Cellular therapy

Day 0

Guide to the completion of the EBMT data collection form: CT_Day0_v1.0

21 August 2023

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EBMT Registry
EBMT Clinical Research & Registry Department
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Cellular therapy

The Cellular Therapy (CT) Day 0 form should be filled and submitted online in the EBMT Registry database straight after the CT infusion. If the CT product was not infused for whatever reason, this form still shall be submitted to record such failed events. In the context of EBMT Registry, the terms 'advanced cellular therapy', ‘cellular therapy’ and CT are used as synonyms and represent the same type of treatment.

The CT Day 0 form includes the following main sections:

1. Pre-infusion, that covers details about the planned treatment and the planned cellular therapy product(s).
2. Cellular therapy, that covers the patient’s status at cellular therapy including comorbidities, details about the cellular therapy infusion unit(s) and the infusion episode(s).

Advanced cellular therapies belong to the group of advanced therapy medicinal products (ATMP) which are defined as medicines for human use that are based on genes, tissues or cells. Advanced cellular therapies can be infused individually, sequentially or in combination with other treatments, including HCT.

Gene therapy should not be reported through this form.

To understand how many forms need to be filled in, consult the flowchart in Appendix A. Additionally, the following definitions are important:

- Cellular therapy treatment is the infusion of one or more units with one indication as selected on the form, where the total units infused or episodes of infusions are separated by less than 100 days.
- Cellular therapy infusion unit: an infusion unit is a product consisting of one or more bags with the same type of manipulated cells, from the same donor (one) and with a unique batch or product number. If different manipulated cell types were used, cells from multiple donors or there are different identification codes for multiple bags, these are regarded as different infusion units.
• Cellular therapy infusion episode: the infusion of one or more units on one day. If the cellular therapy infusion units were infused over multiple days, this is regarded as multiple infusion episodes.

Pre-infusion

1. Cell collection procedure - Apheresis

1.1. Date of collection

Report the date when actual cell collection (apheresis) started, independent of whether a preparatory regimen was necessary or not. If there was more than one collection, enter the date of the first collection. If the date is not known, mark the corresponding Date unknown checkbox (e.g. allogeneic product from unknown donor).

1.2. Number of collections

Report the number of occasions when cells were collected from the donor or patient. Include only those collections that were used for this particular cellular therapy product.

Indication for planned cellular therapy

2. Indication for planned cellular therapy

Select the indication for the cellular therapy treatment.

• Treatment of primary disease;
• Treatment or prevention of complications;
• Other indication; specify;

The indications are specified in the sections below.

2.1. Treatment of a primary disease

Select this option if the treatment was for a primary disease or disorder. Do not select diseases the patient may have had in the past, unless the procedure being reported is meant to treat these diseases.
2.1.1. Enter the main indication diagnosis for this cellular therapy.

Make sure the indication diagnosis has been registered in EBMT Registry first, using the relevant indication diagnosis form.

During online data entry the indication diagnosis can be selected from the drop down list of all registered indication diagnoses for this patient.

2.1.2. Indicate the reason(s) for this cellular therapy

Which may include (select all that apply):

- Treatment of primary diagnosis
- Prevention of disease relapse or progression
- Rescue from disease relapse or progression
- Minimal residual disease reduction
- Refractory disease
- Other; specify it in the text field.

2.2. Treatment or prevention of complications

(derived from a previous treatment or expected from a subsequent treatment)

Select this checkbox if the cellular therapy was prescribed for the treatment or prevention of complications derived from a previous treatment or expected from a subsequent treatment including infections.

2.2.1. Date of the last treatment

If the cellular therapy was prescribed for the treatment or prevention of complications derived from a previous treatment, report the date of this previous treatment.

Important note: before continuing, please make sure that in case of prevention of complications derived from a previous treatment, this previous treatment has been registered and that relevant follow-up form has been submitted; this is so relapse data and other events between transplants and/or cellular therapies can be captured.

E.g. If this cellular therapy is prescribed after a previous HCT, the original treatment and follow-up must be registered first using the respective HCT Day 0 and HCT Day 100 forms.
2.2.2. Reason for this cellular therapy

Indicate all reasons for this CT, which may include:

2.2.2.1. GvHD

Specify also if CT was for:

- Treatment of GvHD; or
- Prevention/Prophylaxis of GvHD.

2.2.2.2. Graft function

Specify also if CT was prescribed for:

- Graft failure treatment;
- Prevention of rejection/Promotion of cell engraftment;
- Graft enhancement

2.2.2.3. Immune reconstitution

2.3. Other indication

Choose this answer option if the indication for the cellular therapy was other than Treatment of a primary disease or Treatment or prevention of complications. Specify it in the text field.

Basic information on the planned cellular therapy

3. Clinical setting

Choose only one answer option to describe the clinical setting for the planned CT.

3.1. As per marketing approval / Standard of care / Institutional guidelines

Select this option if the patient is treated with cellular therapy according to the centre’s standard of care policies.
3.2. Hospital exemption

Select this answer if the patient is treated with cellular therapy manufactured under the hospital exemption rule. The hospital exemption rule is a provision under which some cellular therapy products can be manufactured by academic or commercial facilities, and administered to patients either as orphan treatment where no equivalent commercial product is available or in the context of early clinical trials designed to provide proof-of-concept information. By definition, any approved product already placed on the market cannot be manufactured in the context of the hospital exemption.

3.3. Compassionate use / Accelerated access

Select this option if the patient is treated under compassionate use. These are regulatory provisions under which a cellular product can be administered to a specific patient outside of a clinical trial, upon request and approval from regulatory agencies. Regulations may vary from country to country and some countries may not provide such opportunities. In case of doubt, please check with a clinician in the treating centre.

3.4. Investigational drug product (IDP)/ Clinical trial

Tick this box if the patient is enrolled in a clinical trial, whether academia-sponsored or industry-sponsored. If the product was administered in a clinical trial setting or as an investigational product, answer also questions 3.4.1.-3.4.7.1.:

3.4.1 Phase

Indicate the phase of the IDP or clinical trial by marking if it is:

- 1
- 1/2
- 2
- 2/3
- 3

3.4.2 Blind trial

Indicate if this is a blind trial. This is a trial where neither the treating doctor nor the patient knows which of the treatments offered in the trial is being given (e.g. placebo vs active substance).
3.4.3. Randomised trial

Indicate if the treatment is allocated randomly to the trial subjects.

3.4.4. EudraCT number

Indicate the number given to the trial when registered with the European Clinical Trials Database.

3.4.5. USA NCT number

Indicate the clinical trial number (NCT number). If the number is not clearly documented, it can be found using the ‘Find a Study’ feature on www.clinicaltrials.gov.

3.4.6. UMIN CT number

Japanese clinical trials number, only applicable to trials (also) conducted in Japan.

3.4.7. Tick here if this registration should be hidden

Select this checkbox to mark that the cellular therapy treatment data (CT Day 0, Disease status at HCT/CT/IST form) of this patient should be hidden for all database users except from data editors of the current centre (centre entering information about this event) until a certain date.

If the checkbox is not selected, data viewers from the registering centre, VRs (including National registries and EBMT Working parties) will be able to see the full record.

3.4.7.1. Date by which the registration can be made available for research

Indicate the date from which the registered cellular therapy treatment of the patient can be made visible to other database users and used for research and analysis.

If the field stays blank, the data will be unavailable for research indefinitely or until the tickbox as described at 3.4.7 is unchecked.
4. Cell origin

Indicate the origin of the cells infused by selecting if it is:

4.1. Autologous

To mark that the cells were collected from the same patient.

4.2. Allogeneic

To mark that cells were collected from another person (donor).

4.2.1. This product is manufactured from

If the origin of the cells is allogeneic, also specify if the product for infusion was manufactured from:

- A known donor never used to treat this patient (e.g. from a donor registry or related donor). This option should be selected if it is the first time that the cells of this donor are infused to this patient and all the information about the donor is available. If this answer option is chosen, proceed to the Donor information section to provide more details on the donor.

- A donor that is already registered as part of a previous treatment. Select this option if this donor is already registered as part of previous allogeneic HCT or CT and proceed to Planned cellular therapy infusion product(s) section.

- An unknown donor with no data available (e.g. from a commercial product). Select this option if there is no information about the donor available and proceed to Planned cellular therapy infusion product(s) section.

Donor Information

Complete this section (questions 5-8.7) only if the cell source was allogeneic and if it is a known donor that was never used to treat this patient. If this donor was used to treat this patient in the past and was registered in a previous allogeneic HCT or CT, this section can be left blank.
5. Did the donor consent to having their data in the EBMT registry?

Answer **Yes** if the donor or their legal guardian have signed the informed consent form and consent donor’s data being submitted and processed by the EBMT Registry.

Answer **No** if the written consent was not received or given and complete only fields marked with asterisk (*) in this section. Such donors will be further referred to as non-consenting donors.

Centres might use EBMT donor consent form or their own consent forms, where such consent is requested.

6. Date of birth

Fill in the donor’s exact date of birth (year, month and day). In case providing the full date of birth is not possible, provide the donor age in the next question.

6.a. *Age at time of donation*

Answer this question only if the date of birth cannot be reported.

If the full date of birth cannot be reported (due to legislation or other regulations), report the age of the donor at the time of donation in years. The full number of years should be reported, e.g. if the donor is 35 years and 11 months old at the time of donation, this field should be filled in with 35.

6.b. *Age in months if the donor was younger than 1 year*

Answer this question only if the date of birth cannot be reported and the donor was younger than 1 year at the moment of donation. This field is mandatory even for non-consenting donors.

Report here the full number of months, e.g. if the donor was 11 months and 20 days old at time of donation, report 11 months.

7. *Sex (at birth)*

Indicate if the donor’s sex at birth is **Male** or **Female**.
8. Donor Identification

8.1. Donor ID given by the treating centre (mandatory)

Indicate the donor ID that was assigned to the donor by the treating centre. The word mandatory is used here to call data entry manager's attention as this field is extremely important and should be filled in for all consenting donors.

8.2. Global registration identifier for donors (GRID)

If available, fill in the 19-character global registration identifier for donors (GRID) that was assigned to the donor. More information on the GRID can be found here: https://wmda.info/professionals/optimising-search-match-connect/why-global-identifier/.

8.3. ION code of the Donor Registry or Cord Blood Bank (mandatory)

Fill in the Issuing Organisation Number (ION) of the donor registry or cord blood bank. If the code is unknown, it can be found using https://share.wmda.info/display/WMDAREG/Database. The word mandatory is used here to call data entry manager's attention as this field is extremely important and should be filled in for all consenting donors.

8.4. Eurocord code for the Cord Blood Bank (if applicable)

If cord blood was used for cellular therapy, fill in the Eurocord code.

8.5. Name of Donor Registry or Cord Blood Bank

Enter the name of the donor registry or cord blood bank, and full name of donor centre (if applicable).

8.6. Donor ID given by the Donor Registry or Cord Blood Bank

Enter the identification code that was assigned to the donor by the donor registry or cord blood bank (specified in question 8.5.).
8.7. Patient ID given by the Donor Registry or Cord Blood Bank

Enter the identification code that was assigned to the patient by the donor registry or cord blood bank (specified in question 8.5.).

Planned Cellular Infusion Product(s)

9. Will the planned cellular infusion product consist of more than one infusion unit?

Answer **Yes** if planned cellular infusion product will consist of more than one infusion unit and report the **Number of infusion units**.

Answer **No** if planned cellular infusion product will consist of one infusion unit. Mark **Unknown** if there is no information yet on the number of infusion units in the cellular infusion product.

**Cellular therapy infusion unit**: an infusion unit is a product consisting of one or more bags with the same type of manipulated cells, from the same donor (one) and with a unique batch or product number. If different manipulated cell types were used, cells from multiple donors or there are different identification codes for multiple bags, these are regarded as different infusion units.

10. Tissue source (check all that apply)

Select the tissue(s) from which the cells were collected:

- Bone marrow
- Peripheral blood
- Umbilical cord blood
- Tumour
- Other; specify the tissue source in the textbox.

11. Is the planned cell infusion product a commercial product?

If the product is manufactured by a pharmaceutical company after market authorization was obtained, the product is considered to be a commercial product and it should be answered **Yes**.

If the product was made by the hospital or administered before market authorization, the product is not commercial and this question should be answered **No**.
12. Identification

Report below the Identification details of the planned cellular infusion product.

12.1. Name of manufacturer

Select the name or type of the facility which manufactured the infusion product (pharmaceutical or biotech company, cell processing laboratory or another site) out of the following options:

- Autolus
- Celgene/ Bristol-Myers Squibb
- Celyad
- GlaxoSmithKline (GSK)
- Janssen (Johnson & Johnson)
- Kite Gilead
- Miltenyi
- Novartis
- Local hospital or university

If no answer from the list is applicable, select Other and specify the name in the text box.

12.2. Name of the product

Select the product name out of the following options:

- Abecma
- Breyanzi
- Carvykti
- Kymriah
- Tecartus
- Yescarta

If the product name is not on the list, select Other and specify the name in the text box. Select **No product name available** if the product does not have a name.

*This is the end of the CT Pre-infusion section. Please proceed with completing the Cellular Therapy section to complete the CT Day 0 report.*
Cellular therapy

13. Date of (planned) cell infusion

Report the date of the first cell infusion, or the planned date of infusion if the infusion did not take place.

Important note: this date will be recorded as the date of cellular therapy in the patient timeline and should be entered while creating a Cellular therapy treatment event in the EBMT Registry online application.

14. Centre where infusion took place (CIC)

Enter here the CIC of the centre where infusion took place. If the product was not infused, report the centre where the infusion was planned to take place.

Every centre that is submitting data to the EBMT receives a CIC, which is populated automatically in EBMT Registry when a user selects the corresponding centre as a context during data entry.

15. Was the cellular therapy product infused during this treatment/procedure?

Indicate if the cells that were collected for manufacturing were infused to the patient during this treatment/procedure by answering Yes or No.

15.1. Reason why the treatment did not take place

If the product was not infused, select the appropriate reason(s):

- Production failure
- Out of specification product rejected by physician
- Disease progression or patient condition worsening
- Patient became ineligible for treatment
- Patient died
- Other reason; specify the reason in the text box.
If no infusion took place, the data entry for this form is stopped here. The status at treatment form needs to be completed, using the date of planned infusion as treatment date. Follow-up forms need to be completed as per the follow-up schedule.

15.2. B-cell aplasia at time of cellular therapy?

If the cellular therapy product was infused, report if B-cell aplasia was Present or Absent at the time the infusion took place, or mark Not evaluated if it was not assessed.

15.2.1. Percentage of B-cells

If answered Present to the previous question, report here the percentage of B-cells at time of cellular therapy.

Therapy & cell infusions

16. Chronological number of cellular therapy treatment for this patient

Indicate the chronological (sequential) number of this cellular therapy counting all CTs the patient had. HCTs or DLIs should not be counted when defining the chronological number of cellular therapy.

Note: if the infusions are given more than 100 days apart, or if the indication for the cellular therapy has changed, the therapy should be considered a new treatment (new CT).

17. If > 1

Complete questions 17.1.-17.4.3 only if this is the second or a subsequent cellular therapy for this patient and the previous cellular treatments cannot be registered.

Important note: If > 1 submit an annual follow-up form before proceeding using the latest assessment date before this cellular therapy; this is so relapse data and other events between transplants/cellular therapies can be captured.
17.1. Same package/product as for the previous cellular therapy?
Select Yes to mark that the same cellular therapy infusion product/package is being used for the current cellular therapy as for the previous CT treatment. Otherwise, answer No to mark that there were used different cellular therapy infusion products/packages.

17.2. Date of the last cellular therapy before this one
Report the start date of the most recent cellular therapy treatment.

17.3. Type of the last cellular therapy before this one:
Select the type of the last cellular therapy before this one if it was **Autologous** or **Allogeneic**.

17.3.1. Was the same donor used both for prior and current cellular therapy?
If answered Allogeneic to the previous question, specify if the same donor has been used for the previous and current cellular therapies.

17.4. Was the last cellular therapy performed at another institution?
Report if the patient has received a treatment in another institution. If Yes, fill in the subsequent questions:

17.4.1. CIC (if known)
Indicate the other centre’s CIC (if known). If not known, answer questions 17.4.2.-17.4.3..

17.4.2. Name of institution
Provide the name of the institution where the last cellular therapy before this one took place.

17.4.3. City
Provide the city of the institution where the last cellular therapy before this one took place.
18. Did the patient receive a previous HCT?

Answer **No** if the patient did not receive HCT in the past.

Answer **Yes** if the patient received HCT in the past and answer subsequent questions:

18.1. Date

Report the date of the latest HCT.

18.2. Type

Report the type of the latest HCT the patient received by marking if it is **Autologous** or **Allogeneic**.

18.3. For same indication as the cellular therapy?

Answer **No** if the indication for the last HCT was different from the indication for the cellular therapy.

Answer **Yes** to mark that the indication for the cellular therapy is the same as it was for the past HCT.

**Previous therapies including bridging**

Report in this section previous therapies including bridging before transplant or cellular therapy. Previous therapies refer to any treatment that is given for the indication for the cellular therapy (as it was specified in the question 2 of the current form). Only therapies given for the diagnosis that is the main indication for cellular therapy should be reported. Please note that not only treatments before HCT should be reported, but also treatments that are given between HCT and cellular therapies. Do not include preparative/lymphodepleting regimen. Copy and fill-in all questions of this section for each line of treatment.

Bridging therapy is a new terminology and is defined as any treatment that is given after the leukapheresis, during the period of cell manufacturing, with the goal of controlling the
disease until the cellular product is ready to be infused. Do report bridging therapy in this section. Bridging therapy, therapy given after leukapheresis up until the initiation of lymphodepleting chemotherapy for the purpose of disease control or management, should be reported as a line of therapy, if applicable.

19. Was the patient treated before this cellular therapy procedure?

If the patient was not treated, select No and proceed to the next section of the form Cellular therapy infusion unit(s).

If the patient has been treated for the diagnosis that is the main indication for this cellular therapy, select Yes and proceed to the next questions of this section.

Mark as Unknown if there is no information available about previous therapies of the patient and proceed to the next section of the form Cellular therapy infusion unit(s).

Note: if the patient received cell therapy for lymphoma and the previous therapies have been registered with the lymphoma diagnosis, only the treatments that may have been given since then need to be reported here. It is not needed to repeat the treatments reported at the lymphoma diagnosis.

20. Has the information requested in this section been submitted with a previous HCT/cellular therapy registration for this patient?

If the information on any previous therapy has not been submitted yet, answer No and continue with this section. If the information has been submitted already, select Yes and continue with the Cellular therapy infusion unit(s) section.

Note that not only treatments before HCT or cellular therapy should be reported, but also treatments that are given between HCT and cellular therapies. This should be taken into account while answering this question.

21. Chemotherapy/Drugs given?

Indicate if the patient has been treated with chemotherapy or drugs in previous therapies. If this is not the case, select No and skip the table with treatment lines (question 24-24.5).
If therapies were given, select Yes and provide the requested details in the table (question 24-24.5).

22. Radiotherapy

Indicate if the patient underwent radiotherapy in the past.

22.1. Date started

If the patient received radiotherapy, provide the start date of the radiotherapy.

22.2. Date ended

If the patient received radiotherapy, provide the end date of the radiotherapy.

23. Other treatment

If the patient received any other kind of previous treatments that have not been registered yet, select Yes and specify the treatment in the textbox. This box is not to be used to report chemotherapies for the disease, as bridging nor conditioning, or radiotherapy.

23.1. Date started

If the patient received other kinds of previous treatment, provide its start date.

23.2. Date ended

If the patient received other kinds of previous treatment, provide its end date.

24. List all chemotherapy/drugs given during one line of treatment

All lines of chemotherapies and drugs that were given to the patient for the main indication diagnosis for cellular therapy should be listed in the table.
24.1. *Drug/ Regimen

Fill in the drug or chemotherapy per treatment line. Please consult the LIST OF CHEMOTHERAPY DRUGS/AGENTS AND REGIMENS on the EBMT website for drugs/regimens names. While submitting online, the list is available in the dropdown. If the regimen is not available, report the regimen’s drugs individually.

24.2. No of cycles

Report the number of drug or chemotherapy cycles that were given.

Note: One ‘line’ of chemotherapy usually consists of repeated or alternating cycles of drugs according to a certain schedule.

24.3. Date started

Report the date this line of treatment was started.

24.4. Date ended

Report the date this line of treatment ended.

24.5. Ongoing

Check the checkbox to mark that this line of treatment is ongoing.

25. Response to this line of treatment

Complete only the section (sub-question) that is relevant to the primary indication diagnosis for which this cellular therapy treatment is given:

25.1. Acute Leukaemias

Check the corresponding checkbox to report if the response to the previous therapy was:

- Complete remission (CR); maintained or achieved;
- Relapse/Progression;
- Not evaluable - it is not possible to evaluate the response.
25.2. MDS and MPN

Check the corresponding checkbox to report if the response to the previous therapy was:

- Complete remission (CR); maintained or achieved;
- Relapse/Progression;
- Improvement but no CR;
- Not evaluable - it is not possible to evaluate the response.

25.3. Plasma cell disorders incl. Multiple Myeloma

Check the corresponding checkbox to report if the response to the previous therapy was:

- Stringent complete remission (sCR);
- Complete remission (CR), specify also if the Number of this sCR or CR was:
  - 1st;
  - 2nd;
  - 3rd or higher.
- Very good partial remission (VGPR);
- Partial remission (PR), specify also if the Number of this VGPR or PR was:
  - 1st;
  - 2nd;
  - 3rd or higher.
- Stable disease (no change; includes old MR);
- Progression;
- Not evaluable - it is not possible to evaluate the response.

25.4. Haemoglobinopathy

Check the corresponding checkbox to report if the response to the previous therapy was:

- No transfusion required;
- Transfusions required.

25.5. Lymphomas

Check the corresponding checkbox to report if the response to the previous therapy was:
• Complete remission (CR): maintained or achieved. Please specify if it is Unconfirmed or Confirmed and if Confirmed, was it by: CT scan or PET.
  • Partial remission (>50%);
  • No response (<50%);
  • Progression;
  • Not evaluable - it is not possible to evaluate the response.

25.6. Bone marrow failure syndrome (incl. Aplastic Anaemia)
Check the corresponding checkbox to report if the response to the previous therapy was:
  • Complete remission (CR);
  • Partial remission (transfusion and growth factor independent);
  • No response;
  • Progression;
  • Not evaluable - it is not possible to evaluate the response;
  • Other

25.7. Solid tumours
Check the corresponding checkbox to report if the response to the previous therapy was:
  • Complete remission (CR);
  • Stable disease;
  • Very good partial remission;
  • Progressive disease;
  • Partial remission (>50);
  • Minor response (>25% and <50%);
  • Not evaluable - it is not possible to evaluate the response.

25.8. Other diagnoses
Check the corresponding checkbox to report if the response to the previous therapy was:
  • Cured;
  • Improved;
  • Worse;
• No response;
• Not evaluable - it is not possible to evaluate the response.

Cellular Therapy Infusion Unit(s)

26. Was more than one cell infusion unit administered during this treatment?
Answer **No** if the patient had only one cell infusion unit during this cellular therapy treatment.
If more than one cell infusion unit was infused, answer **Yes** here and specify the sub-question:

26.1. Number of different cell infusion units that were part of this treatment
Specify the number of cell infusion units administered during this cellular therapy treatment.
This number will correspond to the number of copies of the **Cellular therapy infusion unit description** section that needs to be filled in and submitted.

Cellular Therapy Infusion Unit(s): Description

If more than one cell infusion unit was infused, please copy and fill-in this section for each cell infusion unit administered during this cellular therapy.

27. Unique ID of the product
Enter here a unique identification code of the product, if it is available (e.g. serial number).

28. Batch number
Report the batch number of the cell infusion unit, if applicable.

29. Identification of the cell infusion unit given by the centre
Report the cell infusion unit identification that was assigned to the unit by the treating centre.
This information is mandatory if more than one cell infusion unit has been used in the same CT treatment. If there is only one cell infusion unit with no assigned identification number, enter ‘1’.
30. Was the infused cellular product consistent with the specifications?

Answer **Yes** if the product was consistent with the specifications.

Answer **No** if the product was not consistent with the specifications and specify the **difference from specifications** in the text field. Products that are out of specification did not meet the acceptance criteria set by the manufacturer.

Answer **Unknown** if it is not known if the infused cellular product is consistent with the specifications.

Consult the physician who approved the product for infusion in case of doubt.

31. Was the cellular therapy product cryopreserved prior to infusion?

Select **Yes** if the cellular product has been cryopreserved (frozen at very low temperatures) prior to infusion at any time point between collection and infusion. If this was not the case, select **No**.

Answer **Unknown** if it is not known.

**Cellular Therapy Infusion Unit(s): Manipulation**

Complete this section (questions 32-33) for non-commercial products only.

If the infused product is a commercial product, continue with the Preparative regimen section.

If more than one cell infusion unit was administered, please copy and fill-in this section for each cell infusion unit.

32. Identification of the cell infusion unit (given by the centre)

Report the cell infusion unit identification number that was assigned to the unit (you are going to provide details about) by the treating centre. This information is mandatory if more than one cell infusion unit has been used in the same CT treatment. If there is only one cell infusion unit with no assigned identification number, enter ‘1’.
33. Manipulation

33.1. Processing/Manufacturing facility

Indicate where the cell manipulation took place by choosing either:

- **Onsite, by local cell processing facility**, or
- **Offsite, by a non-commercial facility.**

33.2. Gene manipulation

Select **No** if the product was not genetically manipulated. If the product was genetically manipulated, select **Yes** and continue with the subsequent questions to specify the type of gene manipulation used:

33.2.1. Gene transfer

Answer **Yes** if gene transfer was used for gene manipulation.

Gene transfer is a procedure that allows the transfer of a gene into a cell or any other organism.

33.2.1.1. Vector

If gene transfer was used, indicate the vector by choosing one of the following answer options:

- **Retroviral vector**;
- **Lentiviral vector**;
- **Other vector**, specify it in the text field. E.g. non-integrating vectors, including RNA electroporation, should be listed here.

33.2.1.2. Transgene

If genes were inserted, tick the transgene from the following list and specify all targets:

- **CAR** (chimeric antigen receptor); specify all target antigens in the text field. See appendix 1 for a list of target antigens (e.g. CD19, CD20, BCMA etc.).
- **TCR** (T-cell receptor); specify all targets in the text field and specify HLA element.
- **Suicide gene**; specify it in the text field.
- **Other**: specify it in the text field.
33.2.2. Gene editing

Answer **Yes** if gene editing was used for gene manipulation.

Gene editing is a procedure in which DNA is inserted, deleted, modified or replaced in the genome of a living organism.

33.2.2.1. Manipulated gene

If gene editing was used, indicate the manipulated gene by choosing one of the following answer options:

- CCR5;
- Factor IX;
- Factor VIII;
- Other gene; specify it in the text field.

33.2.3. Other

Indicate if a different genetic manipulation not previously listed was used. If the answer is **Yes**, specify it in the text field.

33.3. Manipulation aims

33.3.1. Recognition of a specific target/antigen

Answer **Yes** if the aim of the manipulation was the recognition of a specific target or antigen

33.3.1.1. Type

If answered **Yes** to the previous question, mark all applicable type of targets used:

- **Viral**: specify also the type of virus recognised:
  - Adenovirus;
  - BK Virus;
  - Covid-19 (SARS-CoV-2);
  - Cytomegalovirus (CMV);
  - Epstein-Barr virus;
  - Human herpes virus 6;
  - Human immunodeficiency virus (HIV);
33.2. Cell types administered

Select all the cell types that were infused to the patient after apheresis by marking all the answers that apply:

- CD3+ lymphocytes;
- CD4+ lymphocytes;
- CD8+ lymphocytes;
- CD34+
- Regulatory T-cells;
- Mesenchymal cells;
- Dendritic cells;
- Gamma-Delta cells;
- NK cells;
- Mononuclear cells (DLI);
- Other; specify it in the text field.

33.3. Expansion

Indicate if expansion was performed. This is a procedure meant to increase the number of collected cells in the laboratory before infusion. Mark as Unknown if there is no information on it.

33.4. Activation

Indicate if activation was used. This procedure aims to induce new biological activity(ies) on treated cells. Mark as Unknown if there is no information on it.
33.3.5. *Induced differentiation*

Indicate if the cells were induced to differentiate into different cell types by contact with other cells or stimulation by differentiation inducing factors. Mark as *Unknown* if there is no information on it.

**Preparative regimen**

Do not include lines of therapy given for disease treatment, bridging therapy or maintenance, these should be reported in other sections.

34. **Preparative (conditioning) regimen given?**

Indicate if the patient received lymphodepleting chemotherapy prior to the infusion of the cellular product.

In the event of the cellular therapy infusion unit being infused at the same time as an HCT taking place, the HCT conditioning/preparative treatment is not to be reported here. In these cases, the correct answer to this question would be **No**.

If the patient received a lymphodepleting treatment, answer **Yes**.

Patients with Primary Immunodeficiency Disorders receive cellular therapy without preparative (conditioning) regimen and thus the answer should be **No** for such patients.

35. **Drugs given?**

Answer **No** if the patient did not receive any drugs as a preparation for this cellular therapy. Mark as *Unknown* if there is no information available as to the drugs received by the patient in the preparation of this CT.

Answer **Yes** if any lymphodepleting drugs were given to the patient in preparation for this cellular therapy. This includes any active agent, including chemotherapy, monoclonal antibody, polyclonal antibody, serotherapy, etc. Provide more details on the drugs in the next questions.
36. Specification and dose of the preparative regimen

36.1. Chemotherapy

Indicate the chemotherapy used as a preparative regimen for this cellular therapy by selecting from given options, specify extra details if asked:

- **Alemtuzumab**
- **Anti-Thymocyte Globulin / Anti-Lymphocyte Globulin** - for this chemotherapy specify also:
  - Product name;
  - Origin - by marking if it is Rabbit, Horse or Other origin. For Other origin, specify it in the text box.
- **Bendamustine**;
- **Bleomycin**;
- **Busulfan** - specify also:
  - Route of administration, by marking if it is Oral, IV or Both.
  - Drug monitoring performed - indicate if drug monitoring was performed (answer Yes or not (answer No). If performed, specify the total AUC (measure of total systemic exposure to the drug) and the AUC units used (mg x hr/L, or micromole x min/L, or mg x min/mL).
- **Carboplatin**:
  - Drug monitoring performed - indicate if drug monitoring was performed (answer Yes or not (answer No). If performed, specify the total AUC (measure of total systemic exposure to the drug) and the AUC units used (mg x hr/L, or micromole x min/L, or mg x min/mL).
- **Carmustine**;
- **Cisplatin**;
- **Clofarabine**;
- **Beclometasone**;
- **Budesonide**;
- **Dexamethasone**;
- **Methylprednisolone**;
- **Prednisolone**;
- **Cyclophosphamide**;
- **Cytarabine**;
- **Daunorubicin**;
- **Doxorubicin**;
• Epirubicin;
• Etoposide;
• Fludarabine;
• Gemtuzumab ozogamicin;
• Ibritumomab tiuxetan;
• Idarubicin;
• Ifosfamide;
• Imatinib;
• Lomustine;
• Melphalan;
• Mitoxantrone;
• Paclitaxel;
• Rituximab;
• Teniposide;
• Thiotepa;
• Tositumomab;
• Treosulfan.

If Other chemotherapy was used, specify it in the text field.

Consult the LIST OF CHEMOTHERAPY DRUGS/AGENTS AND REGIMENS on the EBMT website for drugs/regimens names.

While submitting online, select the drugs/regimens from the dropdown list.

36.2. Dose

Report the total prescribed cumulative dose as per protocol. Do not provide daily or weekly doses, but the final cumulative dose received by the time the regimen has ended. Multiply daily dose by the number of days; e.g. for Busulfan given 4 mg/kg daily for 4 days, total dose to report is 16 mg/kg.)

36.3. Units

Specify the units of the total prescribed cumulative dose, by marking mg/m² or mg/kg.
37. Total body irradiation (TBI)
Indicate if a patient received total body irradiation as a part of preparative regimen for the current cellular therapy.

37.1. Total prescribed radiation dose as per protocol
If TBI was administered, specify the total prescribed radiation dose as per protocol in Gy.

37.2. Number of fractions
If TBI was administered, specify the number of fractions.

37.3. Number of radiation days
If TBI was administered, specify the number of radiation days.

Cell Infusion Episode(s)

38. Was there more than one cell infusion episode during this treatment or procedure?
If multiple cell infusions took place, answer Yes here.
If two different cell infusion units are infused simultaneously or within a short interval (within hours), it is considered one cell infusion episode. If the same cell infusion unit is infused on two different days, it is considered two cell infusion episodes.

38.1. Number of cell infusion episodes during this treatment/procedure
If multiple infusion episodes according to the definition above were part of the treatment/procedure, indicate the number of infusion episodes.
Cell Infusion Episode(s): Description

Copy and fill in this section (questions 39 - ) for each cell infusion unit that was administered during each cell infusion episode. Complete it for each cell infusion episode.

39. Date of cell infusion episode

Report the date of the first cellular therapy infusion of the treatment.

For patients receiving cellular therapy for a complication of HCT, put the date of the first cellular therapy treatment, not the date of HCT.

40. Route of infusion

Indicate how the cells were infused to the patient by marking if it is:

- **Intravenous**: refers to an infusion into the veins; examples include infusion via central line or via catheter.
- **Intrathecal**: refers to an infusion within the cerebrospinal fluid at any level of the cerebrospinal axis, including injection into the cerebral ventricles.
- **Intratumour injection**: refers to a direct injection into the tumour.

If the route of infusion is not listed, select Other route and specify the infusion route.

41. Did the patient receive concomitant therapy?

Concomitant therapy is given to enhance the function of cellular therapy. In cases where a recipient has both HCT and cell therapy, this question applies to the cell therapy infusion, not the HCT. Answer Yes if the patient received concomitant therapies in addition to the reported cellular therapy, and specify the drugs in the text field. Answer No if there was no concomitant therapy given besides this cellular therapy.

41.1. If answered Yes

If answered Yes to the previous question, indicate if concomitant therapy was given:

- **Simultaneously to the cellular therapy**
- **After the cellular therapy episode was finished**.
42. If more than one unit was used, indicate the identification of the cell infusion unit given by the centre as described in the Cell Infusion Unit section

If more than one unit was used, indicate the identification of the cell infusion unit given by the centre as described in question 38. This item is mandatory if more than one cell infusion unit was used. If there is only one cell infusion unit with no assigned identification number, enter ‘1’.

For each cell infusion unit, report questions 42.1-42.2.

42.1. Is the exact number of cells infused available?

Indicate if the exact number of infused cells is available by answering Yes or No.

42.1.1. If the exact number of infused cells is available

If the exact number of infused cells is available, specify the number of cells. Enter the value that is not adjusted for cell viability.

42.1.2. Unit (check only one)

If the number of cells infused was known, select the units for the number of cells that were infused and reported in 42.1.1. By selecting one of the options:

- 106/kg
- 106
- 108/kg
- 108

42.2. Cell viability

Report the percentage of cell viability.
Appendix A

Data entry flowchart

How many cellular infusion units were administered?

>1

1 treatment, multiple units, 1 infusion episode

1

1 treatment, 1 unit, 1 infusion episode

Did infusion take place on the same day?

Yes

Multiple treatments

No

Were the infusions more than 100 days apart?

Yes

1 treatment, multiple units, multiple infusion episodes

No

Did infusion take place on 1 day?

Yes

1 treatment, 1 unit, 1 infusion episode

No

Were the infusions more than 100 days apart?

Yes

Multiple treatments

No

1 treatment, multiple units, multiple infusion episodes