CLAIMS:

1. A pharmaceutical composition comprising:
a) a poorly water-soluble active pharmaceutical ingredient (API); and
b) an organic acid system,
wherein:
(i) said API is a cyclooxygenase-2 (COX-2) inhibitor selected from celecoxib and imrecoxib, and said organic acid system comprises an organic acid which is selected from the group comprising malic acid, maleic acid, succinic acid, tartaric acid, citric acid and ascorbic acid and a water soluble excipient selected from a group comprising HPMC (hydroxypropyl methylcellulose); or
(ii) said organic acid system is a weakly effervescent disintegration formulation comprising a carbonate or bicarbonate base and a weak acid, wherein the formulation are present in amounts such that the formulation disintegrates in neutral water to yield a pH greater than 4.9."

2. The pharmaceutical composition of claim 1 characterized in that

comprises celecoxib, an organic acid selected from the group consisting of tartaric acid, maleic acid, succinic acid, malic acid, citric acid and ascorbic acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose, and magnesium stearate, such that the composition is in the form of granules, a capsule or a tablet; and/or

comprises celecoxib, an organic acid selected from the group consisting of tartaric acid, maleic acid, succinic acid, malic acid, citric acid and ascorbic acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose, such that the composition is in the form of granules, a capsule or a tablet which has a dissolution rate of more than 60% of celecoxib in 1000 ml_ of 0.25% sodium dodecyl sulfate / pH 7 sodium phosphate buffer solution under 50 RPM at 120 minutes after the dissolution test; and/or

comprises celecoxib, an organic acid selected from the group consisting of tartaric acid, maleic acid, succinic acid, malic acid, citric acid and ascorbic acid; wherein the amount of organic acid is from 1 to 6 times the weight of celecoxib in the composition; furthermore, the composition contains cross linked povidone, cross linked carboxymethyl sodium cellulose and the composition is in the form of granules, a tablet or a capsule which has a dissolution rate of more than 60% of celecoxib in 1000 mL of 0.25% sodium dodecyl sulfate / pH 7 sodium phosphate buffer solution under 50 RPM at 120 minutes after the dissolution test; and/or

comprises celecoxib, malic acid; the composition further comprises cross linked povidone,

cross linked carboxymethyl sodium cellulose and magnesium stearate such that the composition is in the form of granules, a capsule or a tablet; and/or

comprises celecoxib, tartaric acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose and magnesium stearate such that the composition is in the form of granules, a capsule or a tablet; and/or

comprises celecoxib, maleic acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose and magnesium stearate such that the composition is in the form of a granule, a capsule or a tablet; and/or

comprises celecoxib, succinic acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose and magnesium stearate such that the composition is in the form of granules, a capsule or a tablet; and/or

comprises celecoxib, citric acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose and magnesium stearate, such that the composition is in the form of granules, a capsule or a tablet; and/or

comprises celecoxib, ascorbic acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose and magnesium stearate, such that the composition is in the form of granules, a capsule or a tablet; and/or

comprises imrecoxib, an organic acid selected from the group consisting of maleic acid, succinic acid, tartaric acid, malic acid, citric acid and ascorbic acid or a mixture thereof; the composition further comprises cross linked carboxymethyl sodium cellulose, cross linked povidone and magnesium stearate, such that the composition is in the form of granules, a capsule or a tablet and has a dissolution of imrecoxib of more than 60% in 1000 mL of 0.25% sodium dodecyl sulfate / pH 7 sodium phosphate buffer solution under 50 RPM at 120 minutes after dissolution test; and/or comprises celecoxib, an organic acid selected from the group consisting of maleic acid, succinic acid, tartaric acid, malic acid, citric acid and ascorbic acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose, calcium carbonate, magnesium stearate, such that the composition is in the form of granules, a tablet, or a capsule and has a dissolution rate of celecoxib of more than 60% in 1000 mL of 0.25% sodium dodecyl sulfate / pH 7 sodium phosphate buffer solution under 50 RPM at 120 minutes after dissolution test; and/or

comprises imrecoxib, calcium carbonate, an organic acid selected from the group consisting of maleic acid, succinic acid, tartaric acid, malic acid, citric acid and ascorbic acid; the composition further comprises cross linked povidone, cross linked carboxymethyl sodium cellulose and magnesium stearate such that the composition is in the form of granules, a tablet or a capsule; and/or

comprises celecoxib, hydroxypropyl methylcellulose and pellet consisting of sugar or mannitol such that the composition is in the form of a pellet or a capsule; and/or

comprises 1 part of celecoxib, 1 to 2 parts of hydroxypropyl methylcellulose and 1 to 2 parts of pellet consisting of sugar or mannitol such that the composition is in the form of a pellet or a capsule and has a dissolution rate of celecoxib of more than 60% in 1000 mL of neutral pure water containing 2.5 g of sodium dodecyl sulfate under 50 RPM at 180 minutes after dissolution test; and/or

comprises imrecoxib, hydroxypropyl methylcellulose and pellet consisting of sugar or mannitol such that the composition is in the form of a pellet or a capsule; and/or

comprises 1 part of imrecoxib, 1 to 2 parts of hydroxypropyl methylcellulose and 1 to 2 parts of pellet consisting of sugar or mannitol such that the composition is in the form of a pellet or a capsule and has a dissolution rate of imrecoxib of more than 60% in 1000 mL of neutral pure water containing 2.5 g of sodium dodecyl sulfate under 50 RPM at 180 minutes after dissolution test; and/or

3. The pharmaceutical composition of claim 1 wherein the organic acid system is a weakly effervescent disintegration formulation characterized in that

comprises the weak acid is selected from monosodium salt of a binary acid, monopotassium salt of a binary acid, monosodium salt of a ternary acid, ascorbic acid, a binary acid, and mixtures thereof; and the weak base is selected from calcium carbonate, sodium bicarbonate, potassium bicarbonate and lithium bicarbonate and an API which is selected from the group consisting of calcium carbonate, glucosamine, acarbose, miglitol, dihydropyridine calcium channel blocker, nimodipine, triptans, antihistamines, sartans, 5-HT3 antagonist antiemetic drugs, antifibrinolytic drugs, non-classical antidepressants, NSAIDs, hormone contraceptives and anti-epileptics; wherein the formulation disintegrates in neutral pure water to produce a pH of greater than 4.9; and/ or

comprises calcium carbonate, ascorbic acid, cross linked povidone, magnesium stearate, wherein the ratio of the weight of ascorbic acid to the weight of calcium carbonate is in the range of 1 :1 to 3:1 and the composition is in the form of a capsule, a tablet, an oral disintegration tablet or a dispersible tablet disintegrating in 200 mL of neutral pure water to produce a pH of greater than 4.9 and has the dissolution of calcium ions in the range of 20% to 65% in 900 mL of neutral water under stirring at a speed of 75 RPM when measured at 30 min; and/or comprises calcium carbonate, an organic acid selected from the group consisting of tartaric acid, malic acid, maleic acid and succinic acid and the ratio of these acid to calcium carbonate is in the range of 0.15:1 .0 to 1 .0:1 .0 molar ratio and the composition is in the form of granules, a capsule, a tablet or a dispersible tablet and disintegrates in 200 mL of

neutral pure water to produce a pH of greater than 4.9 and the dissolution of calcium ions is in the range of 20% to 75% in 900 mL of neutral pure water under stirring at a speed of 75 RPM when measured at 30 min; and/or

comprises a calcium carbonate, a citric acid, cross linked povidone, a magnesium stearate, wherein the molar ratio of citric acid to calcium carbonate is less than 0.8:1 and the formulation is in the form of granules, a capsule, a tablet or a dispersible tablet and disintegrates in 200 mL of neutral water to produce a pH of greater than 4.9 and the formulation has a dissolution of calcium ions in the range of 20% to 75% in 900 mL of neutral pure water under stirring at a speed of 75 RPM when measured at 30 min; and/or

comprises calcium carbonate, maleic acid, cross linked povidone, and magnesium stearate, wherein the molar ratio of maleic acid to calcium carbonate is from 0.15:1 to 1 :1 and the formulation is in the form of granules, a capsule, a tablet, oral disintegration tablet or a dispersible tablet disintegrating in 200 mL of neutral pure water to produce a pH of greater than 4.9 and has the dissolution of calcium ions in the range of 20% to 75% in 900 mL of neutral pure water under stirring at a speed of 75 RPM when measured at 30 min; and/or comprises calcium carbonate, malic acid, cross linked povidone and magnesium stearate, wherein the molar ratio of malic acid to calcium carbonate is from 0.15:1 to 1 :1 and the formulation is in the form of granules, a capsule, a tablet, an oral disintegration tablet or a dispersible tablet disintegrating in 200 mL of neutral pure water to produce a pH of greater than 4.9 and has the dissolution of calcium ions in the range of 20% to 75% in 900 mL of neutral pure water under stirring at a speed of 75 RPM when measured at 30 min; and/or

comprises calcium carbonate, tartaric acid, cross linked povidone and magnesium stearate, wherein the molar ratio of tartaric acid to calcium carbonate is from 0.15:1 to 1 :1 and the formulation is in the form of granules, a capsule, a tablet, a dispersible tablet or an oral disintegration tablet disintegrating in 200 mL of neutral pure water to produce a pH of greater than 4.9 and has the dissolution of calcium ions in the range of 20% to 75% in 900 mL of neutral pure water under stirring at a speed of 75 RPM when measured at 30 min; and/or

comprises calcium carbonate, succinic acid, cross linked povidone and magnesium stearate, wherein the molar ratio of succinic acid to calcium carbonate is from 0.15:1 to 1 :1 and the formulation disintegrates in 200 mL of neutral pure water to produce a pH of greater than 4.9 and has the dissolution of calcium ions in the range of 20% to 75% in 900 mL of neutral pure water under stirring at a speed of 75 RPM when measured at 30 min; and/or

comprises calcium carbonate, glucosamine hydrochloride or its salt, cross linked povidone, and magnesium stearate, wherein the formulation is in the form of granules or a tablet, which has a dissolution of calcium ions of about 35% to 55% in 900 mL of neutral pure water under stirring at a speed of 75 RPM when measured at 30 min; wherein the pH of the suspension

formed is from 6.5 to 7.5; and/or

comprises sodium bicarbonate, glucosamine hydrochloride or its salt, cross linked povidone, magnesium stearate, wherein the composition is in the form of granules, a capsule, or a dispersible tablet, which has a pH of the range of 6.5 to 7.5 after disintegration in 200 ml_ of neutral pure water; and/or

comprises sodium bicarbonate, glucosamines sulfate, cross linked povidone, and magnesium stearate, wherein the formulation is in the form of granules, a capsule, or a dispersible tablet, which has a pH of the range of 6.5 to 7.5 in 200 mL of neutral pure water; and/or

comprises acarbose, calcium carbonate, an acid selected from the group consisting of malic acid, maleic acid, tartaric acid, succinic acid, ascorbic acid and citric acid, and cross linked povidone, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises miglitol, calcium carbonate, an acid selected from the group consisting of malic acid, maleic acid, tartaric acid, succinic acid, ascorbic acid and citric acid, cross linked povidone, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises megestrol, calcium carbonate, an acid selected from the group consisting of malic acid, maleic acid, tartaric acid, succinic acid, ascorbic acid and citric acid, and cross linked povidone, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises progesterone, calcium carbonate, an acid selected from the group consisting of malic acid, maleic acid, tartaric acid, succinic acid, ascorbic acid and citric acid, and cross linked povidone, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises a weak base selected from a group consisting of sodium bicarbonate and potassium bicarbonate, an acid selected from the group consisting of monosodium malate, monosodium maleate, monosodium succinate, monosodium citrate, monosodium tartrate, cross linked povidone and nifedipine, wherein the composition is in the form of an oral disintegration tablet which produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises a weak base selected from a group consisting of sodium bicarbonate and potassium bicarbonate, an acid selected from the group consisting of monosodium malate, monosodium maleate, monosodium succinate, monosodium citrate, monosodium tartrate, cross linked povidone and nimodipine, wherein the composition is in the form of an oral disintegration

tablet which produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises a weak base selected from a group consisting of sodium bicarbonate and potassium bicarbonate, an acid selected from a group consisting of monosodium malate, monosodium maleate, monosodium succinate, monosodium citrate, monosodium tartrate, cross linked povidone, cross linked carboxymethyl sodium cellulose, and a sartan API selected from losartan, candesartan, valsartan, telmisartan, fimasartan, irbesartan and salts thereof; wherein the composition is in the form of an oral disintegration tablet or a dispersible tablet which produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises sodium bicarbonate, monosodium tartrate, cross linked carboxymethyl sodium cellulose and valsartan, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises sodium bicarbonate, monosodium tartrate, cross linked carboxymethyl sodium cellulose and irbesartan, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 ml_ of neutral pure water; and/or

comprises a bicarbonate, an acid selected from a group consisting of monosodium malate, monosodium maleate, monosodium succinate, monosodium citrate, monosodium tartrate, monopotassium malate, monopotassium maleate, monopotassium succinate, monopotassium tartrate, cross linked povidone and an antifibrinolytic drug selected from 6-aminocaproic acid and tranexamic acid, wherein the composition produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises sodium bicarbonate, monosodium tartrate, cross linked carboxymethyl sodium cellulose and tranexamic acid, wherein the composition is in the form of a dispersible tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, an organic acid selected from the group consisting of malic acid, maleic acid, succinic acid, tartaric acid, citric acid and ascorbic acid, cross linked povidone, and a serotonin reuptake inhibitor selected from fluoxetine, paroxetine, sertraline, fluvoxamine and its salts thereof; wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, malic acid, cross linked carboxymethyl sodium cellulose, sertraline, wherein the composition is in the form of an oral disintegration tablet and produces

a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, malic acid, cross linked carboxymethyl sodium cellulose, and fluvoxamine, wherein the composition is an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, an organic acid selected from the group consisting of maleic acid, malic acid, succinic acid, tartaric acid, ascorbic acid and citric acid, cross linked povidone, and fexofenadine, wherein the composition is in the form of an oral disintegration tablet which produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, an organic acid selected from the group consisting of malic acid, maleic acid, succinic acid, tartaric acid, ascorbic acid and citric acid, cross linked povidone, and a non-classical antidepressant selected from quetiapine, ziprasidone, wherein the composition is in the form of an oral disintegration tablet which produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, malic acid, cross linked povidone and quetiapine, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, malic acid, cross linked povidone and ziprasidone, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, an acid selected from the group consisting of malic acid, maleic acid, succinic acid, tartaric acid, ascorbic acid and citric acid, cross linked povidone and a triptan drug selected from sumatriptan and eletriptan, wherein the formulation is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises calcium carbonate, malic acid, cross linked povidone and sumatriptan, wherein the composition is in the form of an oral disintegration tablet and produces a pH of more than 4.9 after disintegration in 200 mL of neutral pure water; and/or

comprises ibuprofen, calcium carbonate, an organic acid selected from the group consisting of malic acid, tartaric acid, succinic acid, maleic acid, ascorbic acid and citric acid, and cross linked povidone, such that the composition is in the form of an ODT and produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water; and/or

comprises calcium carbonate, an organic acid selected from the group consisting of malic acid, maleic acid, succinic acid, tartaric acid, citric acid and ascorbic acid, and an anti-

epileptic drug selected from the group consisting of phenobarbital, carbamazepine, topiramate, ethosuximide, gabapentin, and phenytoin, such that the composition is in the form of an oral disintegration tablet or a dispersible tablet and produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water; and/or

comprises calcium carbonate, malic acid, phenobarbital, cross linked povidone, such that the composition is in the form of an ODT and produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water; and/or

comprises a base selected from a group consisting of sodium bicarbonate and potassium bicarbonate, phenytoin sodium, cross linked povidone, an acid selected from the group consisting of monosodium malate, monosodium maleate, monosodium succinate, monosodium citrate, monosodium tartrate, monopotassium malate, monopotassium maleate, monopotassium succinate, monopotassium citrate, monopotassium tartrate, and cross linked povidone, such that the composition is in the form of an ODT and produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water; and/or

comprises calcium carbonate, an acid selected from the group consisting of malic acid, maleic acid, succinic acid, tartaric acid, citric acid and ascorbic acid, topiramate, cross linked povidone, and magnesium stearate; wherein the formulation disintegrates in 200 mL of neutral pure water and the pH of the suspension formed is more than 4.9; and/or

comprises sildenafil, calcium carbonate, an acid selected from the group consisting of malic acid, tartaric acid, succinic acid, maleic acid, ascorbic acid and citric acid, cross linked povidone, such that the composition is in the form of an ODT and produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water; and/or

comprises calcium carbonate, an acid selected from the group consisting of malic acid, maleic acid, succinic acid, tartaric acid, citric acid and ascorbic acid, a 5-HT3 (5-hydroxytryptamine-3) receptor antagonist selected from the group consisting of ondansetron HCI, dolasetron HCI, granisetron HCI, palonosetron HCI, ramosetron HCI or their base, and cross linked povidone, such that the formulation is in the form of an ODT and produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water; and/or

comprises ondansetron HCI, calcium carbonate, malic acid, and cross linked povidone, such that the composition is in the form of an oral disintegration tablet (ODT) and produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water; and/or

comprises granisetron HCI, calcium carbonate, malic acid, and cross linked povidone, such that the composition is in the form of an oral disintegration tablet (ODT) and produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water.

4. A method of production of the pellet composition of cyclooxygenase-2 (COX-2) inhibitors of celecoxib , characterized in that comprises: a) 1 part of celecoxib and 1 to 2 parts of an HPMC E5 is dissolved in 10 to 15 parts of liquid alcohol selected from a group consisting of ethanol and benzyl alcohol, and b) 1 part to 2 parts of sugar pellet is put in the fluid bed; the ethanol solution containing celecoxib and HPMC E5 is sprayed into the fluid bed; the pellet made and magnesium stearate are mixed together and then is filled into a capsule or granules bag, which has a dissolution rate of more than 60% of celecoxib in 1000 mL of 0.25% sodium dodecyl sulfate / pH 7 sodium phosphate buffer solution under 50 RPM at 180 minutes after dissolution test wherein the composition is in the form of pellets.

5. A method of production of the composition of cyclooxygenase-2 (COX-2) inhibitors of celecoxib, characterized in that comprises: a) 1 part of celecoxib and 1 to 6 parts of an organic acid selected from the group consisting of maleic acid, malic acid, tartaric acid, succinic acid, citric acid and ascorbic acid is dissolved in 10 to 20 parts of liquid alcohol selected from a group consisting of ethanol and benzyl alcohol, b) granulation: 1 part of cross linked povidone, 1 part of cross linked carboxymethyl sodium cellulose and a small amount of sodium dodecyl sulfate (about 20 mg per tablet) is put in the fluid bed; the ethanol solution containing celecoxib and organic acid is sprayed into the fluid bed, c) the powder is made into granules with 8% aqueous PVPK30 in fluid bed and dried until the water content is below 4%, d) the resultant granules and magnesium stearate are mixed together and is then compressed into a tablet or is filled into a capsule or granules bag, which has a dissolution rate of more than 60% of celecoxib in 1000 mL of 0.25% sodium dodecyl sulfate / pH 7 sodium phosphate buffer solution under 50 RPM at 120 minutes after dissolution test.

6. A composition, characterized by comprising one or more cyclooxygenase-2 (COX-2) inhibitors, one or more organic acid and water soluble excipients.

7. A weakly effervescent disintegration formulation, characterized by comprising a weak acid-base pair and one or more active pharmaceutical ingredient (API).

8. Use of calcium carbonate with an organic acid, characterized by being in the manufacture of a formulation, composition or medicament for treating hypocalcaemia or calcium deficiency in a subject wherein the organic acid is selected from the group consisting of malic acid, tartaric acid, succinic acid, maleic acid, ascorbic acid and citric, wherein the dosage of calcium carbonate per day is less than 80 mg, the formulation of calcium carbonate produces a pH of more than 4.9 after disintegrating in 200 mL of neutral pure water and has a range of dissolution of calcium ions from 20% to 75% in 900 mL of neutral pure water, such that the formulation is in the form of a tablet, a capsule or granules.

9. Use of a composition, as defined in claim 1, 2 or 6, or of a weakly effervescent disintegration formulation, as defined in claim 1, 3 or 7, characterized by being in the manufacture of a medicament for treating hypocalcaemia or calcium deficiency in a subject.

10. The method of production of the composition as defined in claim 1, 2 or 6, characterized in that the COX-2 inhibitor, organic acid and the water soluble excipient are dissolved in alcohol and mixed with expander and filler, such that the composition is in the form of a pellet, a capsule, granules or a tablet.

11. A pellet composition of cyclooxygenase-2 (COX-2) inhibitors of celecoxib characterized by being produced by the method comprising: a) 1 part of celecoxib and 1 to 2 parts of an HPMC E5 is dissolved in 10 to 15 parts of liquid alcohol selected from a group consisting of ethanol and benzyl alcohol, and b) 1 part to 2 parts of sugar pellet is put in the fluid bed; the ethanol solution containing celecoxib and HPMC E5 is sprayed into the fluid bed; the pellet made and magnesium stearate are mixed together and then is filled into a capsule or granules bag, which has a dissolution rate of more than 60% of celecoxib in 1000 mL of 0.25% sodium dodecyl sulfate / pH 7 sodium phosphate buffer solution under 50 RPM at 180 minutes after dissolution test wherein the composition is in the form of pellets.

12. Invention, by any of its embodiments or any applicable claim categories, for example, product, process or use encompassed by the subject matter initially described, disclosed or illustrated in the patent application; and/or

use of one or more cyclooxygenase-2 (COX-2) inhibitors in the manufacture of a medicament, composition, combination, or product, for preventing, improving or treating a disorder, disease or health condition; and/or

use of a weak acid-base pair and one or more active pharmaceutical ingredients (API) in the manufacture of a medicament, composition, combination, or product, for preventing, improving or treating a disorder, disease or health condition; and/or

use of calcium carbonate with an organic acid in the manufacture of a medicament, composition, combination, or product, for preventing, improving or treating a disorder, disease or health

condition; and/or

use of a weakly effervescent disintegration formulation as defined herein, in the manufacture of a medicament, composition, combination, or product, for preventing, improving or treating a disorder, disease or health condition; and/or

use of one or more cyclooxygenase-2 (COX-2) inhibitors, or of a weak acid-base pair with one or more active pharmaceutical ingredients (API), or of a weakly effervescent disintegration formulation as defined herein, and one or more additional agents, in the manufacture of a single or separate medicament, single or separate composition, single or separate combination, or single or separate product, for preventing, improving or treating a disorder, disease or health condition; and/or

use of one or more cyclooxygenase-2 (COX-2) inhibitors, or of a weak acid-base pair with one or more active pharmaceutical ingredients (API), or of a weakly effervescent disintegration formulation as defined herein, in the manufacture of a medicament, composition, combination, or product, in combination with one or more additional agents, for preventing, improving or treating a disorder, disease or health condition.