

Targeted & Effective Product Development Support

Make Progress,
Manage Infrastructure



Pharmaceutical Advisors Support

The Power of the Network

- Since 2001, focus on enabling outsourced development
- Small number of Partners
- Large network team of deep and broad Advisor expertise
- Flexible business model to complement client strengths
- Enable progress while minimizing infrastructure

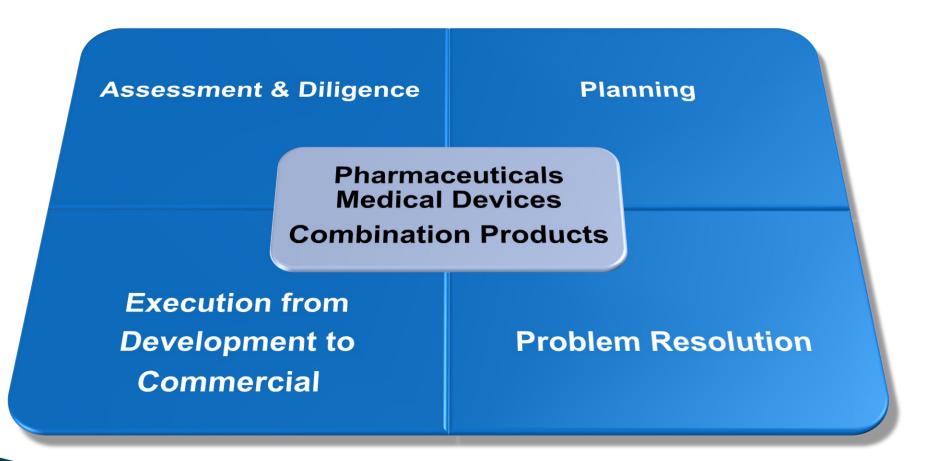
The Right Resources at The Right Time

- Your size, stage & business strategy
- TA & technology
- Advisor Experience
- Marketed & development
- Industry & ex-regulator
- Targeted technical and regulatory support of various issues and functions



Powerful Business Model to Help You

• Flexible resource application to support for all phases product development





Experience & Expertise to Help

- Our model helps ensure that you have and effectively integrate the right amount of the right resources, at the right time and in the right place
- Proven deep network enables support of tight timelines
- Proven broad network enables targeted experts and constructive business and technical solutions to complex / difficult issues
- Hands-on, or in the background; variable to you but engaged and committed
- Insight and actions based not just on experience, but on having been responsible for such operations and activities
- Provides sound basis for current and future decision making and execution

Pharmaceutical Advisors Approach Helps Manage Risk, Cost and Time



Development Accelerator

- Key Acceleration opportunities where people seek our involvement
 - Pre-Candidate Nomination development readiness acceleration and risk reduction
 - IND enabling planning and execution with understanding of "now vs. deferred"
 - Informed and experienced CMO and CRO selection and contracting
 - Phase-appropriate and fit for purpose Quality systems
 - Submission writing and publishing
 - Progression to POC and later-stage trials with track record of FDA success
 - Approval and Launch readiness
 - Backfill / jump in where new functions / skills needed
 - Local in-country auditors to reduce costly travel expenses
 - Support of a bolus of effort or defined program / study
 - Acceleration while suitable hires can be made, help with planning of staffing
 - Help you work through the transitions:
 - Discovery to Development,
 - Early Development to Late Development,
 - Development to Commercial



Our Rapid Development Approach

- Review status and update plans
 - Readiness gap analysis
 - Risks, strategies and decisions to update development plans and resource assumptions, plans for process and systems
 - Outsourcing strategy and plans to support
 - Hiring strategy, as appropriate
- Flexibility to tailor support to client situation
 - Enable
 - Plans, tools, templates, industry & vendor knowledge, decisions, change mgmt.
 - Do
 - Hands on or support in the background as needed
- Rapid Ramp-Up by experienced experts
 - Immediate involvement to maintain progress if needed
 - Rapid but expert planning for next stage of development to meet objective



Network Model Enabled Planning

- Informed deep Due Diligence support to complement your team
- FTE requirements over time for one asset or multiple assets
- "Makability" of pipeline products or product enhancements
- Supply-chain risk and cost / time of adding back-up capacity
- Cost effective market research
 - KOL Interviews and analysis
 - Patient-based market models
 - Market-sizing of emergent / difficult to value technologies
- Market Supply / future capacity assessment for CMO / CRO services
- Benchmarking / best practices for organizational development / planning
- Facility requirements / Make vs. Buy
- Technical risk of competitive threat / ease of work-arounds
- Development landscape of potential competitors / sources



Network Model Enabled Efficiency

- IND to Commercial readiness Gap assessment, planning & budgeting
- Development timeline-shortening strategies
- Planning and execution in the background or hands-on
- Global vendor and partner selection and interaction
- Local in-market resources for vendor management
- Set up and or running of practical, phase-appropriate SOPs
- Rapid resolution of technical issues
- Virtual expert panels
- Technical assessment of IP
- CRO / CMO market "Weather Report" for specific requirements
- Assessment & planning for application of novel technologies
- Rapid ability to provide expert assessment



Broad Capabilities on Recent Projects

Products & Markets

- Broad Therapeutic Area experience
- All CDER Divisions
- Preclinical Post Launch
- Small molecules
- Peptides & Proteins
- Vaccines, Cell & Gene Therapy, Bacteriophages
- Combination products

Regulatory Scope

- From INDs to NDAs
- Global reach
- Orphan Indications
- Fast Track Designation
- 505 (b)(2)
- ANDAs & Biosimilars
- Animal Health
- Dietary Supplements



Targeted and Effective Assessments

- Network model enables fast application of targeted expertise
- Coordination and triage of data rooms for efficient review and analysis
- Tools and expertise to turn technical insight into sound business decisions
- ID early kills or build constructive plans for an accurate NPV and success
- Recent projects include:
 - Late-stage and early stage assets
 - Developability gap analysis and execution plans and costs for mitigation and launch
 - Supply chain readiness to support forecast for a recently approved product
 - Technical and regulatory approval risk of a biosimilar product opportunity
 - Potential to expand claims in certain ex-US markets of a late-stage asset
 - FDA compliance risk for a multi-site manufacturing network
 - Readiness for diligence in advance of out licensing



We Help You Plan and Execute

Typical Planning Issues	Implications for Action
Candidate Selection	 Developability input to avoid surprises
Regulatory pathway and development strategy	ID Gaps in Current data dossiersFast / Efficient action plans
Synthesis / CMC Strategy	Options, resource intensiveness & timing
Formulation Approach	Timing of problem solving vs. PIB
Quality System and Quality Unit	 Phase-appropriate SOPs, Quality Agreements & Audits QA Resources for your team
Successful Vendor Contracting & Management	 Ensure right scope, fit, performance, cost and timing Leverage CMO database, MSA templates
Multiple Program Leverage	Support across programs where appropriateBuild strategic value and tactical efficiency



Development Plans and Support

The only constant is change, only certainty is that things will go wrong

- We provide critical anticipation of risk and options for continued progress
- Our detailed development Gantts and plans are actionable to the task-level
- We bring informed integration across functions to plans and execution
- Include anticipation of often underestimated effort and lead-times e.g.
 Vendor selection, analytical development, submission authoring
- Our key is early integration & focused application of the right expertise
 - Detailed and practical MS Project Gantts
 - Budget roll-ups and cash burn plans and tools
 - Experienced CMO / CRO and internal FTE estimates by function
 - Expertise to execute or help you to execute
 - Insight into timing of critical hires



Supported Functions Include

Function	Considerations
Chemical Development	Problem solving, Planning & Execution
Formulation Development	Problem solving, Planning & Execution
Analytical Development	Problem solving, Planning & Execution
Non-Clinical	Typically tightly defined durationProblem solving & Planning to Execution
Quality	Quality System Design, Audits & Quality SystemLocal to auditors to cut travel to Europe, Asia
Regulatory Strategy and Execution	 Specific regulatory strategy and ad hoc Tactical execution of regulatory activities IND, NDA, 505(b) (2), Orphan, Breakthrough,
Senior Development Strategy, Integration & Leadership	 Preclinical, CMC and Clinical strategy, execution and integration Launch & Commercial Planning & Execution
Supply Chain / Contracting / Integration	Business, supply chain and support
Project & Program Management	Project Management, timelines, deliverables driving, tracking and reporting
Documents / Submissions	SME WritingReport-level publishing and quality controlSubmission-ready template packages



Late Development & Launch Support

Initial Output

- Approval, Launch & Readiness gaps
- Key decisions to be made
- Priorities, key decisions and boundaries for development of Action Plans
- Issues requiring immediate action alternatives to address including contracting
- Integrated with commercial Strategy
- Refined plans as needed

		Area of Foore	Action Dian To
		Area of Focus	Action Plan To
	1.	Late Stage Development	Development priorities & staging if neededRegistration, CommercialCOGS enabling
	2.	Transition to PIII / Launch CMC	Checklist CMC - commercial
	3.	Mfg. Supply Strategy	For key alternatives & decisionsRecommendations
	4.	QA/QC strategy	 Design and implementation of updated QA & QC
	5.	Cost of Goods	 Pursuit of COGS optimization strategies
	6.	Launch & Partner Mgmt.	Defining and implementing internal and partner commercial links and activities
	7.	Warehousing & Distribution	Logistics strategy, plan for registration and launch
	8.	Organizational Design & Development	Org structure optionsResourcing optionsTiming of needsKey hires & timing

Integrate

- With internal structure
- Supply & Partnering Efforts
- Resourcing / Organizational Plan
- Vendor management and sourcing to support Objectives
- Quality Unit



What Makes Us Different

- Business model
 - -The right amount of the right expertise at the right time
- Business approach
 - -Business decisions based on science and business considerations



Thank You!

We look forward to exploring how we might add value

...What's keeping you up at night?