



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice
Praha

**Česká stopa
na 38.mezinárodním kongresu ISBT
v Barceloně 2024**

MUDr. Miloš Bohoněk, Ph.D.

II. Novinky v transfuziologii

ohlédnutí za rokem 2024

Praha, Lékařský dům 8.4.2025

ISBT
BARCELONA
2024

38th International Congress of the ISBT
Barcelona, Spain June 23-27, 2024
In conjunction with the Spanish Society of
Blood Transfusion and Cellular Therapy (SETS)



Celkem

- cca 380 přednášek, z toho 2 x 

- 920 posterů, z toho 4 x 



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha



Cryopreserved platelets - production, indications, and clinical use over the last 10 years in the Czech Republic



Dominik Kutáč¹, Miloš Bohonek^{1,2}, Šárka Blahutová³, Vít Řeháček⁴, Jitka Bělochová⁵, Petra Šlechtová⁶, Hana Lejdarová⁷, Dana Galuszková⁸

¹Department of Hematology and Blood Transfusion, Military University Hospital Prague, Czech Republic; ²Faculty of Biomedical Engineering, Czech Technical University in Prague, Czech Republic; ³Blood center, University Hospital Ostrava, Czech Republic; ⁴Transfusion Department, University Hospital Hradec Kralove, Czech Republic; ⁵Transfusion Department, University Hospital Kralovske Vinohrady Prague, Czech Republic; ⁶Transfusion Department, University Hospital Pilsen, Czech Republic; ⁷Transfusion and tissue department, University Hospital Brno, Czech Republic; ⁸Transfusion Department, University Hospital Olomouc, Czech Republic



P256 | Cryopreserved platelets—production, indications, and clinical use over the last 10 years in the Czech Republic

D Kutac¹, M bohonek^{2,3}, S Blahutova⁴, V Rehacek⁵, J Belochova⁶, P Slechtova⁷, H Lejdarova⁸, D Galuszkova⁹

Abstracts of the 38th International Congress of the ISBT, Barcelona, Spain, 23-27 June 2024. Vox Sang. 2024 Jun;119 Suppl 1:7-596, doi: 10.1111/vox.13652. PMID: 38922723, IF 1,8

Background:

The short shelf-life of fresh platelets (PLTs) limits their efficient inventory management and availability during a massive transfusion protocol. Insufficient availability can be mitigated by building an inventory of cryopreserved platelets. Frozen PLTs have been produced in the Czech Republic since 2014. Frozen PLTs are currently used in 7 university hospitals with main trauma centers that cover most of the population of the Czech Republic, usually as part of a massive transfusion protocol for polytraumatic patients but also for other indications and their stockpile is part of the state crisis blood policy.

Aims:

Describe the production, indications, and experience of clinical use of cryopreserved platelets over the last 10 years in the Czech Republic.

Methods:

Platelets are frozen with 6 % DMSO at -80°C before freezing PLTs are concentrated and the supernatant. The shelf life of frozen PLTs is 2 years. Before use thawed PLTs are reconstituted in thawed plasma type AB or PAS and must be transfused for up to 6 hours. In the study, we monitored the number of units of frozen platelets produced and administered to patients with various diagnoses in 7 major trauma centers in the Czech Republic.

Results:

A total of 2305 units of frozen platelets were produced. The majority of 1387 units were made from apheresis collected PLTs, and 918 units of PLTs were obtained from buffy-coat. In Military University Hospital, reconstitution is carried out in AB plasma in other centers in PAS. Over a period of ten years, 1590 TD of thawed platelets were issued for clinical use. Of this number, 58 frozen units were delivered to smaller hospitals. In the main 7 trauma centers, thawed platelets were administered to 443 patients, plus 346 thawed units were issued to other hospitals. The main indication was the administration of thawed platelets to patients with polytrauma (538 units/114 patients), bleeding (278 units/156 patients), and thrombocytopenia (83 units/30 patients). 61 TD frozen units have expired.

Conclusions:

It follows from our practical experience, that frozen platelets are safe and effective and the procedure of thawing and reconstitution of frozen platelets is very simple and fast, and it allows for having quality platelets products when dealing with massive bleedings and other urgent situations. Frozen PLTs are beneficial for civilian as well as military blood banks and all facilities which do not have a permanent, or sufficient stock of fresh platelets available.

Table: The use of frozen PLTs in Czech Republic

Medical Facility / Blood Transfusion Establishment	Initiating the use of frozen PLTs	Method of collection frozen PLTs	Number of manufactured frozen PLTs	Method of reconstitution of frozen PLTs	Bleeding cases	Transfused units of frozen PLTs (until 12/2023)	Transfused patients with frozen PLTs (until 12/2023)
Military University Hospital Prague	1/2014	Apheresis	1163	Fresh frozen plasma	polytrauma - emergency admission	428	83
					other severe bleeding cases	123	45
					Thrombocytopenia	50	16
University Hospital Ostrava	1/2018	Apheresis / Buffy-coat	78	Platelet additive solution	polytrauma - emergency admission	0	0
					other severe bleeding cases	54	51
					Thrombocytopenia	0	0
University Hospital Hradec Králové	1/2019	Buffy-coat	205	Platelet additive solution	polytrauma - emergency admission	18	10
					other severe bleeding cases	75	44
					Thrombocytopenia	0	0
University Hospital Kralovske vinohrady Prague	12/2018	Apheresis	74	Platelet additive solution	polytrauma - emergency admission	0	0
					other severe bleeding cases	3	2
					Thrombocytopenia	13	9
University Hospital Pilsen	8/2019	Apheresis	54	x	polytrauma - emergency admission	0	0
					other severe bleeding cases	0	0
					Thrombocytopenia	0	0
University Hospital Brno	1/2020	Apheresis / Buffy-coat	662	Platelet additive solution	polytrauma - emergency admission	91	20
					other severe bleeding cases	12	7
					Thrombocytopenia	16	11
University Hospital Olomouc	12/2017	Apheresis / Buffy-coat	69	Platelet additive solution	polytrauma - emergency admission	1	1
					other severe bleeding cases	11	8
					Thrombocytopenia	4	4
Czech Republic - total	12/2014	Apheresis / Buffy-coat	2305	Fresh frozen plasma / Platelet additive solution	polytrauma - emergency admission	538	114
					other severe bleeding cases	278	156
					thrombocytopenia	83	30
					Another reason	345	143
					Another hospital	346	?
					total	1590	443





Use of Low Titre Group O Whole Blood in the Czech Republic

Miloš Bohoněk^{1,2}, Domínik Kutáč², Vít Řeháček³, Šárka Blahutová⁴, Dana Galuszková⁵

¹ Department of Hematology and Blood Transfusion, Military University Hospital Prague, Czech Republic

² Faculty of Biomedical Engineering, Czech Technical University, Czech Republic

³ Transfusion Department, University Hospital Hradec Králové, Hradec Králové, Czech Republic

⁴ Blood Centre, University Hospital Olomouc, Olomouc, Czech Republic

⁵ Transfusion department, University Hospital Olomouc, Olomouc, Czech Republic



P341 | Use of low titre group O whole blood in the Czech Republic

M Bohonek^{1,2}, D Kutac³, V Rehacek⁴, S Blahutova⁵, D Galuszkova⁶

Abstracts of the 38th International Congress of the ISBT, Barcelona, Spain, 23-27 June 2024. Vox Sang. 2024 Jun;119 Suppl 1:7-596, doi: 10.1111/vox.13652. PMID: 38922723, IF 1,8

Background:

Massive bleeding is a leading cause of death in polytrauma, especially in young people. Traumatic hemorrhagic shock in adults has a mortality approaching 20% at 24 hours post-injury. High morbidity and mortality is caused by the „lethal triad” – hypothermia, acidosis and trauma induced coagulopathy. Using early hemostatic resuscitation procedures can in many cases improve survival. In the last two decades the evidence for the lifesaving benefits of Low Titre Group O Whole Blood (LTOWB) in bleeding trauma patients has increased in both the prehospital settings as well as in hospital.

Aims:

Review of LTOWB use in the Czech Republic

Methods:

LTOWB began to be gradually produced and used in the Czech Republic in June 2020. The LTOWB is leucoreduced, RhD-negative with titers of anti-A and -B of <256, TRALI risk mitigated and with a shelf life of either 14 or 21 days depending on the manufacturer. Unused LTOWB units are 1-3 days before expiry reprocessed into RBCs (usable for another 21 days) and plasma (discarded).

Results:

Between June 2020 and December 2023, a total of 2,741 units of LTOWB have been produced in the Czech Republic, of which a total of 2,504 units have been transfused to 1,148 patients. A detailed overview of production is given in Table 1 and an overview of use in Table 2.

Conclusion:

LTWB is viable product to use in the treatment of massive bleeding, especially in polytrauma with the development of hemorrhagic shock. The rationale for the use of LTWB early in the resuscitation of massively bleeding patients is multifactorial: provides a balanced resuscitation that simultaneously addresses oxygen debt and coagulopathy, is a more concentrated product that contains a smaller quantity of anticoagulant and preservative solutions compared with an equivalent amount of reconstituted WB from blood components, the cold stored platelets in WB improve hemostasis more effectively compared to platelet units stored at room temperature.



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

Table 1: Production of LTOWB in the Czech Republic

Blood Transfusion Establishment	University Hospital Hradec Králové	Military University Hospital Prague	University Hospital Ostrava	University Hospital Olomouc	Czech Republic total
Reporting period	6/2020 - 12/2023	6/2020 - 12/2023	6/2020 - 12/2023	1/2023 - 12/2023	6/2020 - 12/2023
Produced units of LTWB (until Dec.2023)	1762	449	467	63	2741

Table 2: The use of LTOWB in Czech Republic

Medical Facility / Blood Transfusion Establishment	Reporting period	Bleeding cases	Transfused units of LTWB (until 12/2023)	Transfused patients with LTWB (until 12/2023)
University Hospital Hradec Králové	6/2020 - 12/2023	polytrauma - emergency admission	887	391
		other severe bleeding cases	487	181
Military University Hospital Prague	6/2020 - 12/2023	polytrauma - emergency admission	194	80
		other severe bleeding cases	42	20
University Hospital Ostrava	6/2020 - 12/2023	polytrauma - emergency admission	249	184
		other severe bleeding cases	109	84
University Hospital Prague - Motol	6/2022 - 12/2023	polytrauma - emergency admission	59	38
		other severe bleeding cases	13	12
University Hospital Olomouc	1/2023 - 12/2023	polytrauma - emergency admission	30	15
		other severe bleeding cases	14	12
Air ambulance service Hradec Králové	6/2020 - 12/2023	polytrauma - prehospital	227	122
Air ambulance service Ostrava	6/2020 - 12/2023	polytrauma - prehospital	19	19
Air ambulance service Army of Czech Republic Píseň	1/2024	polytrauma - prehospital	0	0
Air ambulance service Olomouc	1/2024	polytrauma - prehospital	0	0

Table 3: The use of LTWW in Czech Republic - total (01/2020 - 12/2023)

Reporting period	Bleeding cases	Transfused units of LTWB (until 12/2023)	Transfused patients with LTWB (until 12/2023)
06/2020 - 12/2023	polytrauma - emergency admission	1593	698
	other severe bleeding cases	665	309
	polytrauma - prehospital	246	141
	total	2504	1148



P721 | Leukocytapheresis—new challenges in therapy of the patients

Z Gasova¹, Z Bhuiyan-Ludvikova¹

¹Apheresis Department, Institute of Hematology and Blood Transfusion, Prague, Czech Republic

Aims: The aim of the study was to evaluate the results of productive leukocytapheresis procedures, i.e., MNC, and PBPC collections in different groups of patients and donors. Understanding the process would be helpful in optimizing apheresis procedures.

Methods: MNC and PBPC collections were performed in groups of: **Non-mobilized patients and donors** MNC were collected for extracorporeal photochemotherapy “off line”(ECP), for CAR T cells, and for DLI in: patients: with acute and chronic GVHD (a/c GVHD, 119 procedures, 8 patients), and patients with B cell lymphoproliferative diseases - ALL, DLBCL (155 procedures, 147 patients); healthy donors: who were collected for DLI (7 procedures, 7 donors). **Mobilized PBPC patients and donors** PBPC were collected for autologous and allogeneic transplantation in: patients: with non-Hodgkin lymphoma and multiple myeloma for autologous HSCT transplantation (132 procedures, 79 patients); healthy donors: who were collected for allogeneic HSCT transplantation (46 procedures, 38 donors, Zarzio). Collections were performed using Spectra Optia, v. 11, Terumo, CMNC, MNC. The precollection numbers of leukocytes, CD 34+ cells, CD 3+ cells in blood, as well as the numbers of leukocytes, percentage (%) of MNC, CD 3+ cells, and CD 34+ cells in products were evaluated (Sysmex XN 10, BD FACS Canto II).



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

Results: Total blood volumes processed (\times TBV) were in patients and donors: GVHD 1.4 (1-1.7), ALL/DLBCL 2.6 (2.1 - 3.3), DLI 1.4 (0.8-1.6), PBPC autologous 3.6 (2-5.4), PBPC allogeneic 3.2 (1.3 - 4.7). The results are expressed as medians and their ranges. We found in MNC products: Number of leukocytes: GVHD 7 (4-12), ALL/DLBCL 14 (2-113), DLI 7 (4-12), PBPC autologous 246 (36-829), PBPC allogeneic 328 (119-536) $\times 10^9$; Percentage of MNC: GVHD 86 (45-97), ALL/DLBCL 93 (28-99), DLI 86 (54-98), PBPC autologous 69 (20-98), PBPC allogeneic 72 (30 - 91)%; percentage of CD 3+ cells: GVHD 52 (19-92), ALL/DLBCL 86 (64-97), DLI 42 (14-50), PBPC allogeneic 24 (4-47)%; the median yield of CD 34+ cells from one collection in PBPC autologous 5.7 (1-50), PBPC allogeneic: 5 (0.2-18) $\times 10^6$ /kg b.w. of the patient, the median yield of CD 3+ cells from one collection in MNC for CAR-T was 5.4 (0.4-28) $\times 10^9$.

Summary / Conclusions: Spectra Optia was proved to be an efficient system in the process of MNC and PBPC collections. We obtained the sufficient numbers of MNC, CD 34+, and CD 3+ cells for therapy of the patients in majority of procedures. Percentage of MNC in the products was in non-mobilized patients and donors higher than in mobilized PBPC donors. Percentage of CD 3+ cells in non-mobilized patients was higher than in donors of DLI non-mobilized, and donors of PBPC mobilized. The cause of such differences is not clear yet, and will be studied in near future. No serious adverse reactions in the course of collections have been observed.



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

A novel large deletion in the ABO gene resulting in blood group O

Åsa Hellberg¹, Bahram Hosseini-Maaf¹, Jana Králová³, Annika K Hult^{1,2}, Martin Písačka³, Martin L Olsson^{1,2}

1. Clinical Immunology and Transfusion Medicine, Office for Medical Services, Lund, Sweden

2. Division of Hematology and Transfusion Medicine, Department of Laboratory Medicine, Lund University, Lund, Sweden

3. Immunohematology Department, Ústav hematologie a krevní transfuze, Prague, Czech Republic

B Hosseini-Maaf^{1,2}, J Králová³, A K Hult^{1,2}, Å Hellberg^{1,2}, M Písačka³, M L Olsson^{1,2}

¹Division of Hematology and Transfusion Medicine, Lund University,

²Clinical Immunology and Transfusion Medicine, Region Skåne, Lund,

Sweden, ³Immunohematology Department, Ústav hematologie a krevní transfuze, Prague, Czech Republic

Aims

To investigate the underlying molecular cause for the absence of A antigen on the RBCs from four individuals.

Methods

Blood samples from a pregnant woman and an unrelated family with three generations (grandfather, daughter and granddaughter) were investigated independently.

- Standard serological techniques were used.
- Red blood cells (RBCs) from two of the family members were tested by flow cytometry (Hult & Olsson, Transfusion 2010)
- The ABO locus was analysed by PCR-ASP/PCR-RFLP genotyping (Hosseini-Maaf et al., Transfusion 2007 and Olsson & Chester, Vox Sang. 1995).
- Direct DNA sequencing of all seven exons and parts of the introns was performed.



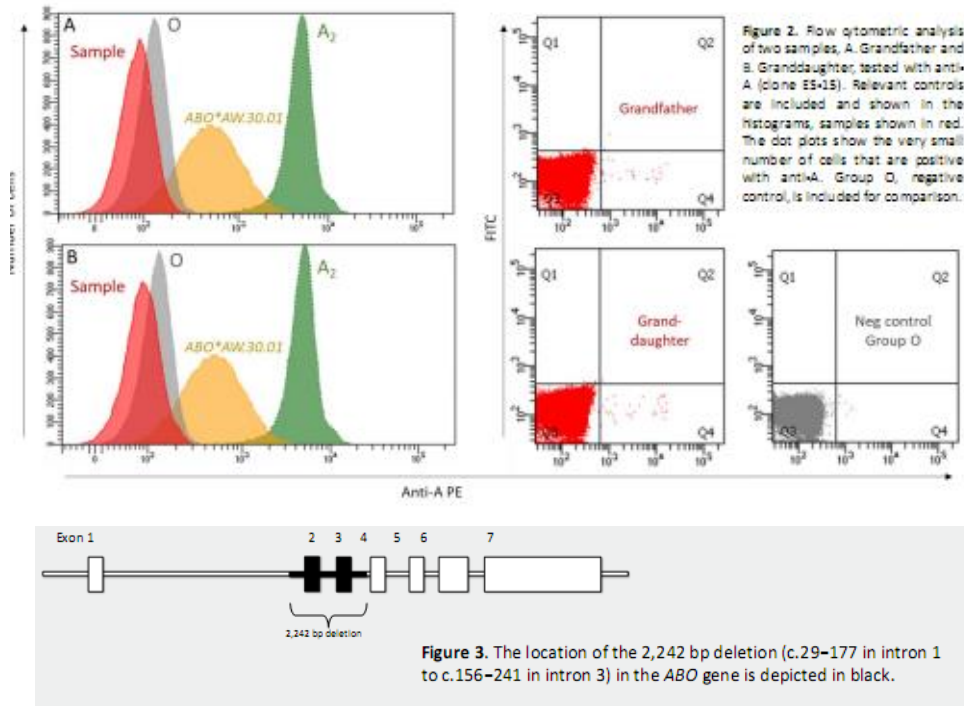
Results

Serology: The pregnant woman's RBCs were negative with anti-A in the forward typing and the reverse typing showed 2+ with A₁ RBCs while A₂ RBCs were negative, hence presenting anti-A1 and anti-B in plasma. The three family members' RBCs showed no reactions with anti-A in forward typing and two of them also presented anti-A1 in addition to anti-B in reverse typing.

Flow cytometry: The vast majority of RBCs stained as the group O control, although a very small portion (<0,1%) of the cells expressed low levels of A antigen, reminiscent of a microchimeric pattern. Anti-B was negative and anti-H strongly positive, as expected. The same pattern was seen for both family members tested (Figure 2).

ABO genotyping: All four individuals were ABO*A1.01 in combination with either ABO*O.01.01 or O.01.02, which is usually consistent with normal expression of A antigen.

DNA Sequencing: Investigation of all seven ABO exons and parts of the introns revealed a large deletion of 2,242 bp, from c.29-177 in intron 1 to c.156-241 in intron 3, encompassing parts of intron 1, the whole of exon 2, intron 2, exon 3 and nearly all of intron 3 (Figure 3).

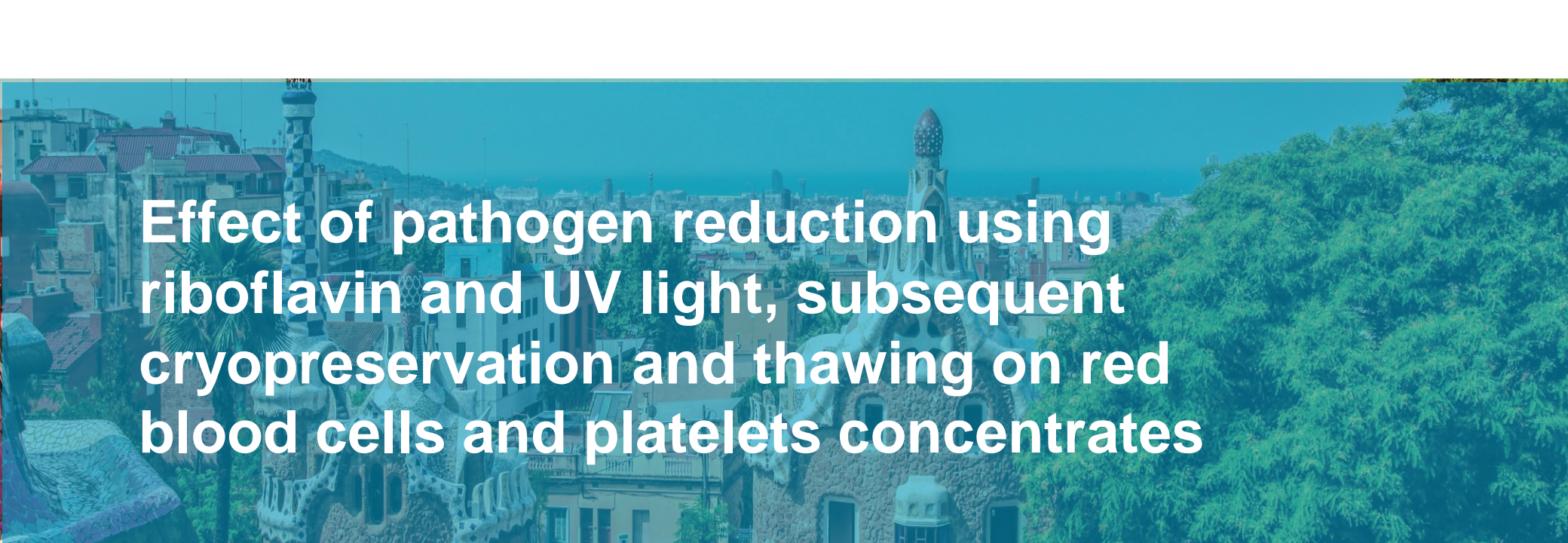


Summary / Conclusions: A large deletion leading to a novel O allele was identified in one individual and the same deletion was also found in three additional samples from a family. No known relationship exists between the index case and the investigated family members.

The large deletion probably results in a shortened stem region in the A₁ glycosyltransferase and complete absence of its transmembrane domain (amino acids 17-37). This will change the overall structure of the enzyme and severely decrease its activity, if expressed at all.

A similar but apparently different deletion encompassing 2,169 bp and involving sequences from intron 1 to intron 3 was described in another family with group O phenotype without anti-A in plasma (Matzhold et al., Transfusion, 2016). Finally, it can be discussed if these kinds of alleles with large deletions encompassing exons 2 and 3 are indeed O alleles or give rise to a very weak form of blood group A with lack of or weakening of anti-A in plasma.





Effect of pathogen reduction using riboflavin and UV light, subsequent cryopreservation and thawing on red blood cells and platelets concentrates

Dominik Kutac LTC, MD, PhD, Military University Hospital Prague, Czech Republic

ISBT
BARCELONA
2024

38th International Congress of the ISBT
Barcelona, Spain
June 23-27, 2024

In conjunction with the Spanish Society of
Blood
Transfusion and Cellular Therapy (SETS)



PA27-L04 | Effect of pathogen reduction using riboflavin and UV light, subsequent cryopreservation and thawing on red blood cells and platelets concentrates

D Kutac¹, M Bohonek^{1,2}, L Landova¹, E Eva¹, M Blahutova¹, J Lovecky³, J M Horacek^{4,5}, Malikova⁶, M Slouf⁷, J Seghatchian⁸, L G Stansbury^{9,10}, J R Hess^{9,11}

Abstracts of the 38th International Congress of the ISBT, Barcelona, Spain, 23-27 June 2024. Vox Sang. 2024 Jun;119 Suppl 1:7-596, doi: 10.1111/vox.13652. PMID: 38922723, IF 1,8



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

T-Mobile CZ 19:00 35 %

< Session Details  

Transfusion out of hospital and pathogen inactivation

Thu 27. 6. 2024
10:30 – 12:00 CEST
Room 114

Information

Days: Thursday, 27 June
Session Type: Scientific Session

Moderators:
Miquel Lozano
Sandra Ramirez-Arcos

 [Post about this session](#)

 0 Posts

Resources

[Evaluate this Session](#) 

[Q&A/Polling](#) 

Presentations

 [Select All](#)

Aims: This work describes the effect of PRT on the recovery and function of cryopreserved platelets and erythrocytes after thawing. The study was divided into two parts, the first part describing the cryopreservation of erythrocytes obtained by collecting whole blood, which was treated with riboflavin and UV light before being processed into erythrocytes. The second part of the study describes the cryopreservation of platelets obtained by apheresis and treated with riboflavin and UV light.

Methods: In the first part of the study, 24 Group 0 whole blood (WB) transfusion units (T.U.) were treated with PRT before cryopreservation; 20 similarly-collected units were untreated controls. All T.U. were subsequently processed into erythrocytes, then cryopreserved with 40% glycerol (wt/vol), frozen at -80°C , and long-term stored. After reconstitution with deglycerolization, the erythrocyte T.U. were resuspended in AS-3 and stored at $4 \pm 2^{\circ}\text{C}$ for 21 days. Erythrocytes were sampled before PRT, after PRT and further after thawing on days 0, 7, 14 and 21. The following measurements were taken from the collected samples: hematocrit, volume, hemoglobin per unit, pH, % hemolysis, hemoglobin in the supernatant, potassium, phosphorus, NH_3 , osmolality, ATP, and 2,3-DPG. The findings show that cryopreserved erythrocytes made from Riboflavin and UV light-treated fresh whole blood, meet the criteria for clinical use and provide additional protection against infectious threats during long-term storage.

In the second part of the study, 16 Group 0 apheresis platelets transfusion units (T.D.) were treated with PRT before freezing; 15 similarly collected T.D. of trombocytes were frozen without PRT as controls. 5%-6% DMSO was added to all units and then the supernatant was removed, then frozen at -80°C , stored for 14 days and then reconstituted in thawed AB plasma. After reconstitution, all units were assessed for: platelet count, MPV, platelet recovery, thromboelastography, thrombin generation time, endogenous thrombin potential, glucose, lactate, pH, pO_2 , pCO_2 , HCO_3 , CD41, CD42b, CD62, Annexin V, CCL5, CD62P, Kunicki score, and aggregates >2 mm.

Conclusion

T-CP vs C-CP

T-CP showed reduced platelet counts, but these platelet counts are sufficient to meet the European standard for clinical use

The reduction in platelet function is greater than would be caused by the combination of reduced T-CP counts and the presence of aggregates

Significant activation of T-CPs with weaker clot strength suggests their reduced efficacy



#ISBTBarcelona

ISBT
BARCELONA
2024



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

Conclusion

T-CRBC vs C-CRBC

Cryopreserved erythrocytes made from PRT whole blood treated with Riboflavin and UV light meet the criteria for clinical use and provide additional protection against infectious threats to long-term stored erythrocytes

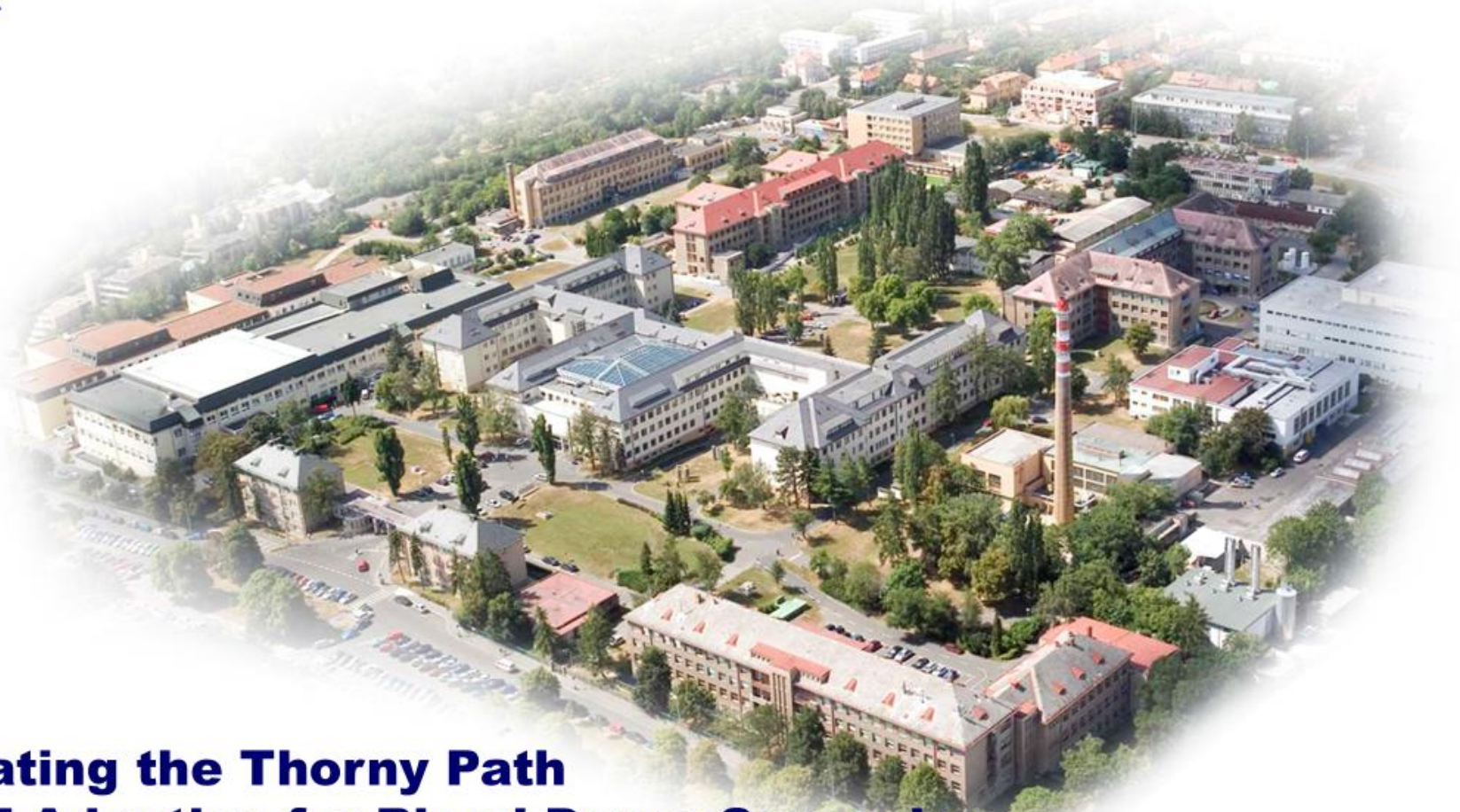




ÚVN

MILITARY UNIVERSITY HOSPITAL
PRAGUE

Department of Hematology and Blood Transfusion



**Navigating the Thorny Path
to NAT Adoption for Blood Donor Screening:
Ensuring Blood Safety in the Czech Republic**

COL(GS) Milos Bohonek, MD, PhD

38th ISBT International Congress in Barcelona, Spain, June 23-27.2024



Navigating the thorny path to NAT adoption for blood donor screening: Ensuring blood safety in the Czech Republic



úterý 25. června 2024
12:50 – 13:10 SELČ
Room 114

Speaker



Miloš Bohoněk



Information

Days: Tuesday, 25 June

Session Type: Satellite Symposium

[Post about this session](#)

0 Posts



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

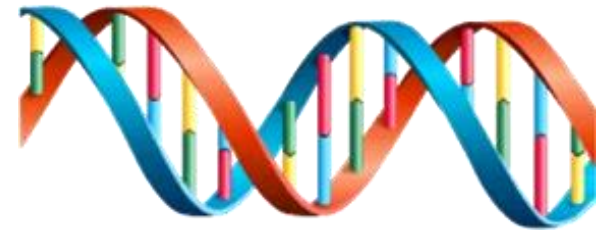
Thorny path...



shutterstock.com · 1073480000



Thomas Couture, 1893



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

ISBT
BARCELONA
2024

Svojí krví nakazil žloutenkou tři pacienty. Státní zástupce na něj teď podal obžalobu

Dárce krve, který nakazil v Praze žloutenkou tři pacienty, půjde před soud. Policie případ uzavřela a státní zástupce na



Královéhradecká policie obvinila soudkyni ze zmanipulování insolvenčního řízení



Královéhradecká policie zahájila trestní stíhání soudce za zneužití pravomoci úřední osoby

Serial transfer of VHC from a single platelet donor:

- 2 platelet collections (8 + 9/2015)
- 3 pediatric hematooncology patients infected + 1 nurse

»

Zatni zuby
a táhni

»

Pečenej
vařenej

»

Chodili mu
tam lidi

»

Jako
fotbalisti

pro virovou žloutenkou typu C. Ta se nejčastěji přenáší krví a v drtivé většině případů jde o injekční uživatele drog.

„I když se jevil, že má několik vpichů v loketních jamkách na horních končetinách, tak zarytě odmítal jakékoliv užívání drog. Přiznával, že řádově před deseti lety užíval pervitin intravenózně, ale že deset let je čistý,“ uvedl lékař.



Muže nepodezírali ani na transfuzní stanici, kam chodil opakovaně darovat krev. Potvrdil to v červnu mluvčí Všeobecné fakultní nemocnice Filip Brož.

„Působil velmi důstojně, a navíc s ním byl opakovaně vyplněn dotazník a vždy z něj vyšel dobře. Ani jsme nezpozorovali žádné vpichy.“

Muž daroval plazmu nejspíš krátce po nákaze v době, kdy tělo vytváří jen málo protilátek a běžné testy nemoc neodhalí. Kvůli tomu dárci krve před každým odběrem vyplňují dotazník o svém chování a zdravotním stavu. Na základě těchto informací pak mohou kvůli riziku lékaři dárce odmítnout.



základním tábo
Co pro horolez
znamená strac

► Hugo Marom: Z Wintonova dítěte pilotem izraelské válce za nezávislost

► Beaugency – malé francouzské městečko, šest let malíř František Kupka





Statement Czech Society of Blood Transfusion (11/2015) - opportunities to improve transfusion safety

1/ Expanding the screening algorithm

a) introduction of HCV antigen serological testing

b) introduction of NAT HCV (HVB, HIV)

2/ PRT of blood products

3/ Supporting activities

a) Adjusting donor selection and moving towards non-contributory platelet donation

b) Improving public access to blood-borne disease testing

c) Effective haemotherapy



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha



Statement of BT society was supported by

Czech Society of Hematology Czech Society of Hepatology

1



Pani
PharmDr. Jana Milštainová,
tajemník Národní transfúzní komise Ministerstva zdravotnictví,
odbor farmacie MZ ČR,
Palackého náměstí 4,
128 01 – Praha 2.

V Praze dne 21.1.2016

Připomínky České hematologické společnosti k navrhovaným změnám ve vyšetřování dárců na přenos viru hepatitidy C

Česká hematologická společnost vnímá současnou situaci jako odraz určitých nedostatků současného systému vyšetřování dárců na přenos HCV, což je jistě důvodem k provedení systémových změn. Určujícím odborným subjektem by podle našeho názoru měla být Společnost pro transfúzní lékařství, Česká hematologická společnost chápe svoji úlohu jako poradní a předkládá následující návrhy a připomínky :

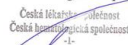
- změna systému povinného vyšetřování dárců je jistě změnou zásadní, z tohoto důvodu se domníváme, že pokud bude změna realizována (a domníváme se, že změna je nutná), měla by reflektovat současně požadavky a metodiku zavedenou a standardní ve většině zemí EU, jakou je HCV-NAT.
- domníváme se, že není nutná celorepubliková centralizace vyšetření a s ní spojené logistické problémy, předpokládáme, že pro fakultní pracoviště nebude problém implementovat standardizovanou a akreditovanou techniku využívající dnes běžné diagnostické postupy, zejména, pokud jsou dostupné komerční systémy.
- ve většině případů je možno z hlediska kliniků akceptovat zdržení dostupnosti přípravků vyrobených v pohotovostním režimu o jeden den, je však nutno trvat na

2

tom, aby pro urgentní situace byla organizačně zajištěna možnost provedení statimového vyšetření umožňující podání přípravku týž den.

- o změnách poměru mezi požadavky na přípravky získané od jednoho či od více dárců je jistě možné diskutovat, ale tento návrh neřeší eliminaci přenosu HCV, pokud se nezmění současný systém vyšetřování, stejně jako úvahy o minimalizaci počtu placených dárců.

Za Českou hematologickou společnost ČLS JEP



Doc. MUDr. Jarošlav Čermák, CSc.,
předseda ČHS/ČLS JEP,
Ústav hematologie a krevní transfuze,
U nemocnice 1,
128 20 – Praha 2.

1 x kopie :

- MUDr. Petr Turek, CSc., předseda NTK
- MUDr. Lenka Walterová, zástupce ČHS v NTK
- MUDr. Hana Galuszková, předsedkyně Společnosti pro transfúzní lékařství ČLS JEP




Ceská hepatologická společnost České lékařské společnosti Jana Evangelisty Purkyně

prim. pplk. MUDr. Miloš Bohoněk, Ph.D.
pro účel jednání
Národní transfúzní komise

V Praze dne 20. ledna 2016

Věc: Vyjádření ČHS ČLS JEP k možnostem zavedení nových testování dárců krve.

Výbor ČHS ČLS JEP jednoznačně podporuje zavedení technik NAT do testování dárců krve za účelem detekce HCV RNA. Ostatní alternativní metody, především vyšetřování hladiny Core antigenu HCV, nemají jakoukoliv odbornou podporu v klinických datech. Metoda detekce HCV Ag se v této, ale ani v jiných klinických situacích spojených s HCV infekcí, neujala nikde ve světě a není ani jednou z autoritativních odborných společností doporučována.



Prof. MUDr. Petr Urbánek, CSc.
Předseda ČHS ČLS JEP

Persistent efforts to achieve the compulsory introduction of NAT testing through meetings at the Ministry of Health, the National Transfusion Commission, addressing Members of Parliament, etc., etc.....



VoxSan
INTERV
Inter
exp
Introduction
HCV

HIV-1
Germany
1997
2000

Australia
Netherlands
Singapore
2001
Finland
New Zealand
Spain
2002
Switzerland

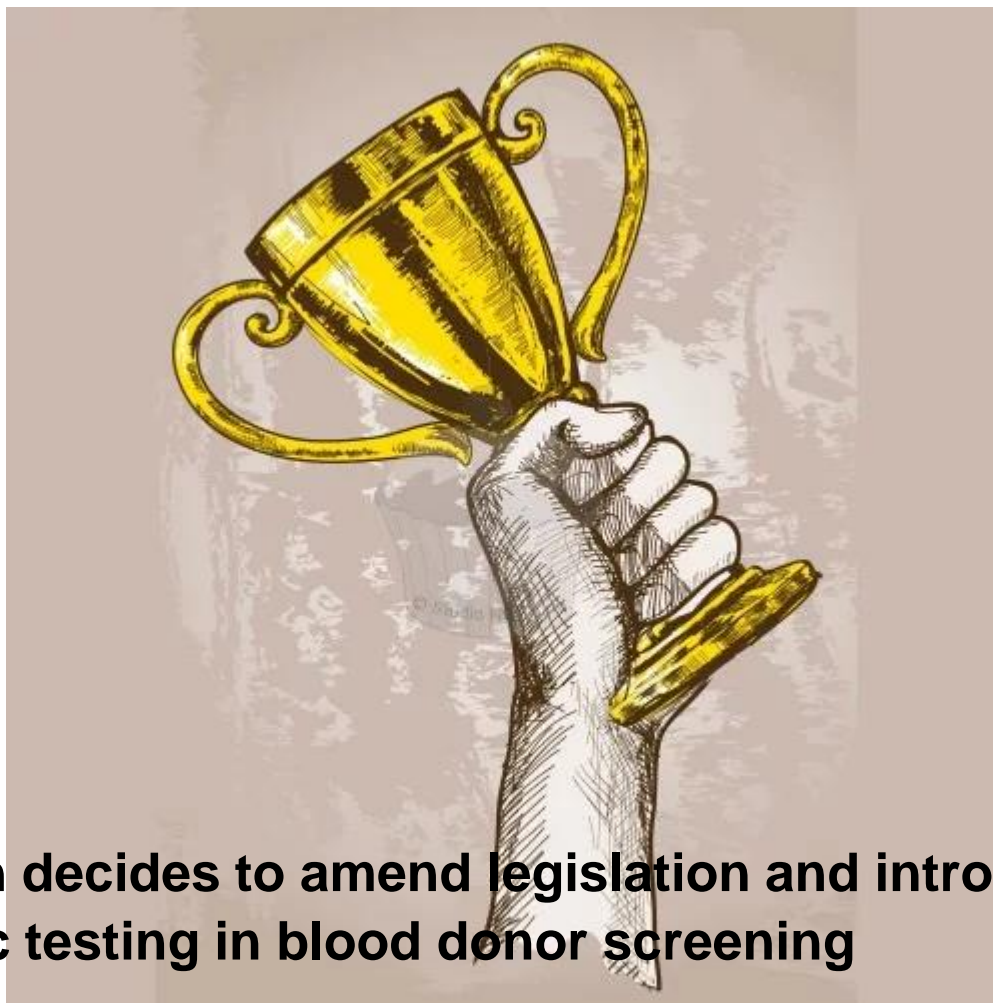
Singapore
Spain
2004
Poland
France (OT-army)
South Africa
2005
Great Britain

Denmark
2010
Finland
Israel
Latvia
Taiwan
2009
Denmark
2010
Hong Kong
Kuwait
Malaysia
New Zealand
2008

Vox Sanguinis
and donations:
to 2009



11/2022



Minister of Health decides to amend legislation and introduce mandatory NAT and anti-HBc testing in blood donor screening

Screening of blood borne infections in CZE – new rules - Amendment of the Decree of the Ministry of Health

- **valid from 01/07/2023,**
- **implementation from 01/07/2024**
- Collections **for clinical blood products**: NAT with sensitivity at least
 - 500 IU/ml HIV RNA
 - 35 IU/ml HBV DNA
 - 150 IU/ml HCV RNA

PP 6 Roche MPX
PP 8 Grifols Tigris
- Collections **for industry**: NAT with sensitivity at least:
 - 10 000 IU/ml HIV RNA
 - 500 IU/ml HBV DNA
 - 5 000 IU/ml HCV RNA

PP 96
- Anti-HBc at new donation



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

ISBT
BARCELONA
2024

The main reasons (arguments) for the introduction of NAT to blood screening in CZE:

- improve blood safety by shortening the diagnostic window
- increase in new HIV and HCV cases in the population, impact of immigration
- preparedness for new threats (WNV, HEV...)
- interoperability and exchangeability of blood between NATO countries



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha

DĚKUJI ZA POZORNOST
milos.bohonek@uvn.cz



ÚVN

ÚSTŘEDNÍ VOJENSKÁ NEMOCNICE
Vojenská fakultní nemocnice Praha