## Nanosonics

Ms Tenneti: Our next speaker is Michael Kavanagh. CEO and President of Nanosonics. Thank you.

Mr Kavanagh: Thank you very much and a very good morning, ladies and gentlemen and thank you for the opportunity to introduce you to Nanosonics. Some of you may have and some of you, many of you, may not have heard of Nanosonics, which actually is Australia's fastest growing healthcare technology organisation. So as identified here on the slide and hopefully this pack of slides will be made available, there's more information in the deck that I plan to present this morning, but Nanosonics is an ASX 200 listed company and it's specialised in the area of infection prevention, so a healthcare technology organisation specialising in the area of infection prevention. The first product that we have out in the marketplace commercialised at the moment is a product called the trophon technology and this trophon technology is specifically designed for the reprocessing and decontamination of ultrasound transducers, which for many may seem and sound like quite a niche area, but hopefully I'll demonstrate it's actually quite a large opportunity for us.

Being a healthcare technology company, we're highly regulated, which means all our technologies have to pass with the regulatory authorities, like the FDA and getting CE mark, et cetera. We do have approval for sale in pretty much all the major markets, including the US, Canada, New Zealand, across Europe with CE marking, in Singapore, also in Japan and those ranges are actually increasing. We've got about 250 staff, but growing quite strongly in staff as the organisation is growing. Those staff, majority here in Australia where all our corporate functions and all our R&D and manufacturing takes place, but we do have direct operations out in a number of markets around the world, particularly in the United States and across Europe.

Our business model, from a distribution and sales perspective, is very, very similar to most medical technology companies, either we sell direct through our own operations or we have strong distributor partners, such as GE Healthcare, Philips and Siemens. So very big and well-known brands. But very, very importantly for the business as well, we've got a very active R&D program, because we're an infection prevention company, not a single product company and our aim is to introduce a range of new products to market over the coming years. So some of the key corporate data, a share price at \$4.53 as of last Friday, which gives us a market capitalisation of almost \$1.4 billion with pretty strong liquidity. As you can see from a shareholder return perspective, we've delivered pretty positive shareholder returns over the last four years or so.

So I did mention some may think that the technology for ultrasound decontamination is quite a niche area, but when you think of ultrasound, it's probably one of the fastest growing diagnostic medical interventions and modalities that's used for lots and lots of procedures. Without a doubt it's very, very well documented that these ultrasound transducers, as you can imagine if they're used intracavity, like transvaginally, transrectally or surface transducers as well that can be used for taking biopsies or scanning wounds or in emergency care, et cetera, if they come into contact with any sort of bodily fluid, the you would like to think that they are actually decontaminated between patient usage. So there is no lack of evidence with respect to the fact that the ultrasound transducers do harbour clinical relevant pathogens that then put patients at risk of cross-contamination.

Traditionally, the mechanism of decontaminating these transducers had not changed for many, many years, decades in some cases, where it was either spraying, but the reality of it is, there is no spray out there that is a high level disinfectant or, in America, the largest single market, the traditional mechanism had been just soaking the transducers in a toxic chemistry called glutaraldehyde, which is a carcinogen, which meant it had to be done in a separate room, dispose of toxic chemistry, put people at risk of possible exposure to toxic chemistry, et cetera. There's actually an image on a door going in where people used to have to decontaminate, warning people of the dangers. What we've done is we've introduced a fully automated device that takes care of the decontamination within seven minutes, so it's totally safe in terms of it is highly bactericidal, fungicidal, virucidal; it's very safe for the user in that there's no exposure to any chemistries and very importantly, it's safe for the environment as well. There's no disposal of any toxic chemistries, in fact the only by-product of our technology is oxygen and water.

It's also very versatile in that it can be used at point of care where the patient is, no need for any extra rooms or anything like that for it and very importantly, very, very simple to use, it really is a press of a button. This is an image of our latest generation which we just launched about five months ago called the trophon 2 and to give you an idea of the footprint of the device, imagine your microwave oven at home put on its side, that would give you an idea as to the size of the actual device. Really what you have here with these two things is that the capital equipment, so that's the device that the transducer is decontaminated in and then the consumables that are used with the device and really the investment thesis is one of an annuity stream of revenue that comes from the ongoing use of the device and the consumables. So really it is the consumables that are the jewel in the crown. Got a strong patent portfolio that goes out and one of the most common questions I always get is can somebody else put their Nespresso pod into our machine and the simple answer is no, we're covered both from a regulatory perspective but also legally through patents covering all of that.

This latest device that we have, the trophon 2, there's one thing I'd point out and it's just this smart traceability because one of the things that is becoming more and more important within the hospital systems is being able to demonstrate, in case something

happens, being able to go back and demonstrate that devices had been decontaminated appropriately. With this technology compared to manual processes, a hospital would be able to understand what probe has been decontaminated in what department on what day, at what time, by who, using what batch of chemistry, all automated in the device through RFID technology. There's another source of revenue besides just selling of the capital equipment and the selling of consumables and that is as the actual devices age and there's an upgrade opportunity with respect to the devices and currently this graph here just shows you the age distribution of the current installed base. About 20% of them are over five years of age, so over the coming years we see an extra revenue source coming from upgrades and replacements.

I'll skip through here and really demonstrate to you that there's a large global market opportunity just for this technology and overall, about 120,000 global opportunities for the trophon device. You'll see here what the installed base and how the installed base is growing and in actual fact, the installed base is probably the most important metric to look at when you're assessing this organisation, because if the installed base grows, well then you've got the annuity stream of revenue that comes from that installed base. So that's where we're at, at the end of December just sold nearly 19,500 units out in the marketplace. What that means is on any single day, just today alone, probably over 65,000 patients will have been prevented from the risk of cross-contamination because their ultrasound transducer has actually been decontaminated using a trophon device.

But we're very proud of the performance of the device and particularly in the largest market in the world. As a small Australian company, we've really taken the United States by storm and we're already at about 43% market penetration in the United States and there's not a single luminary hospital, be it Mount Sinai, Cleveland Clinic, Johns Hopkins, Mayo Clinic, you name it, they are all using the trophon. So we're actually in about 4000 hospitals now in the United States, either in one or more departments with a goal to go deep within those hospitals into all relevant departments of which there are many for the adoption. So a very, very strong growth, as you can see in the installed base in the United States and we're really now just starting in Europe.

We've expanded now over into Europe. What's important in those markets is the fundamentals for adoption of this technology are now strengthening in that there's more guidelines coming out mandating the requirement for high level disinfection. The largest market for us currently in Europe is in the UK where we've got a direct operation, but now Germany is coming online, we've put a direction operation there. Just two weeks ago, the Ministry of Health have come out in France requiring high level disinfection of transducers. So Europe is just starting and we expect to see strong growth.

In Asia Pacific, again, just very much starting, albeit the largest market for us in Asia Pacific is here in Australia where we're about 70% market penetrated and there's no

reason for us to believe that if we can get 70% market penetration in Australia, that we can't get that in other markets. So Australia quite highly penetrated. A large focus for us in Asia Pacific is Japan, but probably counterintuitively for a lot of people. In Japan there is not a requirement today for these transducers to be high level disinfected, but we've just completed a study over there in Japan to demonstrate about 90% of the probes are actually contaminated and 50% of that contamination is with clinically relevant pathogens, in other words, pathogens that can cause disease. So we've got strong business development activities happening in a number of markets around the world.

As I mentioned, it all comes down to whether or not the fundamentals for adoption of the technology are strong and what's happening in our case is they're either strong and strengthening or they're weak and strengthening and weak meaning that the guidelines are not there, strengthening meaning the guidelines are now being released. Over the last year we've seen more and more guidelines internationally coming out requiring high level disinfection of these transducers and as I said, up until just recently where we've had it in France through the Ministry of Health. With that, with the global opportunity, what we've done is we've expanded our global footprint now as a business. As an Australian healthcare technology company, it is all about being a global organisation and we now have a presence in over 20 countries, either direct or through distribution, some in sales mode, some in business development mode, but with the expectation all in sales mode in the not-too-distant future.

Very, very quickly on the financials, when you are reviewing the financials and there is a lot of detail in the deck that is available for you, it is important to take into consideration that there are a number of sales models. It's either we're selling through a direct channel that is our own salesforce selling, or we're selling through distribution. Even in the direct channel there are a number of sales models. The traditional one is where we actually sell the capital equipment and then sell the consumables, but there are other markets where it's quite difficult to gain access to capital budgets, for example in the United Kingdom, gaining capital budgets through the NHS is very difficult, so we've got a very, very different model there where we'll actually place a machine, fully maintained machine, in the hospital where we'll retain ownership of it and depreciate that ourselves. But then we charge an all-inclusive price for the consumables, about double and on a five-year MPV, it's far more positive for us doing that. Then there are some rentals, but not as large.

On the distribution side of things, it's either a full service distribution where we have a distributor that's doing everything, selling the capital, selling the consumables, conducting service for us, or it's just a capital reseller where we just have the distributor selling the capital, but we manage all the consumable sales and the service for the customer, et cetera. We've got agreements like that, for example, with companies like

Philips and Siemens and Samsung et cetera in the United States, where they would like access to the technology to bundle when they're selling an ultrasound machine.

So when you're looking at the revenue, you need to look at the revenue in the context of those different sales modes. But in our financials we do split out the revenue in the context of revenue coming from capital versus revenue coming from consumables. What you see here is in the last half we saw very good results. The total revenue up 36% on prior corresponding period and 33% on the last half. You will notice that there was a dip in sales here, nothing of concern, it is explained when you go through it. That actually had to do with the early approval of our second generation device where the FDA approved the device early, but we weren't ready to launch it and there was a period of about five months before we were ready to actually launch it. So people held off for it, distributors destocked inventory, et cetera but as you can clearly see, the sales are back on track.

From a P&L perspective, we're working at about 75% gross margins. From an opex and we do expense all our R&D, it's not capitalised, probably guidance that we've given the market this year, opex of about \$50 million, we're still very much in investment mode, but that being said, we are positive free cash flow and we do have a very strong cash balance which enables us to continue to invest for future growth globally. Really, if we break down our growth strategy, it comes under three pillars really. It's one of now that we've got this large geographical expansion and footprint, it's establishing the trophon technology as standard of care which we've done here in Australia, we're doing in the United States, there's no reason why we can't do it in all the markets as those fundamentals strengthen. But continue on our geographic expansion, we're now looking into the Chinese market. As I say, we've got now a presence in Japan where we've got regulatory approval.

But very, very important, product expansion. As I said at the very beginning, we're an infection prevention company and with infection prevention, you're not a global leader in infection prevention based on one product, so our intention is to bring a range of products to market. To that end, this year we'll invest probably about \$12 million in R&D. Our R&D is headed up by Dr Steven Farrugia and Steven may be known to some of you who are investors in ResMed as Steven was an executive at ResMed for over 20 years heading up their technology developments and product developments and he joined Nanosonics about two years ago. People are very important because if you've got a great technology, strong fundamentals for adoption, it's important you've got the right people in the business to be able to leverage both of those. We've got a very, very strong board, very, very experienced board with members on the boards of the likes of CSL, Origin Energy, et cetera and our Non-Executive Chairman, Maurie Stang, is actually founder of the company and still very involved and passionate about the business.

From the executive leadership perspective, personally I was on the executive of Cochlear for 12 years, headed up all their global marketing operations for that business, but we got it's all about really ResMed, ResMed, international experience in the United States, Cochlear, Coopers Lybrand, Abbott, et cetera and just very, very recently, we've added three more additions to the leadership team in the case of our Chief Marketing Officer, Renee Salaberry, who is internationally experienced, working for some of the leading agencies in the world like Leo Burnett, the third largest agency in the world; David Morris, who was the chief strategy officer for Cochlear, I worked very closely with David for many, many years; and Rod Lopez, who has joined as our Chief Operating Officer and Rod actually headed up manufacturing and logistics globally for Cochlear as well for many, many years. So a very experienced, internationally experienced team running the company.

In terms of outlook for the business, really it comes down to continuing growth of our trophon franchise around the world, continuing to expand into new markets, bringing new products to market and we expect the first of our new products, non-trophon related, to be introduced into market before the end of FY20 subject to regulatory approvals. As I say, we still are very much, whilst we're positive free cash flow and generate cash, it's still very much in investment mode and as demonstrated, we've got a strong balance sheet to continue to invest in the organisation as we expand the organisation globally. Thank you, I'll stop there for any questions.

Ms Tenneti: Thanks Michael. Just one quick question.

*Question:* Yes, a very interesting presentation, but can you expand a little bit on your patent protection?

Mr Kavanagh: Sure. There's about 14 families of patents covering the technology that go out between 2025, 2030. The one that is of most interest to people actually is around that consumables, because a lot of the investment thesis is about the annuity stream that comes from the consumables. We've got patents out there to 2029 and with the introduction of new technologies, et cetera, we intend to add more patents there. But the protection on the consumables is important to understand because it's not just protection from a patent perspective. What's regulatory approved and I mentioned earlier we have to go through the likes of the FDA and get CE marked through TUV, et cetera and in all the regulatory jurisdictions around the world, what's regulatory approved is the actual system, it's not the technology, just the capital equipment, it's the technology and the consumable together. So that's what is approved as the high level disinfectant. If somebody came with another consumable for use in our machine, they'd have to get it registered for use with our machine and have it registered as a high level disinfectant. We're highly unlikely to enable somebody to do that and quite frankly it would void any warranties that we have on the machine.

The other part of it is that we have worked with all the ultrasound companies, so all the major ultrasound companies around the world and continue to do so, where we now have over 1000 probes, intracavity and surface probes, validated for use with our system and when I say validated, that means we get those probes from them, we put them through thousands of cycles in the technology to make sure there's no deleterious effects on their probes. If another consumable came in to try to be used, they would have to start there, to validate all the probes, because it's the companies, the ultrasound companies have to approve this technology for use with their technology. That's years of effort, that's literally years of effort. So we've got really three prongs: there's the patents, there's the regulatory and there's the compatibility.

Ms Tenneti: Thank you, I'm afraid we'll have to leave it there. Thanks very much, Michael.

Mr Kavanagh: Okay, thank you very much.