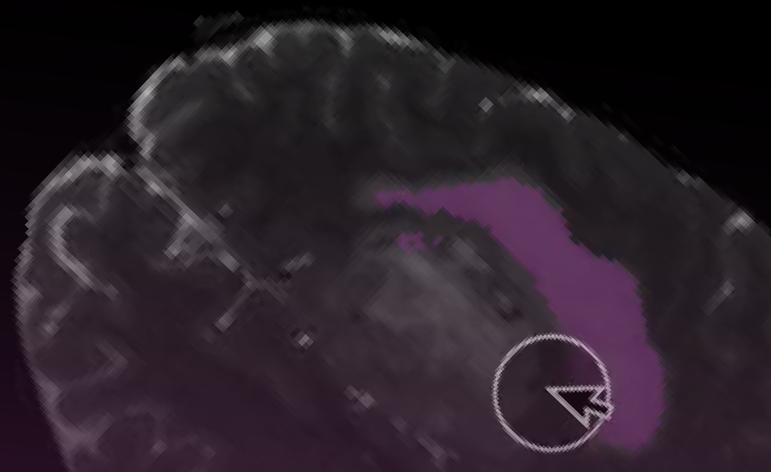
RedBrick AI

Medical Annotation Made *Better*



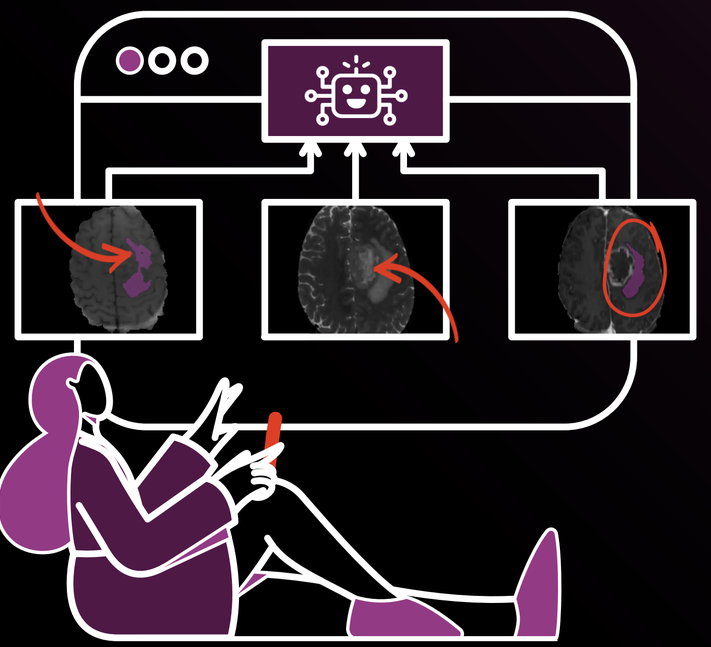
Agenda

1. Company Overview
2. Company Timeline
3. Product Rundown
4. Competitive Landscape
5. Financial Analysis
6. Risks and Mitigants
7. Future Prospects

The Problem

Training Medical AI models is **time-consuming** and **laborious**

- Each scan must be **individually annotated** in order to tell the system what it represents
- So far, no one has developed tools to help clinicians annotate images **quickly**
- As a result, clinicians have to resort to traditional, **difficult-to-use** clinical tools to perform annotations



Company Overview

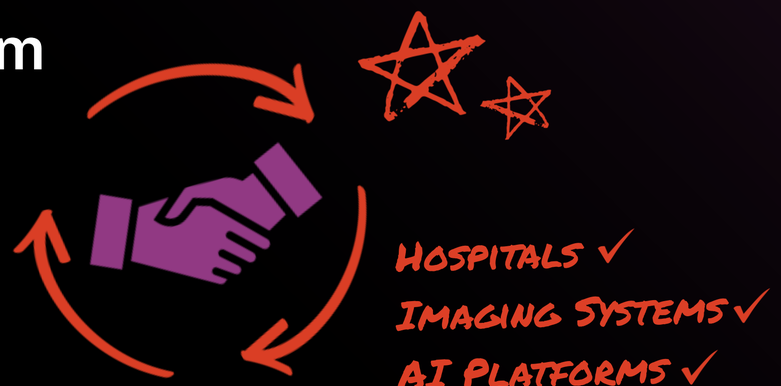
RedBrick AI is a software platform that helps clinicians **annotate medical data** to build high-quality **training datasets** for diagnostic AI models

$4.6M
Total Raised in Seed Funding

Backed by:
SEQUOIA
Y Combinator

Partnerships with leading healthcare AI teams:

- Mass General Brigham
- HYPERFINE
- qure.ai



Meet The Team

SpaceX Hyperloop! Engineers

Shivam Sharma
CEO
Bachelors in Aerospace Engineering and Computer Science, University of Michigan

Derek Lukacs
CTO
Bachelors and Masters in Aerospace engineering, University of Michigan

Company Timeline

Nov 2021
Launched
RedBrick AI

DELAWARE

Mar 2022
Accepted into Y
Combinator Batch

Aug 2022
Expanded Acceptable
Data Formats

Nov 2022
Raised $4.6M
Seed Round

SEQUOIA +
Y COMBINATOR

Feb 2023
Achieved SOC-II
Type 1 compliance

AI Healthcare Market

$11 Billion
Total Addressable Market for AI Healthcare

$188 Billion
Total Addressable Market forecasted for 2023

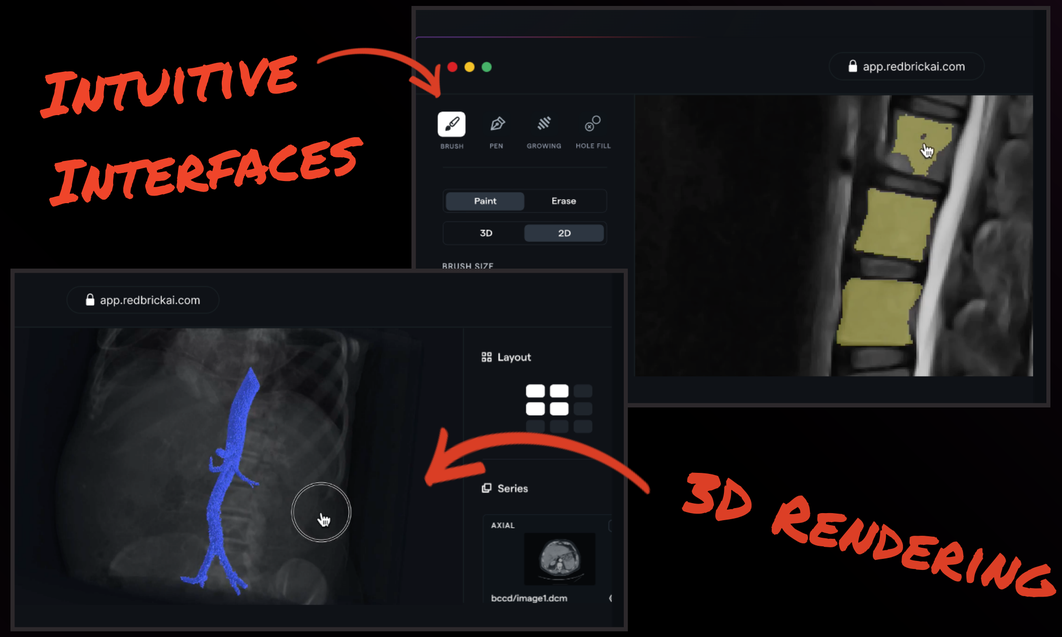
Types of AI applications in Healthcare:
Machine learning, research, natural processing language, surgical robots, healthcare modeling, documentation, tracking symptoms, & diagnosis

RedBrick AI focuses on **medical imagery** like CT scans, X-rays, MRIs and ultrasound AI models are trained on

Product Rundown

Redbrick AI's has developed a set of specialist annotation tools designed specifically for healthcare professionals, reducing AI training time by 60%

- Tailored to medical workflows needs
- Unified collaboration between clinicians
- Automation features accelerate annotation



Competitive Landscape

Company	RedBrick AI	ango.ai	shaip	BASIC AI
Funding	$4.6M	$820K	Private	Private
Category	Medical	Industry Agnostic	Industry Agnostic	Industry Agnostic
Product	Speeds medical imaging dataset generation	AI tools within a personalized hub utilized to make annotating easier	Labeling, annotation & data collection to facilitate AI product development	Modeling & annotation features, with AI backed data visualization tools

Financials

	2022	2023	2024	2025	2026	2027
Market Size	$10,600.00	$11,017.64	$11,506.82	$12,312.79	$12,974.81	$14,069.99
Market Share	0.043%	0.104%	0.166%	0.227%	0.289%	0.350%
Revenues	$4.59	$11.50	$19.08	$27.57	$37.45	$49.24
Pre-Tax Operating Margin	-$0.69	-$1.15	-$0.95	$0.14	$1.87	$4.92
After-Tax Operating Margin	-$0.69	$1.15	$0.75	$0.11	$1.48	$3.89
FCFF	-$2.07	-$0.36	-$0.94	-$1.86	-$0.87	$1.17

Weighted Average Cost of Capital: 0.0992

Present Value of Free Cash Flow: $14.48

Terminal Value: $29.80

Post-Money Valuation: $9.23

Risks & Mitigants

Startup Defensibility

Risk: Lack of Patent or License for Annotation Technology

Mitigant: First Mover, Sole Current Competitor in Medical Data Annotation Space

Patient Data Privacy

Risk: Increase in Cyber Attacks and Data Breaches

Mitigant: Obtaining SOC-II Certification and High Level of Information Security

Lag in AI Adoption

Risk: Relatively Slow Incorporation of AI in Healthcare Facilities

Mitigant: 500+ AI and ML Applications have been FDA Approved in Past 5 Years

Future

$4.6 million seed round led by Sequoia Capital and Y-Combinator will help the firm move towards **3 Key Strategic Goals:**

Fund GTM Strategy

Strategic partnerships with enterprise customers & healthcare specialists

Product Dev.

Investment in developing additional advanced features and tools

Scale Userbase

Expand to reach more customers over the next 12 months

Conclusion

- First platform **tailored specifically** towards medical annotation and imaging
- **Highly personalizable** to work with clients' existing data systems — small learning curve
- **Significantly shortens** training time for AI models, increasing accuracy and efficiency

Exit Opportunities

IPO →

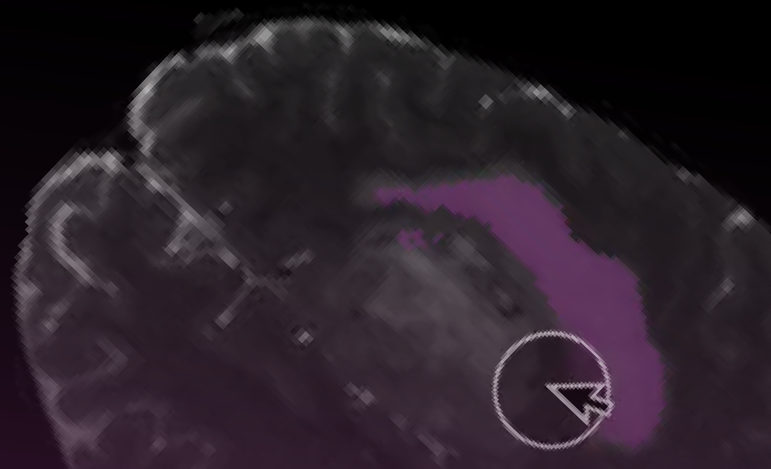
M&A →

34 deals between 2017 and 2019

Increasing Average Deal Flow

RedBrick AI

Medical Annotation Made Better



Appendix A (in millions USD)

Forcasted U.S. Market for Artificial Intelligence in Healthcare Software						
Year	2022	2023	2024	2025	2026	2027
Market Growth Rate		3.94%	4.44%	5.44%	6.94%	8.44%
Overall Market	$ 10,600.00	$ 11,017.64	$ 11,506.82	$ 12,132.79	$ 12,974.81	$ 14,069.88

Diagnostic Healthcare AI Software Companies (In millions) - 2023		
Company	2022 Revenues	Market Share
Cue Health	$ 474.17	4.40%
DarioHealth	$ 27.66	0.26%
QuidelOrtho	$ 3,226.00	30.43%
Oxford Nanopore Tech	$ 244.00	2.03%
Siemens Healthineers	$ 3,200.00	30.18%
Others	$ 3,428.17	32.33%
We expect that RedBrick AI will be able to capture 0.5% of the market share in the next 5 years. (approx 53 million)		

Appendix B (in millions USD)

Estimated Capital Invested and Roic					
Year	After-Tax Op Income	Reinvestment	Cap Invested Start of Yr	Cap Invested End of Yr	Return on Capital
2022	-0.69	4.87	4.6	9.47	0.514255544
2023	1.15	5.34	9.47	14.81	0.360567184
2024	0.75	5.98	14.81	20.79	0.287638288
2025	0.11	6.96	20.79	27.75	0.250810811
2026	1.48	8.35	27.75	36.1	0.231301939
2027	3.89	9.64	36.1	45.74	0.210756449

Expected Revenues, Operating Margins & Revenues (in millions)					
Year	Total Market	Market Share	Revenues	Pre-Tax Op. Margins	Pre-Tax Op Income
2022	$ 10,600.00	0.043%	$ 4.59	-15.00%	$ (0.69)
2023	$ 11,017.64	0.104%	$ 11.50	-10.00%	$ (1.15)
2024	$ 11,506.82	0.166%	$ 19.08	-5.00%	$ (0.95)
2025	$ 12,132.79	0.227%	$ 27.57	0.50%	$ 0.14
2026	$ 12,974.81	0.289%	$ 37.45	5.00%	$ 1.87
2027	$ 14,069.88	0.350%	$ 49.24	10.00%	$ 4.92

Appendix C (in millions USD)

NOLs, Taxes, and After-Tax Operating Income						
Year	Pre-Tax Operating Incom	NOL at Start of Year	NOL at End of Year	Taxable Op Income	Taxes	After-Tax Op Income
2022	$ (0.69)	$ 5.00	$ 5.69	$ -	$ -	$ (0.69)
2023	$ 1.15	$ 5.69	$ 4.54	$ -	$ -	$ 1.15
2024	$ 0.95	$ 4.54	$ 3.59	$ 0.95	$ 0.20	$ 0.75
2025	$ 0.14	$ -	$ -	$ 0.14	$ 0.03	$ 0.11
2026	$ 1.87	$ -	$ -	$ 1.87	$ 0.39	$ 1.48
2027	$ 4.92	$ -	$ -	$ 4.92	$ 1.03	$ 3.89

Estimated Capital Invested and Roic					
Year	After-Tax Op Income	Reinvestment	Cap Invested Start of Yr	Cap Invested End of Yr	Return on Capital
2022	$ (0.69)	$ 1.38	$ 4.60	$ 5.98	$ 0.23
2023	$ 1.15	$ 1.51	$ 5.98	$ 7.49	$ 0.20
2024	$ 0.75	$ 1.69	$ 7.49	$ 9.18	$ 0.18
2025	$ 0.11	$ 1.97	$ 9.18	$ 11.15	$ 0.18
2026	$ 1.48	$ 2.35	$ 11.15	$ 13.50	$ 0.17
2027	$ 3.89	$ 2.73	$ 13.50	$ 16.23	$ 0.17

Appendix D (in millions USD)

Estimated Revenues by Year				
Year	Revenues	Changes in Rev	Sales/Capital	Reinvestment
2022	$ 4.59	$ 6.91	$ 5.01	$ 1.38
2023	$ 11.50	$ 7.58	$ 5.01	$ 1.51
2024	$ 19.08	$ 8.49	$ 5.01	$ 1.69
2025	$ 27.57	$ 9.88	$ 5.01	$ 1.97
2026	$ 37.45	$ 11.79	$ 5.01	$ 2.35
2027	$ 49.24	$ 13.70	$ 5.01	$ 2.73

Expected Free Cashflow to the Firm			
Year	After-Tax Op Income	Reinvestment	FCFF
2022	$ (0.69)	$ 1.38	$ (2.07)
2023	$ 1.15	$ 1.51	$ (0.36)
2024	$ 0.75	$ 1.69	$ (0.94)
2025	$ 0.11	$ 1.97	$ (1.86)
2026	$ 1.48	$ 2.35	$ (0.87)
2027	$ 3.89	$ 2.72	$ 1.17

Valuation	
Cost of Equity	$ 0.12
% Equity	$ 0.80
Beta	$ 1.47
Cost of Debt	$ -
% Debt	$ -
WACC	$ 0.10
Sum of FCFFs	$ (23.24)
Present Value of FCFF	$ (14.48)
Terminal Value	$ 29.80
Discounted Terminal Value	$ 18.61
Pre-money Valuation	$ 4.13
Post-Money Valuation	$ 9.23