CLAIMS

1. Use of an isolated cell population from adipose tissue characterised in that the cells of said cell population:

a) do not express markers specific for antigen-presenting cells (APC), wherein the markers specific for APC are CD11b, CD11c, CD14, CD45 and HLAII,

b) do not express indolamine 2,3-dioxygenase (IDO) constitutively,

c) express IDO upon stimulation with interferon-gamma (IFN-γ) and,

d) present capacity to be differentiated into at least two cell lineages,

for the preparation of a medicament for preventing, treating, or ameliorating one or more symptoms associated with Inflammatory Bowel Disease (IBD) in a subject suffering from IBD.

2. Use of a pharmaceutical composition comprising an isolated cell population from adipose tissue characterised in that the cells of said cell population:

a) do not express markers specific for antigen-presenting cells (APC), wherein the markers specific for APC are CD11b, CD11c, CD14, CD45 and HLAII,

b) do not express indolamine 2,3-dioxygenase (IDO) constitutively,

c) express IDO upon stimulation with interferon-gamma (IFN-γ) and,

d) present capacity to be differentiated into at least two cell lineages,

and an acceptable pharmaceutically carrier for the preparation of a medicament for preventing, treating, or ameliorating one or more symptoms associated with Inflammatory Bowel Disease (IBD) in a subject suffering from IBD.

3. Use of a kit comprising an isolated cell population from adipose tissue characterised in that the cells of said cell population:

a) do not express markers specific for antigen-presenting cells (APC), wherein the markers specific for APC are CD11b, CD11c, CD14, CD45 and HLAII,

b) do not express indolamine 2,3-dioxygenase (IDO) constitutively,

c) express IDO upon stimulation with interferon-gamma (IFN-γ) and,

d) present capacity to be differentiated into at least two cell lineages,

for the preparation of a medicament for preventing, treating, or ameliorating one or more symptoms associated with Inflammatory Bowel Disease (IBD) in a subject suffering from IBD.

4. Use according to any one of claims 1 to 3, characterised in that said cell population is negative for the following cell surface markers: CD11b, CD11c, CD14, CD31, CD34, CD45, CD133 and HLAII.

5. Use according to any one of claims 1 to 3, characterised in that said cell population is positive for at least one and preferably all the following cell surface markers: CD9, CD44, CD54, CD90 and CD105.

6. Use according to any one of claims 1 to 3, characterised in that said cell population is capable of being expanded *ex vivo*.

7. Use according to any one of claims 1 to 3, characterised in that said cell population expresses, at least, one antigenic polypeptide.