Targeting the inactivated state may broaden therapeutic window, minimize adverse effects and increase efficacy.

With prolonged excitation, the proportion of channels in inactivated state increases.

This natural “braking” feature offers opportunity for pharmacological selectivity.
• Learn about cell based assays for state-dependent modulation of native and recombinant calcium channel function.

• Discover novel, first-in-class calcium channel blockers that demonstrate enhanced potency for the inactivated state.

• Understand the profile of Z160, a selective state-dependent N-type calcium channel blocker with potent oral efficacy in the Chung and Chronic Constriction Injury rodent models of neuropathic pain.

• Recognize the profile of Z944, a selective, state-dependent T-type calcium channel blocker with potent oral efficacy in the Complete Freund’s Adjuvant (CFA) and Formalin models of pain.

• Appreciate the utility of inactivation state screening to identify novel, potent, selective and state-dependent calcium channel blockers with efficacy in animal models of pain.