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BRKR - Bruker Corp to Discuss Preliminary Q4 2019 Operating Results

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PRESENTATION

Operator

Good morning, everyone, and welcome to Bruker Corporation's Q4 2019 Preliminary Results Conference Call. (Operator Instructions) Please also note, today's event is being recorded.

At this time, I'd like to turn the conference call over to Ms. Miroslava Minkova, Director of Investor Relations and Corporate Development. Ma'am, please go ahead.

Miroslava Atanassova Minkova - *Bruker Corporation - Director of IR & Corporate Development*

Good morning. I would like to welcome everyone to this morning's conference call to discuss Bruker's fourth quarter and fiscal year 2019 preliminary operating results. My name is Miroslava Minkova, Director of Investor Relations and Corporate Development. Joining me on today's call are Frank Laukien, our President and CEO; and Gerald Herman, our Chief Financial Officer.

During today's call, we will discuss preliminary Q4 and fiscal year revenue and operating income results. We will not be able to address any tax rate, earnings per share, cash flow or balance sheet questions as such items have not yet been finalized. As explained later on the call, Bruker's complete financial results for the fourth quarter and fiscal year 2019 will be released at a future date following further progress on our fiscal year 2019 tax work and the internal investigation that we announced this morning.



Please also note, all operating results discussed today are preliminary, unaudited and subject to completion of standard year-end closing procedures and the issuance of the company's complete financial statements. In addition to the preliminary earnings release we issued earlier today, during today's conference call, we'll be referencing a slide presentation. The PDF of this presentation can be downloaded from the quarterly results section on Bruker's Investor Relations website.

During today's call, we'll be highlighting non-GAAP financial information. Reconciliations of our non-GAAP to GAAP financial measures are included in our press release, which is posted on our website at ir.bruker.com.

Before we begin, I would like to reference Bruker's safe harbor statement shown on Slide 2. During the course of this conference call, we will make forward-looking statements regarding future events and preliminary and future financial and operational performance of the company that involve risks and uncertainties. The company's actual results may differ materially from such estimates described in such statements. Factors that might cause such differences include, but are not limited to, those discussed in today's earnings release, including the internal investigation and in our Form 10-K as well as in subsequent SEC filings, which are available on our website and on the SEC's website.

Also note that the following information is related to current business conditions and to our outlook as of today, February 18, 2020, and does not include a potential negative impact from the novel COVID-19 coronavirus outbreak on our full year 2020 results, as such impact is not estimable at this time. Due to ongoing interruptions with our ability to serve customers in China, the impact on Bruker's Q1 2020 China revenue is likely to be significant.

Consistent with our prior practice, we do not intend to update our forward-looking statements based on new information, future events or other reasons prior to the release of our complete financial statements. Therefore, you should not rely on these forward-looking statements as representing our views or outlook as of any date subsequent to today. We intend to report complete fourth quarter and fiscal year 2019 income tax earnings, cash flow and balance sheet items at a date to be determined.

We will begin today's call with Frank providing a business summary. Gerald will then cover the preliminary operating results for the fourth quarter and fiscal year 2019 in more detail.

Now I'd like to turn the call over to Bruker's CEO, Frank Laukien.

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

Thank you, Miroslava. Good morning, everyone, and thank you for joining us today on short notice.

As you've seen in our disclosure this morning, we have received an allegation concerning the year-end close primarily related to income tax matters, including the effective income tax rate for 2019 and the related income tax balance sheet accounts. The matter was referred to our audit committee, which has initiated an internal investigation into this allegation, with the assistance of independent, experienced external advisers. This internal investigation is in its early stages and we cannot comment further on it at this time. As a result, the company is not in a position to report final financial results, including tax rate, EPS, cash flow and balance sheet for the fourth quarter and fiscal year 2019, which will be reported at a later date.

Back to our preliminary Q4 and fiscal year 2019 results now. Operationally, Bruker's fourth quarter of 2019 capped off a strong year in which we accelerated our organic revenue growth and again delivered further operating margin expansion. During 2019, Bruker's revenue exceeded the \$2 billion mark for the first time, and our non-GAAP operating margin reached 17.6%. For fiscal year 2019, we delivered improved organic revenue growth of 5.7%, constant currency revenue growth of 12% and non-GAAP operating income growth of 14.5%. We are pleased with our operating performance while we also invested significantly in key Project Accelerate initiatives, as I will highlight later on the call.

During the fourth quarter of 2019, year-over-year, our revenues grew 5.2% on an organic basis and 9.5% on a constant currency basis. Our non-GAAP operating income increased 7.9% year-over-year. Over the course of 2019, we significantly advanced our key Project Accelerate initiatives, including functional structural biology by GHz-class NMR, 4D proteomics on our timsTOF mass spectrometry platform and clinical microbiology on our MALDI

Biotyper platform. We are pleased to report that during the fourth quarter of 2019, we received customer acceptance on the first 1.1 GigaHertz NMR system.

Turning to specifics now on the quarter on Slide 4. In the fourth quarter of 2019, Bruker's revenue increased 8.4% year-over-year to \$599.9 million. On an organic basis, revenue increased 5.2% year-over-year, comprised of 5.8% organic growth at our Scientific Instruments segment and a minus 0.5% organic decline at our BEST segment, net of intercompany eliminations.

During the fourth quarter, acquisitions added 4.3% to our growth, while foreign currency translation was a headwind of minus 1.1%. On a constant currency basis, our Q4 revenue increased 9.5% year-over-year.

Our Q4 '19, non-GAAP gross margin was 50 -- of 50.9% was down 10 bps year-over-year. Similarly, our Q4 '19 non-GAAP operating margin of 22.1% was also down 10 bps year-over-year due primarily to softness in our semiconductor metrology and certain industrial research businesses, combined with Project Accelerate investments. Our Q4 '19 preliminary GAAP operating income of \$117.7 million increased 10.6%, and non-GAAP operating income of \$132.5 million increased approximately 8% year-over-year.

Moving on to Slide 5, we show Bruker's preliminary operating results for the full year 2019. Our revenues increased by \$177 million to \$2.070 billion, a 9.3% increase compared to fiscal year 2018. Organic revenue growth in 2019 was 5.7% year-over-year comprised of 5.8% organic growth in the Scientific Instruments segment and 4.9% organic growth in our BEST segment net of intercompany eliminations. Acquisitions added 6.3% to our top line in 2019, while foreign exchange was a minus 2.7% headwind year-over-year. On a constant currency basis, we delivered year-over-year revenue growth of 12% in fiscal year 2019.

Fiscal year 2019 order bookings growth in our Scientific Instruments segment was in the mid-single digits, albeit with a slower Q4 '19 performance, which reflected softer semiconductor metrology and industrial markets demand. End market conditions for Bruker's academic and government, biopharma and microbiology markets were healthy or favorable in the fourth quarter as they had been throughout 2019. Order bookings in our BEST segment were up strongly in the fourth quarter and in 2019 due to renewed multiyear long-term superconductor supply agreements with 3 major magnetic resonance imaging or MRI companies in the second half of 2019.

Our 2019 non-GAAP gross margin of 50% increased 100 basis points compared to 2018. Our non-GAAP operating margin of 17.6% expanded 80 basis points as we benefited from operational improvements within our CALID Group accretive acquisitions and an approximately 50 bps tailwind from changes in foreign currency rates, partially offset by significant investments into our Project Accelerate initiatives. On a GAAP basis, fiscal year 2019 operating income of \$300.9 million increased 14.7%, while fiscal year 2019 non-GAAP operating income of \$364 million grew 14.5% year-over-year.

Please turn to Slides 6 and 7 now where I provide further highlights on the performance in 2019 of our 3 Scientific Instruments groups and of our BEST segment, all in constant currency and in comparison to fiscal year 2018. Fiscal year 2019 BioSpin Group revenue increased at a solid mid-single digit pace to \$621 million. This reflected growth in both systems revenue and aftermarket as well as a small contribution from our software acquisitions. BioSpin's 2019 revenue results include revenue recognition for 3 GHz-class NMR systems, including customer acceptance of our first 1.1 GigaHertz NMR system in the fourth quarter of 2019. BioSpin also saw continued growth with our unique NMR FoodScreener and applied magnetic resonance solutions. BioSpin preclinical imaging systems revenue were slightly higher compared to 2018, and BioSpin's aftermarket revenue continued to grow in 2019, and we have now planted the seeds for our scientific software business.

Our CALID Group had very strong performance in 2019, with revenues up mid-teens in constant currency to \$624 million, including revenues from our Bruker-Hain majority acquisition. CALID's 2019 revenues also increased at a double-digit pace on an organic basis. Within CALID, we continue to see strong performance in our Life Science Mass Spectrometry solutions business driven by initial adoption of our timsTOF Pro platform for proteomics and metabolomics. CALID also had an excellent year in its MALDI Biotyper clinical microbiology business. Our CALID consumable revenue stepped up significantly with the addition of the Hain business. As a subsequent event, we are pleased to report that as of the end of January 2020, we have now acquired 100% ownership in Bruker-Hain Diagnostics.



Looking forward to 2020, we expect another strong year in both Life Science Mass Spec with timsTOF Pro and in microbiology and diagnostics with the rollout of our latest MALDI Biotyper series platform and the potential U.S. regulatory approval of the Sepsityper kit for rapid sepsis identification from positive blood cultures, which is currently pending FDA review. In fiscal year 2019, revenue in our CALID molecular spectroscopy FTIR/NIR business, which now also includes our CBRNE detection business also grew over 2018.

Turning to Slide 7 now. Fiscal year 2019 Bruker NANO revenues were up in the low teens year-over-year to \$633 million. Growth reflects primarily contributions from acquisitions, including Anasys, JPK, Alicona and RAVE. On an organic basis, the NANO Group's 2019 revenues were flat compared to 2018, including soft Q4 2019 results. This is due to weaker demand in NANO's industrial research markets in the second half of 2019 as well as a double-digit organic downturn in our semiconductor metrology business in fiscal year 2019. In 2019, NANO's advanced X-ray business grew with continued academic demand. Our Nano Analysis tools business also grew strongly organically in 2019, while Nano Surface tools revenue was higher due to acquisitions. Our fiscal year '19 semiconductor metrology revenues were higher year-over-year due to the RAVE acquisition. On an organic basis, semicon metrology experienced a steep double-digit revenue decline, including a significant decline in the fourth quarter of 2019. In 2019, for Bruker overall, about 5% to 6% of revenue came from semiconductor markets. We expect our semiconductor metrology business to remain very weak in the first quarter of 2020, but we now expect a gradual recovery later in 2020.

BEST revenue in 2019 was up in the mid-single digits compared to 2018 on strong superconductor demand from MRI companies. During the second half of 2019, BEST entered into long-term superconductor supply agreement renewals that in total added over \$700 million to BEST's backlog. These agreements are for deliveries that are expected over 5- to 7-year time lines.

Moving to Slide 8. In the fourth quarter of 2019, we achieved additional milestones with our GHz-class NMR program for functional structural biology. We achieved acceptance of the world's first 1.1 GigaHertz system at St. Jude's Children's Research Hospital in the U.S., culminating a decade of R&D on the novel ultra-high field magnet technology that uses a combination of low-temperature and high-temperature superconductors. Similar hybrid LTS/HTS technology also used in our 1.2 gigahertz NMR magnets for which we have considerable backlog.

During the fourth quarter, we also received first orders for 1.2 gigahertz NMR systems from the U.S. and South Korea. We shipped the first 1.2 gigahertz NMR in Europe, which has now arrived at the customer's site, with installation expected in the first half of 2020. In 2020, we expect further growth in ultra-high field NMR with expected installations and acceptance of 3 to 4 GHz-class NMRs in Europe. Please note that our first 1.2 gigahertz system is expected to see only partial revenue recognition in 2020 for the NMR console and probes as the magnet is subject to a long-term lease purchase contract.

Turning to Slide 9, I provide an update on our Project Accelerate road map. As a reminder, Project Accelerate describe 6 key initiatives focused on reshaping our portfolio for sustainable, faster growth and higher margins. During 2019, Project Accelerate revenues were in the mid-40s percentage of Bruker's overall revenue, and in the aggregate, grew organically well above Bruker's average organic growth rate. We are particularly pleased with the progress made in the 3 areas highlighted earlier: function and dynamics in functional, structural biology by GHz-class NMR; 4D proteomics and metabolomics; and our microbiology initiative on our MALDI Biotyper platform.

Before I close, I would like to remind everyone of our medium-term objectives. For 2020 to 2022, Bruker continues to target above-market revenue growth of 5% to 7%, average annual operating margin expansion of 75 to 100 bps and double-digit non-GAAP EPS growth. For 2020, our projected organic revenue growth is slightly below this range as we have assumed still sluggish demand in industrial and applied markets in the first half of the year. We remain optimistic about our growth trajectory given our strong and unique new product cadence and attractive secular growth drivers, especially in NMR, proteomics, phenomics, biopharma, imaging and microscopy, microbiology and consumables, software and aftermarket.

In summary, we are pleased with our operational progress during the fourth quarter and 2019. We believe that our innovative products further progress with Project Accelerate and our sustained operational excellence focus position us to continue to perform well.

Let me now turn the call over to our CFO, Gerald Herman, who will review our Q4 and fiscal year '19 operational performance in more detail. Gerald?



Gerald N. Herman - Bruker Corporation - CFO, VP & Corporate Controller

Thank you, Frank. I'm pleased to join you today and review Bruker's fourth quarter 2019 preliminary operating results.

Bruker's reported revenues increased 8.4% to a record \$599.9 million in the fourth quarter of 2019, which reflects organic growth of 5.2%. On a GAAP basis, our Q4 2019 operating income grew 10.6%. Non-GAAP operating income increased 7.9% compared to Q4 2018, while Q4 2019 non-GAAP operating margin was down 10 basis points as headwinds on our NANO semi metrology and industrial research markets offset improvements at CALID, BioSpin and BEST.

Slide 11 shows the revenue bridge for Q4 2019 for your reference. This has already been explained by Frank. From a BSI organic revenue growth perspective, we saw low double-digit growth in Q4 2019 year-over-year at BioSpin, which included acceptance of a 1.1 gigahertz NMR system. Our CALID Group posted mid-teens organic growth year-over-year in the fourth quarter, with strong growth in all major CALID areas, including Life Science Mass Spec solutions, microbiology and FTR near IR molecular spectroscopy tools. NANO Group revenue was down high single digits in the fourth quarter year-over-year on an organic basis. This included a steep year-over-year decline in our semiconductor metrology business and weaker results in some of our NANO's industrial research businesses. From a geographic perspective, Q4 organic revenue was down low single digits in Europe. Asia Pacific organic revenue increased in the low teens, including very strong growth in China and weaker year-over-year results in Japan. North American revenue was up mid-single digits. The rest of the world, other than Latin America, had good results.

Slide 12 shows our preliminary Q4 2019 non-GAAP operating results. Q4 2019 non-GAAP gross profit margin of 50.9% decreased 10 basis points from 51% in Q4 2018. While our CALID and BioSpin groups made good year-over-year operational progress on gross margins, this was offset by NANO semiconductor metrology and industrial research headwinds.

Q4 2019 operating expenses increased over the prior year, reflecting investments in the business and expenses related to recent acquisitions. Q4 2019 non-GAAP operating margin of 22.1% also decreased 10 basis points from the 22.2% reported in Q4 2018. During the fourth quarter, volume and operational improvements at CALID, BioSpin and BEST, were offset by weakness in NANO's semi and industrial research demand. The combination of softness in industrial markets and semi metrology significant demand decline was a meaningful drag on our Q4 and our fiscal year 2019 non-GAAP operating margin. We expect this to be a temporary effect and expect to continue our solid margin expansion in fiscal year 2020, as I'll discuss in a moment.

Finally, Q4 2019 non-GAAP operating income of \$132.5 million increased 7.9% compared to Q4 2018 driven by our revenue growth and accretive acquisitions.

Slide 13 shows the year-over-year revenue bridge for 2019. Full year revenue was up \$177 million or 9.3% over 2018, reflecting 2019 organic growth of 5.7%, contributions from our acquisitions of 6.3% and a foreign currency headwind of 2.7%. This includes 5.8% organic growth at our Scientific Instruments segment, with double-digit increase at CALID, mid-single digit growth at BioSpin and approximately flat NANO organic revenues. Our BEST segment grew 4.9% on an organic basis, net of intercompany eliminations.

Geographically and on an organic basis, in 2019, Bruker's European revenue was flat compared to 2018. North American revenue grew mid-single digits. Asia Pacific revenue grew low teens on an organic basis, driven by strong double-digit growth in both China and Japan. The rest of the world, other than Latin America, also had strong growth.

On Slide 14, our full year 2019 non-GAAP gross profit margin of 50.0% increased 100 basis points. Operational improvements at CALID, accretion from our acquisitions and favorable foreign currency translation drove the improvement relative to 2018. Full year 2019 operating expenses increased slightly ahead of our revenue growth rate, including expenses from acquisitions, combined with selected investments. All in, our non-GAAP operating margin in 2019 was 17.6%, an 80 basis point improvement over 2018, benefiting from volume and operational improvements in CALID, accretion from acquisitions as well as the foreign exchange tailwind of approximately 50 basis points. Fiscal year 2019 non-GAAP operating income of \$364 million grew 14.5% relative to 2018, reflecting our solid revenue growth, higher margins and accretive acquisitions.

Before I turn to our preliminary outlook for full year 2020, there are a few other topics I'd like to address. From a balance sheet perspective, we were in a net debt position of \$128 million as of December 31, 2019, as we deployed cash over the year for acquisitions, share repurchases, capital

expenditures and dividends. We ended the year with \$678.3 million in cash and cash equivalents following the completion of certain debt financing actions in mid-December. These actions were designed to enhance our financial flexibility and fund corporate strategic objectives. We locked in lower fixed rates on approximately 60% of our expanded borrowing capacity and expect this to be accretive to our non-GAAP EPS in 2020 and beyond.

Weighted average diluted shares outstanding in the fourth quarter and in fiscal year 2019 stood at 155.4 million and 156.6 million, respectively. As of December 31, 2019, we still had \$158 million remaining under our share buyback authorization, which is in place through mid-May 2021.

Turning now to our preliminary outlook for 2020 on Slide 16. We are targeting mid-single digit revenue growth and continued operating margin expansion. Specifically, we currently anticipate Bruker's 2020 revenue to increase approximately 4% to 5% on an organic basis. For 2020, we expect Bruker's non-GAAP operating margin to expand an additional 70 to 90 basis points from the 17.6% level achieved in 2019. In 2020, we expect to ship and turn into revenue 3 to 4 GHz-class systems. As Frank mentioned, among these planned systems, our first 1.2 gigahertz system will only generate revenue for the console and probes, while magnetic revenue will be realized over a multiyear lease purchase arrangement. We expect our Scientific Instruments segment will again lead the organic revenue growth performance for the company. Our foreign currency assumptions are listed on this slide. Importantly, our preliminary 2020 outlook does not include a potential negative impact from the ongoing COVID-19 coronavirus outbreak on our full year results, which is difficult to estimate at this time. The impact from the outbreak on Bruker's first quarter results in particular is likely to be significant. Over recent weeks, our ability to sell, service and install equipment in China has been disrupted. We do not have any factories or significant outsourcing partners in China, however.

While we do not provide quarterly guidance, I remind investors that Bruker's first quarter is seasonally slower, with most of our profitability and cash flow typically generated in the second half of the year. To the extent that we experience a negative impact on our revenues from the COVID-19 outbreak in China and beyond, we currently expect that to be also heavily weighted towards the first quarter of the year.

So to wrap up, Bruker delivered solid revenue growth in Q4 2019, with reported revenues up 8.4%, while semi downturn and softer NANO industrial markets weighed on our margins. We made excellent operational progress in 2019, including from a product development and market uptake perspective as well as in terms of organic and constant currency revenue growth and operating income growth year-over-year. While we're not pleased with the delay in our complete financial reporting, we remain focused on achieving our short- and medium-term growth and operating margin expansion objectives.

With that, I'd like to turn the call over to Miroslava to start the Q&A session. Thank you very much.

Miroslava Atanassova Minkova - Bruker Corporation - Director of IR & Corporate Development

Thank you, Gerald. Operator, we would like to begin the Q&A session. (Operator Instructions)

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question today comes from Puneet Souda from SVB Leerink.

Puneet Souda - SVB Leerink LLC, Research Division - MD of Life Science Tools & Diagnostics and Senior Research Analyst

Frank, so I wanted to understand a little bit on the guidance. I understand a number of things in semi and NANO are not expected to perform as you had going into 2020. But just wanted to get a better picture of if you're going to see any impact from that going into -- what gives you the confidence into the second half of the year?



And then on China, if you could elaborate if this is just purely Q1, or that disruption continues into Q2? And what gives you the confidence of that improving in the second quarter?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Thank you, Puneet. So yes, we feel that the -- that our revenue growth guidance for 2020 is reasonable and prudent at this stage. It does reflect that we expect weaker -- weak industrial research market trends. And as we've seen them in the second half of '19, that, that will likely continue through the year, so we're not calling any change in that. In semi, which has been very weak in Q4 of '19 and will be very weak in Q1 of '20, we expect -- and we have some visibility and then also industry visibility in general and that likely to be at its low point probably in Q4 and Q1 of 2020 and to begin to recover gradually later in the year. So we expect later in the year, at least, the absence of a headwind, which has been, as you know, a stiff headwind, even on margins in 2019 later in the year.

As to China, I think we are not making a call right now of whether or not this will persist into Q2 or not because I think it's impossible to do. The situation is fluid. We all know that China hasn't returned to work on February 10 nor fully on February 17. And how long the disruption continues and how gradual the recovery will be, I think, is not something we can predict, and probably not anybody else, for that matter. We expect it to have a significant impact on our Q1 revenue in China. We don't have any factories there, but our commercial operations from marketing, to selling, to delivering, to installing, to servicing is disrupted to a significant extent as it is, I think, for just about everyone in China. And even major cities like Shanghai and Beijing, where we have our commercial operations, are not back to a normal life and normal working conditions. We do not make a call on that. It is not estimable for us. While there may be some catch-up -- we hope there's some catch-up later in the year after presumably a very weak start in China. To the year, it is difficult to make further estimates, and certainly, they're not quantitative. So I think that reflects our present thinking.

Puneet Souda - SVB Leerink LLC, Research Division - MD of Life Science Tools & Diagnostics and Senior Research Analyst

Okay. And in Europe, if you could elaborate on what's your expectation for -- through the year, given the fourth quarter results. And what are you seeing in terms of the academic and government customers and the funding status? And you pointed out 3 to 4 NMRs in Europe, so any sense of those -- would those have any challenges in terms of delivering the final payment if European funding environment stays where it is right now?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Yes, I mean, those are fixed orders. These are fixed in backlog, so there's no question about -- on those in any -- financially. Yes, we do expect 3 to 4 NMRs to be delivered and -- GHz-class NMRs to be delivered and accepted in the year 2020. Those all 3 to 4, however many turns out to be, are for European customers indeed, so I don't see any financial or economic or macro risk to that at all. There's always some technical risk during installation, that's why we're saying 3 to 4. We hope to ship at least 4, but sometimes, things, installations can take longer.

I think to your earlier questions, European funding and academic and research funding for life science research and for microbiology continues to be quite healthy. And the industrial markets have been a little bit more cautious. And there was the Brexit specter, which has now evaporated for some reason. I mean, Brexit has occurred at least politically, and it's no big deal as -- sort of as I predicted. But -- so that's not really disrupting anything, and I think nobody's concerned about that anymore because it's moving very slowly. The practical aspects are moving very slowly and I don't think are going to be disruptive at all. So academic funding, generally for our life science research tools, where we are less dependent on macro, has been quite healthy, including in China. We've had excellent orders late in the year for a lot of our high-end NMR and mass spec tools.

That's the perspective, Puneet.

Puneet Souda - *SVB Leerink LLC, Research Division - MD of Life Science Tools & Diagnostics and Senior Research Analyst*

Okay, great. And then if I could squeeze one last one on the U.S. order, was that an NSF order that you had expected prior? And what's your expectation for further orders for ultra-high frequency magnets in U.S. over the next year or 2?

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

Yes, we hope that, that's an ice breaker. That was indeed the NSF-funded order from a state university, as you're aware of. And there's other fundraising activities and grant application activities. And the need for the functional complement for structural biology for structures generated by cryo-EM or crystallography simply is there -- everywhere. And so we think now that this technology has been demonstrated and good papers have come out with that and good data is being generated, we expect that there will be ongoing urgency in the U.S. and elsewhere to raise funding for investments in this technology.

Operator

Our next question comes from Vijay Kumar from Evercore ISI.

Vijay Muniyappa Kumar - *Evercore ISI Institutional Equities, Research Division - MD*

Frank, maybe starting with -- on the accounting side here. I appreciate you're limited in that what you can say on the investigation at this point, but do we have any clarity on whether this touches free cash flows or any operational items being hit here? Or this is all below-the-line items?

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

Oh, Gerald, yes.

Gerald N. Herman - *Bruker Corporation - CFO, VP & Corporate Controller*

Yes, it's Gerald. I'll just comment. We can't say much about the investigation specifically as it's in its early stage and is ongoing. What we can say is that we've not disclosed balance sheet-related items and cash flow-related items. That's more from an abundance of caution perspective. So that's all I can add to that.

Vijay Muniyappa Kumar - *Evercore ISI Institutional Equities, Research Division - MD*

Understood. And then, Frank, one on the guidance front here. I appreciate the China commentary, but what kind of impact have you seen here in January and February? That thing on the gigahertz, you mentioned the first system was partial revenues is the lease-up method of recognizing revenues. Is that going to be more of a phenomena for the gigahertz just given the higher ASP? Or is this just a one-off?

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

So there was something about China that I'm not -- maybe I answered earlier, but maybe we'll come back to that. On the 1.2 gigahertz, the first 1.2 gigahertz that we've delivered and hope to install in the first half, that is unique in that it has sort of a partial purchase for part of the revenue that we hopefully can recognize this year on console and probes for the system and then a longer-term arrangement where revenue recognition will occur over multiple years on the magnet. That's unique.

Vijay Muniyappa Kumar - *Evercore ISI Institutional Equities, Research Division - MD*

That's helpful, Frank. So in China, any impact so far in January, February? Any qualitative comments on what we've seen so far?

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

China, commercial operations are disrupted. I don't know if -- it's -- there's no -- our people are not all in the office. We cannot visit customers. Our customers are not at work. Like, we don't have any factories or major suppliers over there. There is no conferences. There's no customer meetings. We cannot do normal service and install. China is disrupted. And if that's news, then we're all -- so -- I mean, it's -- that's what -- I'm sure what -- well, I can only speak for Bruker. But as far as I can tell, Beijing and Shanghai are mostly not back to normal, and those are economic powerhouses.

Operator

Our next question comes from Jack Meehan from Barclays.

Nisarg Samir Shah - *Barclays Bank PLC, Research Division - Analyst*

This is Nisarg on for Jack. So on the margin line, why was there not more flow-through from the top line beat on operating income in the fourth quarter?

Gerald N. Herman - *Bruker Corporation - CFO, VP & Corporate Controller*

It's Gerald here. So one of the major factors here we referenced already in our prepared remarks, which is really the issues that we had relative to the semi metrology markets and demand there as well as our performance in industrial markets, particularly in the nano group. So as you probably know, we got some revenue from a year-over-year perspective and reflected that a lot of the margin performance that was expected really did not occur from our semi and industrial research side. This would be the primary area that we've got.

Nisarg Samir Shah - *Barclays Bank PLC, Research Division - Analyst*

Got it. And then within guidance, what are you assuming in terms of organic growth by businesses within BSI?

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

I think just -- this is Frank. Directionally, we again expect the CALID Group to lead the organic growth in 2020, followed by the BioSpin Group that may be at or above corporate average of our guidance and with relatively flat assumptions organically for the Nano group and a low single-digit growth -- organic growth for the BEST group.

Operator

Our next question comes from Derik De Bruin from Bank of America.

Derik De Bruin - *BofA Merrill Lynch, Research Division - MD of Equity Research*

So 2 questions. The first one is quick. I -- just the -- on the accounting issues, just to clarify, there's no concerns about -- revenues are not impacted in any way. I just want to clarify that.



Gerald N. Herman - Bruker Corporation - CFO, VP & Corporate Controller

That's correct. We are reflecting these results -- these preliminary -- operating results as preliminary because our auditors have not finalized their closing procedures, and we still obviously have this investigation to complete. But we don't expect that the revenue numbers of the amounts we've discussed here today would be impacted.

Derik De Bruin - BofA Merrill Lynch, Research Division - MD of Equity Research

Great. Just want to clarify that. And Frank, Gerald, can you just walk me through -- I mean I appreciate that China has obviously shut down. So -- and looking that, that 4% to 5%, I mean, is -- I just want to clarify, is that what you would have guided to regardless of the ongoing situation in China? Or I mean are you building some conservatism into that number already, i.e., would it have looked more like 5% to 6% without China? And I'm just sort of -- I just sort of want to sort of walk through in terms of how you're thinking about sort of the rebound and going like that. I mean that's -- basically, that's where the bulk of our again incoming questions are coming from, from investors.

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Yes. And that's a really good question. And with the COVID-19 crisis in China pending that -- you tend to be more conservative. But let me also clarify that we're not building in the effect that might have because it's not estimable. It may color our sentiment a little bit because obviously this will lead to a weak start in China in Q1, and we don't know for how long that will continue. Hopefully, it's primarily or just Q1, but we don't know. And I think there's the other factors that we've also cited that semi will still be very weak in Q1 and then begin to get healthier later in the year and that the industrial markets and -- are assumed to be similar to the second half of the year, which wasn't that strong, that also led to the fact that we're guiding a little bit below for the -- at least at the beginning of this year, a little bit below our medium-term goals. But we've also confirmed our medium-term goals today, which obviously is an average growth rate. So that's the -- those are the puts and takes, if you like.

Operator

Our next question comes from Doug Schenkel from Cowen.

Chris Lin - Cowen and Company, LLC, Research Division - Research Associate

This is Chris for Doug. Can you talk about the trends in government-funded tenders for high-end instruments in China? It just seems like there has been continued delays in funding the release, even excluding the coronavirus situation. Have you seen that? And do you expect that to impact revenue for 2020?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

We have not seen that, Chris. So we -- in fact, we had very good bookings for high-end NMR and the mass specs in the fourth quarter before there was any talk about the coronavirus endemic or whatever it's called now. So high-end systems orders for us in Q4 in China were very good.

Chris Lin - Cowen and Company, LLC, Research Division - Research Associate

Okay. And then in terms of -- it appears that if we exclude the 3 ultra-high field systems in 2019, the rest of the NMR business with the instrument business was flat to down last year. Is that right? And if so, can you just provide a bit more detail on demand trends for NMR systems below 1 gigahertz? What's impacting growth in that market?



Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

We don't think about our business like that. Our business -- our BioSpin business does include ultra-high field system. It always has. So we think of that as fully part of an organic growth. And so I just don't -- decline to speculate picking things of core organic business out of BioSpin.

Chris Lin - Cowen and Company, LLC, Research Division - Research Associate

Okay. And maybe for my last question, could you give us a update on North America demand? I think 2019 was a solid year of growth and NIH funding for 2020 continues to be really strong. So what are you assuming for North America growth?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Yes. I don't think we've made a specific assumption for North America growth, but I think I agree with all the statements that you've made. And so for life science research, we think the U.S. is basically moderately healthy or healthy. And we expect good academic funding on nonprofit funding in the U.S. to continue as it has in the last couple of years. I'm going a little slow here because I don't think we have a specific North America guidance as far as I know.

Gerald N. Herman - Bruker Corporation - CFO, VP & Corporate Controller

No. We don't.

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

We don't give geographic guidance, right? I think we give some outlook by group and not by geography.

Gerald N. Herman - Bruker Corporation - CFO, VP & Corporate Controller

That's right. But I would say, we did perform well through -- in mid-single digits in North America historically through 2019, and we assume that the markets will remain relatively healthy in North America.

Operator

Our next question comes from Dan Leonard from Wells Fargo Securities.

Daniel Louis Leonard - Wells Fargo Securities, LLC, Research Division - Senior Analyst

So first off, on BSI bookings in the fourth quarter, could you offer a specific color on bookings trends in that period? Were they flat? Were they down a little bit year-on-year?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

I think they were -- Miroslava, jump in, please.

Miroslava Atanassova Minkova - Bruker Corporation - Director of IR & Corporate Development

I think we're up low single digits in the fourth quarter for BSI.

Daniel Louis Leonard - Wells Fargo Securities, LLC, Research Division - Senior Analyst

And is it possible to quantify the magnitude of change you saw in bookings for the semiconductor and industrial markets?

Miroslava Atanassova Minkova - Bruker Corporation - Director of IR & Corporate Development

Well, they were softer for the industrial research markets for sure. I don't think that we would venture to quantify for any single quarter because, as you know, for Bruker, single quarter rarely makes a trend. But once we have more data, then we might be more inclined to give you such numbers.

Daniel Louis Leonard - Wells Fargo Securities, LLC, Research Division - Senior Analyst

And then maybe last one. I know you said semi was down double digits in 2019. Is it possible to be more specific and offer a range there? And maybe a comment on what's implied in the 2020 guide for the semiconductor customer base?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

So semi was actually up last year. But due to acquisitions and organically, it was down in the double digits sort of in the 20% range for the year and more steeply in Q4.

Daniel Louis Leonard - Wells Fargo Securities, LLC, Research Division - Senior Analyst

And the thought around 2020 expectations? I mean I got questions from people who are trying to isolate some of the...

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Yes. Of course. No. Exactly. Well, we're doing the same thing. So we expect semi to be very weak in Q1 of 2020, and we expect a gradual recovery of our semi business later in the year.

Operator

Our next question comes from Sung Ji Nam from BTIG.

Sung Ji Nam - BTIG, LLC, Research Division - Director and Life Science & Diagnostic Tools Analyst

Just a couple of clarification questions. Frank, I think you mentioned that there was some impact on margins from incremental investments in Project Accelerate. Would you be able to break out what that impact may have been for the quarter or for the year?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Sung Ji, good question. No. We're not in a position to break that out. But from organic and from some of the acquisitions that contribute to Project Accelerate, we kind of solve for the operating margin improvement every year. And as we had some -- and so that allowed us in 2019 to accelerate expense investment in R&D, but also in certain marketing and sales functions with a focus on Project Accelerate initiatives, in fact, in all our most Project Accelerate initiatives, not only the ones that performed well. Overall, in the aggregate, all Project Accelerate initiatives in the aggregate, again performed very well last year. And I think we're in a good track there even though, of course, it was uneven with semi down and proteomics and NMR up and microbiology. But yes, we -- and we continue -- we also -- even with our 70% to 90% operating margin expansion guidance for

2020, which doesn't have any bit help baked in from currency in 2020, we again hope to deliver on our targets, but that also includes quite a bit of continued strong investments in our Project Accelerate initiatives. But no, we do not wish to break those out specifically. Hope for your understanding there.

Sung Ji Nam - *BTIG, LLC, Research Division - Director and Life Science & Diagnostic Tools Analyst*

Sure. And then just quickly on -- for Gerald. In terms of the audit committee investigation, the first -- the tax rate for the first 3 quarters of the year as well as EPS numbers should not be affected. Is that correct?

Gerald N. Herman - *Bruker Corporation - CFO, VP & Corporate Controller*

Well, at this point, it's -- again, I'll just repeat. We're in the early stages. I can't comment specifically on those particular -- I can tell you that we -- as you can see, we've excluded from our presentation today the tax rate, EPS, cash flow and balance sheet items.

Operator

Our next question comes from Patrick Donnelly from Citi.

Patrick Bernard Donnelly - *Citigroup Inc, Research Division - Research Analyst*

Frank, maybe just one more on the China side. Just trying to feel out, obviously, you guys have kind of talked about some sales loss in 1Q. Can you just help us think about the equipment versus kind of consumables and service split over there? Is it similar to the corporate breakdown overall? And given that you guys tend to be a little more instrument heavy, I would think you have a higher likelihood of kind of recapturing some of the sales throughout the year, but maybe just help us think about the process there as well.

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

Yes. Another really good question. Compared to Bruker's average, there is a little bit less aftermarket business in China than, let's say, in the Americas or in Europe, so the percentage is a little lower in China compared to Bruker's averages, which you're familiar with. I don't know how the coronavirus crisis plays itself out for consumables' companies or primarily consumables and aftermarket companies. It probably has a different dynamics. Yes, we do believe that we may be able to catch up with orders that we have. I mean we have some orders for semiconductor that we were supposed to deliver to one in Q1. We have assumed that's not going to happen. They'll be ready to ship and hopefully go into these facilities in Q2. But -- so it's a little bit fluid. It's harder to see. We have a chance to catch up. We may see some incremental orders from our MALDI Biotyper, which does not -- cannot be used for coronavirus or flu identification. But of course with the health care crisis, you have to rule out other, for instance, bacterial infections. So there is some interest in potential funding for that in China. So it's a very fluid situation. And indeed, yes, we are -- for once, being an instruments company is perhaps where you want to be to have a chance to catch up and -- or a better chance to catch up. And second of all, not having factories in China or major outsourcing partners at least makes this look like not much of an event or no discernible event so far in our supply chain and ability to deliver and run our factories and final test sites around the world. So it's really a commercial disruption in China, us being able to market, sell, install -- deliver, install, service.

Patrick Bernard Donnelly - *Citigroup Inc, Research Division - Research Analyst*

That's really helpful. And then just staying on the aftermarket side. I know longer term, at the Analyst Day, you talked about high single-digit growth there. Is that the right way to think about it for 2020? And then what are the key initiatives there that I guess are continuing to close the gap with peers? How should we think about 2020 on that front?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

2019 was a little slower in aftermarket. And as now also software gets added to that, that has so far not had a -- that's still in the seed phase, but it's beginning to get some traction. I think we'll get some growth from that as well in 2020, so a little bit more software sales. We now have rolled out a lot of the initiatives to really very actively drive aftermarket revenue to every single one of our divisions. We had some like BioSpin that spearheaded that early on. So with very focused effort to drive this everywhere, including new types of services and programs, we're optimistic that aftermarket in 2020 and also into the next few years will continue to be an important and above-corporate-average growth and margin driver for Bruker.

Operator

Our next question comes from Dan Brennan from UBS.

John Newton Sourbeer - UBS Investment Bank, Research Division - Equity Research Associate

This is John Sourbeer on for Dan. Just -- in particular, can you walk through what timsTOF did in 2019 in terms of placements and revenues? And could you remind us the size of this opportunity? And how has the launch gone versus expectations?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Yes. We -- thank you. John, we have disclosed that since launch, we have now placed or sold more than 100 systems. We've placed a few more that are being evaluated or that are hopefully turning into purchase orders. So we've sold more than 100 since its launch, which was in late '17. Obviously, the majority of those were sold in '19 with '18 being the beginning of the ramp-up. And so the ramp-up is looking very solid. There's a lot of interest in this new and differentiated technology. The \$500 million LC-mass-spec-based proteomics market, that's a narrow definition, there's some broader definitions out there that include other tools and technologies of protein analysis, we think has many, many growth drivers over the next decade. So we actually think the proteomics field will do really, really well. And probably, it's not the time to go through all the growth drivers, although we've discussed them at other times in more detail. We think that market could double over the next several years, which would be good for all participants. So as we ramp up, probably continue to gain in -- somewhat in market share there from a small -- initial small position. And as we play in some very healthy market here, we're quite optimistic that timsTOF will also continue -- and for the proteomics and metabolomics will continue to perform well in 2020 and beyond.

John Newton Sourbeer - UBS Investment Bank, Research Division - Equity Research Associate

And just digging into semi metrology, kind of walking into the key market factors that are pressuring this business and -- what visibility do you have for these markets turning? And given the repositioning of your portfolio towards a more secular growth area, is there a way to deemphasize the semi business so that the -- this cyclical influence in your business is reduced?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Well -- so yes, no. We -- as I said, we expect still a weak Q1 '20 like Q4 '19, which was also weak. We have some visibility into the middle of the year to which it looks healthier. And then generally, the industry trends that we're seeing also from other larger companies that are focused on that industry have been generally healthier. So we are -- we believe later in the year 2020, semi will stop being a headwind and perhaps gradually be in some recovery. And obviously, we're feeling the pain of semi metrology, for instance, in Q4, but we're also looking forward to getting some of the benefits of being in this more cyclical business. Now overall, it's contributing 5% to 6% of our revenue. We're comfortable with that. And it's a very high incremental margin business when it does well and goes into a rapid growth phase. So that's our perspective on that.



Operator

Our next question comes from Steve Unger from Needham & Company.

Stephen Scott Unger - *Needham & Company, LLC, Research Division - Senior Analyst*

Is it possible to get a mix of the revenue from China in the first quarter of '19?

Miroslava Atanassova Minkova - *Bruker Corporation - Director of IR & Corporate Development*

Steve, China in 2018 was about 16% of revenues for Bruker.

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

2019.

Miroslava Atanassova Minkova - *Bruker Corporation - Director of IR & Corporate Development*

In 2019, I'm sorry. In 2019, it was about 16% of revenues. We can't give you by quarter but typically, it runs around that rate.

Gerald N. Herman - *Bruker Corporation - CFO, VP & Corporate Controller*

And we don't typically provide color around the individual mix within a geography, including China.

Stephen Scott Unger - *Needham & Company, LLC, Research Division - Senior Analyst*

Understood. That's helpful. And then as far as the outlook, could you provide an outlook for BEST for 2020?

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

Yes. BEST with very nice backlog and sort of its long-term future really nicely secured and good ability to plan for the medium and longer term, we are expecting to see a low single-digit growth -- organic growth at BEST, and we're looking for BEST to provide very meaningful margin improvement in 2020 as well as in the next couple of years beyond 2020. So that's the outlook for BEST.

Stephen Scott Unger - *Needham & Company, LLC, Research Division - Senior Analyst*

Got it. And then I just have one more. As far as -- it looks like you're planning to launch the XCD product. And I was just wondering, it's my impression that's a larger purchase price. And what are the -- is it a longer installation period similar to like the gigahertz systems?

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

The -- somewhat, it's a little different, but there's some similarities, and then it's also a little different. In the semi industry, the very concentrated, very well-known, very large customers for this type of metrology equipment, they very often tend to evaluate a new technology in-house for a period of time with literally a \$0 loan purchase order. And if you then perform well, this can turn then into revenue. We have -- we hope to make further progress. We have some of these systems out there in customer sites for evaluation. We have not built in a steep adoption of XCD for this



year. Let's see how these evaluations go and let's see how the recovery works out, but XCD could become an important growth driver in 2021 and beyond growth and margin driver.

Operator

Our next question comes from Steve Beuchaw from Wolfe Research.

Stephen Christopher Beuchaw - Wolfe Research, LLC - Director of Equity Research

I have one longer-term question for Frank and then one shorter-term question for Gerald. Frank, now that you have some real-world experience putting ultra-high field systems, north of 1.0 gigahertz systems in the field and you have a little bit of customer evaluation -- validation, rather, that you can think about, how are you thinking about ultra-high field and the cadence of what it can mean at the revenue line over time? Certainly, really encouraging, the 3 to 4 in the outlook for 2020, including the 1.2. If I think about my notes from years ago, it was -- given how significant an operational lift it is to install one of these systems, it was not sure that we can ever ship 5, 6, 7 in any given year. As you've seen the operations evolve, is there a case for that 3 to 4 to go higher over time? It would be interesting just to hear you think about that now that you have more validation. And then I have one for Gerald.

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Yes, Steve, indeed. We hope to be ramping that up to higher unit numbers in 2021 and beyond. And we've -- we're making some further final test side investments for that part of our CapEx in Switzerland, in this particular case, and we hope to have higher unit numbers in 2021 already.

Stephen Christopher Beuchaw - Wolfe Research, LLC - Director of Equity Research

Okay. I really appreciate the certainty there.

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

And over time, we -- over time, not in 2021 yet, but over time, this may very well become a \$75 million to \$100 million unique market segment for Bruker. It is just very important for disease research and for fundamental cell biology research. So we are optimistic that the science and the need for these tools, while they're unique and they're expensive, is really very, very compelling.

Stephen Christopher Beuchaw - Wolfe Research, LLC - Director of Equity Research

Yes. And then -- so I would certainly agree, Gerald, that estimating at this point, the impact of -- the coronavirus impact on the China business this year or even for the quarter is certainly very difficult because we just don't know how things are going to evolve. But I wonder if as you take a look back at what you've seen thus far through the course of the last several weeks in China, if you could give us any sense on a, let's say, per week of disruption basis, where is the China business relative to plan? Is it 5% below plan on an ex coronavirus basis? Is it 30%? How big on a per-week basis has that impact been on the China business to the top line?

Gerald N. Herman - Bruker Corporation - CFO, VP & Corporate Controller

So I guess I can't be quite that specific. What I would say is what we've already commented on, which is just that we have seen significant disruption in our ability to function normally in China. I can't tell you whether that's higher or lower than where our plan was, but fundamentally, it's a challenge at the moment for some of our operations in China.



Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Yes. I mean, initially, there was sort of a view that maybe beyond the Chinese New Year's break, people would maybe spend another 10 to 2 weeks mostly away from work. And I think for most of our customers and most of our teams, this has now been extended to 3 to 4 weeks. And it's also just not clear yet how quickly or how gradually China will then eventually in -- outside of the Hubei province return to normal. Okay. So we're literally looking at this. We're looking -- we're literally looking at this week by week. But it is -- compared to what we saw perhaps 3 weeks ago, the recovery is maybe not totally unexpectedly, but it is more -- much, much slower than had been predicted by the media 2 or 3 weeks ago, which perhaps have been more optimistic that, yes, after 2 weeks, everybody is back at work on Monday, February 10, and that's not the case.

Operator

Our next question comes from Dan Arias from Stifel.

Daniel Anthony Arias - Stifel, Nicolaus & Company, Incorporated, Research Division - MD & Senior Analyst

Frank, can you just spend an extra minute talking about the Project Accelerate items that you expect to be 2020 ramp products? If I look at your slide, it sounds like SpatialOMx applications and some Sepsityper assays and then some software items are the ones that have the 2020 step-up year. You mentioned Sepsityper, but just hoping you could add some color there and if maybe you'd be willing to talk about where you expect those to contribute.

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Look -- and keep in mind that things that started in 2019, they're continuing to ramp up as well. And then there are some examples of that: 4D proteomics, fluorescence microscopy. But yes, 1.2 gigahertz is -- hopefully, we'll see 1 or 2 1.2 gigahertz systems in revenue this year. So that's new. SpatialOMx are primarily focused on the timsTOF fleX, which also does tissue imaging primarily of metabolites or lipids to give additional contrast and information to pathology or tissue researchers who then may wish to extract from the heterogeneous tissue. For instance, in cancer research, selected areas or cell for focused omics experiments on these subpopulations. That's something that has begun a little bit in '19 with the launch, and there's clearly a lot of interest in SpatialOMx. Indeed, the Sepsityper fast ID from positive blood cultures, we are -- we believe we are finished. We have finished our U.S. clinical trials for that. And we have submitted this to the U.S. FDA. And we're hopeful that in the first half of this -- of 2020, we may get clearance for that. In which case, we think there is a lot of demand and also decent reimbursement for that. Fast identification from positive blood cultures within literally an hour or 2, the experiment takes much longer -- much -- sorry, I misspoke, much shorter is incredibly valuable for infectious disease physicians who can assess whether the broadband antibiotics that they generally prescribe for everyone with a suspicion of sepsis are -- given their particular hospital setting might be most appropriate or perhaps likely inappropriate. So based on that, people will -- infectious disease doctors may change therapy approaches, which could shorten ICU times and may likely provide improvements in outcomes. So that's an important one. And indeed, we have now seeded our scientific software expansion, and that's -- that -- we think that's beginning to make a growth and margin contribution perhaps starting in 2020. So these are not hard cutoff on our road map. They give you a bit of a qualitative feel for what additional drivers begin to kick in. But remember, the things that kicked in, in '19 and '18, they're probably ramping up into the overall growth. They may make a bigger difference than the new things that begin to make a difference in any given year. That's how this road map was constructed to give you -- to maybe assist everyone in understanding the timing -- the drivers and the timing of our Project Accelerate initiatives.

Daniel Anthony Arias - Stifel, Nicolaus & Company, Incorporated, Research Division - MD & Senior Analyst

Yes. Now I understand you there. Okay. And then if I could just ask a second one. Are you able to share bookings growth numbers for overall 2019 versus 2018 if you just look at the 2 segment of the business? Just trying to put the guide in the context of what you're expecting when you look at new orders entering the new year for BSI and BEST separately.



Miroslava Atanasova Minkova - Bruker Corporation - Director of IR & Corporate Development

So we gave you the bookings number for BSI, which was mid-single digits for the full year 2019, low single digit in the fourth quarter. Bookings for Best were up strongly for the year. BEST added about \$700 million or north of that to bookings into their backlog, and that is a function of new long-term agreements that were signed with primarily 3 major MRI customers. So that's -- the bookings number, you will see -- the backlog number that you will see in the 10-K disclosure when that comes out will reflect a big increase in the BEST bookings number that happened in 2019.

Daniel Anthony Arias - Stifel, Nicolaus & Company, Incorporated, Research Division - MD & Senior Analyst

Okay.

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

And qualitatively and that's not going to be a surprise is that the general -- the industry markets applied in industrial, in particular, are weaker in 2019 than in 2018, whereas most of our Project Accelerate initiatives are seeing above corporate average growth.

Operator

Our next question comes from Tycho Peterson from JPMorgan.

Tycho W. Peterson - JP Morgan Chase & Co, Research Division - Senior Analyst

Frank, I want to follow up on that last question. Much of the narrative around the company has been about accelerating growth, now you're kind of guiding 4% to 5% and not including corona. Coming off a quarter where you had low single-digit growth in BSI bookings, as you just talked about, how do we get comfortable that bookings are going to pick up over the course of the year to get you to that midpoint of guidance?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

We are thinking that our bookings trends and backlog in our -- provide a reasonable basis and as well as our pipeline provide a reasonable basis for the guidance that we have given. The organic growth guidance happens to be exactly the same organic growth guidance with which we started the year 2019. We did well in 2019. Yes, we see some additional headwinds, and we cannot estimate the coronavirus impact and whether that -- especially on the full year and whether we as an instruments company can substantially catch up from undoubtedly a weak start in China in Q1. So I hope that addressed most of the elements of your question.

Tycho W. Peterson - JP Morgan Chase & Co, Research Division - Senior Analyst

And then a follow-up on margins. I guess the comfort level in the 70, 90 basis points of margin expansion coming off a quarter where you didn't have margin expansion on an 8.4% top line, how much of the recovery in margins, in your view, is that recovery in industrial and semi in the back half of the year versus -- are there operational steps you can highlight that you're taking to maybe drive some of the margin expansion?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

Oh, yes, it's very broad-based. It doesn't include really any accretion or assumed accretion from -- at least nothing meaningful from acquisitions or from currency. So it's really focused on a broad-based operational improvements from volume, from cost containment, from cost actions. All the levers that we tend to pull and making sure we, once again, deliver hopefully within our guidance of 79 to 100 bps of margin improvement. That's what we tend to solve for -- Tycho, as we've said many times, we deliver -- we hope to deliver and plan on delivering that type of margin expansion and -- if and when we can, then we also continue to invest in our priorities, which are often, of course, Project Accelerate related.

We are pretty confident that the slight weakness in margins in Q4 is not a new trend or something like that. And of course, overall, our gross margin and operating margin improvement last year was solid, although a little bit better on the gross margin and on the operating margin side because we, both with the new acquisitions and Project Accelerate initiatives, had -- have had made deliberate choices to invest forward for profitable growth in those areas.

Gerald N. Herman - Bruker Corporation - CFO, VP & Corporate Controller

And I would just add that there's clearly some benefit on the mix side relative to our operating margin expansion as we continue to deliver well, as you already heard, relative to Project Accelerate initiatives that pulls that overall margin performance up. The fourth quarter, as we've mentioned a number of times already, was really a drag down from our nano, semi and industrial research market performance. So I think that's not, as Frank said, a trend. And our expectation is that we'll move back to our continued operating margin expansion at this 70 to 90 basis point level.

Tycho W. Peterson - JP Morgan Chase & Co, Research Division - Senior Analyst

And then just one last one. Gerald, are you able to do the buyback if you're assessing a whistleblower complaint? Or is that -- should we assume that's on hold for the time being?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

We certainly continue to be in a blackout period until we report final results.

Operator

Our next question comes from Steve Willoughby from Cleveland Research.

Joshua Paul Waldman - Cleveland Research Company - Research Associate

It's Josh on for Steve. Just a couple of quick ones for you. One, I wonder, did outlook in semi soften versus what you were previously assuming? And then two, just wonder if you could provide kind of how you're thinking about the contribution from the timsTOF system going into 2020? For example, you've said 100 systems in sold like today. I wonder, do you think the kind of an annual run rate in 2020 could be 100 systems plus?

Frank H. Laukien - Bruker Corporation - Chairman, CEO & President

So semi, we had predicted that Q4 would be weak. And it had a little bit more of a margin impact than we -- that we had anticipated. We're predicting that semi will be very weak in Q1 of 2020. Some of that indeed does already have to do with the shift of some deliveries to Wuhan that we've had planned for Q1 and are assuming will not happen in Q1, but we're planning them for Q2 within -- with some visibility for midyear recovery, and then hopefully longer-term recovery as that whole sector seems to be recovering.

Josh, to your second question, timsTOF Pro. Yes. So the greater than 100 units was over -- essentially over a 2-year period, right, and with the majority of them being delivered and sold in '19 however. And we have -- we expect -- I'll just say we expect continued double-digit growth in our proteomics business in 2020 and beyond.

Operator

And our next question is a follow-up from Derik De Bruin from Bank of America.



Derik De Bruin - *BofA Merrill Lynch, Research Division - MD of Equity Research*

Sorry. Gerald, just a couple of quick housekeeping questions. FX impact for the top line in 2020 and residual acquisitions in 2020.

Gerald N. Herman - *Bruker Corporation - CFO, VP & Corporate Controller*

Marginal impact, actually baked into 2020. We don't expect to see any significant change there.

Frank H. Laukien - *Bruker Corporation - Chairman, CEO & President*

Both very small.

Gerald N. Herman - *Bruker Corporation - CFO, VP & Corporate Controller*

Yes.

Derik De Bruin - *BofA Merrill Lynch, Research Division - MD of Equity Research*

Both of those -- both small?

Gerald N. Herman - *Bruker Corporation - CFO, VP & Corporate Controller*

Yes.

Operator

And ladies and gentlemen, at this time, I'm showing no additional questions. I'd like to turn the conference call back over to management for any closing remarks.

Miroslava Atanassova Minkova - *Bruker Corporation - Director of IR & Corporate Development*

Thank you for joining us on a short notice today to discuss Bruker's preliminary fourth quarter and fiscal year 2019 operating results. We look forward to updating you on our complete financial results for the fourth quarter and fiscal year. Thank you and have a nice day.

Operator

Ladies and gentlemen, that does conclude today's conference call. We thank you for joining today's presentation. You may now disconnect your lines.



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