

CIBMTR Center Number:

CIBMTR Recipient ID:

Laboratory Studies at Diagnosis

Report values prior to first treatment for multiple myeloma / PCL.

11. For PCL only: Plasma cells in blood:

- 1 known → %
 2 not known

12. For PCL only: Absolute number of plasma cells in blood: Specify units:

- 1 known → . 1 x 10⁹/L (x 10³/mm³)
 2 not known 2 x 10⁶/L

13. Immunochemical type:

- 1 secretory →
 2 non-secretory

Specify paraproteins present: (IFE results; see quantification at question 35.)

	Chain type					Source	
	IgG	IgA	IgM	IgD	IgE	Serum	Urine
14. Heavy chain 1	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	15. 1 <input type="checkbox"/>	2 <input type="checkbox"/>
16. Heavy chain 2	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	17. 1 <input type="checkbox"/>	2 <input type="checkbox"/>
		Chain type			Source		
		κ (kappa)	λ (lambda)			Serum	Urine
18. Light chain 1	1 <input type="checkbox"/>	2 <input type="checkbox"/>				19. 1 <input type="checkbox"/>	2 <input type="checkbox"/>
20. Light chain 2	1 <input type="checkbox"/>	2 <input type="checkbox"/>				21. 1 <input type="checkbox"/>	2 <input type="checkbox"/>

22. WBC:

- 1 known → . 1 x 10⁹/L (x 10³/mm³)
 2 not known 2 x 10⁶/L

23. Hemoglobin:

- 1 known → . 1 g/dL
 2 not known 2 g/L
 3 mmol/L

24. Was RBC transfused in the prior 30 days?

- 1 yes
 2 no

25. Platelets:

- 1 known → 1 x 10⁹/L (x 10³/mm³)
 2 not known 2 x 10⁶/L

26. Were platelets transfused in the prior 7 days?

- 1 yes
 2 no

27. Plasma cells in bone marrow aspirate:

- 1 known → %
 2 not known

28. Plasma cells in bone marrow biopsy:

- 1 known → %
 2 not known

29. Plasma cells in bone marrow, sample source unknown:

- 1 known → %
 2 not known

30. Serum albumin:

- 1 known → . 1 g/dL
 2 not known 2 g/L

31. Serum β₂ microglobulin:

- 1 known → . 1 μg/dL
 2 not known 2 mg/L
 3 nmol/L

CIBMTR Center Number:

CIBMTR Recipient ID:

32. If questions 30 and 31 are "not known," what was the International Staging System (ISS) stage at diagnosis?

- 1 Stage I (β_2 -microglobulin < 3.5 mg/dL, albumin \geq 3.5 g/dL)
- 2 Stage II (β_2 -microglobulin < 3.5 and albumin < 3.5; or β_2 -microglobulin between 3.5 and 5.5)
- 3 Stage III: (β_2 -microglobulin > 5.5)
- 4 unknown

33. Serum calcium:

- 1 known \longrightarrow .
- 2 not known

Specify units:

- 1 mg/dL
- 2 mmol/L
- 3 mEq/L


34. Serum creatinine:

- 1 known \longrightarrow .
- 2 not known
- 3 non-secretory

- 1 mg/dL
- 2 mmol/L
- 3 μ mol/L

35. Upper limit of normal for serum creatinine:

 .

36. Serum monoclonal Ig: (only from electrophoresis) (monoclonal (M-spike) protein level) (This value will be used to calculate the best response to HSCT if question 131 is answered as option 1.) 

- 1 known \longrightarrow .
- 2 not known
- 3 non secretory

- 1 mg/dL
- 2 g/dL
- 3 g/L

37. Urinary monoclonal light chains:

- 1 known \longrightarrow . g / 24 hours
- 2 not known

38. Serum free light chains — κ (kappa):

- 1 known \longrightarrow .
- 2 not known

- 1 mg/dL
- 2 mg/L

39. Upper limit of normal for κ free light chain:

 .

- 1 mg/dL
- 2 mg/L

40. Serum free light chains — λ (lambda):

- 1 known \longrightarrow .
- 2 not known

- 1 mg/dL
- 2 mg/L

41. Upper limit of normal for λ free light chain:

 .

- 1 mg/dL
- 2 mg/L

42. LDH:

- 1 known \longrightarrow .
- 2 not known

- 1 U/L
- 2 μ kat/L

43. Upper limit of normal for LDH:

 .

- 1 U/L
- 2 μ kat/L

Specify the following serum quantitative immunoglobulins (measured prior to any disease treatment):

44. IgG:

- 1 known \longrightarrow .
- 2 not known

- 1 mg/dL
- 2 g/dL
- 3 g/L

45. Upper limit of normal for IgG: .

46. Lower limit of normal for IgG: .

47. IgA:

- 1 known \longrightarrow .
- 2 not known

- 1 mg/dL
- 2 g/dL
- 3 g/L

48. Upper limit of normal for IgA: .

49. Lower limit of normal for IgA: .

50. IgM:

- 1 known \longrightarrow .
- 2 not known

- 1 mg/dL
- 2 g/dL
- 3 g/L

51. Upper limit of normal for IgM: .

52. Lower limit of normal for IgM: .

CIBMTR Center Number:

CIBMTR Recipient ID:

Pre-HSCT Treatment for Plasma Cell Disorders

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

- 1 yes →
2 no

Line of Therapy:	1st Line of Therapy			2nd Line of Therapy		
Systemic Therapy:	54. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no →	cont. with q. 78	92. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no →	cont. with q. 116
Date therapy started:	55. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	93. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>
Date therapy stopped:	56. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	94. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>
Number of cycles:	57. <input type="text"/>	<input type="checkbox"/> unknown/not applicable		95. <input type="text"/>	<input type="checkbox"/> unknown/not applicable	
bortezomib (Velcade)	58. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	96. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
carmustine (BCNU, Gliadel)	59. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	97. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
cisplatin (Platinol, CDDP)	60. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	98. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
clarithromycin (Biaxin)	61. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	99. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
corticosteroids	62. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	100. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
cyclophosphamide (Cytosan)	63. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	101. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
cytarabine (Ara-C)	64. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	102. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
doxorubicin (Adriamycin)	65. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	103. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
doxorubicin liposomal (Doxil)	66. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	104. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
etoposide (VP-16, VePesid)	67. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	105. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
idarubicin (Idamycin)	68. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	106. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
interferon (Intron, Roferon) (includes PEG)	69. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	107. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
lenalidomide (Revlimid)	70. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	108. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
melphalan (L-PAM, Alkeran)	71. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	109. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
mitoxantrone (Novantrone)	72. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	110. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
rituximab (anti-CD20, Rituxan)	73. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	111. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
thalidomide (Thalomid)	74. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	112. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
vincristine (VCR, Oncovin)	75. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	113. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
other systemic therapy	76. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	114. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
specify other therapy	77. _____			115. _____		
Supportive Care:	78. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no →	cont. with q. 84	116. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no →	cont. with q. 122
bisphosphonates						
(pamidronate [Aredia],						
zoledronic acid [Zometa])	79. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	117. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
erythroid stimulants						
(epoetin [EPO, Procrit],						
darbepoetin [Aranesp])	80. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	118. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
kyphoplasty	81. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	119. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
vertebroplasty	82. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	120. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
specify number of vertebrae	83. <input type="text"/>			121. <input type="text"/>		
Radiation Therapy:	84. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no →	cont. with q. 87	122. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no →	cont. with q. 125
Date therapy started:	85. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	123. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>
Date therapy stopped:	86. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	124. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>
Was this line of therapy given for stem cell priming?	87. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	125. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
Best Response to Line of Therapy:	88. 1 <input type="checkbox"/> sCR	2 <input type="checkbox"/> CR	3 <input type="checkbox"/> VGPR	126. 1 <input type="checkbox"/> sCR	2 <input type="checkbox"/> CR	3 <input type="checkbox"/> VGPR
(see page 8 for definitions)	4 <input type="checkbox"/> PR	5 <input type="checkbox"/> SD	6 <input type="checkbox"/> PD	4 <input type="checkbox"/> PR	5 <input type="checkbox"/> SD	6 <input type="checkbox"/> PD
	7 <input type="checkbox"/> unknown			7 <input type="checkbox"/> unknown		
Date response established:	89. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	127. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>
Did disease relapse/progress following this line of therapy?	90. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	.....	128. 1 <input type="checkbox"/> yes	2 <input type="checkbox"/> no	
Date of relapse/progression:	91. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	129. <input type="text"/> / <input type="text"/> / <input type="text"/>	<input type="text"/> / <input type="text"/> / <input type="text"/>	<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:

130. Specify the sensitivity of myeloma to chemotherapy prior to the preparative regimen:

(Treatment must have been completed \leq 6 months prior to HSCT.)

- 1 sensitive — \geq 50% reduction in Ig level, or \geq 90% reduction in urinary light chains in light chain only disease, or \geq 50% reduction of plasma cells in bone marrow for nonsecretory myeloma (includes disease status of sCR, CR, VGPR and PR)
- 2 resistant — $<$ 50% reduction of Ig level, or $<$ 90% reduction in urinary light chains in light chain only disease, or $<$ 50% reduction of plasma cells in bone marrow for nonsecretory myeloma (includes disease status of SD and PD)
- 3 not applicable — no chemotherapy, or chemotherapy ended more than 6 months prior to the preparative regimen
- 4 unknown

131. At what point in the disease course was the HSCT performed? 

- 1 as part of *initial therapy* for a recipient with *no disease progression* at any time prior to HSCT
- 2 *later* in the disease course for a recipient *with disease progression* at any time prior to HSCT

Laboratory Studies Prior to the Start of the Preparative Regimen

132. Plasma cells in bone marrow aspirate:

- 1 known \longrightarrow %
- 2 not known

133. Plasma cells in bone marrow biopsy:

- 1 known \longrightarrow %
- 2 not known

134. Plasma cells in bone marrow, sample source unknown:


- 1 known \longrightarrow %
- 2 not known

135. Serum albumin:

- 1 known \longrightarrow . Specify units:
 - 1 g/dL
 - 2 g/L
- 2 not known

136. Serum β_2 microglobulin:

- 1 known \longrightarrow .
 - 1 μ g/dL
 - 2 mg/L
 - 3 nmol/L
- 2 not known

137. Serum monoclonal Ig: (only from electrophoresis) (This value will be used to calculate the best response to HSCT.) (This value will be used to calculate the best response to HSCT if question 131 is answered as option 2.) 

- 1 known \longrightarrow .
 - 1 mg/dL
 - 2 g/dL
 - 3 g/L
- 2 not known

138. For recipients with PCL only: Are circulating plasma cells currently present?

- 1 yes
- 2 no

CIBMTR Center Number:

CIBMTR Recipient ID:

139. Were cytogenetics tested (conventional or FISH)?

- 1 yes
- 2 no
- 3 unknown

140. Results of test at diagnosis:

- 1 yes abnormalities identified
- 2 no evaluable metaphases
- 3 no abnormalities

Complete questions 142–160 in the table below

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

- 1 yes abnormalities identified
- 2 no evaluable metaphases on any tests
- 3 no abnormalities on any tests after diagnosis and before the preparative regimen

Complete questions 161–179 in the table below

Specify abnormalities identified:

Cytogenetic abnormality	At diagnosis	Any test result between diagnosis and preparative regimen
Monosomy -13	142. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	161. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
Trisomy +3	143. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	162. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
+5	144. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	163. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
+7	145. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	164. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
+9	146. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	165. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
+11	147. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	166. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
+15	148. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	167. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
+19	149. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	168. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
Translocation t(4;14)	150. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	169. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
t(6;14)	151. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	170. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
t(11;14)	152. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	171. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
t(14;16)	153. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	172. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
Deletion del 13/13q-	154. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	173. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
del 17/17p-	155. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	174. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
Other hyperdiploid (> 50)	156. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	175. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
hypodiploid (< 46)	157. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	176. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
any abnormality at 1q	158. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	177. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
other abnormality	159. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no	178. 1 <input type="checkbox"/> yes 2 <input type="checkbox"/> no
specify other abnormality:	160. _____	179. _____

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

- 1 yes
- 2 no

CIBMTR Center Number:


CIBMTR Recipient ID:

Disease Status at the Last Evaluation Prior to the Preparative Regimen

181. What was the disease status prior to the preparative regimen?

(Report the most recent disease assessment prior to the preparative regimen.) (see page 8 for definitions)

- 1 stringent complete response (sCR) →
- 2 complete response (CR) →
- 3 very good partial response (VGPR) →
- 4 partial response (PR) →
- 5 stable disease (SD)
- 6 progressive disease (PD) →
- 7 relapse from CR (Rel) (untreated) →
- 8 disease status unknown

182. Specify the date of the most recent assessment for disease status prior to the preparative regimen: 

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

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

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2		0	
Year			

183. Signed: _____

Person completing form

Please print name: _____

Phone: (_____) _____

Fax: (_____) _____

E-mail address: _____

Response Codes

Stringent complete response (sCR) — CR as defined below, plus:

- normal free light chain ratio, and
- absence of clonal cells in the bone marrow by immunohistochemistry or immunofluorescence (confirmation with repeat bone marrow biopsy not needed). (Presence and/or absence of clonal cells is based upon the κ/λ ratio. An abnormal κ/λ ratio by immunohistochemistry and/or immunofluorescence requires a minimum of 100 plasma cells for analysis. An abnormal ratio reflecting the presence of an abnormal clone is κ/λ of $> 4:1$ or $< 1:2$.)

sCR requires two consecutive assessments made at any time before the institution of any new therapy, and no known evidence of progressive or new bone lesions if radiographic studies were performed; radiographic studies are not required to satisfy sCR requirements.

Complete response (CR) — negative immunofixation on serum and urine samples, and disappearance of any soft tissue plasmacytomas, and $\leq 5\%$ plasma cells in the bone marrow (confirmation with repeat bone marrow biopsy not needed).

CR requires two consecutive assessments made at any time before the institution of any new therapy, and no known evidence of progressive or new bone lesions if radiographic studies were performed; radiographic studies are not required to satisfy CR requirements.

Very good partial response (VGPR) — serum and urine M-protein detectable by immunofixation but not on electrophoresis, or $\geq 90\%$ reduction in serum M-protein and urine M-protein level < 100 mg/24 hours

VGPR requires two consecutive assessments made at any time before the institution of any new therapy, and no known evidence of progressive or new bone lesions if radiographic studies were performed; radiographic studies are not required to satisfy VGPR requirements.

Partial response (PR) — $\geq 50\%$ reduction in serum M-protein, and reduction in 24-hour urinary M-protein by $\geq 90\%$ or to < 200 mg/24 hours.

If the serum and urine M-protein are unmeasurable (i.e., do not meet any of the following criteria: • serum M-protein ≥ 1 g/dL

• urine M-protein ≥ 200 mg/24 hours • serum free light chain assay shows involved level ≥ 10 mg/dL, provided serum free light chain ratio is abnormal), a $\geq 50\%$ decrease in the difference between involved and uninvolved free light chain levels is required in place of the M-protein criteria. If serum and urine M-protein are unmeasurable, and serum free light assay is also unmeasurable, a $\geq 50\%$ reduction in plasma cells is required in place of M-protein, provided the baseline bone marrow plasma cell percentage was $\geq 30\%$. In addition to the above listed criteria, a $\geq 50\%$ reduction in the size of soft tissue plasmacytomas is also required, if present at baseline.

PR requires two consecutive assessments made at any time before the institution of any new therapy, and no known evidence of progressive or new bone lesions if radiographic studies were performed; radiographic studies are not required to satisfy PR requirements.

Stable disease (SD) — not meeting the criteria for CR, VGPR, PR or PD.

SD requires two consecutive assessments made at any time before the institution of any new therapy, and no known evidence of progressive or new bone lesions if radiographic studies were performed; radiographic studies are not required to satisfy SD requirements.

Progressive disease (PD) — requires any one or more of the following:

Increase of $\geq 25\%$ from baseline in:

- serum M-component and/or (absolute increase ≥ 0.5 g/dL) (for progressive disease, serum M-component increases of ≥ 1 g/dL are sufficient to define relapse if the starting M-component is ≥ 5 g/dL)
- urine M-component and/or (absolute increase ≥ 200 mg/24 hours)
- for recipients without measurable serum and urine M-protein levels: the difference between involved and uninvolved free light chain levels (absolute increase > 10 mg/dL)
- bone marrow plasma cell percentage (absolute percentage $\geq 10\%$) (relapse from CR has a 5% cutoff vs. 10% for other categories of relapse)
- definite development of new bone lesions or soft tissue plasmacytomas, or definite increase in the size of any existing bone lesions or soft tissue plasmacytomas
- development of hypercalcemia (corrected serum calcium > 11.5 mg/dL or 2.65 mmol) that can be attributed solely to the plasma cell proliferative disorder

PD requires two consecutive assessments made at any time before classification as disease progression, and/or the institution of any new therapy.

Relapse from CR (Rel) — requires one or more of the following:

- reappearance of serum or urine M-protein by immunofixation or electrophoresis
- development of $\geq 5\%$ plasma cells in the bone marrow (relapse from CR has a 5% cutoff vs. 10% for other categories of relapse)
- appearance of any other sign of progression (e.g., new plasmacytoma, lytic bone lesion, hypercalcemia)

Rel requires two consecutive assessments made at any time before classification as relapse, and/or the institution of any new therapy.