

## Q&A Session at the Mid- to Long-term Growth Strategy Briefing

Outlined below are the principal Q&As from the Mid- to Long-term Growth Strategy briefing held on December 12, 2016. Certain details have been expanded or modified to provide readers with a deeper understanding of Terumo Corporation's performance and activities.

### 1. Corporate strategy

Q: The new Mid- to Long-term Growth Strategy appears to be based on the track record Terumo has built thus far and gives me the impression that the content is sensible and feasible. What has been the source of Terumo's competitive strength in recent years that enabled you to build this track record?

A: We have discovered, redefined and expanded what we refer to as "Must Have" proprietary products. In other words, those Terumo products that are absolutely necessary to the patients and medical professionals. This has been the source of our competitive strength. The content of our new growth strategy continues to focus on maximizing the source of our competitive strength and is comprised of highly tangible and feasible strategies.

Q: Management targets include sales growth in the high single digit and double-digit growth in profit margin. Do you expect this level of growth on an annual basis?

A: This is our CAGR for the five-year period for the Mid- to Long-term Growth Strategy. Achieving consistent stable annual growth is the responsibility of management. We plan to disclose annual targets and specific measures for reaching these targets in our annual guidance.

Q: What potential risks do you see as obstacles to achieving the goals you have set?

A: One concern is deterioration in the macroeconomic performance in the markets we operate in. The healthcare market is susceptible to impact from fiscal deterioration given the high reliance on government systems, including health insurance.

Q: What is your assessment of the acquisitions made thus far?

A: The acquisition deals carried out thus far are contributing to the strengthening of our business portfolio and to the growth of the Terumo Group. Recently acquired businesses and products in particular lay the groundwork for future growth.

## 2. Cardiac and Vascular Company

Q: What is your market growth forecast?

A: We forecast a market growth rate for interventional systems of around 5% and slightly lower for other products, including surgical products. In the Cardiac and Vascular Company, we estimate higher-than-market sales growth in the double digits. We expect a sales recovery in the CV business, supported by the lifting of shipping restrictions at TCVS, coupled with solid performance in the Terumo Interventional Systems business (TIS), Neurovascular and Vascular Graft businesses.

Q: You said you expect to see an expansion of adjacent segments emerging from the vascular intervention and surgical businesses. Do you view these markets as growth opportunities for Terumo?

A: Our lineup includes both vascular intervention therapy products and cardiovascular surgery products. We believe it is possible to enter adjacent markets by utilizing the business infrastructures for both these products.

Q: It seems that your profit margin goal is slightly low?

A: In the Cardiac and Vascular Company, the Terumo Interventional Systems business in particular provided impetus to sales and profit growth as we focused on improving profitability at other Companies and businesses. In light of this, investments needed to sustain growth in this particular company were slightly weak. Therefore, we would like to steadily invest to realize sustainable growth with a 10-year perspective under this growth strategy. Furthermore, the goals we set factor in a number of possibilities, including changes in the market environment and acquisitions. In light of this, we believe our profit margin target is reasonable.

Q: In your vision, the Company aims to rank in the Top 3 for each market where you participate. What markets do you aim to be Top 3 in?

A: Hospital purchasing standards do not simply focus on product performance and quality. There is also a heavy emphasis on market share and reliability. Hospitals are narrowing down these suppliers to around 3 companies. Consequently, it is important that we are recognized as being in the Top 3 of each product category. We will strive to maintain the No. 1 position globally in access devices and to rank among the Top 3 in fields such as Neurovascular and CV products.

Q: In the growth driver slide in the presentation materials, the growth rate for access devices is the lowest among your subsegments. Can you explain this?

A: Access device sales have been growing rapidly thus far. We already possess a high share of the global market. In light of this, our growth rate will naturally taper and be on a par with the growth rate for the overall market. Meanwhile, in the CV business, we estimate sales growth is likely to outperform the market reflecting a recovery in sales at TCVS owing to the lifting of shipping restrictions.

Q: The Company is expanding a product lineup for the peripheral intervention devices aiming for offering a full lineup of products. What do you think will drive growth? When do you expect growth to accelerate?

A: In the US, in addition to the resumption of Misago stent sales and the introduction of therapeutic devices with a high market presence, including drug-coated balloon catheter, we plan to differentiate from rivals by providing devices compatible with peripheral intervention via radial artery to accelerate growth.

Q: What elements do you potentially acquire?

A: In the neurovascular business, we mainly carried out internal development. We would like to acquire and introduce new technologies as the market expands into the field of ischemic stroke treatments. In addition, as a major step toward fortifying our business infrastructure, we are looking for potential M&A deals which are expected to contribute to enhance our sales and development capabilities, among other areas, to expand operations in the US.

Q: You have set your sights high for the drug eluting stents (DES) business in Europe and emerging economies. You plan to double your market share in these regions. How competitive do you expect Ultimaster Tansei to be? Also, when do you plan to launch this product?

A: We expect Ultimaster Tansei to contribute to sales. The Ultimaster Tansei is improved in its deliverability compared with the conventional Ultimaster, which is praised by the physicians. The launch of Ultimaster Tansei is not far off.

Q: Why did Abbott Laboratories sell its Angio-Seal? The product had a leading market share.

A: We cannot comment on this. The decision was made by Abbott. What is important is that Terumo adequately increases sales and profits after acquiring the product. We aim to maximize the value of the Angio-Seal by expanding sales in the high-growth peripheral and neurovascular markets, in addition to the coronary market.

Q: What is the profit margin on the vascular closure devices you acquired?

A: We have not closed this deal so this business is not officially ours. We plan to carefully examine this business after the acquisition is completed and disclose any pertinent information.

### 3. General Hospital Company

Q: The sales growth target is set in the mid-single digits range. This seems slightly high?

A: In the Hospital Systems business, in the domains in which Terumo operates, we expect a high level of growth for our high value-added products. Similarly, we look for a higher level of growth in the B2B Alliance business with pharmaceutical companies. Taking all these factors into account, we believe sales growth in the mid-single digits is attainable.

Q: Are you considering acquiring approval of manufacturing and sales for devices that are already filled by Terumo with pharmaceuticals?

A: We are currently not considering acquiring approval of this nature. The added value Terumo offers pharmaceutical companies stems from our capabilities to develop and manufacture devices that suit the unique properties of a pharmaceutical and from our advanced filling technologies.

Q: What is your outlook for overseas expansion at the D&D business?

A: Our goal thus far was to promote the use of PLAJEX (ready-to-fill plastic syringes) mainly for new drugs. However, this is taking more time than expected. Going forward, we plan to further expand our prepackaged business, including needles, which is an area we have already had success in overseas. On top of this, we plan to promote further use of PLAJEX, including its use with generics.

Q: Given the already weak market environment, in the event of further deterioration, is there any possibility you will transform its business portfolio in Japan?

A: We have been reviewing and transforming our portfolio in Japan. We sold the home oxygen division and transferred sales of contrast agents. We also implemented cost reduction measures. Thanks to these measures, profitability improvement is in sight. Going forward, we might transform our portfolio when necessary. However, we will focus on further improving our overall profit margin in the Company through growth of highly profitable key areas, including the B2B business.

### 4. Blood Management Company

Q: In the second half of FY2015, contract prices declined for products delivered to US blood centers. Is there a risk of the same thing happening in other regions?

A: The downward pressure on selling prices has been weakened. However, in developed countries outside of Japan, the number of blood transfusions per thousand population is still relatively high so we cannot rule out the risk of a price decline in tandem with a reduction in blood transfusions. Meanwhile, the number of blood transfusions conducted in emerging countries, including India, is expected to increase further out. We believe this should partially offset the reduction in developed countries.

Q: I understand a large-scale clinical trial for Mirasol (pathogen reduction technology system) is underway in Europe. Do you expect an increase in sales in Europe and Africa going forward?

A: The results of a clinical trial in Ghana have provided tailwinds for expanded usage. Trial results demonstrated a reduction in the incidence of transfusion-transmitted infection of malaria in whole blood. We believe a large-scale clinical trial in the US will be necessary to promote full-fledged use and accelerate expansion of the product. In the US, we plan to conduct a large-scale clinical trial on platelets and also on whole blood.

Q: What level of profit margin recovery do you estimate at the Blood Management Company? Is there risk of impairment losses?

A: Although we posted a temporary drop, we look for our operating margin before goodwill amortization and other intangibles, to recover to nearly 20%. As for impairment losses, we perform an impairment test each year. At this stage, we believe there is no risk of impairment loss. However, given our global operations, one issue is the high level of sensitivity to fluctuations in foreign exchange rates. Going forward, we believe that certain measures may become necessary.

## 5. Corporate R&D

Q: In the new growth strategy, there are three major themes for activities—chronic heart failure, cardiogenic cerebral infraction, and regenerative medicine. The market scale for each of these fields is large, and competition is likely to heat up given other companies are planning to enter these markets. Which of these three themes is most promising?

A: There are major issues in the cardiorenal syndrome market. Despite the imminent risks, we still plan to tackle this market. Meanwhile, we believe Terumo's technological expertise of regenerative medicine will be useful in the fields of chronic heart failure and cardiogenic cerebral infraction. There is no standard treatment for chronic heart failure and cardiogenic cerebral infraction. There is no single device that will provide an overall solution. We plan a multi-faceted approach that meets the needs of the patient.

Q: You plan to increase the number of engineers by 40%. How does this compare with the most recent five years? In what field in specific do you plan to increase the number of engineers?

A: In our previous mid-term management plan, there were development themes we did not get to, mainly in the interventional systems business. In light of this, the increase in the number of development staff will be concentrated in the interventional systems business.

Q: You estimate a double-digit increase in R&D expenses in the next five years. What ratio of R&D expenses to sales do you estimate?

A: At present, this ratio is at the 6% level. Under our new growth strategies, we estimate this ratio will rise to the 7% level.

Q: The development of medical device entails a number of processes from materials R&D to structural design. What processes do you plan to handle internally?

A: Materials R&D is critical to creating innovations. We are collaborating with materials manufacturers in order to develop innovative medical devices.

Q: Are you seeing benefits from your venture capital fund investment and participation in the incubation program?

A: It has only been around 3 years since we started this. We will continue to make efforts to achieve results in the future.

Q: Japanese have difficulty getting accustomed to the open innovation method. How are the engineers at Terumo engaging in open innovation?

A: Our engineers have always been quick on their feet and fast to pick up on the needs of the patients and medical professionals. We are accustomed to open innovation, as this is part of our corporate culture. We will strengthen these activities and also consider setting up facilities in the future.