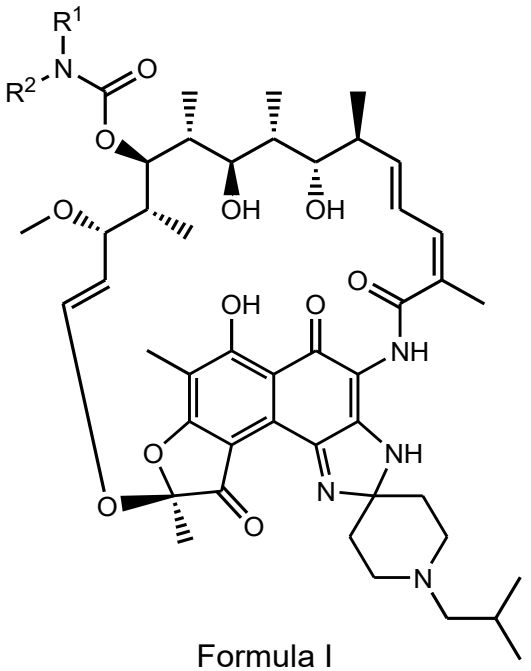
CLAIMS

1. A compound of Formula I or a pharmaceutically acceptable salt, tautomer, solvate, hydrate or enantiomer thereof:



Formula I

wherein:

R^1 and R^2 are each independently selected from -H, -C_1-C_6 alkyl, -C_3-C_{10} cycloalkyl, C_1-C_6 alkylene-C_3-C_{10} cycloalkyl, 3- to 15-membered heterocycloalkyl, -C_1-C_6 alkylene-(3- to 15-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_6 alkylene-C_6-C_{10} aryl, 5- to 10-membered heteroaryl, and -C_1-C_6 alkylene-(5- to 10-membered heteroaryl), wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted with one or more R^3; or

R^1 and R^2, together with the nitrogen atom to which they are attached, combine to form a 5- to 15-membered heterocycloalkyl, wherein said heterocycloalkyl is optionally substituted with one or more R^4;

R^3 is independently, at each occurrence, -OH, halogen, -CN, -C_1-C_6 alkoxy, -C_1-C_6 alkyl, -C_3-C_{10} cycloalkyl, -C_1-C_6 alkylene-C_3-C_{10} cycloalkyl, 3- to 15-membered heterocycloalkyl, -C_1-C_6 alkylene-(3- to 15-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_6 alkylene-C_6-C_{10} aryl, 5- to 10-membered heteroaryl, or -C_1-C_6 alkylene-(5- to 10-membered heteroaryl); wherein each cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted with one or more -OH, halogen, or C_1-C_6 alkyl;

R^4 is independently, at each occurrence, -C_1-C_6 alkyl, -OR^5, -C_1-C_6 alkylene-OR^5, -

NR^6R^7, -C_1-C_6 alkylene-NR^6R^7, -C_3-C_{10} cycloalkyl, -C_1-C_6 alkylene-C_3-C_{10} cycloalkyl, 3- to 15-membered heterocycloalkyl, -C_1-C_6 alkylene-(3- to 15-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_6 alkylene-C_6-C_{10} aryl, 5- to 10-membered heteroaryl, or -C_1-C_6 alkylene-(5- to 10-membered heteroaryl), wherein each alkylene is optionally substituted with one or more oxo, and wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl is optionally substituted with one or more R^8;

R^5 is independently, at each occurrence, -H, -C_1-C_6 alkyl, or -C_1-C_6 alkylene-OH;

R^6 and R^7 are each independently, at each occurrence, -H, -C_1-C_6 alkyl, -C_3-C_{10} cycloalkyl, 3- to 15-membered heterocycloalkyl, C_6-C_{10} aryl, or 5- to 10-membered heteroaryl; and

R^8 is independently, at each occurrence, -OH, halogen, or -C_1-C_6 alkyl.

2. The compound of claim 1, wherein R^1 and R^2 are each independently selected from -H, -C_1-C_4 alkyl, -C_3-C_{10} cycloalkyl, C_1-C_4 alkylene-C_3-C_{10} cycloalkyl, -5- to 15-membered heterocycloalkyl, and -C_1-C_4 alkylene-(5- to 15-membered heterocycloalkyl), wherein each alkyl, cycloalkyl, or heterocycloalkyl is optionally substituted with one or more R^3; or

R^1 and R^2, together with the nitrogen atom to which they are attached, combine to form a 5- to 15-membered heterocycloalkyl, wherein said heterocycloalkyl is optionally substituted with one or more R^4;

R^3 is independently, at each occurrence, -OH, halogen, -C_1-C_4 alkyl, -C_3-C_{10} cycloalkyl, -C_1-C_4 alkylene-C_3-C_{10} cycloalkyl, 5- to 15-membered heterocycloalkyl, -C_1-C_4 alkylene-(5- to 15-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_4 alkylene-C_6-C_{10} aryl, 5- to 10-membered heteroaryl, or -C_1-C_4alkylene-(5- to 10-membered heteroaryl); wherein each cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted with one or more -OH, halogen, or C_1-C_4 alkyl;

R^4 is independently, at each occurrence, -C_1-C_6 alkyl, -OR^5, -C_1-C_4 alkylene-OR^5, -NR^6R^7, -C_1-C_4 alkylene-NR^6R^7, -C_3-C_{10} cycloalkyl, -C_1-C_4 alkylene-C_3-C_{10} cycloalkyl, 5- to 15-membered heterocycloalkyl, -C_1-C_4 alkylene-(5- to 15-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_4 alkylene-C_6-C_{10} aryl, 5- to 10-membered heteroaryl, or -C_1-C_4 alkylene-(5- to 10-membered heteroaryl), wherein each alkylene is optionally substituted with one or more oxo; and wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl is optionally substituted with one or more R^8;

R^5 is independently, at each occurrence, -H, -C_1-C_4 alkyl, or -C_1-C_4 alkylene-OH;

R^6 and R^7 are each independently, at each occurrence, -H, -C_1-C_4 alkyl, -C_3-C_{10} cycloalkyl, 5- to 10-membered heterocycloalkyl, C_6-C_{10} aryl, or 5- to 10-membered heteroaryl; and

R^8 is independently, at each occurrence, -OH, halogen, or -C_1-C_4 alkyl.

3. The compound of claim 1 or 2, wherein R^1 and R^2 are each independently selected from -H, -5- to 15-membered heterocycloalkyl, and -C_1-C_4 alkylene-(5- to 15-membered heterocycloalkyl), wherein each heterocycloalkyl is optionally substituted with one or more R^3; or

R^1 and R^2, together with the nitrogen atom to which they are attached, combine to form a 5- to 15-membered heterocycloalkyl, wherein said heterocycloalkyl is optionally substituted with one or more R^4;

R^3 is independently, at each occurrence, -OH, halogen, -C_1-C_4 alkyl, -C_3-C_{10} cycloalkyl, -C_1-C_4 alkylene-C_3-C_{10} cycloalkyl, 5- to 15-membered heterocycloalkyl, -C_1-C_4 alkylene-(5- to 15-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_4 alkylene-C_6-C_{10} aryl, 5- to 10-membered heteroaryl, or -C_1-C_4 alkylene-(5- to 10-membered heteroaryl); wherein each cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted with one or more -OH, halogen, or C_1-C_4 alkyl;

R^4 is independently, at each occurrence, -C_1-C_6 alkyl, -OR^5, -C_1-C_4 alkylene-OR^5, -NR^6R^7, -C_1-C_4 alkylene-NR^6R^7, -C_3-C_{10} cycloalkyl, -C_1-C_4 alkylene-C_3-C_{10} cycloalkyl, 5- to 15-membered heterocycloalkyl, -C_1-C_4 alkylene-(5- to 15-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_4 alkylene-C_6-C_{10} aryl, 5- to 10-membered heteroaryl, or -C_1-C_4 alkylene-(5- to 10-membered heteroaryl), wherein each alkylene is optionally substituted with one or more oxo; and wherein each alkyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl is optionally substituted with one or more R^8;

R^5 is independently, at each occurrence, -H, -C_1-C_4 alkyl, or -C_1-C_4 alkylene-OH;

R^6 and R^7 are each independently, at each occurrence, -H, -C_1-C_4 alkyl, -C_3-C_{10} cycloalkyl, 5- to 6-membered heterocycloalkyl, C_6-C_{10} aryl, or 5- to 10-membered heteroaryl; and

R^8 is independently, at each occurrence, halogen or -C_1-C_4 alkyl.

4. The compound of any of claims 1 to 3, wherein R^1 and R^2 are each independently selected from -H, -C_1-C_6 alkyl, -C_3-C_6 cycloalkyl, C_1-C_6 alkylene-C_3-C_6 cycloalkyl, -5- to 6-

membered heterocycloalkyl, -C_1-C_6 alkylene-(5- to 6-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_6 alkylene-C_6-C_{10} aryl, 5- to 6-membered heteroaryl, or -C_1-C_6 alkylene-(5- to 6-membered heteroaryl), wherein each cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted with one or more R^3.

5. The compound of any of claims 1 to 4, wherein R^1 and R^2 are each independently selected from -H, -5- to 12-membered heterocycloalkyl, and -C_1-C_4 alkylene-(5- to 12-membered heterocycloalkyl), wherein each heterocycloalkyl is optionally substituted with one or more R^3; and

R^3 is independently, at each occurrence, -C_1-C_4 alkyl, -C_3-C_{10} cycloalkyl, -C_1-C_4 alkylene-C_3-C_{10} cycloalkyl, 5- to 12-membered heterocycloalkyl, -C_1-C_4 alkylene-(5- to 12-membered heterocycloalkyl), -C_6-C_{10} aryl, -C_1-C_4 alkylene-C_6-C_{10} aryl, 5- to 10-membered heteroaryl, or -C_1-C_4 alkylene-(5- to 10-membered heteroaryl); wherein each cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted with one or more C_1-C_4 alkyl.

6. The compound of any of claims 1 to 5, wherein R^1 is -H;

R^2 is independently selected from -5- to 6-membered heterocycloalkyl and -C_1-C_2 alkylene-(5- to 6-membered heterocycloalkyl), wherein each heterocycloalkyl is optionally substituted with one or more R^3; and

R^3 is independently, at each occurrence, -C_1-C_4 alkyl, -C_3-C_6 cycloalkyl, -C_1-C_2 alkylene-C_3-C_6 cycloalkyl, 5- to 6-membered heterocycloalkyl, -C_1-C_2 alkylene-(5- to 6-membered heterocycloalkyl), -C_6- aryl, -C_1-C_2 alkylene-C_6 aryl, 5- to 6-membered heteroaryl, or -C_1-C_2 alkylene-(5- to 6-membered heteroaryl); wherein each cycloalkyl, heterocycloalkyl, aryl, or heteroaryl is optionally substituted with one or more C_1-C_2 alkyl.

7. The compound of any of claims 1 to 3, wherein R^1 and R^2, together with the nitrogen atom to which they are attached, combine to form a 5- to 15-membered heterocycloalkyl, wherein said heterocycloalkyl is optionally substituted with one or more R^4.

8. The compound of any of claims 1 to 3 or 7, wherein R^1 and R^2, together with the nitrogen atom to which they are attached, combine to form a 5- to 12-membered heterocycloalkyl, wherein said heterocycloalkyl is optionally substituted with one or more R^4;

R^4 is independently, at each occurrence, -C_1-C_6 alkyl, -OR^5, -C_1-C_4 alkylene-OR^5, -

NR^6R^7, -C_1-C_4 alkylene-NR^6R^7, -C_5-C_{10} cycloalkyl, -C_1-C_4 alkylene-C_5-C_{10} cycloalkyl, 5- to 12-membered heterocycloalkyl, -C_1-C_4 alkylene-(5- to 12-membered heterocycloalkyl), phenyl, -C_1-C_4 alkylene-phenyl, 5- to 10-membered heteroaryl, or -C_1-C_4 alkylene-(5- to 10-membered heteroaryl), wherein each alkylene is optionally substituted with one or more oxo; and wherein each alkyl, cycloalkyl, heterocycloalkyl, phenyl or heteroaryl is optionally substituted with one or more R^8;

R^5 is independently, at each occurrence, -H, -C_1-C_4 alkyl, or -C_1-C_4 alkylene-OH;

R^6 and R^7 are each independently, at each occurrence, -H, -C_1-C_4 alkyl, -C_5-C_6 cycloalkyl, 5- to 6-membered heterocycloalkyl, phenyl, or 5- to 6-membered heteroaryl; and

R^8 is independently, at each occurrence, halogen or -C_1-C_4 alkyl.

9. The compound of any of claims 1 to 3 or 7 to 8, wherein R^1 and R^2, together with the nitrogen atom to which they are attached, combine to form a 6- to 7-membered heterocycloalkyl, wherein said heterocycloalkyl is optionally substituted with one or more R^4;

R^4 is independently, at each occurrence, -C_1-C_6 alkyl, -OR^5, -C_1-C_4 alkylene-OR^5, -NR^6R^7, -C_1-C_4 alkylene-NR^6R^7, -C_5-C_6 cycloalkyl, -C_1-C_4 alkylene-C_5-C_6 cycloalkyl, 5- to 6-membered heterocycloalkyl, -C_1-C_4 alkylene-(5- to 6-membered heterocycloalkyl), phenyl, -C_1-C_4 alkylene-phenyl, 5- to 6-membered heteroaryl, or -C_1-C_4 alkylene-(5- to 6-membered heteroaryl), wherein each alkylene is optionally substituted with one or more oxo; and wherein each alkyl, cycloalkyl, heterocycloalkyl, phenyl or heteroaryl is optionally substituted with one or more R^8;

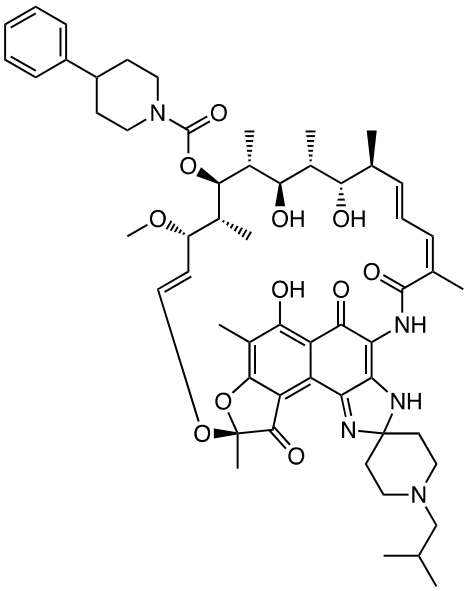
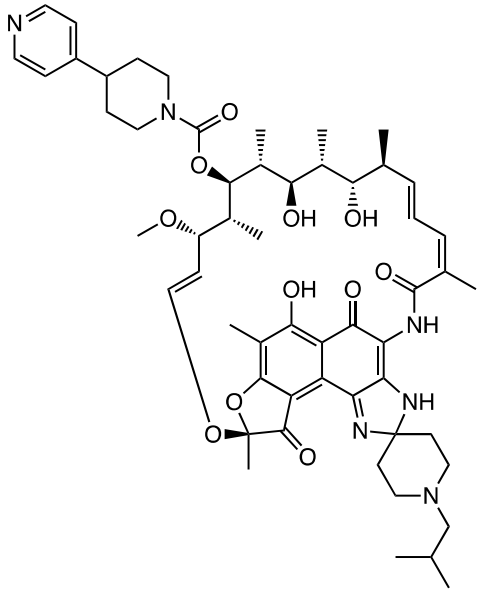
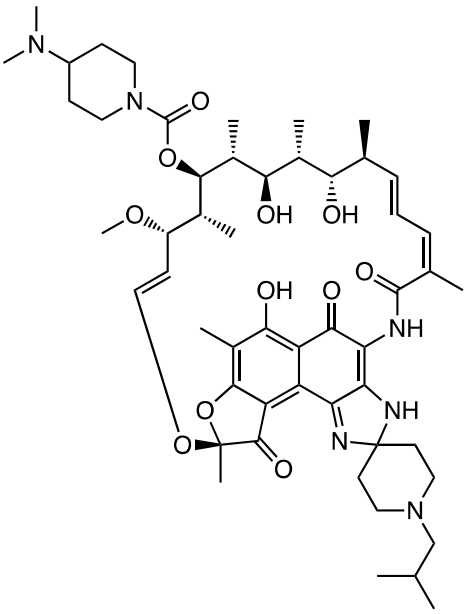
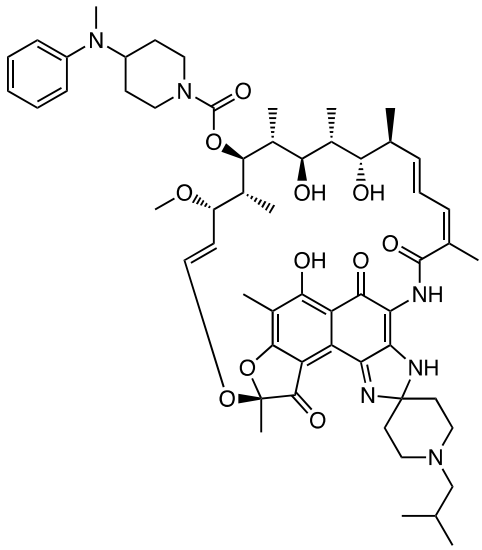
R^5 is independently, at each occurrence, -H, -C_1-C_4 alkyl, or -C_1-C_4 alkylene-OH;

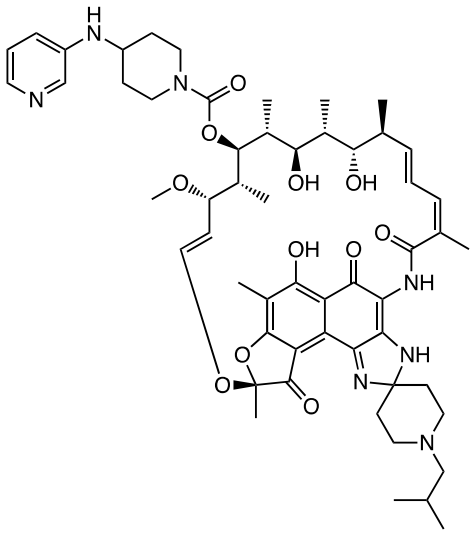
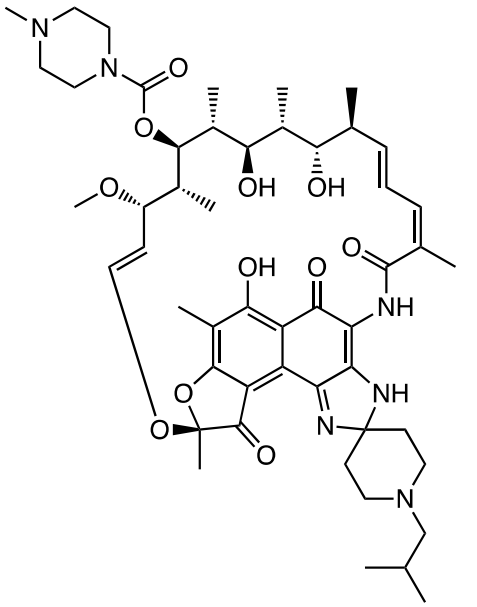
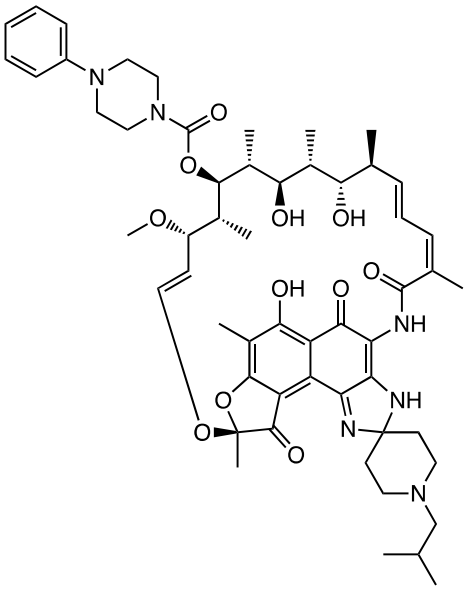
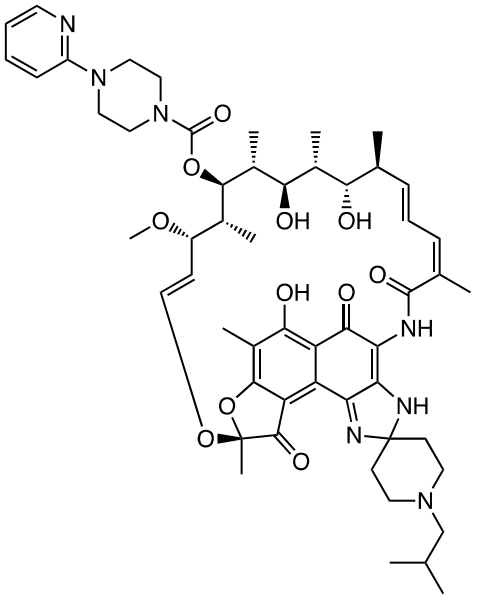
R^6 and R^7 are each independently, at each occurrence, -H, -C_1-C_4 alkyl, -C_5-C_6 cycloalkyl, 5- to 6-membered heterocycloalkyl, phenyl, or 5- to 6-membered heteroaryl; and

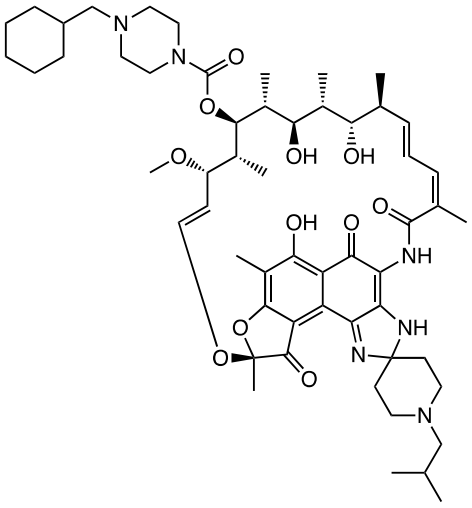
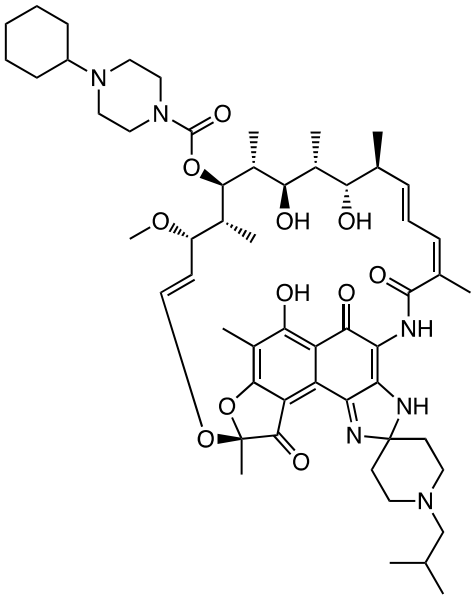
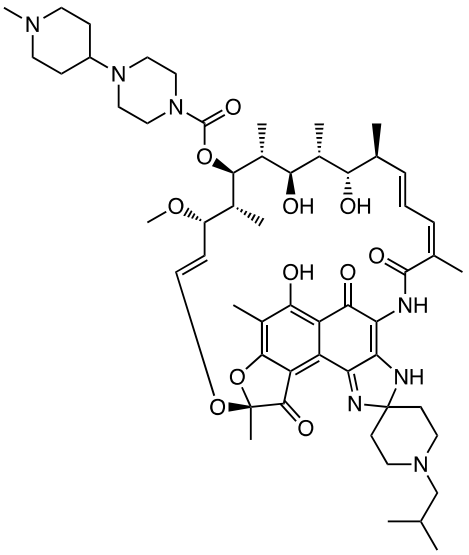
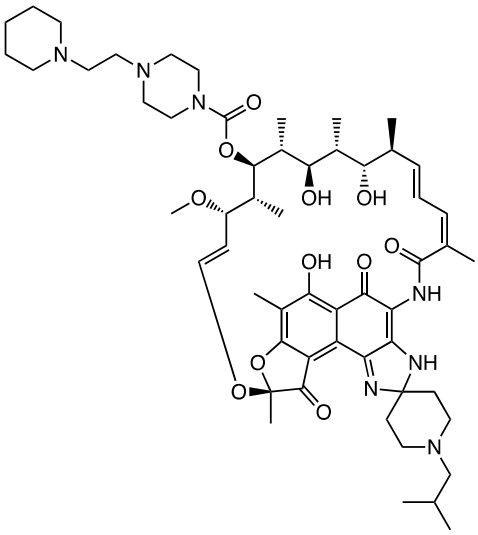
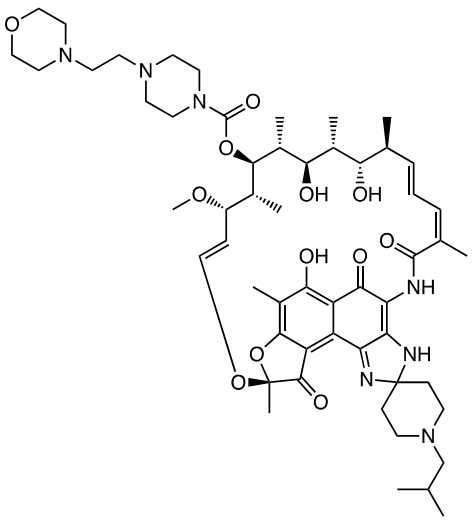
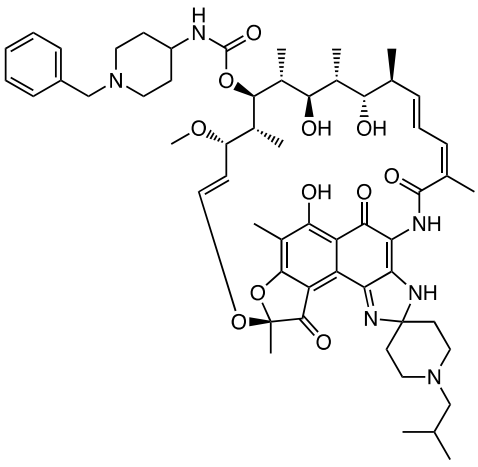
R^8 is independently, at each occurrence, halogen or -C_1-C_4 alkyl.

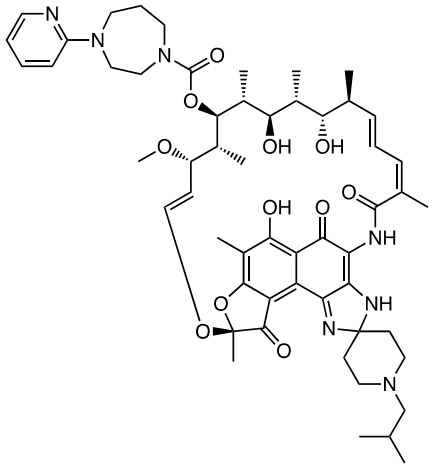
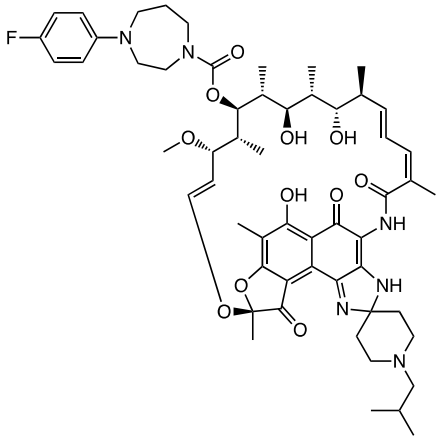
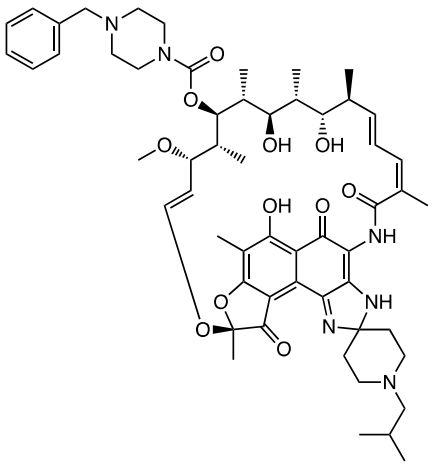
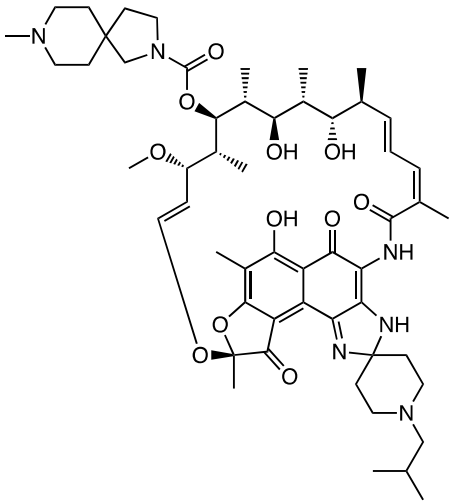
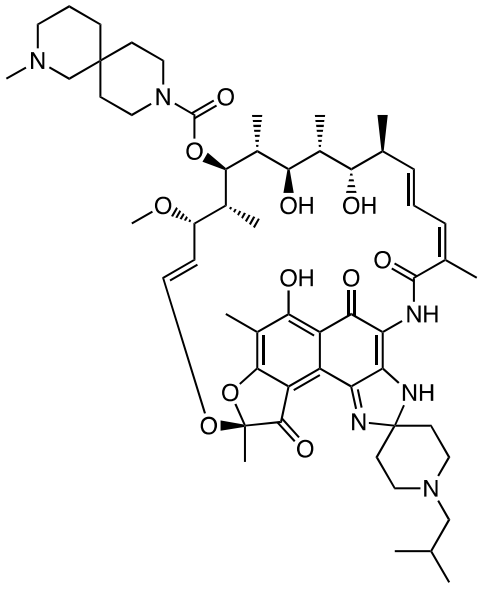
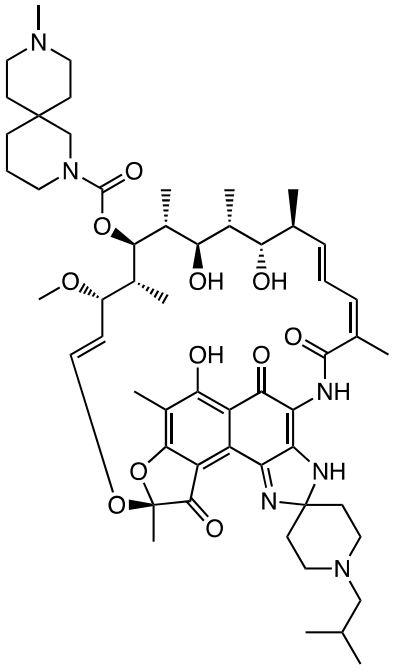
10. The compound according to claim 1, wherein the compound is selected from the group

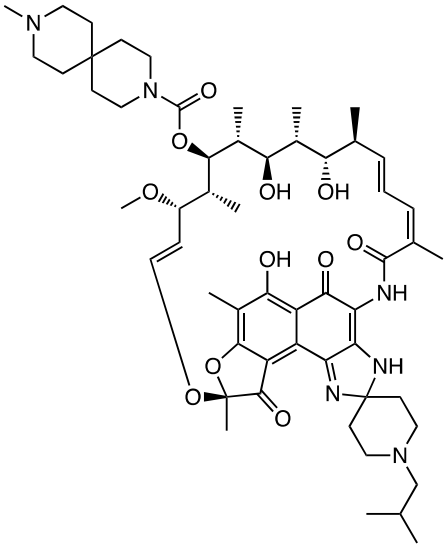
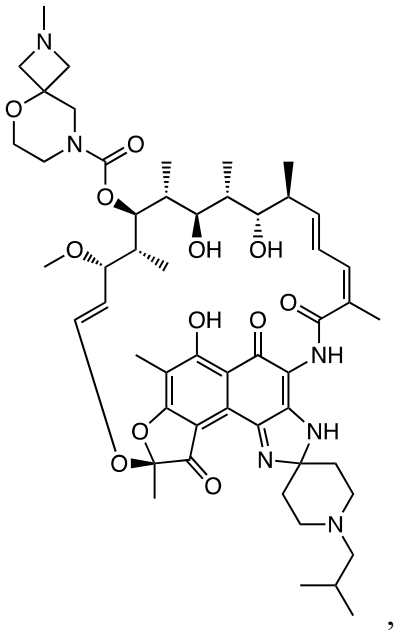
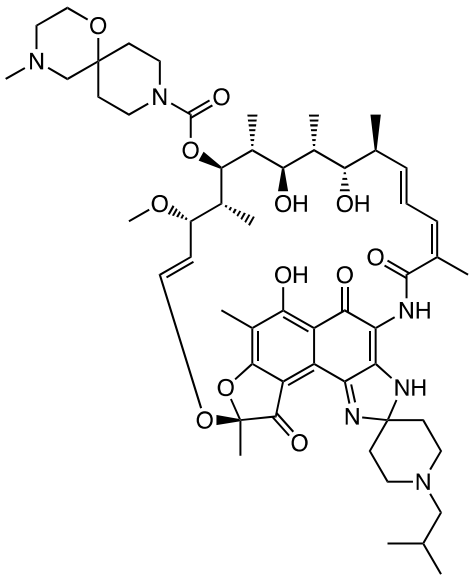
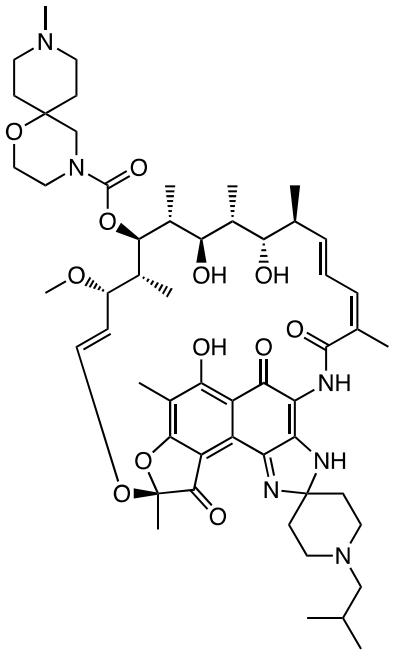
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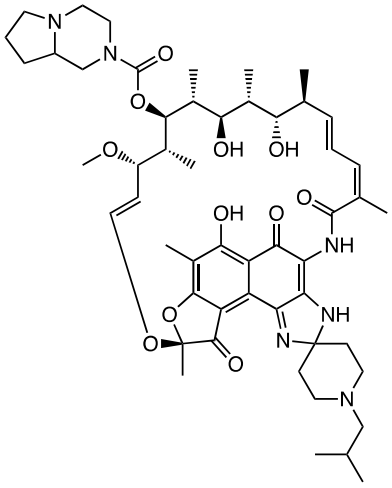
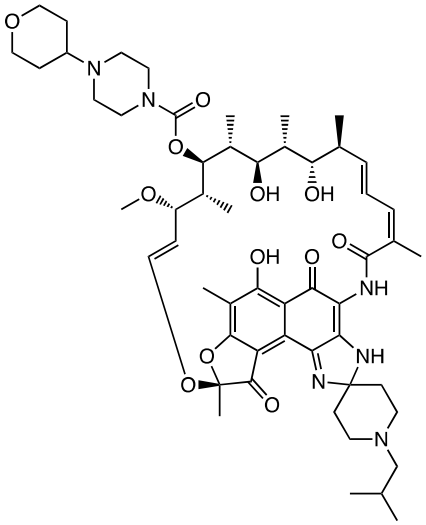
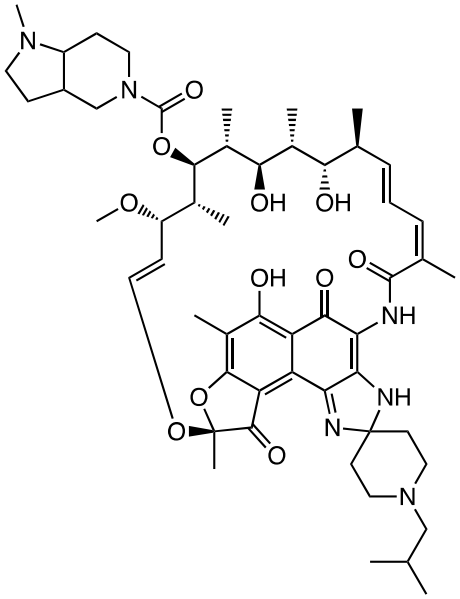
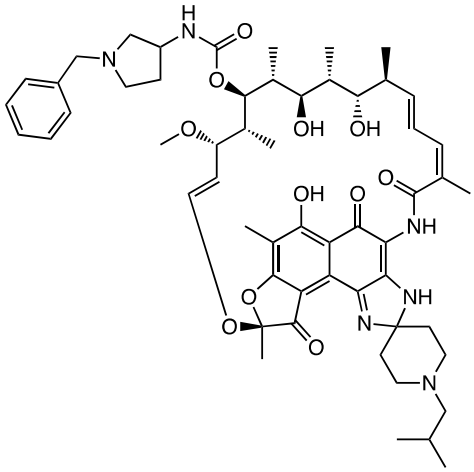
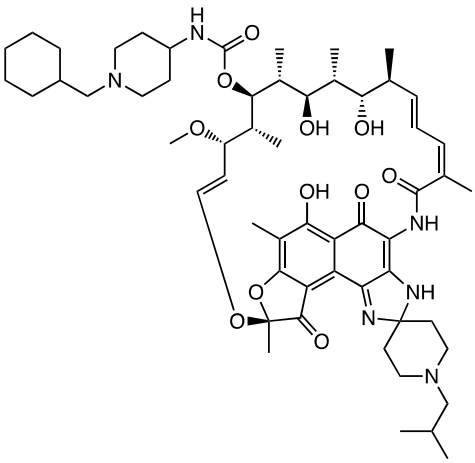
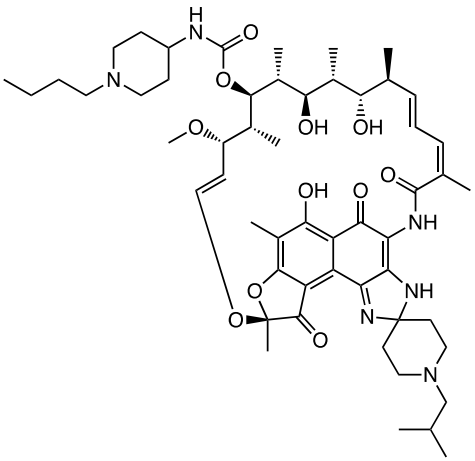

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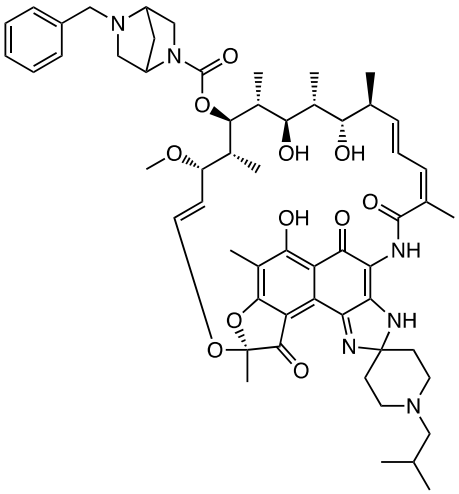

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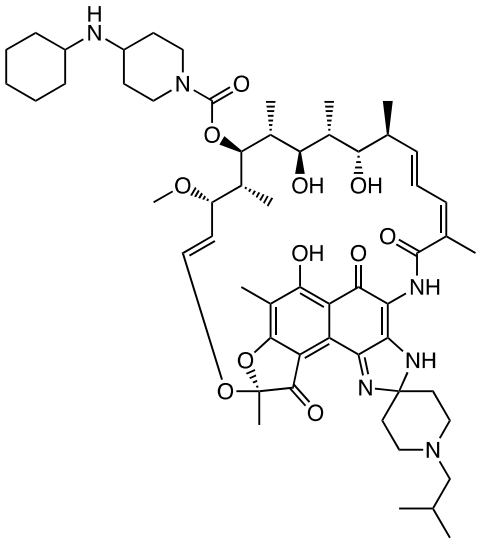

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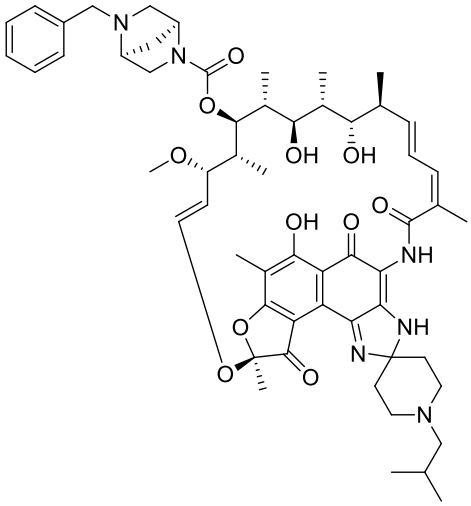

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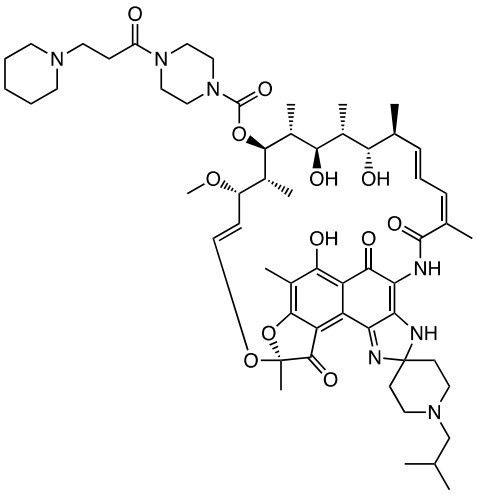

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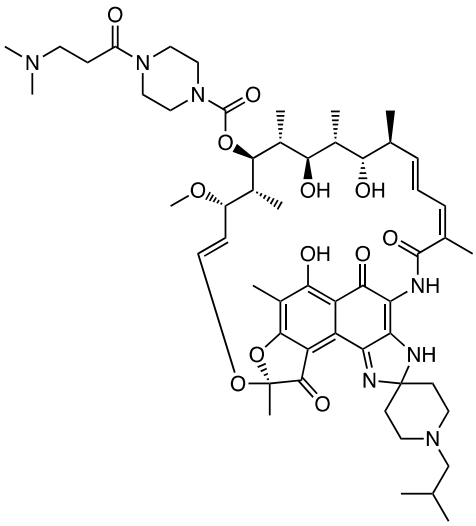

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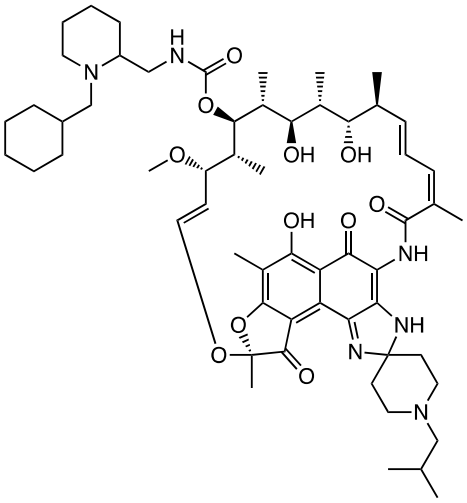
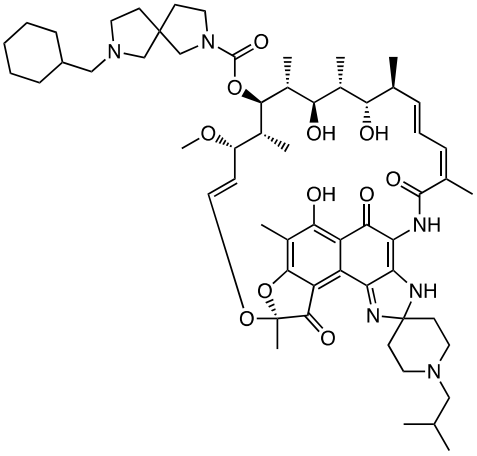
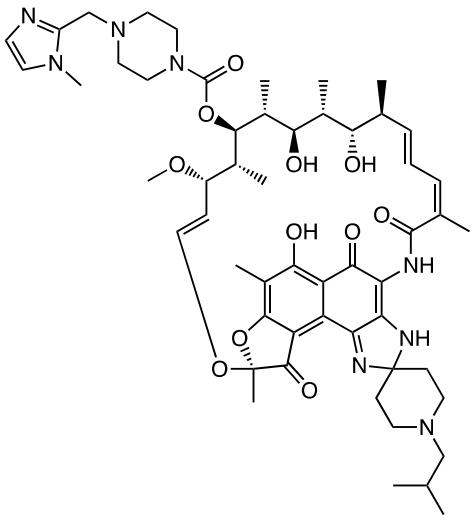
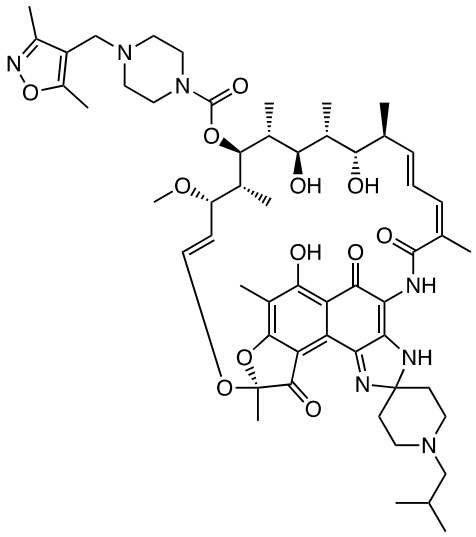
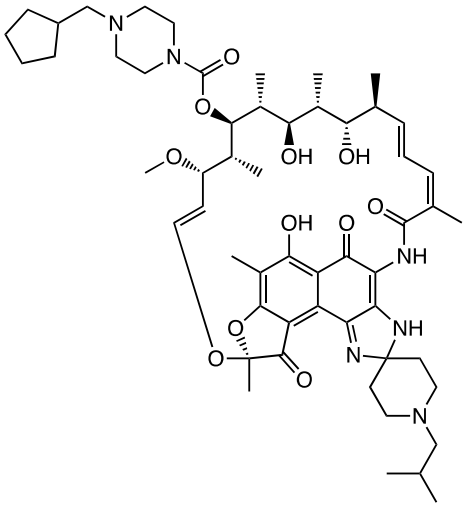
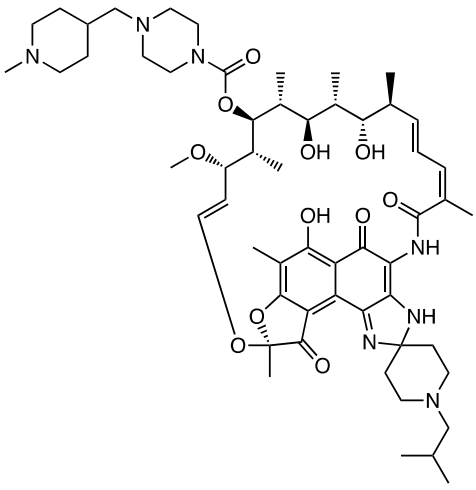
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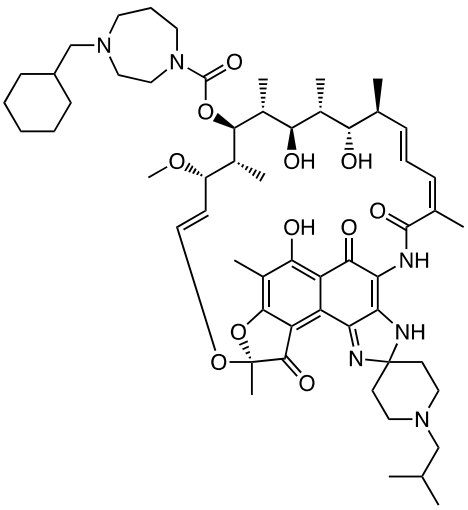
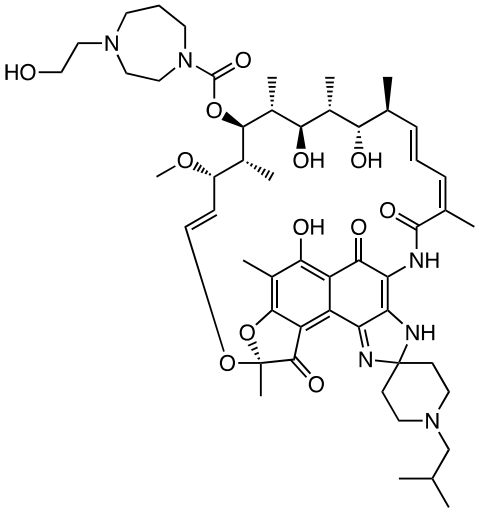
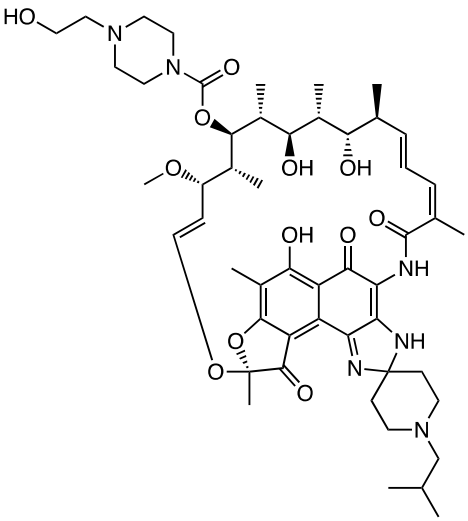
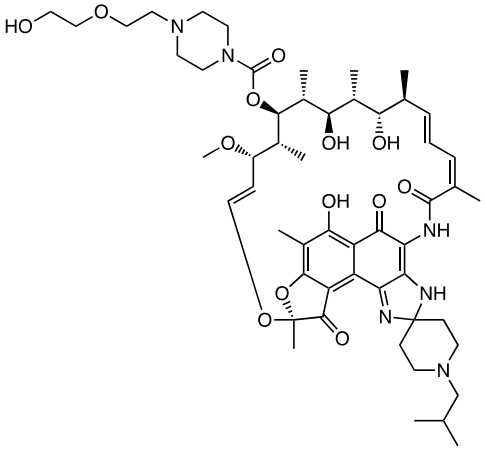
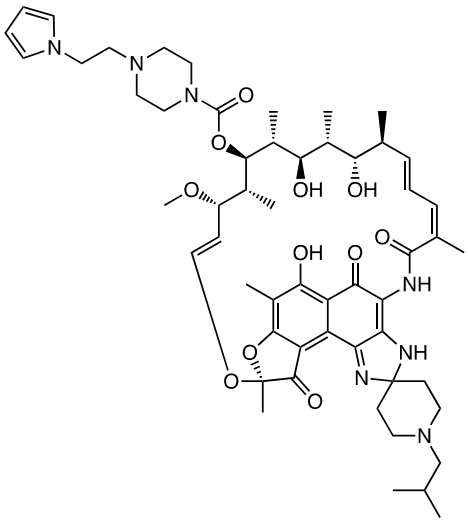
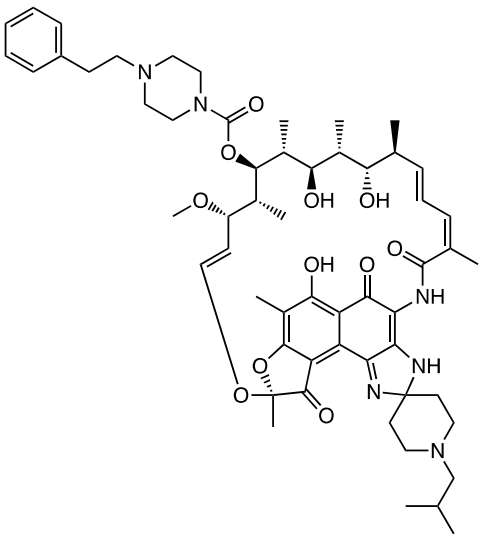

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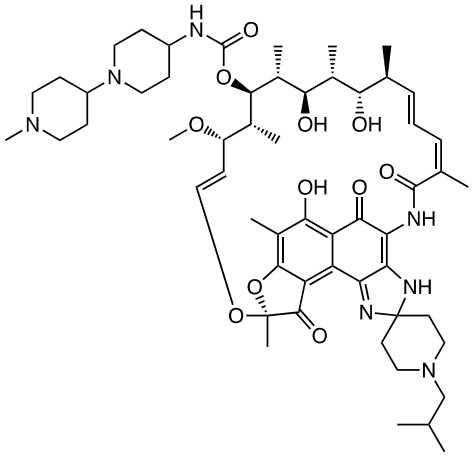
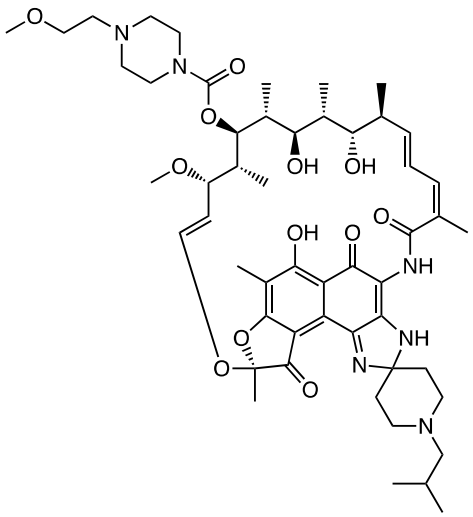
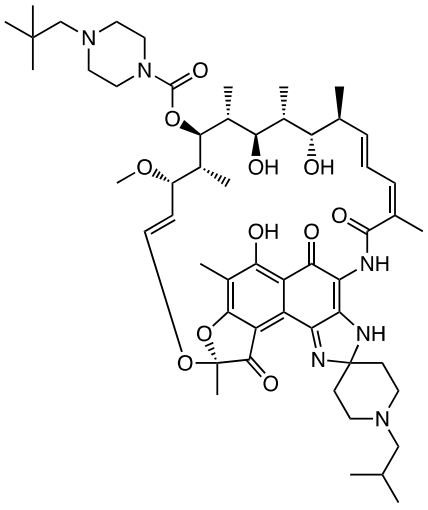
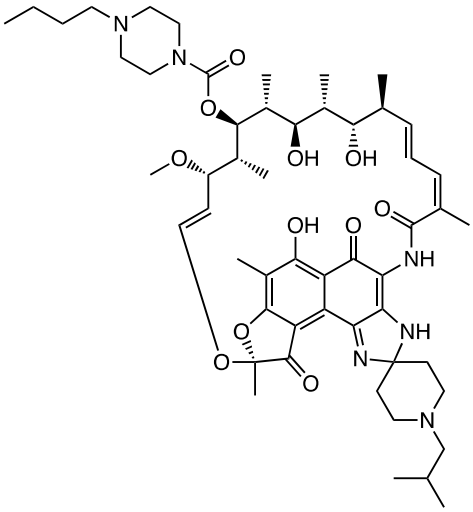
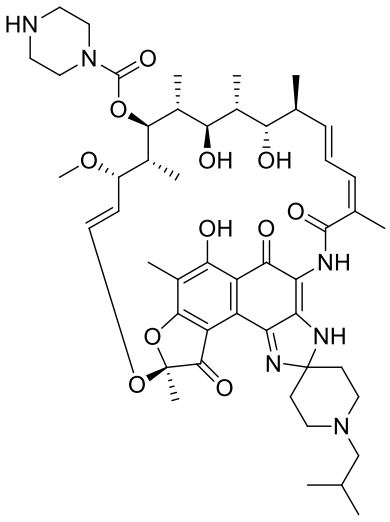
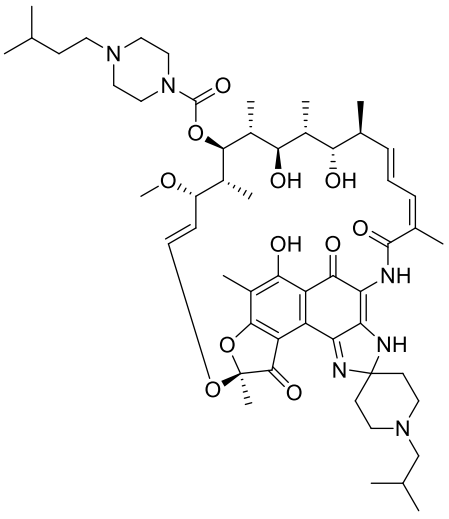

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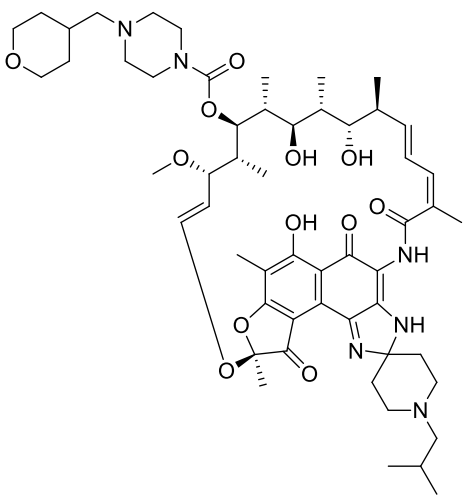
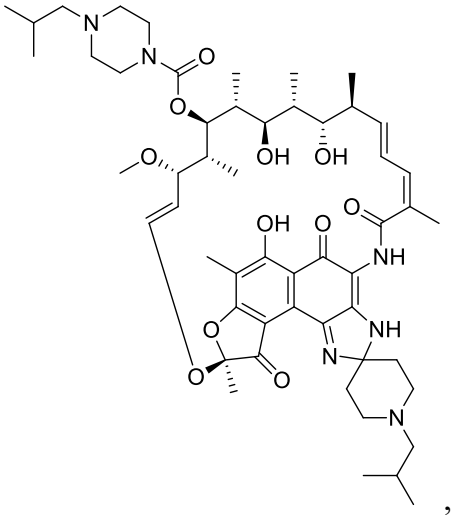
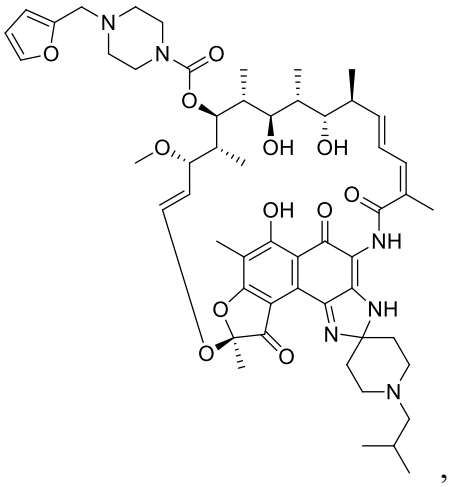
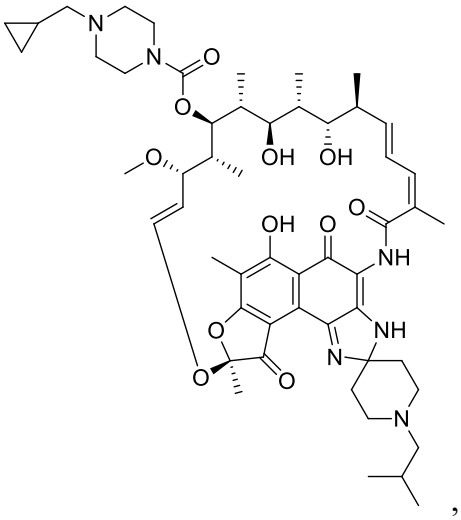
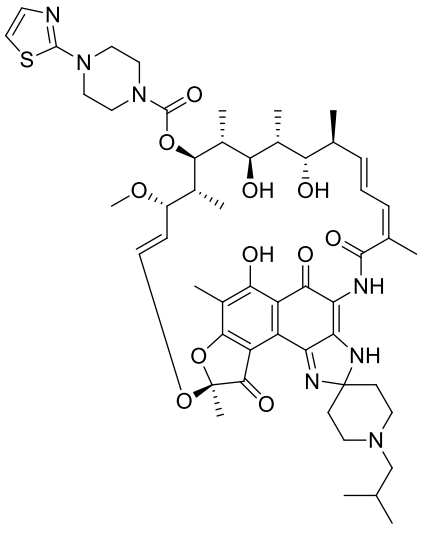
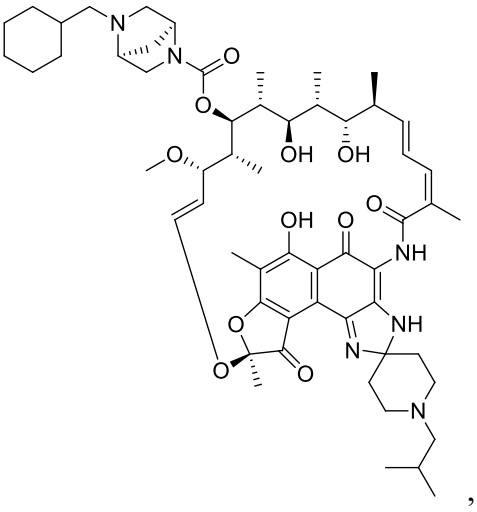

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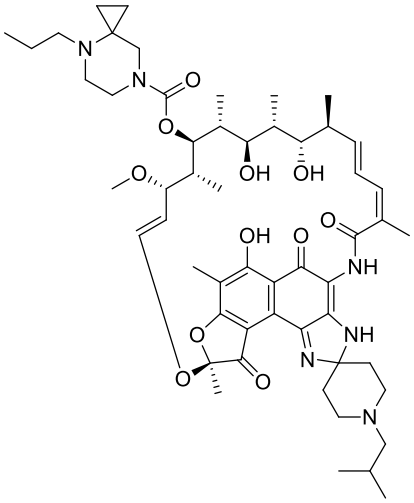
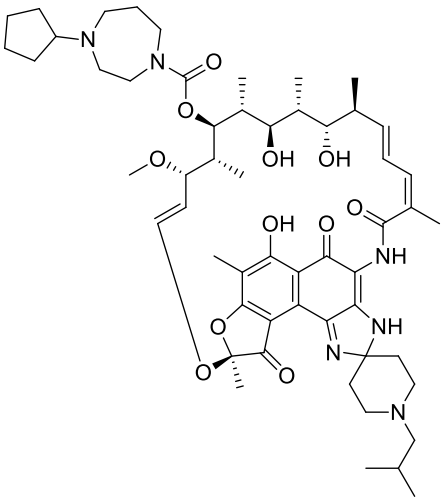
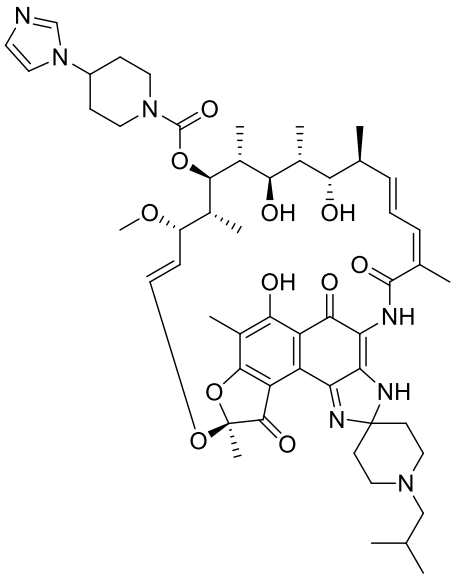
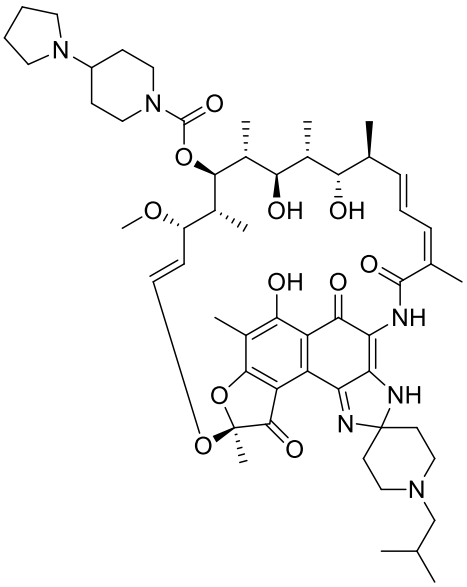
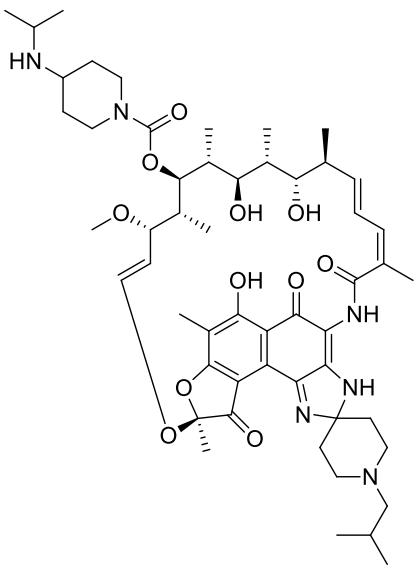
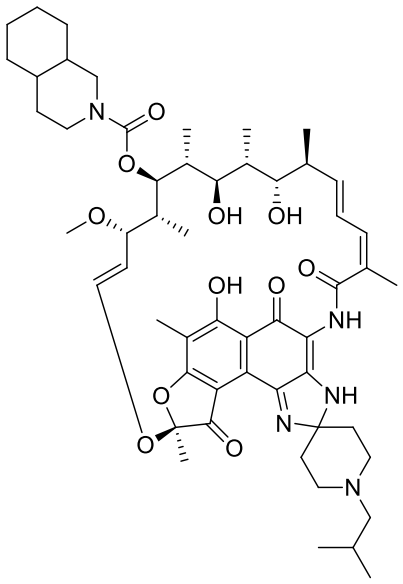

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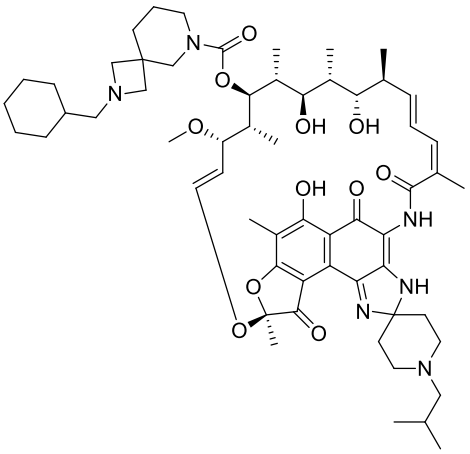
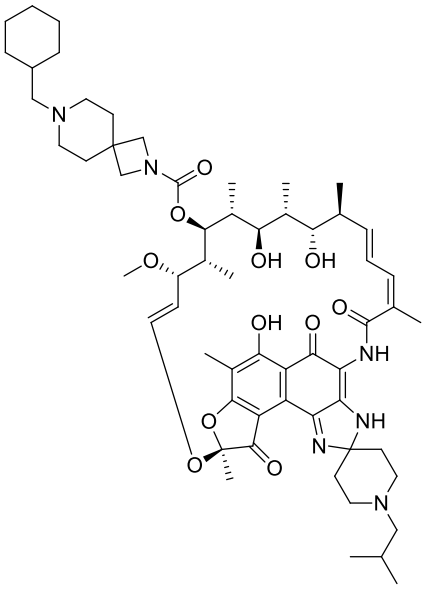
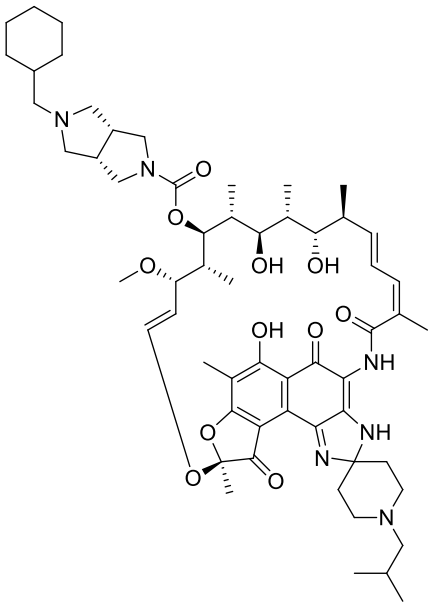
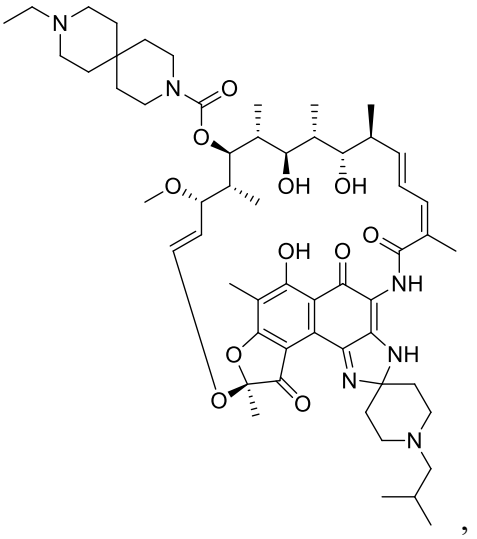
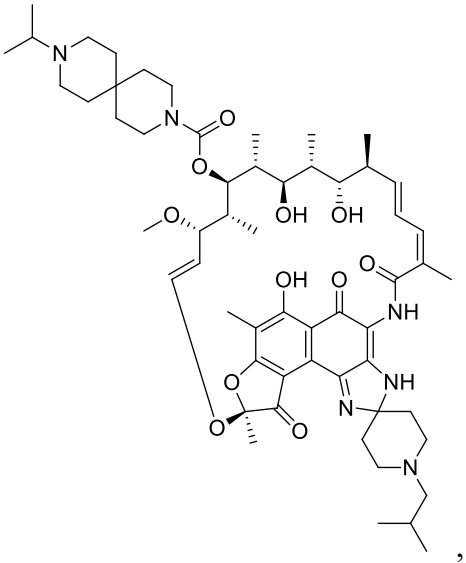
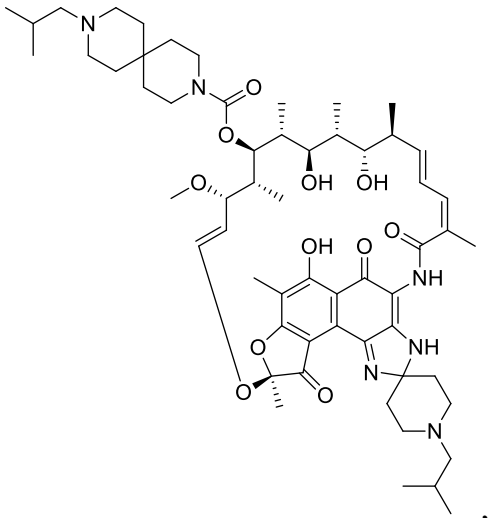

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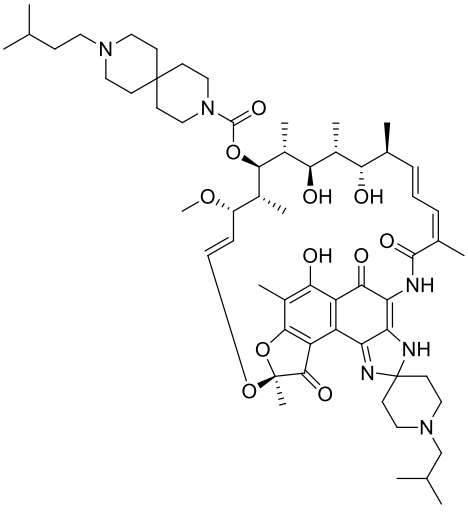
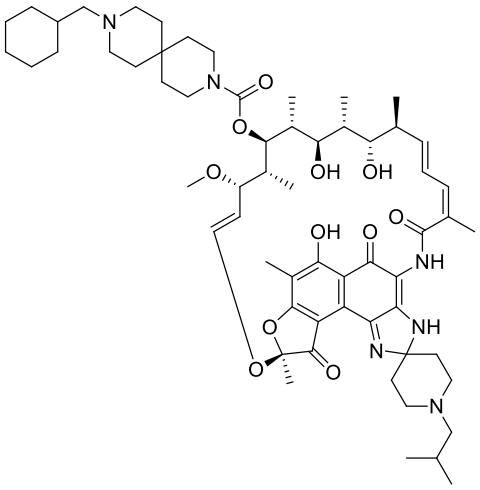
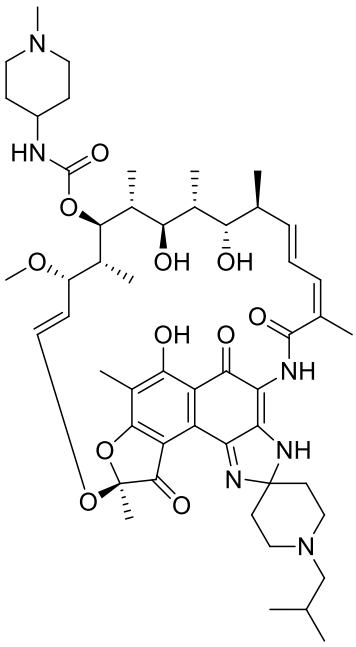
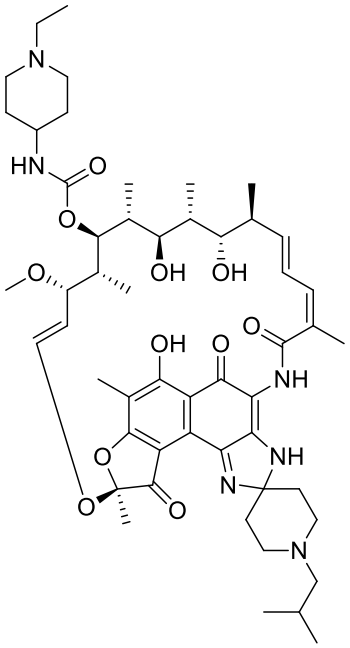

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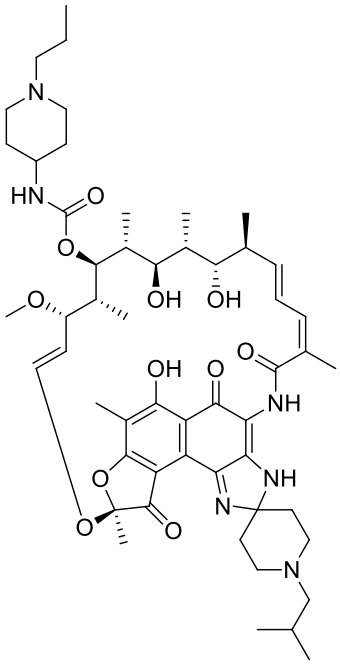
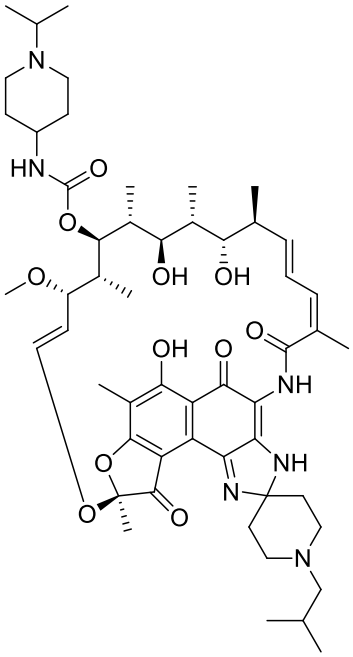
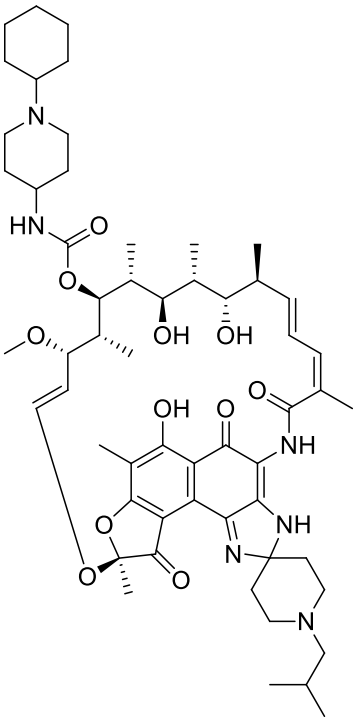
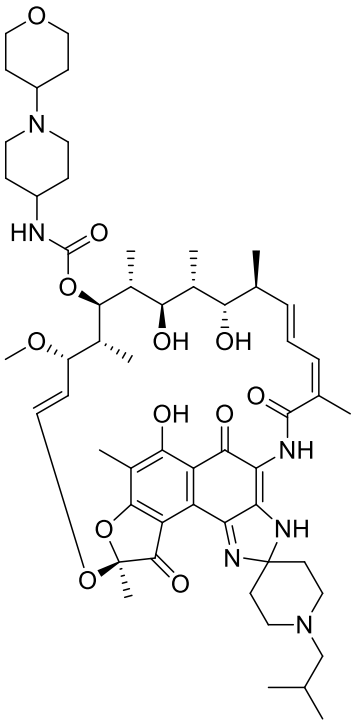

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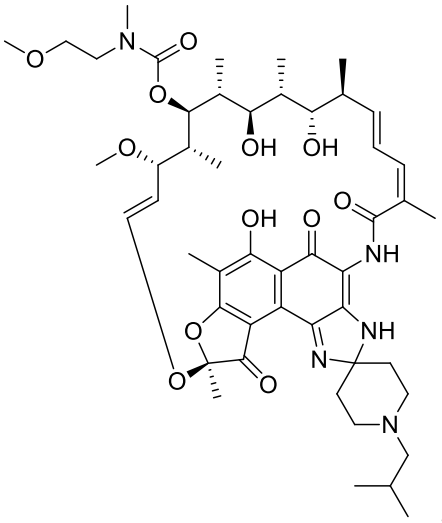
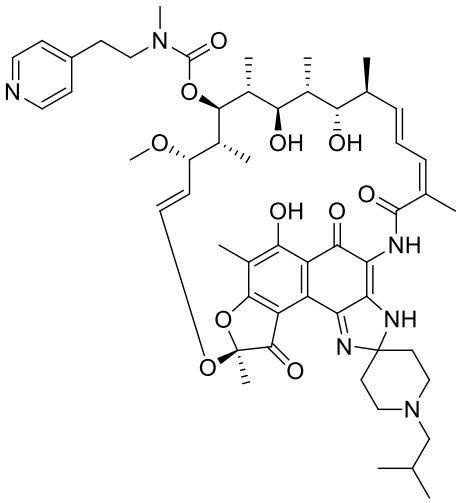
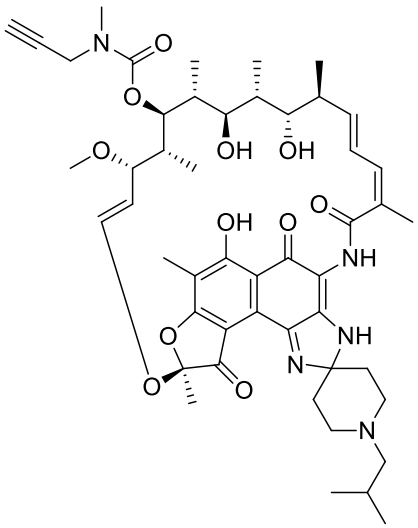
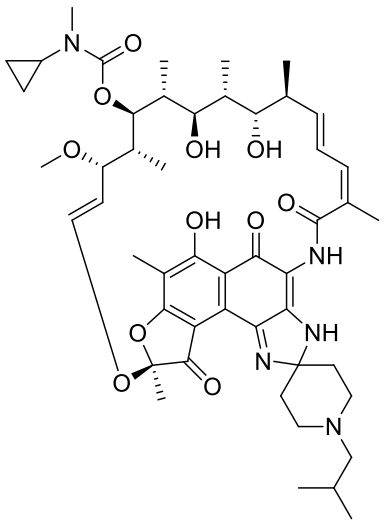
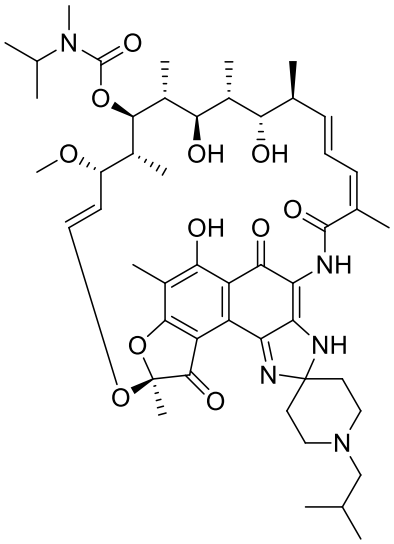
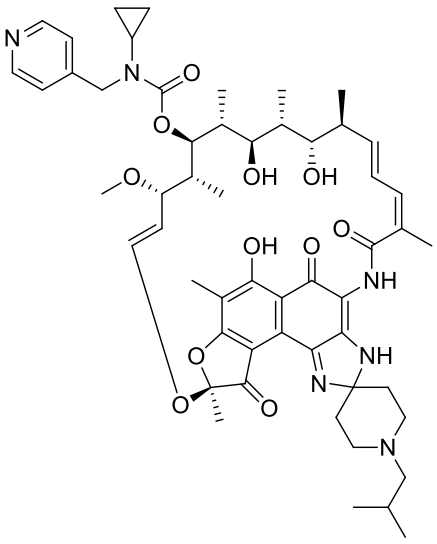

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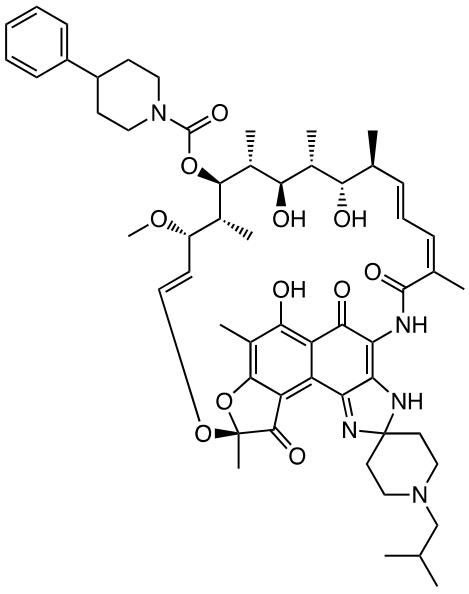

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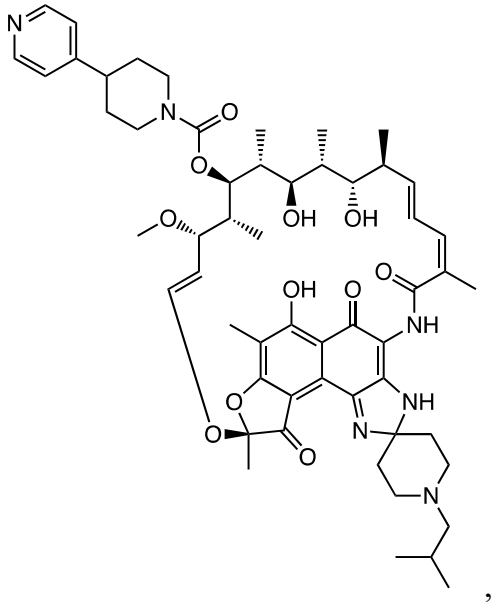

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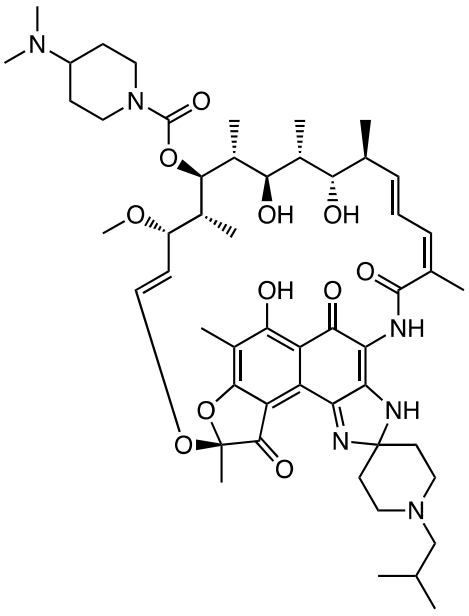

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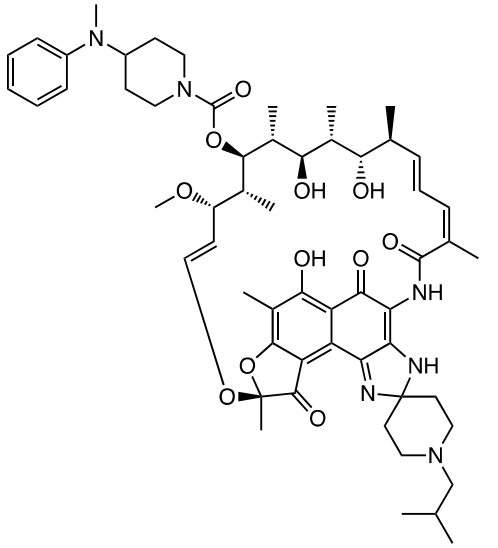
11. The compound according to claim 1, wherein the compound is selected from the group

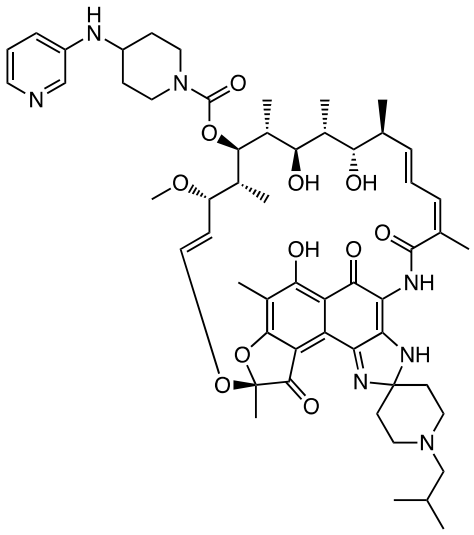
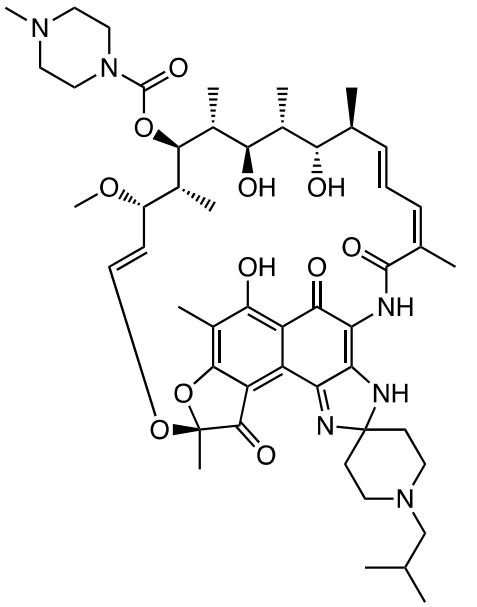
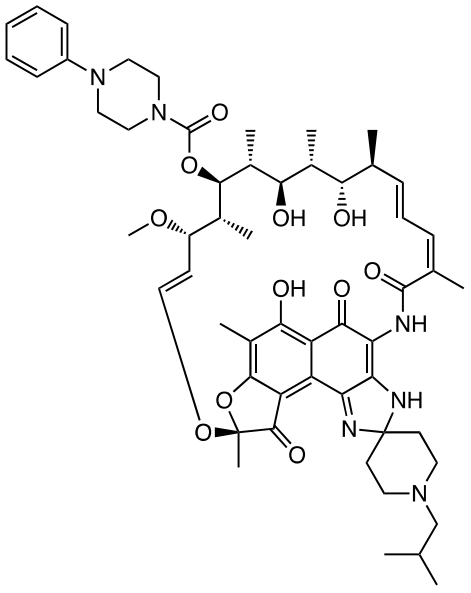
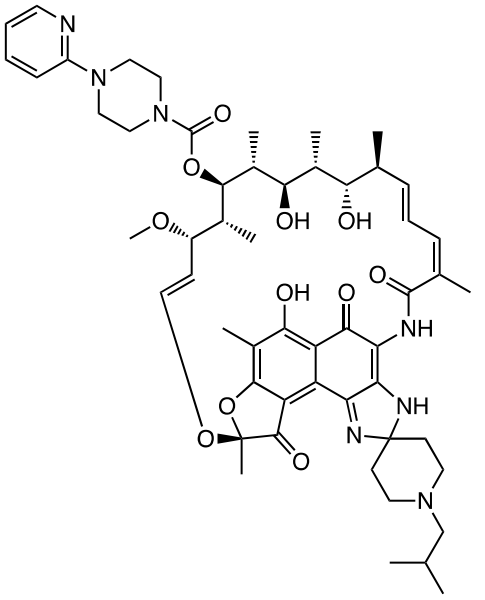
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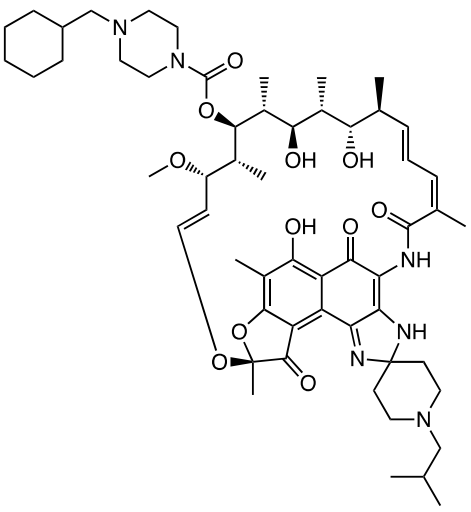
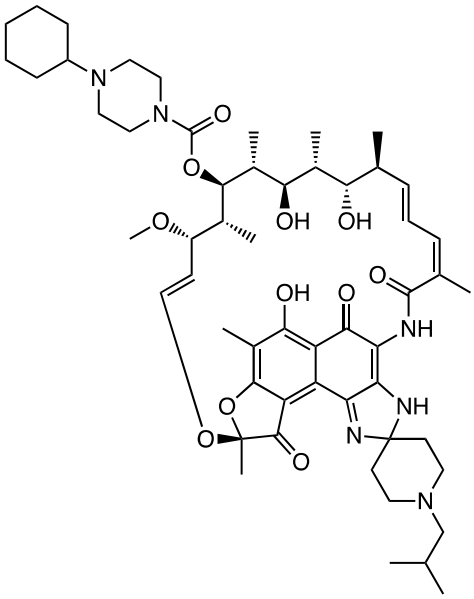
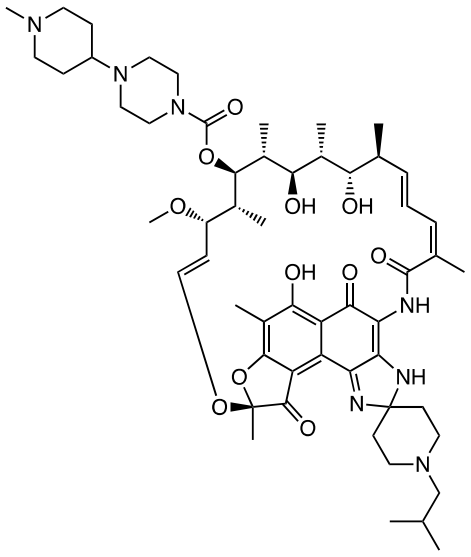
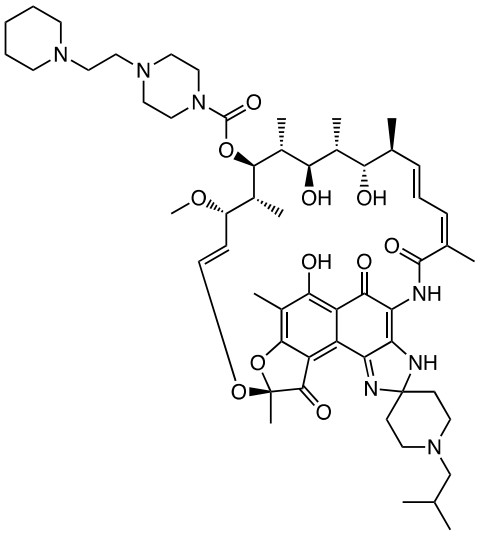
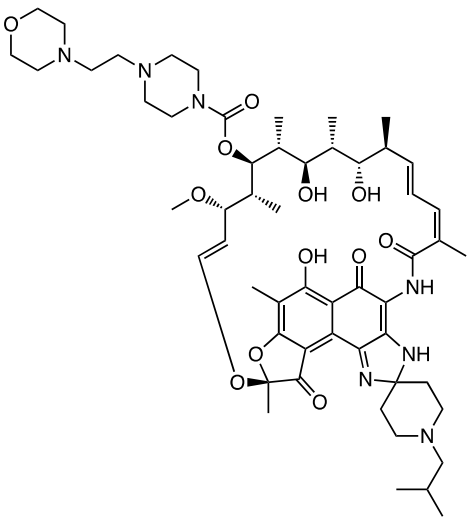
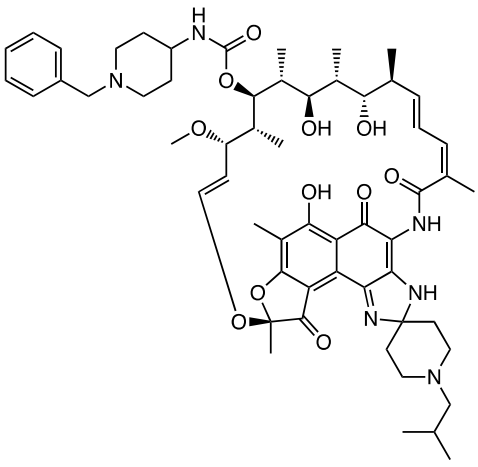

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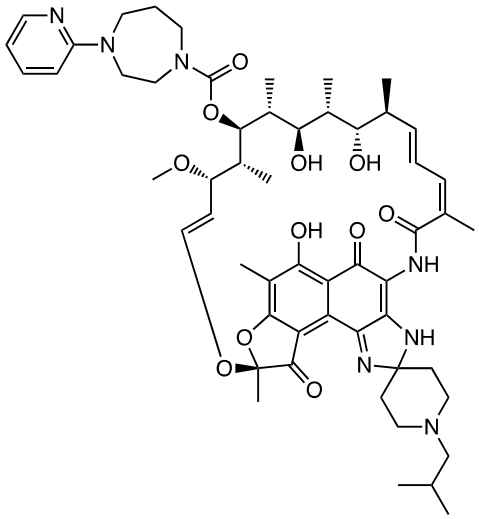
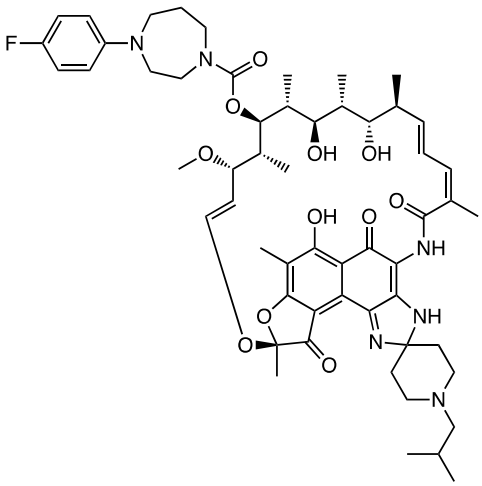
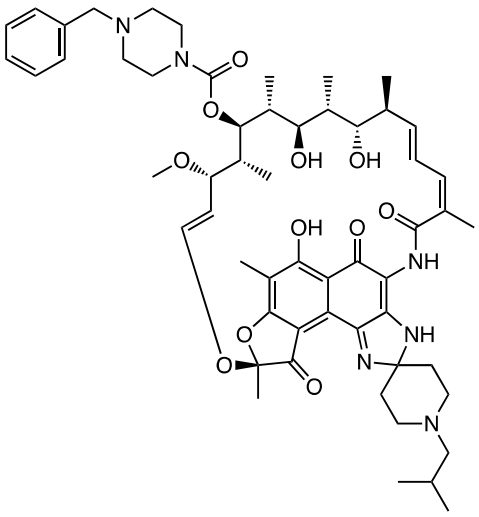
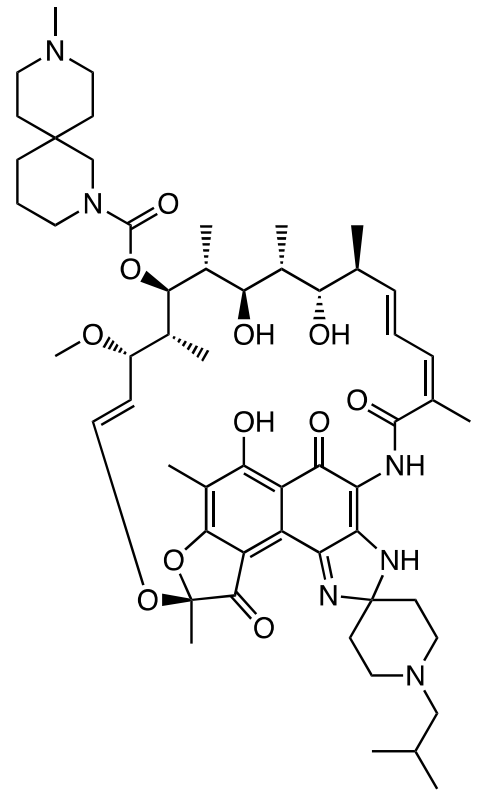

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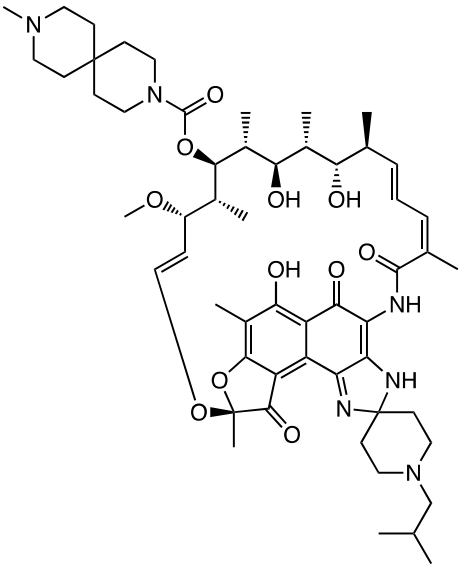

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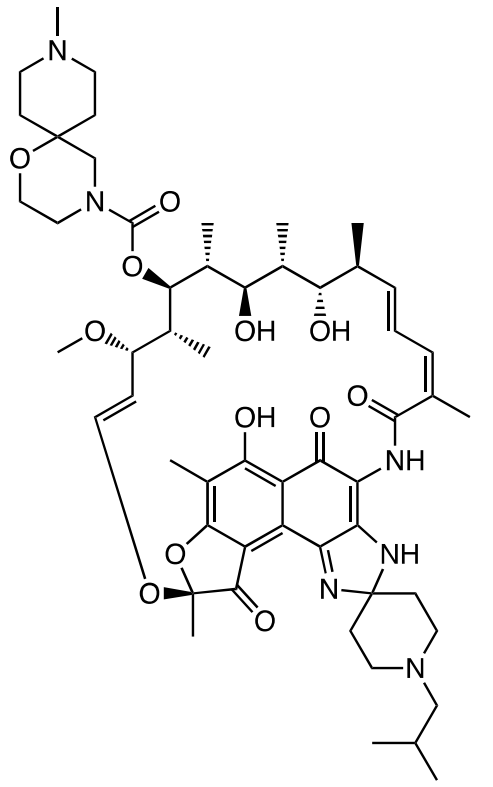

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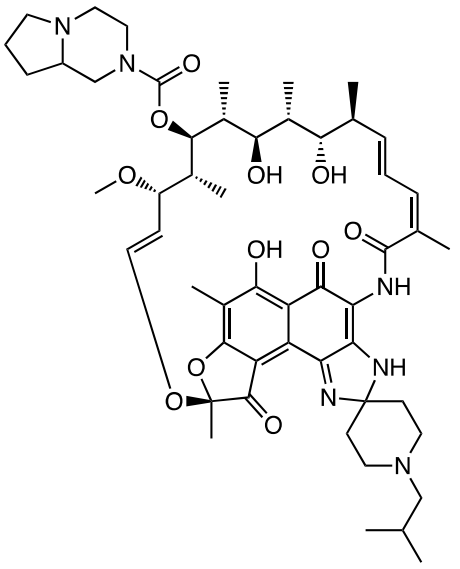

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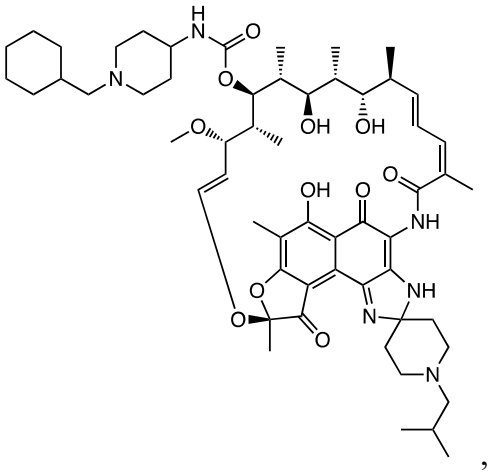
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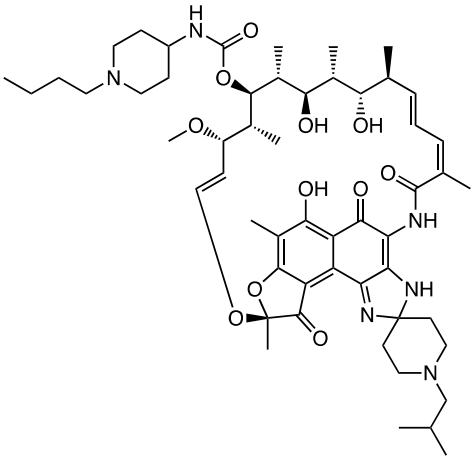
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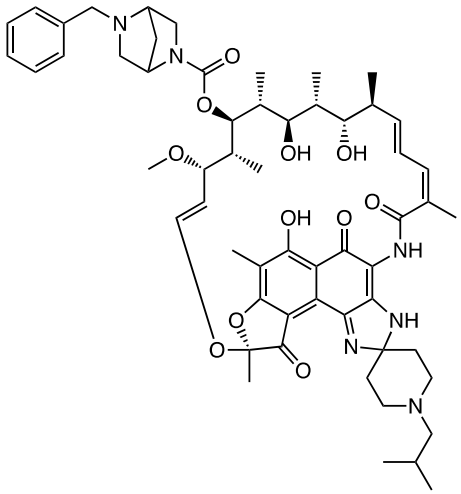


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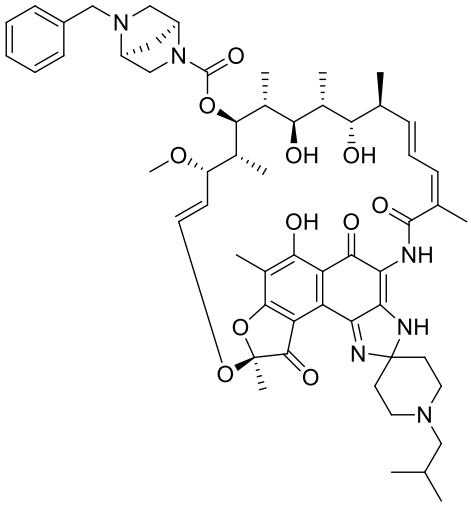


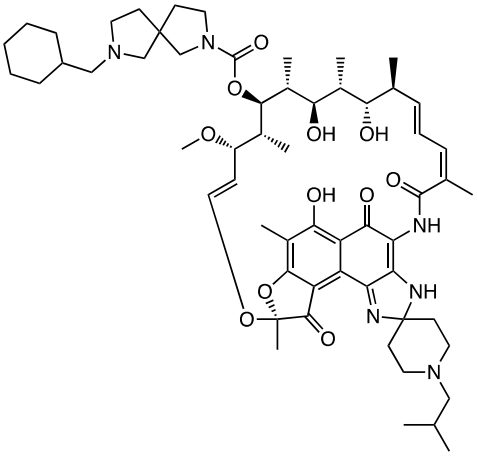
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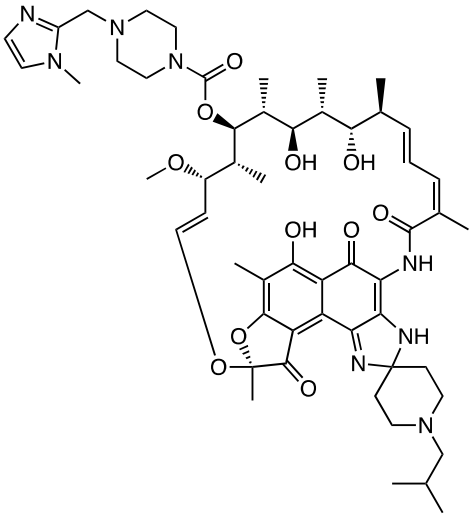

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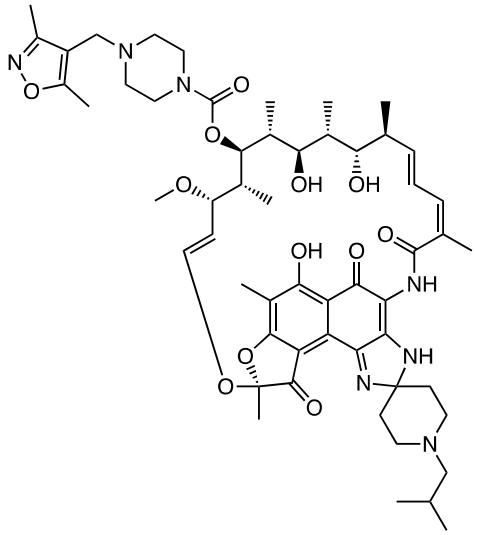
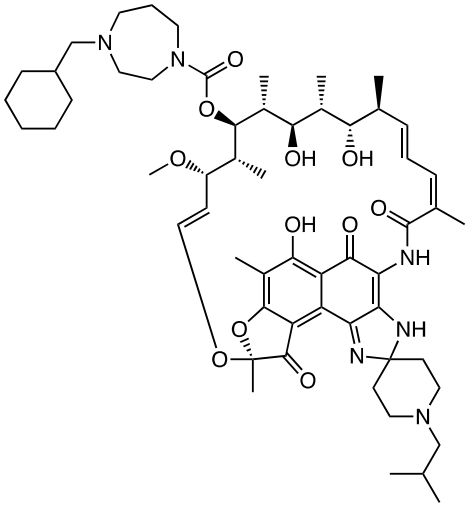
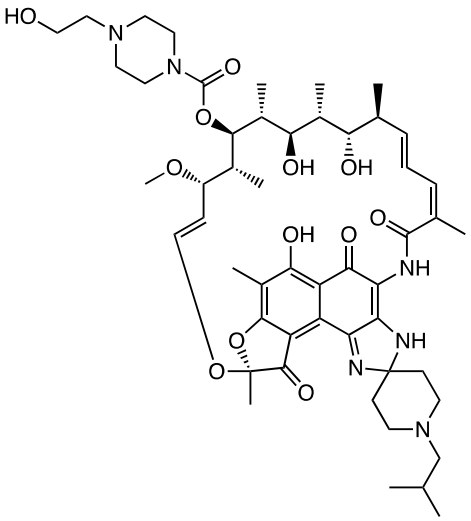
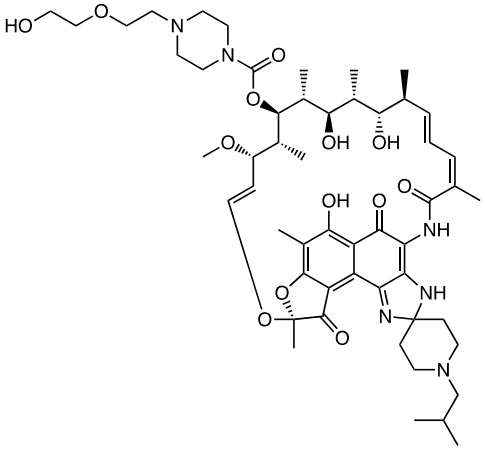
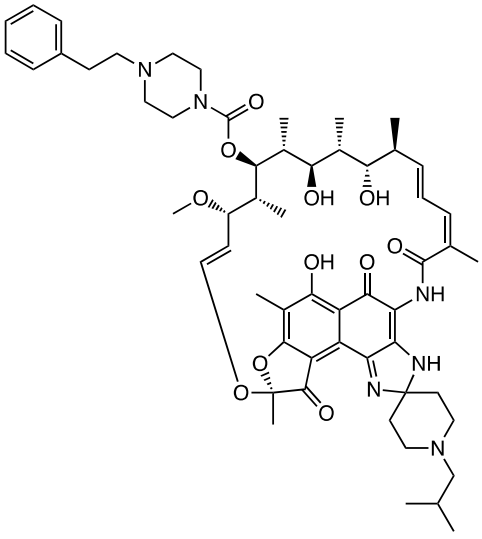
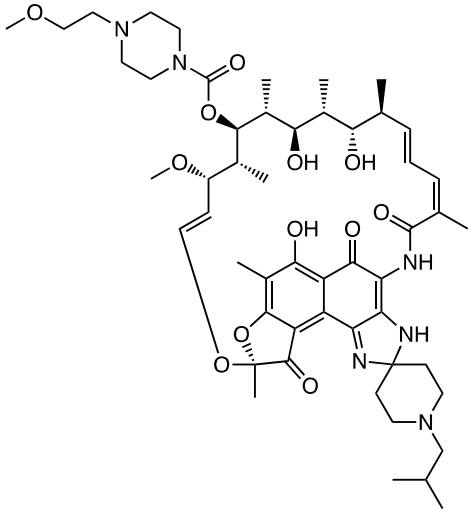

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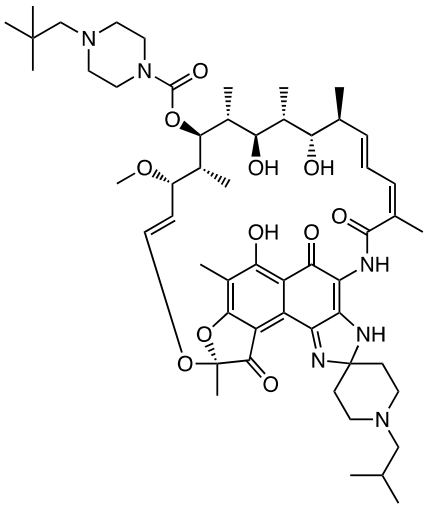
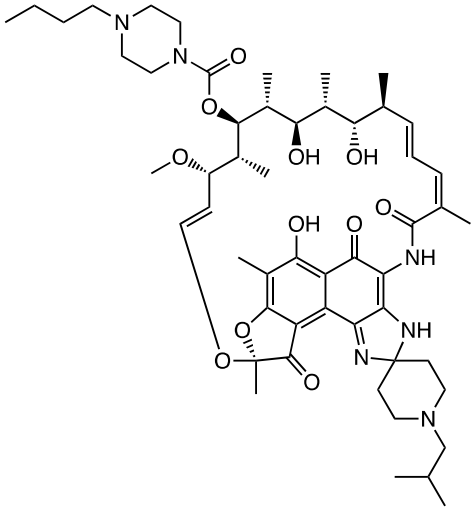
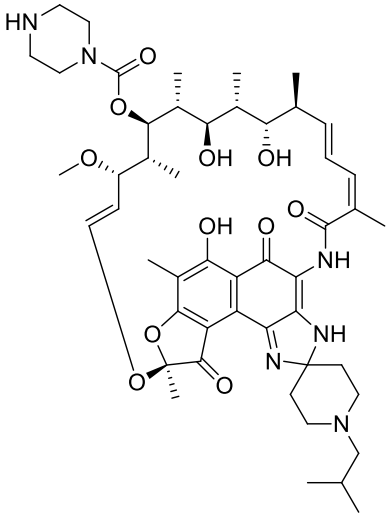
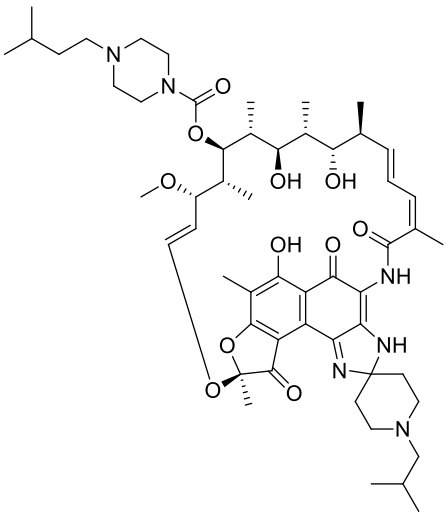
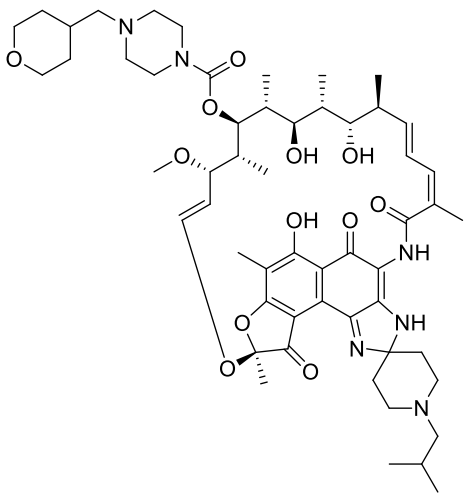
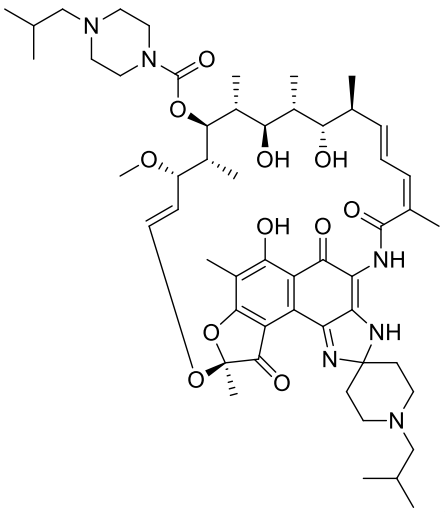
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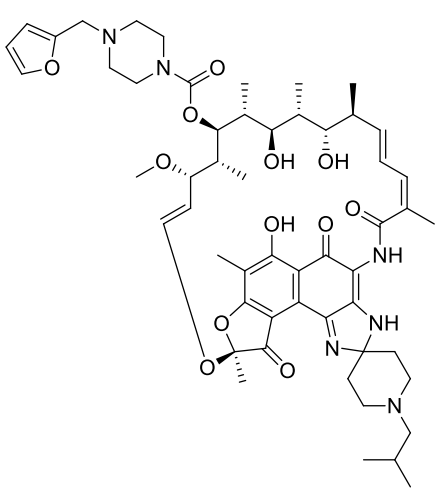
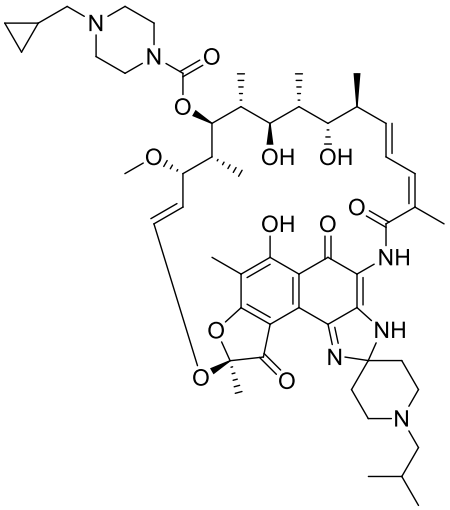
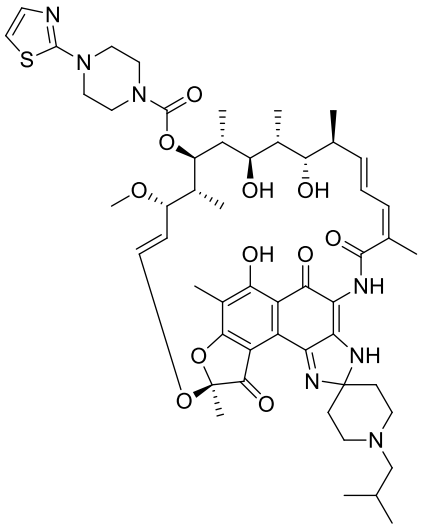
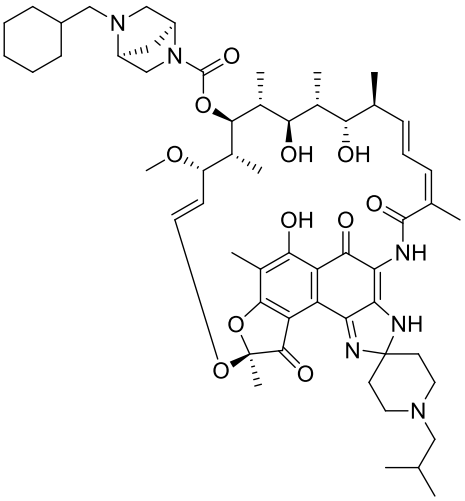
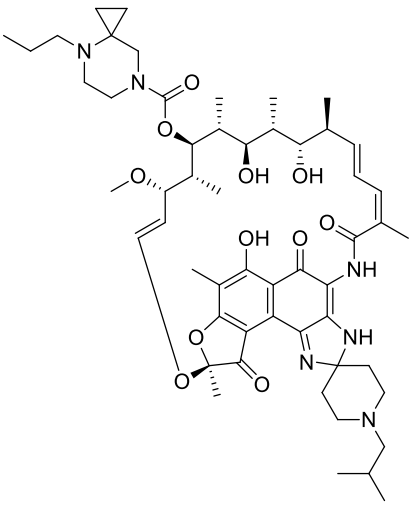
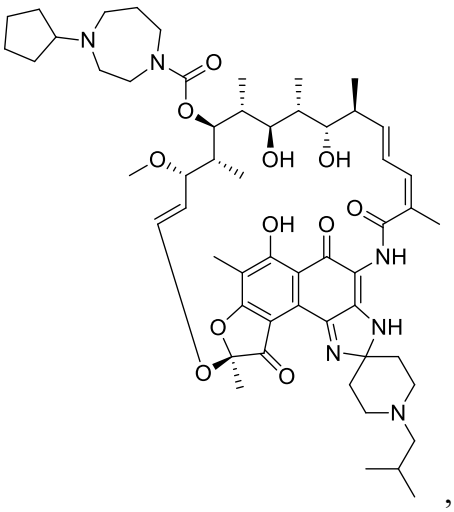

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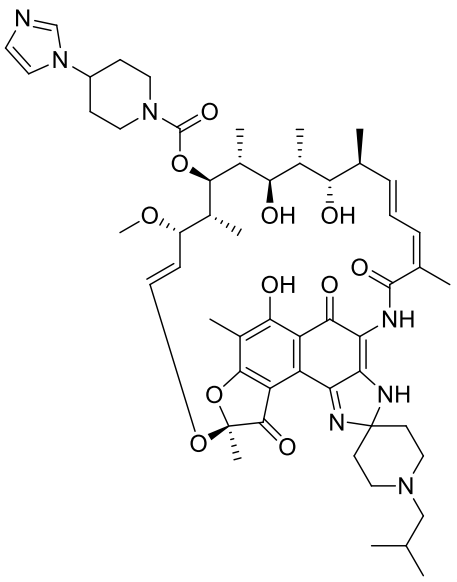
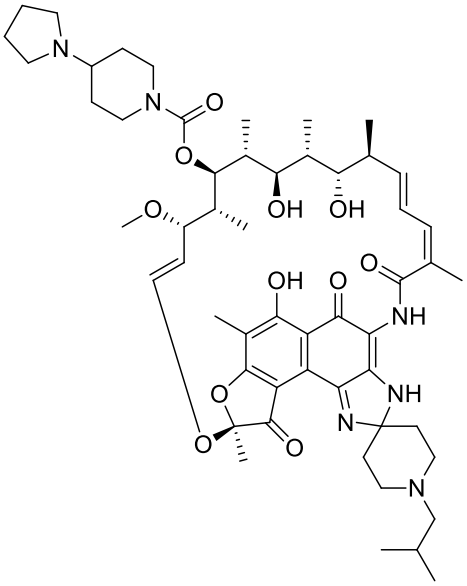
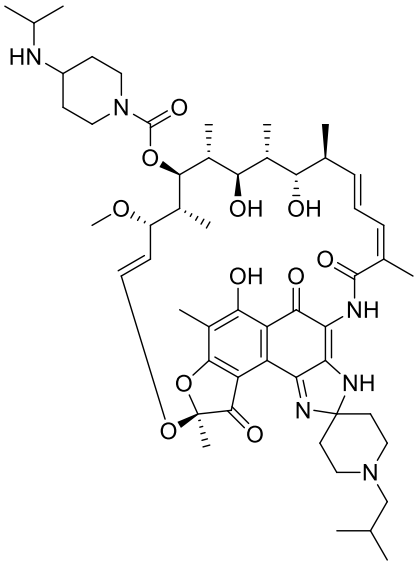
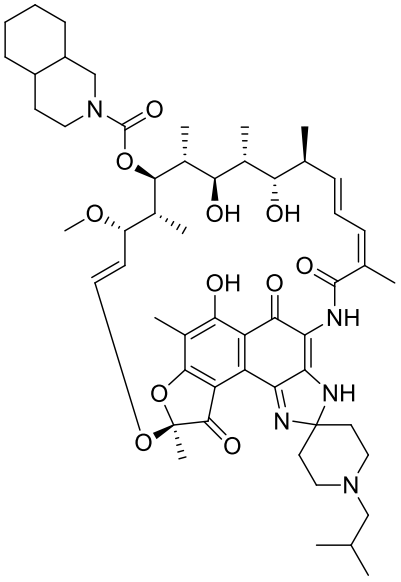
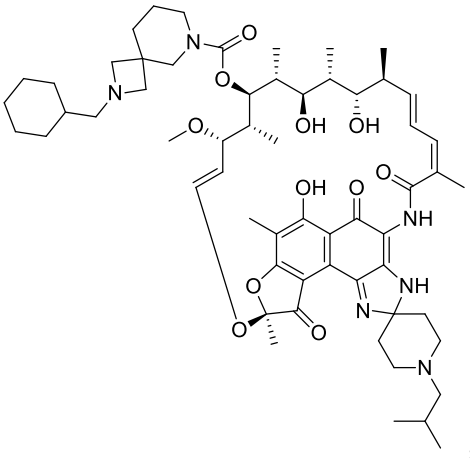
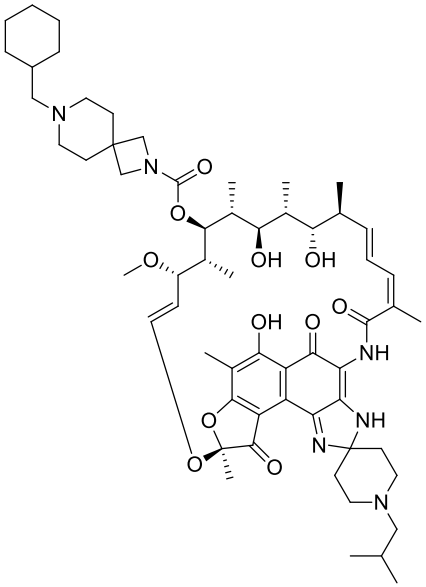

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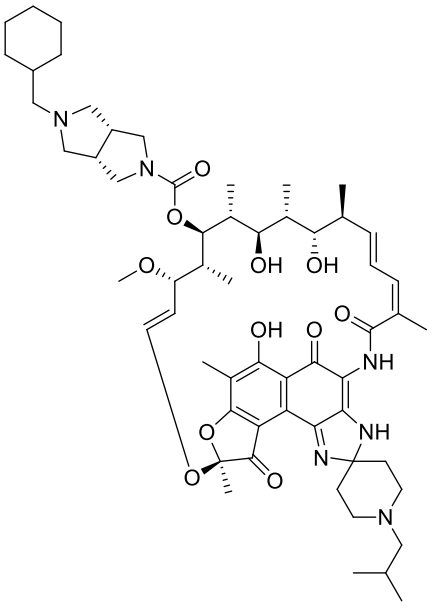
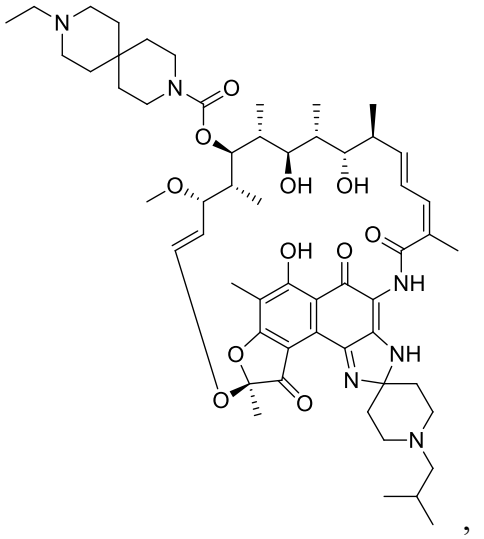
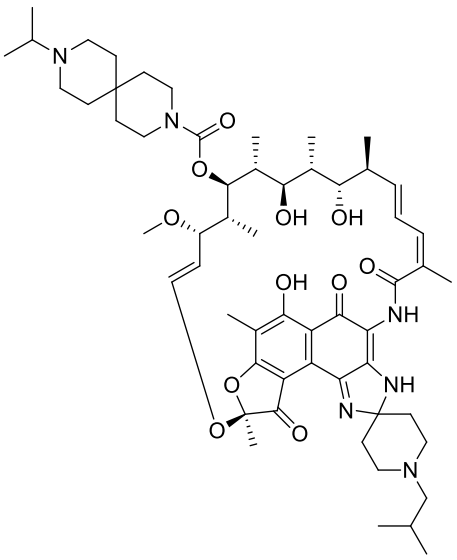
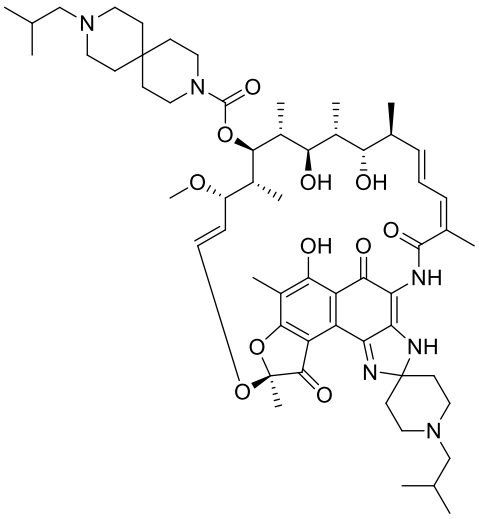
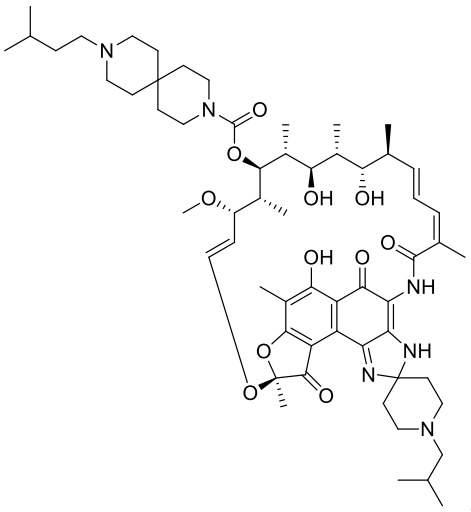
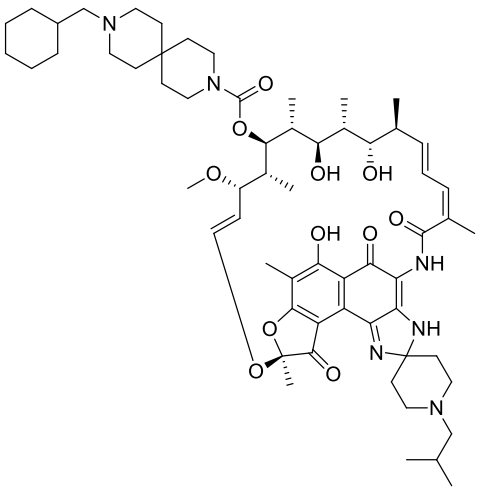

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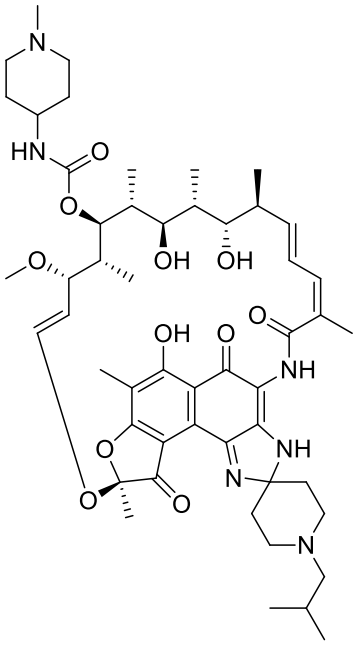
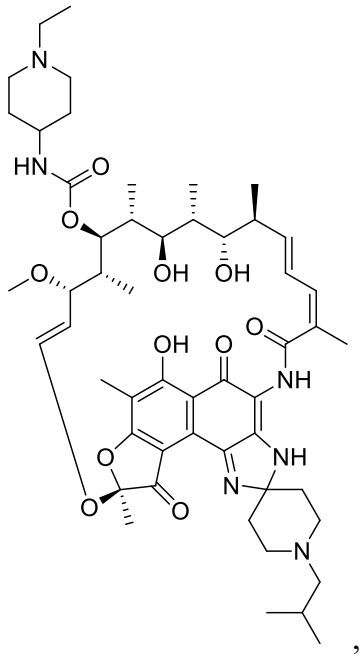
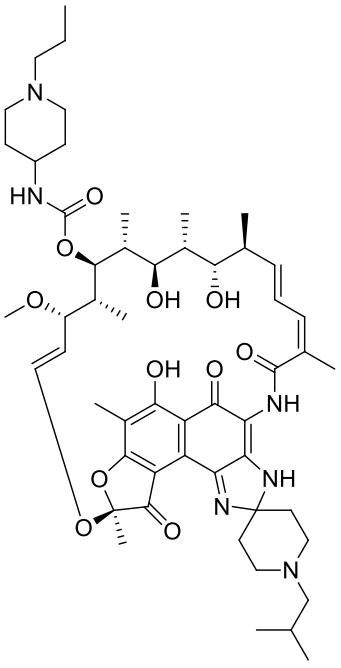
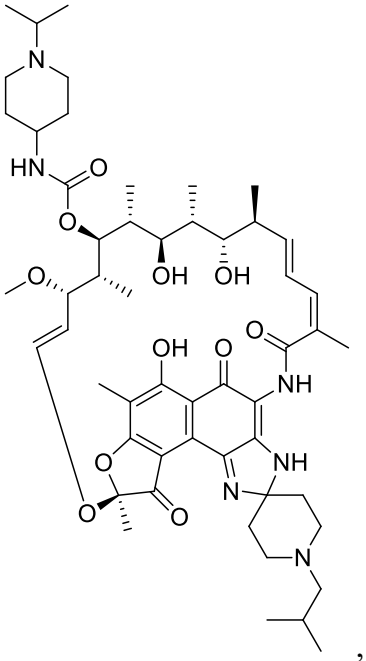

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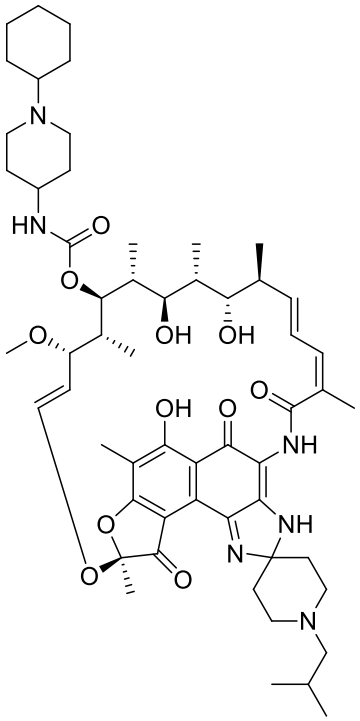
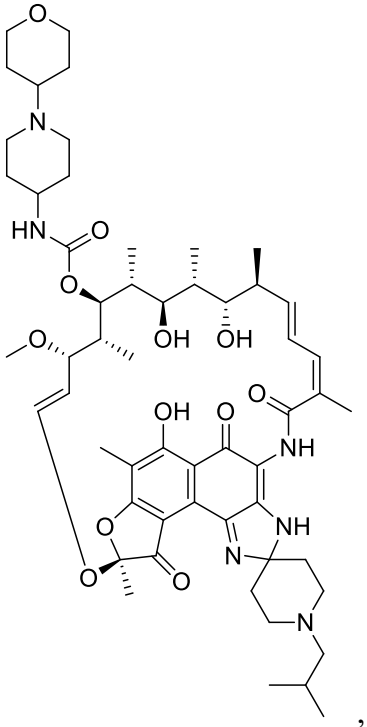
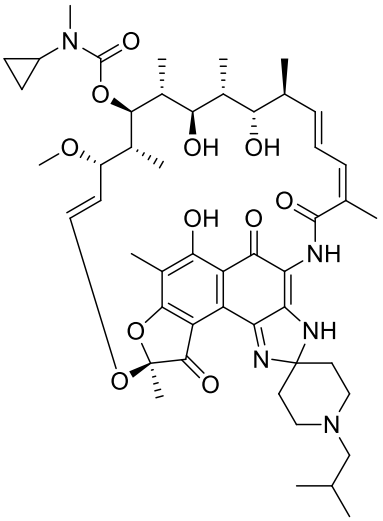
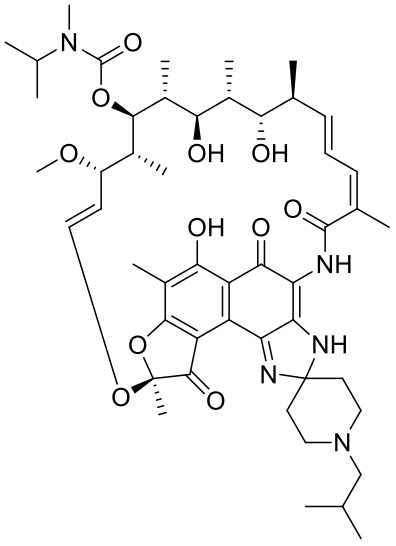

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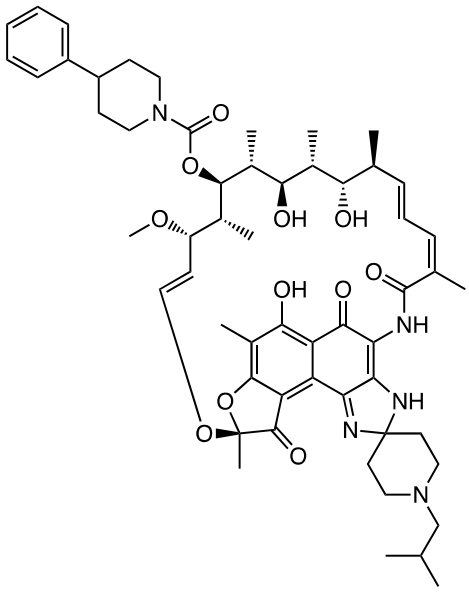
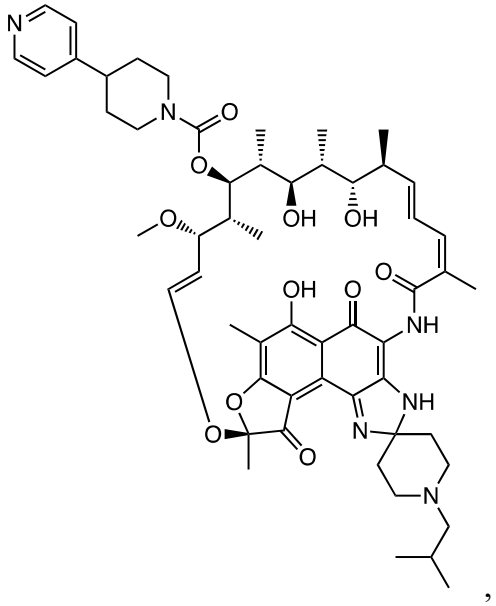
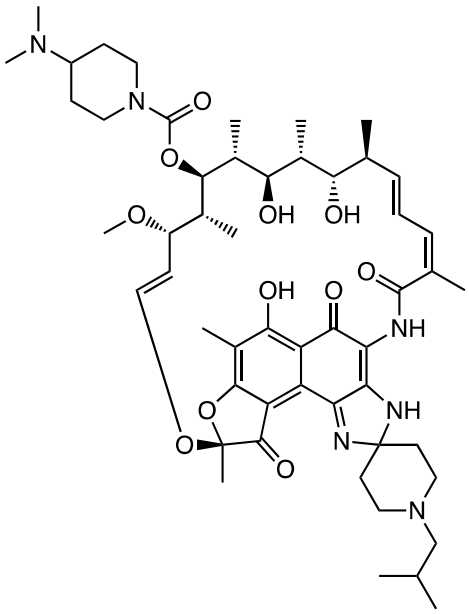
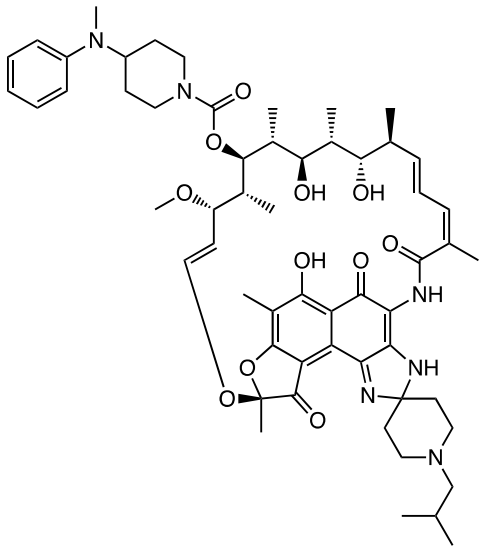

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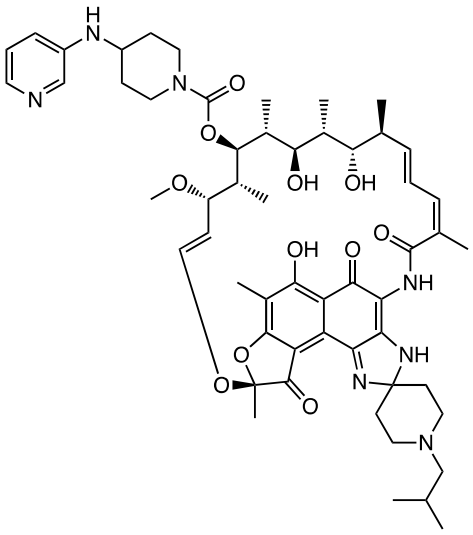
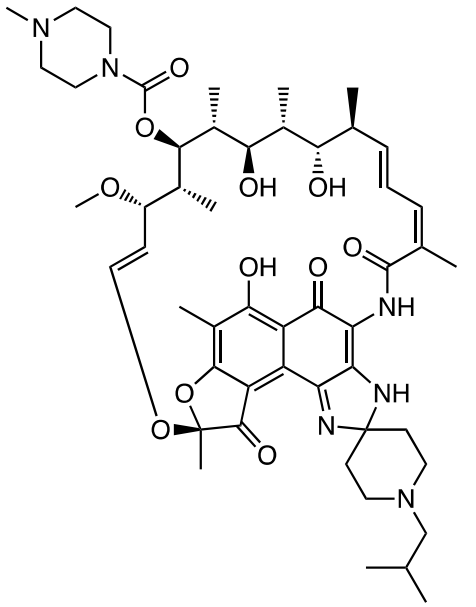
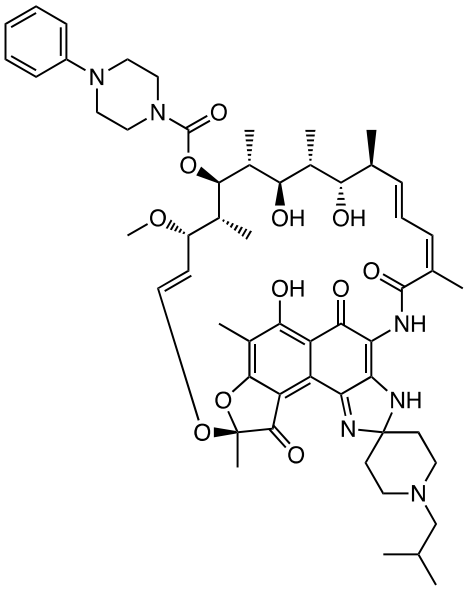
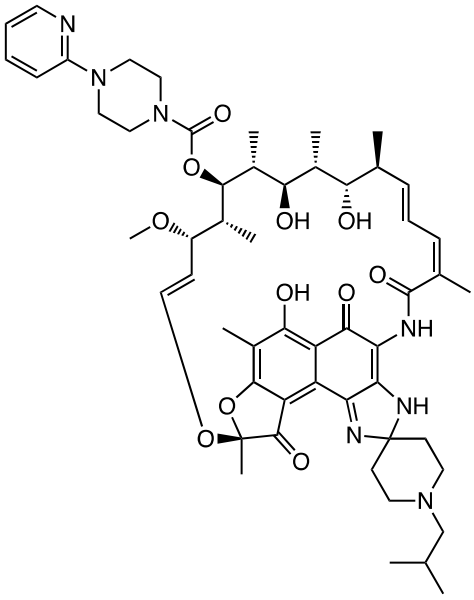

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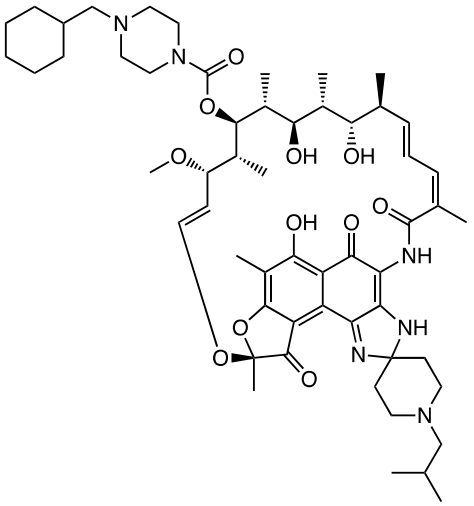
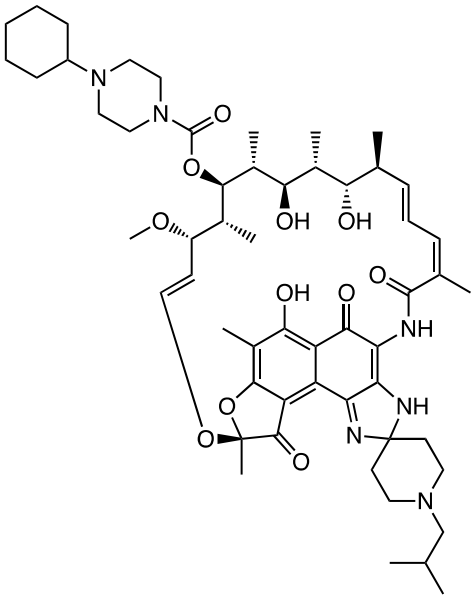
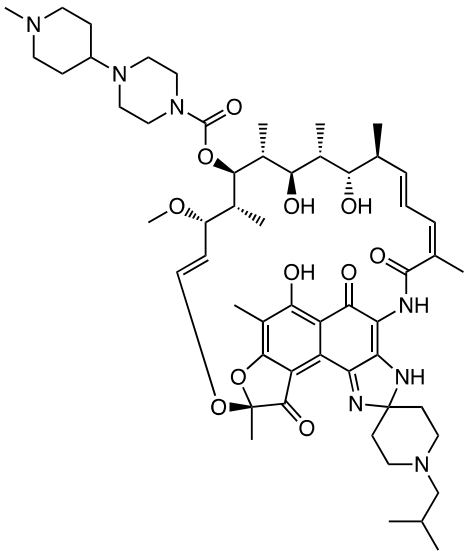
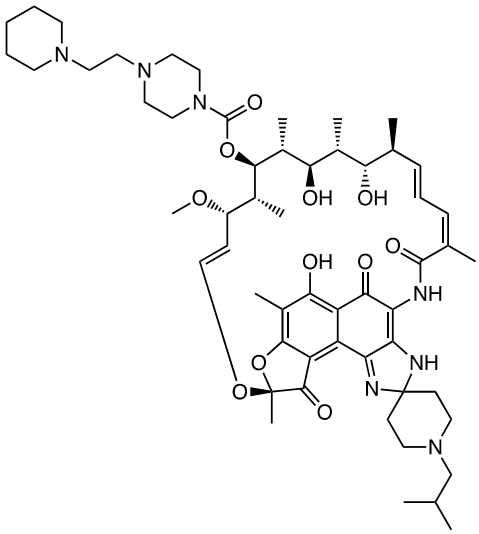
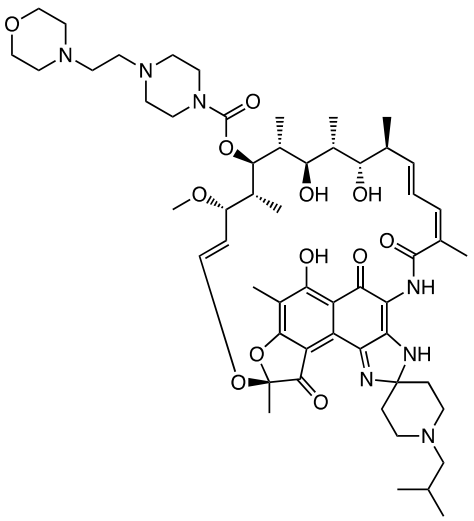
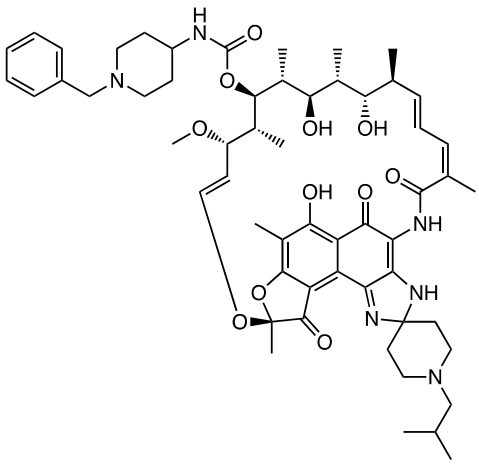
or a pharmaceutically acceptable salt thereof.

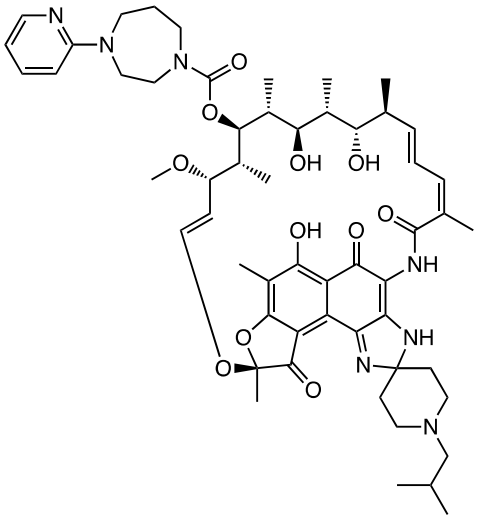
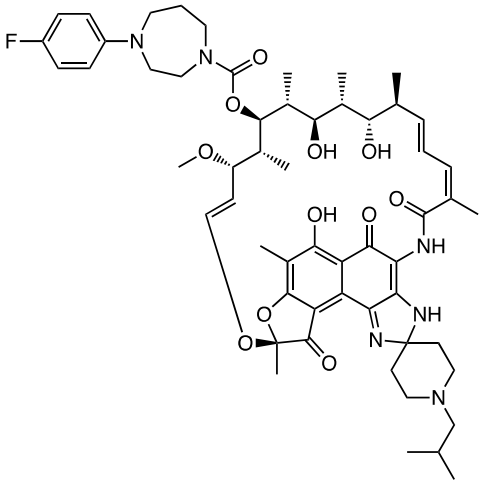
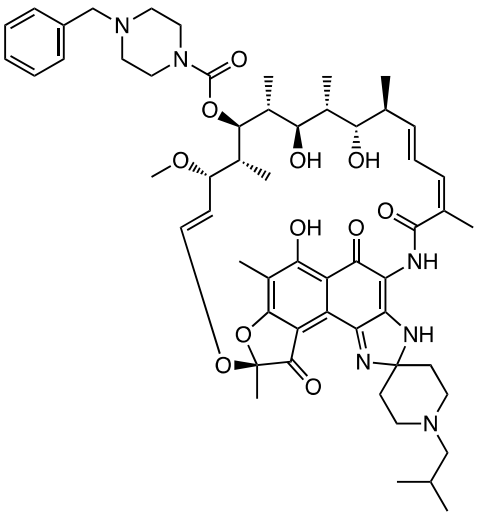
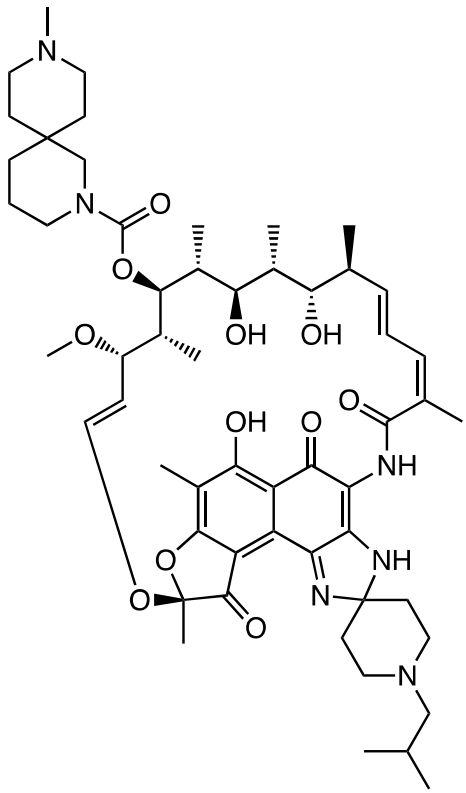
12. The compound according to claim 1, wherein the compound is selected from the group

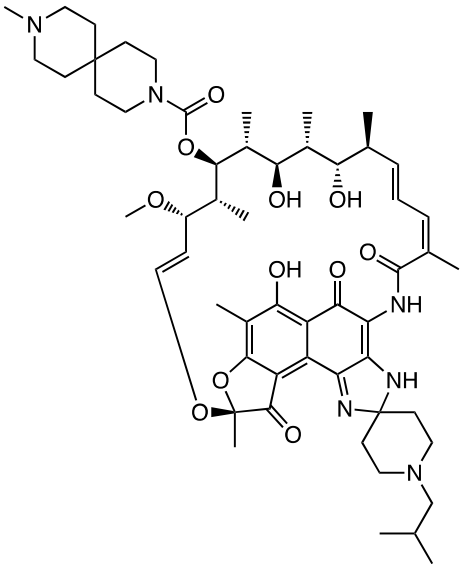
consisting of:


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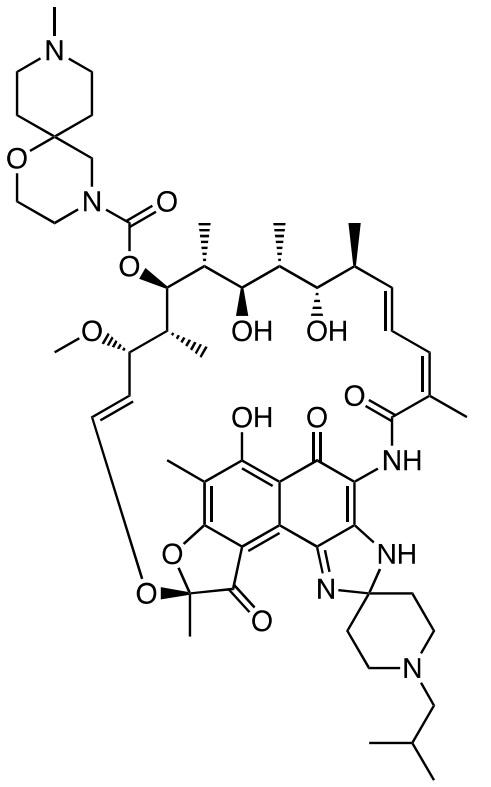

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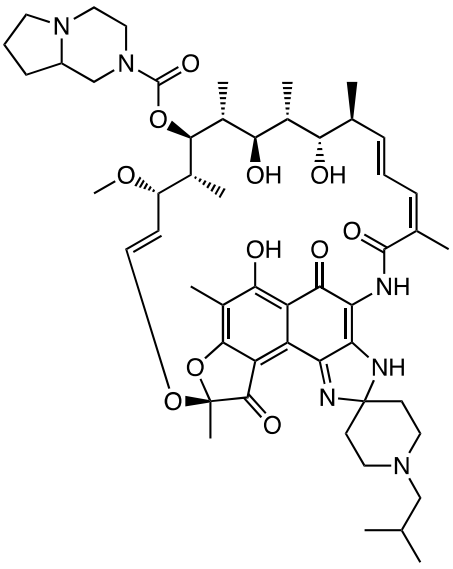

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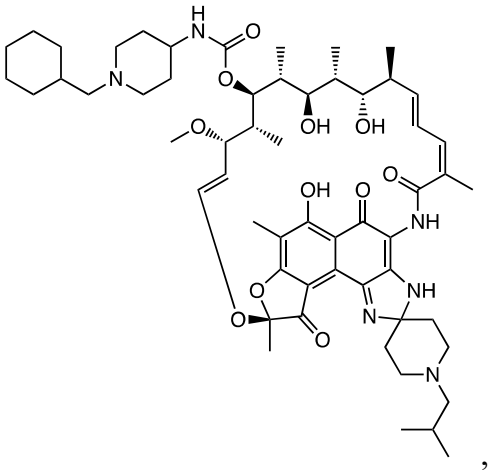
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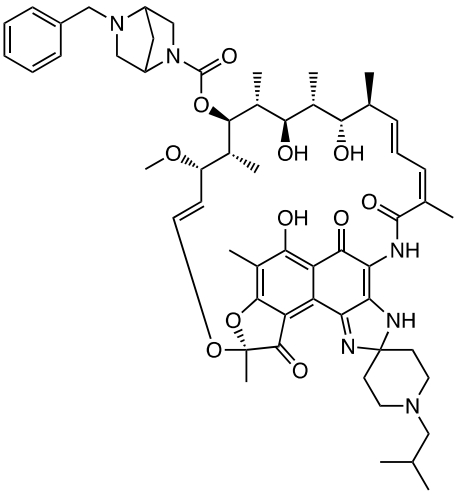
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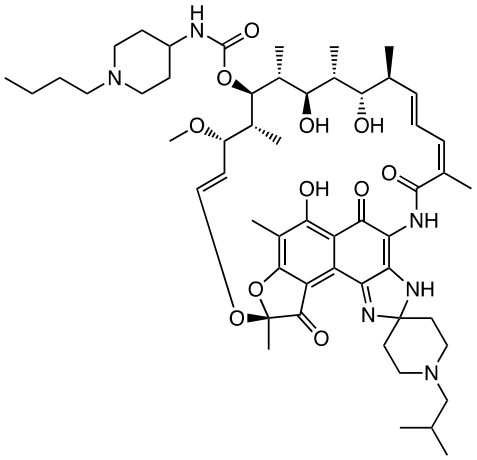


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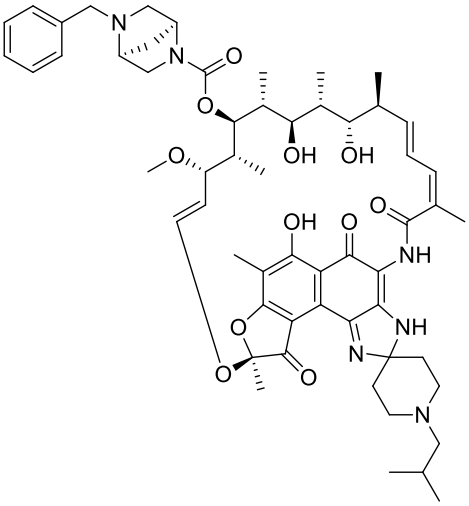


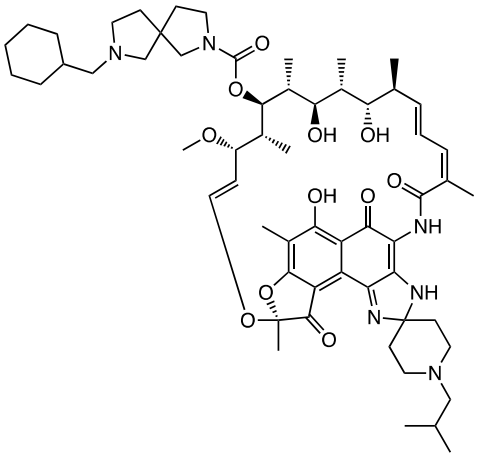
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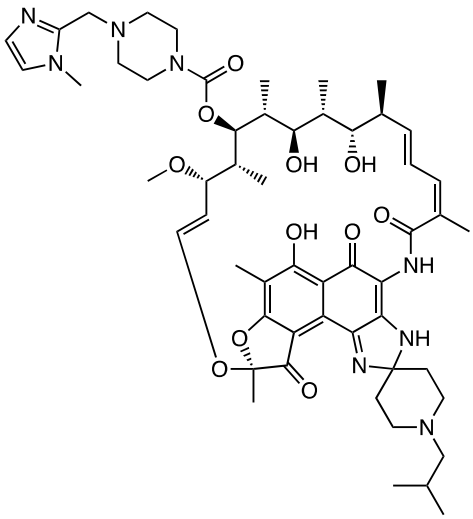

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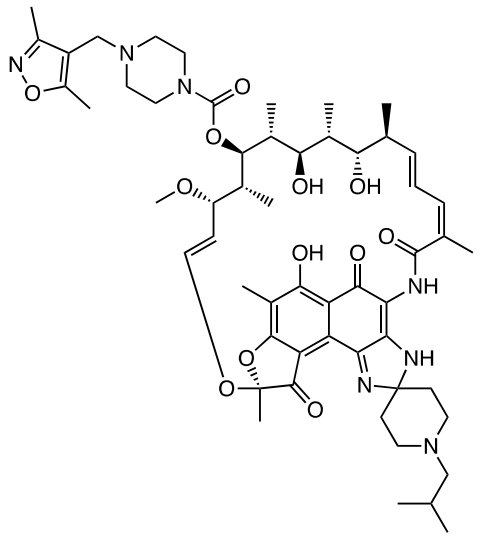
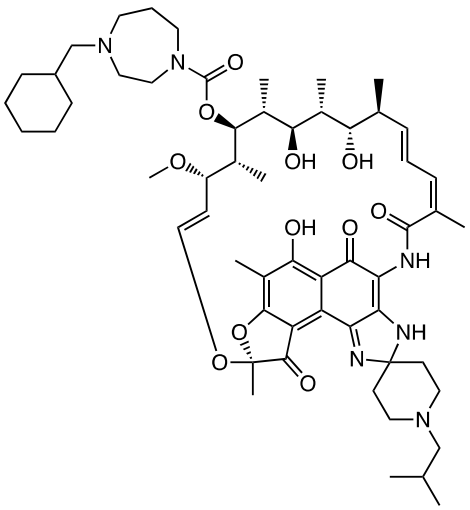
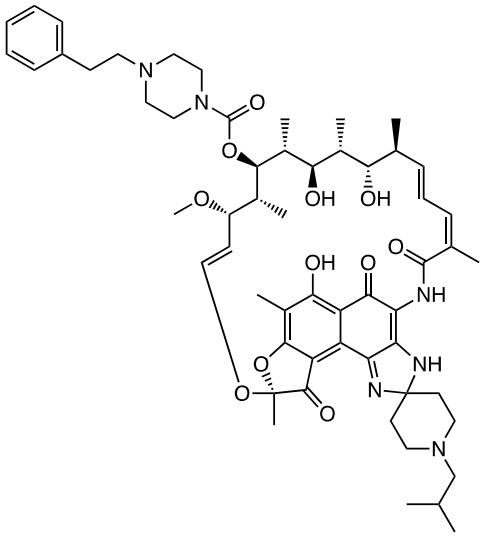
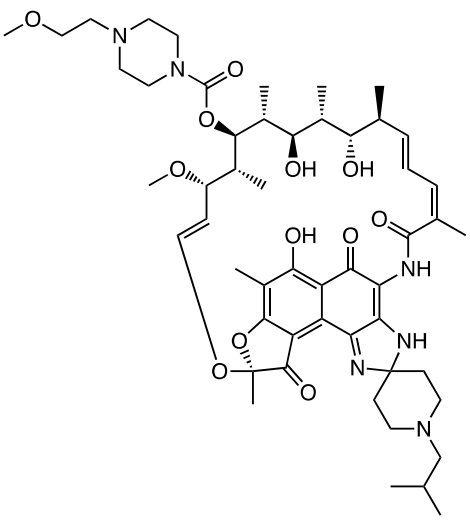
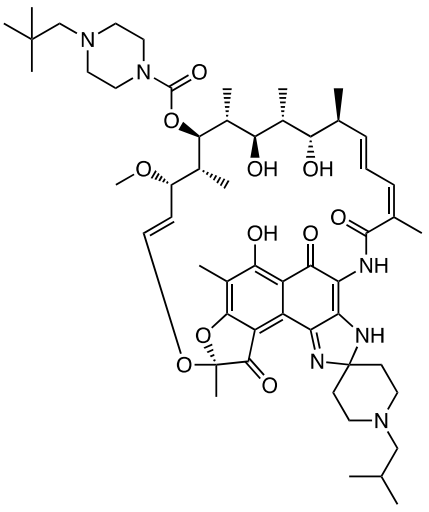
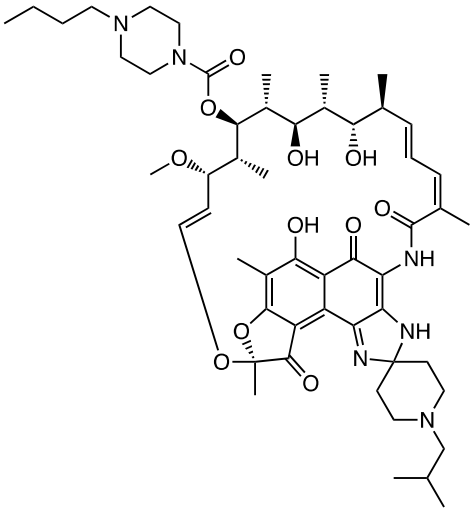

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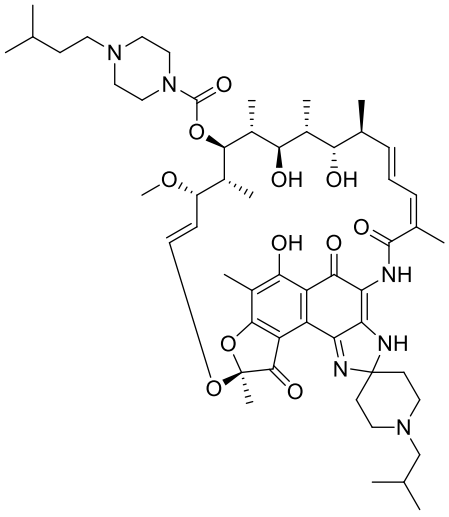
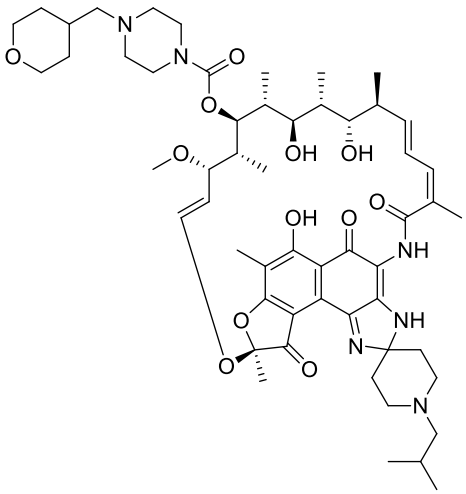
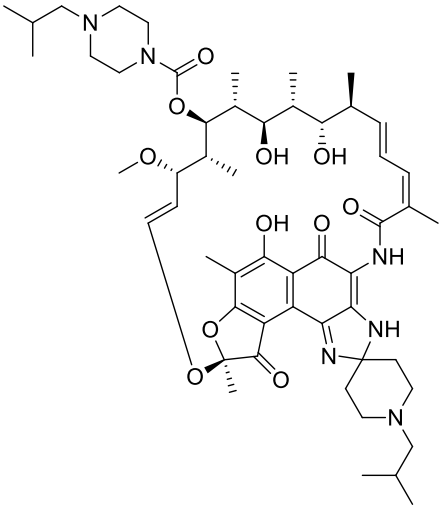
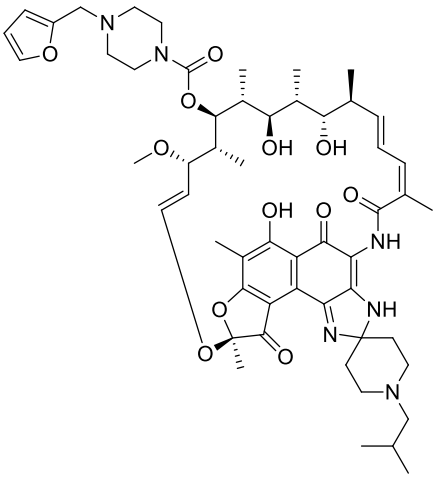
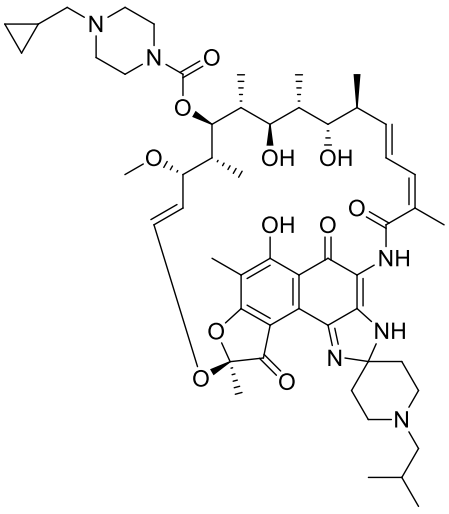
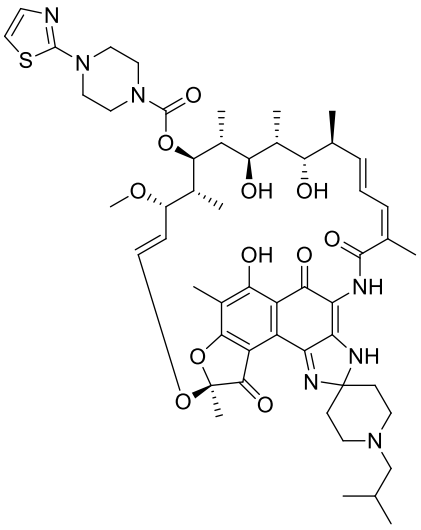
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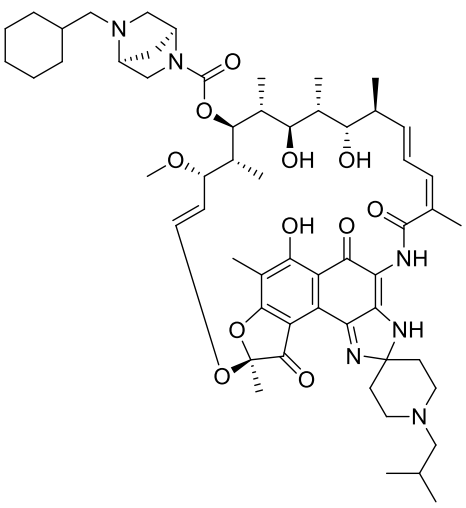
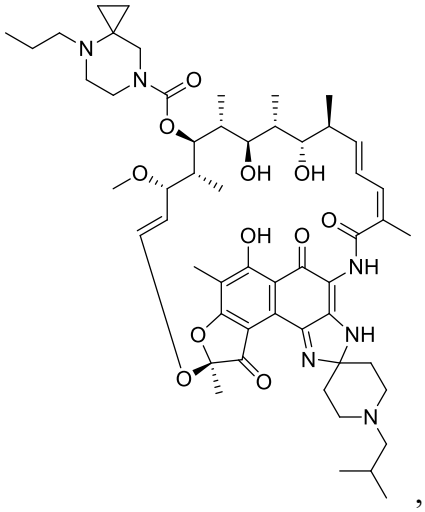
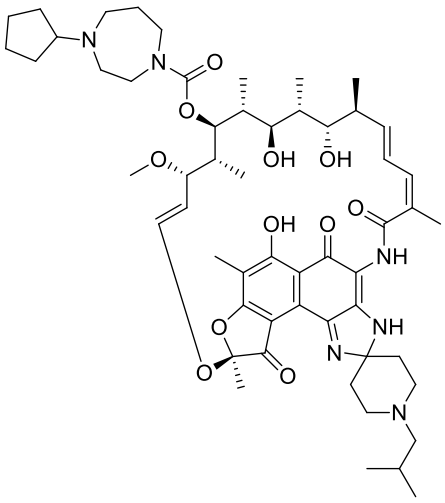
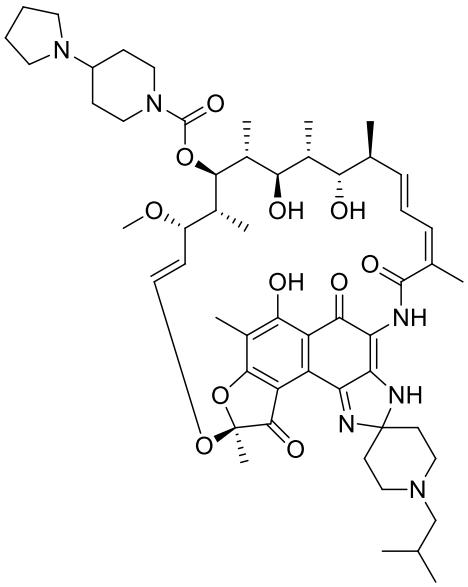
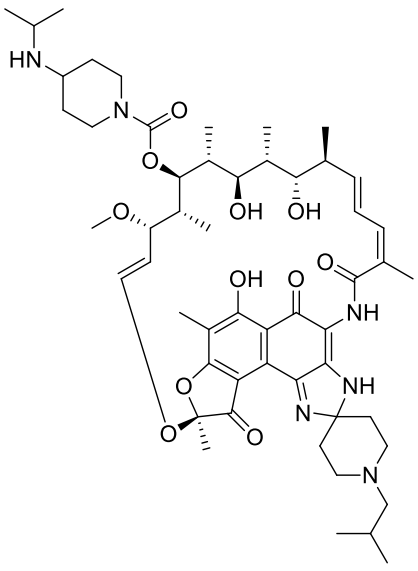
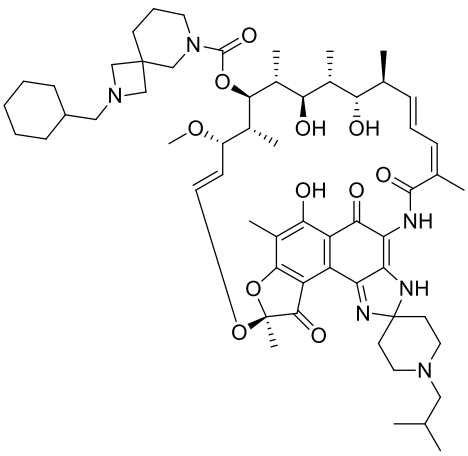

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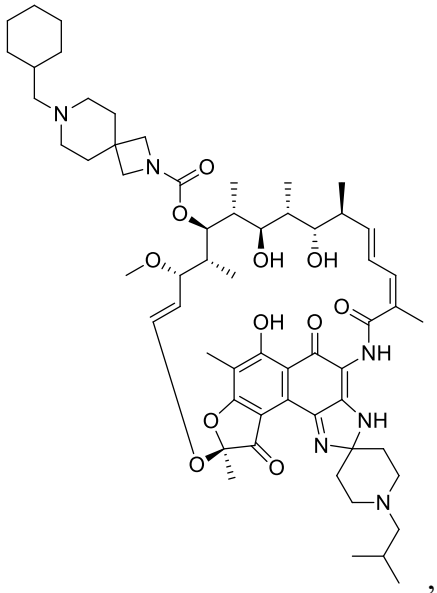
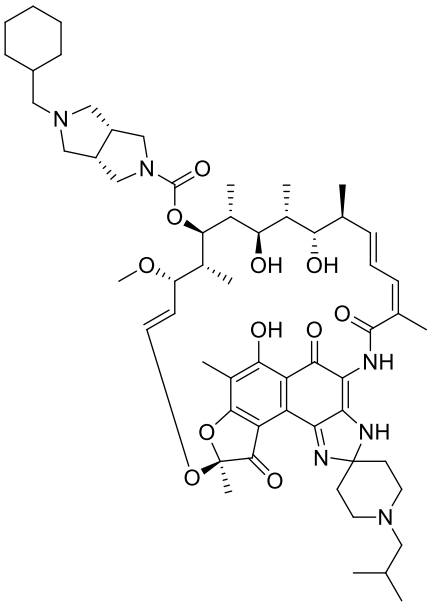
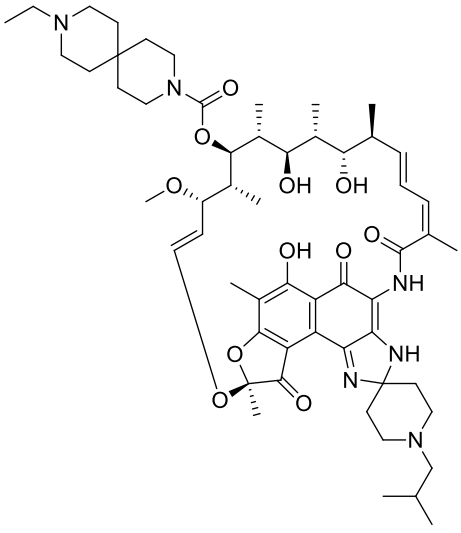
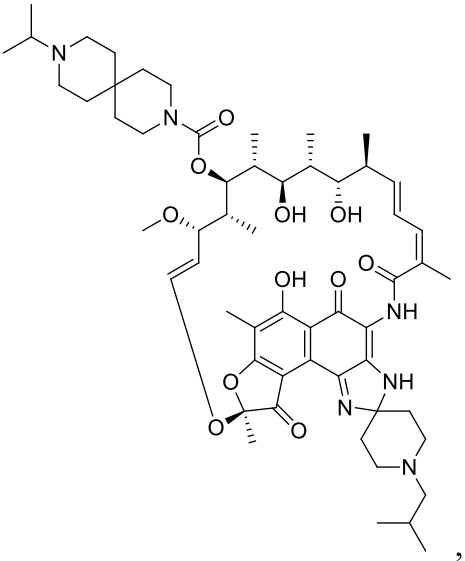
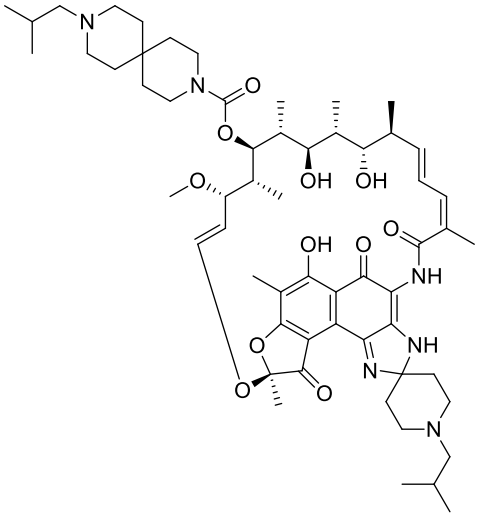
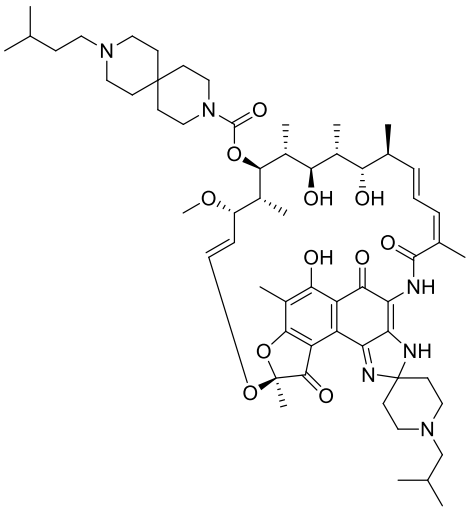

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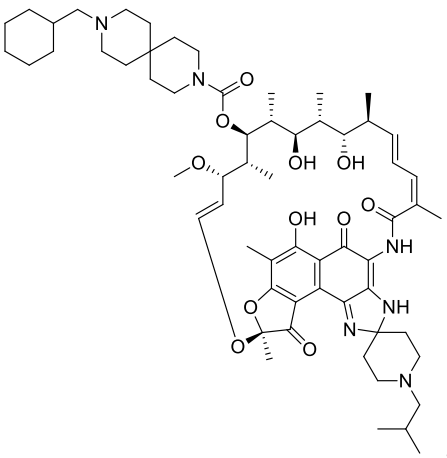
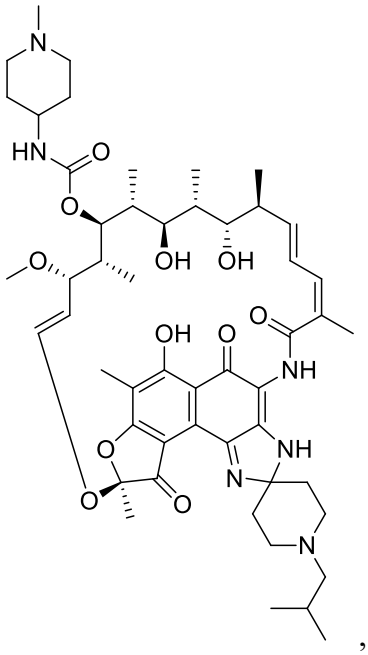
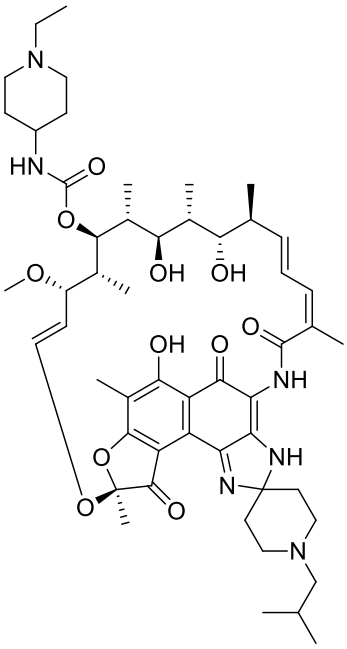
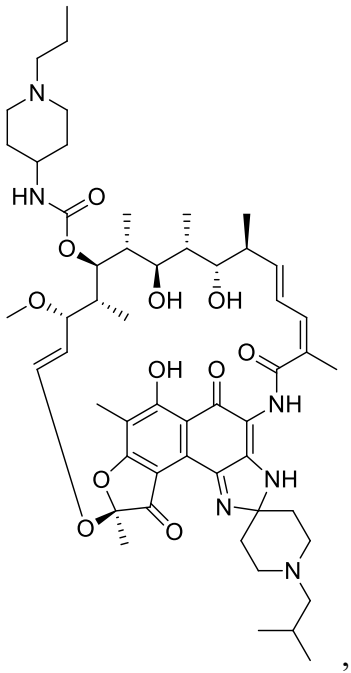

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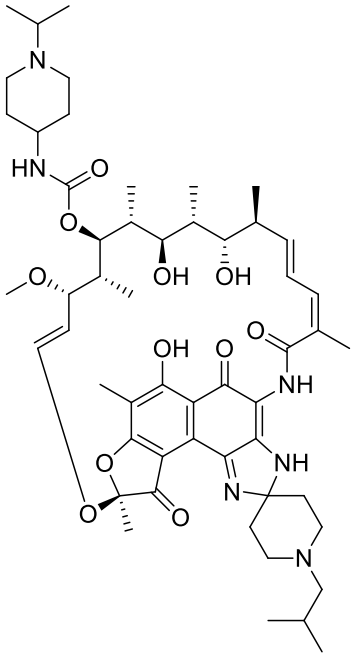

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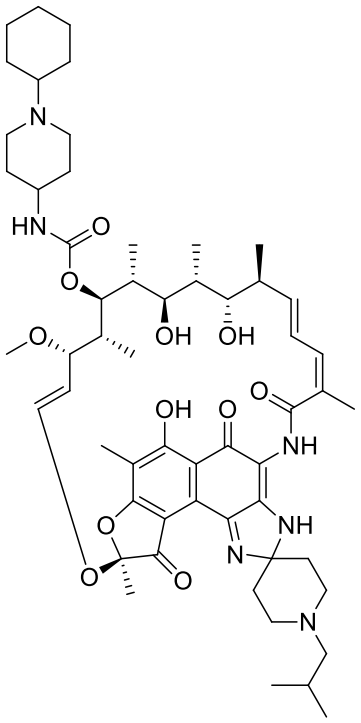

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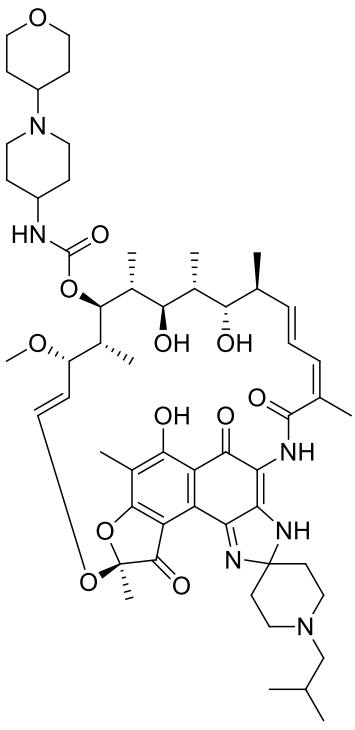

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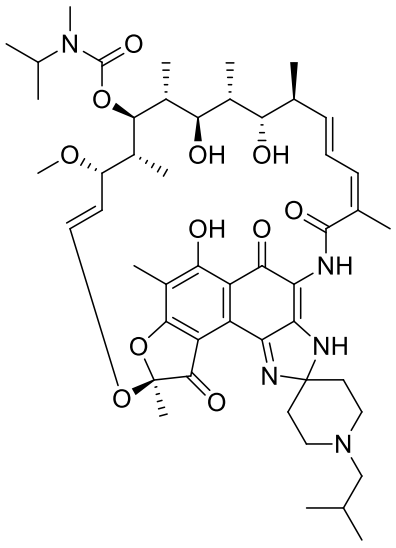

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or a pharmaceutically acceptable salt thereof.

13. A pharmaceutical composition comprising at least one compound according to any of the preceding claims, or a pharmaceutically acceptable salt, tautomer, solvate or hydrate thereof, and a pharmaceutically acceptable excipient.

14. A compound according to any of the claims 1 to 12 or a pharmaceutically acceptable salt, tautomer, solvate or hydrate thereof, for use as a medicament.

15. Use of a compound of according to any of the claims 1 to 12 or a pharmaceutically acceptable salt, tautomer, solvate or hydrate thereof, in the manufacture of a medicament for preventing or treating a disease in a subject, wherein said disease is an infection, further preferably a bacterial infection, yet further preferably a bacterial infection caused by one or more bacterium belonging to a genus of non-tuberculous *Mycobacteria*, preferably *M. abscessus*.