CORPORATE PRESENTATION

Symphony
PHARMA LIFE SCIENCES
Chemistry for Humanity

Symphony Pharma Life Sciences

An ISO 9001-2015 Certified Company

DSIR Recognized R&D Facility

D&B D-U-N-S Number 65-061-8049

July 2019

ABOUT US

- Established in 2008
- Technology driven organization founded by scientists with proven industrial track record
- Expertise in Pharmaceutical and Chemical Research & Development
- Research partner for Global Innovator, Generic, Biotech, Biopharma and Chemical companies

VISION & MISSION

"TO ENHANCE VALUE BY PARTNERING WITH THE GLOBAL PHARMACEUTICAL AND CHEMICAL INDUSTRIES ACROSS ITS **VALUE** CHAIN"

LEADERSHIP TEAM-KEY MANAGEMENT

Dr. Raju Sirisilla – COO

- 25+ years of Pharmaceutical Industry experience working with Dr. Reddys for 15 years and Symphony for 10 Years.
- Expertise in Med. Chem, Process Research & Development, and regulatory filings (NDA & DMFs).
- Co-inventor for several US patents and international publications.

Dr. Ramajeyam Selvaraj – Principal Scientist/Head Chemical Research

- 15+ Years of experience in Synthetic Organic Chemistry, discovery Research and NCE development.
- Experienced at AstraZeneca, Aurigene (DRL) and studied at IIT Madras, Univ. of Delaware (USA), Purdue Univ. (USA)

Dr. Sreedhar– Principal Scientist/Head Analytical Research

- 10+ years of experience in Analytical research and method development etc.

Mr. Mayukh Mukherjee– Senior Manager, Business Development

- 15+ years of experience in International business development, strategy, operations, sales and marketing
- Experienced at TCG Lifesciences (Formerly Chembiotek)

Mr. Narsimlu– Senior Manager, Supply chain management

- 15+ experience in Supply chain management, procurements and imports/export documentation.

TEAM

- More than 90% are technically qualified
- Team members with Qualification of Ph.D, M.Sc and Engineering
- Scientific collective experience of over 100 years
- Extensive Synthetic chemistry, Analytical & Manufacturing skills
- Expertise milligrams to commercial scale
- Scientific advisory board, members from well-known institutes (US & India)

BUSINESS FOCUS

- Contract Research (Full-Time Equivalent - FTE)
- Custom Synthesis (Fee For Services-FFS)
- Product Development (Process & Analytical)

.

Contract Research (FTE services)

- Efficient/ Experienced Manpower
- Deliverables up to 1000g
  - this higher quantity or repeated quantity is also a part of FTE work with exclusive of key raw materials cost.
- Competitive pricing based on chemistry
- Integrated project management
  - support all documentation (record book and bi-weekly tech.reports)

Custom Synthesis (Fee For Services)

- Short turn around time for enquiry response
  - 3-5 days for quote submission.
- Lab to commercial scale
  - few milligrams to multi kilogram scale
- Adherence to strict timelines & Specifications
- Product characterization
  - COA and individual data will be provided with impurity profile etc..

PRODUCT DEVELOPMENT

- Rigorous Literature Search
- Regulatory implication study
- Cost effective and environment friendly process
- Robust scalable process
- IP generation for patent filings
- Complete tech-pack preparation
- Access to exclusive market opportunities
- CMC documentation support

INFRASTRUCTURE

- 25,000+ sq. ft research facility on a 2+ acre lot located in Research & Knowledge park (Biotech park) in Hyderabad
- Working space for 50 Scientists-scope for expansion of another 50 scientists
- Fit-for-purpose labs with 18 fume hoods-scope for expansion of another 18 fume hoods
- Pilot plant with 100Lt to 500 Lt GLR and SSR reactors for scale-up of 100 Kg quantities
- Analytical Lab with well equipped separation sciences instruments like HPLC, GC etc..
- Quality assurance division to support documentation

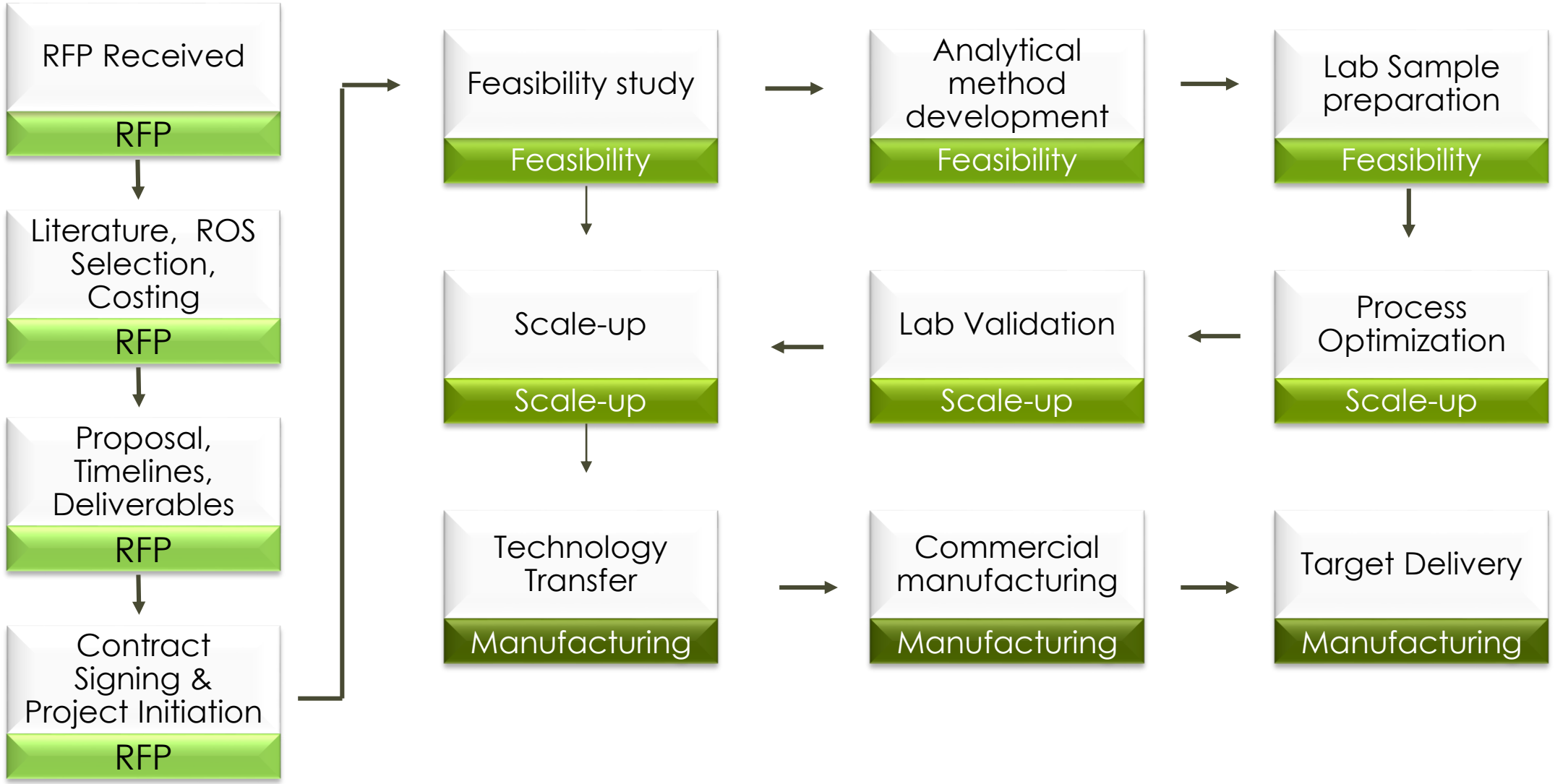
CHEMISTRY SERVICES

Early phase drug Discovery/Med.chem	• Synthesis of building blocks (100+), scaffolds (35+) & analogues/libraries (200+) of NCE's • Developmental work for NCE compounds.
Custom Synthesis (pharma& chemical)	• Synthesis & supply of non-catalogue compounds at all scales • Advanced Intermediates & key starting materials • Fine & Specialty chemicals • Working standards , Impurities & Metabolites
Process R&D	• Exploring all the synthetic routes/ selection • Process Development, Optimization & Validations • Non-infringing route development
Analytical R&D	• Analytical method development, Validations & Transfer • Stability Study : Accelerated & Long term • Impurity profiling
cGMP pilot plant (up to 100 Kg)	• Supply of pre-clinical and clinical drug substance including CMC documentation • Supply of API Advanced intermediates & Fine & Specialty chemicals

R&D (PROCESS & CHEMICAL) STRENGTHS

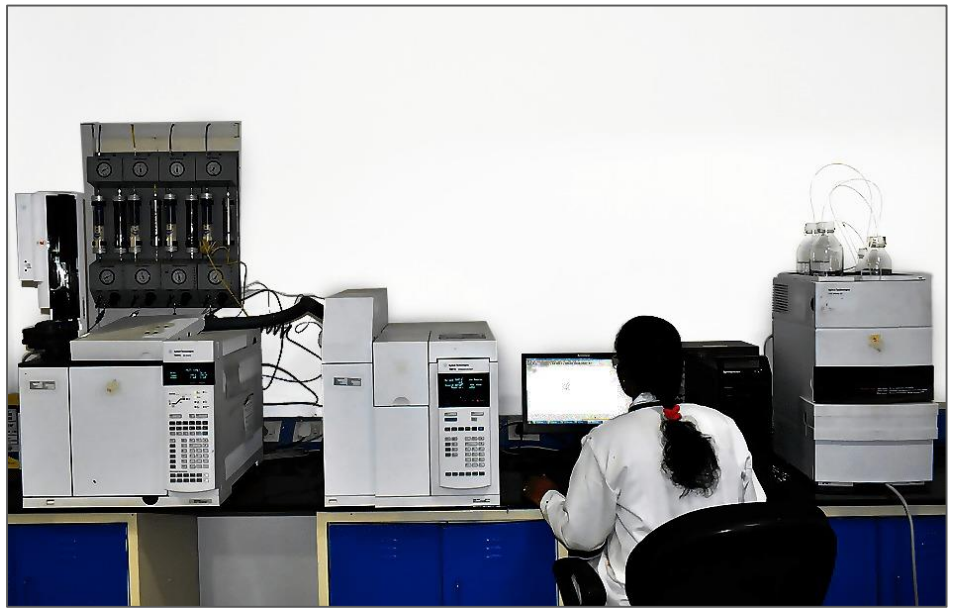
- Route Scouting
- Quick process development to provide proof of concept
- Optimization for a robust and scalable process
- In-process controls
- Process validation and scale up studies
- Preparation of standards samples & impurities
- Technology transfer to manufacturing sites
- Stability testing and Degradation studies
- Solid state studies
- Multi-step chiral synthesis
- Chiral resolution
- Carbohydrate chemistry
- Amino acid chemistry
- Peptide synthesis (solution phase)
- Bio-transformations
- Suzuki Coupling, Heck Coupling and Sonogashira Coupling
- Grignard reaction
- Borane / Diborane chemistry
- Carbonylation
- Swern Oxidation

Our Approach for Process development & Scale-up



ANALYTICAL R&D STRENGTHS

- Method development
- Specification development
- Impurity profiling
- Stability testing and Degradation studies
- Release of products with COA
- Qualification of working standards/Reference standards
- Spectral characterization by NMR, IR, LCMS
- Solid state characterization by XRD, DSC, IR
- Support to regulatory filings



SCALE-UP : DOCUMENTATION SUPPORT

GMP:

- Approved certificate from local FDA
- Campaign report
- BMRs
- Operational SOPs
- COAs of KSMs, Intermediates & Final
- Specs & MOAs KSMs, Intermediates & Final
- Technology transfer report from R&D to plant
- Material Vendor qualification documents

Non-GMP:

- Campaign report
- COAs of KSMs, Intermediates & Final
- ROS & Brief manufacturing details

GMP PILOT PLANT INFRASTRUCTURE

- 500 Lt- SSR
- 250 Lt-SSR
- 100 Lt-SSR
- 250 Lt- GLR
- 100 LT-GLR
- Vacuum tray drier
- (25-50 Kg drying in single slot)
- Blender
- Miller
- Oil freed boiler
- Chiller upto-10 0C

PRODUCTS: BUILDING BLOCKS

Bicyclo compounds	Azaindoles	Thiophenes	Quinoxalines
Pyrazoles	Imidazoles	Pyridines	Pyrimidines
Furans	Benzaxozoles	Benziimidazoles	

PRODUCTS: APIs & INTERMEDIATEs

Lacosamide (US DMF Ref 26594)	Bazedoxifene acetate	Mirabigron	Cinacalcet hydrochloride
Dabigatran Etexilate	Dronerdarone hydrochloride	Flupiritine maleate	Vemurafenib
Plerixafor	Brivaracetam	Eliglustat	

PRODUCTS: API-IMPURITIES (Quantity: 50mg to 1000gm)

- Bazedoxifene
- Mirabigron
- Dronedarone Hydrochloride
- CinacalcetHydrochloride
- Lacosamide
- Dabigatran Etexilate Mesylate
- Asenapine
- Desloratadine
- Valsartan
- Atorvastatin
- Bazedoxifene
- Irbesartan
- Olmesartan
- Ranolazine
- Lurasidone
- Lamotrigine
- Sitagliptin
- Ezetimibe
- Linagliptin
- Voriconazole
- Saxagliptin
- Agomelatine
- Tolterodine
- Zafirlukast
- Pemetrexed
- Lenalidomide
- Nateglinide
- Pregabalin
- Enalapril
- Bicalutamide
- Montelukast
- Lansoprazole
- Fluconazole
- Ramipril
- Eslicarbazepine
- Carvedilol
- Rosuvastatin
- Eszopiclone
- Valganciclovir
- Oxaprozin
- Amlodipine
- Linezolid
- Escitalopram Oxalate
- Famotidine
- Solifenacin
- Vilazodone

Track Record

- Invented about 150 new pigments under FTE research program for US chemical major and some of these new pigments moving toward commercial launching globally.
- In-house development of >25 NCEs and supplied as clinical substances to discovery Pharmas
- Developed 6 APIs with 1 USDMF
- Started with synthesis at 250 mg scale and end delivery up to 250 Kg scale to single Pharma
- >250 in-house stock of impurities
- Experience in working with >150 building blocks
- Successfully executed several projects in record time from process development to multi-kilo scale for innovator and generic pharma companies across the globe
- Customized services to provide cost-effective and robust processes for API and NCE development
- Scientific advisory board members from well known institutes of US and India
- Strategic research partner for some of the top Indian pharma companies

Thank

USA

Symphony Pharma Life Sciences Inc.
103 Morgan Lane, Suite#104
Plainsboro, NJ – 08536, USA

Phone: +1 609.269.2700

INDIA

Symphony Pharma Life Sciences Inc.
7/A, Biotech Park, Phase - II
Genome Valley, Shamirpet,
Hyderabad - 500 078, Telangana, India

Phone: +91 9830554746