AtriCure Inc(Q2 2025 Earnings)

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Corporate Speakers:

- Marissa Bych; Gilmartin Group; Principal
- Michael Carrel; AtriCure Inc; President and Chief Executive Officer
- Angela Wirick; AtriCure Inc; Chief Financial Officer

Participants:

- Unidentified Participant; Canaccord Genuity; Analyst
- Lilia-Celine Lozada; JPMorgan; Analyst
- Marie Thibault; BTIG; Analyst
- John McAulay; Stifel; Analyst
- Daniel Stauder; Citizens JMP; Analyst
- Joseph Conway; Needham & Company; Analyst
- Danielle Antalffy; UBS; Analyst
- Suraj Kalia; Oppenheimer & Co.; Analyst

PRESENTATION

Operator^ Good afternoon. And welcome to AtriCure's Second Quarter 2025 Earnings Conference Call. This call is being recorded for replay purposes (Operator Instructions) I would now like to turn the call over to Marissa Bych from Gilmartin Group for a few introductory comments.

Marissa Bych^ Thank you. By now you should have received a copy of the earnings press release. If you have not received a copy, please call (513) 644-4484 to have one e-mailed to you. Before we begin today, let me remind you that the company's remarks include forward-looking statements.

Forward-looking statements are subject to numerous risks and uncertainties many of which are beyond AtriCure's control including risks and uncertainties described from time to time in AtriCure's SEC filings.

These statements include but are not limited to financial expectations and guidance, expectations regarding the potential market opportunity for AtriCure franchises and growth initiatives, future product approvals and clearances, competition, reimbursement and clinical trial outcomes. AtriCure's results may differ materially from those projected. AtriCure undertakes no obligation to publicly update any forward-looking statements.

Additionally, we refer to non-GAAP financial measures, specifically constant currency revenue, adjusted EBITDA and adjusted loss per share.

A reconciliation of these non-GAAP financial measures with the most directly comparable GAAP measures is included in our press release which is available on our website. With that, I would like to turn the call over to Mike Carrel, President and Chief Executive Officer.

Michael Carrel^ Good afternoon. And thank you for joining us. We are pleased to report an outstanding second quarter with total revenue of $136 million, reflecting a 17% year-over-year increase. Our growth was broad-based, reinforcing the strength and durability of our business and AtriCure's significant market opportunity across all of our franchises.

We also delivered a sizable increase in profitability and cash generation with over $15 million in adjusted EBITDA and nearly $18 million in cash generation in the second quarter. Our pipeline of innovation and clinical science initiatives continues to thrive and generate results as well.

More specifically, new product launches such as AtriClip FLEX-Mini and cryoSPHERE MAX drove accelerated growth in pain management and appendage management and the first lower limb amputation procedures using our cryoXT device for pain management where performed in this quarter.

Additionally, we began testing our PFA device for cardiac surgery. However most notable is the completion of enrollment and our groundbreaking LEAP clinical trial.

I will touch upon these milestones in greater detail later in my remarks, but each reflects our resolve to deliver innovative therapies to address unmet clinical needs for patients around the world as we sustained strong growth and improved shareholder returns.

Now on to updates from each of our franchises. Starting with appendage management, worldwide revenue grew over 20%, driven by open left atrial appendage management growth of 29%.

In the United States, we saw an acceleration in revenue from increasing adoption of our AtriClip FLEX-Mini device. This quarter, FLEX-Mini reached just over 20% of our U.S. appendage management revenue, showing the demand from physicians for this lower-profile solution.

Internationally, we are expanding access to AtriClip devices and continuing to invest in physician awareness to support long-term growth.

We also are excited to announce the first clinical use of our latest innovation in the AtriClip platform, the AtriClip PRO Mini device. Building on the success of the FLEX-Mini and open chest procedures, the PRO Mini leverages our third-generation AtriClip platform, which is the smallest surgical left atrial appendage implant available, enhancing visualization of precision during minimally invasive procedures.

The PRO-Mini is another example of our ongoing commitment to innovation across our franchises. Turning to LeAAPS trial. We are thrilled to announce we completed enrollment earlier this month.

This is a major milestone, not only for AtriCure but for all cardiac surgery and patients treated as it marks the largest global medical device clinical trial ever conducted in this space with total enrollment exceeding 6,500 patients. LeAAPS is designed to evaluate the use of AtriClip devices for stroke prevention in cardiac surgery for patients who do not have a prior Afib diagnosis.

This is a large and underserved patient population with more than 70% of the nearly 2 million patients who undergo cardiac surgery annually not having a prior Afib diagnosis.

We believe the rapid pace of enrollment reflects the strong momentum behind our clinical evidence strategy and interest from surgeons and the broader clinical community in expanding the standard of care for these patients.

I would like to pause and recognize the team at AtriCure for truly outstanding trial execution and our physician hospital partners who were instrumental in this landmark study.

Your collective efforts achieved full enrollment well ahead of our initial projections and place us closer to definitive clinical evidence supporting left atrial appendage management in cardiac surgery.

Now we shift our focus to a robust patient follow-up as we await the study outcomes. We expect results from our LeAAPS clinical trial to support a stroke prevention indication that is exclusive to AtriClip surgical devices and help shape future treatment guidelines.

Within our ablation franchises, open ablation posted a healthy growth of 15% this quarter. Performance was once again led by our EnCompass Clamp, reflecting deep continued adoption across a broad customer base.

This quarter also marked the third anniversary of the EnCompass Clamp launch. The durability of EnCompass growth is a clear testament to our ability to deliver meaningful and consistent innovation, providing clinicians with effective and time-saving solutions.

On the topic of innovation, we are also progressing development of our PFA-enabled EnCompass platform.

During the quarter, we achieved the first milestone in our PFA partnership with the delivery of generators to begin robust preclinical testing, putting us one step closer to first in human use, which we expect to happen later this year.

We look forward to providing more updates on our development milestones as they occur. Turning to clinical initiatives. We are preparing sites for activation in our BoxX-NoAF trial.

As discussed at our Investor Day earlier this year, BoxX-NoAF is aimed at reducing postoperative Afib in cardiac surgery patients who do not have preexisting Afib, increasing our addressable market by over threefold by significantly expanding the opportunity to use our ablation technologies in this broader patient population. Building on momentum from our LeAAPS trial, we believe BoxX-NoAF will transform the standard of care in cardiac surgery toward preventative approaches for patients without Afib.

BoxX-NoAF is a foundational study for AtriCure, and we expect the first patient to be enrolled in the trial later this year. In our minimally invasive hybrid therapy, market dynamics remain challenging in the U.S. due to increased adoption of the PFA catheter technology.

We continue to see durable interest in our MIS offerings in Europe, where PFA has been on the market longer and clinical understanding and patient segmentation are more advanced.

We believe patients with long-standing persistent Afib remain undertreated and our hybrid therapy is uniquely positioned to address this need.

Now turning to our pain management franchise, which grew nearly 43% in the quarter. The acceleration in growth continues to be driven by sales of our latest innovations, the cryoSPHERE MAX and cryoSPHERE+ probes.

We are realizing significant expansion within existing accounts along with new physician users, and we are also encouraged by feedback from surgeons using cryoSPHERE MAX in sternotomy procedures where reduced procedure time is particularly impactful.

Additionally, we are expanding access to our next-generation cryoablation technology outside the U.S. with the launch of cryoSPHERE MAX in Europe. This launch represents another step in bringing superior pain management solutions to patients and providers globally.

In addition to growth in thoracic and cardiac procedures, we're encouraged by the opportunity for Cryo Nerve Block therapy in extremity amputations. Following 510(k) clearance early in the second quarter, we completed initial procedures with our cryoXT probe for pain management and lower limb amputations.

While feedback from surgeons using this device has been excellent, we are even more excited by the reports of rapid patient recovery in the days following the procedure.

We believe cryoXT unlocks a meaningful expansion opportunity for AtriCure, and we're focused on preparing for commercial launch later this year. Parallel to our innovation and market expansion efforts, we continue to invest in clinical and economic data to support the value of Cryo Nerve Block therapies.

As non-opioid pain management becomes an increasing priority across health care, these efforts are helping drive broader awareness and adoption. We remain committed to expanding access innovative non-opioid solutions that improve patient outcomes and align with the goals of hospitals, surgeons and payers.

In closing, I want to thank our entire team for an outstanding quarter. Our financial results were stellar, with accelerating growth and meaningful improvement to profitability, providing a strong foundation for the second half of 2025 and beyond.

I am confident that our focus on delivering exceptional patient outcomes, building our clinical and commercial momentum and executing on our strategic priorities will transform standard of care in each of our markets. And with that, I will turn it over to Angie Wirick, our Chief Financial Officer. Angie?

Angela Wirick^ Thanks, Mike. Our second quarter 2025 worldwide revenue of $136.1 million increased 17.1% on a reported basis and 16.5% on a constant currency basis when compared to the second quarter of 2024.

On a sequential basis, worldwide revenue grew 10.1% from the first quarter to the second quarter of 2025. Second quarter 2025 U.S. revenue was $110.6 million, a 15.7% increase from the second quarter of 2024 and an acceleration over our first quarter results.

Open ablation product sales were $36.5 million, up 18.6% over 2024 with continued strong adoption of our EnCompass Clamp in both new and existing accounts. U.S. sales of appendage management products were $45.1 million, up 18.9% over the second quarter of 2024 on an increasing adoption of our recently launched AtriClip FLEX-Mini device, driving open appendage management growth to 30% for the quarter. U.S. pain management sales were $21.2 million in the second quarter 2025, reflecting 41.1% growth over the second quarter of 2024.

The CryoSPHERE MAX probe contributed just over 50% of our pain management sales in the quarter emphasizing the benefit of reduced procedure times direction.

Finally, with continued pressure on hybrid therapy procedures because of PFA catheter adoption, we saw a decline in our minimally invasive ablation sales, which ended the quarter at $7.8 million.

International revenue was $25.6 million, up 23.3% on a reported basis and 19.9% on a constant currency basis as compared to the second quarter of 2024. European sales accounted for $16.1 million, up 27.7% and Asia Pacific and other international markets accounted for $9.4 million, up 16.3%.

International growth was driven broadly across franchises in most major markets and we expect good momentum in our international business to continue for the remainder of 2025.

Gross margin was 74.5% for the second quarter of 2025 which represents an approximately 15 basis point decrease in comparison to the second quarter 2024. This decrease was primarily driven by less favorable geographic and product mix largely within our international business.

Now moving on to details of our operating expenses for the quarter. Total operating expenses increased $13.7 million or 14.5% from $94 million in the second quarter of 2024 to $107.7 million in the second quarter of 2025. Our total reported operating expenses included a $5 million milestone payment under the PFA co-development agreement.

Excluding this milestone payment, total operating expenses increased $8.7 million or 9.2%. Growth in research and development expenses was approximately 19%, excluding the PFA milestone payment, driven by an acceleration in LeAAPS enrollment during the quarter and continued progress on our R&D pipeline.

SG&A expenses increased 6.5%, primarily from thoughtful expansion of our team globally to support our growth.

With strong top line growth and modest expansion of our operating expenses in the quarter, we saw outstanding results on the bottom line with adjusted EBITDA of $15.4 million this quarter compared to $7.8 million for the second quarter of 2024.

Our loss per share was $0.13 in the second quarter of 2025 compared to a loss per share of $0.17 in the second quarter of 2024, while the adjusted loss per share each period was $0.02 and $0.17, respectively.

We ended the second quarter with $117.8 million in cash and investments, generating $17.9 million in cash during the second quarter including the PFA milestone payment.

We continue to expect positive cash generation for the full year, further strengthening our already robust capital position. And finally, turning to our outlook for 2025. Given ongoing strength from our many growth catalysts and our second quarter results, we now expect to achieve $527 million to $533 million in revenue for the year, reflecting growth of approximately 13% to 15% over 2024. Like our results to date, our international business will outpace growth in the U.S., driven broadly across franchises.

On a U.S. franchise level, we expect strength from new product launches in our pain management and appendage management franchises along with continuing adoption of our EnCompass Clamp and open ablation to drive growth for the remainder of the year

and now anticipate continued modest sequential declines in our U.S. hybrid franchise for the remainder of 2025.

In terms of quarterly cadence, we expect our third quarter will experience typical summer seasonality, resulting in a low single-digit sequential decline in revenue from the second to third quarter followed by a strong rebound in the fourth quarter. From a margin perspective, we are maintaining our expectation that 2025 gross margin will be comparable to 2024 with potential for varying impacts from cost savings initiatives and product mix offset by geographic mix.

On the bottom line, we continue to advance our efforts to expand profitability and are therefore raising our outlook of positive adjusted EBITDA to approximately $49 million to $52 million for the full year 2025. This places our adjusted EBITDA margins in the range of 9% to 11% for the remainder of 2025 with expectations that third quarter is at the lower end of this range, while fourth quarter is at the higher end of this range. And finally, the corresponding adjusted loss per share is approximately $0.34 to $0.39.

In closing, we are truly pleased with our results and the unwavering effort from our team around the world. This quarter highlights the breadth of our business and many growth catalysts with continued improvement in profitability.

We are extremely confident in the outlook for the remainder of 2025 and beyond. At this point, I'll turn the call back to Mike for closing comments.

Michael Carrel^ Thank you, Angie. The completion of another well-executed quarter of strong revenue growth and profitability reflects our team's persistence and devotion to our patients partners and shareholders.

We have a best-in-class product and clinical pipeline that coupled with our existing platforms will increase our ability to impact patients around the world and propel our business to continued growth. The future at AtriCure is bright, and I look forward to providing updates as the year progresses. With that, I'll turn it over to the operator for questions.

QUESTIONS AND ANSWERS

Operator^ (Operator Instructions) Our first question comes from Bill Plovanic with Canaccord Genuity.

Unidentified Participant^ It's Zachary on for Bill. My first question is for appendage management. So you completed LeAAPS enrollment a few weeks ago.

What are you seeing in terms of how the completion of that trial has impacted physician utilization of the products post enrollment? Because you were getting paid for the implants.

So what are you seeing, like have docs been using the devices at the same rate, has utilization decreased? Can you provide any color on that?

Michael Carrel^ Sure. From a LeAAPS standpoint, it's such a de minimis and small part of our overall kind of AtriClip -- if you think about the total trial size, I mean it is only 6,500 patients, half of those patients get a clip, half the patients do not get a clip.

So it really has no impact on our revenue. And actually, many of those people were clipping or putting AtriClips on every one of their patients before. So it kind of all washes out the revenue impact of kind of not having LeAAPS is pretty much a complete wash from that standpoint.

Now as you saw, we're seeing an overall increase in adoption. People are just managing the appendage a lot more. You saw that in the growth rate in the U.S. with almost 30% growth overall, you're seeing it on the global number on the open side of our business.

It's just been really interesting to kind of see, as I talked about on the call many, many months ago or quarters ago, when competition came in, we thought that would actually help the overall market and create more awareness and what we're seeing is that's actually happened. We've had six successive quarters of sequential growth and increasing growth on that platform.

Some of that's due to innovation, but some of it's also doing to just having competition in the space, raises awareness, more people want to treat, they know they must treat when they've got the patient's chest open like that. So it's really -- the LeAAPS ending has zero impact on the overall revenue base.

Unidentified Participant^ Got it. And then my follow-up question is, what is the interaction like with your discussion with EPs about PFA failures? Like how are you managing those discussions because, on one hand, it's they are your customer base, so you don't want to totally alienate them.

But how are you managing explaining that as the funnel grows, there's going to be PFA failures, but also balancing their adoption of PFA.

Michael Carrel^ Yes. I think every EP is on a different journey with their interaction and working with PFA. We do have some sites, so they're -- while, obviously we're under a lot of pressure in that part of the business and many sites have not come back per se. There are many sites, though that have -- we are starting to see that funnel come up.

We haven't -- we're not seeing it in the numbers yet, but we definitely see that. How does the conversation go? We're just very open and transparent. We have the obvious conversation about the clinical evidence and data that is out there. We don't try to push them by any means that they must go down this pathway.

We talk to them very specifically about what are the benefits of PFA or the benefits of doing a follow-up with an epicardial solution at some point in time when they do see nonresponders or failures from that standpoint.

And so they're, I would say, very collaborative type of conversations that are not ones in which we're having a discussion where it's this or that, it's more this is additive when you have a difficult patient population.

And as I -- and the funnel is beginning to build, and again, we're seeing some customers begin to come back and actually start to refer many more patients.

Unfortunately, it's not having an overall impact on the numbers yet. Long term, I think that we still believe that there's a huge market for the long-standing persistent patients in which we have three major randomized controlled trials done around the globe that have demonstrated adding epicardial ablation is beneficial and additive to anything that you use, whether it's cryo, PFA or RF.

Obviously more and more people have gone to the PFA route, and we think that we are additive and will continue to be so. And it's just a lot of good -- it's dialogue and not an argument between the two, it's more of a scientific discussion.

Operator^ Our next question comes from Lily Lozada with JPMorgan.

Lilia-Celine Lozada^ Congrats on the nice quarter. Maybe just starting with guidance. I think the guide implies a deceleration on the top line relative to the 17% growth you put up this quarter.

So is there anything to read into there other than just conservatism? And then similarly on EBITDA, that came in a good amount above, but I think the guide implies adjusted EBITDA flat to slightly down in the next two quarters. So any reason that, that can't be higher? And was there anything onetime that drove the strength in the quarter?

Angela Wirick^ Thanks, Lily. I'll take that. I'd say on both top and bottom line, our philosophy relative to guidance is really unchanged from what you've seen for AtriCure over a very long period of time which is we want to put out numbers, guide to numbers that we feel like we can execute against. And you can see the ability to do better. So a beat and raise kind of strategy as we're looking at the rest of the year.

Obviously the momentum throughout the business with our new product launches in the U.S. as well as our international business, which continues to fire on every cylinder, we feel really good about the outlook for the year.

I'd say maybe a change from kind of where we started the year would be our expectations for a bit more pressure in the second half of 2025 with our hybrid business.

All that together, though, you saw in the second quarter, 17% growth, but our guide range gives us great opportunity to outperform that number. Relative to the question of anything onetime in the quarter on an expense side, there wasn't anything same philosophy on the bottom line as we're taking on the top line.

Lilia-Celine Lozada^ Great. That's helpful. And then just a follow-up on the MIS point. It sounds like those pressures might be more significant than you had expected last quarter. So can you talk a little bit about the trends that you're seeing there? And at what point do you think this business can see a bottom?

Michael Carrel^ Yes. As I'd say that, yes, we're feeling a lot of pressure with PFA in those accounts. As I mentioned, we do see some bright spots with some accounts coming back and beginning to use it.

But if you look at the overall number that we saw for the quarter with the 17% overall growth, we feel really good about the overall platform we're delivering. We understand that there's a lot of pressure. And we just don't want to get ahead of ourselves.

We want to be very clear with investors that look at this as upside at this point in time. Like this is something that it's going to be under pressure. There is clear clinical value. No doubt about it. All the data suggests that.

But the timing for when it's going to kind of bounce back, I think it's just too difficult for us to give any true indication on that particular front. That being said, you can see the power of the rest of our business is able to get us to a 17% number on the top line far ahead of any expectations that were out there in the market. You can see it's across every one of the other new product launches.

We've had a series of new product launches that came out last year. We're still getting benefit from EnCompass.

On top of that, we've had the PRO Mini just come out, and we've got XT that will kick in at the end of this year. So we feel like the cadence of new products, new markets that we're going after, far obviously overcomes obviously the pressure that we're feeling there.

But we do recognize it, and we're going to continue to focus on it. And hopefully, we'll get some upside with it. Maybe not this year, but it could happen, but for sure, obviously in the future.

But we just want to set the expectation really low on that for all investors at this point in time. And we can do that because of the strength of the rest of our business as you're seeing.

Operator^ Our next question comes from Marie Thibault with BTIG.

Marie Thibault^ Congrats on a really nice quarter. I wanted to ask a little about pain management certainly looks like cryoSPHERE MAX is doing extremely well and I wanted to understand where you are in terms of conversion of accounts to cryoSPHERE MAX as we -- in the U.S. and as we head into Europe if we should expect a similarly strong uptick. And I have a quick follow up on pain management as well.

Angela Wirick^ Thanks, Marie. In terms of the progress with our cryoSPHERE MAX device, as we exited the second quarter, it was a little over half of our U.S. accounts, pretty similar parity to it representing a little over half of the revenue in the quarter in the U.S. pain management franchise relative to expectations in Europe, I think with the kind of the premium ASP. I'd say we are cautiously optimistic.

Clearly, the time savings has a benefit -- a clinical benefit to the users, and we can see that with the pace of adoption in the U.S. but economics matter a bit more in those markets, as you know.

So I think we're cautiously optimistic that long term, this is a big driver of growth. I think in the near term, with the uplift in pricing, probably a little bit slower kind of ramp than what we've seen in the U.S.

Marie Thibault ^ Okay. That makes a lot of sense, Angie. And then my follow-up is on cryoSPHERE XT. I heard you say that you're preparing for a launch later this year. My understanding was that this is not being included in the outlook. I think it wasn't being included as of last quarter.

So I want to confirm that, that's still true that anything that we see from that launch could be upside? And anything you're telling us about what you need to do to prepare for that launch.

Angela Wirick^ Yes. On the guidance side, you are correct. This is an upside to the guide that we gave for the year. We expect pretty minimal revenue contribution in 2025 and have said this is a more meaningful contribution when we think about 2026 and go forward from there relative to what we need to do to prepare. I think our teams in a great spot.

There was training earlier this year when we got the 510(k) clearance I know the team is going to have another run at that training again in a little bit more detail. They've also been intimately involved in some of the first use cases and have seen from a physician experience from a patient experience impact that that's having. So they're well prepared relative to kind of what we need to do on the launch.

Michael Carrel^ The only thing I'd add relative to that is I think if you look at how we typically launch a new therapy. So when we launched cryoSPHERE, the first time back in 2019 in a big way.

We definitely take our time because we want to learn from the first customers to begin to use it, kind of adjust and kind of iterate our approach to the market relative to that. That's kind of how we see the rest of this year going. There's a lot of learning, which is why we're not baking any kind of revenue into the numbers this year as we begin to learn.

Angie described it really well but our team is prepared, They'll be trained very well but there's nothing like getting real-world experience that we anticipate getting kind of in the latter part of this year as we're kind of getting ready for a bigger launch in 2026, where it will be in our revenue at that time.

Operator^ Our next question comes from John McAulay with Stifel.

John McAulay^ I wanted to focus on some clinical initiatives that you mentioned on the call BoxX-NoAF, LeAAPS and also your PFA program. Just want to sort of clarify and level set again just the next key milestones for those programs and what we can expect next for these sorts of trials and initiatives?

Michael Carrel^ Sure. So I'll start with LeAAPS because that's the one that we just kind of closed out. Obviously we enrolled a lot faster than we expected, which means we'll hopefully see data faster.

But right now we're in a follow-up mode. We have up to five years for follow-up. We obviously anticipate that the events that will take place in that trial will come sooner than that.

We anticipate that we're going to have to get to the full number of events within that trial, which is about 469 or so overall events that have to occur. We're tracking those. We will get an interim look at 50% of the events then 75%.

I don't anticipate that we'll necessarily win at that particular point because obviously the trial is powered for the full piece of it, but we will get some looks at it. So with LeAAPS, you're not going to get any near-term pieces to that relative to that or don't expect anything kind of in the near term relative to anything.

In the BoxX-NoAF, we are up and running, and we are getting sites through the IRB process right now. We anticipate that we'll have our first enrollment this year, and we'll have many sites up and running.

So I think the next big thing to see is first enrollment which then will lead towards obviously robust enrollment that we anticipate in 2026, and we do anticipate that we'll be able to enroll fairly quickly there. It's 75 sites that we're allowed to use and get up and running. And we have a list of sites that is far in excess of that.

So now it's really just kind of getting through the IRB process with all these sites. And as you saw with LeAAPS, it's the same great clinical team we have there executing this trial.

So we -- and many of the same sites because it's a very similar if not the same patient population. And so we feel like we're going to be able to execute that really well as we kind of roll that out.

But the next big milestone for you to look for is first patient treated, which we do anticipate happening this year. And the PFA front, it's first in human. You'll anticipate seeing a first-in-human by the end of this year with our Encompass clamp. So I'd say that's kind of the next big milestone relative to that.

John McAulay^ Great. That's helpful. And just switching gears to the SG&A spend. I think it's three quarters in a row now of mid-single-digit growth there as opposed to strong double digits mid-teens in the top line.

I just want to sort of level set clarify exactly how we should be thinking about that growth rate going forward just in the context of, again, sort of strong double-digit top line? And how much leverage should we be expecting there?

Angela Wirick^ John, I think our performance thus far, the past couple of quarters is what you should continue to expect.

I think we've -- our longer-term outlook is that we are operating in kind of a single-digit growth rate, so well below top line growth while still investing in commercial resources while still attacking our underpenetrated market opportunities in each area, where we see momentum starting to see the benefit of operating in size and scale, particularly in back office functions.

So I'd say, I think, single-digit kind of mid- to upper single-digit growth on that particular line item going forward.

Operator^ Our next question comes from Dan Stauder with Citizens JMP.

Daniel Stauder^ Yes. Great. Congrats on the really strong quarter. So just first question on appendage management. Another really great quarter. It's nice to see growth accelerating even with the quarter year-over-year comp.

But I just wanted to ask, are there any more puts and takes on what drove growth here? Is this really just FLEX-Mini or are you seeing any indication of a halo effect from FLEX-Mini for your other offerings?

Angela Wirick^ Yes. FLEX-Mini was definitely the growth driver in the quarter in the U.S. Outside the U.S., where FLEX-Mini isn't available, we're seeing growth across our AtriClip platform.

We do still see some growth in the FLEX-V, which, if you recall was kind of the dominant clip that had been sold in the U.S. markets. Most of the growth that we would

have seen normally has been given over to FLEX-Mini but are still seeing a bit of a halo effect on our FLEX-V product at this point, Danny.

Daniel Stauder^ Great. And then just one follow-up on pain management. Really impressive as well given the performance of the first two quarters, how should we be thinking about the back half year. Adoption is clearly very healthy, but just with the more difficult comps, how should we be thinking about our models?

Angela Wirick^ Yes. Great question. I would say this is an area of the business that we expect to well outperform the overall company guidance range. I think to say that we can continue at 40%. I think that's possible, but with set expectations a bit lower than that.

As you said, the comps from last year with the new product introductions more healthily contributing to the back half of 2024 are a consideration here, but feel good about the momentum of this business.

So think of this as something where you're talking about well higher than the overall company growth rate probably a bit less on a percentage basis than where we've been performing so far this year.

Operator^ Our next question comes from Mike Matson with Needham & Company.

Joseph Conway^ Angie and Mike, this is Joseph on for Mike. Would like to just maybe asking another question or two on pain management. Really appreciate all the color you guys have given just some of the drivers there.

But if it would be possible just to get kind of like a summary of all the levers in there. I know price is one aspect of it.

But I guess I'm curious how much of the conference engagement is driving this? To which position awareness just around Cryo Nerve Block in general or the clinical benefits and procedure time with MAX? Is this a lot of the previous investments in the sales team kind of reaching full potential as well? Just would really like to hear all of those levers there.

Michael Carrel^ The good news is, I think you hit on all the levers, but I'll try to kind of maybe extrapolate or kind of talk a little bit more detail about it.

I'd say the number one piece is that when you come out with great innovation and you listen to what is kind of holding you up, in this case, it was time in the procedure. And going from a two-minute freeze down to a one-minute freeze really made the procedure much more approachable for surgeons, both in terms of surgeons that were not using it and surgeons that were using it now want to use it on more of their cases. That is the #1 driver there.

We happen to get a little bit of a price benefit because they're moving to MAX, but we're getting more of the benefit because the volume is seriously increasing because of the speed at which they're able to do that in the thoracic cases. We've had a really small amount that's happening in sternotomy because of that.

So we're definitely seeing some activity there that we hadn't seen I wouldn't say that's been a meaningful number or meaningfully contributing to it at this point in time. And as I mentioned in my comments, we're encouraged, but we're not putting that really into our numbers in any way, shape or form.

But it's obviously an encouraging piece, and we're hearing positive pieces from that standpoint. So I'd say that, number one is just great innovation leads to listening to the customers, cutting down that time and cryoSPHERE MAX is really going to hit the mark on that front.

Angela Wirick^ And maybe one thing to add. You asked the question about kind of price versus volume. I think it's important in this particular franchise. In the U.S., our growth is 41%. When we look at volume growth, we're a little over 30% volume growth.

I think when you look at that in the span of kind of what this franchise has done, that's an exceptional quarter for us. Both new and existing accounts are seeing growth, and we had a really strong second quarter of kind of new account adoption as well.

Joseph Conway^ Okay. Great. Yes. That's very helpful. And then maybe just a quick one, R&D spend. Looking at the second half of 2025. LeAAPS enrollment is complete. Obviously still expenses associated with that.

But then you have these other trials starting up. And just kind of curious, I know there's acceleration in this quarter, but how you view that trending maybe just on a year-over-year basis?

Angela Wirick^ Yes. R&D percentage growth every year, I think we would expect to be in line, maybe slightly higher than kind of top line growth just given momentum behind clinical trial enrollment and product development efforts.

So you'll see less of a ramp than we've seen over kind of the course of the LeAAPS trial but with the new BoxX-NoAF, the new clinical trial starting as well as us really advancing our PFA development efforts, still expect pretty robust growth in R&D year-over-year.

Operator^ Our next question comes from Danielle Antalffy with UBS.

Danielle Antalffy^ Congrats on another strong quarter. Just a question on the open ablation business. I mean that's been your guys -- that plus appendage management has been your bread and butter for forever now. And this is now the second consecutive year you're tracking.

I know this isn't -- you don't give guidance by business, but so far year-to-date, about 15% growth last year, you grew open by 15%. Mike, can you talk about the runway there? Because I know you guys sort of framed this as more high single, low double-digit grower longer term.

I mean you haven't seen momentum flow there at all over the last few years. And so I appreciate we're now two years into EnCompass, but it just feels like maybe we're missing something and there's more momentum there and longer runway than maybe we had thought previously. I would love to hear your thoughts on that.

Michael Carrel^ So Danielle, I appreciate the question. And you're right, we've seen some great momentum in this area. As you know we're three years into the EnCompass launch. And what you've seen is, if you look back three years ago, the penetration rate was probably closer to 25%.

We're now probably closer to 35%, 40% in Afib-only patients. But all the guidelines and reimbursement suggest every one of those patients, meaning close to 100% should be treated. A vast majority of those are in coronary bypass patients and some in [AVR] patients. And that is the market where they just weren't treating at all.

So we have a big market opportunity still in front of us EnCompass makes it very approachable for those surgeons to do something where they don't have to get behind the heart, but they can get a really robust lesion, they can do it very quickly in under 10 minutes. And when they do that and they add the AtriClip with it, they actually get a great result with this and there are more and more studies that we anticipate coming out here in the next six to 12 months to show the efficacy benefits of that as well.

And so the opportunity, I'll call it, in the next 3-year venture is mostly around that CABG patient we're going from 35%, 40% to 80%, 90% of Afib-only patients in the U.S. And those numbers are significantly lower even to this date in the OUS market. They've gone from about 10% to 20%.

So massive market opportunity just in Afib patients. Obviously BoxX-NoAF is designed to triple the size of that overall market. So we anticipate that there is growth for -- I've talked about it before. It's more than a decade worth of really strong growth sitting in front of us.

With BoxX-NoAF, we anticipate being able to demonstrate that there is real clinical benefit to using an EnCompass Clamp to do a box lesion [adding an] AtriClip, you're going to benefit both short term with post-op Afib and longer term clinical benefit that, that patient is not going to develop Afib, which most patients do develop.

So we look at the runway, and it's not short term. We have great short-term runway just in Afib, and we've got a longer-term runway that's going to kick in with BoxX-NoAF.

And we try to talk a little bit about that at the Analyst Day, but hopefully, that gives you context to why we're so excited about the overall market here and why we've got a long-term growth prospect here.

Danielle Antalffy^ Yes. Totally. I guess one of my other -- is just a follow-up question on that in the open ablation business. And one of the gating factors for technologies has always been capacity. And I guess I'm just curious about where you guys think you are from a treating surgeon perspective.

Like do you think -- I know a few years ago and really still education, physician awareness, education, your training days, things like that are a big driver. Are you still adding new surgeons? Or do you feel like you're sort of at where you're going to be with from a treating surgeon perspective? I'm thinking specifically, again, your open ablation business?

Michael Carrel^ No. We're adding surgeons every day. I mean it's -- that CABG surgeon that wasn't doing any treatment before are net new customers for us. They may be in a site that was doing mitral valve and treating in a different surgeon with maybe doing some of the mitral valves but we are absolutely adding a lot of new surgeons that we're just not treating before.

And that's the market opportunity that sits in front of us, there's adding those surgeons who were afraid to treat before and now feel like it's an approachable procedure for them to take care of and they're getting both -- we've reduced the time with a great procedure and CMS has decided to reimburse for it.

So they don't have to worry about the hospital cost relative to that as well because it's a profitable procedure for them to add this.

And why did CMS add that because they know these patients live longer and have better lives if they're ablated at the time of cardiac surgery. So again, we're going to add more surgeons. There's still a long runway here to go.

Operator^ Our next question comes from Suraj Kalia with Oppenheimer & Co.

Suraj Kalia^ Mike, Angie, can you hear me all right?

Angela Wirick^ We can hear you.

Suraj Kalia^ Perfect. Congrats on a nice quarter. So Mike, two questions from my side. First on PFA. For your PFA clamp, Mike, how should we think about the core focus of your clamp device?

Are you all focusing on some differentiated waveform? Is it going to be dual energy? Is that going to be product stratification? How should we think about when you'll -- or at least the roadmap for your PFA surgical clamp?

Michael Carrel^ Yes. I think we talked about this a little bit at the Analyst Day, but to kind of reiterate or kind of emphasize it.

So it's a really good question to kind of emphasize this. Number one is, if you think about the improvements that have been made with the EnCompass Clamp, I think you have to start there. There is a procedure that used to take 30 to 40 minutes that now a surgeon can do in much less time and they can get really robust lesions today.

And by cutting down that procedural time that's been kind of the really big benefit relative to the EnCompass Clamp. One of our differentiators is to add PFA into the EnCompass clamp first.

We do believe that, that is a big deal relative to being able to do that because that's what most surgeons are now beginning to use and really like that clamp and the procedure. The second differentiator is that we're going to have a combination of both PFA and RFA in one clamp, they build -- to deliver it at different times in the same generator to make it very simple and easy for them to do. And we think that's going to be a differentiator as well in terms of being able to kind of combine the two energy sources relative to that.

So you've got both the ergonomic of the EnCompass Clamp that already exists, but now you're adding PFA to that and you're adding PFA plus RF into the same plant, we think that, that's a differentiator from that standpoint.

Suraj Kalia^ Got it. Angie, one question for you. Appreciate you giving us volume price split for the pain management component of the business. Maybe if I could on the appendage management. I mean we know Mini price is significantly higher than the base model, [FLEX-V] is also significantly higher.

I think I heard Mike say 20% contribution of many in the quarter. Forgive me if I heard that wrong. But just if you could split out the different buckets so that we can strip out price uplift versus unit uplift.

Angela Wirick^ All right. So Suraj, you're correct. The AtriClip FLEX-Mini was about 20%, a little over 20% contribution of our U.S. appendage management revenue in the quarter. I think we also talked about open appendage management. This is an open product grew about 30% in the second quarter. That 30%, if you look at a unit-based growth is up about 20%.

So clearly, some uplift on pricing, but 20% volume growth in that franchise is excellent at this point in time given where we're at in terms of penetration of that particular market. We did see a little bit of growth in FLEX-V as well but we're seeing more shifting over to a more robust adoption in the FLEX-Mini clip.

Operator^ Thank you. I'm showing no further questions at this time. I would now like to turn it back to Mike Carrel for closing remarks.

Michael Carrel^ Great. Everyone, thanks again. Hopefully, you got a sense -- that we've got in front of us. And we look forward to talking to you on the.

Operator^ This concludes today's conference call. Thank you for participating. You may now disconnect.