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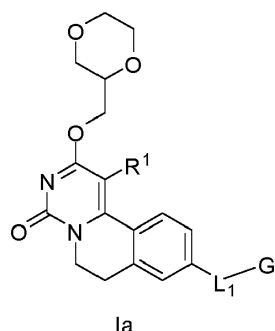
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(73)	Proprietor	Galapagos N.V., Generaal de Wittelaan L11 A3, 2800 Mechelen, Belgia
(72)	Inventor	LABÉGUÈRE, Frédéric Gilbert, 66 Allée de la Dhuys, 93220 Gagny, Frankrike NEWSOME, Gregory John Robert, Galapagos SASU 102 Avenue Gaston Roussel, 93230 Romainville, Frankrike ALVEY, Luke Jonathan, Galapagos SASU 102 Avenue Gaston Roussel, 93230 Romainville, Frankrike SANIÈRE, Laurent Raymond Maurice, Galapagos SASU 102 Avenue Gaston Roussel, 93230 Romainville, Frankrike FLETCHER, Stephen Robert, 10 Clipped Hedge Hatfield Heath, Bishops Stortford, CM22 7EG, Storbritannia
(74)	Agent or Attorney	BRYN AARFLOT AS, Stortingsgata 8, 0161 OSLO, Norge

(54)	Title	DIHYDROPYRIMIDINOISOQUINOLINONES AND PHARMACEUTICAL COMPOSITIONS THEREOF FOR THE TREATMENT OF MULTIPLE SCLEROSIS
(56)	References Cited:	WO-A2-2007/027661 JP-A- 2011 088 847

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. En forbindelse i henhold til formel Ia:



hvor

R¹ er H, Me eller halogen;
 L₁ er fraværende eller er -O-, -S- eller -NR^{4a}-;
 G er

R²,
 -W-L₂-R², eller
 -W-L₃-R³;

W er C₁₋₄ alkylen, C₂₋₄ alkenylen med én dobbeltbinding, eller C₂₋₄ alkynylen med én trippelbinding;

L₂ er fraværende eller er -O-;

R² er

-H,
 - C₁₋₈ -alkyl, valgfritt substitueret med én til tre grupper uafhængig valgt fra

- Åh,
- halogen,
- CN,
- C₁₋₆ -alkoksy,
- C₃₋₇ -sykloalkyl,
- 4-6-leddet heterocykloalkyl som omfatter ett til tre heteroatomer uafhængig valgt fra S, og O,
- 5-6-leddet heteroaryl som omfatter ett til tre heteroatomer uafhængig valgt fra N, S og O, og
- fenyl,

- C₄₋₇ sykloalkenyl som omfatter en dobbeltbinding,
 - 5-7-leddet heterocykloalkenyl som omfatter en dobbeltbinding og ett til tre heteroatomer uafhængig valgt fra N, O og S,
 - C₃₋₇ sykloalkyl valgfritt substitueret med en eller flere uafhængig valgte R⁵ grupper,
 - 4-10-leddet heterocykloalkyl omfattende ett til to heteroatomer uafhængig valgt fra S, og O, valgfritt substitueret med en til tre uafhængig utvalgte R⁵ grupper,
 - 5-10-leddet heteroaryl omfattende ett til tre heteroatomer uafhængig valgt fra N, S og O valgfritt substitueret med en til tre uafhængig utvalgte R⁶ grupper, eller
 - C₆₋₁₀ aryl valgfritt substitueret med en eller flere uafhængig utvalgte R⁶ grupper;

L₃ er -NR^{4b}-;

R³ er

- C₁₋₄ alkyl substitueret med

- C₆₋₁₀ -aryl valgfritt substituert med en eller flere uavhengig utvalgte R⁷ grupper, eller
- 5-10-leddet heteroaryl omfattende ett til tre heteroatomer uavhengig valgt fra N, S og O, valgfritt substituert med en eller flere R uavhengig utvalgte R⁷ grupper,
- 5-10-leddet heteroaryl omfattende ett til tre heteroatomer uavhengig valgt fra N, S og O, valgfritt substituert med en eller flere uavhengig utvalgte R⁷ gruppe, eller
- C₆₋₁₀ -aryl valgfritt substituert med en eller flere uavhengig utvalgte R⁷ grupper;

Hver R^{4a} og R^{4b} er uavhengig valgt fra H, C₁₋₄ -alkyl og C₃₋₇ -sykloalkyl;

R⁵ er oxo eller R⁶;

R⁶ er

- OH,
- halogen,
- -NO₂,
- C₁₋₆ alkyl valgfritt substituert med én til tre grupper uavhengig valgt fra halogen og OH,
- C₁₋₆ -alkoksy valgfritt substituert med én til tre grupper uavhengig valgt fra halogen og OH,
- C₃₋₇ -sykloalkyl,
- -C(=O)OR⁸,
- -C(=O)NR⁹R¹⁰,
- -NHC(=O)-C₁₋₄ -alkyl,
- -CN,
- fenyl,
- -O-fenyl,
- 4-7-leddet heterocykloalkyl som omfatter ett til tre heteroatomer uavhengig valgt fra N, O og S, eller
- 5-6-leddet heteroaryl omfattende ett til tre heteroatomer uavhengig valgt fra N, O og S, valgfritt substituert med en eller flere uavhengig utvalgte C₁₋₄ alkyl, C₁₋₄ -alkoksy, CN, halogen og -C(=O)OR¹¹;

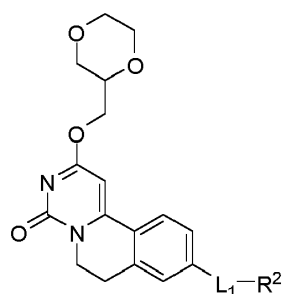
R⁷ er C₁₋₄ -alkyl eller halogen; og

hver av R⁸, R⁹, R¹⁰ og R¹¹ er uavhengig valgt fra H og C₁₋₄ -alkyl,

eller et farmasøytisk akseptabelt salt, eller et solvat, eller et solvat av det farmasøytisk akseptable saltet, for bruk i behandlingen av multippelsklerose.

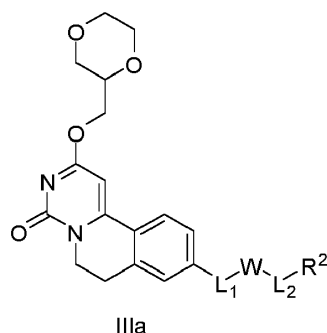
2. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 1, hvori R¹ er H.

3. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 1, hvori forbindelsen er i henhold til formel IIa eller IIIa:



IIa

eller



hvor L_1 , W , L_2 , og R^2 er som beskrevet i krav 1.

4. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 3, hvori forbindelsen er i henhold til formel IIa, og L_1 er fraværende.

5. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 3, hvori forbindelsen er i henhold til formel IIIa, og L_1 er fraværende eller er -O-; W er C_{1-4} -alkylen, eller C_{2-4} -alkenylen med én dobbeltbinding.

6. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 3, hvori forbindelsen er i henhold til formel IIIa, og L_1 er fraværende; W er C_{2-4} -alkynylen med én trippelbinding; og L_2 , og R^2 er som beskrevet i krav 1.

7. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 5 eller 6, hvori L_2 er fraværende.

8. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 3, hvori forbindelsen er ifølge formel IIIa, hvori L_1 og L_2 er fraværende, W er $-CH_2-CH_2-$, $-CH=CH-$, eller $C\equiv C-$, og R^2 er som beskrevet i krav 1.

9. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge hvilket som helst av kravene 3-8, hvori R^2 er 5-10-leddet heteroaryl omfattende ett til tre heteroatomer uavhengig valgt fra N, S og O, valgfritt substituert med en til tre uavhengig utvalgte R^6 grupper.

10. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 9, hvori R^6 er valgt fra OH, halo, C_{1-6} -alkyl, C_{1-6} -alkyl substituert med en eller flere halo, C_{1-6} -alkoksy, -CN, C_{3-7} -sykloalkyl, 4-7-leddet heterocykloalkyl omfattende ett til tre heteroatomer uavhengig valgt fra N, O og S, og fenyl.

11. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk ved behandling av multippelsklerose, ifølge hvilket som helst av kravene 3-8, hvori R^2 er C_{1-8} -alkyl valgfritt substituert med én til tre grupper uavhengig valgt fra OH, halogen, CN, C_{1-6} -alkoksy, C_{3-7} -sykloalkyl, 4-6-leddet heterocykloalkyl omfattende ett til tre heteroatomer uavhengig valgt fra S, og O, 5-6-leddet heteroaryl omfattende ett til tre heteroatomer uavhengig valgt fra N, S og O, og fenyl

12. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge hvilket som helst av kravene 3-8, hvori R^2 er C_{3-7} sykloalkyl.

13. Forbindelse eller farmasøytisk akseptabelt salt derav for bruk i behandlingen av multippelsklerose, ifølge krav 1, hvori forbindelsen er valgt fra:

9-Allyloksy-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-pyridin-3-yl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-pyridin-4-yl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-benzonitril,
 3-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-benzonitril,
 4-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-benzonitril,
 [2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]oksy]-acetonitril,
 2-([1,4]dioksan-2-ylmetoksy)-9-(oksazol-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(pyridin-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(3,5-diklor-fenyl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on, 9-benzofuran-2-yl-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-indol-1-karboksylsyre tert-butylester,
 2-([1,4]dioksan-2-ylmetoksy)-9-(1H-indol-2-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(6-metoksy-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(6-trifluormetyl-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-metyl-3H-imidazol-4-yletynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(5-tert-butyl-[1,2,4]oksadiazol-3-ylmetoksy)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 5-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-pyridin-2-karboksylsyre metylamid,
 2-([1,4]dioksan-2-ylmetoksy)-9-pent-1-ynyl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(2-pyridin-2-yl-etyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(2-pyrazin-2-yl-etyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(1H-indol-5-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(2-metoksy-fenyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(5-metoksy-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(1H-indazol-5-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(4-metoksy-fenyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 3-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-benzamid,
 5-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-2-fluorbenzamid,
 N-{3-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-fenyl}-acetamid,

9-Syklopropyletynyl-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(1-hydroksycyklopentyletynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-pyrimidin-5-yl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-Sykloheks-1-enyl-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(1-metyl-1H-indol-5-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(6-metyl-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-pyridin-2-yletynyl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-metoksy-prop-1-ynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 5-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-pent-4-yne-nitril,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-hydroksy-prop-1-ynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(4-metoksy-fenyletynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-pyridin-3-yletynyl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 4-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-N-metyl-benzamid,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-metoksy-fenyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(2-klor-fenyl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(4-hydroksy-but-1-ynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(1,5-dimetyl-1H-pyrazol-3-ylmetoksy)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(1-metyl-1H-pyrazol-3-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-metyl-[1,2,4]oksadiazol-5-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(4-morfolin-4-yl-fenyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 3-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-4-fluorbenzamid,
 3-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-5-fluorbenzamid,
 9-(3,3-dimetyl-but-1-ynyl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-pyridin-4-yletynyl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(3-metyl-isoksazol-5-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-hydroksy-3-metyl-but-1-ynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(2-metoksy-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(3,6-dihydro-2H-pyran-4-yl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,

5-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-pyridin-2-karbonitril,
 2-([1,4]dioksan-2-ylmetoksy)-9-(6-isopropoksy-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(6-etoksy-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(6-morfolin-4-yl-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(2,3-dimetoksy-fenyl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(3-klor-2-metoksy-pyridin-4-yl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(2-metyl-pyridin-4-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 3-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-isonikotinonitril,
 9-(2,5-dimetoksy-fenyl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3,4,5,6-tetrahydro-2H-[1,2']bipyridinyl-5'-yl)-6,7-dihydro-pyrimido [6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(2-etoksy-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(2,6-dimetoksy-pyridin-3-yl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 4-[2-([1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-a]isokinolin-9-yl]-nikotinonitril,
 9-tert-butoksymetyl-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(2-pyrrolidin-1-yl-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(6-pyrrolidin-1-yl-pyridin-3-yl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(5-fenyl-oksazol-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(5-tert-butyl-oksazol-2-ylmetoksy)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(5-cyklopropyl-[1,2,4]oksadiazol-3-ylmetoksy)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin -4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(5-etyl-[1,2,4]oksadiazol-3-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin -4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(5-metyl-[1,2,4]oksadiazol-3-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin -4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(5-isopropyl-[1,2,4]oksadiazol-3-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin -4-on,
 9-Cyclopentyletynyl-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-Sykloheksyletynyl-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-metyl-but-1-ynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-heks-1-ynyl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-[3-(Benzyl-metyl-amino)-prop-1-ynyl]-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin- 4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-5-metyl-heks-1-ynyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,

2-([1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-but-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-Syklopropyl-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-pent-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(3-hidroksy-4-metyl-pent-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-etyl-3-hidroksy-pent-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(3-hidroksy-3-fenyl-but-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(3-Benzylamino-prop-1-ynyl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-[(furan-2-ylmetyl)-amino]-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(1-etyl-1H-pyrazol-4-yl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-[1-(3-metyl-butyl)-1H-pyrazol-4-yl]-6,7-dihydro-
 pyrimido[6,1-a] isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(5-metyl-furan-2-yl)-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-heks-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(3,5-dimetyl-1H-pyrazol-4-yl)-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(1H-pyrazol-4-yl)-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on, 2-([1,4]dioksan-2-ylmetoksy)-9-(1-propyl-1H-pyrazol-4-yl)-
 6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-[2-((R)-1-[1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-
 a]isokinolin-9-yl]- benzonitril,
 2-[2-((S)-1-[1,4]dioksan-2-ylmetoksy)-4-okso-6,7-dihydro-4H-pyrimido[6,1-
 a]isokinolin-9-yl]- benzonitril,
 9-(5-cyklopropyl-[1,2,4]oksadiazol-3-ylmetoksy)-2-((R)-1-[1,4]dioksan-2-
 ylmetyloksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-etylnyl-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-
 on,
 2-([1,4]dioksan-2-ylmetoksy)-9-pyrimidin-2-yletylnyl-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-(3-fenylamino-prop-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(3-hidroksy-3-pyridin-3-yl-prop-1-ynyl)-6,7-
 dihydro-pyrimido[6,1-a] isokinolin-4-on,
 9-Syklopentyloksymetyl-2-([1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(3-metoksy-4-metyl-pent-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-Syklopropyletylnyl-2-((R)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-metyl-but-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]Dioksan-2-ylmetoksy)-9-(3-imidazol-1-yl-prop-1-ynyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(2-cyklopropyletyl)-2-((R)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-Syklopentyloksymetyl-2-((R)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,

2-([1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-3-pyridin-3-yl-propyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-Allyloksy-2-((R)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on,
 9-Allyloksy-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on,
 2-((R)-1-[1,4]dioksan-2-ylmetoksy)-9-(tetrahydro-pyran-4-yloksymetyl)-6,7-
 dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-{3-[(pyridin-3-ylmetyl)-amino]-prop-1-ynyl}-
 6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-((R)-1-[1,4]dioksan-2-ylmetoksy)-9-pentyl-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on,
 9-Syklopropyletynyl-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(2-cyklopropyletetyl)-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(oksetan-3-yloksymetyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-metyl-oksetan-3-ylmetoksymetyl)-6,7-
 dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(2,2-dimetyl-butylamino)-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-4-metyl-pentyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(2-etyl-heksylamino)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(2-metoksyetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(2-etoksy-etoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-Syklopropylmetoksy-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(2-fluoretoksy)-6,7-dihydro-pyrimido[6,1-
 a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-[3-(2-metoksyetoksy)-prop-1-ynyl]-6,7-
 dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-[3-(2-etoksy-etoksy)-prop-1-ynyl]-6,7-
 dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-[3-(2-fluoretoksy)-prop-1-ynyl]-6,7-
 dihydro-pyrimido[6,1-a]isokinolin-4-on,
 9-(2,2-dimetyl-propoksymetyl)-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-Sykloheksyloksymetyl-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-Syklopropylmetoksymetyl-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(tetrahydro-pyran-2-ylmetoksy)-6,7-
 dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-butyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(4,4-dimetyl-pentylloksy)-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-metoksy-4-metyl-pentyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(3-cyklopropylpropoksy)-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,

9-Sykloheksylamino-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-4,4-dimetyl-pentyl)-6,7-
 dihydro-pyrimido[6,1-a] isokinolin-4-on,
 9-Syklopentylmetoksymetyl-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-metoksy-butyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-fenylamino-propyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(4-hidroksy-pentyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(4-hidroksy-butyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(Sykloheksyl-metyl-amino)-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(Sykloheksylmetyl-amino)-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-[(tetrahydro-pyran-4-ylmetyl)-amino]-6,7-
 dihydro-pyrimido[6,1-a] isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-etyl-3-hidroksy-pentyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin- 4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-3-metyl-butyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin- 4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-hidroksy-pentyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(2,2-dimetyl-propoksy)-2-((S)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(tetrahydro-pyran-4-ylmetoksy)-6,7-
 dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(4-hidroksy-4-metyl-pentyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin- 4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(tetrahydro-pyran-4-ylmetoksymetyl)-6,7-
 dihydro-pyrimido[6,1-a]isokinolin-4-on,
 2-([1,4]dioksan-2-ylmetoksy)-9-metoksy-6,7-dihydro-pyrimido[6,1-a]isokinolin-
 4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(oksetan-3-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 9-(3-cyklopropylpropoksy)-2-((R)-1-[1,4]dioksan-2-ylmetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-metoksy-propyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-[2-(1-hidroksy-cyklopentyl)-etyl]-6,7-
 dihydro-pyrimido[6,1-a] isokinolin-4-on,
 2-((R)-1-[1,4]dioksan-2-ylmetoksy)-9-(4-hidroksy-tetrahydro-pyran-4-yletynyl)-
 6,7-dihydro-pyrimido[6,1-a] isokinolin-4-on,
 2-((R)-1-[1,4]dioksan-2-ylmetoksy)-9-(3-metoksy-propyl)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((R)-1-[1,4]dioksan-2-ylmetoksy)-9-[2-(1-hidroksycyklopentyl)-etyl]-6,7-
 dihydro-pyrimido[6,1-a] isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(2-propoksyetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(2-isopropoksy-etoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,
 2-((R)-1-[1,4]dioksan-2-ylmetoksy)-9-(2-propoksyetoksy)-6,7-dihydro-
 pyrimido[6,1-a]isokinolin-4-on,

2-((R)-1-[1,4]dioksan-2-ylmetoksy)-9-(2-isopropoksy-etoksy)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on, og
2-((S)-1-[1,4]dioksan-2-ylmetoksy)-9-(4-metoksy-butyl)-6,7-dihydro-pyrimido[6,1-a]isokinolin-4-on.

14. Farmasøytisk sammensetning for bruk i behandlingen av multippelsklerose, omfattende en forbindelse eller et farmasøytisk akseptabelt salt derav, ifølge hvilket som helst av kravene 1-13, og en farmasøytisk akseptabel bærer.

15. Farmasøytisk sammensetning for bruk i behandlingen av multippelsklerose ifølge krav 14, omfattende et ytterligere terapeutisk middel.