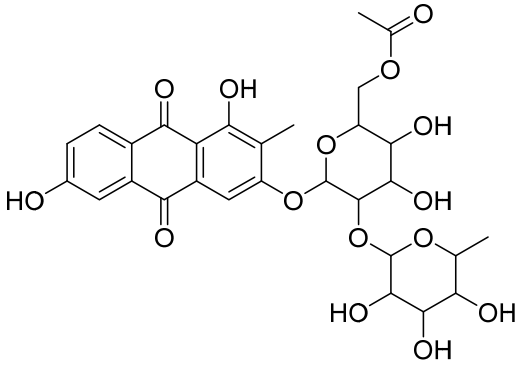
CLAIMS

What is claimed is:

1. Use of a therapeutically effective amount of an herbal extract of *Rubia cordifolia* or a fraction thereof, in the manufacture of a medicament for the treatment of a prostate cancer or a breast cancer,

wherein the medicament is to be administered to a subject in need thereof,

wherein an active chemical species present in the herbal extract or the fraction thereof is 1,3,6-Trihydroxy-2-methyl-9,10-anthracenedione 3-O-[α-L-Rhamnopyranosyl-(1→2)-6-O-acetyl-β-D-glucopyranoside] (RGA) and salts, solvates, isomers or tautomers thereof



(RGA).

2. The use of claim 1, wherein the cancer is a treatment resistant cancer selected from the group consisting of castration resistant prostate cancer, enzalutamide resistant prostate cancer, glucocorticoid receptor mediated resistant prostate cancer, BRCA1 (double strand break repair) deficiency cancer, double negative breast cancer, and triple negative breast cancer.

3. The use of claim 1, wherein the medicament downregulates the expression of at least one protein selected from the group consisting of Brd4, Brd2, cyclin D1, p53, Gata3, Poly[ADP-ribose] polymerase-1 (PARP-1), and CD47.

4. The use of claim 1, wherein the medicament inhibits hyperacetylation of histone H3 in the subject.

5. The use of claim 1, wherein the medicament promotes the phagocytosis of cancerous tumor cells in the subject.

6. The use of claim 1, wherein the medicament inhibits indoleamine-pyrrole 2,3-dioxygenase (IDO) activity in the subject.

7. The use of claim 1, wherein the medicament is to be administered in combination with at least one immune checkpoint inhibitor.

8. The use of claim 7, wherein the at least one immune checkpoint inhibitor is selected from the group consisting of an anti-PD1, an anti-PD-L1, and an anti-CTLA4.

9. The use of claim 7, wherein the at least one immune checkpoint inhibitor is selected from the group consisting of Ipilimumab, Avelumab, Pembrolizumab, Nivolumab, Durvalumab, and Atezolizumab.

10. The use of claim 1, wherein the subject is a mammal.

11. The use of claim 10, wherein the subject is human.