

The AI-native incubator for vulnerable newborns

Sensor-integrated monitoring, respiratory support, and diagnostic intelligence all-in-one.

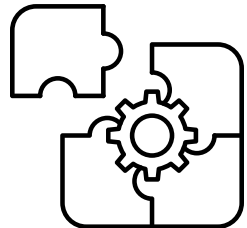
E-mail: hello@corvita biomedical.com
Website: www.corvita biomedical.com

Photo: Corvita's CEO, Salim Kandedi - born at 23 weeks in NICU ,
February 2002, Libreville Gabon

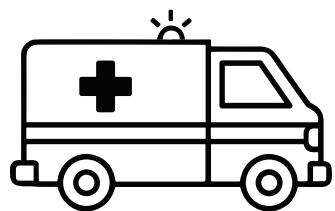
Problem



Premature birth is the **leading cause of death and disability** for children under five.



Today's neonatal incubators are **siloed, passive, and expensive**

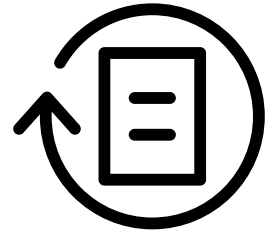


Most hospitals can't treat ill neonates, forcing **risky** transport



The Solution

: a reimaged incubator

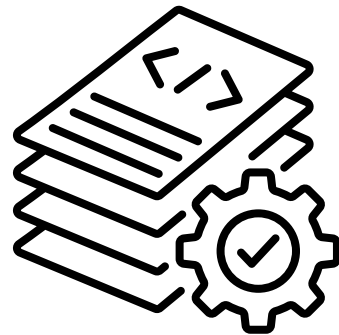
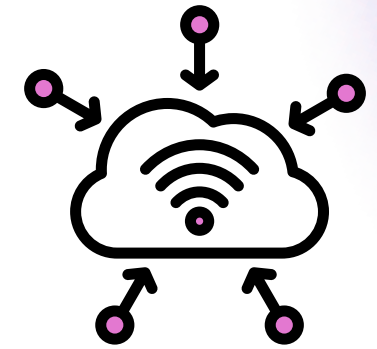


Affordable and portable

Diminished need for transport
Designed for under-resourced environments

Sensor integrated

Less devices needed to start and run NICU



Automated data logging

Lessened workload for nurses
Quick, accurate logging

Automated diagnoses

Detect symptoms even when humans aren't looking



The Ark Incubator

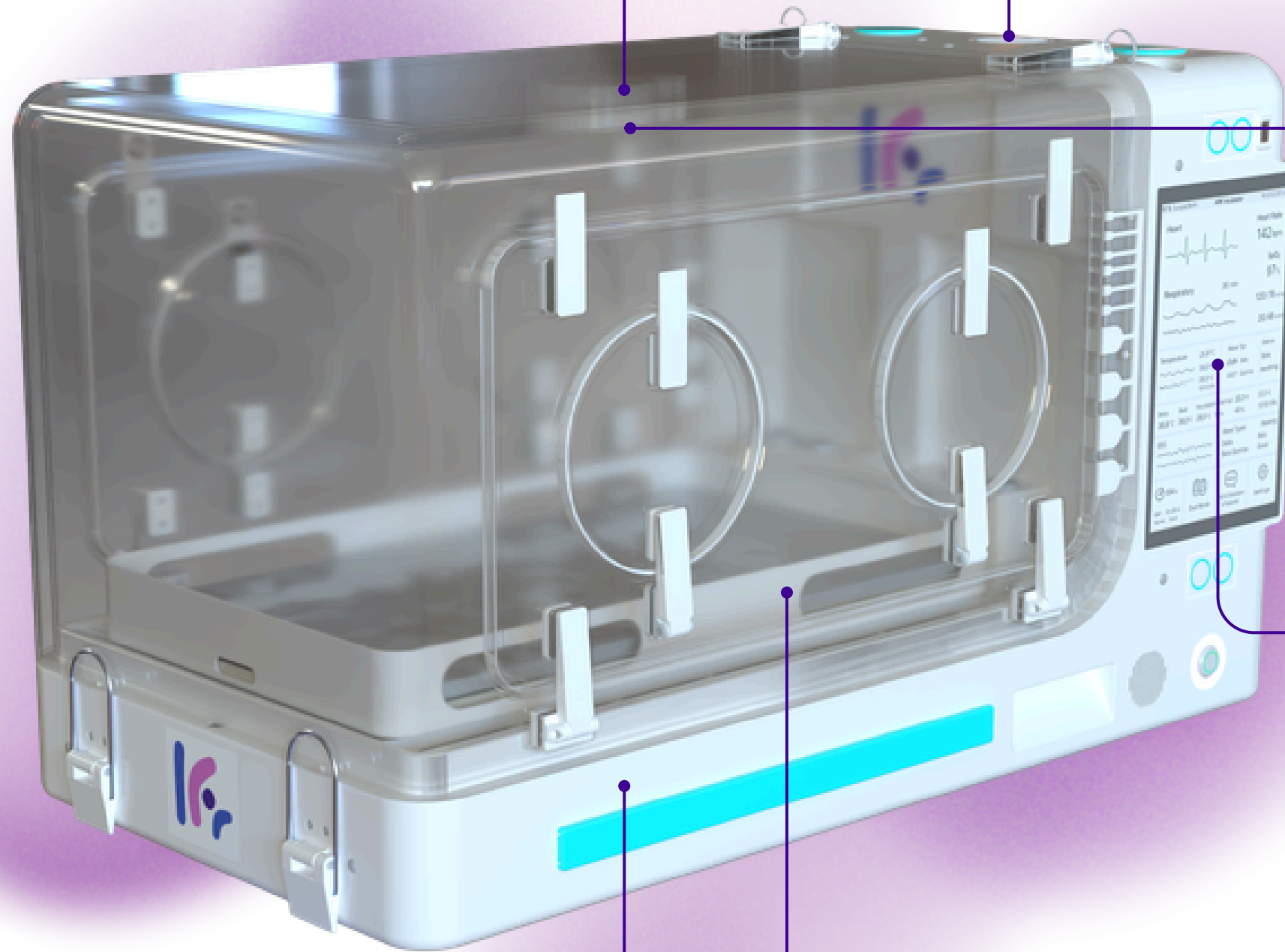
ADVANCED THERMAL & HUMIDITY MANAGEMENT

ALL NICU HEALTH MONITORING WIRELESS SYSTEMS BUILT-IN

BUILT-IN HYBRID VENTILATOR & CPAP MACHINE

BUILT-IN PHOTOTHERAPY FOR HYPERBILIRUBINEMIA TREATMENT

+11 CRITICAL NICU SUPPORT & MONITORING DEVICES.



10 x RGB & Thermal 270 deg cameras



CPAP & Respirator



Billirubin light



Bilirubin meter



3x Thermometers



EEG



ECG



Weight Scale



Incubator

Marks&Clerk Provisional Patent pending (owned by Corvita Biomedical)
Patents, Trade Marks, Designs

The Ark Incubator

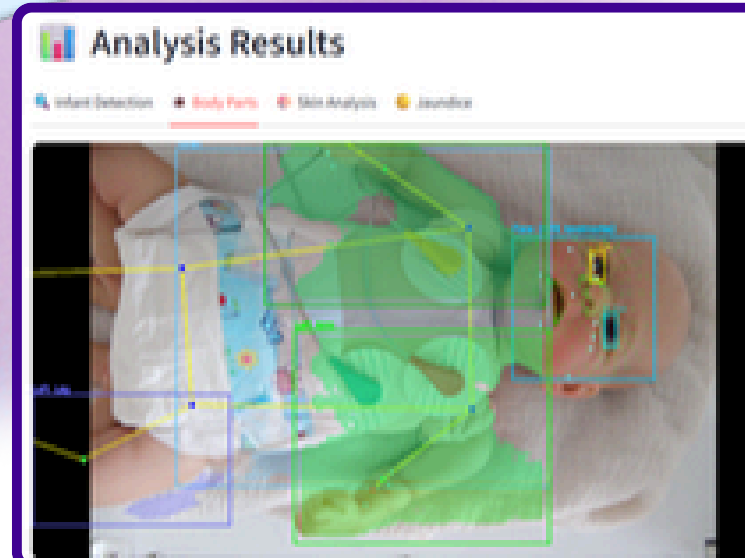
SOFTWARE

COMPUTER VISION &
PHYSICAL AI

AUTOMATED CONTINUOUS
INFANT MONITORING &
DISEASE SCREENING

AUTOMATED MEDICAL
RECORD LOGGING
(DICTATION AND VIDEO)

WORLDWIDE TELEHEALTH
SYSTEM & BUILT-IN
INTERNET ACCESS



NOA-AI

Neonatal Clinical Decision Support – Corvita Biomedical

PATIENT PROFILE

ID: SIM-006 | Name: June | Sex: Male
 GA: 30.0 weeks | Birth Weight: 1300g | Delivery: Vaginal
 Appar Im/Sm: 6/7 | Antenatal Steroids: Yes | Simulation: NEC + SEPSIS
 Day 1 | 01:37 | Hour of Life: 1.6 | Tick #97

VITAL SIGNS

HR: 162.54 bpm	SpO2: 92.76 %	RR: 48.45 /min
BP: 47.95/20 mmHg	MAP: 32.56 mmHg	Temp: 36.80 C
FIO2: 0.21	PEEP: 0.00 cmH2O	PIP: 0.00 cmH2O
pH: 7.36	pCO2: 41.05 mmHg	pO2: 72.79 mmHg
Lactate: 1.33 mmol/L	Glucose: 65.14 mg/dL	BE: 0.13 mEq/L
Bilirubin: 3.34 mg/dL	WBC: 12.61 k/uL	CRP: 0.44 mg/L
aEEG: 21.59/5.8 uV	HRV: 7.11 ms	

CAMERA OBSERVATIONS

Movement: 0.14 Tone: 0.55 Alertness: 0.49 Cyanosis: 0.00 Mottling: 0.07
 Retraction: 0.00 Nasal Flare: 0.00 Grunting: 0.00 Jaundice: 0.63

ACTIVE TREATMENTS

IV Fluids (81 mL/kg/d)

QUALITY GATE

vitals: 100.0%
 memory: 100.0%
 camera: 100.0%

NOA DIAGNOSIS (16 specialists + 10 scorers + Fusion + Calibration + Validation)

HIE	36.0%	conf=66%	[LOW]
drivers:	aEEG_upper=21.6(+0.102)	HR=162.5(+0.090)	aEEG_bw=14.2(+0.085)
NEC	28.9%	conf=66%	[NONE]
drivers:	MAP=32.6(+0.100)	HR=162.5(+0.090)	CRP=0.4(-0.066)
SEPSIS	27.6%	conf=66%	[NONE]
drivers:	HRV=7.1(+0.114)	HR=162.5(+0.090)	CRP=0.4(-0.066)
PDA	25.0%	conf=66%	[NONE]
drivers:	SpO2=92.8(+0.152)	BP_dia=20.3(+0.110)	MAP=32.6(+0.100)
RDS	24.6%	conf=66%	[NONE]
drivers:	PEEP=0.0(-0.400)	SpO2=92.8(+0.152)	Compliance=0.8(+0.095)

CLINICAL NARRATIVE

LOW RISK: SIM-006 – 36.0% probability of Hypoxic-Ischemic Encephalopathy. Key drivers: aEEG_upper, HR, aEEG_bw. If aEEG_upper adjusted from 21.59 to 0.5, risk delta = -0.204.

SIM-006 – 28.9% probability of Necrotizing Enterocolitis. Key drivers: MAP, HR, CRP. If MAP adjusted from 32.56 to 45.0, risk delta = -0.199.

SIM-006 – 27.6% probability of Neonatal Sepsis. Key drivers: HRV, HR, CRP. If HRV adjusted from 7.11 to 50.0, risk delta = -0.229.

The cost of one NICU bed

Incubator hardware

\$40k USD

Multi-parameter monitor

\$10k

Neonatal ventilator

\$35k

EEG/HIE screening

\$15k

IT Integration labor



\$10k

Camera(s)

\$5k/year

Annual servicing

\$13k/year

		Dräger	ceribell Clarity When It's Critical	
Interconnected care platform	✗	✓	✗	✓
Sensor Integration	✓	✗	✗	✓
HIE Screening (real-time)	✗	✗	✗	✓
Automated Monitoring	✓	✓	✓	✓



ceribell
Clarity When It's Critical

→ **\$110k + \$18k/year**

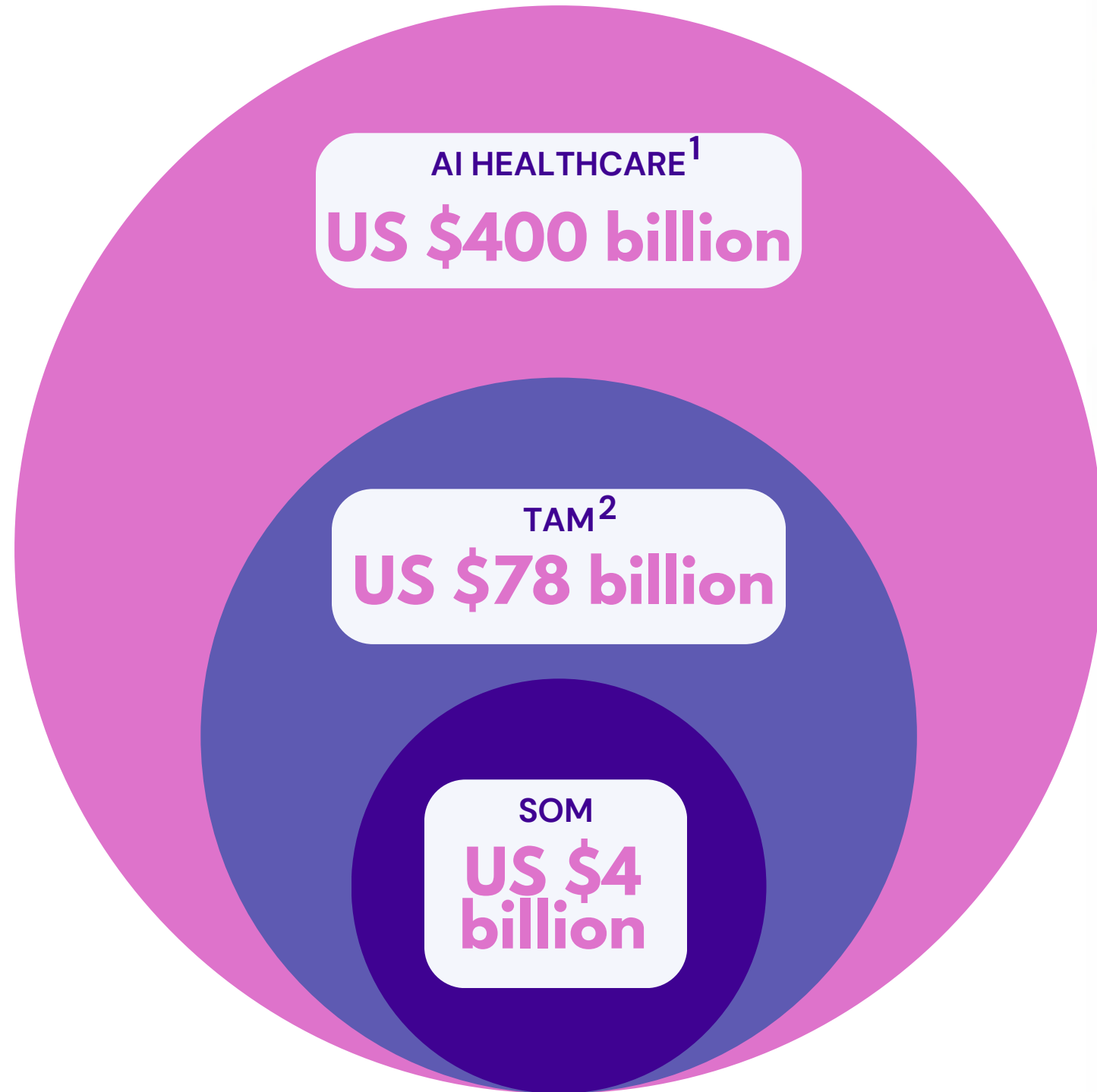
Dräger

AngelEye
HEALTH

The ARK:
\$45k + 18k/year

Market Size

Neonatal Health Tech Industry



\$90k average NICU stay cost per baby across 400k premature births in North America



Impact

Cost Today

\$25B USD per year¹

spent on **NICU inefficiencies** across North America
[high costs, transport, malpractice lawsuits, staffing premiums]

> 2.3M newborns

newborns die globally per year

millions more

live with **lifelong disabilities¹**

however,
up to 70%
of all fatalities can be avoided²



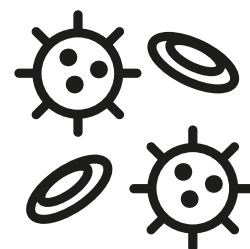
HIE (Hypoxic Ischemic Encephalopathy)

real-time screening → faster intervention → prevents cerebral palsy



Apnea (prematurity)

Continuous monitoring catches irregular breathing as soon as it happens



Sepsis

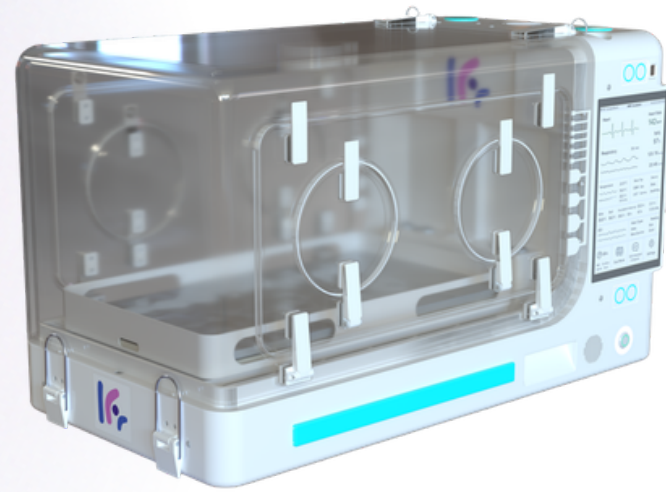
AI flags patterns hours before clinical onset



1. Waitzman et al, *Seminars in Perinatology*, 2021; 45(3):151390.

2. Bhutta et al, *The Lancet*, 2014.

Business Model



Hardware

Hardware Sales

- Direct Purchase
- Lease & Rental Programs (/month)
- Accessories (/device)
- Servicing & Maintenance: /year/device



Software

SaaS tools (yearly recurring)

- NOA-AI Assistant
- Telehealth System
- Advanced disease diagnosis
- Global Connectivity



Platform Ecosystem

Data Licensing (Recurring) - Yearly License

The first multimodal comprehensive data set on neonatal health treatment and recovery.

- **SaMD companies:** Data market place & hosting services
- **Pharma & Research lab:** Neonatal studies

#1

Hospitals with a NICU

Research Hospitals

NGO

SaMD Companies

Big Pharma

Early Traction

Commercial Intent

First Steps Humanitarian Society

**LOI SECURED
(4 ARKS)**



Active engagement with major NICUs across Canada



BC Women's Hospital

**INNOVATION
ADOPTION INTEREST
FOR HIE**



Regulatory Pathway

FDA and Health Canada Pre-sub meetings underway

Multi-site clinical observations underway across Ontario

510(k) submission Q3 2027; clearance by Q1 2028



Salim Kandedi, B. Eng
Founder, CEO,
Lead Biomedical Engineer

+ 6 years experience in
medical device design
development & nationwide
launch

Second time founder
The PrenaBelt



Ex Application Engineer



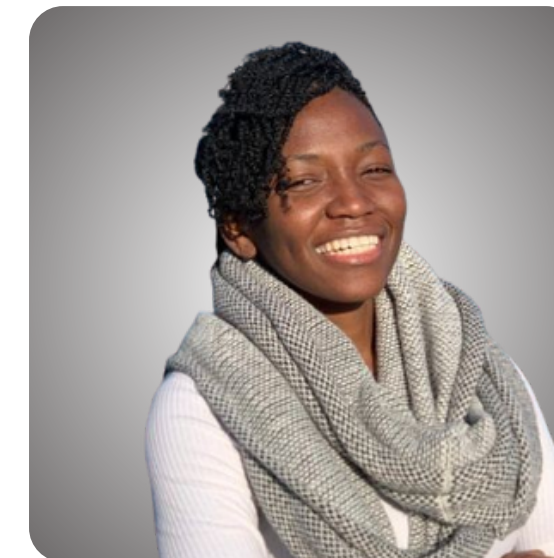
Leah Ritchie, B. Sc.
Biomedical Research
Lead, co-founder

Expertise in clinical
research, peer reviewed
author



Daniel Park Bsc. Comp
Principal System Engineer

+20 years of experience in
full-stack software
development in medical
devices



Vannessa Dzime, BBA,
Msc.Finance
CFO (Fractional)

+15 years Corporate &
Investment finance



Ali Rahbar, Bsc.(c)
Junior Full stack developer

Computer Science @
University of Toronto
Full-stack development of
industrial applications



Yejin Kong, Bsc. Biology (c)
Regulatory Business
Operation Lead

experience in **clinic &**
business operation



Elvis Togban, B. Eng, Ph.D
Lead Machine Vision
Specialist

+10 years of experience in
computer vision and data
pipeline architecture



Product Development
& manufacturing Firm

Project manager
+ 6 Engineers



Dr. Niraj Mistry BSc., MD, MS, FRCPC, (+14 years)
Pediatrician @ SickKids, Scarborough Health Network, UHN, & St. Michael's hospital

Clinical Advisor at Corvita Biomedical



Dr. Michael Dunn MD, FRCPC (+42 years)
Neonatologist @ Sunnybrook, UofT Associate Professor

Clinical Advisor at Corvita Biomedical



Dr. Amr El Shahed (+30 years)
Neonatologist @ SickKids, UofT Associate Professor, HIE Specialist

Clinical Advisor at Corvita Biomedical



Scott Mackenzie Bsc. MBA (+38 year)
President & CEO (retired) Morningstar Canada

Business Strategy Advisor at Corvita Biomedical



Leila Kheradpir MSc., P.Eng. (+24 years)
Humber College Professor, Venture Advisor VentureLAB

Engineering & Clinical Advisor at Corvita Biomedical



Aaron Le, BSc (Math) (+15 years)
Lead Principal Architect @ Hatch, Data & AI

AI Infrastructure & technical Advisor at Corvita Biomedical



Dr. Alexandra Howlett, MD, FRCPC (+35 years)
Neonatologist @ Alberta Health Services, Clinical Associate Professor @ University of Alberta

Clinical Advisory partner at Corvita Biomedical



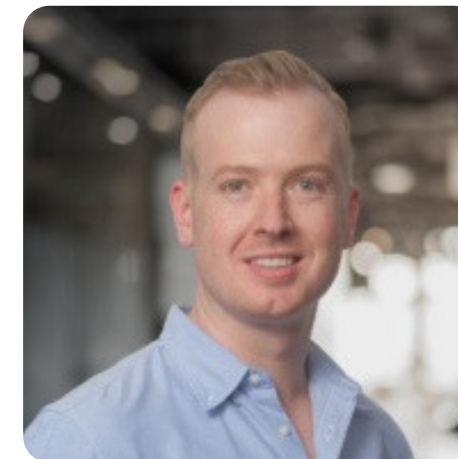
Dr. Allan Kember FRCSC (ObGyn), MD, MSc (+6 years)
OBGYN @ Mount Sinai & UHN. UofT Assistant Professor, President, CEO @ Shiprah Biomedical

Engineering & Clinical Advisor at Corvita Biomedical



Monica Dhaliwal, NP (+10 years)
Pediatric Nurse Practitioner @ Credit Valley Hospital

Clinical Nursing Advisor at Corvita Biomedical



Caleb Cook
Innovation advisor, Venture growth @ Innovation Factory

Business & growth Advisor at Corvita Biomedical



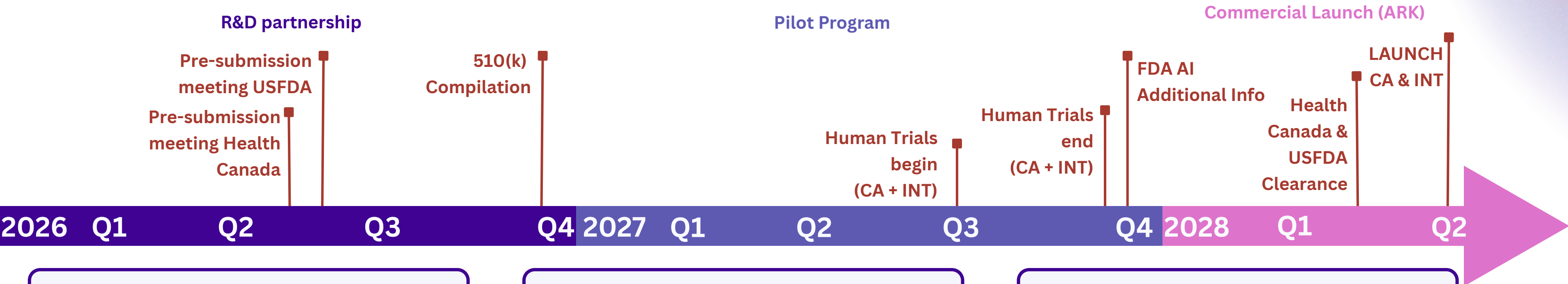
Neil D'Cruz Ph.D (+24 years)
Owner/CEO at Odyssey Health Services Senior Advisor at H2i

Regulatory & Business Advisor at Corvita Biomedical

Partners



Regulatory Strategy



ARK INCUBATOR

- **Class 2** (FDA), **Class 3** (Health Canada)
- **510(k) with Predicates**
- Modular: bedside + transport configs.

NOA-AI

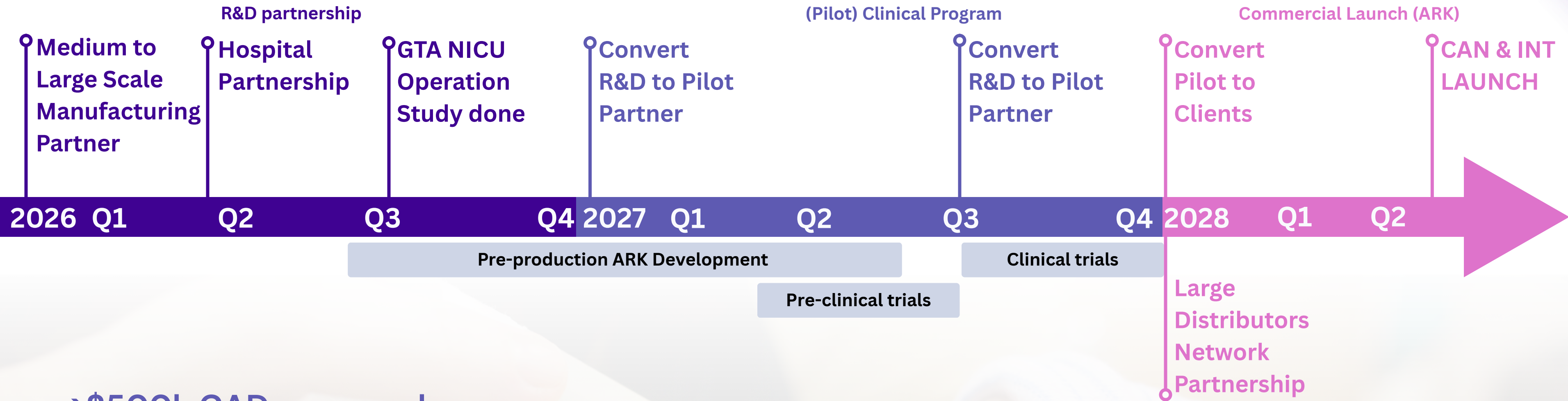
- Class II MLMD (Machine Learning Medical Device)
- **Integrated submission** with the ARK Incubator

AI & DATA PLATFORM

- Not a Medical Device
- HIPAA Compliant
- Edge-native compute system



Go to Market Strategy



>\$500k CAD pre-seed
F&F, non-dilutive gov funding
(No Debt)

Pre-seed KPIs met

- ✓ Expert team + board of experienced advisors built
- ✓ Regulated product manufacturing ability
- ✓ MVP-1: AI/ML models and data pipeline operational
- ✓ MVP-1: Hardware integration successful
- ✓ 5+ clinical and physician partnerships confirmed

Investment Opportunity

- Target Raise: **\$2M CAD**
- Priced round
- Further non-dilutive grants (NCR-IRAP)

Funding purpose

- **52%** → Product development & manufacturing cost
- **30%** → Team Expansion
- **12%** → Professional services & regulatory cost
- **5%** → Operation expenses
- **3%** → Pilot Project Cost

Funding KPIs

- Commercial ARK delivery for pre-clinical Testing
- International pilot project of the ARK+NOA.
- Complete regulatory submissions done (Health Canada, USFDA)
- Hardware - AI-Software integration ready for launch.

Raising Seed round

\$2M CAD

with

\$500,000 CAD
committed matching funds
(OCI)

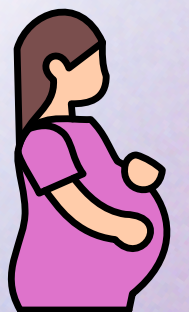
WHY INVEST NOW?



data-driven
medicine



Increased
preterm birth



Advanced
Maternal Age

Multi-path Exit Strategy

POTENTIAL ACQUIRERS

M&A Deal with Large Health technology companies

- Target Acquisition Valuation: **<1.5B USD**

Strategic Acquisition Candidates

- Leading neonatal equipment manufacturer
- Expanding critical care portfolio

IPO/ SPAC IPO Exit

- Target timeline: **10-12 years**
- Target Valuation: **\$1.5-2.5B USD**



EXAMPLES FROM DIFFERENT COMPANIES



**Owlet Baby Care
(Smart Monitoring)**

Founded 2012

Exit Status: 2021 SPAC IPO
(valuation \$ 1.07B)



**Nanit
(Baby monitor)**

Founded 2014

Exit Status: Still private
Valuation: \$220-\$305M



**Bloomlife
(Remote maternal-fetal monitoring)**

Founded 2014

Exit Status: Still private
Valuation: (\$27M)

Exit Strategy: Acquisition Attractiveness



Medical device

Health monitoring software

Database & ML training Platform

Physical AI Infrastructure in NICU

Proprietary Data Moat

- 63-subsystem continuous telemetry
- Device-to-Cloud pipeline

AI/ML Model Ecosystem

- ML sandbox pipeline from design to deployment
- Clinical accuracy NOA-AI

Recurring Revenues

- \$20M - \$40M ARR from platform
- +20 hospital portfolio

IP Portfolio

- Strong patent claims (Hardware, Software, AI-Models, Clinical workflow)

Regulatory Clearances

- USFDA clearance for Ark, NOA-AI & data platform
- Presence in EU & UK

Clinical Validation

- Real-life validated models
- Device validated across regions and patients

Exit Strategy: Similar Transactions



Medical device

Health monitoring software

Database & ML training Platform

Physical AI Infrastructure in NICU



FEB 2026

\$9.9B
USD

Masimo

- Home Clinical Monitoring
- Data Moat



2024

\$19.6B
USD

MIM Software

- Precision Care
- NICU monitoring



2022

\$28.3B
USD

Cerner

- Healthcare AI Infrastructure
- Physical IoT



2022

\$19.7B
USD

Nuance

- Automated AI documentation
- Physical AI



2021

\$16.5B
USD

Varian

- Precision Therapy
- device-AI-data



2018

\$1.9B
USD

Flatiron Health

- Health Data platform
- EHR pipelines



Thank you

Email: hello@corvitabiomedical.com

Phone Number: 647-806-3479

Website: www.corvitabiomedical.com

Corvita Biomedical Inc.



Salim Kandedi, B. Eng
Biomedical Engineer
Founder, CEO,
Lead Engineer