



Tips on Getting Pharma's Attention -- The Big Pharma Perspective

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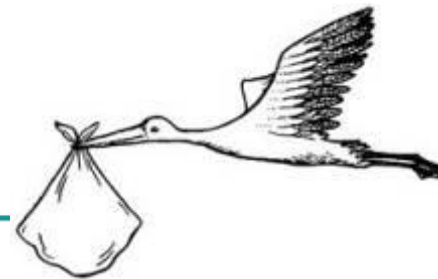
Forward Looking Statement

This presentation contains "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements are based on management's current expectations and involve risks and uncertainties, which may cause results to differ materially from those set forth in the statements. The forward-looking statements may include statements regarding product development, product potential or financial performance. No forward-looking statement can be guaranteed and actual results may differ materially from those projected. Merck undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events, or otherwise. Forward-looking statements in this presentation should be evaluated together with the many uncertainties that affect Merck's business, particularly those mentioned in the risk factors and cautionary statements in Item 1A of Merck's Form 10-K for the year ended Dec. 31, 2008, and in any risk factors or cautionary statements contained in the Company's periodic reports on Form 10-Q or current reports on Form 8-K, which the Company incorporates by reference.

Outline

- Partnering is alive and well
- Fierce competition for good licensing opportunities
- Tips for getting pharma's attention with your opportunity
- Tips for a successful negotiation

Where do “Blockbusters” come from?



Of the \$1BN *p.a.*+ drugs of the past decade...

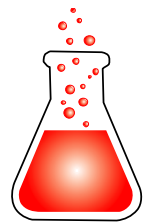
- 60% of innovator small molecules
- 82% of innovator biologics
- 65% of follow on small molecules
- 62% of follow on biologics

Originated in a company other than the company commercializing

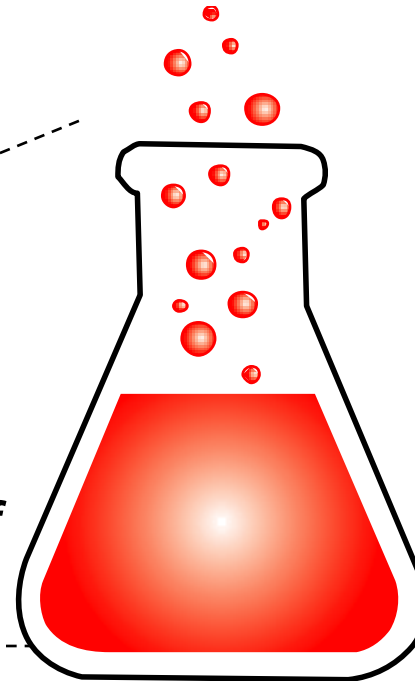
- 66% in total of the blockbuster molecules had a change of ownership in development

Access to External Research Extends Research Capacity

Merck scientists are charged with building a “virtual lab” by mounting the best scientific program in their area, whether it comes from internal research, external collaborations or both



99% of the world's biomedical research takes place outside of our research labs



- ***Other pharma***
- ***Biotechs***
- ***Academia***
- ***Institutions***

Fierce competition for licensing candidates

- In 2000, the vast majority of companies looking to out-license had fewer than 3 interested companies in a given compound or technology
- By 2005, close to half reported as many as 8 interested companies
- Today, our experience shows competition has further tightened
- Merck must compete with not only big pharma for these deals, but also mid-size pharma and bio-techs growing their businesses



- Merck will only beat out the competition by:

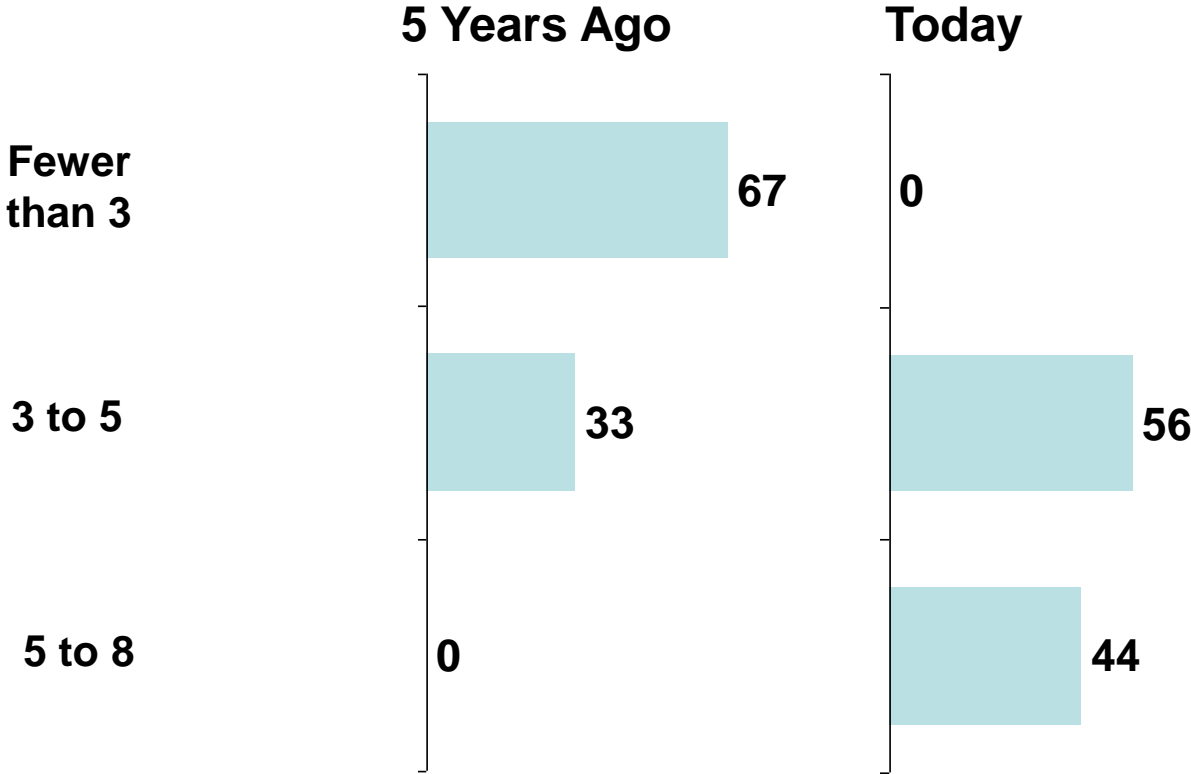
- Putting our best foot forward and pulling out all of the stops
- Negotiating the best deal for us and our future partner by being

FAST, FLEXIBLE and CREATIVE

Competition for deals is increasing due to scarcity of high quality candidates

Competitors for a given licensing deal

Percent of respondents



Source: McKinsey survey

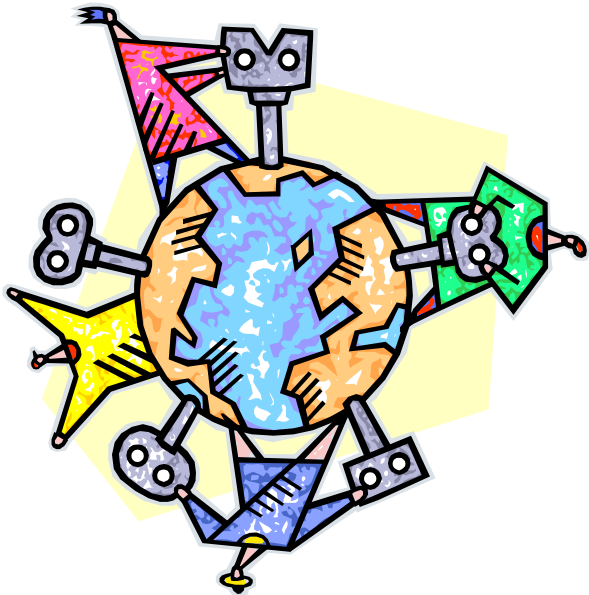


Pharma pursues partnerships at all stages

- Because there is a high risk of failure in drug discovery, multiple programs are critical to increase overall probability of success
- The creation of alliances with both companies and academia worldwide are critical for continued success
 - Alliances at all stages of discovery and development complement an innovative and therapeutically diverse pipeline
 - Intense competition exists for high-quality, late-stage opportunities
 - Those pharma with strong internal research capabilities are at an advantage when competing for early-stage partnerships

General Tips for Submitting Opportunities to Pharma

- **Understand each company's strategy and needs**
 - Unlikely your opportunity will move the company's strategy
 - Exceptions could include late-stage opportunities or the need to fill white space
 - Look for gaps you can fill within a pharma's strategy
 - Ask for specific guidance on what the company is looking for



At Merck you may contact your regionally based-scientific scout who are senior level scientists closely linked both to the local subsidiary and to HQ.

For Academic Collaborations, Merck's Approach is Driven by Strategy



- Defining goals, delivering against a work plan, and respecting intellectual property are the keys to a successful collaboration.
- Well defined goals are critical
 - Objective to produce new knowledge advancing research/product development
 - May be strategic (“breakthrough” science) or tactical (an accepted approach, but elegantly executed)
- Funding is based on the work plan, not for general lab support
 - Milestones / Renewal based on delivering on objectives
- Intellectual property is important, but not the whole story
 - Generation of actionable knowledge is the key objective
 - License to pre-existing IP sometimes, but not always, needed
 - Merck requires, minimally, an exclusive option period to license new IP arising from Sponsored Research
- Merck is mindful of the university’s mission and obligations
 - We will not try to ‘force-fit’ a structure that conflicts with university policy
 - Need to build additional vehicles for exceptional opportunities

To Help Licensors Align with Strategy, Merck Publishes its Areas of Interest

- Our Areas of Interest are updated twice each year and posted on our website!
- For each therapeutic area, we list the Mechanism of Actions that we are interested in and those that we are not.
- Late-stage clinical compounds (phase 2b or beyond) are of interest in any therapeutic area.
- Visit us at: www.merck.com/licensing to learn more!

Where patients come first **MERCK**

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Patients & Caregivers | Healthcare Professionals | Veterinarians

Areas of Interest

COMBINING OUR STRENGTHS
SHARING OUR SUCCESSSES

YOU'VE DISCOVERED SOMETHING SIGNIFICANT

At Merck, we share your passion for developing novel, breakthrough products. You've discovered something significant, and we are inspired by your innovation. Our philosophy is to bring medical excellence to patients through first-in-class/best-in-class products for unmet medical needs.

We are seeking partners for:

- New Chemical Entities (NCEs) and New Molecular Entities (NMEs) as product candidates for development.
- Basic research collaborations
- Technologies that will enhance the productivity of our research laboratories

What we are looking for in a licensing candidate:

We welcome viable compounds in development, targets with proof of concept (or a testable hypothesis), and technologies that provide a competitive advantage. We are most interested in compounds that have large market potential for unmet medical needs, and that can be developed rapidly. An attractive compound would have selectivity, potency, and demonstrated mechanism of action, preliminary toxicology data, oral availability, and a good half-life for once-daily administration. We also look for strong intellectual property protection on the target and the molecule.

What we are looking for in a proposal:

When contacting us about your discovery, we ask that you provide a clear, concise, nonconfidential data package for review, and that you highlight the advantages of your discovery and provide a perspective on its value within the competitive landscape. In preparing the package, it may be helpful to consider that our review process is centralized and includes review by the appropriate experts from basic biology, chemistry, preclinical, clinical, marketing, and patent.

We look forward to hearing from you about your discovery. Together we can translate cutting-edge science into breakthrough medicine.

*Software to view files presented in PDF or SWF format is available at no charge through the Adobe Flash site. [Get Adobe Flash Player](#)

REGIONAL CONTACTS

We have regional contacts in The Americas, Europe, Asia, Middle East and Africa. [Click here](#) to meet them.

SUBMIT YOUR DISCOVERY

We are serious about our commitment to strategic alliances. Our goal is to work together with our partners for turning scientific breakthroughs into medicines that make a difference.

[Submit your discovery](#)

SIRNA THERAPEUTICS

Sirna Therapeutics, a wholly owned subsidiary of Merck & Co. Inc., is realizing the potential of siRNA as a completely novel approach to drug discovery and development that may ultimately lead to an entirely new class of therapeutic products to treat human diseases.

[Visit www.Sirna.com](#)

WHAT OUR PARTNERS ARE SAYING

"We are proud to have established this collaboration with Merck because their researchers have helped to define the therapeutic potential of targeting mGluR4 to treat Parkinson's disease. This is another important validation of our leadership in allosteric modulation."

— Vincent Matta, CEO of Adolor

COMBINING OUR STRENGTHS
SHARING OUR SUCCESSSES

MERCK & CO., INC.
Whitehouse Station, N.J., U.S.A.

Guiding Principles for an Initial Submission to Pharma

- **Provide a clear, concise, non-confidential scientific data package**
 - Your goal is to provide enough information (containing actual data) to help the company representative determine if an offering is within strategy/scope and therefore whether an in-depth review is warranted
 - Understandable by a competent scientist, not necessarily an expert in the field
 - Anticipate obvious questions and answer them in advance
 - Focus on how the opportunity provides a superior solution or answers an unmet need, compared with the state of the art
 - Include links to published matter (papers, patents)
- **Describe what additional data are readily available for an in-depth review**

Desirable Attributes of a *Therapeutic Candidate*

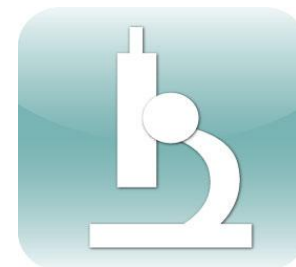
- **Satisfies an unmet medical need**
- **Novel target**
 - Is it validated?
 - Will the molecule be first in class? Best in class?
- **Solid IP position**
 - On the target
 - Freedom to operate and methods of treatment
 - On the molecule
 - Composition, synthetic routes, polymorphs, etc
- **Potential for changing standard of care**
- **Biomarker strategy is a plus**

Demonstrable Attributes of an Attractive Therapeutic Candidate

- **Potency** *in-vitro* and *in-vivo*
- **Mechanism** -- evidence that agent “hits the target” in animals
 - Minimally a pharmacodynamic assay
 - Ideally, activity in a validated animal model
- **Selectivity** vs. a large range of receptors, enzymes, ion channels
- Predictable **pharmacokinetics** and proper **dose** selection
- Preliminary **tolerability** and **toxicology** data
- Oral **bioavailability** (for small molecules)
- Good **half-life** for biologics or small molecules
- Licensor understands the **competitive environment** and can describe strengths and potential weaknesses of the molecule
- **Clinical efficacy** if molecule is sufficiently advanced
- Understanding of the **regulatory** environment

What does Pharma Look for in a *Platform Technology*?

- Incremental improvements to existing capabilities
 - Faster, Better, Cheaper
- New capabilities that confer a competitive advantage or close a gap to a competitor
 - Novel, robust methods to identify and validate targets
 - Formulation and delivery technologies
 - Improved manufacturing methods (chemical or biologics)
 - New therapeutic modalities
 - » RNAi is a recent example
- Tools to help scientists work smarter
 - Automation at all levels
 - Data management, interrogation, and sharing
- Some technologies can be pre-competitive and still be very interesting

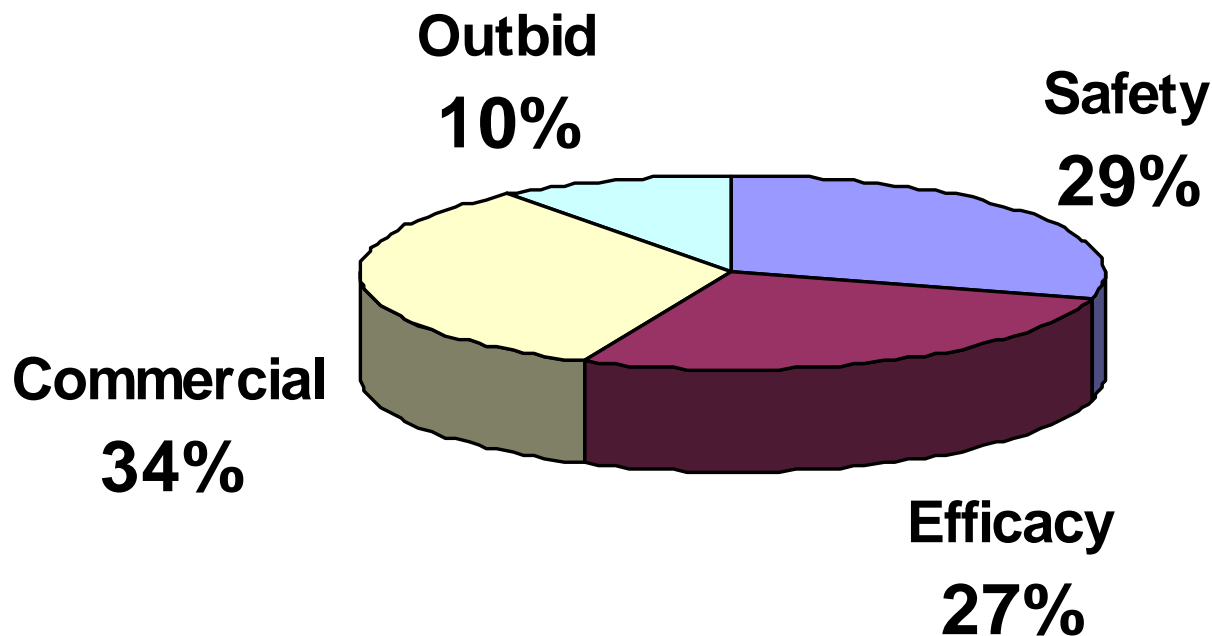


Who is your Audience at a Big Company?

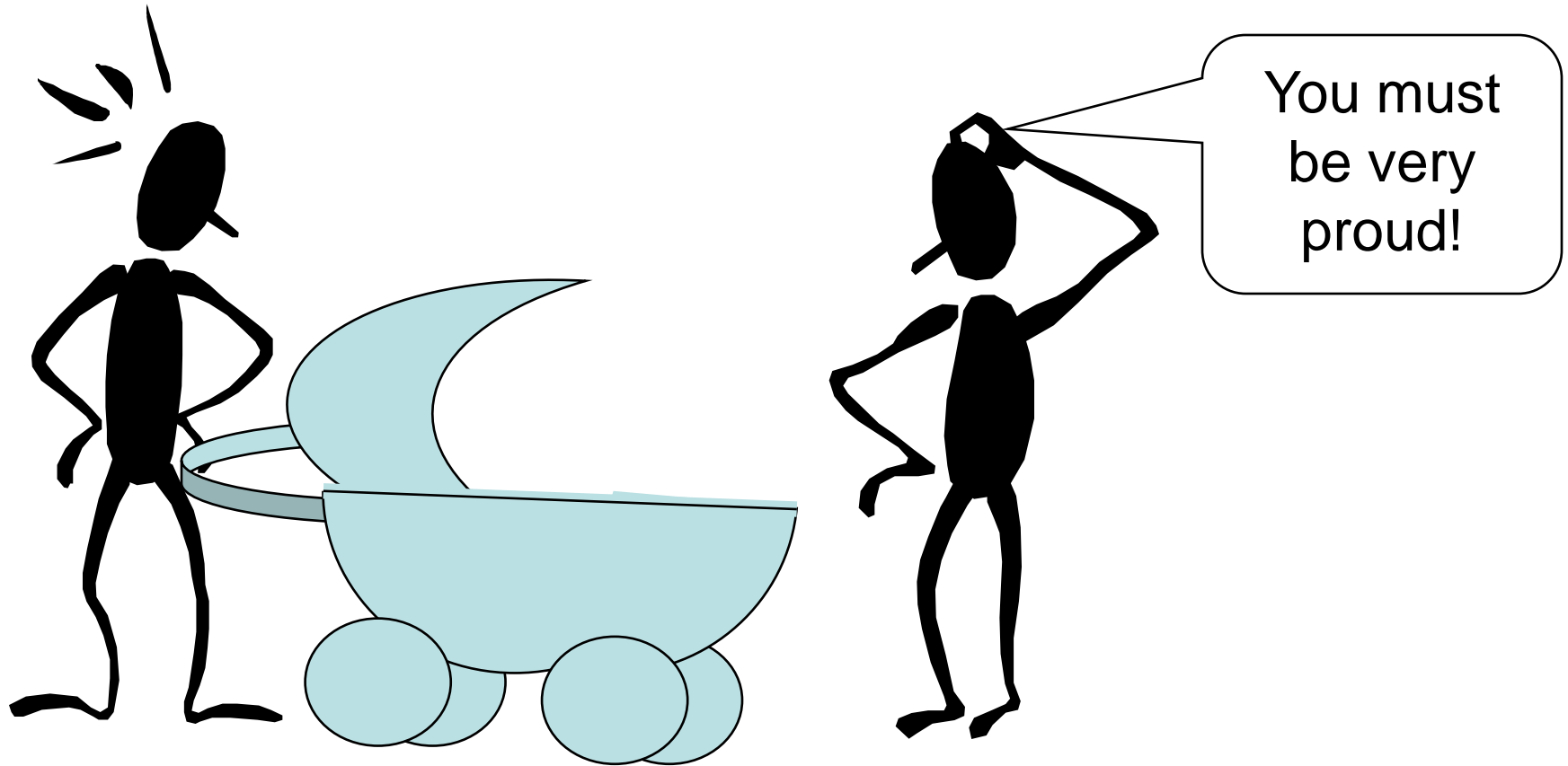
- 1st step: Licensing professional
 - Responsible for initial scientific and strategy assessment
 - Needs enough info to decide if suitable for review by internal experts
 - Can say “no” but is not the final decision maker who can say “yes”
- 2nd step: Therapeutic area head (for targets/ therapeutics) or Functional area head (for platform technologies) and their staff
 - Subject matter experts
 - Responsible for executing on strategy
 - Thinking about a portfolio of projects

Compound Deals that Completed Due Diligence and Did Not Close - 2005 through 2008

Why Deals Did Not Close:



Pharma Charm School - *Never forget... for the biotech, their compound is their "baby"*



Beauty is in the eye of the beholder!

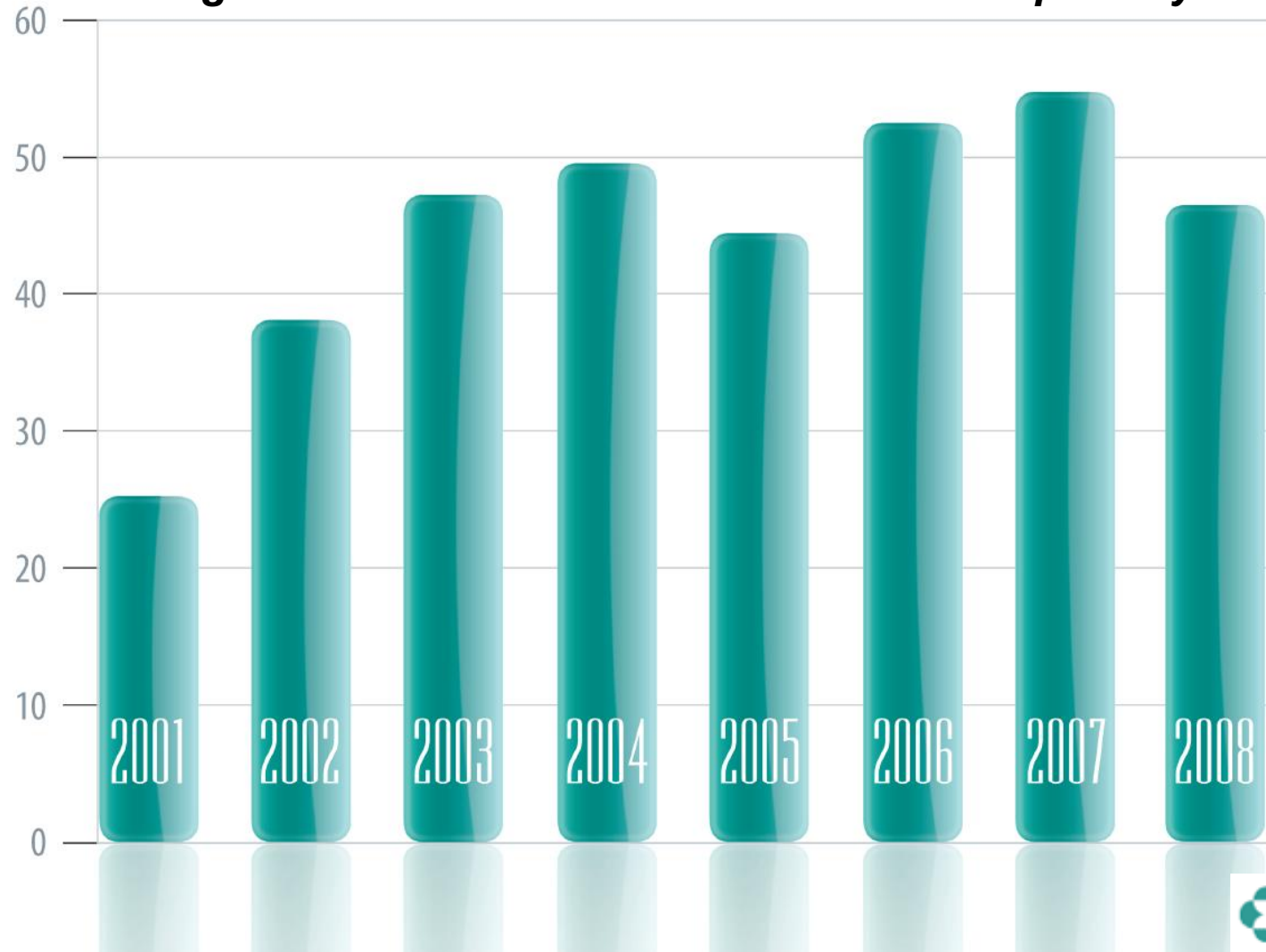
Merck Constantly Scans for Partnering Opportunities

2008 Alliances



Success in Building Partnerships

Over 350 significant transactions executed over the past 8 years



Licenses becoming more complicated



Merck's license to FOSAMAX from Gentili is a typical license from simpler times (1988)

- Instituto Gentili SPA of Pisa, Italy
- Early stage at time of license – FDA approval in 1995
- Worldwide
- Merck developed and commercialized

Today, licensors sometimes demand – and get – other terms

- Co-promotion in certain markets
- Voice in development and commercialization
- Reversion rights of compounds, intellectual property

Getting to Agreement



- Managing the negotiation process is critical for satisfactory outcome
- Resist urge to quickly assert your unwavering position
- Invest time in understanding the needs of your partner
- Truly recognize what is a “Must” and what is a “Want”
- Process itself can be transformational to the potential partners
 - Tests established positions of each party
 - Helps plant foundation of partnership

Getting to Agreement



Work toward finding the Agreement Zones

- Focus first on areas of agreement
 - Recognize where positions can be bridged to move quickly to agreement on those issues
- Don't lose invaluable “interpersonal currency” by over-positioning on subordinate issues
- Focus, Focus, Focus on resolving the “Conflicts of Musts”

Success is virtually assured when the pronouns change from “I/My/You/Yours” to “We/Our”

Solutions to “Conflicts of Must Haves”



- Most challenging aspect of deal structuring – requires the greatest amount of creativity
 - Highest risk of failure
 - Often requires most effort to broker deal with internal stakeholders as “Musts” are challenged
- Break conflicts into subsets to test for areas of agreement
 - Resolve as many as possible with goal of narrowing the “Agreement Gap”

Summary: Advice to Potential Alliance Partners

- Have a realistic idea of the value of your asset
- Have a realistic idea of the stage of evolution of your company
 - Ability to comply with terms of alliance without jeopardizing value of asset
 - Level of experience and potential contribution of your Company's capabilities