CLAIMS

1. A pharmaceutical composition for use in cancer therapy prepared by a method comprising the steps of:

manufacturing an immortalized stem cell by transfecting 4 genes of hTERT, bmi-1, E6 and E7 into dens deciduous dental pulp stem cell derived from mammal dental pulp; and

preparing a conditioned medium by culturing said immortalized stem cell in a serum free medium for predetermined period under the condition of hypoxic concentration of 0.5% or more but less than 20 % of oxygen concentration between the temperature of 23 to 27 °C;

wherein the conditioned medium comprises more than 1.5 times higher concentration of both insulin like growth factor 1 (IGF-1) and vascular endothelial cell growth factor (VEGF), compared to the conditioned medium prepared by culturing the cell on the same condition except the oxygen concentration is set to 20 %;

wherein the resulted conditioned medium is an active ingredient of the pharmaceutical composition.

2. The pharmaceutical composition for use in cancer therapy according to the claim 1, wherein said predetermined period is 40 to 56 hours.

3. The pharmaceutical composition for use in cancer therapy according to the claim 1 or 2, wherein said hypoxic concentration means that oxygen concentration is 5% or less.

4. The pharmaceutical composition for use in cancer therapy according to the claim 3, wherein said hypoxic concentration means the oxygen concentration is 1% or less.

5. The pharmaceutical composition for use in cancer therapy according to the claim 1 further comprises at least five times higher concentration of transforming growth factor β (TGF-β1) compared to that in the conditioned medium prepared by culturing the stem cell under the same condition except the oxygen concentration is set to 20%.

6. The pharmaceutical composition for use in cancer therapy according to the claim 5 further comprises at least three times higher concentration of stromal cell-derived factor (SDF-1).

7. A pharmaceutical preparation for use in cancer therapy comprises the pharmaceutical composition according to the claims 1 or 5 as active ingredient.

8. The pharmaceutical preparation for use in cancer therapy according to the claim 7, wherein said cancer is solid tumor.