PATENT NEWS: PHARMACEUTICALS

1. **Imidazolidinonylaminopyrimidine compounds for the treatment of cancer (253922,C07D409/14), LI Hong-Yu; Brooks , Harold , Burns; Crich , Joyce , Z; Henry , James , Robert; Sawyer , Jason , Scott; Wang , Yan**

   The present invention provides novel imidazolidinonylaminopyrimidine compounds believed to have clinical use for treatment of cancer through inhibiting Plk1. Formula I wherein: R1 is aminomethyl, (C1-C3 alkyl)aminomethyl, di(C1-C2 alkyl)aminomethyl, N- ethyl-N-methyl-aminomethyl, 1-aminoethyl, 1-((C1-C2 alkyl)amino)-ethyl, 3,3,3- trifluoropropylaminomethyl, ethynyl, 2-hydroxy-ethoxy, 2-hydroxyethylaminomethyl, 2- cyanoethylaminomethyl, mopholin-4-ylmethyl, methoxymethoxymethyl, cyclopropyl, 1- azetidinylmethyl, 1-pyrrolidinylmethyl, or 1,3-dioxolan-2-yl; R2 is hydrogen or halo; R3 is hydrogen or halo; provided that at least one of R2 and R3 is hydrogen; R4 is hydrogen, methyl, or halo; and is a single bond that is either present or absent, or a pharmaceutically acceptable salt thereof.

2. **A novel pharmaceutical composition of topical methotrexate gel in chronic inflammatory condition (251524,G01N33/60), AnuradhaMajumdarand Norma Andrades**

   The present invention relates to a topical Novel drug delivery system (NDDS) wherein the therapeutic agent is photostabilized thereby avoiding the photosensitized reactions thereof. The disclosure provides lipid-containing compositions, including liposomes encapsulating methotrexate, an external ingredients such as hyaluronic acid or its salt and may comprise of atleast one of the flavonoids such as hesperitin, rutin, quercetin. kaemferol and pharmaceutical formulations thereof, as well as process for preparing the same. Thus described herein are novel pharmaceutical compositions for sustained delivery of methotrexate via a topical route. The invention is based on the discovery that topical methotrexate gel composition can be used for the treatment of chronic inflammatory disease, such as rheumatoid arthritis.

3. **A dry powder mixture for use in preparing multi coloured substrate (252820,B01F3/00), Pareek Suresh and RajsharadChetan**

The present invention is directed towards a dry mix composition that can be used to produce multi coloured tablets. The dry mix composition can be used to achieve a multi colour effect for uncoated and coated tablets. Coated tablets include any and all coatings applied over tablets like film coating, enteric coating, polymeric coats and other similar coatings. The dry mix composition comprises of commonly used excipients incorporating a fixing agent and a suitable pigment colour. A process to manufacture multi coloured tablets using the inventive dry mix composition is also described. The invention can be applied to pharmaceutical, food products, confectionery, agricultural seeds, nutritional feeds etc. Furthermore, the application describes the formulation variances by which the invented technology can easily be implemented on commercial levels.

4. **Deuterated catecholamine derivatives and medicaments comprising said compounds (256023,C07C229/26), Alken Rudolf-Giesbertand Schneider Frank**

The present invention concerns deuterated catecholamine derivatives as well as pharmaceuticals containing these compounds. In addition, the invention concerns the use of deuterated catecholamine derivatives as well as physiologically acceptable salts thereof, and also pharmaceutical compositions, which contain these compounds, also in combination with enzyme inhibitors, for the treatment of dopamine deficiency diseases or diseases which are based on disrupted tyrosine transport or disrupted tyrosine decarboxylase, as well as other disorders.

5. **Acyloxyalkylcarbamateprodruds, methods of synthesis and use (254957,A61K31/195), Gallop Mark A, Yao Fenmei, Ludwikow Maria J, Phan Thu, PengGe**

The disclosures herein relate generally to acyloxyalkylcarbamateprodrugs of (±) 4 amino 3 (4 chlorophenyl)butanoic acid and analogs thereof, pharmaceutical compositions thereof , methods of making prodrugs of (±) 4 amino 3 (4 chlorophenyl)butanoic acid and analogs thereof, methods of using prodrugs of (±) 4 amino 3 (4 chlorophenyl)butanoic acid and analogs thereof, and pharmaceutical compositions thereof for treating or preventing common diseases and/or disorders

such as spasticity and/or acid reflux disease. The disclosures herein also relate to acyloxyalkylcarbamateprodrugs of (±) 4 amino 3 (4 chlorophenyl)butanoic acid and analogs thereof which are suitable for oral administration and to sustained release oral dosage forms thereof.

6. **An improved process for preparing high purity ethyl-(r)-4-cyano-3-hydroxy butyric acid ester/butyrate (250502,CO7C2/00), PaiganeshGurpur, RanbhanKamleshJayantilal, Darbar Yusuf E**

A process for the preparation of alkyl-(R)-4-cyano-3-hydroxybutyrate of Formula I and Formula I A; OH O Formula I Where R represents lower alkyl group with 1-4 carbon atoms OH O (R) v ^QEt Formula la Esters of Formula I and Formula I A are known to be commercially important as intermediates in the synthesis of pharmaceuticals for treatment of hyperlipidemia.

7. **A process for preparation of nanocrystals of lovastatin (249912,A61K31/5), Ganesh K. Derkar, Basavaraj K. Nanjwade, F. V. Manvi**

The invention relates to nanocrystals of poorly water soluble drugs to increase their solubility and dissolution rate and thereby increased bioavailability. It specifically relates to the preparation of statin nanocrystals. More particularly it relates to the easy and cost-effective process for preparation of lovastatin nanocrystals and its formulations for convenient oral delivery. Nanocrystals of lovastatin was prepared by using simple precipitation method to overcome the difficulty of poor solubility and with less concentration of drug with proper selection of solvent and at proper dilution of drug solution with water, nanocrystals of lesser particle size is possible with slight change in crystallinity. The nanocrystals of lovastatin showed the enhanced saturation solubility, increased dissolution rate and more bioavailability in biological fluid.

8. **Capable of promoting blood circulation to disperse blood clots expelling of toxin to stopping itching Chinese medicine wine (CN101376870B), Yellow Yuxing**

Capable of activating blood and removing blood stasis, expelling toxin and stopping itching Chinese medicine wine, is mainly made from the following components by weight: Cottonrose hibiscus leaf 50 - 90 share, garden balsam 50 - 90 share, jade

placed in hair on flower cap 50 - 90 share, lotus-root joints 40 - 70 share, paliurusramosissimus 10 - 30 share, plantain seed 10 - 30 share, white spirit 1500 - 2000 share. The invention treatment is heavy in washing to eliminate stasis to be, removing blood stasis, dredging meridian and expelling toxin, exorcises go out, toxic evil in outlet, evilly, and then Zhengan, causing the body to restore the physiological balance. Therefore the invention selected multiple taste can be a heat clearing and detoxicating, antibiotic and anti-inflammation, detumescence and dispersed silt Chinese *herbal* medicine, the medicine, promote each other. With good curative effect.

9. **A traditional Chinese medicine composition for treating osteoporosis and reinforcing kidney blood circulation granule (CN102145106B), Tongs Peijian, Wu Chengliang, Yin Flower, Small Lu Component, Yellow red Ring, Batch Element zhen, The XI, Gold educated youth**

The invention provides a Chinese medicine composition and granule for treating osteoporosis, Chinese medicine composition quality proportion ofCooked 5 to 8 share, Eucommia bark 2 to 5 share, aconite 5 to 8 share, Chinese wolfberry 2 to 5 share, cinnamon 3 to 5 share, dogwood 1 to 3 share, peach kernel 3 to 5 share, safflower 1 to 3 share, Chinese yam 2 to 5 share, licorice root 3 to 5 share. Advantages of the invention: The invention provides a traditional Chinese medicine composition for treating osteoporosis, and traditional Chinese medicine granule of the composition preparation for nourishing kidney, promoting blood circulation granule, the large limit extraction of effective medicine components, improve the drug efficacy,Additionally provided with a quality control system of multi-component multi-target to the preparation, which conforms to the Chinese medicine theory, mass action provides scientific basis for the stability of the preparation quality controllable, ensures the safety of clinical administration is of effective.

10. **Traditional Chinese medicine powder for treating Psoriasis (CN102416127A), Cui Guozhi**

The invention relates to a traditional Chinese medicine for Psoriasis, in particular to aTraditional Chinese medicine powder for treating Psoriasis,Traditional Chinese medicine powder for the Psoriasis is prepared by: Oral traditional Chinese medicine

powder and external liniment composition: And aOral traditional Chinese medicine powder formula is: Angelica Dahurica, cicada slough and other five traditional Chinese medicine compositions; The liniment isCentipede, scorpion, waiting for 18 kinds of Chinese medicinal materials and medical ethanol, and dimethyl sulfoxide composition; Traditional Chinese medicine powder for the invention for treating Psoriasis, based on a secret recipe handed down in the family, after years of clinical experience, psoriasis to the reason, screening and in the refrigeration, cooling blood, dispelling wind and stopping itching, expelling activating blood, toxic materialNourishing blood and moistening dryness, insect type medicine attacks the toxin and other medicine science blend and traditional process the internal and external application medicine; The traditional Chinese medicine powder for Psoriasis, because of using the traditional pharmacy technology, which is a pure Chinese medicinal preparation, the patient to feel released and, no toxic side effect and no recurrence and other features; And is easy to operate, and is economical and applicable resistance.

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