

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Not applicable	<p>Mouse studies suggest antibiotics could inhibit the potency of DNA-alkylating agents. In healthy or tumor-bearing mice, the generic DNA-alkylating agent cyclophosphamide disrupted gut mucosal integrity and induced commensal bacteria translocation to secondary lymphoid organs, which resulted in polarization of splenic naïve T cells toward an antitumor T helper type 17 (Th17) cell phenotype. In tumor-bearing mice, those receiving cyclophosphamide plus broad-spectrum antibiotics showed less antitumor Th17 cell differentiation and greater tumor volume than mice receiving cyclophosphamide alone. Next steps could include investigating probiotics to establish commensal gut bacteria beneficial for cancer treatments.</p> <p>SciBX 6(48); doi:10.1038/scibx.2013.1381 Published online Dec. 19, 2013</p>	Patent application filed; available for partnering	<p>Viaud, S. <i>et al. Science</i>; published online Nov. 22, 2013; doi:10.1126/science.1240537 Contact: Laurence Zitvogel, Gustave Roussy Institute, Villejuif, France e-mail: laurence.zitvogel@gustaveroussy.fr</p>