ACS Medicinal Chemistry Letters

PATENT HIGHLIGHT

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Novel Inhibitors of Platelet Aggregation

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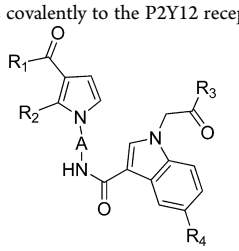
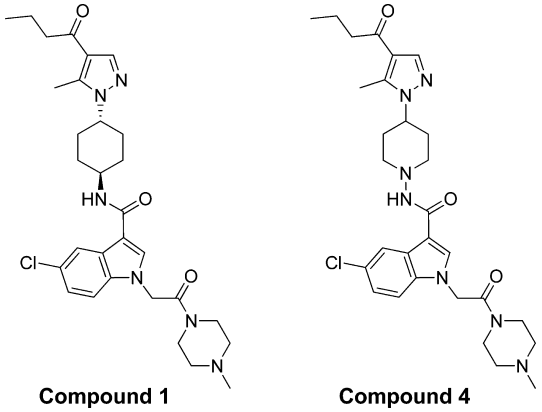
Title:	Novel Inhibitors of Platelet Aggregation		
Patent/Patent Application Number:	WO 2014/064219 A1	**Publication date:**	May 1, 2014
Priority Application:	EP 2012−306334	**Priority date:**	October 26, 2012
Inventors:	Boldron, C.		
Assignee Company:	Sanofi, France		
Disease Area:	Cardiovascular Diseases	**Biological Target:**	P2Y12 Receptor

Summary: The present application claims a series of indole carboxylic acid analogues as inhibitors of the P2Y12 receptor for the potential treatment of cardiovascular diseases. The P2Y12 receptor is a clinically validated target. The approved drug Clopidogrel (Plavix) is a prodrug that binds covalently to the P2Y12 receptor.

Important Compound Classes:



Key Structures:



Compound 1 Compound 4

Biological Assay: The ability of the compounds to inhibit platelet aggregation was evaluated in vitro in a PRP assay using either rat or human plasma.

Pharmacological Data:

In vitro assays

Compound	Rat PRP IC_{50} (μM)	Human PRP IC_{50} (μM)
1	0.091	0.27
4	0.043	0.025

Synthesis: The synthesis of six compounds is described.

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Notes

The authors declare no competing financial interest.

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