What is Claimed:

1. An isolated mammalian internal mammary artery-derived cell, the cell capable of self-renewal and expansion in culture, wherein the cell is positive for the expression of cell-surface marker HLA-1 and negative for expression of each one of cell-surface markers CD 10, CD31, CD34, CD45, CD133, CD141 and KDR/Flk-1.

2. The cell of claim 1, wherein the cell is additionally positive for expression of CD29, CD44, CD73, CD166, and additionally negative for CD15, CD23, CD24, CD62p, CD80, CD86, CD104, CD105, CD117, CD138, CD146,VE-Cadherin, and HLA-2.

3. The cell of claim 1, wherein the cell is capable of differentiation into adipocytes, cardiomyocytes, and endothelial cells.

4. A method of isolating a mammalian internal mammary artery-derived comprising the steps of:
   a. Providing a mammalian internal mammary artery,
   b. providing an enzyme mixture wherein the enzyme mixture is comprised of digestion enzymes selected from the group consisting of a metalloprotease enzyme, a neutral protease enzyme, a mucolytic enzyme, and combinations thereof,
   c. incubating the mammalian internal mammary artery in the enzyme mixture for a time sufficient to remove the intimal layer and to remove external debris from the artery and provide a partially digested artery,
   d. transferring the partially digested artery into a fresh enzyme mixture and continue digestion for a time sufficient to provide a digested material,
   e. isolating the cells from the digested material,
   f. culturing the cells on collagen coated tissue culture vessels.

5. The method of claim 6 wherein the enzyme mixture is comprised of collagenase and dispase.

6. The method of claim 6 wherein the time to remove the intimal layer and to remove external debris from the artery is about 60 minutes.

7. The method of claim 6 wherein the time sufficient to provide digested material is in the range of about 30 minutes to about 60 minutes.

8. The method of claim 9 wherein the time sufficient to saturate the enzyme mixture with digested material is about 60 minutes.

9. A cell isolated from a mammalian internal mammary artery by a method comprising the steps of:
   a. Providing a mammalian internal mammary artery,
   b. providing an enzyme mixture wherein the enzyme mixture is comprised of digestion enzymes selected from the group consisting of a metalloprotease enzyme, a neutral protease enzyme, a mucolytic enzyme, and combinations thereof,
   c. incubating the mammalian internal mammary artery in the enzyme mixture for a time sufficient to remove the intimal layer and to remove external debris from the artery and provide a partially digested artery,
   d. transferring the partially digested artery into a fresh enzyme mixture and continue digestion for a time sufficient to provide a digested material,
   e. isolating the cells from the digested material,
   f. culturing the cells on collagen coated tissue culture vessels.

10. The method of claim 11 wherein the enzyme mixture is comprised of collagenase and dispase.

11. The method of claim 11 wherein the time to remove the intimal layer and to remove external debris from the artery is about 60 minutes.

12. The method of claim 11 wherein the time sufficient to provide digested material is in the range of about 30 minutes to about 60 minutes.

13. The method of claim 14 wherein the time sufficient to saturate the enzyme mixture with digested material is about 60 minutes.

What is claimed:

1. A method of isolating a mammalian internal mammary artery-derived cell comprising the steps of:

a. Providing a mammalian internal mammary artery,

b. providing an enzyme mixture wherein the enzyme mixture is comprised of digestion enzymes selected from the group consisting of a metalloprotease enzyme, a neutral protease enzyme, a mucolytic enzyme, and combinations thereof,

c. incubating the entire mammalian internal mammary artery in the enzyme mixture for a time sufficient to remove the intimal layer and to remove external debris from the artery and provide a partially digested artery,

d. transferring the partially digested artery into a fresh enzyme mixture and continue digestion for a time sufficient to provide a digested material,

e. isolating the cells from the digested material, wherein the cells are positive for the expression of cell-surface marker HLA-1 and negative for expression of each one of the cell-surface markers CD 10, CD31, CD34, CD45, CD133, CD141 and KDR/Flk-1, and

f. culturing the cells on collagen coated tissue culture vessels.

2. The method of claim **1** wherein the enzyme mixture is comprised of collagenase and dispase.

3. The method of claim **1** wherein the time sufficient to remove the intimal layer and to remove external debris from the artery is about 60 minutes.

4. The method of claim **1** wherein the time sufficient to provide the digested material is in the range of about 30 minutes to about 60 minutes.

5. The method of claim **4** wherein the time sufficient to provide the digested material is about 60 minutes.