CLAIMS

1. Use of a composition comprising:

an Smac mimetic compound, which is GDC-0152/ RG7419;

an Immune Checkpoint Inhibitor, which is Ipilimumab (MDX-010, 10D1), in the manufacture of a medicament for the treatment of cancer; and

wherein said Smac mimetic compound and said Immune Checkpoint Inhibitor are to be provided in amounts that together are sufficient to treat said cancer in a patient in need thereof.

2. Use of a Smac mimetic compound for the manufacture of a medicament for the treatment of cancer in a patient,

wherein the Smac mimetic compound is GDC-0152/ RG7419; and

wherein said Smac mimetic compound is to be administered with an Immune Checkpoint Inhibitor, which is Ipilimumab (MDX-010, 10D1);; and

wherein said Smac mimetic compound and said Immune Checkpoint Inhibitor are to be administered simultaneously or within 28 days of each other in amounts that together are sufficient to treat said cancer.

3. The use according to claim 2, wherein said Smac mimetic compound and said Immune Checkpoint Inhibitor are to be administered within 14 days of each other, or within 10 days of each other, or within 5 days of each other, or within 24 hours of each other, or within 6 hours of each other or substantially simultaneously.

4. The use according to any one of claims 1 to 3, for the treatment of cancer refractory to treatment by a Smac mimetic compound in the absence of an Immune Checkpoint Inhibitor.

5. The use according to any one of claims 1 to 4, wherein the medicament is to be further administered with a therapeutic agent comprising an interferon, wherein said interferon is preferably a type 1 interferon.

6. The use according to any one of claims 1 to 5, wherein said cancer is selected from adrenal cancer, basal cell carcinoma, biliary tract cancer, bladder cancer, bone cancer, brain cancer, breast cancer, cervical cancer, choriocarcinoma, colon cancer, colorectal cancer, connective tissue cancer, cancer of the digestive system, endometrial cancer, epipharyngeal carcinoma, esophageal cancer, eye cancer, gallbladder cancer, gastric cancer, cancer of the head and neck, hepatocellular carcinoma, intra-epithelial neoplasm, kidney cancer, laryngeal cancer, leukemia, liver cancer, liver metastases, lung cancer, lymphoma, melanoma, myeloma, multiple myeloma, neuroblastoma, mesothelioma, neuroglioma, myelodysplastic syndrome, multiple myeloma, oral cavity cancer, ovarian cancer, paediatric cancer, pancreatic cancer, pancreatic endocrine tumors, penile cancer, plasma cell tumors, pituitary adenoma, thymoma, prostate cancer, renal cell carcinoma, cancer of the respiratory system, rhabdomyosarcoma, salivary gland cancer, sarcoma, skin cancer, small bowel cancer, stomach cancer, testicular cancer, thyroid cancer, ureteral cancer, and cancer of the urinary system.

7. Use of an Immune Checkpoint Inhibitor in the manufacture of a medicament for the treatment of cancer in a patient,

wherein the Immune Checkpoint Inhibitor is to be administered with a Smac mimetic compound, said Smac mimetic compound is GDC-0152/ RG7419; and

wherein said Smac mimetic compound and said Immune Checkpoint Inhibitor are to be administered simultaneously or within 28 days of each other in amounts that together are sufficient to treat said cancer.

8. The use according to claim 7, wherein the Immune Checkpoint Inhibitor is Ipilimumab (MDX-010, 10D1).

9. The use according to claim 7 or 8, wherein said Immune Checkpoint Inhibitor and said Smac mimetic compound are to be administered within 14 days of each other, or within 10 days of each other, or within 5 days of each other, or within 24 hours of each other, or within 6 hours of each other or substantially simultaneously.

10. The use according to any one of claims 7 to 9, in the treatment of cancer that is refractory to treatment by a Smac mimetic compound in the absence of an Immune Checkpoint Inhibitor.

11. The use according to any one of claims 7 to 10, wherein the medicament is to be further administered with a therapeutic agent comprising an interferon, wherein said interferon is preferably a type 1 interferon.

12. The use according to any one of claims 7 to 11, wherein said cancer is selected from adrenal cancer, basal cell carcinoma, biliary tract cancer, bladder cancer, bone cancer, brain cancer, breast cancer, cervical cancer, choriocarcinoma, colon cancer, colorectal cancer, connective tissue cancer, cancer of the digestive system, endometrial cancer, epipharyngeal carcinoma, esophageal cancer, eye cancer, gallbladder cancer, gastric cancer, cancer of the head and neck, hepatocellular carcinoma, intra-epithelial neoplasm, kidney cancer, laryngeal cancer, leukemia, liver cancer, liver metastases, lung cancer, lymphoma, melanoma, myeloma, multiple myeloma, neuroblastoma, mesothelioma, neuroglioma, myelodysplastic syndrome, multiple myeloma, oral cavity cancer, ovarian cancer, paediatric cancer, pancreatic cancer, pancreatic endocrine tumors, penile cancer, plasma cell tumors, pituitary adenoma, thymoma, prostate cancer, renal cell carcinoma, cancer of the respiratory system, rhabdomyosarcoma, salivary gland cancer, sarcoma, skin cancer, small bowel cancer, stomach cancer, testicular cancer, thyroid cancer, ureteral cancer, and cancer of the urinary system.