This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Pulmonary disease				
Pulmonary fibrosis	Transient receptor potential vanilloid 4 (TRPV4; VRL2); transforming growth factor β1 (TGFB1)	*In vivo* and *in vitro* studies suggest inhibiting TRPV4 could help treat idiopathic pulmonary fibrosis (IPF). TRPV4 activity was higher in lung fibroblasts from patients with IPF than in those from healthy subjects. In cultured lung fibroblasts derived from healthy subjects and patients with IPF, *TRPV4* knockdown or a TRPV4 inhibitor decreased TGFB1-mediated myofibroblast differentiation—a key factor in fibrogenesis—compared with normal *TRPV4* expression or vehicle. In a mouse model of bleomycin-induced lung fibrosis, *Trpv4* knockout decreased collagen levels and fibrosis in the lungs compared with wild-type Trpv4 expression. Next steps could include developing clinically relevant TRPV4 antagonists.	Patent and licensing status unavailable	Rahaman, S.O. *et al. J. Clin. Immunol.*; published online Nov. 3, 2014; doi:10.1172/JCI75331 **Contact:** Mitchell A. Olman, Cleveland Clinic, Cleveland, Ohio e-mail: olmanm@ccf.org **Contact:** Shaik O. Rahaman, same affiliation as above e-mail: rahamao@ccf.org

SciBX 7(47); doi:10.1038/scibx.2014.1385
Published online Dec. 11, 2014