



Myelodysplasia / Myeloproliferative Disorders Pre-HSCT Data

Registry Use Only

Sequence
Number:

Date
Received:

CIBMTR Center Number:

CIBMTR Recipient ID:

Today's Date: / /
Month Day Year

Date of HSCT for which this form is
being completed: / /
Month Day Year

HSCT type: autologous allogeneic, allogeneic, syngeneic
unrelated related (identical twin)

Product type: marrow PBSC cord blood other product,
specify: _____

This form must be accompanied by Form 2000 – Recipient Baseline Data. All information in the box above, including the date, should be identical with the corresponding Form 2000. Information should come from an actual examination by the Transplant Center physician, or the physician who is following the recipient pre-HSCT, or abstraction of the recipient's medical records.

Questions followed by the symbol indicate additional information necessary to complete the question is referenced in the forms instruction manual.

If this is a report of a second or subsequent transplant, check here and continue with question 181.

Disease Assessment at Diagnosis

1. What was the date of diagnosis of myelodysplastic / myeloproliferative disorder?

 / /
Month Day Year

2. What was the MDS / MPS subtype at diagnosis?

- 1 refractory anemia (RA)
- 2 refractory anemia with ringed sideroblasts (RARS)
- 3 refractory anemia with excess blasts (RAEB-1)
- 4 refractory anemia with excess blasts in transformation (RAEB-2)
- 5 refractory cytopenia with multilineage dysplasia (RCMD)
- 6 refractory anemia with ringed sideroblasts with dysplasia (RCMD-RS)
- 7 5q- syndrome
- 8 MDS unclassifiable, not otherwise specified
- 9 chronic myelomonocytic leukemia (CMML)
- 10 chronic MPS disorder, not otherwise specified
- 11 chronic neutrophilic leukemia
- 12 chronic eosinophilic leukemia and hypereosinophilic syndrome
- 13 polycythemia vera (PCV)
- 14 chronic idiopathic myelofibrosis (with extramedullary hematopoiesis), myelofibrosis with myeloid metaplasia, acute myelofibrosis or myelosclerosis
- 15 essential or primary thrombocythemia

Mail this form to your
designated campus (Milwaukee
or Minneapolis). Retain the
original at the transplant center.

CIBMTR Center Number:

CIBMTR Recipient ID:

3. Was this a secondary (therapy-linked) disorder?

- 1 yes
 2 no
 3 unknown

4. Specify prior disease (malignant or nonmalignant):

1 breast cancer
 2 Hodgkin lymphoma
 3 non-Hodgkin lymphoma
 4 other disease
 5 unknown

5. Specify prior disease:

6. Date of diagnosis of prior disease:

Month Day Year

Treatment of prior disease included:

7. 1 yes 2 no 3 unknown Chemotherapy
 8. 1 yes 2 no 3 unknown Radiation
 9. 1 yes 2 no 3 unknown Other treatment

10. Specify treatment:

11. Did the recipient have other predisposing conditions prior to diagnosis of the hematologic disorder?

- 1 yes
 2 no

12. Specify predisposing condition:

1 aplastic anemia
 2 Bloom syndrome
 3 Down syndrome
 4 Fanconi anemia
 5 other condition

Also complete Form 2028 — APL

Also complete Form 2029 — FAN

13. Specify condition:

Questions 14–16 refer to MPS subtypes only (see question 2, options 9–15); if the diagnosis other than MPS, continue with question 17.

14. Did the recipient have systemic symptoms (e.g., fever, sweats, weight loss > 10%) at diagnosis?

- 1 yes
 2 no
 3 unknown

15. Did the recipient have splenomegaly at diagnosis?

- 1 yes
 2 no
 3 unknown

16. Did the recipient have hepatomegaly at diagnosis?

- 1 yes
 2 no
 3 unknown

Question 17 refers to MDS only (see question 2, options 1–8); if the diagnosis other than MDS, continue with question 18.

17. What was the disease prognosis score at diagnosis? (see table below) .

International Prognostic Scoring System (IPSS) for MDS					
SCORE	0.0	0.5	1.0	1.5	2.0
Prognostic variable:					
Percent blasts	< 5%	5–10%	—	11–20%	20–30% *
Karyotype **	Good	Intermediate	Poor	—	—
Cytopenias ***	0–1	2–3	—	—	—

* This group is recognized as AML in this proposed classification; see question 25
 ** Karyotype:
 Good = normal, -Y, del(5q), del(20q)
 Intermediate = other abnormalities
 Poor = complex (≥ 3 abnormalities) or chromosome 7 abnormalities; see questions 33–96
 *** Cytopenias = Hb < 10 g/dL; platelets < 100 x 10⁹/L; neutrophils < 1500/μL; see questions 19–23

CIBMTR Center Number:

CIBMTR Recipient ID:

Laboratory Studies at Diagnosis (Prior to the First Treatment for MDS / MPS)

18. WBC: known not known → . Specify units:
1 x 10⁹/L (x 10³/mm³)
2 x 10⁶/L

19. Hemoglobin: known not known → .
1 g/dL
2 g/L
3 mmol/L

20. Was RBC transfused < 30 days before date of test?
1 yes
2 no

21. Platelets: known not known →
1 x 10⁹/L (x 10³/mm³)
2 x 10⁶/L

22. Were platelets transfused < 7 days before date of test?
1 yes
2 no

23. Neutrophils: known not known → %

24. Monocytes: known not known → %

25. Blasts in blood: known not known → %

26. Was a bone marrow examination performed at first diagnosis of hematologic disorder (reported at questions 1–2)?
1 yes
2 no

27. Cellularity:
1 decreased
2 normal
3 increased
4 unknown

28. Fibrosis:
1 absent
2 mild
3 moderate
4 severe
5 unknown

29. Blasts in marrow: known not known → %

CIBMTR Center Number:

CIBMTR Recipient ID:

30. Were cytogenetics tested (conventional or FISH)?

- 1 yes
- 2 no
- 3 unknown

31. Results of test at diagnosis:

- 1 yes abnormalities identified → **Complete questions 33–64 in the table below**
- 2 no evaluable metaphases → **Continue with question 32**
- 3 no abnormalities → **Continue with question 32**

32. Results of tests after diagnosis and prior to the preparative regimen:

- 1 yes abnormalities identified → **Complete questions 65–96 in the table below**
- 2 no evaluable metaphases on any tests → **Continue with question 97**
- 3 no abnormalities on any tests after diagnosis and before the preparative regimen → **Continue with question 97**

Specify abnormalities identified:

Cytogenetic abnormality	At diagnosis		Any test result between diagnosis and preparative regimen	
Monosomy				
-5	33. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	65. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
-7	34. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	66. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
-17	35. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	67. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
-18	36. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	68. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
-20	37. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	69. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
-X	38. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	70. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
-Y	39. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	71. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
Trisomy				
+4	40. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	72. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
+8	41. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	73. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
+11	42. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	74. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
+13	43. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	75. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
+14	44. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	76. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
+21	45. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	77. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
+22	46. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	78. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
Translocation				
t(3;3)	47. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	79. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
t(6;9)	48. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	80. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
t(8;21)	49. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	81. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
t(15;17) and variants	50. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	82. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
t(16;16)	51. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	83. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
Deletion				
del(5q) / 5q-	52. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	84. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
del(7q) / 7q-	53. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	85. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
del(9q) / 9q-	54. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	86. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
del(11q) / 11q-	55. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	87. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
del(17q) / 17q-	56. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	88. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
del(20q) / 20q-	57. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	89. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
Inversion				
inv(3)	58. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	90. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
inv(16)	59. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	91. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
Other				
(11q23) balanced abnormality	60. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	92. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
12p any abnormality	61. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	93. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
complex (≥ 3 distinct abnormalities)	62. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	94. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
other abnormality	63. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	95. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no
specify other abnormality:	64. _____		96. _____	

97. Is a copy of the cytogenetic or FISH report attached?

- 1 yes
- 2 no

Pre-HSCT Treatment for MDS / MPS

98. Was therapy given between diagnosis and the start of the preparative regimen?

- 1 yes →
- 2 no
- 3 unknown

	1st Line of Therapy	2nd Line of Therapy
Line of Therapy:	1st Line of Therapy	2nd Line of Therapy
Systemic Therapy:	99. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no → cont. with 130	140. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no → cont. with 171
Date therapy started:	100. <input type="text"/> / <input type="text"/> / <input type="text"/>	141. <input type="text"/> / <input type="text"/> / <input type="text"/>
Date therapy stopped:	101. <input type="text"/> / <input type="text"/> / <input type="text"/>	142. <input type="text"/> / <input type="text"/> / <input type="text"/>
Indication for therapy: (see codes on page 8)	102. <input type="text"/>	143. <input type="text"/>
If code 4 "other," specify:	103. _____	144. _____
anagrelide (Agraylin, Xagrid)	104. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	145. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
androgens	105. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	146. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
antithymocyte globulin (ATG)	106. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	147. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
azacytidine (Vidaza)	107. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	148. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
busulfan	108. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	149. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
chlorambucil (Leukeran)	109. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	150. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
corticosteroids	110. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	151. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
cyclosporine (CSA, Neoral)	111. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	152. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
cytarabine (Ara-C)	112. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	153. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
Cytokines:		
erythropoietin (EPO) (any formulation)	113. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	154. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
G-CSF (any formulation)	114. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	155. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
GM-CSF	115. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	156. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
interleukin-3 (IL-3)	116. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	157. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
stem cell factor (SCF)	117. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	158. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
other cytokine	118. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	159. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
specify other cytokine	119. _____	160. _____
decitabine (Dacogen)	120. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	161. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
deferiprone (Ferriprox)	121. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	162. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
deferaginox (Exjade)	122. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	163. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
deferoxamine (Desferal)	123. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	164. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
hydroxyurea (Droxia, Hydrea)	124. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	165. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
lenalidomide (Revlimid)	125. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	166. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
thalidomide (Thalomid)	126. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	167. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
topotecan (Hycamtin)	127. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	168. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
other systemic therapy	128. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	169. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
specify other therapy	129. _____	170. _____
Other Therapy:	130. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no → cont. with 135	171. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no → cont. with 176
splenic radiation	131. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	172. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
splenectomy	132. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	173. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
other therapy	133. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	174. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
specify other therapy	134. _____	175. _____
Best Response to Line of Therapy (see definitions on page 8)	135. 1 <input type="checkbox"/> CR 2 <input type="checkbox"/> HI → 136. Specify cell line: 3 <input type="checkbox"/> NR / SD 1 <input type="checkbox"/> HI-E 4 <input type="checkbox"/> Prog from HI 2 <input type="checkbox"/> HI-P 5 <input type="checkbox"/> Rel from CR 3 <input type="checkbox"/> HI-N 6 <input type="checkbox"/> AML	176. 1 <input type="checkbox"/> CR 2 <input type="checkbox"/> HI → 177. Specify cell line: 3 <input type="checkbox"/> NR / SD 1 <input type="checkbox"/> HI-E 5 <input type="checkbox"/> Prog from HI 2 <input type="checkbox"/> HI-P 4 <input type="checkbox"/> Rel from CR 3 <input type="checkbox"/> HI-N 6 <input type="checkbox"/> AML
Date response established:	137. <input type="text"/> / <input type="text"/> / <input type="text"/>	178. <input type="text"/> / <input type="text"/> / <input type="text"/>
Did patient relapse/progress following this line of therapy?	138. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	179. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
Date of relapse/progression:	139. <input type="text"/> / <input type="text"/> / <input type="text"/>	180. <input type="text"/> / <input type="text"/> / <input type="text"/>

Copy this page to report more than 2 lines of therapy; check here if additional pages are attached.

CIBMTR Center Number:

CIBMTR Recipient ID:

Transformation

181. Did the recipient transform to a different MDS / MPS subtype prior to the preparative regimen?

- 1 yes →
2 yes, with subsequent complete remission →
3 no

182. Specify the MDS subtype at the time of HSCT; or if in complete remission, the most recent subtype:

- 1 refractory anemia (RA)
2 refractory anemia with ringed sideroblasts (RARS)
3 refractory anemia with excess blasts (RAEB-1)
4 refractory anemia with excess blasts in transformation (RAEB-2)
5 refractory cytopenia with multilineage dysplasia (RCMD)
6 refractory anemia with ringed sideroblasts with dysplasia (RCMD-RS)
7 5q- syndrome
8 MDS unclassifiable, not otherwise specified
9 chronic myelomonocytic leukemia (CMML)
10 chronic MPS disorder, not otherwise specified
11 chronic neutrophilic leukemia
12 chronic eosinophilic leukemia and hypereosinophilic syndrome
13 polycythemia vera (PCV)
14 chronic idiopathic myelofibrosis (with extramedullary hematopoiesis), myelofibrosis with myeloid metaplasia, acute myelofibrosis or myelosclerosis
15 essential or primary thrombocythemia
16 transformed to AML →

Specify the AML subtype on the CIBMTR form 2000 – Recipient Baseline Data at question 9.

Answer q. 183 and skip to the signature lines at q. 200.

183. Specify the date of the most recent transformation:

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Month		Day		Year	

Most Recent Disease Assessment Prior to the Start of the Preparative Regimen

Questions 184–186 refer to MPS subtypes only (see question 2, options 9–15); if the diagnosis other than MPS, continue with question 187.

184. Did the recipient have systemic symptoms (e.g., fever, sweats, weight loss > 10%) just prior to the preparative regimen?

- 1 yes
2 no
3 unknown

185. Did the recipient have splenomegaly just prior to preparative regimen?

- 1 yes
2 no
3 splenectomy
4 unknown

186. Did the recipient have hepatomegaly just prior to preparative regimen?

- 1 yes
2 no
3 unknown

Laboratory Studies Prior to the Start of the Preparative Regimen

187. Monocytes in blood:

- 1 known → %
2 not known

188. Blasts in blood:

- 1 known → %
2 not known

Codes for Indication for Therapy

- 1 bone marrow failure (anemia, thrombocytopenia, neutropenia)
- 2 early evidence of progression to leukemia (increasing percentage of blasts)
- 3 induce complete remission (prior to bone marrow failure or evolution)
- 4 other indication; specify at line below reporting box

Codes for Best Response to Line of Therapy

- 1 complete remission (CR) — requires all of the following, maintained for ≥ 4 weeks:
 - bone marrow evaluation: $< 5\%$ myeloblasts with normal maturation of all cell lines
 - peripheral blood evaluation: hemoglobin ≥ 11 g/dL untransfused and without erythropoietin support; ANC ≥ 1000 / mm^3 without myeloid growth factor support; platelets $\geq 100 \times 10^9/\text{L}$ without thrombopoietic support; 0% blasts
- 2 hematologic improvement (HI) — requires one measurement of the following, maintained for ≥ 8 weeks without ongoing cytotoxic therapy; specify which cell line was measured to determine HI response:
 - HI-E — hemoglobin increase of ≥ 1.5 g/dL untransfused; for RBC transfusions performed for Hgb ≤ 9.0 , reduction in RBC units transfused in 8 weeks by ≥ 4 units compared to the pre-treatment transfusion number in the previous 8 weeks
 - HI-P — for pre-treatment platelet count of $> 20 \times 10^9/\text{L}$, platelet absolute increase of $\geq 30 \times 10^9/\text{L}$; for pre-treatment platelet count of $< 20 \times 10^9/\text{L}$, platelet absolute increase of $\geq 20 \times 10^9/\text{L}$ and $\geq 100\%$ from pre-treatment level
 - HI-N — neutrophil count increase of $\geq 100\%$ from pre-treatment level and an absolute increase of ≥ 500 / mm^3
- 3 no response / stable disease (NR / SD) — does not meet the criteria for at least HI, but no evidence of disease progression
- 4 progression from hematologic improvement (Prog from HI) — requires at least one of the following, in the absence of another explanation (e.g., infection, bleeding, ongoing chemotherapy, etc.):
 - $\geq 50\%$ reduction from maximum response levels in granulocytes or platelets
 - reduction in hemoglobin by ≥ 1.5 g/dL
 - transfusion dependence
- 5 relapse from complete remission (Rel from CR) — requires at least one of the following:
 - return to pre-treatment bone marrow blast percentage
 - decrease of $\geq 50\%$ from maximum response levels in granulocytes or platelets
 - transfusion dependence, or hemoglobin level ≥ 1.5 g/dL lower than prior to therapy
- 6 progression to AML (AML) — $\geq 20\%$ blasts in the bone marrow