# Cord Blood Bank Technology Survey 2017

Response ID:122 Data

1.

**1. General data**
**Name of the Cord Blood Bank:**

Cord Blood Bank Czech Republic

2.

**2. In what year did your Cord Blood Bank start collecting cord blood units?**

1996

**3. Type of cord blood units in the inventory of your Cord Blood Bank (please note the number of cord blood units stored on December 31, 2016).**

Cord Blood Units in inventory for Unrelated Allogeneic. : 4173
Cord Blood Units in inventory for Autologous. : 0
Cord Blood Units in inventory for Related Allogeneic (directed). : 184

**4. How many cord blood units do you plan to store for public use (unrelated patients)?**

In 2017 : 20
In 2018 : 20

**5. Does your Cord Blood Bank list units in BMDW (www.bmdw.org)?**

Yes

**6. Is your Cord Blood Bank affiliated with a National Stem Cell Donor Registry? If yes, list the name of the registry.**

Yes, please list the name of the registry: Czech Stem Cells Registry

## 3. Cord Blood Units in Inventory

**7. What is your current processing method? Check all that apply.**

**8. What year did your Cord Blood Bank start using your current processes?**

1996

**9. If possible, please upload a picture of cord blood units in your inventory for your current practise in use. You can upload a maximum of five pictures per question.**

**10. If possible, please upload a picture of cord blood units in your inventory for volume reduction. You can upload a maximum of five pictures per question.**

**11. If possible, please upload a picture of cord blood units in your inventory for no volume reduction. You can upload a maximum of five pictures per question.**

**12. Total Nucleated Cell Count (x10E7) of your cord blood units stored for Unrelated Patients (Public Use).**

**Please specify the number of cord blood units per category.**

< 125 : 2518
125 - 149 : 752
150 - 199 : 667
200 - 250 : 182
> 250 : 53

## 4. Accreditations-licenses-certifications

**13. FACT-Netcord accreditation**

**Is your Cord Blood Bank FACT-Netcord accredited?**

In process of accreditation

**Year of last on-site inspection (FACT):**

2018

**14. AABB accreditation**

**Is your Cord Blood Bank AABB accredited?**

No

**15. Competent Authority/National Health Authority (state-based).**

**Is your Cord Blood Bank licensed by a (state-based) Competent Authority?**

Yes

**Does the Competent Authority perform on-site inspections?**

Yes, please specify year of the last inspection.

**Year of last on-site inspection of your Competent Authority:**

2016

**Name of the institution Competent Authority:**

State Institute of Drug Control

**Link to the license website of the institution Competent Authority:**

http://www.sukl.cz/prehled-drzitelu-povoleni-cinnosti-v-oblasti-lidskych-tkani

**16. Does your National Stem Cell Donor Registry perform on-site inspections?**

Yes

**17. Please describe other accreditations, licenses, or certifications of your Cord Blood Bank.**

JCI from 2007

## 5. Cord Blood Collection

**18. What is your current practice for collecting cord blood?**

Both

**19. Current antiseptic. Check all that apply.**

Other, please describe: As per local SOP - depends on collecting organization

**20. Collection bag**

Double needle

**21. Agitation during collection**

Manual

## 6. Conditioning and transport from Collection Centre to Cord Blood Bank.

**22. Do you use a secondary bag (sealed, plastic bag or similar to avoid any leakage)?**

Yes

**23. Transport conditions.**

Insulating transport container
Active refrigeration system
Electronic temperature probe
Ground transport

**24. Specify temperature range for storage and transportation of fresh product.**

Temperature between +2 to +8 °C

## 7. Evaluation

**25. Pre-processing Evaluation**
**Please specify your current threshold for accepting a cord blood unit for public use in your cord blood bank.**

### Net weight in grams (excluding bag and anticoagulant) before processing

60 - 69.99 grams

### TNC (10E7) before processing

< 125

### Viability CD45 positive cells (%)

NA- not evaluated pre-processing

### Viability CD45 positive cells (method)

### Viability CD34 positive cells (%)

NA- not evaluated pre-processing

### Viability CD34 positive cells (method)

**26. Pre Processing Evaluation**
**Please mark the criteria that are completed before accepting a cord blood unit for public use in your Cord Blood Bank. Check all that apply.**

Medical History
Collection Report
Informed Consent
Maternal IDM results
Temperature and integrity of the bag

**27. Which method is used for CD34 enumeration?**

ISHAGE guidelines

**28. Do you use external proficiency testing for QC of your FACS lab?**

Yes, please specify (e.g. UKNEQAS): UKNEQAS

**29. Does your Cord Blood Bank perform post processing/pre-freeze CD34 cell count?**

No

**30. Acceptable time from collection to processing.**

Other, please specify: 0-48

## 8. Processing-Packaging

**31. Please select the pre freeze processing methods you have used at any stage in time. Check all that apply.**

No processing

**32. What are your current pre-freeze processing methods? Check all that apply.**

No processing

**33. Please specify additives currently in use in addition to anticoagulants and DMSO during processing. Check all that apply.**

Albumin

**34. Please specify cryoprotectant additives currently in use. Check all that apply.**

DMSO

Other reagent(s), please describe: DMSO+Albumin

**35. Please specify cryopreservation method currently in use. Check all that apply.**

Programmed freezer

**36. Please specify cryobag currently in use. Check all that apply.**

Multiple bags

**37. What packaging is currently used when a unit is stored? Check all that apply.**

Metal canister

**38. How many segments do you currently store with the unit? Check all that apply.**

Two or more attached segments

Other samples

## 9. Testing

**39. Using the list below, indicate which Infectious Disease Marker (IDM) testing of the maternal donor and/or cord blood is CURRENTLY performed by your Cord Blood Bank.**

| | Standard on Maternal Sample | Standard on cord blood sample | Testing available by request on maternal sample | Testing available by request on cord blood sample | Not done |
|---|---|---|---|---|---|
| Hepatitis B Surface Antigen | X | X | | | |
| Hepatitis B core Antibody | X | X | | | |
| Hepatitis B Surface Antibody | | | | | |
| HBV NAT | | | X | X | |
| Hepatitis C Antibody | X | X | | | |
| HCV NAT | | | X | X | |
| HIV 1/2 Antibody | | | | | |
| HIV 1 and 2 + 0 Antibodies | X | X | | | |
| HIV p24 Antigen | X | X | | | |
| HIV NAT Antigen | | | X | X | |
| HTLV I/II Antibodies | | | X | X | |
| HTLV NAT | | | | | X |
| CMV Antibody - IgG | X | X | | | |
| CMV Antibody - IgM | X | X | | | |
| CMV Anitbody Total | | | X | X | |
| Syphilis | X | X | | | |
| West Nile Virus | | | | | X |

| | | | | | |
|---|---|---|---|---|---|
| NAT | | | | | X |
| West Nile Virus Antibody | | | | | X |
| T. Cruzi Antibody (Chagas Disease) | | | | | X |
| EBV Antibody - IgG | | | X | X | |
| EBV Antibody - IgM | | | X | X | |
| EBV Antibody Total | | | X | X | |
| Toxoplasmosis Antibody - IgG | | | X | X | |
| Toxoplasmosis Antibody - IgM | | | X | X | |
| Toxoplasmosis Antibody Total | | | X | X | |

**40. In case the Antibody - IgM is positive (for CMV, Toxoplasmosis or EBV) does your Cord Blood Bank perform a PCR? Please mark checkbox, when your Cord Blood Bank performs PCR testing. Check all that apply.**

**41. Does your Cord Blood Bank currently store extra material?**

Cord blood DNA
Cord blood material for DNA extraction
Maternal material for DNA extraction
Maternal plasma/serum
Plasma/cord blood

**42. HLA typing at time of listing.**

| | Low Resolution | Intermediate Resolution | High Resolution | Not performed |
|---|---|---|---|---|
| HLA-A | | X | | |
| HLA-B | | X | | |
| HLA-C | | X | | |
| HLA-DRB1 | | X | | |
| HLA-DQB1 | | X | | |
| HLA-DPB1 | | | | |

**43. Current threshold for accepting a cord blood unit for public use (post processing)**

| | Please specify threshold | Please provide method | Not performed |
|---|---|---|---|
| Minimum TNC (10E7) | 120x10E7 | hematological analyzer | |
| Minimum CD34 (10E6) single platform | NA | PE | |
| Minimum CD34 (10E6) double platform | | | not performed |
| Total-CFU (10E5) | NA | Methocult | |
| Viability (10E5) | NA | 7-AAD | |

## 10. Storage

**44. What type of storage container is currently used in your cord blood bank?**

Conventional storage tank-Vapor phase
Conventional tank-Liquid phase

**45. What type of storage monitoring is currently used in your cord blood bank?**

Alarm on individual tanks only
Centralized system-local
Centralized system-remote monitoring
LN2 level
Lid opening
Temperature monitoring

## 11. Verification/Extended HLA Typing

**46. Is extended/verification typing performed at an ASHI, EFI or CAP accredited lab?**

EFI accredited lab

**47. What is the average turnaround time for extended HLA typing results?**

7 Days

## 12. Confirmatory/verification typing.

**48. Does your Cord Blood Bank use an attached (contiguous) segment (if available) for confirmatory/verification HLA typing currently?**

Yes

**49. Does your Cord Blood Bank list cord blood units that do NOT have attached segments and have NOT previously been confirmatory typed on attached segments?**

Yes

**50. What is the percentage of cord blood units in your inventory that will be sent with attached segment?**

50-75%

**51. Is your current practice to perform confirmatory/verification typing on all cord blood units prior to release?**

Yes

## 13. Reservation/cancellation policies

**52. At what point is a cord blood unit reserved for a patient and not available for other patients? Check all that apply.**

At time of HLA typing request
At time of reservation request
At time of shipment request

**53. What is the length of time a cord blood unit can be reserved?**

60 days

**54. Is there a fee to reserve a cord blood unit?**

No

**55. Is there a fee to cancel the reservation for a cord blood unit in the absence of a subsequent request for shipment?**

No

**56. Do you allow for an extension on a reservation of a cord blood unit?**

Yes

**57. Will your Cord Blood Bank provide a cord blood unit report on a cord blood unit that is already reserved for another patient (and thus not available) without specifying that the cord blood unit is already reserved?**

No

**58. If your Cord Blood Bank releases a cord blood unit from a patient's search (as opposed to the transplant centre indicating that the cord blood unit may be released), do you inform the transplant centre of the release?**

Yes

**59. Using the list below, please indicate which tests are currently performed by your Cord Blood Bank on a thawed attached segment and at which stage.**

| | TNC count | Total viable CD34 count | % viability of CD34 | % viability of CD45 | CFUs |
|---|---|---|---|---|---|
| As standard when verification typing is performed | | | | | |
| As standard when CBU is reserved | | | | | |
| Upon request when CBU is reserved | | | | | |
| Upon request when verification typing is performed | | | | | |
| Only once shipment is requested | | | | | |
| Not performed | | | | | |
| Not from attached segment, but from aliquot in cryovial | X | X | X | | X |

## 14. Release-Shipment

**60. Does your Cord Blood Bank perform hemoglobinopathy screening before release?**

No

**61. Criteria to allow a Cord Blood Unit to be shipped to transplant centres. See Appendix V of FACT Netcord Standards 6th Edition.**

| | Acceptable range of values | Please provide method | Please provide additional information |
|---|---|---|---|
| Viability / cell count: | NA | 7AAD | |

**62. Criteria to allow a cord blood unit to be shipped to transplant centres. See Appendix V of FACT Netcord Standards 6th Edition.**
**What do you perform at the time a cord blood unit is released to be shipped to a transplant centre? Check all that apply.**

Identity testing with HLA

**63. Current packaging for shipment to transplant centre.**

Metal Canister
Protective sleeve

**64. How many segments do you currently send with the unit?**

One attached segment

**65. How much time is required from the date the shipment order is placed until the unit is shipped?**

Less than one week

**66. Is there a fee for cancellation of shipment?**

Yes, always

**67. Does your Cord Blood Bank validate its dry shippers to ensure they maintain the temperature at ≤ -150°C at least 48 hours beyond the expected arrival time at the receiving facility?**

Yes

**68. Do all dry shippers used by your Cord Blood Bank contain an electronic temperature data logger?**

No

**69. Who typically chooses the courier company for international transports?**

Cord Blood Bank or sending registry

**70. Please specify the shape of the transport container you currently use.**

Cubic

## 15. Adverse Events Reporting

**71. Adverse Event Reporting**

Competent authority
Internal report
National registry
Transplant centre
WMDA