

Title (en)

METHOD OF DYNAMIC RETARDATION OF CELL CYCLE KINETICS TO POTENTIATE CELL DAMAGE

Title (de)

METHODE ZUR DYNAMISCHEN VERZÖGERUNG DER ZELLZYKLUSKINETIK ZUR POTENZIERUNG DER ZELLSCHÄDIGUNG

Title (fr)

PROCEDE DE RALENTISSEMENT DYNAMIQUE DE LA CINETIQUE DU CYCLE CELLULAIRE, DESTINE A POTENTIALISER LES LESIONS CELLULAIRES

Publication

EP 0835111 A2 19980415 (EN)

Application

EP 96923453 A 19960626

Priority

- US 9610921 W 19960626
- US 54695 P 19950627
- US 66893296 A 19960624

Abstract (en)

[origin: WO9701344A2] Method for inducing cell damage by administering a restraining agent (RA) to a target cell population at a concentration and under conditions sufficient to retard but not arrest the progress of the target cells through the cell cycle, and administering a targeted cytotoxic insult (TCI) concomitant with or subsequent to the application of the RA. The invention also relates to a microculture indicator system and auxiliary data analysis procedures for identifying, designing and using new agents as restraining agents or targeted cytotoxic insults, and for improving synergistic combinations of existing agents. In embodiments of the invention, the RA can be a ribonucleotide reductase inhibitor, a dihydrofolate reductase inhibitor, a thymidylate synthase inhibitor, a DNA polymerase inhibitor, a protein kinase inhibitor or a topoisomerase inhibitor. In addition, embodiments of the invention include, as TCI, indole carbazoles, such as staurosporine, K252a, KT5926, and KT5720. In a specific embodiment, the RA is thymidine and the TCI is staurosporine.

IPC 1-7

A61K 31/55; A61K 31/70; A61K 31/17; A61K 31/045

IPC 8 full level

C07D 475/08 (2006.01); **A61K 31/17** (2006.01); **A61K 31/40** (2006.01); **A61K 31/505** (2006.01); **A61K 31/519** (2006.01); **A61K 31/70** (2006.01); **A61K 31/7028** (2006.01); **A61K 31/7042** (2006.01); **A61K 31/7052** (2006.01); **A61K 31/7064** (2006.01); **A61K 33/24** (2006.01); **A61K 45/00** (2006.01); **A61K 45/06** (2006.01); **A61P 35/00** (2006.01); **A61P 43/00** (2006.01); **C07H 15/26** (2006.01); **C07H 19/073** (2006.01); **C07H 19/09** (2006.01)

CPC (source: EP)

A61K 31/70 (2013.01); **A61K 45/06** (2013.01); **A61P 35/00** (2017.12); **A61P 43/00** (2017.12)

C-Set (source: EP)

1. **A61K 31/70 + A61K 31/55**
2. **A61K 31/70 + A61K 2300/00**

Citation (search report)

See references of WO 9701344A2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9701344 A2 19970116; WO 9701344 A3 19970327; AU 6396096 A 19970130; AU 715527 B2 20000203; CA 2225682 A1 19970116; EP 0835111 A2 19980415; JP H11509193 A 19990817

DOCDB simple family (application)

US 9610921 W 19960626; AU 6396096 A 19960626; CA 2225682 A 19960626; EP 96923453 A 19960626; JP 50454597 A 19960626