

THE DISTILLERY

This week in therapeutics

| Indication | Target/marker/ pathway | Summary | Licensing status | Publication and contact information |
|-------------------------------------|---|--|--|--|
| Autoimmune disease | | | | |
| Inflammatory bowel disease (IBD) | Nucleotide-binding oligomerization domain containing 1 (NOD1; CARD4); chemokine (C-C motif) receptor 6 (CCR6) | Studies in mice suggest that NOD1 and CCR6 could be targeted to treat IBD or other diseases characterized by self-destructive intestinal immunity. In mice, bacteria living in the large intestine were found to communicate with the intestinal immune system using the Nod1 receptor and chemokine receptor Ccr6 to induce the formation of isolated lymphoid follicles. The intestines of <i>Nod1</i> and <i>Ccr6</i> knockout mice had lower levels of those follicles, less B cell maturation and more abnormal intestinal flora than wild-type controls. Abnormal B cell development in the intestines is thought to contribute to IBD. Next steps could include testing the effect of NOD1 and CCR6 agonists in animal models of IBD. | Patent and licensing status undisclosed | Bouskra, D. <i>et al. Nature</i> ; published online Nov. 5, 2008; doi:10.1038/nature07450 Contact: Gérard Eberl, Pasteur Institute, Paris, France e-mail: geberl@pasteur.fr |

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