This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Infertility	Defensin β 1 (DEFB1)	<p>Patient sample studies suggest increasing DEFB1 levels could help treat male infertility. In sperm samples from infertile patients with asthenozoospermia or leukocytospermia, DEFB1 levels were lower than those in sperm from fertile individuals, and lower DEFB1 levels correlated with decreased sperm mobility and bactericidal activity. In sperm samples from infertile patients, recombinant DEFB1 partially rescued the impaired sperm behavior. In a human sperm-hamster oocyte penetration assay that predicts fecundity rate, recombinant DEFB1-treated sperm from infertile patients showed significantly greater oocyte penetration than untreated sperm ($p < 0.01$). Next steps could include further testing the effects of DEFB1 on sperm penetration of oocytes.</p> <p>SciBX 7(35); doi:10.1038/scibx.2014.1042 Published online Sept. 11, 2014</p>	Unpatented; licensing status not applicable	<p>Diao, R. <i>et al. Sci. Transl. Med.</i>; published online Aug. 13, 2014; doi:10.1126/scitranslmed.3009071 Contact: Hsiao Chang Chan, The Chinese University of Hong Kong, Hong Kong, China e-mail: hsiaocchan@cuhk.edu.hk Contact: Zhiming Cai, First Affiliated Hospital of Shenzhen University, Shenzhen, China e-mail: caizhiming2000@163.com</p>