CLAIMS

1. Use of an antimalarial endoperoxide compound or a pharmaceutically acceptable salt thereof in the manufacture of the treatment of a myelodysplastic syndrome (MDS) in a subject suffering therefrom, wherein a therapeutically effective amount of the medicament is to be administered to the subject.

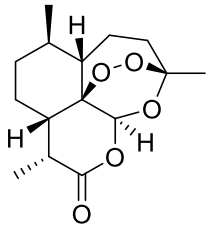
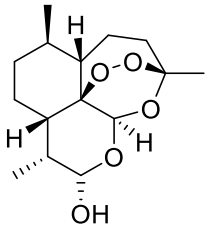
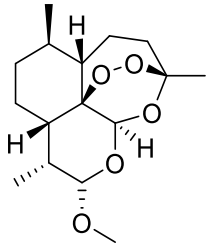
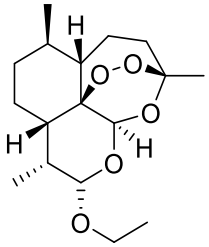
2. Use of an antimalarial endoperoxide compound or a pharmaceutically acceptable salt thereof in the manufacture of a medicament for use in a method for slowing or preventing the development of leukemia in a subject, wherein a therapeutically effective amount of the medicament is to be administered to the subject, and wherein the subject is one who suffers from a myelodysplastic syndrome (MDS).

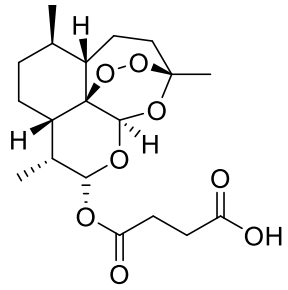
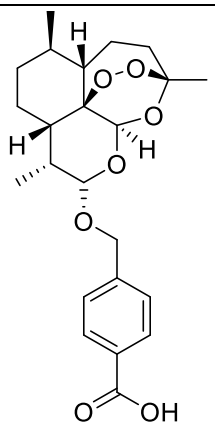
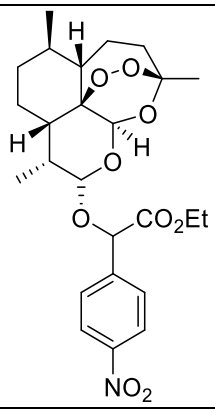
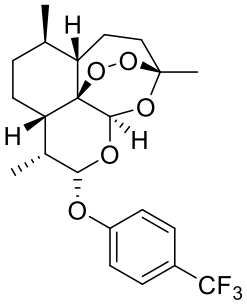
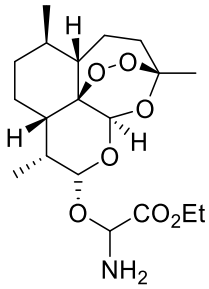
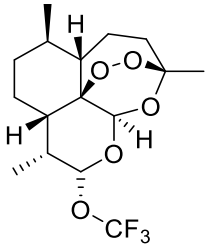
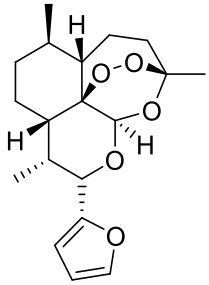
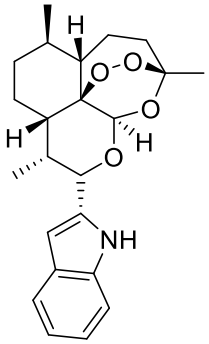
3. The use according to claim 2, wherein the leukemia is acute myeloid leukemia (AML).

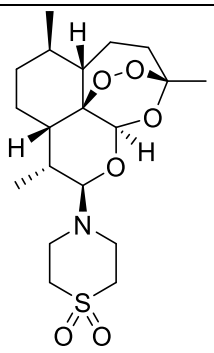
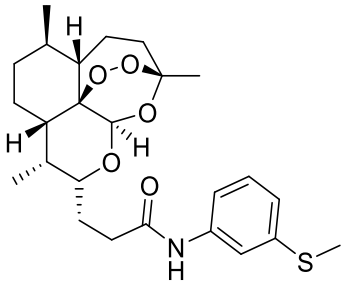
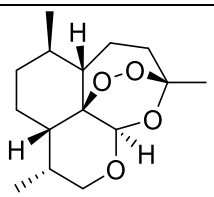
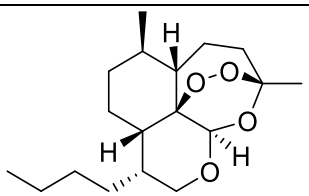
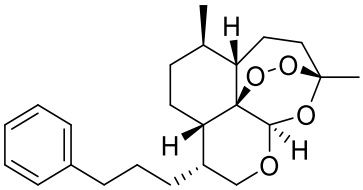
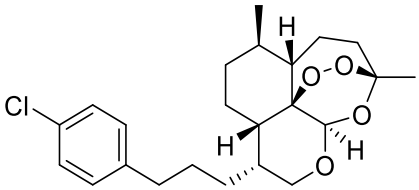
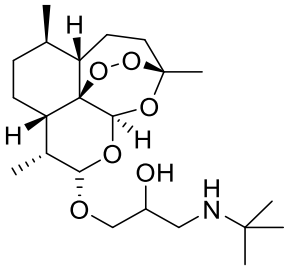
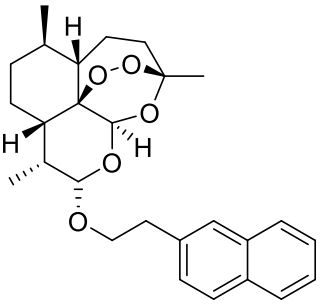
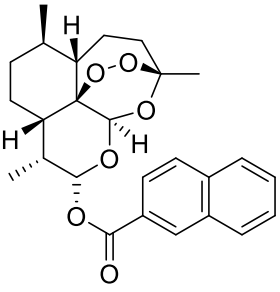
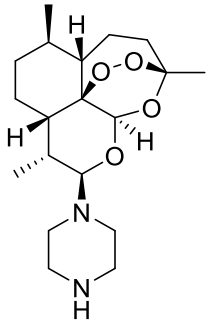
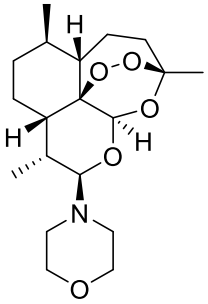
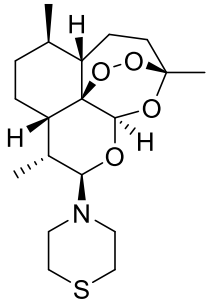
4. The use according to any one of claims 1 to 3, wherein the endoperoxide compound is chosen from artemisinin and derivatives thereof, a compound containing a 1,2,4-trioxane ring, a compound containing a 1,2,4-trioxolane ring, a compound containing a 1,2,4,5-tetraoxane ring, and pharmaceutically acceptable salts thereof.

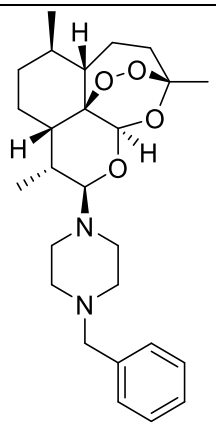
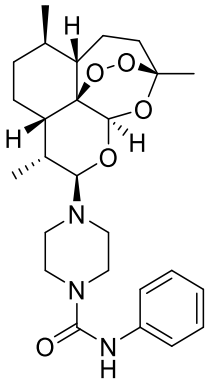
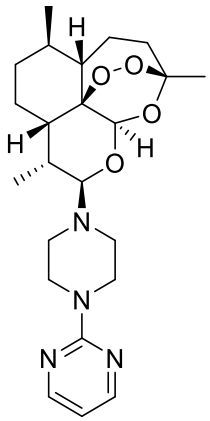
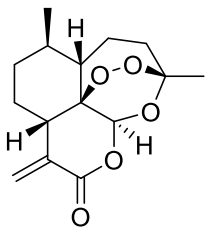
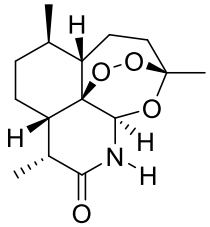
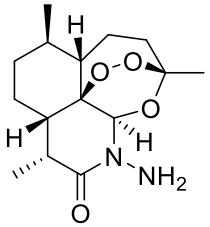
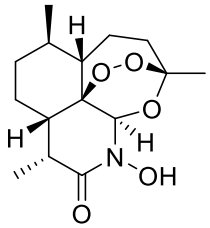
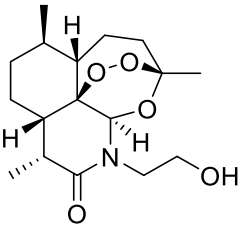
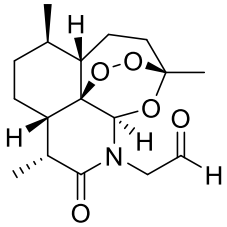
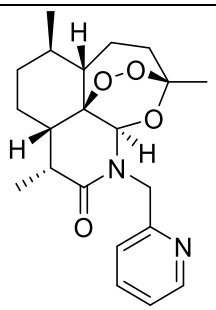
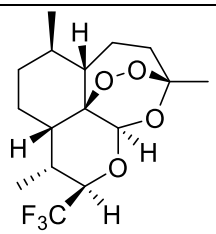
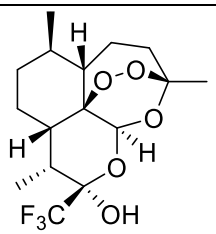
5. The use according to any one of claims 1 to 4, wherein the endoperoxide is chosen from artemisinin and derivatives thereof, or a pharmaceutically acceptable salt thereof.

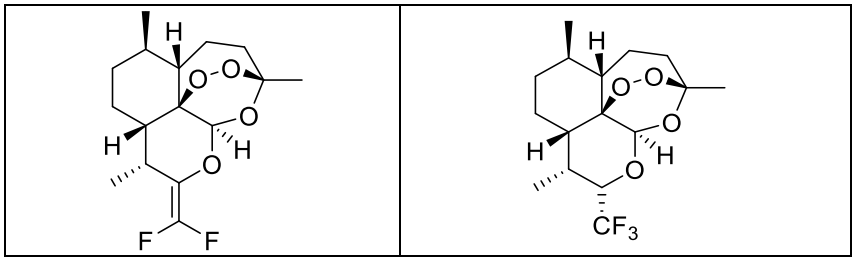
6. The use according to claim 5, wherein the artemisinin and derivatives thereof or a pharmaceutically acceptable salt thereof is one selected from the following table:

 artemisinin	 dihydroartemisinin
 artemether	 arteether

 artesunate	 artelinate
	
	
	

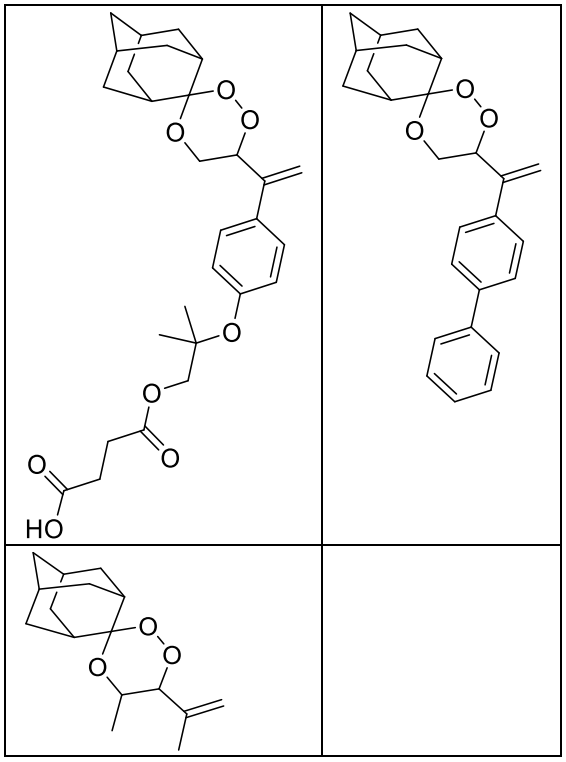
 Artemisone	 3-artesanilide
	
	
	
	
	



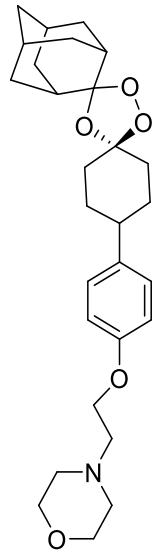
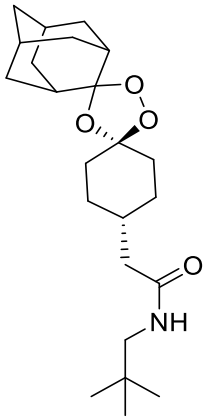
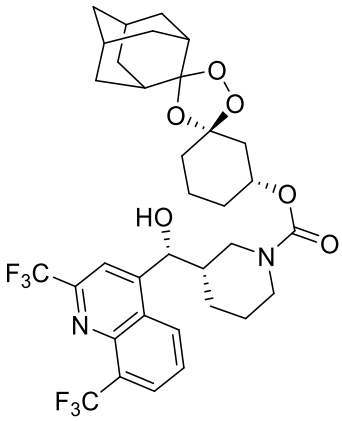
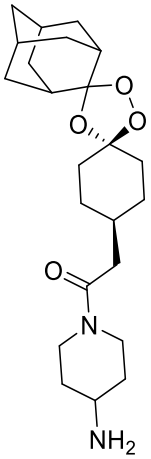
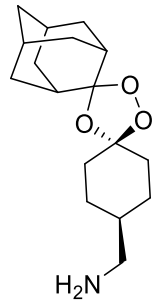
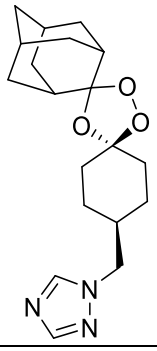
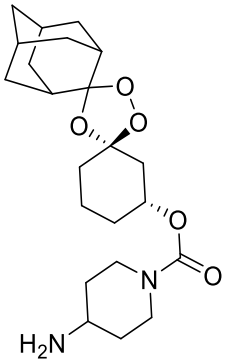
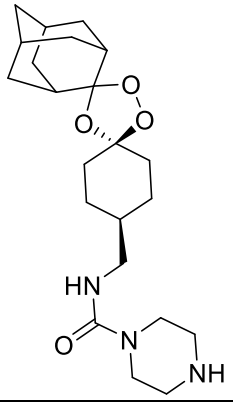
7. The use according to any one of claims 1 to 4, wherein the endoperoxide is a compound containing a 1,2,4-trioxane ring, or a pharmaceutically acceptable salt thereof.

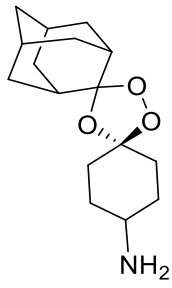
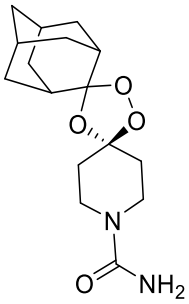
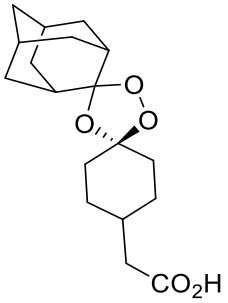
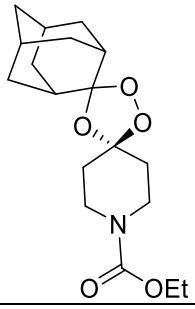
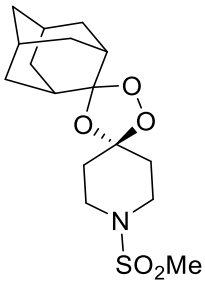
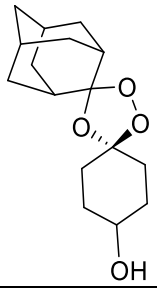
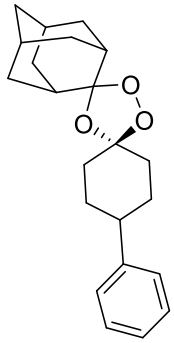
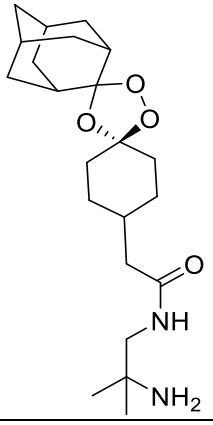
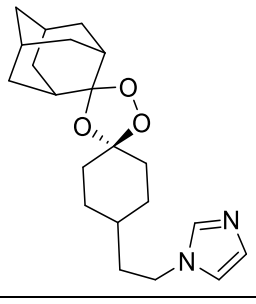
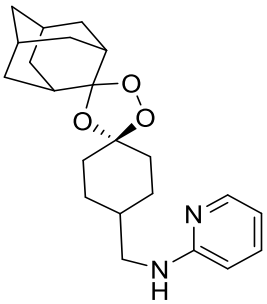
8. The use according to claim 7, wherein the compound containing a 1,2,4-trioxane ring, or a pharmaceutically acceptable salt thereof, is one selected from the following table:

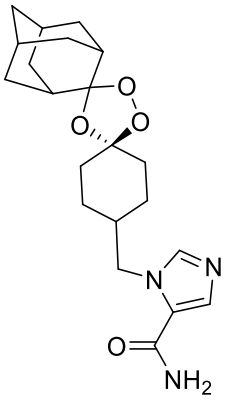


9. The use according to any one of claims 1 to 4, wherein the endoperoxide is a compound containing a 1,2,4-trioxolane ring, or a pharmaceutically acceptable salt thereof.

10. The use according to claim 9, wherein the compound containing a 1,2,4-trioxolane ring, or a pharmaceutically acceptable salt thereof, is one selected from the following table:

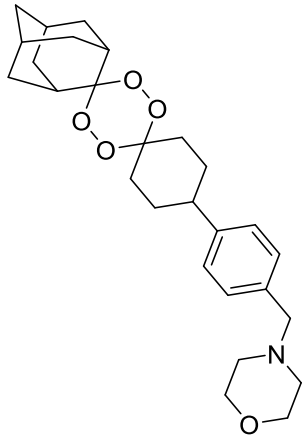
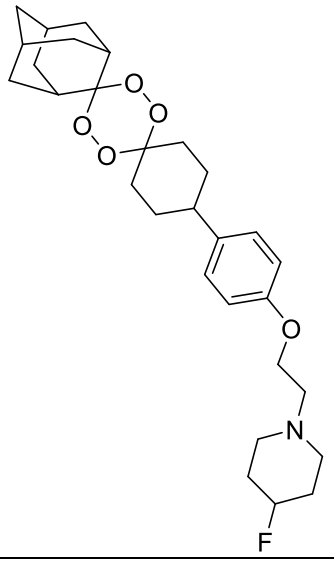
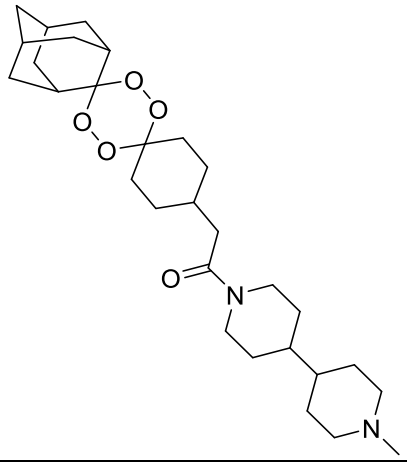
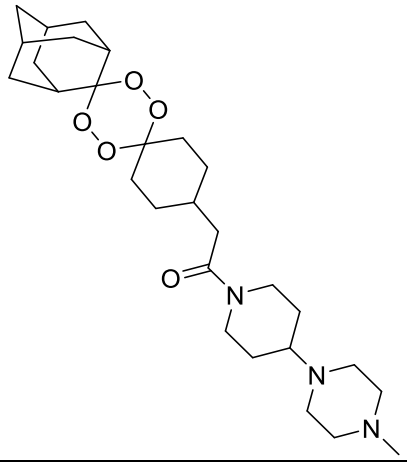
 artefenomel	
	
	
	

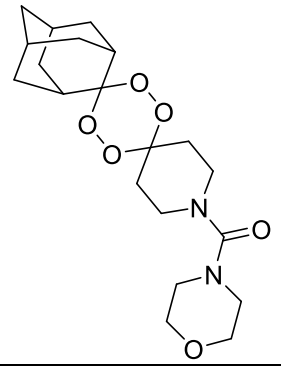
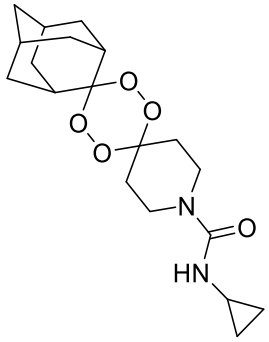
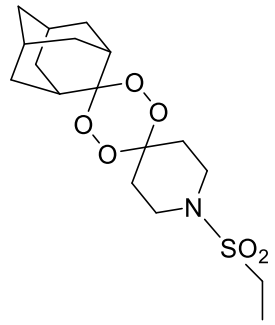
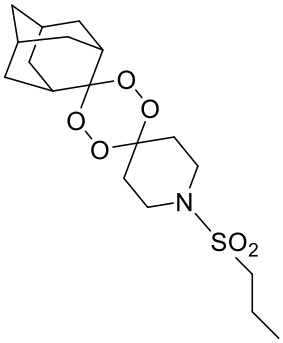
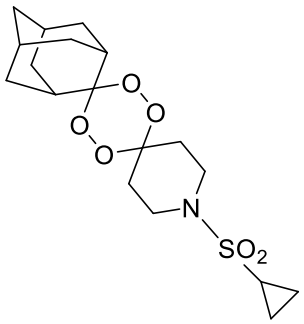
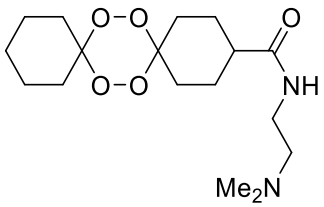
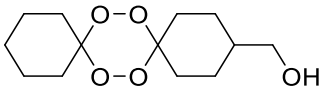
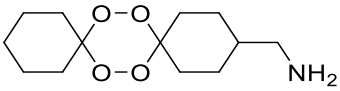
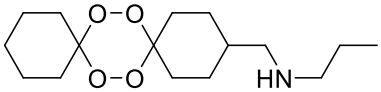
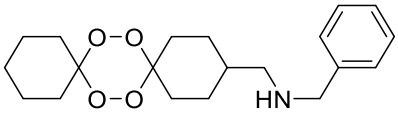
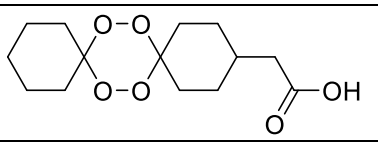
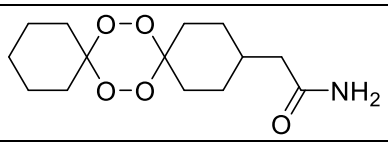
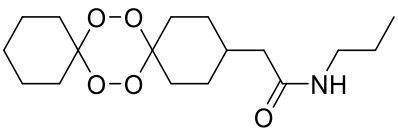
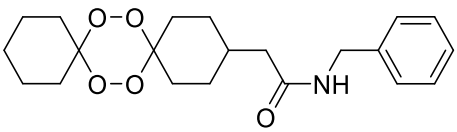
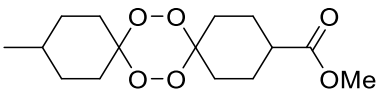
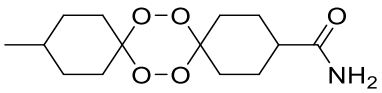
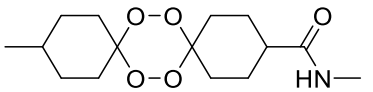
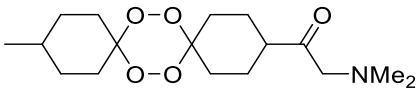
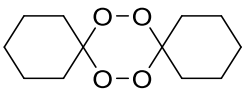
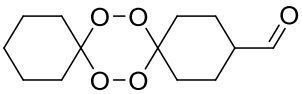
	
	
	
	
	

11. The use according to any one of claims 1 to 4, wherein the endoperoxide is a compound containing a 1,2,4,5-tetraoxane ring, or a pharmaceutically acceptable salt thereof.

12. The use according to claim 11, wherein the compound containing a 1,2,4,5-tetraoxane ring, or a pharmaceutically acceptable salt thereof, is one selected from the following table:

13. The use according to any one of claims 1 to 12, wherein the MDS is primary MDS.

14. The use according to any one of claims 1 to 12, wherein the MDS is secondary MDS.

15. The use according to any one of claims 1 to 14, wherein the MDS is one or more subtypes chosen from refractory anemia (RA), refractory anemia with ringed sideroblasts (RARS), refractory cytopenia with multilineage dysplasia (RCMD), refractory cytopenia with multilineage dysplasia and ringed sideroblasts (RCMD-RS), refractory anemia with excess blasts (RAEB), myelodysplastic syndrome unclassified (MDS-U), and MDS associated with isolated del(5q).