Treatment Targets for Chemotherapy Induced Peripheral Neuropathy: Clues From Studies on Ectopic Spontaneous Activity

Li et al, Pain 2017

Cisplatin Neuropathy
Venous Clip Arterial Clip Brush
400 μV

Vincristine Neuropathy
Venous Clip Arterial Clip Brush
200 μV

Taxol Neuropathy
Venous Clip Arterial Clip
200 μV

Thalidomide Neuropathy
Venous Clip Arterial Clip
1 μV

Weng et al, Pain 2003
Cata et al, Neuroscience 2006
Cata et al, Brain Res. 2008
Cata et al, unpublished
North, Odem, Li, Wedeen, Dougherty, unpublished
North et al, Brain 2019
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In the absence of brief extrinsic depolarizing inputs, only three basic electrophysiological alterations can (in principle) produce OA.

Taxol induced the expression of CD68 in DRG

Macrophage (CD68 staining) immunoactivity was detected in the L4-5 DRG.
Clodronate reduced CD68 expression in treated rat DRG and partially reverse the neuropathic pain induced by taxol.

Clodronate is a macrophage killer.

Zhang et al, J Pain 2016

Li et al, Pain 2017; Li et al, JNS 2018

Megat et al, JNS 2018

Li et al, unpublished