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Datum međunarodne objave: 06.01.2022.

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(73) Nositelj patenta:

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Jens Willwacher, 55216 Ingelheim am Rhein, DE**

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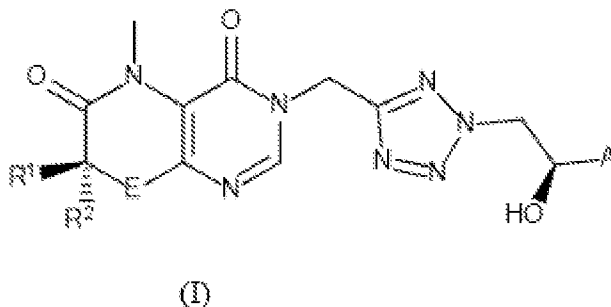
(54) Naziv izuma:

DERIVATI TETRAZOLA KAO INHIBITORI TRPA1

HR P20241730 T2

PATENTNI ZAHTEJEVI

1. Spoj, **naznačen time, da** je predstavljen formulom (I)

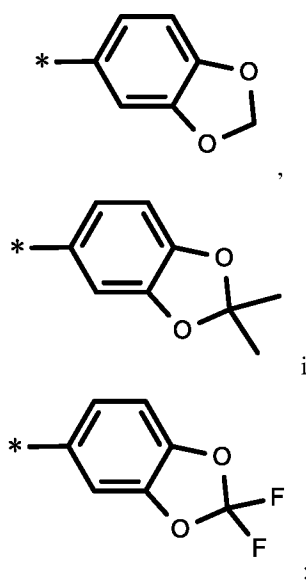


u kojoj

A se bira iz skupine koju čine fenil, tiofenil, benzotiofenil ili benzofuranil, nesupstituirani ili supstituirani s jednim, dva ili tri člana skupine R³ koja se sastoji od halogena, CN, C₁₋₄-alkila, O-C₁₋₄-alkila, C₁₋₄-fluoroalkila, O-C₁₋₄-fluoroalkila, C₃₋₄-cikloalkila, O-C₃₋₄-cikloalkila, C₃₋₄-ciklofluoroalkila, i O-C₃₋₄-ciklofluoroalkila,

ili

A se bira iz skupine koju čine

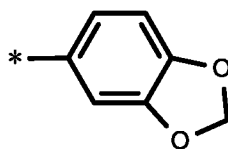


E se bira iz skupine koja se sastoji od O, S, SO, SO₂ i CH₂;

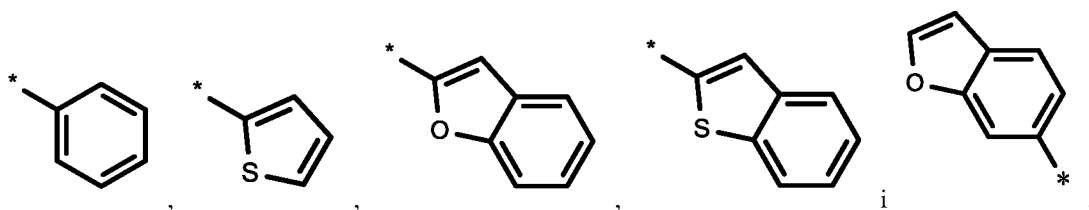
i

R¹ i R² su neovisno odabrani iz skupine koju čine H, C₁₋₄-alkil, C₁₋₄-fluoroalkil i halogen, ili R¹ i R² zajedno s ugljikom s kojim u vezani, tvore ciklopropilni ili ciklobutilni prsten.

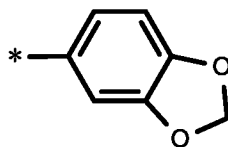
2. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** se A bira iz skupine koju čine fenil, tiofenil, benzotiofenil ili benzofuranil, nesupstituirani ili supstituirani s jednim ili dva člana skupine R³ koja se sastoji od F, Cl, Br, CH₃, CN, i OCH₃, ili A je



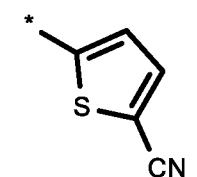
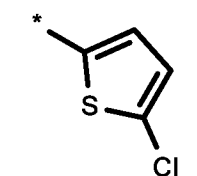
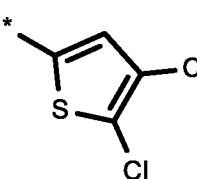
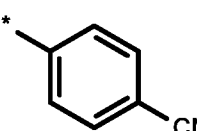
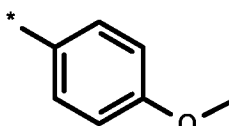
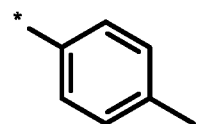
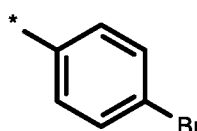
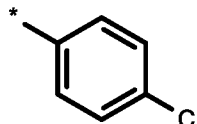
3. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** se A bira iz skupine koju čine



nesupstituirani ili supstituirani s jednim ili dva člana skupine R^3 ,
 ili
 A je

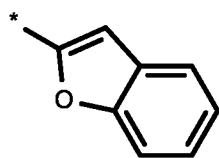


- 5 4. Spoj formule (I) prema bilo kojem od patentnih zahtjeva 1 do 3, **naznačen time, da** se R^3 bira iz skupine koja se sastoji od F, Cl, Br, CH_3 , CN, i OCH_3 .
5. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** se A bira iz skupine koju čine

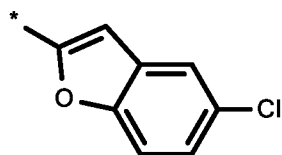


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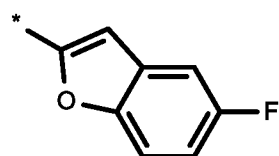
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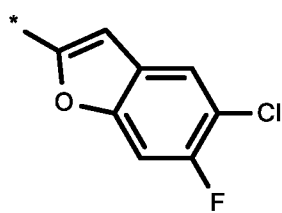
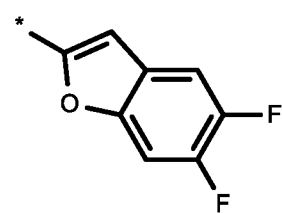
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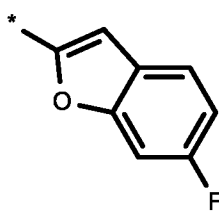
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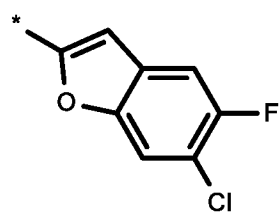
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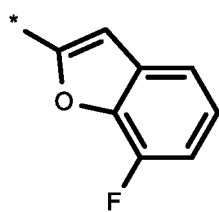
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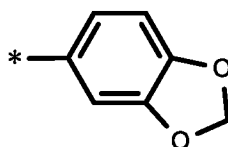
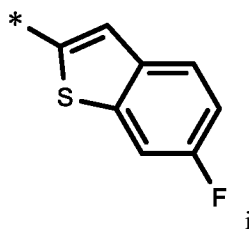
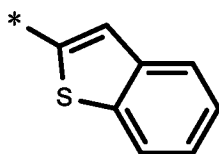
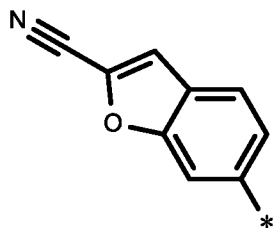
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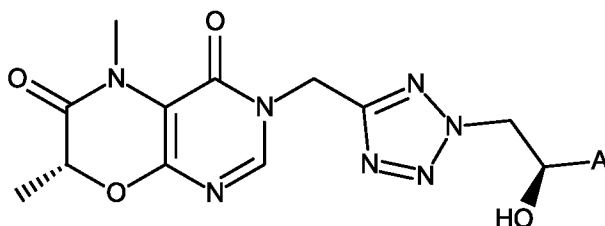
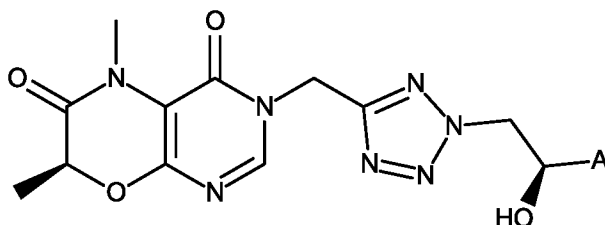
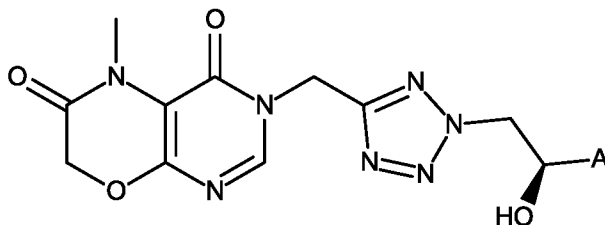
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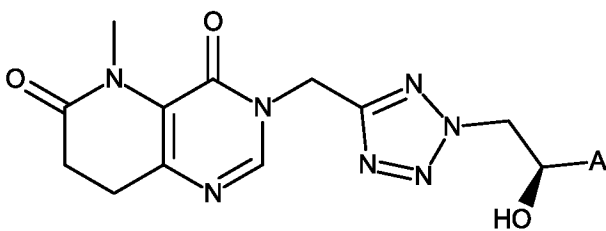
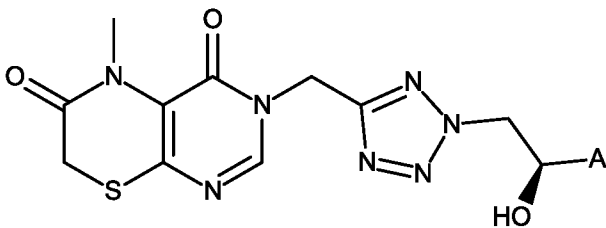
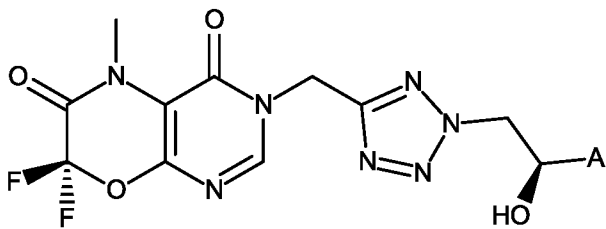


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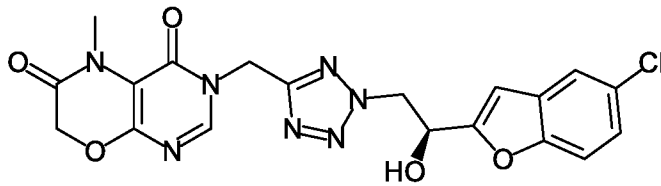
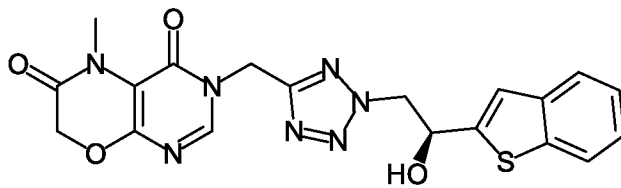
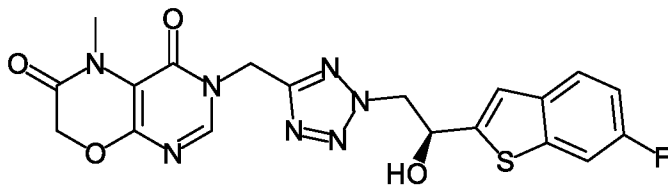
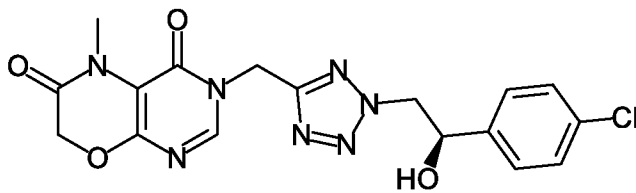


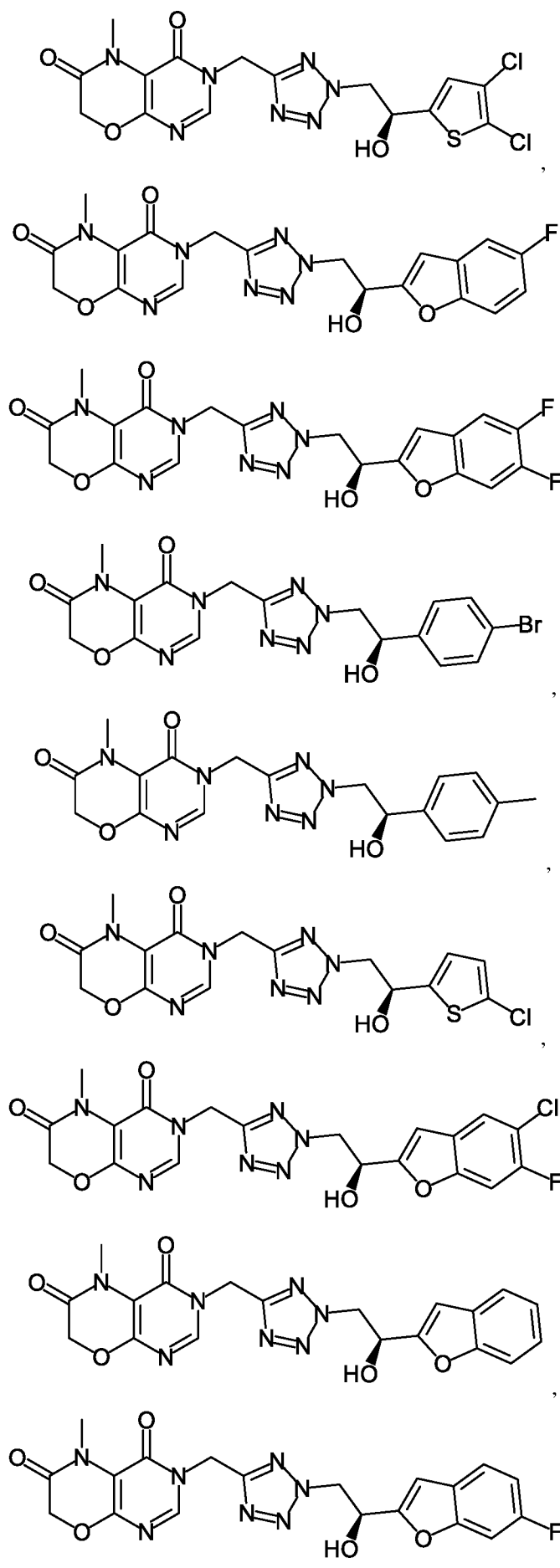
5. 6. Spoj formule (I) prema bilo kojem od patentnih zahtjeva 1 do 5, **naznačen time, da** E jest O.
 7. Spoj formule (I) prema bilo kojem od patentnih zahtjeva 1 do 6, **naznačen time, da** R¹ i R² su neovisno odabrani iz skupine koja se sastoji od H, CH₃, i F.
 8. Spoj formule (I) prema bilo kojem od patentnih zahtjeva 1 do 6, **naznačen time, da** R¹ i R² su H.
 9. Spoj formule (I) prema bilo kojem od patentnih zahtjeva 1 do 5, **naznačen time, da** se bira iz skupine koju čine

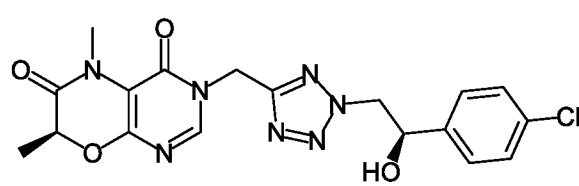
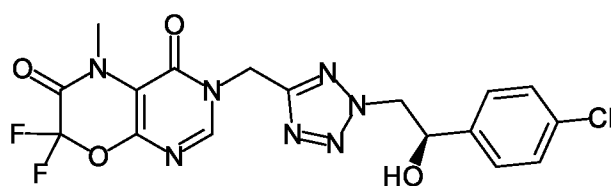
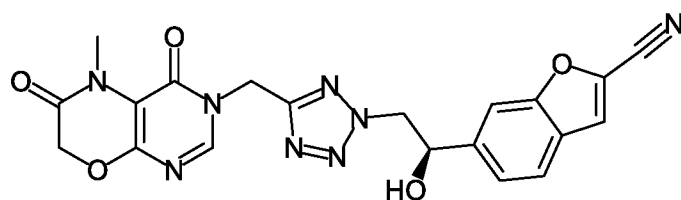
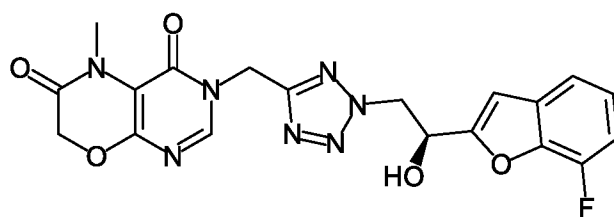
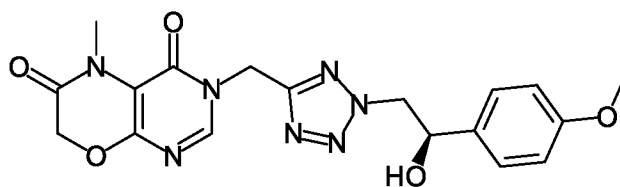
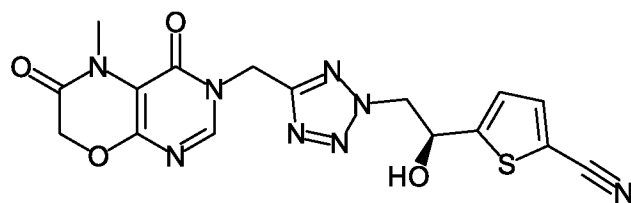
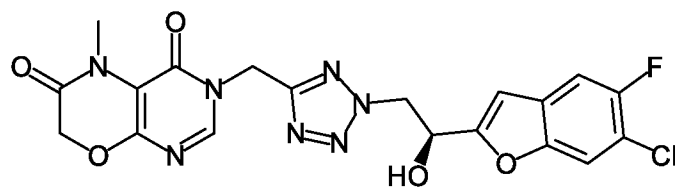
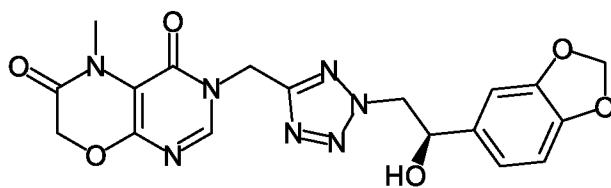


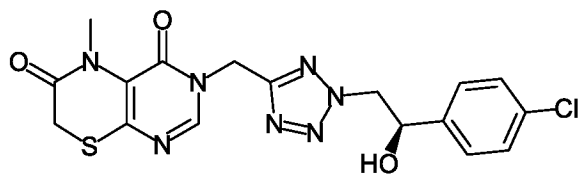
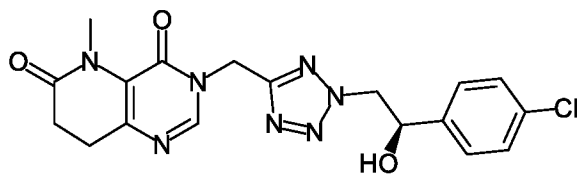
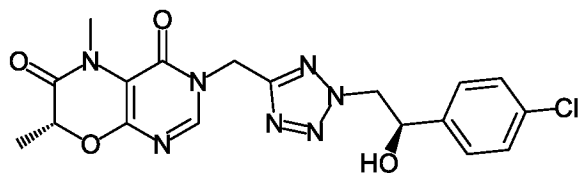


10. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** se bira iz skupine koju čine

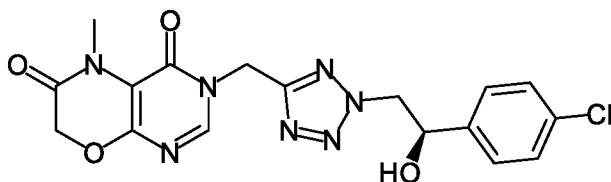




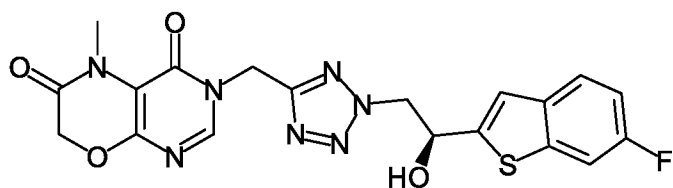




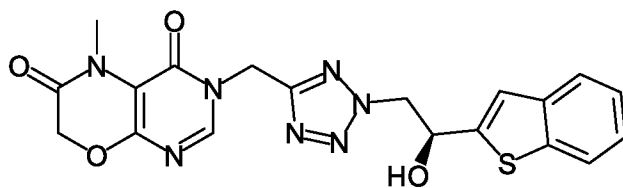
11. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** ima strukturu



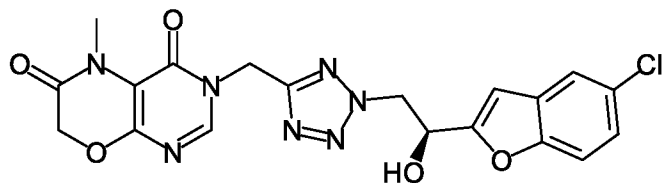
12. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** ima strukturu



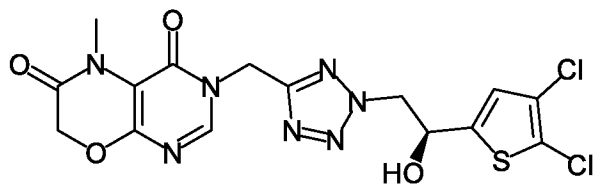
13. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** ima strukturu



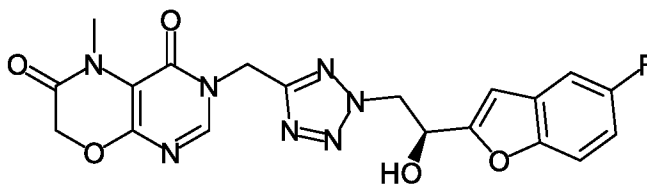
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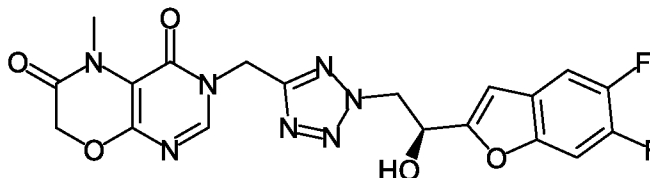
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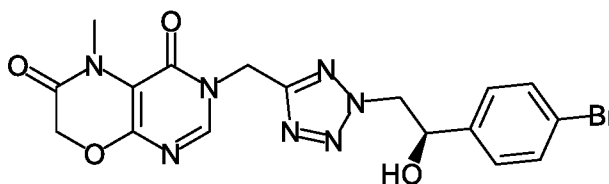
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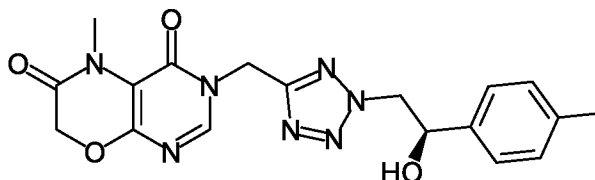
17. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** ima strukturu



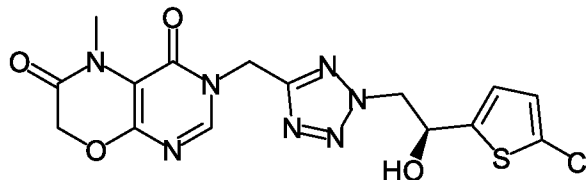
18. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** ima strukturu



19. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** ima strukturu



20. Spoj formule (I) prema patentnom zahtjevu 1, **naznačen time, da** ima strukturu



21. Sol, prvenstveno farmaceutski prihvatljiva sol, **naznačena time, da** je od spoja u skladu s bilo kojim od patentnih zahtjeva 1 do 20.
22. Farmaceutski pripravak, **naznačen time, da** sadrži najmanje jedan spoj formule (I) u skladu s bilo kojim od patentnih zahtjeva 1 do 20, ili njegovu farmaceutski prihvatljivu sol, i jedno ili više farmaceutski prihvatljivih pomoćnih sredstava.
23. Spoj formule (I) prema bilo kojem od patentnih zahtjeva 1 do 20, ili njegova farmaceutski prihvatljiva sol, **naznačen time, da** je za uporabu kao lijek.
24. Spoj prema bilo kojem od patentnih zahtjeva 1 do 20, ili njegova farmaceutski prihvatljiva sol, **naznačen time, da** je za uporabu u liječenju ili prevenciji upalnih bolesti dišnih puteva ili fibroznih bolesti ili kašlja.
25. Spoj prema bilo kojem od patentnih zahtjeva 1 do 20, ili njegova farmaceutski prihvatljiva sol, **naznačen time, da** je za uporabu u liječenju ili prevenciji idiopatske plućne bolesti (IPF) ili kašlja.