**Supplementary Table 1:** Table showing the appropriately sized culture vessels used to initially seed cells obtained from the heart tissue.

| Weight of the tissue (mg) | Culture dish      | Total media volume |
|------------------------|-------------------|--------------------|
| 10-30                  | 12-well plate     | 1 mL/well          |
| 30-60                  | 6-well plate      | 2 mL/well          |
| 60-150                 | T25 flask         | 5 mL/flask         |
| 150-300                | 2 x T25 flask     |                    |

**Supplementary Table 2:** Table showing cell number used for serum-free treatment in normoxia and hypoxia.

| Culture conditions | Cell groups       | Number of cells/T25 flask |
|--------------------|-------------------|---------------------------|
| Normoxia (20% O₂)  | RAA CPC           | 100,000 cells             |
|                    | LV CPC            | 100,000 cells             |
|                    | RAA and LV CPC (Combination) | 50,000 RAA CPC + 50,000 LV CPC |
| Hypoxia (1% O₂)    | RAA CPC           | 100,000 cells             |
|                    | LV CPC            | 100,000 cells             |
|                    | RAA and LV CPC (Combination) | 50,000 RAA CPC + 50,000 LV CPC |