



TRIANA, URIBE & MICHELSEN

MINISTERIO DE COMERCIO INDUSTRIA Y TURISMO
SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
DIRECCIÓN DE NUEVAS CREACIONES

E.

S.

D.

EXPEDIENTE No. : NC2022/0004978
REFERENCIA : **MODIFICACION VOLUNTARIA EN RESPUESTA
AL OFICIO 15089 DE 27 DE AGOSTO DE 2024
DEL EXAMEN DE FONDO A LA SOLICITUD DE
PATENTE DE INVENCION TITULADA
“DERIVADOS DE INDAZOLCARBOXAMIDAS,
ÚTILES PARA LA INHIBICIÓN DE IRAK”.-
EXPEDIENTE No. NC2022/0004978.**

1. LIMITACIÓN PLIEGO DE REIVINDICACIONES.

Se adjunta un nuevo pliego reivindicatorio que ha sido estrictamente limitado con el objeto de subsanar cada una de las objeciones recibidas. En ese sentido se ha eliminado los compuestos 291 y 292. Esperamos la oportuna aceptación de estas enmiendas en tanto no implican el agregado de materia adicional a la presente solicitud tal como fue originalmente presentada.

2. FUNDAMENTO DE DERECHO

Fundamento esta remisión en las normas legales siguientes:

- 2.1. Artículo 34 de la Decisión 486 de la Comisión de la Comunidad Andina.
- 2.2. En las demás normas concordantes.

3. ANEXOS

- 3.1. Un nuevo capítulo reivindicatorio.
- 3.2. Pago de tasa de modificación voluntaria.

4. NOTIFICACIONES

Para efectos de notificaciones que por disposición debe hacer su Despacho, informo que mi representada y el suscrito recibiremos notificaciones en la Secretaría de su Despacho o en mis oficinas de abogado situadas en la Calle 93B No. 12-48 P.4 de esta ciudad de Bogotá.



De la Señora Directora,

Hernando Triana S.
HERNANDO TRIANA SOTO

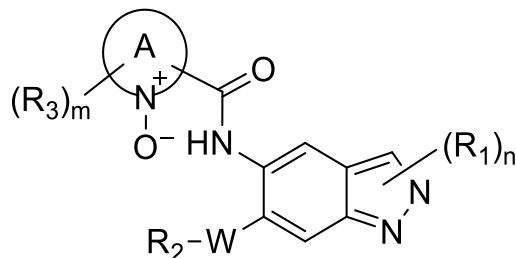
C.C. No. 79.154.036

T.P.A. 45.265 del C.S. de la J.

8180111018 /NJV
COLO-8916-0301-96642

REIVINDICACIONES

1. Un compuesto de fórmula I, o un estereoisómero, un racemato, un tautómero o una sal farmacéuticamente aceptable del mismo,



Fórmula I

en donde,

el anillo A es un heteroarilo de 5 a 10 miembros que contienen uno de N;

cada R₁ se selecciona independientemente de los siguientes grupos opcionalmente sustituidos con uno, dos, o tres R: hidrocarbilo alifático (C₁-C₆), cicloalquilo C₃₋₆;

cada R₂ es seleccionado independientemente de los siguientes grupos opcionalmente sustituidos con uno, dos, o tres R: hidrocarbilo alifático (C₁-C₆), cicloalquilo C₃₋₆, heterociclilo de 3-12 miembros que tiene 1 heteroátomo seleccionado de N, o heteroarilo de 5-10 miembros que tiene 1-2 heteroátomos seleccionados entre N y O, y -NR_aR_b;

cada R₃ es seleccionado independientemente entre hidrógeno, halógeno y los siguientes grupos opcionalmente sustituidos con uno, dos, o tres R: hidrocarbilo alifático (C₁-C₆), hidrocarbilo alifático (C₁-C₆) que comprende opcionalmente un heteroátomo seleccionado entre O, C₃₋₆ cicloalquilo y -NR_aR_b;

W se selecciona entre O o es un enlace sencillo;

R_a y R_b se selecciona independientemente entre H e hidrocarbilo alifático (C₁-C₆);

cada R se selecciona independientemente entre halógeno, CN, OH, NR_aR_b y los siguientes grupos opcionalmente sustituidos con uno, dos, o más R': hidrocarbilo alifático (C₁-C₆), cicloalquilo C₃₋₆;

cada R' se selecciona independientemente entre halógeno CN, OH y NR_aR_b; y

n es 1; y m es 1.

2. El compuesto según la reivindicación 1 en el que el hidrocarbilo alifático (C₁-C₆) opcionalmente comprende un heteroátomo seleccionado de O se selecciona de hidrocarbilo alifático (C₁-C₆), hidrocarbilo alifático (C₁-C₃); hidrocarbilo alifático (C₁-C₃);

el anillo A es piridina;

cada hidrocarbilo alifático (C₁-C₆) es independientemente seleccionado entre alquilo (C₁-C₆), alqueno (C₂-C₆) y alquino (C₂-C₆);

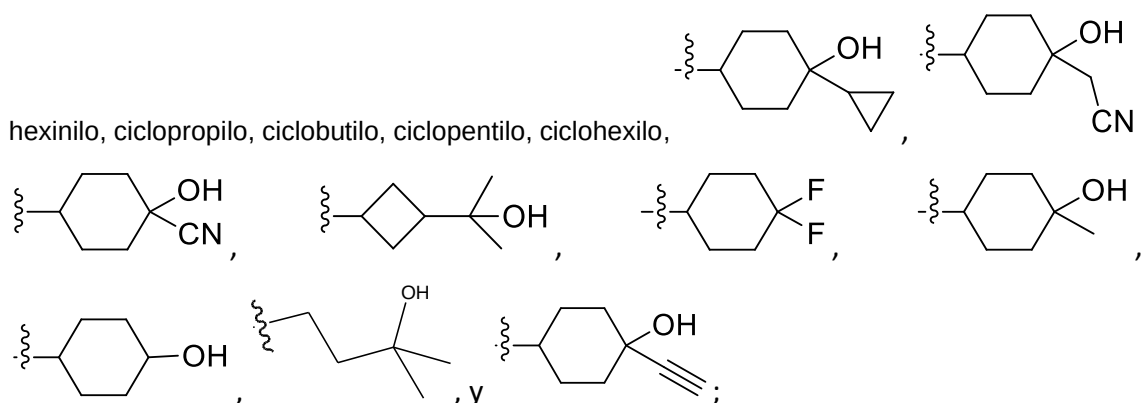
cada halógeno es independientemente seleccionado entre F, Cl, Br e I; y

cada cicloalquilo C₃₋₆ es independientemente seleccionado entre ciclopropilo, ciclobutilo, ciclopentilo y ciclohexilo.

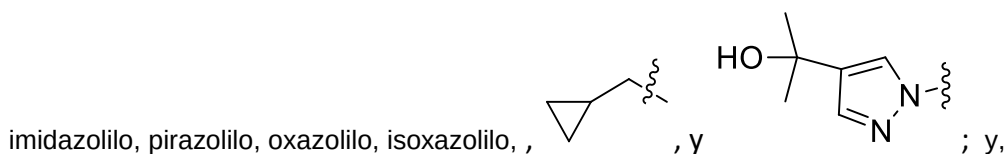
3. El compuesto según la reivindicación 1, en el que el hidrocarbilo alifático (C₁-C₆) se selecciona de (C₁-C₆) alquilo, (C₂-C₆) alqueno y (C₂-C₆) alquino.

4. El compuesto según la reivindicación 1, en el que:

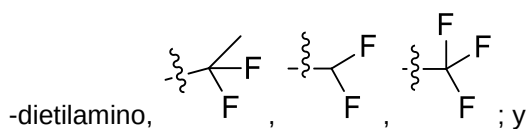
R₁ se selecciona de los siguientes grupos opcionalmente sustituidos con uno, dos o tres R: metilo, etilo, *n*-propilo, isopropilo, *n*-butilo, isobutilo, *terc*-butilo, *n*-pentilo, isopentilo, neopentilo, *n*-hexilo, etenilo, 1-propenilo, 2-propenilo, 1-metiletenilo, 1-butenilo, 1-etilenilo, 1-metil-2-propenilo, 2-butenilo, 3-butenilo, 2-metil-1-propenilo, 2-metil-2-propenilo, 1-pentenilo, 1-hexenilo, etinilo, 1-propinilo, 2-propinilo, 1-butinilo, 1-metil-2-propinilo, 3-butinilo, 1-pentinilo, 1-



R₂ se selecciona de los siguientes grupos opcionalmente sustituidos con uno, dos o tres R: metilo, etilo, *n*-propilo, isopropilo, *n*-butilo, isobutilo, *terc*-butilo, *n*-pentilo, isopentilo, neopentilo, *n*-hexilo, etenilo, 1-propenilo, 2-propenilo, 1-metiletenilo, 1-butenilo, 1-etilenilo, 1-metil-2-propenilo, 2-butenilo, 3-butenilo, 2-metil-1-propenilo, 2-metil-2-propenilo, 1-pentenilo, 1-hexenilo, etinilo, 1-propinilo, 2-propinilo, 1-butinilo, 1-metil-2-propinilo, 3-butinilo, 1-pentinilo, 1-hexinilo, ciclopropilo, ciclobutilo, ciclopentilo, ciclohexilo, *N*-metilaminometilo, *N*-metilaminoetilo, *N*-etilaminoetilo, *N*, *N*-dimetilaminometilo, *N*, *N*-dimetilaminoetilo, *N*, *N*-dietilaminoetilo, amino, *N*, *N*-dimetilamino, *N*, *N*-dietilamino, tetrahidropirrolilo, piperidinilo, piridilo, pirazinilo, pirrolilo,



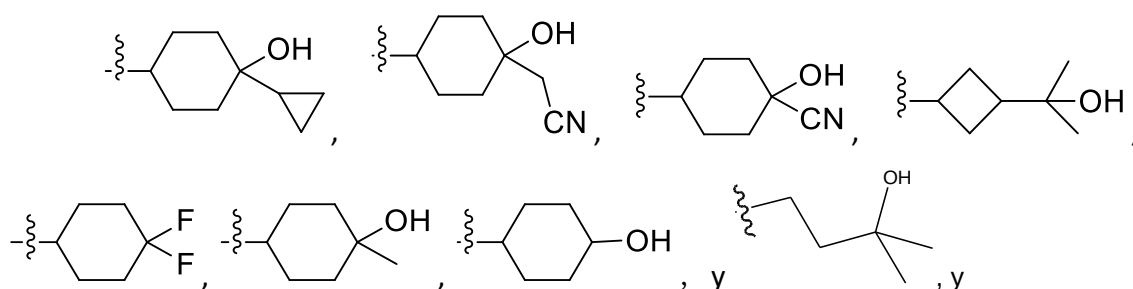
R₃ es seleccionados de los siguientes grupos opcionalmente sustituidos con uno, dos o tres R: metilo, etilo, *n*-propilo, isopropilo, *n*-butilo, isobutilo, *terc*-butilo, *n*-pentilo, isopentilo, neopentilo, *n*-hexilo, etenilo, 1-propenilo, 2-propenilo, 1-metiletenilo, 1-butenilo, 1-etilenilo, 1-metil-2-propenilo, 2-butenilo, 3-butenilo, 2-metil-1-propenilo, 2-metil-2-propenilo, 1-pentenilo, 1-hexenilo, etinilo, 1-propinilo, 2-propinilo, 1-butinilo, 1-metil-2-propinilo, 3-butinilo, 1-pentinilo, 1-hexinilo, ciclopropilo, ciclobutilo, ciclopentilo, ciclohexilo, metoxi, etoxilo, propoxi, butoxi, pentiloxi, metoximetilo, etoximetilo, propoximetilo, metoxietilo, etoxietilo, propoxietilo, metoxipropilo, etoxilpropilo, propoxipropilo, *N*-metilaminometilo, *N*-metilaminoetilo, *N*-etilaminoetilo, *N*, *N*-dimetilaminometilo, *N*, *N*-dimetilaminoetilo, *N*, *N*-dietilaminoetilo, amino, *N*, *N*-dimetilamino, *N*, *N*-



"" indica el sitio de conexión del grupo.

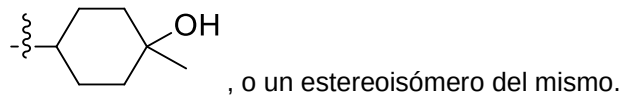
5. El compuesto según la reivindicación 1 o 2, en el que:

R₁ se selecciona de los siguientes grupos opcionalmente sustituidos con uno, dos o tres R: ciclopentilo, ciclohexilo,



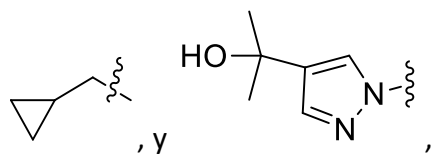
"" indica el sitio de conexión del grupo.

6. El compuesto según cualquiera de las reivindicaciones 1 a 5, en el que R₁ es



7. El compuesto según la reivindicación 1 ó 2, en el que:

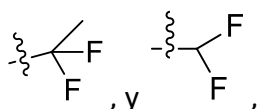
R₂ se selecciona de los siguientes grupos opcionalmente sustituidos con uno, dos o tres R: metilo, etilo, ciclopropilo, N, N - dimetilamino, tetrahidropirrolilo, piridilo, pirazolilo, oxazolilo,



y "" indica el sitio de conexión del grupo.

8. El compuesto según la reivindicación 1 ó 2, en el que:

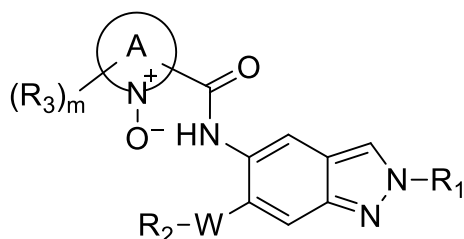
R₃ se selecciona de los siguientes grupos opcionalmente sustituidos con uno, dos o tres R: metilo, isopropilo, ciclopropilo, metoxi, amino, N, N-dimetilamino,



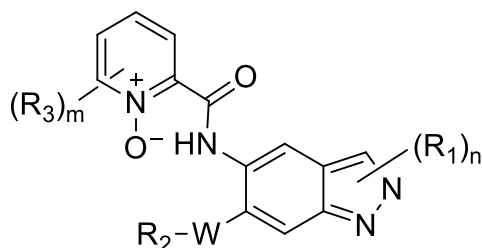

 "}" indica el sitio de conexión del grupo.

9. El compuesto según cualquiera de las reivindicaciones 1 a 8, en el que R_2 y R_3 son cada uno independientemente metilo o etilo, opcionalmente sustituido con uno, dos o tres R.

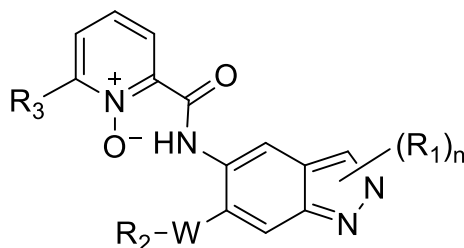
10. El compuesto según cualquiera de las reivindicaciones 1 a 9, que es un compuesto de fórmula Ia, fórmula Ib, fórmula Ic, fórmula Id y fórmula Ie:



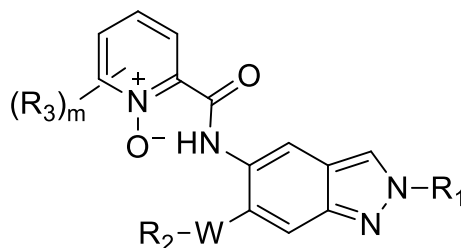
fórmula Ia



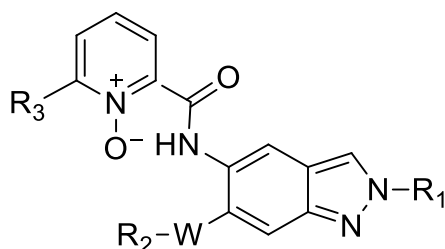
fórmula Ib



fórmula Ic



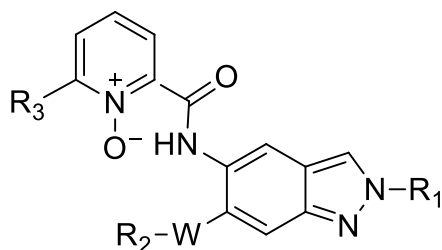
fórmula Id



fórmula Ie

o un estereoisómero, un racemato, un tautómero o una sal farmacéuticamente aceptable del mismo.

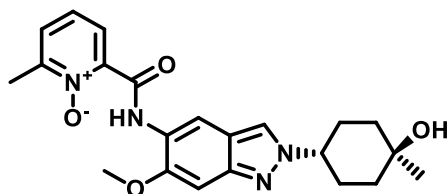
11. Compuesto según la reivindicación 10, que es un compuesto de fórmula Ie:



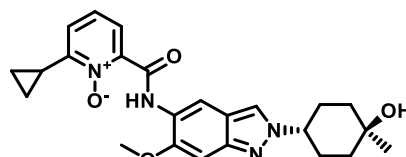
fórmula Ie

o un estereoisómero, un racemato o una sal farmacéuticamente aceptable del mismo.

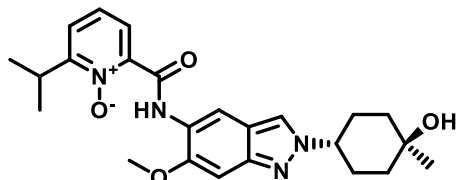
12. Un compuesto seleccionado de las siguientes estructuras:



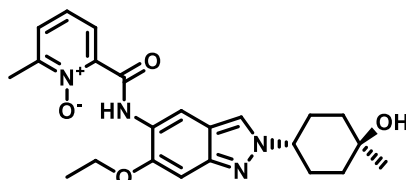
001



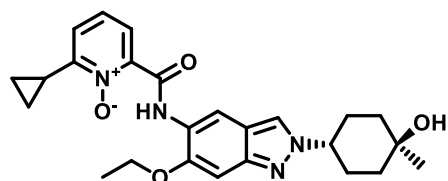
002



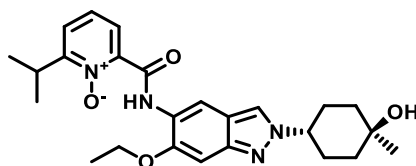
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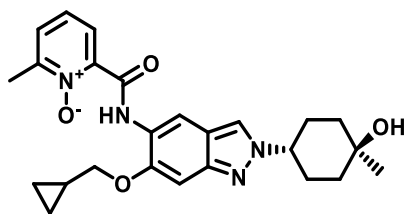
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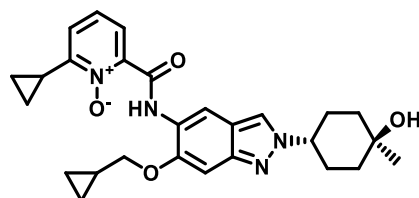
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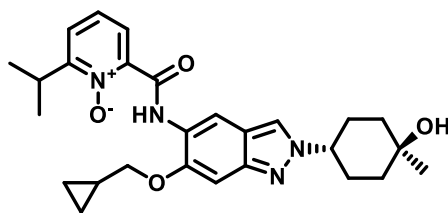
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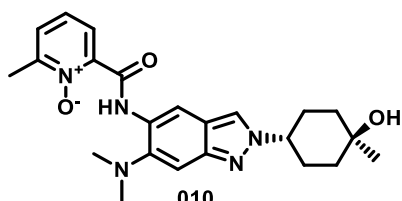
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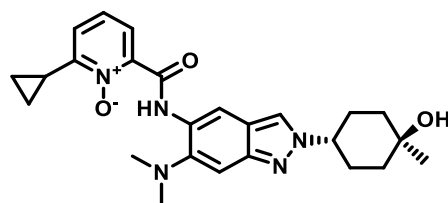
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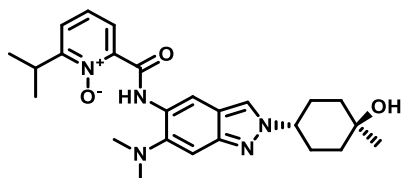
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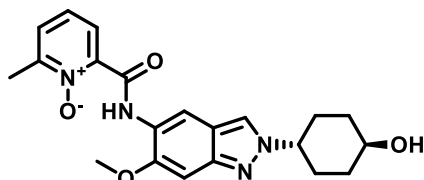
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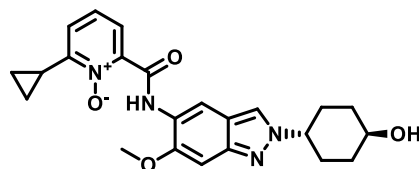
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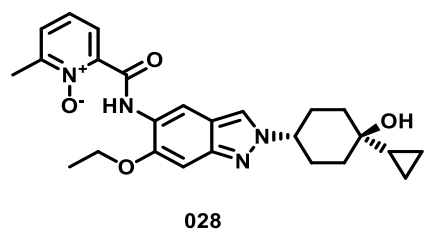
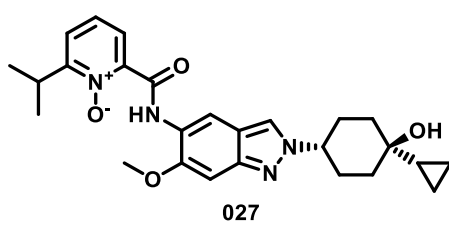
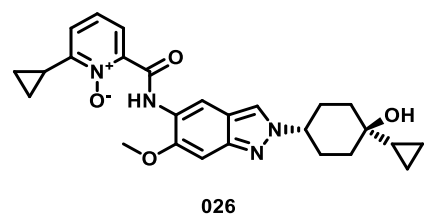
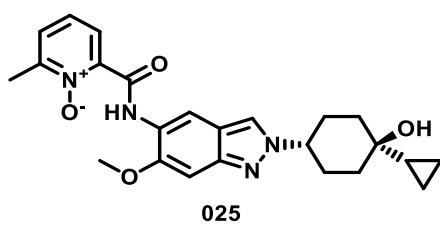
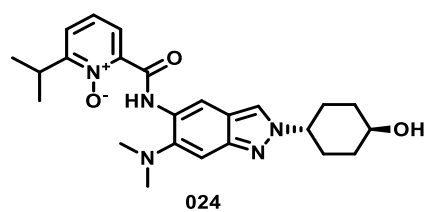
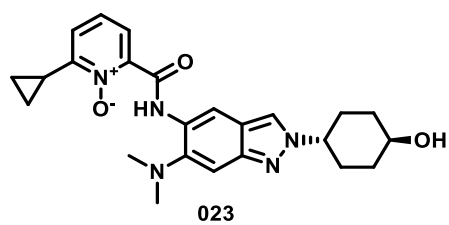
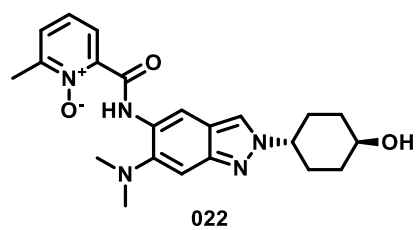
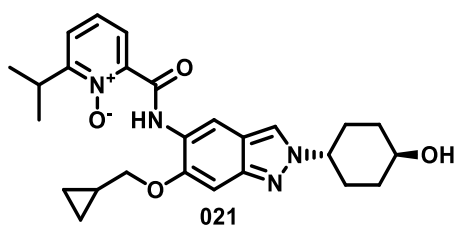
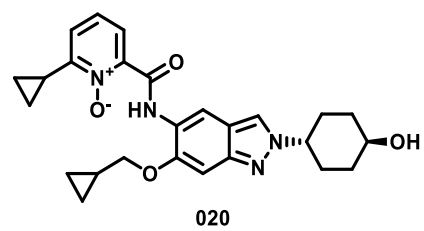
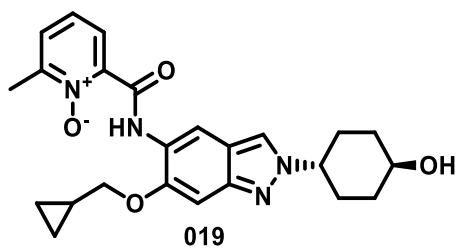
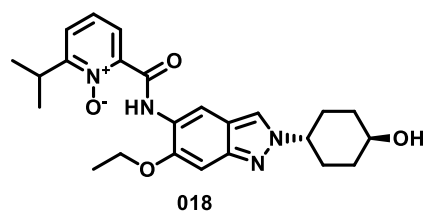
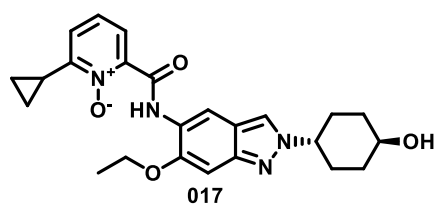
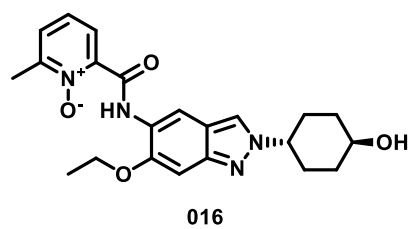
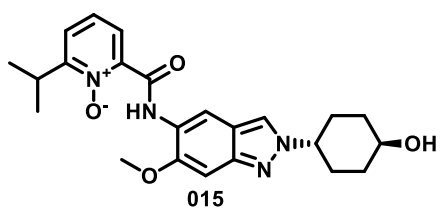
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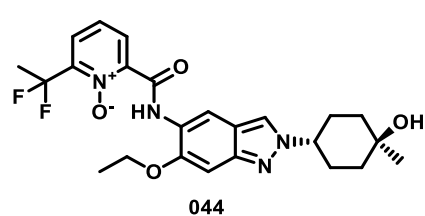
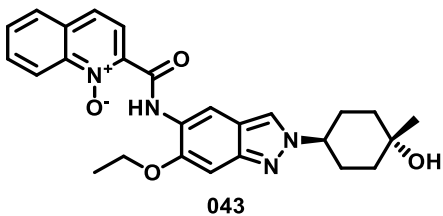
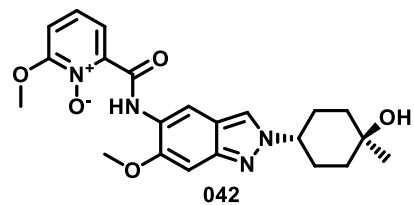
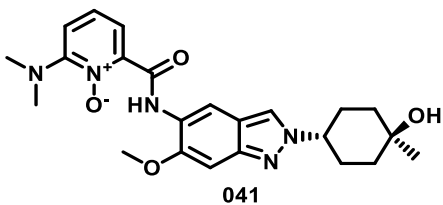
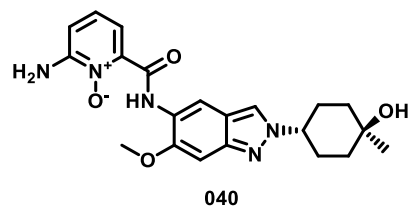
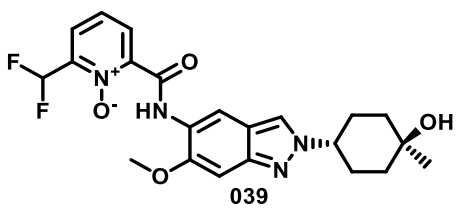
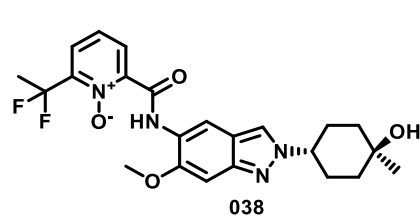
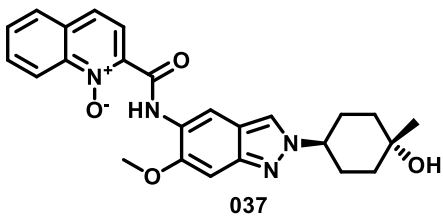
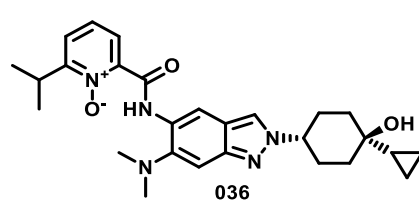
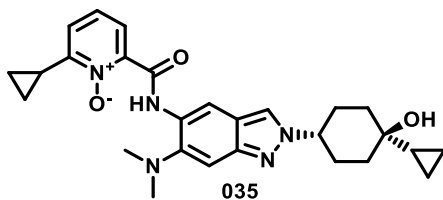
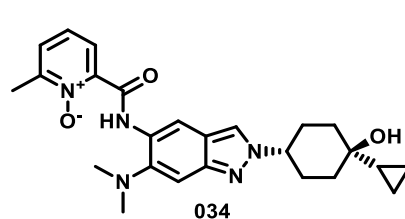
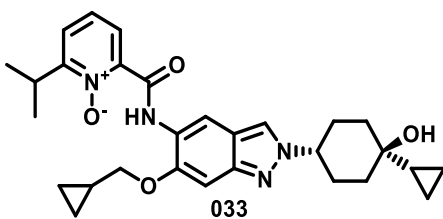
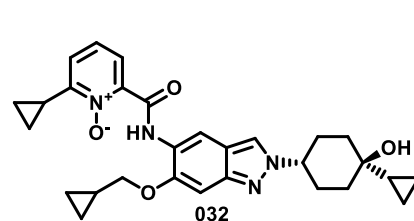
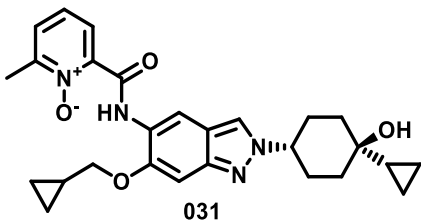
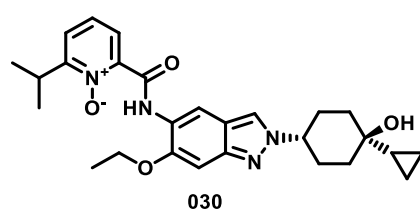
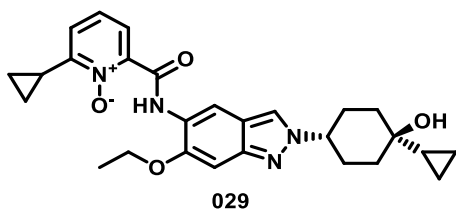


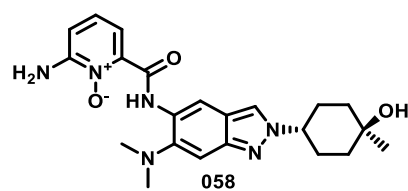
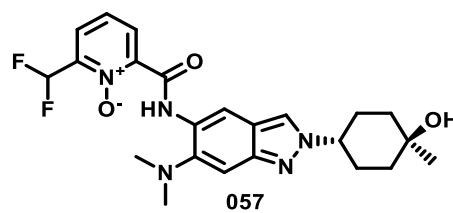
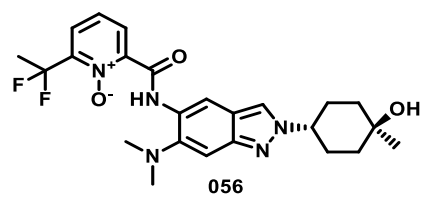
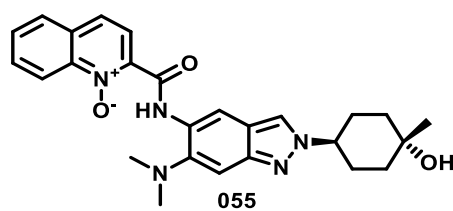
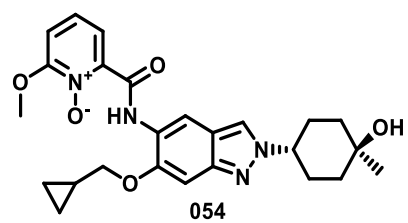
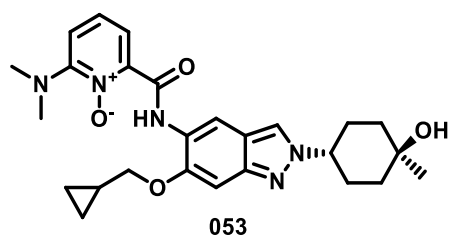
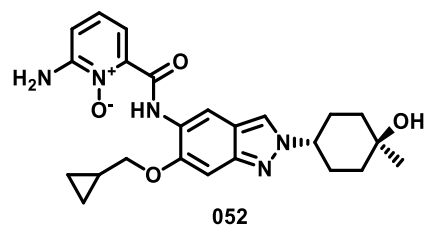
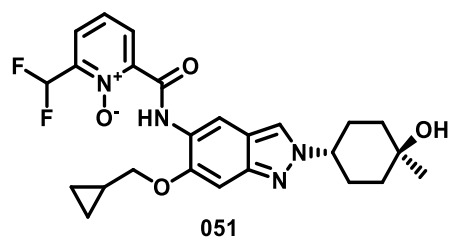
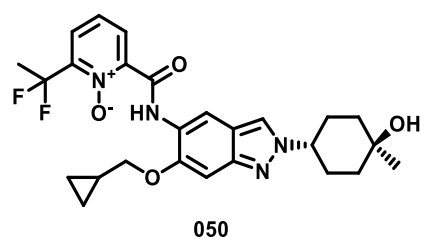
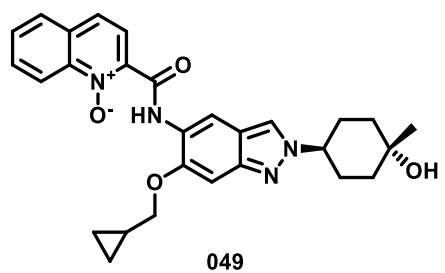
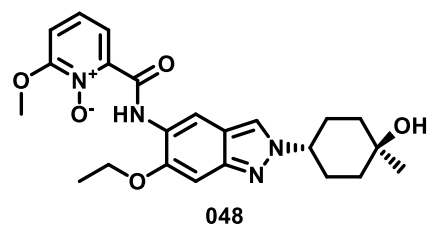
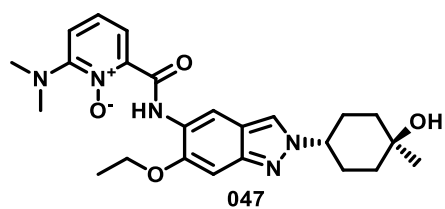
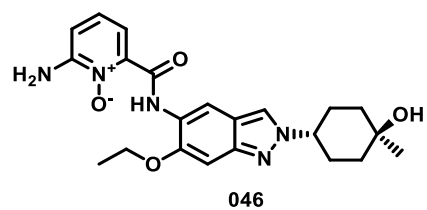
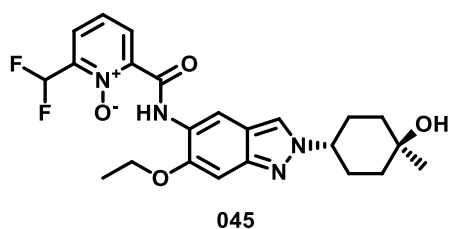
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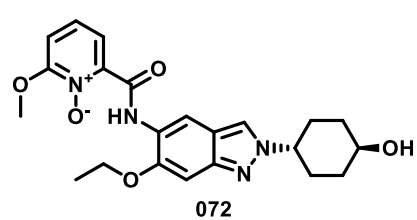
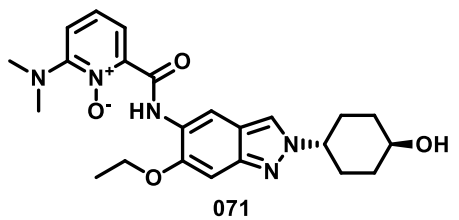
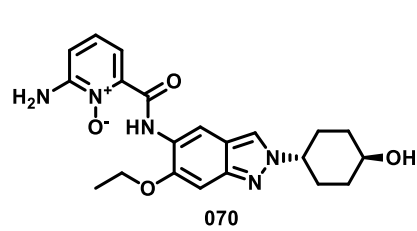
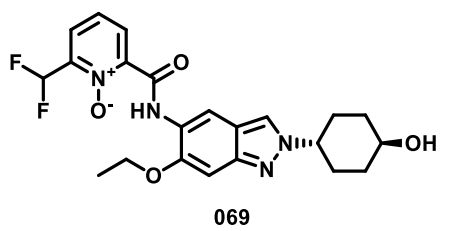
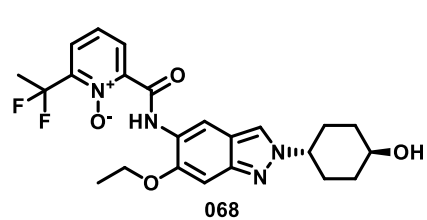
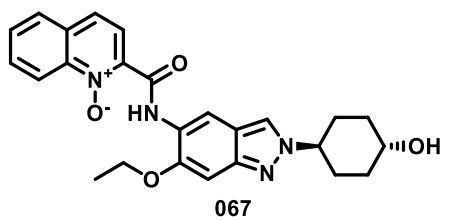
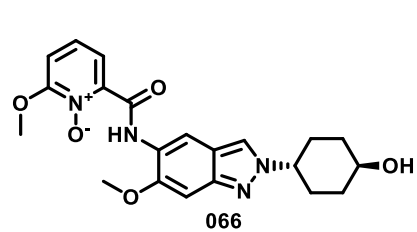
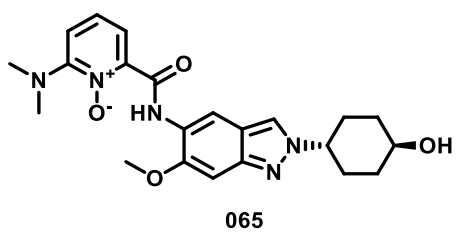
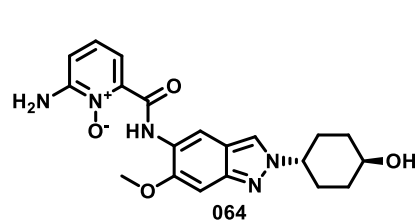
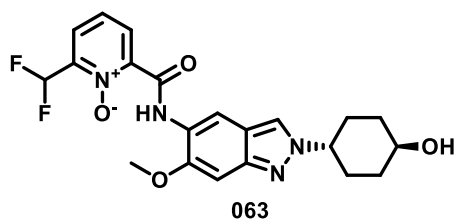
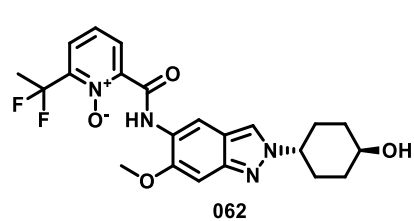
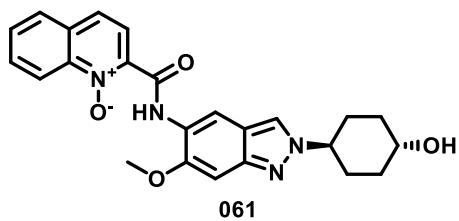
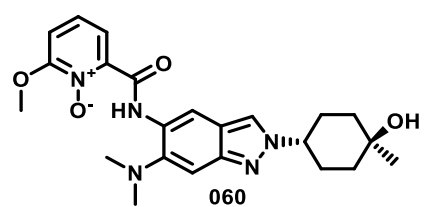
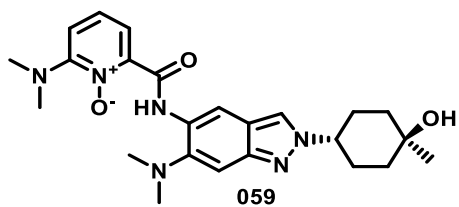


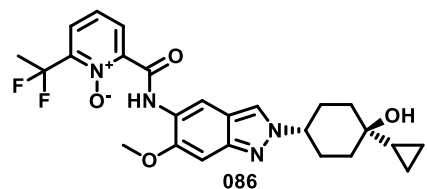
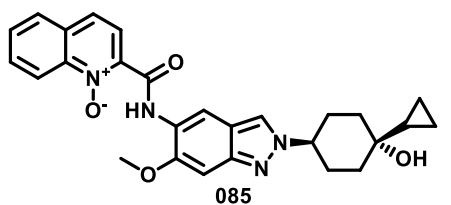
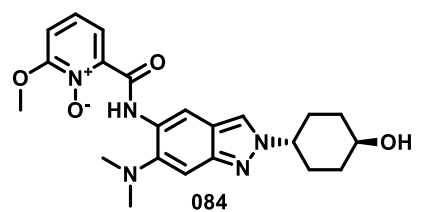
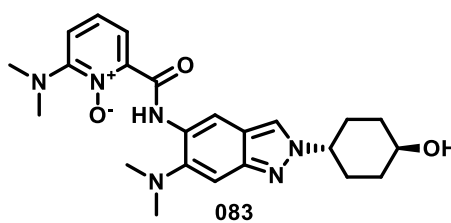
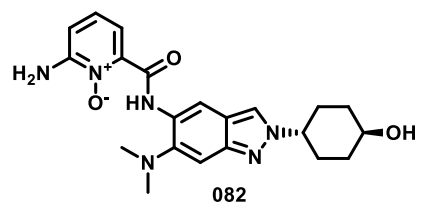
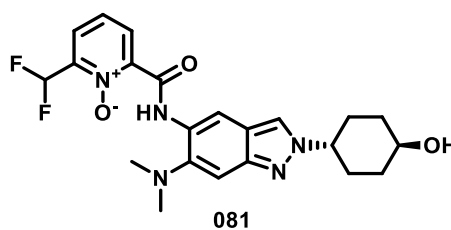
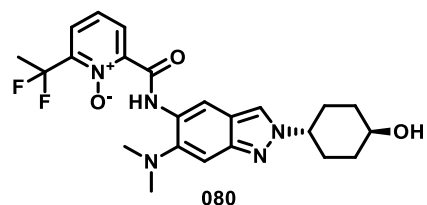
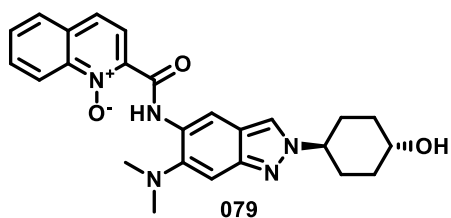
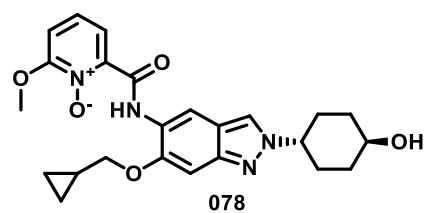
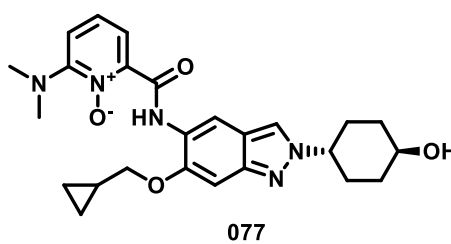
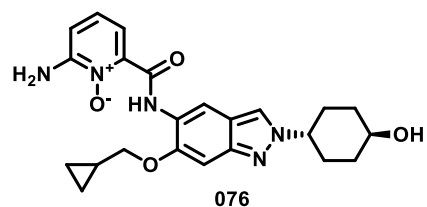
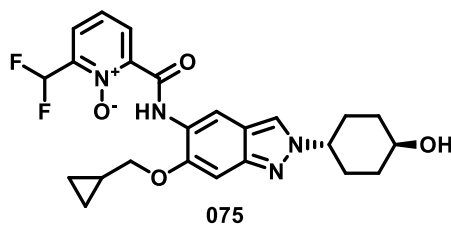
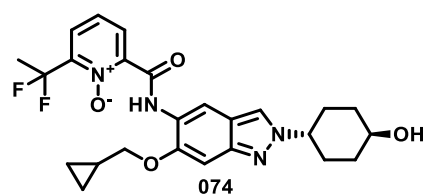
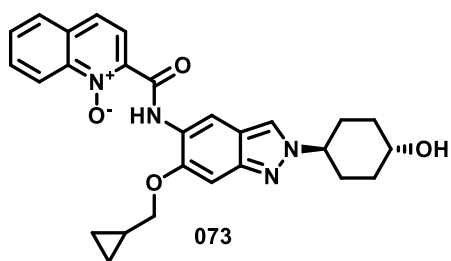
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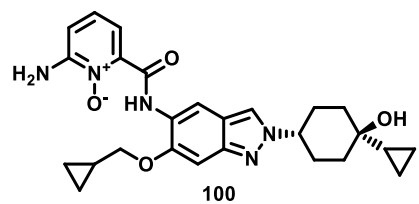
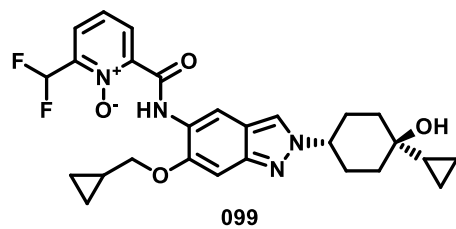
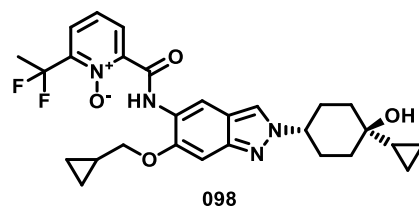
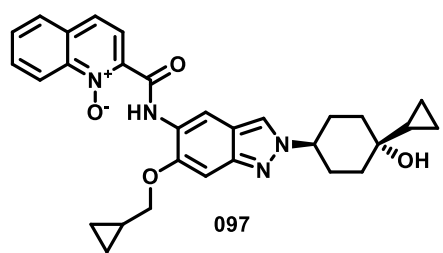
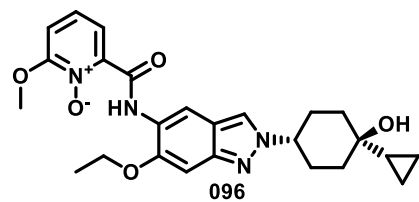
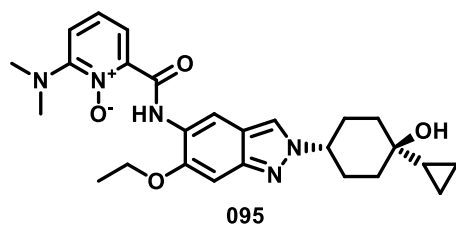
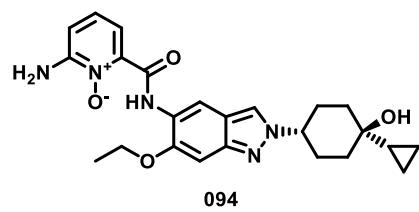
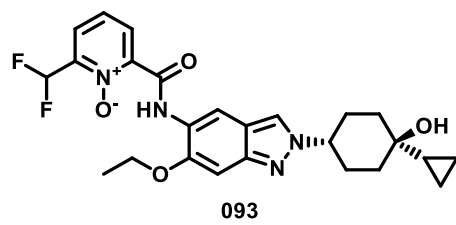
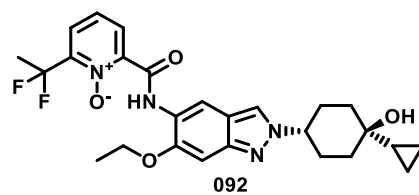
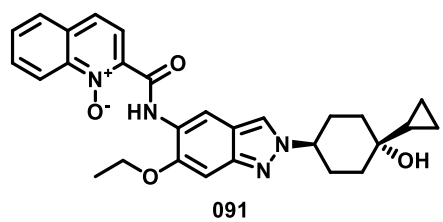
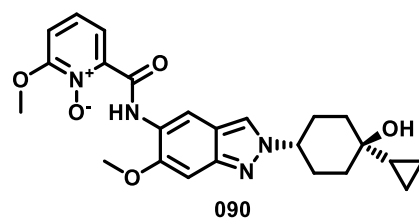
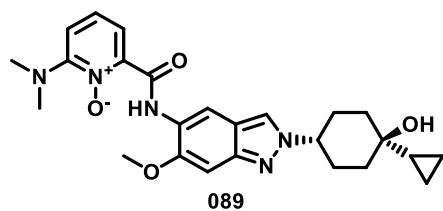
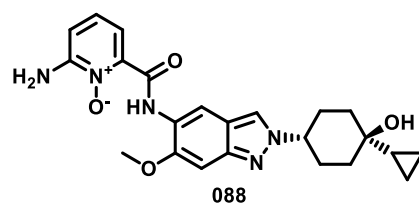
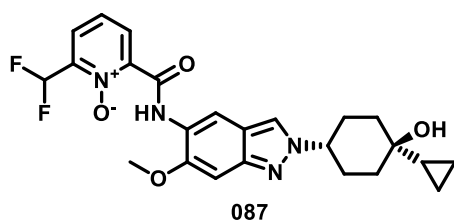


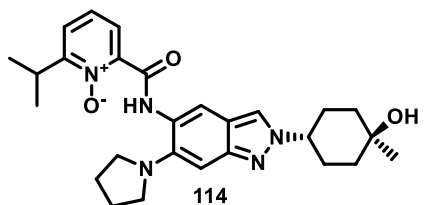
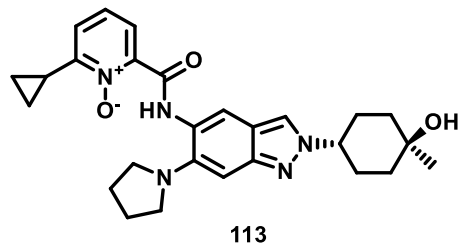
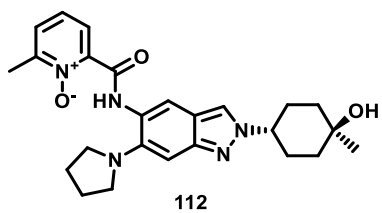
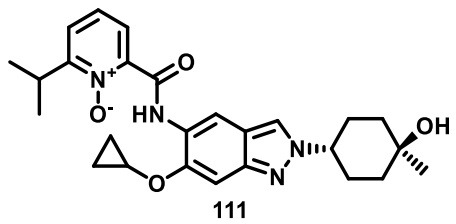
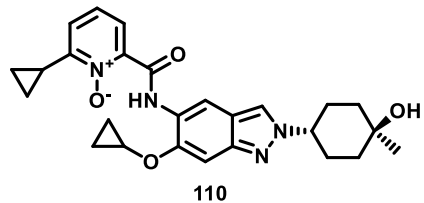
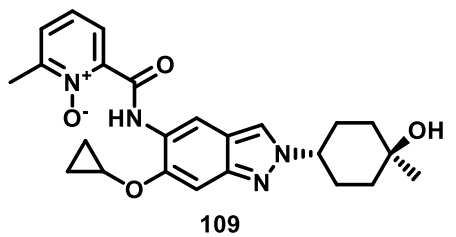
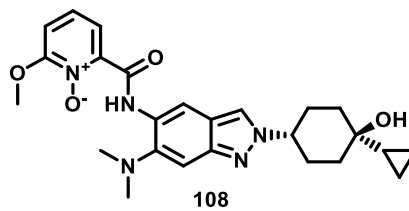
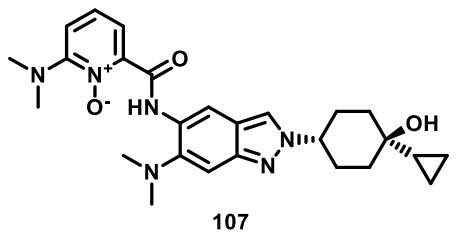
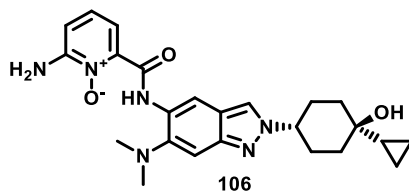
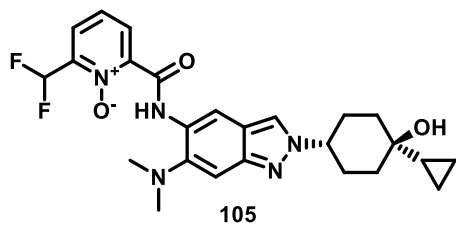
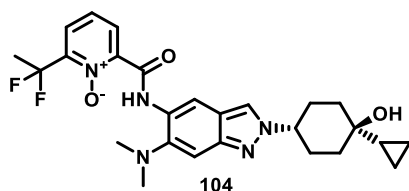
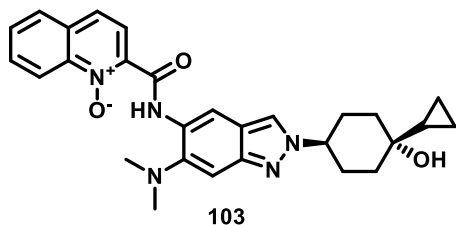
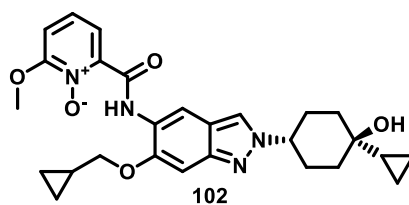
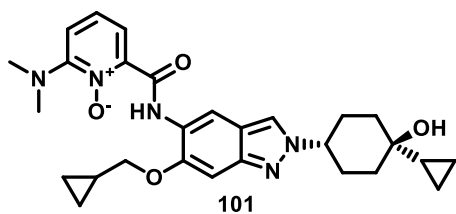


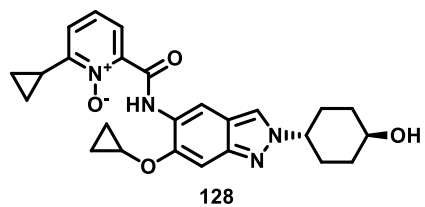
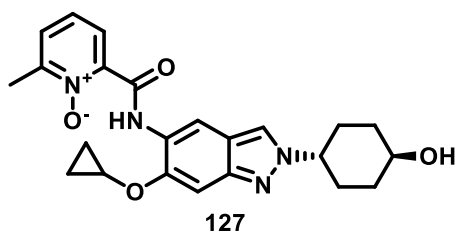
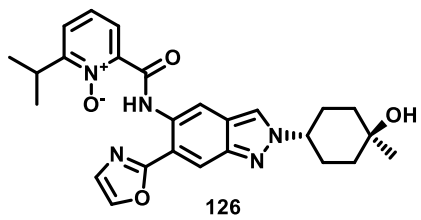
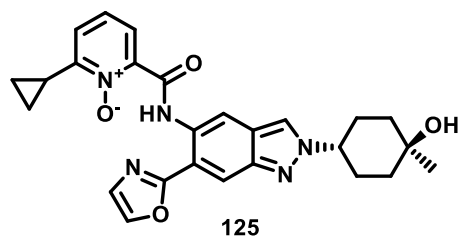
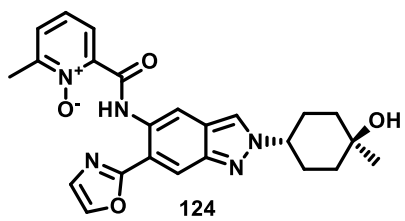
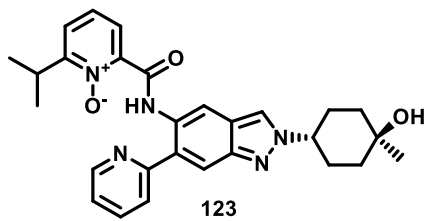
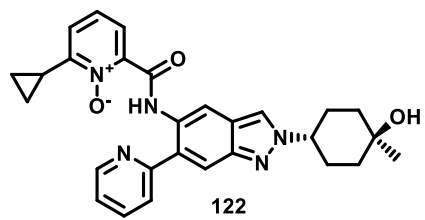
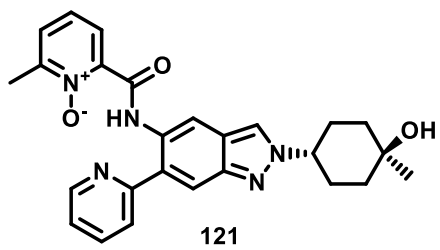
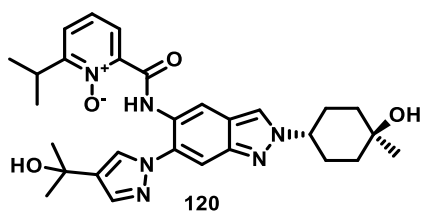
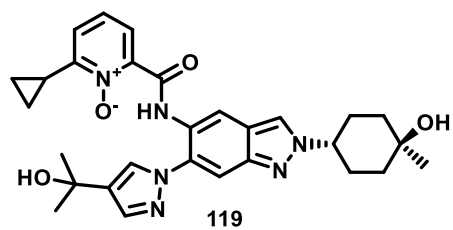
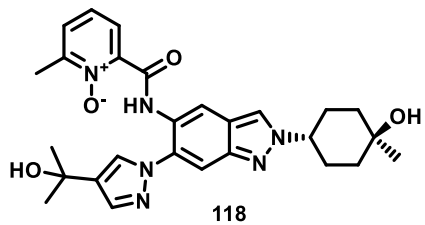
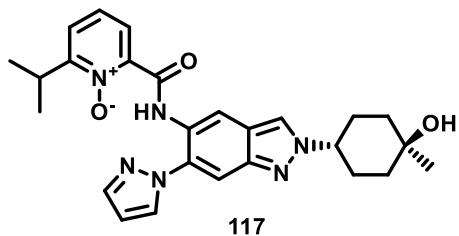
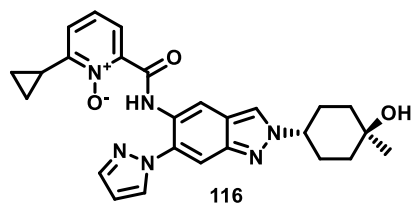
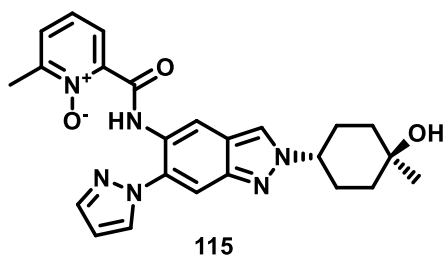


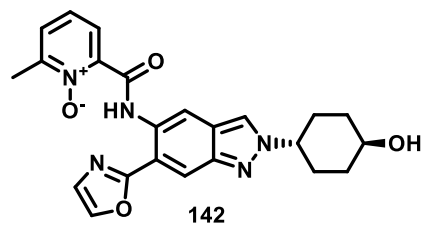
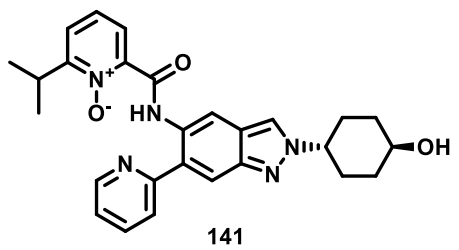
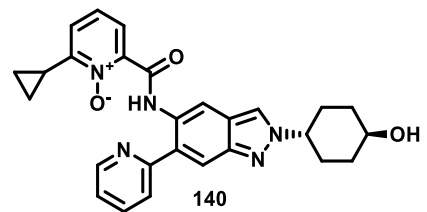
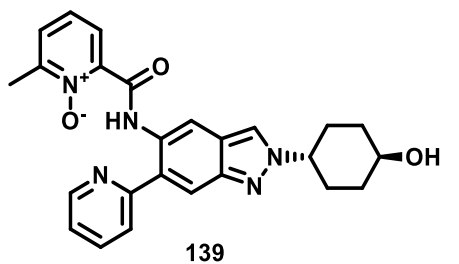
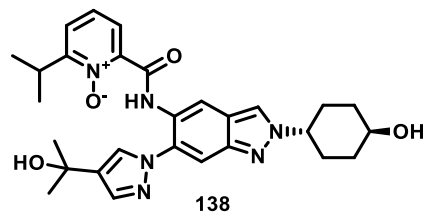
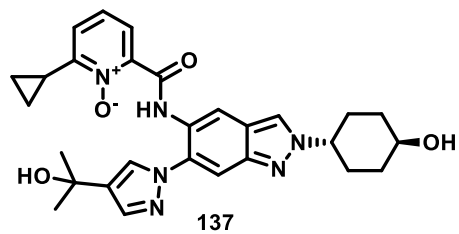
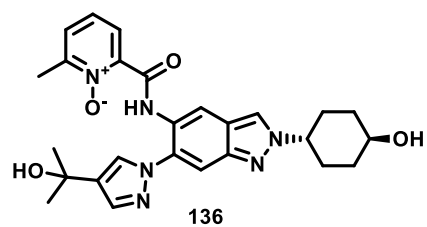
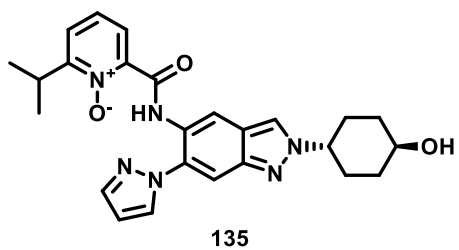
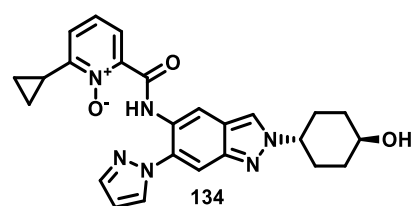
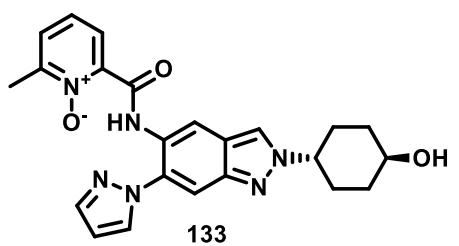
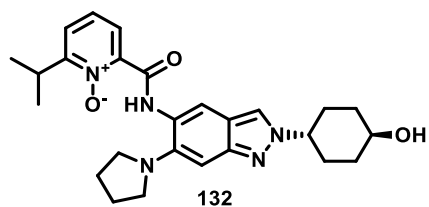
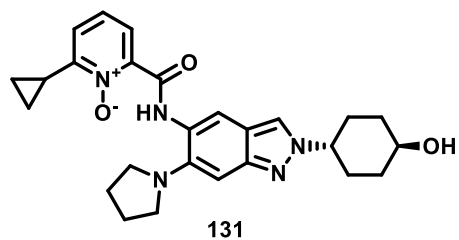
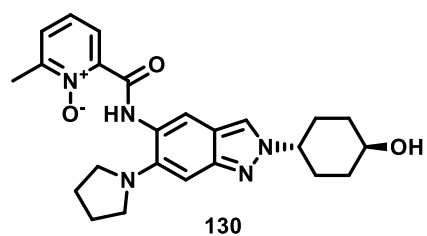
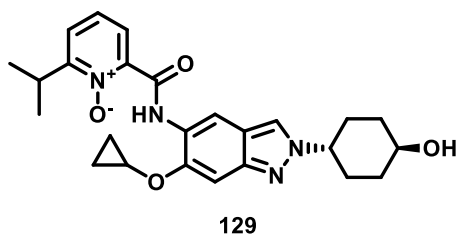


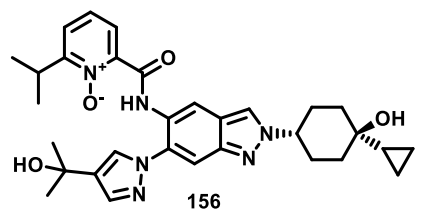
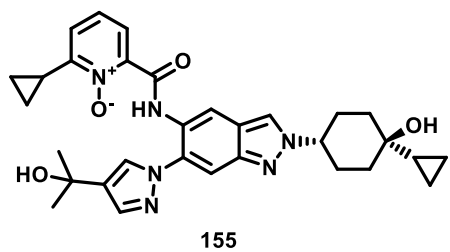
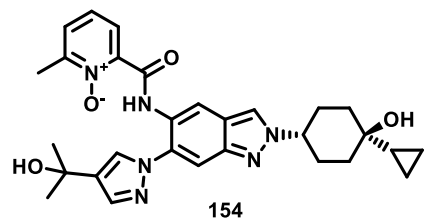
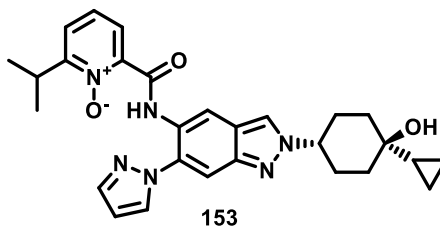
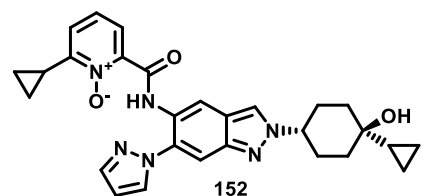
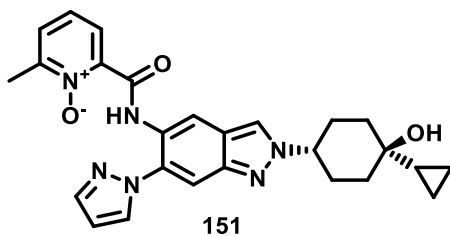
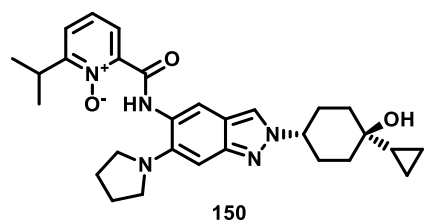
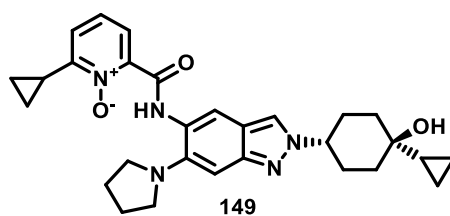
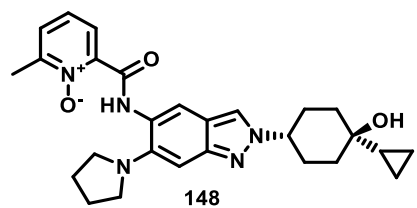
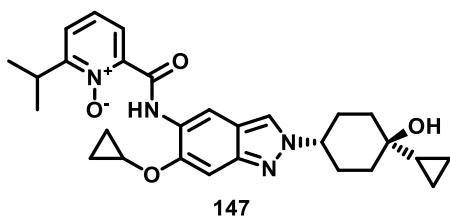
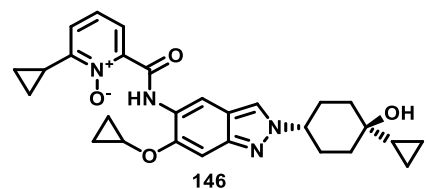
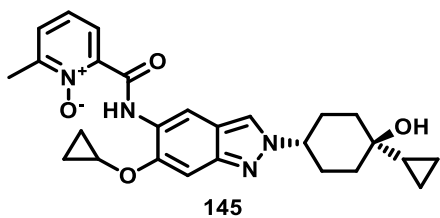
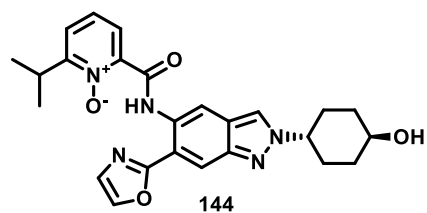
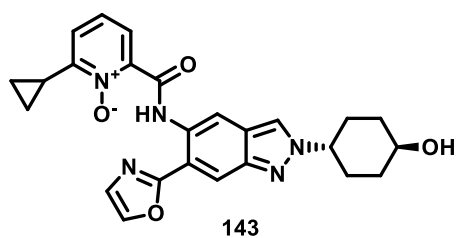


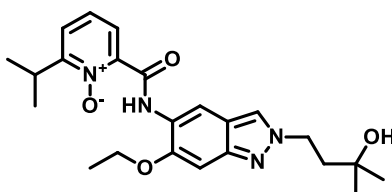
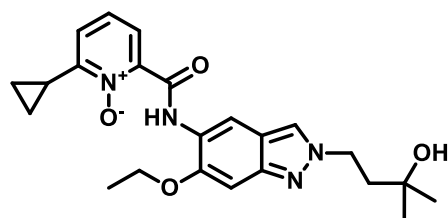
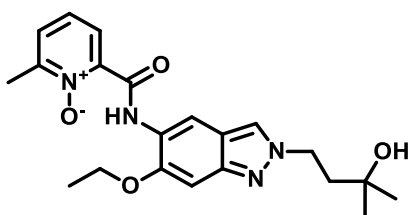
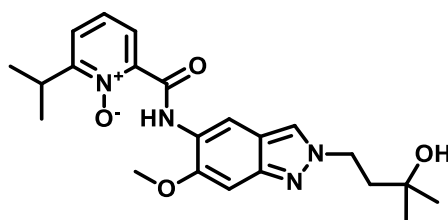
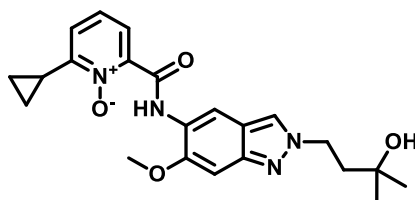
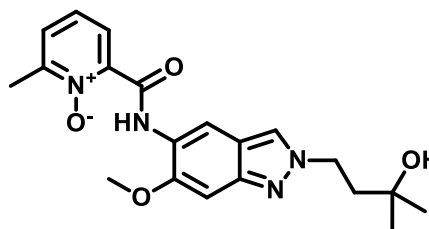
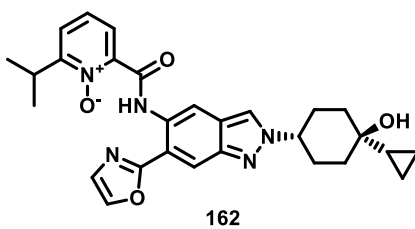
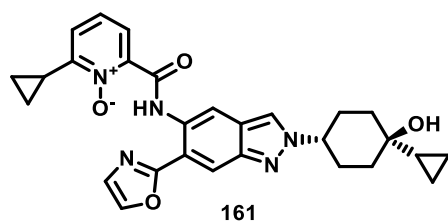
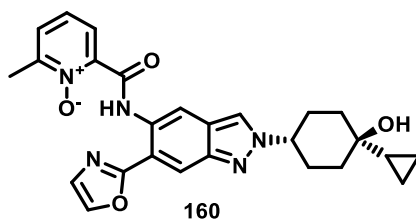
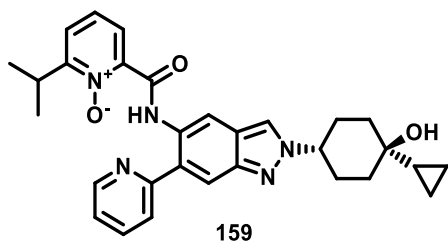
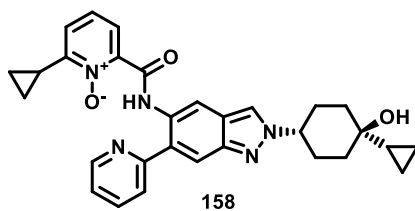
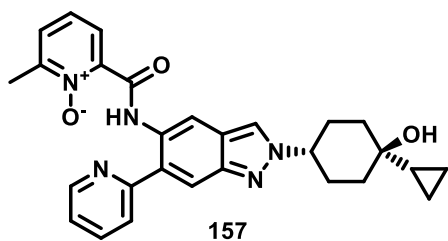


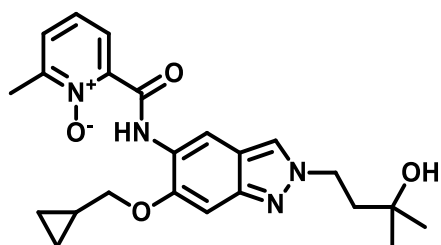




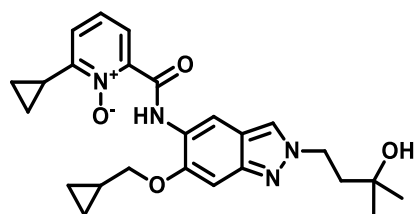




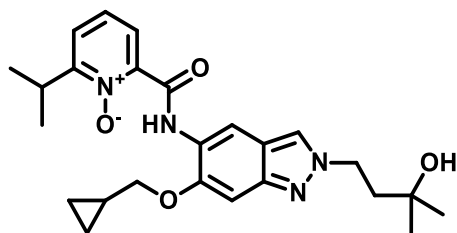




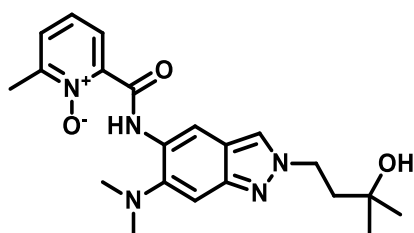
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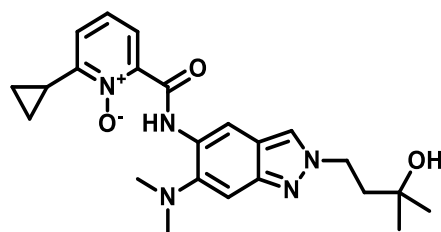
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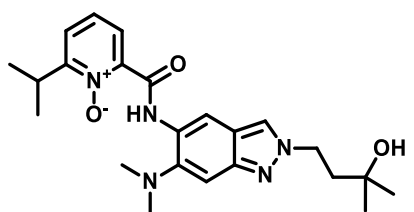
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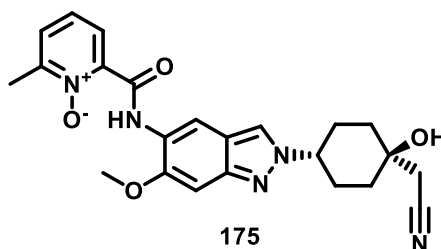
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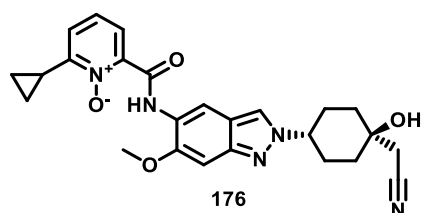
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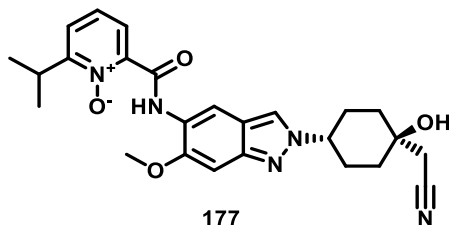
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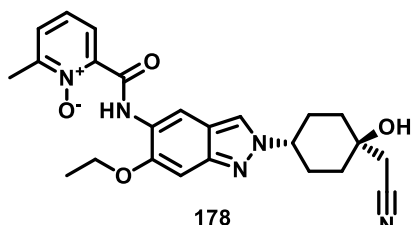
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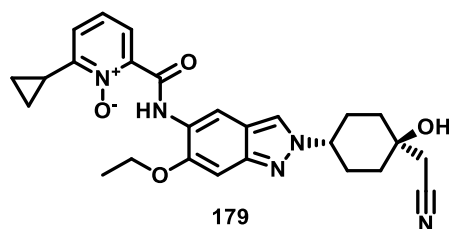
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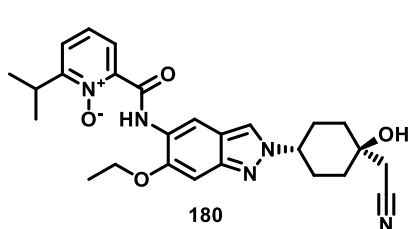
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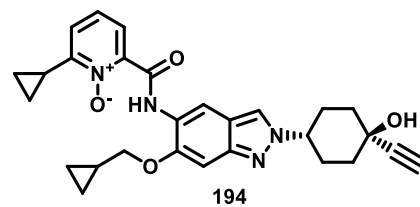
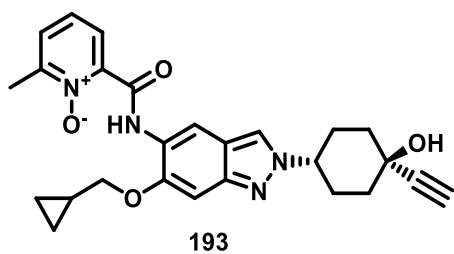
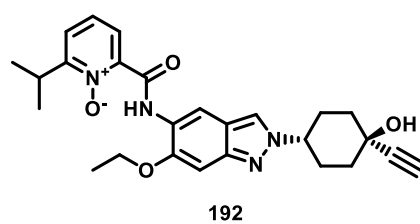
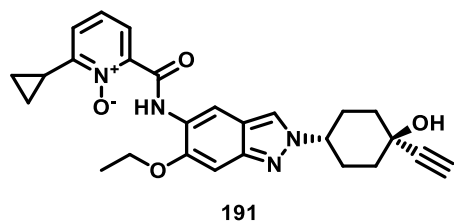
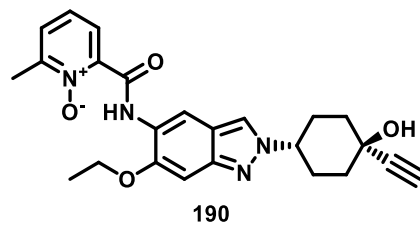
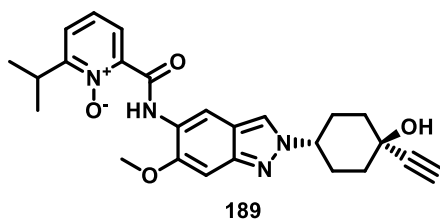
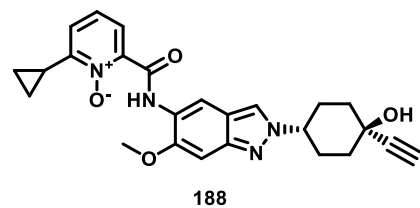
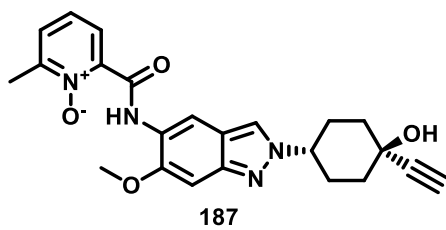
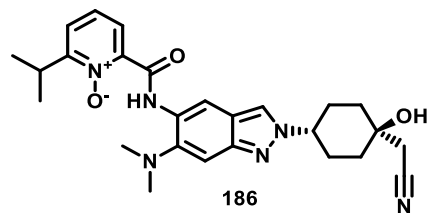
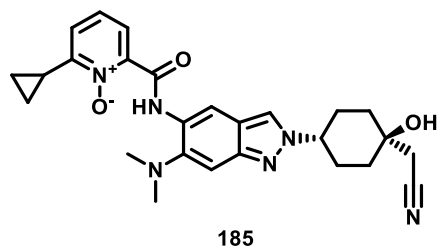
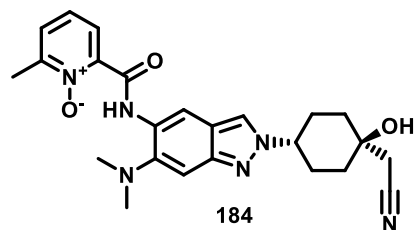
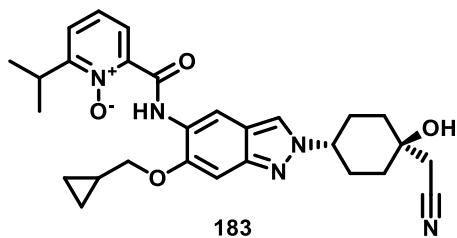
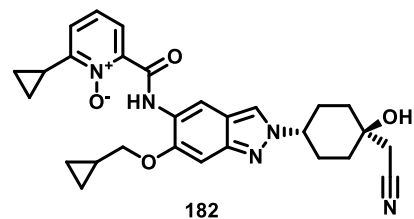
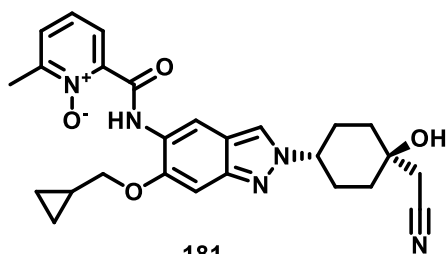
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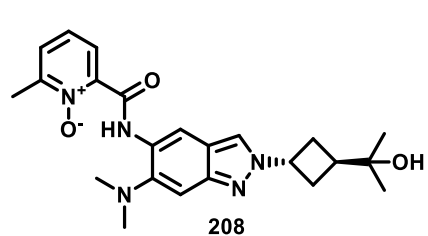
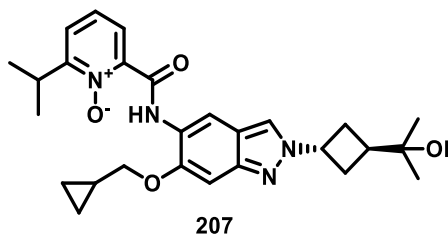
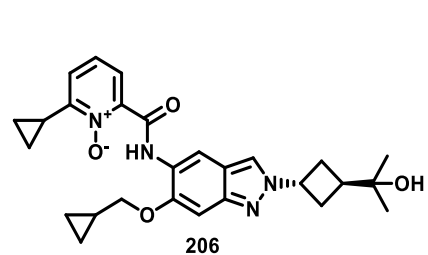
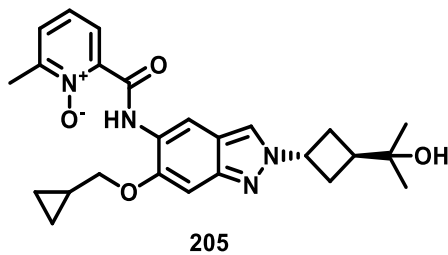
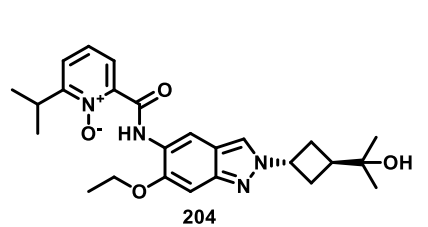
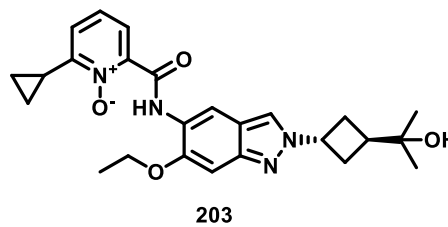
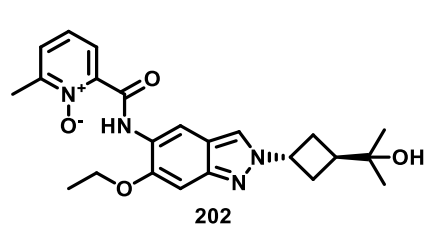
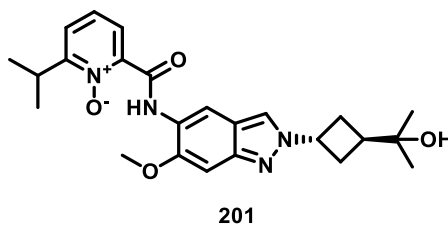
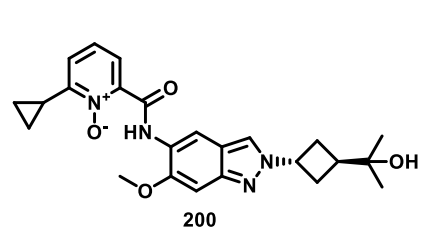
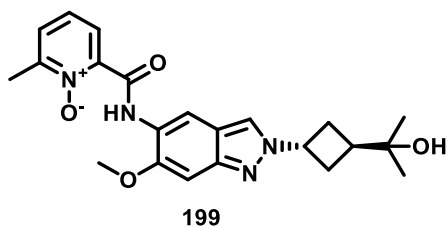
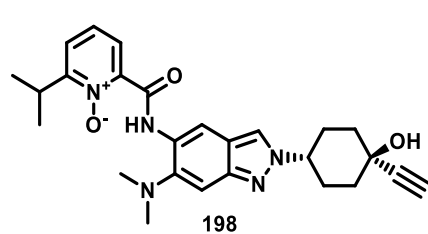
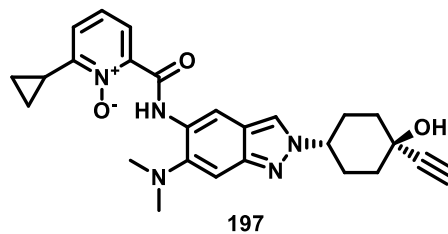
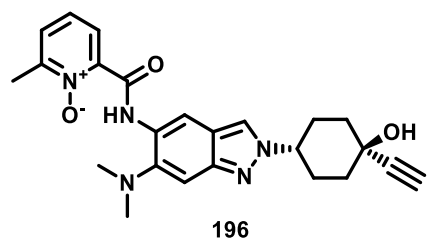
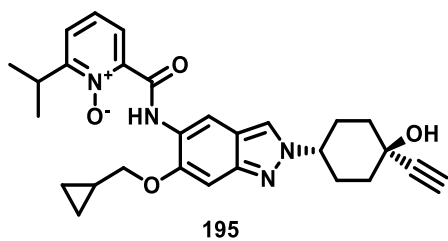


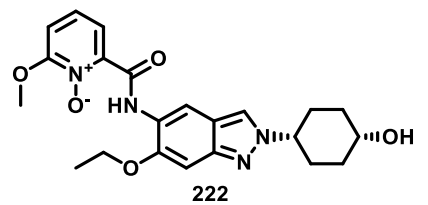
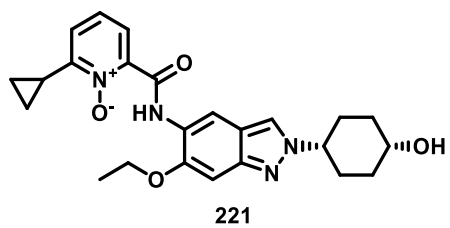
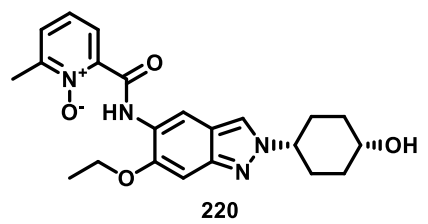
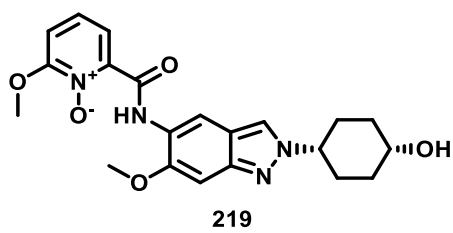
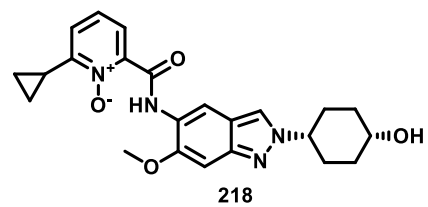
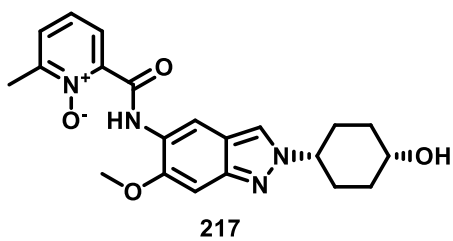
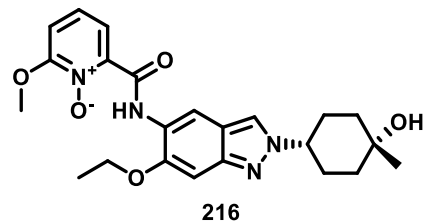
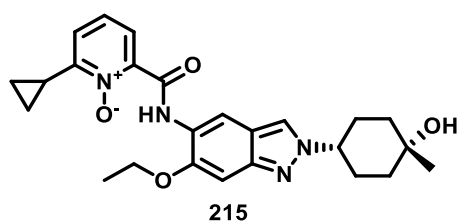
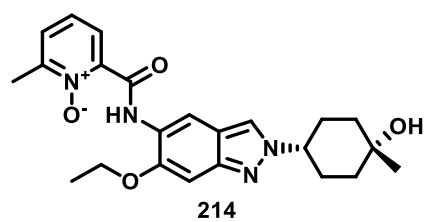
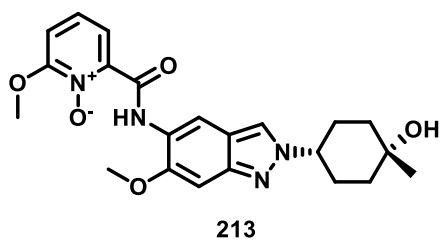
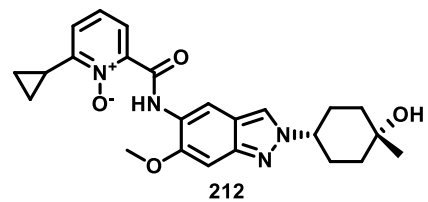
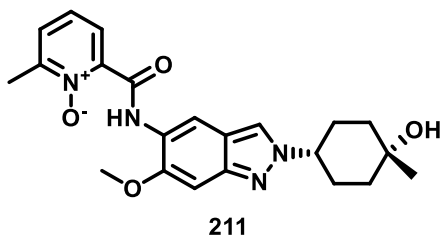
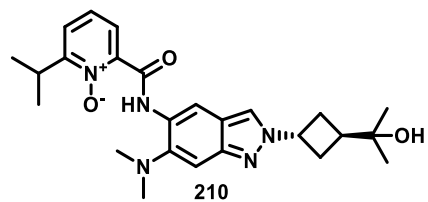
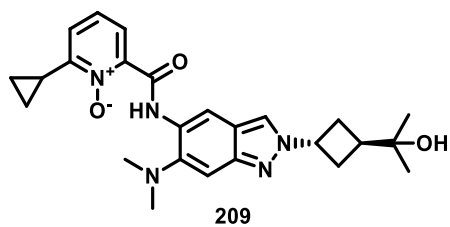
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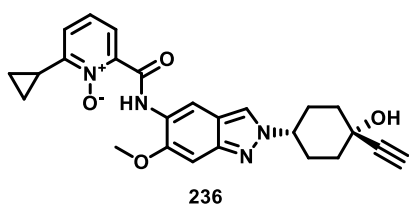
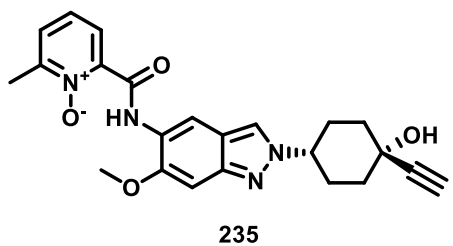
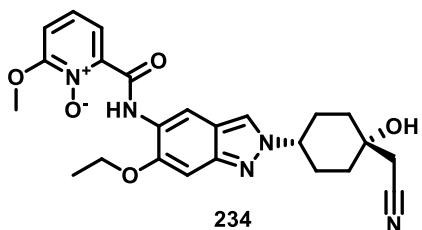
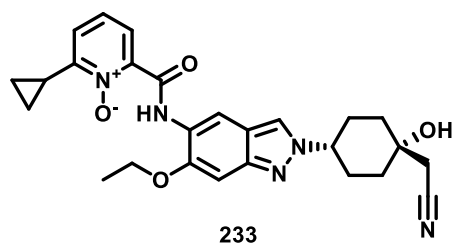
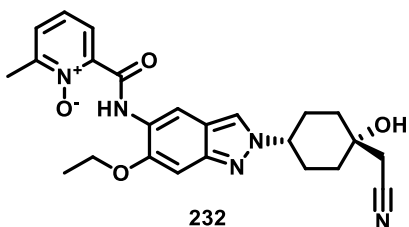
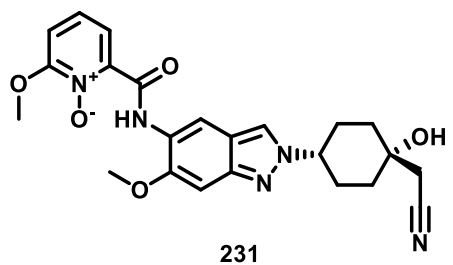
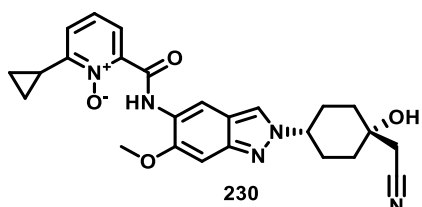
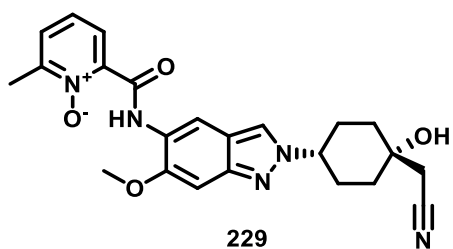
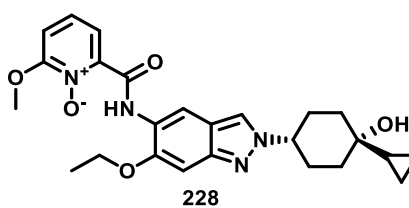
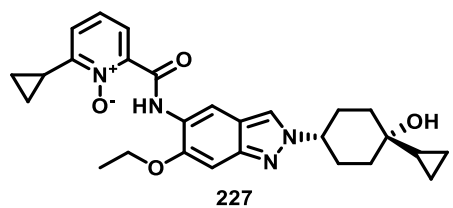
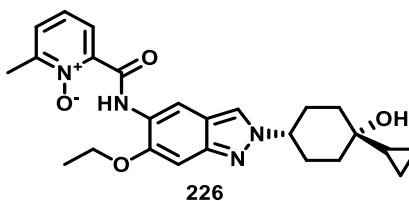
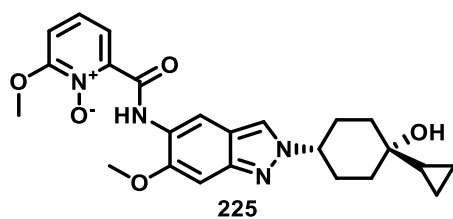
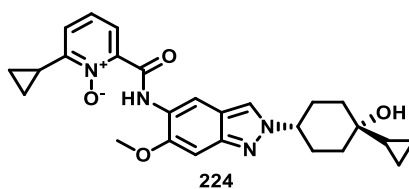
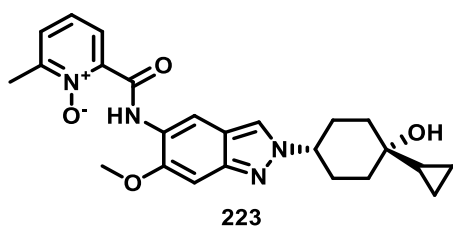


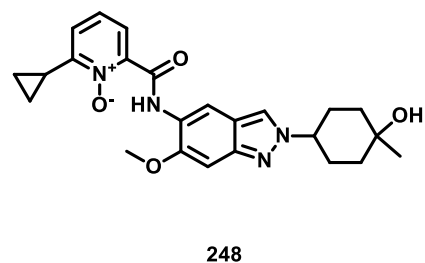
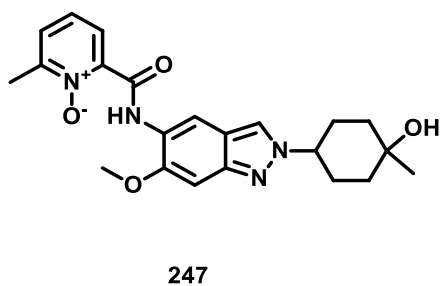
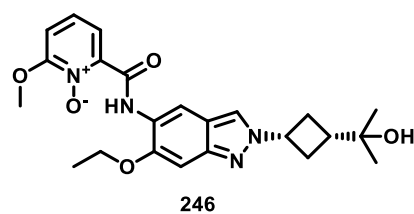
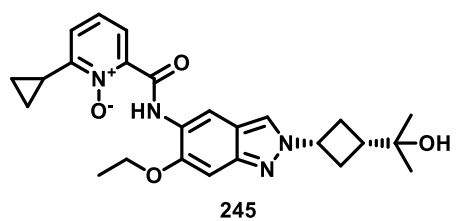
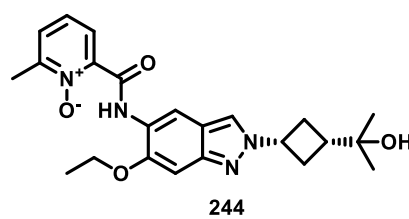
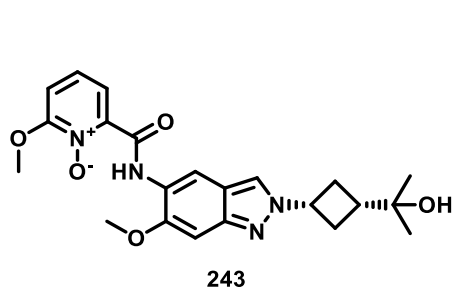
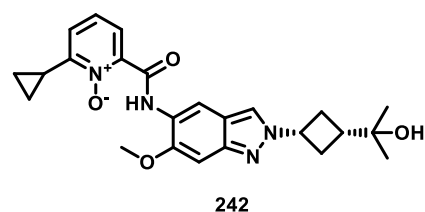
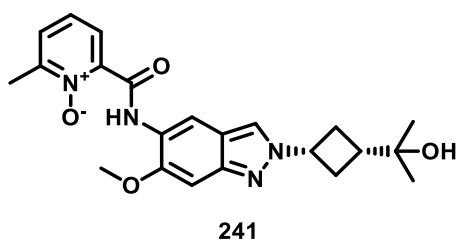
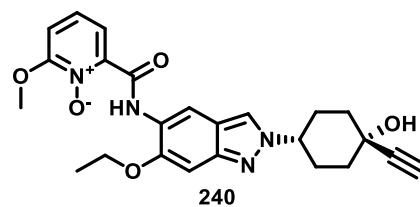
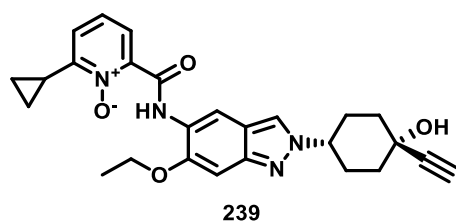
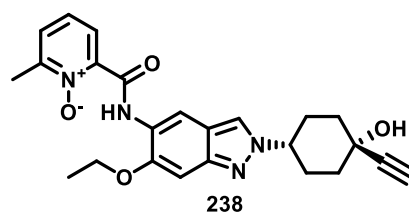
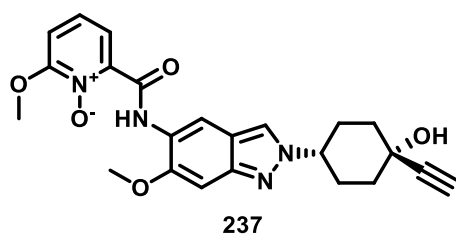
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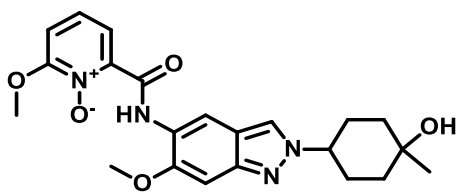




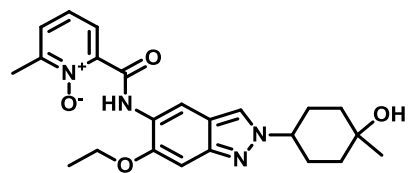




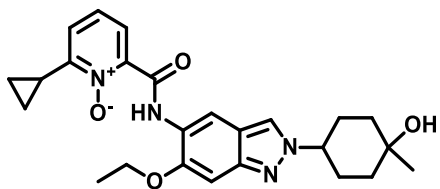




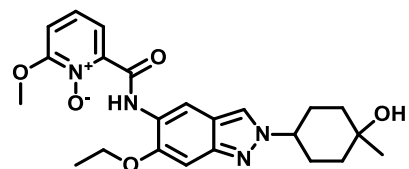
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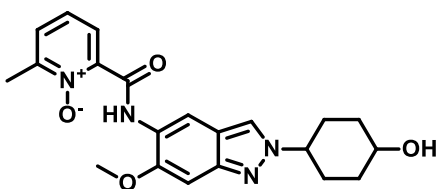
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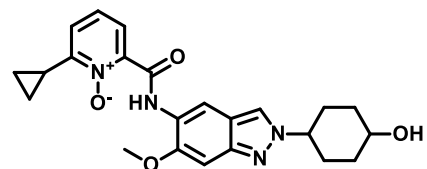
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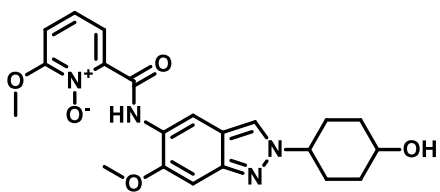
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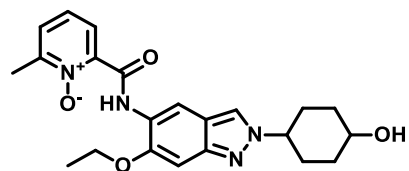
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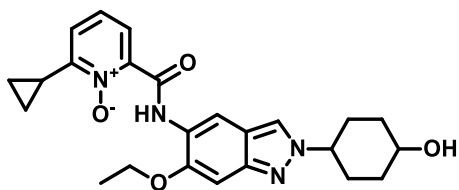
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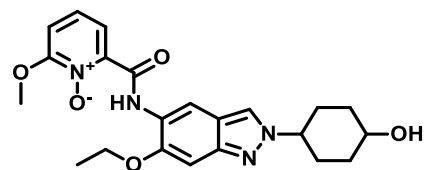
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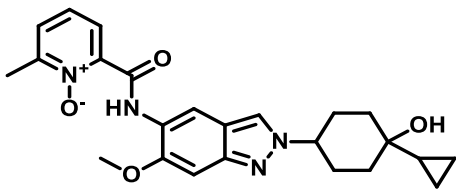
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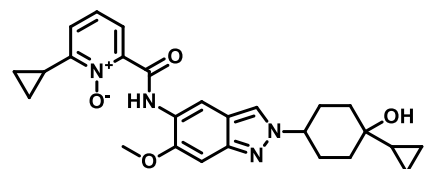
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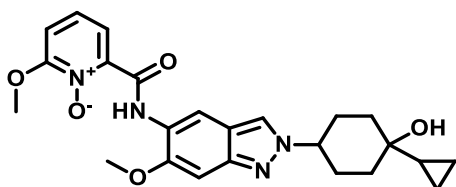
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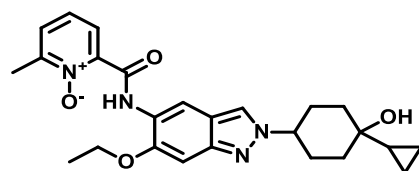
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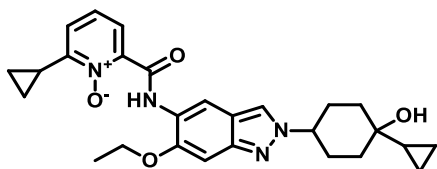
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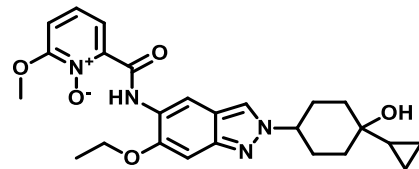
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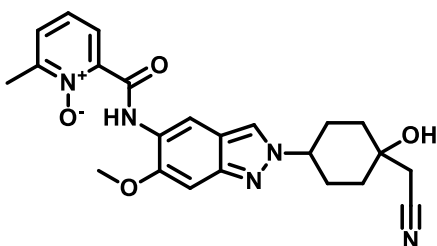
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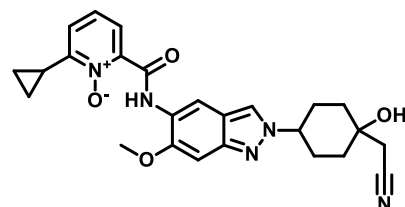
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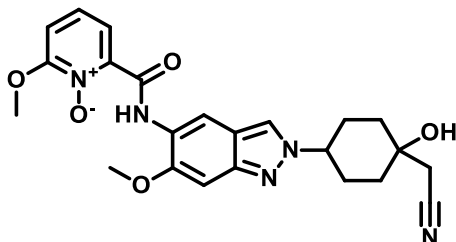
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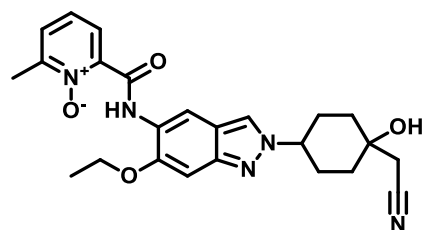
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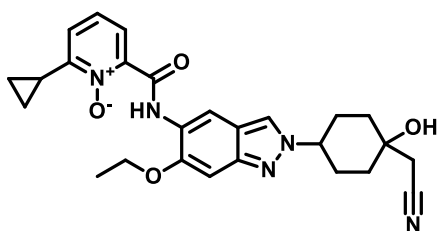
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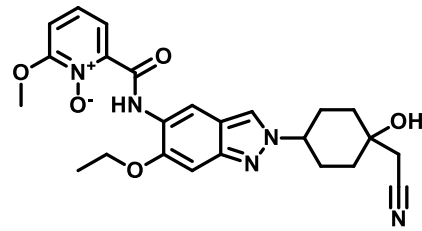
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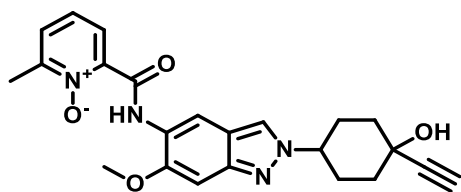
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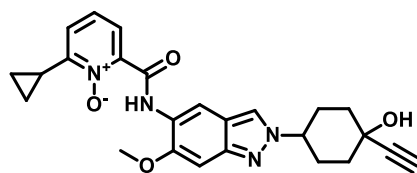
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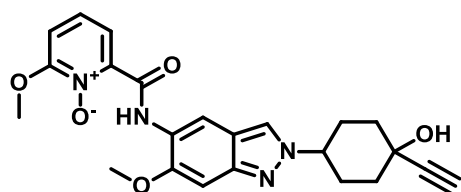
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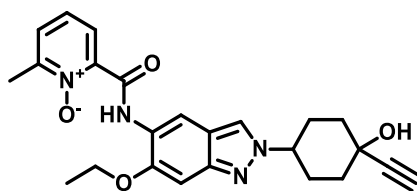
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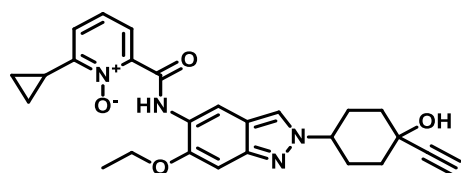
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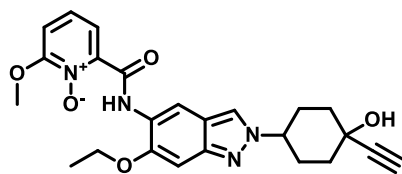
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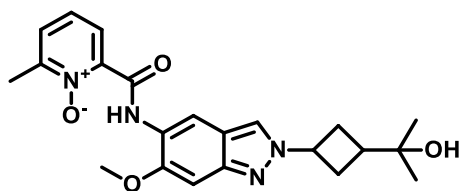
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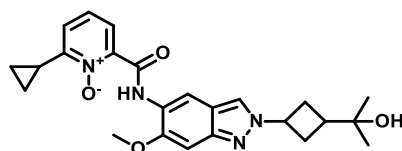
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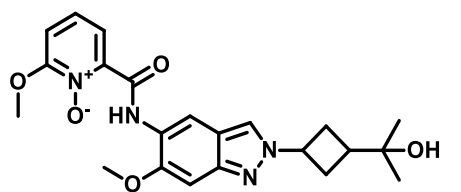
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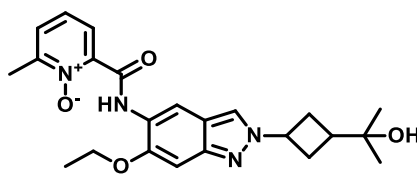
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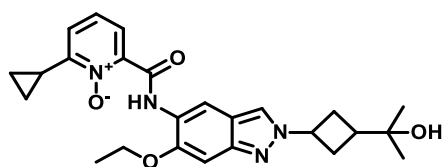
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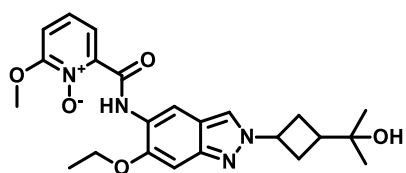
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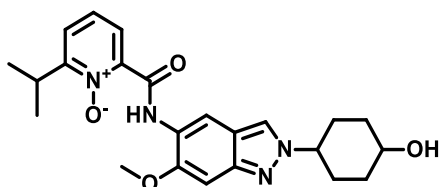
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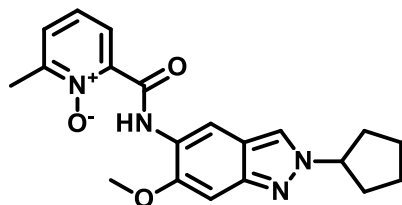
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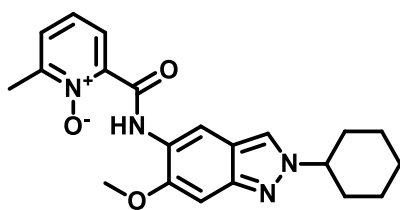
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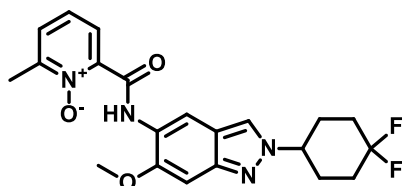
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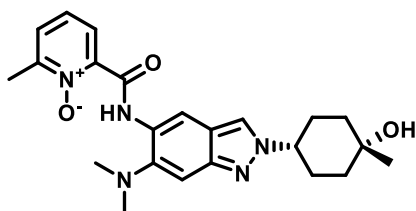
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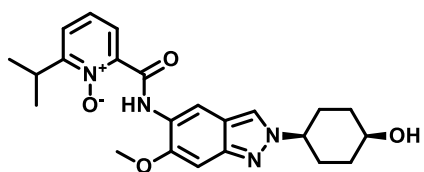
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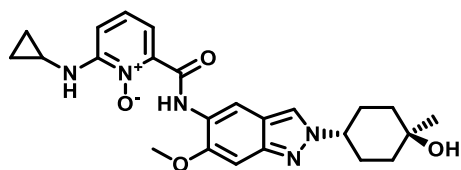
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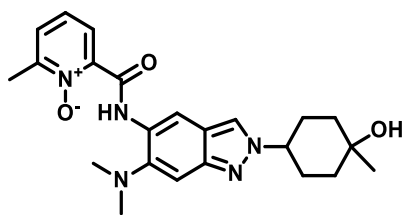
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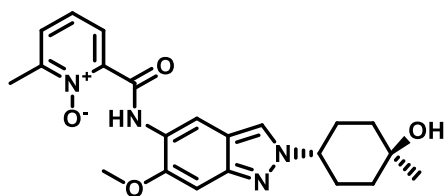
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o un estereoisómero, un racemato, un tautómero o una sal farmacéuticamente aceptable del mismo.

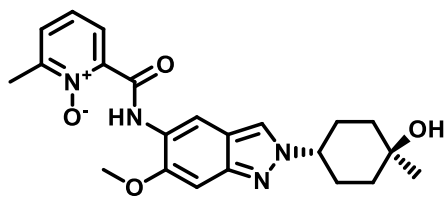
13. Un compuesto que es:



001

o un estereoisómero, un racemato o una sal farmacéuticamente aceptable del mismo.

14. El compuesto según la reivindicación 13, que es:



001

15. Una composición farmacéutica que comprende el compuesto según cualquiera de las reivindicaciones 1-14.

-/-