Antagonists of the Transient Receptor Potential Vanilloid 1 and Uses Thereof

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Description:
One of the major disabling symptoms of gastroparesis is nausea and vomiting which can be difficult to control with currently available treatments. It is postulated that signaling of gastrointestinal causes of nausea starts with activation of vagal afferent nerves that trigger the central emetic pathway. Most vagal afferent nerves are unmyelinated C-fibers, many of which express the vanilloid receptor TRPV1 and respond to capsaicin. Resiniferatoxin is a very potent capsaicin analogue that has a much more favorable ratio of desensitization to excitation than capsaicin leading to more effective desensitization without irritation. The present invention demonstrates that desensitization of TRPV1 responsive gastric sensory neurons would attenuate nausea and vomiting.

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