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(54) Title **ALDOSTERONE SYNTHASE INHIBITORS**

(56) References

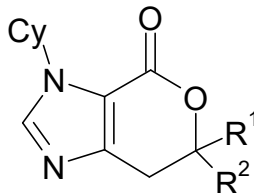
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WO-A1-2007/116099, HARTMANN R W ET AL: "Discovery of selective CYP11B2 (aldosterone synthase) inhibitors for the therapy of congestive heart failure and myocardial fibrosis", EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, EDITIONS SCIENTIFIQUE ELSEVIER, PARIS, FR, vol. 38, no. 4, 1 April 2003 (2003-04-01), pages 363-366, XP004425009, ISSN: 0223-5234, DOI: 10.1016/S0223-5234(03)00049-7, WO-A2-2007/117982

Enclosed is a translation of the patent claims in Norwegian. Please note that as per the Norwegian Patents Acts, section 66i the patent will receive protection in Norway only as far as there is agreement between the translation and the language of the application/patent granted at the EPO. In matters concerning the validity of the patent, language of the application/patent granted at the EPO will be used as the basis for the decision. The patent documents published by the EPO are available through Espacenet (<http://worldwide.espacenet.com>) or via the search engine on our website here: <https://search.patentstyret.no/>

Patentkrav

1. Forbindelse med formel I



I

hvor:

Cy er et monocyklisk eller bicyklisk ringsystem valgt fra C₃₋₁₀cykloalkyl, heterocyklyl, aryl og heteroaryl,

hvor hver av de nevnte C₃₋₁₀cykloalkyl, heterocyklyl, aryl og heteroarylgrupper eventuelt og uavhengig er substituert med én, to eller tre substituentgrupper valgt fra halogen, -C₁₋₃-alkyl, -OC₁₋₃-alkyl, -CF₃, cyano, okso, -N(C₁₋₃-alkyl)₂, -NH(C₁₋₃-alkyl), -NHCOC₁₋₃-alkyl, -C(O)C₁₋₃-alkyl, -C(O)OC₁₋₃alkyl, hydroksyC₁₋₃alkyl eller heteroaryl; og

R¹ og R² er uavhengig valgt fra H, C₁₋₃alkyl, hydroksyC₁₋₃alkyl, -CH₂NHC(O)OC₁₋₄alkyl, -CH₂OC(O)C₁₋₄alkyl, -C(O)OC₁₋₄-alkyl, -C(O)H, -COOH, -C(O)NHC₁₋₄-alkyl og C(O)N(C₁₋₄-alkyl)₂; eller

R¹ og R² sammen danner en C₃₋₆cykloalkyl eller C₃₋₆-heterocyklyl;

eller et salt derav.

2. Forbindelse med formel I ifølge krav 1, hvor:

Cy er en fenyl-, cykloheksyl-, indanyl-, 2,3-dihydrobenzofuranyl- eller tetrahydrokinolinynggruppe, hver eventuelt substituert med én, to eller tre substituentgrupper uavhengig valgt fra -Cl, -F, C₁₋₃alkyl, okso og CN; og

R¹ og R² er uavhengig valgt fra H, C₁₋₃alkyl, hydroksyC₁₋₃alkyl, -CH₂NHC(O)OC₁₋₄alkyl, -C(O)N(C₁₋₄-alkyl)₂ og -CH₂OC(O)C₁₋₄alkyl.

3. Forbindelse med formel I ifølge krav 1 eller 2, hvor:

Cy er fenyl eventuelt substitueret med én, to eller tre substituentgrupper uafhængig valgt fra -Cl, -F, C₁₋₃alkyl og CN.

4. Forbindelse med formel I ifølge hvilket som helst af kravene 1, 2 eller 3 hvor:

Cy er fenyl substitueret med CN og eventuelt substitueret med én eller to ytterligere grupper uafhængig valgt fra -Cl, -F og C₁₋₃alkyl;

R¹ er -CH₃; og

R² er -CH₃ eller -CH₂OH.

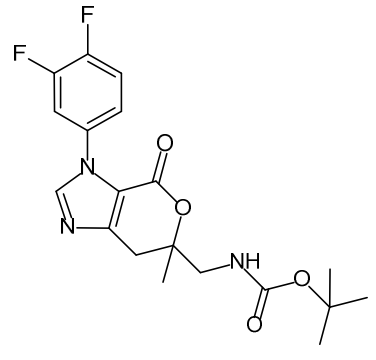
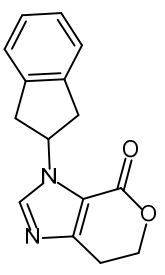
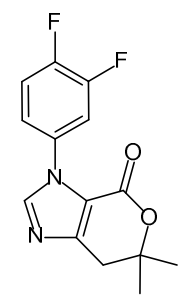
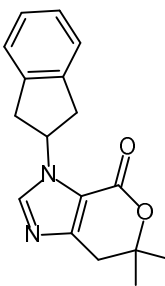
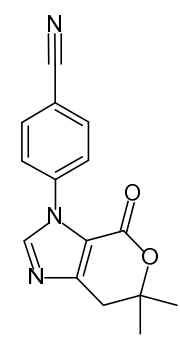
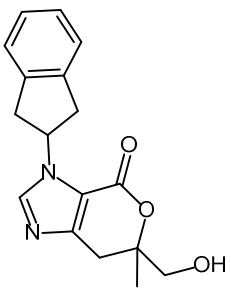
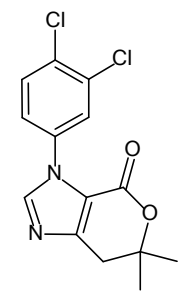
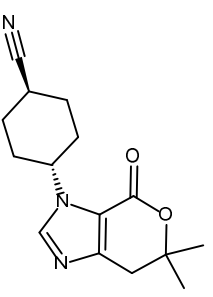
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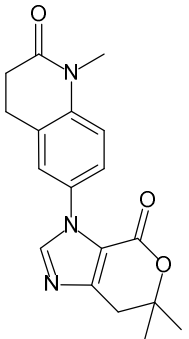
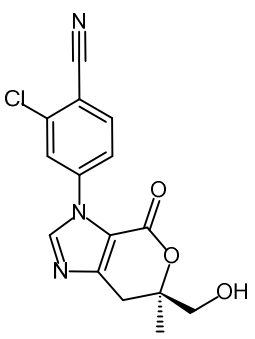
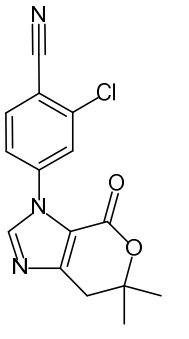
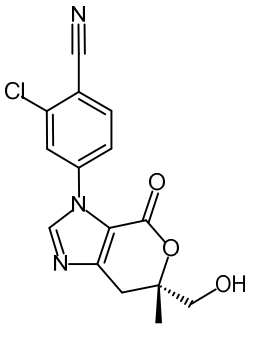
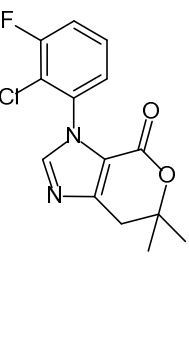
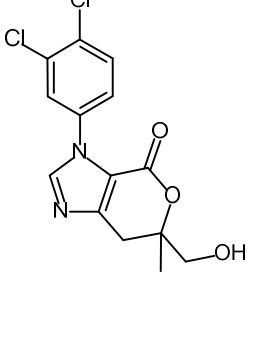
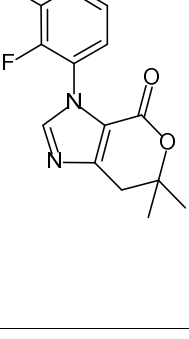
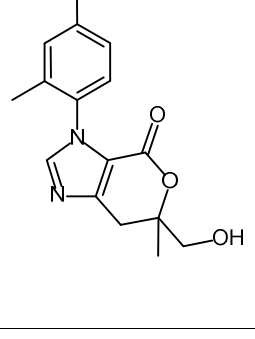
R² er -CH₂OH.

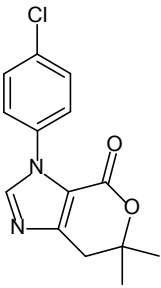
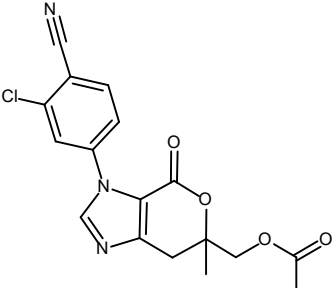
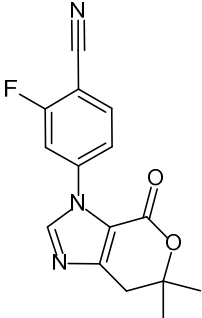
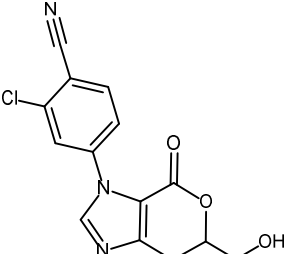
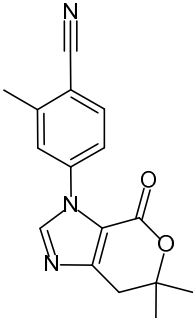
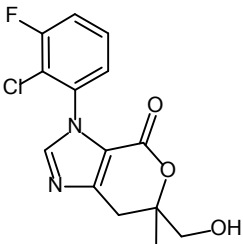
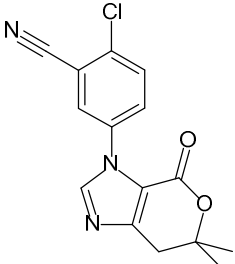
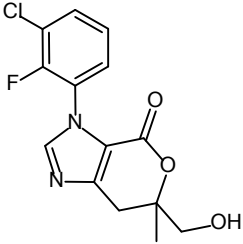
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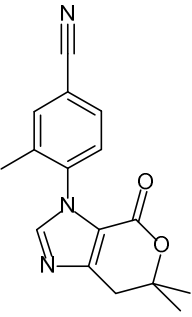
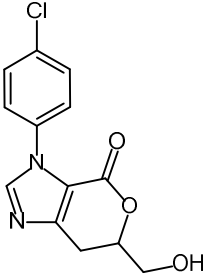
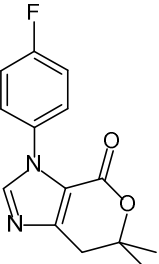
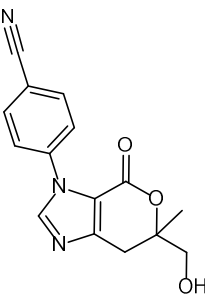
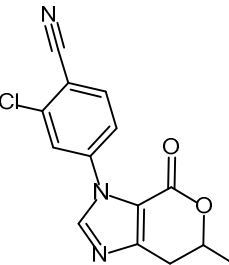
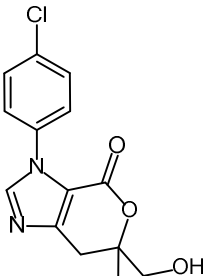
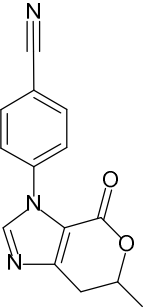
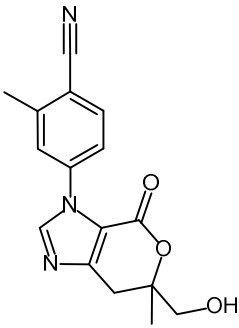
R² er -CH₃.

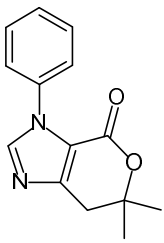
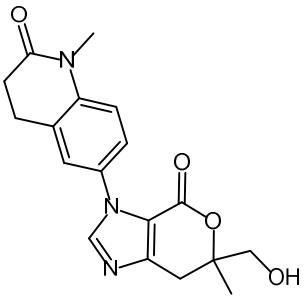
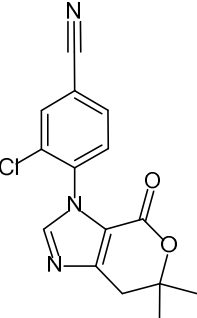
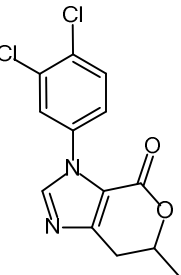
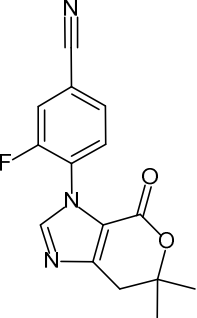
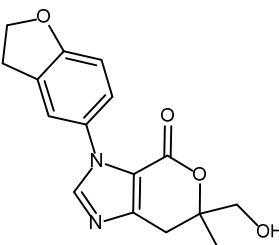
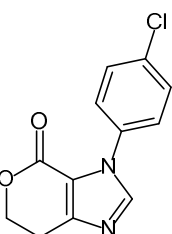
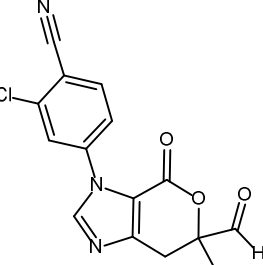
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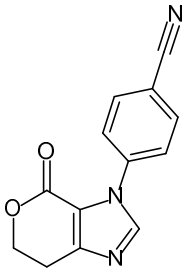
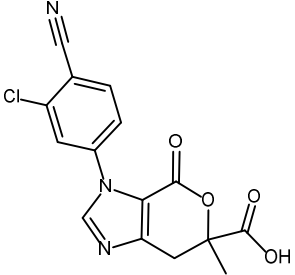
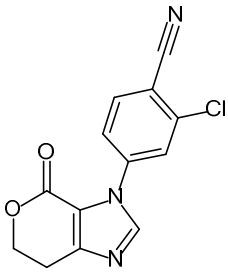
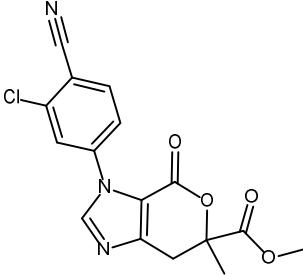
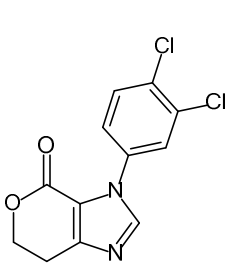
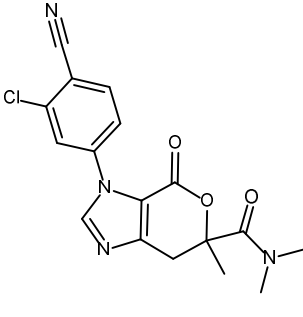
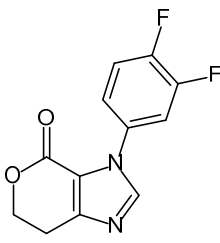
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2		26	
3		27	
4		28	

5		29 A	
6		29 B	
7		30	
8		31	

9		32	
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16		39	

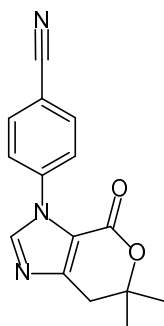
17		40	
18		41	
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20		43	

21		44	
22		45	
23		46	
24			

og de farmasøytisk akseptable salter derav.

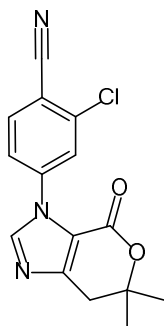
8. Forbindelse ifølge krav 7 valgt fra gruppen bestående av forbindelsene 1-11, 13, 15, 18, 19, 22, 23, 26, 28, 29A, 29B, 30-33, 35, 39, 41, 42, 45 og 46.

9. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



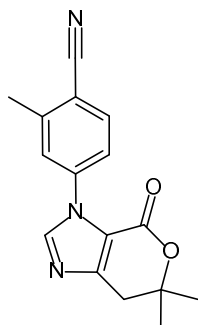
eller et farmasøytisk akseptabelt salt derav.

10. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



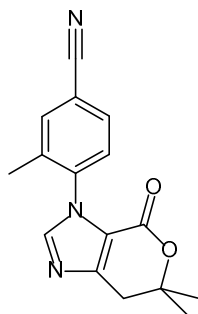
eller et farmasøytisk akseptabelt salt derav.

11. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



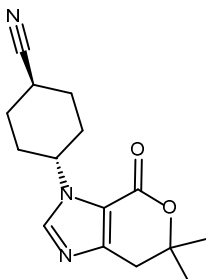
eller et farmasøytisk akseptabelt salt derav.

12. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



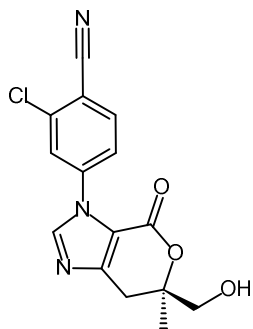
eller et farmasøytisk akseptabelt salt derav.

13. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



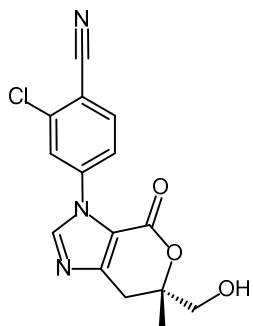
eller et farmasøytisk akseptabelt salt derav.

14. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



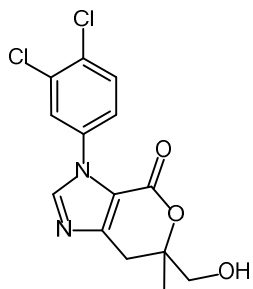
eller et farmasøytisk akseptabelt salt derav.

15. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



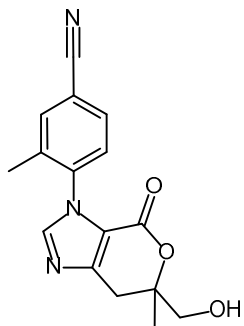
eller et farmasøytisk akseptabelt salt derav.

16. Forbindelse ifølge krav 1, hvor nevnte forbindelse er

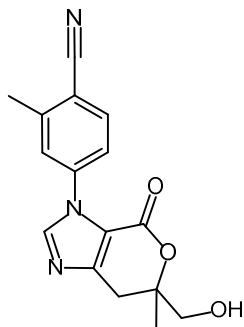


eller et farmasøytisk akseptabelt salt derav.

17. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



18. Forbindelse ifølge krav 1, hvor nevnte forbindelse er



eller et farmasøytisk akseptabelt salt derav.

19. Farmasøytisk preparat omfattende en forbindelse ifølge hvilket som helst av kravene 1 til 18 og et farmasøytisk akseptabelt tilsetningsmiddel eller bærer.

20. Forbindelse ifølge hvilket som helst av kravene 1 til 18 for anvendelse ved en metode for behandling av en sykdom eller lidelse som lindres ved hemning av aldosteronsyntase valgt fra diabetisk nefropati, glomerulosklerose, glomerulonefritt, IGA nefropati, nefrittisk syndrom, focal segmental glomerulosklerose (FSGS), hypertensjon, pulmonal arteriell

hypertensjon, Conn's syndrom, systolisk hjertesvikt, diastolisk hjertesvikt, venstre ventrikulær dysfunksjon, venstre ventrikulær stivhet og fibrose, venstre ventrikulær fyllingsabnormaliteter, arteriell stivhet, aterosklerose og kardiovaskulær sykdom forbundet med primær eller sekundær hyperaldosteroni, adrenal hyperplasi og primær og sekundær hyperaldosteroni.

21. Forbindelse for anvendelse ifølge krav 20, hvor sykdommen eller lidelse er valgt fra diabetisk nefropati, glomerulosklerose, glomerulonefritt, IGA nefropati, nefrittisk syndrom og focal segmental glomerulosklerose (FSGS).

22. Forbindelse for anvendelse ifølge krav 20, hvor sykdommen er diabetisk nefropati.

23. Forbindelse ifølge hvilket som helst av kravene 1-19 for anvendelse som medikament.