



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

Novel therapies

Innovation Task Force (ITF), scientific advice and new Ad Hoc group on
Veterinary Novel Therapies (ADVENT)



Presented by Fia Westerholm on 12 March 2015
Development and evaluation of veterinary medicines

An agency of the European Union





Presentation objectives

- Describe the challenges posed by novel therapy products
- Data requirements for marketing authorisations and considerations regarding MRLs
- Inform on guidance and advice available from the EMA to applicants to support development of novel therapy products
- Present the supporting functions and processes available



What are novel therapies?

- Wide range of products are generally understood to fall under this term: from new concepts for active substances in veterinary medicine to new technologies in manufacture applied to products that may contain “classic” active substances (e.g. nanotechnology)
- As a result of advances in biotechnology, industry is increasingly developing veterinary medicinal products containing active substances of biological origin, such as growth factors, cytokines, recombinant hormones, monoclonal antibodies and other biologically active molecules.
- These products are entirely new for veterinary medicine, and do not easily fit within the framework of existing legislation.
- This presentation focuses mainly on those products with active substances of biological origin, novel therapy products.



Challenges

Requirements

Guidance and advice

Functions and processes



Challenges posed by novel therapy products (1/3)

- Neither pharmaceutical nor immunological veterinary medicinal product.
- Data requirements as in Annex I of Directive 2001/82/EC are in general not directly applicable.
- Assessment concepts developed for pharmaceuticals and immunologicals are not directly applicable.
- Specific guidance for veterinary products only available to a very limited extent.
- More guidelines are available for human advanced therapy medicinal products. In how far can/should they be applied for veterinary products?



Challenges posed by novel therapy products (2/3)

- New therapies can concern very different types of active substances and concepts thus making it difficult to extrapolate approach for one type of product to another.
- The exact qualitative and quantitative composition may be difficult to define.
- In case of a product for food producing animals the requirements regarding residues and need for establishment of maximum residue limit (MRL) uncertain.
- For the development of new products companies need predictability in respect to data requirements and outcome of an application in order to allow time and budget planning.



Challenges posed by novel therapy products (3/3)

- Regulators to prepare for submissions:
 - make available / find / develop specific expertise,
 - provide regulatory and scientific advice to specific product developments,
 - develop general guidance
- Challenging to develop guidelines without experience of assessments
- Difficult to prioritise guideline developments and difficult to identify types of products most likely to be developed.



Challenges
Requirements
Guidance and advice
Functions and processes

Data requirements for marketing authorisations (1/2)

- In general a novel therapy product will not fit the definition of a pharmaceutical or an immunological and the data requirements as per Annex I will not be applicable directly.
- Requirements depend very much on the properties of the active substance and the specific product.
- Often elements from both Title I (Pharmaceuticals) and Title II (Immunologicals) of Annex I are applicable
 - Active substance can be “biological” by nature and intended for a “pharmaceutical” indication
 - Active substance can be chemically defined molecule thus fit to the specification of a pharmaceutical but have immunological properties and immunological indication



Data requirements for marketing authorisations (2/2)

- Tailored requirements: the dossier requirements need to be tailored to the specific active substance and product
- No “one fits all” set of requirements
- It is often useful to review requirements step by step for the identification of suitable tailored data requirements
- Dialogue with responsible authority recommended
- Scientific and regulatory advice recommended
- EMA/CVMP intends to make available more guidance in the future

Requirements regarding MRLs (1/3)

- Legal requirement (Art 6(1) of Directive 2001/82/EC) that pharmacologically active substances contained in a veterinary medicinal product intended for food producing animals have MRL classification (included in Table 1 of the Annex to Regulation 37/2010).
- Regulation 470/2009 does not apply to “*active principles of biological origin intended to produce active or passive immunity or to diagnose a state of immunity*” (Article 1(2) of Regulation 470/2009).
- However, active principles of biological origin, whose intended use is not to produce immunity or to diagnose a state of immunity, are not exempted by this definition.



Requirements regarding MRLs (2/3)

- The scientific rationale of the exemption rule seems to apply equally for many of these biologicals, e.g. stem cells.
- Other biologicals are likely to require residue and consumer safety assessment/MRL evaluations, e.g. some types of cytokines.
- Upon request, and with agreement of the Commission, the CVMP included exceptionally stem cells as active substance in the list of substances not falling within the scope of Regulation 470/2009 (“Out of scope list”) – new heading *“Biologically active constituents”*.



Requirements regarding MRLs (3/3)

- A single approach cannot be applied to this class of products as a whole. Case-by-case considerations necessary.
- Recommendations by CVMP to include such biological active substance in the “out of scope list” will continue to require approval by the Commission.
- If an MRL evaluation is necessary, the data requirements will need to be tailored to the characteristics and profile of the specific active substance.



Challenges
Requirements
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Guidance and advice available at EMA

- The European Medicines Agency (EMA) is committed to assist companies in providing guidance and advice during development phase of novel therapy products.
- New and established fora and processes. Aim: One-stop-shop.
- Innovation Task Force (ITF)
- Guidance by CVMP Ad hoc group on Veterinary Novel Therapies (ADVENT)
- Scientific Advice (CVMP SAWP-V)
- Pre-submission meetings
- Guidance and guidelines on EMA website on procedural, regulatory and scientific issues.



Challenges Requirements Guidance and advice **Functions and processes**

- Innovation Task Force (ITF)
 - Ad hoc expert group on Veterinary Novel Therapies (ADVENT)
 - Scientific advice
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Innovation Task Force (ITF) (1/3)

- Multidisciplinary group for preparatory dialogue and orientation with applicants on innovative medicines, technologies and methods.
 - Provide a forum (soft landing zone) for innovation.
- ITF members are scientific and legal administrators appointed from different departments of the Agency including scientific, regulatory and legal competencies.
- To fulfil its task the ITF involves as appropriate experts from EMA scientific Committees and Working Parties or individual experts.



Innovation Task Force (ITF) (2/3)

- Briefing meetings aiming to provide an early guidance and information; ITF was established first for human medicines only.
- Now also open for veterinary medicines.
- Scope of the ITF activities encompasses:
 - emerging therapies (i.e. gene therapy, cell therapy and engineered tissues),
 - emerging technologies (i.e. new development strategies, new manufacturing approaches),
 - borderline therapeutics (i.e. combination of pharmaceuticals and devices) for which there is no established EMA scientific, legal and regulatory experience, and
 - biomarkers and new technology platforms.



Innovation Task Force (ITF) (3/3)

- ITF arranges the briefing meetings within 60 days of receipt of a valid request from an applicant.
- Meetings usually via teleconference
- Veterinary pre-step for request:
 - Initial review of ITF request
 - Allows the veterinary division to customise the process
- For enquiries regarding suitability of the ITF in respect to their product or requests for ITF briefing meetings, applicants for innovative veterinary medicines are invited to send all potential applications to: vet.applications@ema.europa.eu



Scientific Advice (1/2)

- Scientific advice particularly useful for novel therapy products to provide advice to companies on the appropriate tests and studies in the development of a veterinary medicine.
- Areas for scientific advice: quality, safety, efficacy; data requirements for minor use minor species (MUMS) products; the establishment of new MRLs or extrapolation of existing MRLs.
- Scientific advice helps the applicants to ensure that the appropriate tests and studies are performed and to support predictability of outcome of an intended application.



Scientific advice (2/2)

- For veterinary medicines, scientific advice is given by the CVMP on the recommendation of its Scientific Advice Working Party (SAWP-V).
- Independent of route of authorisation.
- Possibility for parallel advice with FDA: may be of particular interest for novel therapy products.
- Free scientific advice for products classified as MUMS/Limited market with fee incentives.
- 90% fee reduction for SMEs.



Ad hoc group on Veterinary Novel Therapies (ADVENT) (1/3)

- Requests from applicants for advice related to entirely new therapies to the veterinary domain have to date been channelled through scientific advice and more recently the innovation task force (ITF).
- In December 2014 CVMP created the Ad hoc expert group on Veterinary Novel Therapies (ADVENT).
- ADVENT is intended to provide advice to CVMP on novel veterinary therapies and to develop guidance on specific topics to respond to emerging needs in the veterinary therapeutic field.
- Main objective: develop advice for use by applicants on requirements for authorisation of therapies that are new to the veterinary domain.



Ad hoc group on Veterinary Novel Therapies (ADVENT) (2/3)

- Scope/mandate to develop scientific and technical guidance for novel therapy products.
- Aim: sufficiently detailed that it is useful yet sufficiently flexible that it does not constrain innovation or access to market.
- Initially in the form of Questions and Answers for publication:
 - o Based on the current state of scientific knowledge;
 - o Advice to be updated on basis of scientific developments.
- Formal guidelines later when experience has been gained.
- Scientific advice procedure to be used for confidential advice on application or product.



Ad hoc group on Veterinary Novel Therapies (ADVENT) (3/3)

- First ADVENT work plan adopted by CVMP on 12 March 2015 including initial priority topics
- Topics are chosen on the basis of emerging and expanding interest in the society, brought to the knowledge of EMA, CVMP and ADVENT via various routes
 - Proposals and suggestions for topics from applicants and the public are also welcome for consideration
- Priority topics chosen for initial consideration to include aspects of stem cells, monoclonal antibodies and cancer vaccines



Presentation objectives - recap

- It is recognised that the development and authorisation of novel therapy veterinary medicines pose particular challenges.
- Data requirements need to be tailored for the specific (type of) product.
- EMA is committed to assist companies in providing guidance and advice to pave the way towards a successful marketing authorisation application.
- Important to engage in dialogue with regulatory authority and seek advice on regulatory and scientific issues early and throughout development process.

Next steps for ADVENT

ADVENT topics:

- First steps: priority topics identified for ADVENT to initially consider , maybe to prepare guidance
- Priority topics
 - stem cells (sterility, tumorigenicity, extraneous agents),
 - monoclonal antibodies (aspects to be considered), and
 - cancer vaccines (?)
- Input is invited from stakeholders on continuous basis for identification and consideration of future priority topics (contact email: ADVENT@ema.europa.eu)



Thank you for your attention