2113: CLL Post-HCT

The Chronic Lymphocytic Leukemia Post-HSCT Data Form is one of the Comprehensive Report Forms. This form captures CLL-specific post-HSCT data such as: disease assessment at the time of best response to HSCT, laboratory studies at the time of best response to HSCT, Post-HSCT planned treatment for CLL, disease relapse or progression post-HSCT, and disease status at the time of assessment for this reporting period.

This form must be completed for all recipients whose primary disease, reported on Form 2000 question 9, is chronic lymphocytic leukemia (CLL), B-Cell/small lymphocytic leukemia (SLL), hairy cell leukemia, or prolymphocytic leukemia (PLL). The Chronic Lymphocytic Leukemia Post-HSCT Data (Form 2113) must be completed in conjunction with each Post-HSCT follow-up form (Forms 2100, 2200, and 2300) completed. The form is designed to capture specific data occurring within the timeframe of each reporting period (i.e., between day 0 and day 100 for Form 2100, between day 100 and the six-month date of contact for Form 2200 Six-Month follow-up, between the date of contact for the six-month follow-up Form 2200 and the date of contact for the one-year follow up Form 2200, etc.).

If the recipient was originally diagnosed with CLL but underwent a transformation to diffuse large B-cell lymphoma (Richter transformation), only the Pre-HSCT CLL Disease Data (Form 2013) must be completed. Do not complete a Post-HSCT CLL Disease Data (Form 2113).

Manual Updates:
Sections of the Forms Instruction Manual are frequently updated. The most recent updates to the manual can be found below. For additional information, select the manual section and review the updated text.

If you need to reference the historical Manual Change History for this form, please click here or reference the retired manual section on the Retired Forms Manuals webpage.

Date	Manual Section	Add/Remove/Modify	Description

Q1-2: Disease Assessment at the Time of Best Response to HCT

When determining the best response to HCT in any post-HCT reporting period (i.e. 100-day, six-month, one-year, etc.), compare the post-HCT disease status to the status immediately prior to the preparative regimen. Identify the recipient's best disease status within the reporting period, even if relapse or progression followed the best response. If the best response was achieved in a previous reporting period, report this response again and indicate that the date was previously reported.

Question 1: Compared to the disease status prior to the preparative regimen, what was the best response to HCT since the date of the last report? (Include response to any planned post-HCT treatment.)

The intent of this question is to determine the best overall response to HCT. This is assessed in each reporting period. When evaluating the best response, determine the disease status within the reporting period and compare it to all previous post-HCT reporting periods. If the response in the current reporting period is the best response to date, report the disease status established within this reporting period. If a better response was established in a previous reporting period, report the previously established disease status. See question 2 to indicate that this disease status was previously reported.

Include response to any post-HCT treatment planned as of Day 0. If post-transplant therapy is given as prophylaxis or maintenance for recipients in CR or as preemptive therapy for recipients with minimal residual disease, consider this "planned therapy," even if this was not documented prior to the transplant. ***Do not include any treatment administered as a result of relapse or progression.***

See CLL Response Criteria for disease status definitions.

Question 2: Date best response began

Enter the date the best response first began. Report the date the radiological, pathological, or clinical assessment was performed (i.e., the date the sample was taken, the date the CT scan was taken, or the visit date).

If the best response is the same as the pre-transplant disease status, report the date of the first assessment that confirmed the ongoing disease status post-transplant or select "previously reported" if the date was already reported on a previous form.

If the date was reported in the prior reporting period, check "date of best response was previously reported" and continue with question 10.

If the exact date is not known, use the process described for reporting partial or unknown dates in General Instructions, Guidelines for Completing Forms.

Q3-9: Laboratory Studies Supporting Best Response to HCT

Question 3: Was molecular testing/immunophenotyping performed at the time of the disease assessment for best response to HCT reported at question 1?

Molecular and immunophenotyping assessments are used to detect disease within the recipient. These methods can detect minimal residual disease (MRD) in the recipient's blood, marrow, or tissue.

If molecular testing/immunophenotyping was performed at the time of best response, select "yes" and continue with question 4.

If molecular testing/immunophenotyping was not performed, select "no" and continue with question 10.

Question 4: Immunophenotyping (4 color flow cytometry)

Immunophenotyping (flow cytometry) is a technique that can be performed on blood, bone marrow, or tissue preparations where cell surface markers can be detected on cellular material.

If immunophenotyping (flow cytometry) was performed at the time of best response, select "yes" and continue with question 5.

If immunophenotyping (flow cytometry) was not performed, select "no" and continue with question 7.

Question 5: Specify the date immunophenotyping was performed

Enter the date the sample was collected for immunophenotyping at the time of best response to HCT.

If the exact date is not known, use the process described for reporting partial or unknown dates in General Instructions, Guidelines for Completing Forms.

Question 6: Was disease detected?

Indicate if disease was detected by immunophenotyping. If this is not clear from the laboratory report, consult with a physician and have her/him document if evidence of disease is present.

Question 7: Heavy chain gene rearrangement (ASO-PCR)

Heavy chain gene rearrangement (ASO-PCR) testing is a molecular assessment that involves identifying a heavy chain rearrangement from diagnostic tissue (i.e., molecular abnormality detected in the marrow,

peripheral blood, or mass), creating an allele-specific oligonucleotide (ASO) (a “primer” unique to the recipient’s disease), and using polymerase chain reaction (PCR) to detect the disease.

If heavy chain gene rearrangement (ASO-PCR) was performed at the time of best response, select “yes” and continue with question 8.

If heavy chain gene rearrangement (ASO-PCR) was not performed, select “no” and continue with question 10.

Question 8: Specify the date the heavy chain gene rearrangement testing was performed

Enter the date the sample was collected for heavy chain gene rearrangement (ASO-PCR) testing at the time of best response to HCT.

If the exact date is not known, use the process described for reporting partial or unknown dates in General Instructions, Guidelines for Completing Forms.

Question 9: Was disease detected?

Indicate if disease was present based on heavy chain gene rearrangement (ASO-PCR) testing. If this is not clear from the laboratory report, consult with a physician and have her/him document if evidence of disease is present.

Q10-22: Post-HCT Planned Treatment for CLL

Question 10: Was planned treatment given per protocol since the date of the last report? (Include any maintenance therapy, but exclude any treatment for relapse/progressive disease.)

Indicate if the recipient received planned treatment post-HCT since the date of last report. If “yes,” continue with question 11. If “no” or “unknown,” continue with question 23.

Recipients are generally transplanted under a specific protocol that defines the radiation and/or systemic therapy the recipient is intended to receive as a preparative regimen prior to the HCT; infection and GVHD prophylaxis to be administered pre- and/or post-HCT; as well as any systemic therapy, radiation, and/or other treatments to be administered post-HCT as planned (or maintenance) therapy. Planned (maintenance or consolidation) therapy is given to assist in prolonging a remission. This protocol may be either a research protocol or standard of care protocol and should be referred to when completing this section.

If post-transplant therapy is given as prophylaxis or maintenance for recipients in CR, or as preemptive therapy for recipients with minimal residual disease, consider this “planned therapy,” even if this was not documented prior to the transplant.

Do not include any treatment administered as a result of relapse or progression.

Question 11: Chemotherapy

Indicate if chemotherapy was given as planned treatment post-HCT since the date of the last report. If chemotherapy was not given as planned therapy, then indicate “No.”

Post-transplant therapy given as prophylaxis or maintenance for recipients in CR or as preemptive therapy for recipients with minimal residual disease should be reported here, even if this was not documented prior to transplant.

Rituximab and other immune therapy/monoclonal antibodies should be reported on question 13.

Do not report chemotherapy given for relapse or progressive disease.

Question 12: Radiation

Radiation therapy uses high-energy radiation to kill cancer cells. For CLL, radiation therapy may be used to kill cells that have invaded other tissues and lymph nodes. Radiation may be planned if bulky (having a large lymph node mass) disease was present just prior to transplant.

Indicate “yes” if the recipient received radiation as planned therapy post-transplant since the date of the last report. Indicate “no” if the recipient did not receive radiation as planned post-transplant therapy.

Questions 13-20: Immune therapy/monoclonal antibody (mAb)

Indicate if immune therapy/monoclonal antibody (mAb) was given as planned treatment post-HSCT since the date of the last report. If immune therapy/monoclonal antibody (mAb) was not given as planned therapy, then indicate “No.”

Post-transplant therapy given as prophylaxis or maintenance for recipients in CR, or as preemptive therapy for recipients with minimal residual disease, should be reported here, even if this was not documented prior to transplant. For example, if a physician decides to put the recipient on rituximab **maintenance** therapy post-HCT, even if it the intent wasn’t documented prior to transplant, report it here.

If the recipient received immune therapy/monoclonal antibodies as post-HCT treatment, please specify the treatment(s) given using questions 14-20. If the recipient received a monoclonal antibody that is not listed, select “Other mAb” for question 17 and specify the other monoclonal antibody using question 18. If the recipient an immune therapy that is not listed, select “other immune therapy” for question 19 and specify the other immune therapy using question 20.

Questions 21-22: Other Treatment

Indicate if the recipient received any other treatment as part of the post-HCT *planned* protocol. Specify the type of treatment administered as part of the post-HCT *planned* protocol using question 22.

Q23-31: Disease Relapse or Progression Post-HCT

Question 23: Was a disease relapse or progression detected by any method since the date of last report?

Use the criteria below to determine if a relapse or progression occurred since the last report. These criteria relate specifically to clinical/hematologic relapse or progression detected in the blood, marrow, nodal, and/or extramedullary/extranodal sites. ***Do not report new or recurrent molecular, cytogenetic, or FISH abnormalities as evidence of relapse or progression without evidence of clinical/hematologic criteria.***

Questions 25-31 are meant to capture the recipient's molecular and immunophenotypical status *at the time of* clinical/hematologic relapse or progression.

Relapse is the recurrence of disease after CR. Relapse is demonstrated by the reappearance of disease, based on one or more diagnostic tests.

Progression of CLL is a worsening of the disease following nPR, PR, or SD; it requires **one or more** of the following:

- ≥ 50% increase in the sum of the products of ≥ 2 lymph nodes (≥ 1 lymph node must be ≥ 2 cm) or new nodes
- ≥ 50% increase in liver or spleen size, or new hepatomegaly or splenomegaly
- ≥ 50% increase in absolute lymphocyte count to ≥ 5×10^9/L
- Transformation to a more aggressive histology

Question 24: Date disease relapse or progression was detected

Enter the date of the clinical/hematologic disease assessment that documented disease relapse or progression. Report the date disease was detected by radiographic examination (e.g., CT, MRI, PET, or PET/CT scans), bone marrow examination, peripheral blood assessment, or clinical assessment.

For more information regarding reporting partial or unknown dates, see General Instructions, Guidelines for Completing Forms.

! Question 25 currently asks if molecular testing was performed at the time of relapse or progression. It should also include immunophenotyping. This question's intent is to capture if molecular testing or immunophenotyping was performed at the time of relapse or progression.

Question 25: Was molecular testing performed at the time of disease relapse or progression?

Molecular and immunophenotyping assessments are used to detect disease within the recipient. These methods can detect minimal residual disease (MRD) in the recipient's blood, marrow, or tissue.

If molecular testing or immunophenotyping was performed at the time of relapse or progression, select "yes" and continue with question 26.

If molecular testing or immunophenotyping was not performed, select "no" and continue with question 32.

Question 26: Immunophenotyping (4 color flow cytometry)

Immunophenotyping (flow cytometry) is a technique that can be performed on blood, bone marrow, or tissue preparations where cell surface markers can be detected on cellular material.

If immunophenotyping (flow cytometry) was performed at the time of relapse or progression, select "yes" and continue with question 27.

If immunophenotyping (flow cytometry) was not performed, select "no" and continue with question 29.

Question 27: Specify the date immunophenotyping was performed

Enter the date the sample was collected for immunophenotyping at the time of relapse or progression.

If the exact date is not known, use the process described for reporting partial or unknown dates in General Instructions, Guidelines for Completing Forms.

Question 28: Was disease detected?

Indicate if disease was detected by immunophenotyping. If this is not clear from the laboratory report, consult with a physician and have her/him document if evidence of disease is present.

Question 29: Heavy chain gene rearrangement (ASO-PCR)

Heavy chain gene rearrangement (ASO-PCR) testing is a molecular assessment that involves identifying a heavy chain rearrangement from diagnostic tissue (i.e., molecular abnormality detected in the marrow,

peripheral blood, or mass), creating an allele-specific oligonucleotide (ASO) (a “primer” unique to the recipient’s disease), and using polymerase chain reaction (PCR) to detect the disease.

If heavy chain gene rearrangement (ASO-PCR) was performed at the time of relapse or progression, select “yes” and continue with question 30.

If heavy chain gene rearrangement (ASO-PCR) was not performed, select “no” and continue with question 32.

Question 30: Specify the date heavy chain gene rearrangement was performed

Enter the date the sample was collected for heavy chain gene rearrangement (ASO-PCR) testing at the time of relapse or progression.

If the exact date is not known, use the process described for reporting partial or unknown dates in General Instructions, Guidelines for Completing Forms.

Question 31: Was disease detected?

Indicate if disease was present based on heavy chain gene rearrangement (ASO-PCR) testing. If this is not clear from the laboratory report, consult with a physician and have her/him document if evidence of disease is present.

Q32-40: Disease Status at the Time of Assessment for This Reporting Period

Question 32: Was molecular testing/immunophenotyping performed at the time of disease assessment reported at question 39?

Molecular and immunophenotyping assessments are used to detect disease within the recipient. These methods can detect minimal residual disease (MRD) in the recipient's blood, marrow, or tissue.

If molecular testing/immunophenotyping was performed at the time of assessment for this reporting period, select "yes" and continue with question 33.

If molecular testing/immunophenotyping was not performed, select "no" and continue with question 39.

Question 33: Immunophenotyping (4 color flow cytometry)

Immunophenotyping (flow cytometry) is a technique that can be performed on blood, bone marrow, or tissue preparations where cell surface markers can be detected on cellular material.

If immunophenotyping (flow cytometry) was performed at the time of assessment for this reporting period, select "yes" and continue with question 34.

If immunophenotyping (flow cytometry) was not performed, select "no" and continue with question 36.

Question 34: Specify the date immunophenotyping was performed

Enter the date the sample was collected for immunophenotyping at the time of best response to HCT.

If the exact date is not known, use the process described for reporting partial or unknown dates in General Instructions, Guidelines for Completing Forms.

Question 35: Was disease detected?

Indicate if disease was present based on immunophenotyping. If this is not clear from the laboratory report, consult with a physician and have her/him document if evidence of disease is present.

Question 36: Heavy chain gene rearrangement (ASO-PCR)

Heavy chain gene rearrangement (ASO-PCR) testing is a molecular assessment that involves identifying a heavy chain rearrangement from diagnostic tissue (i.e., molecular abnormality detected in the marrow,

peripheral blood, or mass), creating an allele-specific oligonucleotide (ASO) (a “primer” unique to the recipient’s disease), and using polymerase chain reaction (PCR) to detect the disease.

If heavy chain gene rearrangement (ASO-PCR) was performed at the time of best response, select “yes” and continue with question 37.

If heavy chain gene rearrangement (ASO-PCR) was not performed, select “no” and continue with question 39.

Question 37: Specify the date heavy chain gene rearrangement was performed

Enter the date of the heavy chain gene rearrangement (ASO-PCR) testing at the time of latest disease assessment.

If the exact date is not known, use the process described for reporting partial or unknown dates in General Instructions, Guidelines for Completing Forms.

Question 38: Was disease detected?

Indicate if disease was present based on heavy chain gene rearrangement (ASO-PCR) testing. If this is not clear from the laboratory report, consult with a physician and have her/him document if evidence of disease is present.

Question 39: What is the current disease status?

Indicate if the recipient is in “complete remission” or “not in complete remission.”

Complete remission requires ***all*** of the following:[1]

- No evidence of lymphadenopathy[2]
- No organomegaly
- Neutrophils ≥ 1.5×10^9/L
- Platelets > 100×10^9/L
- Hemoglobin > 11 g/dL
- Lymphocytes < 4×10^9/L
- Bone marrow < 30% lymphocytes
- Absence of constitutional symptoms (including weight loss, fever, and night sweats)

[1] Hallek, M., Cheson, B. D., Catovsky, D., Caligaris-Cappio, F., Dighiero, G., Döhner, H., … & Kipps, T. J. (2008). Guidelines for the diagnosis and treatment of chronic lymphocytic leukemia: a report from the International Workshop on Chronic Lymphocytic Leukemia updating the National Cancer Institute–Working Group 1996 guidelines. *Blood*, 111(12), 5446-5456.

[2] Absence of significant lymphadenopathy (e.g., lymph nodes > 1.5 cm in diameter) by physical examination. In clinical trials, a CT scan of the abdomen, pelvis, and thorax is desirable if previously abnormal. Lymph nodes should not be larger than 1.5 cm in diameter.

Question 40: Date of the current disease status was established in this reporting period

Enter the date of the assessment in which the disease status was established in the reporting period of the form being completed. Report the date of the pathological evaluation (e.g., bone marrow) or blood/serum assessment (e.g., CBC, peripheral blood smear). Enter the date the sample was collected for pathological and laboratory evaluations. If the assessment that established the disease status was a radiographic examination (e.g., X-rays, CT scans, MRI scans, PET scans) in which extramedullary disease was assessed, enter the date the imaging took place. If no pathological, radiographic, or laboratory assessment was performed to establish the current disease status of the recipient within the timeframe of the form being completed, report the office visit at which the physician clinically assessed the recipient's disease status.

For more information regarding reporting partial or unknown dates, see General Instructions, Guidelines for Completing Forms.