This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Neurology				
Neurology; Parkinson's disease (PD)	Monoamine oxidase B (MAO-B)	<p><i>In vitro</i> studies have identified indazole carboxamide-based MAO-B inhibitors that could help treat PD and other neurological diseases. Chemical synthesis and <i>in vitro</i> testing of indazole carboxamide analogs yielded multiple compounds that inhibited rat and human MAO-B at picomolar to low nanomolar IC₅₀ values. For several lead compounds, the calculated values of lipophilicity, brain penetrance and other physicochemical properties fell within accepted ranges for drug likeness and were comparable to those calculated for rasagiline, selegiline and safinamide. Planned studies include testing the lead compounds in animal models of PD.</p> <p>Teva Pharmaceutical Industries Ltd., H. Lundbeck A/S and Takeda Pharmaceutical Co. Ltd. market Agilect/Azilect rasagiline, an irreversible, selective inhibitor of MAO-B, to treat PD.</p> <p>Valeant Pharmaceuticals International Inc. markets Zelapar selegiline, an MAO-B inhibitor, to treat PD.</p> <p>Newron Pharmaceuticals S.p.A., Meiji Seika Pharma Co. Ltd. and Zambon Co. S.p.A. have safinamide, an α-aminoamide derivative that acts as a reversible MAO-B inhibitor, in registration to treat PD.</p> <p>SciBX 7(30); doi:10.1038/scibx.2014.901 Published online Aug. 7, 2014</p>	Unpatented; unlicensed	<p>Tzvetkov, N.T. <i>et al. J. Med. Chem.</i>; published online June 23, 2014; doi:10.1021/jm500729a</p> <p>Contact: Christa E. Müller, University of Bonn, Bonn, Germany e-mail: christa.mueller@uni-bonn.de</p> <p>Contact: Nikolay T. Tzvetkov, same affiliation as above e-mail: ntzvetkov@uni-bonn.de</p>