



**Figure S7.** Human telomerase activity positively correlates with dGTP levels. (A) Telosspot assay was performed by incubating crude “super-telomerase” extracts with a telomeric (TTAGGG)<sub>3</sub> primer and varying concentrations of dNTPs. “Physiological dNTP concentrations” used are derived from concentrations in yeast, although concentrations in mammalian cells are in the same range, as explained in the text. A small fraction of the reaction was directly spotted onto a nylon membrane, which is then probed with a randomly radiolabeled telomeric probe. Each reaction was spotted in triplicate. Each row of spots varies one of the four dNTPs, as indicated, from the lowest concentration shown on the left side to the highest concentration shown on the right. The reaction performed using physiological concentrations of all four dNTPs were spotted in triplicate, and then copy and pasted into each row for clarity. (B) Activity in each spot from A was quantified, and the mean for each reaction was plotted as a function of the concentration of the indicated dNTP. Error bars indicate the standard error. (C) The Telosspot reactions with varying dGTP concentrations were repeated using a 5'-biotinylated (TTAGGG)<sub>3</sub> primer, purified with streptavidin-coated beads, resolved on a polyacrylamide gel, and transferred onto a nylon membrane. The membrane was then probed as in A. The concentration of dGTP used for each reaction is indicated above each lane.