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Innovation Forum in Pharmaceutical Process

Market Access considerations in asset valuations

Future and current business

28/10/15

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Topics

- Brief introduction
- Health economics rationale
 - Current landscape
 - HE introduction
 - Meta-analysis
 - Value-of-information
 - Real World Data
 - Pricing
- Issues affecting reimbursement
- Checklist

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Introduction

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Mapi

- Founded 41 Years Ago
- Pioneered many of the practices that are now standard in the industry:
 - Patient centered research-PROs and Linguistic Validation
 - Acquired Registrat in 2010—pioneered registries
 - Acquired several of Optum's businesses in Dec 2014 (RWE, HEOR, SRS)
 - Established Mapi Research Trust—non profit information clearing house for researchers



PATIENT-CENTE

OVATING

SINCE



Mapi's Patient-Centered Global Research Service



Real World Strategy & Analytics

- Identification of evidence required for all key stakeholders
- Market access challenges for specialty products and rare diseases
- Stakeholder Insights
- Evidence that supports value story and market access strategy
- Communication & evidence generation
- Real-world data (retrospective, prospective) & analytics
- Literature review / metaanalyses



Real World Evidence

- IV & Observational Studies
- Registries
- Outcomes
- REMS/EU-RMPs
- Safety Surveillance/PASS
- Expanded Access
- Direct To Patients (ProClinica)
- Patient Recruitment
- Patient Retention and Engagement
- Patient Insights
- Retrospective Chart Research



Language Services

- Cultural & Linguistic Validation
- Translatability Assessment
- Research Materials Localization
- eCOA screen shot reviews



Strategic Regulatory Services

- Leads clients through the drug registration process
- Advises clients subsequent to approval to maintain drug compliance
- Provides native knowledge through the regulatory process
- Provides postapproval pharmacovigilance and clinical auditing

Mapi Research Trust

- PRO & PRM Newsletters
- PROQOLID and PROLabels
- COA Questionnaire Licensing
- COA Questionnaire Distribution
- Data Extractions on COA research and endpoints
- Instrument Author Collaboration



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Situational analysis

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Current situation in the pharma market

- Products developed without regard to their commercialisation
- 2009 to 2012, ~ \$75b will evaporate as products go generic
- Clinical development programmes insufficiently productive
- Development programmes are becoming increasingly expensive (~ \$1.2bn)
- Many new products targeted to narrow patient populations
- New products sourced from smaller companies, licensed in at various stages of development
- Premium-price is still expected
- Effective patent life time is decreasing

Reality for individuals in licencing

- More complex deals as owners increasingly want to retain some level of control or license out to several partners
- Increasing risk as products get licensed in earlier affecting:
 - Deal valuation
 - Cost of additional trials
 - Likelihood of reimbursement
 - Investments (total value)
- Increasing regulatory demands
- More stringent payer requirements
- Pricing pressures due to complex reimbursement and payer environment

Complex payer landscape in Europe Drug expenditure outpaces GDP in high income countries with limited budgets





Different Payer archetypes in EU

- Market Access Clinical Assessment- (e.g. TC, AIFA)
- HTA groups/bodies –(e.g. NICE, IQWIG, HAS)
- Price & Reimbursement agencies (e.g. AIFA, Spain MOH, CEPS, Tenders)
- Budget Holders (Regional/sub-regional) (e.g. Regional Health Authorities, Primary Care Trusts, Spain /Italy regions)
- Reimbursement Funds (e.g. Sickfunds, Mutuelles, ZIN)



Payers ask questions in addition to those asked by regulators



Answers to these questions are (often) provided by Health Economic evidence



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Evidence development

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Cost-effectiveness analysis: value-for-money

 Cost-effectiveness analysis is a structured way of analysing *costs* and *effects* in an attempt to answer the question:

Does the drug provide value for money compared to the standard of care?

- Models developed in using *Excel* or other software
- Comparing new intervention to current standard of care
- Cornerstone of most reimbursement submissions
- Often expressed as cost per quality-adjusted life years gained or cost per life year gained

Budget impact modelling: affordability

- Often requested to complement cost-effectiveness analysis
- CE analysis measures 'value-for-money'
- Budget impact analysis estimates the actual cost of implementing a new treatment within a specific population

An intervention may be considered cost-effective but it may still be unaffordable in specific circumstances or health care settings

- Takes into account both the <u>number of people</u> <u>eligible for treatment</u> and the <u>expected rate of</u> <u>uptake in that population (market share)</u>
- A new treatment with a relatively high ICER may have a relatively low budget impact due to a small population

Significant differences between CEA and BIM Budget impact analysis vs. CE analysis

	CEA	BIM
Objective	Is it value for money?	Can the system afford it?
Framework	Comparisons of two strategies	"World with" vs. "World without"
Level of analysis	Individuals or groups of given characteristics	Covered population
Primary emphasis	Incremental cost and incremental effectiveness	Incremental costs and cost offsets
Market share over time	Usually ignored	Usually considered
Time horizon	Long enough for all relevant outcomes	Typically matched to budget cycle
Budget impact and cost-effectiveness analysis are data intensive and require local data from published sources		

Meta-analysis to compare all evidence of efficacy and safety

- Requested by most HTA agencies
- Ensure that clinical data for economic evidence include all available data and all <u>relevant</u> comparators
- Avoids "cherry picking" of evidence
- More robust estimates of efficacy and safety



Hedges' g and 95% CI



Meta-analysis – direct comparison

Direct meta-analysis

- All evidence involves the same treatment
- Identification of evidence using a systematic literature review
- Pooling of evidence
 - Several methods but most used in inverted variance method and Bucher methods



Meta-analysis – indirect comparison

- Using one common comparator
- All evidence will come from a systematic literature review
- Valuable method if you have a few treatments (up to 3) that need to be synthesised and compared

Evidence	Direct comparison	Indirect comparison
Trial 1: Drug A vs. placebo Trial 2: Drug A vs. placebo	Pairwise analysis	analysis
Trial 3: Drug B vs. placebo Trial 4: Drug A vs. placebo	Drug Alvsi placebo	Drug A vs. Drug B
Trial 5: Drug B vs. placebo		Drug A vs. Drug C
Trial 6: Drub B vs. placebo Trial 7: Drug C vs. placebo	Drug B vs. placebo	Drug B vs. Drug C
Trial 8: Drug C vs. placebo 	Drug C vs. placebo	

Meta-analysis: network meta-analysis

- Network meta-analysis (NMA) s is a generalisation of standard pair-wise meta-analysis
- Used when comparing multiple treatment options (3 or more)
- Mixture of comparators
- Ideally a closed network is used



The cost and value of future research - VOI

- For licensed-in assets in Ph I or Ph II/b additional clinical evidence will be needed
- To assess how much these trial should cost -Value-of-Information (VOI) analysis
- How much to spend on add evidence? Dependent of effect on:
 - Efficacy and safety
 - Probability of reimbursement
 - Profitability
- Bayesian statistical analyses; based on what "perfect information" adds in decision making process

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Real world data

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Real World Data (RWD)

- RWD the latest trend in pharma
- RWD include any data that are not captured within the context of a clinical trial
- RWD are considered "big data" when vast in quantity and multiple sources are combined
- RWD is complex, diverse and can be obtained (sometimes) within minimal time
- Can provide information on substantial number of research questions
- Methodological considerations



RWD: Sources and outcomes

- RWD can be used for a multitude of purposes
- In licencing can provide information on unmet need or population size



Late phase studies

Registries

Pragmatic clinical trials

Claims / admin databases

Health surveys

EMRs

Medical chart reviews



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Pricing archetypes that you can encounter		
Free pricing	UK (sort of)	
Value-based pricing	(UK DE FR) pricing so that the product's price is in line with its value	
Internal reference priding	(NL DE BE DK FR IT PT ES) – where products in the same reference category have the same price; mostly for non-innovative products	
International reference pricing	All Eur countries except DE UK SE DK	
Negotiations	Possible at the national and regional/local level. Happens in most countries for hospital products but at the national/regional level in UK DE, IT, ES	

Example of international price comparisons – France, Spain, Italy

- Complex and interlinked
- Continually changing





Aspects to consider in price setting

Launch sequence	 Will determine ultimate price due to reference pricing To be determined based on items below Complex and subject to uncertainty
Time to reimbursement	 Substantial differences between countries – may interfere with launch sequence and thus price Requires in-depth local knowledge Can depend on price level
Price corridor	 Range between which all prices in all countries should fall; Considers int. reference pricing and launch sequences; Developed by pricing department If price fall outside this corridor then consider not launching

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Issues affecting reimbursement

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What are the challenges that can effect reimbursement?



Contrasting perspectives

Regulators

- Evaluates efficacy vs. placebo
- Rewards areas of high unmet need (e.g. orphan drugs)
- Increasing focus on comparison against other therapeutic options
- Unmet medical need

Payers

- Evaluate efficacy vs. comparators
- Concerned with innovation
- Concerned with burden of illness
- Concerned with unmet need
- Value-for-money

Manufacturers

- Utilise pipeline
- Return on investment
- Focus on burden of illness
- Effective patent life

*Copy and paste this text box to enter notations/source information. 7pt type. Aligned to bottom. No need to move or resize this box.

It is hard to be considered innovative

60%

50%

40%

30%

20%

10%

0%

As license

29%

Restricted

15%

No routine use



•

2%

Not licensed

benefit

and III

No difference since then HCV treatments which have curative potential: ASMR II

(significant) therapeutic



(Premium) Pricing considerations that may affect reimbursement

Efficacy does not warrant high price (non-inferiority)	Comparator is a generic
--	-------------------------

Product is a me-too

High price will results in reimbursement delays

It will be severely restricted....



Challenges related to efficacy that may affect reimbursement





Issues related to safety which may affect reimbursement





Is your product innovative?

Once daily/sustained release	New administration route	New treatment pathway
Uses a device	Novel process	Patient preferences

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Possible solutions and checklist

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What you can do.....early scientific advice

- Licensors may ask licensees to provide an overview of HE evidence and likelihood of reimbursement as part of the due diligence
- Early assessment is now possible for both regulatory and Health Economic evidence
 - No panacea
 - No guarantee of reimbursement but will provide early indication of where issues lie and what can be done to resolve them



Overview of early scientific advice

Agency	Type of advice
EMA-HTA parallel/joint scientific advice	EMA and EUNetHTA agencies
SEED multi-HTA early dialogue	14 HTA bodies from the Belgium, Denmark, France, Germany, Hungary, Ireland, Italy, Netherlands, Spain, UK
NICE Scientific advice	HTA-only advice; In parallel with EMA or MHRA
G-BA consultation	HTA-only advice (no economic advice), to be done in parallel with EMA
HAS early encounter	HTA-only advice; to be carried out in parallel with EMA

Check list for health economic evidence when assessing reimbursability potential

- Critical assessment of (relative) efficacy & safety data
 - Understanding of future needs for clinical trials and ideal design
 - Maximum spend on additional data (VOI analysis)
 - Mini landscape assessment

- Understanding of main competitors
- Benefits of current treatment over SOC
- Assessment of possible innovation
- HE evidence summary (prelim)
- Probability of reimbursement at highest price
- Early scientific advice

Thoughts or questions?





Thank You

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