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# Pyrrolopyridines-quinazolines Inhibitors of PKR-Like ER Kinase

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Title:	Pyrrolopyridines-quinazolines Inhibitors of PKR-Like ER Kinase			
Patent/Patent Application Number:	WO 2014/161808 A1	Publication date:	October 9, 2014	
Priority Application:	EP 2013-162362	Priority date:	April 4, 2013	
Inventors:	Stansfield, I.; Ligny, Y. A. E.; Amblard, N. C., I.; Versele, M. L. A.			
Assignee Company:	Janssen Pharmaceutica NV, Belgium			
Disease Area:	Cancer, diabetes, and neurodegenerative diseases	<b>Biological Target:</b>	PKR-like ER kinase (PERK)	
Summary:	The present application claims pyrrolopyridines-quinazolines analogues as inhibitors of PERK kinase. The compounds of t invention are potentially useful in the treatment of a wide range of disorders such as cancer, diabetes, ocular disease, stro			
	inflammation, viral infections, and neurodegenerative diseases.			
Important Compound Classes:		$\mathbf{P}_{1}$		

Definitions:

A = CH or N

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### Key Structures:



**Biological Assay:** 

The enzymatic activity of the compounds was evaluated in a PERK kinase assay using LanthaScreen technology and in a cell-based TR-FRET assay in HEK293 cells.

Pharmacological Data:

Enzymatic assays	ŝ	
Compound	PERK pIC <sub>50</sub>	Cell PERK pIC <sub>50</sub>
1	9.1	7.7
2	9.2	7.6
3	9.4	7.3
4	8.8	7.4
7	8.5	7.1
15	8.2	6.5
16	8.3	6.3
28	6.6	5.1
30	8.0	<4.5
39	9.0	7.9

Synthesis:

The synthesis of 153 compounds is described.

# AUTHOR INFORMATION

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### Notes

The authors declare no competing financial interest.