPI, Invitrogen) for 1 hour for imaging. Scale bar for 100 μm.



Supplementary Figure 2 Images of viability after vitrification. Viability images of five cancerous epithelial cell lines (**a**–**e**), normal HMECs (**f**) at 12–18 hours after vitrification using 200 μm(ϕ)–20 μm(t) fused silica capillary. Entire plate (3.3 mm × 3.3 mm) images which contain all the cells dispensed from the capillary.