EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

ACCELERATE
INNOVATION FOR CHILDREN AND ADOLESCENTS WITH CANCER

13 November 2017
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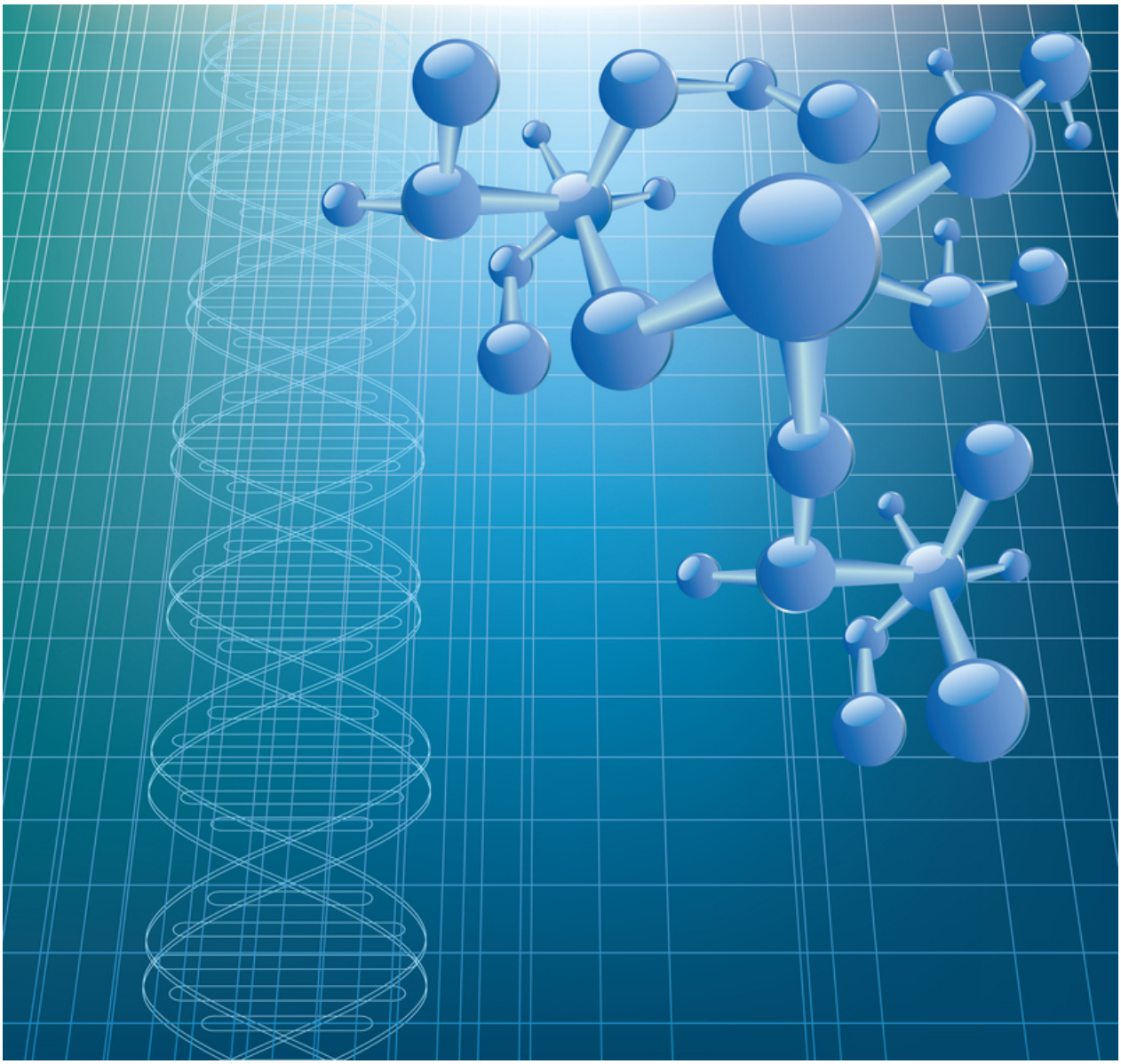
Paediatric Strategy Forum for Medicinal Product Development for Mature B cell Malignancies in Children

13-14 November 2017



Background and objectives

The second multi-stakeholder Paediatric Strategy Forum, jointly organized by ACCELERATE and the European Medicines Agency (EMA), will focus on mature B cell malignancies in children. In this scientific meeting there will be interaction between all stakeholders (patients/patient representatives, clinicians, academics, pharmaceutical companies, and regulators) with an interest in drug development for children and adolescents with cancer. The goal of this meeting is to share information, in a pre-competitive setting, to facilitate the developments of innovative medicines for the treatment of children with mature B cell malignancies.

The summary of the first Paediatric Strategy Forum held in January 2017 on ALK inhibition in paediatric malignancies can be found here.

The current therapy for high-risk mature B cell malignancies with multi-agent chemotherapy and rituximab was evaluated in an international trial in Europe, the US and Asia (Inter B NHL Ritux 2010). The trial resulted in one year event free survival (EFS) rates (95%CI) of 94.2% (88.5% - 97.2 %), which is similar to other first-line protocols. Chemotherapy alone results in greater than 96% EFS for patients with a standard-risk disease. The acute toxicity is significant but most survivors have no or mild long term toxicity.

Therefore current unmet therapeutic needs for mature B cell malignancies in children are:

i) to reduce the high acute toxicity of current therapy; however further reduction of intensive therapy leads to reduced rates of cure;

ii) to develop innovative treatments for patients remaining incurable.

There are a number of medicines being developed for B cell malignancies in adults; however most of the malignancies in adults differ from those in children. Therefore the challenges are:

i) To identify which of the many potential new drugs will have a) the optimal probability of improving cure rates in those patients who currently have chemotherapy resistant disease and b) the optimal success in reducing toxicity in the majority of patients.

ii) To design and execute scientifically sound studies in very small populations with refractory or relapsed mature B cell malignancies

iii) To design and execute scientifically sound and ethical studies in populations to reduce toxicity with a very high rate of cure.

In the Forum the epidemiology, clinical features, biology, similarities and differences compared to adult mature B cell malignancies, current international standard approaches and therapeutic needs of mature B cell malignancies will be presented. The medicines for mature B cell malignancies in development, relevant pre-clinical data and data from paediatric clinical trials completed or in progress, sponsored by industry or academia, will be reviewed. The output will be a published summary from all participants addressing the challenges and documenting the conclusions.

List of speakers and moderators

Enrica Alteri, EMA

Gilles Vassal, ACCELERATE

Andy Pearson, ACCELERATE

Koenraad Norga, Universitair Ziekenhuis Antwerpen

Giovanni Lesa, EMA

Franca Ligas, EMA

Alessandro Jenkner, Ospedale Pediatrico Bambino Gesù

Martin Schrappe, Universitätsklinikum Schleswig-Holstein

Thomas Gross, National Institute of Health

Robert Markus, Consultant Haematologist, London

Wolfram Klapper, Christian Albrechts Universität Kiel

Veronique Minard-Colin, Institute Gustave Roussy

Birgit Burkhardt, University of Munster

Pierre Demolis, Agence nationale de sécurité du médicament et des produits de santé

Peter Adamson, Children Hospital of Philadelphia

Amos Burke, Addenbrooke's Hospital

Rodney Miles, University of Utah

Simon Bomken, Newcastle University

Jochen Büchner, University Hospital Rikshospitalet

Lynley Marshall, Royal Marsden Hospital

Gregory Reaman, FDA

Jaroslav Sterba, University Hospital Brno

Programme Details

13 November 2017

09:30: Registration

Please collect badges at the reception on the ground floor. The workshop will be held in room 02-A

10:00 – 10:20: Welcome and Introduction

Welcome: Enrica Alteri

Introduction: Gilles Vassal, Andy Pearson, Koenraad Norga, Giovanni Lesa, Franca Ligas

Session 1

Chairs: Alessandro Jenkner and Martin Schrappe

10:20 – 10:50: Spectrum of mature B cell malignancies in children compared to adults

Thomas Gross

10:50- 11:20: Therapy of adult B cell malignancies

Robert Markus

11:20 – 11:40 Molecular difference between pediatric and adults mature B Cell malignancies

Wolfram Klapper

11:40 -13:30: Therapeutic needs of mature B cell malignancies in children

11.40 - 12.10: Inter-B-NHL Ritux 2010 study perspective

Veronique Minard-Colin

12.10 – 12:40: BFM Non-Hodgkin's Lymphoma study

Birgit Burkhardt

12.40 – 13:10: North American perspective

Thomas Gross

13.10 – 13:30: Discussion

13.30 - 14.30 Lunch

Session 2

Chairs: Pierre Demolis and Peter Adamson

14.30 – 15:00: Relapse and refractory disease

Amos Burke

15.00 – 15:30: Therapeutic targets in paediatric non-Hodgkin lymphomas

Rodney Miles

15:30 – 15:50: Data in relevant paediatric pre-clinical models

Simon Bomken

15.50 – 16.15 CAR-T cells

Jochen Büchner

16.15 – 16.45 Coffee

16.45 – 17:00 Review of Paediatric Investigation Plans of medicinal products in mature B cell malignancies in childhood

Lynley Marshall

17:00 – 18:00: Review of products by the pharmaceutical industries

17:00 – 17:30: Antibody Drug Conjugates

- CD79 - Polatuzumab vedotin - Roche
- CD37 - Debio 1562 - Debiopharm International SA

Discussion of the role of Antibody Drug Conjugates

17:30 – 18:30: CAR-T cells

- CD19 - CTL019 - Novartis
- CD19 - KTE-C19 - Kite pharma

Discussion of the role of CAR-T cells

Evening event

14 November 2017

Session 3

Chairs: Gregory Reaman and Gilles Vassal

08:30 – 12:30: Review of products by pharmaceutical companies

08:30 – 09:00 - Monoclonal antibodies

- CD20 - Obinutuzumab - Roche

Discussion of the role of monoclonal antibodies

09:00 – 09:40 - T-cell Engagers

- CD3-CD19 - Blinitumomab – Amgen
- CD20 - CD3 TCB - RG6026 and CD3 TBD - RG7828 - Roche

Discussion of the role of T-cell Engagers

09:40 – 10:20 - Checkpoint inhibitors

- Pembrolizumab- Merck
- LAG-3 - BMS-986016 - BMS

Discussion of the role of checkpoint inhibitors

10:20- 10:50 - BCL inhibitors

- Venetoclax – AbbVie
- Navitoclax - AbbVie

Discussion of the role of BCL inhibitors

10.50 - 11.00 Coffee break

11:00 – 12:10 - Cell Signalling Inhibitors

- BTK - Ibrutinib - Janssen
- BTK - Acalabrutinib (ACP-196) - AZD
- ATR - BAY1895344 - Bayer
- BET - BMS986158 - BMS
- PI3-K - Idelalisib - Gilead

Discussion of the role of Cell Signalling Inhibitors

12:10 – 12:30 Targeted thorium conjugate

- D22-TTC - Bayer

Discussion

12:30 – 13:30 Lunch

Session 4

Chairs: Jaroslav Sterba and Andy Pearson

13:30 – 14:20 IMiDs and Cytotoxic

- IMiDs and CELMoDs : cc-122 and cc-220 - Celgene
- Cytotoxic: Pixantrone - Servier

Discussion

Closing session

Chair: Koenraad Norga

14:20 – 17:00: Overall Perspective and conclusions

Gilles Vassal, Andy Pearson, Koenraad Norga, Giovanni Lesa, Franca Ligas

List of participants

Name	Representing
Enrica Alteri	EMA
Giovanni Lesa	EMA
Franca Ligas	EMA
Sylvie Benchetrit	ANSM
Pierre Demolis	ANSM
Apostolos Pourtsidis	Athens General Children's Hospital
Peter Adamson	Children Hospital of Philadelphia
Wolfram Klapper	Christian Albrechts Universität Kiel
Maaike van Dartel	College ter Beoordeling van Geneesmiddelen
Robert Markus	Consultant Haematologist, London
Auke Beishuizen	Erasmus MC – University Medical Center Rotterdam
Michel Zwaan	Erasmus MC – University Medical Center Rotterdam
Edita Kabickova	Fakultní nemocnice v Motole
Olga Kholmanskikh	FAGG-AFMPS
Gregory Reaman	FDA
Veronique Minard-Colin	Institute Gustave Roussy
Gilles Vassal	ACCELERATE
Andy Pearson	ACCELERATE
Dominik Karres	MHRA
Daniel O'Connor	MHRA
Simon Bomken	Newcastle University
Josef Vormoor	Newcastle University
Jochen Buchner	Oslo University Hospital
Alessandro Jenkner	Ospedale Pediatrico Bambino Gesù
Owen Smith	Our Lady's Children's Hospital, Dublin
Danielle Horton-Taylor	Patient representative
Nicole Scobie	Patient representative
Christopher Copland	Patient representative
Susan Weiner	Patient representative
Immanuel Barth	Paul-Ehrlich-Institut

Karin Mellgren	Queen Silvia Childrens Hospital
Lynley Marshall	Royal Marsden Hospital & Institute of Cancer Research
Anne Blondeel	The European Society for Paediatric Oncology
Elena Botanina	The European Society for Paediatric Oncology
Samira Essiaf	The European Society for Paediatric Oncology
Riccardo Riccardi	Universita Cattolica del Sacro Cuore
Koenraad Norga	Universitair Ziekenhuis Antwerpen
Martin Schrappe	Universitätsklinikum Schleswig-Holstein
Jaroslav Sterba	University Hospital Brno
Birgit Burkhardt	University Hospital Münster
Janez Jazbec	University Medical Center Ljubljana
Csongor Kiss	University of Debrecen
Mark Turner	University of Liverpool
Rodney Miles	University of Utah
Su Young Kim	AbbVie Limited
Silvia Stotter-Brooks	AbbVie Limited
Davy Chiodin	Acerta Pharma
Amos Burke	Addenbrooke's Hospital
Shagufta Ahmad	Amgen Limited
Zugmaier Gerhard	Amgen Limited
Ellen Bolotin	Bayer Healthcare
Kirstin Meyer	Bayer Healthcare
Siobhan Donohoe	Bristol-Myers Squibb Pharma EEIG
Rosanna Ricafort	Bristol-Myers Squibb Pharma EEIG
Patrick Hagner	Celgene Europe Limited
Ian Hawkins	Celgene Europe Limited
Bouchra Benettaib	Celgene International Sarl
Mahdi Farhan	Debiopharm S.A
Mohamed Ibrahiem	Debiopharm S.A
Ronald Dubowy	Gilead Sciences International Limited
Joanne Wallace	Gilead Sciences International Limited
Jeanette Bachir	Hoffmann-La Roche Ltd.
Huber Caron	Hoffmann-La Roche Ltd.

Mireille Methlin Costantzer	Hoffmann-La Roche Ltd.
Brigitte Maurer	Hoffmann-La Roche Ltd.
Kerri Nottage	Janssen
Fiona Hemming	Janssen
Remus Vezan	Kite Pharma UK
Arun Balakumaran	Merck Sharp & Dohme (Europe) Inc
Emilie Niedercorn	Merck Sharp & Dohme (Europe) Inc
Thomas Gross	National Institute of Health
Lida Pacaud	Novartis
Armela Joset	Novartis
Anton Egorov	Servier
Catherine Wendling	Servier