

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Colorectal cancer	β -Catenin (CTNNB1); E-cadherin (CDH1; CD324); <i>Fusobacterium nucleatum</i> FadA	<p>Mouse studies suggest targeting <i>Fusobacterium nucleatum</i> could help treat colorectal cancer. <i>F. nucleatum</i> is a human gut bacterium previously shown to be associated with colorectal cancer, but its role in the disease was unclear. In mice, oral administration of <i>F. nucleatum</i> promoted the recruitment and expansion of myeloid cells, which can induce tumor progression, and accelerated intestinal tumorigenesis, whereas oral administration of control bacteria had no effect. In a mouse xenograft model of human colorectal cancer, <i>F. nucleatum</i> was shown to promote tumor growth, inflammation and oncogenic signaling via its FadA adhesin, which was shown to bind CDH1 to induce activation of CTNNB1 signaling. Next steps include determining whether FadA could be a diagnostic marker and developing an inhibitory peptide for therapeutic use.</p> <p>SciBX 6(35); doi:10.1038/scibx.2013.957 Published online Sept. 12, 2013</p>	<p>Patent application filed for findings from first study; available for licensing from the Case Western Reserve University Technology Transfer Office</p> <p>Patent and licensing status unavailable for findings from second study</p>	<p>Rubinstein, M.R. <i>et al. Cell Host Microbe</i>; published online Aug. 14, 2013; doi:10.1016/j.chom.2013.07.012 Contact: Yiping W. Han, Case Western Reserve University, Cleveland, Ohio e-mail: yiping.han@case.edu</p> <p>Kostic, A.D. <i>et al. Cell Host Microbe</i>; published online Aug. 14, 2013; doi:10.1016/j.chom.2013.07.007 Contact: Wendy S. Garrett, Harvard Medical School, Boston, Mass. e-mail: wgarrett@hsph.harvard.edu Contact: Matthew Meyerson, same affiliation as above e-mail: matthew_meyerson@dfci.harvard.edu</p>