ExoDynamics

Enabling Limitless Movement for Knee Related Injuries

Strider MK. II

Never Before Seen

There is nothing like it on the market right now. Experience all the functionality of an exoskeleton in the familiar style of a knee brace.

Integrated Passive and Active Systems

The Strider remains operational even when there is no power. Our novel liquid spring system works around the clock so you don't have to.

Customized to YOU

Every person is unique, and so is every purchase of the Strider. Each and every model is manufactured to your specific knee anatomy.

Knee Pains, Injuries, and Tears

65%

Rise in knee pain over the past 20 years

25%

Of adults are affected by knee pain

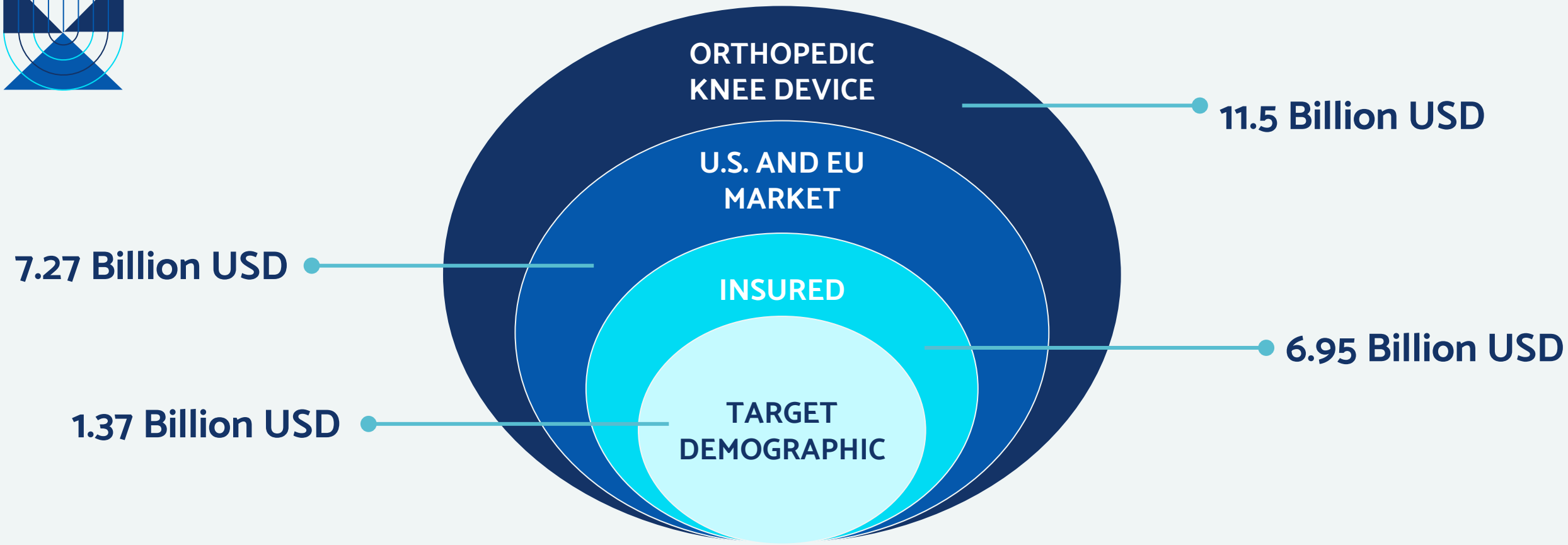
40%

Of all sport injuries are related to the knee joint

52%

More likely to develop knee osteoarthritis for those in physically demanding jobs

Market Sizing



Total Market Value: 1.37 - 1.71 Billion USD

Strider MK. II

Carbon Fibre Frame

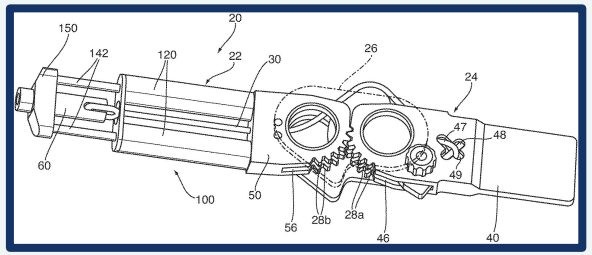
Integrated Liquid
Spring Passive System

Pneumatic Active System

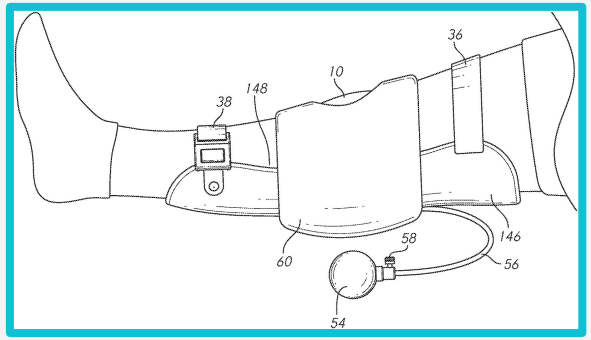
Elastic Straps

Intellectual Property (IP)

Patents that may pose a barrier to commercialization



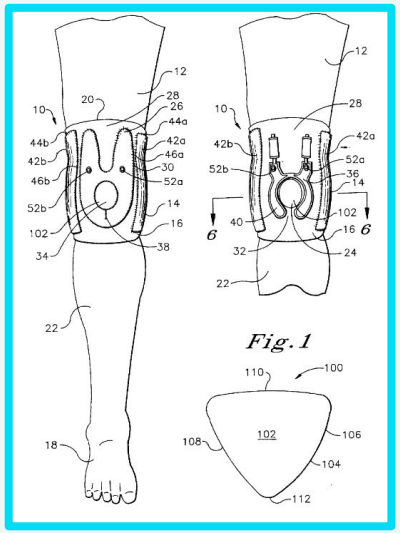
Hinge for a brace (US11464661B2)



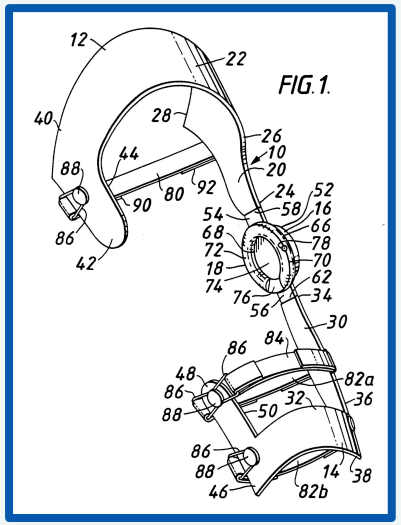
Soft inflatable exosuit for knee rehabilitation (US11259980B2)

- ✓ Conducted a “Freedom to Operate” search
- ✓ Diversified search queries to broaden search
- ✓ **Strider Mark II has the freedom to operate**

Expired Patents



Knee brace having an inflatable pad circumscribing the patella (US5792084A)



Osteoarthritic knee brace (EP0670152B1)

Equity Considerations

Accessibility

Affordability

Inclusivity

Availability

Accountability

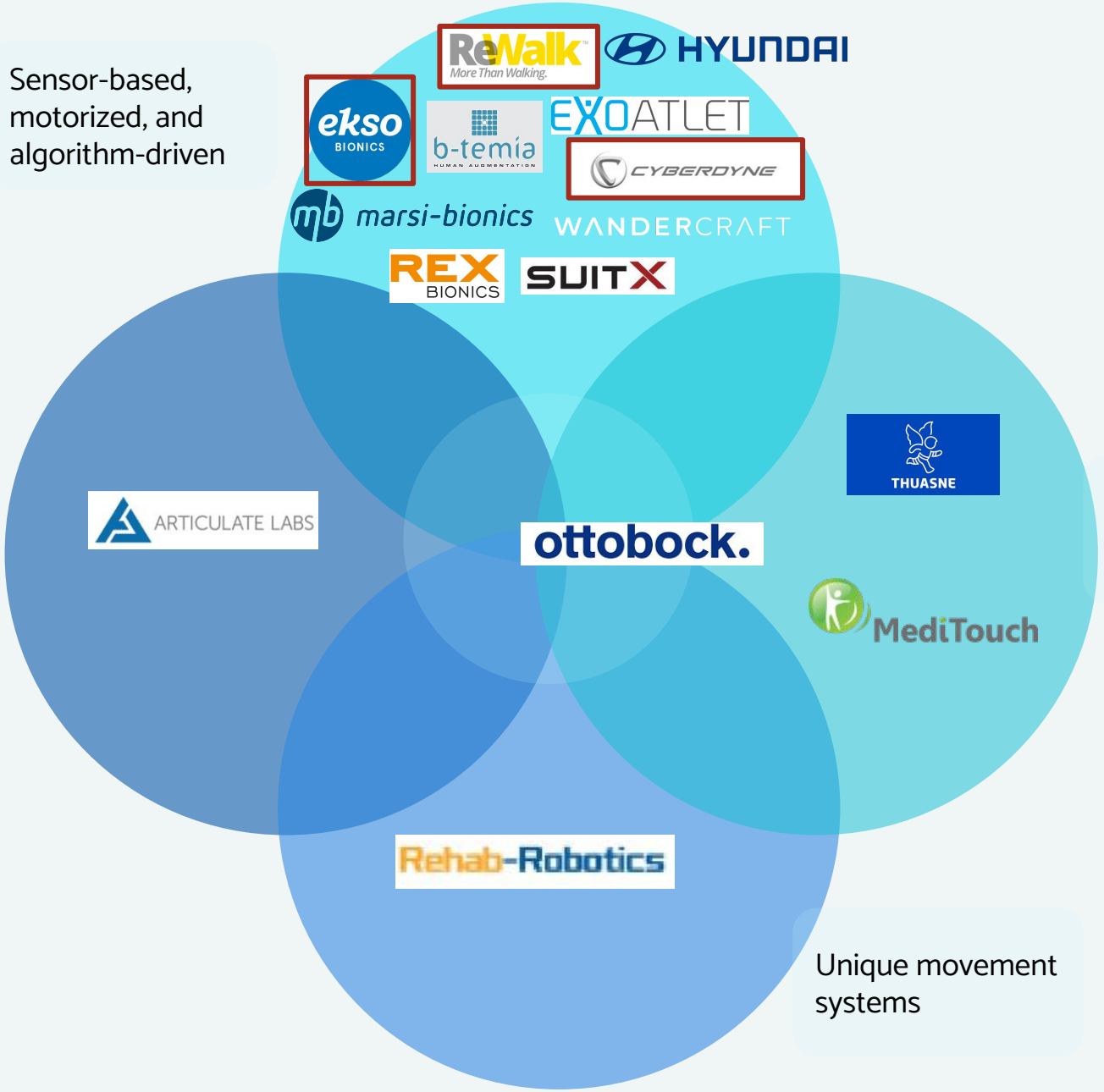
Petal Diagram

Sensor-based, motorized, and algorithm-driven

Electrical stimulation (NMES)

Braces for the knee joint

Unique movement systems



Whitespace Diagram

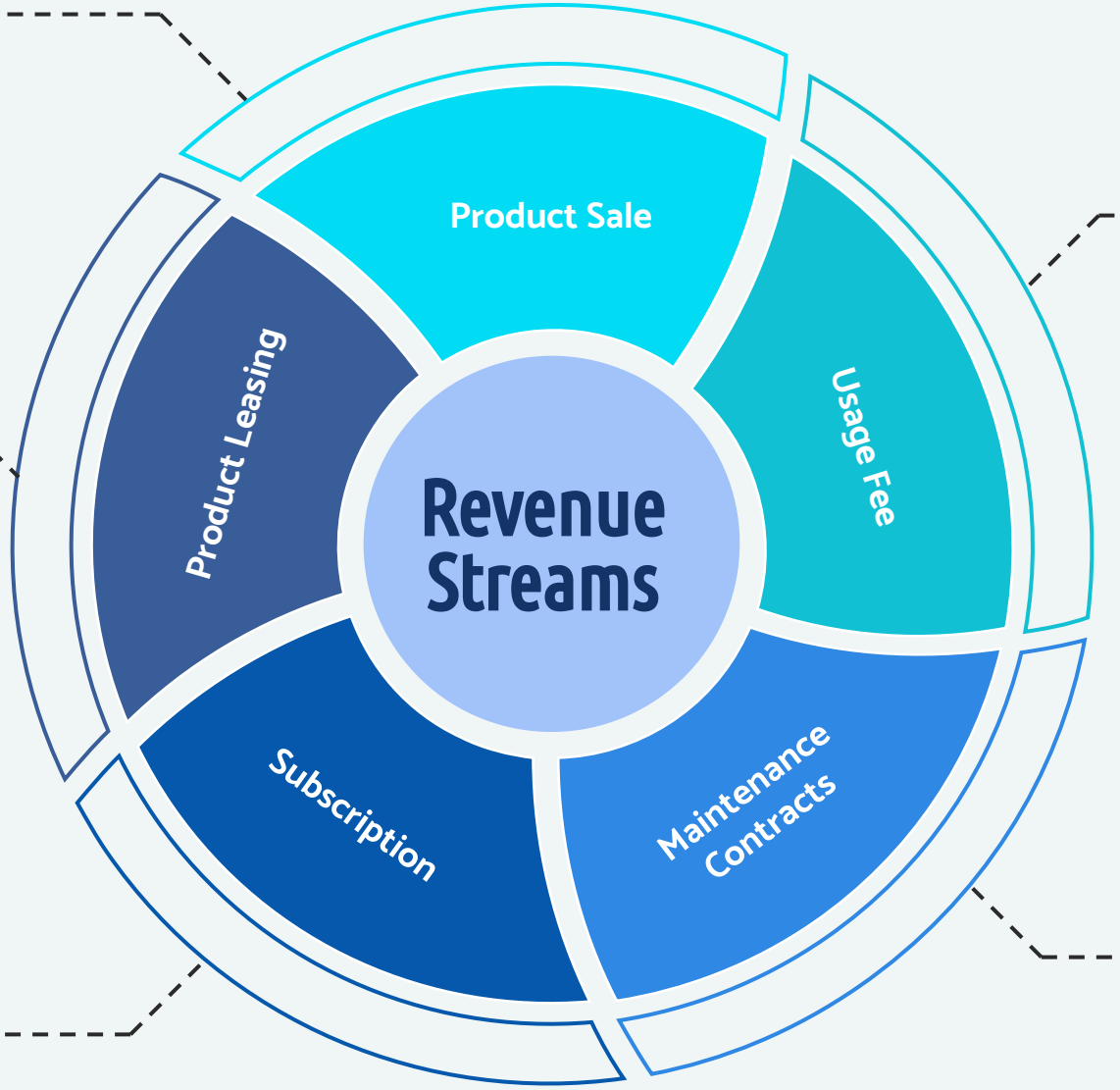
	Fail-Safe for Power Loss	Dual Activation System	Product Cost	Accompanying App
	Device still usable if loss of battery / user is not harmed?	**Adds redundancy to the system in case of failure**	**Low cost means more accessible for more people**	**Helps with control, various settings, and data analytics**
ExoDynamics (Strider MkII)	**Relies on secondary passive system**	**Dual system - pneumatic active system & liquid spring passive system**	**$10,000**	**Strider Companion App**
Ekso Bionics (Ekso Indego Personal)	Locking mechanism	Single system - motor-based active system	$100,000+	Indego Therapy Assistant
ReWalk Robotics (ReWalk Robotics ReWalk Personal 6.0 Exoskeleton)	"Gravity Mode" maintaining a standing position & locking mechanism	Single system - motor-based active system	$77,000	ReWalk Personal App
Cyberdyne (Hybrid Assistive Limb)	Manual mode & gradually and smoothly reduce the power assistance to zero	Single system - motor-based active system	$20,000	HAL Connect

Proposed Revenue Model

$10,000 one time

$50 per use

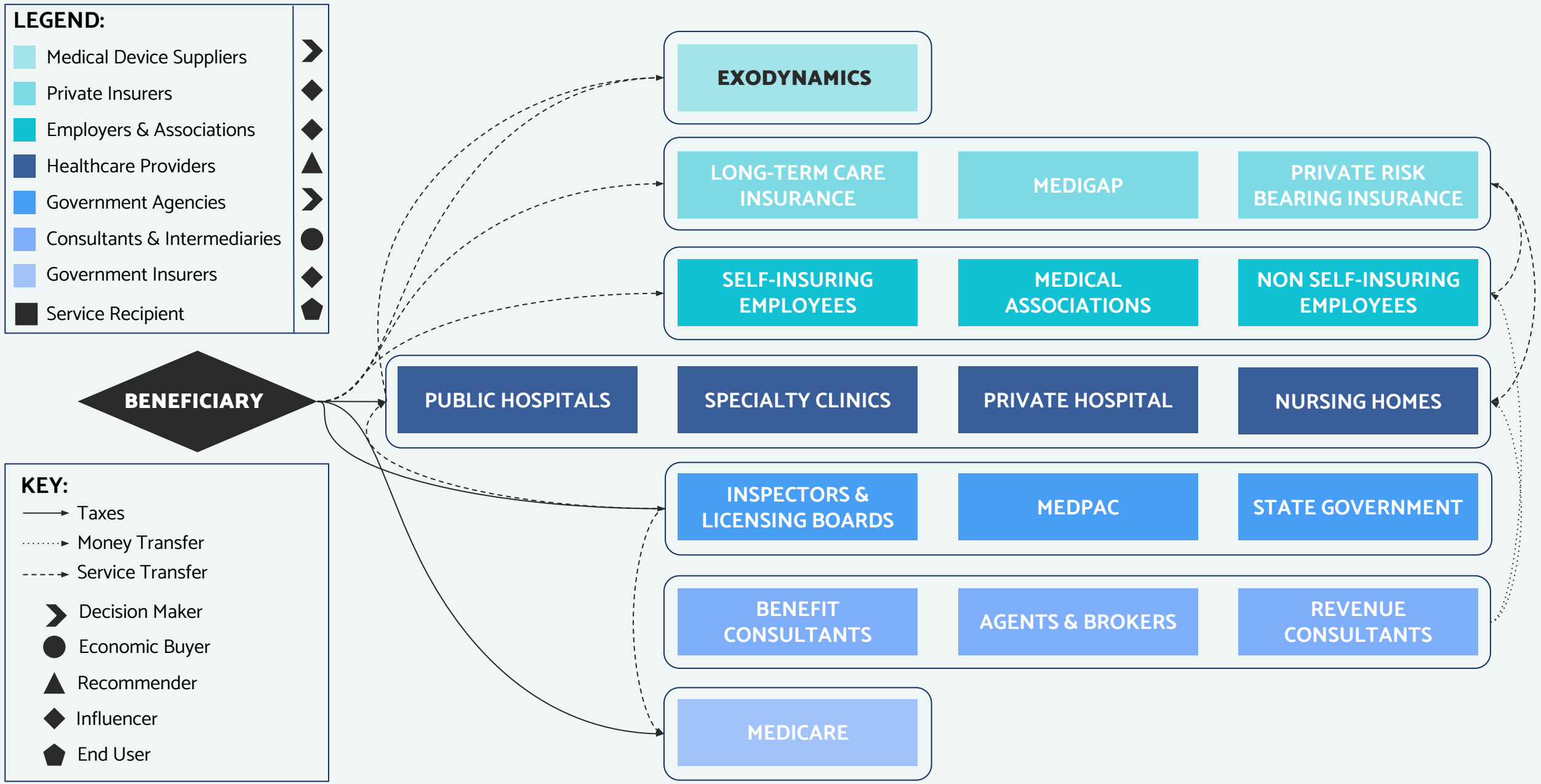
5 years @ 3.1%
= $180.13 monthly



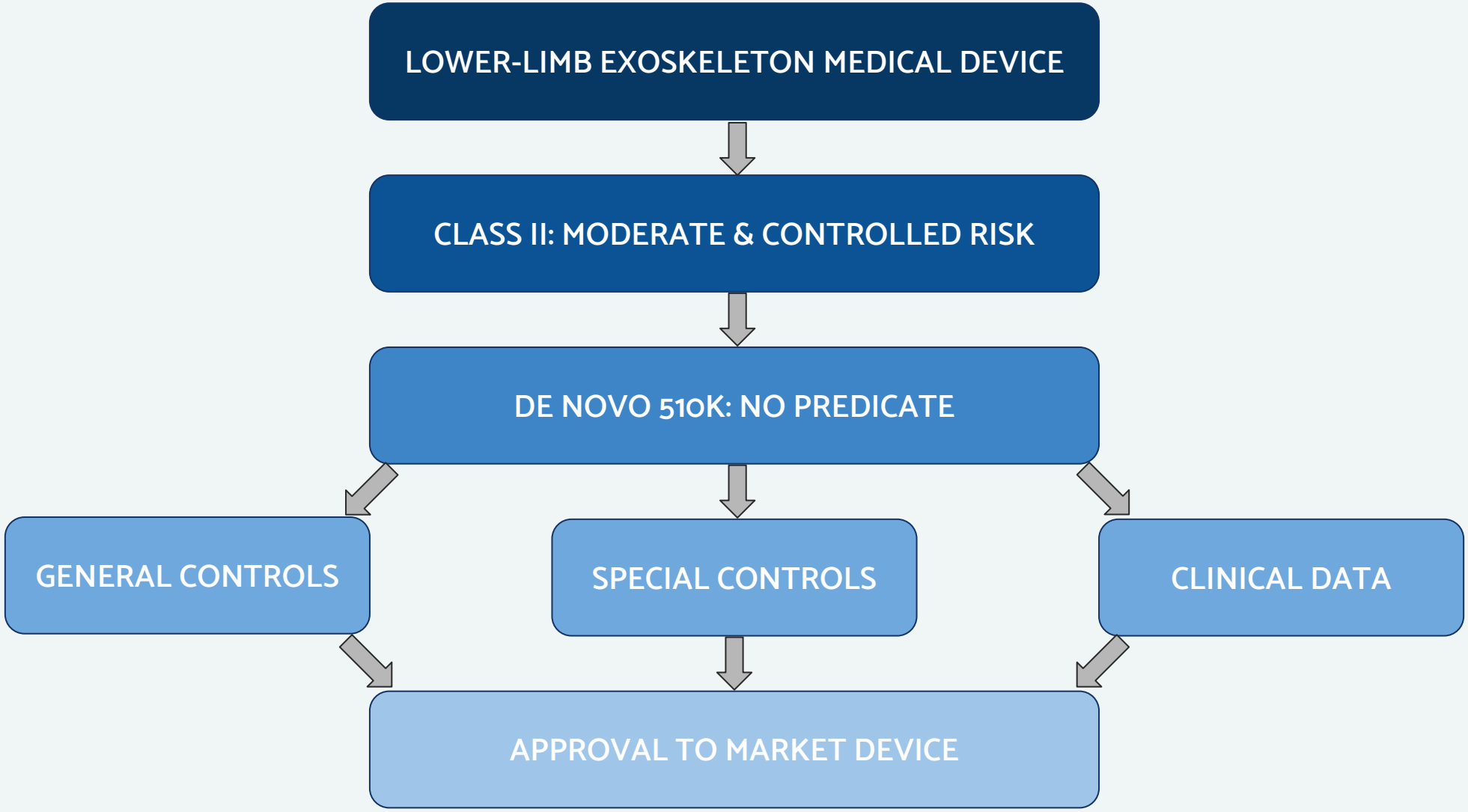
$500 - $1500 yearly

$50 - $200 monthly

Customer Decision Network



Regulatory Process



The ExoDynamics Team

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3+ Years Experience in Biomechanics & Biomaterials

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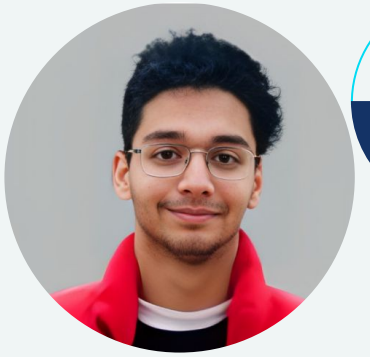

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MAYO CLINIC

UC Berkeley Robotics & Human Engineering Laboratory

Harvard Biodesign Lab

SARCOS®

HONORHEALTH™

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EPIC LAB

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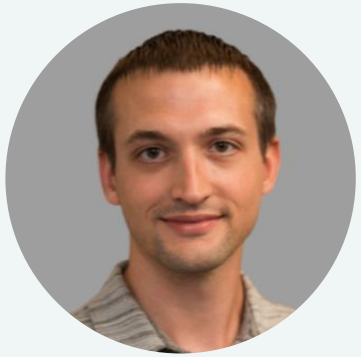

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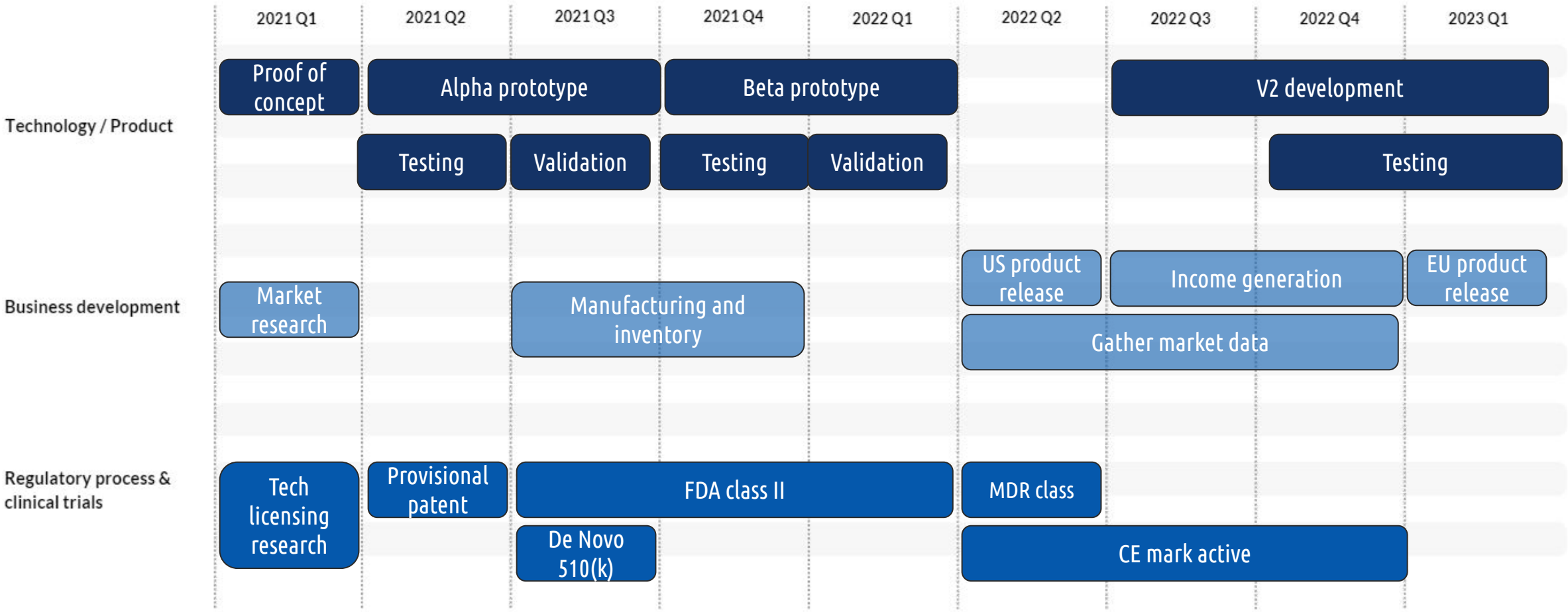
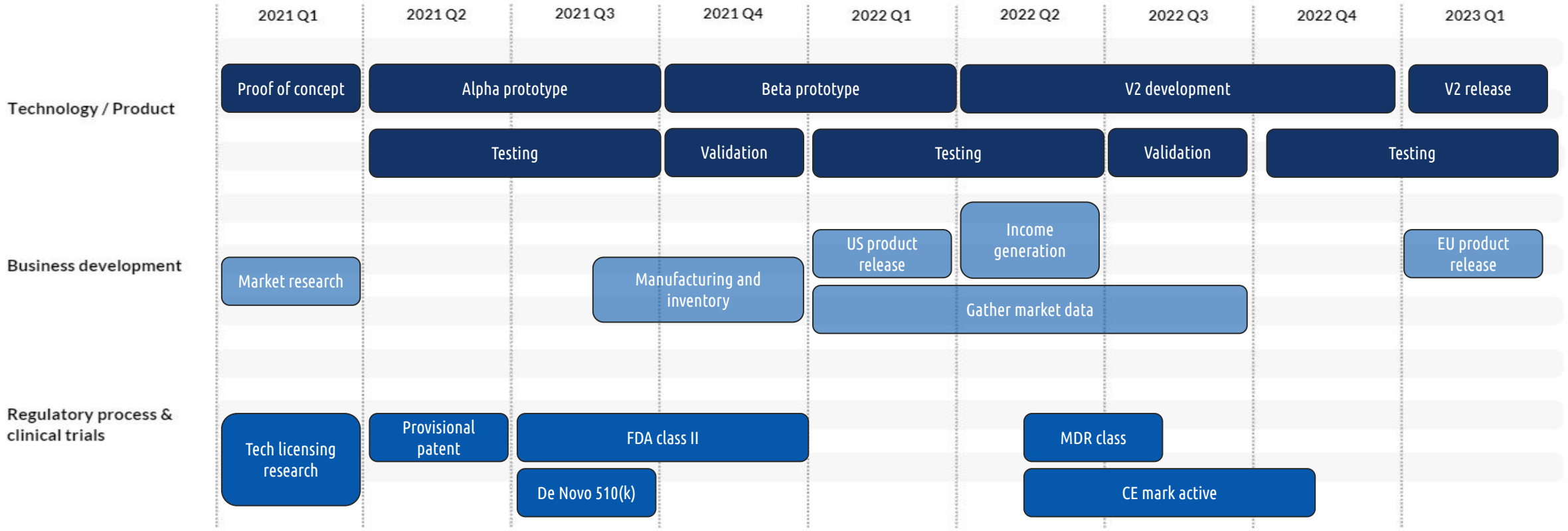
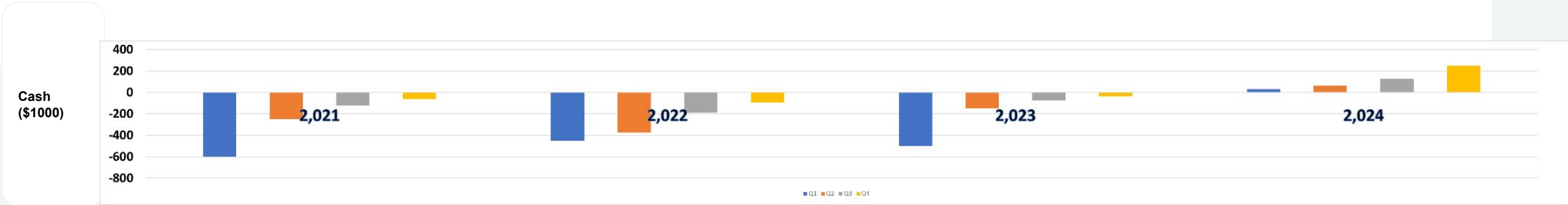
20+ Years Experience in Ligament Reconstruction

Venture Roadmap



Costs and Cash Timeline





ExoDynamics

Thank you!

Do you have any questions?

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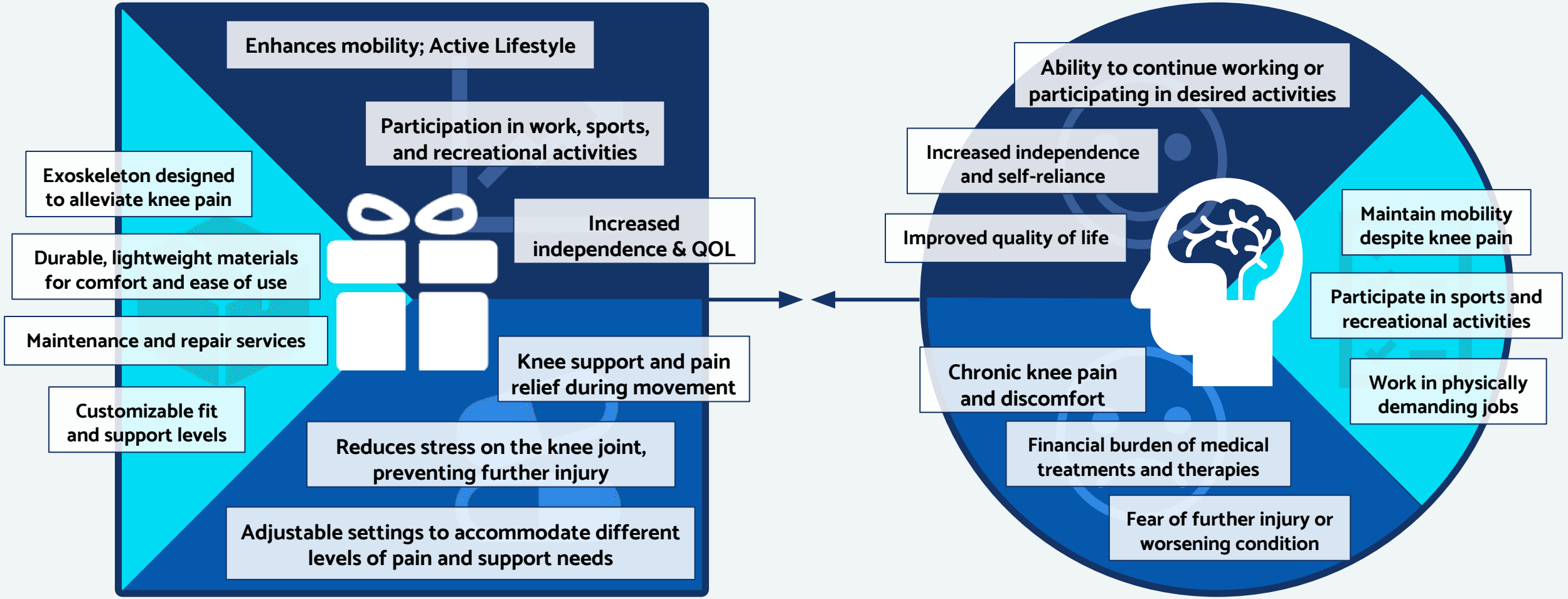
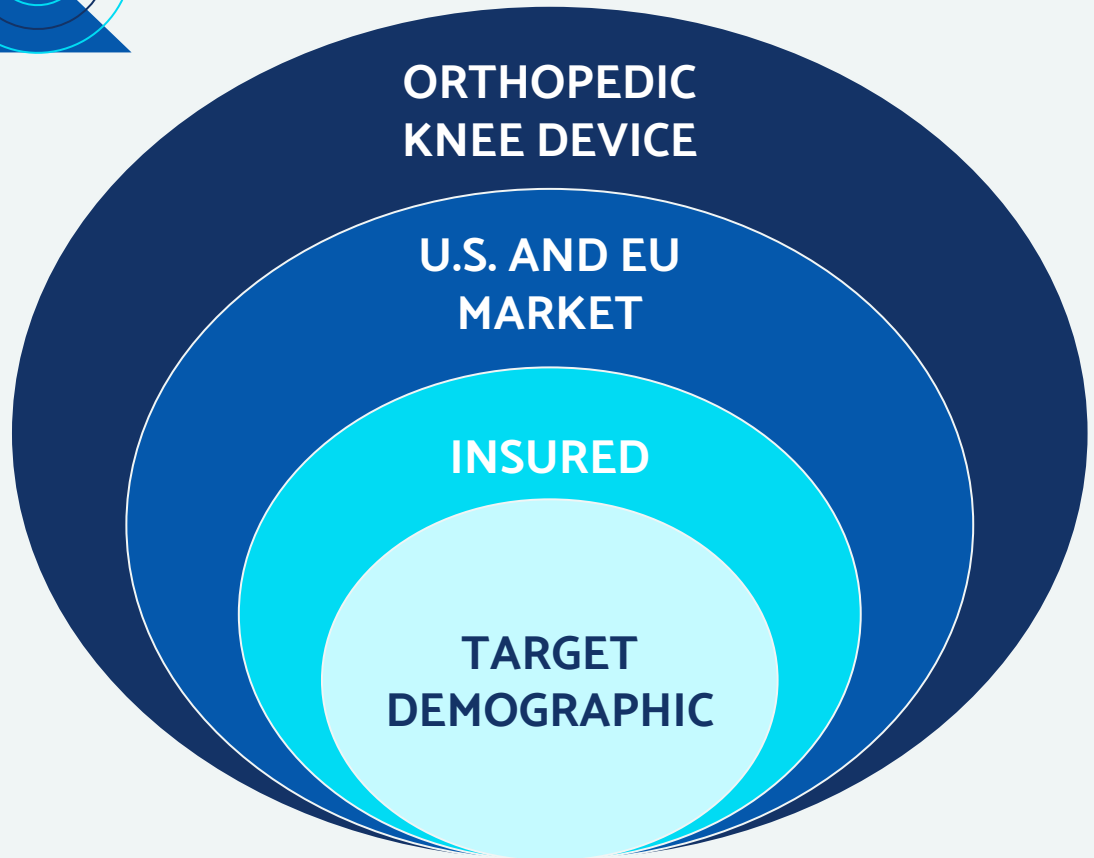
Appendix

Value Proposition Canvas: Knee Related Injuries



Market Sizing



Global Orthopedic Device Market	40.88 Billion USD
Knee Market Share	28.2%
Global Orthopedic Knee Devices Market	**11.5 Billion USD**

U.S. Market Share	33.3%
U.S. Knee Devices Market	**3.83 B USD**

EU Market Share	29.9%
EU Knee Devices Market	**3.44 B USD**

U.S. Insured %	91.7%
U.S. Insured	**3.51 B USD**

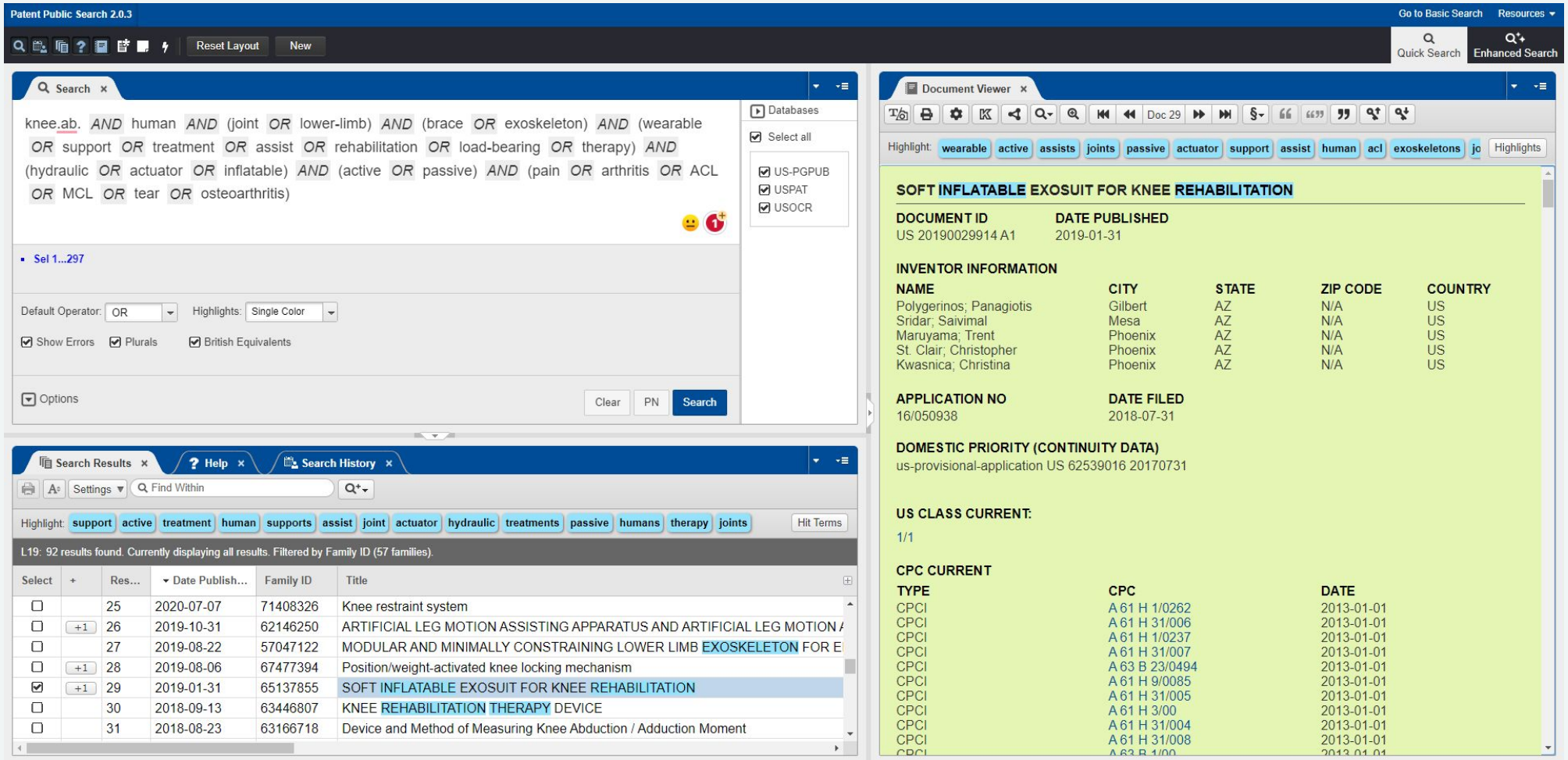
EU Insured %	100%
EU Insured	**3.44 B USD**

Knee Implants	60-70%
Knee Brace	**20-25%**
Arthroscopy Devices	10-15%

Total Market Value	**1.39 - 1.73 Billion USD**

Freedom to Operate Search Example

USPTO - Patent Public Search



Competitive Landscape Research

Cyberdyne	- Sensors to detect electrical signals in muscles - Computer system interprets signals and controls electric motors that drive joint motion - Battery powered for electric motors
Esko Bionics	- Sensors that detect the user's movements and weight shifts - Computer system on waist interprets signals and controls motors - Battery powered, but is also removable
Hyundai Medical Exoskeleton (H-MEX)	- Sensors that detect the user's movements and weight shifts - Computer system on waist interprets signals and controls motors - Still in development phase
Wandercraft	- Motorized joints and sensors - Motors at the hip, knee, and ankle joints, which are controlled by a wearable remote control - Adjustable to fit different body types and is modular - Currently undergoing clinical trials in Europe
Articulate Labs Inc	- Uses electrical stimulation to activate specific muscle groups around the knee joint, helping to improve knee function and reduce pain - Sensors that detect the user's movements and adjust the stimulation patterns and intensity accordingly - Includes an app that allows users to track their progress and adjust settings, as well as access instructional videos and other resources
ReWalk Robotics	- Sensors that detect changes in the user's posture and balance, allowing it to adjust its movements and maintain stability - Motors that provide powered movement to the hip and knee joints - Controlled using a wearable remote control that the user can activate to stand up, walk, turn, and sit down - Using crutches or other assistive devices for support

Competitive Landscape Research Cont.

Indego	- Sensors and motors to detect the user's movement intentions and provide powered assistance for walking and standing - Connected to a control unit worn around the waist and a backpack-style power source - Sensors detect the movement and send a signal to the motors to provide assistance in lifting the leg and placing it forward
Rex Bionics Ltd	- Hands-free control system that allows users to initiate movements and adjust settings using body movements like weight-shifting or leaning forward - Sensors, motors, and software algorithms to detect the user's movement intentions and provide powered assistance for walking and standing
ExoAtlet	- Backpack containing the control unit and power source - Sensors, motors, and software algorithms to detect the user's movement intentions and provide powered assistance for walking and standing - Controlled by a therapist using a tablet-based interface, allowing for real-time adjustment of assistance level and gait parameters - Designed to be used in rehabilitation settings
Meditouch	- Biofeedback technology to guide patients through exercises and provide real-time feedback on their movements and progress - Adjustable to fit patients of different sizes and can be used with both legs - Control box that contains sensors and motors
Thuasne	- Dynamic compression to help reduce pain and improve function - Adjustable hinge system allows the user to control the amount of support and flexibility provided by the brace

Competitive Landscape Research Cont.

MarsiBionics	- Lithium-ion battery for power - Bluetooth connectivity for smartphone app control - Sensors, motors, and software algorithms to detect the user's movement intentions and adjusts the resistance of the knee joint in real time

Rehab-Robotics Company Limited	- Mechanical linkage system for adjusting the angle of the knee joint - Knob or lever for adjusting the angle of the knee joint - The angle of the knee joint can be locked in place to provide stability during physical activities

SuitX	- Several components, including a hip module, thigh module, knee module, and foot module, which can be combined and adjusted to fit the user's individual needs - Controlled by a wireless remote that allows the user to adjust the level of assistance provided by the device - Powerful motors to provide assistance to the user's lower limbs, helping them to stand up, walk, etc - Advanced sensors and algorithms to adapt to the user's movements in real-time, providing a more natural and intuitive experience - Unique feature is its "quick release" mechanism, which allows the user to easily detach and reattach the exoskeleton components for greater flexibility and convenience

B-Temia	- Sensors, motors, and software algorithms to detect the user's movement intentions and provide powered assistance for walking and standing - Backpack containing the control unit and power source - Unique "stair mode" allows the device to detect when the user is climbing stairs and adjust the assistance provided accordingly

Ottobock	- Sensors that detect the user's movements - Passive spring-based mechanical system

Costs and Cash Analysis

	2021				2022				2023				2024			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenue	0	0	0	0	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
COGS	0	0	0	0	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000
Gross profit	**0**	**0**	**0**	**0**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**	**125,000**
Operating expenses																
R&D	0	75,000	75,000	75,000	75,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000	125,000
Sales & marketing	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
General & administrative	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Regulatory	0	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000
Total costs	**0**	**200,000**	**200,000**	**200,000**	**200,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**	**250,000**
EBITDA	**0**	**-200,000**	**-200,000**	**-200,000**	**-75,000**	**-125,000**	**-125,000**	**-125,000**	**-125,000**	**-125,000**	**-125,000**	**-125,000**	**-125,000**	**-125,000**	**-125,000**	**-125,000**
Yearly P/L				**-600,000**				**-450,000**				**-500,000**				**-500,000**
Ask												**1,550,000**				