



Pharma Licensing Interests:  
An Updated Wish List of 56  
Big Pharma Companies

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expertise-based consulting

## Intro

Over the past two decades, we have seen a major shift in the Big Pharma R&D model. In the face of declining efficiency and increases in both cost and timing for the successful approval and launch of new medicines, large pharma is relying less on internal R&D alone. Discovery collaborations, the in-licensing of early, preclinical, and clinical stage drug candidates, and the acquisition of innovative biotech companies are now central components of pipeline expansion strategies. The aim is mutually beneficial: providing the diversification and added shots-on-target big pharma seeks, while also giving much needed fuel to early-stage innovation. Early partnering provides small biotech and pharma companies with validation and much needed capital for expanding their R&D efforts, while also enabling the diversification of their own pipelines and improving risk mitigation. Acquisition by large pharma is also an ideal exit strategy for many initial investors. In 2021, Alacrita Consulting conducted an analysis of the business development (BD) priorities for the world's largest pharma companies, and published the findings [here](#). Given the ever-changing landscape and concurrent Big Pharma interests, we sought to revisit and revise this analysis and highlight any shifts in their appetites over the past two years.

### What is Pharma searching for?

Stage of asset development, therapeutic area, technology type, and asset differentiation are all important factors for gaining the attention of Big Pharma. Many of these commercial-stage companies provide specific web pages that precisely detail their BD interests, while others offer

downloadable PDFs that publicly disclose their partnering interests.

We identified large pharma companies with market capitalizations greater than \$10B USD (56 companies), that provide partnering web pages or PDFs on their websites (Table 1). The information these companies provide can indicate either broad descriptions of diseases of interest or more precise details of target indications, modalities, stages of development, and even specific pathways that are considered in scope. We have compiled this information and the links to each company's partnering and therapeutic-areas-of-interest webpages, or their downloadable content, and have listed each company's stated partnering interests as of June 2023.

### Which therapeutic areas have the highest probability of attracting attention?

In order to answer this question, we standardized the areas of partnering interest (Table 2) according to those used by a majority of companies or, when there was no commonly-used specification, we selected a suitable grouping. Using these standardized groupings, companies indicated a broad range in number of interests from one to thirteen areas, with a mean of 4.8 and a median of 5.0. The most popular areas of partnering interest listed by the 56 pharma companies were oncology (68%), immunology (59%), and neuroscience (50%), followed by infectious diseases (45%), cardiovascular (38%), endocrine/metabolic (34%), and rare/genetic (32%) (Figure 1).

There is a suggestion here that a biotech company may have a higher probability of gaining the attention of Big Pharma if its drug development programs target the most sought-after indications. Though, we also note that while rare/genetic diseases are of interest to only 32% of the pharma companies we gathered details on, this represents a 13% increase in the past 2 years. In addition, orphan status protections for these indications can provide additional incentives that often prove to be very attractive to the larger players. Furthermore, industrywide interest in rare disease is expected to grow, as the rare disease market is projected to exceed \$346B by 2029, more than doubling the estimated \$155B market size in 2021.<sup>1</sup>

When we compared other current pharma interests with the interests of those same pharma companies from two years ago (Figure 2), we also found increases in the following therapeutic areas:

- Allergy (+50%)
- Dermatology (+33%)
- Women's Health (+25%)
- Ophthalmology (+18%)
- Endocrine/metabolic: (+6%)
- Cardiovascular: (+5%)

Concurrently, percentage decreases were observed in the following indications:

- Cerebrovascular (-50%),
- Psychiatric and Respiratory (-25%)
- Miscellaneous (-20%)
- Inflammation (-17%)
- Musculoskeletal (-14%)
- Infectious disease (-4%)
- Neuroscience and Oncology (-3%)

While interest in psychiatric indications by large pharma seems to have declined, this

is not necessarily true for the biopharma industry as a whole, given the resurgence of interest in psychedelics and cannabinoids.

When comparing M&As in 2022 vs 2021, some interesting correlative trends emerge. Notably, there have been significant increases in the number of M&As involving companies within ophthalmology and dermatology. In contrast, the number of partnerships within the infectious disease space has seen a 4% decrease, in line with the declining interest in that area.

Moreover, over 42% of the total dollar value for M&As in 2022 (\$37B) was concentrated in the rare/genetic disease, ophthalmology, and women's health spaces, highlighting the growing interest in these disease areas.<sup>2,3</sup>

A final caveat: it's important to note that these companies' published interests may not reflect true, shifting priorities or actual current and future needs, and are best used as a guide, not as the basis for strategic planning.

Lastly, for those interested, a brief partnering primer, can be found at the end of this paper.

## Citations

1. Rare Diseases Treatment Global Market Report 2022: The U.S Leads the Way, With High Potential Opportunities Coming from Asia." PR Newswire, 29 November 2022, <https://www.prnewswire.com>.
2. Micklus, A. and Giglio, P. (2022) 'Biopharma dealmaking in 2021', Nature Reviews Drug Discovery, 21(2), pp. 93-94.
3. Giglio, P. and Micklus, A. (2023) 'Biopharma dealmaking in 2022', Nature Reviews Drug Discovery, 22(2), pp. 92-93.

4. **Table 1.** Pharma Partnering Interests

Company	General Partnering Webpages	Company Areas of Interest Webpage	Areas of Interest List
AbbVie	<a href="https://www.abbvie.com/partnerships.html">https://www.abbvie.com/partnerships.html</a>	<a href="https://www.abbvie.com/partnerships/areas-of-interest.html">https://www.abbvie.com/partnerships/areas-of-interest.html</a>	Immunology, Oncology, Neuroscience, Cystic Fibrosis, Eye care (retinal degeneration, glaucoma, dry eye and ocular surface disease, refractive medicine), Body aesthetics (facial and body filling, breast reconstruction/augmentation, and regenerative soft tissue repair), Women's Health, Virology
Alnylam Pharmaceuticals	<a href="https://www.alnylam.com/about-alnylam/investigator-initiated-studies/">https://www.alnylam.com/about-alnylam/investigator-initiated-studies/</a>	<a href="https://www.alnylam.com/our-science/the-science-of-rnai/">https://www.alnylam.com/our-science/the-science-of-rnai/</a>	RNAi therapeutics for genetic diseases, cardio-metabolic diseases, infectious diseases, and central nervous system (CNS) and ocular diseases
Amgen	<a href="https://www.amgen.com/partners/">https://www.amgen.com/partners/</a>	<a href="https://www.amgenbd.com/resource/1610139576000/Brochure_AmgenBD?">https://www.amgenbd.com/resource/1610139576000/Brochure_AmgenBD?</a>	Oncology/Hematology, Cardiovascular Disease, Bone Health, Nephrology, Inflammation, Neuroscience
Apellis	<a href="https://apellis.com/contact-us/">https://apellis.com/contact-us/</a>	<a href="https://apellis.com/focus-areas/">https://apellis.com/focus-areas/</a>	Ophthalmology, Rare Disease, Neurology
Argenx	<a href="https://www.argenx.com/innovation#partnering-opportunities">https://www.argenx.com/innovation#partnering-opportunities</a>	<a href="https://www.argenx.com/patients#disease-areas">https://www.argenx.com/patients#disease-areas</a>	Autoimmune diseases (myasthenia gravis, immune thrombocytopenia, chronic inflammatory demyelinating neuropathy and pemphigus vulgaris)
Astellas Pharma	<a href="https://www.astellas.com/us/innovation/partnering">https://www.astellas.com/us/innovation/partnering</a>	<a href="https://www.astellas.com/us/innovation/areas-of-interest">https://www.astellas.com/us/innovation/areas-of-interest</a>	Oncology, Urology, Nephrology, Immunology, Neuroscience, Muscle Diseases, ophthalmology, Regenerative Medicine, Vaccines, Gene Therapy
AstraZeneca	<a href="https://www.astrazeneca.com/Partnering.html">https://www.astrazeneca.com/Partnering.html</a>	<a href="https://www.astrazeneca.com/our-therapy-areas.html">https://www.astrazeneca.com/our-therapy-areas.html</a>	Oncology, Cardiovascular, Renal, Metabolism, Respiratory & Immunology, autoimmunity, infection & vaccines, neuroscience and gastroenterology
Baxter International	<a href="https://www.baxter.com/our-story/fueling-collaborative-innovation">https://www.baxter.com/our-story/fueling-collaborative-innovation</a>	<a href="https://www.baxter.com/our-story/fueling-collaborative-innovation/baxter-ventures">https://www.baxter.com/our-story/fueling-collaborative-innovation/baxter-ventures</a>	In-Hospital Solutions and Therapeutics, Medical devices, Diagnostic tools, Renal therapies
Bayer	<a href="https://pharma.bayer.com/partnering">https://pharma.bayer.com/partnering</a>	<a href="https://pharma.bayer.com/our-areas-interest">https://pharma.bayer.com/our-areas-interest</a>	Cardiology, hematology, oncology, women's healthcare, ophthalmology, radiology
BeiGene	<a href="https://www.beigene.com/partnering/partnering-with-beigene">https://www.beigene.com/partnering/partnering-with-beigene</a>	<a href="https://www.beigene.com/science-and-product-portfolio/research-development">https://www.beigene.com/science-and-product-portfolio/research-development</a>	Cancer (molecular targets), immuno-oncology therapies, combination therapies
Biogen	<a href="https://www.biogen.com/en_us/contact.html">https://www.biogen.com/en_us/contact.html</a>	<a href="https://www.biogen.com/en_us/scientific-expertise.html">https://www.biogen.com/en_us/scientific-expertise.html</a>	MS & neuroimmunology, neuromuscular disorders (SMA, ALS), movement disorders (Parkinson's), Alzheimer's & dementia, ophthalmology, neuropsychiatry, immunology, acute neurology, neuropathic pain

Company	General Partnering Webpages	Company Areas of Interest Webpage	Areas of Interest List
BioMarin Pharmaceutical	<a href="https://www.biomarin.com/our-company/funding-and-support/independent-research/">https://www.biomarin.com/our-company/funding-and-support/independent-research/</a>	<a href="https://www.biomarin.com/products/pipeline">https://www.biomarin.com/products/pipeline</a>	Genetic therapies for rare diseases
BioNTech	<a href="https://servicesplatform.partneringplace.com/OppPortal/portal/BioNTech/">https://servicesplatform.partneringplace.com/OppPortal/portal/BioNTech/</a>	<a href="https://www.biontech.com/int/en/home/research-and-innovation/therapeutic-areas.html">https://www.biontech.com/int/en/home/research-and-innovation/therapeutic-areas.html</a>	Oncology, Infectious Disease (COVID-19, Malaria, Tuberculosis)
Boehringer Ingelheim	<a href="https://www.boehringer-ingelheim.com/partnering">https://www.boehringer-ingelheim.com/partnering</a>	<a href="https://www.boehringer-ingelheim.com/partnering/working-together/partnering-interests">https://www.boehringer-ingelheim.com/partnering/working-together/partnering-interests</a>	CardioMetabolic Diseases, CNS Diseases, Immunology, Oncology & Cancer Immunology, Respiratory Diseases, Retinal Health
Bristol Myers Squibb	<a href="https://www.bms.com/researchers-and-partners/partnering.html">https://www.bms.com/researchers-and-partners/partnering.html</a>	<a href="https://www.bms.com/business-development/science-and-technology-areas-of-interest.html">https://www.bms.com/business-development/science-and-technology-areas-of-interest.html</a>	Solid tumors, hematology, cardiovascular, immunology, fibrotic diseases, neuroscience, translational medicine, cell therapy
Celltrion	<a href="https://celltrion.com/en-us/contact/customer">https://celltrion.com/en-us/contact/customer</a>	<a href="https://celltrion.com/en-us/science/rndstudy">https://celltrion.com/en-us/science/rndstudy</a>	Biosimilars (cancer, autoimmune disease, Osteoporosis, Asthma, IBS, dyslipidemia), novel antibody drugs (infectious disease, cancer, autoimmune), vaccines, fusion technology
Chongqing Zhifei Biological Products	<a href="http://en.zhifeishengwu.com/about/hzhh/">http://en.zhifeishengwu.com/about/hzhh/</a>	<a href="http://en.zhifeishengwu.com/produce/zycp/">http://en.zhifeishengwu.com/produce/zycp/</a>	Vaccines
Chugai Pharmaceutical	<a href="https://www.chugai-pharm.co.jp/english/profile/strengths/index.html">https://www.chugai-pharm.co.jp/english/profile/strengths/index.html</a>	<a href="https://www.chugai-pharm.co.jp/english/ir/rd/structure.html">https://www.chugai-pharm.co.jp/english/ir/rd/structure.html</a>	Technology research and genetic analysis for therapeutic antibodies; At Fuji Gotemba Research Laboratories focus on bone and joint, renal, hematologic and immune diseases, cancer
CSL Behring	<a href="https://www.csl.com/partnering">https://www.csl.com/partnering</a>	<a href="https://www.cslbehring.com/r-and-d/r-and-d-capabilities">https://www.cslbehring.com/r-and-d/r-and-d-capabilities</a>	Immunology, Hematology & Thrombosis, Transplant, Respiratory, Cardiovascular & Metabolic
CSPC Pharmaceutical Group	<a href="https://www.cspc.com.hk/en/contacts/contact-us.php">https://www.cspc.com.hk/en/contacts/contact-us.php</a>	<a href="https://www.cspc.com.hk/en/competence/strategies.php">https://www.cspc.com.hk/en/competence/strategies.php</a>	Oncology, autoimmunity, psychiatry and neurology, digestion and metabolism, cardio-cerebrovascular system and anti-infectives
Daiichi Sankyo	<a href="https://www.daiichisankyo.com/about_us/partnerships/business_development/index.html">https://www.daiichisankyo.com/about_us/partnerships/business_development/index.html</a> <a href="https://www.daiichisankyo.com/rd/strategy_operations/open_innovation/">https://www.daiichisankyo.com/rd/strategy_operations/open_innovation/</a>	<a href="https://www.daiichisankyo.com/rd/strategy_operations/open_innovation/our_interests/">https://www.daiichisankyo.com/rd/strategy_operations/open_innovation/our_interests/</a>	Oncology, rare diseases (monogenic, non-monogenic), CNS, ophthalmology, chronic heart failure, immunology
Eisai Co	<a href="https://www.eisai.com/sustainability/partner/partnership/index.html">https://www.eisai.com/sustainability/partner/partnership/index.html</a>	<a href="https://www.eisai.com/company/glance/index.html">https://www.eisai.com/company/glance/index.html</a>	Neurology, Oncology

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Eli Lilly	<a href="https://www.lilly.com/partners/scientific-partnering">https://www.lilly.com/partners/scientific-partnering</a>	<a href="https://www.lilly.com/partners/scientific-areas-of-interest">https://www.lilly.com/partners/scientific-areas-of-interest</a>	Loxo Oncology, neurodegenerative disease, pain & migraine, diabetes and related complications, immunology, new therapeutic modalities
Fresenius SE	<a href="https://www.linkedin.com/company/fresenius-kabi/">https://www.linkedin.com/company/fresenius-kabi/</a>	<a href="https://www.fresenius.com/fresenius-kabi">https://www.fresenius.com/fresenius-kabi</a>	I.V. generic drugs, infusion therapies and clinical nutrition products, biosimilars (autoimmune disease, oncology), transfusion technology
Genmab	<a href="https://www.genmab.com/partnering/">https://www.genmab.com/partnering/</a>	<a href="https://www.genmab.com/research-innovation/antibody-technology-platforms/">https://www.genmab.com/research-innovation/antibody-technology-platforms/</a>	Antibody therapeutics (cancer, autoimmune conditions, inflammation, central nervous system conditions and infectious diseases)
Gilead Sciences	<a href="https://www.gilead.com/utility/contact/partnership-request">https://www.gilead.com/utility/contact/partnership-request</a>	<a href="https://www.gilead.com/science-and-medicine/medicines">https://www.gilead.com/science-and-medicine/medicines</a>	HIV/AIDS, COVID-19, Liver Disease, Hematology/Oncology, Cardiovascular, Inflammation/Respiratory
GlaxoSmithKline	<a href="https://www.gsk.com/en-gb/partnerships/">https://www.gsk.com/en-gb/partnerships/</a>	<a href="https://www.gsk.com/en-gb/research-and-development/partnerships/our-areas-of-interest/">https://www.gsk.com/en-gb/research-and-development/partnerships/our-areas-of-interest/</a>	Respiratory, HIV/Infectious Disease, Vaccines, Oncology, Immune system, Human Genetics, Advanced Technologies
Horizon Therapeutics	<a href="https://www.horizontherapeutics.com/company/partnering">https://www.horizontherapeutics.com/company/partnering</a>	<a href="https://www.horizontherapeutics.com/science/research-development">https://www.horizontherapeutics.com/science/research-development</a>	Endocrinology, Nephrology, Neuroimmunology, Ophthalmology, Rare diseases, Rheumatology
Incyte	<a href="https://www.incyte.com/what-we-do/collaborate-partners-in-science">https://www.incyte.com/what-we-do/collaborate-partners-in-science</a>	<a href="https://www.incyte.com/what-we-do/drug-development">https://www.incyte.com/what-we-do/drug-development</a>	Oncology, Inflammation, Autoimmunity
Japan Tobacco	<a href="https://www.torii.co.jp/en/contact/">https://www.torii.co.jp/en/contact/</a>	<a href="https://www.torii.co.jp/en/company/research.html">https://www.torii.co.jp/en/company/research.html</a>	Glucose and lipid metabolism, immune disorders and inflammation, virus research
Jiangsu Hengrui Medicine	<a href="http://www.shhrp.com/about/1345730403.html">http://www.shhrp.com/about/1345730403.html</a>	<a href="http://www.shhrp.com/research/1345730683.html">http://www.shhrp.com/research/1345730683.html</a>	Tumor and diabetes drugs, expand the field of protein and antibody biopharmaceuticals
Johnson & Johnson	<a href="https://jnjinnovation.com/innovation-centers">https://jnjinnovation.com/innovation-centers</a>	<a href="https://jnjinnovation.com/partnering/pharmaceuticals">https://jnjinnovation.com/partnering/pharmaceuticals</a>	Cardiovascular & Metabolism; Immunology; Infectious Diseases & Vaccines; Neuroscience; Oncology; and Pulmonary Hypertension
Kirin Holdings	<a href="https://www.kyowakirin.com/what_we_do/research_collaboration_licensing/index.html">https://www.kyowakirin.com/what_we_do/research_collaboration_licensing/index.html</a>	<a href="https://www.kyowakirin.com/what_we_do/approach_for_innovation/index.html#anc-h5o-4">https://www.kyowakirin.com/what_we_do/approach_for_innovation/index.html#anc-h5o-4</a> <a href="https://www.kyowakirin.com/what_we_do/index.html">https://www.kyowakirin.com/what_we_do/index.html</a>	Therapeutic antibodies (oncology, nephrology, central nervous system and immunology), small molecule drugs, nucleic acid drugs, regenerative medicine
Legend Biotech	<a href="https://legendbiotech.com/about/collaborations/">https://legendbiotech.com/about/collaborations/</a>	<a href="https://legendbiotech.com/research-development/">https://legendbiotech.com/research-development/</a>	Oncology (hematologic malignancies and solid tumors)

Company	General Partnering Webpages	Company Areas of Interest Webpage	Areas of Interest List
LG Chem	<a href="https://www.lgchem.com/main/index">https://www.lgchem.com/main/index</a>	<a href="https://www.lgchem.com/upload/file/introduce/2021_Introduction_of_LGChem_EN[15].pdf">https://www.lgchem.com/upload/file/introduce/2021_Introduction_of_LGChem_EN[15].pdf</a>	Has Life Science division with products in diabetes, cardiovascular, musculoskeletal, autoimmune, growth hormones, hepatitis B and pentavalent vaccines, aesthetics
Merck	<a href="https://www.merck.com/licensing/home.html">https://www.merck.com/licensing/home.html</a>	<a href="https://www.merck.com/research/index.html#WhatWereWorkingOn">https://www.merck.com/research/index.html#WhatWereWorkingOn</a>	Oncology, Vaccines, Infectious Diseases, COVID-19, cardio-metabolic disorders
Merck KGaA	<a href="https://www.emdgroup.com/en/company/partnering/collaboration/collaboration-in-healthcare.html">https://www.emdgroup.com/en/company/partnering/collaboration/collaboration-in-healthcare.html</a>	<a href="https://www.emdgroup.com/en/research/our-approach-to-research-and-development/healthcare/our-r-and-d-areas-of-focus.html">https://www.emdgroup.com/en/research/our-approach-to-research-and-development/healthcare/our-r-and-d-areas-of-focus.html</a>	Oncology, Immuno-Oncology, Immunology, Multiple Sclerosis, Fertility
Moderna	<a href="https://www.modernatx.com/partnerships/strategic-collaborators">https://www.modernatx.com/partnerships/strategic-collaborators</a>	<a href="https://www.modernatx.com/research/therapeutic-areas">https://www.modernatx.com/research/therapeutic-areas</a>	infectious diseases, immuno-oncology, rare diseases, cardiovascular diseases and autoimmune diseases
Novartis	<a href="https://www.novartis.com/our-company/novartis-partnering">https://www.novartis.com/our-company/novartis-partnering</a>	<a href="https://www.novartis.com/our-focus">https://www.novartis.com/our-focus</a>	Oncology, Cardiovascular, Metabolic & Renal Diseases, Immunology & Dermatology, Neuroscience, Ophthalmology, Respiratory Diseases, Cell and Gene Therapy
Novo Nordisk	<a href="https://www.novonordisk.com/research-and-development/partner-with-us.html">https://www.novonordisk.com/research-and-development/partner-with-us.html</a>	<a href="https://www.novonordisk.com/disease-areas.html">https://www.novonordisk.com/disease-areas.html</a>	Type 1 Diabetes, Type 2 Diabetes, obesity, growth disorders, hemophilia
Otsuka Holdings	<a href="https://www.otsuka.co.jp/en/partnering-and-licensing/inquiry-form/form">https://www.otsuka.co.jp/en/partnering-and-licensing/inquiry-form/form</a>	<a href="https://www.otsuka.co.jp/en/pharmaceutical-business/">https://www.otsuka.co.jp/en/pharmaceutical-business/</a>	Neuroscience, nephrology, autoimmune, oncology, gastrointestinal disorders, cardiovascular diseases, ophthalmology, dermatology
Pfizer	<a href="https://www.pfizer.com/partners">https://www.pfizer.com/partners</a>	<a href="https://www.pfizer.com/science/therapeutic-areas">https://www.pfizer.com/science/therapeutic-areas</a>	Internal Medicine, Rare Disease, Inflammation & Immunology, Vaccines, Oncology
Regeneron	<a href="https://www.regeneron.com/collaborations">https://www.regeneron.com/collaborations</a>	<a href="https://www.regeneron.com/research-areas">https://www.regeneron.com/research-areas</a>	Cardiovascular/Metabolic diseases, Infectious diseases, Inflammation and Immunology, Oncology, Hematology, Ophthalmology, Neurology, Rare Diseases
Roche Holding AG	<a href="https://www.roche.com/partnering/about_partnering_at_roche.htm">https://www.roche.com/partnering/about_partnering_at_roche.htm</a>	<a href="https://www.roche.com/partnering/pharma-areas-of-interest.htm">https://www.roche.com/partnering/pharma-areas-of-interest.htm</a>	Oncology and cancer immunotherapy, immunology, infectious diseases, neuroscience, ophthalmology, rare diseases
Sanofi	<a href="https://www.sanofi.com/en/partnering">https://www.sanofi.com/en/partnering</a>	<a href="https://www.sanofi.com/-/media/Project/One-Sanofi-Web/Websites/Global/Sanofi-COM/Home/common/docs/science-and-innovation/SAN_Brochure_partnering_2021-Finale.pdf?la=en&amp;hash=A77B0FEF1DD5A29C047DBF67045D5E6E">https://www.sanofi.com/-/media/Project/One-Sanofi-Web/Websites/Global/Sanofi-COM/Home/common/docs/science-and-innovation/SAN_Brochure_partnering_2021-Finale.pdf?la=en&amp;hash=A77B0FEF1DD5A29C047DBF67045D5E6E</a>	Immunology, Oncology, Neuroscience, Rare Diseases, Vaccines, Diabetes, Cardiovascular

Company	General Partnering Webpages	Company Areas of Interest Webpage	Areas of Interest List
Sarepta	<a href="https://www.sarepta.com/science/strategic-partners">https://www.sarepta.com/science/strategic-partners</a>	<a href="https://www.sarepta.com/disease-areas">https://www.sarepta.com/disease-areas</a>	Rare genetic diseases (Duchenne muscular dystrophy, limb-girdle muscular dystrophies, and Charcot-Marie-Tooth disease)
Seagen	<a href="https://www.seagen.com/who-we-are/partnerships">https://www.seagen.com/who-we-are/partnerships</a>	<a href="https://www.seagen.com/patients-and-caregivers/disease-we-study">https://www.seagen.com/patients-and-caregivers/disease-we-study</a>	Hodgkin lymphoma, cutaneous and peripheral T-cell lymphoma (CTCL, PTCL), cancer (breast, lung, bladder, ovarian)
Shanghai Fosun Pharmaceutical Group	<a href="https://www.fosunpharma.com/en/innovation/alliance.html">https://www.fosunpharma.com/en/innovation/alliance.html</a>	<a href="https://www.fosunpharma.com/en/product/pharmacy-list.html">https://www.fosunpharma.com/en/product/pharmacy-list.html</a>	Metabolism and digestive tract, anti-tumor, anti-infective, CNS, cardiovascular, blood diseases, vaccine
Shionogi & Co	<a href="https://www.shionogi.com/global/en/innovation/partnering.html">https://www.shionogi.com/global/en/innovation/partnering.html</a>	<a href="https://www.shionogi.com/global/en/innovation/randd/drug-discovery/what-we-are-focusing-on.html">https://www.shionogi.com/global/en/innovation/randd/drug-discovery/what-we-are-focusing-on.html</a>	Infectious disease, pain CNC (novel mechanisms), novel modalities
Sun Pharmaceutical Industries	<a href="http://www.sunpharma.com/business-development">http://www.sunpharma.com/business-development</a>	<a href="https://sunpharma.com/products/">https://sunpharma.com/products/</a>	CNS, Cardiovascular, Women Health, Dermatology, Ophthalmology, Oncology, Anti-Infectives and Gastro therapies, orphan indications  India: CNS disorders, Cardiology, Diabetes and Metabolic disorders, Gastroenterology, Ophthalmology, Oncology, Pain, Rheumatology, Allergy, Asthma and Inflammation and Gynecology
Takeda	<a href="https://www.takeda.com/what-we-do/alliances-partnerships/">https://www.takeda.com/what-we-do/alliances-partnerships/</a>	<a href="https://www.takeda.com/what-we-do/therapeutic-areas/">https://www.takeda.com/what-we-do/therapeutic-areas/</a>	Oncology, Rare Diseases, Neuroscience, and Gastroenterology (GI), Plasma-Derived Therapies, Vaccines
UCB	<a href="https://www.ucb.com/our-company/partnering/">https://www.ucb.com/our-company/partnering/</a>	<a href="https://www.ucb.com/disease-areas/">https://www.ucb.com/disease-areas/</a>	Neurology, immunology, rare diseases
United Therapeutics	<a href="https://www.unither.com/contact">https://www.unither.com/contact</a>	<a href="https://pipeline.unither.com/">https://pipeline.unither.com/</a>	Pulmonary arterial hypertension, Pulmonary hypertension, and End-stage organ disease
Vertex Pharmaceuticals	<a href="https://www.vrtx.com/we-are-vertex/collaborations-partnering">https://www.vrtx.com/we-are-vertex/collaborations-partnering</a>	<a href="https://www.vrtx.com/we-are-vertex/collaborations-partnering#areas-of-interest">https://www.vrtx.com/we-are-vertex/collaborations-partnering#areas-of-interest</a>	Cystic fibrosis, Alpha-1 Antitrypsin Deficiency (AATD), Sickle Cell Disease and Beta Thalassemia, Pain, APOL1-Mediated Kidney Disease, new platform technologies that will enable exploration of new diseases or disease targets
Viatriis	<a href="https://www.viatriis.com/en/about-us/corporate-social-responsibility/partnerships">https://www.viatriis.com/en/about-us/corporate-social-responsibility/partnerships</a>	<a href="https://www.viatriis.com/en/products/therapeutic-areas">https://www.viatriis.com/en/products/therapeutic-areas</a>	Cardiovascular, CNS & Anesthesia, Dermatology, Diabetes & Metabolism, Eye Care, Gastroenterology, Immunology, Infectious Disease, Oncology, Respiratory & Allergy, Women's Healthcare

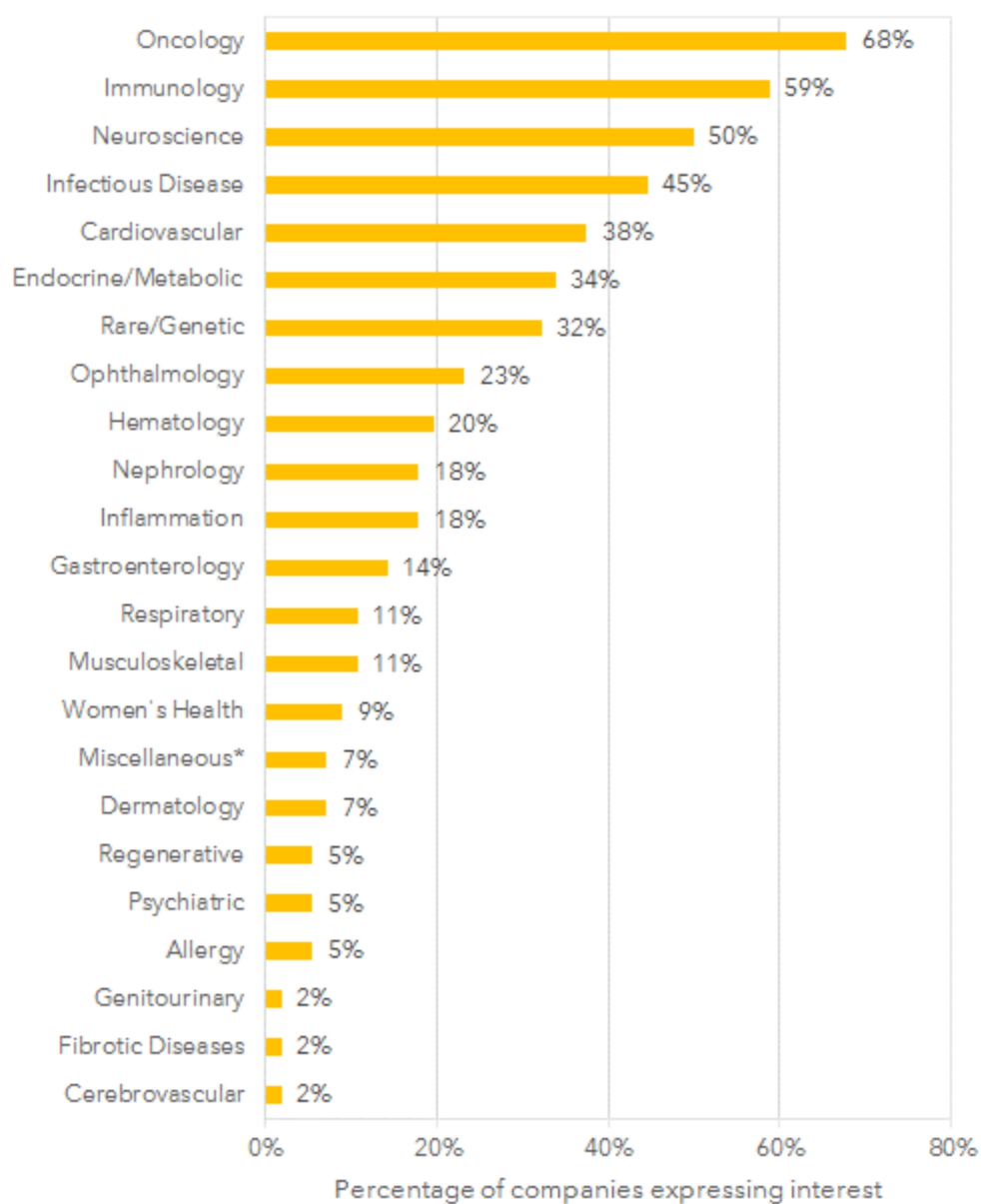


Company	General Partnering Webpages	Company Areas of Interest Webpage	Areas of Interest List
Yunnan Baiyao Group	<a href="https://www.linkedin.com/company/yunnan-baiyao-group-co-ltd">https://www.linkedin.com/company/yunnan-baiyao-group-co-ltd</a>	<a href="https://yunnanbaiyao.co/company-profile/">https://yunnanbaiyao.co/company-profile/</a>	Chinese patent medicines, Chinese traditional medicines, biological products, health food, cosmetics and beverages, and medical devices

**Table 2.** Standardized pharma partnering interests

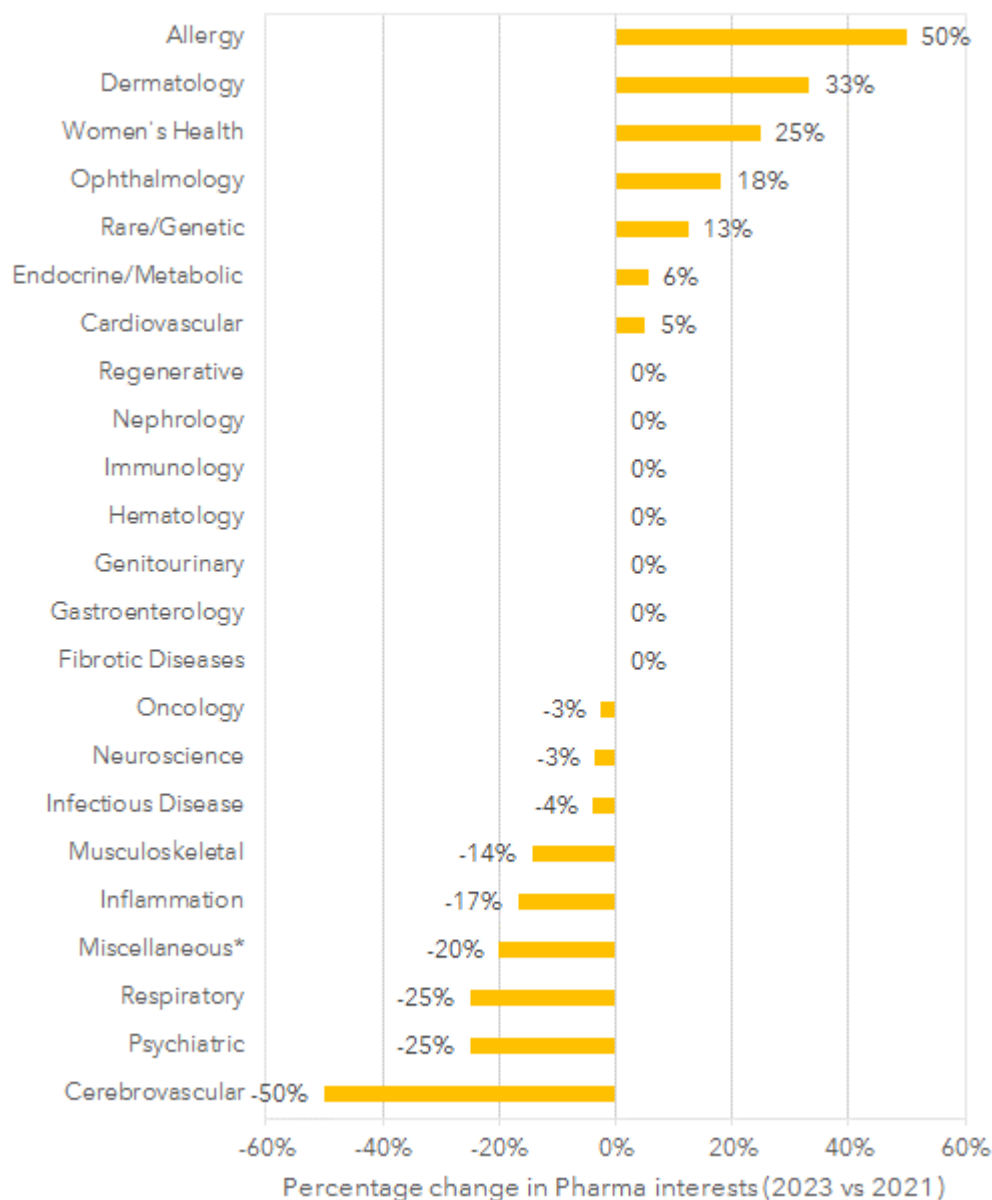
Company	Allergy	Cardiovascular	Cerebrovascular	Dermatology	Endocrine/Metabolic	Fibrotic Diseases	Gastroenterology	Genitourinary	Hematology	Immunology	Infectious Disease	Inflammation	Miscellaneous*	Musculoskeletal	Nephrology	Neuroscience	Oncology	Ophthalmology	Psychiatric	Rare/Genetic	Regenerative	Respiratory	Women's Health	
AbbVie										Y	Y					Y	Y			Y			Y	
Alnylam Pharmaceuticals																					Y			
Amgen		Y							Y			Y		Y	Y	Y	Y							
Apellis																Y	Y		Y		Y			
Argenx									Y	Y						Y								
Astellas Pharma							Y			Y	Y			Y	Y	Y	Y	Y			Y	Y		
AstraZeneca		Y			Y		Y			Y	Y				Y	Y	Y						Y	
Baxter International													Y		Y									
Bayer		Y							Y									Y	Y					Y
BeiGene																	Y							
Biogen										Y						Y		Y						
BioMarin Pharmaceutical																					Y			
BioNTech											Y							Y						
Boehringer Ingelheim		Y			Y				Y	Y						Y	Y	Y					Y	
Bristol Myers Squibb		Y				Y			Y	Y						Y	Y							
Celltrion	Y	Y								Y	Y			Y			Y							
Chongqing Zhifei Biological Products											Y													
Chugai Pharmaceutical									Y	Y				Y	Y		Y							
CSL Behring		Y			Y				Y	Y												Y	Y	
CSPC Pharmaceutical Group		Y	Y		Y		Y			Y	Y						Y	Y		Y				
Daiichi Sankyo		Y								Y							Y	Y	Y		Y			
Eisai Co										Y	Y						Y	Y						
Eli Lilly					Y					Y							Y	Y						
Fresenius SE					Y					Y			Y				Y							
Genmab										Y	Y	Y				Y	Y							
Gilead Sciences		Y					Y		Y		Y	Y					Y						Y	
GlaxoSmithKline										Y	Y	Y					Y				Y		Y	
Horizon Therapeutics					Y					Y		Y			Y			Y			Y			
Incyte										Y	Y						Y							
Japan Tobacco					Y					Y	Y	Y												
Jiangsu Hengrui Medicine					Y												Y							
Johnson & Johnson		Y			Y					Y	Y					Y	Y	Y						
Kirin Holdings										Y					Y	Y	Y					Y		
Legend Biotech																	Y							
LG Chem		Y			Y					Y	Y			Y										
Merck		Y			Y						Y						Y							
Merck KGaA										Y							Y	Y						Y
Moderna										Y	Y						Y				Y			
Novartis		Y			Y	Y				Y					Y	Y	Y	Y			Y		Y	
Novo Nordisk					Y				Y															
Otsuka Holdings		Y			Y		Y			Y	Y				Y	Y	Y	Y	Y					
Pfizer										Y	Y	Y					Y				Y			
Regeneron		Y			Y					Y	Y	Y				Y	Y	Y			Y			
Roche Holding AG										Y	Y	Y				Y	Y	Y			Y			
Sanofi		Y			Y					Y	Y					Y	Y				Y			
Sarepta																					Y			
Seagen																	Y							
Shanghai Fosun Pharmaceutical Group		Y			Y		Y		Y		Y						Y	Y						
Shionogi & Co											Y			Y			Y			Y				
Sun Pharmaceutical Industries	Y	Y			Y	Y				Y	Y	Y					Y	Y	Y		Y			Y
Takeda						Y			Y		Y						Y	Y			Y			
UCB										Y							Y							
United Therapeutics		Y											Y											
Vertex Pharmaceuticals															Y	Y					Y			
Viatis	Y	Y			Y	Y				Y	Y							Y	Y					Y
Yunnan Baiyao Group													Y											
<b>% of Companies</b>	<b>5%</b>	<b>38%</b>	<b>2%</b>	<b>7%</b>	<b>34%</b>	<b>2%</b>	<b>14%</b>	<b>2%</b>	<b>20%</b>	<b>59%</b>	<b>45%</b>	<b>18%</b>	<b>7%</b>	<b>11%</b>	<b>18%</b>	<b>50%</b>	<b>68%</b>	<b>23%</b>	<b>5%</b>	<b>32%</b>	<b>5%</b>	<b>11%</b>	<b>9%</b>	

\*Miscellaneous includes hospital, generics, internal medicine, orthopedics, medical devices, Chinese traditional medicine, end-stage organ disease

**Figure 1.** Percentage of companies expressing interest in standardized therapeutic area.

\*Miscellaneous includes hospital, generics, internal medicine, orthopedics, medical devices, Chinese traditional medicine, end-stage organ disease

**Figure 2.** Percentage change in companies expressing an interest in standardized therapeutic areas (2023 vs 2021).



\*Miscellaneous includes hospital, generics, internal medicine, orthopedics, medical devices, Chinese traditional medicine, & end-stage organ disease.

## Brief Partnering Primer

Whether or not your company is developing a therapeutic for a 'hot' indication or drug target, it is crucial to be prepared in advance of reaching out to potential partners. The entire partnering process for a pharmaceutical asset can take over a year to complete, depending on a number of factors such as the type of molecule and disease indication, how advanced the program is in development, what volume of data needs to be considered, how competitive the space is, and how complex the deal and contract terms are. Alacrita has considerable experience in supporting companies with partnering and can provide assistance across any or all components of the partnering process.

To ensure your asset is ready for partnering, we recommend the following initial workplan:

- Materials preparation and partner screening:
  - Build a virtual data room
  - Mock due diligence and gap analysis
  - Prepare non-confidential (NC) and confidential pitch decks
  - Identify and prioritize prospective partners for outreach

Alacrita can assist you with these steps, and our network of expert consultants ensures we have the scientific and business expertise on hand to highlight the strengths of your asset and express its value. If you are already in discussions with potential partners, we can provide you with a deal comparables analysis, sales forecast and rNPV asset valuation, and/or transactional support to ensure that deal terms are fair. Alternatively, if your company is in a position to in-license an asset, our team of asset scouting experts can help you source and evaluate assets that meet your search criteria and enable you to diversify your pipeline.

For more information visit [www.alacrita.com](http://www.alacrita.com).