

EFLM PREANALİTİK ÇALIŞMA GRUBU AKTİVİTELERİ

Pınar Eker

Kamu Hastaneler Birliđi İstanbul Kuzey Merkezi Laboratuvarı

İstanbul,TURKİYE

EFLM Preanalytical Phase Working Group Corresponding Member

EFLM PREANALİTİK FAZ ÇALIŞMA GRUBU

Preanalitik hatalar tüm laboratuvar hataları içinde ağırlıklıdır. Bu nedenle “ European Federation of Clinical Chemistry and Laboratory Medicine Working Group for Preanalytical Phase (EFLM WGPRE)”preanalitik politika ve pratiklerin standardize ve harmonize edilmesine öncülük etmek amacıyla kurulmuştur

Ana-Maria Šimundić ,Clinical Institute of Chemistry of the University Hospital Center "Sestre milosrdnice” de laboratuvar tıbbı uzmanıdır;

Hırvatistan ‘Medical Biochemistry and Laboratory Medicine’ dernek başkanıdır;

‘ Biochemia Medica Chief Editor’ olarak görev yapmakta ve aynı zamanda; ‘EFLM Executive Board Secretary ‘ unvanı yanında ‘EFLM working group preanalytical phase’ da Chair olarak görevini sürdürmektedir.



The screenshot displays the EFLM website interface. At the top, the EFLM logo is visible alongside the text "European Federation of Clinical Chemistry and Laboratory Medicine" and "EFLM represents IFCC in Europe". A search bar and a list of national flags are also present. The main navigation menu includes "WHO WE ARE", "EVENTS", "EFLM PUBLICATIONS", "EFLM MEMBERS", and "CONTACT US". The current page is titled "Working Group: Preanalytical Phase" and features a profile for Ana-Maria Šimundić, who is the Chair of the group. Her profile includes a photo, her name, and her affiliation with the Department for Medical Laboratory Diagnostics at the Clinical Hospital "Sveti Duh" in Zagreb, Croatia. The page also includes sections for "Event-Highlights" and "Collaboration".

EFLM PREANALİTİK FAZ ÇALIŞMA GRUBU ÜYELERİ

EFLM Preanalitik çalışma grubu farklı ülkelerden 15 kişilik asil ve 'corresponding' üyeleri aracılığı ile belirli aralıklarla toplanmakta ve çalışmalarına devam etmektedir. 2013 yılından bu yana Oxford, Zagreb Paris, Porto ve tekrar Zagreb de toplantılar gerçekleştirilmiştir.

Members

<i>Member</i> Kjell Grankvist second term 2015-2016	Dept. of Medical Biosciences, Clinical Chemistry Umea University Umea - Sweden	<i>Corresponding Member</i> Svetlana Kovalevskaya second term 2015-2016	Labstory Company Saint Petersburg - Russia
<i>Member</i> Giuseppe Lippi second term 2015-2016	Clinical Chemistry and Hematology Laboratory Academic Hospital Parma - Italy	<i>Corresponding Member</i> Gunn B.B. Kristensen second term 2015-2016	NKK-Norwegian Clinical Chemistry EQA Programme Bergen - Norway
<i>Member</i> Mads Nybo second term 2015-2016	Dept. of Clinical Biochemistry and Pharmacology Odense University Hospital Odense - Denmark	<i>Corresponding Member</i> Ludek Sprongl second term 2015-2016	Central Laboratory Sumperska nemocnice a.s. Sumperk - Czech Rep.
<i>Member Young Scientist</i> Michael Cornes second term 2015-2016	The Royal Hospitals NHS Trust New Cross Hospital Wolverhampton - UK	<i>Corresponding Member</i> Zorica Sumarac second term 2015-2016	Center for Medical Biochemistry Clinical Center of Serbia Belgrade - Serbia
<i>Corresponding Member</i> Janne Cadamuro first term 2016-2017	Dept of Laboratory Medicine University Hospital Salzburg Paracelsus Medical University Salzburg - Austria	<i>Corresponding Member</i> Edmée van Dongen-Lases second term 2015-2016	Dept. of Clinical Chemistry Academic Medical Center Amsterdam - The Netherlands
<i>Corresponding Member</i> Pinar Eker second term 2015-2016	Ümraniye Eğitim ve Araştırma Hastanesi Ümraniye İstanbul - Turkey	<i>Expert/Consultant</i> Stephen Church	Becton Dickinson
<i>Corresponding Member</i> João Tiago Guimarães first term 2014-2015	Clinical Pathology and Biochemistry Dept. Hospital de São João Porto - Portugal	<i>Expert/Consultant</i> Helene Ivanov	Greiner Bio-One
<i>Corresponding Member</i> Mercedes Ibarz first term 2014-2015	Laboratory Medicine University Hospital Arnau de Vilanova Lleida - Spain		

TEMEL HEDEFLER

- Laboratuvar tıbbında preanalitik fazın önemini vurgulama;
- Kritik aktiviteler için öneriler hazırlama ve iyi uygulamaları tanımlama;
- Güncel preanalitik pratiklerle ilgili anketler düzenleme;
- Valide anketler yoluyla güncel preanalitik pratikleri birleştirme;
- Sempozyum,çalıştay,webinar,eğitimler düzenleme

PREANALİTİK HATALAR VE TOTAL LABORATUVAR SÜRECİ

ÇALIŞMA GRUBU KURULMASINDA YOLA ÇIKIŞ NEDENLERİ

Toward optimal laboratory use. Problems in laboratory testing in primary care. (1996)

- [JAMA](#). 1996 Feb 28;275(8):635-9.
- [Nutting PA¹](#), [Main DS](#), [Fischer PM](#), [Stull TM](#), [Pontious M](#), [Seifert M Jr](#), [Boone DJ](#), [Holcomb S](#).
- Problems involving test ordering and specimen handling were the most common (56%), while those attributable to the test analysis itself accounted for 13% of the total

Mistakes in a stat laboratory: types and frequency. (1997)

- [Clin Chem.](#) 1997 Aug;43(8 Pt 1):1348-51.
- [Plebani M¹](#), [Carraro P.](#)
- preanalytical 68.2%, analytical 13.3%, and postanalytical 18.5%.

Errors in a stat laboratory: types and frequencies 10 years later.(2007)

- [Clin Chem.](#) 2007 Jul;53(7):1338-42. Epub 2007 May 24.
- [Carraro P¹](#), [Plebani M.](#)
- 61.9% were preanalytical errors, 15% were analytical, and 23.1% were postanalytical.

Is the test result correct? A questionnaire study of blood collection practices in primary health care.

- [J Eval Clin Pract.](#) 2010 Aug;16(4):707-11
- [Söderberg J¹](#), [Wallin O](#), [Grankvist K](#), [Brulin C](#).
- Only 54% reported that they always identified the patient by using name/Swedish identification number and only 5% reported that they always used photo-ID, the two preferred means for patient identification
- In the surveyed PHCs, there are **clinically important risks** for **misidentification of patients** and **erroneous test results**, with consequences for the diagnosis and treatment of patients. Quality interventions, aimed at improving VBS practices, are needed to ensure patient safety.

PARMA 2011 1.EFCC EUROPEAN CONFERENCE ON PREANAYTICAL PHASE

The major focus of this conference is the quality of the preanalytical phase of laboratory practices - a highly prominent and increasingly important topic in the era of increasing awareness of patient safety and implementing total quality management practices in clinical laboratories.



1st EFCC-BD



European Conference on Preanalytical Phase

Preanalytical quality improvement - from dream to reality



Preanalytical
Quality
Improvement
from Dream
to Reality

Bu konferansın temel odağı hasta güvenliği ve klinik laboratuvarlarda total kalite yönetim pratiklerinin uygulanması konusunda yükselen farkındalık alanı olarak öne çıkan **preanalitik faz** ve uygulamaları şeklindeydi.



Parma
2011
April 01-02

Conference venue:
Academic Hospital of Parma

28 AVRUPA ÜLKESİNDE ULUSAL REHBERLER VE FLEBOTOMİ EĞİTİMİ ÜZERİNE BİR ANKET ÇALIŞMASI EFLM WG-PA TARAFINDAN GERÇEKLEŞTİRİLDİ.(1.ANKET)

- **Sonuçlar:**
- Büyük bir heterojenite saptanmıştır.
- Pekçok ülke ulusal rehberlere sahip değildir.
- Filebotomi medikal ve medikal olmayan kişilerce gerçekleştirilmektedir.
- Değişik düzeylerde eğitim ve pratik
- Hastalar tüm Avrupa genelinde aynı seviyede bakım almalıdır.

DE GRUYTER

DOI 10.1515/cclm-2013-0283 — Clin Chem Lab Med 2013; 51(8): 1585–1593

Ana-Maria Simundic*, Michael Cornes, Kjell Grankvist, Giuseppe Lippi, Mads Nybo, Svjetlana Kovalevskaya, Ludek Sprongl, Zorica Sumarac and Stephen Church

Survey of national guidelines, education and training on phlebotomy in 28 European countries: an original report by the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) working group for the preanalytical phase (WG-PA)

Aim:

- who performs phlebotomy in EFLM countries?
- differences in personnel?
- level of education and skills?
- are guidelines available?

AÇLIK NUMUNELERİNİN SATANDARDİZASYONU

1. Existing guidelines for phlebotomy need revision. Revised recommendations should include the exact definition of requirements for patient preparation for laboratory testing. Blood for all blood tests should be drawn preferably in the morning from 7 to 9 a.m. [30]. Fasting should last for 12 h, during which water consumption is permitted. Alcohol should be avoided for 24 h before blood sampling. In the morning before blood sampling, patients should refrain from cigarette smoking and caffeine containing drinks (tea, coffee, etc.).
2. Professional associations (IFCC, EFLM and other) should support harmonization efforts by disseminating standardized recommendations for fasting.
3. Laboratories worldwide should implement standardized procedures for blood sampling and patient preparation.
4. Laboratories should have policies for sample acceptance criteria related to fasting samples. Blood samples for routine testing should not be taken if a patient has not been appropriately prepared for sample collection. 'No sample is better than a bad sample' should always be the leading principle.
5. Laboratory professionals are responsible for disseminating information about fasting requirements to patients as well as to clinicians and general practitioners who are the preferred source of information for patients.

Simundic AM, Cornes M, Grankvist K, Lippi G, Nybo M. Standardization of collection requirements for fasting samples: For the Working Group on Preanalytical Phase (WG-PA) of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM). *Clin Chim Acta* 2013; Epub ahead of print

Clinica Chimica Acta 432 (2014) 33–37



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journal homepage: www.elsevier.com/locate/clinchim



Standardization of collection requirements for fasting samples For the Working Group on Preanalytical Phase (WG-PA) of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)



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^c The Royal Wolverhampton, Hospitals NHS Trust, New Cross Hospital, Wolverhampton, UK

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Guidelines

Quality improvement

ABSTRACT

Standardized protocols for patient preparation for laboratory testing are currently lacking. Moreover, a great heterogeneity exists in the definitions of "fasting" currently being used among healthcare workers and in the literature. Marked metabolic and hormonal changes occur after food ingestion, mainly due to the absorption of fluids, lipids, proteins, carbohydrates and other food constituents. This postprandial response varies markedly in response to numerous factors, such as eating behavior, food composition, fasting duration, time of the day, chronic and acute smoking, coffee and alcohol consumption. It is therefore crucial to minimize the total variability by controlling as many of these modifying factors as possible. Control of the abovementioned effects on postprandial response can only be achieved by standardizing the way patients are prepared for laboratory testing, i.e. by defining the fasting duration, as well as what is and what is not allowed (e.g., coffee, tea, smoking, water) during the period of fasting prior to sample collection. The aim of this article is to describe the range of effects of different approaches to fasting on laboratory tests, and to provide a framework for the harmonization of definitions for fasting requirements for laboratory tests.

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AÇLIK KONUSUNDA STANDARDİZASYON

- Tüm Laboratuvar testleri için numune tercihan sabah 7-9 arasında alınmalıdır.
- Mevcut rehberlerde hasta hazırlığı tam tarif edilecek şekilde revizyon yapılmalıdır.
- Açlık 12 saatte sonlanmalıdır. Sıvı kullanımına izin verilmelidir. Kan alımından 24 saat öncesinde alkol alımından kaçınılmalıdır.
- Kan alımı yapılacak sabah sigaradan kaçınılmalı ve kafein içeren içecekler (çay,kahve gibi) alınmamalıdır.
- Bu kurallar dünya genelinde standardize edilmelidir.(IFCC,EFLM ve diğer aracılığı ile)

KAN ALMA TÜP KAPAK RENKLERİNİN STANDARDİZASYONU İÇİN HARMONİZASYON

Amaç:

Uluslararası kabul edilebilir renk kodları standardı geliştirmek

EFLM WG-PRE ve WG-H sorumluluk almaya ve diyalog oluşturmaya aday

Diyaloğa tüm ürün sağlayıcılar davet edildi.

Üreticiler üzerinde anlaşılmış renk kod standardına uymalıdır.

Standart belirleyici kurumlar (ISO CLSI) mevcut önerilere yeni bir renk kodlama standardı ilave etmelidir.

Opinion paper

Ana-Maria Simundic*, Michael P. Comes, Kjell Grankvist, Giuseppe Lippi, Mads Nybo, Ferruccio Ceriotti, Elvar Theodorsson and Mauro Panteghini on behalf of the European Federation for Clinical Chemistry and Laboratory Medicine (EFLM)

Colour coding for blood collection tube closures – a call for harmonisation

DOI:10.1515/cclm-2014-0927

Received for publication September 19, 2014

Abstract: At least one in 10 patients experience adverse events while receiving hospital care. Many of the errors are related to laboratory diagnostics. Efforts to reduce laboratory errors over recent decades have primarily focused on the measurement process while pre- and post-analytical errors including errors in sampling, reporting

and decision-making have received much less attention. Proper sampling and additives to the samples are essential. Tubes and additives are identified not only in writing on the tubes but also by the colour of the tube closures. Unfortunately these colours have not been standardised, running the risk of error when tubes from one manufacturer are replaced by the tubes from another manufacturer that use different colour coding. EFLM therefore supports the worldwide harmonisation of the colour coding for blood collection tube closures and labels in order to reduce the risk of pre-analytical errors and improve the patient safety.

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Keywords: blood specimen collection; harmonization; quality of health care; standards; venipuncture.

Preanalitik kalite geliştirilmesi;CLSI H3A6 (yeni adı GP41-A6) ile kan alımı prosedürlerinin uyumu için gözlemsel bir çalışma(2.ANKET)

2nd EFLM-BD

European Conference on Preanalytical Phase

Preanalytical quality improvement - in quality we trust



Compliance of blood sampling procedures with the CLSI H3-A6 guidelines: An observational study by the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) working group for the preanalytical phase (WG-PRE)
Simundic AM, Church S, Cornes MP, Grankvist K, Lippi G, Nybo M, Nikolac N, van Dongen-Lases E, Eker P, Kovalevskaya S, Kristensen GBB, Sprongl L, Sumarac Z.

İKİNCİ ANKET ÇALIŞMASI

Bu çalışmadan çıkan sonuçlar:

Uyum düzeyleri çok düşüktür.

Bazı kritik flebotomi basamaklarına uyulmamaktadır.

- Güvenlik konusu
- Hastaya zarar
- Numune kalitesi

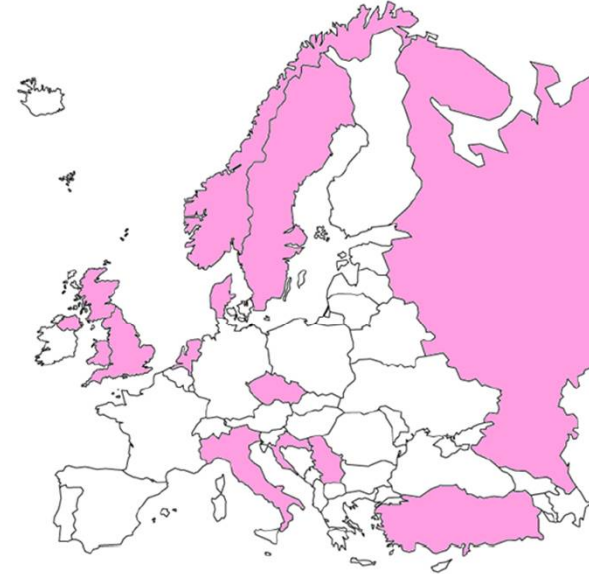
Numune ve hasta ID prosedürü : en kritik nokta

Tüm flebotomi alanları geliştirilme ihtiyacındadır.

CLSI H3-A6 revizyona gerek duymaktadır.

- Her basamak eşit derecede önemli değil
- Bazı basamaklar kanıta dayalı değil.

Our 2nd project – observational study



This study was performed during June 2013 – March 2014.

12 countries have participated in this study:

1. Croatia,
2. Czech Republic,
3. Denmark,
4. Italy,
5. Kazakhstan,
6. Netherlands,
7. Norway,
8. Russia,
9. Serbia,
10. Sweden,
11. Turkey,
12. UK

N=336

The median number of audits per country was 33 (18 – 36).

- compliance with CLSI H3-A6 standard was assessed through witness audits (3 phlebotomies per each phlebotomist)

HASTA KİMLİKLENDİRME VE TÜP ETİKETLEME İÇİN HARMONİZASYON ÇAĞRISI

With this Position paper, the EFLM WG-PRE wishes to express continuing support to the worldwide harmonisation of phlebotomy practices. This document addresses two of the most critical steps in phlebotomy that need immediate attention: tube labelling and patient identification. **We believe that harmonisation of these important steps could effectively decrease the potential risk of preanalytical errors and improve patient safety.**

Önemli basamakların harmonizasyonu preanalitik hataların potansiyel riskini düşürecektir ve hasta güvenliğini arttıracaktır.

DE GRUYTER

Clin Chem Lab Med 2016; aop

EFLM Position Paper

Edmée C. van Dongen-Lases, Michael P. Cornes, Kjell Grankvist, Mercedes Ibarz, Gunn B.B. Kristensen, Giuseppe Lippi, Mads Nybo and Ana-Maria Simundic*, on behalf of the Working Group for Preanalytical Phase (WG-PRE), European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

Patient identification and tube labelling – a call for harmonisation

DOI 10.1515/cclm-2015-1089
Received November 7, 2015; accepted November 13, 2015

Abstract: Venous blood sampling (phlebotomy) is the most common invasive procedure performed in patient care. Guidelines on the correct practice of phlebotomy are available, including the H3-A6 guideline issued by the Clinical Laboratory Standards Institute (CLSI). As the quality of practices and procedures related to venous blood sample collection in European countries was unknown, the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM) Working Group for the Preanalytical Phase conducted an observational study in 12 European countries. The study demonstrated that the level of compliance of phlebotomy procedures with the CLSI H3-A6 guideline was unacceptably low, and that patient identification and tube labelling are amongst the most critical steps in need of immediate attention and improvement. The process of patient identification and tube labelling is an essential safety barrier to prevent patient identity mix-up. Therefore, the EFLM Working Group aims to encourage

and support worldwide harmonisation of patient identification and tube labelling procedures in order to reduce the risk of preanalytical errors and improve patient safety. With this Position paper we wish to raise awareness and provide recommendations for proper patient and sample identification procedures.

Keywords: harmonisation; patient identification; patient safety; phlebotomy; preanalytical phase; tube labelling.

Background and aims

Venous blood sampling (also known as “phlebotomy”) is the most common invasive procedure carried out in healthcare. It involves several distinct processes, all of which are vulnerable to errors [1, 2] potentially putting the patient safety at risk. Guidelines on the correct practice of phlebotomy are available, including the H3-A6 guideline issued by the Clinical Laboratory Standards

KLİNİK LABORATUVARLARDA KAN ALMA TÜPLERİNİN LOKAL VALİDASYONU

DE GRUYTER

Clin Chem Lab Med 2016; aop

EFLM Opinion Paper

Giuseppe Lippi, Michael P. Cornes, Kjell Grankvist, Mads Nybo and Ana-Maria Simundic*, on behalf of the Working Group for Preanalytical Phase (WG-PRE), European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

EFLM WG-Preanalytical phase opinion paper: local validation of blood collection tubes in clinical laboratories

DOI 10.1515/cclm-2015-1274

Accepted for publication January 2, 2016

Abstract: The selection or procurement of blood collection devices in healthcare facilities is often an underestimated issue. This is probably due to different factors including the lack of knowledge of policymakers, hospital administrators and even laboratory managers about the importance of preanalytical quality and phlebotomy process, as well as to the absence of reliable guidelines or recommendations on how to precisely assess the quality of blood collection devices around the globe. With the awareness that a gap remains between manufacturers' and local validation of blood collection devices, the Working Group for Preanalytical Phase (WG-PRE) of the European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

has drafted a consensus document aimed to provide a set of essential requisites, technical criteria (e.g. presence of physical defects, malfunctioning, safety problems) and clinical issues for supporting laboratory professionals in organization blood collection tubes tenders and validating new devices before local routine implementation. The laboratory professionals should also make sure that the tenders accurately and strictly define the responsibilities for validation experiments and the potential consequences in the case the validation outcome shows that tubes do not fulfill the expectations.

Keywords: blood collection; blood tubes; errors; preanalytical variability; venipuncture.

Introduction

- Bir konsensus dokümanı niteliğindedir.
- Kan alma tüp ihalelerinde lab profesyonellerine destek sağlamak amaçlıdır.
- Kan alma tüplerinin rutin implemantasyonu öncesi validasyonunu kolaylaştırmak amacıyla bir set hazırlığı amaçlanmıştır.
- CLSI GP34-A uygulanmak noktasında zorlayıcı ve karışık.

PREANALİTİK FAZIN STANDARDİZASYONU VE HARMONİZASYONU

Porto
2015
March 20-21

*Prenalytical quality improvement -
In pursuit of harmony*

**3rd EFLM-BD
European Conference on Preanalytical Phase**



**The Association for
Clinical Biochemistry &
Laboratory Medicine**
Better Science, Better Testing, Better Care

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acb.sagepub.com


The role of European Federation of Clinical Chemistry and Laboratory Medicine Working Group for Preanalytical Phase in standardization and harmonization of the preanalytical phase in Europe

Michael P Cornes¹, Stephen Church², Edmée van Dongen-Lases³, Kjell Grankvist⁴, João T Guimarães⁵, Mercedes Ibarz⁶, Svetlana Kovalevskaya⁷, Gunn BB Kristensen⁸, Giuseppe Lippi⁹, Mads Nybo¹⁰, Ludek Sprongl¹¹, Zorica Sumarac¹², Ana-Maria Simundic¹³, on behalf of the Working Group for Preanalytical Phase (WG-PRE) and European Federation of Clinical Chemistry and Laboratory Medicine (EFLM)

Abstract

Patient safety is a leading challenge in healthcare and from the laboratory perspective it is now well established that preanalytical errors are the major contributor to the overall rate of diagnostic and therapeutic errors. To address this, the European Federation of Clinical Chemistry and Laboratory Medicine Working Group for Preanalytical Phase (EFLM WG-PRE) was established to lead in standardization and harmonization of preanalytical policies and practices at a European level. [One of the key activities of the WG-PRE is the organization of the biennial EFLM-BD conference on the preanalytical phase to provide a forum for National Societies \(NS\) to discuss their issues.](#) Since 2012, a year after the first Preanalytical phase conference, there has been a rapid growth in the number of NS with a working group engaged in preanalytical phase activities and there are now at least 19 countries that have one. As a result of discussions with NS at the third conference held in March 2015 five key areas were identified as requiring harmonisation. These were test ordering, sample transport and storage, patient preparation, sampling procedures and management of unsuitable specimens. The article below summarises the work that has and will be done in these areas. The goal of this initiative is to ensure the EFLM WG-PRE produces work that meets the needs of the European laboratory medicine community. Progress made in the identified areas will be updated at the next preanalytical phase conference and show that we have produced guidance that has enhanced standardisation in the preanalytical phase and improved patient safety throughout Europe.

11:30 – 12:50

Short reports from EFLM National Societies

1. Austria and Germany – Janne Cadamuro
2. Croatia – Nora Nikolac
3. Czech Republic – Martina Bunesova
4. France – Michel Vaubourdolle
5. Italy – Gabriel Lima Oliveira
6. Lithuania – Dalius Vitkus
7. Macedonia – Sonja Kuzmanovska
8. Nordic countries – Mads Nybo
9. Poland – Bogdan Solnica
10. Russia – Svyetlana Kovalevskaya
11. Spain – Nuria Barba
12. Serbia – Bojana Lusic
13. The Netherlands – Edmee van Dongen Lases
- [14. Turkey – Dogan Yucel](#)
15. UK – Barbara de la Salle

ULUSAL VENÖZ KAN ALMA FLEBOTOMİ KILAVUZU



HAZIRLAYANLAR

Fehime Benli AKSUNGAR

Nedim ALBAYRAK

Cihan COŞKUN

İpek ÇINAROĞLU

Ayfer ÇOLAK

Canan DEMİRTAŞ

Pınar EKER

Funda GÜÇEL

Aylin HAKLIGÖR

Berrin Berçik İNAL

Bağnu ORHAN

Çiğdem SÖNMEZ

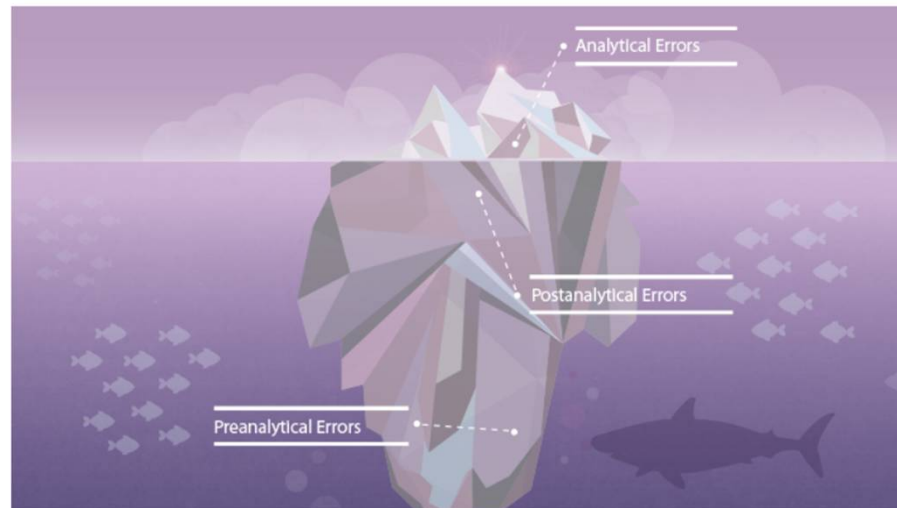
Mehmet ŞENEŞ

Fatma TANELİ

Avoiding Titanic Errors

The preanalytical phase is subject to more error than any other part of the testing cycle – what can we do to improve it?

By Ana-Maria Šimundić



About the author

Ana-Maria Šimundić



Ana-Maria is President of the Croatian Society of Medical Biochemistry and Laboratory Medicine, and serves as EFLM Executive Board Secretary and Chair of their working group for Preanalytical Phase (WG-PA). She is currently serving as Head of the Clinical unit for Medical Biochemistry and Analytical Toxicology at Sestre milosrdnice University Hospital center. She is an assessor for ISO 15189 Accreditation and Conformity Assessment. Since 2011, she has served as the Executive Board Secretary of the EFLM.

Ana-Maria has published several book chapters and over 80 publications, and has



Members' Musings

The views of the members of the EFLM Working Group for Preanalytical Phase



Pinar Eker



Pinar Eker (PE) is a biochemistry and clinical chemistry specialist at Umraniye Research and Training Hospital, Istanbul, Turkey.

Kjell Grankvist



Kjell Grankvist (KG) is a professor and senior consultant of the Department of Medical Biosciences, Clinical Chemistry, Umeå University, Sweden.

Mercè Ibarz



Mercè Ibarz (MI) is head of the Clinical Biochemistry Unit and the laboratory quality assurance manager at the University Hospital Arnau de Vilanova, ICS Lleida, Spain.

Gunn Berit Berge Kristensen



Gunn Berit Berge Kristensen (GBBK) is head of the Norwegian EQA organization for medical laboratories in Norway.

Edmée van Dongen-Lases



Edmée van Dongen-Lases (EVDL) is a clinical chemist and staff member at the Department of Clinical Chemistry of the Academic Medical Center in Amsterdam, The Netherlands.

Giuseppe Lippi

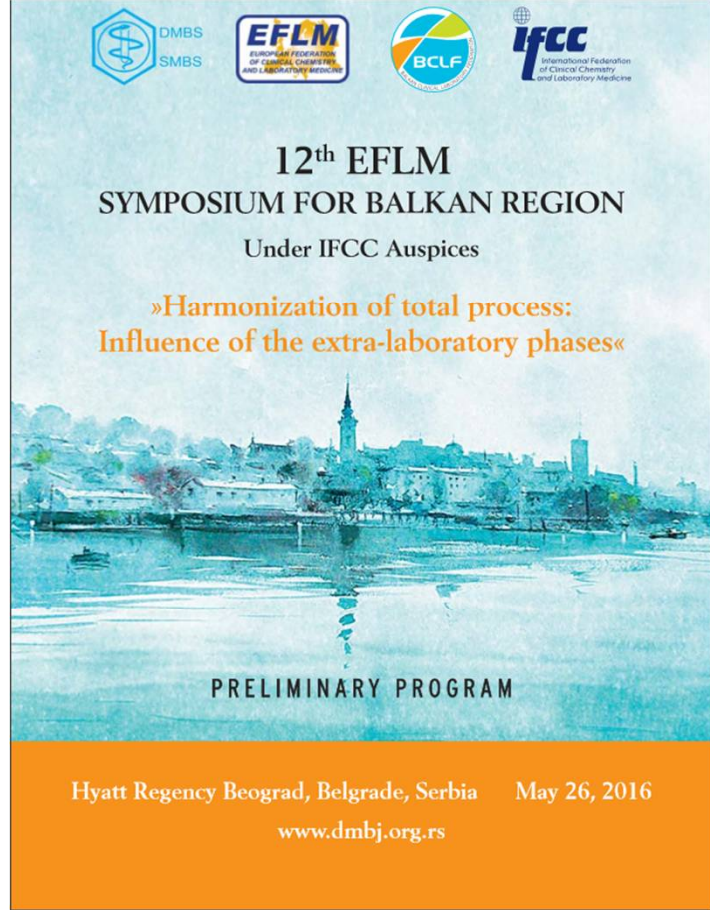


Giuseppe Lippi (GL) is director of the clinical chemistry and haematology laboratory of the University Hospital of Parma, Italy.

'The PATHOLOGIST' questions

- Why is the preanalytical phase the biggest source of lab errors?
- What are common mistakes laboratories make in protocol design that may lead to an increased likelihood of preanalytical error?
- What are common sources of preanalytical error relating to laboratory setup, equipment setup or use?
- From your own experience, what are the most common sources of preanalytical error?
- What are the easiest preanalytical phase errors to avoid and how?
- What is your top piece of advice for laboratories looking to reduce preanalytical phase error?

BENİM DEVAM EDEN GÖREVLERİM:



Klinisyen düzeyinde pre ve post analitik fazlar hakkında farkındalık

Clinical awareness about pre and post analytical phase on North Anatolian Union hospitals central laboratory
Pinar Eker (Istanbul, Turkey)

KANITA DAYALI REHBER ÇALIŞMALARI KAPSAMINDA:

- Tüplerin üretici önerileri doğrultusunda alt üst edilmelerinin ne kadar zaman aldığı ve bu işlem pratik uygulamada hangi noktada yapılabilir? (iğne damarda iken ya da alım tamamlandıktan sonra mı)
- İşlem bitiminde venöz giriş deliğine flaster yapıştırılması için hasta ne kadar bekletilebiliyor? Hastayı gerçekten işlem sonrası ne kadar izleyebiliyoruz? Kanama kontrolü yapılabilir mi?
- 28 MAYIS 2016 BELGRAD EFLM PRE- WG TOPLANTI

ÇALIŞMALAR DEVAM EDİYOR...



Why is the preanalytical phase the biggest source of lab errors?

Giuseppe Lippi: There are several reasons, including the fact that: (a) it's often overlooked as a cause of errors (all lab errors are still too often associated with analytical errors); (b) it's poorly standardized (too many national and international guidelines exist about best practice in this phase); (c) there is poor training of doctors and nurses on how to collect a quality specimen; (d) no internal or external quality control systems have been established so far.

Edmée van Dongen-Lases: It relies on humans, and therefore it's prone to human error.

Kjell Grankvist: Most laboratories still focus solely on analytical quality. Laboratories need to take more responsibility to try to minimize errors regardless of which phase of the total testing process they occur.

Michael Cornes: There are multiple reasons: i) it's often outside the direct control of the laboratory; ii) it's poorly standardized both nationally and internationally and guidelines are often inadequately followed; iii) there is a lack of understanding of the consequences of errors as there is a disconnect between where the error occurs and where its impact is seen; iv) staff are under a lot of pressure because of decreasing staff numbers, decreasing funding and increasing workload, which leads to increasing human errors; v) there is insufficient funding for technological solutions leaving healthcare years behind other industries (i.e. private sector). The technology is there but we are unable to use it.

Stephen Church: I agree. The source of these errors are often outside of the direct control of

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leaving healthcare years behind other industries (i.e. private sector). The technology is there but we are unable to use it.

Stephen Church: I agree, the source of these errors are often outside of the direct control of laboratories, and the staff who collect samples are not aware of the impact that, what seem small errors in their practices, have on sample quality and identification and therefore a lab's ability to provide accurate results. I call it the domino effect: if something goes wrong at the beginning, the further the erroneous sample advances through the analytical process, the greater the impact on laboratory efficiency, laboratory cost and ultimately patient care.

Pinar Eker: Preanalytical actions are outside the walls of the lab; it is always easier to manage what we can see. For many years, laboratory professionals have been too busy in their labs dealing with analytical procedures – we liked playing with numbers, which is always easier than managing people. The preanalytical phase is the part of our work that is mainly governed by “human factors”; as long as the challenge of managing “human factors” exists, so too will our preanalytical challenges. Besides, clinicians generally do not know much about the preanalytical phase and the impact it has on the total test process. They think the analytical phase is the most error prone stage, and this is a really big issue. All health professionals must know more about what the preanalytical risks are and their effects on test results. We must change the way of thinking; this phase is not only the responsibility of lab professional and this means we will need much more training. Patients also need to be trained.

What are common mistakes laboratories make in protocol design that may lead to an

What are common mistakes laboratories make in protocol design that may lead to an increased likelihood of preanalytical error?

Gunn Berit Berge Kristensen: Guidelines and protocols are often too comprehensive and too long. They should focus on important issues and be as short as possible. They stand a better chance of being used if they are simple, logical and perceived as useful.

Luděk Šprongl: Intelligible and clear instructions often don't exist for those who prepare the patient for phlebotomy, and this causes problems. Common errors are also made in the transportation of phlebotomy samples, so it's important that labs are made aware of the optimum time and transport conditions.

PE: As laboratorians we must be trained in processes before we design our protocols. I believe we need some basic social sciences training, like management skills. Protocols must be prepared by a team that has specialists from different disciplines Making protocols is not enough. We have some protocols for every phase in our quality management systems, but we must follow the indicators and analyze the results and replan according to the outcomes of this process.

What are common sources of preanalytical error relating to laboratory setup, equipment