Part 1: 29 November 2022, 9:00-11:30 am ET
Part 2: 30 November 2022, 9:00-11:00 am ET

This series is supported by the FDA Scientific Conference Grant Program.
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• I have no personal financial conflicts of interests to disclose.

• This webinar will be recorded and will be posted publicly on our YouTube channel.
Our Vision
Improve the integrity, safety, and rigor of global clinical trials.

Our Mission
Engage diverse stakeholders to define emerging issues in global clinical trials and to create and implement ethical, actionable, and practical solutions.
Where we started & why this is important:

- Children **deserve access** to safe and effective medicines
- Children **historically excluded** from or underrepresented in research
- **Pediatric population widely dispersed** so clinical trials must be conducted in multiple jurisdictions
- **Persistent ethical issues**: while governing ethical principles may be generally agreed upon, differences in interpretation and application of principles exist
- Differing or nonexistent pediatric **regulations**
- Challenges in **trial initiation and conduct**
- The **pediatric patient and family voice** is not routinely solicited nor included in research life-cycle.
- **Children are not routinely offered a seat at the table.**
Project Objectives

Broadly, sought to identify and propose solutions to regulatory, ethical, and operational challenges

- Current global landscape of pediatric research governance, focusing on legislative, regulatory, and guidance gaps and inconsistencies
- Identify current initiatives to improve pediatric research globally
- Identify challenges related to decision making by and on behalf of children
- Address benefit and risk considerations that create barriers and inefficiencies in transnational research with children.
- Identify meaningful ways to engage patients/families/community members
- Diverse leadership (Academia, EMA, Industry, participant advocates)
- 80+ members from all stakeholder groups with geographic diversity
Webinar Series: 
Advancing International Pediatric Clinical Research

- An offshoot of the MRCT Center’s *Promoting Global Clinical Research in Children* project
- Funded in part through an FDA scientific conference grant award
- 5 virtual webinars
  1. Informing the future from COVID-19 lessons learned: October 2021
  2. Time to Listen—Hearing from young people in clinical research: February 2022
  3. Assent and Consent in the Field: Culture, Context, and Respect: June 2022
  5. Winter 2023: MRCT Center Pediatrics Project Launch

*Please see "Bio Book" for extended introductions to the speakers and panelists*
And we are pleased to share.....

Prioritizing Young People’s Voices in Clinical Research

MULTI-REGIONAL CLINICAL TRIALS
THE MRCT CENTER of BRIGHAM AND WOMEN’S HOSPITAL and HARVARD

ICAN
International Children’s Advisory Network

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Today’s Agenda

• Brief Presentations of 4 existing models of pediatric regulatory approval:
  • Pediatric Regulatory Cluster: Dr. Donna Snyder (US FDA)
  • Parallel Scientific Advice: Dr. Tahira Khan (AbbVie)
  • ACCELERATE Multi-Stakeholder Discussion Forum: Dr. Gilles Vassal (ACCELERATE)
  • Reliance Model: Dr. Marie Valentin (WHO)

• Panel Discussion: *Strengths and Opportunities of Existing Models of Global Cooperation*
The Pediatric Regulatory Cluster
Global Collaboration and the Pediatric Cluster

Donna Snyder, MD, MBE
Office of Pediatric Therapeutics (OPT)
Office of Clinical Policy and Programs (OCPP)
Office of Commissioner (OC)
Food and Drug Administration (FDA)
• The views expressed in this presentation do not necessarily represent the policies of the Food and Drug Administration (FDA) or the Department of Health and Human Services (HHS)
• The speaker has no relevant personal, professional or financial relationship(s) with respect to this presentation
Objectives of Today’s Talk

• Provide an overview of US and EU (European Union) regulatory requirements as they apply to global drug development in pediatrics, including some similarities and differences
• Describe the history of the Pediatric Cluster
• Review the processes and procedures of the Pediatric Cluster
• Provide an overview of the Pediatric Cluster output since inception
• Summary
Historical Milestones and Legislation in Pediatrics

1902: National Institutes of Health enacts the Biologics Control Act following the death of 22 children from tainted anti-toxins.

1938: FD&C Act: enacted after the deaths of over 100 people, many of whom were children, following use of the Elixir Sulfanilamide; all marketed drugs must be safe for use as directed.

1962: AAP Committee on Drugs issues guidelines for evaluating drugs for pediatric use.

1974: FDA requires sponsors to conduct pediatric clinical trials before including pediatric information in the labeling.

1979: Institute of Medicine holds workshop regarding the lack of labeling for pediatric drugs.

1990: Agency proposed pediatric labeling and extrapolation.

1992: Pediatric Plan to encourage voluntary development of pediatric data.


1997: Molecular Target list posted publicly in August.

2002: FDAMA reauthorized as the BPCA 2002. Maintains the 6-month market exclusivity added to the remaining patent life of the active moiety. Biological products are not eligible.

2003: Pediatric Rule declared invalid by the Federal Court for the District of Columbia. The court determined that the rule exceeded the FDA’s existing statutory authority.

2007: Reauthorization of BPCA & PREA for 5 years under the FDAAA: Pediatric Review Committee (PrRc) formed for consults on pediatric plans/assessments and reviews all requests for deferrals, waivers, and pediatric plans. Studies submitted will result in pediatric labeling information.

2012: PREA reinstates the FDA’s 1998 pediatric rule. Requires each new drug or biological product application contain data adequate to assess the safety and effectiveness of the drug for its claimed adult indication and to support safe and effective dosing formulations for each pediatric subgroup. Products with orphan designation are exempted.

2017: FDASIA legislation BPCA and PREA are permanent.

2019: The pediatric exclusivity provision, FDAMA: provides 6-month market exclusivity incentive to sponsors who, in response to a FDA pediatric written request, conduct pediatric studies for drugs with potential use in children.
Pediatric Regulatory History: EU and US

**US**
- **1979** Product labels include Pediatric Use section
- **1994** Pediatric Use Labeling Rule
- **1997** FDAMA Pediatric Exclusivity; introduction of the Written Request
- **1998** Pediatric Rule; enjoined by the Court in 2002
- **2002** Best Pharmaceuticals for Children Act (BPCA); replaced FDAMA
- **2003** Pediatric Research Equity Act (PREA); replaced the Pediatric Rule
- **2006** ‘Paediatric Regulation’ adopted
- **2007** FDAAA; reauthorization of BPCA and PREA; establishment of Pediatric Review Committee (PeRC)
- **2007** Entry into Force for Regulation; establishment of Pediatric Committee (PDCO)
- **2010** BPCA and PREA made permanent by FDASIA
- **2012**
- **2017** FDARA/RACE Act (pediatric oncology)
- **2019** Molecularly targeted list (pediatric oncology)

**EU**
- **1979** Product labels include Pediatric Use section
- **1994** Pediatric Use Labeling Rule
- **1997** FDAMA Pediatric Exclusivity; introduction of the Written Request
- **1998** Pediatric Rule; enjoined by the Court in 2002
- **2006** ‘Paediatric Regulation’ adopted
- **2007** Entry into Force for Regulation; establishment of Pediatric Committee (PDCO)

*Source: adapted from Mette Due Theilade Thomsen, 2019*

Preclinical Phase → Phase 1 → Phase 2 → Phase 3

US FDA

EU EMA

Written Request & Pediatric Review of Safety; PREA PMRs issued

Modifications to iPSP and Written Request proposed by FDA or sponsor

Written Request

Initial Pediatric Study Plan

Modifications to PIP proposed by sponsor

NDA/BLA Submission

Marketing Authorization Application

Post Marketing

Key
BLA – Biologics License Application
EMA – European Medicines Agency
FDA – Food & Drug Administration
iPSP – initial Pediatric Study Plan
NDA – New Drug Application
PIP – Pediatric Investigation Plan

“FDA and EMA are committed to ongoing harmonization of scientific issues and convergence of approaches through the work of the Pediatric Cluster with a view toward a more global approach to the effective and efficient development of medicines for pediatric patients.”

**History of the Pediatric Cluster**

- **2003**
  - FDA and EMA sign memorandum of understanding and a confidentiality agreement that allow commercial confidential information, but not trade secrets, to be shared across agencies.

- **2004**
  - The first formal FDA-EMA cluster was established to discuss hematology-oncology medicines.

- **December 2006**

- **January 26, 2007**
  - EU Pediatric legislation implemented.

- **July 26, 2007**
  - First Pediatric Cluster meeting.

- **August 1, 2007**
  - First PDCO meeting.

- **2007**
  - FDAAA; reauthorization of BPCA and PREA; establishment of Pediatric Review Committee (PeRC).
Objectives of the Pediatric Cluster

- **Facilitate regular exchange of information** related to scientific and ethical issues on pediatric product development submitted according to EU/US legislation to avoid exposing children to unnecessary or duplicative trials.
- **Aim at global pediatric development** in line with the pediatric legislation and regulations in the EU and US.
- **Understand the scientific rationale** when differences in opinion exist.
- **Discuss post-marketing pediatric requirements** and issues, including risk management and plans for long term safety monitoring.
- **To discuss general topics** of regulatory and scientific interest to the participating agencies.
- **Inform the participants** of planned scientific meetings or workshops related to pediatric matters with the possibility of attending the meetings.

Source: Terms of Reference for the Pediatric Medicinal products cluster June 2007, updated August 2018.
Participation in Pediatric Cluster by Agency

- FDA and EMA: since August 2007
- Japan’s Pharmaceuticals and Medical Device Agency (PMDA) joined as observers in November 2009
- Health Canada (HC) joined as observers in September 2010
- Active participation by PMDA and HC since October 2012
- Australia’s Therapeutic Goods Administration (TGA) joined as observers in February 2014
- Active participation by TGA since 2016
• Established in 2007 as monthly informal teleconferences
• 194 t-cons: 663 products, 198 general topics
• Most frequently discussed product issues through 2021:
  – Scope of pediatric development
  – Safety
  – Types of clinical studies
  – Study design
  – Study population
• High rate of convergence, historically ~70%
  – Convergence is when FDA and EMA agree, or a similar approach/view is expected on a specific clinical trial issue discussed at the Pediatric Cluster
Number of Pediatric Cluster Teleconferences 2007-2021

*Partial year since the Pediatric Cluster was established in July 2007
Examples of Areas of Discordance

• Clinical trial endpoints
• Interpretation of significance of non-clinical data
• Ability to extrapolate and the use of bridging biomarkers
• Potential need for juvenile toxicology studies
• Differences in clinical standard of care
• Topics often suggested at Pediatric Review Committee meetings
• Anyone from any of the participating agencies can request topic
  – Sponsors may request that their product be discussed at the Pediatric Cluster; ultimately it is at the discretion of the Agencies to decide if a discussion at the Pediatric Cluster would be helpful
  – For FDA, the request should be sent to the relevant review division, not OPT
• Topics can be general or for a specific product
Who Proposed Topics for the Pediatric Cluster 2018-2021?
Therapeutic Areas Discussed in 2021

- Oncology, 12
- Antivirals, 9
- Neurology, 8
- CarioRenal, 4
- Rheumatology, 3
- Pulmonary, 2
- Hematology, 2
- GI, 1
- Endocrinology, 1
- Hepatology, 2
- CariRenal, 4
- Pulmonary, 2
- Hematology, 2
- GI, 1
- Endocrinology, 1
- Oncology, 12
The Pediatric Cluster and its external communications are managed by OPT

• Common Commentary – started in 2012
  – Informal comments are NOT binding or formal regulatory advice
• Action items from Pediatric Cluster shared with Sponsors if appropriate – started in 2018
  – High level comments to inform sponsors that their product was discussed and the agreed action
• Process for conveying action items to the sponsor
  – If the procedure is still ongoing at EMA, EMA will incorporate the action into the Summary Report to inform the sponsor
  – If the PIP is already agreed or is in clock stop, OPT will inform the sponsor
• Joint scientific documents and workshops - examples
  – Joint guidance - Gaucher disease
  – EMA/FDA/Health Canada joint workshop addressing unmet needs of children with pulmonary arterial hypertension.
Common Commentary Process

• Purpose of a Common Commentary is to provide informal non-binding comments to sponsors:
  – Simultaneous pediatric development plans are submitted to EMA and FDA
  – Pediatric development plans are currently under review
  – The product is discussed at the Pediatric Cluster

• Product-specific Common Commentary considered:
  – Serious or life-threatening disease particularly for those with few or no therapeutic options (e.g., oncology product)
  – Non-life-threatening disease but major issue, such as trial design, endpoint, safety or dosing

• General-topic Common Commentaries considered when the agencies determine that sharing information on the approach to studying a disease or condition will be helpful to sponsors

• FDA and EMA discuss if a Common Commentary is appropriate during the Pediatric Cluster teleconference
  – Document is cleared by both agencies before being sent to the sponsor
  – General common commentaries may be posted on the respective agencies’ websites
Common Commentaries by Therapeutic Area 2012 – Oct 2022

- Oncology, 28, 42%
- Gastroenterology, 9, 13%
- Genetic Disorders, 6, 9%
- Antivirals, 6, 9%
- Cardiorenal, 5, 7%
- Hematology, 2, 3%
- Respiratory, 2, 3%
- Neurology, 2, 3%
- Ophthalmology, 2, 3%
- Anti-Infectives, 1, 2%
- Dermatology, 1, 2%
- Endocrinology, 1, 2%

N=67
• FDA / EMA Common Commentary on Submitting an initial Pediatric Study Plan (iPSP) and Paediatric Investigation Plan (PIP) for the Prevention and Treatment of COVID-19
• Common issues requested for discussion by the respective agency (EMA/PDCO and FDA) concerning pediatric oncology development plans (Paediatric Investigation Plans [PIPs] and initial Pediatric Study Plans [iPSPs])
• Gaucher Disease Common Commentary - a collaborative approach from EMA and FDA
<table>
<thead>
<tr>
<th>Name</th>
<th>Position and Team Information</th>
<th>Email</th>
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</thead>
<tbody>
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Summary

• The goal of the Pediatric Cluster is to promote a global approach to pediatric development plans with harmonization of scientific issues and convergence of approaches when possible.

• FDA and EMA may issue a Common Commentary or provide action items from Pediatric Cluster discussions to sponsors, when appropriate.

• Sponsors can request to have their products discussed at the Pediatric Cluster and can request a Common Commentary:
  – For FDA, contact the appropriate review division.

• COVID-19 Common Commentary illustrates how iPSP and PIP submissions may be aligned to meet the regulatory requirements of the FDA and EMA.
Thank you!
Parallel Scientific Advice

Tahira Khan
AbbVie
Parallel Scientific Advice

Tahira Khan

Director, Oncology Early Development and Pediatric Strategy
Regulatory Affairs, Abbvie
30 November 2022
Disclaimer

The views and opinions expressed in this presentation are those of the presenter and should not be attributed to Abbvie
Parallel Scientific Advice

Outline

1. Background
2. Procedure
3. Outcome
4. Benefits
5. A Hypothetical Case Study

Note: material presented in some of these slides is based upon published FDA and EMA guidance documents (references are provided)
Parallel Scientific Advice: Background

**Objective:** to enable EMA and FDA assessors and Sponsors to exchange their views on scientific issues during the development phase of new medicinal products.

Best candidates for PSA include:
- **Important medicines** for which guidelines do not exist or for which guidelines differ significantly.
- Products with **unique or significant issues** that could impede further development e.g. clinical safety, animal toxicology, or unique manufacturing concerns.

Reference: PSA “General Principles”, July 2021
Parallel Scientific Advice: Procedure

- Voluntary and usually initiated at the Sponsor’s request
- May also be initiated by either Agency in cooperation with the Sponsor
- Should focus primarily on specific questions or issues involving the development of the product for further scientific input from both FDA and EMA
- Addresses one set of questions by the sponsor; it is not a series of consultations
- Meetings are conducted under the provision of the confidentiality arrangement between the FDA and EMA and with the Sponsor’s authorization
- If request is denied by one or both Agencies, independent Scientific Advice may be sought by Sponsor or experts from one agency may be invited by the other for discussions (consultative advice)

Reference: PSA “General Principles”, July 2021
Parallel Scientific Advice: Procedure

Published PSA Timeline follows SAWP meeting timelines: ~75-90 days from validated briefing book to final advice. Predictable timeline once the briefing package is validated; pre-submission meeting with EMA may be requested.
Parallel Scientific Advice: Outcome

Sponsor receives independent advice from FDA and EMA on the questions posed during the PSA.

FDA and EMA will aim to provide responses that are convergent. However, Sponsors may not receive the same recommendations from the two Agencies.

Reference: PSA “General Principles”, July 2021
Parallel Scientific Advice: Benefits

- Concurrent FDA and EMA scientific advice through a single meeting mechanism

- Clearer and deeper understanding of FDA and EMA regulatory and scientific perspectives on the development program, and, if divergent, the reasons for divergence

- Provides FDA and EMA with an opportunity to identify Sponsor’s concerns in implementing regulatory advice, if divergent between the Agencies

- Optimizes global medicinal development, avoids unnecessary duplication of work/testing

- May identify hurdles in global development of new medicines in unmet disease settings to inform policy development and potential regulatory changes

Reference: PSA “General Principles”, July 2021
Hypothetical Case Study:
Utilizing Two Separate Meeting Procedures for a Single Trilateral Meeting

**Objective:** Qualification of a novel study design and associated regulatory processes for pediatric medicinal development with joint input from EMA and FDA

**Issue:** Joint FDA and EMA Qualification procedure does not exist for “novel study designs”; joint applications accepted for qualification of biomarkers and clinical outcome assessments

**Solution:**
- Proceed with EMA Qualification procedure
- Utilize the PSA procedure to invite FDA to discuss the issues raised with EMA
- Submit the same briefing package to both FDA and EMA
- Joint FDA and EMA discussion followed by a trilateral meeting with Sponsor

**Outcome:** better understanding of the scientific and regulatory issues related to proposed study design and feasibility of implementing the study globally
References

• [https://www.fda.gov/media/105211/download](https://www.fda.gov/media/105211/download) (July 2021)
  • General principles ema-fda parallel scientific advice (human medicinal products)

  • Parallel Scientific Advice 101
  • 5-Year Program Review and “Myth-busting” the PSA Timeline
  • FDA/EMA Parallel Scientific Advice (PSA) - Two case studies
  • Considering a PSA Request? Summary and Best Practices

ACCELERATE
Pediatric Strategy
Forum

Gilles Vassal
Gustave Roussy
Comprehensive Cancer Center
ACCELERATE Pediatric Strategy Forums

Gilles Vassal, MD, PhD
Gustave Roussy Comprehensive Cancer Center
MRCT Webinar November 29, 2022
Disclosure

Pr Gilles Vassal, MD, PhD

Advice on pediatric oncology drug development to:
Astra-Zeneca, Bayer, BMS, Hutchinson-Medi Pharma, Pyramid,
Lilly, Novartis, Pfizer, Roche/Genentech

Do not accept personal remuneration.
**Childhood cancers**

- More than 400,000 new cases worldwide, annually
- In Low and Middle Income Countries
  - 15% - 45% cure rate
  - Challenge: access to standard effective treatments
- In High Income Countries
  - 80% disease free at 5 years with major differences across malignancies
  - 2/3 survivors with long term toxicity
  - Leading cause of death from disease beyond 1 year of age (6,000 deaths in Europe)

**Cure More, Cure Better and Tackle inequalities**

Save 1 million children’s lives from cancer by 2030
A regulatory environment
For better medicines for children

Obligations, incentives, rewards

Not delivering well for childhood cancers
The issue - The ALK inhibition story

10 YEARS

1994 2011 2012 JAN 14, 2021

Discovery
ALK+
Lung cancer
ALCL*
IMT**

Academic pediatric development
More than 200 patients

Marketing authorisation

Marketing authorization
Crizotinib in ALK+ Lung cancer
Crizotinib in ALCL

Waivered pediatric development
(lung cancer does not occur in children)

Crizotinib in ALCL and IMT

* anaplastic lymphoma kinase gene
** inflammatory myofibroblastic tumor
An international multistakeholder organization to

Improve and accelerate new drug development for children and adolescents with cancer

A patient centric organisation to solve problems

Created in 2015
International participation

Already present in 2021
New entries
Steering Committee Members

**Academia**
- Steven DuBois
- Pam Kearns
- Elly Barry
- Hubert Caron
- Lynley Marshall
- Lia Gore
- Heather Wasserstrom
- Darshan Wariabharaj

**Industry**
- Leona Knox
- Patricia Blanc
- Susan Weiner
- Nicole Scobie

**Patients Advocacy**
- Sara Galluzzo
- Dominik Karres
- Gregory Reaman
- Alberto Pappo
- Peter Adamson

**Regulators**
- Steven DuBois
- Pam Kearns
- Elly Barry
- Hubert Caron
- Lynley Marshall
- Lia Gore
- Heather Wasserstrom
- Darshan Wariabharaj

**In tuitu personae**
- ITCC President / ACCELERATE Chair
- PSF Oversight Committee Chair/Senior Advisor

**SIOP Europe CEO**
- Samira Essif
- Gilles Vassal
- Andy Pearson

**ITCC President / ACCELERATE Chair**
- Heather Wasserstrom
- Darshan Wariabharaj

**PSF Oversight Committee Chair/Senior Advisor**
- Steven DuBois
- Pam Kearns
- Elly Barry
- Hubert Caron
- Lynley Marshall
- Lia Gore
- Heather Wasserstrom
- Darshan Wariabharaj
A patient centric organisation to solve problems
And shape the international landscape of pediatric oncology drug development

Principles
• Identify together a problem (annual conference)
• Understand the issue in an open multistakeholder dialog
  No blame! No shame!
• Generate data
• Find solutions
• Implement solutions
Multistakeholder working group on new development strategy to solve the ALK issue

2016

Request for Mechanism of action biology-driven early drug development

- Aggregated database of paediatric biological tumour drug targets
- Joint academic–pharmaceutical industry pre-clinical platform to analyse the activity of new drugs = ITCC-P4 and PIVOT
- Paediatric Strategy Forums to facilitate prioritisation
- Molecular profiling of paediatric tumours at diagnosis and relapse
- Suppression of article 11b of the European Paediatric Regulation
• **Goal** –
  To *share* information between *all* stakeholders, to *evaluate* science, to *inform* paediatric drug development strategies and *subsequent* decisions
  a multi-stakeholder meeting with open dialog in a pre-competitive setting, on a malignancy or class of compounds

• Improve the selection *and prioritisation* of innovative drugs being evaluated for children and adolescents cancer, this will be driven by science and meet patients’ unmet needs
## Paediatric Strategy Forums
Continually evolving

<table>
<thead>
<tr>
<th>Year</th>
<th>Topic</th>
<th>Zoom Link</th>
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<tbody>
<tr>
<td>2017</td>
<td>PSF - 1 ALK inhibition</td>
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<tr>
<td></td>
<td>PSF - 2 Mature B-cell lymphoma</td>
<td></td>
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<td>2018</td>
<td>PSF - 3 CheckPoint Inhibitors</td>
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<tr>
<td>2019</td>
<td>PSF - 4 Acute Myeloid Leukemia</td>
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<td>PSF Prioritisation</td>
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<tr>
<td></td>
<td>Acute Myeloid Leukemia</td>
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<tr>
<td>2020</td>
<td>PSF - 5 Epigenetic modifiers</td>
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<tr>
<td></td>
<td>PSF Prioritisation BET inhibitors</td>
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<td>2021</td>
<td>PSF - 6 Second ALK inhibition</td>
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<td>PSF - 8 TKI in Sarcomas</td>
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<td>2022</td>
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<td>PSF -10 DNA Damaging agents</td>
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<td>2023</td>
<td>PSF - 11 PI3K/AKT/mTOR Pathway</td>
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<td>PSF - 12 CDK 4, 6 &amp; 9 inhibitors</td>
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<td>PSF - 13 Topic To be decided</td>
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Overall more than 200 assets discussed by 1000 participants.

Lancet Oncol 2022, 23:1354
PUBLICATION of PEDIATRIC STRATEGY FORUMS and PRIORITISATION MEETING

N°2 Mature B cell Lymphoma

ACCELERATE and European Medicine Agency Paediatric Strategy Forum for median product development for mature B-cell malignancies in children

Andrew D.J. Pearson 1,2, Nicole Scobie 3, Konrad Noga 4, Franco Ligas 5

N°4 Acute Myeloid Leukemia

Paediatric Strategy Forum for median product development for acute myeloid leukaemia in children and adolescents

ACCELERATE in collaboration with the European Medicines Agency with the participation of the Food and Drug Administration


N°6 ALK inhibitors

Second Paediatric Strategy Forum for anaplastic lymphomas kinase (ALK) inhibition in paediatric medicines development

ACCELERATE in collaboration with the European Medicines Agency with the participation of the Food and Drug Administration


Prioritising BET inhibitors

Bromodomain and extra-terminal inhibitors—A consensus prioritisation after the Paediatric Strategy Forum for medicinal product development of epigenetic medicines

Andrew D. Pearson 1,2, Simon G. Dubois 3, Vicky Benger 3, Mark Karon 4, Kimberly Stojanov 4, Pipiti Bouboulidou 4, Kelly Bennett 5, Amy Goult 6, Patrick A. Ross 4, Jessica Chyern 4, Elizabeth Fox 7, Christopher A. French 8, Steve Gilbert 9, Gordon Gilchrist 10, Julia G. Hender 11, Maureen M. Hesley 11, Donald Ludwinski 12, Kazutaka Leptakova 12, John Melo 13, Joe Nicholson 13, Zarinia Nikolaeva 13, Malgorzata Smith 13, Ahtanmi C. Taint 14, Rajier Vihan 13, Susan Weiner 14, Joanna S. Yiu 15, Fred Zheng 16, Gilles Vassal 16

N°3 Check Point Inhibitors

Original Research

ACCELERATE and European Medicines Agency Paediatric Strategy Forum for median product development of checkpoint inhibitors for use in combination therapy in paediatric patients


N°5 Epigenetic Modifiers

Original Research

Paediatric Strategy Forum for median product development of epigenetic modifiers for children

ACCELERATE in collaboration with the European Medicines Agency with the participation of the Food and Drug Administration

FDARA Implementation Guidance for Pediatric Studies of Molecularly Targeted Oncology Drugs: Amendments to Sec. 505B of the FD&C Act Guidance for Industry

Can a Multistakeholder Prioritization Structure Support Regulatory Decision Making? A Review of Pediatric Oncology Strategy Forums Reflecting on Challenges and Opportunities of this Concept

December 2019

CPT, 108, 3, 553, 2020

Dominik Kötay1, Giovanni Less1, Francs Ligo3, Pieter Arends2, Maudke van Derel1, Pierre Demols5,6, Sam Galluzzi5, Ralf Herold6, Olga Khomanskikh van Crickingen1, Viola Stoyanova-Beninska1,10 and Koon Nong1,11,12,13
Unmet therapeutic needs
i) develop innovative treatments for patients remaining incurable
ii) reduce high acute toxicity of current therapy

Conclusion
• Successful de-escalation at low risk in front line therapy can only be undertaken with an effective salvage regimen
• Priority = developing treatment for relapse
  – Very small number of patients = global strategy
  – Combination approach rather than monotherapy

Consensus of clinicians on priorities
• Antibody drug conjugates
• CAR-T cells
• T-cell Engagers

Impact of the Forum

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Number of Products</th>
<th>PIP</th>
<th>Full-Waivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-cell products</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 2007 – November 2017</td>
<td>27</td>
<td>15/27 (56%)</td>
<td>12/27 (44%)</td>
</tr>
<tr>
<td>December 2017 – June 2021</td>
<td>36</td>
<td>9/36 (25%)</td>
<td>27/36 (75%)</td>
</tr>
</tbody>
</table>

Prioritisation + Medically and Scientifically justified Waivers

* International academic platform trial
Multistakeholder cooperation to facilitate prioritization: a pilot experience beyond oncology

Multi-stakeholder Meeting on Paediatric Inflammatory Bowel Disease

2021

In press in Journal of Crohn’s and Colitis

Multi-stakeholder Meeting on Pediatric Atopic Dermatitis

2022
ACCELERATE 360°

mutistakeholder working groups

Nathalie Gaspar & Chris Copland

Fostering Age Inclusive Research

Elly Barry & Pam Kearns

Fit For Filing

Daniele Horton & Mark Kieran

Long Term Follow Up

Leona Knox, Nicole Scobie & Greg Reaman

International Collaboration
ALADDIN
Multi-stakeholder Education Alliance to Accelerate Drug Development for Children and Adolescents with Cancer

This project has received funding from the European Union’s Erasmus+ programme under Grant Agreement No 101056190. Call: ERASMUS-EDU-2021-PI-ALL-INNO
Key success factors for accelerating the development of innovative therapies for children and adolescents with cancer

- Science-driven and patient-centered developments to address unmet needs
- Introduce use of real word data and deep learning of multiomics data
- Multistakeholder collaboration and engagement in a favorable and incentivizing regulatory environment to facilitate prioritisation
- Equal access to innovative and essential medicines for all children and adolescents 24/7
- A necessary global endeavour with international academic collaboration
- WORK TOGETHER: feasible and efficient
Thanks
The Team

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11th ACCELERATE Paediatric Oncology Annual Conference

9–10 February 2023
Brussels
OUR NAME IS OUR MISSION!

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Reliance Models

Marie Valentin
World Health Organization
Panel Discussion: Strengths and Opportunities of Existing Models of Global Cooperation

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AbbVie

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Elly Barry
Day One Bio

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Franca Ligas
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R13 Webinar Series

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Looking Ahead: Today’s Wrap Up & Part 2 Agenda

- Reflections on today

- 30 November 2022, 9-11 am ET
  - Presentation: *Moving Towards Greater Global Cooperation for Pediatric Medicines Development*
  - Panel: Actions Towards Improving Existing Processes and Looking to the Future
  - Wrap up/moving ahead
Thank You!

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