

Fueling the APAC Medtech Innovation Engine: An Ecosystem Investment

APACMed & L.E.K. Consulting

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Foreword

Early-stage medtech innovation is a lifeblood of healthcare systems around the globe. Historically, many of today's leading medtech conglomerates began as small, visionary startups. These companies, once fledgling enterprises, have grown into industry titans, driving forward the frontiers of medical science and technology. However, the journey from a small business to a global giant is fraught with challenges, particularly within the healthcare sector which is characterized by a high-risk, high-reward profile.

The medtech industry stands at a pivotal juncture. The inherent risks associated with healthcare innovation — regulatory hurdles, elongated R&D timelines, fragmented commercial opportunities, diverse reimbursement environment and significant capital requirements — create formidable barriers to entry, and therefore growth. Despite these challenges, the potential rewards for successful innovations are unparalleled, offering transformative benefits to patient care and public health.

However, the landscape for early-stage medtech companies in the Asia-Pacific (APAC) region has become increasingly challenging. Recent market developments have intensified the struggle for survival among these innovators. Investment in the medtech sector has seen a marked decline, a trend exacerbated by economic uncertainties and shifting investor priorities. Concurrently, the cost of operations has surged, driven by inflationary pressures, supply chain disruptions, R&D cost and the escalating expenses associated with regulatory and market access pathways.

This confluence of decreasing investment and rising costs threatens to stifle the very innovation that is essential for the evolution of medtech. Medtech startups, which are typically more agile and capable of pioneering disruptive technologies, find themselves in a precarious position. Without adequate funding, many promising ventures face the grim prospect of stagnation or failure, unable to bring their groundbreaking ideas to fruition.

To ensure the continued delivery of innovative and lifesaving treatments, the medtech industry in APAC, public and private sector alike, must address the critical issue of insufficient capital flow into early-stage innovation. Ecosystem-level support is required to reinvigorate investment and support the growth of these nascent enterprises.



Dr. Chris L. Hardesty
Head of SME Portfolio,
APACMed



Stephen Sunderland
Head of APAC,
L.E.K. Consulting

Approach

In developing this special whitepaper, L.E.K. Consulting's team has drawn upon extensive experience in all corners of the medtech industry as well as a diversity of primary and secondary sources.

For a key source of current insight on the ecosystem, L.E.K. conducted 12 one-on-one discussions with key market participants, including policy advisors, large medtechs and medtech startup executives. These discussions aimed to, respectively, elucidate current and anticipated trends in the industry, understand medtech company initiatives and their impact on the innovation ecosystem, and determine actionable and impactful support for startups in advancing early-stage innovation.

Additionally, L.E.K. held two discussion sessions with the APACMed team and its steering committee to further enrich the existing research.

For secondary research, L.E.K. drew upon information from government statistical offices, third-party data providers and disclosures by industry analysts to obtain factual evidence about the current market landscape and dynamics.

Executive summary

APAC early-stage medtech innovation is at risk

The medtech investment landscape in the APAC region has experienced a notable downturn since its peak in 2021. Venture financing and M&A deals have decreased by 22% and 37%, respectively, over the past two years (thru 2023). This decline is driven by global factors such as market volatility, rising interest rates and geopolitical instability, as well as specific regional challenges.

These challenges are compounded by escalating operating costs, including increased inflation pressure, supply chain disruptions, research costs and regulatory hurdles, which collectively strain the financial sustainability of startups.

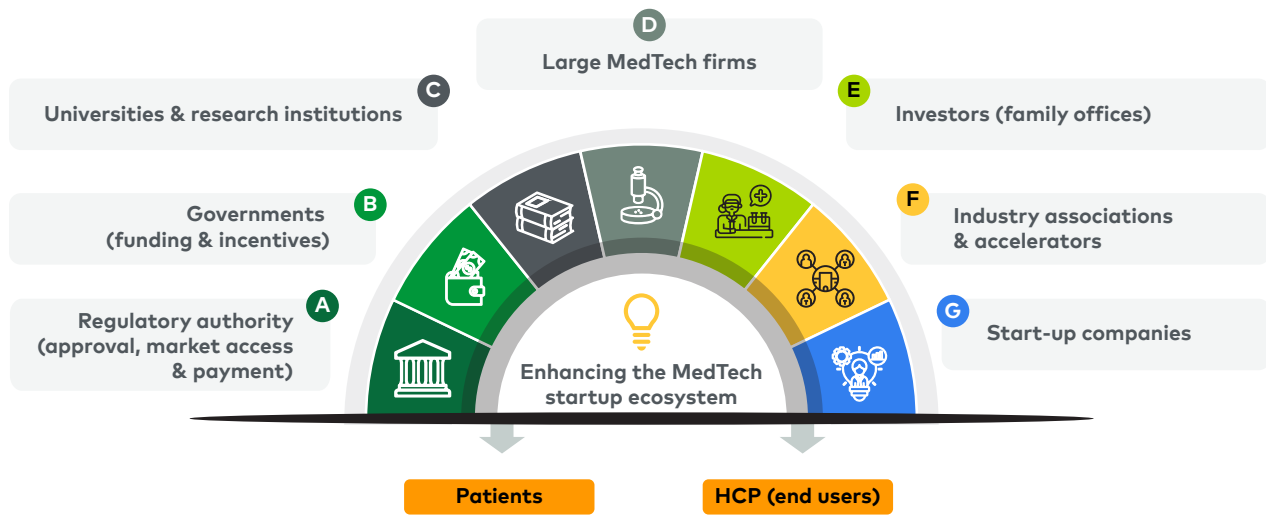
The participants of APAC's medtech innovation ecosystem are grappling with critical issues that require urgent attention. Despite these challenging conditions, the region's pivotal role in advancing medtech innovation for the world is recognized. Addressing inadequate capital allocation is crucial for sustaining innovation and delivering lifesaving interventions. This requires a collective effort from all stakeholders, across the public and private sectors, to foster a more favorable investment climate through enhanced collaboration and strategic initiatives.

Yet a significant gap remains in the ecosystem's ability to support innovation effectively. L.E.K.'s sentiment survey rates the maturity of the APAC medtech ecosystem at 2, compared with 5 in the U.S., highlighting the need for further development to better nurture and sustain medtech advancements. This whitepaper delves into stakeholder perspectives and identifies key areas for improvement within the ecosystem.

Action from the whole ecosystem is needed to support successful medtech startups

Addressing the decline in innovation investment in APAC requires proactive measures among stakeholders, including regulatory authorities (approval, market access and payment), governments (direct funding and incentives), universities and research institutions, large medtech firms, investors (specifically family offices in this report), and startup companies themselves. By collectively addressing barriers and implementing strategic initiatives, these stakeholders can accelerate the quantity, quality and pace of medtech innovation in the region.


Figure 1:
Medtech ecosystem stakeholders required for innovation to scale





Source: L.E.K. research and analysis


In this report, we detail the challenges and potential areas of development faced by each stakeholder, drawing from our conversations with interviewees and L.E.K.'s proprietary sources. By incorporating insights from case studies that highlight best practices, we offer informed recommendations. The main body of the report provides an in-depth analysis, while this section summarizes the key challenges and suggestions.

 A. Regulatory authorities	
Challenges highlighted by innovation community	Potential areas of development
<p>A1. More streamlined and flexible processes are needed to accelerate the real-world implementation of innovation, reduce development costs, and create more opportunities for groundbreaking advancements</p> <p>A2. Clearer guidance, more accessible communication mechanisms, and approachable channels are essential to help startups more effectively navigate the complex regulatory landscape</p> <p>A3. Enhancing integrated and targeted support — particularly in a landscape where approval, market access, and payment are managed by separate authorities — can significantly improve startups' ability to successfully commercialize their products</p>	<p>Regulatory approval</p> <ul style="list-style-type: none"> • Develop accelerated approval pathways for breakthrough and high-need medical products • Improve communication through comprehensive materials and a robust process-tracking system, which will provide greater transparency and efficiency • Establish pre- and in-process communication mechanisms for innovative startups and provide support and guidance to navigate regulatory landscapes • Initiate cross-recognition of clinical trial data and registration between APAC jurisdictions to enhance efficiency and reduce burden on startups • Implement clear guidelines and align local regulations with international standards (e.g., U.S. FDA, EU CE) to streamline approval processes and reduce redundancy <p>Market access</p> <ul style="list-style-type: none"> • Allow fast-track access programs for hospital listings, including rapid evaluation and reimbursement support • Refine the listing criteria for public tenders, focusing on innovation and impact rather than just costs • Encourage early adoption by hospitals to foster easier validation of new technologies and real-world testing <p>Payment</p> <ul style="list-style-type: none"> • Align regulatory approval and payment/reimbursement mechanisms to ensure quick listing for reimbursement upon approval • Implement value-based pricing and outcome-based reimbursement models that incentivize innovation, rewarding new technologies that demonstrate high effectiveness and efficiency

 B. Governments	
Challenges highlighted by innovation community	Potential areas of development
<p>Direct funding</p> <p>B1. Direct funding support is crucial for medtech companies to successfully scale up</p> <p>B2. Some rigidity in funding mechanisms, which at times could be the bootstrap of the development process</p> <p>B3. Lengthy application processes, preventing timely access to government funding</p> <p>B4. Additional requirements (e.g., local employment or manufacturing) along with investment, impeding startups' ability to innovate and grow</p> <p>Indirect funding and nonfinancial incentives</p> <p>B5. Limited relevance of indirect funding to startups, as the funding is often awarded after commercialization, rendering it less pertinent to early-stage innovations</p>	<ul style="list-style-type: none"> • Provide holistic support for innovation to maximize the impact of direct funding; establish "Medtech office" format agency to coordinate all government agencies that provide funding • Enhance indirect funding and nonfinancial incentives by tailoring mechanisms to the evolving needs of startups

 C. Universities and research institutions	
Challenges highlighted by innovation community	Potential areas of development
<p>C1. Intellectual property (IP) ownership concern due to involvement of multiple stakeholders, which may cause disputes and hinder the progress of innovation</p> <p>C2. Concern about talent leakage from the university may result in reduced willingness to collaborate with startups</p> <p>C3. Resource constraints, in that universities may not be able to allocate resources to support extensive research projects, as they themselves are struggling with limited funding and personnel</p> <p>C4. Lack of understanding about commercialization among university professors and researchers due to their devotion to research and academic pursuits, reducing the likelihood of product success</p>	<ul style="list-style-type: none"> • Provide R&D support by establishing dedicated research centers and connecting startups with subject matter experts to enrich research quality and facilitate real-world testing • Foster talent development by offering mentoring workshops to better navigate the business environment and innovation landscape • Foster knowledge transfer by developing interdisciplinary programs to equip innovators with the diverse skills needed for medtech innovation • Foster partnerships between startups and relevant stakeholders by organizing conferences and networking events

 D. Large medtech firms	
Challenges highlighted by innovation community	Potential areas of development
<p>D1. Limited market size of startups, as the fragmentation of the APAC region (e.g., market access) inevitably causes startups to limit their geographical focus</p> <p>D2. Asset's emphasis on achieving commercial success (vs. addressing unmet needs), due to pressure to deliver quick returns and limited resources among startups</p> <p>D3. Heavier focus on "me-too" products instead of innovative products, as the core technology having already been validated reduces development risks and R&D costs</p> <p>D4. Lower return on investment compared with the U.S. due to the immaturity of capital markets, stringent price controls and a limited exit channel within the APAC region</p> <p>D5. Limited communication channels between startups and MNCs HQs, resulting in misalignments regarding startup offerings and MNCs investors' pursuits</p>	<ul style="list-style-type: none"> • Build a success story in APAC by highlighting achievements (e.g., successful product launches) in order to enhance credibility, attract interest from potential partners and serve as a powerful testament to the potential of medtech innovation in APAC • Steer startups through complicated international markets by providing guidance and support on regulatory requirements, IP concerns and market entry strategies • Establish efficient communications forums for startups to effectively exchange information and align expectations with those of relevant stakeholders

 E. Investors (family offices)	
Challenges highlighted by innovation community	Potential areas of development
<p>E1. Generally weak familiarity with the leading edge of healthcare technology and care delivery</p> <p>E2. Limited expertise in healthcare and medtech, preventing funds from thoroughly assessing the potential of and making an informed judgment on investment in a product</p> <p>E3. Reduced appetite for high risk investments among APAC family offices due to increased geopolitical and economic uncertainty</p>	<ul style="list-style-type: none"> • Adequately educate family offices on the importance of and opportunities within the medtech sector, to prompt the onboarding of personnel with in-depth medtech expertise • Establish introductory forums in APAC to provide startups an opportunity to communicate their vision and product value proposition to family offices



F. Industry associations and accelerators

Industry associations and accelerators must step up and champion the cause of early-stage innovation by amplifying the voices of startups. While individual startups may struggle to influence government policy due to their limited scale, a united front can create a resonant voice within the ecosystem. Industry associations can play a pivotal role in this by gathering input from startups and advocating on their behalf, transforming their collective concerns into policy initiatives.

In addition to serving as a unified voice, associations play a crucial role in fostering innovation by acting as a meeting ground for corporations and startups. Both groups often seek innovative solutions but may face challenges due to limited resources and effective matchmaking opportunities. By facilitating these connections, associations and accelerators help scale innovation efforts and create valuable synergies.

Accelerators, with their proximity to startups, could provide targeted support that can significantly enhance a startup's development journey. They offer resources, mentorship, and strategic guidance that prepare startups to be more attractive to investors. By accelerating their growth and refining their business models, accelerators position startups for investment more effectively and expediently than they might achieve on their own. This support not only increases the likelihood of securing investment but also enhances the overall impact and success of the innovative solutions being developed.



G. Final thoughts for startup companies

Last but not least, startups hold the keys to the transformative engine our medtech ecosystem desperately needs. But with great potential comes great responsibility. The journey begins with a commitment to the "right" innovations — those that fill the gaps in healthcare that others have overlooked. This requires startups to robustly understand the clinico-economic challenges of the other stakeholders in the ecosystem.

By crystallizing a clear innovation value proposition, startups can access funding and strategic partnerships that might otherwise remain hard to reach. A well-mapped innovation development pathway ensures that everyone — from the founders to the investors — marches in step, reducing the risk of costly delays and setbacks.

And let's not forget the power of communication. Keeping key stakeholders in the loop isn't just good business — it's essential for turning breakthrough ideas into tangible, world-changing realities.

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Name (alphabetical order)	Title	Company
Dr. Amit Garg (MD)	Regional Director of Medical Affairs and Digital Health	Terumo
Ashley Wittorf	APAC Head of Business Development	Johnson & Johnson Medtech
Creston Wong	Manager, APAC New Business Development & Strategy	Boston Scientific
Fatima Khan	Vice President, APAC Business Development and Strategy	Boston Scientific
Joaquin Lasso	Senior Vice President and General Manager Sports Medicine International	Smith+Nephew
Justin Leong	Chief Product Officer	ResMed
Kris Liang	APAC Director of Business Development & Integration	Stryker
Marc Radatt	Regional Chief Executive Officer	Olympus
Dr. Shailendra Bajpai, MD	Medical & Public Affairs Director - Asia	embecta
Yeonjung (YJ) Park	Senior Associate, Philips Ventures	Philips
James Sung	Chief Executive Officer	MatrixLabs
Dr. Lynne Lim	Founder and Chief Executive Officer	NousQ
Sampson Lau	President	PrimaNova

Below are the authors of the report.

Name	Title	Company
Dr. Chris L. Hardesty	Head of SME Portfolio	APACMed
Jaime Chua	SME Portfolio Analyst	APACMed
Stephen Sunderland	Head of APAC	L.E.K. Consulting
Feras Mahdi	Partner, APAC & MEA	L.E.K. Consulting
Wonder Wang	Manager	L.E.K. Consulting
Vincent Septian	Associate	L.E.K. Consulting
Dai Nakamura	Associate	L.E.K. Consulting

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About APACMed

Founded in 2014 and headquartered in Singapore, APACMed represents manufacturers and suppliers of medical equipment, devices and in vitro diagnostics; industry associations; and other key stakeholders associated with the medical technology industry in Asia-Pacific.

Providing a unified voice for the medical devices and in vitro diagnostics industry in Asia-Pacific, APACMed works proactively with bilateral, regional and local government bodies to shape policies, demonstrate the value of medical technology and promote regulatory harmonization. We strive to promote digital health innovation and impact policy that advances healthcare access for patients by engaging with medical device associations and companies in Asia-Pacific.

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