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This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Induced multipotent progenitor cell–derived human hepatocytes (iMPC-Heps) with proliferative and functional potential *in vivo*	Cell culture and mouse studies suggest human iMPC-Heps could be used for disease modeling and could enable autologous liver therapy. Human hepatocytes derived from induced pluripotent stem (iPS) cells have previously been shown to have broad metabolic activity but lack the proliferative potential required for efficient liver regeneration. In cell culture, human fibroblasts engineered to express *OCT4*, *SOX2* and *KLF4* and also treated with small molecule combinations transdifferentiated into iMPC-derived endoderm progenitors that could be further converted to iMPC-Heps by additional chemicals and growth factors. In a mouse model of liver injury, transplanted iMPC-Heps proliferated for at least 9 months, matured *in vivo* and repopulated up to 2% of the liver, and they led to 10% higher serum albumin levels than no transplant. Next steps include further optimizing *in vitro* maturation of iMPC-Heps. *SciBX* 7(11); doi:10.1038/scibx.2014.327 Published online March 20, 2014	Patent filed covering reprogramming conditions to generate hepatocytes from fibroblasts; available for licensing	Zhu, S. *et al. Nature*; published online Feb. 23, 2014; doi:10.1038/nature13020 **Contact:** Holger Willenbring, University of California, San Francisco, Calif. e-mail: willenbringh@stemcell.ucsf.edu **Contact:** Sheng Ding, Gladstone Institute of Cardiovascular Disease, San Francisco, Calif. e-mail: sheng.ding@gladstone.ucsf.edu

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