eligible to have their patent terms extended, according to a recent decision by the Federal Court of Australia.

Patent term extensions were introduced to compensate for delays in receiving regulatory approval. To be eligible for a patent term extension under Australian patent law, the patent must claim one or more pharmaceutical substances *per se*. "A number of decisions have applied inconsistent meanings to the definition of a pharmaceutical substance, resulting in a number of patentees being refused extensions of term," says Mark Wickham, a biotechnology patent attorney at Phillips Ormonde Fitzpatrick, Melbourne, Australia.

However, the Court found that a controlled-release formulation of the known drug oxycodone (OxyContin) was a pharmaceutical substance *per se* rather than a new formulation of a known drug. This is because OxyContin is a mixture that makes use of both the analgesic oxycodone and ingredients that affect the gastrointestinal tract to assert controlled release, and so the effects of OxyContin are different to those achieved by repeated doses of immediate-release oxycodone.

"This decision will be important as claims to formulations that contain an active pharmaceutical ingredient that has previously received regulatory approval in Australia may now also be eligible for a patent term extension," highlights Wickham.

Charlotte Harrison

Recent patents related to S1P

Sphingosine-1-phosphate (S1P) is a bioactive lipid that has a key role in the control of immune cell trafficking. In their Review on p688, Spiegel and colleagues discuss how the S1P axis could be targeted in disorders including cancer and inflammation.

Here in TABLE 1 we describe recent patents related to S1P published in the past year. Data were researched using the Espacenet database.

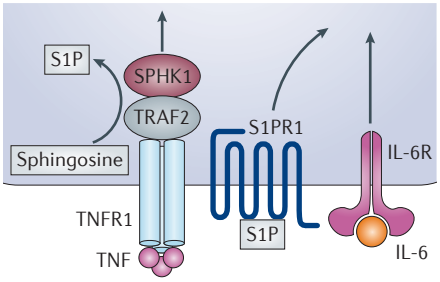

Table 1 | **Recent patent applications related to S1P**

Patent numbers	Applicants	Subject
CN 103068827	Abbott Healthcare	Fused heterocyclic derivatives that are S1PR5 agonists and can be used to treat cognitive disorders
EP 2563783 and others	Allergan	Novel benzyl azetidine, pyridine, phenyl oxadiazole, oxime, azetidine, alkyne and alkene derivatives that act as S1PR modulators
WO 2012142255	Allergan	Substituted bicyclic methyl azetidines that act as S1PR modulators
WO 2012145236	Allergan	Substituted bicyclic methylamine derivatives that act as S1PR modulators
WO 2013036530	Allergan	3-(4-(5-phenyl-1,2,4-oxadiazol-3-yl)phenoxy)propan-2-ol derivatives that act as S1PR modulators
US 2013059821	R.D. Caldwell (Biogen Idec)	Bicyclic aryl S1P analogues that act as S1PR agonists after phosphorylation
WO 2012140020	Bioprojet Pharma; Sun Pharma	Novel piperidinyl monocarboxylic acids that act as S1PR1 agonists and are useful for treating transplant rejection, tissue graft rejection, immune disorders and autoimmune diseases
WO 2012123613	CSIC; Universidad de Valladolid	An antagonist or an interfering RNA of S1PR1, S1PR2, S1PR3 or S1PR4 for preventing and/or treating calcified aortic stenosis
EP 2586874	Daiichi Sankyo	A cell-based method of screening for an S1P lyase inhibitor that has improved detection sensitivity
US 2013202680	EuroEspes Biotecnologia	Prevention and treatment of Alzheimer's disease using an amyloid-β peptide and S1P
US 2012225064 WO 2013022863	Expression Drug Designs	Antibodies and aptamers that bind to an epitope in the first extracellular loop of S1PR3; useful for treating cancer and screening for antineoplastic agents
US 2013012491	GlaxoSmithKline	Pyrimidine derivatives that act as S1PR agonists
US 2012283297	GlaxoSmithKline	Oxadiazole-substituted indazole derivatives that act as S1PR agonists
CA 2790753	R.A. Sabbadini (LPath)	Prevention and treatment of pain using antibodies to S1P
MX 2012015021	Merck Serono	5-(biphenyl-4-yl)-3-phenyl-1,2,4-oxadiazolyl derivatives that act as S1PR ligands
US 2013109669	Merck Serono	6-amino-pyrimidine-4-carboxamide derivatives that bind to S1PRs and are useful for treating multiple sclerosis
US 2012225031	C.A. Foster (Novartis)	S1PR agonists that are useful for treating demyelinating disorders
JP 2013059273	NCVC	A new function of an S1P transporter
AU 2013100561 AU 2012258451	Novartis	S1PR modulators that can be used to treat organ or tissue transplant rejection, autoimmune disease, inflammatory conditions or demyelinating disorders
US 2013196966 WO 2012158550	Receptos	S1PR modulators and methods of chiral synthesis; useful for treating multiple sclerosis, transplant rejection and acute respiratory distress syndrome
US 2013079309	University of Illinois	A method of treating acute lung injury using S1P analogues or S1PR agonists
WO 2012166859	University of Missouri	Modulation of S1P-metabolizing enzymes for treating negative-strand RNA virus infections
WO 2013026765	University of Münster	New ligands that target S1PRs and are useful for *in vivo* imaging and treating inflammation

CSIC, Consejo Superior de Investigaciones Científicas; NCVC, National Cerebral and Cardiovascular Center; S1P, sphingosine-1-phosphate; S1PR, S1P receptor.