2016 ANNUAL REPORT

WE CREATE OPPORTUNITIES

For learners: Education courses; ITI Academy; Straumann 'Smart' education concept; corporate forums at key events; ITI Study Clubs • **For specialists:** Peer-to-Peer Program events • **For general practitioners:** Education partnerships; Straumann intra-oral scanner; chairside milling • **For dental labs:** Straumann Variobase abutments; Straumann premilled abutments; Straumann Motion2 in-lab milling machines; Straumann nIce glass ceramic; extended connectivity to Straumann CARES digital workflow; cost-effective abutments for all leading implant systems through etkon iDent and Medentika; distribution agreement with Zirkonzahn & Planmeca • **For compromised patients:** Roxolid small diameter and short implants; research in diabetes • **For the disadvantaged:** Charitable dental care programs in underdeveloped countries; Straumann AID; dental scholarships in Cambodia and Nicaragua • **For young professionals:** Straumann-botiss Young Pro Award; Young Professionals Program • **For women in dentistry:** workshops; mentoring • **For employees:** new jobs created; International Talent Program; apprentice program; training programs; Straumann Academy; global pulse perception study • **For investors:** total shareholder return of 32% in 2016; dividend raised to CHF 4.25 • **For inventors:** 100 ideas through our innovation portal • **For research:** 77 publications on studies in peer-reviewed journals • **For patients in general:** more than 1.5 million patients treated; new smiles with restored confidence • **For edentulous patients:** Strauman Novaloc retention system; Straumann Pro Arch • **For impatient patients:** Smile-in-a-box solution; shorter time to teeth with SLActive tapered implants for accelerated loading • **For patients wanting metal free solutions:** Straumann PURE ceramic monotype implants (and ceramic prosthetics) • **For tomorrow's patients:** A stocked innovation pipeline • **For cost conscious patients:** A broad range of attractively priced solutions with Neodent, Medentika and other Straumann Group brands • **For bone & tissue regeneration:** botiss and Straumann biomaterials; Emdogain for wound healing • **For cultural change:** Cultural Journey project; 29 I-WE workshops • **For entrepreneurs**: Investment in V2R Biomedical • **For customers in emerging markets:** Acquisition of Equinox in India; entry into the Chinese non-premium segment with Anthogyr; subsidiaries in Russia and Argentina • **For you** to read more about us...

straumanngroup

ABOUT STRAUMANN

The Straumann Group (SIX: STMN) is a global leader in tooth replacement solutions that restore smiles and confidence. It unites global and international brands that stand for excellence, innovation and quality in tooth replacement and esthetics, including Straumann, Instradent, Neodent, and Medentika, etkon and other fully or partly owned companies and partners.
In collaboration with leading clinics, institutes and universities, the Group researches, develops, manufactures and supplies dental implants, instruments, CADCAM prosthetics, biomaterials and digital solutions for use in tooth replacement and restoration or to prevent tooth loss.
Headquartered in Basel, Switzerland, the Group employs approximately 3 800 people worldwide and its products, solutions and services are available in more than 100 countries through a broad network of distribution subsidiaries and partners.

WE CREATE OPPORTUNITIES

‘Create opportunities’ is one of eight core behaviours that we believe will drive and sustain our success. It is fundamental to innovation, entrepreneurism and sustainability and we chose to emphasize it in 2016.
Opportunities create value and annual reports focus on value creation. This report highlights some of the countless opportunities our company and employees created in 2016, adding value for our stakeholders around the world today and tomorrow.

2016 ANNUAL REPORT

WE CREATE OPPORTUNITIES FOR

CONTENTS

Throughout this Report, pages references preceded by a capital 'F' refer to our detailed Financial Report, which is published as a separate volume.

We create opportunities for online users
annualreport.straumann.com

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STUDENTS
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GENERAL DENTISTS
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EMPLOYEES
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Performance highlights 2016
At a glance

KEY FIGURES
(in CHF million)

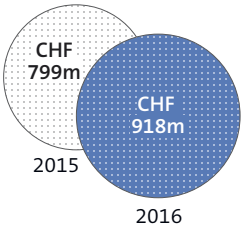
More on p. 64 ff.

	2016	2015	Change (%)
Revenue	918	799	15
Gross profit	719	615	17
Operating profit (EBIT)	227	173	32
excl. exceptionals	227	186	22
Net profit	230	72	221
excl. exceptionals	187	145	29
Cash generated from operating activities	185	186	(0)
Capital expenditure	46	35	33
Free cash flow	139	151	(8)
Basic EPS (in CHF)	14.68	4.52	225
excl. exceptionals	11.94	9.19	30
Employees (at year end)	3 797	3 471	9

REVENUE GROWTH (ORGANIC)

+13%

TOTAL REVENUE



EBIT MARGIN

25%

Up 150 base points

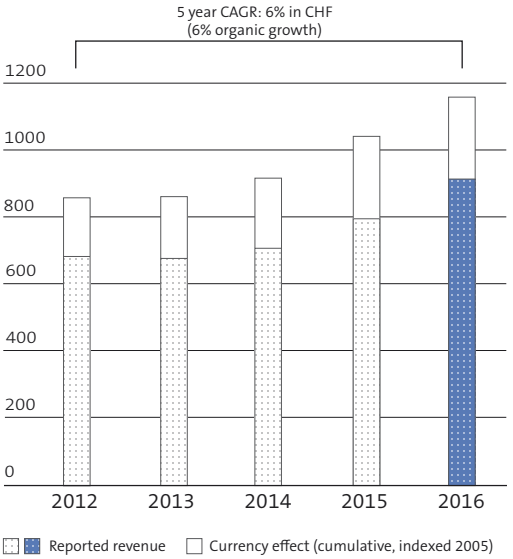
NET PROFIT MARGIN (EXCL. EXCEPTIONALS)

20%

Up 230 base points

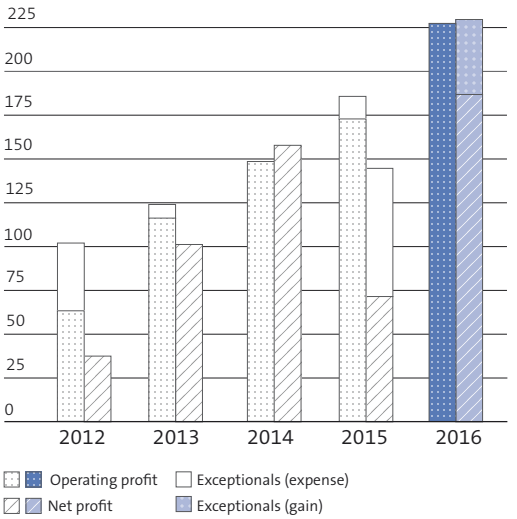
REVENUE
(in CHF million)

More on p. 64 ff.

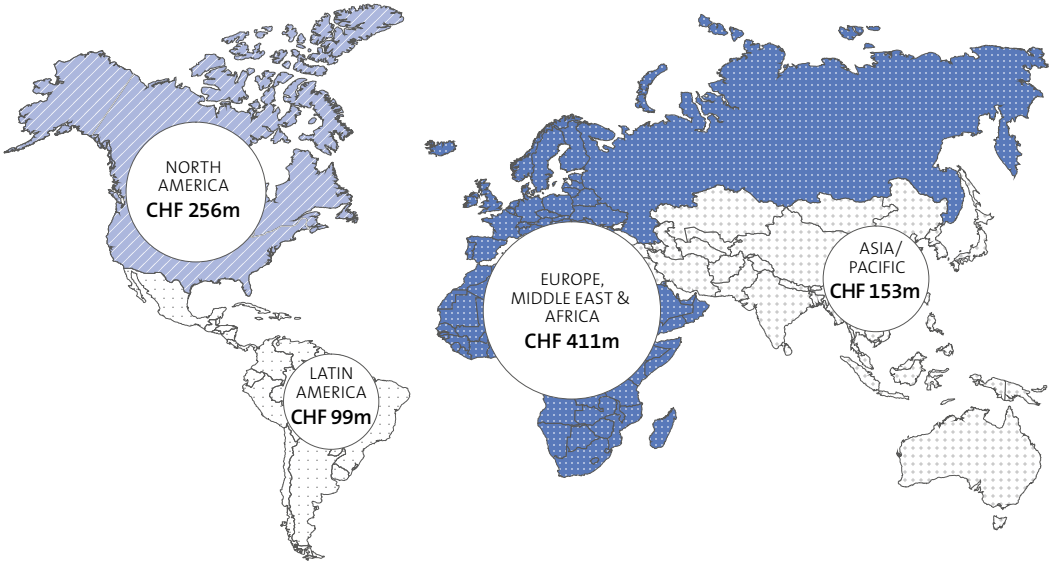


OPERATING AND NET PROFIT
(in CHF million)

More on p. 64 ff.



REVENUE BY REGION

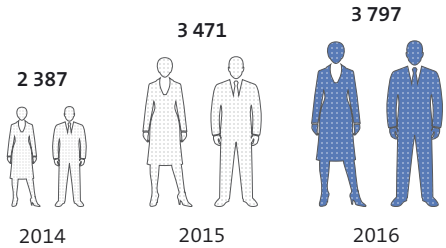


ORGANIC GROWTH BY REGION

More on p. 64 ff.

NORTH AMERICA	LATIN AMERICA	EMEA	ASIA/PACIFIC
+16%	+15%	+9%	+20%

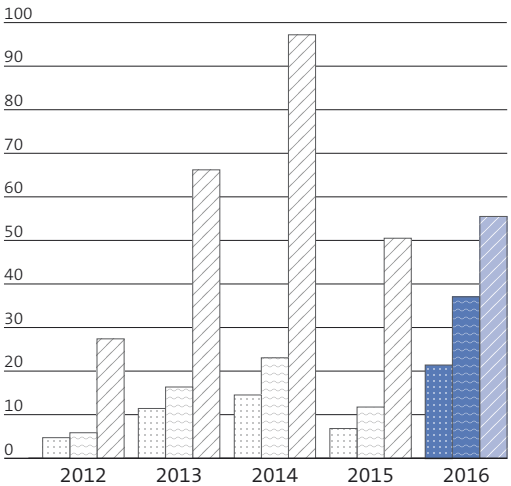
EMPLOYEES



+326

Employees

PROFITABILITY
(in CHF million)

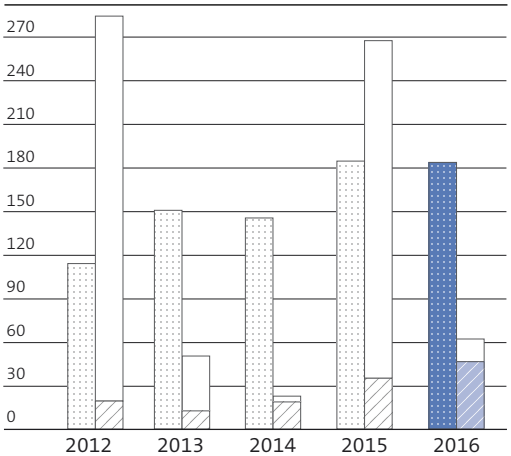


Return on assets (ROA)
Return on equity (ROE)
Return on capital employed (ROCE)

EQUITY RATIO

58%

CASH FLOW AND INVESTMENTS
(in CHF million)



Operating cash flow
Acquisitions & participations
Capital expenditure

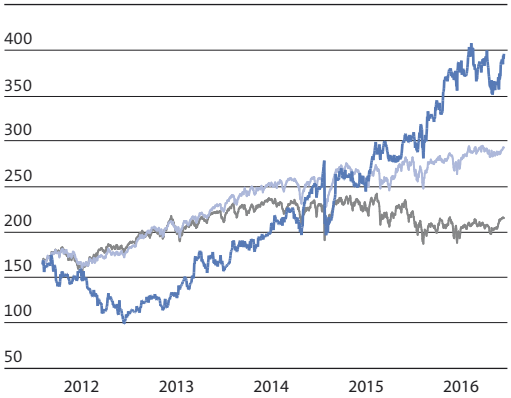
FREE CASH FLOW MARGIN

15%

SHARE PRICE DEVELOPMENT

More on p. 176 f.

(in CHF)



Straumann
Swiss Mid Cap index (SMIM) adjusted
STOXX® Europe 600 index (in CHF) adjusted

SHARE INFORMATION

More on p. 176 f.

(in CHF)	2016	2015
Earnings per share (EPS)[1]	11.94	9.19
Ordinary dividend per share	4.25[2]	4.00
Payout ratio	36%	44%
Share price at year end	397.50	305.00

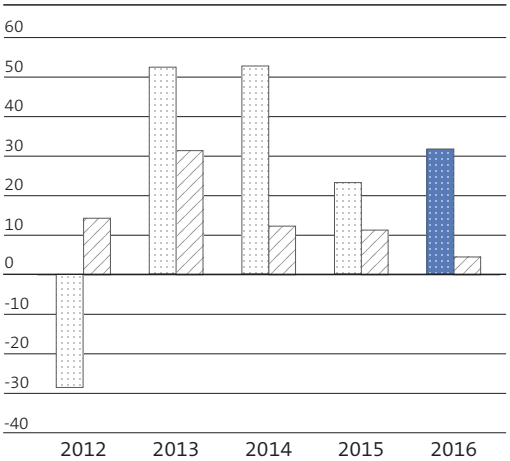
[1] Excluding exceptionals and one-time effects
[2] Payable in 2017 subject to shareholder approval

SHARE PRICE

+30%

TOTAL SHAREHOLDER RETURN

(in %)



Straumann SMIM Total Return Index

TOTAL SHAREHOLDER RETURN

32%

Letter to shareholders

Marco Gadola (Chief Executive Officer) and Gilbert Achermann (Chairman of the Board)

DEAR SHAREHOLDER,

2016 was another very good year for the Straumann Group as we achieved our strongest performance in eight years in terms of revenue growth, operating profit margin and market share gains. We strengthened our leading position in the premium segment and we moved up to rank among the world's top three implant companies in the non-premium segment. We entered new markets and segments, launched new products and solutions and created new jobs bringing our global team to approximately 3800 employees.

Most importantly we helped to create smiles for innumerable patients around the world, restoring their confidence, improving their quality of life and creating new opportunities for them. Based on the volumes of products sold, every 10 seconds someone somewhere in the world was treated with a Straumann Group product in 2016.

As this report illustrates, we also created opportunities for other stakeholders – from customers and employees to partners, communities and investors, not forgetting the opportunities we created for our own business.

BUSINESS AND FINANCIAL PERFORMANCE

GROWTH IN ALL DIRECTIONS

All of these activities translated into organic revenue growth of 13%. Including acquisitions and a slightly positive currency effect, Group revenue rose 15% in Swiss francs to CHF 918 million. This is remarkable in the context of the global market for tooth replacement, which has grown at 3–4% in the past two

years. With our organic growth accelerating from 9% in 2015 to 13% in 2016, we have left our competitors behind.

By region, North America (+16%[1]) was our largest growth contributor and Asia/Pacific our fastest (+20%[1]). We sold more implants in Latin America (+15%[1]) than anywhere else and we continued to grow solidly in Europe, Middle East and Africa (+9%[1]), which is our largest region by value.

Almost two thirds of our growth was generated by the implants business, where the main contributor was our Bone Level Tapered (BLT) range. Since its launch at the end of 2014, BLT has gained an estimated 4% share of the large conical implant segment and now accounts for a quarter of the Straumann implants we sell. At the same time, our attractively priced range of non-premium implants also grew strongly, capturing business from competitor brands and making the second largest contribution to our growth.

The other key drivers were our high-strength implant material Roxolid (see p. 33) and our SLActive implant surface technology, which reduces healing times (see p. 33). The main advantage of these features and BLT is that they significantly shorten tooth replacement time. They are now available in all major markets except China, where regulatory approvals are still pending.

2016 marked the 30th anniversary of our Tissue Level SLA implant, which has been described as 'our best employee' because it has worked more hours, achieved more sales and served more customers than any other. It commands great respect, is one of the best documented implants on the market and still catches the limelight in top scientific publications[2,3,4].

For the first time in several years, our restorative business returned to double-digit growth, reflecting our intense efforts over the past two years to become the partner of choice for dental labs. Sales of prosthetics – both standard and CADCAM customized – developed very positively. Our simple, cost-effective Variobase abutments, which can be restored in milling centers, labs and even dental practices, contributed to this, while our new intraoral scanner and in-lab milling solutions added to growth in digital solutions.

Variobase, BLT and Pro Arch are all young product ranges, which collectively contributed more than two thirds of our growth.

Our smallest business, biomaterials, was the fastest growing. Thanks to our successful collaborations with botiss and other partners, we are able to offer regenerative solutions in most markets and are well positioned in each category, with a full range of bone graft and soft tissue regeneration materials. One highlight in 2016 was the launch of Emdogain to enhance oral wound-healing, reducing pain, swelling, and risk of complications while improving esthetic outcomes and patient satisfaction.

PROFITABILITY TARGETS EXCEEDED

Another notable achievement is that our growth did not come at the expense of profitability. We continued to invest in research to create new and better treatments (see p. 45 ff.). We developed new designs, processes, and procedures to improve existing solutions and to make implant dentistry more accessible, affordable, comfortable, convenient and reliable. We also invested in new training and education concepts to increase the provider base and ensure the successful use of our products. And we invested in new jobs, personal development and cultural change to sustain our success in the future.

Despite these and significant investments in new markets and segments we still delivered our target for margin expansion. Our underlying operating and net profit rose 22% and 29%, respectively, with the corresponding margins reaching 25% and 20%. Underlying basic earnings per share climbed from CHF 9.19 to CHF 11.94.

SOLIDLY FINANCED TO INVEST IN FURTHER GROWTH OPPORTUNITIES

We also invested in new partnerships, strategic acquisitions and production expansion. Capital expenditure rose to CHF 46 million. Free cash flow reached CHF 139 million, CHF 40 million of which was used for acquisitions. We purchased a block of our own shares for CHF 200 million, which together with the dividend pay-out of CHF 63 million were the main financing activities.

As a result, cash and cash equivalents at year-end amounted to CHF 164 million. With an equity ratio of

58% we remain solidly financed to invest in further growth opportunities.

AN EXCELLENT RETURN

Our strong performance, strategy, market potential and other fundamentals are all reflected in the share price (see p. 176) which rose 30% to close the year at CHF 397.50 – substantially outperforming the SMIM index for a fourth consecutive year.

Based on the results and positive developments in 2016, the Board proposes a dividend increase to CHF 4.25 per share, payable on 13 April 2017. Going forward, the Board's intention is to increase the dividend per share subject to further good performance.

MARKET DEVELOPMENTS AND TRENDS

We estimate that the global market for tooth replacement grew at 3–4% in 2016 and that the implant dentistry segment is worth CHF 3.5 billion. Having outperformed consistently in recent years, we reinforced our leadership position with a market share of approximately 23% (see p. 49 ff.). Our share in the restorative and regenerative dentistry segments is lower but they are closely connected with implants and we can leverage our sales force and technology network to capture cross-selling opportunities and generate attractive margins. Collectively, the markets we address are worth approximately CHF 7 billion.

The main trends seen in recent years continued in 2016, including the gender shift, the growing number of GPs placing implants, the growth of corporate dentistry and the increase in digitalization.

ADDRESSING THE NEEDS OF FEMALE DENTISTS, GENERALISTS AND CORPORATES

In previous annual reports, we have drawn attention to the fact that more women are becoming dentists than men and are less likely to own practices or become implantologists[5,6]. Early integration of implant dentistry in the dental curriculum as well as career planning, coaching and female mentoring programs are important aspects[7] that featured in our focus on female dentists in 2016 (see p. 100 ff.).

The number of general dentists placing implants continues to grow[8]. Our tissue level implant system is designed to simplify procedures and enable them to refer patients to a specialist for implant placement and then complete the restoration themselves. To gain further access to this group and to support teaching and mentoring we collaborate with leading institutes and offer education in collaboration with the ITI (see p. 103). Furthermore, our highly skilled representatives and our international young professionals program position Straumann to be the partner of choice for women and general dentists.

Another important trend has been the expansion of dental service organizations (DSOs), which range from groups of local practices to international networks of fully integrated clinics. Having gained a foothold in this segment in 2015 (see p. 74 ff.), we actively targeted DSOs in 2016 and won key accounts in Europe by offering comprehensive, tailored solutions with multiple brands and price levels all from one company.

EMBRACING DIGITALIZATION

Digitalization is changing almost everything we do. In production we implemented digital workflows and stepped closer to our goal of paperless factories (see p. 119). In treatment workflows – which are already digitalized – we added new functionality and connectivity as well as planning, scanning and milling tools (see p. 35 f.). In education we developed the Smart concept of blended learning using online modules so that dentists can study when and where they want. We also made good progress with our e-shop, achieving our frequency and turnover targets in most countries (see p. 40). And we began investing in tools and capabilities to tap into the huge opportunities offered by digital marketing and social media.

STRATEGIC GOALS AND EXECUTION

Our goal for the years to come is to be the leading global provider in tooth replacement, which means meeting medical needs, making treatment possible for more people, enhancing the standard of care and offering greater flexibility and value to customers. Our strategy to achieve this focuses on three key priorities:

- Drive a high-performance culture and organization
- Target unexploited growth markets and segments
- Become a total solution provider in tooth replacement.

These translate into clearly defined initiatives, which are assessed continuously and are reflected in the major activities featured in this report.

A CULTURE OF HIGH PERFORMANCE

Our future success depends on the ability to outperform consistently, to innovate and create opportunities, and to improve continually. Culture is the key to this. Having set and communicated the targets for our ideal culture in 2014 (see p. 104 f.), we started our Cultural Journey with a program of training modules, workshops, and other initiatives to stimulate the 'player-learner' mindset and core behaviours (see p. 19) that will drive cultural change, foster high performance and create an even better place to work. By the end of 2016, more than a third of our staff had taken part in this program and we extended our goal to include all employees by the end of 2018.

Cultural transformation takes several years but we already have clear indications of our progress. For example, in our 2016 global staff survey 88% of respondents said they actively supported our Cultural Journey and 65% observed positive changes in our culture (see p. 104 for further examples). Further evidence of this strategy in action is found in our operational performance, full innovation pipeline, and execution of strategic priorities as well as our track record in forging partnerships (see p. 24 ff.) and building talent (see pp. 107 ff., 154 ff.). This scorecard reflects the motivation, creativity, openness and dynamism that our Cultural Journey is producing.

GROWING IN UNDER-PENETRATED MARKETS AND SEGMENTS

Several new partnerships and acquisitions improved Straumann's geographical reach in 2016. One pressing goal was to enter the fast-growing non-premium segment in China. Facing lengthy regulatory procedures with our own brands, we invested in the French implant company Anthogyr, which provided us with a registered system, an established business and a dedicated sales team.

The acquisition of Equinox fulfilled our long-held ambition of entering the fast-growing implant market in India, where each year only two implants are placed per 10 000 population. Equinox is the country's third-ranking implant company and offers a launch platform for the Straumann brand. On the other side of the world, we opened subsidiaries in Argentina and Chile serving both the premium and non-premium segments. Closer to home, we entered the non-premium segment in Turkey in a joint venture with our former distributor. We also reorganized in Europe to free up resources for expansion in Russia, Eastern Europe and the Middle East, and to establish completely new markets e.g. in Africa.

A LEADING POSITION IN THE FAST-GROWING NON-PREMIUM SEGMENT

We are determined to extend our lead in the premium segment by offering innovative products and services backed by research, education and a global service structure, and by entering or building new markets. At the same time, the non-premium segment is growing faster and accounts for more than a third of the global market (see p. 49 ff.). To maintain overall leadership we need to be strong in all sectors, offering complete product solutions at a wide range of prices.

In just a few years, we have become a top-tier player in the non-premium segment by building a portfolio of value brands and driving their international expansion. Instradent, the platform we use for this, generated triple-digit growth in 2016. With an established footprint in North America, Iberia and Italy, Instradent added subsidiaries in the Czech Republic and the UK as well as a European hub to accelerate entry into new markets and to provide customer services, commercial management functions, warehousing and distribution facilities.

Our intention to obtain a controlling stake in the Korean implant company MegaGen by exercising our convertible bond and share purchase option was hampered when MegaGen initiated arbitration. The delay and diminished spirit of collaboration turned our attention to partners like Anthogyr and Zinedent. Another attractive partner is Medentika, in which we now have a controlling interest. In 2016, we took over their distribution business in Germany and thus entered the value segment in that key market.

A TOTAL SOLUTION PROVIDER

To compete against conglomerates in a consolidating and fast-changing industry, our strategy is to become a total solution provider for tooth replacement,

including conventional and digital solutions for all major indications. This strategy is not unique and the keys to our success are in agility and speed of execution.

Our core implant business, which offers a comprehensive range of implant designs with multiple material, surface and price options is complemented by a broad range of standard and CADCAM prosthetics, a comprehensive range of biomaterials, and plug-and-play, open-platform digital technology that supports the entire workflow (see p. 35 f.).

To complete the portfolio we have developed products and solutions in house and have brought in new technologies by investing in highly innovative companies and building partnerships. For instance, our strategic partnership with botiss and other suppliers enables us to offer a full range of biomaterials to support implant procedures. The tie between us deepened in 2016, when we agreed to take over distribution of botiss products in Germany.

We now offer not only our own family of implants, abutments and restorations, but also a broad range of attractively priced, high quality prosthetics for competitor implants – through Medentika (standard prosthetics) and our new etkon iDent CADCAM service. The strategy of partnering also opened the door to a large number of previously inaccessible dental labs when we signed an agreement allowing Zirkonzahn, an international supplier of lab solutions and prosthetics, to distribute our Variobase solutions.

We are currently launching n!ce, our unique glass ceramic material that offers considerable advantages (e.g. high-end esthetics and excellent handling properties) for labs and dentists (see p. 36). In addition to using our own sales and distribution channels, we have granted global distribution rights to Planmeca, a global leader in dental equipment, software and CADCAM solutions, to help build the brand globally.

Perhaps our most exciting progress has come in the digital arena. Through our partnership with Dental Wings we entered the intra-oral scanner business, while with Amann Girrbach we began selling CARES-compatible in-lab milling machines under the Straumann brand. The combination of our compact milling machine and intra-oral scanner enables us to offer a highly competitive chairside solution.

In 2017, we will offer validated digital solutions that cover the full tooth replacement workflow including guided-surgery, a choice of intra-oral scanners, CAD-CAM equipment and services, as well as central, in-lab and chairside milling options.

These steps, together with the innovative education concepts and services we have developed, bring us close to achieving our strategic goal of becoming a total solution provider.

STRAUMANN GROUP – UNITING GLOBAL EXCELLENCE IN DENTISTRY

Our steps to become the global provider in tooth replacement have brought a number of companies and partners into Straumann and we have become a global Group of national and international companies and brands. To provide a common identity, we have introduced 'Straumann Group' as our overarching brand, with a distinct visual identity and positioning. This unites and adds value for all our brands and partners, allowing them to leverage Straumann's global reputation without compromising our premium brand (see p. 21).

A GOOD EMPLOYER AND CORPORATE CITIZEN

The breadth and depth of our success clearly demonstrate the quality and dedication of our staff, and the value of our conscious shift toward a high-performance mindset and culture. Our global team increased by 326 to approximately 3800 employees, reflecting the incorporation of new businesses and investments in growth markets, projects, production, and R & D to drive our strong development pipeline.

In recognition of the continued strong performance, the Board decided early in 2016 to fully reinstate the variable incentive schemes used in Switzerland prior to the exchange-rate shock and awarded an unreduced bonus for the prior year (see p. 158 ff.). We strongly feel that the loyalty and efforts of our employees as well as the continuous improvements they achieved fully merit these initiatives.

We also remained committed to sustainable development and value creation. This means running our

operations efficiently and using natural resources effectively to avoid waste and minimize our impact on the environment (see p. 117 ff.). It also encompasses our support for charitable programs in 15 countries with the goal of making dental healthcare available to underprivileged people.

OUTLOOK

Last year, continuing consolidation in our industry (see p. 49) raised the question of whether the Straumann Group would have the critical mass to retain its leadership in the field. At that time we were confident that we would. Today, that confidence has been strengthened by the quality of our performance, strong brand, global reach and broad portfolio, not to mention our track record in creating winning partnerships.

The fact that we are nearing our strategic goal of becoming a total solution provider has led us to consider the next steps, which might involve broadening our current business scope and creating opportunities in adjacent fields (see p. 26). This will be an important focus in 2017 as we continue to seek and evaluate new opportunities for acquisitions, partnerships and scope expansion. We will increase our focus on digitalization, customer base shifts, materials and technology.

Continuing to build a high performance culture will remain our key priority. To avoid complacency coming from success, we will concentrate on maintaining a sense of urgency and will continue to challenge the things we do with an increasingly open mind. We shall also keep vigilant and agile to adapt to our fast-changing environment. Most important, we are determined to make change happen rather than simply reacting to it.

Barring unforeseeable circumstances, we expect the global implant market to grow at a similar rate in 2017 and we are confident that we can continue to outperform by achieving organic growth in the high-single-digit range. Despite further investments in strategic growth initiatives and assuming that currency exchange rates remain fairly stable, we expect our topline growth and operational leverage to lead to further improvements in our organic[9] operating profit margin.

On your behalf, we would like to thank all our employees around the world for their personal commitment, engagement and hard work in 2016. On behalf of the Board we also thank you, our shareholders, for your ongoing support and confidence in our company.

Yours sincerely,

Gilbert Achermann
Chairman of the Board of Directors

Marco Gadola
Chief Executive Officer

7 February 2017

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6 Distribution of dentists in the US, by region and state, 2009. American Dental Association. 2011 Apr.
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9 Excluding the effects of the Medentika and Equinox acquisitions.

WE CREATE OPPORTUNITIES FOR PATIENTS

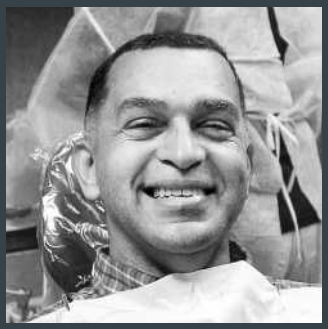
GHISLAINE
NURSE

"I've always told my children that if you are polite and smile it will open many doors in life. But before my dental operation, I rarely smiled and avoided speaking because I didn't want people to see my teeth. It wasn't a problem with people I knew well, but I am a nurse and have to work close to people. If you cannot smile at a patient when you walk into a ward, it closes a door and puts a strain on the way you relate and work. Thank goodness I don't have that any more". Ghislaine was one of 15 patients who received complete tooth replacements in the charitable 'One Day a Smile' event at the Afopi clinic near Paris. New fixed teeth have changed their lives. They have rediscovered the joy of eating. Poor digestion, stomach pains and bad breath have gone. One woman who had been unemployed because of her teeth and low self-confidence soon found a job, while another patient has seen his business grow. Instead of covering their mouths to speak, they laugh with confidence and contentment.

EVERY TEN SECONDS SOMEONE SOMEWHERE IN THE WORLD RECEIVES A STRAUMANN GROUP PRODUCT.

"My mother cried when she saw my new teeth. She was so glad that I would not suffer with plastic dentures like she did."

TOUNSIA



"Biting and chewing food is essential because I have a stomach ailment. I'm also looking for a job so this will help me."

JAMES

"I couldn't eat, had stomach problems, and bad breath. I felt very low and didn't dare open my mouth. I rinsed and cleaned but couldn't scrub my teeth because they wobbled. I never smiled in photos – just kept my mouth shut."

MIREILLE

"My dentures kept slipping. I hardly dared to speak. I didn't smile in any photos. I could not imagine that I would be able to look at people differently, crunch into an apple or eat anything I wanted. But that's all changed."

DOMINIQUE

"I am a 911 police dispatcher and deal with kids all day. I don't want them to be afraid of me because I'm missing a tooth. The operation was much easier than I thought. No pain. The staff were great and made it so easy and comfortable."

MICHAEL

"Much of my day is in front of clients and colleagues. I was very concerned about the gap in the front of my teeth and how it would impact my job."

EILEEN

Management commentary

Business model & objectives
Vision, strategy, core behaviors

STRAUMANN GROUP IN BRIEF

WHO WE ARE AND WHERE WE COME FROM

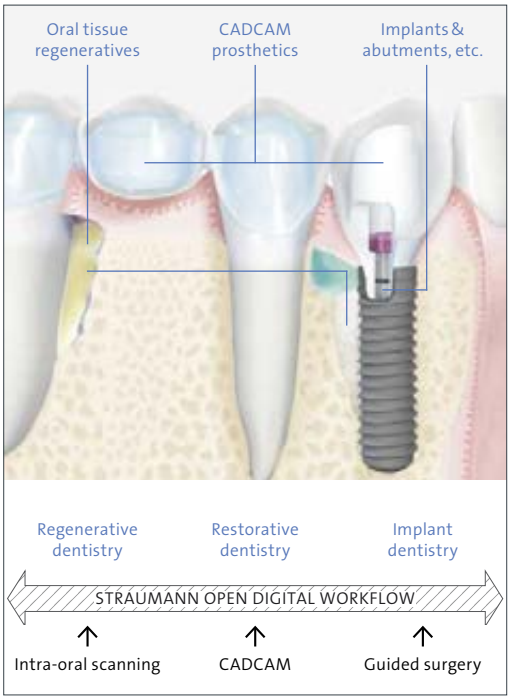
Headquartered in Basel, Switzerland, the Straumann Group is a global leader in tooth replacement. The company was founded in 1954 as a research institute specialized in alloys. In the 1960s, it became a pioneering force in dental implantology, which had become its sole focus by 1990. In 2003, it expanded into oral tissue regeneration and, four years later, entered the field of CADCAM tooth restoration in order to provide full tooth replacement solutions. Institute Straumann remained a family-owned business until 1998, when it became a public company, traded on the SIX Swiss exchange.

Today the Straumann Group unites global and international brands that stand for excellence, innovation and quality in tooth replacement and esthetics, including Straumann, Instradent, Neodent, Medentika, etkon and other fully or partly owned companies and partners (see pp. 20, 23, 25).

The Group develops, manufactures and supplies dental implants, instruments, CADCAM prosthetics and biomaterials for use in tooth replacement and restoration solutions or to prevent tooth loss (see p. 31 ff.). The principal production sites for implant components and instruments are in Switzerland, the US, Brazil and Germany, while CADCAM prosthetics are milled centrally in Germany, the US, Japan and Brazil. The production facility for Straumann biomaterials is located in Sweden.

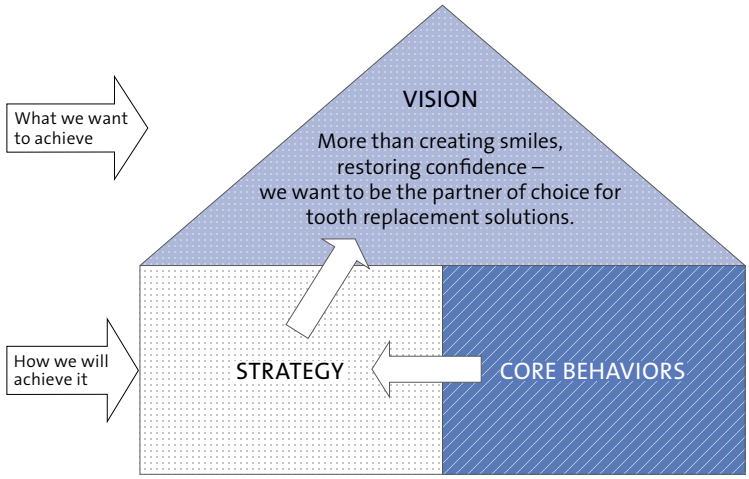
The Group offers a wide range of services to dental practitioners, clinics and laboratories all over the world. It is recognized as a leading innovator in its field, working in collaboration with leading universities, clinics, and research institutes to further increase the standard of patient care. Through a unique collaboration with its academic partner the International Team for Implantology (ITI), Straumann supports research and offers training and education to dental professionals.

OUR BUSINESS



The Group currently employs 3797 people worldwide. Its products, solutions and services are available in more than 100 countries through a broad network of distribution subsidiaries and partners (see chart on p. 184 f. for an overview of subsidiary and distributor locations). More than 90% of the business is conducted directly through fully-owned subsidiaries.

OUR COMPANY HOME



OUR VISION

Our vision is: MORE THAN CREATING SMILES, RESTORING CONFIDENCE – WE WANT TO BE THE PARTNER OF CHOICE IN TOOTH REPLACEMENT.

Confidence relates to all our activities; it is built on trust, integrity, respect, communication, transparency, collaboration and delivering what we promise. For our customers, it means peace of mind, because our solutions are predictable and durable. For our employees, confidence means secure, rewarding jobs. For our shareholders, it means sustainable returns from a highly ethical business. For the communities in which we operate, confidence means that we care for the world around us as a responsible corporate citizen. For all our stakeholders it means that Straumann is a reliable partner.

We want to be the first place that people come to do business, to find genuine solutions, to turn ideas into reality, to learn, master, succeed and improve lives. This is what being the partner of choice means for us.

We are committed to being the premium partner of choice in tooth replacement, offering education, innovation, quality, support, expertise, clinically proven long-term success, and peace of mind. At the same time we are making high quality implant solutions more affordable to a broader population through Neodent, Medentika, Equinox, Zinedent, Anthogyr and our Instradent platform.

MAKING VISION A REALITY

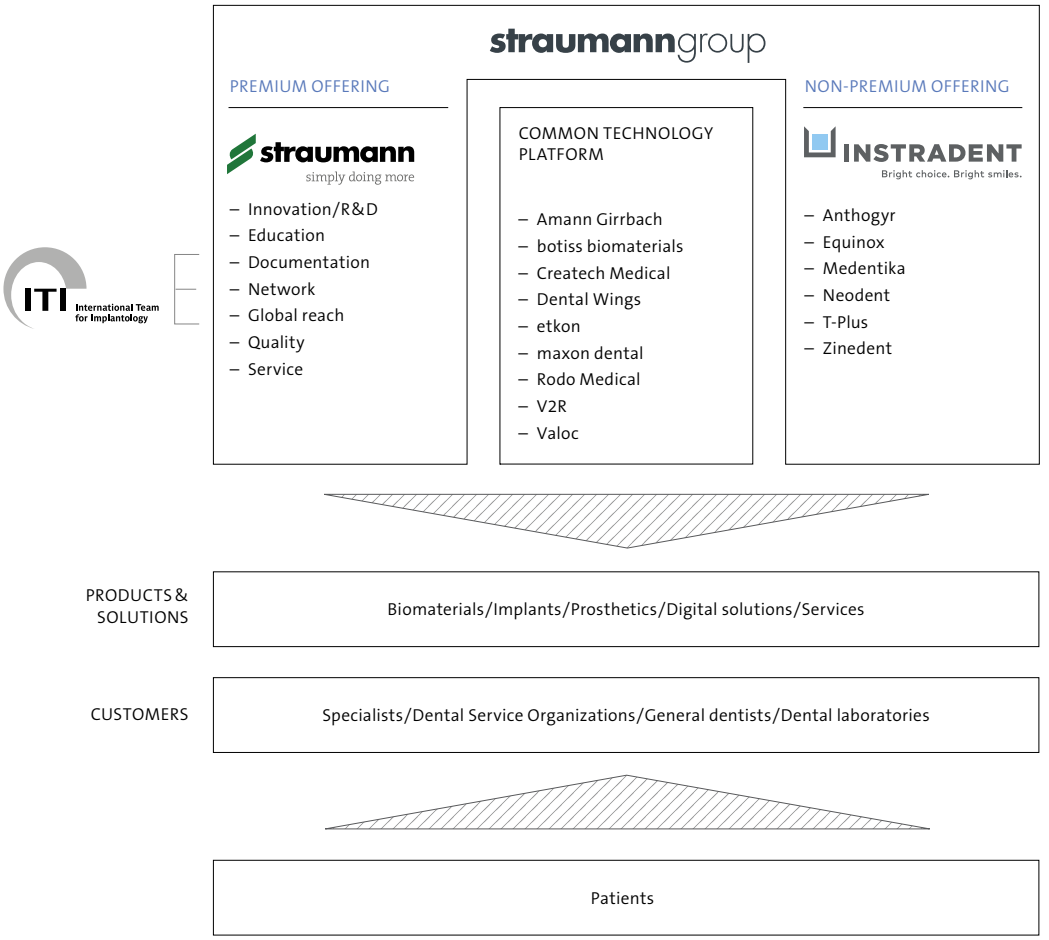
The way to a sustainable future is mapped out in our three 'Strategic Priorities' (see p. 22 ff.) which form the backbone of our strategy and are constantly monitored and adapted. Making it happen is a matter of culture and behavior. Thus vision, strategy and behavior form the figurative building of 'our company home' (see above).

CORE BEHAVIORS BUILT ON LONG-HELD VALUES

Behavior is the key to the culture that we believe will drive and sustain our success in the future. Building on the values that have made Straumann what it is today, we focus on the following eight core behaviors that apply for all employees in the Straumann Group:

– Focus on customers
– Collaborate
– Take ownership
– Create opportunities
– Build trust
– Engage
– Communicate effectively
– Be agile.

OUR BUSINESS MODEL



The Straumann Group is a global leader in tooth replacement. Our core premium business is built on the Straumann Dental Implant system supported by CADCAM prosthetics, digital workflows and oral tissue regeneration products, which together make up a comprehensive solution. Innovation (p. 45), research, development, global reach, guaranteed quality, and service excellence are all inherent to the Straumann brand. So too are clinical evidence, high standards of education and a global network. In these areas, we collaborate with leading institutes, universities and the ITI (p. 103).

We produce most of our products in house (p. 115 ff.) and sell them to dental professionals either directly or through distribution partners. Our customers (p. 97 ff.) are specialists, general dentists, and dental labs which prepare the prosthetic restorations for the dentists. Patients are addressed by general dentists, who often decide on the type of treatment and system, and specialists.

We address the value segment of implant dentistry mainly through the Instradent platform of international brands (pp. 23, 37 f.) in which we hold investments. To provide complete solutions, we have entered a number of partnerships/agreements that, together with fully and partially-owned companies, form a shared technology platform that can serve both our premium and Instradent businesses (p. 25).

MINDSET

Having the right mindset is essential for the high-performance culture we are striving to build. We need everyone at Straumann to have a player-learner mindset. Player-learners inspire trust; they are energized and change; they listen, find out, share, collaborate, take risks, find solutions, learn by doing, embrace, encourage and celebrate. The Straumann tradition of 'simply doing more' is an integral part of the Straumann brand; it is at the heart of these behaviours, and is the overriding principle for everything we do.

OUR BRAND

STRAUMANN GROUP – UNITING GLOBAL EXCELLENCE IN DENTISTRY

Our strategy to become the leading global total solution provider for tooth replacement has brought a number of companies and partners into Straumann. What began as a family-owned research institute is now a global Group of national and international companies and brands.

To provide a common identity with which the employees and partners of the Group can identify, we introduced 'Straumann Group' as our overarching brand at the outset of 2017, with a distinct visual identity and positioning.

straumanngroup

The new brand unites and adds value to our brands and partners, allowing them to leverage the global reputation of Straumann without compromising the premium brand. At the same time it allows the individual companies and partners to maintain their unique character, identity and culture while, importantly, it enables us to further differentiate the Straumann premium brand, which will retain its original green color and visual identity.

This initiative will be implemented quickly without disruption to our normal business. No significant investment is necessary, as the names of products, brands, legal entities, etc. will not change.

Strategy in action
Culture: the key to execution

Our goal for the years to come is to be the global provider in tooth replacement. At the heart of the Group's strategy to achieve this are three key priorities which provided our focus in 2016:

- Drive a high-performance culture and organization
- Target unexploited growth markets and segments
- Become a total solution provider in tooth replacement.

The strategic priorities are reviewed annually by the Board of Directors and translate into a number of clearly defined initiatives and deliverables, which are continuously tracked and adjusted as necessary. They also serve as a basis for individual target-setting and performance assessments. For competitive reasons, details cannot be disclosed, although most of the initiatives are reflected in the major activities, investments, product launches, development pipeline and other achievements featured in this report.

STRATEGY EXECUTION – A MATTER OF CULTURE

High performance organizations consistently outperform, continually innovate and steadily improve. They create opportunities, unlock the potential of employees and use resources and energies effectively without waste. They are agile and collaborate as an aligned team with a shared goal. These are the main characteristics of the culture we are building across the Straumann Group. Culture is our first strategic priority because it drives results.

Having established a clear picture of our ideal culture (see p. 104) as well as the mindset and behavioral levers for cultural transformation, we implemented a series of workshops and training modules in 2015 to stimulate the player-learner mindset and core behaviours that are central to the high performance culture that will drive our future success. We broadened this program in 2016 and, by year-end, more than 40% of our global staff had taken part. Our goal is to extend it to all employees by the end of 2018.

An important lever introduced in 2016 was to integrate our core behaviours into the employee performance management process. To complement this, we are building up a set of modules to develop and strengthen our people. 'Create opportunities' was one core behaviour we emphasized in 2016, as this report illustrates.

To drive cultural change across levels, we formed cross-departmental groups of champions in our largest country organizations and established a global Community of Practice to support the Cultural Journey across the organization.

Although cultural transformation takes several years, regular internal surveys have shown clear signs of progress and high levels of engagement (see p. 104 ff.). In our global staff survey, 85% of respondents said they understood our strategy, 88% said they actively supported our Cultural Journey and 65% observed positive changes in our culture, even after a relatively short time. Further evidence of cultural change can be found in a new open-minded, entrepreneurial approach to concepts and strategic initiatives that were previously 'unthinkable', for example: selling Straumann products in Neodent stores, offering products for immediate tooth replacement protocols (BLT and Pro Arch), selling third-party milling machines that compete with our own milling centers (Amann Girrbach), investing in a company that sells copies of our own products (Medentika), investing in entrepreneurial companies that might or might not be game-changers (maxon dental, V2R, Rodo Medical), and selling third-party implants (Anthogyr).

PORTFOLIO OF INVESTMENTS TO TARGET THE NON-PREMIUM SEGMENT

Company	Specialty	Reach	Key facts	Straumann's stake
Anthogyr (France)	High-quality attractively-priced dental implant system	Registered and established in various marktes incl. China	Founded 1980; ≈400 employees. China business transferred to Straumann	30% stake acquired in 2016
Equinox (India)	Fast-growing dental implant company	Ranks #3 in India; distributors in Asia, Africa and the Middle East	Founded 2005 ≈70 employees; acquired at year-end	100% acquired in 2016
Medentika (Germany)	Broad range of implant prosthetics for multiple implant systems; titanium implants and instruments	Products sold directly in Germany and through distributors in Europe and the rest of the world	Founded 2005; 70 employees. German distribution transferred to Straumann in 2016	51% acquired in 2013; controlling interest as of 1 January 2017
Neodent (Brazil)	Full dental implant system and service	Market leader in Brazil; present in other major implant markets through Instradent and distributors	Founded 1993; ≈1000 employees	100% (51% purchased in 2015; initial 49% in 2012)
T-Plus (Taiwan)	Dental implants and related prosthetic components	Sold mainly in Taiwan; regulatory approvals in China, Europe & the US	Founded 2009; 20 employees. Opportunity to tap into the lower non-premium segment, e.g. in China.	49% non-controlling interest, acquired in 2015; options to increase to 90% by 2020
Zinedent (Turkey)	Distributes dental implants and related prosthetic components with a view to potential manufacture	Implants for Turkey & other markets	Joint venture	50%

KEY BRANDS BY CATEGORY AND GEOGRAPHY

		EMEA[1]	NAM	LATAM[1]	APAC[1]
Implant systems	Implants	Straumann Medentika Neodent Zinedent	Straumann Neodent	Straumann Neodent	Straumann Anthogyr T-Plus
	Prosthetics	Straumann Createch Medentika Neodent Zinedent	Straumann Neodent	Straumann Neodent	Straumann Neodent Anthogyr T-Plus
Prosthetics for 3rd party implants	Abutments	etkon Medentika	etkon Medentika		etkon
	Precision bars/bridges	Createch			
Digital solutions	Lab scanners	Straumann[2]	Straumann[2]	Straumann[2]	
	Intra-oral scanners	Straumann[2]	Straumann[2]	Straumann	
	Milling equipment	Straumann[4]		Straumann[3]	
Biomaterials		Straumann botiss	Straumann	Straumann	Straumann

[1] In selected countries
[2] Developed & co-marketed by Dental Wings
[3] Developed by Amann Girrbach

However, the most significant evidence of this strategy in action is found in our operational performance, full innovation pipeline, and execution of strategic priorities as well as our track record in forging partnerships and building talent.

PURSUING GROWTH OPPORTUNITIES IN UNDERPENETRATED MARKETS AND SEGMENTS

One continuing goal was to gain further access to the Chinese market, particularly the fast-growing non-premium segment. To this end we bolstered our country organization and intensified our efforts to obtain further regulatory approvals. A key strategic step was our investment in Anthogyr, enabling us to take over their Chinese business and thus gain immediate access to the value segment with a dedicated sales team.

It has been our ambition to enter the Indian market for several years. Through the acquisition of Equinox at the end of the year, we became one of the leading implant companies in India and gained a platform to enter the premium segment with the Straumann brand.

Across the world, our strategy to penetrate Latin America advanced when our new subsidiaries in Argentina and Chile went into operation, offering solutions for both the premium and non-premium segments. Closer to home, we deployed a different strategy to enter the non-premium segment in Turkey by forming Zinedent, a joint venture with our former distributor. We also reorganized our regional organizations in Europe to free up resources for new markets in Africa and Central Asia.

Another important development has been the expansion of chains and networks – often referred to as dental service organizations (DSOs) – which range from group practices to international networks of fully integrated clinics with significant purchasing power and influence. We gained a foothold in this segment in 2015 with ClearChoice in the US (see pp. 74, 76) by offering value and premium ranges together with tailored service solutions. This strategy created similar opportunities to win leading chains in Europe in 2016 (see p. 76).

A LEADING POSITION IN THE FAST-GROWING NON-PREMIUM SEGMENT

The premium segment remains a key focus and we are determined to extend our lead in it through innovation, documented clinical research, differentiated comprehensive solutions, service excellence, high standards of training/education, a global network, and guarantees on original products. Our activities and achievements in each of these respects are discussed in subsequent chapters.

There has been a marked increase in local and regional companies who offer implant and prosthetic products at lower (non-premium) prices. Many are copycats. Few offer the high level of service, support, innovation and long-term assurance that are inherent to the Straumann brand. Nevertheless, the non-premium market segment is growing faster than premium and accounts for more than a third of the global implant market (see p. 49). It offers significant business opportunities and we have to be a top player in it to secure our overall leadership.

Our strategy has been to build a portfolio of non-premium companies with growing footprints in key markets, making them valuable strategic assets for Straumann. The initial approach is through partial ownership, ensuring entrepreneurial flexibility and enabling the companies to maintain their own character and dynamism (see table p. 23). It also enables us to treat our interest as a 'strategic' or an 'entrepreneurial' investment, depending on the development of the company and the market.

Our intention is not to grow simply through acquisitions but by driving the international expansion of the brands in our portfolio and offering them as part of a full solution with multiple value propositions. We are achieving this through our Instradent platform and have become a top 3 player in this segment worldwide. Instradent expanded further during the year, opening subsidiaries in the Czech Republic and the UK and establishing a European hub to accelerate direct entry into new markets.

Our intention to obtain a controlling stake in the Korean implant company MegaGen by exercising our convertible bond and share purchase option in 2016 was stalled when MegaGen initiated arbitration. When we invested in MegaGen we viewed them as an interesting partner in Asia, but the delay and diminished spirit of collaboration have turned our attention to other partners like Anthogyr in order to take important strategic opportunities while they are still open.

TECHNOLOGY PLATFORM OF GROUP-OWNED COMPANIES AND PARTNERS

Company	Activities	Reach	Key facts	Straumann's stake
Amann Girrbach (Austria)	Pioneer and leader in in-house CAD/CAM solutions	Global; distributed by Neodent in Brazil	In-lab/chairside milling of custom dental prosthetics	Business partner
botiss biomaterials (Germany)	Oral tissue regeneratives	International; Europe's second largest supplier.	Exclusive distribution in Germany transferred to Straumann for a consideration of approx. CHF 9 million	Option to obtain up to 30% in 2017
Createch Medical (Spain)	High-end CADCAM bridges, bars and abutments for multiple implant systems	Sold mainly in Spain, Germany and other markets in Europe	Established 2006	30% acquired in 2013; options to increase to 100% by 2019
Dental Wings (Canada)	Dental prosthetics design (CAD), open software and scanners	Distributed by Straumann and leading dental companies in over 45 countries	Established 2007; platform to develop lab & chairside hard- & software solutions	55% non-controlling interest; option to increase to 100% by 2020
etkon (Germany)	Centrally-milled CADCAM prosthetics.	Global through Straumann	Established 2000; acquired 2007	100%
maxon dental (Germany)	Ceramic dental implant systems produced by injection moulding	Start-up company	Joint venture with maxon motor established in 2017	Joint venture; 49% non-controlling interest
Rodo Medical (USA)	Prosthetic fixture devices	Start-up company	Established 2009; FDA clearance obtained in 2016	12% acquired 2014
V2R Biomedical (Canada)	Planning service for guided-surgery solutions	Global through Straumann	Established 2008	30% acquired in 2016; option to increase to 100% by 2020
Valoc (Switzerland)	Novaloc & Optiloc overdenture retention systems	Global through Straumann	Established 2011	44% acquired in 2015

Another attractive partner is Medentika, in which we now have a controlling interest. An agreement with their shareholders enabled us to take over their distribution business in Germany and thus to enter the segment for value abutments and implants in the largest EU market.

A TOTAL SOLUTION PROVIDER

Continuing consolidation in our industry presents both challenges and opportunities. While we now have to compete with heavy-weight conglomerates that cover the entire dental spectrum, we have the advantages of agility and focus. We also have the expertise and resources to make strategic acquisitions and to forge strategic partnerships.

To compete in this environment our strategy is to become a total solution provider (TSP) in tooth replacement – which means offering conventional, semi- and fully-digital tooth replacement solutions for all major indications. We have filled some portfolio gaps, e.g. with our Bone Level Tapered implant and our Pro Arch solution for immediate full-arch replacement. One such example in 2016 was the launch of our Novaloc fixation system (p. 34 f.).

To offer a comprehensive solution, we needed a full range of biomaterials. Our strategic partnership with botiss and other suppliers made this possible and we were able to take over distribution of botiss products in Germany in September 2016.

We have also built a comprehensive portfolio for dental laboratories including pre-milled abutments, Variobases, high-end materials, etc. Being able to offer attractively priced, high quality prosthetics for competitor systems through Medentika and etkon iDent (launched in 2016) further positions us as a provider of choice for dental labs. But perhaps the most exciting steps have been in the digital arena. In 2017, we will offer validated digital solutions that cover the full tooth replacement workflow including guided-surgery, a choice of intra-oral scanners, a full CADCAM service, a Scan & Shape option, as well as central, in-lab and chairside milling. These developments are complemented by tailored and blended education packages as well as other marketing tools. We have made good progress with our TSP strategy and are now considering the next steps, which might involve broadening our scope.

GAME-CHANGER THINKING

In 2016, we convened a high-level expert event with internal and external experts to consider potential opportunities and risks of substitution technologies, services and business models. We looked at our current business scope and potential opportunities in adjacent fields. Areas in which we will increase our focus include digitalization, customer base shifts, materials and technology.

OUTLOOK

Continuing consolidation in our industry raises the question of whether the Straumann Group will have the critical mass to retain its leadership in the field. We are confident that we will – based on our good performance, strong global brand, broad portfolio of partnerships, success in the non-premium segment, and the progress of our Cultural Journey. We continue to evaluate new opportunities for acquisitions, partnerships and scope expansion, vigilant of our changing market and environment and ready to adapt our strategy accordingly.

WE CREATE OPPORTUNITIES FOR SPECIALISTS

DR PEDRO GONÇALVES
MEDICAL ADVISOR EUROPE

One of the our most successful initiatives to create opportunities in the specialist segment in 2016 was the Straumann Peer-to-Peer Program, which coaches, develops and shares new products and surgical techniques with dental professionals who are already experts in implant dentistry. With Dr Pedro Gonçalves, a highly experienced and recognized dentist, joining Straumann in 2016, the Peer-to-Peer Program team increased its outreach significantly. The team staged seven surgical-prosthetic events on three continents, helping new customers to become proficient with Straumann solutions, such as the digital workflows with BLT, guided surgery, immediate loading, and the new, exciting Novaloc retention system.

Throughout the year, Straumann organized events for surgeons, prosthodontists and technicians to enable them to offer new procedures to their patients.

"This was my first experience with guided surgery. I found the approach much easier. One has to try this!"

DR FILIP BRZOZOWSKI

Warsaw, Poland
For example, in March, 15 surgeons from four clinics took part in a peer-to-peer event in Warsaw, in which 22 edentulous patients received fixed full-arch tooth replacements in a single surgery session. This was made possible using computer-guided surgery, Roxolid BLT implants and CARES CADCAM prosthetics, which were all prepared before the surgery. The opportunity to share knowledge and experience, as well as the convenience, predictability, and high patient satisfaction of the treatment were all highly rated by the participants.

"It is amazing to have the prosthesis ready before the surgery. Normally you have to wait for weeks or even months."

DR WIKTOR LISIAKIEWICZ

Riga, Latvia
Our new Novaloc retention system for implant borne removable dentures was the focus of an intensive peer-to-peer training event in Latvia, where a group of specialists from the Riga Stradiņš University Institute of Stomatology placed the implants together with the new retention system in 22 patients. This event brought colleagues from different departments together to perfect a new solution for edentulous patients.

"The mentorship provided by Straumann was highly productive and inspiring."

DR. ILZE INDRIKSONE

Dr Ilze Indriksone, DDS
Prosthodontist at the Riga Stradiņš University, Latvia

Boston, USA
With the launch of Straumann PURE in 2016, dentists in North America now have a fully ceramic implant solution that is reliable, highly esthetic and metal-free.

Dr Paul Fugazzotto and Dr Anja Rost, two highly experienced specialists working in private practice, were among the first dental surgeons in the US to place the new implant. Together with Straumann they partnered with their referring dentists and laboratory to host a 5-day peer-to-peer event in their practice.

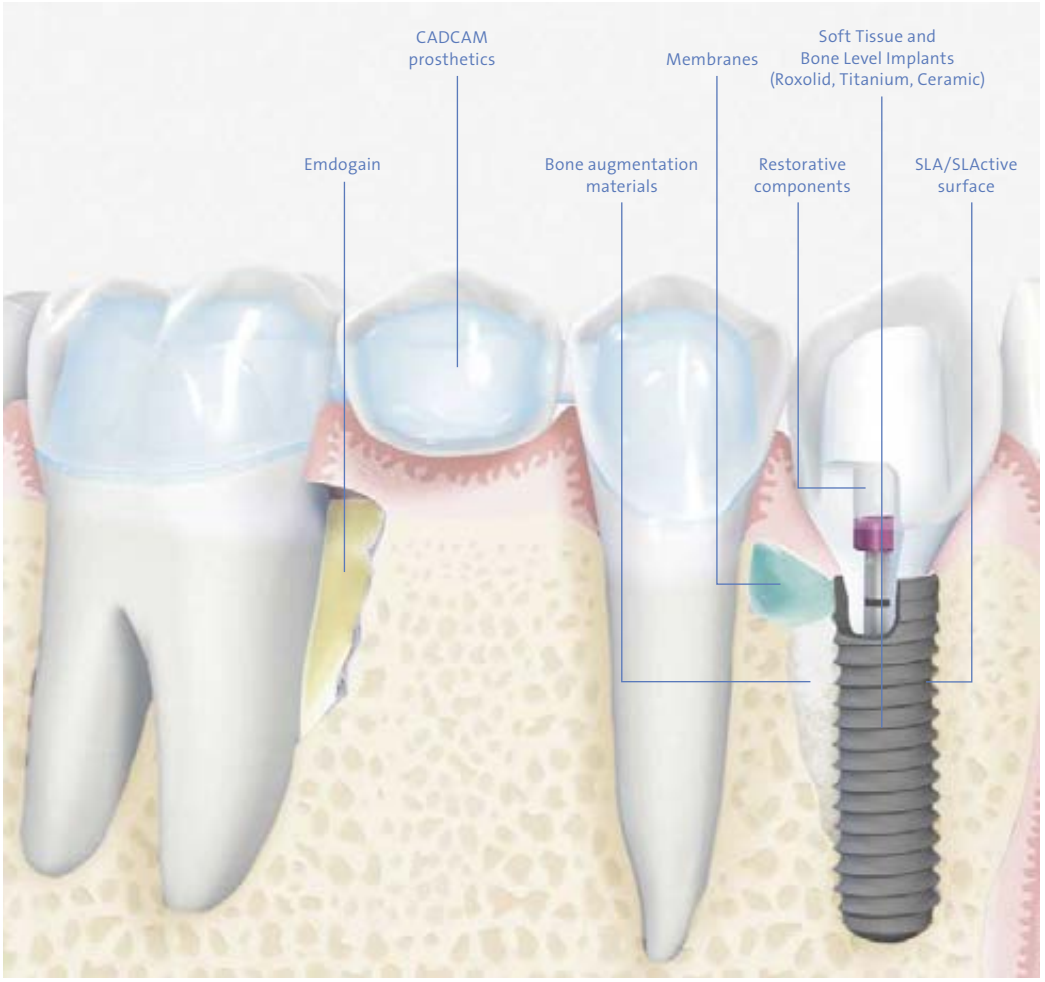
26 Straumann PURE implants were placed using computer-guided surgery and were restored immediately with provisional crowns. All of the patients responded positively.

Dr Wiktor Lisiakiewicz (left) and Dr Filip Brzozowski (right), oral surgeons at the Elektoralna Dental Clinic in Warsaw

Dr Anya Rost, DMD, MSD
Periodontist of Milton, MA, USA

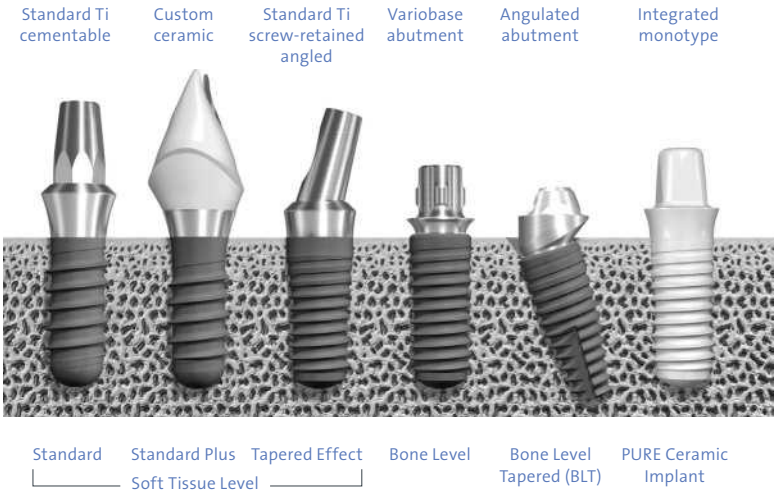
Products & services
Excellence, innovation, lasting performance

STRAUMANN SURGICAL PRODUCTS



Sectional overview of Straumann's products.

THE STRAUMANN DENTAL IMPLANT SYSTEM



Designed for maximum flexibility with a minimum number of components, the highly versatile Straumann Dental Implant System covers all indications and preferences – from standard applications to highly esthetic individualized CADCAM solutions.

PRODUCTS

For more than six decades, Straumann has been innovating, developing, testing and refining products that address patient needs and contribute to their quality of life. We have also been combining products, technologies, procedures and services into solutions that add convenience, save time, reduce cost and add value. Our products and solutions are used by oral surgeons, specialists and general practitioners as well as dental laboratories in procedures that range from saving compromised teeth, to individual tooth restoration right up to complete dental replacement. We strive to broaden treatment options, increase precision and longevity, minimize discomfort, add value and provide security – in line with our vision of 'more than creating smiles – restoring confidence'.

SAVING COSTS AND IMPROVING QUALITY OF LIFE

Published research shows that – compared with traditional treatments – dental implants are generally cost-saving or more cost-effective for single-tooth replacement. For the replacement of multiple teeth, implants represent a cost-effective option in the long run and lead to further improvements in oral-health-related quality of life and decreased general healthcare costs. Research also shows that acceptance, satisfaction, and willingness to pay for dental implants are high – particularly among elderly edentulous patients.[1]

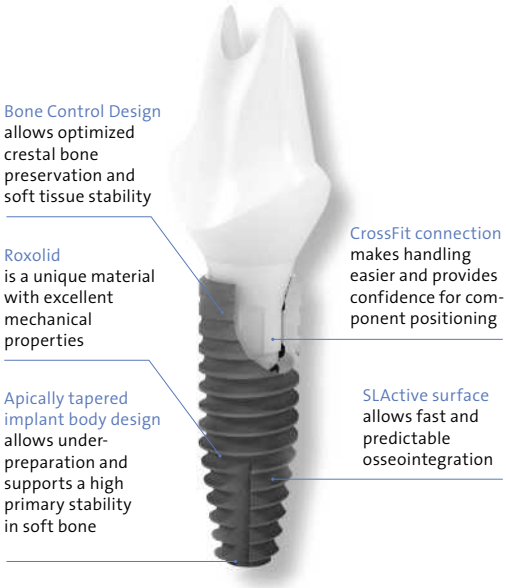
TOOTH REPLACEMENT

The Straumann Dental Implant System covers all tooth replacement indications. It comprises Soft Tissue Level and Bone Level implants (with parallel wall and tapered designs) in a variety of lengths, diameters and materials. It also includes a wide range of standard and individualized prosthetic components, and all the necessary surgical instruments.

STRAUMANN SOFT TISSUE LEVEL IMPLANTS: THE BENCHMARK FOR LONGEVITY

Millions of patients around the world chew, smile, and rely on Straumann Tissue Level Implants, which celebrated their 30th anniversary in 2016 and which account for half of the implants we currently sell.

The soft tissue level implant simplifies soft tissue management and prosthetic restoration, saving time, discomfort and cost, although its greatest benefit may be lasting reliability. It is backed by published ten-year clinical results[2], showing survival and success rates of 99% and 97% respectively, with zero implant fractures. High survival rates after nine years were also reported in a landmark retrospective study[3], published in 2015.



Straumann's Bone Level Tapered implant, fitted with a ceramic CADCAM custom abutment.

A follow-up publication in 2016[4] looking at peri-implantitis (which can lead to implant loss) also showed excellent results.

BONE LEVEL IMPLANTS – USER PREFERENCES COVERED

In contrast to soft tissue level designs, bone level implants have prosthetic connections that are below the gums, at or close to the crest of the jaw bone. While each design claims its advantages, market research shows that the choice of implant type is driven mainly by user preference.

BONE LEVEL TAPERED IMPLANTS (BLT) – POPULAR FOR IMMEDIATE REPLACEMENT SOLUTIONS

Implants with tapered or conical designs make up more than two thirds of the global implant market, and their popularity is expected to increase further. One reason for this is that they provide improved immediate stability, which makes them popular for accelerated tooth replacement procedures with minimal disruption for the patient.

When it was introduced in 2015, Straumann's BLT implant brought a new level of convenience and reliability to this segment, for example with the proven mechanical and biological properties of Roxolid and SLActive. These implants are suitable for placement in tooth extraction sockets[5] – potentially reducing the need for bone augmentation – and in situations where primary stability is difficult to achieve, e.g. in low density bone. BLT implants are particularly useful for addressing the challenging needs of edentulous patients who want fast, reliable, fixed, full-arch solutions.

SLACTIVE – A BETTER GOLD STANDARD

When Straumann introduced its SLA implant surface in 1997, it became the gold standard, cutting healing times in half and offering improved safety and predictability. As implant dentistry became more common, increasingly difficult cases were treated and surgeons wanted even higher predictability and shorter times to restoration. In 2005, our SLActive surface brought a further reduction in healing times, achieving earlier secondary stability and reduced risk of failure, even in challenging situations like sinus augmentations[6]. Both SLA and SLActive are among the most documented and clinically validated surfaces.

ROXOLID – HIGHER STRENGTH AND EXCELLENT OSSEOINTEGRATION

Biocompatibility, resistance to corrosion, and strength made titanium the most widely-used material for dental implants. However, its strength is limited. Introduced in 2009, Straumann's high performance alloy Roxolid was specifically designed to offer higher strength than pure titanium and excellent osseointegration capabilities. Its strength makes it possible to use reduced-diameter implants[7] for narrow spaces or extra-short implants for patients with reduced bone height[8]. This helps to avoid bone augmentation, thus reducing invasiveness[9,10,11] and creating opportunities to treat patients with insufficient bone for conventional implants.

All Straumann implants have been available in Roxolid since 2014 and most customers have upgraded to it. Roxolid is being tracked in one of the largest clinical research programs to be undertaken with a dental implant. Three- and five-year results from randomized controlled clinical trials published in 2015 reported implant survival rates of 100%[12] and 98.9%[13], respectively.

PURE CERAMIC IMPLANTS – STRONG, ESTHETIC, METAL-FREE

Ceramics provide a good biocompatible alternative for patients asking for metal-free solutions. They also have a distinct esthetic advantage over metals.

The Straumann PURE Ceramic Implant Monotype ('PURE') has a translucent ivory color – just like natural tooth roots – and a ZLA surface to enhance the healing process and promote highly predictable bone integration. Its remarkable mechanical reliability was achieved through an innovative manufacturing process and testing procedure, in which every implant undergoes a 360° strength test – a level of quality checking that is exceptional in the dental implant industry.

These attributes were evident in a multicentre clinical study published in December 2016[14], which reported success and survival rates of 98% with zero breakages, as well as a very stable bone level situation after one year in function. These rates are comparable to the excellent performance of titanium dental implants.

In addition to esthetics, Straumann PURE ceramic implants may offer an additional advantage of soft tissue attachment. A pilot histological study[15] investigating hard and soft tissues surrounding implants was published in 2016 and reported better epithelial attachment than with titanium implants.

Straumann PURE has been available in Europe and Australia since 2014 and was launched in the US and Brazil in 2016. Other markets will follow. It has a monotype (one-piece) design with an integrated abutment, which offers excellent esthetics, stability and reliability. As two-piece designs offer greater flexibility, Straumann has been developing a highly reliable two-piece ceramic solution, which will be presented in 2017. In addition, the Group entered a joint venture with maxon motor in 2016 to develop a new generation of ceramic implants manufactured using injection moulding technology.

PROSTHETICS: THE FINAL BITE

Implants provide the foundation, but the final bite comes with prosthetics. We offer a broad range of standard and customized abutments, which connect the implant to the prosthetic tooth or denture. Abutments for steep-angled implants have to withstand very high mechanical forces. During development, Straumann's angulated abutments were subjected to more than 5000 hours of rigorous hydropulser tests, representing no fewer than 280 million human bites without breaking.

VARIOBASE BECOMES A FAMILY

The growing trend of using simple titanium-bonding-base abutments (TiBases) prompted the introduction of the Straumann Variobase in 2013, a cost-effective flexible treatment concept offering a very broad range of restorative options, from single tooth to fully edentulous indications, from straightforward to esthetic cases, from cemented to screw-retained solutions. Customers can use these abutments in both conventional and digital workflows.

In the meantime, we have developed a family of Variobases – e.g. for bridge and bar restorations and for Sirona's CEREC system, which offers a chairside option with an original Straumann connection[16].

SOLUTIONS FOR FULLY EDENTULOUS PATIENTS

For decades, people suffering from the debilitating handicap of severely damaged dentition had little alternative than to have their remaining compromised teeth removed and to wear plastic dentures held in place by suction or adhesive. The functional limitations and loss of self-confidence and well-being associated with unanchored dentures are well known and documented[17,18,19].

The introduction of dental implants to anchor removable dentures has made a tremendous difference both in terms of health and quality of life. While removable prostheses are proven and popular, many patients prefer fixed solutions. Another development is the acceleration of treatment times, so that patients increasingly expect replacement solutions that function immediately and cause minimal disruption to their daily lives. Straumann addresses both these requirements.

NOVALOC – INNOVATION FOR DURABILITY

Implant-borne dentures that are removable rely on retention devices supplied by a small number of manufacturers. In search of alternatives, Straumann partnered with Valoc and launched its Novaloc system in 2016 with an innovative coating to improve durability. It covers a broad range of clinical situations and, with durable PEEK matrices, provides excellent wear resistance, low maintenance, precise fit, and an original Straumann implant-abutment connection.

The Novaloc system provides excellent wear resistance, low maintenance, precise fit, and an original Straumann connection.

Straumann Pro Arch: complete solutions for accelerated fixed full-arch tooth replacement.

STRAUMANN PRO ARCH – COMPLETE FIXED SOLUTIONS FOR EDENTULOUS PATIENTS

Straumann Pro Arch is a comprehensive solution, comprising a broad range of implants, screw-retained abutments, CADCAM frameworks, bars, bridges and other components as well as educational support. Pro Arch enables clinicians and dental technicians to provide accelerated fixed full-arch tooth replacements and is supported by Straumann CARES, the complete digital workflow from treatment planning to guided surgery and computer-designed prosthetics – all from one company.

DIGITAL DENTISTRY

Digitalization is one of the most innovative and fast-moving areas in dentistry. To substitute standard implant prosthetics with individualized, digitally designed and manufactured components is a major trend. Customers appreciate the advantages of high-precision CADCAM solutions, since they can offer efficiency gains for dentists as well as time and/or cost savings, greater comfort and lasting satisfaction for patients. Straumann CARES Digital Solutions combine state-of-the-art dental equipment with digital technology and premium materials to provide a seamless, open and fully validated digital workflow for dental professionals.

CADCAM RESTORATIVE SOLUTIONS

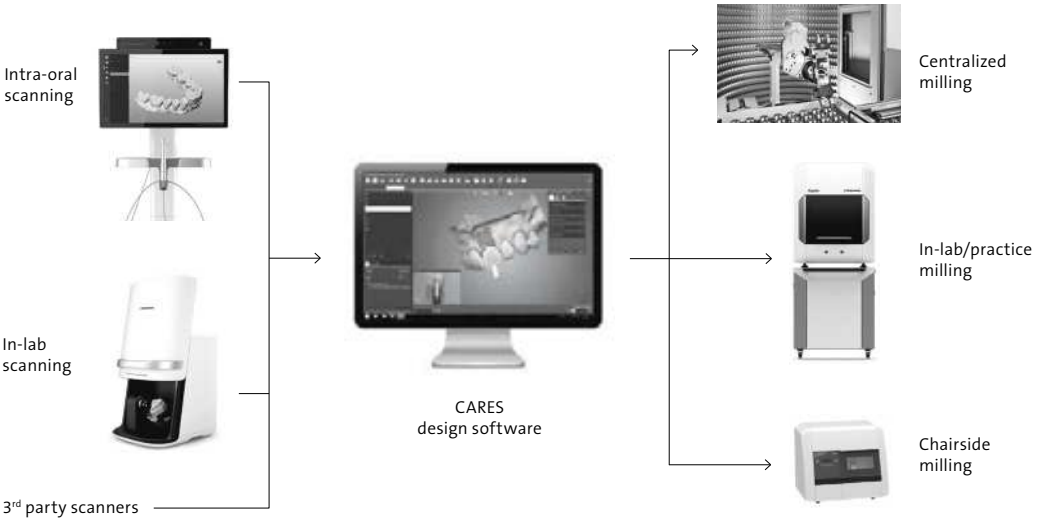
Computer-assisted design and manufacturing (CADCAM) for tooth- and implant-borne prosthetics (onlays, inlays, crowns and bridges) is more efficient than traditional methods. The cornerstones of our system are the software (CARES Visual) for scanning, designing and ordering, and our milling centers in Germany, the US and Japan, which manufacture the prosthetic elements. The integration of coDiagnostiX – our planning software for guided surgery – into CARES Visual opens new treatment possibilities including true prosthetic-driven implant treatment. The Straumann integrated workflow offers another interdisciplinary tool for treatment planning, implant placement and prosthetic rehabilitation.

A COMPETITIVE NEW INTRA-ORAL SCANNER

Our partnership with Dental Wings has been a key to offering leading-edge software and scanning technology. 2016 saw the introduction in selected markets of the Straumann CARES intra-oral scanner, which – like Straumann's in-lab scanners – was developed by Dental Wings. It is highly intuitive to use, competitively priced and, with one of the smallest hand pieces on the market today, is easy to handle. To offer dental practices a complete solution that combines intra-oral scanning with in-house prosthetic production, we have developed a compact chairside milling machine with Amann Girrbach.

Thanks to our open software platform and data format, users of third-party equipment are able to connect to our system and produce prosthetics through our validated CARES workflow – which is covered by our guarantee – or through alternative milling processes.[20] Our CARES Scan & Shape offers a comprehensive CADCAM design service for customers who prefer to outsource the design and manufacture of customized restorations.

A COMPLETE DIGITAL SOLUTION



HIGH PERFORMANCE MATERIAL FOR CADCAM RESTORATIONS

In addition to offering prosthetics made from high performance third-party ceramic materials, we now produce our own glass ceramic, n!ce. Its key advantages are high translucency and flexural strength, short milling times and easy finishing. It is available in two stages of crystallization, one of which is easy to mill and can be stained /glazed – making it attractive to labs. The other requires no firing and can be milled, finished and seated directly, making it an ideal chairside solution.

To add marketing power and to help build the n!ce brand worldwide, Straumann signed an agreement in 2016 granting global distribution rights to Planmeca, a global leader in dental equipment, software and CADCAM solutions.

BECOMING THE PARTNER OF CHOICE FOR DENTAL LABORATORIES

Having taken our first step into the in-lab milling segment at the end of 2015, we began to introduce the Straumann CARES M Series five-axis in-lab milling machine developed together with Amann Girrbach. It enables dental laboratories to produce an extensive range of restorations for any indication and complements our high-volume, high-precision centralized milling service.

BIOMATERIALS

A large share of implant procedures require guided bone regeneration, which is why it is important for us to offer a full range of effective biomaterials to our customers. Collaborations with botiss and other partners have enabled us to roll out comprehensive guided-bone regeneration solutions internationally.

A WIDE SELECTION OF SOLUTIONS FROM A CONVENIENT ONE-STOP SHOP

	Straumann	botiss
Bone allografts	•[1]	•
Bone xenografts	•[1]	•
Synthetic bone grafts	•	•
Bone blocks		•
Custom bone blocks		•
Collagen cones		•
Fleeces & sponges		•
Membranes	•[1]	•
Soft-tissue grafts		•
Biologics	•	

[1] Sold under license

Through our partnership with botiss, we offer a complete portfolio of innovative and scientifically proven regenerative solutions to customers in various markets

Straumann and botiss biomaterials: a complete portfolio of innovative and scientifically proven regenerative solutions.

around the world, including membranes for guided tissue and bone regeneration, a full range of bovine, allogenic and synthetic bone graft materials, as well as soft-tissue-graft products.

We offer products like Straumann Membrane Plus, Membrane Flex and Straumann Xenograft under license in North America and other markets where the botiss range is not registered.

EMDOGAIN – CREATING MORE REGENERATIVE OPPORTUNITIES

Periodontal disease is the most common cause of adult tooth loss[21] and is an important health issue. Treatment involves controlling the inflammation and bacteria that cause it and then restoring the tissues that support the tooth. Straumann Emdogain promotes the regeneration of those tissues and thus helps to preserve endangered teeth.

Emdogain remains the gold standard in periodontal tissue regeneration. Backed by almost a thousand peer-reviewed publications and 500 human studies, it has become one of the most extensively investigated products in dentistry. Based on volumes sold, more than two million patients around the world have been treated with Emdogain.

Regulatory clearance in 2016 opened the door for a promising new indication, authorizing the use of Emdogain to support soft-tissue wound-healing processes as part of oral surgical procedures, such as flap surgeries, implantation procedures, soft-tissue grafting and gingivectomy. By accelerating wound closure, modulating inflammation[22], and improving blood vessel formation[23], the application of Emdogain reduces pain and swelling[24] as well as the risk of post-surgical complications, and improves esthetic outcomes. The new indication was launched in Europe, with other markets to follow pending regulatory clearances.

OUTLOOK

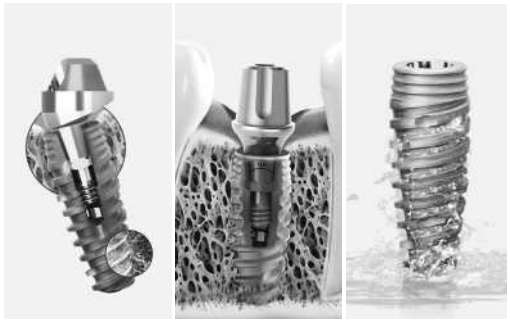
Together with the Group's technology partners, Straumann continues to develop solutions to improve productivity, treatment options and clinical outcomes. In order to provide clinicians with a comprehensive range of treatment options for their patients, we aim to bring meaningful innovations to the market and to make them widely available. At the same time, we are working on solutions that help labs to grow their business and improve their efficiency.

ATTRACTIVELY-PRICED HIGH-QUALITY SOLUTIONS THROUGH INSTRADENT

Instradent is a global business platform established by Straumann to drive the international expansion of brands that address customer needs for attractively-priced high-quality tooth replacement solutions.

NEODENT

Neodent's philosophy is to make tested implant solutions more affordable to a broader population. For more than 20 years it has specialized in the design, development, and manufacture of dental implants and related prosthetic components and, during that time, has sold approximately 12 million implants. Its wide range of products is designed to address all clinical needs and bone types with various implant designs, two



Neodent's system covers a wide range of clinical needs and features a variety of implant designs and sizes as well as a choice of connections.

connection types (morse taper and external hex) and two surfaces: NeoPoros and Acqua (hydrophilic) to enhance success rates and treatment outcomes. The implants are complemented by a broad range of standard abutments.

Neodent offers excellent alternatives to products sold by competitors of Straumann and appeals to dentists and patients who want high quality, state-of-the-art solutions at an attractive price.

Benefitting from our common technology platform, Neodent has also partnered with Dental Wings and launched its own CADCAM service in Brazil, offering in-lab scanners as well as custom abutments and prosthetics under the Neodent Digital brand. In Brazil, it has also become the national distributor for Amann Girrbach products and services, including the Ceramill range of in-lab milling equipment.

EQUINOX

The latest addition to the Straumann Group, Equinox, designs, develops, manufactures and sells dental implant systems that are based on proven treatment concepts with innovative enhancements to simplify procedures and to reduce costs.

Marketed under the Myriad brand, the Equinox implant system has been refined for simplicity and covers requirements for single or multiple-tooth replacements as well as fixed or removable full-arch solutions for edentulous jaws. The implants have a self-tapping, tapered design and use Nanopore surface technology for enhanced osseointegration. The range includes cost-effective one-stage implants with integrated prosthetic connections and two-stage solutions with separate abutments, conveniently packaged with the necessary components for the procedure.

MEDENTIKA

Medentika is a fast-growing provider of attractively-priced implant prosthetics for most leading implant and CADCAM systems. Focused on prosthetics, including standard, custom and titanium base implant abutments, Medentika offers dental labs a one-stop source to restore implants. The company also supplies its own range of titanium implants and instruments. Medentika has contributed significantly to Straumann's strategic goals of providing comprehensive solutions to dental labs and becoming a global leader in the non-premium segment of the tooth-replacement market.

Medentika: Attractively-priced implant prosthetics for most leading implant and CADCAM systems, and titanium implants.

ETKON

etkon is a Straumann Group brand for tooth and implant borne CADCAM prosthetics from veneers and on/inlays, to crowns and full arch dentures milled from various materials in our four milling centers. In 2016, we launched etkon iDent, a CADCAM service offering high precision

Equinox: A system of cost-effective one- and two-stage dental implants.

A comprehensive multi-platform solution: etkon iDent prosthetic components, compatible with other major implant systems.

KEY STRAUMANN LAUNCHES IN 2016

Product/Solution	Description	Added value/benefit for customer
SURGICAL		
Bone Level Tapered implant	– Range extended – Regional launch in Brazil and Japan	– New implant length (18mm) – Guided surgery integration
Roxolid	– Expansion to LATAM and APAC key markets – Lifetime Plus guarantee	– Innovative material widely available for full portfolio – Product replaced and cash contribution to treatment
ProClean Cassette	– Instrument cassette fully compatible with machine washing	– More efficiency in centralized reprocessing units
RESTORATIVE		
Pro Arch 2.0	– Complete fixed solution for edentulous patients using short Tissue Level implants	– Fast, flexible, reliable solutions – Treatment in situations where bone is limited
Etkon/Createch screw-retained bars & bridges	– High-end prosthetics, complex restorations	– Centralized milling – Very high precision, quality and reliability
Straumann Variobase	– Extension of chair-side workflow offering	– Variobase C available for Sirona CEREC workflow – Optimized emergence profile for Bone Level Version – New distribution channel with Zirkonzahn
Novaloc	– Retention systems for hybrid dentures with innovative carbon-based abutment coating (ADLC)	– High resistance to wear – Flexibility to compensate for implant divergence
etkon iDent	– Attractively priced prosthetic components for other implant systems	– High-quality CADCAM prosthetics from a trusted partner – Comprehensive multi-platform choice
PROSTHETIC MATERIALS		
n!ce	– Fully crystallized glass-ceramic – Developed and produced by Straumann – Available through Straumann CARES centralized milling – For single tooth restorations in different shades and shapes	– Compatible with numerous lab milling systems and available through Straumann CARES centralized milling – High strength through optimized mechanical properties. – Simple & reliable – Significantly improved dental workflow
zerion ML and UTML	– High-performance ceramic – Available in high and low translucency – Broad spectrum of applications	– High strength and reliablilty – Translucency gradation mimics natural teeth – Cost effective
3M ESPE Lava Plus zirconia & coron	– Restoration height increase for most popular zirconium dioxide and cobalt chromium restorations	– Increased design flexibility
DIGITAL		
CARES In-lab solution	Extensive in-lab equipment: – M series milling machine – Broad range of prosthetic solutions and materials (e.g. pre-mills, discs, blocs) – Dual furnaces	– All-round solution enabling labs to produce wide range of prosthetics from broad selection of materials – Validated workflows providing high versatility and freedom of choice
CARES Intra-oral scanner	– Very small hand piece – Hands-free control (voice and gesture operated)	– Attractive price – Intuitive, hygienic, easy of handling – Comfort for patients – Fully validated digital workflow
Scan & Shape service extension	– Open STL file upload including screw-retained bars and bridges – Upload from any open system such as 3Shape, exocad, DWOS, etc.	– Access to Straumann's CADCAM technology for small practices & laboratories
BIOMATERIALS		
Emdogain wound healing	– Extended indication includes wound healing in oral surgery; new marketing materials	– Patient comfort (faster healing, less pain); reduced risk of complications[22]
SERVICES		
Patient Pro	– Tools to help dentists educate patients, leveraging patients as advocates	– Periodontal disease prevention campaign with waiting room videos, animations, flyers, social media episodes and webpage

attractively-priced prosthetics for implants made by our competitors. The service was launched in the US, UK and Ireland, with further markets in Europe to follow in 2017.

SERVICES

To complement our products and solutions, and to support their effective implementation, we offer a broad spectrum of services under the Straumann brand. For instance, we assist with networking and arrange experienced mentoring on request. We also offer initiatives to help clinicians develop practical skills, such as practice management and business expansion. Straumann services of this kind require staff with a very high standard of professional knowledge, able to provide the necessary information and instruction on products. Extensive training is therefore an important aspect.

ADDING TO CUSTOMER CONVENIENCE AND CONFIDENCE

Straumann serves and supports customers directly through a highly trained sales team, providing personalized service with a high level of expertise. Each Straumann sales subsidiary operates a call center for customers in need of assistance. Callers are quickly linked to a specialist for product support.

While many customers still prefer a more traditional kind of personal service for ordering, Straumann's e-shop platform adds convenience and value for its users. Traffic rose considerably in 2016, and e-commerce now accounts for a substantial part of our business.

PEACE OF MIND

Straumann premium implants are covered by a lifetime guarantee (void when combined with other manufacturers' components), while Straumann abutments and restorations have a limited guarantee. In 2016, we launched the Roxolid Lifetime Plus guarantee in certain countries to include a monetary contribution to the treatment costs in addition to replacing the implant in the rare event of breakage. We believe that this sets a new benchmark in our industry.

COMPUTER-GUIDED SURGERY PLANNING

In 2016, we acquired a 30% stake in V2R Biomedical, a small, privately-owned company in Montreal that specializes in prosthetically-driven guided-surgery solutions. The concept of a surgical planning service is a logical complement to Straumann's Scan & Shape service. Based on CT scans and intra-oral images of the patient, V2R's experts plan the exact position, angulation and depth of the implants by computer, taking the prosthetic requirements into account. Once the treatment plan has been approved by the surgeon, a precise drill-guide is fabricated and can be delivered together with the implants, drills, abutments, prosthetics and other components as a 'smile-in-a-box' solution, making it possible to perform single/multiple tooth replacements right up to full-arch restorations in a single surgical appointment. This approach saves time for the patient and adds convenience for the dentist.

EXPANDING TRAINING, EDUCATION AND COMMUNICATION

Long-term success and patient satisfaction depend on the education and experience of the dental professional. Under the Straumann brand, we offer a broad educational program, including classic implant dentistry, tissue regeneration and state-of-the-art digital solutions, covering all proficiency levels and relevant specialties.

The program is based on the clinical guidance of the International Team for Implantology (ITI) with most of the teaching provided by ITI specialists and renowned experts, in collaboration with leading universities. Courses are offered around the world, with the highest concentration in North America and the most rapid increase in China, where Straumann has invested significantly in a consultative sales force as well as a local training and education organization.

We expanded our Peer-to-Peer Program, which helps us to attract customers from our competitors and to develop young professionals through mentoring. The program extends from personal coaching to surgical activities, where highly experienced implantologists share surgical techniques and experience with their peers in the operating room (see pp. 28, 30).

SOCIAL MEDIA PRESENCE

Digital Content Marketing Campaigns are increasingly important for reaching customers and addressing their information needs. We are present on Facebook, LinkedIn, Twitter, Instagram and other channels, targeting hundreds of thousands of users with customized content-marketing campaigns.

Straumann's digital customer magazine Starget[25] is a popular channel for keeping customers up to date on innovation, clinical results, product news, expert opinions and Straumann's presence at trade events. Information on our education programs is also featured as well as video tutorials and other multimedia content.

STRAUMANN PATIENT PRO

One in two patients consults the internet before, after and sometimes even during a consultation with the dentist. Often the choice of treatment and provider is based on the information found on the web. The Straumann Patient Pro platform provides dental professionals with digital information for educating patients and promoting their practices. It supports them with materials and tools for the internet and social media as well as for use in their dental practices.

OUTLOOK

We strive to extend product and service solutions that enhance convenience, leverage efficiency and add value, comfort and security for customers and patients.

Education is the key to driving implant dentistry in both established and new markets. It is also essential for sustaining high treatment standards and success rates. This is why we will continue to be its strong advocate, together with the ITI and dental schools all over the world. To broaden access to education and information, we will make even greater use of new media channels and platforms.

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WE CREATE OPPORTUNITIES FOR DENTAL LABS

BRANDON DICKERMAN
CERTIFIED DENTAL TECHNICIAN, DICKERMAN DENTAL PROSTHETICS

Brandon Dickerman had little desire to follow his grandparents, parents and aunt into the family's dental-laboratory business near Boston, Massachusetts, USA. But having completed studies in geography and anthropology, he was unable to decide on a career and took up his grandfather's offer to join the company on a temporary basis seven years ago. One of his major assignments was to integrate Straumann's computer-guided surgery system, CoDiagnostix, into the lab's workflow. Being a computer talent with a wealth of technical skills learned in the lab, he quickly became an expert. Using the Straumann CARES system, 3D printers and in-lab mills, the lab today offers a fully integrated prosthetic service for computer guided surgery, in addition to a full prosthetic range. Straumann recognized Brandon's potential and helped him to develop teaching and presentation skills. He now instructs fellow technicians and dentists across the United States in prosthetic-driven computer-guided surgery and was a Corporate Forum speaker at the 2016 annual meetings of the Academy of Osseointegration and American Academy of Periodontology. Our collaboration with the Dickermans has opened opportunities for his personal growth and for both our businesses to expand – especially in digital dentistry.

Artwork Dental Lab
Campinas, Brazil
Just six years ago, Ricardo Takeshi Nagahisa and Douglas Bueno Ornaghi opened the Artwork Dental Lab with the ambition of becoming the reference lab in Campinas, Brazil. Having specialized in implantology, they 'took an early train' into the digital world. Keen to offer their clients the best technology, they needed state-of-the-art equipment and invested in their first Amann Girrbach milling machine.

With the business expanding, they hired more people and bought more machines. Their latest acquisition is the new Straumann mill, which is integrated into the Straumann CARES System and helps to produce prosthetic elements even faster.

Ricardo Takeshi Nagahisa and Douglas Bueno Ornaghim with the Artwork team.

"Straumann really created opportunities for us and promoted our lab to implantologists, helping us to grow so well. They have become true partners for labs."

RICARDO TAKESHI NAGAHISA
ARTWORK DENTAL LAB

Today, Artwork Dental Lab has a team of 32 and is the biggest milling center in the state of São Paulo, serving 200 clients and manufacturing 1 200 prosthetic elements a month. As Takeshi says, "Digital technology is beginning to dominate our market. Fortunately we embraced it early and are far ahead of our competitors. Straumann really created opportunities for us and promoted our lab to implantologists, helping us to grow so fast. They have become true partners for labs."

mayrmaeder zahnwerk
Zurich, Switzerland
Master technicians Nicole Mayr and Sibylle Maeder know that one size does not fit all and insist on tailoring the right solution for each patient and practitioner.
The breadth and flexibility of the Straumann portfolio makes this possible.

"We really have the opportunity to offer our customers and patients the ideal solution – every time."

NICOLE MAYR AND SIBYLLE MAEDER

For Mayr and Maeder, the fast-growing Variobase family has become a favoured platform because of its versatility.

Nicole Mayr and Sibyille Maeder; owners of mayrmaeder zahnwerk in Zurich

Since founding their company 14 years ago, Straumann has been with them every step of the way. "Straumann has always listened to us and uses our feedback to make changes that benefit labs. We liked their products from the start – not least because most of them are Swiss made. They are everywhere in our lab and we would miss working without them."

Mayr and Maeder also value the networking opportunities – for example at ITI study clubs – to discuss technology and techniques with fellow professionals and to meet new customers. "These meetings have helped us to accomodate the chairside requirements of our customers."

Innovation
Global excellence, focused on customer needs and commercial success

Creating opportunities in the specialist segment: In Straumann's Peer-to-Peer Program, experts share their knowledge and techniques with dental professionals.

Surgical drill templates for placing dental implants with precision are produced using 3D printing technology.

Straumann was a pioneering force in implant dentistry and still is a leading innovator in the field. Our history is full of developments that have defined industry standards and created opportunities for dental professionals, patients and the company itself. We continue to be a leading contributor to research in the field and invest to ensure a constant flow of projects in our pipeline.

MEANINGFUL INNOVATION

For us, meaningful innovation is the successful commercialization of an idea or combination of ideas. One example of this, introduced in 2016, is our 'smile-in-a-box' solution which delivers all the components needed for implant surgery and restoration at the same time.

The practitioner receives a customized drill-guide, prosthesis, implants, drills, abutments, etc. prior to surgery, which means the patient can be treated in a single session and leave the practice with functioning new teeth. The concept, introduced at two peer-to-peer events (see pp. 26, 30), relies on careful pre-planning and saves time, cost and inconvenience.

Innovative technology was evident throughout the event: Straumann's interconnected digital workflow was used to plan the surgery, manufacture the guides, produce the prosthesis, order the components, manage the patient information, and even schedule the first check-ups.

The drill guides were produced by 3D printing for precision and cost effectiveness; Roxolid BLT SLActive implants were used for high strength, immediate stability and fast osseointegration; Emdogain was applied to

A STOCKED INNOVATION PIPELINE

	Project	Key benefit target	Introduction/ rollout
	Smaller implants	Less invasive procedures if guided bone regeneration (GBR) can be avoided	2017
	Modular Surgical Cassette	Enhanced surgical flexibility and lower entry barrier	2017
	Single-use instruments	Complete portfolio of instruments for single use	2017
	PURE 2 ceramic implant	High-end esthetics, increased prosthetic flexibility	2017+
	Simplified Guided Surgery	Increasing confidence when placing implants	2017+
	Mini-Implants	Cost effective edentulous procedures	2018
	New Bone Level implant system	Implant system for immediate procedures	2018
	New Tissue Level implants	Straumann heritage revisited	2019
	Variobase prosthetics	Enable cost-effective restorations for the esthetic zone	2017
	New material	Direct veneerable CADCAM abutments	2017
	Colored prosthetics	Naturally colored abutments for patients with thin gingiva	2017
	New material	Multilayered ceramic material for improved esthetics	2017
	etkon iDent	High quality prosthetic compatible to major brands	2017
	Angulated solution	Allowing for screw-retained restorations in all indications	2017+
	Integrated workflow	Digital workflow support for immediate tooth replacement	2017
	Intra-oral scanner	Further portfolio development of our integrated digital impression system	2017
	CARES milling system	New integrated in-house milling systems and additive manufacturing options	2017
	CARES printing system	Additive manufacturing systems (3D printing)	2017
	Emdogain	New indications	2017+
	Osteogain	Bone enhancement	2017+

Highlights from Straumann's development pipeline. Introduction/rollout dates may be subject to positive clinical results and regulatory clearances, and barring unforeseen circumstances.

reduce swelling and support wound healing (see p.37); Pro Arch screw-retained prosthetics or high-tech Novaloc retention devices (see p.34 f.) – launched in midyear – were used.

Even the marketing/education approach was innovative, with peer-to-peer mentoring for the surgeons and prosthodontists, and full documentation to record and perfect the technique.

All of these innovations were brought together to treat patients in general daily practice conditions.

INNOVATION – INSPIRED BY AND TAILORED FOR CUSTOMERS

Over time, product, process and solution innovations have proven to be the key drivers of Straumann's global success. The inspiration to turn a multitude of ideas into marketable solutions that address increasing consumer needs comes from various sources:

- The constant internal exchange of ideas between the Straumann Group companies in the areas of product management, production, and R&D;
- Continuous market screening, including scouting at dental congresses/trade fairs and observing other industries for insight into new trends and developments;
- The Straumann 'Idea Portal', a global, web-based platform invites researchers, clinicians, clients, employees and other stakeholders to share innovative ideas

SELECTED KEY PUBLICATIONS ON STRAUMANN'S PRODUCTS IN 2016

Authors	Study Title	Product	Journal	Conclusion
Gahlert M, Kniha H, Weingart D, Schild S, Gellrich NC, Bormann KH	A prospective clinical study to evaluate the performance of zirconium dioxide dental implants in single-tooth gaps.	PURE	Clin Oral Implants Res. 2016 Dec; 27(12): e176-e184.	Monotype ceramic implants can achieve clinical outcomes comparable to published outcomes of equivalent titanium implants.
Monzavi M, Noumbissi S, Nowzari H	The impact of in vitro accelerated aging, approximating 30 and 60 years in vivo, on commercially available zirconia dental implants.	PURE	Clin Implant Dent Relat Res. 2016 Nov 9.	Straumann PURE implant performed as well as, or better than the evaluated competitors, especially at longer time points.
Liñares A, Grize L, Muñoz F, Pippenger BE, Dard M, Domken O, Blanco-Carrión J	Histological assessment of hard and soft tissues surrounding a novel ceramic implant: a pilot study in the minipig.	PURE	J Clin Periodontol. 2016 Jun;43(6):538-46.	The epithelial attachment favors the PURE ceramic implant over the titanium one.
Derks J, Schaller D, Håkansson J, Wennström JL, Tomasi C, Berglundh T	Effectiveness of implant therapy analyzed in a Swedish population: Prevalence of peri-implantitis.	Tissue Level implant	J Dent Res. 2016 Jan;95(1):43-9.	The probability of being diagnosed with peri-implantitis 9y after implant therapy was lowest with Straumann TL SLA implants.
Herrmann J, Hentschel A, Glauche I, Vollmer A, Schlegel KA, Lutz R	Implant survival and patient satisfaction of reduced diameter implants made from a titanium-zirconium alloy: A retrospective cohort study with 550 implants in 311 patients.	Roxolid/ SLActive	J Craniomaxillofac Surg. 2016 Sep 23.	Impant survival of 97.4% after 2 years for Roxolid 3.3mm implants.
Medvedev AE, Molotnikov A, Lapovok R, Zeller R, Berner S, Habersetzer P, Dalla Torre F	Microstructure and mechanical properties of Ti-15Zr alloy used as dental implant material.	Roxolid	J Mech Behav Biomed Mater. 2016 Sep;62:384-98.	Enhanced fatigue performance of Roxolid over Titanium.
Calvo-Guirado JL, López Torres JA, Dard M, Javed F, Pérez-Albacete Martínez C, Maté Sánchez de Val JE	Evaluation of extra short 4-mm implants in mandibular edentulous patients with reduced bone height in comparison with standard implants: 12-month results.	4mm implant	Clin Oral Implants Res. 2016 Jul;27(7):867-874.	Impant survival of 97.5% after 1 year for Roxolid extra short 4mm long implants.
Stavropoulos A, Cochran D, Obrecht M, Pippenger BE, Dard M	Effect of osteotomy preparation on osseointegration of immediately loaded, tapered dental implants.	Bone Level Tapered implant	Adv Dent Res. 2016 Mar;28(1):34-41.	Increased primary stability of Bone Level tapered implant in underprepared osteotomies.
Piano S, Romeo E, Sbricoli L, Pisoni G, Cea N, Lops D	Simplified procedure for the immediate loading of a complete fixed prosthesis supported by four implants in the maxillary jaw: a 2-year prospective study.	Pro Arch	Clin Oral Implants Res. 2016 Dec;27(12):e154-e160.	Immediate loading of four implants positioned anteriorly to the maxillary sinus could be a reliable treatment procedure to support fixed complete restorations.
Dard M, Shiota M, Sanda M, Yajima Y, Sekine H, Kasugai S	A randomized, 12-month controlled trial to evaluate non-inferiority of early compared to conventional loading of modSLA implants in single tooth gaps.	SLActive	Int J Implant Dent. 2016 Dec;2(1):10.	Early loading of SLActive implants in single tooth gaps in molar regions is non-inferior to conventional loading approach in terms of crestal bone level change in short follow-up period.
Alayan J, Vaquette C, Saifzadeh S, Hutmacher D, Ivanovski S	Comparison of early osseointegration of SLA and SLActive implants in maxillary sinus augmentation: a pilot study.	SLActive	Clin Oral Implants Res. 2016 Sep 29.	SLActive performs better than SLA with regards to percentage of bone to implant contact and composition of the tissue surrounding the implant.
French D, Cochran DL, Ofec R	Retrospective cohort study of 4591 Straumann implants placed in 2060 patients in private practice with up to 10-year follow-up: the relationship between crestal bone level and soft tissue condition.	SLA	Int J Oral Maxillofac Implant 2016 Nov/Dec; 31(6):e168-e178.	Long term data with a high number of implants showing outstanding performance.
Mattheos N, Li X, Zampelis A, Ma L, Janda M.	Investigating the micromorphological differences of the implant-abutment junction and their clinical implications: a pilot study.	Original Straumann implant-abutment connection	Clin Oral Implants Res. 2016 Nov;27(11):e134-e143.	Non-original abutments present morphological differences from the original ones.
Maymon-Gil T, Weinberg E, Nemcovsky C, Weinreb M	Enamel Matrix Derivative promotes healing of a surgical wound in the rat oral mucosa.	Emdogain	Clin Oral Investig. 2016 Apr; 20(3):589-95.	EMD improves incisional wound healing by promoting formation of blood vessels and collagen fibers in connective tissue.

with us. Out of the hundred ideas submitted and evaluated in 2016, a handful have potential for further development;
– Interaction with customers is an important source of innovation. Besides individual customer visits, we organize global, national and regional meetings to understand professional, business, and market needs and to discuss existing and potential innovations. In 2016, 130 participants from 20 nations attended these meetings.

PRECLINICAL AND CLINICAL RESEARCH

SUCCESS BASED ON SCIENCE

It is essential that all products destined for patients are appropriately tested for biocompatibility, stability, and strength, and to ensure that the properties developed in the laboratory can be reproduced on a commercial scale. Technologies, materials and designs that demonstrate the necessary characteristics are studied in vivo, together with the surgical techniques in appropriate cases.

Straumann products and technologies are thoroughly evaluated in a defined global clinical study program, which includes single- and multi-center studies, as well as investigator-initiated studies. Proposals for the latter are carefully screened and may be supported in various ways. Clinical investigation can further include large post-market surveillance and non-interventional studies covering a range of patients and indications treated in daily practice conditions. Very few implant companies perform clinical studies on this scale. The results provide clear reasons why our customers trust in Straumann products.

DOZENS OF PUBLICATIONS

In 2016, an impressive body of scientific evidence on our products was published in peer-reviewed journals. There were at least 77 publications, including results from our own programs, ITI-funded studies (p. 103) and independent research. These are some of the highlights:
– A study published by French et al. reported outstanding performance of almost 4 600 Straumann implants in more than 2 000 patients. Many of the implants had been functioning for more than ten years and bone loss was minimal (less than half a millimeter on average) even after this time.
– Following their publication in 2015 on relative risk for implant loss, Derks et al. published the second part of their study in early 2016. Looking at periimplantitis, which can lead to implant loss, the follow-up publication also showed excellent results for Straumann.
– 2016 also saw the first multicentre clinical data on Straumann PURE ceramic implants, published by Gahlert et al.; reporting a success and survival rate of 97.6% as well as very stable bone level after one year in function. These high rates are comparable to the excellent performance of titanium implants.

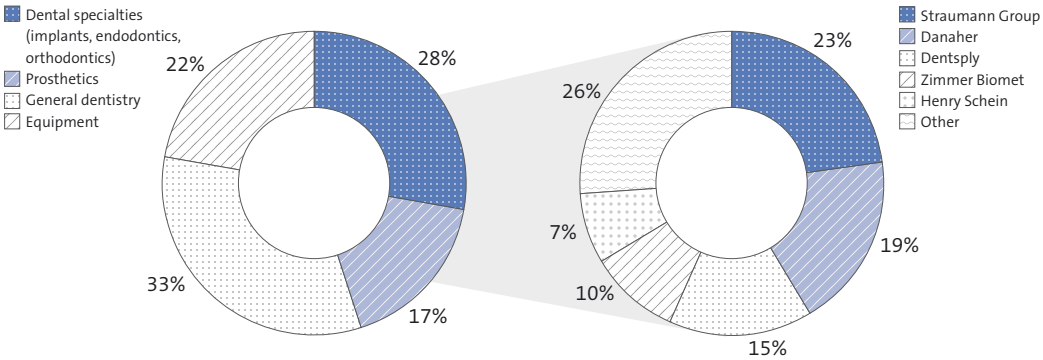
An overview of selected key studies published in 2016 is presented in the table on p. 47. More details on these and other relevant publications on Straumann products can be found at
http://www.straumann.com/en/home/science

OUTLOOK

Customer needs and commercial success are the driving forces of Straumann's innovation process. Straumann continues to rigorously test its products under scientific conditions in order to provide customers and patients with reliability, quality and peace of mind. With this in mind we will continue to invest significantly in research and development for more life-long smiles wordwide.

Markets
Leadership strengthened in a CHF 7 billion market

THE CHF 24BN GLOBAL DENTAL MARKET BY CATEGORY AND IMPLANT SEGMENT SHARE



Consolidated figures for Straumann (incl. Neodent), Danaher (incl. Nobel Biocare, Implant Direct and Alpha-Bio Tec.), Dentsply Sirona (incl. Dentsply, AstraTech and MIS) and Henry Schein (incl. Camlog and BioHorizons). The global market for implant dentistry (chart on the right) is worth CHF 3.5 billion.

THE GLOBAL DENTAL MARKET BY CATEGORY

The global market for dentistry is an attractive segment of the medical device sector with annual sales of approximately CHF 24 billion[1]. Typically it grows 1.5 to 2 times faster than global GDP, driven by increasing oral health awareness and an aging population. In the past decade, studies have linked missing or poor dentition with significant nutritional changes, increased risk of diabetes, stimulation of coronary artery disease, and higher probability of some forms of cancer.[2,3]

The implant and abutment segment, where Straumann generates most of its revenues, accounts for nearly 15% of the overall dentistry market and is part of the dental specialties segment (see chart above). Independent research indicates that this segment will continue to grow faster than general dentistry and offers an attractive return on invested capital, particularly to those companies that serve a large share of the market.

Market size and growth have to be estimated using internal intelligence and independent research because very few companies in these markets publish sales and other relevant performance information.

In recent years, Straumann has entered new fast-growing markets organically and with partners, which has provided new insights. We have also broadened the geographical and segmental scope of our market intelligence efforts and currently believe that the global market for implant dentistry is worth CHF 3.5 billion[4], including implant fixtures, abutments and related instruments.

In 2016, the world market continued to grow at 3–4%, bringing the estimated total number of implants placed to approximately 18 million. Growth was higher in volume than in monetary terms, reflecting strong growth in emerging markets (where average prices are lower), the increased share of non-premium products, and modest price deflation in general.

Geographically, Europe remains the strongest region and, together with North America, accounts for approximately three quarters of the global market value. Asia continues to be a growth engine, increasing twice as fast as the next fastest region, North America. The implant market in Europe grew modestly and showed mixed dynamics in national markets. While traditional markets like Italy, Switzerland or the Netherlands fell short of the previous year's level, demand in other key markets like Iberia, France, the UK, and Scandinavia increased. The development was bolstered by high growth markets in Eastern Europe, except for Russia, which is still suffering from the economic crisis. Latin America grew modestly despite a stagnating Brazilian implant market.

The implant market can be divided into two segments: premium and non-premium. Premium companies are distinguished by their pre-clinical research and development activities; pre- and post-market clinical documentation; degree of product innovation and breadth; as well as added-value customer service including training and education. The Straumann Group leads the global implant market. Under its premium brand, Straumann, it offers a wide range of implants priced at multiple levels, depending on the material and surface technology. The Group also competes in the non-premium segment through its Instradent platform and its associated partners.

By consistently outperforming the market average in recent years, the Group has strengthened its leadership position and commands an estimated market share of 23%.

By value, about 70% of the market is controlled by the leading five companies. The remaining 30% is distributed among several hundred non-premium manufacturers, who compete mainly on price, offering only limited research, training and education services. However, in several developing countries where overall treatment costs are low (namely Brazil, Russia, Israel and South Korea), non-premium manufacturers hold substantial combined market shares. Even though the growth differential between the two segments is diminishing, the non-premium end of the market continued to grow faster in 2016.

Straumann entered the fast-growing non-premium segment in 2012 through a partnership with Neodent, and the Group's value platform has continued to expand since then. Our strategy is to offer an attractively priced portfolio in all relevant markets through Instradent without compromising the premium leadership of our legacy brand. Instradent comprises well-respected brands and uses a different distribution model to match specific market needs and affordability.

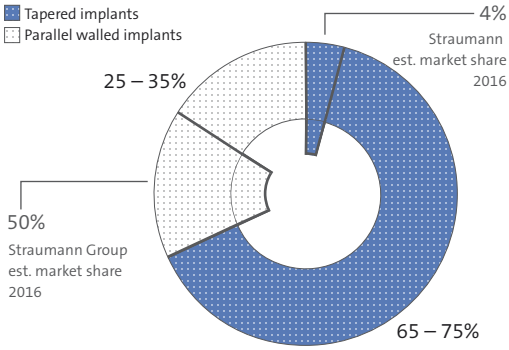
The attractiveness of the industry continued to stimulate the appetite of strategic buyers and private equity firms in 2016 and several companies took advantage of the historically low interest rates to make acquisitions. The largest transaction (USD 5.5 billion[5]) was the stock-for-stock merger between the Dentsply International and Sirona Dental Systems in February 2016, creating a dental conglomerate with annual revenues of USD 3.8 billion[6] Dentsply also acquired the Israeli non-premium implant company MIS Implants Technologies for USD 375 million. In 2016, the Straumann Group acquired a 30% stake in the French implant manufacturer Anthogyr. Finally, the Carlyle Group, one of the world's leading private equity companies, acquired a majority stake in the German company exocad, a provider of innovative dental laboratory CADCAM software. In 2011, Carlyle invested in 'mydentist', a large dental chain in the UK with 450 practices focusing on Natonal Health Service dentistry.

THE TAPERED IMPLANT SEGMENT OFFERS HIGH POTENTIAL

Dental implants are distinguished by their thread and body design. Tapered implants offer high primary stability, while parallel-walled implants are versatile and have been documented for 30 years. More than two thirds of the implants sold in 2016 were tapered.

Over the years, Straumann and the ITI have been strong proponents of parallel-walled implants and Straumann controls roughly half of this segment (see chart opposite). Contrastingly, our Neodent brand has offered

IMPLANT CATEGORIES AND THE STRAUMANN GROUP'S VOLUME SHARE OF EACH



tapered implants for many years. In 2015, Straumann entered the tapered segment with its premium BLT implant which had gained a (volume) market share of slightly more than 4% by end of 2016. We aim to increase this in the coming years through targeted marketing initiatives and further product line extensions.

IMPLANT PENETRATION LEVEL STILL LOW

The principal factors driving growth in the tooth replacement market are increases in:

- The number of older people,
- The middle class in developing countries,
- The use of implants,
- Patient awareness, and
- People choosing cosmetic surgeries and implants.

Over the past decade, the proportion of elderly people in developed countries has increased every year. The percentage of the US population over the age of 60 has more than tripled and now amounts to 14%.[7] This is expected to rise to 22% by 2020.

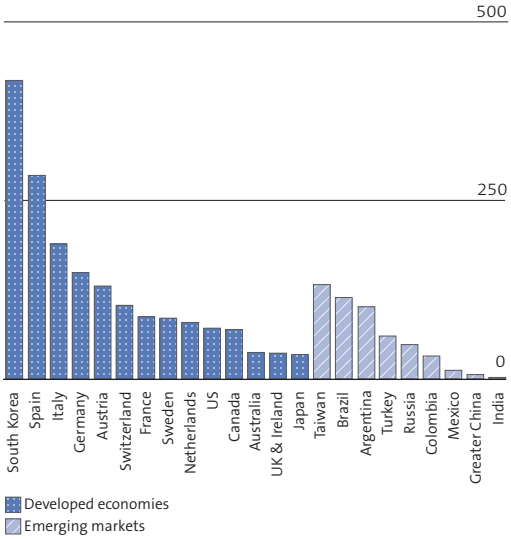
More than 35 million Americans are fully edentulous.[8] This is expected to continue rising as the baby boomer population ages. Older patients are far more likely to require tooth replacement or be partially or fully edentulous than the younger generations. The American College of Prosthodontists estimates that the number of partially edentulous patients will continue to increase in the next 15 years to more than 200 million.[8] 90% of edentulous people use simple, unanchored dentures. Some may not see a need for improvement in their chewing function and have accepted the limitations of their gum-supported dentures. Others cannot afford implant procedures and seek low-end permanent restoration solutions (WHO estimates more than 60% fall in this category). Still others want to upgrade to implant-supported fixed or removable overdentures. To serve this market, Straumann offers its customers various premium solutions including Pro Arch (see p. 35 f.) and Novaloc.

While the absolute number of edentulous people is rising, epidemiological data indicate that the rate of toothlessness in the US[9] and Germany[10] is decreasing as preventive measures to reduce tooth decay and periodontal diseases become effective. Today, one in eight people in Germany aged 65 – 74 is edentulous, in contrast to one in four 20 years ago. Nevertheless, despite improvements in highly developed countries, edentulism is still increasing in emerging markets.[11] Consequently, patients in countries with better oral health will require more single- and multiple-tooth restorations than full dentures. In emerging markets, simpler surgical protocols that reduce technical barriers for dentists and can be performed at lower cost will be required to serve a larger pool of patients.

The pool of potential implant patients seems inexhaustible. In the developed world more than 600 million people are affected by tooth loss, but each year fewer than 60 million seek treatment[12]. It is striking to see that 178 million people in the US are missing at least one tooth, yet only a million are treated per year (corresponding to 2.3 million implants). This level is low in absolute terms and in comparison with other countries.

In 2016, the 5th edition of the widely recognised German oral health study ('Deutsche Mundgesundheitsstudie V') was published. It is limited to Germany, but is probably the most systematic and comprehensive study in the industry and provides interesting information on the trends and prevalence of modern tooth replacement. The study revealed that roughly 10 times more patients have implant-supported crowns or bridges compared with 1997, which supports the prevailing trend of increased fixed tooth replacement. Yet, despite the positive trend, implant prevalence is still modest. Only 3% (2005: 1%) of young German adults (35 – 44 years old) have one or more implants, while 8% of people aged between 65 and 74 years (2005: 3%) have implant-borne

DENTAL IMPLANT PENETRATION BY COUNTRY (PER 10 000 POPULATION)



With very few exceptions, tooth replacement is an out-of-the-pocket expense. In South Korea, reimbursement was gradually introduced for senior citizens in 2014. This, together with the fact that over 70% of the dentists in the country place implants, explains the high penetration rate. By contrast, large economies like China and India remain heavily underpenetrated due to a lack of qualified dental professionals.

prosthetics. Further evidence of a positive trend is that the implant penetration among younger adults with high social status reaches 20%, although only 2% of the German population aged between 65 – 74 have received implant-borne solutions to replace missing teeth.

As the chart above shows, the number of implants placed per 10 000 population in the US is only half that in t he largest European market, Germany, which illustrates the considerable growth potential. Other highly populated countries like the UK and Japan also show strong upside potential.

It is well established that the primary causes of tooth loss are decay and injury, but periodontal disease, cancer, simple wear, or anodontia (absence of permanent teeth) can also create a need for tooth replacement.

Despite the fact that statistics show positive effects of enhanced oral hygiene and preventive measures, the increased substitution of implants for conventional dentures, bridges and crowns is the main driver for growth in the dental implant market. Manufacturers are therefore seeking to unlock potential by raising awareness of the advantages and long-term clinical benefits of implant solutions among patients and dentists.

Despite the fact that implant-supported tooth replacement has become an accepted, well established treatment in all developed markets, only 15 – 20% of the 1.2 million world's active dentists are surgically active.[13] Dentists with a post-graduate degree (e.g. periodontists, oral and cranio-maxillofacial surgeons) place a high number of implants and get referrals from less-trained general dentists.

The referral concept is still common in many countries because most dental schools do not offer hands-on implant courses in their undergraduate programs, and implant-based procedures require experience.

Practitioners are slowly becoming comfortable with the surgical procedure. Research data show that a typical US dental practice restores 220 – 330 teeth per year, but places only 20 implants.[14] In contrast, specialists place several hundred implants per year. Straumann therefore has several initiatives to increase adoption and to reduce the entry barriers for younger dentists (see pp. 86 ff., 98).

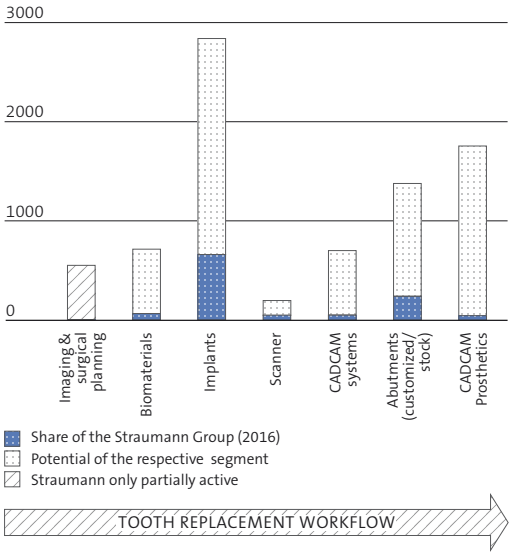
Our penetration analysis indicates that 15 – 20% of US adults who are medically eligible and seek treatment for tooth loss actually receive implants.[15] In Germany, the penetration level is approximately 20%, and in Switzerland, our internal surveys indicate that it is close to 40%.

Cost is an obstacle. In a few cases, the public healthcare system reimburses part of a dental implant procedure. Private insurance schemes on the other hand are either financially unattractive or apply strict entry criteria. Even in cases where insurance companies do cover dental implant procedures, the amount reimbursed is often insufficient to cover the full cost of treatment, leading to considerable out-of-pocket costs for patients, who are discouraged from choosing the procedures.

Market research shows that some patients seek metal-free implant solutions, which is why Straumann

STRAUMANN'S ADDRESSABLE MARKET (WORTH CHF 7BN)

(in CHF million)



developed its all-ceramic PURE implant. Although this type of implant currently represents less than 1% of the global implant volumes, demand is expected to grow significantly in coming years.

BECOMING A FULL SOLUTION PROVIDER – ADDRESSING A CHF 7 BILLION MARKET

Besides its implant business, the Straumann Group is also active in the prosthetic and regenerative dentistry market, which includes both consumables and equipment. Restoration and regeneration are strongly connected with implant procedures and offer the Group considerable cross-selling potential (see chart above). Straumann has increasingly focused on these fields in recent years. By doing so, the Group has increased its addressable market and is now active in dental segments that are collectively worth approximately CHF 7 billion (see chart above).

Thanks to investments in Dental Wings, Valoc and Medentika, as well as partnerships with Amann Girrbach, botiss and others (for a complete overview please refer to page 25), the company is able to offer its customers a complete range of biomaterials as well as a comprehensive range of CADCAM tools and services.

THE DENTAL PROSTHETICS MARKET

Tooth restorations (e.g. crowns, inlays, onlays, bars and bridges) are made increasingly by automated processes rather than by hand. Digitalization now makes it possible to design and make prosthetic elements by Computer-Aided Design and Manufacturing (CADCAM), saving time and increasing accuracy. Straumann's products in this area help dental practitioners to complete a dental tooth replacement procedure more efficiently with digital tools.

Digital dentistry – from CT/DVT imaging and intra-oral impression taking in the practice to automated output in the laboratory – is still at an early stage, although less so for laboratories than for dentists. As the technology advances, more dentists and laboratories will recognize the benefits and value of investing in CADCAM technology and will offer them to their patients.

CADCAM makes it possible to use strong, translucent glass-ceramic materials such as Straumann n!ce and zirconia, which look natural and are fracture-resistant. Internal and independent surveys have shown that patients are increasingly willing to invest in treatments that not only restore function, but which also improve appearance.

The sale of CADCAM-produced prosthetic elements is the largest part of this market segment. In 2016, we estimate that one in three prosthetic elements (tooth- and implant-borne) was made by CADCAM. This is expected to increase. Market research[16] indicates that general dentists usually obtain CADCAM manufactured crowns and bridges from local labs. About two thirds use models or impressions to order the restorations. In an internal US labs survey, labs reported that they receive fewer than 1 in 10 impressions from the dentist in digital form. In the next few years, general practitioners anticipate that most CADCAM restorations will be outsourced but that digital scans will increasingly replace physical models.

CADCAM EQUIPMENT

Different CADCAM sites deploy different equipment:

- In chairside systems scanning, design and milling are all performed in the dental practice. The milling machine is small.
- Full in-lab systems offer scanning, design and manufacture on medium-sized milling machines.

– In central milling, in-lab scanners are connected to an offsite milling center that uses sophisticated, heavy milling machines.

Currently, penetration of complete chairside milling systems remains low. Only an estimated 15–20% of dental practices in developed markets like the US, Germany or Switzerland have made the investment[16], underscoring the value proposition and market opportunity the technology holds.

In contrast to the slow adoption of chairside scanning and milling systems, dental labs have invested in CADCAM technology. 60% of the dental labs surveyed have an in-lab scanner and 40% have also invested in a milling system. Of the larger labs, 85% have a scanner, milling system, and sintering furnace, and a significant proportion intends to invest in additional CADCAM equipment.[17] While small labs are eager to adopt automated workflows, the high cost means that few own CADCAM milling equipment.

In-lab scanning with centralized milling is an attractive solution because it offers labs access to the latest technology without investing in expensive, high-maintenance milling equipment. The etkon 'Scan & Shape' service offers scanning and milling to labs that do not have their own scanning capability. This service benefits smaller and medium-sized labs when complex restorations need to be milled. Through its collaboration with Amann Girrbach, the Group gained an initial foothold in the in-lab milling segment at the end of 2015. In 2017, Straumann will also begin to offer chairside systems. Lack of reliable market data makes it difficult to quantify market shares in CADCAM prosthetics. We estimate that in 2016, our share of the centrally-milled and in-lab milling segment was in the single digit range.

THE MARKET FOR DENTAL BIOMATERIALS

The market for oral bone and tissue regeneration products grew robustly in the mid-single digit range in 2016. As biomaterials are frequently used to support implant procedures, the market exhibited similar growth to the implant and prosthetic market. Our geographical expansion has provided us with a more accurate picture of this sub-segment, which is estimated to be worth CHF 600 to 700 million.

Due to our late entry and the fact that botiss biomaterials do not yet have regulatory approvals in most markets outside Europe, the respective market shares are still low compared with our core business. The potential of this business should help the Group to grow successfully in the coming years.

The biomaterials market can be divided into three segments:
– Bone-graft materials
– Membranes
– Tissue-regeneration products.

Bone-graft materials form the largest segment and account for more than 60% of the market. They are used mainly in dental implant procedures, but sometimes to preserve a tooth extraction socket, and in smaller volumes in periodontal procedures. Thanks to successful collaborations with botiss and other partners, the Straumann Group has been able to roll out comprehensive guided-bone regeneration solutions internationally and now plays in each segment of the biomaterials market.

BONE GRAFT MATERIALS

It is currently estimated that every other implant patient[18] requires bone augmentation or graft procedures. Four types of bone graft material are commonly used:
– Autografts (patient's own bone)
– Allografts (human donor bone, e.g. Straumann Allograft, botiss maxgraft)
– Xenografts (bone sourced from animals, e.g. Straumann Xenograft, botiss cerabone)
– Synthetic bone (e.g. Straumann BoneCeramic, botiss maxresorb).

Traditionally, European dentists tend to use xenografts, while Americans prefer allografts, so the markets are regional. In 2014, Straumann entered the xenograft segment, which accounts for 45 – 50% of the bone graft substitute market. The synthetic and allograft segments make up 15 – 20% and 35 – 40% of the market, respectively, and the Group has been present in both for more than five years.

MEMBRANES

Oral membranes are used in up to 60% of bone augmentation procedures[19] and act as barriers to prevent the

growth of soft tissue in the space required for bone formation. Straumann has competed in this segment since 2010.

SOFT TISSUE REGENERATION

Between 10 and 15% of the overall population in developed countries suffer from severe periodontitis[20], a common cause of tooth loss. To treat the disease, periodontists or general dentists aim to regenerate the tissues that anchor the tooth if they have been damaged by periodontal disease. Through its product Emdogain, Straumann leads the segment for soft tissue regeneration and its share of this segment is more than 50%.

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WE CREATE OPPORTUNITIES IN EMERGING MARKETS

DR SHAHVIR NOORYEZDAN
FOUNDING OWNER AND CEO OF EQUINOX, HEAD STRAUMANN INDIA

Dr Shavir Nooryezdan is a practicing clinician with his own dental clinic in Mumbai. He is also a recognized authority in the field of implant and restorative dentistry. Seeing the great need and opportunity for affordable and effective tooth replacement solutions in India, he established his own implant production company in 2005. At the same time he began training dentists in implantology. In the meantime, his company, Equinox, has become the third largest provider of dental implants in India. To take it to the next step, he wooed Straumann as an investor and global partner. In 2016, Straumann acquired the company and engaged Dr Shavir to head and drive the Straumann business in India. His expertise and networks, together with the infrastructure established by Equinox, offered Straumann the opportunity to enter the Indian market with its premium implant brand.

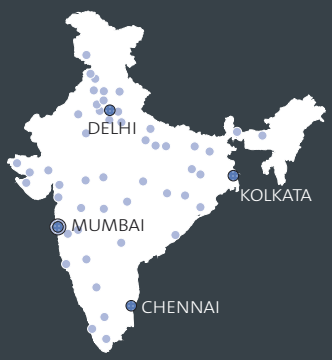
India
Only a small minority of Indians can afford premium tooth replacement solutions. The majority is far less affluent. The lack of trained specialists and the high cost put treatment out of reach for most people.

As a result, India is one of the least penetrated markets with just two implants placed per ten thousand population, in contrast for example to Brazil and the US, where the respective rates are 114 and 75.

However, the standard of dentistry is rising and with organizations like Equinox, Straumann, the International Team for Implantology and a small number of other companies offering training and education, the provider base will expand. In addition, the availability of inexpensive solutions and increasing awareness of dental implants make India an exciting opportunity for tooth-replacement companies.

Without local business expertise, distribution channels, dental networks and a product offering tailored to local needs, most international companies have not been able to address the Indian market effectively. Equinox on the other hand has successfully built a customer network in more than 180 cities across the country to become a leader in the value segment.

EQUINOX DISTRIBUTORS IN INDIA



"In 2016, an estimated 220 000 implants were placed in India, 350 000 in Turkey, and 400 000 Argentina."

China
While Straumann is the market leader in China, its presence has been limited to the premium segment, while the value segment is beginning to expand rapidly. The time needed to obtain regulatory approvals for a value implant system – not to mention the cost – seriously threatened the Group's chances of building a leadership position outside the premium segment.

Partnering with Anthogyr, whose implant system was already established in China, offered both companies a significant growth opportunity. Straumann acquired a 30% stake in Anthrogyr and took over their implant business in China. In addition to providing immediate access to the value segment there, the partnership may offer opportunities in other markets.

Turkey
To address the non-premium segment in Turkey, Straumann and its local distributor established a joint venture called Zinedent to supply implants and prosthetics in the domestic and surrounding markets. The collaboration may also offer the possibility of manufacturing locally.

Antogyr promotion in China

Argentina
Argentina is the second largest market for tooth replacement in Latin America with approximately 100 implants placed per ten thousand population annually. To capture this significant opportunity, the Group opened a subsidiary in 2016 to sell both the Straumann and Neodent brands, as the lion's share of the Argentinian market is non-premium.

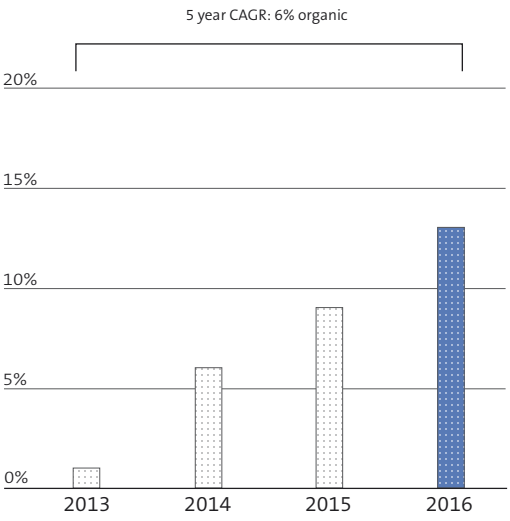
To create and capture opportunities in other emerging markets – for example Africa and central Asia, the Group reorganized its European business in 2016, creating a dedicated team for distributors and emerging markets in the EMEA Region.

2016 Business performance
Group

The Straumann Group reported a strong performance in 2016, as revenue grew 15% in Swiss francs to CHF 918 million, fueled by double-digit increases across all businesses. 13% of the growth was organic, with North America (+16%) contributing the largest portion, and Asia/Pacific posting the strongest relative growth (+20%).

The Group invested significantly in new markets and segments, in its strong R & D pipeline and in production capacity expansion, but still achieved further improvements in underlying profitability, as operating and net profit rose 22% and 29% respectively, with the corresponding margins reaching 25% and 20%. At CHF 230 million (earnings per share: CHF 14.68), net profit actually exceeded operating profit by CHF 3 million due to a one-time tax gain of CHF 43 million resulting from the merger of Straumann Brazil with Neodent.

ORGANIC REVENUE GROWTH



The Implant business was the main contributor to growth throughout the year. Volumes expanded at a double-digit rate, led by the Bone Level Tapered (BLT) range and the high-performance implant material Roxolid. More than 20% of the Straumann implants sold in 2016 were tapered and the trend continues. BLT enables Straumann to address the large conical implant segment, where high primary stability is important especially in accelerated treatment protocols. Based on independent market research, the share of tapered implants worldwide is greater than 70%. Since its launch in 2015, BLT has gained an estimated 4% volume share of this segment.

The Group's intense efforts over the past two years to become a total solution provider for dental labs have led to sustained double-digit growth in the restorative business. Sales of prosthetics – both standard and CADCAM – developed very positively. The success of Straumann's flexible Variobase abutments, which can be restored in a milling center, in the lab or even in the dental practice, together with campaigns to promote original connections contributed to sales, while Straumann's new intraoral scanner and Amann Girrbach milling solutions added to growth in digital solutions.

The Group's smallest business, Biomaterials, was the fastest growing. Thanks to successful collaborations with botiss and other partners, the Group has been able to roll out comprehensive guided-bone regeneration solutions internationally and now plays in each category of the biomaterials market. One additional highlight in 2016 was the approval and launch of Emdogain in oral soft-tissue wound healing.

The Group succeeded in improving its share of the biomaterials market and has exclusive distribution rights for botiss products in most countries. In 2017/18, the two partners will work to add biomaterials in countries where they are not yet available.

KEY PERFORMANCE FIGURES

	2016		2015	
	Reported	Excluding exceptionals[1]	Reported	Excl. business combination exceptionals[2]
Revenue (CHF m)	917.5		798.6	
Gross profit margin (%)	78.3		77.0	78.6
EBITDA margin (%)	28.3		26.0	27.6
EBIT margin (%)	24.8		21.6	23.3
Net profit margin (%)	25.0	20.4	9.0	18.1
Free cash flow margin (%)	15.1		18.9	

[1] In H1 2016, net profit was lifted by a one-time effect of CHF 43m (corresponding to CHF 2.74 earnings per share) related to the capitalization of deferred tax assets in Brazil.
[2] Charges in 2015 related to the Neodent business combination amounted to CHF 77m (CHF 73 m after tax), which includes inventory revaluation expenses of CHF 13 m and a CHF 64 m net loss below the EBIT line.

OPERATIONS AND FINANCES

Early in 2016, Straumann Brasil Ltda was merged into Neodent. As a result, Neodent will benefit from future tax savings and has recognized a deferred tax asset, leading to a one-time profit of CHF 43 million in 2016. In the prior-year, the consolidation of Neodent resulted in several one-time effects, which reduced gross/operating income by CHF 13 million and net profit by CHF 73 million. These effects are defined as 'exceptionals' and the key financial figures are shown both on a 'reported' and an 'underlying' (i.e. excluding exceptionals) basis in order to facilitate the performance comparison.

DOUBLE-DIGIT VOLUME EXPANSION LIFTS GROSS PROFIT

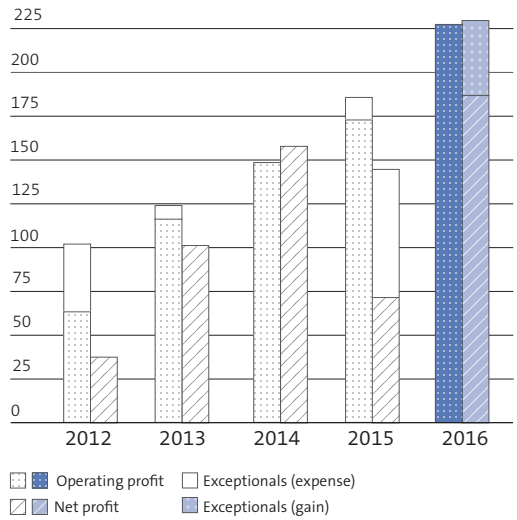
Strong demand for Straumann's premium and value products lifted gross profit by 17% to CHF 719 million, corresponding to a margin of 78%. The comparative margin in 2015 excluding exceptionals was 30 base points higher, reflecting a lower share of value and third-party products. Double-digit volume increases over the past three years have made it necessary to invest in capacity expansion, which led to higher production costs.

EBIT MARGIN EXPANDS FURTHER

Distribution costs, which comprise salary and commission fees for the direct sales force as well as logistic expenses, increased by CHF 38 million to CHF 211 million as the company continued to invest in high-growth markets and projects. This includes amortization expenses of CHF 6 million for customer-related intangible assets of Neodent.

OPERATING AND NET PROFIT

(in CHF million)



Administrative expenses, which include marketing, research & development, general management and support functions, rose CHF 11 million to CHF 283 million. The increase includes a low million expense for the transfer of finance functions to a European accounting services center in Germany and start-up costs related to Instradent's European hub as well as the 12-month effect of the Neodent business, which was consolidated in March 2015. In addition, the Group bolstered its R & D

capabilities in Basel to drive the stream of promising R & D projects and to provide supporting clinical documentation. In spite of all these items, administrative expenses decreased as a percentage of revenue by 3 percentage points to 31%, thanks to tight cost control.

Due to these operating improvements, earnings before interest, tax, depreciation, amortization (EBITDA) and exceptionals increased CHF 39 million to CHF 259 million. The respective margin reached 28%, which represents an underlying improvement of 70 basis points.

After amortization and depreciation charges of CHF 32 million, operating profit amounted to CHF 227 million compared with CHF 173 million (CHF 186 million underlying) last year. The underlying EBIT margin increased from 23% in 2015 to almost 25% in 2016.

ONE-TIME TAX GAIN ADDS TO STRONG NET PROFIT

Interest expenses of CHF 3 million related to the outstanding CHF-200-million corporate bond were paid in 2016. Still, the financial result improved by CHF 13 million compared with the prior year, when the financial result was impacted by fair-value adjustments of various financial instruments.
Straumann's share of results from its associate partners (Medentika, Dental Wings, Createch, Anthogyr, T-Plus, Valoc, V2R and Zinedent), which is shown net of tax and after intangible amortization, was a negative CHF 2 million in contrast to a negative CHF 12 million in 2015.

Income taxes in 2016 reached a positive CHF 7 million after a one-time tax gain. Excluding this, tax expenses would have amounted to CHF 35 million, reflecting an underlying tax rate of 16%.

Taking all these factors into account, the Group generated net profit of CHF 230 million, which amounted to 187 million (margin: 20%) before the one-time tax gain. Underlying (basic) earnings per share grew 30% to CHF 11.94 (2015: CHF 9.19).

SOLID FREE CASH FLOW OF CHF 139 MILLION

Net cash from operating activities of CHF 185 million remained roughly at the prior year level. The result was constrained by higher inventory levels due mainly to the extension of the Group's product range (including digital equipment) and the opening of new subsidiaries and Instradent organizations. Apart from this, dynamic topline growth in emerging and distributor markets was followed by an increase in accounts receivable from 53 to 55 days of sales outstanding.

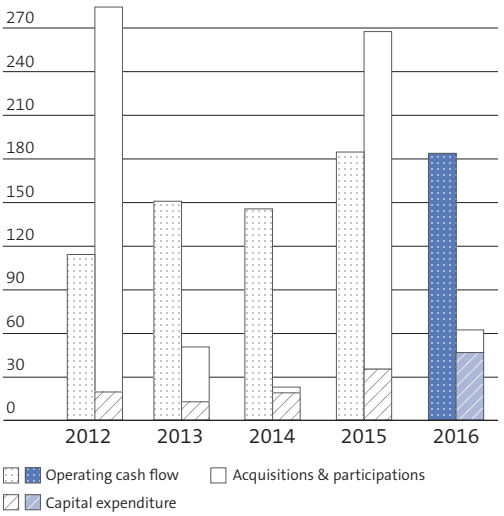
The Group invested in production-capacity expansion at various sites, increasing CAPEX by CHF 12 million to a total of CHF 46 million. The combination of these effects meant that free cash flow reached CHF 139 million, bringing the respective margin to 15%.

INCREASED DIVIDEND AND FURTHER INVESTMENTS IN THE VALUE SEGMENT

A portion of the free cash flow was used to acquire the Equinox business in India and a minority stake in the French implant manufacturer Anthogyr as part of the Group's strategy to invest in the non-premium segment. In addition, the Group took over the exclusive distribution of botiss products in Germany. Collectively, these investments amounted to CHF 40 million. Total cash used in investing activities reached CHF 83 million.

In April, the shareholders' AGM approved a dividend increase to CHF 4.00 per share, resulting in total payout of CHF 63 million. This and the acquisition of 531 632 Straumann shares for a total consideration of CHF 200 million in an accelerated book-building process were the

CASH FLOW AND INVESTMENTS
(in CHF million)



main components of the cash used for financing activities, which totaled CHF 257 million.

As a result, cash and cash equivalents at the end of December amounted to CHF 164 million, CHF 154 million lower than a year previously. With an equity ratio of 58% the Straumann Group remains solidly financed to further invest in strategic growth initiatives.

Based on the results and positive developments in 2016, the Board proposes a dividend increase to CHF 4.25 per share, payable on 13 April 2017. Going forward, the Board's intention is to increase the dividend per share subject to further good performance.

OUTLOOK 2017

(BARRING UNFORESEEN CIRCUMSTANCES)

The Straumann Group expects the global implant market to grow at a similar rate (3 – 4%) in 2017 and is confident that it can continue to outperform by achieving organic growth in the high single-digit range. Despite further investments in strategic growth initiatives and assuming that currency exchange rates remain fairly stable, the expected revenue growth and operational leverage should lead to further improvements in the (organic) operating profit margin.

SUMMARY OF MAIN INVESTMENTS

INVESTMENTS IN HIGH-GROWTH SEGMENTS AND REGIONS

One of the Group's strategic priorities is to penetrate the fast-growing non-premium segment. To this end we invested significantly in recent years in our Instradent platform (see p. 23) by acquiring or investing in value brands in different markets.

In 2016, we acquired a 30% stake in the French implant manufacturer Anthogyr. The agreement provided the Group with immediate access to the value segment in China. Subsequently we acquired the dental implant manufacturer Equinox, which has a leading position in the Indian market. These investments totaled approximately CHF 37 million.

INVESTMENTS TO STRENGTHEN EXISTING PARTNERSHIPS

Having partnered with botiss biomaterials since 2013, we took over the exclusive distribution of their products in Germany, their major market, for a consideration of approximately CHF 9 million. Straumann has an option to acquire up to 30% of the shares in botiss biomaterials in 2017.

INVESTMENTS IN PRODUCTION

To meet strong growth in demand for our products, we invested approximately CHF 16 million in machinery at our production plants in Switzerland, the US, Germany and Brazil. Major plant expansions will materialize in the coming years in Brazil and in Switzerland.

INVESTMENTS IN TECHNOLOGY

In pursuit of our strategy to become a total solution provider, and to secure access to innovative technologies and concepts, we have invested in several partner companies in recent years, which form a common technology platform (see p. 25). We added to this platform in 2016 by acquiring a 30% stake in V2R Biomedical Inc., an entreprenneurial Canadian company specialized in prosthetically-driven guided-surgery solutions.

Shortly afterwards, we announced a joint venture with maxon motor to develop ceramic components for dental implant systems that are produced by injection moulding. The Group holds 49% of the joint venture company.

These two investments totaled CHF 9 million.

OTHER INVESTMENTS

The International Team for Implantology (see p. 103) is Straumann's longstanding academic partner and shares our goal of developing optimal treatment solutions to the benefit of patients. In 2016, the Group supported the ITI with total investments of approximately CHF 11 million.

Investments in people (training and development) are covered in the Employees section of this report. Information on investments in distribution, including selling activities as well as research, development, intangible and tangible assets and our investment in organizations like the ITI are presented in our financial report.

Business performance
Regions

The Group currently operates in 54 distributor markets, two thirds of which are in the region we define as Europe, Middle East and Africa. At the outset of 2017, our Central European subsidiaries were combined with Western Europe, enabling a dedicated team to focus on expansion in distributor markets in Eastern Europe and the Middle East, in addition to developing our business in Russia and new markets (e.g. in Africa and Central Asia).

Throughout 2016 we outperformed the market significantly and gained share in all regions. The strong performance was led by dynamic growth in North America and Asia/Pacific – which was our fastest growing region.

Latin America's impressive growth shone out against a backcloth of economic and market recession. Our largest region, EMEA, performed well and crossed the double-digit growth threshold in two quarters, posting robust growth of 9% over the full term.

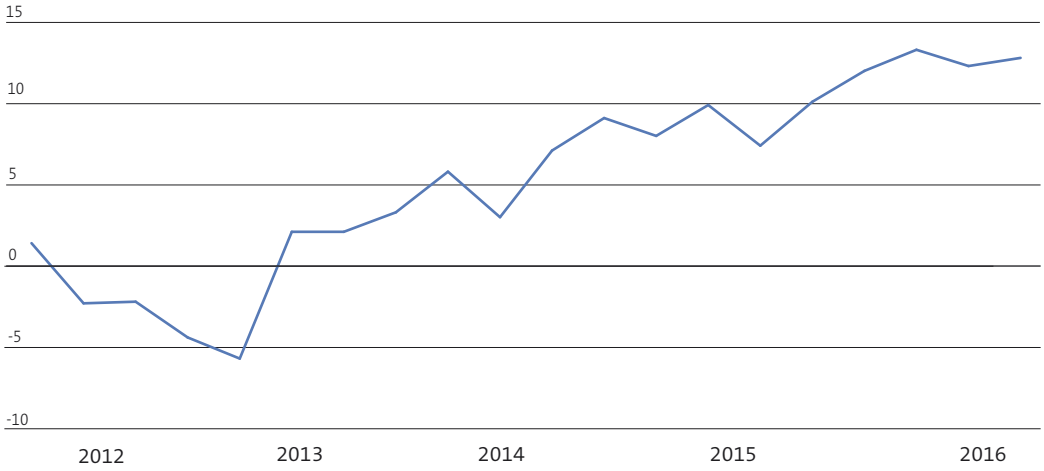
To support future growth, we enlarged our geographic footprint, opened new markets and entered the non-premium segment in Argentina, China, Germany, India, Turkey, and the UK, contributing to triple-digit revenue growth in our global Instradent business.

REGIONAL SALES PERFORMANCE BY QUARTER

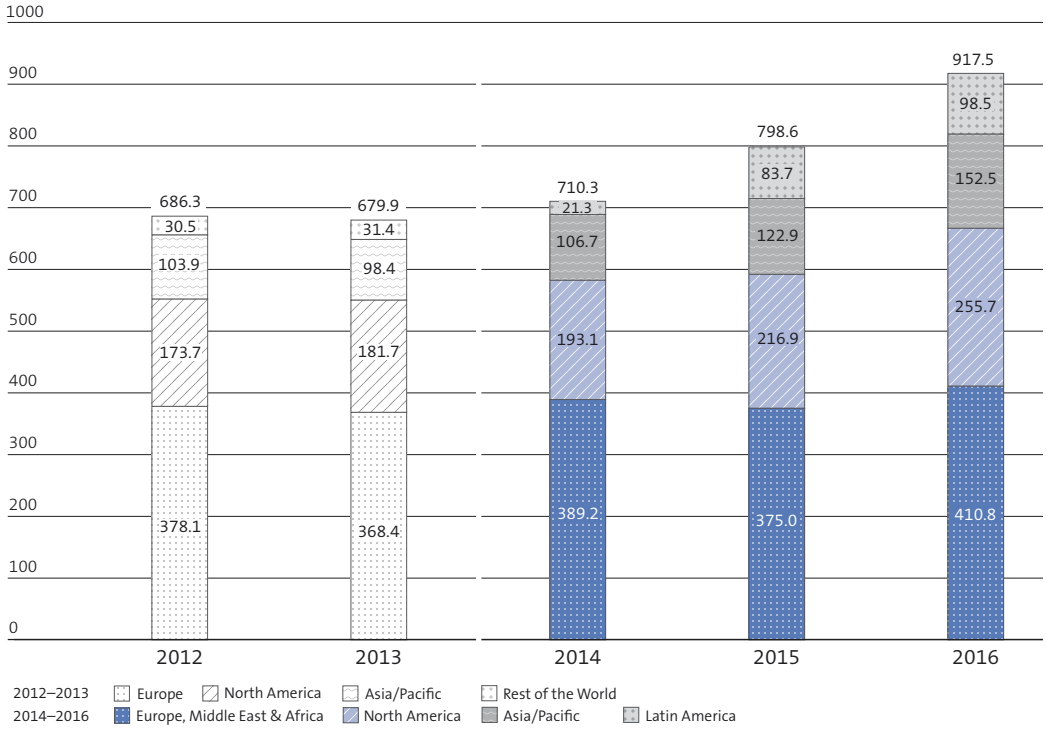
(in CHF million)	Q1	Q2	Q3	Q4	Total 2016	Total 2015
Europe, Middle East & Africa	108.0	108.2	89.1	105.6	410.8	375.0
Change in CHF %	9.5	14.6	7.6	6.4	9.5	(3.6)
Change (local currencies) in %	9.4	11.1	7.7	8.0	9.1	6.1
As a % of Group revenue					44.8	47.0
North America	62.0	64.5	61.7	67.5	255.7	216.9
Change in CHF %	15.4	21.0	18.7	16.6	17.9	12.3
Change (local currencies) in %	12.5	16.9	17.3	16.0	15.6	8.3
As a % of Group revenue					27.9	27.2
Asia/Pacific	35.5	39.7	36.3	41.0	152.5	122.9
Change in CHF %	22.9	26.1	25.3	22.1	24.1	15.2
Change (local currencies) in %	21.0	20.2	17.0	20.5	19.7	19.4
As a % of Group revenue					16.6	15.4
Latin America	17.5	25.9	26.7	28.3	98.5	83.7
Change in CHF %	46.0	(0.6)	15.8	25.3	17.6	292.9
Change (local currencies) in %	79.7	17.2	12.7	15.0	22.8	396.5
Change (organic[1]) in %	13.3	17.2	12.7	15.0	14.6	11.0
As a % of Group revenue					10.7	10.5
TOTAL	223.0	238.3	213.9	242.4	917.5	798.6
Change in CHF %	15.4	16.1	14.4	13.7	14.9	12.4
Change (local currencies) in %	15.5	14.7	12.5	13.0	13.9	18.6
Change (organic) in %	12.2	14.7	12.5	13.0	13.1	9.1

[1] 'Organic' means excluding the effects of currency fluctuations and acquired/divested business activities. As of 1 March 2015, the Neodent business was fully consolidated and led to an acquisition effect in the Latin American region.

FIVE-YEAR QUARTERLY REVENUE GROWTH (ORGANIC)
(in %)



REGIONAL SALES PERFORMANCE BY YEAR
(in CHF million)



Europe, Middle East & Africa (EMEA)

While it may not be our fastest-growing region, EMEA contributes the lion's share (45%) to Group revenue. With Europe delivering its strongest performance since the economic crisis of 2008, the region grew 9% organically and 10% in Swiss francs.

ALL COUNTRIES REPORT GROWTH

By country, the results were generally positive, with Iberia, Italy, and Germany as principal contributors, despite their competitive environments. We also grew well in France and Scandinavia. Demand was strong in distributor markets, especially in Eastern Europe, and in Russia, where our new subsidiary made a good start.

MORE CUSTOMERS

New products and strong sales execution helped us to expand our customer base. The key growth drivers were BLT, which completed its first year on the market, screw-retained bar-and-bridge prosthetics and Variobase abutments, which have enabled our restorative business to close the gap on implants in terms of volume growth.

The uptake of botiss biomaterials, which complement our implant business perfectly, has been very positive and we were excited to take over exclusive distribution of botiss in Germany, together with their sales team.

TOTAL SOLUTIONS FOR LABS

In recent years, dental laboratories have invested increasingly in CADCAM equipment to produce prosthetics in house. Our collaboration with Amann Girrbach opened the door to the in-lab milling segment and the launch of our CARES M Series in-lab mill (p. 36) as part of a complete lab solution.

To promote this and the launch of our CARES Digital Solution strategy, we staged an impressive truck tour across Germany and Switzerland. Other successful promotional activities included trade events in France (ADF), Italy (ITI congress) and Spain (Expodental) as well as peer-to-peer events (see. p. 30) and seminars across the region.

GROWING VALUE BUSINESS

Having a full range of premium and value solutions supported by a digital workflow makes us an attractive partner for dental service organizations and opened the door to significant accounts in 2016 for example in Italy, the Netherlands, Portugal and Spain.

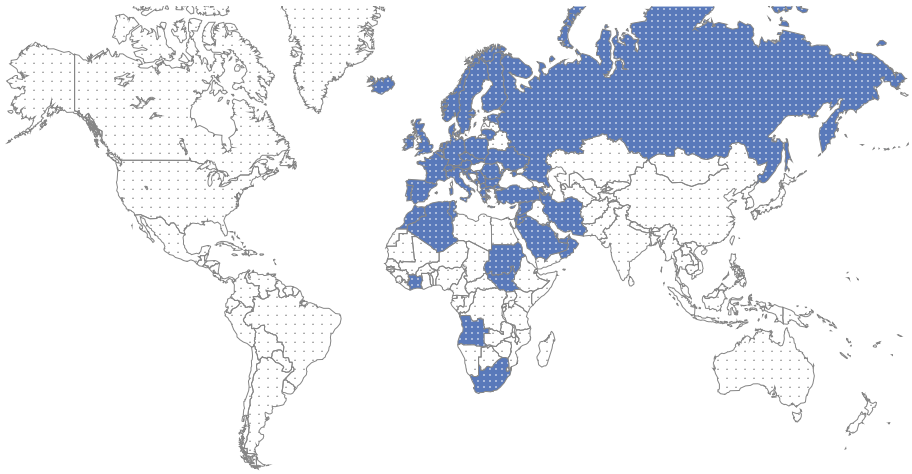
We achieved our goals in the value segment by creating Instradent UK, building Zinedent in Turkey, and establishing a European hub to provide distribution and services for our Instradent subsidiaries, agents and customers. In view of the strong demand, we also created an Instradent Europe subsidiary to serve key customers in Germany, France, the Nordic and Benelux countries with the Neodent range. We were also able to take over the German distribution business of our partner Medentika, a leading supplier of attractively-priced prosthetics, marking our entry into the value segment in Europe's largest market.

OUTLOOK

Our business has not been affected by the general uncertainty in Europe related to Brexit. Our new Instradent subsidiaries and European hub will help to expand our business in the value segment and we will create opportunities for Zinedent and Medentika in other markets.

The IDS and ITI World Symposium will be major opportunities to present innovations and promote new products and solutions in Europe in 2017.

Having conducted market-acceptance tests in Europe for our intra-oral scanner produced by Dental Wings and the compact milling machine developed by Amann Girrbach, we plan to launch them both in Europe in 2017, offering our own chairside milling solution.



GROUP'S PRESENCE IN KEY REGIONAL MARKETS IN 2016

Market (in order of size)	Contribution to regional revenue	Implants/prosthetics		CADCAM	Biomaterials
		Premium	Non-premium		
Germany	1	•••••	yes	yes	yes
Italy	2	•••••	yes	yes	yes
Spain	3	•••••	yes	yes	partial
France	4	•••••	yes	yes	yes
Switzerland	5	•••••	yes	yes	yes

• Dots denote: 1. Titanium standard range; 2. Roxolid; 3. SLActive; 4. Bone Level Tapered; 5. PURE

ORGANIC GROWTH

+9%

HIGHLIGHTS

– Continued solid growth
– Expansion in non-premium segment
– Resources freed up for new and emerging markets

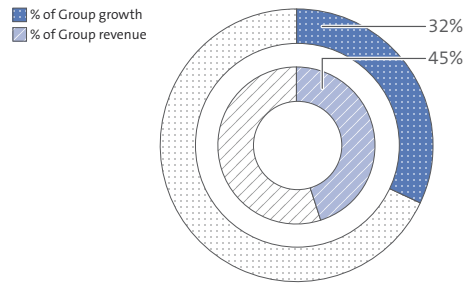
CHANGE IN CHF

+10%

REVENUE

CHF 411m

CONTRIBUTION COMPARISON



North America

North America gathered momentum and posted organic revenue growth of 16%. The region contributed a third of the Group's overall growth. Thanks to an appreciation of the dollar, growth in Swiss francs reached 18%, bringing net revenue to CHF 256 million.

The performance was driven by strong demand across all businesses and by new customers, many of whom are attracted by Roxolid, BLT and our Pro Arch solutions for edentulous patients.

Our Variobase family of abutments helped to win back lab customers by offering a cost-effective, versatile solution with an original implant interface. Variobases also offer the flexibility of producing the restoration in a milling center, in the lab or even chairside.

NEW LAUNCHES AND INITIATIVES

Straumann PURE, our fully ceramic implant, made its regional debut in February and has been well received. While metal-free implant solutions are currently a niche market, we believe that the availability of ceramic implants with similar performance, price and flexibility to their metal counterparts will change the market and are a potential game changer.

The CARES intra-oral scanner, which was developed by Dental Wings, was launched early in the year at the Chicago Midwinter meeting. To offer it to a broader group of customers, we granted distribution rights to Benco and Burkhart, two of the largest dental distributors in the US.

CADCAM FACILITY EXPANDED

To meet growing demand for CADCAM prosthetics – especially from large customers like ClearChoice (see p. 74) – we significantly expanded and increased the technical capabilities of our North American milling center in Arlington and opened the a extension in April.

IMPRESSIVE GAINS IN THE VALUE SEGMENT

We made notable gains in the value segment thanks to Neodent's range of attractively-priced implant solutions. These were complemented by the launch of Medentika's cost-effective prosthetic solutions.

'SMILE-IN-A-BOX' INVESTMENT

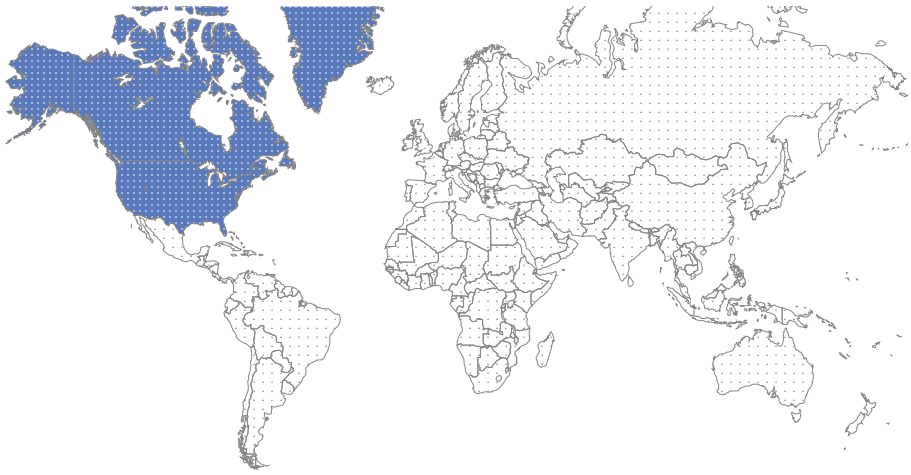
In the third quarter, we acquired a 30% stake in V2R Biomedical, a Canadian company specializing in prosthetically-driven guided-surgery solutions. V2R offers a planning service for guided surgery and delivers patient-specific drill-guides, implants, prosthetics and other components as a 'smile-in-a-box' solution, making it possible to perform up to full-arch restorations in a single surgical appointment, saving time for patients and adding convenience and predictability for dentists.

OUTLOOK

The North American market still offers considerable opportunities in view of its comparatively low penetration, and we are confident that we can gain further market share in the region in 2017.

More than 70% of implants sold in North America have tapered designs and we are making broad inroads into this segment, with further line extensions planned in the near future.

In 2017, we will add Medentika and our etkon iDent range of prosthetics for third-party implants, creating further growth opportunities in the value segment. We will also launch CARES in-lab and chairside milling machines. These and other new products will complement our intraoral and in-lab scanning solutions, and our expanded central milling and computer-guided surgery services as part of a complete solution for customers across North America.



GROUP'S PRESENCE IN KEY REGIONAL MARKETS IN 2016

Market (in order of size)	Contribution to regional revenue	Implants/prosthetics		CADCAM	Biomaterials
		Premium	Non-premium		
USA	1	●●●●●	yes	yes	yes
Canada	2	●●●●●	yes	yes	yes

● Dots denote: 1. Titanium standard range; 2. Roxolid; 3. SLActive; 4. Bone Level Tapered; 5. PURE

ORGANIC GROWTH

+16%

HIGHLIGHTS

– Momentum increases
– Strong demand in all businesses
– Further gains in non-premium business

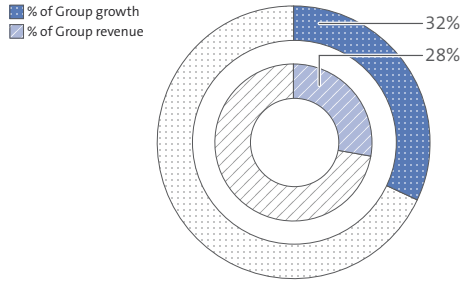
CHANGE IIN CHF

+18%

REVENUE

CHF 256m

CONTRIBUTION COMPARISON



Asia / Pacific

DOUBLE DIGIT GROWTH THROUGHOUT

Asia Pacific, which accounts for approximately 16% of Group revenue, was our fastest growing region throughout 2016 with organic revenue climbing almost 20%. Growth in Swiss francs amounted to 24%, reflecting the appreciation of the yen.

CHINA – A KEY SOURCE OF GROWTH

More than half the regional growth was generated in China, where we continued to benefit from the dynamic market; our investments in sales, training, and education; and the hybrid distribution model we implemented in 2015.

Our strategic investment in Anthogyr (see pp. 23, 58) provided immediate access to the fast-growing value segment, avoiding long regulatory delays. In June we integrated their business in China and began to roll the brand out through our distribution network and the combined sales team.

LEAD EXTEND IN JAPAN

Customers in Japan were eager to use our BLT implants, SLActive surface and high strength Roxolid material, which were all launched recently and helped us to win further market share. The first Straumann Scientific Forum in Tokyo in mid-year attracted 1 800 dental professionals making it our largest congress in Asia to date. A quarter of the participants were new customers and the event provided an excellent platform to launch Roxolid, our Pro Arch solutions and our local CADCAM milling service.

NEW PRODUCTS LIFT AUSTRALIA AND KOREA

Roxolid, SLActive and BLT helped us to outperform the market in Australia. These products, together with the successful launch of our botiss biomaterials range and reimbursement changes, contributed to strong growth in Korea, where Straumann is the only leading foreign implant company to maintain a direct presence.

We continued to make good progress in other established regional markets, all of which delivered double-digit growth.

OPPORTUNITIES OPEN IN INDIA

In 2016, we entered the Indian market, where the need for implant-based tooth-replacement is huge. With the acquisition of Equinox in November, we became the third largest supplier of dental implants in India. In addition, we gained the infrastructure and local expertise to launch the Straumann premium brand, our first implant production site in Asia, and an implant system that is affordable for a very broad population.

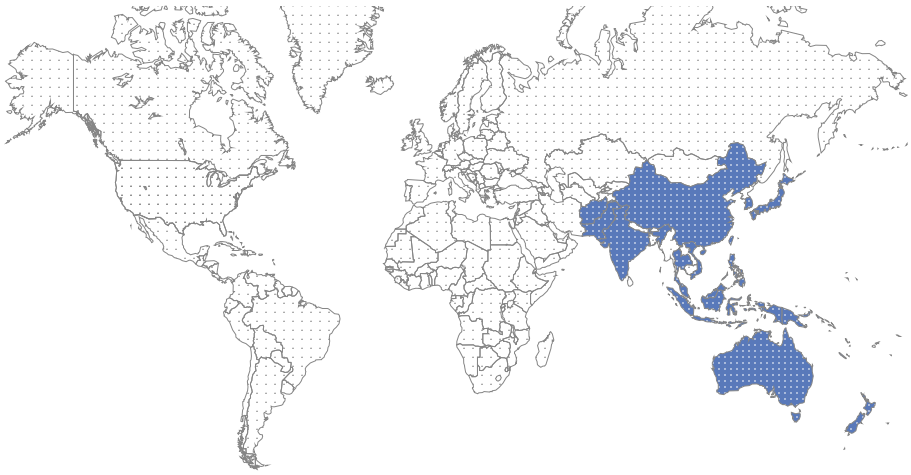
OUTLOOK

We plan to invest in additional subsidiaries in South East Asia, bringing us closer to customers.

We will also drive further expansion in the value and premium segments in China and are looking forward to launching Roxolid, BLT, Pro Arch and CADCAM in the near term, pending regulatory approvals. We are working to add biomaterials and CADCAM in all markets where they are not yet available.

We will enhance capacity and our offering in India, including the introduction of Straumann premium implant solutions in the near term.

Our plans to partner with the Korean implant company MegaGen have been delayed by arbitration regarding our convertible bond. Fortunately, we now have alternative brands to address markets where MegaGen would have been an asset.



GROUP'S PRESENCE IN KEY REGIONAL MARKETS IN 2016

Market (in order of size)	Contribution to regional revenue	Implants/prosthetics		CADCAM	Biomaterials
		Premium	Non-premium		
China	1	••	yes	no	no
Japan	2	••••	no	yes	partial
Australia	3	•••••	no	yes	partial
Korea	4	••••	no	no	yes
India	n/a		yes	no	no

• Dots denote: 1. Titanium standard range; 2. Roxolid; 3. SLActive; 4. Bone Level Tapered; 5. PURE

ORGANIC GROWTH

+20%

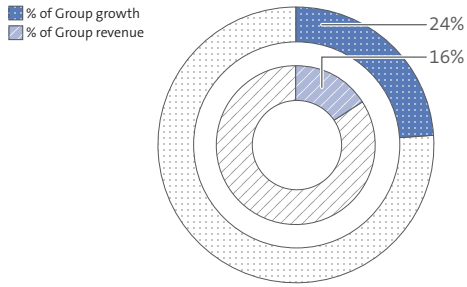
HIGHLIGHTS

– Dynamic performance powered by China and Japan
– Entry into non-premium segment in China
– Third largest implant company in India

CHANGE IIN CHF

+24%

CONTRIBUTION COMPARISON



REVENUE

CHF 153m

Latin America

The dental markets in Latin America suffered from the continuing economic recession especially in the region's largest economy, Brazil. While the tooth replacement market contracted, our Neodent and Straumann businesses both achieved double-digit increases, gaining market share and lifting our organic revenue growth to 15%. The Brazilian real depreciated year-on-year leading to a negative currency impact of 5% points and reported regional revenue to CHF 98 million or 11% of the Group.

SURPRISING SHOP SUCCESS

Several factors contributed to the exceptional performance in Brazil: Neodent's network of stores across the country proved invaluable as it assured product availability without customers' having to keep stocks themselves – a business 'lifesaver' in a recession. Against our policy of segregating value and premium brands, we started selling Straumann products in Neodent stores with surprising success.

BLT DRIVES GROWTH

The uptake of our BLT implant was another key factor and by year-end more than a third of Straumann implants sold in the region were BLTs. Neodent also introduced new products, fuelling a shift towards higher value implants featuring internal connections and the Acqua surface.

BROAD RANGE OF DIGITAL SOLUTIONS

Neodent and Straumann are now able to offer a broad range of digital solutions in Brazil including in-lab scanning and milling solutions in addition to a central milling service. In 2016, Neodent took over distribution of Amann Girrbach milling solutions in Brazil, which cover the full workflow for dental labs to produce CADCAM prosthetics in house for tooth-borne and implant-based restorations. Neodent began selling the range at CIOSP Congress in February.

MOBILE PRACTICE RAISES BRAND AND SOCIAL AWARENESS

Neodent also benefited from a brand and social awareness campaign (NeoSorriso) in Brazil featuring a trailer with a mobile dental practice offering free consultations. This was first presented at Neodent's triennial congress in June, which attracted more than 2000 dental professionals.

EXPANSION INTO NEW MARKETS

With the Brazilian market subdued, Mexico actually achieved the fastest growth, thanks to significant customer acquisitions, strong demand in both the premium and the value businesses, and the renewal of a military supply contract. To complete its range, Mexico launched the Straumann CARES portfolio including scanning and milling solutions at the Straumann LATAM Congress in Cancun, which attracted more than 400 customers.

Argentina is the second largest market in the region, with 400 000 implants sold annually. In 2016, we incorporated our former distributor and began selling both brands directly through our own subsidiary. Colombia made an initial contribution to regional growth, confirming our decision to invest there. We also invested in a subsidiary in Chile, which was established in 2016 and opened at the beginning of 2017.

OUTLOOK

In addition to building up our new subsidiary markets we will extend our reach to other emerging markets in the region. We will also expand our range of products and services, including a new CADCAM chairside offering and a new e-shop platform in 2017.

To meet increasing international demand for Neodent, we are investing in office and production facilities as well as a fully automatized logistics center in Curitiba.

GROUP'S PRESENCE IN KEY REGIONAL MARKETS IN 2016

Market (in order of size)	Contribution to regional revenue	Implants/prosthetics		CADCAM	Biomaterials
		Premium	Non-premium		
Brazil	1	••••	yes	yes	partial
Argentina	3	••••	yes	no	partial
Mexico	2	••••	yes	yes	partial
Columbia	5	••••	yes	no	partial
Chile	4	••••	yes	no	partial

• Dots denote: 1. Titanium standard range; 2. Roxolid; 3. SLActive; 4. Bone Level Tapered; 5. PURE

ORGANIC GROWTH

+15%

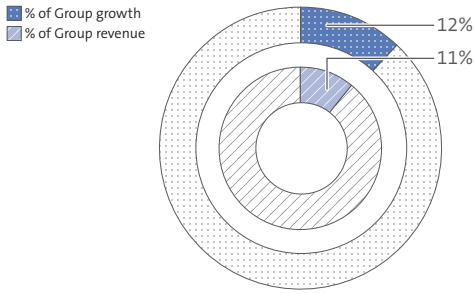
HIGHLIGHTS

– Exceptional performance in Brazil
– Subsidiaries open in Argentina and Chile
– Broad range of digital and milling solutions

CHANGE IN CHF

+18%

CONTRIBUTION COMPARISON



REVENUE

CHF 98m

WE CREATE OPPORTUNITIES FOR DENTAL SERVICE ORGANIZATIONS

KEVIN MOSHER
CEO OF CLEAR CHOICE

When the ClearChoice Group of clinics made Straumann a preferred partner almost two years ago, it opened the door to several new opportunities in North America, the world's largest market for tooth replacement. First, it provided the Group with entry into the fast-growing segment of dental service organizations and clinic chains. Second, it endorsed our Neodent range, which had just been launched in the US. Since equipping the ClearChoice clinics, our business with them has grown rapidly. As an innovative total solution provider offering products, services and more that cater to various budgets and needs, Straumann is also a partner for opportunities. One of the visionaries to see this and to open that door was Kevin Mosher, CEO of Clear Choice.

ClearChoice is a network of affiliated dental implant centers, which are owned by doctors, across the US. ClearChoice clinics perform more implant procedures than any other facility or network in the US and are leaders in screw-retained full-mouth or whole-arch dental restorations. ClearChoice's objectives include having all the specialists at one location working together as an integrated team, supported by advanced imaging equipment and an on-site lab.

Dental Service Organizations (DSOs)

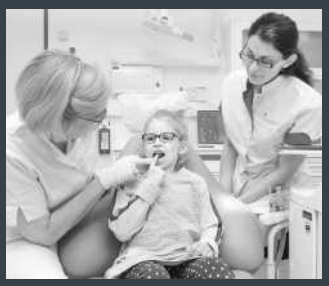
Dental chains and networks are expanding rapidly, particularly in North America and Europe. Larger organizations are characterized by economies of scale, significant purchasing power, a seven-day week service, significant budgets for patient advertising, and the financial ability to invest in cutting-edge technology.

DSOs are particularly successful in Italy and Spain, where there are more than 60, which collectively place more than half a million implants each year.

"Straumann was the first company to apprehend the changes in our industry and is a key factor in our dentists' professional development."

MALCOLM HUGHES
CHAIRMAN OF HESIRA

The UK-based Hesira group has built a network of more than a hundred local clinics across Europe in just three years. Hesira and Straumann share values like the commitment to excellence and innovation, superior patient care and forward-thinking, which is why Hesira began working with us with a view to using our entire portfolio of implants, prosthetics, biomaterials and digital workflows as well as services like our Smart education concept (see p. 124) and Patient Pro (see p. 41 f.), to provide tailored solutions for every clinic and every patient



Hesira's dental clinics offer a high service concept which is attractive to patients and practioners alike.

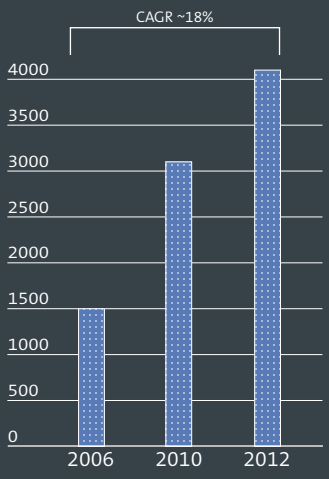
Hesira's partnership with Straumann offers their practitioners comprehensive training programs which also cover best practices in order to treat their patients in a consistent way.

IMPLANTS PLACED BY DENTAL CHAINS

	DSO	IMPLANTS
Germany & Switzerland	~10	>10 000
Finland	6	>10 000
Chile & Argentina	7	~14 000
UK	30	>15 000
Mexico	6	~20 000
Netherlands	12	~25 000
Sweden	3	~28 000
China	4	~30 000
USA	>200	>100 000 [1]
Brazil	6	>120 000
Italy	45	>120 000
Spain	30	>500 000

[1] Sales of top 30 DSOs only

ESTABLISHMENT OF CORPORATE DENTISTRY FIRMS WITH 500+ EMPLOYEES (US)



Business Performance Financials

Consolidated income statement

(The notes referred to in this and subsequent tables are the notes to the consolidated financial statements on pp. F 10 ff.)

(in CHF 1 000)	Notes	2016	2015
Revenue	4	917 517	798 600
Cost of goods sold		(198 987)	(183 662)
Gross profit		718 530	614 938
Other income	21	2 376	2 161
Distribution costs		(211 004)	(173 439)
Administrative expenses		(282 726)	(271 092)
Operating profit		227 176	172 568
Finance income	24	35 260	44 115
Finance expense	24	(38 607)	(60 326)
Loss on consolidation of Neodent	24	0	(63 891)
Share of results of associates	7	(1 603)	(12 268)
Profit before income tax		222 225	80 198
Income tax expense	18	7 375	(8 687)
NET PROFIT		229 600	71 511
Attributable to:			
Shareholders of the parent company		229 600	70 679
Non-controlling interests		0	832
Basic earnings per share attributable to ordinary shareholders of the parent company (in CHF)	25	14.68	4.52
Diluted earnings per share attributable to ordinary shareholders of the parent company (in CHF)	25	14.60	4.47

Consolidated statement of financial position

ASSETS

(in CHF 1 000)	Notes	31 Dec 2016	31 Dec 2015
Property, plant and equipment	5	119 320	105 478
Intangible assets	6	314 027	246 500
Investments in associates	7	61 284	48 232
Financial assets	8	49 907	54 396
Other receivables		4 013	2 751
Deferred income tax assets	18	84 119	43 730
Total non-current assets		632 670	501 087
Inventories	9	101 957	76 113
Trade and other receivables	10	181 645	140 598
Financial assets	8	1 105	1 059
Income tax receivables		8 522	9 142
Cash and cash equivalents	11	164 024	318 297
Total current assets		457 253	545 209
TOTAL ASSETS		1 089 922	1 046 296

EQUITY AND LIABILITIES

(in CHF 1 000)	Notes	31 Dec 2016	31 Dec 2015
Share capital	12	1 588	1 572
Retained earnings and reserves		632 093	603 398
Total equity attributable to the shareholders of the parent company		633 681	604 970
Straight bond	13	199 632	199 520
Other liabilities	15	13 759	6 975
Financial liabilities	14	831	618
Provisions	16	24 511	28 832
Retirement benefit obligations	20	46 763	44 496
Deferred income tax liabilities	18	2 078	1 503
Total non-current liabilities		287 574	281 944
Trade and other payables	17	138 702	124 173
Financial liabilities	14	440	925
Income tax payable		12 739	15 572
Provisions	16	16 785	18 712
Total current liabilities		168 666	159 382
Total liabilities		456 241	441 326
TOTAL EQUITY AND LIABILITIES		1 089 922	1 046 296

Consolidated cash flow statement

(in CHF 1 000)	Notes	2016	2015
Net profit		229 600	71 511
Adjustments for:			
Taxes charged	18	(7 375)	8 687
Interest and other financial result		2 574	3 181
Foreign exchange result		2 156	(259)
Fair value adjustments		(1 382)	5 356
Loss on consolidation of Neodent		0	63 891
Share of results of associates	7	1 603	12 268
Depreciation and amortization of:			
Property, plant and equipment	5, 22	22 852	25 579
Intangible assets	6, 22	9 171	9 455
Change in provisions, retirement benefit obligations and other liabilities		(5 761)	(10 482)
Share-based payments expense	19, 23	4 242	3 599
Gains on disposal of property, plant and equipment		0	109
Working capital adjustments:			
Change in inventories		(19 856)	(740)
Change in trade and other receivables		(33 203)	6 383
Change in trade and other payables		11 623	14 310
Interest paid		(4 626)	(4 461)
Interest received		2 305	3 373
Income tax paid		(29 180)	(26 162)
Net cash from operating activities		184 743	185 598

(in CHF 1 000)	Notes	2016	2015
Purchase of financial assets		(348)	(9 479)
Purchase of property, plant and equipment		(39 170)	(32 063)
Purchase of intangible assets		(7 526)	(3 114)
Purchase of investments in associates		(15 706)	(14 206)
Acquisition of a business, net of cash acquired		(24 703)	8 083
Contingent consideration paid		(782)	(3 153)
Proceeds from loans		6 244	3 149
Disbursement of loans		(2 931)	(1 401)
Dividends received from associates		894	3 388
Net proceeds from sale of non-current assets		642	700
Net cash used in investing activities		(83 386)	(48 096)
Purchase of shares of non-controlling interests		0	(224 532)
Transaction costs paid		(426)	(813)
Dividends paid to the equity holders of the parent	26	(63 152)	(58 564)
Dividends paid to non-controlling interests		0	(5 016)
Proceeds from finance lease		0	18
Proceeds from exercise of options		14 062	13 321
Sale of treasury shares		2 228	912
Purchase of treasury shares		(209 763)	0
Net cash used in financing activities		(257 051)	(274 674)
Exchange rate differences on cash held		1 421	(3 952)
Net change in cash and cash equivalents		(154 273)	(141 124)
Cash and cash equivalents at 1 January	11	318 297	459 421
CASH AND CASH EQUIVALENTS AT 31 DECEMBER	11	164 024	318 297

Five-year overview

OPERATING PERFORMANCE

(in CHF million)	2012	2013	2014	2015	2016
	Restated				
Net revenue	686.3	679.9	710.3	798.6	917.5
Growth in %	(1.1)	(0.9)	4.5	12.4	14.9
Gross profit	531.5	535.9	558.7	614.9	718.5
Margin in %	77.5	78.8	78.7	77.0	78.3
Operating result before depreciation and amortization (EBITDA)	119.5	148.4	176.2	207.6	259.2
Margin in %	17.4	21.8	24.8	26.0	28.3
Growth in %	(24.1)	24.3	18.7	17.8	24.9
Operating result before amortization (EBITA)	91.5	122.6	153.1	182.0	236.3
Margin in %	13.3	18.0	21.5	22.8	25.8
Growth in %	(30.6)	33.9	24.9	18.9	29.8
Operating profit (EBIT)	63.1	115.8	148.3	172.6	227.2
Margin in %	9.2	17.0	20.9	21.6	24.8
Growth in %	(21.1)	83.6	28.1	16.4	31.6
Net profit	37.5	101.2	157.8	71.5	229.6
Margin in %	5.5	14.9	22.2	9.0	25.0
Growth in %	(47.1)	169.8	56.0	(54.7)	221.1
Basic earnings per share (in CHF)	2.43	6.55	10.15	4.52	14.68
Value added / economic profit[1]	(7.7)	52.7	113.7	27.1	182.2
Change in value added	(37.4)	60.4	59.3	(86.6)	155.1
Change in value added in %	(125.9)	785.3	109.2	(76.2)	572.5
as a % of net revenue	(1.1)	7.8	16.0	3.4	19.9
Number of employees (year-end)	2 517	2 217	2 387	3 471	3 797
Number of employees (average)	2 530	2 308	2 302	3 232	3 615
Sales per employee (average) in CHF 1 000	271	295	309	247	254

[1] Figures as reported in the financial reports

FINANCIAL PERFORMANCE

(in CHF million)	2012	2013	2014	2015	2016
	Restated				
Cash and cash equivalents	140.5	383.8	459.4	318.3	164.0
Net working capital (net of cash)	63.0	57.3	64.9	63.3	123.9
as a % of revenue	9.2	8.4	9.1	7.9	13.5
Inventories	63.6	62.3	69.2	76.1	102.0
Days of supplies	152	161	149	155	171
Trade receivables	91.8	93.2	106.8	125.2	148.9
Days of sales outstanding	49	49	51	53	55
Balance sheet total	776.9	1 019.7	1 160.8	1 046.3	1 089.9
Return on assets in % (ROA)	4.7	11.4	14.5	6.8	21.5
Equity	601.7	631.4	736.8	605.0	633.7
Equity ratio in %	77.4	61.9	63.5	57.8	58.1
Return on equity in % (ROE)	5.9	16.4	23.1	11.8	37.1
Capital employed	187.7	162.3	142.9	341.8	476.2
Return on capital employed in % (ROCE)	27.4	66.2	97.2	50.5	55.5
Cash generated from operating activities	114.6	151.5	146.2	185.6	184.7
as a % of revenue	16.7	22.3	20.6	23.2	20.1
Investments	(286.1)	(50.6)	(22.8)	(44.5)	(87.9)
as a % of revenue	41.7	7.4	3.2	5.6	9.6
thereof capital expenditures	(19.4)	(12.6)	(18.8)	(35.2)	(46.7)
thereof business combinations related	(0.7)	0	(4.0)	4.9	(25.5)
thereof investments in associates	(266.0)	(38.0)	0	(14.2)	(15.7)
Free cash flow	95.2	139.2	128.4	151.1	138.7
as a % of revenue	13.9	20.5	18.1	18.9	15.1
Dividend	57.9	58.2	58.6	63.2	65.1[1]
Dividend per share (in CHF)	3.75	3.75	3.75	4.00	4.25[1]
Pay-out ratio in % (excluding exceptionals)	75.7	53.3	37.1	43.4	35.6

[1] To be proposed to the shareholder's AGM in 2017

WE CREATE OPPORTUNITIES FOR YOUNG PROFESSIONALS

DR VÍTOR SAPATA
2016 STRAUMANN-BOTISS YOUNG PRO AWARD WINNER

Like most aspiring researchers, Dr Vitor Sapata struggled to win recognition and to secure funding for his project and studies in guided bone regeneration. In 2016, the Straumann-botiss YoungPro Award offered him a platform to promote his work and establish himself professionally. Topping a global field of entries, the Brazilian won the cash prize of 10 000 euros. He was also invited to participate in the botiss Bone & Tissue days congress in Berlin, where he presented his research to a large audience of eminent practitioners in the field. In addition, his work was published in 'Starget', Straumann's customer magazine. Dr Sapata believes this award has opened a door to his dreams of a career in research and becoming a professor. For him the experience was 'simply amazing'. "Networking and being involved with a company like Straumann is great. They really are the vanguard of creating opportunities for young professionals", he said.

The Straumann-botiss Young Pro Award

Created by Straumann and botiss biomaterials, the YoungPro Award was established to foster and encourage the development of young dental professionals in the field of regenerative dentistry and dental biomaterials research. Professionals under the age of 35 submit original work which contributes to the advancement of treatment, care or research in regenerative dentistry. The entries are reviewed by a jury of internationally recognized experts, academics and clinicians in the field.

"Straumann offers young dentists the perfect introduction to implantology along with mentoring and support to further their professional careers."

Support from the ground up

One of the most common needs among young dental professionals is help in starting and running a practice. Straumann's Young Professional Program offers them the guidance they need, mainly online, with a virtual toolbox of resources. More than 6 500 young pros in 17 countries have enrolled in the program, which gives them the opportunity to access advanced education, professional networks and practice-oriented training.

young professional

The Straumann Young Professional Program provides support, networking and advice in practice management for newly-qualified and self-employed dentists.

This is complemented by hands-on courses taught by experts, enabling the young dentists to expand their skills and also to learn what it takes to build a business.

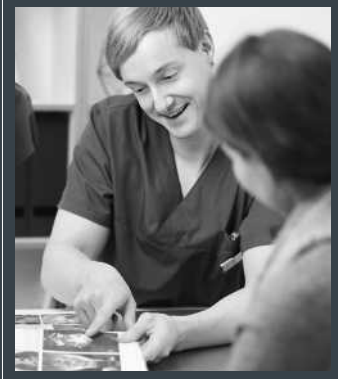
Straumann's Young Professionals Program offers hundreds of courses, exclusive symposia, workshops and events every year.

Dr Tobias Dierkes

Dr Tobias Dierkes was just the sort of young professional we had in mind when we started the program six years ago. He saw the benefit of having a 'silent' experienced partner when he launched his own maxillofacial surgery practice, and took advantage of the plethora of resources on offer through YPP, including presentations on everything from regenerative surgery to practice etiquette, the ITI treatment guides, and attractively priced instrument sets.

"Straumann offered me an overall concept and the opportunity to master every situation and indication with confidence."

DR TOBIAS DIERKES



Dr Tobias Dierkes
Specialist in Maxillofacial Surgery
Andernach, Germany

Risk and sustainability report

Risk management
A comprehensive internal control framework

The management of opportunities and risks is an integral part of corporate governance and sustainability. We are committed to implementing appropriate controls, processes and strategies to identify, assess and manage risks associated with our activities in order to prevent or minimize the impact of unexpected events on our business and our ability to create value.

The objective is to apply – at an early stage and with foresight – a globally standardized process for identifying and managing possible developments within or outside the Group that could jeopardize the Group's sustained growth, profitability and objectives.

Our approach generally takes into account all relevant types of risk, such as operational, strategic, compliance-related and market risks, as well as internal and external factors. Risk-relevant information is compiled once a year and ad hoc as necessary. The documentation contains a description, an assessment of possible damage, the probability of occurrence, and a list of measures to monitor and counteract the risk.

RESPONSIBILITIES AND ORGANIZATION

Risk monitoring and control are management objectives. At Straumann, the Chief Financial Officer is the Chief Risk Officer (CRO) and is responsible for risk management. We believe that risk assessment and management must be embedded in a comprehensive internal control framework, and we address it through a holistic, disciplined and deliberate approach. For more information see Group Note 29 (p. F 55 ff.).

Our approach matches that of the COSO (Committee of Sponsoring Organizations of the Treadway Commission), whose integrated internal control framework is one of the most widely used. For identified risks that arise from accounting and financial reporting, relevant control measures are defined throughout Straumann's Internal Control System (ICS) framework (p. 151).

Various tools and aids are used to assess and manage risks. For instance, foreign exchange risks are managed with an SAP Treasury tool, while external consultants are used on a regular basis to assess insurance coverage risks.

RISK REPORTING

A comprehensive corporate risk assessment report is produced annually and serves as a working document for the coming year. It includes key risks that are critical for the Group's business.

A specific scenario is developed for each risk topic, including existing and new measures and controls. The risks are ranked and prioritized. Action plans are defined and the implementation of measures to reduce risk is monitored.

The significance of a risk scenario is estimated in terms of EBIT cumulated over three years. Certain risks are assessed according to qualitative criteria, e.g. risks to the Group's reputation.

The reporting of key risks is based on fixed value limits. The report is prepared by Internal Audit and the CRO, and is discussed with the Executive Management Board. The Audit Committee assesses and discusses risks on the basis of the report in consultation with the CRO and/or relevant members of Senior Management regularly. Key findings are presented to the Board.

Pressing risks that emerge very rapidly are discussed by the Board at short notice.

RISK ASSESSMENT

STRATEGIC RISK

MARKET ENVIRONMENT

Straumann is active in specialty segments of the dental industry. Based on the aging population, the rising number of professionals trained, and increasing awareness, there are no discernible reasons why these segments should not continue to offer attractive growth prospects in the long term (p. 49 ff.). However, current economic uncertainties and consolidation might continue for some time and dampen the prospects of market growth.

Straumann's strategic priorities for 2016 were to drive a high performance culture and organization, to target unexploited growth markets, and to become a total solution provider for tooth replacement (p. 22 ff.).

Our future revenues depend on market reach and expansion as well as on our ability to defend and increase our business with existing customers, to enlarge our customer base, to develop innovative solutions that meet customers' needs and bring them to market in a timely manner.

New market entrants and price pressure from discounters pose a threat to established companies like ours. We conduct analyses of competitors based on our own and external market intelligence to counteract such risks and to evaluate our opportunities. A key strategy in this respect is our expansion into other segments through alliances, partnerships and acquisitions.

OPERATIONAL RISK

LEGAL AND INTELLECTUAL PROPERTY RISKS

We operate in a competitive market, in which intellectual property rights are of significant importance. We therefore actively pursue a strategy of protecting our intellectual property, patents and trademarks.

In 2016, the Straumann Group was involved in important IP disputes against Nobel Biocare at the US International Trade Commission, whose decision was appealed and is now pending at the US Federal Circuit Court of Appeal. The action filed by Nobel in the US Central District Court of California, Southern Division is still pending the outcome of the ITC appeal. The Group is also in a dispute with Sirona regarding a patent infringement action filed in the Federal District Court of Delaware. The case is pending as Straumann has successfully initiated an IPR. The decision was appealed by Sirona in the US Federal Circuit Court of Appeals. Straumann also contests a patent infringement action filed by the company Zircore in the US Eastern District Court of Texas, Marshal Division. Apart from this, Straumann is involved in a pending arbitration against MegaGen and some shareholders relating to the exercise of its conversion right and call option.

MANUFACTURING AND SUPPLIER RISK

The Group has spread its manufacturing risk by establishing production centers for key products on both sides of the Atlantic. The addition of Neodent's production facilities in South America further spreads this risk.

With regard to suppliers, we pursue a second source strategy, which offers a high degree of independence from single suppliers. Straumann and Neodent production facilities keep about a year's stock of titanium, the key material for our implant systems, to avoid any bottleneck in the supply/demand chain.

ETHICAL SUPPLY CHAIN

Adherence to ethical behaviour in accordance with Straumann's Code of Conduct is not only expected from our employees and our suppliers. We revised our 'Code of Conduct for Suppliers' in September 2016, which refers to working conditions, human rights protection, business ethics, legal compliance, and environmental protection in the supply chain. Responses have been positive and by year-end more than two thirds of our key suppliers had signed it.

PRODUCT RISK AND TREATMENT OUTCOME

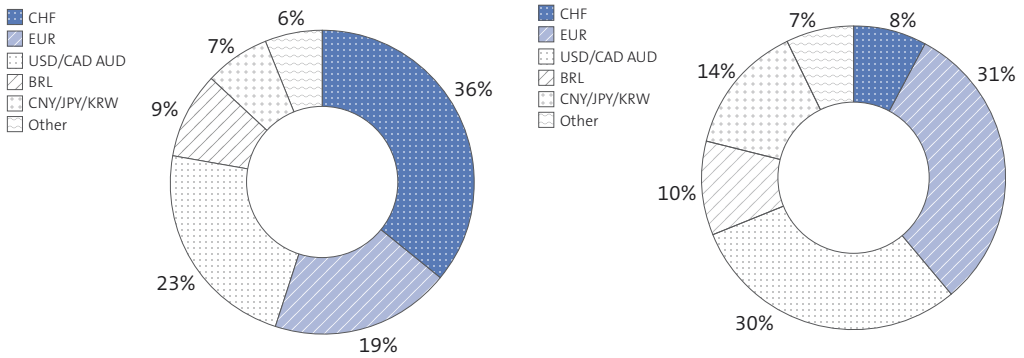
We seek to minimize product risks by going well beyond the minimum statutory requirements and conducting large-scale trials under real-life conditions, followed by controlled, selective introductions and long-term product surveillance wherever appropriate. We also offer a comprehensive range of education courses at all levels in all countries where our products are sold.

FINANCIAL RISK (SEE ALSO P. F 55 FF.)

EXCHANGE RATE RISK

As the majority of our business is international and because we prepare our financial statements in Swiss

COST (LEFT) AND REVENUE (RIGHT) BREAKDOWN – MAJOR CURRENCIES



Allocation of cost of goods sold, distribution and administrative expenses (left) and net revenues (right) across the various currencies. In general, the target is to concentrate the currency risk mainly in Switzerland at the Swiss Group companies. All numbers are rounded approximations.

francs, fluctuations in exchange rates affect both the Group's operating results and the reported values of its assets and liabilities.

Straumann's Corporate Treasury is responsible for managing the risks created by currency fluctuations within the Group, following the scope of the policy approved by the Executive Management Board and the Audit Committee of the Board of Directors.

The Group is exposed to transactional and translation risks. Hedging decisions are taken by Corporate Treasury with subsidiaries being co-responsible for identifying currency exposures and informing headquarters.

The key objective is to limit the foreign currency transactional exposure of the Group. Transactional risk arises when the currency structure of Straumann's costs and liabilities deviates to some extent from the currency structure of the sales proceeds and assets, as well as from imbalances in the payment streams between the various currencies. Straumann hedges these risks by means of options, spot transactions and forward transactions based on the principles stated in the Treasury Policy. The limitation and management of the translation exposure is a secondary priority.

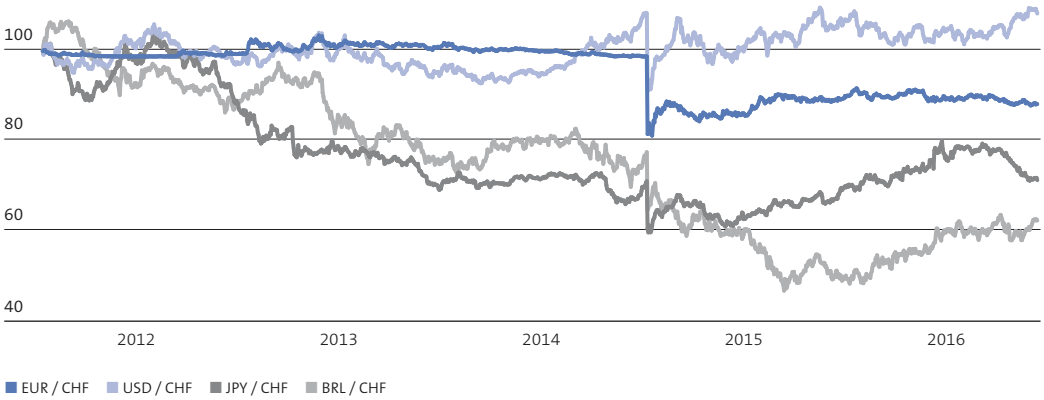
The major foreign currencies in Straumann's business are the euro, the US dollar, the Brazilian real, the Chinese renminbi and the Japanese yen. Straumann invoices its subsidiaries in local currencies and its distributors mainly in euro and US dollars. Each subsidiary invoices its local third-party customers in the local currency. Exchange rate fluctuations have an impact on the company's balance sheet and earnings, which are reported in Swiss francs.

At year end, the Group's gross transactional booked exposure (TBE) to the euro was 25%. The euro accounted for 31% of the sales and 19% of costs, making it the Group's most important currency. The US dollar, Canadian dollar and Australian dollar collectively make up 30% of sales, 23% of costs and 49% of TBE. Our major Asian currencies (Japanese yen, Chinese renminbi and Korean won) collectively make up 14% of sales, 7% of costs and 20% of TBE. The Brazilan real makes up 10% of sales and 9% of costs and 1% of transactional booked exposure.

CREDIT RISK

Credit risks arise from the possibility that customers may not be able to settle obligations as agreed. There are no significant concentrations of credit risk within the Group.

CURRENCY CHART (DOLLAR, EURO, YEN, REAL)



COUNTERPARTY RISK

Counterparty risk encompasses issuer risk on marketable securities, settlement risk on derivative and money-market contracts, and credit risk on cash and time deposits. Exposure to these is closely monitored and kept within predetermined parameters.

Further information on financial risk management is provided in Note 29 on financial risk management objectives and policies (see p. F 55 ff.), in Note 30 on financial instruments, p. F 59 ff. of consolidated financial statements.

INSURANCE POLICIES

Straumann covers its inherent key business risks in the same way that it covers product or employer liability risks and property loss through corresponding insurance policies held with reputable companies.

PENSION LIABILITY RISKS

The Group offers its staff competitive pensions. The pension funds are managed locally and invested by independent financial institutions. The investment strategy is determined by the Group's Pension Fund Commission and is executed by the financial institution. Neither Straumann nor the trustees are allowed to influence the specific investment decisions. The pension funds publish regular reports for all members.

The Swiss pension fund represents the largest pension plan of the Group. Based on the recommendations of the Pension Fund Trustees, the Straumann Swiss Pension Fund was transferred completely to the independent GEMINI Collective Foundation on 1 January 2016. The transfer has no impact on the pension scheme participants.

FINANCIAL REPORTING RISK

Straumann's Internal Audit acts as an independent and objective assurance and consulting body, which reports directly to the CFO and the Audit Committee. Internal Audit does not confine itself to financial audits, but also monitors compliance with external and internal policies and guidelines. Acting in a consulting role, its main tasks are to assess internal processes and controls, propose improvements, and assist in their implementation. The objective is to safeguard the Group's tangible and intangible assets and to evaluate the effectiveness of its risk management and governance processes.

COMPLIANCE RISK

LEGAL COMPLIANCE

It is essential for Straumann to ensure that the company in general and the individual employees conduct business in a legal, ethical and responsible manner. To this end, we implemented a Code of Conduct in 2006.

ISO CERTIFICATION AND AUDITS PERFORMED IN 2016

Standard	ISO 9001 Quality management system	ISO 13485 Medical device quality management system	ISO 14001 Environmental management system
Institut Straumann AG (Basel, Gräfelfing)	Yes	Yes	No
Straumann Villeret SA (Villeret)	No	Yes	Yes
Straumann Manufacturing Inc (Andover)	No	Yes	Yes
J.J.G.C Indústria e Comércio de Materiais Dentários S.A [Neodent] (Curitiba)	Yes	Yes	No
Etkon GmbH (Markkleeberg)	No	Yes	No
Biora AB (Malmö)	No	Yes	Yes

All employees are required to report any breach of this internal policy to the Compliance Officer by e-mail or telephone. Infringements of the Code are tracked and appropriate measures taken against non-compliance. We monitor laws and revisions and adapt our internal processes to cover new legal requirements. We fully comply with the 'Sunshine' legislation in the United States and France, not least through implementing a data collection system and corresponding policies and guidelines.

Like other leading manufacturers, the Group is exposed to the risk of damaged public perception of dental implants by third parties, which might be the result of poor implant placement, competitor's inferior implant quality, or unethical business practices.

Many Straumann country organizations are members of associations of manufacturers of medical/dental products, such as FASMED in Switzerland, Comident in France and ABIMO in Brazil (Neodent). These associations are dedicated to the advancement of medical technology and its safe and effective use.

REGULATORY COMPLIANCE

Companies in the medical device industry face growing scrutiny from regulators around the world and increasing requirements for documentation. In Europe, the Medical Device Regulation is under review. The anticipated outcomes include greater surveillance, involvement of competent authorities for higher-class products, longer approval times, access to technical documentation, tests on products, and unannounced audits. We have noticed a reduction in the number of Notified Bodies and an increase in their control. To ensure the readiness of all our certified sites, we have taken the initiative to conduct unannounced internal audits and dedicated audits of our technical files.

In 2016, Straumann subsidiaries in Madrid (Spain), Paris (France), Freiburg (Germany), Oslo (Norway), Crawley (GB) and Burlington (Canada) were inspected by the local authority. No major observation was identified.

Several regulatory authorities continue to inspect manufacturers in foreign countries. We are prepared for this and have built up experienced teams of regulatory and compliance specialists in Basel, the US, China,

Japan, Korea and Brazil. As a consequence, successful registrations of our BLT implant portfolio, ceramic implant and n!ce in various countries were based on excellent collaboration of our experts in Basel with our colleagues in different regions.

Stricter requirements and regulations are also expected in smaller markets, which will increase the need for enhanced compliance and safe and efficient products.

QUALITY COMPLIANCE

To avoid the risks associated with regulatory compliance for Medical Devices, we have a qualified team of specialists in regulatory and quality assurance.

Focused quality objectives, supported by key performance indicators, and comprehensive internal as well as supplier-related quality audit programs assured our status of substantial compliance and helped to identify opportunities for improvement. To streamline processes we run a continuing education program.

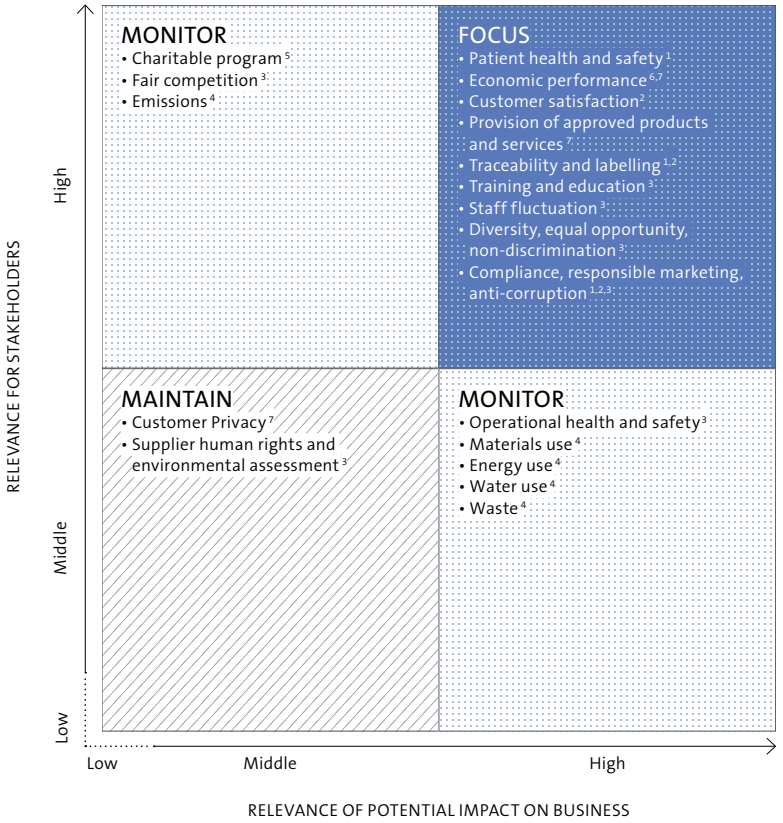
We consolidated our 'One Quality Management System' (same quality management system at design centers and manufacturing sites) after a successful recertification of the quality system.

In 2016, we passed all Notified Body audits, which are required to maintain the certification status of the quality and environmental management systems at our manufacturing and design/development sites. Overall, there were no critical issues with any authorities at any of our manufacturing and design sites.

We also continue to challenge our quality by mock FDA inspections at the FDA registered establishments to ensure that people and processes have the appropriate readiness for inspections.

Straumann continues to collaborate with Neodent in the area of quality compliance and regulatory affairs. Neodent products have received approvals in various markets outside Brazil, including the US, Europe and APAC.

SUSTAINABILITY MATERIALITY MAP



Information on material sustainability topics is provided in the following places:

1 Risk Management, page 90
2 Customers, page 97
3 Employees, page 104
4 Environment, page 117
5 Communities, page 113
6 Operational performance, page 60 ff.
7 Addendum GRI Sustainability Reporting

The Addendum includes further information and is published on www.straumann.com under Media > Publications and Reports > Annual Reports.

SUSTAINABILTY – MATERIAL TOPICS

We believe a key contribution to our long-term success is to identify and address relevant (or 'material') sustainability topics, i.e. economic, ecological and social issues that present significant risks or business opportunities. Risk and opportunity management and sustainability are therefore closely linked in our business processes and stakeholder communications, which is why we pursue open communication and interactive dialogue with all relevant stakeholder groups.

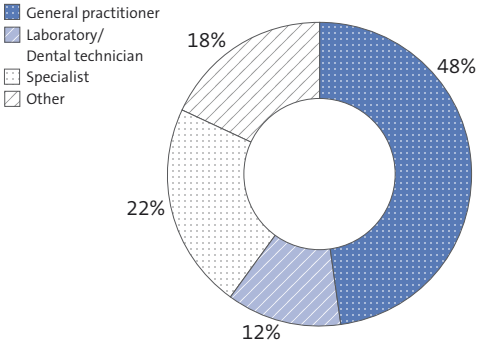
To identify and address relevant and material sustainability topics, we conducted interviews with senior managers across the company that were aligned with the provisions of Global Reporting Initiative (GRI) Principles for Defining Report Content to determine the most pertinent sustainability issues for Straumann and our stakeholders. The chart above gives an overview of the sustainability topics found to be most relevant for our business success (horizontal axis) and the interests expressed by our stakeholders such as clients, investors or community representatives (vertical axis). The 2016 interviews did not indicate any major changes in the materiality of our sustainability topics since the prior year. We plan to revisit the assessment for our next annual report and to revise it if necessary.

The material sustainability topics are discussed in various parts of this report especially in the following sections on customers, employees, communities, and environment.

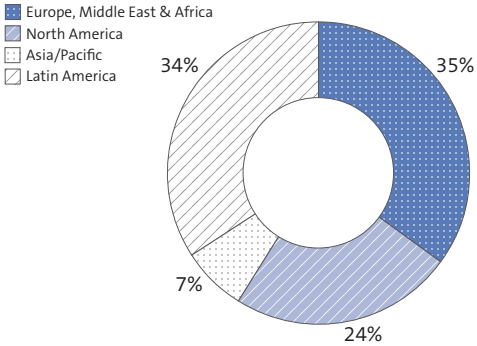
This page includes information on GRI indicators G4-18 and G4-19 (see also p. 191 f.).

Customers
Increasingly global, corporate and female

STRAUMANN'S CUSTOMERS BY SEGMENT



STRAUMANN'S CUSTOMERS BY REGION



Our customer base by grouping/segment did not change significantly in 2016. Corporate customers (e.g. dental chains, distributors, hospitals and university clinics) are included in 'other' in the chart on the left. The number of customers grew in all regions, while the regional spread remained fairly constant.

GLOBAL CUSTOMER BASE EXPANDS

In 2016 our global customer base increased by more than 10% and comprises general dentists, specialists (oral surgeons, periodontists, prosthodontists), dental technicians/laboratories and an increasing number of corporate customers spread across more than 100 countries.

While education programs and starter courses attracted general dentists, we succeeded in winning customers from our competitors through innovative products, comprehensive solutions, our value range, and sales excellence. Apart from this, we gained clients through acquisitions (e.g. Equinox in India, Anthogyr in China), the incorporation of distributors (e.g. Russia and Argentina) and distribution agreements (e.g. botiss in Germany and Amann Girrbach in Brazil).

All regions reported customer increases. 35% of our customers are located in Europe compared with 52% five years ago, reflecting the further spread of implant dentistry from its roots, the global expansion of our business and the pace of growth in emerging markets like China, Brazil, and Russia.

Customer feedback and survey results underline the importance of product availability, which is challenging in large emerging regions with limited infrastructure. In China, we operate with a network of distributors across the country supported by our own consultative sales

and education team. In Brazil, we began using Neodent's local stores and distribution centers to sell Straumann products, assuring availability without customers having to carry large stocks. In India, Equinox offers a versatile implant system with few components and uses a third party logistics network ensuring delivery and payment receipt (see p. 58).

PARTNERING WITH CHAINS

Another important development has been the expansion of dental chains and networks, particularly in North America and Europe. These range from local group practices to national and international networks of fully integrated clinics with significant purchasing power and influence. We entered this segment in 2015 as the preferred supplier of ClearChoice (see pp. 74, 76) and the experience we have gained has enabled us to establish agreements with leading chains in Europe.

Without economies of scale, purchasing power, the resources to offer 7-day-a-week services, budgets for direct-to-consumer advertising, and the ability to invest in expensive technology, some small practices and labs struggle to compete. Some are bought up by chains, others close.

A larger portion of our business will therefore be determined by a smaller number of customers who have greater purchasing power and focus heavily on profit. They have special needs, including premium and non-premium ranges, private label lines, logistics services, support for international expansion and more. In view of the scope of these requirements and the size of the business, we are extending our capabilities in high-level key account management.

EDUCATION A RESPONSIBLE APPROACH TO GROWTH

Dental chains and service organizations also require support with education as they tend to attract young dentists who have little exposure to implant dentistry. Staff movement and fluctuation adds to this need. Over the past two years we have developed concepts and tools which together with the ITI's Online Academy (see p. 103) offer blended learning opportunities for working dental professionals.

Further education for dentists to deepen their knowledge and expand their competence is offered for example through the ITI, Straumann's Peer-to-Peer Program, Neodent's partner the ILAPEO institute, and more.

Market research[1] indicates that, in the near future, more implants will be placed collectively by GPs than by specialists. To gain further access to this group and to support teaching and mentoring we began early in 2016 to collaborate with the Engel Institute in the U.S., which has provided implant education to more than 7 000 dentists since opening its doors in 2005.

BUILDING THE NEXT GENERATION

The sustainability of our business in the mid-to-long term depends on our ability to attract young professionals to implant dentistry. Perception-pulse studies in the past revealed that their most common expectation from companies like ours is for help in building up their business and establishing a reputation as a specialist.

We continued to take a structured approach to this group through dedicated programs, including our Young Professional Program (YPP) which has now been running for more than four years and supports budding professionals on their career paths from studying, through residencies and clinic employment, to setting up their own practices. The program was expanded in 2016, is currently offered in 17 countries and more than 6 500 participants have enrolled.

THE SHIFT IN GENDER

Market research shows that more women are graduating from dental school than men[2,3]. In some countries, e.g. Germany, up to 70% of dental school graduates are female. This trend is evident in most developed countries. At the same time women are less likely to own dental practices and many prefer to work part-time as employees in dental practices. Our research also shows that they are more likely to work in esthetic- or paediatric dentistry rather than in surgical specialties[5]. This trend will affect the dental markets in the mid to long term and Straumann is working on several initiatives to address it. We believe that early integration of implant dentistry in the dental curriculum as well as career planning, coaching and female mentoring programs are important to meeting future needs for dentists and will help women to step into implantology or implant prosthodontics.[4] In 2016, we held an international workshop with female dentists (see pp. 100, 102) to gain deeper insights into

their needs and to create opportunities for networking and coaching. In addition, our academic partner, the ITI, formed a task force dedicated to young dentists. Straumann is well positioned to be the partner of choice for women dentists in tooth replacement because:

- Our tissue level implant solution was designed to support the referral model, in which specialists perform the surgery and generalists do the restoration.
- Our system is comprehensive, designed for simplicity, flexibility and predictable outcomes, and is one of the best documented.
- We are a leader in education together with the ITI and other partners.
- We are working together with dental schools to support the inclusion of implant dentistry in their curricula.
- We reach out early to young dentists, e.g. through our YPP, which also addresses the needs and preferences of women.

EMBRACING DIGITAL MARKETING

Straumann serves customers directly through more than 1 300 sales and marketing professionals, most of whom are highly trained sales representatives or service staff. Our direct sales approach adds value for customers and helps us to identify, manage and learn from their needs. In 2016, we continued the global training program to enhance the effectiveness of our sales representatives and to help our customers improve their businesses. The success of this program is reflected in our revenue growth.

We made good progress with our e-shop and reached our frequency and turnover targets in most countries. This channel offers a number of advantages:

- Product returns have decreased significantly
- Customer service teams have more time for customer needs and active selling
- E-commerce is a good source of information on customer behavior.

To tap into the huge opportunities offered by digital marketing we are building new capabilities and investing in new software tools.

CHECKING CUSTOMER EXPECTATIONS

Instead of large general perception pulse surveys across several markets we have conducted more targeted enquiries focused on specific customer groups and solutions. For instance, prior to introducing the intraoral scanner developed by our partner Dental Wings in Europe, we conducted market acceptance tests with customers to ensure satisfaction even though the scanner had already been launched in North America.

SAFEGUARDING COMPLIANCE IN THE INTEREST OF PATIENTS

Our Global Sales Compliance Program has been in place since 2009 and is one of several safeguards to ensure compliance with regulations relating to the sale of our products and services. Further supporting our commitment to the patients' interest, much of the scientific information used to endorse our products is peer-reviewed.

OUTLOOK

In 2017, our customer base will broaden as we expand in Asia, Latin America and Eastern Europe, and as we pursue opportunities in new geographies like Africa. Our strategy to penetrate the global non-premium segment and to address price-sensitive customers with different value propositions will also broaden our customer base.

Our initiative to support female dentists has led to the creation of the 'Women in Implant dentistry Network' (WIN), which we will extend internationally in 2017 and beyond.

We will continue to invest in new education tools and concepts, like our 'Smart' blended learning concept and our Peer-to Peer Program, in addition to our regular training and education programs. Building up digital marketing capabilities will require investment and full use of the opportunities offered by key international events (see p. 178) in 2017, e.g. the ITI World Symposium in Basel and the International Dental Show in Cologne, to reach new and existing customers.

REFERENCES / FOOTNOTES

[1] Exevia, 2014, based on market research data in Germany, Italy, Spain and the US.
[2] Distribution of dentists in the US, by region and state, 2009. America Dental Association. 2011 Apr.
[3] FDI Oral Health Atlas p. 61.
[4] Boll A, Gehrke P: Gender aspects of implant dentistry: opportunities and career paths. Z Zahnärtzl Implantol 2014;30:267–287.
[5] Exevia, 2016, Market Research data Germany, Italy, US, China.

WE CREATE OPPORTUNITIES FOR WOMEN IN DENTISTRY

DR LAURENCE ADRIAENS
PRIVATE PRACTITIONER

The opportunities for women to combine a career in implantology with family and personal interests are limited. Dr Laurence Adriaens is a dentist who has achieved both. Having grown up in Belgium, she qualified as a dentist and completed postgraduate studies in periodontics and implantology at the University of Bern in Switzerland. Today, she and her husband run a private practice in Mallorca and have used Straumann implants exclusively for nine years. Devoted to giving her patients the best possible care, she has a passion for deepening and sharing her knowledge, which is why she agreed to become the Director of ITI study clubs in Palma de Mallorca. “Straumann is always finding solutions with new technologies, new products and excellent education – which is hard to find as a professional.” Dr Adriaens was an enthusiastic participant at Straumann’s Women in Dentistry workshop in 2016, one of several initiatives to create opportunities for this group of professionals who will be the major providers of dental care in the future.

Women now represent 57% of all graduating dentists. Although this number continues to grow, women make up only a fraction of implantologists.

Straumann wants to engage and support women in dentistry in general and to mentor them in implantology. Research suggests that we can encourage them with coaching programs and education, and our comprehensive system of simple and flexible solutions gives them confidence to take the first step.

In 2016, Straumann invited leading female dentists from nine countries for discussions and training at the first Women in Dentistry Workshop.

The participants all requested that Straumann makes this an annual event.

Dr Martina Stefanini
Bologna, Italy

"I hope to create a network of women who can work together to improve research in dentistry."

DR MARTINA STEFANINI

Dr Stefanini left her busy practice, university research and three daughters to take advantage of Straumann's Women in Dentistry Workshop. She really appreciated this event and the opportunity to meet some very interesting colleagues. At the encouragement of her professor, she recently attended a seminar on computer-guided surgery with the Straumann software as a first step for implantology.

Dr Charlotte Stilwell
London, UK

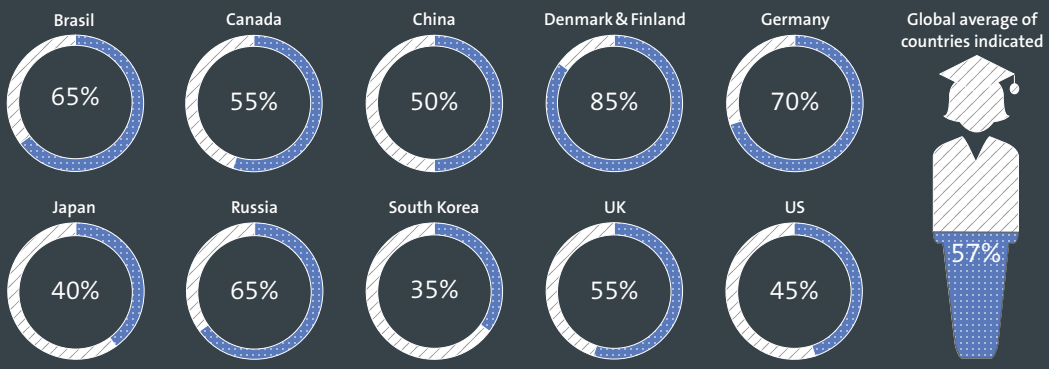
Dr Charlotte Stilwell is an ITI Fellow and co-founder of the ITI Online Academy. A distinguished educator and experienced practitioner, she has a passion for dentistry and for coaching young dentists.

She believes that women can make a unique contribution to the future of patient care.

"Straumann has done so much for me since I started with their system in 1996. I would rather walk over burning coals than change products."

DR CHARLOTTE STILWELL

FEMALE DENTAL GRADUATES TODAY



The ITI and Straumann
Academia and industry moving forward in step

For more than three decades, the unique relationship between the ITI and Straumann has created remarkable opportunities for dental professionals and patients. As Straumann's academic partner, the ITI's primary focus is on education as well as research into implant dentistry and its related fields, which complements Straumann's core competencies of developing, manufacturing and marketing commercial products and solutions.

The ITI is the largest academic organization in its field, comprising a global network of more than 15 000 professionals. In its ongoing quest for excellence, the organization underwent significant restructuring in 2016 to embrace the extended field of treatment providers as well as treatment approaches and demand for new learning formats. The new leaner structure allows for Task Forces to be established ad hoc to respond quickly and efficiently to significant changes and their impact on the needs of the ITI membership.

SUPPORTING RESEARCH AND EDUCATION

Since 1988, the ITI has committed more than CHF 2 million annually to research projects that are selected from internal applications and from non-affiliated scientists. In 2016, 22 of the 86 applications were supported.

Educational support is provided in various ways. Since 1998, the ITI has awarded scholarships to young practitioners, giving them the opportunity to spend a year in an ITI Scholarship Center with an ITI Fellow mentor. 22 scholarships were awarded in 2016 and 25 for 2017. The ITI also reaches out to its Fellows and Members through 650 Study Clubs around the world and Education Weeks in eight centers worldwide.

In 2016, 13 national congresses were organized through the ITI's 27 Sections, including spectacular events in China, Italy and North America, which each attracted more than 1 000 participants. Preparations continued for the triennial ITI World Symposium, which will be in Basel in 2017. More than 4 000 participants are expected.

Every five years the ITI convenes a Consensus Conference with experts from various disciplines in implant dentistry to review the latest literature and define evidence-based guidelines for the profession. Preparations for the next conference, in 2018, are also underway.

The ITI's most ambitious project is its Online Academy, which has added valuable content and services since it began in 2014. This user-centric e-learning platform offers top-quality evidence-based educational material to practitioners 24/7. In 2016, a University Campus concept was added, allowing universities and dental schools to establish a private learning space with multiple virtual classrooms. This is free of charge and is accessible only to authorized members. Each institution has access to all ITI Online Academy content and can add its own material to create a structured curriculum.

The ITI Curriculum complements the Online Academy and will be piloted later in 2017. It has been developed to offer practitioners, particularly those with limited experience, a structured approach to implant dentistry through multiple channels to provide 'blended' learning.

OUTLOOK

In 2017, in addition to the above activities, the ITI intends to advance in step with Straumann, addressing the needs of the implant dentistry community, and maintaining a place at the leading edge of progress in treatment and technology.

Employees
Diverse, highly engaged and proud to work for Straumann

The strength, diversity and spread of our global team increased again in 2016, reflecting the growth in demand for our solutions and our strategy to expand in emerging markets. We added 326 employees, bringing headcount to 3 797. The majority of the new positions were in sales and manufacturing. Our staff in Switzerland increased by 73 to 842.

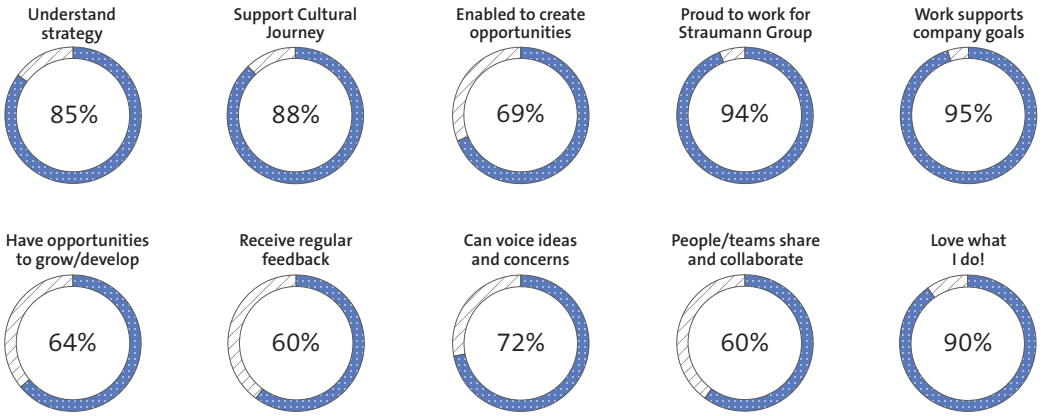
CULTURAL JOURNEY ADVANCES

Almost three years ago, we defined the culture that we believe will sustain our success. It fosters constructive behavior, collaborative leadership and high performance. This means enabling everyone to do their best, focusing our efforts and resources optimally on aligned priorities, being agile to seize opportunities, constantly challenging what we do in order to improve and innovate, sharing openly, collaborating efficiently, avoiding waste, and continually delivering what we promise.

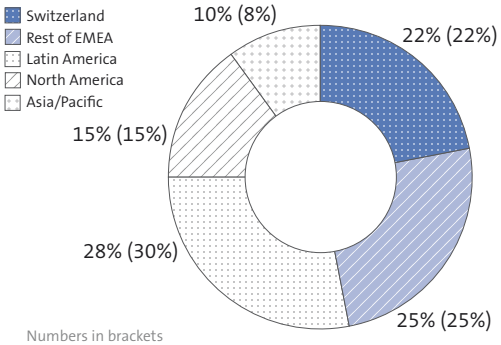
Driving a high-performance culture and organization is a key strategic priority for Straumann (see p. 22) and since we started our Cultural Journey in 2014 we have invested more than CHF 2.5 million in training and development initiatives worldwide. In 2016, we extended our program of workshops and training modules which have now included about a third of our global staff.

To drive cultural change across all levels, we formed additional interdisciplinary groups of Cultural Change Champions (CCCs) around the world and a Community of Practice to act as role models and a communication bridge across the organization.

GLOBAL PULSE CHECK RESULTS

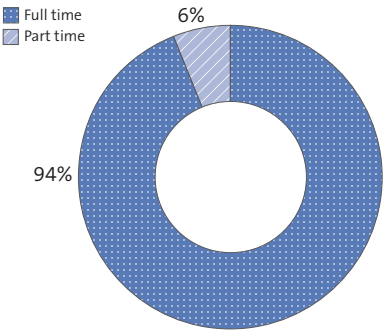


EMPLOYEES BY REGION

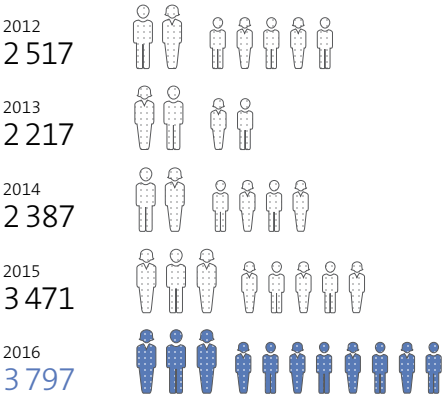


Numbers in brackets refer to 2015.

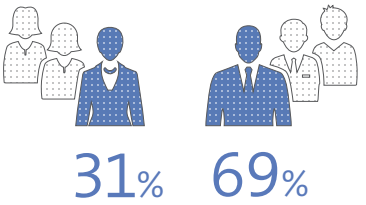
EMPLOYMENT



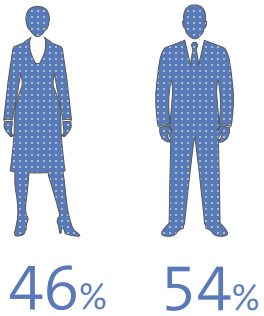
EMPLOYEES



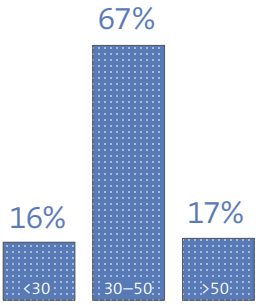
LEADERSHIP BY GENDER



GENDER



AGE



Headcount increased by 326 of which the majority were new jobs.

HUMAN RESOURCES KEY FIGURES

Parameter		Unit	2016[1]	2015[1]	2014
Staff size	Employees	Total headcounts Full-time equivalents	3 797 3 729	3 471 3 235	2 387 2 330
Employment type	Part-time employees	% of headcount	6	6	7
Gender diversity	Women in general staff (excl. Mgmt)	%	50	45	48
	Women in SMD pool[2]	%	25	21	24
	Women in management[3]	%	31	28	29
Training and education	Investment in staff learning[4]	CHF million	3.1	2.6	1.7
	Average annual training & learning	Days/employee	4	3	3
Fluctuation and absence	Staff fluctuation[5]	%	12	9	13
	Absence rate due to sickness[6]	%	3	4	3
	Absence rate due to workplace accidents[6]	%	0	0	0
	Work-related fatalities	Number	0	0	0
Employee protection	Reported cases of discrimination	Number	0	0	0

[1] Including Neodent.
[2] Strategic Management Development group.
[3] Job position "Manager" and all levels above.
[4] Only direct expenses for internal and external training activities are counted here. Salaries paid to employees while in training are additional and are not included.
[5] Includes resignations and terminations (incl. Neodent).
[6] Switzerland only. Proportion of absence time compared to target working hours.

STAFF STRUCTURE BY CATEGORY AND AGE GROUP (%)[1]

Age	<30	30–50	>50	Unit	2016
General staff (excl. Management)	15	54	12	% of headcount	81
Management[2]	1	13	5	% of headcount	19
TOTAL	16	67	17		100

[1] Including Neodent.
[2] Job position "Manager" and all levels above.

As the key to achieving our aspired culture lies in mindset and core behaviors (p. 19) we have included behavioural assessments in the staff performance management process and we are building up a set of training modules to help in areas where improvement is needed. In addition, we redefined and simplified Straumann's global competency model to reflect our vision, core behaviors and ideal culture. This will be reflected in all employee-related processes and interactions such as recruiting, onboarding, performance management, promotions, development and succession planning.

HIGH ENGAGEMENT

Regular meetings between the Executive Management and various focus groups – including the CCCs – provide open and constructive dialogue as well as direct feedback on staff engagement. During the year, 14 general staff meetings were held with the CEO in 11 countries in addition to 14 informal small group sessions in Basel.

We extended our tracking of mood and engagement to all our employees on 2016 by expanding the simple anonymous survey tool used at headquarters in 2015. More than 70% of our global team responded and the results were generally very positive: around 90% said that they

love what they do, are proud to work for Straumann, actively support the Cultural Journey, and that their work helps the company to achieve its goals (see chart on p. 104).

The lowest scoring items received 60% positive ratings and revealed feedback, leadership, collaboration as areas for improvement. Using the survey feedback, our strategic management team committed to specific actions including the following:

- Focus on developing people, including a leadership program for all people managers in 2017
- Extend the Cultural Journey workshops to all Group organizations and staff
- Foster a strong, direct feedback culture (e.g. providing workshops on difficult conversations)
- Manage workloads effectively (initiatives in 2016 included 'world-café' workshops with more than 120 employees at headquarters).

DEVELOPING SKILLS, ENHANCING LEADERSHIP

Training and development are essential to meet the requirements for an international company in the medical device industry and are keys to attracting and retaining top performers. In addition to introductory product and technical training, we offered updates to staff who have been with the company for some time.

We extended our continuing training and education programs considerably, aligning them with our high performance culture and cultural change, and continued to offer a choice of informal educational sessions. The overall investment in staff training and education, as well as actual training days increased significantly in 2016, with a considerable portion devoted to the cultural change programs and high performance.

STRATEGIC MANAGEMENT DEVELOPMENT (SMD)

The SMD process involves senior management, staff in key positions, and future leaders; it reviews leadership, performance, behavior, and career potential as a basis for development, deployment, and succession planning.

Straumann's family day in Basel – one of many social events during the year intended to nurture collaboration, communication and trust.

GLOBAL DEVELOPMENT PROGRAM (GDP)

This program identifies and develops future leaders with a view to filling our succession pipeline. The 18-month program is for members of general staff to middle management, who have leadership aspirations and potential. It includes international assignments, assessments and mentoring by top management. The program included 8 participants in 2016.

PROFESSIONAL CAREER PATH (PCP)

The PCP is designed to provide career opportunities outside line-management by enabling individuals to progress through four defined stages to the level of 'Expert'. The model already includes R & D and is being extended to Sales, Marketing and other functions.

In addition to the above, we maintained our apprenticeship, internship and Corporate Graduate Programs.

A BETTER PLACE TO WORK

One aspect of our Cultural Journey is to encourage and enable our staff to make Straumann 'an even better place to work'. A recent example is the 'We Care' initiative, which started in 2016 in our four largest country organizations and seeks to promote health at work.

DIVERSITY AND EMPLOYEE PROTECTION

The acquisition of Equinox further broadens our diversity. A diverse team adds value and supports our ability to serve an increasingly diverse customer base. We monitor diversity with regard to age, gender, origin and educational background. Gender diversity is generally strong, with 46% female employees.

RESPONSIBILITY AND ETHICAL BEHAVIOR

Straumann's Code of Conduct defines our expectations for ethical behavior in all our business activities. Being an integral part of the company's employment contracts, it prohibits any form of human rights violation, bribery, corruption, unfair competition, misleading marketing, etc.

Neodent has a good record as a responsible, ethical company and its Code of Conduct is very similar to Straumann's, which led to the successful integration of the Group's ethical principles in 2016. Our onboarding training for new employees focuses on corporate alignment including our Code of Conduct, which protects employees from discrimination (unequal treatment based on gender, race, religion, or sexual orientation).

No cases of discrimination were reported in 2016. Health/safety training and awareness are given due importance throughout the Group, and no workplace fatalities or serious accidents were reported in 2016. Employees are obligated to report any violation, suspected violation or misconduct. In 2016, five Code of Conduct violations were reported worldwide, all of which led to dismissal.

OUTLOOK

We expect our workforce to grow in 2017 as we meet increasing demand for our products and as we pursue our strategy to exploit growth opportunities in emerging markets and attractive segments. We will continue to refine and expand our staff development programs, but the key priorities in 2017 will be implementing our leadership development program and driving behavioral and mindset changes to create and sustain a high performance culture. Our goal is to extend our 3-day Cultural Journey workshop program to all employees by year end and for all mangers with leadership roles to participate in the new leadership program in the next 2 – 3 years.

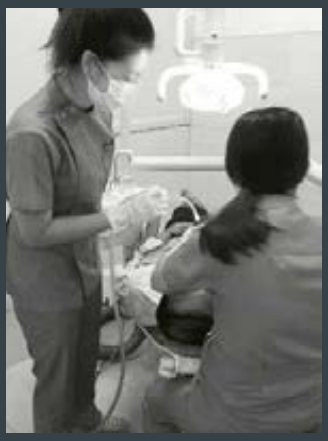
An array of externally provided assessment tools are used to measure organizational culture and effectiveness as well as group and leadership styles. It usually takes 3 – 4 years to see a distinct change in an organization's culture, which is why we do not foresee an organizational cultural inventory re-assessment until 2018.

WE CREATE OPPORTUNITIES FOR STUDENTS

DENIS JOSÉ SALGADO RODRIGUEZ
STUDENT

In Nicaragua, unemployment is high, wages are very low and few people can afford to study. Denis José Salgado Rodriguez grew up there in extreme poverty. Instead of attending school, he washed car windshields until he was taken in by a home belonging to the Nuestros Pequeños Hermanos™ (NPH) charity. For the past 10 years Straumann has sponsored the Sonrisa foundation, a charity that provides dental care to children in NPH homes. At 15, Dennis watched the visiting dentist in action and set his heart on becoming one. In the following years, the dentist saw his talent and commitment and asked Straumann to offer him a scholarship. “This incredible gift changed my life and gave me belief in a better future. I am now in my fourth year at dental school and still cannot believe that someone would give me such a great opportunity. I am trying to share the goodness I have received by helping to provide free treatment to others. Straumann gives people the chance of a better life and I dream of learning to place implants to help others.”

Dentists in the making
Since 2006 Straumann has extended all-inclusive scholarships to young talented Cambodian men and women who lack the means to study. The scholarships were established through our sponsoring relationship with the Hope-For-All clinic in Phnom Penh. Since we began this initiative, the first students have graduated and practise at the clinic; one has set up an auxiliary practice at home. This extraordinary opportunity is a gift that keeps on giving, to a needy community.



Learning the hard way
Some of the best lessons are learned outside the classroom. That's why Straumann supports opportunities for students to participate in missions that bring dental care to underprivileged people in remote areas. The students have to be adventurous and resourceful. Often the infrastructure is poor, the equipment is very basic and no power is available. Along the way they learn project planning, fund raising, and logistics. Perhaps the most valuable lesson is improvising and problem-solving in difficult circumstances.

Cambodia
For many years Straumann has supported teams of dental students from Basel University in remote areas of Cambodia. In 2016 the project brought dental care to some 1 200 orphans. Working with a local practitioner in mobile operatories, the young dentists performed hundreds of fillings, extractions, and fluoride treatments – making use of every minute of daylight in areas without power.

Dominican Republic
Students from Zurich University sharpened their diagnostic skills while working without x-rays, drills or even suction equipment. They found the experience of treating 400 orphans to be intense, challenging and invaluable.

Myanmar
Students from the University of Witten/Herdecke took 180 kilos of donated dental supplies to Naypyidaw, where they assisted in oral surgery, and to rural areas, where they treated patients and taught dental hygiene to some 3 000 children.

Cameroon
Three public hospitals in Cameroon welcomed the extra hands offered by young dentists from the University of Geneva, who performed endodontic treatment, extractions, and prophylaxis on 360 patients. They also found time to train local teachers in oral health and nutrition and to participate in meetings with the Ministry of Public Health.

Communities
Enhancing well-being and quality of life

Our solutions help more than one-and-a-half million people every year by providing safe, effective, lasting solutions that enhance well-being and quality of life. This is our biggest contribution to the community.

At the same time, we acknowledge that millions of people do not have access to even basic dental care, which motivates our support for initiatives that make dental treatment and education about oral hygiene available to the underprivileged. Like most of our charitable activities, these are connected to our field of business – since this is where we can make a meaningful difference.

SUPPORT FOR THE UNDERPRIVILEGED

2016 was similar to previous years in terms of sponsoring activities. We evaluated 65 requests and supported 20 (see table overleaf). In addition, Straumann UK helped to organize a fund-raising event in which customers and employees raised more than GBP 50 000 for an international charity that trains local healthcare workers in the provision of emergency dental treatment in some of the poorest communities in the world.

STRAUMANN AID

Straumann AID (Access to Implant Dentistry), which was set up in 2007, is another global initiative to help underprivileged patients who are in need of treatment but cannot afford it. It relies on collaboration with dentists from the ITI network, who provide the implant treatment without charge, while Straumann makes the respective product donations.

OUTREACH IN DEVELOPING REGIONS

Elsewhere, we continued to support basic dental care initiatives, mostly in developing regions. We are grateful to our dental partners – many of whom are volunteers – for their devotion and for ensuring that the funds are used efficiently.

Many people around the world are unable to benefit from dental care. As an industry leader and responsible corporate citizen, we help in a practical, meaningful way.

HELPING ECTODERMAL DYSPLASIA PATIENTS

We continued our longstanding commitment to helping people affected by ectodermal dysplasia. Sufferers typically have severely malformed or missing teeth from infancy, and their dental treatment is rarely covered by insurance. Straumann provides free implants and prosthetics as well as financial support to the National Foundation for Ectodermal Dysplasia (NFED), a US-based non-profit organization that helps patients and their families around the world.

SUPPORT FOR YOUNG DENTISTS

We continued to sponsor four young dental students in Cambodia and Nicaragua, who are connected with charitable projects that we support there. Our hope is that these students will help to address the huge local need and to sustain the respective projects.

All the abovementioned projects focus on dentistry and promote Straumann's reputation among stakeholders as a caring, responsible corporate citizen. This supports our business and thus adds value for our shareholders.

MAIN INITIATIVES AND PROJECTS SPONSORED BY STRAUMANN IN 2016

REGION	LEAD PARTNER	OBJECTIVE[1]	STATUS/RESULTS
Cambodia	'Hope for All' Clinic	Dental student scholarships and clinic support	Support ongoing since 2007; three students fully supported
	University of Basel, Switzerland	Dental outreach project	2016 project completed
Cameroon	University of Geneva, Switzerland	Dental treatment at Mfou, Obala and Soa hospitals	2016 project completed; approx. 360 patients treated
Dominican Republic	University of Zurich, Switzerland	Dental outreach project	2016 project completed
Ethiopia	Julius-Maximilians-University Würzburg, Germany	Dental outreach project	2016 project completed
Kenya	Dentists for Africa, Germany	Dental treatment at hospitals	2016 project completed
Korea	Smile Foundation, Korea	Supporting dental treatment for underprivileged and handicapped people	2016 project completed
Myanmar	600Kids, Switzerland	Dental treatment for children in the delta region	Ongoing project
	Witten/Herdecke University, Germany	Free dental care for children	2016 project completed
Nicaragua	Sonrisa Foundation, Switzerland	Free dental care for orphaned children; dental student scholarship	Support ongoing since 2006
Syria/Turkey	Alkawakibi Association for Democracy and Human Rights, Germany	Prosthetic restorations for patients with facial damage (donations of implants)	2016 project completed
Tanzania	Secours Dentaire International, Switzerland	Training for dentists and assistants	2016 project completed
Uganda		Donation of equipment and sanitary installations	2016 sponsoring project completed, clinic treats up to 100 patients per day
United States	National Foundation for Ectodermal Dysplasia, USA	Financial, treatment and PR	Support ongoing since 2004
	University of Connecticut School of Dental Medicine, USA	Dentures for native people in south-east Alaska	Annual outreach trip completed
Other	Straumann UK / Bridge2Aid	Training local healthcare workers in the provision of emergency dental treatment in the developing world	GBP > 50 000 raised; third consecutive year of support
	Straumann AID	Free products for underprivileged individuals	Ongoing project

[1] In each case clear prerequisites and goals were set.

CLEAR PRINCIPLES AND GOALS

Sponsoring requests and initiatives are evaluated according to clearly defined principles and policies by our Corporate Sponsoring Committee, which reports periodically to the Executive Management. For each charitable project, clear goals were set. We look for continuity and sustainability in the projects we support, which is reflected in our long-standing relationships and commitments.

OUTLOOK

We shall continue our support for charitable activities in the dental field, focusing on education programs and initiatives or projects that provide access to dental treatment for needy people. We also plan further sponsored events, for example to treat edentulous patients who are unable to afford tooth replacement treatment. This kind of involvement is in the interest of multiple stakeholder groups.

Global production & logistics
Driving efficiency and expanding capacity to ensure future success

RISING TO THE CHALLENGES OF GROWING IN EVERY DIRECTION

Double-digit growth across all our businesses in 2016 reflects the strong increase in demand and the corresponding pressure on our production and logistics teams to supply higher volumes with uncompromised quality. At the same time, the inclusion of new products and brands in our overall portfolio significantly increased the logistics challenges – not to mention requirements for timely delivery and the fact that every day we serve more customers in more places than ever before.

Moreover, our profitability target meant that gross margin contribution had to be maintained. This was only possible thanks to a number of successful projects to improve efficiency, for example the continuation of our automation strategy including unmanned turning operations in our implant system production facilities, which contributed to an 8% increase in productivity in our core business.

NEW PRODUCTS

Upscaling for the rollout and extension of recently introduced lines has also been demanding for Villeret and Andover.

Having now sold almost a million Straumann BLT implants since the initial launch in 2014, we are still increasing production. In addition, we have extended the range and added new guided surgery tools. At the same time, the success of our Variobase abutments has led to a whole family of new products.

New products and above all the international expansion of Neodent's business stretched capacity in Curitiba, making it necessary to rephase certain launches in order to avoid backorders for in-market products.

In 2016, our milling center in Arlington, Texas, was extended and refurbished.

In CADCAM prosthetics, we added further options to our existing lines which are milled centrally in Markkleeberg, Arlington, Curitiba and Narita. Our biggest project was to create the etkon iDent multiplatform service, offering a large range of high quality custom abutments for implants made by our major competitors.

These are just a few examples of the many initiatives that occupied us in 2016 (see p.39); many are still to come.

NEW CAPACITY

Our growth makes it essential to expand. Our extension in Arlington became operational at the beginning of 2016 and we continued to leverage capacity elsewhere for example by operating additional shifts.We invested in additional machines in Andover. We also completed the technology transfer from Villeret to Andover so that the two facilities now have equivalent capabilities. Lack of capacity in Villeret makes a production expansion necessary. Production expansion is also under construction in Curitiba.

Apart from this, the acquisition of Equinox in India has added an implant production facility to our global pro-

STRAUMANN'S PRODUCTION SITES

LOCATION	PRODUCTS	STAFF	MARKETS	CERTIFICATION
Villeret, Switzerland (Straumann)	Implant systems	386	Global	ISO, FDA, Anvisa, MHLW
Curitiba, Brazil (Neodent)	Implant systems	417	Latin America, US, Iberia, Italy	Anvisa, ISO, FDA
Andover, USA (Straumann)	Implant systems	114	Global	ISO, FDA, Anvisa, MHLW
Mumbai, India (Equinox)	Implant systems	39	India, neighboring countries	ISO
Markkleeberg, Germany (Straumann, etkon)	CADCAM prosthetics	68	Europe	ISO
Arlington, USA (Straumann, etkon)	CADCAM prosthetics	37	USA	FDA
Narita, Japan (Straumann, etkon)	CADCAM prosthetics	15	Japan (Asia)	n / a
Malmö, Sweden (Straumann)	Biomaterials	27	Global	ISO, FDA, Anvisa, MHLW

duction network. This and the creation of new jobs increased our global production headcount to more than 1100.

NEW TECHNOLOGIES

Aside from efficiency and capacity increases, we have been evaluating innovative technologies like injection moulding to produce ceramic implants, 3D printing (for example to fabricate models), milling of abutments from bars, and 3D printing combined with milled metal frameworks. We also invested in state-of-the-art production equipment for our proprietary glass ceramic material, to coat abutments and to enhance our custom abutment range.

UPGRADING OUR INFRASTRUCTURE

In addition to purchasing equipment, we have also invested in our infrastructure, for example in Villeret, where we have introduced a new software system to manage increasing complexity and to further standardize shop floor processes. It brings us closer to our goal of creating a paperless workflow and supports our commitment to high quality and compliance. External audits in general have reconfirmed the high standard of our quality management system (p. 94).

NEW WORKFLOWS FOR LOGISTICS

The main challenge in Logistics has been the stream of new products and the significant increase (more than 500 per year) in new articles from our development pipeline in addition to articles from Neodent, Medentika, botiss and Anthogyr – resulting in double digit volume growth. To manage this we have introduced new systems and structures – for example a 'pick-to-light' system in our Swiss, German and US warehouses and a new structure allowing efficient drop shipments.

OUTLOOK

In 2017, production and logistics will focus primarily on the geographic roll-out of our value business as well as new products and various measures to increase capacity. Our aim is to leverage output in Villeret and Andover by a quarter and to almost double capacity in Curitiba by 2018. We will also upgrade production in India and will work towards establishing new milling capabilities in various locations. In logistics, we will complete the installation of new systems in our main warehouses and evaluate extending it to other sites.

All of this will require substantial investments in plant and equipment.

Environment
Creating opportunities to use energies and resources more effectively

One attribute of the high-performance culture we are working to create is the effective use of resources and energies without waste. Straumann recognizes that sustainable development and environmental protection is a global challenge that must be addressed collectively. To do our part, we monitor our environmental performance, which enables us to deepen the understanding of our impacts and uncover innovative ways to reduce our footprint.

As a leading provider of implant dentistry solutions, the environmental impacts associated with our operations are relatively minor. Apart from production and research activities, our impacts are low compared to most manufacturing companies. We do not produce dental filling materials or surgical equipment, and therefore do not use significant amounts of problematic metals such as mercury, lead, or manganese that are often found in production processes of manufacturers serving the dental industry. However, this does not absolve us of the responsibility to operate in an environmentally conscious manner.

Our environmental initiatives are focused on areas Straumann has the greatest potential to impact. Consequently, resource efficiency, energy consumption and waste reduction are key priorities.

OUR RESPONSIBILITY

Our product portfolio ranges from titanium and ceramic dental implants to prosthetic elements made of ceramic, metal, or polymer, and to biomaterials for tissue regeneration. We also distribute digital equipment such as scanners and milling machines, which are manufactured by third parties.

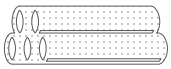
The Straumann Group's environmental impact occurs mainly in the production process as well as in research and development. Our principal product is dental implants, which are produced from rods of titanium or titanium-zirconium alloy on computerized CNC lathes. In the manufacturing process, cutting oil is used as a cooling agent, followed by sand-blasting, acid etching, cleaning, packaging, and sterilization. As a medical device manufacturer, we are subject to stringent regulations. Adherence to strict quality-control protocols for identity and purity as well as analysis of raw materials ensure that manufactured products are safe and effective. We fully document all manufacturing processes to provide traceability.

At Straumann, environmental stewardship goes beyond compliance with laws and regulations. As outlined in our Code of Conduct, we encourage management and employees to consider environmental protection as an integral part of their daily responsibilities. Suppliers are also expected to uphold our values as outlined in our Supplier Code of Conduct. The code specifies our expectations with regards to environmental protection in addition to social and legal requirements. To deliver on these commitments, we monitor energy consumption and corresponding greenhouse gas emissions (GHGs), certify our environmental management system to ISO 14 001, and communicate our progress over time. This environmental performance report is based on available data for our group headquarters in Basel (Switzerland) and all production sites in operation during the entire reporting year: Villeret (Switzerland), Markkleeberg (Germany), Malmö (Sweden), Andover (USA), and Arlington (USA), Curitiba (Brazil) and Narita (Japan).

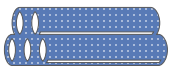
OUR CONTRIBUTION

To reduce the impacts associated with our operations, we closely monitor our energy consumption and corresponding CO_2 emissions. In 2016, we implemented a variety of energy conservation measures across our facilities. For example, we applied a new energy model in

TITANIUM RECYCLING
(tons)



2015
11.9

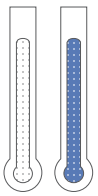


2016
14.1

+18 %

Strong volume growth accounted for increased consumption, emissions and waste material.

HEATING ENERGY
(GWh)

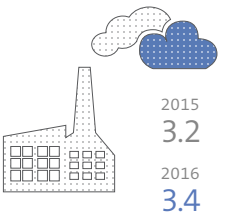


2015
4.6

2016
4.4

-4 %

CO_2 EMISSIONS PER CAPITA



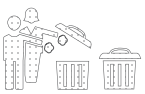
2015
3.2

2016
3.4

+6 %

REFUSE
(tons)

2015
230

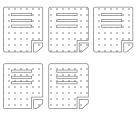


2016
241

+5 %

Measures to conserve energy implemented across sites.

PAPER CONSUMPTION PER CAPITA
(sheets)



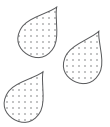
2015
3 529

2016
3 117

-12 %

WATER
(m^3)

2015
49 734



2016
62 336

+25 %

Villeret, our largest production site in terms of energy and materials consumption. By participating in the Energy Agency of the Swiss Private Sector (EnAW) program, we have agreed to implement measures to increase energy efficiency by 2% per year for the next 10 years. To monitor our progress towards this goal, we will report our performance to the Canton of Bern between 2015 and 2024.

Participation in this program reduces our carbon footprint and energy costs. It also supports the mission of the Swiss Energy Strategy 2050 to reduce GHGs nationally and complies with the CO_2 Act, which is in line with the UN Climate Conference accord to limit global warming to 2°C. In 2016, our Villeret production facility saved over 87 000 kWh as a result of these measures.

Straumann's US headquarters in Andover, the refurbished facility in Arlington, and the new milling center in Narita (Japan) also contributed to improving energy efficiency by using LED lighting. The upgrade from metal halide lighting in Andover is expected to save over 226 000 kWh annually and to reduce maintenance costs due to the longer life of LEDs.

COMMITMENT TO TRANSPARENCY

We interact with stakeholders through a variety of reporting activities, including the Carbon Disclosure Project CDP. In the context of CDP's Climate Change program, we regularly and transparently communicate our CO_2 emissions and reduction initiatives. In 2016, we reached the 'Awareness' level of disclosure. Companies who achieve this have started to implement changes to reduce emissions and identify risks and opportunities. This achievement reflects the continuous improvement since our first participation in 2010, emphasizing our commitment to improve transparency and disclosure regarding our environmental performance.

ENVIRONMENTAL PERFORMANCE

In 2016, our production volumes increased considerably. This accounts for the main differences in our environmental reporting and performance compared with 2015. Following the full acquisition of the Brazilian implant company Neodent in 2015, we worked hard to integrate their operations in our reporting promptly and pragmatically. In 2016, we improved the consistency of our data collection and have restated the 2015 electricity consumption figures and associated Scope 2 emissions accordingly. We have also included full-year data for our new milling center in Narita (Japan), which opened at the end of 2015 and had only a small impact on our environmental key figures in 2016.

RAW AND OPERATING MATERIALS

The volumes of implants and abutments sold expanded considerably in 2016, and with it the amounts of titanium used and recycled.

Yttrium stabilized zirconium oxide is used for ceramic implants and prosthetic components. Cobalt-chrome and polymethylmethacrylate (PMMA) are used in customized crown and bridge solutions. Consumption of these raw materials increased significantly due to increased demand and the continuing shift to high-end prosthetic materials.

One of our goals is to implement paperless workflows in several areas. Villeret introduced a computerized system that replaces paper-based workflow on the shop floor, reducing paper consumption and human error. The manufacturing execution system (MES) tracks and documents the transformation of raw materials to finished goods and already covers 80% of product volumes. It also helps to manage the increasing complexity of an expanding portfolio – in 2016, Straumann added 500 new items to its product range. In addition, our facility in Arlington supported this goal by switching to paperless invoicing for its shipping activities. Collectively this resulted in a further reduction of paper consumption overall and per-capita for the fifth consecutive year. We are exploring opportunities to extend these systems to other production sites to further reduce paper consumption in the future.

ENERGY USE AND GREENHOUSE GAS EMISSIONS

Energy use increased due to production growth. While electricity consumption developed roughly in line with production activities, heating energy slightly declined, mainly due to favorable climatic conditions.

Increased electricity consumption led to higher emissions. We monitor CO_2 emissions that are generated by electricity and heating, and distinguish between direct (Scope 1) and indirect (Scope 2) emissions. While Scope 1

encompasses emissions from sources such as burning natural gas, Scope 2 comprises emissions from purchased electricity and district heat.

OUTLOOK

The increase in our environmental footprint in 2016 was due to strong volume growth and the expansion of our business in general – which are expected to continue. Looking forward, our commitment to continuous improvement will be critical to minimizing our environmental impacts. To help offset increased energy consumption, we are evaluating the installation of photovoltaic panels at our Curitiba site. Furthermore, we will continue introducing paperless processes wherever feasible to support our goal of using resources more efficiently. We will also work towards including data for the recently acquired Equinox production facility, although this may take some time.

ENVIRONMENTAL KEY PERFORMANCE FIGURES

		Performance indicator	Unit	2016	2015
Product raw materials	Titanium	Consumption	tons	27.51	22.36
		Recycled (consumption minus product)[2]	tons	14.12	11.90
	Cobalt chrome	Consumption	tons	5.39	3.16
		Recycled[2]	tons	1.54	1.96
	Zirconia	Consumption	tons	3.58	2.28
	Polymethyl methacrylate	Consumption	kg	38	24
Operating materials	Various oils	Consumption	tons	78.15	77.45
		Recycled[2]	tons	58.94	41.84
	Cleaning solvents[2]	Consumption[2]	tons	44.12	36.60
		Recycled[2]	tons	26.47	21.50
	Acids	Consumption	tons	64.61	52.93
	Paper	Consumption	million sheets	5.56	5.85
		Consumption per capita[3]	sheet/employee	3 117	3 529
Energy and CO_2	Electricity	Consumption[4,5]	MWh	25 640	22 803
		Consumption per capita[3,5]	MWh/employee	14.39	13.76
	Heating	Total heating energy	MWh	4 377	4 604
		– Fossil fuel	MWh	3 479	3 801
		– District heat	MWh	897	803
		Total heating energy per capita[3]	MWh/employee	2.46	2.78
Emissions	CO_2 emissions[6]	Total emissions	tons	6 098	5 323
		– Direct (Scope 1)[5,6,7]	tons	1 116	1 083
		– Indirect (Scope 2)	tons	4 983	4 239
		Total emissions per capita[3,5]	tons/employee	3.4	3.2
Water	Water	Consumption	m^3	62 336	49 734
		Consumption per capita[3]	m^3/employee	35.0	30.0
	Untreated waste water	Disposal	m^3	112	101
Waste	Diverse waste	Hydroxide sludge[2]	tons	16.9	17.1
		Contaminated material	tons	156	131.3
		Solvents[2]	tons	3.6	3.3
	Refuse	Total	tons	241	230
		Per capita[3]	kg/employee	135	139

[1] Includes data for our Narita milling center.
[2] Data is not yet available for Neodent – our environmental data collection process is being refined.
[3] Per capita figures refer to employees at the relevant sites only.
[4] Includes 1505 MWh (2015: 1138 MWh) diesel consumption for electricity generation.
[5] 2015 data for Neodent revised.
[6] Scope 1 covers CO_2 emissions directly emitted by sources owned or controlled by Straumann such as heating boilers, while Scope 2 comprises emissions from generating electricity and heat we consume.
[7] CO_2 emissions associated with electricity consumption of 4783 tCO_2e (2015: 4061 tCO_2e) calculated according to the location-based approach, as defined in the GHG Protocol Scope 2 Standard. Results can be used as a proxy for the market-based approach.

Pages 119-121 include information on the Global Reporting Initiative (GRI) indicator G4-22 (see also page 191 f.).

WE CREATE OPPORTUNITIES FOR GENERAL DENTISTS

DR LIAT MOORE
GENERAL DENTIST

Having spent 13 years as an associate practitioner, Dr Liat Moore successfully established her own family dental practice in Norwell, Massachusetts, which is particularly impressive in view of her limited resources and business experience, not to mention the competitive environment and the fact that she is also a single mom to three young children. Dr Moore is committed to continuous education and strives to keep up on the latest trends in dentistry. The opportunity of teaming up with a specialist for implant placement makes it possible for her to offer modern tooth replacement options, which she restores prosthetically. In 2016, Dr Moore participated as a restoring dentist in one of Straumann's peer-to-peer events, in which her patients received the latest in implant technology and computer guided surgery. Straumann's innovative dental implant system has created opportunities for countless general dentists to offer implant solutions by referring their patients to a specialist for the surgery. Having started like this many go on to specialize and place implants.

General practitioners are increasingly faced with patients who either need implants or aftercare, or are experiencing complications.

Creating opportunities for general practitioners with the ITI
The ITI supports GPs in securing the skills to assess and react to each these clinical situations, offering a variety of resources to help GPs acquire a basic understanding of implant dentistry or extend their knowledge. For GPs with some experience, ITI Study Clubs all over the world provide the opportunity to learn about implant dentistry and to discuss individual cases and issues with other experienced practitioners. For GPs interested in learning about a particular area, the ITI Online Academy offers a comprehensive selection of learning modules and accompanying assessments. If a more structured approach is required, the new ITI curriculum extends from the novice through to expert and specialist levels.

The ITI also offers tools for GPs to extend their comfort zone when dealing with implants and to evaluate their patients' needs and respond accordingly.

Straumann Smart
Straumann 'Smart' is a blended education concept that we developed in 2016 to create opportunities for dental professionals who want to get started in implant dentistry, to expand their business, and to progress further. 'Smart' was developed in collaboration with eminent clinicians from the University of Zurich to enable general practitioners to successfully place and / or restore dental implants in straight-forward cases and to grow their business quickly.

Promotion visual for the Straumann Smart education concept

"With Smart, Straumann has created a 'cookbook' for straightforward procedures, with step-by-step instructions, based on the latest scientific findings. The e-books and videos have all the information GPs need to get started."

DR FRANCINE BRANDENBERG-LUSTENBERGER

Dr Francine Brandenberg-Lustenberger
Assistant Medical Director, Center of Dental Medicine, University of Zurich UZH & General practitioner in Lucerne

Dr Elisabeth Baumgartner
General Practitioner
Reinach / Therwil, Switzerland

Dr Elisabeth Baumgartner is a GP who chose to place Straumann implants. She likes the variety, quality and dependability of the products. Even more, she finds the complete system of tooth replacement and tissue regeneration solutions for every indication easy to use. Like many generalists, she appreciates the broad offering of education programs available from Straumann and the ITI, such as the ITI Education Week, a basic course for clinicians interested in implant dentistry.

"Most GPs refer their implant patients, but the Straumann system enables me to treat straightforward cases myself."

DR ELISABETH BAUMGARTNER

Corporate governance

PRINCIPLES

The principles and rules of Straumann's corporate governance are laid down in the Articles of Association, the organizational regulations, the code of conduct, and the charters of the Board Committees. These principles and rules are the basis of our corporate governance disclosures, which comply with the Directive on Information relating to corporate governance published by the SIX Swiss Exchange, where Straumann's shares have been traded since the company's initial public offering in 1998.

GROUP STRUCTURE

Straumann Holding AG is a listed stock corporation incorporated under the laws of Switzerland and domiciled as well as registered in Basel. Information about the company's shares, which are traded on the main segment of the SIX Swiss Exchange under the symbol STMN, is provided on p. 176.

Straumann Holding AG is the ultimate parent company of the Straumann Group (referred to collectively as 'the Group'), which is headquartered in Basel and, as of 31 December 2016, includes 46 wholly owned and two partially-owned subsidiaries (see chart p. 128 f.) as well as 11 companies in which non-controlling interests are held (see table opposite).

OPERATIONAL STRUCTURE

In 2016, the operational structure of the Straumann Group comprised the following groups/departments and sales regions (in alphabetical order):

- Corporate Services, comprising: Corporate Communication, Human Resources, Legal Compliance & Intellectual Property and Strategic Planning & Business Development
- Customer Solutions & Education, comprising: Customer Marketing & Education, Marketing Communications and Product Management
- Finance, comprising: Treasury, Controlling and all other finance-related functions, Corporate IT, Corporate Procurement, Facility Management, Internal Audit and Investor Relations
- Instradent Management
- Research, Development & Operations, comprising: Project Management, Research & Development, Technical Services, Quality Management & Regulatory Affairs, Production, Corporate Logistics
- Sales Central Europe and Worldwide Distributor Management (excluding APAC and LATAM)
- Sales Western Europe
- Sales North America,
- Sales Latin America and regional Distributor Management, including Neodent's manufacturing plant in Brazil
- Sales Asia / Pacific and regional Distributor Management.

On 1 January 2017, Straumann reorganized all its subsidiaries in Central and Western Europe into a single European region and the other markets into the 'Distributor & Emerging Markets EMEA' region, which includes Africa, Central Asia, Eastern Europe, the Middle East and Russia.

LEGAL STRUCTURE

LISTED COMPANIES

Straumann Holding AG is listed in the main segment of the Swiss stock exchange. No other company controlled by Straumann Holding AG is listed on a stock exchange.

Name	Straumann Holding AG
Domicile	Peter Merian-Weg 12, 4052 Basel, Switzerland
Listed on	SIX Swiss Exchange
Valor number	1228 007
ISIN	CH 0012 280 076
Ticker symbol	STMN

NON-LISTED GROUP COMPANIES

The major subsidiaries of Straumann Holding AG are presented on p. 128 f. and in Note 33 to the Financial Statements on p. F 64 f. of the Financial Report.

The Group is managed through its Headquarters at Institut Straumann AG in Basel. As laid down in the organizational regulations, the respective Regional Sales Head, the CFO and the General Counsel usually represent Straumann Holding AG and / or the other holding companies of the Straumann Group on the boards of the subsidiaries.

Straumann's premium products and services are sold through Institut Straumann AG, various distribution subsidiaries, and third-party distributors (see chart on p. 184 f. for overview of subsidiary and distributor locations). Other brands of the Straumann Group are sold through various distribution subsidiaries and

STRAUMANN'S PARTICIPATION AND REPRESENTATION IN OTHER COMPANIES

On 31 December 2016, Straumann held the following non-controlling stakes:

Non-consolidated company	Location	Activities	Capital rights held	Straumann representation
Anthogyr SAS	Sallanches (France)	Implant solutions for the value segment in China	30%	1 Board seat
Createch Medical SL	Mendaro (Spain)	CADCAM prosthetics for multiple implant systems	30%	1 Board seat
Dental Wings Inc	Montreal (Canada)	Dental prosthetics design (CAD), software and scanners	55%	2 Board seats
Instradent Deutschland GmbH	Hügelsheim (Germany)	Distribution of implant & prosthetic value brands	51%	At general meeting, 100% as of 1 Jan 2017
Medentika GmbH	Hügelsheim (Germany)	Implant prosthetics & dental implants	51%	At general meeting, controlling interest as of 1 Jan 2017
Open Digital Dentistry AG (in liquidation)	Zug (Switzerland)	(Assets and activities transferred to Dental Wings GmbH)	44%	n/a
RODO Medical, Inc.	San Jose (USA)	Prosthetics	12%	1 Board seat
T-Plus	New Taipei City (Taiwan)	Dental implant systems	49%	1 Board seat
V2R Biomedical Inc.	Montreal (Canada)	Prosthetically-driven guided-surgery solutions	30%	1 Board seat
Valoc AG	Möhlin (Switzerland)	Prosthetics (implant based denture-attachment systems)	44%	1 Board seat
Zinedent Implant Üretim AS	Ankara (Turkey)	Joint venture, supply of dental implants and prosthetics	50%	1 Board seat

The Straumann Group has no other significant shareholdings of more than 10%.

third-party distributors, mostly managed through the Instradent business platform at Headquarters in Basel.

In certain countries, Straumann has established fully-owned subsidiaries under the name of 'Manohay' with the purpose of distributing both premium and value brands from a single point (see pp. 128 f., 182ff., F 64 f. for an overview of subsidiary locations).

On 31 December 2016, Straumann Holding AG directly or indirectly held 100% of the capital and voting rights in all consolidated Group companies with the exception of STM Digital Dentistry, in which Straumann Holding AG holds a controlling stake of 49% (see p. 129). In addition, Straumann Holding AG directly or indirectly held capital rights in the companies listed in the table above.

CHANGES IN 2016 AND EARLY 2017

Early in 2016, Straumann Brasil Ltda was merged into Neodent, which is now responsible for the promotion and sale of premium and value products in Brazil in addition to the design, development, and manufacture of Neodent dental implants and related prosthetic components.

In the second quarter, STM Digital Dentistry was established in Hong Kong in cooperation with Modern Dental Group. STM Digital Dentistry holds 100% of etkon China, which was established towards the end of 2016 and has not yet begun production.

In the context of the Group's acquisition of Equinox and our strategy to penetrate the Indian market, Straumann Dental India Private Limited was converted into an LLP and Equinox Implants LLP was founded - both in the third quarter of 2016. In addition, Equinox Dental AG, a holding company, was founded in Switzerland.

Principal Group Companies
Ownership & share capital

STRAUMANN HOLDING AG
Basel, Switzerland
CHF 1 587 898

- **STRAUMANN MANUFACTURING, INC**
  Andover, USA
  USD 1
  - **STRAUMANN USA LLC**
    Andover, USA
    USD 1
- **INSTRADENT USA, INC**
  Andover, USA
  USD 2 000 000
- **STRAUMANN CANADA LTD**
  Burlington, Canada
  CAD 100 000
- **INSTRADENT CANADA LTD**
  Burlington, Canada
  CAD 500 001
- **MANOHAY COLOMBIA SAS**
  Bogotá, Colombia
  COP 5 500 062 207
- **MANOHAY ARGENTINA SA**
  Buenos Aires, Argentina
  ARS 8 000 000
- **MANOHAY MEXICO SA DE CV**
  México DF, Mexico
  MXN 38 392 615
- **MANOHAY CHILE SPA**
  Santiago, Chile
  CLP 263 200 000

- **STRAUMANN SINGAPORE PTE LTD**
  Singapore
  SGD 1
- **STRAUMANN PTY LTD**
  Victoria, Australia
  AUD 100
  - **STRAUMANN NEW ZEALAND LTD**
    Napier, New Zealand
    NZD 0
- **STRAUMANN JAPAN KK**
  Tokyo, Japan
  JPY 10 000 000
  - **ETKON JAPAN KK**
    Shibayama, Japan
    JPY 10 000 000
- **STRAUMANN (BEIJING) MEDICAL DEVICE TRADING CO LTD**
  Beijing, China
  RMB 40 000 000
- **STRAUMANN DENTAL KOREA INC**
  Seoul, Republic of Korea
  KRW 2 300 000 000
- **STRAUMANN DENTAL INDIA LLP**
  Gurgaon, India
  INR 1 256 000 000

- **INSTITUT STRAUMANN AG**
  Basel, Switzerland
  CHF 100 000
  - **STRAUMANN ITALIA SRL**
    Milan, Italy
    EUR 270 000
  - **INSTRADENT ITALIA SRL**
    Milan, Italy
    EUR 10 000
  - **EQUINOX IMPLANTS LLP**
    Mumbai, India
    INR 170 000 000
- **EQUINOX DENTAL AG**
  Basel, Switzerland
  CHF 100 000
- **STRAUMANN VILLERET SA**
  Villeret, Switzerland
  CHF 9 000 000
- **INSTRADENT AG**
  Basel, Switzerland
  CHF 100 000

STRAUMANN HOLDING DEUTSCHLAND GMBH
Freiburg, Germany
EUR 25 000

- STRAUMANN GMBH
  Freiburg, Germany
  EUR 200 000
- ETKON GMBH
  Gräfelfing, Germany
  EUR 326 000
- INSTRADENT EUROPE GMBH
  Freiburg, Germany
  EUR 25 000

STRAUMANN GMBH
Vienna, Austria
EUR 40 000

STRAUMANN LLC
Moscow, Russia
RUB 21 000 000

INSTRADENT LLC
Moscow, Russia
RUB 17 250 000

STRAUMANN SRO
Prague, Czech Republic
CZK 200 000

INSTRADENT SRO
Prague, Czech Republic
CZK 100 000

STRAUMANN AB
Mölndal, Sweden
SEK 100 000

BIORA AB
Malmö, Sweden
SEK 950 152

STRAUMANN AS
Oslo, Norway
NOK 1 000 000

STRAUMANN DANMARK APS
Brøndby, Denmark
DKK 125 000

STRAUMANN OY
Helsinki, Finland
EUR 32 000

STRAUMANN SA / NV
Zaventem, Belgium
EUR 2 081 620

STRAUMANN BV
Ijsselstein, Netherlands
EUR 18 151

- JJGC INDÚSTRIA E COMÉRCIO DE MATERIAIS DENTÁRIOS S. A .(NEODENT)
  Curitiba, Brazil
  BRL 1 107 621 860

STRAUMANN LTD
Crawley, UK
GBP 300 000

INSTRADENT LTD
Crawley, UK
GBP 1 000

MANOHAY DENTAL SA
Madrid, Spain
EUR 60 101

INSTRADENT IBERIA SL
Madrid, Spain
EUR 3 000

STRAUMANN SARL
Marne-la-Vallée, France
EUR 192 000

49%

STM DIGITAL DENTISTRY HOLDING LIMITED
Hong Kong
USD 100

100%

- ETKON DENTAL (SHENZEN) COMPANY LIMITED
  Shenzen, China
  USD 4 488 598

At 31 December 2016
Values indicate share capital

The following distribution companies were established in 2016: Manohay Chile SpA, Instradent Canada Ltd, Instradent LLC in Russia and Instradent Europe GmbH in Germany.

Straumann Middle East was established as a distribution company in Iran early in 2017.

On 1 January 2017, the Group re-gained full ownership of the distribution company Instradent Deutschland GmbH by purchasing the 49% stake held by Medentika. At the same time, an agreement with the minority shareholders changed Straumann's 51% stake in Medentika GmbH into a controlling interest. As a result, Straumann has consolidated Medentika fully in its financial statements as of 1 January 2017, although its stake remains unchanged.

PARTICIPATIONS IN OTHER COMPANIES

The Group invested further in the value segment and in its common technology platform (p. 25) in 2016, acquiring:

- A 30% stake in Anthogyr SAS of France, a manufacturer of attractively priced implant solutions, offering immediate access to the value segment in China;
- Tangible and intangible assets from botiss in Germany, providing Straumann with exclusive distribution rights for botiss products in Germany and strengthening the existing partnership between the two companies;
- A 30% stake in V2R Biomedical, a small, privately-owned company in Montreal specializing in prosthetically-driven guided-surgery solutions.

The Group also exercised its conversion right and call option to acquire a controlling stake in the South Korean implant manufacturer MegaGen. The option was obtained in 2014, when Straumann purchased convertible bonds from MegaGen. The conversion is being determined by arbitration under ICC rules.

In November 2016, Straumann announced a joint venture with maxon motor that will develop and produce ceramic implants made by injection moulding. Straumann obtained a 49% non-controlling stake in the joint venture company, maxon dental GmbH in January 2017.

CROSS SHAREHOLDINGS

Straumann does not have, and has not entered into, any cross-shareholdings with other companies relating to equity or voting rights.

CAPITAL STRUCTURE

In April 2016, 156 045 conditional shares were converted into ordinary shares in two tranches, one before and one after the increase of the Group's contingent share capital that was approved by the Annual General Meeting (AGM) in 2016 to ensure the continuation of share-based incentive plans and share-ownership programs for employees.

Apart from this and the conversion of 46 390 conditional shares into ordinary shares in 2015, there have been no changes in Straumann's share capital in the past three years. On 31 December 2016, the share capital was composed of:

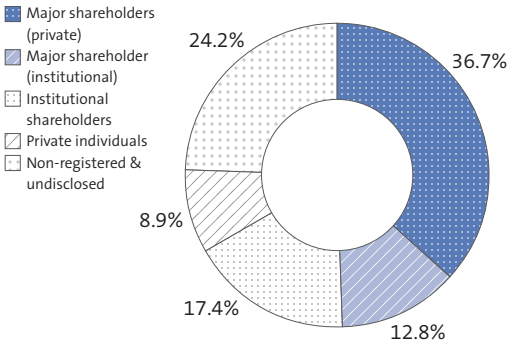
- 15 878 984 registered shares, fully paid in, each with a nominal value of CHF 0.10
- Conditional capital of CHF 28 395.50, divided into 283 955 conditional shares, each with a nominal value of CHF 0.10.

Straumann Holding AG did not have any authorized share capital.

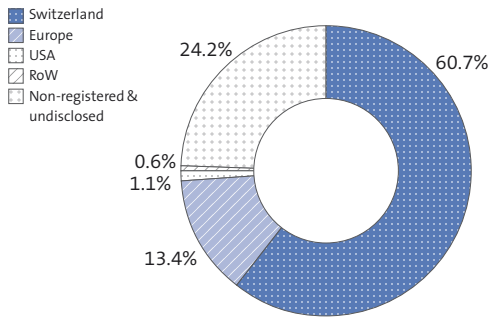
The listed portion of the conditional share capital was approved for an unlimited period at an extraordinary General Meeting in 1998. The unlisted portion of the conditional share capital was approved for an unlimited period at the 2016 ordinary General Meeting. Both are for use in equity participation plans for employees and management (see Compensation Report for details).

Straumann has no other categories of shares than registered shares. There are no restrictions on the transferability of Straumann Holding's shares. Purchasers of shares are entered in the share register as shareholders with voting rights if they expressly declare that they have acquired the registered shares in their own name and for their own account. If a purchaser is not willing to make such a declaration, he / she is registered as a shareholder without voting rights. Proof of acquisition of title in the shares is a prerequisite for entry in the share register.

SHAREHOLDINGS ON 31 DECEMBER 2016 (BY SEGMENT)



SHAREHOLDINGS ON 31 DECEMBER 2016 (BY GEOGRAPHY)



Nominees approved by the Board of Directors are recorded in the share register as shareholders with voting rights. Nominees who have not been approved by the Board of Directors may be refused recognition as shareholders if they do not disclose the beneficiary. In such cases, the nominees will be recorded in the share register as shareholders without voting rights. At 31 December 2016, no nominee had asked for registration and voting rights.

Straumann has not issued any financial instruments (participation certificates, dividend-right certificates, warrants, options or other securities granting rights to Straumann shares) other than the options/warrants and Performance Share Units granted to certain employees as a component of compensation (see Compensation report p. 157 ff.) and the CHF-200-million domestic straight bond launched in 2013 and due on 30 April 2020 (see Financial Report Note 13, p. F 39 f. for details).

SHAREHOLDERS

SIGNIFICANT SHAREHOLDERS

In 2016, the Group reported two transactions according to Art. 20 of the Federal Act on Stock Exchanges and Securities Trading (Stock Exchange Act, SESTA). One refers to the sale of 1.4 million shares by GIC Private Limited, which reduced its stake from 14% to less than 5%. The other refers to the purchase of approximately 530 000 of those shares by Straumann Holding. Details of the transactions are published on the SIX Swiss Exchange online reporting platform.

ENTRIES IN THE SHARE REGISTER

Straumann's share register, in which the names and addresses of owners and usufructuaries of registered shares are recorded, is maintained and administered on behalf of the Company by Nimbus AG, Ziegelbrückstrasse 82, 8866 Ziegelbrücke, Switzerland.

Only persons recorded in the share register as shareholders or usufructuaries are acknowledged as such by the Company. The transfer of registered shares requires the authorization of the Board of Directors, which delegated this power to Nimbus AG. Authorizations will be granted after purchasers have provided their name, nationality, and address and declared that the shares were acquired in their own name and for their own account.

Persons who have voting rights but no title to shares as a consequence of legal provisions (e.g. legal representatives of minors) will be referenced in the share register upon request.

Registered shareholders must inform the company of any change of address. If they fail to do so, all notices will be deemed to be legally valid if sent to the address recorded in the share register. The Company may, after hearing the parties concerned, delete entries in the register if these are based on false information.

There are no statutory rules concerning deadlines for entry in the share register. However, for organizational

SHAREHOLDERS BY VOLUME OF SHARES HELD

(absolute number)	31 Dec 2016	31 Dec 2015
1–100 shares	5 806	4 893
101–1000	2 413	2 219
1 001–10 000	291	249
10 001–100 000	66	56
100 001–1 000 000	11	8
1 000 001 and more	2	3
TOTAL	8 589	7 428

MAJOR SHAREHOLDERS

(in %)	31 Dec 2016[1]	31 Dec 2015
Dr h.c. Thomas Straumann (Vice Chairman of the Board)	17.1	17.3
Dr h.c. Rudolf Maag	12.1	12.2
BlackRock Group[2]	5.0	5.0
GIC Private Ltd[2]	4.4	13.6
Simone Maag de Moura Cunha	4.3	4.4
Straumann Holding AG	3.5	n/a
Gabriella Straumann	3.2	3.3
TOTAL	49.6	55.8

[1] Or at last reported date if shareholdings are not registered in the share register
[2] Not registered in Straumann's share register

CAPITAL STRUCTURE

(in CHF 1 000)	31 Dec 2016	31 Dec 2015
Equity	633 681	604 970
Reserves	(263 360)	(126 910)
Retained earnings	897 041	731 880
Ordinary share capital (fully paid in)	1 588	1 572
Conditional share capital	28	28
Authorized share capital	0	0
Number of registered shares	15 878 984	15 722 939
Treasury shares (% of total)	3.5%	<0.05%
Nominal value per share (in CHF)	0.10	0.10
Registration restrictions	None	None
Voting restrictions or privileges	None	None
Opting-out, opting-up	None	None

reasons, the share register is closed several days before the General Meeting. Participation and voting at the 2017 General Meeting is reserved for shareholders registered with voting rights in the share register on 29 March 2017. Shareholders who sell their shares prior to the Meeting are no longer entitled to vote.

SHAREHOLDERS' PARTICIPATION RIGHTS

VOTING RIGHTS AND REPRESENTATION RESTRICTIONS

Each share duly entered in Straumann's share register as being held in the shareholder's own name and for the shareholder's own account entitles the shareholder to one vote. On 31 December 2016, 76% of the issued capital was registered in the share register. All shares have the same entitlements to dividends. There are no preferential rights granted to any shareholders or shares.

All shareholders may be represented at the General Meeting by a proxy. Proxies and directives issued to the independent voting representative may either be given in writing or online via the Nimbus Shareholder Application ShApp (https://shapp.ch). Other voting representatives must have a proxy signed by hand by the shareholder. The Board of Directors decides whether proxies shall be recognized.

The independent voting representative is elected by the General Meeting for a term of office until the end of the next AGM and can be re-elected. In the case of a vacancy, the Board of Directors shall designate an independent voting representative for the next General Meeting.

QUORUMS

The General Meeting adopts its resolutions and holds its ballots by a majority of votes cast. Abstentions and invalid ballots are not taken into account. The legal provisions (in particular section 704 of the Swiss Code of Obligations) that stipulate a different majority are reserved. Votes on resolutions and elections are held electronically. In case of technical difficulties, the Chairman may order an open or written ballot. Likewise, the Chairman may repeat a ballot if he considers that the outcome is doubtful. In such a case, the preceding ballot is not considered.

The General Meeting may only approve the annual financial statements and resolve on the appropriation of the balance sheet profit if the Auditors' report is available and the Auditors are present. The presence of the Auditors can be dispensed with the unanimous resolution of all shares represented.

CONVOCATION OF GENERAL MEETINGS, AGENDA PROPOSALS

The Shareholders' General Meeting is convened by the Board of Directors within six months of the end of the business year. In 2017, the Shareholders' General Meeting will take place on 7 April at the Basel Congress Center. Shareholders individually or jointly representing at least 10% of the share capital may request an extraordinary General Meeting. The request must be made to the Board of Directors in writing, stating the agenda items and motions.

Invitations to the General Meeting are issued in writing and are delivered via ordinary mail to the address recorded in the share register at least 20 days before the date of the General Meeting and are published on the company's website (www.straumann.com). If shareholders agree to the electronic delivery of notices, the invitation will also be sent by email.

All agenda items and proposals by the Board of Directors and by shareholders who have requested the General Meeting must be announced in the notice convening the General Meeting.

Shareholders who individually or jointly represent shares with a par value of at least CHF 15 000 may request that an item be included in the agenda. The request shall be in writing at least 45 days before the General Meeting and must set forth the agenda items and the proposals of the shareholder(s).

2016 GENERAL MEETING

The 2016 AGM took place on 8 April and was attended by 362 shareholders, who together with proxies, represented 80% of the total share capital. Shareholders were also able to provide voting instructions online to the independent proxy.

The meeting approved the Management Report, Financial Statements and Consolidated Financial Statements for the 2015 business year, the appropriation of the available earnings in 2015, and the discharge of the Board of Directors for the 2015 business year. The meeting also approved the compensation of the Board of Directors and the Executive Management (see pp. 170 f., 173 of the Compensation Report) and – in a consultative vote – the Compensation Report. It also approved an increase of the contingent share capital to CHF 44 000 and an increase in the number of mandates that members of the Executive Committee may have in listed companies outside the Straumann group to two, both with the corresponding amendment of the Articles of Association.

The Chairman, Members of the Board, and Members of the Compensation Committee were all re-elected. Neovius Schlager & Partner was appointed as the independent voting representative and Ernst & Young AG as auditors.

The minutes of the meeting (including the voting results) are published in the Investors section of the company's website (www.straumann.com > Investors > Corporate Governance > Annual General Meeting).

BOARD OF DIRECTORS

The Board of Directors of Straumann Holding AG comprised seven non-executive members until May 2016 and six thereafter. No Director has been a member of the company's Executive Management during the past three years. The Directors are all Swiss citizens. The average age of the Members of the Board at year-end was 57.5.

ELECTIONS AND TERM OF OFFICE

The members of the Board of Directors, the Chairman of the Board and the members of the Compensation Committee (which shall at least be 3) are all elected individually by the Shareholders' General Meeting for a term of one year. Re-election is permitted until the age of 70.

If the position of Chairman of the Board or a position in the Compensation Committee falls vacant, the Board of Directors appoints a replacement from among its own members for the remaining term of office.

At the AGM in April 2016, Gilbert Achermann, Dr h.c. Thomas Straumann, Dr Sebastian Burckhardt, Roland Hess, Ulrich Looser, Dr Beat Lüthi and Stefan Meister were all re-elected to the Board for a further one-year term. Gilbert Achermann was elected as Chairman of the Board; Stefan Meister, Beat Lüthi and Ulrich Looser were re-elected to the Compensation Committee. The Board appointed Dr h.c. Thomas Straumann as its Vice Chairman and Roland Hess, Sebastian Burckhardt and Ulrich Looser as members of the Audit Committee.

On 23 May 2016, Stefan Meister stepped down from the Board because of a family illness. He had served on the Board for six years and was released from his responsibilities both as a Board Member and as Chairman of the Compensation Committee. In accordance with Article 3.2.6 of the Articles of Association, Ulrich Looser was appointed Chairman of the Compensation Committee and Dr h.c. Thomas Straumann as the third member of the Committee alongside Dr Beat Lüthi until the 2017 AGM.

Thus, from May 2016 to the publication of this report, the Board comprised:

GILBERT ACHERMANN
Swiss (born 1964)
Chairman of the Board since 2010
Board Member since 2009

In addition to his role as Chairman of Straumann, Gilbert Achermann's activities in 2016 included serving on the Board of Directors of the private bank Julius Baer Group and as an Executive-in-Residence at the IMD Business School in Lausanne. He is also a Business Angel of several start-up companies.

In previous years, he served as Chairman and Co-CEO of the Vitra / Vitrashop Group, a family-owned furniture and retail company, Chairman of the Siegfried Group, a listed pharma service company, and Vice Chairman of the Moser Group, a privately-owned luxury watchmaking company. From 2002 to 2010, he was CEO of Straumann, which he joined as CFO in 1998.

Gilbert Achermann started his professional life at UBS in Investment Banking in 1988, working in Switzerland, New York, London and Frankfurt. He holds an Executive MBA from IMD and a bachelor's degree from the University of St. Gallen.

Gilbert Achermann represents continuity, stability and credibility among the various stakeholders. The Board benefits from his extensive knowledge of the dental industry, the extensive experience and insight gained from directorships in other industries.

DR H.C. THOMAS STRAUMANN
Swiss (born 1963)
Vice Chairman of the Board
Board Member since 1990

Thomas Straumann's skills in precision engineering were complemented by his studies at the Basel Management School and the Management and Commercial School of Baselland. In 1990, he was responsible for restructuring Institut Straumann AG and was both CEO and Chairman of the Board of Directors until 1994. He continued as Chairman of the Board until 2002. In 2004, he was awarded an honorary doctorate by the University of Basel, Switzerland.

Further examples of Dr Straumann's success as an entrepreneur and businessman are the orthopedic / medical device company Medartis AG – of which he is the founder, joint owner and Chairman, the Grand Hotel Les Tros Rois, Basel – of which he is the owner and Chairman, and CSI-Basel AG – the equestrian event company, over which he presides as Chairman. He also has a diverse portfolio of interests, including not-for-profit activities.

Thomas Straumann is the principal shareholder of Straumann Holding AG and is the longest-serving member of the Board. He complements the Board with his understanding of the dental and medical device industries through personal management experience and various shareholdings.

DR SEBASTIAN BURCKHARDT
Swiss (born 1954)
Member of the Audit Committee
Secretary of the Board
Board Member since 2002

Sebastian Burckhardt began his studies in the fields of economics and law and obtained his doctorate law degree at the University of Basel. He is a lawyer admitted to the Bar of Switzerland and a civil law notary in Basel. He was admitted to the New York Bar following studies at New York University School of Law. He is a partner at Vischer AG, a law firm in Basel.

Straumann's Board of Directors benefits from Dr Burckhardt's expertise as an independent lawyer. He is a specialist in corporate and commercial law and in mergers, acquisitions, joint ventures, licensing, distribution and technology agreements. His knowledge extends well beyond legal matters and includes many years' experience on corporate boards.

ROLAND HESS
Swiss (born 1951)
Chairman of the Audit Committee
Board Member since 2010

From 2008 until 2012, Roland Hess served as senior advisor to the Executive Committee of the Board of Schindler Holding AG, Ebikon, and held positions on several Boards of Directors for companies within the Schindler Group. He joined Schindler in 1984 and rose through positions of increasing responsibility in controlling, finance and regional management to become President of the Elevator and Escalator Division. From 1971 to 1984, he worked for Nestlé, initially in accounting, then as an international auditor, and finally as Chief Financial Officer of a Group company.

His career includes several years in North and Latin America, in addition to assignments in Europe. He holds a degree in business administration from Lucerne Business School and studied at Harvard Business School near Boston.

He has a long and distinguished track record in larger companies in more mature industries, combined with in-depth regional and functional experience. In addition, he complements the Board with expertise in compliance, risk management and standardized global procedures.

Roland Hess has decided not to stand for re-election at the 2017 AGM.

ULRICH LOOSER
Swiss (born 1957)
Chairman of the Compensation Committee,
Member of the Audit Committee
Board Member since 2010

Ulrich Looser is a partner of BLR & Partners AG. From 2001 to 2009, he was with Accenture Ltd, where he became Chairman of its Swiss affiliate (2005) and Managing Director of the Products Business in Austria, Switzerland and Germany. Earlier, he spent six years as a partner at McKinsey & Company Ltd. Ulrich Looser graduated in physics at the Swiss Federal Institute of Technology (ETH), Zurich, and in economics at the University of St. Gallen.

His expertise in strategy, project and human capital management is of great value to the Straumann Board. He also adds in-depth consultancy and business development experience.

DR BEAT LÜTHI
Swiss (born 1962)
Member of the Compensation Committee
Board Member since 2010

Beat Lüthi is CEO and co-owner of CTC Analytics AG, Zwingen, a globally active medium-sized Swiss company in the field of chromatography automation. After obtaining his PhD in Engineering from the Swiss Federal Institute of Technology (ETH), Zurich, he began his career with Zellweger Uster AG, a leading manufacturer of quality control equipment in textile production.

In 1990, he moved to Mettler-Toledo International Inc and rose to the position of General Manager of the Swiss affiliate. In 1994, he completed an executive program at INSEAD and subsequently joined the Feintool Group in 1998. During his four-year tenure as CEO, the company went public and doubled in size. In 2003, he returned to Mettler-Toledo as CEO of the Laboratory Division. At the end of 2007, he joined CTC Analytics to lead and further develop the company as an entrepreneur.

Beat Lüthi combines entrepreneurship and corporate experience in different industries, which make him a valuable contributor to strategic and operational matters. His scientific background together with his experience as acting CEO, Chairman and Board member in various industrial businesses are of further benefit to the Straumann Board.

STRAUMANN BOARD OF DIRECTORS – MATERIAL MEMBERSHIPS IN OTHER BOARDS

Member	Commercial enterprise	Charity / other	Location	Function
Gilbert Achermann	IMD – International Institute for Management Development		CH	Executive-in-Residence (2016 – 2017)
	Julius Bär Gruppe AG / Bank Julius Bär & Co. AG		CH	Board member
		Handelskammer beider Basel	CH	Board member
		International Team for Implantology (ITI)	CH	Board member
Thomas Straumann	Centervision AG		CH	Chairman
	CSI-BHE AG		CH	Chairman
	Grand Hotel Les Trois Rois		CH	Board member
	Medartis Holding AG & Medartis group companies		CH	Chairman
		FDR Foundation for Dental Research and Education	CH	Board member
		International Bone Research Association	CH	Board member
Sebastian Burckhardt	Amsler Tex AG		CH	Board member
	Applied Chemicals International AG & ACI Group companies		CH	Board member
	Dolder AG		CH	Chairman
	Le Grand Bellevue SA		CH	Board member
	Grether AG		CH	Board member
	Immobiliengesellschaft zum Rheinfels AG		CH	Chairman
	persona service AG & persona service GmbH Schweiz		CH	Board member
	Qgel SA		CH	Board member
		Fondation Bénina	CH	Member, Board of trustees
		Gehörlosen- und Sprachheilschule Riehen / GSR Wieland Stiftung / Stiftung Autismuszentrum	CH	Vice Chairman, Board of trustees
		Misrock-Stiftung	CH	Member of the Board of trustees

Member	Commercial enterprise	Charity/other	Location	Function
Roland Hess	Societé Civile Immobilière Solivie		F	Board member
Ulrich Looser	Bachofen Holding AG		CH	Chairman
	BLR & Partners AG & BLR group companies		CH	Chairman
	Econis AG		CH	Chairman
	Kardex AG		CH	Board member
	LEM Holding SA		CH	Board member
	Spross Entsorgungs Holding AG		CH	Board member
		Economiesuisse	CH	Board member
		Schweizerische Studienstiftung	CH	Board member
		Swiss-American Chamber of Commerce: 'Doing Business in the US'	CH	Panel member
		Swiss National Fund	CH	Board member
		University Hospital Balgrist, Zürich	CH	Board member
		University of Zürich	CH	Board member
Beat Lüthi	APACO AG		CH	Board member
	CTC Analytics AG		CH	CEO & Board member
	INFICON Holding AG		CH	Chairman
		Swiss-American Chamber of Commerce: 'Doing Business in the US'	CH	Panel member
		Industrieverband Laufen-Thierstein-Dorneck-Birseck	CH	Board member
		Stiftung Behindertenwerk St. Jakob	CH	Board member

Board of Directors

TIME (DAYS) SPENT BY DIRECTORS AT BOARD/COMMITTEE MEETINGS AND ON COMPANY RELATED MATTERS

2016 MEETINGS	G. Achermann	T. Straumann	S. Burckhardt	R. Hess	U. Looser	B. Lüthi	S. Meister
Board[1]	7	6	7	7	7	6	2
Audit Committee	5	n/a	5	5	5	4	n/a
Compensation Committee	6	5	n/a	n/a	6	6	2
Other[2]	67	21	12	12	12	12	n/a
TOTAL DAYS 2016	85	32	24	24	30	28	4

1 incl. 1 telephone conference
2 Meeting preparation, travel

OTHER ACTIVITIES AND VESTED INTEREST

None of the Directors had any significant business connections with Straumann Holding AG or any of its subsidiaries in 2016.

Unless stated in their CVs or in the table "Material Memberships" (p. 138 f.), none of the Directors:

- Performed any activities in governing or supervisory bodies of significant foreign or domestic organizations, institutions or foundations under private or public law
- Held any permanent management or consultancy position for significant domestic or foreign interest groups
- Held any official function or political post.

PERMITTED MANDATES OUTSIDE STRAUMANN (PURSUENT TO ART. 12 OAEC)

Art. 4.4 of Straumann's Articles of Association states that no member of the Board of Directors may perform more than 15 additional mandates (i.e. mandates in the highest-level governing body of a legal entity required to be registered in the Commercial Register or in a corresponding foreign register) in commercial enterprises, of which no more than five may be in listed companies.

The following are exempt from the foregoing restrictions:

- Mandates in enterprises that are controlled by the Company
- Mandates in enterprises that are performed at the instruction of the Company
- Mandates in associations, organizations and legal entities with a public or charitable purpose, and in foundations, trusts, and employee pension funds; no member of the Board of Directors may perform more than ten such mandates.

Mandates in several legal entities under common control or under the same economic authority shall be deemed as one mandate.

OPERATING PRINCIPLES OF THE BOARD OF DIRECTORS

The Board of Directors meets for one-day meetings at least four times a year and as often as business requires. In 2016, the full Board held seven meetings including one telephone conference, while the Audit Committee met five times and the Compensation Committee six times (see the table above for details).

The CEO and CFO generally participate in Board meetings and are occasionally supported by other EMB members. Dr Andreas Meier, General Counsel of the Group, is responsible for the minutes.

The Board of Directors consults external experts on specific topics where necessary.

The Board of Directors is responsible for the strategic management of the company, the supervision of the EMB and the financial control. It reviews the company's objectives and identifies opportunities and risks. In addition, it decides on the appointment and/or dismissal of members of the EMB.

The Board of Directors also provides a mentoring service to the Executive Management. This aims to provide executives with an experienced sparring partner/coach and a sounding board for testing ideas and seeking qualified independent opinions.

The Board of Directors has the following specific tasks and duties:
– To approve the Group's vision, behaviours and strategy
– To determine the principal organization and processes of the Group
– To approve the Group's strategic plan, financial medium-term plan and annual budget
– To approve the semi-annual financial statements
– To approve the annual report, the Compensation Report and the annual financial statements and submit these to the AGM
– To prepare and approve the agenda of the AGM and to implement its resolutions
– To appoint and dismiss the CEO and the members of the EMB
– To decide on the proposal of the Compensation Committee regarding the compensation payable to Board members, the CEO and the EMB
– To supervise the EMB and approve important transactions.

The Board of Directors has a quorum if a majority of members is present. This does not apply to resolutions that require public notarization, which do not require a quorum. Valid resolutions require a majority of the votes cast. In the event of a tie, the chairman of the meeting has the decisive vote.

COMMITTEES OF THE BOARD OF DIRECTORS

The Board of Directors has an Audit Committee and a Compensation Committee, each consisting of no fewer than three Board members with relevant background and experience.

The members of the Compensation Committee are elected by the General Meeting for a term of one year. In the event of a vacancy in the Compensation Committee, the Board of Directors appoints the replacement from among its own members for the remaining term of office. The members of the Audit Committee are appointed by the Board of Directors. Both Committees constitute themselves and appoint their chairman from among their members.

The Board of Directors may establish further committees or appoint individual members for specific tasks.

AUDIT COMMITTEE

Members: Roland Hess (Chair), Sebastian Burckhardt and Ulrich Looser

The Committee's main tasks are to:
– Assess the management of financial and other risks and the compliance with risk-related procedures and other relevant standards
– Oversee the performance of the external auditors, assess the fees paid, and assure their independence
– Oversee the activities of the internal audit function
– Review and discuss the financial statements with the CFO and with the external auditors and approve the quarterly statements for the first and third quarter of each financial year
– Review and assess processes and assumptions used for the financial planning and forecast cycles
– Review the funding, investing and management of liquid assets and propose profit distribution to the Board of Directors.

COMPENSATION COMMITTEE

Members: Stefan Meister (Chair) until May 2016, Ulrich Looser (Chair as of May 2016), Dr Beat Lüthi, Dr. h.c. Thomas Straumann as of May 2016.

The Committee's main tasks are to:
– Prepare the compensation report and submit it to the Board of Directors for approval and submission to the AGM
– Review the compensation principles for any compensation paid to the Board of Directors, the CEO and the EMB and submit them to the Board of Directors for approval
– Prepare proposals concerning the compensation of the Board of Directors, the CEO and the EMB and submit them to the Board of Directors for approval and submission to the AGM
– Establish the targets and target amounts of the short- and long-term performance-based compensation components and determine the amount payable under the scheme
– Discuss the CEO's proposals for appointments to the EMB with the CEO and submit them to the Board of Directors for approval
– Assess candidates for the CEO role and submit a proposal to the Board of Directors for approval
– Prepare agreements concerning payments to a new CEO or EMB member according to Article 4.3 in the Articles of Association and submit them to the Board of Directors for approval

– Review the composition of the Board of Directors and make proposals in the context of a regular renewal, taking into consideration the representation of major shareholders, balanced skills, experience and diversity.

ASSIGNMENT OF RESPONSIBILITIES TO THE EXECUTIVE MANAGEMENT BOARD

The Board of Directors has delegated responsibility for the operational management and sustainable development of the Group to the Chief Executive Officer (CEO) and the other members of the Executive Management Board (EMB). For details on the specific responsibilities see the operational structure on page 144.

The Board of Directors has not delegated any management tasks to companies or persons outside the Group.

FUTURE NOMINATIONS

To identify potential successors for Stefan Meister and Roland Hess, the Board conducted a structured search in 2016 and will propose the following candidates for election by the shareholders at the next AGM on 7 April 2017:

MONIQUE BOURQUIN

Swiss (born 1966)

Monique Bourquin has a strong track record in general management, finance, marketing and distribution gained from her career in consulting and the consumer-goods industry. Having worked with PWC, Rivella and Mövenpick, she joined Unilever in 2002. After four years as a Country Manager, she became CFO for the GAS region from 2012 to 2016. She also held board mandates in Promarca (the Swiss branded goods association) and two Unilever pension funds.

She has served on the Board of Directors of Emmi, the leading Swiss dairy group, since 2013 and is a member of their Market and Audit Committees. She is also on the Board of the Swiss marketing association GfM. She will broaden her career as a board member in 2017.

Monique Bourquin graduated from the University of St. Gallen and lectures in the Executive MAS program of the Swiss Federal Institute of Technology (ETH) in Zurich.

REGULA WALLIMANN

Swiss (born 1967)

Regula Wallimann is an expert in multinational group auditing, financial advisory and corporate governance, having been with KPMG since 1993. As a Global Lead Partner since 2003, she has been responsible for several global companies and has led audit teams specializing in tax, IT, treasury, compliance, litigation, environmental matters, pensions, international accounting and reporting, covering the US, China, LATAM and other regions.

She was a member of the strategic partners committee of KPMG Switzerland from 2012 to 2014. As of April 2017, Regula Wallimann will start a new career as an independent financial expert and board member.

A graduate of HSG, University of St. Gallen, Switzerland, Regula Wallimann has studied at INSEAD and is a Certified Public Accountant both in the US and Switzerland.

Executive Management Board

CHIEF EXECUTIVE OFFICER

Marco Gadola
Swiss (born 1963)
EMB member since 2013

DISTRIBUTOR & EMERGING MARKETS EMEA

Wolfgang Becker
German (born 1966)
EMB member since 2013

SALES EUROPE

Jens Dexheimer
German (born 1966)
EMB member since 2016

SALES NORTH AMERICA

Guillaume Daniellot
French (born 1970)
EMB member since 2013

SALES LATIN AMERICA / CEO OF NEODENT

Matthias Schupp
German (born 1964)
EMB member since 2016

SALES ASIA / PACIFIC

Dr Alexander Ochsner
Swiss (born 1964)
EMB member since 2012

CHIEF FINANCIAL OFFICER

Dr Peter Hackel
Swiss (born 1969)
EMB member since 2014

CUSTOMER SOLUTIONS & EDUCATION

Frank Hemm
Swiss (born 1970)
EMB member since 2012

RESEARCH, DEVELOPMENT & OPERATIONS

Dr Gerhard Bauer
German (born 1956)
EMB member since 2013

INSTRADENT MANAGEMENT & STRATEGIC ALLIANCES

Petra Rumpf
German (born 1967)
EMB member since 2015

MARCO GADOLA
Swiss (born 1963)
Chief Executive Officer

Marco Gadola has a strong executive track record in a broad range of global businesses. He rejoined Straumann in 2013 as CEO, having previously served as Chief Financial Officer and Executive Vice President Operations from 2006 to 2008, when he left to pursue a career development opportunity at Panalpina, a world leader in supply chain management. Having started as Panalpina's Chief Financial Officer, he became Regional CEO Asia / Pacific in 2012, with overall responsibility for the regional business.

Prior to his first term at Straumann, he spent five years at Hero, the Swiss-based international food group, where he was also CFO and responsible for IT and operations. Previously, he spent nine years at the international construction tool manufacturer Hilti, where he held a number of senior commercial / sales and finance-related positions in various countries. Before that, he worked for Sandoz International Ltd, as Audit Manager, and for Swiss Bank Corporation, Basel, in Corporate Finance.

Mr Gadola graduated from Basel University in business administration and economics. He also completed various programs at the London School of Economics and at IMD in Lausanne.

Marco Gadola is Vice Chairman of the Board of Calida Group and heads its Audit Committee. He is also a member of the Board of MCH Group, Switzerland, and heads its Audit Committee, in addition to being a panel member of the Swiss-American Chamber of Commerce.

DR PETER HACKEL
Swiss (born 1969)
Chief Financial Officer

Peter Hackel rejoined Straumann in 2014, after three years at Oerlikon Industrial Group, where he was CFO of the global segment Oerlikon Drive Systems. He first joined Straumann in 2004 in a project management and business development role and rose to become Head of Group Controlling and member of the Corporate Management Group. Prior to Straumann, he spent three years at Geistlich Biomaterials, as Director of Marketing & Sales Orthopaedics, and two years at McKinsey & Company as a consultant.

Peter Hackel offers a valuable combination of financial and business expertise together with an analytical scientific background. He obtained both his Master's degree and PhD in Biochemistry and Molecular Biology from the Swiss Federal Institute of Technology (ETH) in Zurich and complemented his education with studies in Business Administration at the University of Hagen in Germany.

DR GERHARD BAUER
German (born 1956)
Head Research, Development & Operations

Gerhard Bauer is a seasoned executive with a broad international background in global operations. He has spent more than 30 years in the pharmaceutical and medical device industry in various leadership positions.

Prior to joining Straumann in 2010, Dr Bauer held managerial positions at Nextpharma, a specialist company in the biotech industry, and Bausch & Lomb, a global leader in eye-care products. From 1992 to 2008, his career at Bausch & Lomb was distinguished by increasing responsibility and in 2006, he was appointed Head of Global Operations & Engineering and member of the Executive Team. From 1984 to 1992, he worked for Ciba Vision, a subsidiary of Novartis. He began his career in production at GlaxoSmithKline in 1983.

Dr Bauer received his PhD from the Institute of Pharmaceutics at the Ludwig-Maximilians-University in Munich, where he also obtained his MSc in Pharmaceutics. He also obtained an advanced degree in Pharmaceutical Technology from the Bavarian Chamber of Pharmacists.

WOLFGANG BECKER
German (born 1966)
Head Distributor and Emerging Markets EMEA

Wolfgang Becker holds a number of business school diplomas including that of the St. Gallen Management Center.

He began his professional career at Straumann in 1986 and held a series of managerial positions of increasing responsibility in the company's German subsidiary, becoming Head of Human Resources in 1991, Head of Marketing in 2000, and General Manager of Straumann Germany in 2001. He served on Straumann's Executive Committee as Head of Sales Europe from 2005 to 2006. Since then, he has been responsible for Straumann's business in Central and Eastern Europe, and headed the Group's distributor business from 2007 to 2008.

Wolfgang Becker rejoined the Group's Executive Management Board as Head Sales Central Europe & Distributors EMEA in 2013.

GUILLAUME DANIELLOT
French (born 1970)
Head Sales North America

Having obtained a Bachelor's degree in Physics from the University of Dijon and a Masters in Marketing from FGE in Tours, Guillaume Daniellot completed his studies with a Masters in Business Administration at the ESC European School of Management in Paris.

His professional career began in hospital product management – initially at Coloplast and then at B. Braun, as an international business unit manager. He switched to the dental industry in 2001, joining Dentsply France, where he became Sales & Marketing Director.

Mr Daniellot joined Straumann in 2007 as Managing Director of Straumann France. Two years later, he transferred to Group Headquarters to become Head of Global Sales Digital Dentistry. Shortly afterwards he took over responsibility for Straumann's Prosthetic Laboratory Business Group, including global management of sales, marketing, product development, training and education. In both these roles he was a member of the Corporate Management Group. He joined Straumann's Executive Management Board as Head Sales Western Europe in 2013 and took on his current role at the outset of 2016.

JENS DEXHEIMER
German (born 1966)
Head Sales Europe

Jens Dexheimer is responsible for Straumann's European region, which includes Austria, Benelux, France, Germany, Iberia, Italy, Scandinavia, Switzerland and the UK. In his previous positions, he successfully managed the business in Germany, the Group's largest European market, and Iberia. In 2016, he was made responsible for the entire Western Europe region and joined the EMB.

He moved to Straumann in 2010 from Wella / Procter & Gamble, which he joined in 1996 and where he rose through various international roles of increasing responsibility from regional Human Resources management to country, divisional and regional leadership. He began his career in consumer goods industry with Benckiser in Germany.

Mr Dexheimer obtained a degree in Economics at the State Vocational Academy in Mannheim and a Masters' Degree from Mainz University. He also completed an Executive Development Program at Kellogg University in Chicago.

FRANK HEMM
Swiss (born 1970)
Head Customer Solutions & Education

Frank Hemm holds a Master's degree in Economics from the University of St. Gallen and a Master's in Business Administration from Kellogg Graduate School of Management in Chicago. His business career began in management consulting with Andersen Consulting and McKinsey, focusing on business process re-engineering and strategic management consulting.

He joined Straumann in 2004 and was initially responsible for Corporate Business Development & Licensing. He was appointed Head of Sales, Western Europe in 2007 and became a member of the Corporate Management Group. A year later, he was given responsibility for the Asia / Pacific Region as Head of Sales based in Singapore, where he established and built up Straumann's regional headquarters. In addition to leading the integration and turnaround of the acquired distributors in Japan and Korea, he also expanded Straumann's presence in China.

In 2012, Mr Hemm was appointed to the Executive Management Board as Head of EMEA and LATAM, and he moved into his current role in 2013.

DR ALEXANDER OCHSNER
Swiss (born 1964)
Head Sales APAC

Alexander Ochsner is a seasoned executive with extensive international experience in the medical device industry, having spent more than a decade in senior managerial roles at the top of the dental implant industry in regional leadership positions.

Before moving to the dental industry, he held managerial positions in marketing / sales at Medtronic and Medela, where he gained experience of the medical device market in the Far East as Area Sales Manager & Executive Director of the Japanese subsidiary. From 2002 to 2008, he worked for Zimmer Dental, where he was Vice President Europe & Asia / Pacific and a member of the Divisional Executive Team.

Alexander Ochsner joined Straumann in September 2012 from Nobel Biocare, where he was Senior Vice President & General Manager EMEA and member of the Executive Committee.

Dr Ochsner gained his PhD at the Swiss Federal Institute of Technology (ETH) in Zurich, where he also attained an MSc in natural sciences. He has held his current position since 2012.

PETRA RUMPF
German (born 1967)
Head Instradent Management & Strategic Alliances

Petra Rumpf has a strong executive track record in the dental implant industry and 20 years' experience in growth management, e-commerce, operational turnaround, strategy and mergers & acquisitions (M&A).

She worked for Nobel Biocare from 2007 to 2014, where she was Member of the Executive Committee and responsible for Corporate Development and M&A, global e-commerce, clinical training & education, and the successful development of the distributor business. She also managed the successful initiation of the Foundation for Oral Rehabilitation (FOR), a global foundation that is active in the area of science, education and humanity. During her last three years with the company, Petra Rumpf was also responsible for AlphaBio Tec – which is active in more than 50 countries, guiding its successful expansion into China and emerging markets.

Before joining Nobel Biocare, she spent 16 years at Capgemini Consulting, where she rose through various managerial roles to become Vice President Strategy & Transformation Consulting. Her work covered a spectrum of countries and industries with a focus on life sciences and high-tech.

Petra Rumpf holds an MBA from Clark University in Worcester (USA) and a BA in economics from the Trier University in Germany.

MATTHIAS SCHUPP
German (born 1964)
Head Sales Latin America, CEO of Neodent

Matthias Schupp joined Straumann from Procter & Gamble in 2007 as Regional Manager, Western Europe. In 2013, he was appointed Head of Sales for the LATAM region and joined the management of Neodent, of which he became CEO early in 2015. He joined Straumann's Executive Management Board at the beginning of 2016.

Mr Schupp has a strong track record in country / regional management in various industries. He began his career in marketing and customer service with Merck KGaA, the German pharmaceuticals, fine chemicals and diagnostics company, and rose through country management to the position of Regional Manager Latin America and US. He moved to Wella in 2000 as Managing Director of the business in Russia and became Managing Director Professional Care Portugal in 2004, following the acquisition of Wella by P&G.

Having graduated at the German / Brasilian High School in Rio de Janeiro, he gained most of his training in Business Administration and Management on the job through managerial and professional development programs at Merck and P&G. He took on his current role at the outset of 2016.

EXECUTIVE MANAGEMENT BOARD

The CEO and, under his direction, the other EMB members are responsible for the Group's overall business, affairs and day-to-day management. The EMB is also responsible for implementation of strategic decisions and stakeholder management. The CEO reports to the Board regularly and whenever extraordinary circumstances so require. Each member of the EMB is appointed and discharged by the Board of Directors. On 31 December 2016, the EMB comprised ten members under the leadership of, and including, the CEO, Marco Gadola.

There were no changes to the EMB throughout 2016. On 1 January 2017, Straumann reorganized its subsidiaries in Central and Western Europe into a single European region, led by Jens Dexheimer, and the other markets into the 'Distributor & Emerging Markets EMEA' region, led by Wolfgang Becker and including Africa, Central Asia, Eastern Europe, the Middle East and Russia.

OTHER ACTIVITIES AND VESTED INTEREST

Marco Gadola is Vice President of the Board of Directors of Calida Holding AG, Switzerland, and heads its Audit Committee. He is also a member of the Board of Directors of MCH Group, Switzerland, and heads its Audit Committee. In addition, he is a panel member of the Swiss-American Chamber of Commerce.

Marco Gadola was also a member of the Board of Directors and Board of trustees of the independent academic network International Team for Implantology (ITI) until early 2016, when he was succeeded by Frank Hemm. Under a collaboration agreement, Straumann supports the ITI with payments (see Note 28 of the Audited Consolidated Financial Statements on p. F 54).

Alexander Ochsner is an advisor of the Essence & DM Dental Industry Investment Partnership, a private-equity fund addressing the dental sector in China.

Other than these, no member of the EMB:
- Performed any activities in governing or supervisory bodies of significant foreign or domestic organizations, institutions or foundations under private or public law
- Held any permanent management or consultancy function for significant domestic or foreign interest groups
- Held any official function or political post.

PERMITTED MANDATES OUTSIDE STRAUMANN (PURSUENT TO ART. 12 OAEC)

As approved by the AGM in 2016, the maximum number of mandates in listed companies exercised by individual EMB members was increased from one to two, reflecting the practice in more than 50% of SPI companies, according to a study published in 2015 by Ethos, the Swiss Foundation for Sustainable Development.

Art. 4.4 of Straumann's Articles of Association thus states that no member of the EMB may perform more than five mandates (i.e. mandates in the highest level governing body of a legal entity required to be registered in the Commercial Register or in a corresponding foreign register) in commercial enterprises, of which no more than two may be in a listed company. The following are exempt from the foregoing restrictions:
- Mandates in enterprises that control the Company or are controlled by the same
- Mandates in enterprises that are performed at the instruction of the Company
- Mandates in associations, organizations, and legal entities with a public or charitable purpose, and in foundations, trusts, and employee pension funds. No member of the Executive Management may perform more than three such mandates.

Mandates in several legal entities under common control or under the same economic authority shall be deemed as one mandate.

MANAGEMENT CONTRACTS

The Board of Directors and the EMB have not delegated any managerial powers to persons or companies outside the Group.

INTERNAL MANAGEMENT DEVELOPMENT

Straumann continued the Strategic Management Development System (SMD) program initiated in 2008 to develop and deploy key talent internally, in order to build a strong succession pipeline. The goal is to fill at least 50% of business-critical and key management positions with internal candidates. The scope was broadened to include Strategic Management and their direct reports as well as other business-critical roles e.g. sales-force, and the target was achieved again in 2016.

COMPENSATION, SHAREHOLDINGS AND LOANS

The compensation and equity holdings as well as the basic principles and elements of the programs determining them for the members of the Board of Directors and the EMB and their related parties are disclosed in the Compensation Report on p. 170 f. and also in the audited financial statements in Note 4 on p. F 79 f.

CHANGES OF CONTROL AND DEFENSE MEASURES

The Articles of Association of Straumann Holding AG do not contain provisions for opting out or opting up. There are no change-of-control clauses included in agreements and schemes benefiting members of the Board of Directors or the Executive Management Board or other management staff.

INFORMATION AND CONTROL MECHANISMS FOR THE BOARD OF DIRECTORS AND THE EXECUTIVE MANAGEMENT BOARD

MANAGEMENT INFORMATION SYSTEM

The Group's Management Information System encompasses management, business and financial reporting. The information is provided to the Executive Management Board once a month and to the Board of Directors as a monthly summary and in detail on a quarterly basis.

Straumann operates a state-of-the-art SAP enterprise resource planning system, which covers 90% of all business transactions of the Group's fully consolidated entities. With the exception of the Brazilian subsidiary, Neodent, the system links all other major subsidiary companies and production sites directly with Group headquarters. This greatly reduces the potential for error or fraud, and it enables the Executive and Senior Management to monitor local processes and related figures directly, in detail and in real time. Neodent is integrated in the Group's reporting system but not yet in SAP.

INTERNAL CONTROL SYSTEM

The Group's Internal Control System (ICS) is a key instrument for designing business processes, measuring progress towards financial goals and addressing potential financial issues before they occur. It also supports the design of business processes in order to achieve the desired level of control in terms of efficiency and effectiveness.

The company's approach is to ensure that internal controls are accurate, timely, robust, and receive appropriate management attention in each respect. To achieve this, dedicated control templates are used for each business process to address major risks. The templates are continuously improved.

In addition, each entity (sales affiliate, production site or global function) has a designated, trained person or team that is ultimately accountable for the assessment undertaken and the decisions arising from it. Clear benefits of the Internal Control System include enhanced segregation of duties, increased control consciousness and higher awareness of potential risks and their consequences.

The ICS program is coordinated by Corporate Internal Audit, which meets with the external auditors on a regular basis to discuss the status of internal control issues and the status of remediation of control deficiencies. Internal controls are evaluated annually by the external auditors and by Internal Audit according to an agreed program.

INTERNAL AUDIT

Corporate Internal Audit at Straumann is an independent and objective assurance and consulting body, reporting directly to the CFO and to the Audit Committee of the Board of Directors.

The main task of Corporate Internal Audit is to evaluate the effectiveness of the Group's governance and risk management processes, to review and assess internal controls, to monitor compliance with external and internal policies and procedures, and to ensure the economical and efficient use of the company's resources. In this role, Corporate Internal Audit promotes the exchange of best practices within the Straumann Group, proposes improvements, and monitors their implementation. In addition, Corporate Internal Audit pursues the development of the Group's Internal Control System.

In 2016, Corporate Internal Audit performed ten audits at global and local levels, according to the audit program approved by the Audit Committee of the Board of Directors.

CORPORATE RISK MANAGEMENT

The Board of Directors is responsible for the overall supervision of risk management and uses the Internal Audit function to this end. The Board has delegated the task of risk management to the Chief Risk Officer (CRO), who is also the CFO. Through its Audit Committee, the Board assesses and discusses risks on a regular basis in consultation with the CRO and / or the relevant members of senior management (see p. 90).

EXTERNAL AUDITORS

The Shareholders' General Meeting elects and appoints the Group's external auditors on an annual basis. In April 2016, Ernst & Young AG, Basel, was re-elected as auditor of Straumann Holding AG for a third term of one year. The auditor in charge is Daniel Zaugg, Swiss Certified Public Accountant, who took over the mandate in 2014.

The Board of Directors supervises the external auditors through the Audit Committee, which met five times in 2016. The external auditors participated in two of these meetings, to discuss the scope, the audit plan and the auditors' conclusion of the financial report. Details of the instruments that assist the Board in obtaining information on the activities of the external auditors can be found on p. 151.

The worldwide fees paid to the auditors were as follows:

(in CHF 1 000)	31 Dec 2016	31 Dec 2015
Total audit fees	815	828
Tax consultancy	0	0
Legal	0	0
Transaction services	61	135
Other services	25	0
Total non-audit fees	86	135
TOTAL	901	963

INFORMATION POLICY

Straumann is committed to a policy of open, transparent and continuous information. In accordance with the rules of the SIX Swiss Exchange, Straumann publishes detailed sales figures on a quarterly basis as well as annual and half-yearly reports. Detailed information is provided at the Shareholders' General Meeting, and the minutes are published on the company's website. Where necessary or appropriate, the Group also publishes additional information on significant events. The CEO, CFO, the Head of Investor Relations and the Head of Corporate Communication & Public Affairs are responsible for communication with investors and representatives of the financial community, media and other stakeholders.

In addition to personal contacts, discussions, and presentations in Europe, North America, and Asia, Straumann held four quarterly financial results conferences for the media and analysts in 2016, two of which were teleconferences. The average participation at each event was more than 70 attendants on-site or remote by conference call. The conferences were transmitted live via audio webcast and / or traditional conference call. In addition, Straumann's CEO and CFO attended two sector-specific and four general equity conferences.

For the first time, the company organized 'corporate governance' meetings with the Chairman and set-up 'carbon free' roadshows, where participants met in a virtual video conference room in order to save travel and for environmental considerations.

Research analysts from 19 banks / national institutions cover developments at the Straumann Group and are listed on p. 179 of this report as well as on the 'Investors' section of the Straumann corporate website.

Apart from this, Straumann frequently publishes media releases, briefing documents, and videos, which are archived and available from the company's website (www.straumann.com). The company offers a media release subscription service via its website and takes care to ensure that investor-relevant media releases are circulated broadly and in a timely manner according to the rules of the SIX Swiss Exchange and with due regard for the principles of fair disclosure. The company does not update its releases, reports and presentations, which means that the information they contain is only valid at the time of publication. Straumann advises against relying on past publications for current information.

ANNUAL REPORT & COMPENSATION REPORT

Straumann's Annual Report is a key instrument for communicating with various stakeholder groups. It is published in English (with a summary in German) in hard copy (with the Financial Report as a separate volume) and electronically on the company's website, where it

can also be downloaded. The Compensation Report is issued as part of the Annual Report and can be downloaded from the company's website in the Investors section under www.straumann.com > Investors > Corporate Governance > Compensation.

Printed versions of the Compensation Report and full Annual Report can be ordered from:
investor.relations@straumann.com.

MEDIA USED FOR REPORTING PURPOSES

The company's website is www.straumann.com. The company's journal of record is the 'Schweizerisches Handelsamtsblatt' (SHAB – Swiss Official Gazette of Commerce). Further information requests should be addressed to:

Investor Relations:
investor.relations@straumann.com
Tel. +41 61 965 16 78

Corporate Communication:
corporate.communication@straumann.com
Tel. +41 61 965 11 11

CALENDAR

Straumann's calendar of planned reporting dates and investor relations events in 2017 can be found on p. 178 and also published and updated on the company's website.

In 2016, Straumann's 2015 Annual Report received a prestigious Swiss HarbourClub / BILANZ award for value reporting (third in class), outranking some of the world's largest companies. Our Annual Report has consistently featured among the Top-10 in the BILANZ / HarbourClub ratings for more than a decade.

WE CREATE OPPORTUNITIES FOR EMPLOYEES

CARMEN BRUMANN
ACCOUNTANT

When she joined Straumann from school as an apprentice, Carmen Brumann hardly expected to enter a world of opportunities. But together with her colleagues we have helped her create and realize several. Eager to improve her skills and prospects she embarked on a three-year business school course in general management alongside her full-time job. Recognizing her commitment and hard work, the company supported and sponsored her and she graduated with a top grade. Having started work immediately after leaving school, she wanted to take six months out to for a world tour and we were pleased to continue her employment when she returned. In 2014, she went on an international assignment to Straumann UK and took on a higher responsibility when she returned to Basel. In 2016, she made a significant contribution to establishing our new European Finance Center and, as the year came to a close, she was on a special assignment in Spain. Carmen is a true 'player / learner' and a 'down-to-earth' example of the high-performance culture Straumann is adopting – which explains why she was distinguished by her colleagues as the best exponent of our core behaviors in 2016.

In 2016, we created 326 new jobs worldwide and filled more than 50% of the key management positions through internal promotions. The latter success is driven by various programs including the following:

Global Development Program (GDP)
Our GDP lasts 18 months and is designed to create career opportunities for talented employees, who are mentored by the Executive Management. One goal is to identify and groom managers to take on and succeed in higher leadership roles in the next two to three years.

In 2016, more than 50% of key management positions were filled through internal promotion.

'myCareer'
This project addresses employees who wish to pursue careers as experts rather than managers. The goal is to enable them to excel in their field and to pursue inspiring careers.

Corporate Graduate Program
Our program for graduates continued in 2016 and involves members of the Executive Management in the selection process.

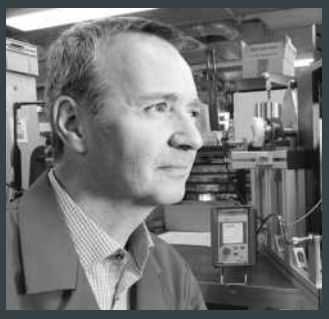
Apprentices
Over the years, the Group has expanded its global contingent of apprentices to 60, across disciplines and continents. One of Straumann's longest-serving members started at the company as an apprentice and today is our Vice Chairman of the Board.

René Mücke,
Higher opportunities
When René Mücke graduated the world economy was locked in economic crisis and work prospects were slim but Straumann offered him a post as a process engineer in Leipzig which challenged him to take responsibility for transferring technology from the milling center in Germany to the US. Bright and motivated, he won a place in the GDP with an assignment in Japan helping to set up the new facility in Narita. He has relished the opportunity to work and share with colleagues in different cultures.

"Straumann took me beyond my comfort zone, to responsibilities in other cultures."

RENÉ MÜCKE,
GDP PARTICIPANT

One of the most coveted accolades at Straumann is the Manager-of-the Year Award, which recognizes extraordinary achievements at Country and Corporate levels. Two of the 2016 recipients are already taking on new opportunities in their careers.



Andrew Lowe,
a Corporate Manager of the Year
Andrew Lowe heads Straumann's largest production site. Under his leadership, its financial performance has improved significantly in the past three years and its agile team has coped with unpredictable increases in demand. In 2017, Andrew takes on additional responsibility for the Group's production facility in India, in addition to running and significantly expanding the plant in Switzerland

Holger Haderer,
a Country Manager of the Year
As Head of Marketing in Western Europe, Holger Haderer has been a role model in creating opportunities, encouraging cultural change and actively developing talented people in marketing and sales. In 2016 he stepped in as ad-interim Country Head in France and as the year drew to a close, he was appointed Country Head of Germany, Straumann's largest European market.

Compensation report

FOREWORD

In 2016, the Compensation Committee met six times and covered the topics on p. 160. Our main focus was to review the aptness of our fundamental compensation elements.

INCENTIVE SCHEMES RE-ESTABLISHED

Following strong results in 2015, the Group delivered an outstanding performance in 2016 both in absolute and relative terms. As a result, in 2016 the Board decided to pay unreduced bonuses for the prior business year on a discretionary basis to all employees in Switzerland with the exception of Senior Management, whose bonuses were partially compensated.

The discretionary award was necessary as the staff in Switzerland had contractually agreed to compensation reductions in 2015 as part of a package of measures to protect the business and jobs against the impact of the sharp appreciation of the Swiss franc. With the company's strong performance continuing in 2016, the Board decided to reinstate the incentive schemes used in Switzerland prior to the exchange-rate shock in 2015 even though the Euro is considerably short of a full recovery. We strongly feel that the loyalty and efforts of our staff and the continuous improvements achieved fully merit these initiatives and outweigh the related cost effects.

ECONOMIC PROFIT REINSTATED AS MAIN PERFORMANCE INDICATOR

The overall stabilization and improvement in the exchange rates enabled the Board to revert from operating profit (EBIT) to economic profit (EP) as the major performance indicator for the short-term incentive in 2016 and beyond. Apart from these, there were no significant changes to the compensation system in 2016.

ACHIEVEMENT OF OBJECTIVES

Despite the competitive market environment, the company succeeded in expanding its normalized EBIT-margin in 2016 by 150 base points to 24.8%, which was achieved thanks to double-digit organic revenue growth, high capacity utilization and efficiency gains. At the same time, the Group made good progress with all of its strategic priorities.

Based on the strong fundamentals over the past 3 years, the objective of total shareholder return of 10% p.a. was again overachieved. The 2013–16 long-term incentive target for Senior Management was clearly exceeded, yielding the capped maximum payout of 200%.

LOOKING AHEAD

Our compensation system seeks to promote sustainable performance, entrepreneurship and loyalty – thus combining the interests of shareholders, management and employees. It effectively supports the company's efforts to build and foster a high-performance culture and to attract the best talent in our industry. To ensure that we remain competitive as an employer, we periodically conduct benchmark comparisons with peer companies and continued this practice in 2016, closely reviewing our total compensation approach.

Experience gained with our long-term incentive system over the past three years has prompted us to complement total shareholder return (TSR) with a second performance indicator, which will be a pre-defined EBIT-growth amount (EGA).

In 2017, the main focus of the Compensation Committee will be to ensure that our compensation system supports and facilitates the Group's efforts to create a high-performance culture in addition to enabling us to recruit and retain the best talent. In this context, we will extend the benchmark analysis across other Group functions in addition to addressing any significant deviations identified in previous years.

In view of the economic environment, the Board again foresees only basic compensation increases that are linked to structural adjustments. In high inflation countries, local management may grant general merit increases. This approach will be implemented carefully and with due regard to local developments as well as our aim to remain a competitive employer.

On behalf of the Board and our shareholders, I would like to thank our staff for their commitment and achievement. I would also like to thank the shareholders and the Board for their confidence in the Compensation Committee, and the management team for their constructive approach to the dialog in 2016.

ULRICH LOOSER
Chairman of the Compensation Committee

INTRODUCTION

This report provides an overview of Straumann's compensation principles and practices and is in line with the Swiss Code of Best Practice for Corporate Governance and Swiss law.

It provides information on the compensation of the general staff, management, Executive Management Board (EMB) and the Board of Directors (BoD). It also explains the equity participation programs, including disclosure of the equity participation of the EMB and the Board of Directors. The compensation paid to these two groups is presented in the audited tables on p. 170 f.

Straumann's present compensation system has been in place since 2011, when the Compensation Committee conducted a comprehensive review of the company's overall approach to rewarding employees and compensating the Board. The system was published in our Compensation Reports, which were approved through consultative votes in 2011–13 and formally approved in 2014–16 by the respective Shareholder's Annual General Meetings (AGM).

The compensation system is built on principles designed to:

- Align the interests of the leadership team and employees with those of our shareholders
- Support our attractiveness as a global employer, helping us to recruit and retain an engaged workforce
- Reward individuals according to clear targets
- Encourage entrepreneurism, above-market performance, accountability and value creation
- Bring out the best in each of our colleagues in line with our Cultural Journey objectives.

RESPONSIBILITY FOR COMPENSATION

The Board of Directors nominates the members of the Compensation Committee for election by the AGM. The Committee is entrusted with the design of the compensation system, which applies to the Board of Directors and the EMB. It reviews the compensation principles and programs annually and evaluates remuneration against relevant benchmarks and other related criteria. The Committee reports to the Board of Directors on its views regarding compensation practices as well as on the compensation of the EMB at least once a year and proposes changes when necessary.

COMPENSATION
RECOMMENDATIONS & DECISIONS

Recipient	Compensation recommended by	Compensation decided by
Chairman of the Board	Compensation Committee / Board of Directors	AGM
Board Members		
CEO	Chairman of the Board / Compensation Committee / Board of Directors	
Executive Management	CEO	
Senior Management	EMB	CEO
Management and staff	Line Management	EMB

Further information on the duties of the Compensation Committee can be found on p. 142 f. in the section on Corporate Governance.

At the 2017 AGM, the shareholders will be asked to approve:

- The short-term incentive (STI) of the EMB for the 2016 business year
- The total fixed compensation of the EMB for the period 1 April 2017–31 March 2018
- The total long-term incentive (LTI) for the 2017 grant for the EMB
- The total compensation of the Board of Directors for the period between the 2017 and 2018 AGMs.

In 2016, the Compensation Committee met six times with all its members present. The Chairman of the Board and the CEO participated in all of the meetings except during discussions concerning the evaluation and determination of their own compensation. The calendar and general agenda of the Committee are presented in the table overleaf. In addition to participating in Board and Committee meetings all Board members regularly visit international customers with sales representatives, attend international congresses (e.g. IDS, EAO, etc.) and go on field trips to important markets, e.g. 2015 China and Brazil in 2016. In addition, the Board took part in a three-day strategic think-tank meeting together with the EMB, customers and experts from the dental and other industries. All the Board members are active mentors to the EMB and have regular one-to-one exchanges with their assigned mentees.

TOPICS AND SCHEDULE OF COMPENSATION COMMITTEE MEETINGS 2016

FEBRUARY	APRIL	JUNE	AUGUST	OCTOBER	DECEMBER
Reviewed – Company, CEO & EMB performance Updates on – global benchmarking – incentive compensation management projects – Cultural Journey progress & KPI's Approved – 2015 compensation report – Compensation of new EMB members Determined – 2016 target framework	Reviewed – HR policies – Compensation Committee charter – Impact of new regulations Followed up – LTI concept for 2016 – EMB target framework – AGM feedback on Corporate Governance, improvements, miscellaneous	(Meeting in Brazil) Reviewed – STI / LTI re-establishment in Switzerland Followed up – LTI concept for 2016	Reviewed – Global Perception Pulse survey results – Cultural Journey progress Followed up – 2016 Annual Salary Review – STI / LTI re-establishment in Switzerland	Reviewed – BoD composition & compensation – Leadership development programs – Strategic Management development – 2016 Compensation Report topics – Total remuneration system (including 2016 / 17 STI & LTI)	Updates on – Pension funds – 2017 Annual Salary Review – Compensation benchmarks for CEO & EMB – 2017 salary development plan Followed up – 2016 Compensation Report topics

COMPENSATION PRINCIPLES

The compensation principles outlined below are valid for all employees, including the EMB, working for consolidated Straumann Group companies.

VALUE CREATION DRIVES COMPENSATION

We believe that a compensation system driven by value creation encourages sustainable performance, loyalty and entrepreneurship and is thus in the interests of management, employees and shareholders. We are committed to compensating our staff, management and Board of Directors in a way that is competitive and rewards sustainable long-term performance as well as current success.

It is Straumann's view that the company's success depends largely on the quality and engagement of its employees. A modern compensation system is an important instrument for attracting, retaining and motivating talented people. Straumann's compensation system takes these factors into account in that it

- Offers competitive compensation packages
- Fosters a high-performance culture that differentiates and rewards above-average performance, both in the short and long term
- Links variable long-term compensation to value generated by the company over the long term based on shareholder expectations
- Is benchmarked with comparable companies in the industry
- Provides employees with benefits based on good practices and regulations in local markets
- Is periodically reviewed by the Compensation Committee.

COMPREHENSIVE BENCHMARKING

Straumann's policy is to pay employees, the EMB and the Board of Directors a base compensation that is close to the median of comparable medical-device companies and other comparable industries in the respective local market. In addition, the variable compensation elements are set to enable the overall compensation to be moved toward the upper quartile for outstanding performance.

Benchmark reviews for the EMB are conducted externally and include market analyses by industry specialists. Bespoke benchmarks include a peer group of comparable companies in various industries selected according to the following criteria:
– Comparable scope and business complexity
– Comparable geographic footprint
– Companies with whom we compete for talent.

In 2016, we commissioned benchmarks from well-known global providers for most of our employee base. The analysis and comparison revealed that our compensation was generally in line with or above the benchmark in most countries with few exceptions. Any significant deviations from the benchmarks will be addressed in the upcoming compensation reviews.

ETHICAL, FAIR STANDARDS

We are committed to fair and equal treatment of all our employees and seek to be in full compliance with international labor standards. Compensation is not influenced by gender. Local minimum wage regulations have no bearing on our compensation policy, as our compensation clearly surpasses them.

TOTAL COMPENSATION AND COMPENSATION ELEMENTS

Overall, Straumann spent CHF 357 million on compensation, benefits and social costs in 2016, corresponding to an average of CHF 94 000 per employee (2015: CHF 91 000).

As in the past, the compensation of employees and managers in 2016 comprised fixed as well as short- and long-term variable components, the mix of which was defined by role, profile, location and strategic impact. For the Executive and Senior Management, greater emphasis has generally been placed on the long-term variable component, in line with our strategic objective of promoting entrepreneurism. Their compensation mix has included a long-term variable compensation element, emphasizing long-term, sustainable decision-making and staff retention.

SUMMARY OF OVERALL COMPENSATION

FIXED COMPONENTS

In 2016, the fixed compensation elements included the following:
– Base salary
– Pension plans (depending on local practices and regulations)
– Other benefits (depending on local practices and regulations).

BASE SALARY

Straumann employees receive a fixed salary based on:
– Job profile
– Experience and skills
– External comparisons
– Place of work and local regulations
– Strategic importance of the position.

SALARY PROGRESSION 2016 – 2017

As mentioned previously, there were no general salary increases in 2016. Where necessary, structural adjustments were made to adapt salaries to benchmarks and for staff who took on new roles and / or increased responsibilities. For 2017, the Board of Directors continues to foresee only basic compensation increases that are linked to structural adjustments. In countries with high inflation, the local management teams may grant general merit increases. These approaches will be implemented carefully and with due regard to local developments as well as our ambition to remain a competitive employer.

PENSION PLANS

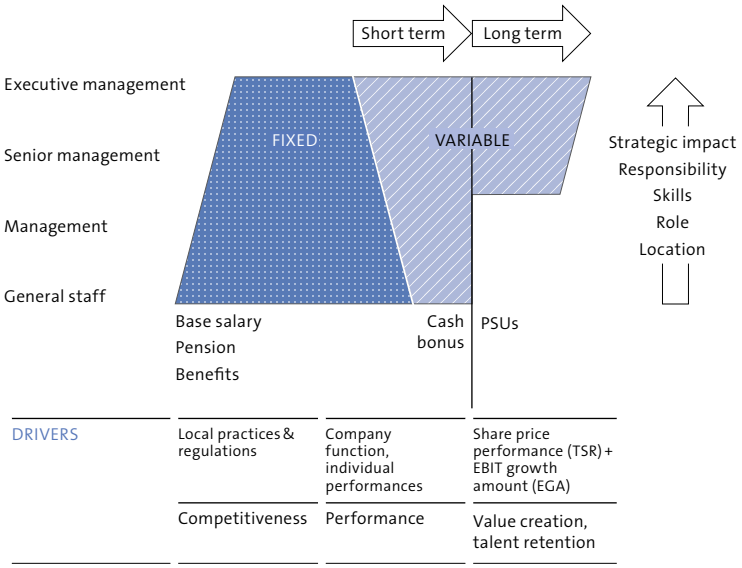
Internal analyses carried out in recent years showed that Straumann and its subsidiaries fulfill and in some respects exceed local legal requirements. In most cases, pension obligations are fully funded. Where this is not the case, liabilities are reported in the Annual Report following actuarial rules.

Further information on pension plans is provided in Note 20 to the audited consolidated financial statements on p. F 47 ff. Information on pension fund risks is also provided in the Risk Analysis on p. 93.

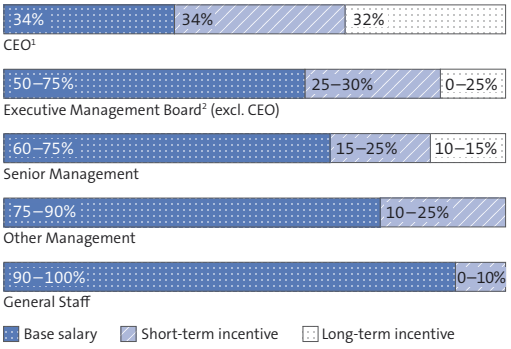
SWITZERLAND

There are two defined contribution pension plans in Switzerland, which together make up the occupational benefits at Straumann. The basic insurance plan offers

COMPENSATION MIX



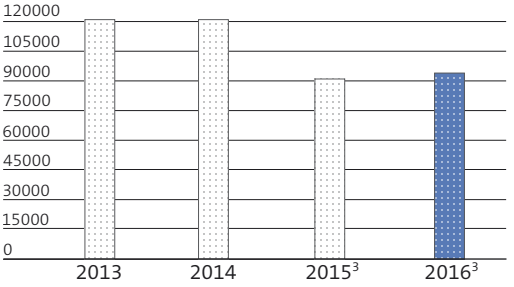
PAY MIX CORRIDOR (AT-TARGET ACHIEVEMENT)



[1] At target, the variable compensation (incl. STI and LTI) for the CEO will amount to 192% of base salary.
[2] At target, the variable compensation (incl. STI and LTI) for the EMB members will in average amount to 85% of base salary. Matthias Schupp had no LTI component in 2016 but will have one for 2017 which will bring him into the desired range for EMB members.

TOTAL COMPENSATION AVERAGE PER EMPLOYEE

(in CHF)



[3] Including Neodent

SUMMARY OF OVERALL COMPENSATION

ELEMENTS OF TOTAL REMUNERATION

Element		Type	Description
Base salary		Fixed cash	– Fixed compensation, determined by scope and complexity of the role – Generally within an 80–120% range of relevant market median
Variable pay	Short-term incentives (STI–one year)	Performance, cash	– For EMB, Senior Management and a broad group of employees, paid annually – Payout range: 0–200% of target – Performance measured against business results and accomplishment of individual and financial targets
	Long-term incentives (LTI–three years)	Performance Share Units (PSUs)	– For the EMB and a defined Senior Management group – Payout range: 0–200% of target – The grants made prior to 31.12.2011 vest in three installments (after 1, 2 and 3 years) and are determined according to the Group's total shareholder return (TSR) and return on shareholders' equity (ROE) over three calendar years – Since 01.01.2012, PSUs with a 3-year vesting period have been granted and shares are allocated based on a TSR of 10% p.a. over a 3-year period; see p. 166 f. (for 2015 the LTI for eligible employees in Switzerland and the EMB was forfeited but reinstated and for the 2016 grant the TSR was adjusted to 7% p.a. and EGA was introduced as an additional performance indicator)
Employee benefits		Fixed benefits	– Employee benefits are provided in line with local market practices – Pension plans are de-risked in line with Group guidelines – Benefits are positioned towards relevant market medians

protection against the financial consequences of old age, death and disability to all employees of Institut Straumann AG and Straumann Villeret SA. There is additional supplementary insurance for selected members of the management, whose proportion of variable compensation is high. Straumann employees in Switzerland and the Chairman of the Board of Directors are eligible for this pension scheme.

EUROPE

In other European countries, Straumann offers retirement insurance according to local practices. According to IFRS accounting standards, the majority of European pension plans are considered funded or unfunded defined contribution plans.

USA

A 401k retirement plan is provided to all Straumann employees in the USA over 21 years of age to enable them to save for retirement. The 401k plan is a defined contribution plan whereby (a) the employee has the option of making deferral elections from his/her pay on a pre-tax basis and (b) Straumann USA may make matching contributions should the employee elect to make deferral elections. The plan is a tax-qualified plan under the Employee Retirement Income Security Act (ERISA).

In addition to the 401k plan, Straumann USA has a Supplemental Executive Retirement Plan (SERP) for a select management group. The purpose of this plan is to provide eligible employees with defined employer contributions and the opportunity to elect to defer receipt of certain compensation that would otherwise be payable to them in cash. The plan is intended to be a non-qualified, unfunded, deferred compensation arrangement for purposes of Title I of ERISA and is intended to comply with Section 409A of the Internal Revenue Code. According to IFRS, SERP is treated as a defined contribution plan.

OTHER BENEFITS

Straumann's benefit programs are an integral part of total compensation and are designed to enable the company to compete for and retain employees and managers. Benefits are structured to support our overall

business strategy and are aligned with local practices and legislation. Examples of benefits include public transportation passes, lunch vouchers, the use of company cars, mobile phones, and concessions on Straumann products.

EMPLOYEE SHARE PARTICIPATION PLAN

Employees in Switzerland have the opportunity to purchase Straumann shares for 75% of the average share price over a period of seven trading days beginning on the ex-dividend day (see table below). The shares are subject to a two-year blocking period and are dividend-bearing from the day of purchase.

In 2016, the plan was fully reinstated for all employees in Switzerland, enabling them to purchase shares from a minimum of 10 to a maximum of 1 000, depending on their level in the organization.

EMPLOYEE SHARE PLANS

	Employees participating	Shares issued	Discount share price at issue	End of lock-up period
2016	86	8 754	CHF 254	April 2018
2015[1]	86	4 653	CHF 196	April 2017
2014	107	11 495	CHF 138	April 2016

[1] The maximum number of purchasable shares was reduced by 50% as part of the cost management program in 2015

The shares required for this plan were held by the Group as Treasury shares. The Board of Directors is not eligible for this program.

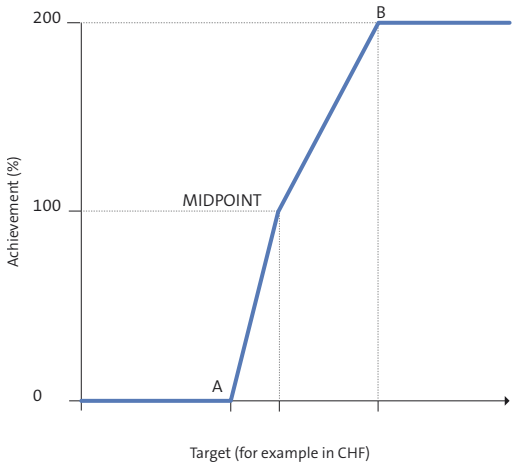
VARIABLE COMPONENTS

In 2016, the variable compensation components included one or more of the following:
– Short-term incentive
– Long-term incentive (Performance Share Plan)

SHORT-TERM INCENTIVE (STI)

The STI scheme (see graph above) is tied directly to profit generated by the Group. For some areas, additional specific financial and / or individual performance criteria apply. Hence, the payout in 2016 was based on a combination of the following:
– Company performance
– Achievement of specific financial target
– Individual performance

SHORT-TERM INCENTIVE TARGET ACHIEVEMENT (STI)



In the short-term incentive model, the scale for financial target achievement extends from 0% to a maximum of 200% and is based on a line joining three points: 0% (point A), 100% (midpoint) and 200% (point B). The difference on the horizontal axis between the midpoint and point B must be equal to, or greater than, the difference between the midpoint and point A. The actual target achievement is measured by way of linear interpolation.

COMPANY PERFORMANCE

In general, economic profit (EP) is the key performance indicator in Straumann's STI scheme. The Board of Directors sets the absolute target for EP generation in Swiss francs annually, prior to the respective performance cycle, based on medium-term business plans and the defined budget for the year of performance. The payout ranges from 0 to 200% of the target.

EP is calculated by deducting a capital charge from the net operating profit after tax (NOPAT). The Board of Directors may exclude extraordinary elements from the calculation of the EP. The capital charge represents the cost of capital calculated on the basis of an average equity return expected by investors. This scheme builds the basis for our general bonus calculation model.

The main advantage of EP as a performance objective is that it goes beyond revenue growth and profitability increase and takes into account the resources used to achieve these increases and the resulting additional capital costs (see chart opposite).

COMPANY PERFORMANCE – 2016 ECONOMIC PROFIT (EP)

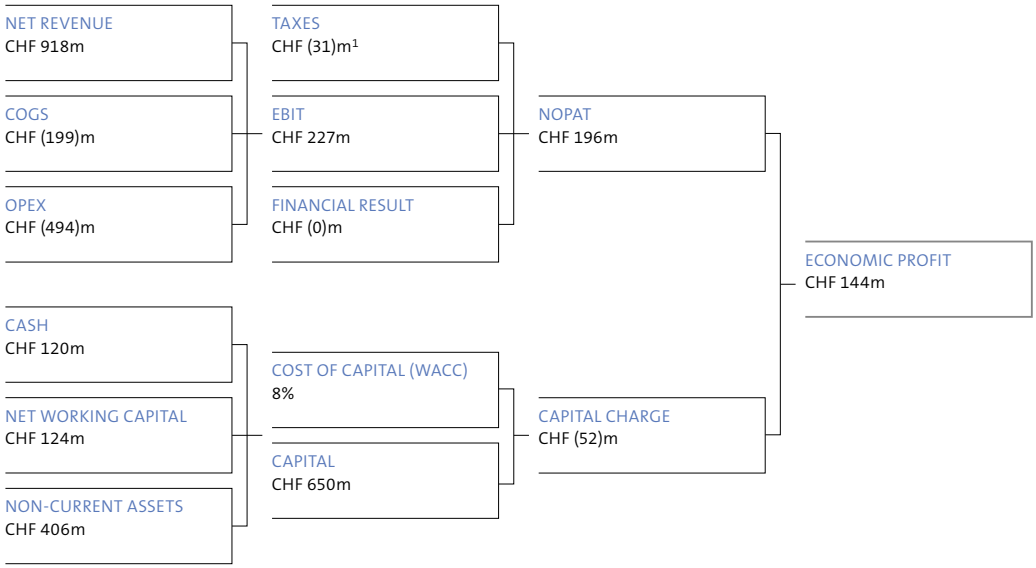


Chart showing the various components of economoc profit. NOPAT = Net operating profit after taxes; COGS = Cost of goods sold; OPEX = Operating expenses; EBIT = Earnings before interest and taxes.
[1] Excluding a capitalized one-time tax benefit which is not compensation relevant.

SPECIFIC FINANCIAL TARGETS

Specific financial targets are used for the following organizational units: Sales Regions, Customer Solutions & Education, Instradent Management, and Research, Development & Operations. The targets are derived from annual budgets and are set by the CEO and CFO together with the member of the EMB responsible for the respective organizational unit. In 2016, for example, improvements to contribution margin and to strategic key sales initiatives were set as specific financial targets for the Sales Regions whilst improvement to cost of goods sold was defined as a specific financial target for Research, Development & Operations.

INDIVIDUAL PERFORMANCE

In 2016, individual performance was measured by the achievement of targets established with the respective line manager at the beginning of the year in the performance management process. These could involve a combination of specific project targets, the development of competences or skills, and specific contributions to team or organizational unit targets. A global performance management system supervised by Human Resources ensured that the objectives are defined in line with the company's strategic goals and that their achievement was assessed continuously during the year.

WEIGHTING OF PERFORMANCE CRITERIA

In 2016, the weighting of the performance criteria depended on the role and responsibilities of the individual (see table).

SHORT-TERM INCENTIVE PERFORMANCE

CRITERIA WEIGHTING

Management Level	Company	Financial	Individual
Chief Executive Officer	80%		20%
Executive Vice President	40 – 80%	0 – 40%	20 – 50%
Senior Vice President	20 – 40%	0 – 60%	20 – 60%
Vice President	20 – 40%	0 – 60%	20 – 60%
Management (Director, Senior Manager, Manager)	20 – 30%	0 – 60%	20 – 70%
Staff	0 – 20%	0%	80 – 100%

This table shows the weighting of the different types of performance measures according to the level of the employee and depending on the organizational unit the employee is working in

MEASUREMENT OF ACHIEVEMENT

The measurement scale for the achievement of company performance and financial targets ranges from 0% to a maximum of 200% of target and is based on a line joining three points (see p. 164).

For individual target achievement, the assessment scale ranged from 0% to 150% of target. It was based on descriptors with corresponding percentage ranges:
– Outstanding (131–150%)
– Exceeds expectations (111–130%)
– Meets expectations (91–110%)
– Partially meets expectations (51–90%)
– Does not meet expectations (0–50%)

LONG-TERM INCENTIVES (LTI)

The LTI program is designed for the EMB, Senior Management and other key employees depending on role, responsibility, location, strategic impact, and market practice. Participation is determined by the Board of Directors, who themselves are not eligible.

As noted previously, the Executive and Senior Management team in Switzerland agreed contractually to forgo their long-term incentive plan for 2015 as part of the measures to mitigate the currency impact. This measure was reverted in 2016 and the LTI is once again part of the total compensation approach.

PERFORMANCE SHARE PLAN

This plan was introduced in 2012 and is designed to:
– Offer an attractive variable compensation element related to TSR and EBIT growth
– Increase shareholdings of key employees
– Align participants' interests with those of the shareholders.

Based on experience gained over the past three years, the Board has decided to introduce a second performance indicator to the existing plan which is a predefined EBIT Growth Amount (EGA). This will strengthen the objective outlined above and supports the aim of long-term value generation for our shareholders.

GRANT

Participants in the plan are granted Performance Share Units (PSUs) entitling them to receive shares after a three-year vesting period. PSUs are granted once a year after the AGM. No cash investment is required from the participants. The number of PSUs granted is equal to the participant's LTI value divided by the fair value of one PSU at the grant date. The LTI target value is a percentage of the total target compensation, and is determined in accordance with the participant's role in the organization. In 2016 the total grant value amounted to CHF 4.455 million and 14 520 PSUs were granted.

ALLOCATION OF SHARES

The PSUs vest at the end of the performance periods and are converted into shares. They are forfeited if the individual leaves the company before the vesting date.

The number of shares allocated per PSU depends on the achievement of
– An absolute Total-Shareholder-Return target, which is determined by the Board of Directors and is currently set at 7% per annum for the 3-year performance period. Performance against the TSR target is calculated using the average of the closing share prices over the period of seven trading days starting on the ex-dividend date in the year of grant and in the year of vesting. The achievement factor is capped at 200%.
– A pre-defined EBIT Growth Amount, which is determined by the Board of Directors in advance for the three business years starting on January 1 of the year of the Grant. The achievement factor is capped as well at 200%. In line with the principle of fair disclosure, the EGA target is not published in advance.

Current participants are entitled to Performance Share Units that were awarded in 2014–2016 and vest in 2017–2019. The three-year TSR target for the PSUs that were awarded in 2013 and vested in April 2016 was clearly exceeded and resulted in a maximum achievement factor of 200%.

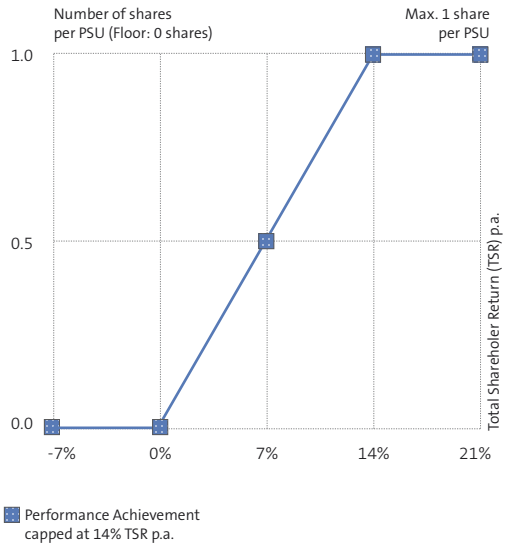
TOTAL SHAREHOLDER RETURN

TSR is the profit (or loss) realized by an investment at the end of a year or specific period. It includes capital gains or losses from changes in the share price as well as gross dividends.

EBIT GROWTH AMOUNT

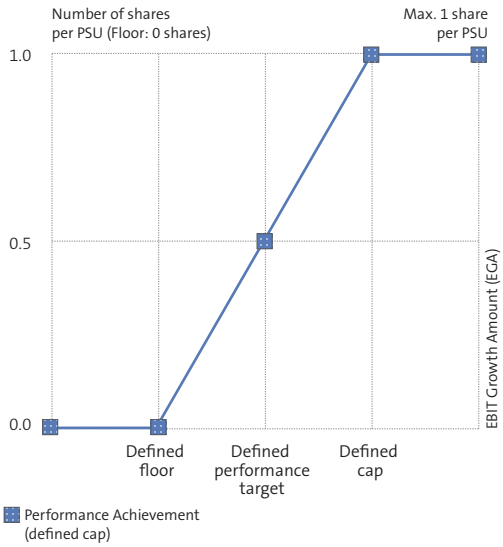
EGA is a total target EBIT growth amount over the full EBIT performance period determined by the Board of Directors at the time of the grant. It is related to the three business years starting on January 1 of the year

TOTAL SHAREHOLDER RETURN



The compensation model awards shares according to the number of PSUs allocated and the total shareholder return (TSR) and EBIT growth amount (EGA) achieved per annum over a three-year performance period. Both KPI's are weighted equally with 50%.
At the end of the performance period, no shares will be allocated for a TSR of 0% p.a. or less; half a share will be granted per vested PSU if the TSR is +7% p.a. and one share per vested PSU for a TSR of +14% p.a. or more (capped at 200%). For a TSR between 0% and 7% p.a. or between 7% and 14% p.a., the number of shares allocated per vested PSU is calculated on a linear basis.

EBIT GROWTH AMOUNT (EGA)



The compensation model awards shares according to the number of PSUs allocated and the total shareholder return (TSR) and EBIT growth amount (EGA) achieved per annum over a three-year performance period. Both KPI's are weighted equally with 50%.
At the end of the performance period, no shares will be allocated for a EGA which is below the defined floor; half a share will be granted per vested PSU if the EGA is exactly the defined performance target and one share per vested PSU for a EGA which is the defined cap or more (capped at 200%). For a EGA between the defined floor and the defined performance target or between the defined performance target and the defined cap, the number of shares allocated per vested PSU is calculated on a linear basis.

of the grant (for example from 1 January 2016 until 31 December 2018).

The EBIT growth amount over the 3-years EBIT Performance Period ('Actual EBIT GA') will be calculated as follows:

- Straumann Group EBIT growth over the EBIT Performance Period,
- Less EBIT of all businesses and participations acquired after the Grant Date during the EBIT Performance Period,
- Excluding all currency exchange effects,
- Considering all other specific calculation effects specified by the board at the time of the grant,
- Considering other adjustments decided by the board at the time of calculating the Actual EBIT GA in order to compensate for unforeseen major effects which would impair the purpose of the plan.

PSU FAIR VALUE

The fair value of the PSUs granted has been determined using a Monte Carlo simulation algorithm. The valuation was performed by independent specialists applying the following significant inputs into the model: grant date, vesting date, average reference price, performance target including 'cap' and 'floor', EGA target including 'cap' and 'floor', share price at issue, risk-free interest rate, expected volatility, expected EGA and expected dividend rate.

OPTION PLAN (UP TO AND INCLUDING 2011)

Up to the end of 2011, tradable options (non-tradable for participants outside Switzerland) with a term of six years and a two-year vesting period were allocated. The exercise price was equal to the share price on 31 December / 1 January. The value of the options was determined at grant date and is expensed as a personnel expense from service commencement to the end of the vesting

PERFORMANCE SHARE UNIT FAIR VALUE

	2016	2015	2014	2013
Grant date	20.04.2016	22.04.2015	25.04.2014	17.04.2013
Vesting date[1]	20.04.2019	22.04.2018	25.04.2017	15.04.2016
Share price at grant	336.00	262.50	184.00	117.60
Risk-free interest rate	-0.72% p.a.	-0.63% p.a.	0.14% p.a.	0.15%
Expected volatility	28.50% p.a.	31.75% p.a.	31.81% p.a.	31.28%
Expected dividend yield[2]	0%	0%	0%	0%
Estimated fair value	CHF 306.84	CHF 208.06	CHF 152.33	CHF 88.24

[1] Seven trading days after the ex-dividend date.
[2] Assuming immediate reinvestment of dividend payment.

OUTSTANDING PERFORMANCE SHARE UNITS

In April 2016, the 2013 Grant vested and the cap of 20% TSR p.a. was clearly exceeded for the performance period. Consequently, 44 105 PSUs were converted into 88 210 freely available Straumann shares for the eligible plan participants, representing a value of CHF 29.727m at that time (share price at vesting: CHF 337). The corresponding shareholder value created during the performance period amounted to CHF 3.7bn.

	2016	2015	2014	2013
As of 1 January	76 799	99 810	79 138	32 894
Granted PSUs	14 520	7 586	30 063	64 977
Exercised	(44 105)	(23 559)	0	0
Forfeited PSUs[1]	(1 608)	(7 038)	(9 391)	(18 733)
Expired PSUs	0	0	0	0
AS OF 31 DECEMBER	45 606	76 799	99 810	79 138

[1] Eligible participants who left Straumann voluntarily or as part of the 2013 reorganization forfeited their PSU allocations for 2012 and 2013

NUMBER OF OPTIONS OUTSTANDING UNDER THE STOCK OPTION PLAN

	2016	2015	2014	2013
As of 1 January	77 200	131 702	199 470	260 676
Granted options	0	0	0	0
Exercised options	(73 305)	47 447	(62 796)	0
Forfeited options	0	0	0	(12 497)
Expired options	(2 862)	(7 055)	(4 972)	(48 709)
As of 31 December	1 033	77 200	131 702	199 470
Options available for exercise	1 033	84 255	136 647	156 057

	Options expiring at year-end	Options available for exercise
2016	2 862	1 033
2017	1 033	1 033
TOTAL	3 895	

SUMMARY OF ALL VALID WARRANTS ISSUED IN THE STRAUMANN STOCK OPTION PLAN

Name / symbol	Year	Security ID number	Market maker	Type / ratio	Number	Strike price	Expiry
STRAUM17 OPT1 ESOP (USA	2011	4000212	Not traded	American 1:1	1 033	162.10	12.2017
TOTAL VALID WARRANTS ISSUED					1 033		

period. The fair value of the options granted was determined using the Black-Scholes valuation model. The calculation of the option value was performed by independent specialists. No further option allocations have been made since 2012.

REGULATIONS RELATING TO COMPENSATION

The Swiss Ordinance against Excessive Compensation (OaEC) is fully reflected in Straumann's compensation schemes for the EMB and Board of Directors and in the Articles of Association (AoA), which are available on our website: www.straumann.com / articles.

AGREEMENTS WITH THE BOARD OF DIRECTORS AND EMB

Agreements with members of the Board of Directors regarding their compensation, and with members of the EMB regarding their employment may be temporary or permanent. Temporary agreements have a maximum term of one year, with the possibility of renewal, while permanent agreements have a notice period of no more than 12 months. Non-compete clauses are permissible. Compensation may be paid as indemnity for non-compete clauses. In such cases, the compensation must not exceed the last annual total compensation paid to the individual and may not be paid for more than one year (see Art. 4.5 AoA).

In 2016 no compensation was paid to related parties of members of the EMB and members of the Board of Directors.

COMPENSATION OF THE EMB

The principles for the compensation of the EMB specify both a fixed cash component, which includes base salary and other fixed compensation items, and a variable component (see Art. 4.2 AoA). The latter includes:

- An STI based on the achievement of corporate performance targets, and / or financial targets, and/or individual targets, and
- A variable share-based LTI based on the achievement of performance targets over a period of three years.

The compensation of each member of the EMB is determined according to role and responsibilities and is based on external benchmarks. Each member receives a base salary and is included in the STI plan, as described earlier. The compensation packages of the existing members of the EMB remained more or less unchanged in 2016 with regard to the fixed cash component and STI. 'Other compensation', which includes non-cash benefits, allowances, contributions to insurances and pensions, etc., increased in 2016 reflecting the 2013 LTI grant, which vested, and related social security costs, some of which are borne by the company.

If there are changes in the EMB subsequent to the AGM, the following apply:

- The total compensation (at target) of a new CEO shall not exceed 140% of the compensation paid to the departing CEO.
- The compensation of any other incoming member of the EMB shall not exceed 140% of the average compensation paid to EMB members (excluding the CEO).
- In addition, and as defined in the AoA, incoming EMB members may receive compensation to offset any losses of valuable rights associated with giving up their prior activities. The amount of this compensa-

2016 (AUDITED TABLE)

(in CHF 1 000)	Fixed cash compensation	Fixed share compensation			Other compensation	Total compensation
BOARD OF DIRECTORS						
Gilbert Achermann (Chairman)	400	200			164	764
Dr h.c. Thomas Straumann (Vice Chairman)	200	100			20	320
Dr Sebastian Burckhardt	100	100			13	213
Roland Hess (Chairman Audit Committee)	150	100			16	266
Ulrich Looser (from 1 June 2016, Chairman Compensation Committee)	129	100			16	245
Dr Beat Lüthi	100	100			13	213
Stefan Meister (until 31 May 2016, Chairman Compensation Committee)[1]	63	38			5	106
Total	1 142	738			247	2 127

(in CHF 1 000)	Fixed cash compensation		Performance bonus	Performance share units	Other compensation	Total compensation
EXECUTIVE MANAGEMENT BOARD						
Marco Gadola (CEO)	825		1 520	780	779	3 904
Other members	3 390		3 027	1 282	2 436	10 135
Former members	49		27	0	486	562
Total	4 264		4 574	2 062	3 701	14 601
TOTAL	5 406	738	4 574	2 062	3 948	16 728

[1] Resigned from the Board of Directors as of 31 May 2016

tion may not exceed CHF 1 000 000 for a CEO or CHF 500 000 for other members (see Art. 4.3 AoA).

At the 2016 AGM, the shareholders prospectively approved a fixed compensation of CHF 5.8 million for the collective EMB (as composed in April 2016) for the period between 1 April 2016 and 31 March 2017. The variable STI for the business year ending 31 December 2016 will be submitted for approval by the shareholders at the AGM in 2017. The table on page above shows the compensation paid to the EMB in 2016 in accordance with the OaEC.

COMPENSATION PAID TO FORMER MEMBERS OF THE EMB

In 2016, Andrew Molnar, the former Executive Vice President Sales North America, received compensation based on his employment contract. In addition, Straumann paid social security costs as an employer for Andrew Molnar, Sandro Matter and Thomas Dressendörfer, in relation to the vesting of PSUs from the 2013 LTI grant.

LOANS TO EMB MEMBERS

The AoA do not allow for loans, advances or credits to any member of the EMB or related parties.

SHAREHOLDINGS OF THE EMB

The shareholdings in Straumann shares and stock options of the members of the EMB who held office at the end of 2016 are shown in the table on p. F 79.

COMPENSATION OF THE BOARD OF DIRECTORS

According to the AoA, the compensation of the Board of Directors must be approved by the AGM and consists of a fixed compensation component only, which is paid in cash and shares (Art. 4.1 AoA). The Board of Directors establishes the compensation payable to its members within the limits approved by the AGM.

The 2016 AGM approved a maximum total compensation for the Board of Directors for the term of office ending at the 2017 AGM of CHF 2.30 million. It consists of

2015 (AUDITED TABLE)

(in CHF 1 000)	Fixed cash compensation	Fixed share compensation			Other compensation	Total compensation
BOARD OF DIRECTORS						
Gilbert Achermann (Chairman)	400	224			119	743
Dr h.c. Thomas Straumann (Vice Chairman)	200	112			17	329
Dr Sebastian Burckhardt	100	112			11	223
Roland Hess (Chairman Audit Committee)	150	112			14	276
Ulrich Looser	100	112			11	223
Dr Beat Lüthi	100	112			11	223
Stefan Meister (Chairman Compensation Committee)	150	112			14	276
Total	1 200	896			197	2 293

(in CHF 1 000)	Fixed cash compensation		Performance bonus	Performance share units	Other compensation	Total compensation
EXECUTIVE MANAGEMENT BOARD						
Marco Gadola (CEO)	750		1 535	0	306	2 591
Other members (7 members until 31 March 2015, thereafter 8 members)[1]	2 831		2 910	0	2 113	7 854
Former members	484		367	0	449	1 300
Total	4 065		4 812	0	2 868	11 745
TOTAL	5 265	896	4 812	0	3 065	14 038

[1] Includes compensation of remuneration components forfeited by Petra Rumpf due to resignation from previous employment.

a fixed compensation paid in cash and shares. The proposed total amount includes social security charges and the fringe benefits disclosed in the Compensation Report.

Between 33 and 50% of the compensation is paid in shares which are blocked for two years. In addition to shares allocated as part of their compensation, each member of the Board of Directors is required to hold at least a further 2000 Straumann shares, demonstrating engagement with the company. New Board Members are expected to build up that required shareholding within two years.

Irrespective of role, all members of the Board of Directors are entitled to reimbursement from the company for their reasonable expenses for travel to and from Board meetings, or on behalf of the Board, and other related incidental expenses, in accordance with the expense regulations for Members of the Board of Directors of Straumann Holding AG.

The compensation of the Board of Directors is laid out in the tables (above) in accordance with Swiss law and is in line with current market practices.

None of the Board members received any compensation from the Straumann Group other than that disclosed in this report.

COMPENSATION PAID TO FORMER MEMBERS OF THE BOARD OF DIRECTORS

In 2016, no payments to former members of the Board or related parties were made.

LOANS TO MEMBERS OF THE BOARD OF DIRECTORS

The AoA do not allow for loans, advances or credits to any member of the Board of Directors or related parties. Thus, no such payments were made in 2016.

APPROVAL OF COMPENSATION

The AGM prospectively approves the maximum compensation payable to the Board of Directors for the term of office ending at the next AGM. Likewise, the AGM approves the maximum fixed compensation of the EMB prospectively for the period commencing on 1 April and ending on 31 March of the next calendar year. The variable short-term components of the EMB's compensation are approved retroactively for the business year preceding the AGM (see art. 3.1.9 AoA and table opposite).

The compensation of the individual members of the Board and the EMB is decided by the Board of Directors on recommendation of the Compensation Committee and within the limits set by the AGM. The relevant criteria are explained on p. 169 ff., and the compensation awarded to the Board of Directors and the EMB is disclosed in the tables on pp. 170 and 171.

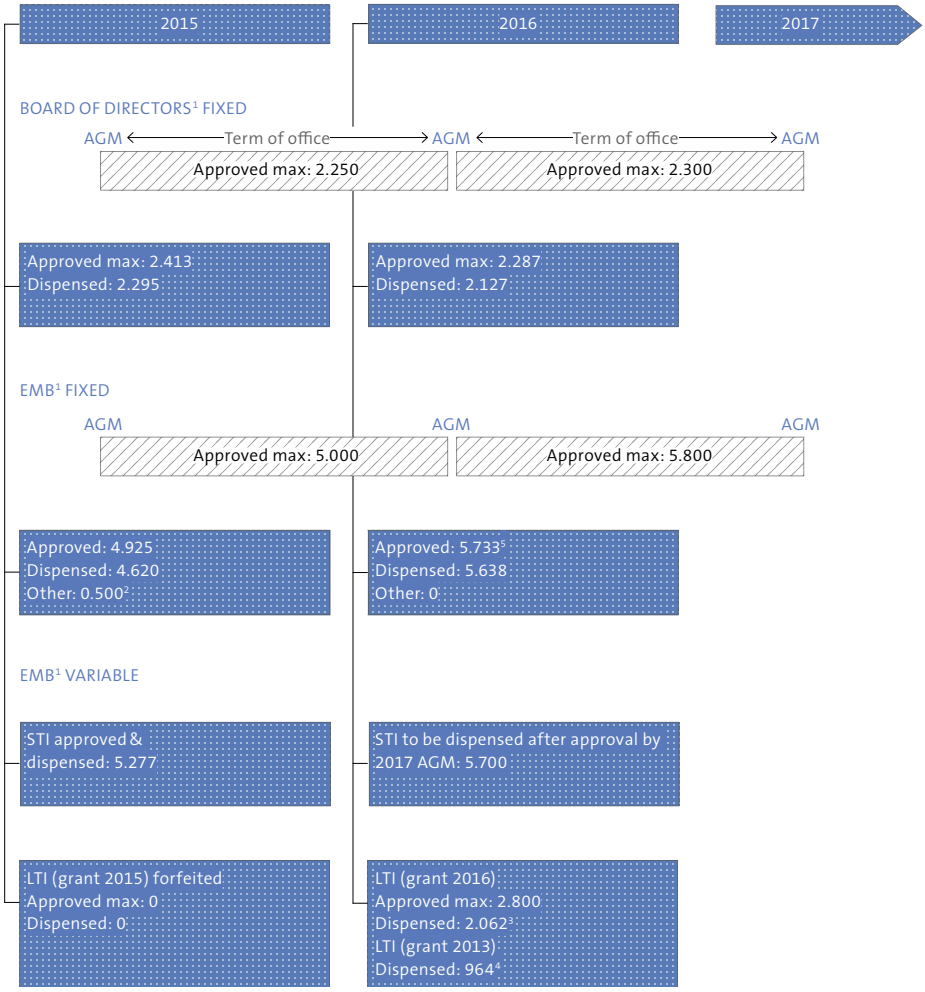
For 2017, a maximum collective STI of CHF 6.20 million (including social costs and other compensation) is budgeted for the EMB if all relevant targets are achieved to the defined maximum (subject to approval at the 2018 AGM). In addition, the Board of Directors will submit a maximum fixed compensation for the EMB of CHF 5.80 million to the AGM. In each case, these figures apply to the EMB as composed on 1 January 2017.

For 2016, a maximum collective LTI of 2.8 million (including social costs) has been approved by the 2016 AGM. Based on the 2016 performance and results the LTI has been granted to the members of the EMB as shown in the 2016 compensation table above.

None of the EMB received any compensation from the Straumann Group other than that disclosed in this report.

COMPENSATION APPROVED[1] AND DISPENSED

(in CHF million)



[1] As composed at time of respective AGM (2015: 9; 2016: 10 EMB members) and including social costs (active EMB members only). The approved amount for the business year is calculated from one quarter of the previous years' approval and three quarters of the actual approved year.
[2] 'Other compensation' according to Art. 4.3 of the Articles of Association includes compensation of Petra Rumpf in 2015 for remuneration forfeited due to resignation from previous employment.
[3] Excluding social security costs.
[4] Social security costs for vesting grant 2013 only, no approval for that position (before Ordinance against Excessive Compensation).
[5] Includes kCHF 133 for additional EMB member for first quarter of 2016.

In April, the AGM approves the maximum fixed compensation of the Board of Directors for their new term of office, which runs between AGMs. At the same time, the AGM approves the fixed compensation of the Executive Management Board for the period starting on 1 April and ending on 31 March, as well as their short-term incentive for the completed business year, and their long-term incentive grant for the current year.

In each case the approvals relate to the Board and EMB configurations at the time of the respective AGM. This chart shows the amounts approved by the AGM, the respective portions thereof calculated for the calendar year, and the amounts dispensed in the calendar year to the active members of the Board and EMB.

Report of the statutory auditor on the remuneration report of Straumann Holding AG, Basel

TO THE GENERAL MEETING OF STRAUMANN HOLDING AG, BASEL

Basel, 9 February 2017

REPORT OF THE STATUTORY AUDITOR ON THE REMUNERATION REPORT

We have audited the accompanying remuneration report of Straumann Holding AG for the year ended 31 December 2016. The audit was limited to the information according to articles 14–16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance) contained in the tables labeled 'audited' on page 170 and 171 of the remuneration report.

BOARD OF DIRECTORS' RESPONSIBILITY

The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance. The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion on the accompanying remuneration report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report complies with Swiss law and articles 14–16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the remuneration report with regard to compensation, loans and credits in accordance with articles 14–16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the remuneration report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

OPINION

In our opinion, the remuneration report for the year ended 31 December 2016 of Straumann Holding AG complies with Swiss law and articles 14–16 of the Ordinance.

Ernst & Young Ltd

Daniel Zaugg
Licensed audit expert
(Auditor in charge)

Ina Braun
Licensed audit expert

Information for investors

Share performance
Another year of outperformance

Three factors dented the global stock markets in 2016: the decline in Chinese export demand, the UK's decision to exit the EU, and the US presidential election, which had the greatest impact. Despite global uncertainty, Wall Street reacted positively and the S&P 500 reached new highs. European stocks fell and finished the year where they began. While firms in Europe are still recovering from the economic crisis, US firms took advantage of low interest rates to acquire other companies and/or to repurchase their own shares in order to stimulate earnings growth.

Swiss interest rates have been negative for almost two years. Government bonds bear negative returns, and private investors have seen no interest on their savings. Although it offers alternative opportunities, the Swiss equity market has also been under pressure and the SMI closed the year 7% lower than it began. The SMIM mid-cap index performed better (+5%) but only half as well as in previous years and considerably lower than the US S&P 500 (+10%).

With the share price rising 30%, Straumann ranked fifth in the SMIM and 75th in the Euro Stoxx 600. The stock price progression was only temporarily interrupted by profit-taking activities and asset rotations after the US election. During this period, active investors shifted investments away from high P/E, defensive stocks (e.g. medical devices) to pharmaceuticals, financial services and infrastructure sectors.

Over the past three years, Straumann has outperformed the SMIM by 112% (37% p.a.), reflecting the change in strategy, market share gains, replenished product pipeline, and margin expansion. Strong fundamentals have lifted investor confidence considerably. In a poll of 60 investor professionals, 86% said the company's strategy was convincing.

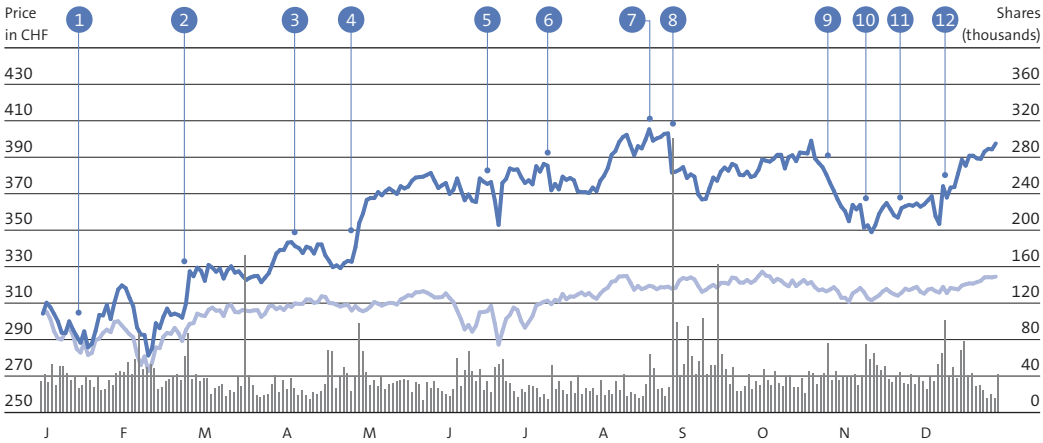
Total pre-tax shareholder return amounted to 145% or CHF 242 per share. The average daily closing price in 2016 ranged from CHF 281 to CHF 405, with the year-end closing price at CHF 397.50. On average, 38 800 Straumann shares were traded daily, which is good in view of the narrow free-float and increase in multilateral trading facilities.

SHARE PRICE DATA
(in CHF)

	2016		2015	
	Value	Date	Value	Date
First trading day	249.90	04.01.	249.90	05.01.
Lowest[1]	281.00	11.02.	199.20	28.01.
Highest[1]	405.25	23.08.	307.00	02.12.
Last trading day (tax value)	397.50	30.12.	305.00	30.12.
Average	357.54		268.00	
Total shareholder return, gross of tax	31.6%		23.1%	
Share price performance	30.3%		21.6%	
Market capitalization at year end (CHF million)[2]	6 092		4 779	

[1] Value reflects closing price
[2] Treasury shares are excluded from calculation

SHARE PRICE DEVELOPMENT



1 18 Jan Oil price slumps to >USD 30.

2 25 Feb Straumann reports 25% rise in FY 2015 EBIT; raise in dividend to 4 Swiss francs proposed.

3 8 Apr All AGM proposals approved with overwhelming majority.

4 3 May Strong start to the year with organic revenue growth of 12% in Q1; guidance raised.

5 24 Jun UK population voted to leave EU.

6 18 Jul Straumann takes over distribution of botiss products in Germany.

7 23 Aug Strong H1 performance and guidance lifted.

8 31 Aug Singapore's SWF GIC reduced stake in Straumann to <5%.

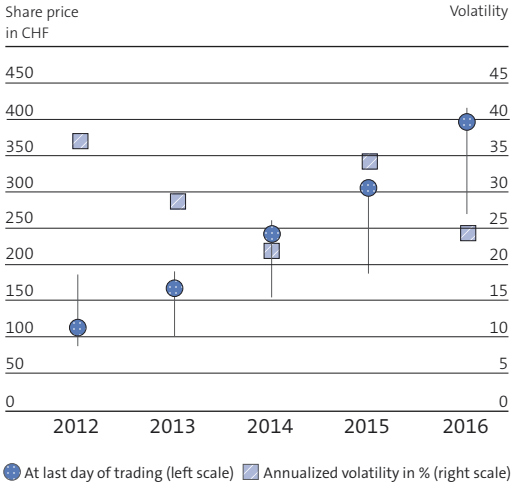
9 27 Oct Strong Q3 organic growth (+13%) keeps Straumann on track to achieve full-year targets.

10 10 Nov Donal Trump elected as new US president.

11 23 Nov Partnership with maxon motor announced in the field of ceramic injection moulding.

12 9 Dec Morgan Stanley upgrades to Overweight.

TRADING INFORMATION



STOCK EXCHANGE INFORMATION

Listing	SIX Swiss Exchange (STMN)
Bloomberg	STMN SW
Reuters	STMN.S
Investdata	STMN
Ex date	11 April 2017
Payment date	13 April 2017
Security ID	001 228 007
ISIN	CH 0012 280 076

Calendar
Reporting dates & key events

KEY DATES IN 2017

16 February	2016 Full-year results conference
7 April	Annual General Meeting
11 April	Dividend ex date
13 April	Payment date
27 April	First-quarter results conference call
17 August	Half-year results conference
26 October	Third-quarter results conference call

PLANNED INVESTOR RELATIONS EVENTS AND CONFERENCES

Members of Straumann's Executive Management and/or Investor Relations team plan to participate in the events listed below (subject to availability). If you are interested in meeting Straumann's top management at one of the meetings, please contact investor.relations@straumann.com.

2017 ROADSHOWS & CONFERENCES

17 February	Analyst breakfast & investor meetings; London
21 February	Investor meetings; Singapore
27 February	Investor meetings; Zurich
15 March	Investor meetings; Boston & New York
16 March	Investor meetings; New York
20 March	Investor meetings; Frankfurt
23 March	IDS investor & analyst meeting; Cologne
29 March	Kepler Cheuvreux Swiss Seminar; Zurich
28 April	Investor meetings; Paris
9 May	Investor meetings; Stockholm & Copenhagen
10 May	Investor meetings; Amsterdam & Brussels
31 May	Stifel Dental & Veterinary Conference; New York
7 June	Vontobel Summer Conference; Interlaken (Switzerland)
21 August	Investor meetings; New York
22 August	Investor meetings; Zurich & Boston
23 August	Investor meetings; Geneva, Toronto & Montreal
14 September	UBS Best of Switzerland Conference; Wolfsberg (Switzerland)
28 September	Bernstein Strategic Decisions Conference; London
29 September	Investor meetings; Edinburgh
27 October	Investor meetings; Zurich
16 November	Credit Suisse Mid Cap Conference; Zurich
6 December	Berenberg Equities Conference; Pennyhill (UK)

SELECTED DENTAL MEETINGS IN 2017

16–18 February	International Congress of Oral Implantologists (ICOI) Winter Symposium; New Orleans
23–25 February	Chicago Dental Society Midwinter Meeting (incl. LMT Lab Days 24/25 Feb.); Chicago
15–18 March	Academy of Osseointegration 2017 Annual Meeting; Orlando
21–25 March	International Dental Show (IDS); Cologne
4–6 May	ITI World Symposium; Basel (Switzerland)
18–20 May	Expodental; Rimini (Italy)
22–25 May	Asia Pacific Dental Congress; Macau
2–3 June	Dental Forum; Lille (France)
8–10 June	International Congress of Oral Implantologists (ICOI) European Summer Symposium; Krakow (Poland)
9–10 June	Neodent 2017 Symposium; Miami (USA)
9–12 June	Sino Dental; Bejing
17–19 August	International Congress of Oral Implantologists (ICOI) World Congress; Vancouver (Canada)
21–25 August	ITI Education Week; Berne (Switzerland)
29 August–1 September	World Dental Federation Congress (FDI); Madrid
9–12 September	American Academy of Periodontology (AAP); Boston
5–7 October	26th Annual Scientific Meeting of the European Association for Osseointegration (EAO) & 47 Congreso Anual de SEPES (joint congress); Madrid
19–23 October	American Dental Association (ADA); Atlanta (USA)
1–4 November	American College of Prosthodontists (ACP); San Francisco (USA)
24–29 November	Greater New York Dental Meeting; New York
30 November–2 December	Kongress der Deutschen Gesellschaft für Implantologie (DGI); Düsseldorf (Germany)
1–2 December	ITI National Congress; Bangalore (India)

Research coverage

BANK AM BELLEVUE
Laura Pfeifer-Rossi
+41 44 267 67 89

BANK OF AMERICA MERRILL LYNCH
Ines Duarte Da Silva
+44 207 996 7049

BANK VONTOBEL
Carla Bänziger
+41 58 283 70 21

BERENBERG
Thomas Jones
+44 203 207 7877

CITIGROUP
Patrick Wood
+44 207 986 2755

COMMERZBANK AG
Oliver Metzger
+49 69 136 81573

CREDIT SUISSE
Christoph Gretler
+41 44 333 79 44

EXANE BNP PARIBAS
Julien Dormois
+33 1 44 95 69 49

GOLDMAN SACHS
Veronika Dubajova
+44 207 774 1901

HSBC TRINKHAUS & BURKHARDT
Richard Latz
+49 211 910 1074

JEFFERIES
Chris Cooper
+44 207 029 8675

J.P. MORGAN
David Adlington
+44 207 742 6264

KEPLER CAPITAL MARKETS
Maja Pataki
+41 43 333 66 23

MAINFIRST
Markus Gola
+49 69 788 08 221

MORGAN STANLEY
Michael Jüngling
+44 207 425 595 75

SANFORD C. BERNSTEIN
Lisa Clive
+44 207 170 5052

UBS
Ian Douglas-Pennant
+44 207 568 77 63

ZÜRCHER KANTONAL-BANK
Sibylle Bischofberger
+41 44 292 37 34

Contacts

STRAUMANN GROUP HEADQUARTERS
Peter Merian-Weg 12, 4002 Basel
Tel. +41 61 965 11 11
Fax +41 61 965 11 01

INVESTOR RELATIONS
Fabian Hildbrand Tel. +41 61 965 13 27
Rahel Schafroth Tel. +41 61 965 16 78
investor.relations@straumann.com

MEDIA RELATIONS
Mark Hill Tel. +41 61 965 13 21
Thomas Konrad Tel. +41 61 965 15 46
corporate.communication@straumann.com

GENERAL INQUIRIES
Corporate Communication
Tel. +41 61 965 11 11
Fax +41 61 965 11 03
info@straumann.com

Publications
Media releases

The Straumann Annual Report is published in February and presented at the analysts' and media conferences. It is also available online at www.straumann.com. The half-year interim report is published in the form of a media release in August. Other media releases include the quarterly sales reports published in April for the first quarter and in October for the third quarter.

Where necessary or appropriate, Straumann also publishes additional information on significant events.

Press releases and presentations can be downloaded from the Straumann homepage at www.straumann.com. Please see Information Policy on p. 152 f.

2016 MEDIA RELEASES

30 November	Straumann is granted a controlling interest in Medentika
23 November	Straumann and maxon motor announce partnership to produce dental implant components by ceramic injection moulding (CIM)
27 October	Another strong quarter (+13% organic) keeps Straumann on track to achieve full-year targets
7 October	Straumann: Invitation – 2016 Third-quarter sales report webcast
12 September	2016 Straumann-botiss Young Pro Award goes to Vítor Sapata
31 August	Straumann purchases approx. 530 000 own shares from GIC for CHF 200m
23 August	Strong performance continues as organic growth of 14% lifts first-half revenue to record level
	Straumann invests in India
4 August	Invitation to Straumann's 2016 First-Half Report analysts' and media conference Basel, 23 August 2016
18 July	Straumann takes over distribution of botiss products in Germany
14 July	Straumann exercises conversion right and call option to obtain controlling stake in MegaGen
23 May	Straumann announces change in Board of Directors and Compensation Committee
3 May	Straumann reports strong start to the year with organic revenue growth of 12% in Q1
	Straumann Emdogain launched in new wound-healing indication
22 April	Straumann introduces Lifetime Guarantee Plus for Roxolid implants
15 April	Straumann: Invitation – 2016 First-quarter sales report webcast
8 April	Straumann: shareholders approve all proposals at 2016 AGM
25 February	Straumann posts organic revenue growth of 9% with 25% rise in underlying operating profit in 2015
	Straumann and Anthogyr announce partnership
8 February	Rising stars sought in 2016 YoungPro Award
28 January	Invitation to Straumann's 2015 full-year financial results analysts' and media conference – Basel, 25 February 2016
20 January	Excellent results for Straumann in independent peri-implantitis study

Appendix

Global presence
Straumann Group around the world

ARGENTINA
Manohay Argentina S.A.
Av Juana Manso 555, "7 Piso E"
C1107CBK Buenos Aires
Tel. +54 11 2150 6540
info.ar@straumann.com

AUSTRALIA & NEW ZEALAND
Straumann Australia P/L
7 Gateway Court
Port Melbourne 3207, Victoria
Tel. +61 3 9261 1300
Tel. 1800 660 330 (toll-free from AU)
Tel. 0800 408 370 (toll-free from NZ)
info.au@straumann.com

AUSTRIA
Straumann GmbH
Florido Tower
Floridsdorfer Hauptstrasse 1
1210 Wien
Tel. +43 1 294 0660
info.at@straumann.com

BELGIUM
Straumann NV/SA
Belgicastraat 3, Box 3
1930 Zaventem
Tel. +32 2 790 10 00
info.be@straumann.com

BRAZIL
Neodent/Straumann
Juscelino Kubitschek de Oliveira Avenue, 3291
81270-200 Curitiba (PR)
Tel. +55 41 2169-4000
sac@neodent.com.br (Neodent)
info.br@straumann.com (Straumann)

CANADA
Straumann Canada Ltd
3375 North Service Road, Units B12-14
Burlington, Ontario L7N 3G2
Tel. +1 905 319 2900
info.can@straumann.com

Instradent Canada Ltd
3375 North Service Road, Units B12-14
Burlington, Ontario L7N 3G2
Tel. +1 855 412 8883
info.ca@instradent.com

CHILE
Manohay Chile SpA
Cerro El Plomo 5420, Suite 1101
Santiago
Tel. +54 11 2150 6540

CHINA
Straumann (Beijing) Medical Device Consulting Co. Ltd.
3Fl, Tower B, Jiaming Centre27#
Dongsanhuan Beilu Chaoyang District
Beijing 100020
Tel. +86 10 5775 6555
info.cn@straumann.com

COLOMBIA
Manohay Colombia SAS
Carrera 9 #115-06 18th floor, Room 1806
Edificio Tierra Firme
Bogota
Tel. +57 (1) 756 2962
info.co@straumann.com

CZECH REPUBLIC
Straumann sro
Na zertvach 2196/34
180 00 Praha 8
Tel. +420 2 8409 4650
info.cz@straumann.com

Instradent s.r.o.
Na zertvach 2196/34
180 00 Praha 8
Tel. +420 226 200 930
info.cz@instradent.com

DENMARK

Straumann Danmark ApS
Nygårds Plads 21, 1
2605 Brøndby
Tel. +45 4616 0666
info.dk@straumann.com

FINLAND

Straumann Oy
Äyritie 12 A, 4.krs
01510 Vantaa
Tel. +358 9 565 8260
info.fi@straumann.com

FRANCE

Straumann S.à.r.l.
3, rue de la Galmy-Chessy
77701 Marne-la-Vallée, Cedex 4
Tel. +33 1 6417 3000
info.fr@straumann.com

GERMANY

Straumann GmbH
Heinrich-von-Stephan-Strasse 21
79100 Freiburg
Tel. +49 761 4501 0
info.de@straumann.com

Etkon GmbH
Koburgerstrasse 45
04416 Markkleeberg
Tel. +49 341 350 354 0
info.cadcam@straumann.com

Etkon GmbH
Lochhamer Schlag 6
82166 Gräfelfing
Tel. +49 89 309 07 50
info.cadcam@straumann.com

Instradent Deutschland GmbH
Heinrich-von-Stephan-Strasse 21
79100 Freiburg
Tel. +49 761 707455-54
info@instradent.com

Hammweg 8
76549 Hügelsheim
Tel. +49 7229 69912 0
info.de@instradent.com

HUNGARY

Straumann GmbH Magyarországi Fióktelepe
Buda-Center
Hegyalja út 7-13.
1016 Budapest
Tel. +36 1 787 1095
info.hu@straumann.com

INDIA

Equinox Implants LLP
301-C, Pooname Chambers, A Wing
Dr. Annie Besant Road, Worli
Mumbai 400018
Tel. +9122 2493 4400
shahvir@equinoxmed.com

ITALY

Straumann Italia srl
Bodio Center
Viale Luigi Bodio 37/A - Palazzo 4
20158 Milano
Tel. +39 02 3932 831
info.it@straumann.com

Instradent Italia srl.
Bodio Center
Viale Luigi Bodio, 37/A - Palazzo 4
20158 Milano
Tel. +39 800 975 895
info.it@instradent.com

Straumann's products and services are available in more than 100 countries through our subsidiaries and a broad network of distributors.

★ Holding/Service Company
● Straumann locations
▲ Distributors
■ Production facilities
▼ Instradent

JAPAN

Straumann Japan KK
Mita Bellju Building, 6F
5-36-7, Shiba, Minato-ku
Tokyo 108-9914
Tel. +81 3 6858 1188
info.jp@straumann.com

Etkon Japan KK
Prologis Park Narita 3
125-3 Iwayama, Shibayama-cho, Sanbu-gun
Chiba 289-1608
Tel. +81 479 85 6550

MEXICO

Manohay México, SA de CV
Rubén Darío #281-1702 Piso 17
Col. Bosque de Chapultepec
11580 México D.F.
Tel. +52 55 5282 6262
info.mx@straumann.com

NETHERLANDS

Straumann BV
Einsteinweg 15
3404 LE IJsselstein
Tel. +31 30 604 66 11
informatie@straumann.com

NORWAY

Straumann AS
Nils Hansens vei 7
0667 Oslo
Tel. +47 23 35 44 88
info.no@straumann.com

PORTUGAL

Manohay Dental SA
Lagoas Park, Edificio 11, Piso 3
2740-244 Porto Salvo
Tel. +351 21 422 9170
info.pt@straumann.com

Instradent Iberia S.L.U., Sucursal em Portugal
Lagoas Park, Edificio 11, Piso 3
2740-244 Porto Salvo
Tel. +351 210 134 400
info.pt@instradent.com

RUSSIA

LLC “Straumann”
119A Leninskiy prospect
119571 Mockba
Tel. +7 495 139 7474
info.ru@straumann.com

Instradent LLC Moscow
119A Leninskiy prospect
119571 Mockba
Tel. +7 495 933 3405
info.ru@instradent.ru

SINGAPORE

Straumann Singapore Pte Ltd
#09-04 Harbour Front Centre
1 Maritime Square
Singapore 099253
Tel. +65 6376 2023

SOUTH KOREA

Straumann Dental Korea Inc.
1005 Korea Trade Tower
Samseong 1-dong, Gangnam-gu
Seoul 135-729
Tel. +822 2149 3800
info.kr@straumann.com

SPAIN

Manohay Dental SA
Calle Anabel Segura, 16
Edificio 3 – Planta Baja
28108 Alcobendas (Madrid)
Tel. +34 91 630 82 14
info.es@straumann.com

Instradent Iberia SL
Calle Anabel Segura, 16
Edificio 3 – Planta Baja
28108 Alcobendas (Madrid)
Tel. +34 91 662 34 35
info.es@instradent.com

SWEDEN

Straumann AB
Krokslätts Fabriker 45
431 37 Mölndal
Tel. +46 31 708 75 10
info.se@straumann.com

Biora AB
Per Albin Hanssons vaeg 41
Medeon Science Park
20512 Malmö
Tel. +46 40 32 13 33

SWITZERLAND

Institut Straumann AG
Peter Merian-Weg 12
4002 Basel
Tel. +41 61 965 11 11
info@straumann.com

Straumann Villeret SA
Champs du Clos 2
2613 Villeret
Tel. +41 32 942 87 87

Equinox Dental AG
Peter Merian-Weg 12
4002 Basel
Tel. +41 61 965 1111
info@straumann.com

Instradent AG
Peter Merian-Weg 12
4002 Basel
Tel. +41 61 965 1111
info@straumann.com

UNITED KINGDOM

Straumann Ltd
3 Pegasus Place
Gatwick Road
Crawley RH10 9AY, West Sussex
Tel. +44 1293 651230
info.uk@straumann.com

Instradent Limited
3 Pegasus Place
Gatwick Road
Crawley RH10 9AY, West Sussex
Tel. +44 1293 560777
info.uk@instradent.com

USA

Straumann USA, LLC & Straumann Manufacturing, Inc.
60 Minuteman Road
Andover, MA 01810
Tel. +1 978 747 2500
info.usa@straumann.com

Straumann Manufacturing, Inc.
113th Street 916A
Arlington, TX 76011
Tel. +1 817 701 11 81

Instradent USA, Inc.
60 Minuteman Road
Andover, MA 01810
Tel. +1 855 412 8883
info.us@instradent.com

Glossary

DENTAL & MEDICAL TERMS

ABUTMENT
A component that protrudes into the oral cavity and connects the implant to the prosthesis.

ASTM
ASTM International is an international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials, products, systems, and services.

BONECERAMIC
Straumann's fully synthetic bone substitute used in bone augmentation procedures.

BONE LEVEL IMPLANT
Implant which connects with the abutment at bone crest level.

BONE LEVEL TAPERED (BLT) IMPLANT
Bone level implant with tapered profile which provides excellent primary stability.

BRIDGE
An appliance used to bridge the gap left by missing teeth by using one or more false teeth fixed to crowns anchored on tooth stumps or implants.

CADCAM
Computer-aided design/computer-aided manufacturing: A computer system is used both for designing a product and for controlling manufacturing processes.

CARES
CARES is a brand that Staumann uses for its digital prosthetic services, including CADCAM, software, functionality, scanning technology, etc.

CROWN
A tooth-shaped cap attached to a tooth stump or implant abutment.

DENTAL TECHNICIAN
Dental professional who manufactures crowns, bridges, dentures and other dental prosthetics according to the dentist's specifications.

DISTRIBUTOR MARKETS
In markets where the Straumann Group does not have a subsidiary, its products are supplied through local distributors. The Group operates a hybrid model in China, in which the subsidiary supplies a network of distributors across the country has a consultative sales-force.

DWOS
Dental Wings Open Software is an open software platform that allows prosthetics to be designed using data from multiple sources.

EDENTULOUS
Having no teeth (can refer to upper and/or lower jaw).

EMDOGAIN
An extract of enamel matrix proteins which are involved in the development of cementum, periodontal ligament and bone. In 2016, Emdogain was launched in the new indication of soft-tissue wound healing as part of oral surgical procedures and dental implantation procedures in general.

GUIDED SURGERY
Surgery in which 3D imaging technologies are used to plan the position, depth and angle of an implant.

HYDROPHILIC
Readily absorbing or attracting water, or having chemical groups that interact with water.

INTRA-ORAL SCANNING
Digital scanning to create a 3D image of the patient's teeth that replaces the conventional process of impression-taking followed by model casting.

ITI
International Team for Implantology.

MEMBRANE
A barrier used in guided bone regeneration to prevent tissue from occupying space into which new bone should form, and to stabilize bone augmentation materials.

NARROW NECK IMPLANT
Small diameter implant for limited interdental spaces or narrow bone ridges.

NON-INTERVENTIONAL STUDY (NIS)
Non-interventional studies are designed to evaluate products in everyday clinical settings, where the clinician can use the product as deemed suitable, within treatment guidelines, and results are tracked.

ONE-STAGE PROCEDURE
Surgical procedure whereby the implant is placed but not covered by the gum tissue during healing, eliminating the necessity of a second surgical procedure to expose the implant.

OSSEOINTEGRATION
The biological process of bone integrating with the implant.

PERI-IMPLANTITIS
Inflammatory tissue pathology and/or progressive bone loss at implant site, resulting from plaque accumulation and bacterial infiltration around dental implants. If not treated successfully, peri-implantitis can lead to implant loss.

PERIODONTICS
Branch of dentistry concerned with the care and treatment of the supporting tissues of the teeth from the gingiva to the adjacent alveolar bone and ligament.

PERIODONTIST
Dental professional specialized in the tissue and bone surrounding the teeth and in treating the diseases that affect them.

PERIODONTITIS
Progressive disease of the periodontal tissues, resulting in the gradual loss of the tooth and supporting structures.

PRE-MILLED ABUTMENT BLANKS
Titanium blanks with pre-fabricated implant connections, compatible with a wide range of milling machines and enabling labs to fabricate one-piece customized titanium abutments with original Straumann connections in house.

PRO ARCH
A comprehensive restoration system for the entire jaw comprised of implants, abutments, and prosthetic components.

PROSTHODONTIST
A dental professional who carries out prosthetic restorations on natural teeth and implants.

PURE
The Straumann PURE Ceramic Implant Monotype features a translucent ivory color and the ZLA surface technology. It is the biocompatible alternative for patients asking for metal-free solutions.

RCT
Randomized controlled trial.

REFERRAL MARKET
A market characterized by a relatively large number of specialists and in which general dentists tend to refer patients to specialists for procedures like implant placement.

RESTORATIVE DENTISTRY
Branch of dentistry concerned with the replacement or reconstruction of teeth.

ROXOLID
Straumann's proprietary alloy of titanium and zirconium, which combines high tensile and fatigue strengths with excellent osseointegration.

SCAN & SHAPE
A Straumann CARES brand service, by which dental technicians generate CADCAM-based, customized abutments from a model or wax-up.

SCREW-RETAINED BARS AND BRIDGES
Bridges are devices used to 'bridge' a toothless gap and are fixed with screws to two or more dental implants; bars are commonly used to support partial or full dentures.

SLA
SLA refers to a second-generation implant surface technology introduced by Straumann in 1997.

SLACTIVE
Straumann's third-generation implant surface technology. By virtue of its hydrophilic properties, healing time is cut in half.

SOFT TISSUE LEVEL IMPLANT
Implant where the connection between the implant and the abutment is placed at the level of the gums, so that the soft tissue surrounds the polished collar of the implant.

TITANIUM
Metallic element isolated from minerals as an iron-gray powder; used in many dental and orthopedic applications.

TWO-STAGE PROCEDURE
Surgical procedure whereby the implant is inserted and a healing cap placed, which is then covered by the gum tissue during healing phase. A second surgical procedure is performed later, in which the healing cap is removed and an abutment and provisional prosthesis is placed.

VARIOBASE
Straumann hybrid abutment with a titanium bonding base and a zirconium dioxide coping. Cost-effective metal-to-metal implant abutment with an original Straumann connection and a variety of esthetic shades.

X-STREAM
Solution-driven function within the CARES Visual software, providing a one-step, single-tooth implant-based prosthetic restoration process which significantly reduces turnaround time and shipment cost.

ZIRCONIA
ZrO_2 – the white oxide of zirconium used for its infusibility and luminosity in dental implants, prosthetics, enamels and glazes.

ZIRCONIUM
A grayish-white ductile metallic element obtained from zircon and used in ceramic and refractory compounds as an alloying agent.

ZLA
The ZLA surface of Straumann's ceramic implant features a topography characterized by macro- and micro-roughness, similar to the SLA surface, to enhance cell attachment and osseointegration.

FINANCIAL & LEGAL TERMS

AMORTIZATION
Systematic allocation of the depreciable amount of an intangible asset over its useful life.

AGM
Annual general meeting of the shareholders.

AOA
Articles of Association.

CAGR
Compound annual growth rate.

DEPRECIATION
Systematic allocation of the depreciable amount of a tangible asset.

DOS-DAYS OF SUPPLIES
Inventory level at the end of a quarter divided by cost of goods sold for a given quarter, times 90. An indicator that helps to determine how long it takes to turn the inventory into actual sales.

DSO-DAYS OF SALES OUTSTANDING
Trade receivables divided by revenue for a given quarter, times 90. A measure of the average number of days that it takes to collect revenue after a sale has been made.

EARNINGS PER SHARE (EPS)
Net profit divided by the number of shares.

EBIT
Earnings before interest and taxes; also referred to here as operating profit.

EBITDA
Earnings before interest, taxes, depreciation and amortization.

EQUITY RATIO
Shareholder equity divided by total assets in %.

ERP
Enterprise resource planning.

FREE CASH FLOW
Net cash from operating activities, less capital expenditures, plus net proceeds from property, plant and equipment.

FREE CASH FLOW MARGIN
Free cash flow divided by Group net revenue in %.

FREE CASH FLOW YIELD
Free cash flow per share divided by the stock price of the company.

GOODWILL
Future economic benefits arising from assets that are not capable of being individually identified and separately recognized.

IFRS
International Financial Reporting Standards.

IMPAIRMENT LOSS
The amount by which the carrying amount of an asset or a cash-generating unit exceeds its recoverable value.

NET PROFIT MARGIN
Net profit divided by Group net revenue in %.

OPEX
Operating expenses, also called non-manufacturing expenses, including distribution costs, marketing, research & development, as well as general administrative expenses.

ORGANIC GROWTH
Growth excluding the effect from business combination and currency effects.

PAY-OUT RATIO
Dividend paid divided by net profit over the same period in %.

REVENUES
Sales, see p. F 19 f.

ROA
Return on assets; net profit divided by average assets in %.

ROCE
Return on capital employed; earnings before interest and taxes divided by average capital employed in %.

ROE
Return on equity; net profit divided by average equity in %.

SALES
See ‘sale of goods’ on p. F 19

TOTAL SHAREHOLDER RETURN (TSR)
Profit or loss realized by an investment. TSR includes capital gains/losses from increases/decreases in stock price as well as received gross dividends.

WACC
Weighted average cost of capital.

WRITE-DOWN
See ‘impairment loss’.

Global Reporting Initiative
Transparency for Stakeholders

Sustainability is integral to business success and is an important part of the context of our achievements and progress. This is why we have consistently integrated sustainability topics in our annual report since 2004.

To provide transparency for stakeholders who determine or are significantly affected by our business/activities (including customers, shareholders, employees, and members of the communities in which we operate), we base our sustainability reporting on the guidelines of the Global Reporting Initiative (GRI).

GRI is a nonprofit, multi-stakeholder organization that provides companies with a systematic basis for informing stakeholders on corporate responsibility in a clear and comparable manner. This is our eleventh consecutive Annual Report to follow GRI sustainability reporting guidelines. It has been developed in accordance with GRI G4 Guidelines – Core option, and successfully completed the GRI Materiality Disclosures Service on 09 February 2017.

The G4 guidelines require us to determine which sustainability topics are most relevant or material for our company and stakeholders. Our corresponding assessment and the topics determined to be material are presented on page 96. The material topics listed are relevant for Straumann's operations, shareholders, and employees, as they can influence cost, brand reputation, and ultimately business success. Economic and environmental topics found to be material are also relevant for the local communities where we operate. In addition, environmental topics are of interest for environmental organizations. Product-related topics are relevant for our customers and the patients they serve, and human resources topics influence the competence of our team and ultimately the confidence and peace of mind we provide to our customers.

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Page numbers prefaced with “A” refer to our Addendum GRI Sustainability Reporting, published on www.straumann.com under Media, Publications and Reports, Annual Reports.

Points to note

FINANCIAL REPORT

Straumann's detailed financial report is published in English as a separate volume. It can be viewed or downloaded through our website:
http://annualreport.straumann.com

Printed copies can be ordered from:
Corporate Communication or Investor Relations
Institut Straumann AG
Peter Merian-Weg 12
CH - 4002 Basel
Tel. + 41 61 965 11 11
E-mail:corporate.communication@straumann.com or investor.relations@straumann.com

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Straumann Holding AG
Peter Merian-Weg 12
4002 Basel
Switzerland
www.straumann.com