

Form 2014 R3.0: Myelodysplasia/Myeloproliferative Neoplasms (MDS/MPN) Pre-HCT Data

Center: CRID:

Key Fields

Sequence Number:
Date Received:
CIBMTR Center Number:
CIBMTR Recipient ID:
Date of HCT for which this form is being completed:

HCT type: (check all that apply)

- Autologous
- Allogeneic, unrelated
- Allogeneic, related

Product type: (check all that apply)

- Bone marrow
- PBSC
- Single cord blood unit
- Multiple cord blood units
- Other product

Specify:

Subsequent Transplant

Is this the report of a second or subsequent transplant for the same disease?

yes no

Disease Assessment at Diagnosis

Questions: 1 - 18

1 What was the date of diagnosis?
2 What was the MDS / MPN subtype?

3 Was the disease (MDS/MPN) therapy related?

yes no Unknown

4 Specify prior disease

- Breast cancer
- Hodgkin lymphoma
- Non-Hodgkin lymphoma
- Other disease (malignant or nonmalignant)

5 Specify other prior disease:

6 Date of diagnosis of prior disease

Known Unknown

7 Date of diagnosis of prior disease:

Center: CRID:

8 Systemic therapy  
(chemotherapy)

☐ yes ☐ no ☐ Unknown

9 Radiation

☐ yes ☐ no ☐ Unknown

10 Other therapy

☐ yes ☐ no ☐ Unknown

11 Specify other therapy: \_\_\_\_\_

12 Did the recipient have a predisposing condition?

☐ yes ☐ no ☐ Unknown

13 Specify condition

☐ Aplastic Anemia Also complete CIBMTR form 2028- APL

☐ Bloom syndrome

☐ Down syndrome

☐ Fanconi anemia Also complete CIBMTR form 2029- FAN

☐ Other condition

14 Specify other condition: \_\_\_\_\_

15 Did the recipient receive any RBC transfusions at the time of diagnosis and/or during the first year post diagnosis?

☐ yes ☐ no ☐ Unknown

16 Were systemic symptoms (B symptoms) present?  
(unexplained fever > 38 C; or night sweats; unexplained weight loss > 10% body weight in six months before diagnosis)

☐ yes ☐ no ☐ Unknown

17 Did the recipient have splenomegaly (spleen palpable > 3 cm below left costal margin)?

☐ yes ☐ no ☐ Unknown

18 Did the recipient have hepatomegaly (liver edge palpable > 3 cm below right costal margin)?

☐ yes ☐ no ☐ Unknown

Laboratory Studies at Diagnosis

Questions: 19 - 39

19 Monocytes

☐ Known ☐ Unknown

20 \_\_\_\_\_ %

21 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

22 Blasts in blood

☐ Known ☐ Unknown

23 \_\_\_\_\_ %

24 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

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Center:

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**25** Was a bone marrow examination performed?

☐ yes ☐ no ☐ Unknown

**26** Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

**27** Cellularity

☐ Decreased (hypocellular)

☐ Normal (normocellular)

☐ Increased (hypercellular)

☐ Unknown

**28** Fibrosis

☐ Present ☐ Absent ☐ Unknown

**29** Were tests for molecular markers performed (e.g. PCR)?

☐ yes ☐ no ☐ Unknown

**30** Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

**31** ASXL1

☐ Positive ☐ Negative ☐ Not Done

**32** JAK2

(For MPN only)

☐ Positive ☐ Negative ☐ Not Done

**33** ETV6

☐ Positive ☐ Negative ☐ Not Done

**34** EZH2

☐ Positive ☐ Negative ☐ Not Done

**35** P53

☐ Positive ☐ Negative ☐ Not Done

**36** RUNX1

☐ Positive ☐ Negative ☐ Not Done

**Other Molecular Marker (1)**

**Questions: 37 - 38**

**37** Other molecular marker

☐ Positive ☐ Negative ☐ Not Done

**38** Specify other molecular marker: \_\_\_\_\_

**39** Was documentation submitted to the CIBMTR?

☐ yes ☐ no

**Pre-HCT Therapy**

**Questions: 40 - 122**

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Center: CRID:

40 Was therapy given?

☐ yes ☐ no

Line of Therapy (1) Questions: 41 - 122

Specify laboratory findings immediately prior to this line of therapy:

41 WBC

☐ Known ☐ Unknown

42 \_\_\_\_\_ ☐ x 10<sup>9</sup>/L (x 10<sup>3</sup>/mm<sup>3</sup>)  
☐ x 10<sup>6</sup>/L

43 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

44 Hemoglobin

☐ Known ☐ Unknown

45 \_\_\_\_\_ ☐ g/dL ☐ g/L ☐ mmol/L

46 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

47 Was RBC transfused < 30 days before date of test?

☐ yes ☐ no

48 Platelets

☐ Known ☐ Unknown

49 \_\_\_\_\_ ☐ x 10<sup>9</sup>/L (x 10<sup>3</sup>/mm<sup>3</sup>)  
☐ x 10<sup>6</sup>/L

50 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

51 Were platelets transfused < 7 days before date of test?

☐ yes ☐ no

52 Neutrophils

☐ Known ☐ Unknown

53 \_\_\_\_\_ %

54 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

55 Blasts in bone marrow

☐ Known ☐ Unknown

56 \_\_\_\_\_ %

57 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

58 Were cytogenetics tested (conventional or FISH)?

☐ yes ☐ no ☐ Unknown

59 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

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Center:

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## 60 Results of tests

☐ Abnormalities identified

☐ No evaluable metaphases

☐ No abnormalities

### Specify abnormalities identified prior to this line of therapy:

#### 61 Specify number of distinct cytogenetic abnormalities

☐ One (1)

☐ Two (2)

☐ Three (3)

☐ Four or more (4 or more)

### Monosomy

#### 62 -5

☐ yes ☐ no

#### 63 -7

☐ yes ☐ no

#### 64 -13

☐ yes ☐ no

#### 65 -20

☐ yes ☐ no

#### 66 -Y

☐ yes ☐ no

### Trisomy

#### 67 +8

☐ yes ☐ no

#### 68 +19

☐ yes ☐ no

### Translocation

#### 69 t(1;3)

☐ yes ☐ no

#### 70 t(2;11)

☐ yes ☐ no

#### 71 t(3;3)

☐ yes ☐ no

#### 72 t(3;21)

☐ yes ☐ no

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Center:

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**73** t(6;9)

☐ yes ☐ no

**74** t(11;16)

☐ yes ☐ no

## Deletion

**75** del(3q) / 3q-

☐ yes ☐ no

**76** del(5q) / 5q-

☐ yes ☐ no

**77** del(7q) / 7q-

☐ yes ☐ no

**78** del(9q) / 9q-

☐ yes ☐ no

**79** del(11q) / 11q-

☐ yes ☐ no

**80** del(12p) / 12p-

☐ yes ☐ no

**81** del(13q) / 13q-

☐ yes ☐ no

**82** del(20q) / 20q-

☐ yes ☐ no

## Inversion

**83** inv(3)

☐ yes ☐ no

## Other

**84** i17q

☐ yes ☐ no

**85** Other abnormality

☐ yes ☐ no

**86** Specify other abnormality: \_\_\_\_\_

## Line of Therapy

**87** Systemic therapy

☐ yes ☐ no

**88** Date therapy started

☐ Known ☐ Unknown

**89** Date started: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

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Center:

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**90** Date therapy stopped



Known



Unknown

**91** Date stopped: \_\_\_\_-\_\_\_\_-\_\_\_\_

**92** Androgen



yes



no

**93** Antithymocyte globulin (ATG)



yes



no

**94** Azacytidine (Vidaza)



yes



no

**95** Bendamustine



yes



no

**96** Corticosteroids



yes



no

**97** Cytarabine (Ara-C)



yes



no

**98** Decitabine (Dacogen)



yes



no

**99** Deferiprone (Ferriprox)



yes



no

**100** Deferasirox (Exjade)



yes



no

**101** Deferoxamine (Desferal)



yes



no

**102** Erythropoietin (EPO)  
(any formulation)



yes



no

**103** G-CSF  
(any formulation)



yes



no

**104** GM-CSF



yes



no

**105** Hydroxyurea (Droxia, Hydrea)



yes



no

**106** Idarubicin (Idamycin)



yes



no

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Center:

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**107** Lenalidomide (Revlimid)

☐ yes ☐ no

**108** Ruxolitinib (Jakafi)

☐ yes ☐ no

**109** Thalidomide (Thalomid)

☐ yes ☐ no

**110** Tyrosine kinase inhibitor  
(e.g. imatinib mesylate)

☐ yes ☐ no

**111** Other systemic therapy

☐ yes ☐ no

**112** Specify other systemic therapy: \_\_\_\_\_

**113** Other therapy

☐ yes ☐ no

**114** Splenic radiation

☐ yes ☐ no

**115** Splenectomy

☐ yes ☐ no

**116** Other therapy

☐ yes ☐ no

**117** Specify other therapy: \_\_\_\_\_

**118** Best response to line of therapy

- ☐ **Complete remission (CR)** - requires all of the following, maintained for  $\geq 4$  weeks: \* bone marrow evaluation:  $< 5\%$  myeloblasts with normal maturation of all cell lines \* peripheral blood evaluation: hemoglobin  $\geq 11$  g/dL untransfused and without erythropoietin support; ANC  $\geq 1000 / \text{mm}^3$  without myeloid growth factor support; platelets  $\geq 100 \times 10^9/\text{L}$  without thrombopoietic support; 0% blasts
- ☐ **Hematologic improvement (HI)** - requires one measurement of the following, maintained for  $\geq 8$  weeks without ongoing cytotoxic therapy; specify which cell line was measured to determine HI response: \* HI-E- hemoglobin increase of  $\geq 1.5$  g/dL untransfused; for RBC transfusions performed for Hgb  $\leq 9.0$ , reduction in RBC units transfused in 8 weeks by  $\geq 4$  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  $\geq 500 / \text{mm}^3$
- ☐ **No response (NR) / stable disease (SD)** - does not meet the criteria for at least HI, but no evidence of disease progression
- ☐ **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  $\geq 1.5$  g/dL \* transfusion dependence
- ☐ **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  $\geq 1.5$  g/dL lower than prior to therapy
- ☐ **Progression to AML (AML)** -  $\geq 20\%$  blasts in the bone marrow
- ☐ **Unknown**
- ☐ **Not assessed**



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**119** Specify the cell line examined to determine HI status

- ☐ HI- - hemoglobin increase of  $\geq 1.5$  g/dL untransfused; for RBC transfusions performed for Hgb  $\leq 9.0$ , reduction in RBC units transfused in 8 weeks
- ☐ E by  $\geq 4$  units compared to the pre-treatment transfusion number in 8 weeks.
- ☐ HI- - for pre-treatment platelet count of  $> 20 \times 10^9$ /L, platelet absolute increase of  $\geq 30 \times 10^9$ /L; for pre-treatment platelet count of  $< 20 \times 10^9$ /L, platelet
- ☐ P absolute increase of  $\geq 20 \times 10^9$ /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  $\geq 500$  / mm<sup>3</sup>

**120** Date assessed: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

**121** Did disease relapse/progress following this line of therapy?

☐ yes ☐ no

**122** Date of relapse/progression: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

## Transformation

Questions: 123 - 126

**123** Did the recipient progress or transform to a different MDS / MPN subtype between diagnosis and the start of the preparative regimen?

☐ yes ☐ no

**124** Was a subsequent complete remission achieved?

☐ yes ☐ no

**125** Specify the date of the most recent transformation: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

**126** Specify the MDS / MPN subtype after transformation

- ☐ Refractory cytopenia with unilineage dysplasia (RCUD) (includes refractory anemia (RA)) (51)
- ☐ Refractory anemia with ringed sideroblasts (RARS) (55)
- ☐ Refractory anemia with excess blasts-1 (RAEB-1) (61)
- ☐ Refractory anemia with excess blasts-2 (RAEB-2) (62)
- ☐ Refractory cytopenia with multilineage dysplasia (RCMD) (64)
- ☐ Childhood myelodysplastic syndrome (Refractory cytopenia of childhood (RCC)) (68)
- ☐ Myelodysplastic syndrome with isolated del(5q) (5q- syndrome) (66)
- ☐ Myelodysplastic syndrome (MDS), unclassifiable (50)
- ☐ Chronic neutrophilic leukemia (165)
- ☐ Chronic eosinophilic leukemia, NOS (166)
- ☐ Essential thrombocythemia (includes primary thrombocytosis, idiopathic thrombocytosis, hemorrhagic thrombocythemia) (58)
- ☐ Polycythemia vera (PCV) (57)
- ☐ Primary myelofibrosis (includes chronic idiopathic myelofibrosis (CIMF), angiogenic myeloid metaplasia (AMM), myelofibrosis/sclerosis with myeloid metaplasia (MMM), idiopathic myelofibrosis) (167)
- ☐ Myeloproliferative neoplasm (MPN), unclassifiable (60)
- ☐ Chronic myelomonocytic leukemia (CMML) (54)
- ☐ Myelodysplastic / myeloproliferative neoplasm, unclassifiable (69)
- ☐ Transformed to AML (70) - Also complete CIBMTR form 2010

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Center:

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## Laboratory Studies at Last Evaluation Prior to the Start of the Preparative Regimen(Conditioning)

Questions: 127 - 153

### 127 Monocytes

☐ Known ☐ Unknown

128 \_\_\_\_\_ %

129 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

### 130 Blasts in blood

☐ Known ☐ Unknown

131 \_\_\_\_\_ %

132 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

### 133 Was a bone marrow examination performed?

☐ yes ☐ no ☐ Unknown

134 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

### 135 Cellularity

☐ Decreased (hypocellular)

☐ Normal (normocellular)

☐ Increased (hypercellular)

☐ Unknown

### 136 Fibrosis

☐ Present ☐ Absent ☐ Unknown

### 137 Were tests for molecular markers performed (e.g. PCR)?

☐ yes ☐ no ☐ Unknown

138 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

### 139 ASXL1

☐ Positive ☐ Negative ☐ Not Done

### 140 JAK2

(For MPN only)

☐ Positive ☐ Negative ☐ Not Done

### 141 ETV6

☐ Positive ☐ Negative ☐ Not Done

### 142 EZH2

☐ Positive ☐ Negative ☐ Not Done

### 143 P53

☐ Positive ☐ Negative ☐ Not Done

### 144 RUNX1

☐ Positive ☐ Negative ☐ Not Done

## Other Molecular Marker (1)

Questions: 145 - 146

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Center:

CRID:

## 145 Other molecular marker



Positive



Negative



Not Done

146 Specify other molecular marker: \_\_\_\_\_

## 147 Was flow cytometry performed?



yes



no



Unknown

## Specify tissue and results:

### 148 Blood



yes



no

149 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

### 150 Was disease detected?



yes



no

### 151 Bone marrow



yes



no

152 Date sample collected: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

### 153 Was disease detected?



yes



no

## Disease Assessment at the Last Evaluation Prior to the Preparative Regimen (Conditioning)

Questions: 154 - 161

### 154 Were systemic symptoms (B symptoms) present?

(unexplained fever > 38 C; or night sweats; unexplained weight loss > 10% body weight in six months before last evaluation prior to the start of the preparative regimen)



yes



no



Unknown

### 155 Did the recipient have splenomegaly (spleen palpable > 3 cm below left costal margin)?



yes



no



Unknown

### 156 Did the recipient have hepatomegaly (liver edge palpable > 3 cm below right costal margin)?



yes



no



Unknown

### 157 What was the disease status?



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<sup>3</sup> without myeloid growth factor support; platelets ≥ 100 x 10<sup>9</sup>/L without thrombopoietic support; 0% blasts



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 x 10<sup>9</sup>/L, platelet absolute increase of ≥ 30 x 10<sup>9</sup>/L; for pre-treatment platelet count of < 20 x 10<sup>9</sup>/L, platelet absolute increase of ≥ 20 x 10<sup>9</sup>/L and ≥ 100% from pre-treatment level \* HI-N- neutrophil count increase of ≥ 100% from pre-treatment level and an absolute increase of ≥ 500 / mm<sup>3</sup>



No response (NR) / stable disease (SD) - does not meet the criteria for at least HI, but no evidence of disease progression



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.): \* ≥ 50% reduction from maximum response levels in granulocytes or platelets \* reduction in hemoglobin by ≥ 1.5 g/dL \* transfusion dependence



Relapse from complete remission (Rel from CR)

- requires at least one of the following: \* return to pre-treatment bone marrow blast percentage \* decrease of ≥ 50% from maximum response levels in granulocytes or platelets \* transfusion dependence, or hemoglobin level ≥ 1.5 g/dL lower than prior to therapy



Not assessed

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Center:

CRID:

## 158 Specify the cell line examined to determine HI status



HI- - hemoglobin increase of  $\geq 1.5$  g/dL untransfused; for RBC transfusions performed for  $\text{Hgb} \leq 9.0$ , reduction in RBC units transfused in 8 weeks by  $\geq 4$  units compared to the pre-treatment transfusion number in 8 weeks



HI- - 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  $\geq 500/\text{mm}^3$

159 Date of progression: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

160 Date of relapse: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

161 Date assessed: \_\_\_\_ - \_\_\_\_ - \_\_\_\_

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Date: \_\_\_\_ - \_\_\_\_ - \_\_\_\_