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This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Diagnosing and monitoring treatment response of Enterobacteriaceae infections with 2-[^{18}F]-fluorodeoxysorbitol (^{18}F-FDS) PET imaging	A sorbitol-based PET imaging agent could help detect and monitor treatment responses in Enterobacteriaceae infections. Sorbitol is metabolized by bacteria of the Enterobacteriaceae family but not by other bacterial families. In mouse models of thigh or lung bacterial infection, PET imaging with ^{18}F-FDS correctly localized and distinguished *Escherichia coli* and *Klebsiella pneumoniae* infections from *Staphylococcus aureus*, which is not part of the Enterobacteriaceae family. In mouse models of *E. coli* infection treated with Rocephin ceftriaxone, ^{18}F-FDS PET signal intensity correlated with treatment response. Planned work includes testing the ^{18}F-FDS PET agent in patients. Roche markets Rocephin, a third-generation cephalosporin antibiotic, to treat multiple Gram-positive and Gram-negative bacterial infections.	Patented; available for licensing	Weinstein, E.A. *et al. Sci. Transl. Med.*; published online Oct. 22, 2014; doi:10.1126/scitranslmed.3009815 **Contact:** Sanjay K. Jain, The Johns Hopkins University School of Medicine, Baltimore, Md. e-mail: sjain5@jhmi.edu

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