This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Venous thromboembolism (VTE); thrombosis	Factor Xa; thrombin (factor IIa; F2)	<p><i>In vitro</i> and rat studies identified a dual factor Xa and thrombin inhibitor that could help treat thrombosis. <i>In vitro</i>, the inhibitor, SAR107375, blocked both factor Xa and thrombin with low nanomolar potency. In a rat model of venous thrombosis, i.v. and oral dosing of SAR107375 had antithrombotic activity. In a rat model of arterial thrombosis, oral dosing of SAR107375 decreased bleeding compared with oral dosing of the factor Xa inhibitor Xarelto rivaroxaban or the thrombin inhibitor Pradaxa dabigatran and had comparable antithrombotic activity. Next steps include further assessing advantages of SAR107375 such as reduced bleeding risks relative to existing anticoagulants.</p> <p>Boehringer Ingelheim GmbH markets the thrombin inhibitor Pradaxa to treat VTE.</p> <p>Bayer AG and Johnson & Johnson market Xarelto to treat deep vein thrombosis (DVT), fibrillation, pulmonary embolism (PE), stroke and VTE.</p> <p>SciBX 6(48); doi:10.1038/scibx.2013.1388 Published online Dec. 19, 2013</p>	Patent application filed covering inhibitor; licensed to an undisclosed Chinese company	<p>Meneyrol, J. <i>et al. J. Med. Chem.</i>; published online Oct. 31, 2013; doi:10.1021/jm4005835</p> <p>Contact: Gilbert Lassalle, Sanofi R&D, Toulouse, France e-mail: gilbert.lassalle@sanofi.com</p>