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INTRODUCTION

A growing number of medicines are based on biological molecules such as proteins and monoclonal antibodies. These novel drugs have resulted in new, more effective treatments for a number of serious conditions. Yet sometimes these medicines trigger a response from the patient's immune system, which can decrease the effectiveness of the drug or cause severe side effects.

The aim of the IMI-founded ABIRISK project **"Anti-Biopharmaceutical Immunization: Prediction and Analysis of Clinical Relevance to Minimize the Risk",** is to shed new light on the factors behind this immune response. The project, which represents the first concerted effort to solve this problem, officially kicked off March 1st, 2012. ABIRISK project will aid in the creation of new, safer **biopharmaceuticals (BPs)** and also generate tools to determine how individual patients are likely to respond to them both in clinical trials and after release to the market.

The ABIRISK consortium (presently made up of thirty-five partners, twenty-four of which are academic institutions, nine are EFPIA member companies and two are small and medium enterprises, with thirteen countries represented), has been designed to meet all of these requirements in order to target three types of disorders: **Hemophilia A, Multiple sclerosis and Inflammatory diseases: inflammatory rheumatisms (including rheumatoid arthritis) and inflammatory bowel diseases.**

ABIRISK Project will collect data both retrospectively from patients suffering from various types of diseases and treated with various BPs at European centers with a high level of experience in clinical research and will prospectively recruit additional patients in dedicated studies during the 5 years of this program. Guidelines and Standard Operating Protocols for the study of anti-drug immunization will be established and used to standardize the collection of prospective data from these patients.

ABIRISK Project thus represents a unique opportunity to create an interdisciplinary task force of clinical centers especially designed to study immune responses against biopharmaceuticals.

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WELCOME

Dear Reader,

We would like to welcome you to the **April 2014** issue of the **ABIRISK Scientific Newsletter**. The Scientific Newsletter gives you a monthly update on the most relevant literature related to ABIRISK topics published around the globe, both inside and outside ABIRISK consortium.

This month, we chose to highlight a white paper published by the Global Bioanalysis Consortium in the AAPS Journal, which explores the impact of immunogenicity on pharmacokinetic assessments and aims to propose best practices when developing pharmacokinetic assays for biotherapeutics.

In addition, you will find in this issue some regulatory news on biopharmaceuticals from the European Medicines Agency.

We look forward to your visit on **ABIRISK** website for more information and updates on the program.

Enjoy reading !

Best wishes

The ABIRISK management team

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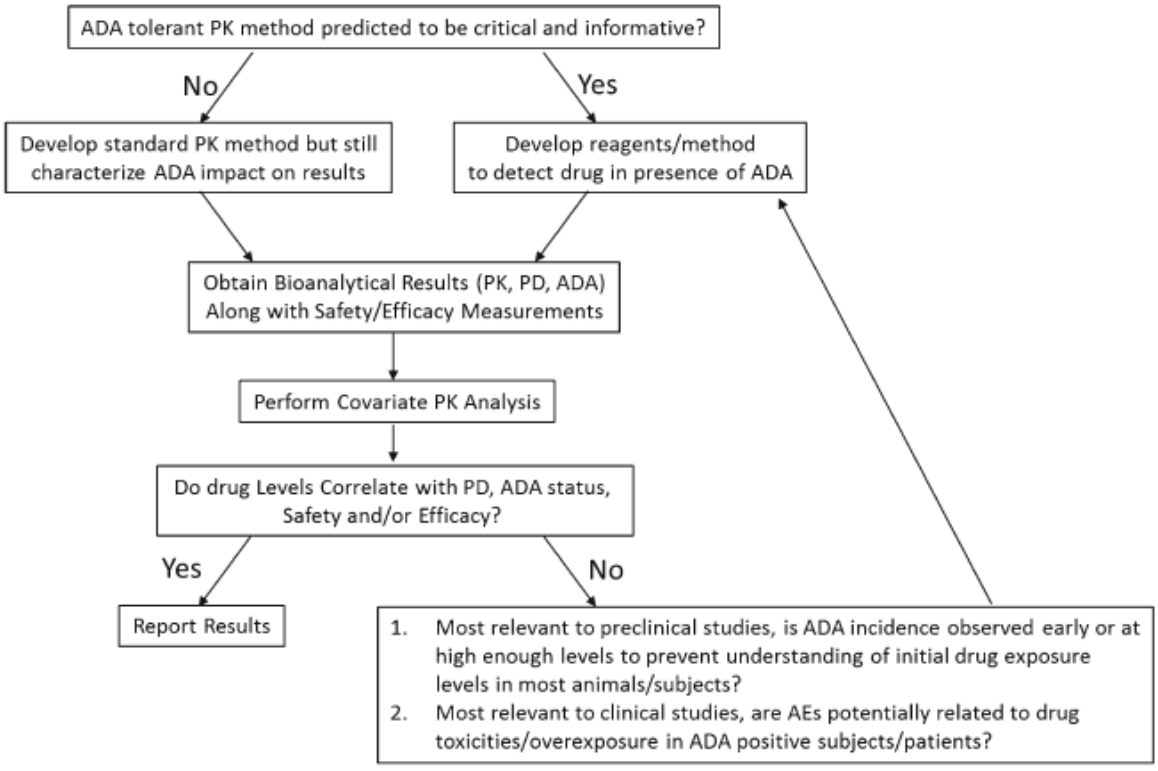
LITERATURE

This month's selected article

Albeit no formal requirements are yet stated in current regulatory guidance documents, evaluating the impact of anti-drug antibodies(ADA) on pharmacokinetics (PK) assessments is gradually becoming part of the drug development process when it comes to biopharmaceuticals.

In the present white paper, the Global Bioanalysis Consortium put forward a series of recommendations to address this issue, with the aim to provide 'a vehicle for robust and thoughtful discussion between the bioanalytical scientists, pharmacokineticists and regulators'

As depicted in the proposed decision tree below, drug development teams are firstly advised to carefully evaluate whether or not an ADA-tolerant PK assay would add true value to the interpretation of study results before embarking on the development of such an assay. Indeed, the decision to invest resources into improving PK assay performance should be driven by a risk-based approached, also taking into consideration the development stage of the candidate drug.



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Beyond this decision tree, detailed practical strategies to characterize the impact of ADA on PK measurement, and most importantly to improve ADA tolerance in PK assays are proposed.

Of note, when discussing the impact of ADA on circulating drug levels and efficacy in the case of the anti-TNFs, the authors underline once again the lack and need for standardized ADA assays to monitor and compare immunogenicity across studies.

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Immunogenicity

! ABIRISK publication !

The case for measuring anti-drug antibodies in people with multiple sclerosis.
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REGULATION

EMA

Work plan for the Biosimilar Medicinal Products Working Party 2013
Updated
March 2014

Newsletter: News bulletin for small and medium-sized enterprises - Issue 27
March 2014

Human medicines European public assessment report (EPAR): Lemtrada, alemtuzumab
Revision: 1, Authorised
March 2014

Human medicines European public assessment report (EPAR): Betaferon, interferon beta-1b
Revision: 23, Authorised
March 2014

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Scientific guideline: Guideline on the declaration of the quantitative composition / potency labelling of biological medicinal products that contain modified proteins as active substance
Adopted
March 2014

Guideline on the declaration of the qua

European Medicines Agency recommends approval of a locally targeted treatment for ulcerative colitis and Crohn's disease
March 2014

Pending EC decision: Entyvio, vedolizumab
Opinion date: 20-Mar-2014

Opinion/decision on a Paediatric Investigation Plan (PIP): Clazakizumab
Therapeutic area: Immunology-Rheumatology-Transplantation
March 2014

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