This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Blood substitute; hypoxia	Not applicable	<p>Studies in human blood and rabbits suggest oxygen-loaded microparticles could help treat asphyxia and other hypoxemic conditions. <i>In vitro</i>, phospholipid- and copolymer-based microparticles transferred free oxygen to the hemoglobin of deoxygenated human red blood cells within four seconds without altering blood viscosity. In a rabbit model of hypoxemia and asphyxia, the microparticles normalized blood levels of oxygenated hemoglobin and decreased metabolic acidosis, signs of liver injury and incidence of cardiac arrest compared with control particles not loaded with oxygen. Ongoing work includes testing the microparticles in animal models of cardiac arrest.</p> <p>SciBX 5(27); doi:10.1038/scibx.2012.710 Published online July 12, 2012</p>	Patented; licensing status undisclosed	<p>Kheir, J.N. <i>et al. Sci. Transl. Med.</i>; published online June 27, 2012; doi:10.1126/scitranslmed.3003679 Contact: John N. Kheir, Boston Children's Hospital, Boston, Mass. e-mail: john.kheir@childrens.harvard.edu</p>