

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Musculoskeletal disease				
Muscular atrophy	Transient receptor potential vanilloid 1 (TRPV1; VR1)	<i>In vitro</i> and mouse studies suggest activating TRPV1 in skeletal muscle could help treat or prevent muscular atrophy. In mice, mechanical and functional overload of muscles caused Trpv1 activation and led to muscular hypertrophy. In the mice subjected to muscle overload, the TRPV1 activator capsaicin increased muscle weight and fiber length compared with vehicle. In a mouse model of muscular atrophy, the TRPV1 activator capsaicin prevented muscle weight loss and decreases in fiber length. Next steps could include identifying a muscle-specific TRPV1 activator. NeurogesX Inc. and Astellas Pharma Inc. market Qutenza, a dermal patch containing capsaicin, to manage neuropathic pain associated with postherpetic neuralgia (PHN). NeurogesX's NGX-1998, a topical liquid formulation of synthetic capsaicin, is in Phase II testing for the same indication.	Patent and licensing status unavailable	Ito, N. <i>et al. Nat. Med.</i> ; published online Dec. 2, 2012; doi:10.1038/nm.3019 Contact: Shin'ichi Takeda, National Center of Neurology and Psychiatry, Kodaira, Japan e-mail: takeda@ncnp.go.jp
<p><i>SciBX</i> 6(1); doi:10.1038/scibx.2013.17 Published online Jan. 10, 2013</p>				