ABSTRACT

This invention is related to a pharmaceutical combination that contains a Casein kinase 2 (CK2) peptide inhibitor (termed P15) along with the standard chemotherapeutic drugs used in cancer treatment and which are administered together, separated or sequentially. The chemothearapeutic drugs include cisplatin, taxol, alkaloids from Vinca, 5-fluorouracil, doxorubicin, cyclophosphamide, etoposide, mitomicin C, imatinib, iressa and velcade (vortezomib). The synergism between the P15 peptide and the anticancer drugs achieves an efficient concentration of each cytostatic drug in the combination which is from 10- to 100-fold lower than that for each cytostatic drug alone. The pharmaceutical combination described in this invention exhibits lower toxicity compared to that reported by the anticancer therapeutics and therefore, it represents a crucial advantage for its use in cancer therapy. Furthermore, the sequential administration of this pharmaceutical combination through the pretreatment with the P15 peptide leads to the chemo sensibilization of refractory tumors to the anticancer therapeutics.