



BLUE KNIGHT™

JUNE 2025

Empowering Entrepreneurs to Create a Healthier, Safer World

Investing Toward Health Security

Johnson&Johnson

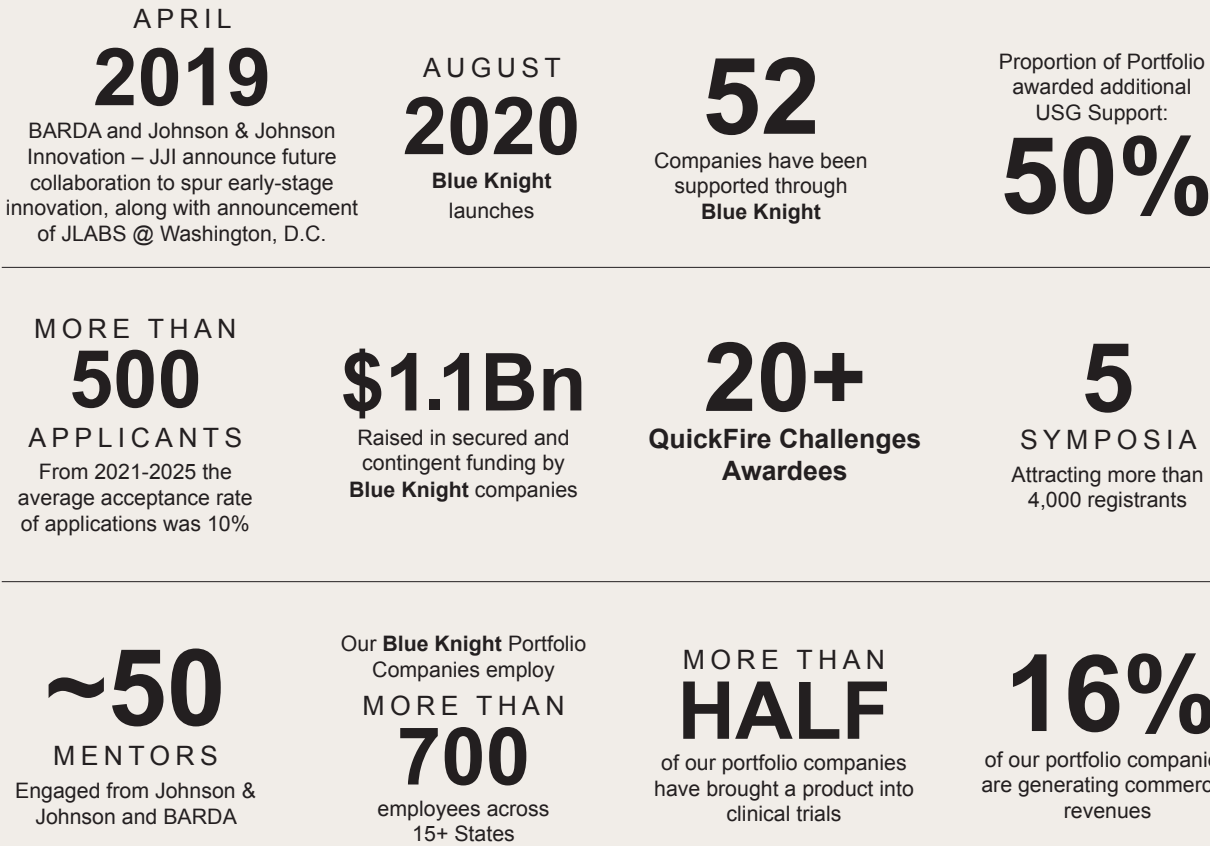


BLUE KNIGHT™

Blue Knight is a joint initiative between Johnson & Johnson Innovation – JLABS (JLABS) and the Biomedical Advanced Research and Development Authority (BARDA). This collaboration supports the sustainable development of early-stage technologies that demonstrate potential to improve health security and unlock new approaches to solving health issues. Accelerating these innovations will enable BARDA to maintain a mission-ready response to health emergencies through the deployment of commercially sustainable and market-available technologies.

Facts At a Glance

as of June 2025



R&D STAGE as of June 2025	% OF BLUE KNIGHT™ COMPANIES	COMPANIES ARE DEVELOPING MULTI-USE HEALTHCARE SOLUTIONS FOR PREPAREDNESS as of June 2025		
Discovery (Research, TI/TV)/Concept	6%	52% Platforms that accelerate or scale medical solutions	35% Pathways with commercial and health emergency relevance	13% Detecting potential threats
Lead (H2-LO)/Prototype	6%			
Pre-clinical (GLP Tox-IND)/Animal testing	39%			
Clinical (Phase 1, Phase 2a, Phase 2b, Phase 3)	37%			
Marketed Products	16%			

This information is self-reported by companies and may not reflect the full set of companies.

The BLUE KNIGHT™ Story: Securing a Safe, Healthy Future through Collaboration

WHO WE ARE

Blue Knight is a collaboration dedicated to responding to potential health security threats by partnering with early-stage innovators, entrepreneurs, and startup companies to support the development of solutions that can improve patient health. In vetting potential resident companies, **Blue Knight** prioritizes those with solutions that have both commercial indications, as well as potential for impact in the event of health emergencies, to ensure that these solutions will be sustainably available in the marketplace when needed.

OUR UNIQUE APPROACH

Since the inception of **Blue Knight** in August 2020, the program has grown to support more than 50 companies in translating their innovative technologies into solutions that have a meaningful impact on patients' lives. By bringing together entrepreneurs, investors, and thought leaders, **Blue Knight** connects early-stage companies developing solutions to key stakeholders that align with their strategic focus areas. Together with BARDA, Johnson & Johnson has accelerated the development of commercial and emergency use solutions – and enabled the long-term sustainability of businesses – that secure a safe, healthy future for everyone.



BLUE KNIGHT™ sits at the intersection of Johnson & Johnson and BARDA's strategic areas of focus.

Through **Blue Knight**, stakeholders have engaged with early-stage companies developing high-priority technologies that align with their areas of interest. This public-private partnership developed a pipeline of early-stage innovation and allowed BARDA and Johnson & Johnson to engage with companies as they met critical milestones along commercialization pathways for both preparedness and commercial applications.



"Blue Knight creates a fusion of public and private mindsets and skillsets, which has allowed us to understand how to run through that gauntlet of being a commercially sustainable company but also being a company that can help society prepare for a future pandemic."

Rick Pierce,
Co-Founder and CEO,
Decoy Therapeutics



"The mentorship from the folks at Blue Knight, both BARDA and J&J, has been incredible for us. We were never in anti-virals before joining Blue Knight, but the mentors at BARDA know this space really well, and they have helped inform our preclinical and clinical drug development."

Brent Stead,
Co-Founder and CEO,
Specific Biologics

Timeline of Program & Partnerships



“Having this Blue Knight community, with opportunities to meet many of the stakeholders working in this exact niche, has been really valuable for us to deliver our message about how our technology can best be used to serve national security and bio defense use cases.”

Josh Yang ,
Co-Founder and CEO, Glyphic Biotechnologies



Build and Support a Strong and Strategic Innovation Portfolio

SELECT THE MOST PROMISING INNOVATORS

Blue Knight has accepted applications from early-stage companies aiming to make a significant impact in the field of health emergency response. Each application has been evaluated by reviewers from Johnson & Johnson with input from BARDA. This process ensures we support partners and technologies that demonstrate potential to fulfill unmet needs and align with both the Johnson & Johnson and BARDA missions.

Blue Knight companies are JLABS companies, therefore applicants must be incorporated companies to be eligible. Blue Knight applications were reviewed and selected on a rolling basis, using the following criteria:

- **Compelling and credible science and/or technology that has the potential to change the trajectory of health**
- **Strategic alignment with Johnson & Johnson and BARDA areas of focus**
- **Addressing an area of significant unmet need**
- **Demonstrating a strong team and financial solvency**

SUPPORT ENTREPRENEURS WITH STRATEGIC RESOURCE DEPLOYMENT

Blue Knight provides selected companies access to the JLABS ecosystem, including modular lab units, office space, shared core laboratory equipment and business facilities based on the availability at the location of residency, both physical and virtual. Virtual engagement options are available for qualifying companies who are not location dependent or do not require lab space. Additionally, Blue Knight companies have access to unique benefits, including:

- **JLABS Space Access & Fee Assistance**
Access to modular lab units, office space, shared core laboratory equipment & business facilities, with fee assistance for certain associated costs
- **Resident Quickfire Challenges**
Limited-competition opportunities for non-dilutive funding for current and alumni **Blue Knight** companies
- **Cross-Sector Mentorship**
Dedicated mentorship from both Johnson & Johnson and BARDA
- **Programming & Visibility**
Blue Knight companies have access to unique visibility and programming, including opportunities with key ecosystem leaders and representatives at conferences and events
- **Dedicated Equipment**
Dedicated equipment for **Blue Knight** companies will be available at select JLABS locations
- **JLABS Ecosystem**
As part of the J&J ecosystem, residents enjoy access to business development teams and designated mentors, Resource and Investor Hubs and virtual and onsite programming



FOSTERING INNOVATION COMMUNITIES

Blue Knight has cultivated a community of innovators by bringing together entrepreneurs, investors and academic stakeholders to host events and symposia, where stakeholders discover and learn about opportunities to accelerate potential next-gen solutions. The annual symposia are often hosted in conjunction with major healthcare innovation conferences and offer a unique platform through which early-stage companies can connect with investors in a one-on-one capacity.

Additionally, **Blue Knight** companies are provided mentorship support from both Johnson & Johnson and BARDA staff, giving them access to a broad community of subject matter experts to help guide and inform their development, regulatory and commercialization plans. These mentorship

relationships include quarterly progress reviews with one of more than 50 dedicated mentors, but may also extend to other subject matter experts across the organizations who can provide specific functional input and guidance at critical decision points to keep the companies moving forward swiftly toward the market.

POSITIONING EARLY-STAGE COMPANIES FOR LONG-TERM SUCCESS

Blue Knight positions program residents for long-term, sustainable success by helping them unlock new sources of funding to achieve key milestones along their development pathways. For example, **Blue Knight** organizes Resident QuickFire Challenges, where residents and alumni are invited to apply for limited-competition non-dilutive funding.



“Catalytic funding like the QuickFire Challenge has been critical to get us to the next inflection point in our development plan, which will enable us to be competitive for investors and future pharmaceutical partnerships.”

Sherine Chan,
Co-Founder and CEO, Neurorene Therapeutics

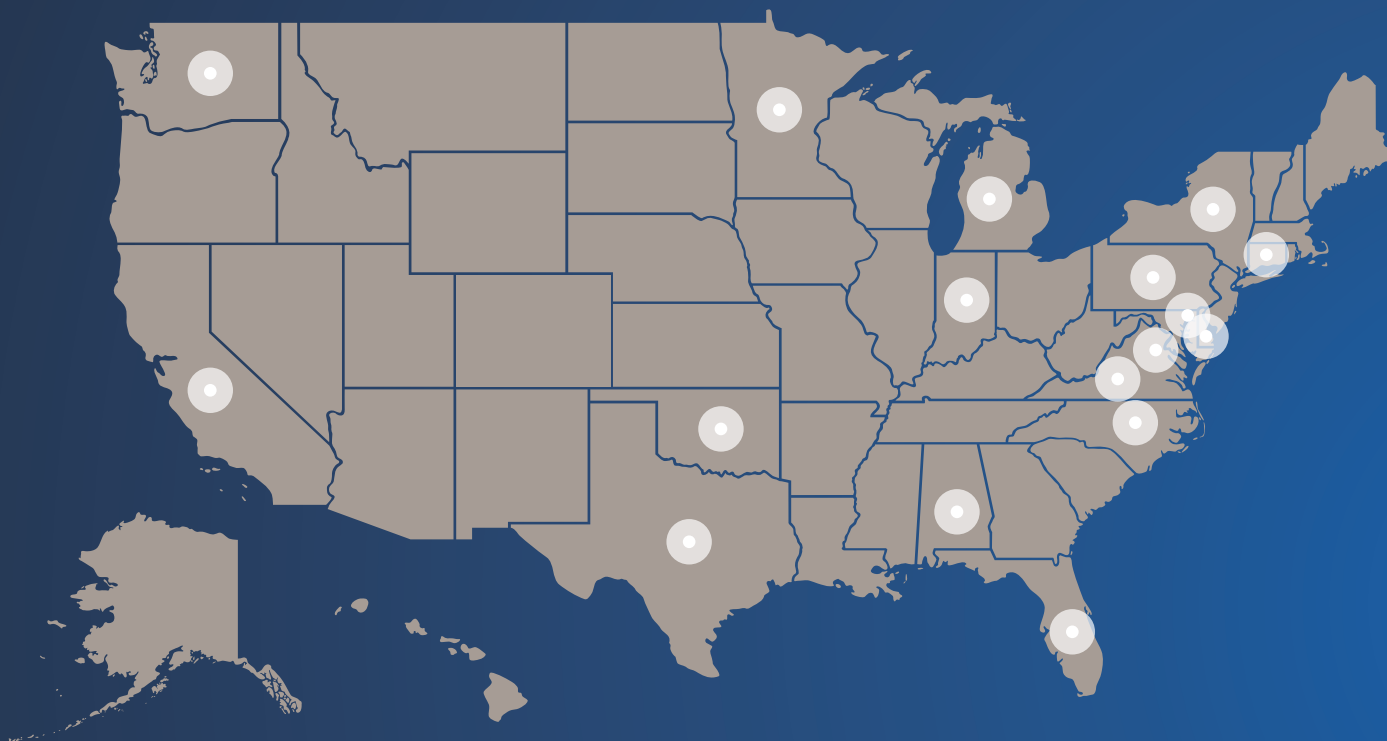
BLUE KNIGHT™ Companies' Technologies Deliver Sustainable Impact

THE PATH TO MORE PREPARED, PROTECTED, AND HEALTHIER INDIVIDUALS, FAMILIES, AND COMMUNITIES

1. Platforms that accelerate or scale medical solutions	# of Approaches by BLUE KNIGHT™ Companies
Role in Readiness: Prioritizing the development of early-stage innovative technologies that will accelerate, scale and/or derisk the development and deployment of new healthcare solutions Examples of strategically aligned technologies may include: - Technologies that improve the yield, speed or safety of pharmaceutical manufacturing - AI Platforms to accelerate the discovery of new molecules for high unmet needs - Platform technologies that enable enhanced drug formulations	
2. Pathways with commercial and health emergency relevance	# of Approaches by BLUE KNIGHT™ Companies
Role in Readiness: Identifying solutions that have demonstrated potential to address unmet health needs in the commercial marketplace, with the flexibility to be adapted for use in health emergencies. Examples of strategically aligned technologies may include: - Innovative solutions that repair tissue damaged by radiation exposure - Delivery mechanisms that cross the blood brain barrier - Novel molecules that reduce build up of toxins in the brain or other tissues - Scalable infection prevention tools	
3. Detecting potential threats	# of Approaches by BLUE KNIGHT™ Companies
Role in Readiness: Providing information to assess potential disease and infection at the individual and population level, allowing for timely and targeted responses to contain and mitigate the spread of health threats. Examples of strategically aligned technologies may include: - Technologies that allow for better deployment of medical countermeasures through patient stratification and inform patient care - Technologies that can predict or identify new and emerging threats or variants	

The BLUE KNIGHT™ Portfolio of Companies:

The **Blue Knight** program stimulates growth on a local level through fee assistance, access to capital-efficient lab space, and acceptance into an open network of mentorship regardless of location. Since the program's inception, **Blue Knight** companies have expanded their teams, accelerated their innovations and advanced their journeys to patient use.



BLUE KNIGHT™ Impact by Geography

NORTH AMERICA

STATES

Alabama	Maryland	Oklahoma
California	Massachusetts	Pennsylvania
Delaware	Michigan	Texas
District of Columbia	Minnesota	Virginia
Florida	New York	Washington
Indiana	North Carolina	

COMPANY DISTRIBUTION BY JLABS SITE

11	JLABS @ Washington, D.C., the BLUE KNIGHT™ Hub
9	JLABS NYC
6	JLABS San Francisco
1	JLABS @ Toronto
2	JLABS San Diego
2	JLABS @ TMC
1	Affiliate Site
20	Virtual

Our global footprint has included 8 portfolio companies outside the US, across Latin America, EMEA, and APAC

Spotlight on BLUE KNIGHT™ Companies

Explore examples of companies in our portfolio, including size, funding, research and development and/or technology readiness level. Also learn about the health security impact and commercial opportunity for the innovative solutions being developed by these companies.

COMPANY	COMPANY LOCATION	COMPANY SIZE	FUNDING STATUS	R&D STATUS	TECHNOLOGY READINESS LEVEL (TRL) STATUS
 CHO+Plus	South San Francisco, CA	9 employees	Seed Stage \$2M Total Funding Raised	N/A (Pre-Commercial)	TRL-7

CHO Plus has developed patented technologies for engineering mammalian cells to increase therapeutic protein and viral vector productivity. The technology improves specific productivity up to five-fold for antibodies via engineered CHO cells, and up to 20-fold for AAV via engineered HEK-293 cells with a two-fold increase in full capsids. Proof of concept has been demonstrated for improved production for both monoclonal antibodies, and for AAV. This technological approach to increasing cell productivity has the potential to reduce manufacturing costs for all biologics, to alleviate manufacturing constraints, and to help meet unmet gene therapy needs. As of 2025, CHO Plus is working with large pharma, CDMO, and biotech tools companies to develop paths toward commercialization.

 uvaxbio	Newark, DE	7 employees	Series B \$55M Total Funding Raised	Phase 1	TRL-6
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UVAX BIO is employing its proprietary 1c_SApNP(R) platform to develop protein nanoparticle vaccines to fight the world's most harmful diseases. They are combining rational antigen design and protein engineering to create innovative protein-based VLP vaccines. Uvax Bio's 1c-SApNP(R) vaccine platform uses a multilayered nanoparticle carrier, which presents optimized pre-fusion antigens on the outside and carries a T-help signal within the nanoparticle core, thus enabling the induction of a broad and potent nAb response. Their platform offers a universal solution for development of prophylactic and therapeutic vaccines. As of 2025, Uvax BIO have multiple candidates across Phase 1 and Preclinical Stages and were recently awarded a CEPI grant to develop a MERS vaccine.

 PARANANO	Oklahoma City, OK	5 employees	Seed Stage \$5M Total Funding Raised	N/A (Pre-Commercial)	TRL-6
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ParaNano Wound Care provides a simple yet robust color changing smart bandage that enables early intervention for wound infections. The Bio-Z® Smart Bandage covers and protects the wound like any bandage, but changes color within 6 hours to alert the patient and care provider of heavy colonization or early infection in any setting, for patients and clinicians of any skill level, without the need for batteries, wires, or connectivity. ParaNano is on track to complete their FDA requirements for Class 1 device approval in mid-2025, paving the way for a planned post-market clinical study, which will support the expansion of their initial claims with the FDA, and position the company to fulfill its first committed orders by the end of 2025. Additionally, they have executed a Direct-to-Phase II contract with the Defense Health Agency through the Military Burn Research Program to deploy the technology in Role 1 settings for traumatic burn injuries.

Spotlight on BLUE KNIGHT™ Companies

COMPANY	COMPANY LOCATION	COMPANY SIZE	FUNDING STATUS	R&D STATUS	TECHNOLOGY READINESS LEVEL (TRL) STATUS
Immunyx	New York, NY	5 employees	Seed Stage \$4M Total Funding Raised	Preclinical (GLP Tox-IND)	TRL-5

Immunyx has developed platform technologies for modulating toxic neutrophils in chronic disease, such as chronic inflammatory diseases and cancer, as well as in the case of infectious disease activated “cytokine storm”. Their lead compound, IMYX-3, is a RAB27A small molecule inhibitor which modulates activated neutrophil toxicity in acute and chronic inflammatory disease. They have demonstrated efficacy of the drug in advanced pre-clinical models and shown positive outcomes for toxicity, tolerability and pharmacokinetics. IND submission for the molecule is anticipated in 2025, and first in human experiments in 2026.

NEUROENE THERAPEUTICS	Kensington, MD	4 employees	Pre-Seed Stage \$3.2M Total Funding Raised	Preclinical (GLP Tox-IND)	TRL-5
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Neuroene Therapeutics has discovered a novel class of well-tolerated, brain-penetrating, non-sedating small molecule compounds that protect mitochondrial and neurological health. While they are developing these molecules for use against Parkinson’s Disease and Epilepsy, with lead molecules ready for IND-enabling studies, the team at Neuroene are also developing these compounds for use as a medical countermeasure (MCM) for nerve agent exposures. In the past year, Neuroene has demonstrated significant results in an animal model for soman nerve agent exposure, as well as in a human brain organoid model for Parkinson’s Disease, and they obtained FDA Rare Pediatric Drug Designation for Dravet Syndrome.

 JURATA	Chapel Hill, NC	12 employees	Series A \$25M Total Funding Raised	Preclinical (GLP Tox-IND)	TRL-5
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Jurata innovative formulations for use in human and animal drugs preserve the activity of biologic materials by stabilizing their three-dimensional structure, reducing or eliminating cold chain handling requirements. The Jurata technology supports needle-free and injectable administration, without specialized devices, for stability and efficacy at ambient and elevated temperatures across liquid, film, and dry-in-a-vial presentations without the need for API lyophilization, making it well-suited for both commercial scale up as well as global health and emergency use deployment. Jurata will submit a Drug Master File (DMF) in June 2025 for their novel excipient and currently have ten ongoing/planned proof-of-concept (PoC) studies with a broad range of partners from the government, academia, foundations and both Human Health and Animal Health pharmaceutical partners.

COMPANY	COMPANY LOCATION	COMPANY SIZE	FUNDING STATUS	R&D STATUS	TECHNOLOGY READINESS LEVEL (TRL) STATUS
 Specific Biologics	Toronto, ON	20 employees	Seed Stage \$11M Total Funding Raised	Lead (H2L-LO)	TRL-4

Specific Biologics' RNA-programmable Dualase® gene editors have a unique two site mechanism of action for efficient, precise and highly specific genome editing. Specific has demonstrated this efficient, precise and durable genome editing for sequence removal and replacement in humanized models for CNS, lung and liver diseases in areas of high unmet need. Leveraging their work in Cystic Fibrosis, where they developed lung-delivered programmable DNA and RNA editors, Specific have also developed rapidly reprogrammable genome editors as potential antivirals through their partnership with BARDA as a Blue Knight company. In 2025, Specific is completing its preclinical studies in CF and neurodegenerative disorders and plans to advance to IND-enabling studies in 2026.

 DECOY therapeutics	Cambridge, MA	8 employees	Public (2025)	Lead (H2L-LO)	TRL-4
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Decoy Therapeutics is building a drug discovery platform that combines in silico tools with modern chemistry to engineer peptide-small molecule conjugate therapies capable of addressing existing and emerging biological threats, ranging from viruses to cancers. This new modality draws on the strengths of peptides and small molecules like lipids to create targeted, potent drugs with limited undesired drug-drug interactions, while reducing multi-stage purification steps to streamline manufacturing and create ready to test drug compounds. This technology platform has been applied across multiple infectious disease projects to yield potent therapeutic compounds, including an anti-coronavirus antiviral currently at the late preclinical stage of drug development as well as a "ready to test" pan-paramyxovirus fusion inhibitors, developed within 4 days, that showed nanomolar activity against RSVA2, RSVB18537, hPIVC243. In 2025, Decoy is conducting a fundraiser to complete their reverse merger with Salarius Pharmaceuticals.

 AMPLITUDE THERAPEUTICS	Boston, MA	10 employees	Pre-Seed Stage \$16M Total Funding Raised	Lead (H2L-LO)	TRL-4
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Amplitude Therapeutics is developing a next-generation trans-amplifying (taRNA) platform technology for use in vaccine and non-vaccine applications that has advantages over existing RNA technologies including increased expression, improved ability to express multiple proteins, and improved manufacturing. Trans-amplifying RNA leverages the strengths of both chemically modified mRNA and self-amplifying RNA to create a RNA with robust expression across a variety of cell-types, improved valency, and increased ease of manufacturing. Amplitude have generated data indicating that taRNA is >60x more expressive than mRNA in vivo, can express 11 proteins simultaneously, and can be produced in a platform/modular manner that enables that sharing of >99% of the drug product across candidates.

BLUE KNIGHT™ Companies



BLUE KNIGHT™



Updated as of June 2025



Scan for more information on each company



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