CLAIMS

1. A nucleic acid construct comprising a sequence that encodes a human telomerase reverse transcriptase (hTERT) protein which is devoid of telomerase catalytic activity by deletion of amino acids 867-869 (VDD), and of a nucleolar localization signal by deletion of at least amino acids 1-23, wherein the hTERT protein is fused at N-terminus with a protein enhancing addressing of the hTERT protein to proteasome.

2. The nucleic acid construct of claim 1, wherein the hTERT protein is devoid of telomerase catalytic activity by a further deletion of 1 to 12 amino acids upstream and/or downstream amino acids 867-869 (VDD).

3. The nucleic acid construct of claim 1 or 2, wherein the hTERT protein is devoid of a nucleolar localization signal by deletion of amino acids 1-47.

4. The nucleic acid construct of any of claims 1 to 3, wherein the protein enhancing addressing of the hTERT protein to proteasome is ubiquitin.

5. The nucleic acid construct of any of claims 1 to 3, wherein the protein enhancing addressing of the hTERT protein to proteasome is a chaperon protein, such as calreticulin.

6. The nucleic acid construct of any of claims 1 to 5, which is a DNA, preferably a DNA plasmid.

7. The nucleic acid construct of claim 6, which encodes amino acid sequence SEQ ID NO: 12.

8. The nucleic acid construct of claim 7, which comprises SEQ ID NO: 11 or nucleotides 3488 to 6961 of SEQ ID NO: 11.

9. The nucleic acid construct of claim 6, which encodes amino acid sequence SEQ ID NO: 14, 16 or 18, and preferably comprises nucleotide sequence SEQ ID NO: 13, 15, or 17.

10. The nucleic acid construct of any of claims 1 to 9, for use in triggering an immune response in a subject, against cells that overexpress telomerase, preferably dysplasia cells, tumor cells, or cells infected by an oncovirus.

11. The nucleic acid construct of any of claims 1 to 9, for use in preventing or treating a tumor in a patient.

12. The use of the acid nucleic construct of any of claims 1 to 9, in the manufacture of a medicament for the prevention or treatment of a tumor in a patient.