Management of regulatory affairs during mergers and acquisitions

A presentation by Jonathan Rousell, Teva Pharmaceuticals
Learning Outcomes

- Organisation of the RA department & functions
- Management of M&A projects
- Commercial rationalization - optimisation of portfolio
- Regulatory contribution to corporate strategy
- RA support & Manufacturing rationalisation
In this presentation we will cover

Main drivers behind M&A
RA involvement at the various phases
Impact to regulatory affairs departments
Practical experiences
Demerger/divestment considerations
People and other key assets
M&A within the pharma sector is back in the news....

- Actavis/Forest for $25bn
- Sun Pharma/Ranbaxy $3.2bn
- GSK/Novartis
  - Oncology pipeline ($14bn)
  - Vaccine business ($7bn)
  - JV for consumer healthcare
- Valeant/Allergan for $46bn (???)
- Pfizer/AstraZeneca for >$100bn (???)

- Many other companies searching for targets.....
Drivers behind M&A

Internal and external/environmental factors

• Economies of scale drove M&A in the 90s
• Last 10 years mainly driven by pricing pressure, expiring patents and moves towards personalised healthcare

Some common drivers:

• Building market share
• Bolstering R&D pipeline
• Diversification to a more balanced business model
• Global footprint and emerging markets growth
  • Doubling in number of acquisitions targeting emerging markets*
• Overheads/costs
  • Divestment of facilities and outsourcing of R&D

*By number of acquisitions in emerging markets: 20% 2008-1012 vs. 10.9% 2003-2007
Teva has a long history of M&A activity
Each deal is unique

| **Cephalon** | Expansion of branded business  
| | Sale of assets in CH and Asia, LatAm and MENA business |
| **ratiopharm** | Development of EU generics business |
| **PGT Healthcare** | Joint venture with Proctor and Gambol  
| | Development of a global OTC franchise |
| **NuPathe** | Specific extension of portfolio |
Content

Main drivers behind M&A

RA involvement at the various phases

Impact to regulatory affairs departments

Practical experiences

Demerger/divestment considerations

People and other key assets
Key players in any M&A

HR

Legal

Regulatory Affairs

Portfolio

Corporate Business Dev.

Operations

S&M

R&D
May begin many months before any announcement

Involvement will depend on the goal of the acquisition

- Products/market share/geographical footprint/pipeline
- People/knowhow/technology

Give input/general advice on regional regulatory aspects

Ask the right questions

Good due diligence is a mix of “trust + verification”
Typically information is hosted in a Virtual Data Room (VDR)

- May be significant amounts of information to review

**Regulatory affairs interest will centre around**

- Company/department structure
  - Location and geographical spread of RA staff
  - Organigrams/qualifications and experience of staff
  - Reliance on internal resource vs. local agents/consultants

- Portfolio
  - Authorised/submitted products by market
  - Relationship of MAs with 3rd parties
  - Volume of work (new MAAs, post approval changes, renewals etc)
  - Assurance on compliance of approved products
Pre-closure, both companies continue to operate as independent commercial enterprises

Still strictly limited interaction due to competition law considerations

- Time to do your home work
- Further exchange of public domain and general information
  - Approved products
  - Corporate structure
  - S&M information
- Some kick off discussions to discuss general landscape, map processes etc
Potential to have a major impact on regulatory department workload

Many drivers of change

- Commercial
- Operations
- Organisation and structure etc

Period of uncertainty for workforce

Strong leadership is critical to success
Major steps in M&A
Impact on regulatory affairs

Corporate due diligence
Agreement
Negotiations /competition clearance
Deal Close
Operational integration

RA effort

Time

Major involvement begins post-closure, but could begin much earlier........
Main drivers behind M&A
RA involvement at the various phases
**Impact to regulatory affairs departments**
Practical experiences
Demerger/divestment considerations
People and other key assets
**With M&A comes complexity**

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<tr>
<th>Sales</th>
<th>Net Income*</th>
<th>Operations</th>
<th>Plants</th>
<th>Employees**</th>
<th>Market Cap**</th>
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*Net income in billions of dollars.
**Employees and Market Cap in thousands and billions of dollars.
High level decisions that will impact regulatory affairs

**Portfolio management**
- Pipeline as well as approved products
- What to keep, cancel or divest
- How to brand/rebrand it

**Geographical footprint**
- Access to/expansion into new markets
- Consolidation and divestment of existing markets

**Structure, systems and people**
- Infrastructure (facilities, product lines etc)
- Consolidation of systems (IT, financial etc)
- Displacement of people and knowhow
Decision points impacting RA
Development pipeline

**Review of pipeline is a good place to start**

Â Review pipeline and commercial interest
  - What is needed
  - Where is there overlap?
  - Are there opportunities to modify the program or broaden scope?

Â Specialists/specific technologies
  - Potential new molecules for acquired specific technologies?

Â Understand development risks, milestones and timelines
  - Does it still make sense to continue in the new merger company
  - Review risk and probability of successful registration

Â Are the development plans suitable all markets in the new company?
Decision points impacting RA
Existing products

More complexity and potential to have major impact on RA

Commercial drivers
- Current market coverage and interest
- Product portfolio overlap
- Reimbursement/selling price/cost of goods
- Trade dress and branding considerations
- MA holder changes

Geographical footprint
- Suitability of existing marketing authorisations for new registrations
- Interrelationship between products in different regions
Decision points impacting RA
Approved products

**Operations and supply chain decisions**
- Where is the product coming from and will the long term supply be from elsewhere?
- Can the existing site support of new commercial volumes?
- Need to invest in infrastructure?
- Impact of moving product manufacture, packaging, release etc

**Legal/regulatory constraints**
- Contractual restraints with third parties to consider
  - Supply agreements & regulatory services
- Forced divestment of some of the portfolio
- Suitability of data package for broadening market coverage
- Dependency of MAs to other markets (CPPs etc)
Decision points impacting RA
Systems and support

• IT systems
  - May be possible to run in parallel but long term need to harmonise to one system for compliance reasons

• Document management system
  - Dependency of manufacturing site systems
  - Dealing with legacy documentation

• Regulatory lifecycle databases
  - Data validated?
  - Migration and data integrity into single system
  - Interfaces with other systems
  - EVPRM reporting

• Pharmacovigilance system/QP
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Demerger/divestment considerations
People and other key assets
Portfolio optimisation
Case study

**Company A**
- >15,000 EU MAs
- Strong global presence
- Mainly in house manufacture

**Company B**
- >8000 EU MAs
- Strong regional presence
- Mainly 3rd party supply

Large overlapping EU portfolio (>150K SKUs)
Multiple formulations/parallel supply chains

Reduce redundancy in portfolio
Supply markets with best quality/cost
1 formulation, 1 manufacturing site
Portfolio optimisation
Project goal

Targeted >100 products (INN/Dosage Form) to:
  Â Remove product duplication
  Â Fill portfolio gaps
  Â Optimise formulation including API changes
  Â If necessary switch the formulation within the same MA
  Â In parallel update file to....
    Â Rebrand, update PI, product name, change MAH, other CMC updates etc etc.

Bring annual savings of >$130M & improve

Simplify supply chain and improve product quality
Portfolio optimisation
Typically multiple changes in CMC package

**API changes**
- Supplier/site of manufacture
- Route of synthesis

**Finished product**
- Manufacturing site
  - Bulk product, packaging
  - QC testing, Importation, BRS
- Manufacturing process and batch size
- Analytical methods updates
- Final packing
  - Immediate and secondary packaging changes
  - Pack configuration and size

Typically 30, but up to 80 individual variations in one grouping!!!!
## Portfolio optimisation
### Breaking down the complexity

<table>
<thead>
<tr>
<th>Objective</th>
<th>Output metrics</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td><strong>Top level assessment</strong></td>
<td></td>
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<tr>
<td>Learn top level plan</td>
<td>PM/Operations blueprint</td>
<td>Weeks</td>
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<tr>
<td>Regulatory overview</td>
<td>Basic license information</td>
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<tr>
<td>Identify major limitations</td>
<td>Top level file and supply contract gap analysis</td>
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<tr>
<td><strong>Prepare detailed plan per at INN level</strong></td>
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<tr>
<td>Determine plan at country and formulation level</td>
<td>Detailed gap analysis and plan by formulation/by market</td>
<td>Months</td>
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<tr>
<td>Detailed analysis of data requirements and costs</td>
<td>Labour and cost analysis for individual and overall change</td>
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<tr>
<td><strong>Execution</strong></td>
<td></td>
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<td>Variation package preparation &amp; submission</td>
<td>Variation submission and approval</td>
<td>Years</td>
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<tr>
<td>New MAA submissions</td>
<td>New MAAs</td>
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<tr>
<td>Simplification</td>
<td>MA cancellations</td>
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</table>
Portfolio optimisation
Milestones and decision points

MS 1: Top level feasibility assessment of dossier
MS 2: Detailed gap and regulatory costing analysis
MS 3: Final execution step
Go/No Go
MS 4: Generate data and regulatory documents/submit
MS 5: Change approved and implemented

~600 Dossiers
~330
~250
~175
~80
Portfolio optimisation
Hurdles and bottlenecks

Common inhibitors to executing the plan

**Dossiers no longer “state of the art”**

- NtA format conversions
- Variations planned or pending
- Renewals pending

**Real example (2011 review)**

- Dossier approved end-2008
- Product sold in some markets
- Major change to add API supplier in 2009
- Administrative changes

- Dossier review and gap analysis identified **16 CMC variations** need before submission to new markets plus administrative updates
Other restraining factors

- Contractual/legal factors
- Pending post-approval commitments
- Data availability
- New data generation
- Agency resource and willingness to support you
- Unclear or moving project plan
- Internal resource

Critical to have strong project management and senior management support
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**Demerger/divestment considerations**

People and other key assets
Demerger and divestment

May be commercially motivated or enforced
- Competition authority requirement

May include many facets
- Intellectual property rights
- MAs and products
- Sites/facilities
- People

Considerations
- Forced divestment may come with strict time lines
- Regulatory services to support divestment and for future supply
- Support of 3rd countries/link between divested/non-divested MAs
BD wish to divest portfolio in some but not all regions.

CPPs in CH and PT support international markets. How to manage both needs?
**Demerger and divestment**

**Case study**

**CH situation**
1. Transfer MA if no interest to EU or International business
2. Gain co-marketing duplicate. Later de-link MAs to give autonomy to 3rd party

**PT situation**
1. Transfer MA if no interest
2. No duplicate MA possible due to age of dossier. Transfer MA to partner and license back rights to allow sales in PT as well as supporting international business
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People and other key assets
M&A activity creates extra work for RA, but change creates uncertainty
People are key assets in any organisation

M&A is a great opportunity to combine the best from both organisations

Must be conscious of differences and commonalities

• Listen and don’t assume!!
• Mindsets and expectations may be different
• Don’t underestimate cultural aspects
  • Corporate identity
  • Corporate culture
  • Local regional identity
• Be precise in communication
• Try to speak the same language

Get the right management team in place as early as possible to drive the process
People

Human Resource have a key role to play

Are roles and responsibilities equivalent in the two companies?

- Do equivalent positions exist?
- What would be the impact
- Further clarify reporting structures, roles and responsibilities

How many people do you need and in which roles?

- To manage existing workload
- To manage the peak of regulatory change activity
- To manage workload in the future integrated organisation

Retaining and developing key talent should be an objective for any M&A
Keep people engaged and motivated during transition of workload

- Possible for internal transfers?
- Understand local labour laws
- Financial incentives to retain staff?

What transitional arrangements are required?

- Need to bring in short term support?
- How long for?
- Financial incentives to retain staff?

Need clear project goals to ensure that there is effective hand over in a time frame acceptable to senior management
Summary

- M&A is a fact of life in the pharma sector
- No two deals are the same....
- But most, if not all, will create work for the regulatory affairs department...
- With the potential to create a huge impact
- Need to see the bigger picture in order to effectively plan and execute the change
- People are the key assets in any organisation and handling your human resources is critical to success
QUESTIONS?
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