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(73) Nositelj patenta:

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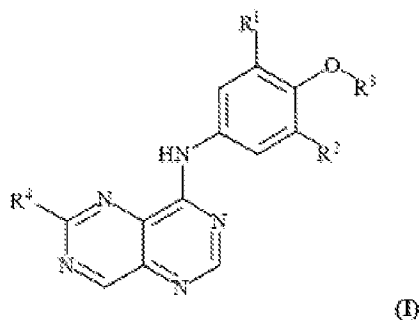
CPZ - CENTAR ZA PATENTE d.o.o., 10000 Zagreb, HR

(54) Naziv izuma: [1,3] DIAZINO[5,4-D]PIRIMIDINI KAO INHIBITORI HER2

HR P20250426 T1

PATENTNI ZAHTJEVI

1. Spoj, **naznačen time, da** je predstavljen Formulom (I) ili njegova sol,



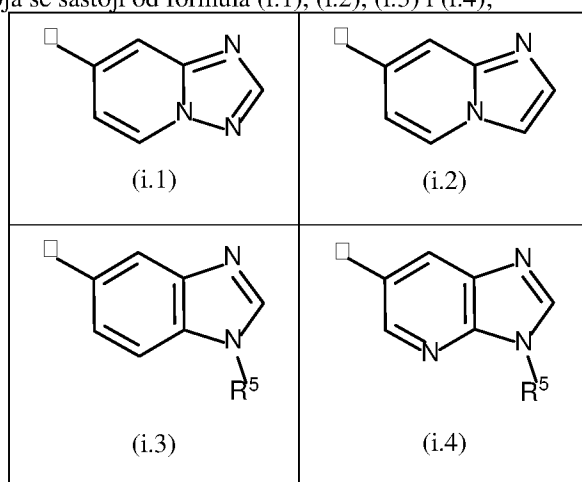
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u kojoj

R^1 se bira iz skupine koju čine vodik, $-CH_3$, $-CCH_3$, $-OCH_3$ i halogen;

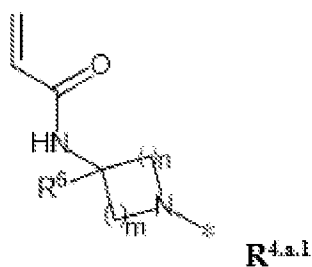
R^2 je vodik ili halogen;

R^3 se bira iz skupine koja se sastoji od formula (i.1), (i.2), (i.3) i (i.4);



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R^4 se bira iz skupine koja se sastoji od $R^{4.a}$ i $R^{4.b}$ pri čemu
 $R^{4.a}$ je $R^{4.a.1}$



gdje

R^6 je $-H$ ili $-CH_3$,

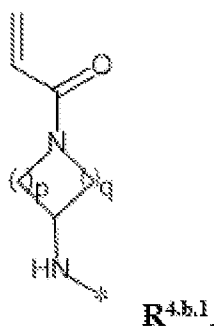
n je 1 ili 2;

m je 1 ili 2;

i

$R^{4.b}$ je $R^{4.b.1}$

15



gdje

p je 1 ili 2;

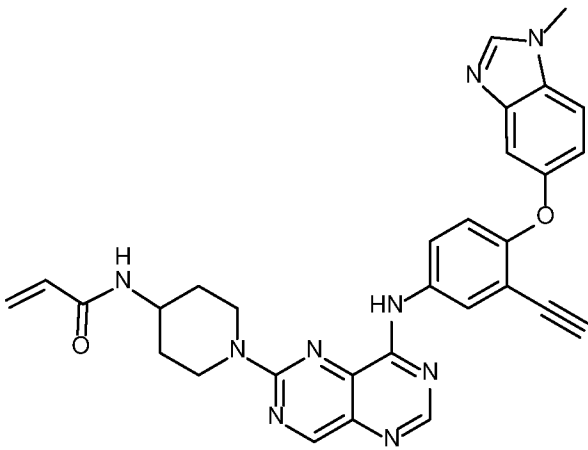
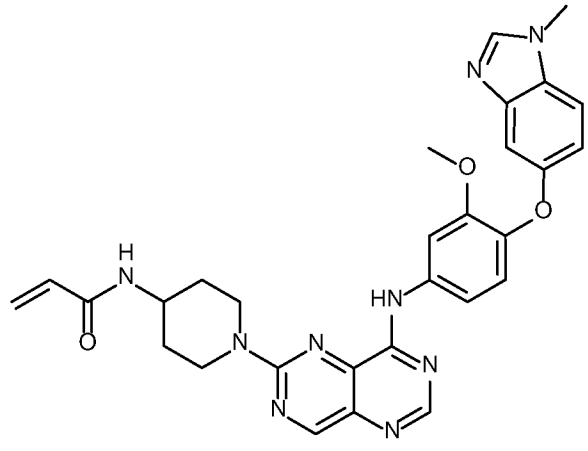
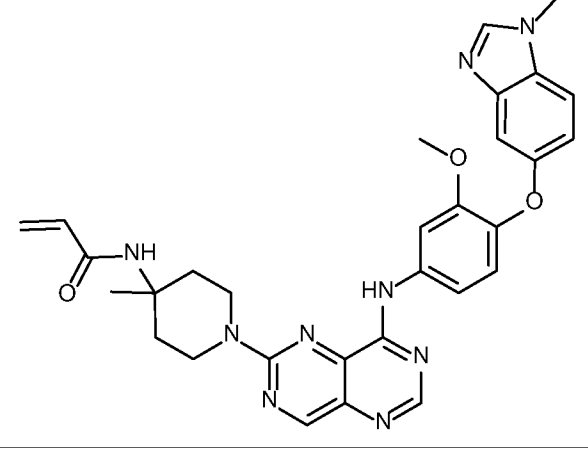
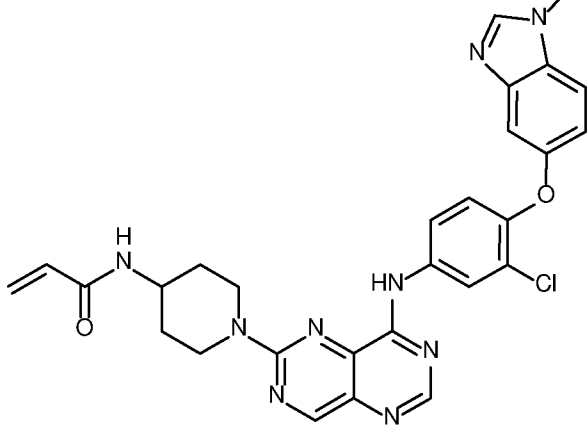
q je 1 ili 2;

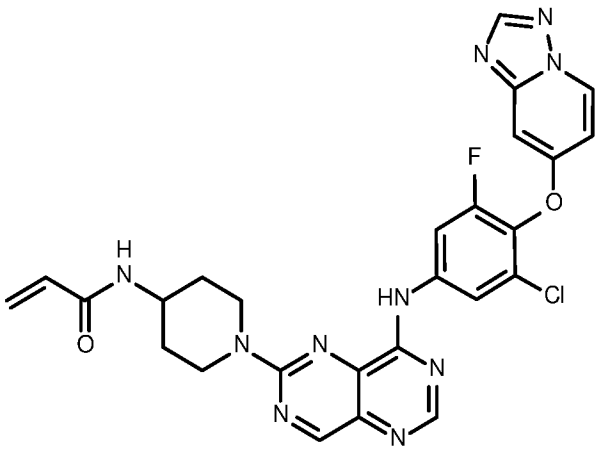
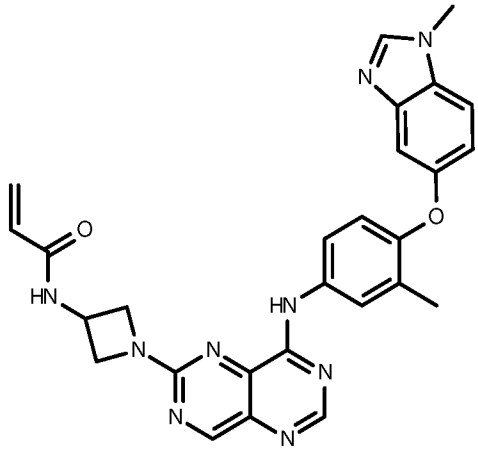
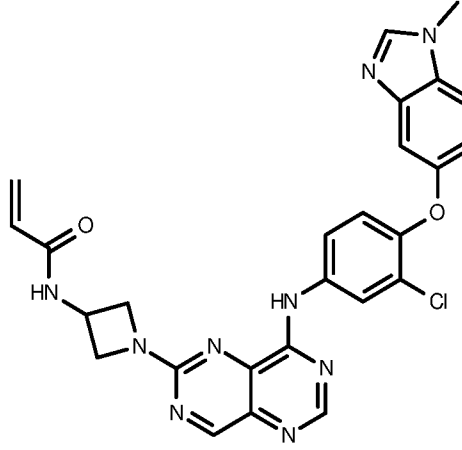
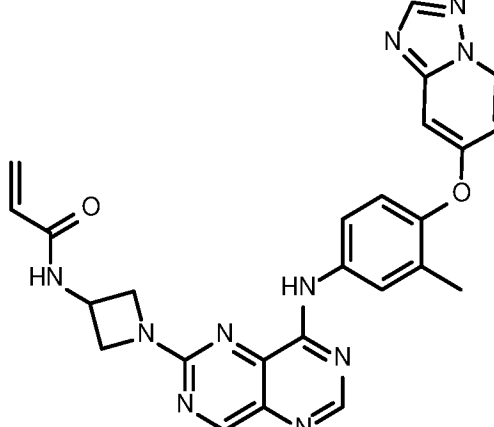
R^5 je -H ili -CH₃;

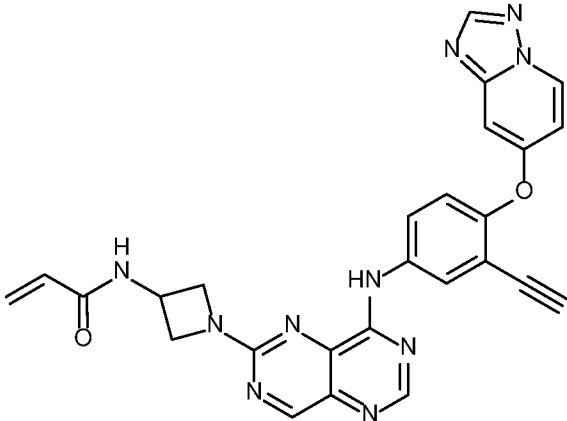
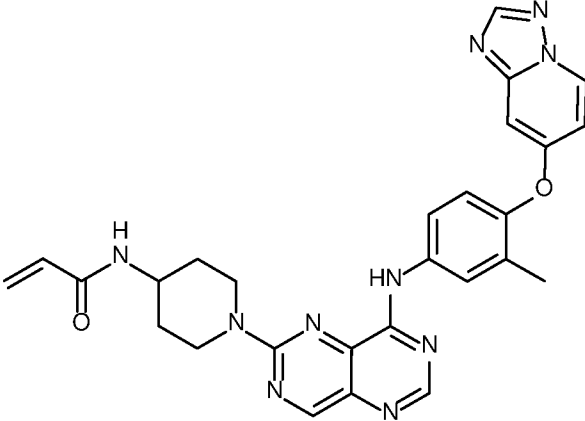
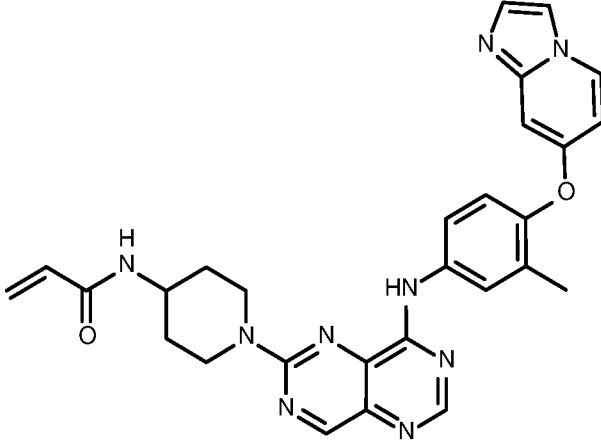
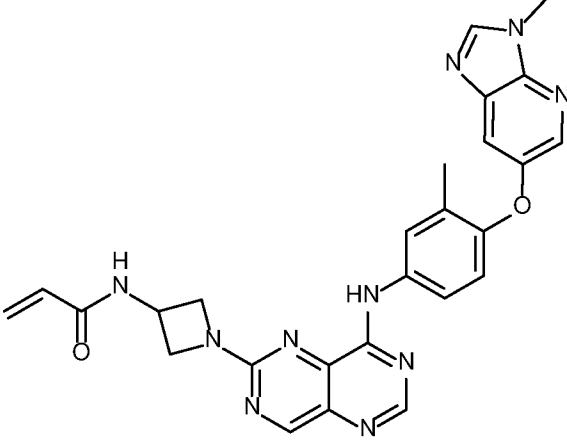
i barem jedan od R^1 i R^2 nije vodik.

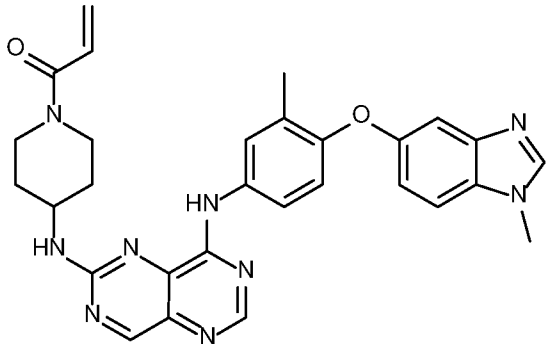
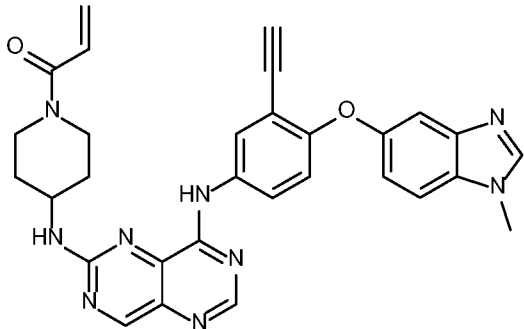
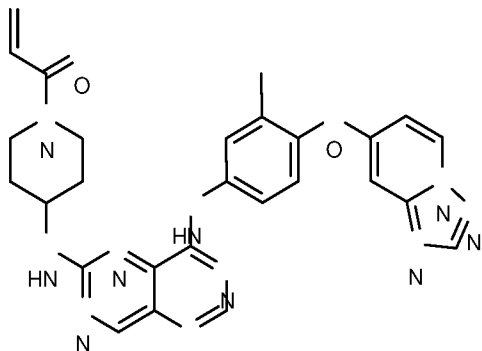
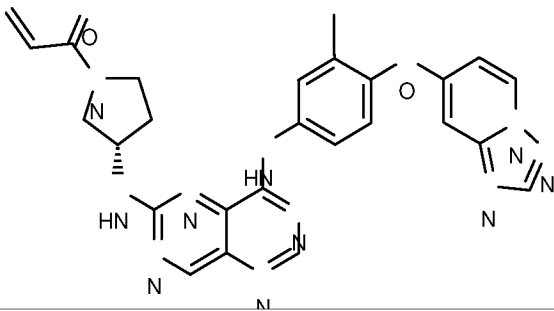
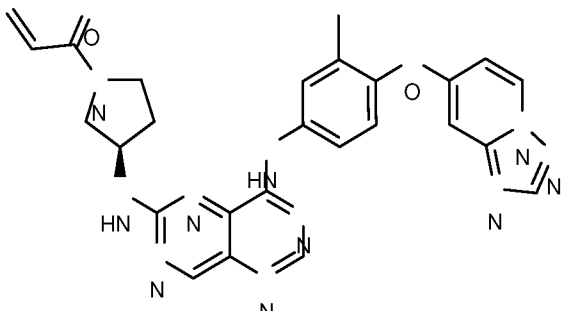
2. Spoj prema patentnom zahtjevu 1 ili njegova sol, **naznačen time, da R^1 se bira iz skupine koju čine -CH₃, -CCH, -OCH₃ i halogen.**
3. Spoj prema patentnom zahtjevu 1 ili 2 ili njegova sol, **naznačen time, da R^1 je -CH₃.**
4. Spoj prema patentnom zahtjevu 1 ili 2 ili njegova sol, **naznačen time, da R^1 je -CCH.**
5. Spoj prema patentnom zahtjevu 1 ili 2 ili njegova sol, **naznačen time, da R^1 je -OCH₃.**
6. Spoj prema patentnom zahtjevu 1 ili 2 ili njegova sol, **naznačen time, da R^1 je klor.**
7. Spoj prema patentnom zahtjevu 1 ili 2 ili njegova sol, **naznačen time, da R^1 je fluor.**
8. Spoj prema jednom ili više od patentnih zahtjeva 1 do 7 ili njegova sol, **naznačen time, da R^2 je vodik.**
9. Spoj prema jednom ili više od patentnih zahtjeva 1 do 7 ili njegova sol, **naznačen time, da R^2 je klor.**
10. Spoj prema patentnom zahtjevu 1 ili njegova farmaceutski prihvatljiva sol, **naznačen time, da se bira iz skupine koja se sastoji od primjera I-01 do I-19:**

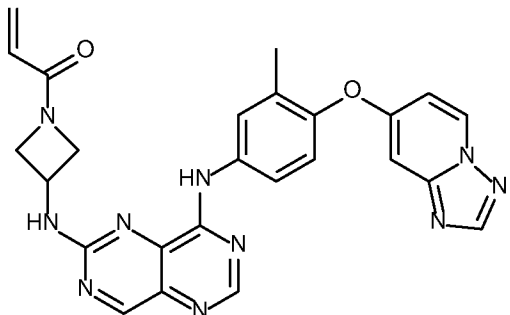
Primjer	Struktura
I-01	

Primjer	Struktura
I-02	 Chemical structure of compound I-02: A 1,2,3,4,6,7-hexahydroquinazolo[2,1-b]pyridine core. The nitrogen at position 4 is substituted with a (E)-3-allyl-1-((4-ethynyl-2-(1-methyl-1H-imidazol-2-yl)phenoxy)phenyl)hydrazinyl group. The nitrogen at position 2 is substituted with a (E)-3-allyl-1-((4-ethynyl-2-(1-methyl-1H-imidazol-2-yl)phenoxy)phenyl)hydrazinyl group.
I-03	 Chemical structure of compound I-03: A 1,2,3,4,6,7-hexahydroquinazolo[2,1-b]pyridine core. The nitrogen at position 4 is substituted with a (E)-3-allyl-1-((4-ethynyl-2-(1-methyl-1H-imidazol-2-yl)phenoxy)phenyl)hydrazinyl group. The nitrogen at position 2 is substituted with a (E)-3-allyl-1-((4-ethynyl-2-(1-methyl-1H-imidazol-2-yl)phenoxy)phenyl)hydrazinyl group.
I-04	 Chemical structure of compound I-04: A 1,2,3,4,6,7-hexahydroquinazolo[2,1-b]pyridine core. The nitrogen at position 4 is substituted with a (E)-3-allyl-1-((4-ethynyl-2-(1-methyl-1H-imidazol-2-yl)phenoxy)phenyl)hydrazinyl group. The nitrogen at position 2 is substituted with a (E)-3-allyl-1-((4-ethynyl-2-(1-methyl-1H-imidazol-2-yl)phenoxy)phenyl)hydrazinyl group.
I-05	 Chemical structure of compound I-05: A 1,2,3,4,6,7-hexahydroquinazolo[2,1-b]pyridine core. The nitrogen at position 4 is substituted with a (E)-3-allyl-1-((4-ethynyl-2-(1-methyl-1H-imidazol-2-yl)phenoxy)phenyl)hydrazinyl group. The nitrogen at position 2 is substituted with a (E)-3-allyl-1-((4-ethynyl-2-(1-methyl-1H-imidazol-2-yl)phenoxy)phenyl)hydrazinyl group.

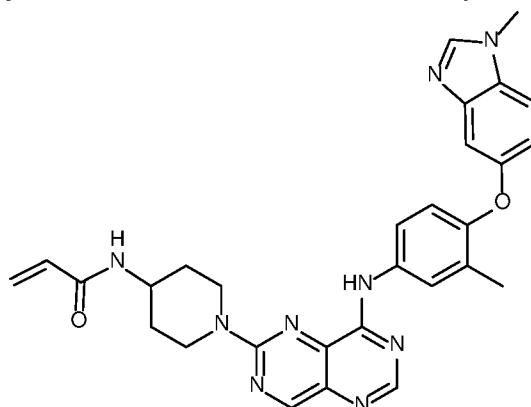
Primjer	Struktura
I-06	
I-07	
I-08	
I-09	

Primjer	Struktura
I-10	
I-11	
I-12	
I-13	

Primjer	Struktura
I-14	
I-15	
I-16	
I-17	
I-18	

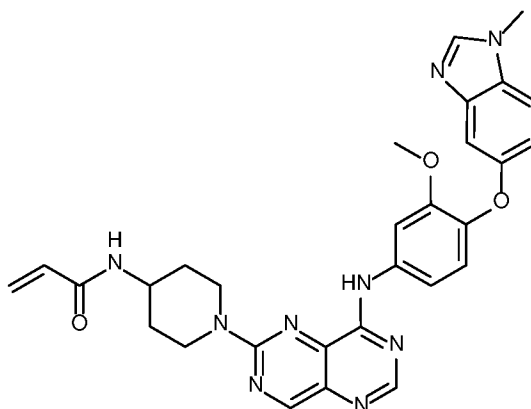
Primjer	Struktura
I-19	

11. Spoj prema patentnom zahtjevu 1, 2, 3 ili 8, **naznačen time, da** ima sljedeću strukturu:



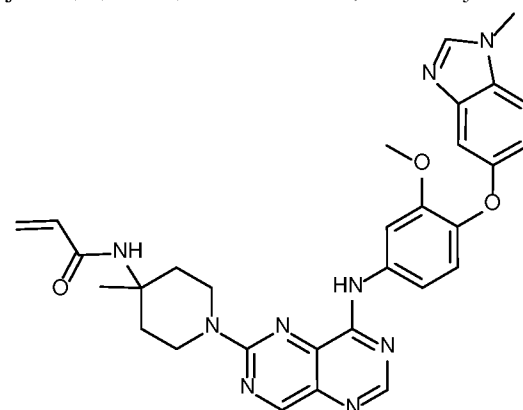
I-01.

12. Spoj prema patentnom zahtjevu 1, 2, 5 ili 8, **naznačen time, da** ima sljedeću strukturu:



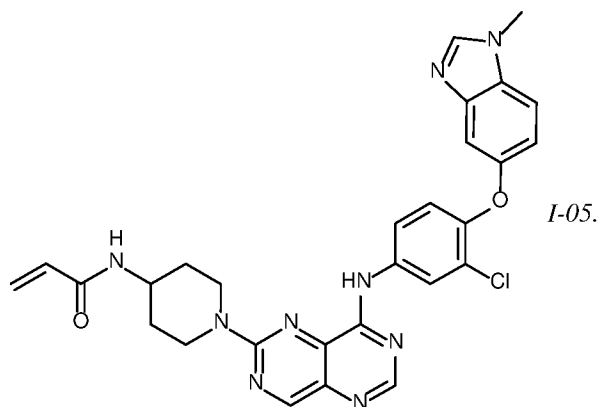
I-03.

5 13. Spoj prema patentnom zahtjevu 1, 2, 5 ili 8, **naznačen time, da** ima sljedeću strukturu:

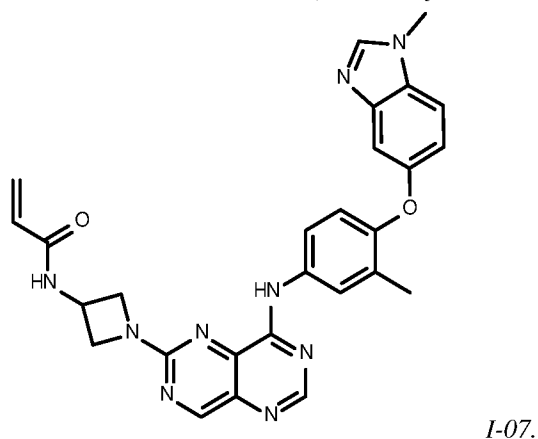


I-04.

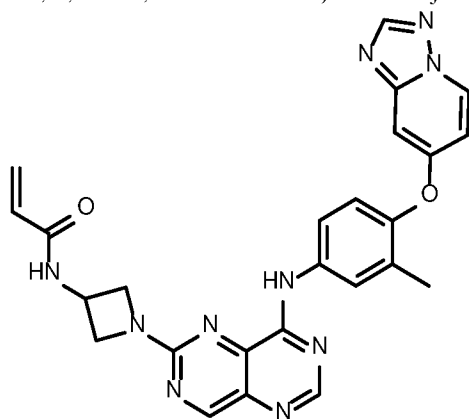
14. Spoj prema patentnom zahtjevu 1, 2, 6, 8 ili 9, **naznačen time, da** ima sljedeću strukturu:



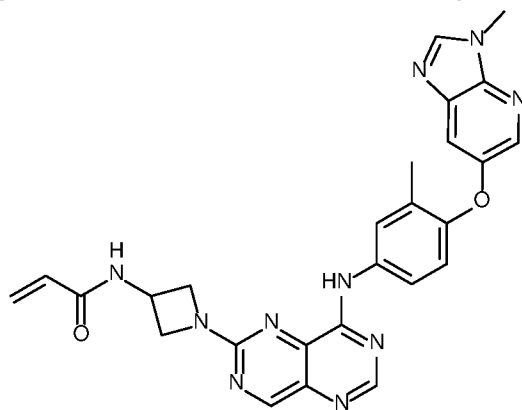
15. Spoj prema patentnom zahtjevu 1, 2, 3 ili 8, **naznačen time, da** ima sljedeću strukturu:



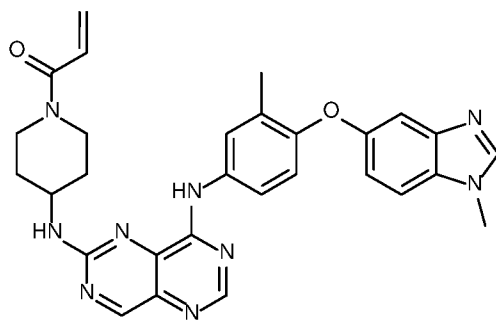
16. Spoj prema patentnom zahtjevu 1, 2, 3 ili 8, **naznačen time, da** ima sljedeću strukturu:



- 5 17. Spoj prema patentnom zahtjevu 1, 2, 3 ili 8, **naznačen time, da** ima sljedeću strukturu:

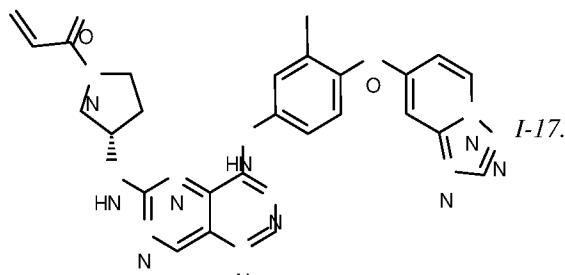


18. Spoj prema patentnom zahtjevu 1, 2, 3 ili 8, **naznačen time, da** ima sljedeću strukturu:



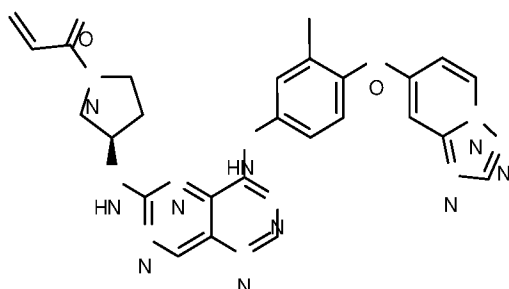
I-14.

19. Spoj prema patentnom zahtjevu 1, 2, 3 ili 8, **naznačen time, da** ima sljedeću strukturu:



I-17.

20. Spoj prema patentnom zahtjevu 1, 2, 3 ili 8, **naznačen time, da** ima sljedeću strukturu:



I-18.

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21. Farmaceutski prihvatljiva sol, **naznačena time, da** je od spoja koji je definiran u bilo kojem od patentnih zahtjeva 10 do 20.
22. Farmaceutski pripravak, **naznačen time, da** sadrži terapijski učinkovitu količinu od najmanje jednog spoja Formule (I) u skladu s bilo kojim od patentnih zahtjeva 1 do 20 ili njegove farmaceutski prihvatljive soli i jedno ili više farmaceutski prihvatljivih pomoćnih sredstava.
23. Spoj 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 raka mozga, raka dojke, raka žučnih vodova, raka mokraćnog mjehura, raka grlića maternice, kolorektalnog raka, raka endometrija, raka kože, tumora jednjaka, tumora glave i vrata, gastrointestinalnog raka, tumora žučnog mjehura, raka bubrega, raka jetre, raka pluća ili raka prostate.