EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Health systems, medical products and innovation
Medical products: quality, safety, innovation

Rapid Alert system for human Tissues and Cells (RATC) and for human Blood and Blood Components (RAB)

Summary of 2021 activities

Introduction

The rapid alert platforms for blood (RAB) and for tissues and cells (RATC) give Member States' competent authorities the possibility to create and launch alerts to each other and/or to request information in case of an alert or crisis involving more than one Member State. The systems facilitate the communication of information needed to allow competent authorities in other Member States to rapidly assess risks and take adequate and timely measures.

DG SANTE hosts these two platforms, maintains the standard operating procedures (SOPs) and manages users from the national competent authorities. These national users are the ones who draft, launch and close the alerts.

This report provides an overview of the functioning of both systems and alerts submitted in 2021.

Background

Article 8 of Directive 2006/86/EC[1] requires the Member States' competent authorities for human **tissues and cells** to "*communicate to each other and to the Commission, such information as is appropriate with regard to serious adverse reactions and events, in order to guarantee that adequate actions are taken.*"

Article 9 of Directive 2005/61/EC[2] regarding communication of information between Member States' **blood** competent authorities and to the Commission requires that Member States "*ensure that their competent authorities communicate to each other such information as is appropriate with regard to serious adverse reactions and events in order to guarantee that blood or blood components known or suspected to be defective are withdrawn from use and discarded.*"

The rapid alert platform for human tissues and cells (RATC) was initiated in 2013 and the rapid alert platform for human blood and blood components (RAB) was initiated in 2014, in order to provide the Member States' competent authorities and the European Commission with an effective and secure tool for the exchange of information for situations in which there is a suspicion of serious health risks associated with tissues, cells, blood and blood components distributed across borders.

The system has been used in parallel with existing national vigilance systems, which collect and manage alerts on human tissues, cells, blood and blood components donated and used within a Member State. Additionally, messages can be communicated regarding problems in related sectors (e.g. medical devices, human or veterinary medicinal products, human organs intended for transplantation) which might imply a risk for the quality and safety of blood, tissues or cells.

[1] http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_294/l_29420061025en00320050.pdf

[2] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:256:0032:0040:EN:PDF

RATC alerts

The criteria established by the Member States and the European Commission for encoding rapid alerts in the RATC system remained unchanged in the reporting period (i.e. the need for immediate/urgent consideration or follow-up measures in two or more Member States; known or potential risk to patients; issues of a serious or potentially serious nature; potential public health risk to other countries).

Four types of rapid alert were defined and used as follows:

1) Quality and Safety Defects are understood as alerts requiring field corrective actions (e.g. recall, quarantine, discard, etc.) of the concerned human tissues/cells potentially affecting patient safety in other Member States.

2) Information Notices are defined as alerts related to corrective actions issued in the medical device sector, medicinal products sector or other sector(s), which were of relevance to the tissues and cells sector.

3) Illegal and fraudulent activities are defined as alerts used to notify Member States and the European Commission of the possible presence in the distribution network of tissues or cells resulting from actual or suspected illegal and fraudulent activities in the procurement, testing, processing, packaging, distribution, labelling, import/export or promotion of human tissues or cells.

4) Epidemiological Notices are alerts related to the development of significant epidemiological situations (e.g. disease outbreaks) which may have cross-border implications in the field of tissues and cells intended for human application.

Bilateral inquiries are defined as rapid ways of communication between competent authorities of only two Member States related to any type of alert to be used in particular situations:

- the need to substantiate/confirm information related to a potential rapid alert before the official submission in the RATC system;
- any other situation which is deemed appropriate for such an alert.

At a later stage, an inquiry can be either closed or converted into another type of alert.

The RATC Standard Operating Procedures (SOP) provide guidance on when and how Member States' competent authorities should inform each other.

Rapid alerts reported in RATC during 2021

In the interest of openness and transparency to regulatory authorities, professional organisations and other interested parties, the communications via RATC system, reported by the Competent Authorities, are presented below.

A total of 32 alerts were launched in 2021: 27 alerts were encoded in relation to quality and safety defects of tissues and cells (all from DK), three alerts were encoded as epidemiological notice (all from AT) and two alerts were encoded as information notice (FI and PL). There were no bilateral enquiries. There was a significant reduction in the number of submitted alerts compared to previous years, almost certainly due to the fact

that activities in tissue establishments were dramatically reduced during the lockdowns imposed by national governments during the Covid-19 pandemic and the effects are still evident almost two years after the beginning of the pandemic.

All the alerts encoded as quality and safety defects concerned sperm donations identified as posing a risk for transmission of genetic disease. Authorities limited further distribution and use of the donations concerned.

The epidemiological notices encoded concerned the implementation of preventive measures against West Nile Virus transmission (donor surveillance and/or deferral and donation testing) in Austria. These were also reported to the RAB network.

Poland reported that, due to closure of a private cord blood stem cell bank resulting from financial liquidation, samples belonging to over 300.000 families from across the EU, together with their associated documentation, stored at the time at the bank premises in Belgium, Germany and Switzerland, were safely transported and properly secured in the PBKM laboratory in Warsaw. The quality of the samples and documentation were under assessment in the Warsaw facility.

Finland reported defects found in a freezing bag used by stem cell laboratories. The defect resulted in a leak of stem cells posing a risk of contamination to the graft. The lot number allowed identifying and removing from the market the affected bags. The incident had also been reported via the medical device vigilance channels.

RAB alerts

The RAB Standard Operating Procedures (SOP) establish the criteria for encoding rapid alerts in the RAB and provide guidance on when and how Member States should communicate with each other. These have been defined by the Member States and the European Commission. They concern the need for immediate/urgent consideration or follow-up measures in two or more Member States, a known or potential risk to patients, issues of a serious or potentially serious nature and potential public health risk to other countries.

Three types of rapid alert were defined and used as follows:

1) Quality and Safety Defects are understood as alerts requiring field corrective actions (e.g. recall, quarantine, discard, etc.) for the blood or blood components that might affect patient safety in other Member States.

2) Information Notices are defined as alerts related to field corrective actions performed in the medical device sector, medicinal products sector or other sector(s), which are of relevance to the blood and blood components sector.

3) Epidemiological Notices are alerts related to important epidemiological developments (e.g. disease outbreaks) which may have cross-border implications in the field of blood donation and transfusion.

A fourth type of alert, a bilateral communication, is also possible. Bilateral inquiries are defined as rapid ways of communicating between competent authorities of only two Member States related to any type of alert to be used in particular situations:

- the need to substantiate/confirm information related to a potential rapid alert before the official submission in the RAB system;

- any other situation that is deemed appropriate for such an alert.

At a later stage, an inquiry can be either closed or converted into another type of alert.

Rapid alerts reported in RAB during 2021

In the interest of openness and transparency to regulatory authorities, professional organisations and other interested parties, the communications via the RAB system, reported by the competent authorities, are presented below.

A total of eight rapid alerts were encoded in RAB, four related to epidemiological notices, one to quality and safety issues and three were information notices. These were issued by the following seven Member States: AT (3), DK (1), FI (2), IT (1) and LU (1).

In analogy with the RATC, the number of alerts submitted to the blood network almost halved compared to 2019 but remained stable compared to 2020.

The epidemiological notices encoded concerned the implementation of preventive measures against West Nile Virus transmission (donor surveillance and/or deferral and donation testing) in Austria and Italy. Austria reported the same alert to the RATC network.

Two alerts were encoded as an Information Notice (from Finland) addressing:

1) A risk linked to the use of infusion sets for which a third party sterilisation service provider had intentionally falsified sterilisation process records. Those products were identified, disposed and/or removed from the market.

2) An issue with an immunoassay analyser used to screen blood donors' samples for infectious diseases giving abnormally low signal graphs not automatically flagged by the instrument. The device has been removed from service and the samples were reanalysed showing no false negative results.

Luxembourg reported issues arising during visual inspection of plasmapheresis bags. All concerned batches had been put under quarantine and were disposed of. The remaining unused bags were returned to the supplier.

Conclusions

In comparison with 2019, the number of alerts has considerably decreased for both tissues & cells and blood & blood components, but remained stable when compared with 2020.

The activities of the Member States in the rapid alert platforms, RAB and RATC, have focused on blood, tissues and cells that are distributed between Member States in Europe and on exchanges of information and description of urgent measures to be taken. While most of the alerts for tissues and cells concerned quality and safety defects, epidemiological notices were the main category of alert in the blood sector.

Once more, the platforms proved to be an effective tool to respond to the needs of authorities for communication and information dissemination in relation to immediate health threats.