

**NCL does not endorse any of the organizations listed below. This list is for informational purposes only.**

<b>Contract Manufacturing Organization &amp; Contract Development and Manufacturing Organization</b>	<b>Web Site</b>	<b>Description of Services</b>
Althea, Inc.	<a href="http://altheacmo.com/about/company-profile-history/">http://altheacmo.com/about/company-profile-history/</a>	Offers formulation and aseptic filling for complex drug formulations - liposomes, nanoparticles and viscous products. Underwent 9 FDA inspections. cGMP manufacturing of biologics.
AmatsiGroup	<a href="http://www.amatsigroup.com/en/">http://www.amatsigroup.com/en/</a>	FDA inspected, cGMP manufacturing and filling of nanoformulations. Examples of nanoformulations supported: liposomes, emulsions, polymeric nanoparticles, micelles, etc.
Avanti Polar Lipids, Inc.	<a href="https://avantilipids.com/divisions/cgmp-manufacturing/">https://avantilipids.com/divisions/cgmp-manufacturing/</a>	FDA inspected and approved facilities. Performs lipid synthesis, cGMP manufacturing, liposome formulation, analytical testing of lipid compounds, compound synthesis, lipidomics (identification and/or quantitation of lipid compounds in a biological sample). Examples of formulations supported: liposomes, hydrophobic small molecules for API production.
Baxter BioPharma Solution	<a href="http://www.baxterbiopharmasolutions.com/sterile-manufacturing-solutions/index.html">http://www.baxterbiopharmasolutions.com/sterile-manufacturing-solutions/index.html</a>	Contract services for complex sterile manufacturing, such as cytotoxics, highly potent compounds, biologics, lyophilized vials.
ChemConnection	<a href="http://www.chemconnection.eu/">http://www.chemconnection.eu/</a>	Focus on development and cGMP of nanomedicines, potent APIs (cytotoxics, hormones) and theranostics. Experience in iron oxide nanoparticles, polymeric nanoparticles, liposomes. Full package of analytical techniques available for testing and characterization of nanoparticles.
Dalton Pharma Services	<a href="https://www.dalton.com/cgmp-sterile-api-manufacturing">https://www.dalton.com/cgmp-sterile-api-manufacturing</a>	Develops and manufactures complex cGMP APIs. Grams to multi-kg scale. Have experience using complex liposomal formulations with small molecules, proteins and peptides.
Encapsula NanoSciences, LLC	<a href="http://www.encapsula.com">www.encapsula.com</a>	Manufactures and packages liposome-based products that are used in food, nutraceutical or cosmetic industry. Encapsula NanoSciences does not manufacture any injectable liposome formulations for pharmaceutical companies or for clinical trial applications.
Exelead Biopharma	<a href="http://www.exeleadbiopharma.com/commercial-contract-manufacturing">http://www.exeleadbiopharma.com/commercial-contract-manufacturing</a>	Commercial CMO that can develop liposomal formulations and perform PEGylation, aseptic filling, packaging and inspection. Can handle batches from 1-1,000 L. Clean rooms are qualified to GMP and ISO standards.
IDRI	<a href="http://www.idri.org">http://www.idri.org</a>	Non-profit organization focused on treatments for infectious diseases. Performs cGMP services, including formulation development and drug manufacturing services. Focused on small molecules or proteins formulated in liquids, emulsions and liposomes for preclinical to Phase 2 studies. Portfolio include adjuvants, diagnostics, vaccines and drugs.
Particle Sciences, a Lubrizol Company	<a href="http://www.particlesciences.com">http://www.particlesciences.com</a>	Provides a wide range of nanoparticle fabrication and nanoparticle preparation services, including full cGMP analytic, bioanalytic and characterization facilities, along with ICH compliant stability chambers. FDA registered, DEA licensed, cGMP/cGLP compliant. Handles highly potent compounds, biologics, small molecules, as well as nanoformulations.
Piramal Pharma Solutions (formerly known as Coldstream Labs)	<a href="http://www.piramal.com/pharmasolutions/">http://www.piramal.com/pharmasolutions/</a>	GMP and non-GMP capability from the gram scale for preclinical to Phase III clinical studies. Supports nanoparticles, including liposomes as well as cytotoxic and potent compounds.
Plough Center for Sterile Drug Delivery Systems	<a href="https://www.uthsc.edu/plough-center/">https://www.uthsc.edu/plough-center/</a>	GMP-compliant core processing facility. Small-scale manufacturing of sterile preparations. Includes formulation services for the development of sterile dosage forms, manufacturing of small lots of products for clinical investigation.
Polymun Scientific GmbH	<a href="http://www.polymun.at/">http://www.polymun.at/</a>	GMP manufacturing that meets EU requirements, specializes in liposomal formulations.
Samyang Biopharm	<a href="https://www.samyangbiopharm.com/">https://www.samyangbiopharm.com/</a>	Manufacturing of oncology injections; compliant with with cGMP, EU-GMP, JP-GMP, and KGMP standards
Transferra Nanosciences/Evonik Industries	<a href="http://www.transferra.ca/services/gmp-manufacturing/">http://www.transferra.ca/services/gmp-manufacturing/</a>	GMP manufacturing of liposomes. Support formulations containing oligonucleotides, siRNA, mRNA, peptides, proteins, sparingly soluble compounds and highly potent API.

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WuXi AppTec	<a href="http://www.stapharma.com/">http://www.stapharma.com/</a>	Commercial manufacturing facility that can handle complex formulations and high potency APIs. Facility is approved by eight international regulatory agencies including US.
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Contract Research Organizations	Web Site	Description of Services
Albany Molecular Research Inc. (AMRI)	<a href="http://www.amriglobal.com/">http://www.amriglobal.com/</a>	a global contract research and manufacturing organization that has been working with the Life Sciences industry to improve patient outcomes and the quality of life for more than two decades.
Associates of Cape Cod	<a href="http://www.acciusa.com/">http://www.acciusa.com/</a>	Endotoxin testing
Avanti Polar Lipids, Inc.	<a href="https://avantilipids.com/divisions/cgmp-manufacturing/">https://avantilipids.com/divisions/cgmp-manufacturing/</a>	FDA inspected and approved facilities; lipid synthesis, cGMP Manufacturing, liposome formulation, analytical testing of lipid compounds, compound synthesis, lipidomics (identification and/or quantitation of lipid compounds in a biological sample)
BATTS Laboratories	<a href="http://www.battslabs.com/">http://www.battslabs.com/</a>	Antibody services, immunochemistry procedures, and preclinical studies for drug development
Bioreliance	<a href="http://www.bioreliance.com/">http://www.bioreliance.com/</a>	cGMP- and GLP-compliant virological, immunological, molecular biology and microbial testing services. cGMP production facilities, manufacturing needs for the production of cell banks, viral seed stocks, viral vaccines and cell therapeutics. Comprehensive toxicology.
Bioqual	<a href="http://www.bioqual.com/">http://www.bioqual.com/</a>	Primate biology and medicine; small animal; reproductive endocrinology and toxicology; infectious disease; in vitro lab services; environmental behavior; GLP studies
British Columbia Cancer Agency	<a href="http://www.bccancer.bc.ca/default.htm">http://www.bccancer.bc.ca/default.htm</a>	Basic/translational research; patient services
Cambridge Biolabs	<a href="http://www.biolabs.io/about">http://www.biolabs.io/about</a>	NP characterization: sizing, particle interaction monitoring, concentration analysis, multimodal nanoparticle sizing, particle interaction monitoring, concentration analysis; assay development
Celsion Labs	<a href="https://www.celsionlabs.com/">https://www.celsionlabs.com/</a>	Pharmaceutical formulation development, method development, lead identification, IND-enabling pharmacodynamics, pharmacology/toxicology, pharmacokinetics and bio-analytical services, all animal imaging services, surgical animal models, in vivo efficacy testing, tumor models, cell-based assays
CCS Associates	<a href="http://www.ccsainc.com/">http://www.ccsainc.com/</a>	Strategic planning; regulatory; data management; clinical trials management; library search; scientific writing; event management; discovery & early development
Charles River Laboratories	<a href="http://www.criver.com/">http://www.criver.com/</a>	Basic research; discovery; safety assessment; CMC support; clinical trial support
Cognate Bioservices, Inc.	<a href="http://www.cognatebioservices.com/">http://www.cognatebioservices.com/</a>	Process development; cGMP manufacturing; regulatory services
Covance Inc.	<a href="http://www.covance.com/">http://www.covance.com/</a>	Global CRO; drug development program provides nonclinical, preclinical, clinical and commercialization services to pharma and biotech
CS Bio	<a href="http://www.csbio.com/">http://www.csbio.com/</a>	Manufacture peptides, stability-indicating analytical method development, GLP bioanalytical sample analysis, LC/MS/MS methods for pharma products, GLP sample test for PK/TK studies
CuriRx	<a href="http://www.curirx.com">http://www.curirx.com</a>	Formulation, analytical, and lyophilization development
DSI InPharmatics	<a href="http://www.dsinpharmatics.com/">http://www.dsinpharmatics.com/</a>	CMC Consulting & Regulatory Affairs Consultants
Explora Biolabs	<a href="http://www.explorabiolabs.com/">http://www.explorabiolabs.com/</a>	In vivo research and vivarium services

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The Hamner Institutes For Health Sciences	<a href="http://www.thehamner.org/">http://www.thehamner.org/</a>	Capabilities in inhalation exposure and aerosol sciences, pharmacokinetics, general toxicology, and analytical chemistry are available to conduct preclinical safety studies of chemical compounds and drug candidates. Quality assurance (QA) and quality control (QC) procedures are an integral component. If necessary, preclinical safety studies can be conducted under Good Laboratory Practice (GLP) standards as defined by U.S. EPA regulations.
Hana Biosciences	<a href="http://www.hanabiosciences.com">http://www.hanabiosciences.com</a>	Biopharmaceutical company
Hemogenix	<a href="http://www.hemogenix.com/">http://www.hemogenix.com/</a>	In vitro nanoparticle testing panel based on NCL's assays, stem cell research, basic and veterinary research, cellular therapy and regenerative medicine, in vitro toxicity testing
i3 Research	<a href="http://www.i3global.com/">http://www.i3global.com/</a>	Conduct any clinical trial, from a single local study to programs spanning multiple continents
IIT Research Institute	<a href="http://www.iitri.org/">http://www.iitri.org/</a>	Fully accredited, GLP compliant pre-clinical toxicology, efficacy, PK and ADME evaluation services
Lovelace Respiratory Research Institute	<a href="http://www.lrri.org/">http://www.lrri.org/</a>	Complete standard study designs that meet regulatory guidelines, as well as customized study designs to meet a sponsor's special needs. Ability to conduct clinical research through our clinical trials company, Lovelace Scientific Resources (LSR); preclinical PK/PD studies; in vivo pharmacology studies; medicinal chemistry; [pharmaceutical formulation development; in vivo ADME studies; bioanalytical services; GLP and non-GLP toxicology
MDS Pharma	<a href="http://www.mdsinc.com/">http://www.mdsinc.com/</a>	Provider of medical isotopes, targeted therapies and sterilization technologies
MIR Preclinical Services	<a href="http://www.molecularimaging.com/">http://www.molecularimaging.com/</a>	Array of services collectively focused on the in vivo evaluation of new drug candidates therapeutic potential
MPI Research	<a href="http://www.mpiresearch.com/">http://www.mpiresearch.com/</a>	Discovery services; bioanalytical and analytical services; drug safety evaluation
MVA Scientific Consultants	<a href="http://www.mvainc.com">http://www.mvainc.com</a>	EM particle sizing and analysis
Nanobiotec, LLC		simple Western assays, Luminex-based multiplex immunoassay, flow cytometry, LC-MS/MS
NEI Corporation	<a href="http://www.neicorporation.com/">http://www.neicorporation.com/</a>	NP characterization: dispersion characterization for aqueous and non-aqueous dispersions, dispersion stability (pH, electrophoretic mobility, zeta potential, viscosity), analysis of solids content, rheology, aggregate size, optical transmission
OpAns, LLC	<a href="http://opans.com/">http://opans.com/</a>	Analytical laboratory specializing in development of routine assays to support drug development. Offers separations, mass spectrometry, and NMR expertise and capacity along with steroid panel analysis, dried specimen collection using an innovative technique, and low volume sampling techniques.
Piedmont	<a href="https://www.piedmont.org/research/">https://www.piedmont.org/research/</a>	Discovery and preclinical stage work; clinical trial monitoring
Precision NanoSystems	<a href="https://www.precisionnanosystems.com/formulation-development/">https://www.precisionnanosystems.com/formulation-development/</a>	Development and manufacture of NPs for drug delivery and as research tools
PPD	<a href="http://www.ppd.com/">http://www.ppd.com/</a>	PPD is a leading global contract research organization providing comprehensive, integrated drug development, laboratory and lifecycle management services.
Quintiles	<a href="http://www.quintiles.com/">http://www.quintiles.com/</a>	Offering clinical, commercial, consulting and capital solutions
SoBran BioScience	<a href="http://www.sobran-inc.com/solutions">http://www.sobran-inc.com/solutions</a>	GLP and non-GLP compliant research and technical support services for preclinical toxicology and drug discovery programs; regulatory support consulting services
Southern Research	<a href="http://www.southernresearch.org">http://www.southernresearch.org</a>	Discovery stage testing; preclinical testing; clinical trial management
SRI International	<a href="http://www.sri.com/">http://www.sri.com/</a>	Client-sponsored R&D
Stillmeadow, Inc.	<a href="http://www.stillmeadow.com/">http://www.stillmeadow.com/</a>	Toxicology (mammalian and aquatic), animal health, (pet products, production animals, entomology), analytical services, (product chemistry and environmental fate), and in vitro studies

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Synecor Labs	<a href="http://www.synecorlabs.com/">http://www.synecorlabs.com/</a>	Discovery and development; preclinical testing; GLP
TD2 - TGEN Drug Development Services, LLC	<a href="http://www.td2.org/">http://www.td2.org/</a>	Preclinical work: GLP, safety/tolerability, in vitro assays, tumor xenograft models, primary tumor models, orthotopic tumor models, and isogenic cell lines; regulatory and compliance expertise; clinical development plans, program analysis, medical writing and clinical trial management
Toxikon Corporation	<a href="http://www.toxikon.com/">http://www.toxikon.com/</a>	Biological and analytical services for the pharmaceutical, biotechnology, and medical device sectors. Services include toxicology (acute, subchronic, and chronic toxicity, reproductive toxicity, genetic toxicology, and carcinogenicity), pharmacokinetics, toxicokinetics, bioavailability, ADME, chemical characterization, impurities analysis and synthesis, bioanalytical, and microbiology/virology.
Translational Genomics Research Institute	<a href="http://www.tgen.org/">http://www.tgen.org/</a>	Translational genomics research
Univ. of Missouri Veterinary Medical Diagnostic Laboratory (VMDL)	<a href="http://vmdl.missouri.edu/">http://vmdl.missouri.edu/</a>	Full-service Veterinary Medical Diagnostic Laboratory
XenoBiotic Labs	<a href="http://www.xbl.com/">http://www.xbl.com/</a>	Bioanalytical and metabolism services
ZoneOne Pharma	<a href="https://www.zoneonepharma.com/contact-services">https://www.zoneonepharma.com/contact-services</a>	Liposome drug formulation and characterization, in vitro release assay development services for complex parenteral formulations, lipid nanoparticle formulation for in vitro and in vivo delivery of siRNA, mRNA, oligo and plasmid