



# Clinical Trial Research Sites: A Second Wave of Consolidation

**QUADRIGA**  
PARTNERS

August 2023

With steady increases in pharma R&D spend, precision medicine, and increased clinical trial complexity, the fragmented clinical trial site industry has experienced outsized growth in recent years, and on the heels of that growth, targeted interest from private equity investors are looking to consolidate the industry

### Clinical Trial Introduction

Clinical trials are a type of research that studies new treatments and therapies to evaluate their safety and effectiveness to improve human health outcomes. In order for a drug or therapy to attain approval for commercialization and distribution by the Federal Food & Drug Administration (“FDA”), studies must progress through vigorous phases of testing. Phase I studies test new drugs for the first time in a small group of people to evaluate a safe dosage range and identify side effects. Phase II studies test treatments that have progressed through phase I and have been found to be safe, but now need a larger group of human subjects to monitor for any adverse effects and test for treatment efficacy. These studies are also used to study pharmacokinetics, or optimal drug administration, dosage amounts, and treatment intervals. Phase III studies are conducted on larger populations across a diversified geography and are usually the final step before FDA approval. Following FDA approval, if needed, phase IV studies provide further drug testing in a wide population over long time frames.

### Clinical Trial Research Site Overview

Clinical research sites can be categorized into two distinct business models: free standing and physician affiliated sites. Free standing research sites are dedicated research facilities typically led by experienced principal investigators (“PIs”) and key opinion leaders (“KOLs”) with long-standing expertise in specific therapeutic areas. Free standing research sites exclusively perform research on behalf of sponsors and CROs during study duration and provide no ongoing clinical care for patients upon study conclusion. These sites rely heavily on external marketing efforts and proprietary patient databases for study recruitment but benefit from operational freedom that comes from a lack of health system oversight. Free standing sites generally operate with higher overhead given the ongoing need for external patient recruitment and are more exposed to financial hardship in the case of poor business development or a slow-down in study contracts. Physician-affiliated sites, on the other hand, are housed within physician practices and manage study execution on behalf of physician practice groups and health systems.

#### About Quadriga Partners

Quadriga Partners is a premier healthcare investment bank, providing merger and acquisition advisory and growth and debt capital raising services exclusively for healthcare companies. Quadriga has a particular emphasis on several key sectors, including outsourced pharmaceutical services, and is among the most active advisors for clinical research focused transactions. Quadriga begins by obtaining an intimate understanding of their client’s short and long-term objectives.



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Clinical trial sites benefit from strong industry tailwinds through increased drug R&D spend and a growing number of registered clinical studies that on average have exceedingly long timelines

Given the ongoing patient care beyond study duration, physician-affiliated research sites benefit from an existing database of patients receiving care within the sites network. With the ongoing care model providing more financial security and less patient recruitment need, physician-affiliated research sites tend to operate with lower overhead.

Within free standing research sites, there are operational pros and cons to both large site networks and single sites. Site networks generally have dozens, if not hundreds, of principal investigators running studies within their dedicated therapeutic area. Generally, this means large site networks have capabilities to run clinical studies for all active therapeutic areas that sponsors are spending R&D money on, making them a one-stop-shop for long standing client relationships. In addition to wide therapeutic focuses, site networks have a deep history of running trials in a diversified geography, and therefore have a diverse population of study subjects to recruit from. With the added back-office capabilities of these sites and dedicated recruitment professionals, large site networks have an easier time recruiting diverse patient populations to provide enriched study data, even for the largest phase III studies. In contrast single site operators generally have specific therapeutic focuses and gain a reputation of being experts in their research areas. In addition to therapeutic area expertise, single sites smaller employee base results in exceptional customer service to sponsors and CROs.

U.S. Clinical Trial Site Market

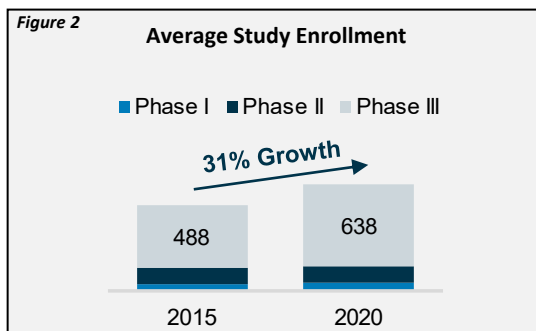
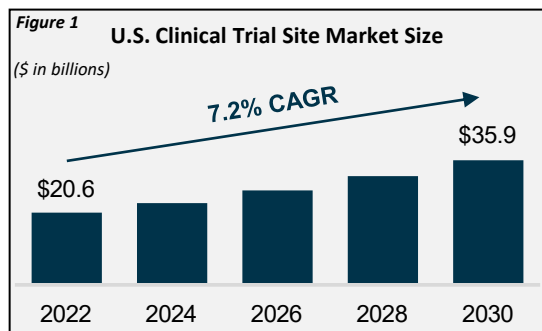
The United States clinical trial site market was valued at roughly \$20.6 billion in 2022 and is expected to grow at a compound annual growth rate of 7.2% through 2030, reaching a total market size of \$35.9 billion.

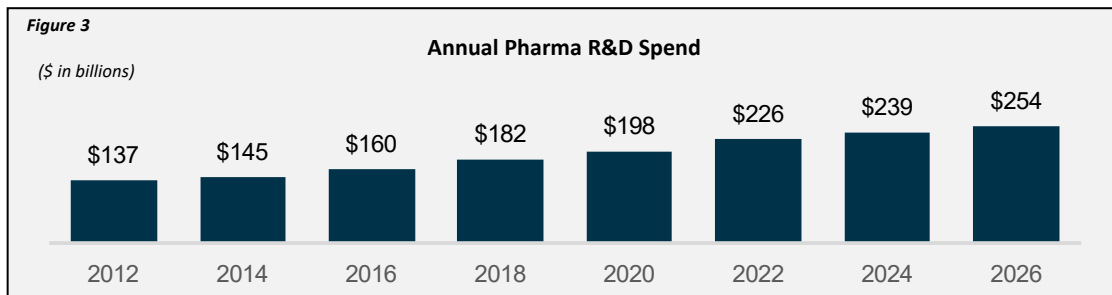
As global pharma R&D spend has been steadily increasing and is expected to grow at 4.5% CAGR through 2026, increased R&D spend trickles into the clinical trial market as the number of new registered clinical trials each year is growing at 7.7% CAGR, while lengthened trial timelines results in an increase in the total number of registered clinical studies.

In addition to growing global R&D spend, a driver of growth in the trial site industry is robust phase III study revenue coming from longer duration contracts as approval timelines lengthen and average enrollment grows. Phase III clinical trials require significant patient enrollment ranging from 300 - 3,000 patients per study and require longer treatment times. While increased R&D spend and growing phase III study enrollments provide a strong revenue backlog for trial sites, this growth is not without challenge as stricter enrollment requirements contribute to an increase in trial complexity.

Increased Trial Complexity

With pharma companies spending billions every year on research and development, leading to a sharp increase in the number of clinical studies, trials are becoming increasingly complex. Increased enrollment requirements, protocols required, regulatory requirements for patient diversity, and greater focus on precision medicine has driven pharma sponsors to look to outsourced service providers like CROs and dedicated clinical trial site facilities for the execution of clinical programs. Those reasons include:





**Growing Phase III Study Enrollment** - Phase III studies have experienced increased subject enrollment since 2015. Pairing this with an increase in the number of registered phase III studies, clinical trial sites benefit from not only longer study timelines, but increased revenue from phase III study screening and enrollment

**Substantial Protocol Amendments** - In a recent study conducted by the Tufts University Center for the Study of Drug Development, between June and October 2022, of 952 total protocols studies three quarters had at least one substantial protocol amendment (defined as protocol changes requiring both internal/external approval and reconsenting of participants). These protocol amendments play a significant role in not only driving up the clinical cost of completing studies, but delay timelines that are unbudgeted in pharma sponsors original development plans. Increased protocol amendment instances and overall protocol complexity necessitate outsourced clinical study sites that can effectively execute complex protocols and efficiently pivot in the case of protocol amendments.

**Increased Diversity Requirements** – In the 2023 omnibus spending bill, diversity action plans for clinical trials used by the FDA are now required for study compliance. Strict patient diversity requirements necessitate the usage of third-party sites to successfully recruit and enroll patients in clinical trials.

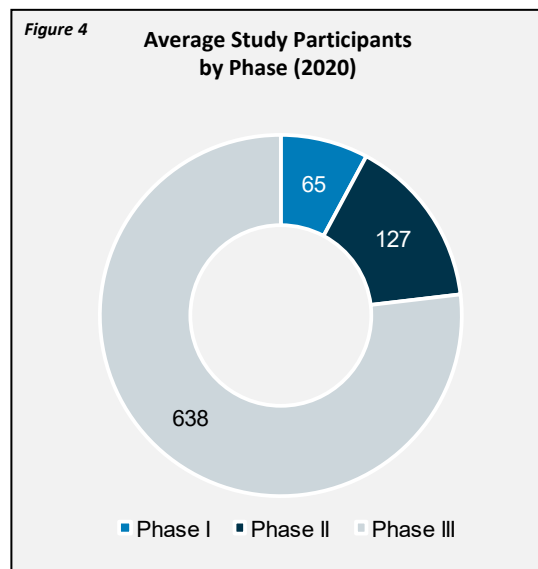
**Greater Focus on Precision Medicine** – As referenced in our August 2023 paper [The Proliferation of The Medical Communications Industry](#), precision medicines, which are often costly and complex to manage and administer, require clinical trial site sophistication to recruit the right patient base and execute complex studies that are too costly for pharma sponsors to run independently.

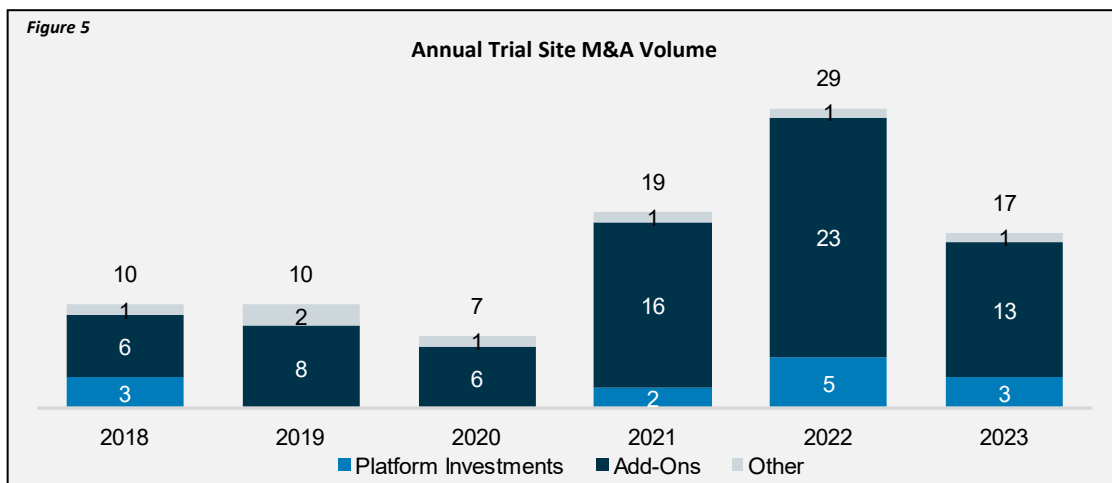
**Industry Consolidation**

**The Role of Private Equity** - Following the COVID-19 pandemic, as global deal flow slowed down and investment banks stopped bringing deals to market,

private equity firms began researching timely sector ideas and seeking out executives to partner with in those areas. Seeing the fragmented clinical trial site industry as being ripe consolidation and scaling efforts, funds began investing heavily in starting new platforms. Private equity has made significant investment in the last five years in new research site platform creates and continues to roll up smaller sites to diversify their study geography, therapeutic area focuses, and patient populations. Since 2018, the trial site industry has experienced 90+ M&A transactions, 13 of which have been new platform investments or platform buyouts.

**Clinical Trial Site Fragmentation** – According to the Society for Clinical Research Sites, there are nearly 900 active clinical trial research sites in the United States. Given the early stage of consolidation the site research industry is experiencing, nearly all of these sites are independently owned and operated, and can be identified by private equity to be key consolidation targets to achieve operational efficiencies through centralization.





**A Second Wave of Consolidation** - Consolidation in the clinical trial space, and more specifically private equity investment in research platforms, became prevalent around 2018 with KKR’s investment in Headlands Research, Linden’s investment in Evolution Research Group (ERG), and Webster Equity’s investment in CenExel. With sponsor investment, each of these platforms have completed roughly 10 roll-up acquisitions, diversifying both their geographic footprint and service offerings. Following these investments, the industry was relatively quiet, with the only M&A activity being platform add-ons through 2020. Since then, 10 additional private equity sponsors followed suit, launching the second wave of trial platform investments and corresponding roll-up acquisitions. With nearly 30 total research site M&A events in 2022, private equity sponsors are investing in the second wave of trial site consolidation.

**Benefits of Consolidation**

Given the overhead expense of running a free-standing trial site, private equity sponsors have recognized the benefits of consolidation within the research site industry. Centralized platforms experience economies of scale through larger patient databases, lower study start-up costs, and efficient trial execution.

**Centralized Back-Office Operations** - One of the primary pain points during study execution for CROs and pharma sponsors is the fragmentation of processes and system silos when conducting trials across dozens of sites. Centralized back-office functions cut down on manual processes, improve collaboration, and boost sponsor visibility and

oversight of trials. Improving the use of CTMS software results in better reporting and analytics and increased visibility to provide sponsors with accurate data needed to evaluate studies and cut down on barriers to information flow and standardize data reporting.

**Efficient Study Start-Up** - Industry consolidation also results in faster study start-up. Currently, the process of site identification through to study initiation takes roughly 7 months to complete. Through consolidation, large platforms develop standard operating procedures for study start-up cutting down on unnecessary start-up steps, variation across sites, and general lack of understanding of what is required to launch a study, particularly when studies are complex. Industry experts estimate that underperforming study sites and delayed start-up times cost CROs and sponsors anywhere between \$600 thousand and \$8 million per day of trial delay. Partner the monetary cost of delays with the extended timeline of bringing new therapies to patients, in many instances 10 – 15 years for modern therapies, and rapid site identification and study start-up becomes a critical site capability.

**Robust Patient Recruitment** - Free standing clinical trial sites have long struggled with recruitment efforts for clinical studies. Without large patient databases that physician-affiliated sites benefit from, free standing trial sites rely heavily on community outreach, word of mouth, and advertising campaigns. As sites initiate new trials and studies get more complex, advertising strategies need to become increasingly tailored to specific patient populations.

Tailoring advertising strategies for each trial is expensive and time consuming. As platforms continue to consolidate single sites, patient databases grow, resulting in more effective and targeted outreach and in turn, higher study enrollment.

In addition to larger patient recruitment databases, industry consolidation increases the footprint from which research site platforms can recruit from. With an increased focus on patient diversity in clinical studies, having a diverse patient database to recruit from is invaluable. Sponsors have recently placed increasing emphasis on diverse study enrollment bases to enrich safety and efficacy data for specific drugs. Diversity in clinical studies has a secondary effect of building trust between pharmaceuticals and historically marginalized populations as patients of all ethnicities, races, sexual orientations, and lifestyle backgrounds see representation in clinical studies.

**Expansion of Service Offerings** - As fragmented players in the clinical site space consolidate, additional capital and workforce enables expansion of capabilities for site platforms to offer CROs and sponsors a higher-end service offering. Platforms with previous expertise in the execution of late-phase trials have acquired diversified single sites to expand services to cover trials for all phases of development, from early-stage to post approval. As platforms expand their capabilities, either through acquisitions or de novo growth of new sites, many have built out dedicated early-phase facilities, stocked with pharmacology units prepared to handle large numbers of patients, and databases of thousands of healthy volunteers. Early phase trials, such as bioavailability, bioequivalence, drug interaction, and first-in-man studies require unique expertise that large, well-capitalized platforms are better equipped to handle than standalone sites with few PIs.

**Decentralized Clinical Trials**

Decentralized trials (“DCT”) are studies where some or all of a trials activities occur at locations other than traditional trial sites. DCTs have grown in popularity in

congruence with digital health technologies utilizing devices like activity trackers, continuous glucose monitors, blood pressure monitors, and other wearables to capture patient health information remotely. Throughout the COVID-19 pandemic, decentralized trials became an invaluable method to continue the drug approval process while limitations were placed on in-person patient visits to trial sites.

While DCTs have proven to be useful tools in data collection for clinical research, the clinical research industry is far from a fully remote research environment. As mentioned in our October 2022 publication [Navigating Evolving Trends in Clinical Research](#), decentralized trials pose unique logistical challenges that can hinder the efficiency of trial execution. Drug distribution must be highly coordinated to ship drugs directly to patient's homes. Direct shipments necessitate assurance of drug stability, methods to prevent unauthorized access, and proper dosing and documentation. Ultimately, while DCTs provide useful tools for remote patient monitoring and decreased patient visits, decentralized trials are a tool best used in tandem with traditional study methodologies.

**Summary**

The clinical trial site industry is a fragmented market that is benefitting heavily from industry tailwinds like increased R&D spend and extended approval timelines. Private equity investors have taken note of the efficiencies that can be achieved by large scale site consolidation and have invested billions of dollars in the industry to provide diversified platforms serving the pharmaceutical industry and, ultimately, bettering patient outcomes.



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Select Clinical Trial Site Platforms



Acquired by KKR in 2018, Headlands Research is one of the leading consolidators of clinical trial sites in the United States. Founded in San Francisco, CA, and headquartered in Lake Worth, FL, KKR's investment has enabled Headlands to expand to 6 states in the U.S. and 2 provinces in Canada.

Headlands' broad therapeutic focus and fragmented geography grants the platform access to a diverse patient population across multiple ethnic and age demographics.

**Kyle Burnett**

CEO

**2018**

Year Acquired

**10**

Platform Add-ons

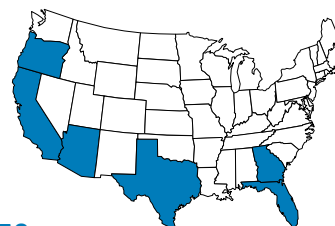
**50**

Principal and Sub-Investigators

**25**

Therapeutic Areas

**U.S. Geographic Presence**



**350+**

Employees



Acquired by Linden in 2018, ERG operates 18 clinical research sites across 6 states and 9 therapeutic areas. ERG has dedicated expertise in conducting early-phase trials with a specialized healthy volunteer clinical pharmacology unit with 120 beds having conducted 800+ studies. In total, ERG has conducted 2,000+ phase I studies.

**Lori Wright**

CEO

**2018**

Year Acquired

**7**

Platform Add-ons

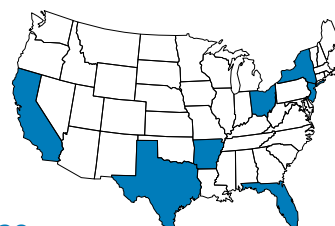
**35+**

Principal and Sub-Investigators

**9**

Therapeutic Areas

**U.S. Geographic Presence**



**130+**

Employees



Acquired by Webster Equity in 2018, CenExel is a network of 18 centers of excellence in 7 states throughout the U.S. Originally a single site focused on post-operational pain studies in Salt Lake City, Webster's investment enabled CenExel to expand to six additional states while developing expertise in a wide range of therapeutic areas and recruitment capabilities for ethnic bridging studies.

**Stuart Goldblatt**

CEO

**2018**

Year Acquired

**12**

Platform Add-ons

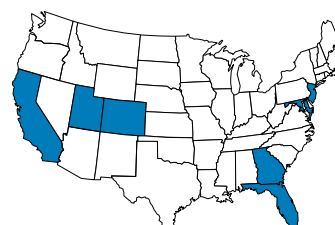
**170+**

Active Studies

**8**

Therapeutic Areas

**U.S. Geographic Presence**



**50+**

Employees



Acquired by GHO Capital from NaviMed Capital in 2021, Velocity operates 80 research sites across the United States and Europe with a diversified therapeutic focus and capabilities to run trials for various specialized patient populations and provide specialized trial support. Velocity has completed 15,000+ clinical trials since its founding in 1986 and has enrolled 100,000+ patients worldwide.

**Paul Evans**

CEO

**2021**

Year Acquired

**18**

Platform Add-ons

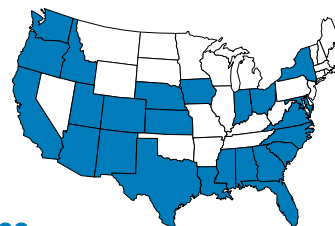
**220**

Principal and Sub-Investigators

**25**

Therapeutic Areas

**U.S. Geographic Presence**



**800+**

Employees

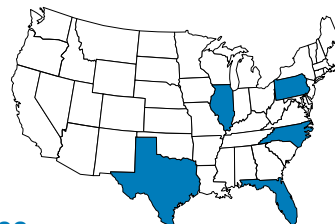
### Select Clinical Trial Site Platforms



NMS | CAPITAL

Created through NMS Capital’s recapitalization of Clinical Trials of Texas, Flourish is a centralized clinical trial site network headquartered in San Antonio, TX providing phase I-IV studies covering 48 inpatient beds. Flourish’s dedicated Phase I inpatient site provides early-stage trial development services to CROs and sponsors and has conducted 89 studies enrolling more than 1,500 patients.

#### U.S. Geographic Presence



**Reinhold Schulz**

CEO

**2021**

Year Established

**7**

Platform Add-ons

**22**

Principal and Sub-Investigators

**6**

Therapeutic Areas

**100+**

Employees

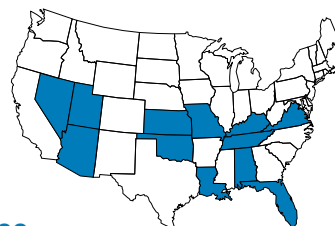


AMR ALLIANCE FOR MULTISPECIALTY RESEARCH



Acquired by Curewell Capital in 2022, AMR operates 27 clinical study locations across 12 states studying a broad variety of therapeutic indications. AMR has particular experience conducting vaccine trials and has been awarded the World Congress’s Vaccine Industry Excellence Award for “Best Clinical Trial Site or Network” in 2013, 2015, and 2017.

#### U.S. Geographic Presence



**William Smith**

CEO

**2022**

Year Acquired

**7,800+**

Completed Studies

**126**

Principal and Sub-Investigators

**25**

Therapeutic Areas

**200+**

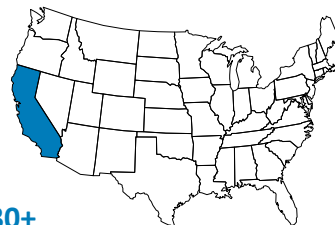
Employees



Acquired by Latticework in 2022 through a recapitalization of Catalina Research Institute, American Clinical Research Services (“ACRS”) was founded to improve the quality of life for millions of Americans through scientific research.

Following the investment from Latticework, ACRS acquired Clinical Site Services and Patient Advertising Guru to further centralize patient recruiting and research.

#### U.S. Geographic Presence



**Dustin Owen**

CEO

**2022**

Year Acquired

**2**

Platform Add-ons

**4**

Principal and Sub-Investigators

**4**

Therapeutic Areas

**30+**

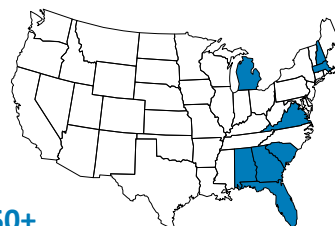
Employees



Acquired by Martis in 2022, Alcanza operates clinical research sites across 8 states with expertise in 10 therapeutic areas.

Alcanza’s centralized site network focuses on developing a diverse patient base across races, ethnicities, genders, sexual orientations, and disability statuses with capabilities to execute phase I-IV clinical studies.

#### U.S. Geographic Presence



**Carlos Orantes**

CEO

**2022**

Year Acquired

**4**

Platform Add-ons

**100,000+**

Patients Enrolled

**10**

Therapeutic Areas

**50+**

Employees



### Select Clinical Trial Site Platforms



Acquired by LongVue Capital in 2022, Pinnacle Clinical Research operates 6 clinical trial facilities in South Texas specializing exclusively in the treatment and early detection of fatty liver disease and other advanced-staged liver diseases. LongVue's investment has assisted in Pinnacle's expansion into one de novo facility and one platform acquisition since 2022. Pinnacle's dedicated early phase / phase I facility is tailored to fit sponsor / CRO early stage study execution needs.

**Rashmee Patil**

CEO

**2022**

Year Acquired

**1**

Platform Add-on

**14**

Principal and Sub-Investigators

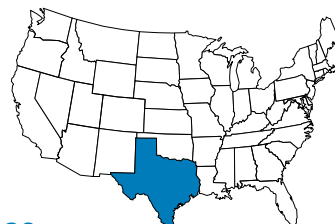
**1**

Therapeutic Specialization

**~20**

Employees

#### U.S. Geographic Presence



Acquired by Grant Avenue Capital in 2022, Helios operates 20 clinical research sites throughout the United States with a growing footprint in middle America. Helios' trial site network has capabilities to execute Phase II-IV trials focused on drug development and utilizes local and regional outreach strategies for patient recruitment.

**E.B. McLindon**

CEO

**2022**

Year Acquired

**650+**

Completed Studies

**220**

Principal and Sub-Investigators

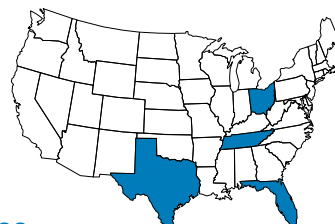
**15**

Therapeutic Areas

**800+**

Employees

#### U.S. Geographic Presence



Founded by BPOC in 2023 alongside the formation of a strategic partnership with Rochester Clinical Research, Atlas is a therapeutically-driven clinical site network built on centralized process management and integrated technology. Rochester Clinical Research is the foundation of the new platform by which the subsequent platform expansion will be modeled.

**Mark Scullion**

CEO

**2023**

Year Acquired

**2**

Platform Add-ons

**9**

Principal and Sub-Investigators

**4**

Therapeutic Areas

**70+**

Employees

#### U.S. Geographic Presence



Acquired by Amulet Capital in 2023, Alliance operates 6 clinical research sites with capabilities to conduct phase I-IV clinical trials. Alliance utilizes electronic source data integration, automated stipend payment processing for improved subject retention, and six sigma project management to ensure high quality study execution and efficiency.

**Anthony Abey**

CEO

**2023**

Year Acquired

**6**

Research Sites

**100,000+**

Patient Database

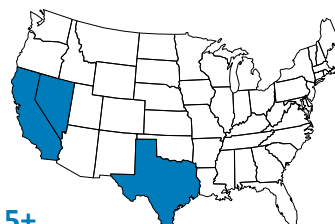
**11**

Therapeutic Areas

**15+**

Employees

#### U.S. Geographic Presence

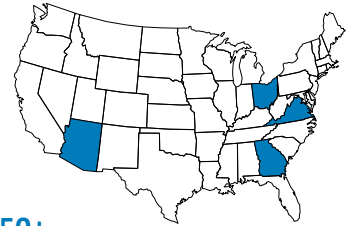


Select Clinical Trial Site Platforms



Acquired by Trinity Hunt Partners in 2023, Centricity is a fully integrated research organization (IRO) specializing in conducting phase I-IV clinical trials for inpatient and outpatient, pharmaceutical, biotechnology, and medical device trials across range of therapeutic areas. Centricity conducts studies out of 4 U.S. States and 4 Canadian Provinces with access to 7.8 million patients.

U.S. Geographic Presence



**Jeff Kingsley**

CEO

**2023**

Year Established

**2**

Platform Add-ons

**150+**

Principal and Sub-Investigators

**35+**

Therapeutic Areas

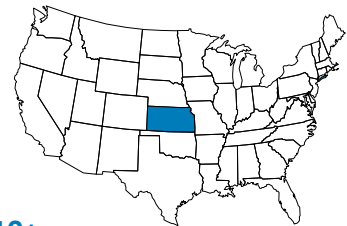
**150+**

Employees



Acquired by FFL Partners in 2023, Johnston County Clin-Trials (“JCCT”) is a clinical research site conducting phase I-IV trials in outpatient and inpatient settings on behalf of sponsors and CROs for both healthy volunteers and special populations. JCCT has completed over 300 total studies with particular expertise in vaccine clinical research. JCCT and FFL have signaled a desire to grow through additional M&A activity and demonstrate the latest trial site consolidation event.

U.S. Geographic Presence



**Mazen Zari**

CEO

**2023**

Year Acquired

**70**

Completed Vaccine Trials

**15,000+**

Study Participants Engaged

**9**

Therapeutic Areas

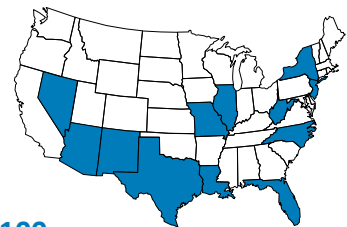
**10+**

Employees



A subsidiary of IMA Group, IMA Clinical Research is a centralized clinical trial site network conducting trials across a wide range of therapeutic areas. IMA’s centralized tech platform enables the network to deliver flexible study designs including site-based, hybrid, and fully decentralized trials throughout their 180 satellite sites. IMA’s broad network provides access to a genetically, socially, and racially diverse patient population across the United States.

U.S. Geographic Presence



**Mark Weinberger**

CEO

**2011**

Year Acquired

**3**

Platform Add-ons

**10,000+**

Unique Weekly Visits

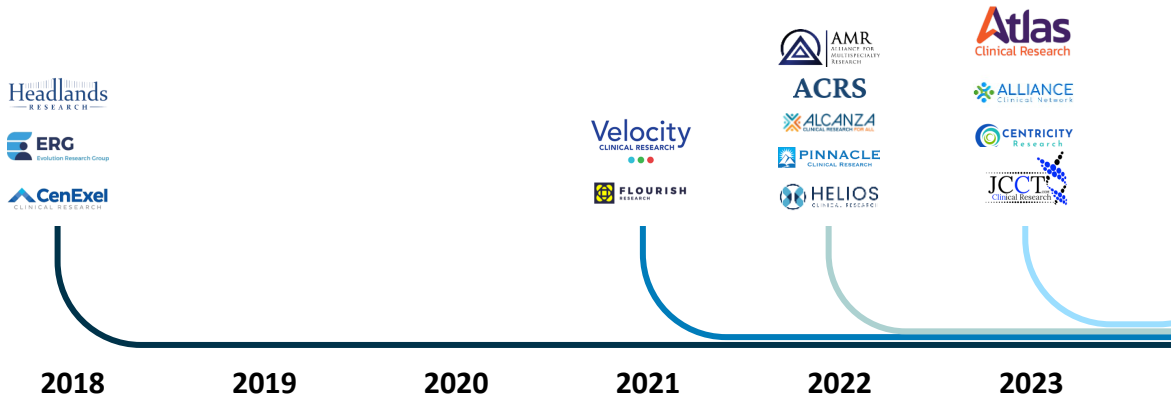
**30**

Therapeutic Areas

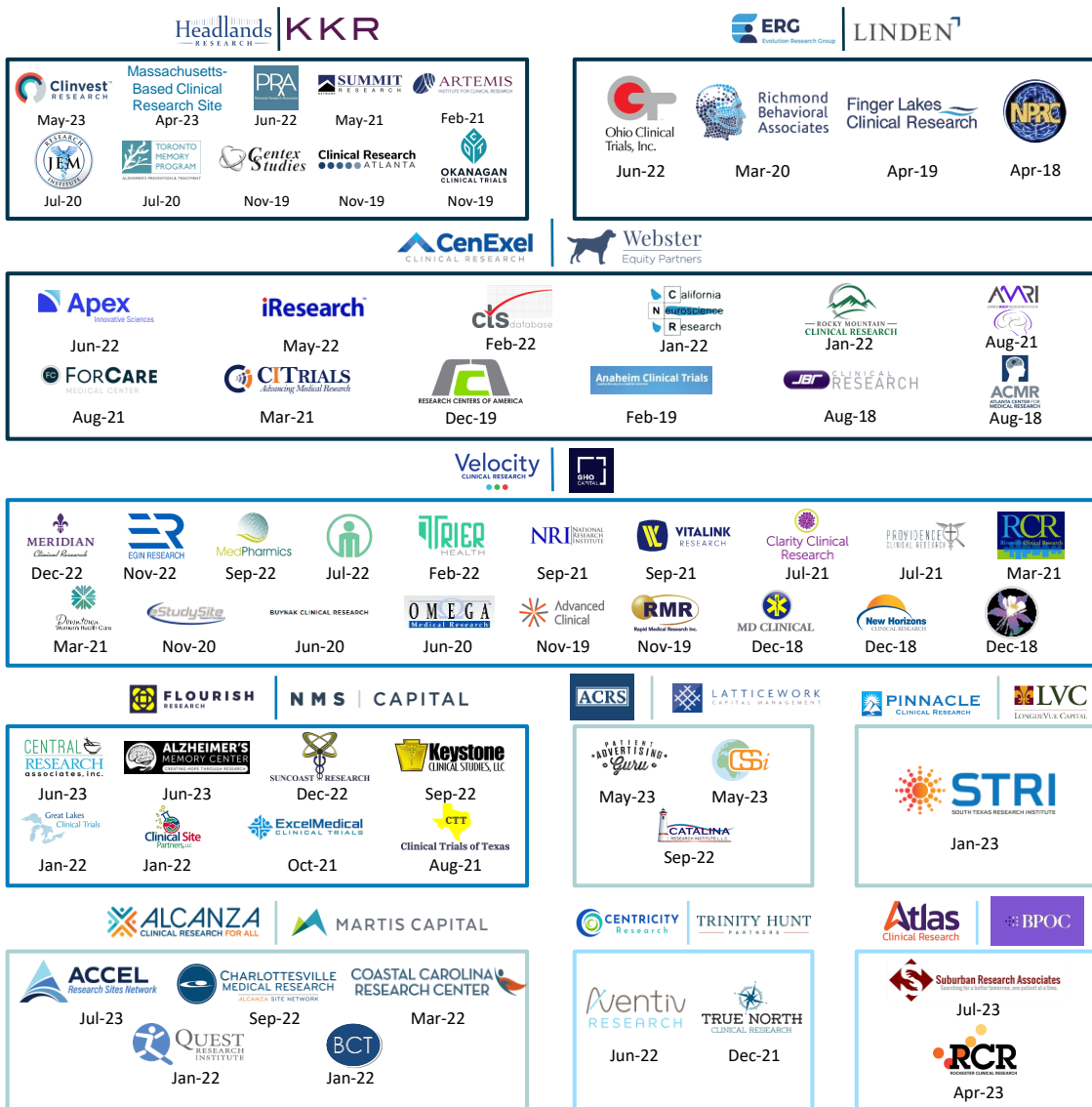
**~100**

Employees

## Clinical Trial Site Platform Originations



## Clinical Trial Site Platform Add-ons



Clinical Trial Research Sites: A Second Wave of Consolidation

Select Clinical Trial Site Transactions

<i>(in millions)</i>				<i>(in millions)</i>			
Target	Buyer	Price	Date	Target	Buyer	Price	Date
		N/A	Jul-23			N/A	Apr-23
		N/A	Jul-23			N/A	Apr-23
		N/A	Jul-23			N/A	Jan-23
		N/A	Jun-23			N/A	Jan-23
		N/A	Jun-23			N/A	Dec-22
		N/A	May-23			N/A	Dec-22
		N/A	May-23			N/A	Nov-22
		N/A	May-23			N/A	Sep-22
		N/A	Apr-23			N/A	Sep-22
Massachusetts-Based Clinical Research Site		N/A	Apr-23			N/A	Sep-22

Clinical Trial Research Sites: A Second Wave of Consolidation

Select Clinical Trial Site Transactions

<i>(in millions)</i>				<i>(in millions)</i>			
Target	Buyer	Price	Date	Target	Buyer	Price	Date
 Keystone CLINICAL STUDIES, LLC	 FLOURISH RESEARCH	N/A	Sep-22	 cis database	 CenExel CLINICAL RESEARCH	N/A	Feb-22
 Velocity CLINICAL RESEARCH	Velocity CLINICAL RESEARCH	N/A	Jul-22	 TRIER HEALTH	Velocity CLINICAL RESEARCH	N/A	Feb-22
 PRA Peninsula Research Associates	 Headlands RESEARCH	N/A	Jun-22	 Great Lakes Clinical Trials	 FLOURISH RESEARCH	N/A	Jan-22
 Ventiv RESEARCH	 CENTRICITY Research	N/A	Jun-22	 Clinical Site Partners, LLC	 FLOURISH RESEARCH	N/A	Jan-22
 Apex Innovative Sciences	 CenExel CLINICAL RESEARCH	N/A	Jun-22	 ROCKY MOUNTAIN CLINICAL RESEARCH	 CenExel CLINICAL RESEARCH	N/A	Jan-22
 Ohio Clinical Trials, Inc.	 ERG Evolution Research Group	N/A	Jun-22	 California Neuroscience Research	 CenExel CLINICAL RESEARCH	N/A	Jan-22
 MULTI-SPECIALTY RESEARCH ASSOCIATES	 M3 WAKE RESEARCH	N/A	May-22	 QUEST RESEARCH INSTITUTE	 ALCANZA CLINICAL RESEARCH FOR ALL	N/A	Jan-22
 iResearch	 CenExel CLINICAL RESEARCH	N/A	May-22	 BCT	 ALCANZA CLINICAL RESEARCH FOR ALL	N/A	Jan-22
 COASTAL CAROLINA RESEARCH CENTER	 ALCANZA CLINICAL RESEARCH FOR ALL	N/A	Mar-22	 TRUE NORTH CLINICAL RESEARCH	 CENTRICITY Research	N/A	Dec-21
 Amici CLINICAL RESEARCH	 IMA CLINICAL RESEARCH AN IMA GROUP COMPANY	N/A	Mar-22	 ExcelMedical CLINICAL TRIALS	 FLOURISH RESEARCH	N/A	Oct-21

Clinical Trial Research Sites: A Second Wave of Consolidation

Select Clinical Trial Site Transactions

<i>(in millions)</i>				<i>(in millions)</i>			
Target	Buyer	Price	Date	Target	Buyer	Price	Date
 <b>DIAGNOSTICS RESEARCH GROUP</b> <small>Expertise in Clinical Research</small>	 <b>IMA CLINICAL RESEARCH</b> <small>AN IMA GROUP COMPANY</small>	N/A	Oct-21	 <b>SUMMIT RESEARCH</b>	 <b>Headlands RESEARCH</b>	N/A	May-21
 <b>clinedge</b>	 <b>ELLIGO HEALTH RESEARCH</b>	\$135	Sep-21	 <b>ROR</b> <small>Riverside Clinical Research</small>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Mar-21
 <b>NRI</b> <small>NATIONAL RESEARCH INSTITUTE</small>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Sep-21	 <b>Downtown Women's Health Care</b>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Mar-21
 <b>VITALINK RESEARCH</b>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Sep-21	 <b>CITRIALS</b> <small>Advancing Medical Research</small>	 <b>CenExel CLINICAL RESEARCH</b>	N/A	Mar-21
 <b>ALBUQUERQUE NEUROSCIENCE</b>	 <b>IMA CLINICAL RESEARCH</b> <small>AN IMA GROUP COMPANY</small>	N/A	Sep-21	 <b>ARTEMIS</b> <small>INSTITUTE FOR CLINICAL RESEARCH</small>	 <b>Headlands RESEARCH</b>	N/A	Feb-21
 <b>AMRI</b> <small>AMERICAN MEDICAL RESEARCH INSTITUTE</small>	 <b>CenExel CLINICAL RESEARCH</b>	N/A	Aug-21	 <b>eStudySite</b> <small>Research Services</small>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Nov-20
 <b>CTT</b> <small>Clinical Trials of Texas</small>	 <b>FLOURISH RESEARCH</b>	N/A	Aug-21	 <b>RESEARCH JEM INSTITUTE</b>	 <b>Headlands RESEARCH</b>	N/A	Jul-20
 <b>FORCARE</b> <small>MEDICAL CENTERS</small>	 <b>CenExel CLINICAL RESEARCH</b>	N/A	Aug-21	 <b>TORONTO MEMORY PROGRAM</b> <small>ALZHEIMER'S PREVENTION &amp; TREATMENT</small>	 <b>Headlands RESEARCH</b>	N/A	Jul-20
 <b>Clarity Clinical Research</b>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Jul-21	 <b>BUYNAK CLINICAL RESEARCH</b>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Jun-20
 <b>PROVIDENCE CLINICAL RESEARCH</b>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Jul-21	 <b>OMEGA</b> <small>Medical Research</small>	 <b>Velocity CLINICAL RESEARCH</b>	N/A	Jun-20

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<i>(in millions)</i>				<i>(in millions)</i>			
Target	Buyer	Price	Date	Target	Buyer	Price	Date
 BIOCLINICA®		N/A	Apr-20	 Finger Lakes Clinical Research		N/A	Apr-19
 Richmond Behavioral Associates		N/A	Mar-20			N/A	Feb-19
 RESEARCH CENTERS OF AMERICA		N/A	Dec-19			N/A	Dec-18
 Centex Studies		N/A	Nov-19			N/A	Dec-18
 Clinical Research ATLANTA		N/A	Nov-19			N/A	Dec-18
 OKANAGAN CLINICAL TRIALS		N/A	Nov-19			N/A	Aug-18
 Advanced Clinical		N/A	Nov-19			N/A	Aug-18
 RMR Rapid Medical Research Inc.		N/A	Nov-19			N/A	Apr-18
 MEDINOVA Quality Research Sites		\$54	May-19			N/A	Feb-18
 Advanced Clinical Trials		N/A	Apr-19			N/A	Dec-17