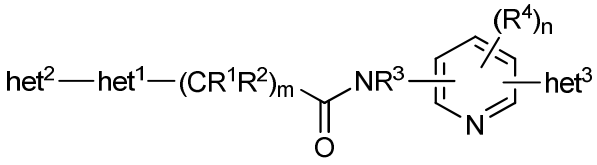
CLAIMS

1. A compound of formula (I):



(I)

wherein

het^1 represents a 8 or 9 membered bicyclic heterocyclic ring system comprising a 5 membered ring and 1, 2, 3 or 4 heteroatoms selected from N, O or S, wherein the 8 or 9 membered bicyclic heterocyclic ring system is unsubstituted or substituted, and when substituted the ring system is substituted with 1, 2, or 3 groups independently selected at each occurrence from: halo, C_{1-4} alkyl, C_{1-4} haloalkyl, $-OR^{A2}$, $-NR^{A2}R^{B2}$, -CN, $-SO_2R^{A2}$, and C_{3-6} cycloalkyl;

het^2 is a 5 or 6 membered heterocyclic ring which may be unsubstituted or substituted, and when substituted the ring is substituted with 1, 2 or 3 groups independently selected at each occurrence from: halo, C_{1-4} alkyl, C_{1-4} haloalkyl, $-OR^{A1}$, $-NR^{A1}R^{B1}$, -CN, $-NO_2$, $-NR^{A1}C(O)R^{B1}$, $-C(O)NR^{A1}R^{B1}$, $-NR^{A1}SO_2R^{B1}$, $-SO_2NR^{A1}R^{B1}$, $-SO_2R^{A1}$, $-C(O)R^{A1}$, $-C(O)OR^{A1}$ and C_{3-6} cycloalkyl;

het^3 is a 6 membered heterocyclic ring which may be unsubstituted or substituted, and when substituted the ring is substituted with 1, 2 or 3 groups independently selected at each occurrence from: halo, C_{1-4} alkyl, C_{1-4} haloalkyl, $-OR^{A1}$, $-NR^{A1}R^{B1}$, -CN, $-NO_2$, $-NR^{A1}C(O)R^{B1}$, $-C(O)NR^{A1}R^{B1}$, $-NR^{A1}SO_2R^{B1}$, $-SO_2NR^{A1}R^{B1}$, $-SO_2R^{A1}$, $-C(O)R^{A1}$, $-C(O)OR^{A1}$ and C_{3-6} cycloalkyl;

R^1 and R^2 are independently selected at each occurrence from: H, halo, C_{1-4} alkyl, C_{1-4} haloalkyl, $-OR^{A3}$, $-NR^{A3}R^{B3}$ and C_{3-6} cycloalkyl;

R^3 is selected from: H, C_{1-4} alkyl, C_{1-4} haloalkyl, and C_{3-6} cycloalkyl;

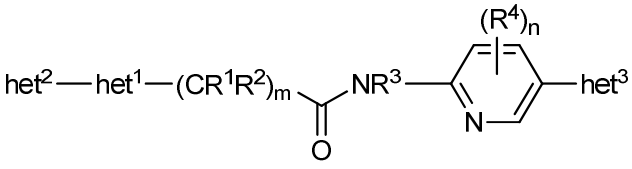
R^4 is independently selected at each occurrence from: halo, C_{1-4} alkyl, C_{1-4} haloalkyl, -CN, $-OR^{A4}$, $-NR^{A4}R^{B4}$, $-SO_2R^{A4}$, C_{3-6} cycloalkyl and C_{3-6} halocycloalkyl;

m is selected from, 1, 2 or 3;

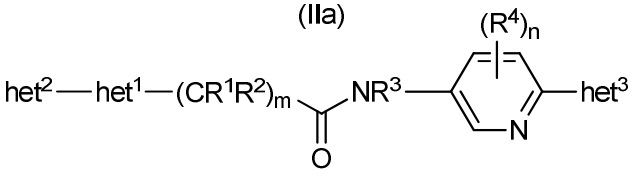
n is selected from 0, 1 or 2; and

R^{A1}, R^{B1}, R^{A2}, R^{B2}, R^{A3}, R^{B3}, R^{A4} and R^{B4} are at each occurrence independently selected from: H, C_{1-4} alkyl, C_{1-4} haloalkyl.

2. A compound of claim 1, wherein the compound is a compound according to formulae (IIa) or (IIb):



(IIa)



(IIb)

3. A compound of claim 1 or claim 2, wherein het^2 represents a ring selected from unsubstituted or substituted: pyrazole, imidazole, pyridine, pyrazine, pyrimidine, pyridazine, pyran, tetrahydropyran, dihydropyran, piperidine, piperazine, morpholine, thiomorpholine, oxazine, dioxine, dioxane, thiazine, oxathiane and dithiane.

4. A compound of any preceding claim, wherein het^3 represents an aromatic, saturated or unsaturated 6 membered heterocyclic ring which is unsubstituted or substituted and comprises at least one nitrogen atom.

5. A compound of any preceding claim, wherein het^3 represents a ring selected from unsubstituted or substituted: pyrimidine, pyrazine, pyridazine, piperazine, dioxine, dioxane, morpholine and thiomorpholine.

6. A compound of any preceding claim, wherein het^1 represents a substituted or unsubstituted C_{8-9} bicyclic heteroaryl group comprising a 5 membered ring and comprising 1, 2, 3 or 4 heteroatoms selected from N, O or S.

7. A compound of any preceding claim, wherein het^1 represents a group selected from unsubstituted or substituted: indolizine, indole, isoindole, benzofuran, isobenzofuran, benzothiophene, isobenzothiophene, benzothiazole, benzoxazole, benzisothiazole, benzisoxazole, purine, pyrrolopyrimidine, pyrazolopyrimidine, azaindole, and azaisoindole.

8. A compound of any preceding claim, wherein R^1 and R^2 may be independently selected at each occurrence from: H, chloro, fluoro, methyl, ethyl, trifluoromethyl, trifluoroethyl, $-OCF_3$, -OH, -OMe, -OEt, $-NH_2$, -NHMe, and $-NMe_2$.

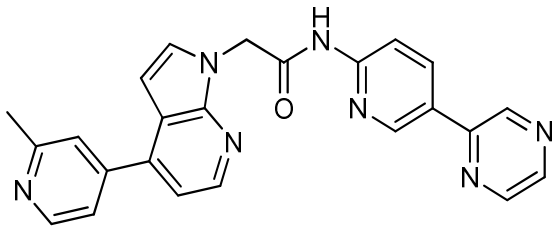
9. A compound of any preceding claim, wherein R^3 is H or methyl.

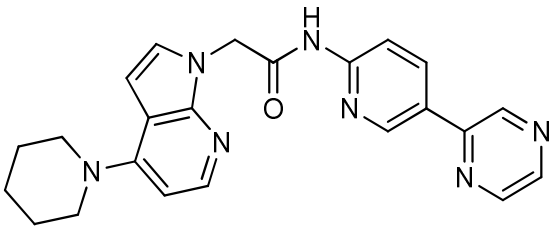
10. A compound of any preceding claim, wherein R^4 is independently selected at each occurrence from: H, chloro, fluoro, methyl, ethyl, trifluoromethyl, trifluoroethyl, $-OCF_3$, -OH, -OMe, -OEt, $-NH_2$, -NHMe, and $-NMe_2$.

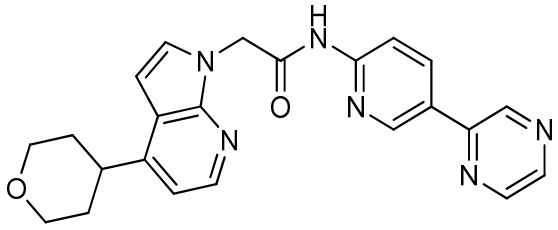
11. A compound of any preceding claim, wherein m is 1.

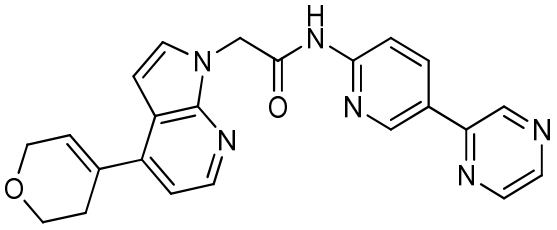
12. A compound of any preceding claim, wherein n is 0.

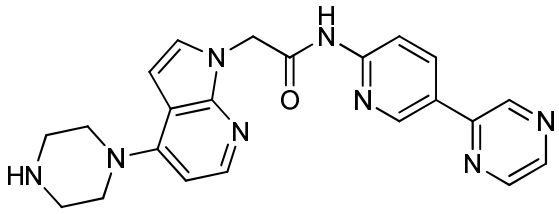
13. A compound of claim 1, wherein the compound is selected from:

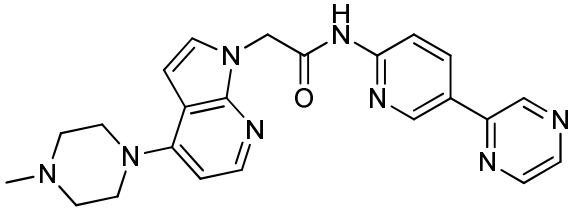


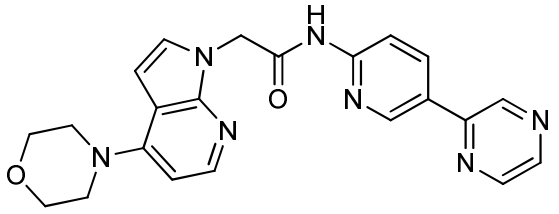


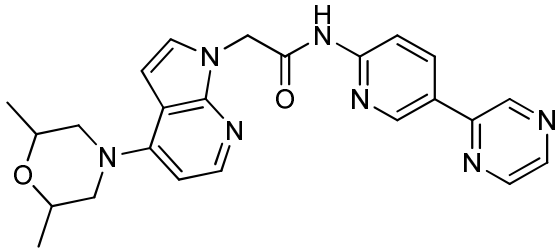












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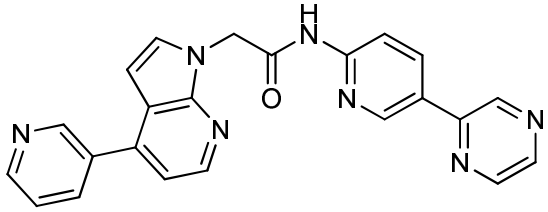

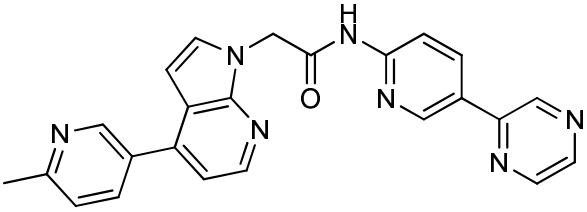

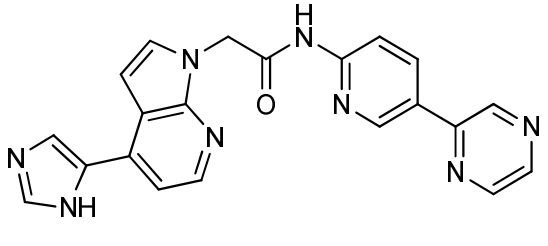

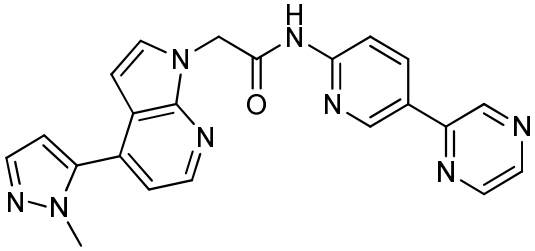

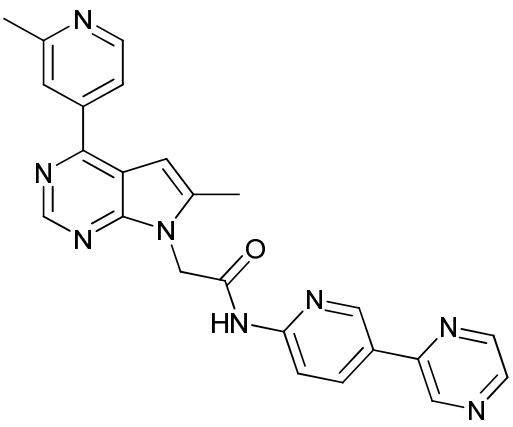

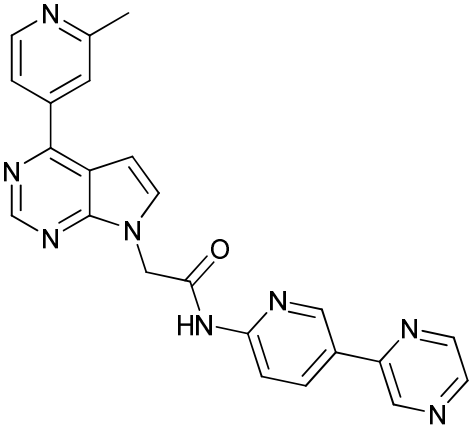

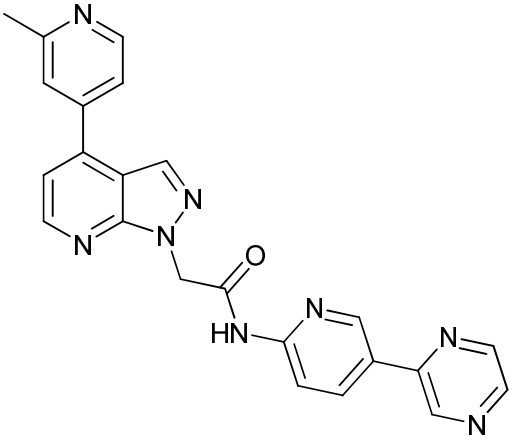

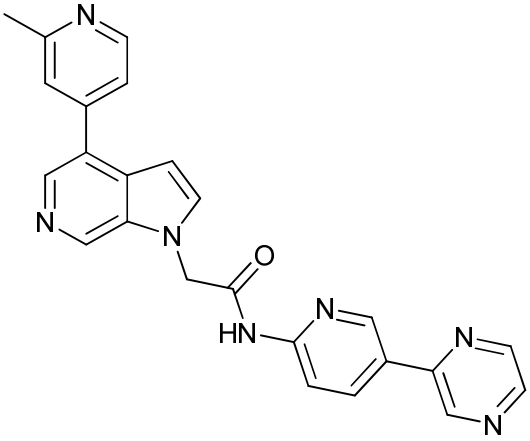

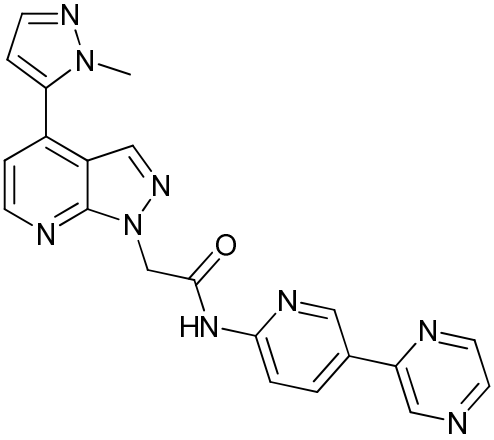

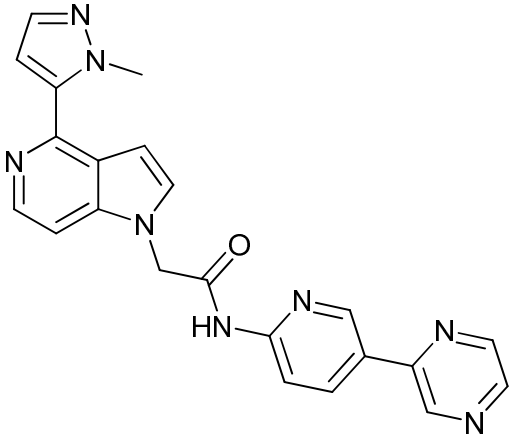

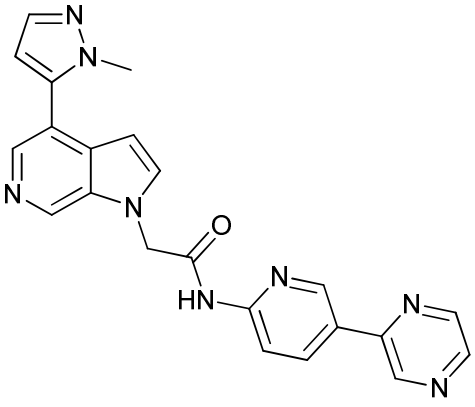

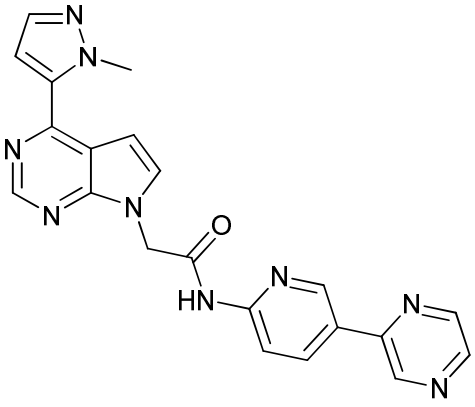

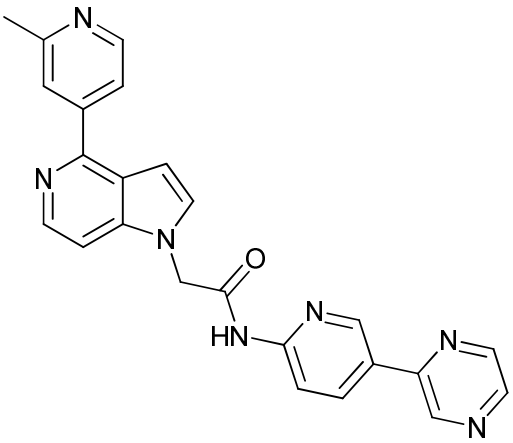

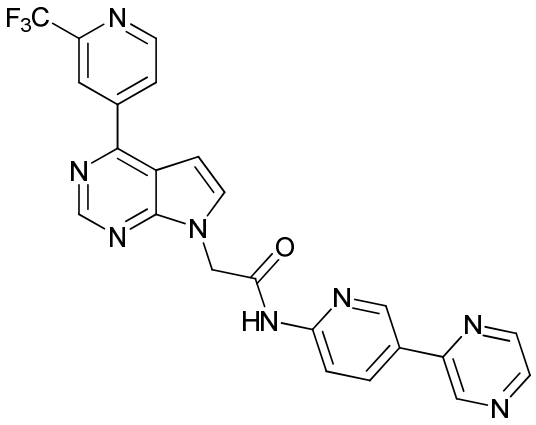

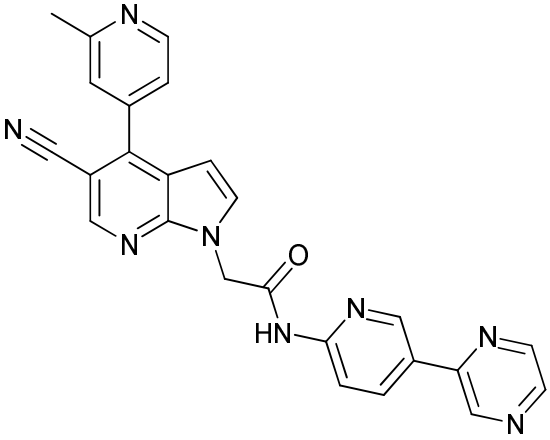

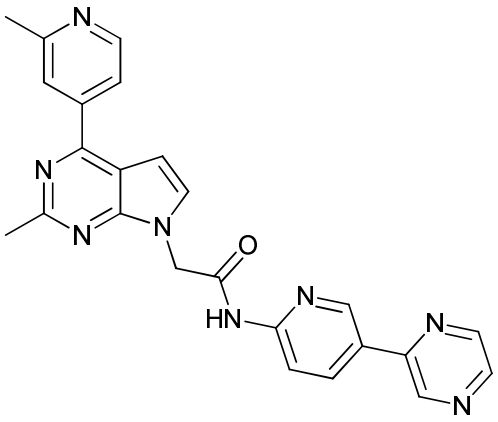

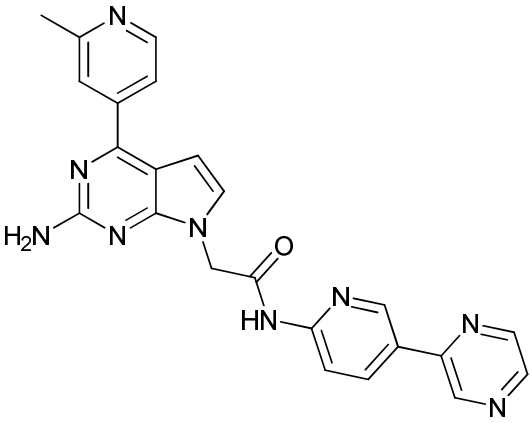

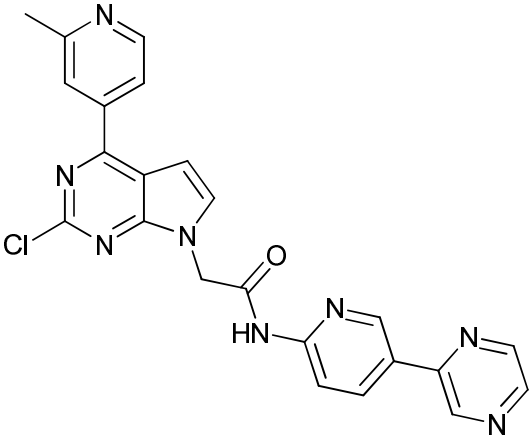

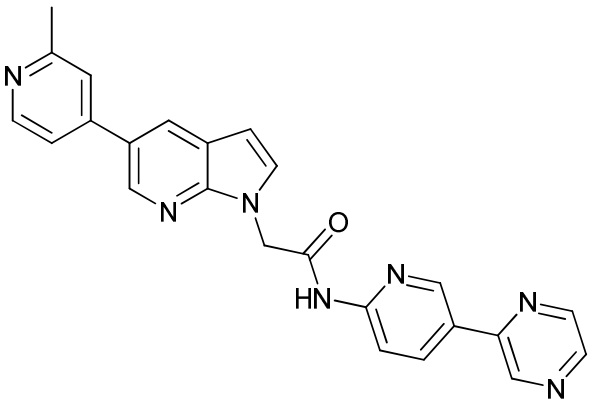

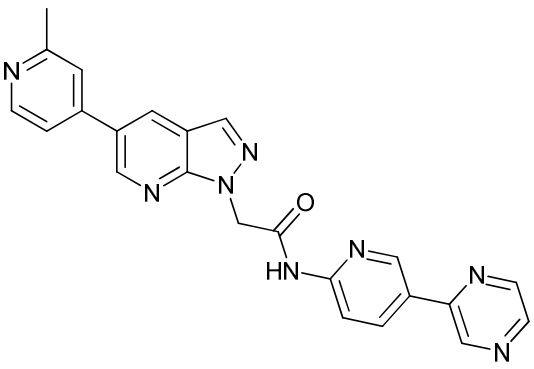

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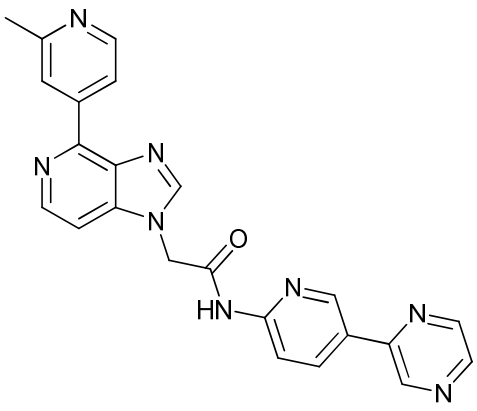

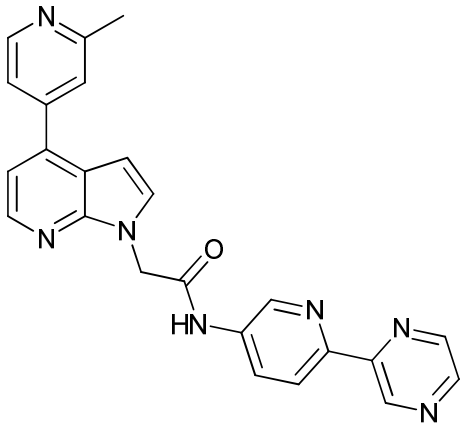

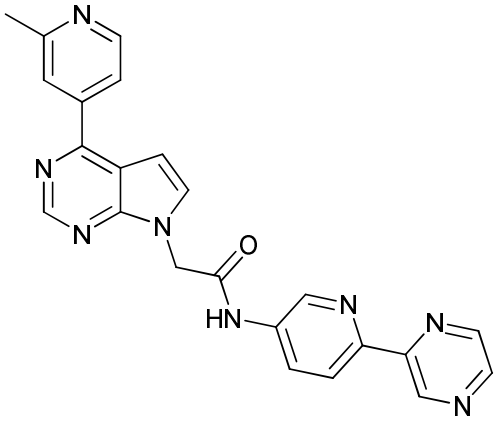

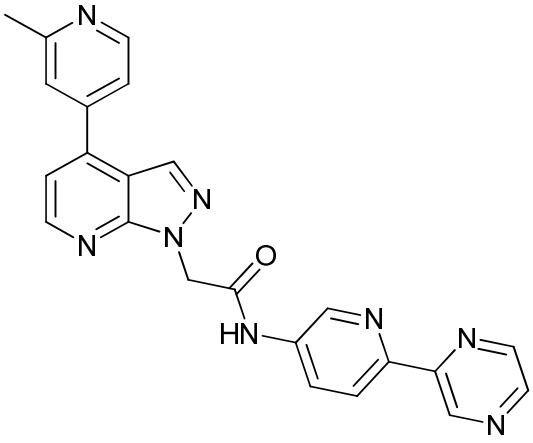

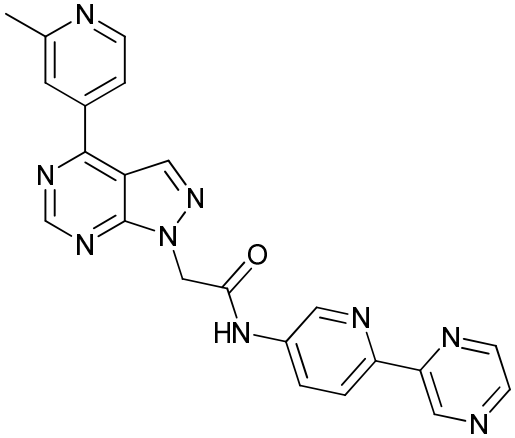

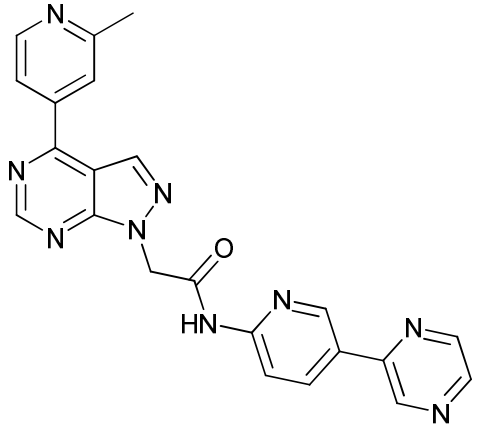

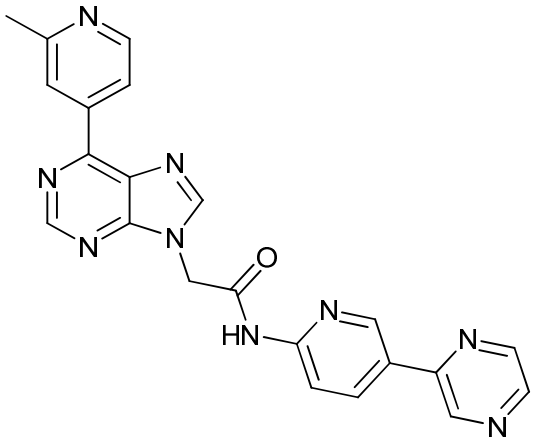

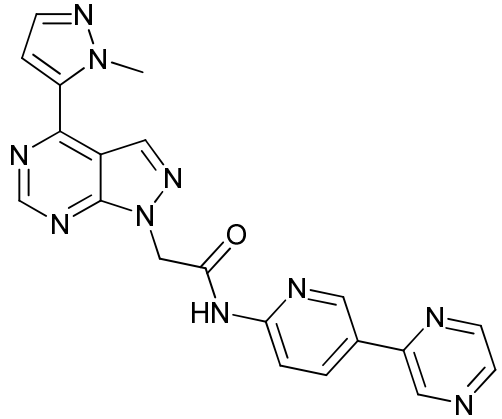

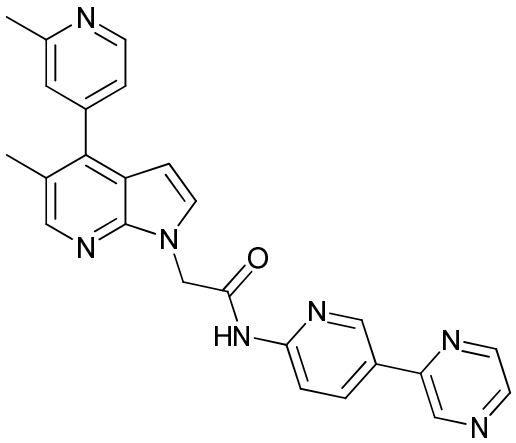

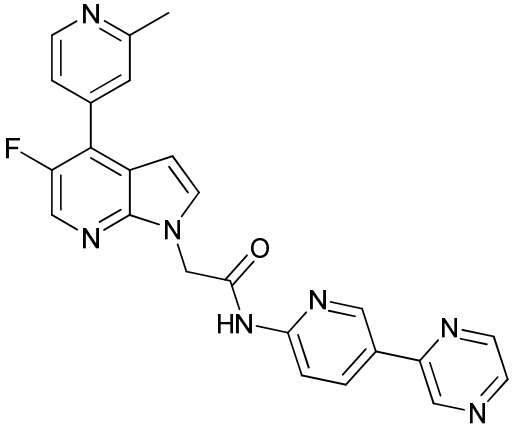

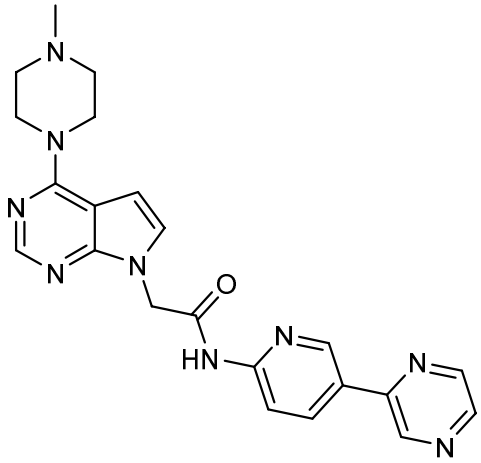

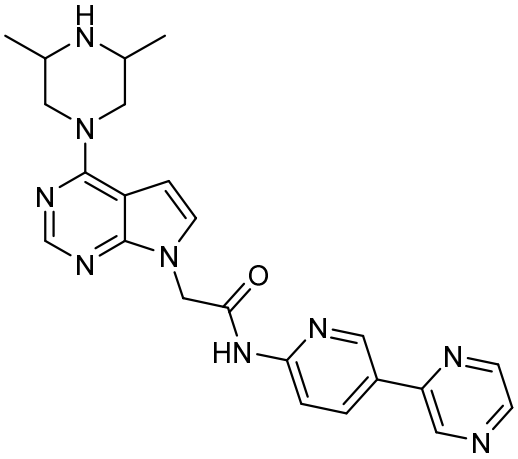

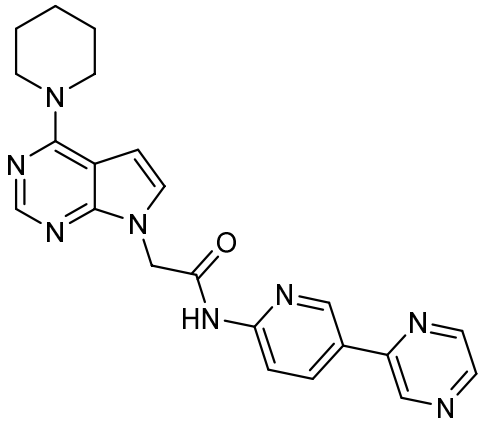

14. The compound of any preceding claim for use as a medicament.

15. The compound of any of claims 1 to 13, wherein the compound is for use in the modulation of Wnt signalling.

16. The compound of any of claims 1 to 13 for use in the treatment of a condition which can be modulated by inhibition of Porcn.

17. The compound for use of claim 16, wherein the condition treatable by the inhibition of Porcn may be selected from: cancer, sarcoma, melanoma, skin cancer, haematological tumors, lymphoma, carcinoma, and leukemia.

18. The compound of claim 16 or claim 17, wherein the condition is selected from: esophageal squamous cell carcinoma, gastric cancer, glioblastomas, astrocytomas; retinoblastoma, osteosarcoma, chondosarcoma, Ewing's sarcoma, rabdomysarcoma, Wilm's tumor, basal cell carcinoma, non-small cell lung cancer, brain tumour, hormone refractory prostate cancer, prostate cancer, metastatic breast cancer, breast cancer, metastatic pancreatic cancer, pancreatic cancer, colorectal cancer, cervical cancer, head and neck squamous cell carcinoma and cancer of the head and neck

19. The compound of claim 16 or claim 17, wherein the condition is selected from: skin fibrosis, idiopathic pulmonary fibrosis, renal interstitial fibrosis, liver fibrosis, proteinuria, kidney graft rejection, osteoarthritis, Parkinsons's disease, cystoid macular edema, uveitis associated cystoid macular edema, retinopathy, diabetic retinopathy and retinopathy of prematurity

20. The compound of any of claims 1 to 13 for use in the treatment of a condition selected from: cancer, sarcoma, melanoma, skin cancer, haematological tumors, lymphoma, carcinoma, and leukemia.

21. The compound of claim 20, wherein the condition is selected from: esophageal squamous cell carcinoma, gastric cancer, glioblastomas, astrocytomas; retinoblastoma, osteosarcoma, chondosarcoma, Ewing's sarcoma, rabdomysarcoma, Wilm's tumor, basal cell carcinoma, non-small cell lung cancer, brain tumour, hormone refractory prostate cancer, prostate cancer, metastatic breast cancer, breast cancer, metastatic pancreatic cancer, pancreatic cancer, colorectal cancer, cervical cancer, head and neck squamous cell carcinoma and cancer of the head and neck.

22. The compound of claim 20, wherein the condition is selected from: skin fibrosis, idiopathic pulmonary fibrosis, renal interstitial fibrosis, liver fibrosis, proteinuria, kidney graft rejection, osteoarthritis, Parkinsons's disease, cystoid macular edema, uveitis associated cystoid macular edema, retinopathy, diabetic retinopathy and retinopathy of prematurity.

23. A use of a compound of any of claims 1 to 13 in the manufacture of a medicament for the treatment of a condition which is modulated by Porcn.

24. A pharmaceutical formulation comprising a compound of any of claims 1 to 13 and a pharmaceutically acceptable excipient.

25. The pharmaceutical composition of claim 24, wherein the pharmaceutical composition is a combination product comprising an additional pharmaceutically active agent.