

# Freedom 300 Pro

## Method of Action - How Does Anodyne Therapy Work?

The mechanism of action underlying neuropathic pain relief associated with MIRE may be due, in part, to a combination of topical heat and an increased local release of nitric oxide that has been reported using this wavelength (890nm) of near infrared light energy. The source of released nitric oxide may be endothelial cells or red blood cells, or both.

## Clinical Research has linked nitric oxide with:

- Increases in local circulation
- Reduction of pain
- Reduction in inflammation
- Angiogenesis
- Collagen synthesis

Nitric oxide production is compromised in both type 1 and type 2 diabetic patients. If near infrared light is able to favorably alter local nitric oxide availability in the diabetic patient, this may improve microcirculation via an alteration of cGMP-mediated vasodilation at the site of treatment. Better blood flow may, in part, explain the symptomatic decrease in pain these patients.

Nitric oxide also appears to be able to mitigate pain via a mechanism similar to morphine, namely via nitric oxide mediated production of cGMP and phosphorylation of ATP-dependent potassium channel activity. There may be a significant analgesic effect of MIRE if local concentrations of nitric oxide are increased.

## Clinical Studies

Statistical Analysis of outcomes in more than **4,000** patients:

- Substantial reductions in the impairment of foot sensation
- **97%** of patients reported improved sensation
- Average sensory improvement- **65%**
- Significant reductions in foot and leg pain
- **92%** of patients experienced pain reduction
- Average pain reduction- **60%**
- Major increases in balance and reduced risk of falls
- **90%** of patients reported reduced fall risk
- Average balance improvement- **85%**
- Ongoing home use of the Anodyne Therapy System provides lasting benefit measured after an 12 months of use
- Improved balance
- Fewer falls
- Pain reduction
- Improved activities of daily living

