

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Autoimmune disease</b>				
Rheumatoid arthritis (RA)	<i>Porphyromonas gingivalis</i> peptidyl arginine deiminase (PgPADI; PgPAD)	Mouse studies suggest inhibiting PgPAD could help treat RA. In mice, inoculation with wild-type <i>P. gingivalis</i> increased levels of protein citrullination and production of antibodies against citrullinated proteins compared with PAD-deficient <i>P. gingivalis</i> . In a collagen-induced arthritis mouse model, infection with wild-type <i>P. gingivalis</i> increased the proportion of mice that developed the condition and the severity of arthritic symptoms compared with infection with PAD-deficient <i>P. gingivalis</i> . Next steps include testing inhibitors of human PAD (PADI) and PgPAD in preclinical models of RA.	Patent and licensing information available from 4SC AG and the Gums and Joints Consortium	Maresz, K.J. <i>et al.</i> <i>PLoS Pathog.</i> ; published online Sept. 12, 2013; doi:10.1371/journal.ppat.1003627 <b>Contact:</b> Piotr Mydel, University of Bergen, Bergen, Norway e-mail: <a href="mailto:piotr.mydel@gades.uib.no">piotr.mydel@gades.uib.no</a>

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