GLOBAL BIOANALYSIS CONSORTIUM

Regulated Bioanalysis - A Proposed Global Harmonization Process

Presented by Peter van Amsterdam for GBC
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Mission Statement

Create an all inclusive **Global Bioanalysis Consortium** (GBC) consisting of represented scientific associations with world wide influence to merge existing or emerging bioanalytical guidance to create one, **unified consensus document** that can be presented to the regulatory bodies/health authorities in various countries.
GBC: Goals and Objectives

- To bring together stakeholders from the pharmaceutical industry, contract research organizations and academia to share **current understanding of bioanalysis guidelines**, identify differences in these guidelines or differences in the interpretation or application thereof to routine regulated bioanalysis.

- To come forward with **recommendations** to Health Authorities and regulatory bodies worldwide on globally agreed best practices for Bioanalytical Method Validation (BMV) and application of such methods/technologies to the analysis of drugs of all molecular sizes in support of clinical and nonclinical studies.
GBC: Goals and Objectives

• To invite relevant stakeholders, from industry, academia, Health Authorities and regulatory bodies, to jointly discuss the GBC recommendations at a global conference(s) in order to achieve globally agreed guidelines on bioanalysis.

• Going forward, to serve as a pivot point on the continued harmonized interpretation and/or updates of globally agreed guidelines.
GBC: History

2008-2009:

- Loose discussions in multiple BA communities contemplating on the need and added value of harmonized BA guidelines

Dec. 2009 - EBF Conference (Barcelona, Spain)

- Formal request for harmonization from Bioanalytical community
- Acknowledgement by Regulatory Agencies present (FDA & EMA)
- Discussion among international pharmaceutical scientific organizations with a strong stake in bioanalysis: AAPS, APA, CVG and EBF
- Request Health Authorities to initiate a harmonization process
  - Offer support to Health Authorities for such a process
  - Letter sent to FDA and EMA in February 2010
- Publication as Open letter in April 2010 issue of Bioanalysis
- Entertain initial idea of forming a Global Bioanalysis Consortium
GBC: History (cntd)

Dec. 2009 - EBF Conference

OPEN LETTER

Request for Global Harmonization of the Guidance for Bioanalytical Method Validation and Sample Analysis

Open letter to the bioanalytical community. Sent to the US FDA/European Medicines Agency in February 2010
GBC: History *(cntd)*

Apr. 2010 - CVG Workshop (Montreal, Canada)

- Consensus reached among panelists, 5 regulatory agencies and international attendees on how to proceed with the Global Harmonization of Bioanalytical Guidances: institution of a **Global Bioanalytical Consortium**

- Agreement on the main characteristic of a **Global Bioanalytical Guidance**:
  - Should be science driven
  - Should include rationale behind each requirement to prevent “box checking”
  - Should look at global picture, not local issues
  - Should NOT be a prescriptive guidance
  - Must get buy-in from all the countries
GBC: how to organize?

GBC Steering Committee

Harmonization Team Leaders Group

Harmonization Team # 1

Harmonization Team # 2

Harmonization Team # ‘n’
GBC Steering Committee (SC)

Roles and Responsibilities of SC

- **Coordinate** the GBC process of supporting a global BMV harmonizing strategy
- **Connect** and support the harmonization teams (via team lead)
- **Communicate** GBC progress to global community
- **Represent** GBC at international meetings
- **Dialogue** with Health Authorities/regulatory agencies on behalf of GBC
- **Organize** harmonization through international meetings/conferences
- **Interact** with and appraise other interested bodies of GBC progress e.g. organizational support and quality assurance groups
- **Ensure**
  - Global participation in harmonization teams
  - Representation of both biologics and small molecule analytical representatives in harmonization teams
GBC Steering Committee (SC) *(cntd)*

Notes:

- SC do not own content of harmonization discussion, but can act as a **sounding board**

- SC ensures that **large and small molecule** bioanalysis be fully represented in process

- Size of SC will be kept minimal, but all regions are represented in SC

- Currently **4 regions** are identified:
  - North America (NA)
  - Latin America (LA)
  - Europe (EU)
  - Asia-Pacific (APAC)
Steering Committee (as per 10-2010)

North America
• Binodh DeSilva
• Fabio Garofolo
• Mark Arnold

Latin America
• Rafael Barrientos

Asia Pacific
• Daniel Tang
• 2\textsuperscript{nd} SC member being identified

Europe
• Peter van Amsterdam
• Philip Timmerman
Roles and Responsibilities of HT

• **Engage on discussing** different subtopics in preparation of harmonization meeting(s)

• Team consists of a **team lead** and subject matter experts from multiple regions

• Team members engage to discuss and share experience in support of harmonization and best practice. By focusing on content in detail, will come forward with a **recommendation**, reached by consensus, to be presented at Global Harmonization meeting(s).

• Will include all technologies during assessment, but may defer some in favor of earlier enacted recommendations for those more broadly used.
Harmonization Teams

Roles and Responsibilities of HT

• Each team focuses on their defined topics, but is mindful of potential overlaps and will discuss these with the other teams (via team lead)

• Teams report back on content and progress (via team lead) to SC to allow SC oversight of progress or identify potential roadblocks/contradictions

• Membership to more than 1 team can be beneficial and is endorsed, but membership is limited to 3 teams
Harmonization Team Leads

Roles and Responsibilities of HT leads

• Leads the HT working on a specific method validation or sample analysis topic

• Identifies team members for his/her team

• Profile of HT members
  – Selected team members should be **experienced in the topic**
  – **No region can be excluded** unless the region elects not to be involved
  – No region can have >50% of team members.
  – Size of teams can vary (advice: 5-10 members, depending on the topic)
Roles and Responsibilities of HT leads

- **Organizes** the HT meetings (agenda/timing) and ensures meeting minutes are available.

- **Connects** with SC to report back on progress or get input from SC.

- **Connects** with other HT leads in case of overlapping discussions.
Selection process for HT Leads and Members

HT Leads
• SC will identify the HT leads based on level of expertise the candidates have with the topic of the specific team.
• The principle is to be selective rather than restrictive.
  • Candidates for HT leads can make themselves known by submitting the registration form to:
    – apply@globalbioanalysisconsortium.org
    – Identifying the team they volunteer to lead

Team members
• HT leads will identify their team based on level of expertise the candidates have with the topic of the specific team.
• Candidates for HT membership can make themselves known by submitting the registration form to:
  – apply@globalbioanalysisconsortium.org
  – Identifying the team(s) they volunteer be a member of
Selection process \textit{(cntd)}

Registration form available from GBC website

- \url{http://www.globalbioanalysisconsortium.org}

Registration Form seeks input on:

- Name
- Organization
- Region you will represent
- Experience
  - Small vs Large molecule analysis (or both)
  - Years
- Interest
  - Lead an HT (commit to the time, effort and travel)
  - Participate in a HT
  - Which teams are you interested in
Which Harmonization Teams?

- GBC Steering Committee
- Harmonization Team Leaders Group
- Harmonization Teams: Examples Are …

**Run Acceptance Criteria**

- Ref. Standards, QC and Reagents
- Bioanalytical Reports
- Ref. Standards, QC and Reagents

**Matrix Stability**

- Bioanalytical Reports
- Ref. Standards, QC and Reagents

**ISR**

- Bioanalytical Reports
- Ref. Standards, QC and Reagents

**Aspects of Method Transfer**

- Bioanalytical Reports
- Ref. Standards, QC and Reagents

**Bioanalytical Reports**

- Bioanalytical Reports
- Ref. Standards, QC and Reagents

**Tiered Approach**

- Bioanalytical Reports
- Ref. Standards, QC and Reagents

**Metabolite Quantification**

- Bioanalytical Reports
- Ref. Standards, QC and Reagents

**General or applicable to both**

- Acc & Prec and Cal. curves
- Sensitivity, Specificity, Matrix Effects
- Tiered Approach Non regulated Assays
- Metabolite Quantification

**Small Mol only**

- Acc & Prec and Cal. curves
- Sensitivity, Specificity, Matrix Effects
- Tiered Approach Non regulated Assays
- Metabolite Quantification

**LBA only**

- Acc & Prec and Cal. Curves, Hook-effect Dilution linearity
- Sensitivity, Specificity, Matrix Effects
- Reagents & Parallelism

**Others are being identified**

- Biomarkers
- Immunogenicity
Proposed way forward

2010 (Jan. 2011 included):

• Steering Committee to agree on GBC charter
• Monthly teleconferences to build GBC (founding members plus new members of SC)
• Identify regional bioanalytical organizations (NA, SA, EU, APAC - ongoing) and identify representative SC member
• Identify harmonization team (HT) lead and HT members
• Create awareness at international Bioanalysis meetings in all regions
  – LOL (NA) (done)
  – CVG-CRO (NA) (done)
  – APA-BSAT (NA) (done)
  – EBF-CRO (EU) (done)
  – CPSA (NA) (done)
  – FABIAN (EU) (done)
Proposed way forward (cntd)

2010 (Jan. 2011 included):

• Get **input** at regional key meetings to **reach agreement**
  – AAPS/PSWC/FIP (NA)
  – EBF (EU)
  – CVG-Asia Pacific (APAC)
  – TBD (SA)

• Get broader consensus on process from industry

• Finalize identification of harmonization team topics (Jan 2011)

• Reach out to **health authorities/regulatory** agencies to create awareness and reach agreement on process

• Create GBC website and e-mail address (**done**)
  • [http://www.globalbioanalysisconsortium.org](http://www.globalbioanalysisconsortium.org)
  • info@globalbioanalysisconsortium.org
Proposed way forward (cntd)

2011 (from Feb. onwards):

• Finalize identification and assignment of experts to SC (founding members replaced by SC), HT leads and HT members (Q1-2011)

• Start discussion in Harmonization Teams

• SC and HT leads work together and interact to prepare global harmonization meeting at globally accepted venue
  - SC to identify date and venue
  - current target date: Q1-2012

• Continue to update industry to maintain consensus on process

• Give regular feedback in meetings (SC) /web page
Acknowledgment

GBC founding team members:

• Peter van Amsterdam (Abbott, for EBF)
• Mark Arnold (BMS, for AAPS)
• Surendra Bansal (Roche, for AAPS)
• Douglas Fast (Covance, for BSAT)
• Fabio Garofolo (Algorithme Pharma, for CVG)
• Steve Lowes (Advion, for AAPS)
• Philip Timmerman (J&J, for EBF)
• Eric Woolf (Merck, for AAPS)