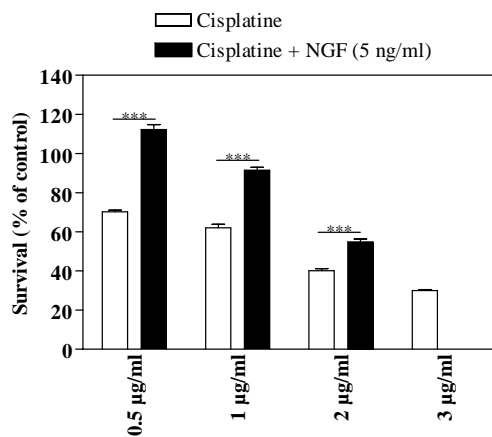


### 1. Introduction

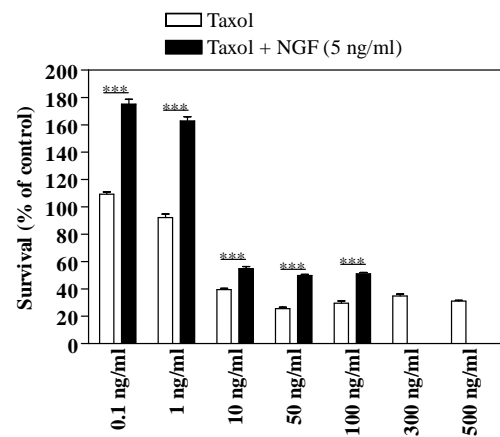
Cisplatin, vincristine and taxol are widely used as antimetabolic drugs for treating various cancers. However, their employment is often limited by their neurotoxicity (Quasthoff et Hartung, 2002). Counteracting this side effect without affecting their anti-cancer activities is a promising developmental strategy.

### 2. Compound testing

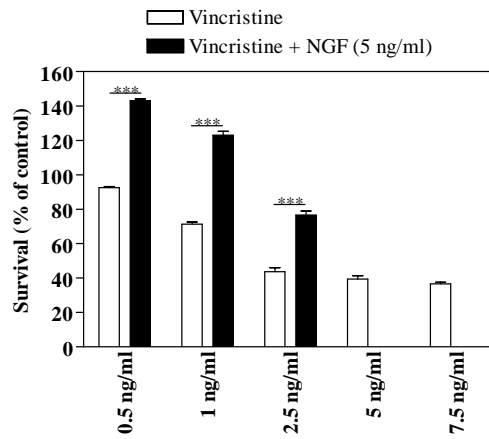
Co-cultures from sensory neurons and Schwann cells are injured by anti-chemotherapeutic drugs (cisplatin 0.5  $\mu\text{g/ml}$ , vincristine 1 ng/ml or taxol 0.5  $\mu\text{g/ml}$ ). The aim of this study is to investigate the putative protective effect of tested compounds on this damage. Global cellular survival is assessed by measuring acid phosphatase activity after 48h exposure to injured drug and tested compound.



Cisplatin induces cell death in sensory neurons in a dose dependent manner. At each dose tested, NGF at 5 ng/ml is able to protect neurons against cisplatin damage.



Taxol induces sensory neuron cell death. NGF is able to protect sensory neurons against this injury.



Vincristine induces cell death in sensory neurons in a dose dependant manner. At each dose tested, NGF at 5 ng/ml is able to protect neurons against the vincristine damage.

### 3. References

Quatschoff S. and Hartung H.P. Chemotherapy-induced peripheral neuropathy. (2002). J. Neurol. 249:9-17.