CRED: Understanding Clinical Development Programme
15-16 October 2024
Day one
Chairperson: Steve Pinder, Envestia Ltd

Time	Activity	Speaker
09:20	**Registration and Coffee**	
09:30	**Introduction to TOPRA**	
09:35	**Welcome and Introduction** **Clinical Development in Context** • Target product profile • Use 10-year development diagram, say where everything fits in • Why are clinical data needed? • Relevance of preclinical data • Definitions of Phases I, II, III and IV. • Clinical development strategy and the Clinical Development Plan • Sources of advice and timing • Need for a PIP	**Steve Pinder** Envestia Ltd

09:50	**Clinical Pharmacokinetics**
	• To see how the drug is handled in man
	• To understand the basic parameters used to describe the PK of a drug
	• To understand the importance of PK in drug development
	  ○ Describe the different processes involved in Pharmacokinetics: absorption, distribution, metabolism and excretion
	  ○ Define the PK parameters which describe each process, e.g. Cmax, t½, AUC, Volume of distribution, Clearance, Bioavailability etc, and their relevance
	  ○ Discuss multiple dosing and non-linear kinetics
	  ○ Understand the importance of metabolism including,
	  ▪ Drug metabolising enzymes,
	  ▪ Importance of ensuring main metabolites in man are similar to those produced by preclinical toxicology species
		Marco Siccardi
		ESQlabs

Time	Activity	Speaker
	○ Discuss generation of PK data throughout the different phases of Drug development including ▪ Overview of studies performed in phase I, II and III ▪ Standard PK sampling employed in Phase I and II. ▪ Use of sparse sampling and population PK approaches in Phase III. ○ Discuss importance of validation of analytical methods – as a regulatory requirement.	
10:30	**Tea/ coffee break**	
10:50	**Clinical Pharmacodynamics** • First in human trials • Guideline • Objectives of clinical pharmacodynamic studies • Mechanism/onset/duration of action • Examples of pharmacodynamic models • Different study designs • Identification of sub-group differences e.g. disease-related, gender, age, race, geography (racial sub-populations) • Biomarkers • Practicalities of clinical pharmacodynamic studies	**Marco Siccardi** ESQlabs
11:30	**Panel Discussion**	
12:00	**Lunch**	
13:00	**Optimal Study Design – Objectives and Issues Relating to Phase II studies** • Objectives of Phase II studies • "Proof of concept" • Design of Phase II studies • Definition of target patient population • Choice of end point(s) • Dose response • Initial identification of possible safety issues • Importance of keeping the target product profile in mind throughout • Adaptive design and accelerated development • Conditional approval	**Carly Barraclough** Amgen LTD

Time	Activity	Speaker
14:00	**Paediatric Investigation Plans** • Legal framework • Why children are different • Preferred approaches to clinical development in children • Devising PIP strategy • Content and format of a PIP • PIP review process • Compliance Check	**Steve Pinder** Envestia Ltd
14:35	**Case study and feedback session** *Tea to be taken in case study groups*	
17:00	**Close**	

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Day two

Chairperson: Beatrix Friedeberg, Vertex Pharmaceuticals

Time	Activity	Speaker
08:55	**Introductory comments**	**Chair**
09:00	**Design of Clinical Trials to Support Proof of Efficacy (Phase III)** • Confirmation of efficacy in the target patient population • Considerations for trial design e.g. control groups, duration of treatment • Long term safety data (circumstances when needed) • Choice of comparator (placebo vs active comparator) • Statistical issues – stats plan, primary and secondary endpoints, exploratory endpoints • Enlargement of the safety data-base to support the safety sections of the SmPC • Inclusion of quality of life (QoL) and other pharmaco-economic end-points to support pricing/reimbursement • Master protocols	**Beatrix Friedeberg** Vertex Pharmaceuticals
10:00	**Tea/ coffee break**	
10:30	**Safety** • Pharmacovigilance - aims and objectives • Definitions • Clinical Trial Regulation – Reporting • Causality attribution • Risk management plans • PASS Studies • The SPC • Current EU Pharmacovigilance Legislation – mention Reference Safety Information (RSI) and new guidance	**Janet Jepras** Janet Jepras Consulting Ltd
11:30	**Panel discussion**	
12:00	**Lunch**	
13:00	**Case study and feedback session** *Tea to be taken in case study groups*	

Time	Activity	Speaker

15:15	**The Perspective of a Regulatory Authority Reviewer**
	• Specific examples of what regulatory agencies look for
	• Common problems with the clinical data in MAAs
	• Reasons for different views and decisions between regulatory authority reviewers
	• Obtaining regulatory agency input and appropriate timelines
	  ○ CHMP scientific advice versus national agency advice
	  ○ Implementation of advice received
		Jana Zizkovska
		State Institute for Drug Control (SUKL)

16:00	**Summary**	**Chair**
16:30	**Close**	

Delegates will be encouraged to ask questions throughout the day so as to ensure the meeting is as interactive as possible.