Our first experience with a EMA Adaptive Licensing pilot project

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Adaptive Licensing: for which medicine

- Life threatening or severe condition that justifies early access
- Ability to clearly define a (sub) population which anticipates the best benefit risk balance for the initial study
- Ability to define a robust surrogate endpoint
- Ability to restrict access to this population in the initial marketing setting
- Availability of the 'expansion' populations



Case study:

GSK2315698 (small molecule SAP* depleter) and GSK2398852 (anti-SAP mAb)

- Investigational medicines for the treatment of systemic amyloidosis (AL amyloidosis)
- Disease caused by amyloid deposition in key organs
 - Amyloid accumulation leads to progressive organ failure
 - Heart and kidney prognostically most important
- Anti-SAP mAb binds to Serum Amyloid P component (SAP) decorating amyloid fibrils = drug target
 - GSK2315698 depletes SAP in plasma (leaves some bound to fibrils)
 - GSK2398852 anti-SAP mAb binds to SAP
 - complement and macrophage clearance of amyloid restores organ function enabling treatment of underlying cause



Case study: GSK2315698 (small molecule SAP* depleter) and GSK2398852 (anti-SAP mAb)

- The anti-SAP approach has the potential to improve functional status and therefore the ability to tolerate and receive other therapies addressing the underlying production of amyloidforming protein
- Anti-SAP treatment taken together with therapy addressing AL production has the potential to substantially alter prognosis





Challenges of traditional licensing approach

Systemic amyloidosis:

- A clearly defined condition, BUT clinical manifestations and natural history show great diversity:
 - AL, AA, ATTR
 - Differing patterns organ involvement
 - Varying stages of disease at presentation
- Several approaches for clinical development:
 - underlying condition VS organ involvement
- The obligate co-administration of both developmental medicines further complicates the traditional development



Adaptive licensing proposed approach

- Initially studying a subgroup of patients with AL amyloidosis
 - AL represents ~80% of systemic amyloidosis patients (prev 1-5/10000)
- Possible to select initial patient population by clinical stage
- Propose adaptive licensing based on a robust clinically meaningful surrogate in this restricted population
 - commitment to follow up to investigate how surrogate translates into long term survival
- Defined nature of target population would allow for a focussed initial indication
 - treatment in specialist centres would facilitate this approach
- This population would provide solid evidence to guide further development



Adaptive licensing proposed approach

- Single Phase II and III trial using validated surrogate markers
- Named Patient Registry follow-up for safety and to survival/PFS clinical endpoint
- Retreatment data
- New patient registry
- Access limited to specialist treatment centres and specific diagnostic criteria
- Commence Phase III in other subpopulations as results dictate



The EMA pilot experience

- Pilot Project launched in March 2014
- Our programme selected as a pilot
- Meetings of the Adaptive Licensing Discussion Group (ALDG)
- The discussions cannot be considered a formal advice: there is no in-depth discussion of scientific aspects, which is within the remit of a formal SA/PA procedure. It is a high-level early dialogue led by the SAWP chair and assigned coordinators to review the plausibility of the development plan and guide to the next –more formal - regulatory steps
- An HTA/SA parallel advice, shaped by this initial discussion
- Stakeholders to be involved in the procedure should be identified by the Applicant.



Challenges of Adaptive Licensing

- Managing off-label use
- Communicating benefits and risks to prescribers and patients
- Withdrawing indications or products
- Ensuring a predictable and attractive NPV
- Securing market access at a price that reflects the potential value
- Investment post-launch
- Length of product life
- Not always adapted for rare diseases



Personal views on Adaptive Licensing

- Real potential to streamline drug development and access for patients.
- Enables early alignment of perspectives :Regulators, Patient Experts, Clinicians, HTA, Sponsor
- Leads to early access and knowledge acquisition
- May result in more sustainable development: lower costs; earlier revenue generation

However...

- Misunderstanding on level of guidance companies may receive
- Advice is not binding
- Concept not universally accepted
- HTA and pricing still disconnected
- Any lessons to learn from FDA Breakthrough designation approach?



Thank you for your attention!