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(71) **Applicant** *(for CN only)*: **DALIAN WANCHUN BIOTECHNOLOGY CO., LTD.** [CN/CN]; No. 9, East Liaohe Road, Dalian Development Zone, Dalian, Liaoning 116001 (CN).

(71) **Applicant**: **BEYONDSPRING PHARMACEUTICALS, INC.** [US/US]; 48 Wall Street, 11th Floor, New York, New York 10005 (US).

(72) **Inventor**: **HUANG, Lan**; No. 9, East Liaohe Road, Dalian Development Zone, Dalian, Liaoning 116001 (CN).

(74) **Agent**: **XU & PARTNERS, LLC.**; Room No.106, Building No.1, Universal High-Tech Plaza, 958 Zhen Bei Road, Putuo District, Shanghai 200333 (CN).

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(54) **Title**: CANCER TREATMENT WITH COMBINATION OF PLINABULIN AND TAXANE

(57) **Abstract**: This invention provides a novel cancer treatment method in which plinabulin (t-butyl- dehydrophenylahistin or NPI-2358) and a taxane compound (such as docetaxel) are used in combination. Our study has shown that the optimum combination of injecting plinabulin after taxane compound has unexpected enhanced efficacy in large tumor populations in animal model and in NSCLC cancer patients compared to taxane compound treatment alone. In addition, this optimum combination can achieve unexpected safety effect in lowering unbearable side effects of taxane compound, including decreasing its neutropenia rates at all grades and decreasing G-CSF use in cancer patients.