



MANAGEMENT REPORT

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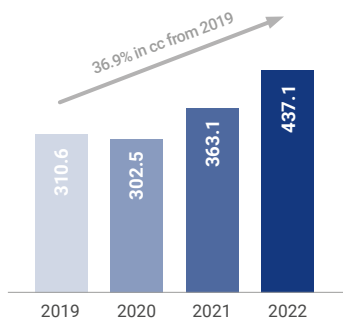
2022 KEY FIGURES

FINANCIAL FIGURES

REVENUES

EUR 437.1M

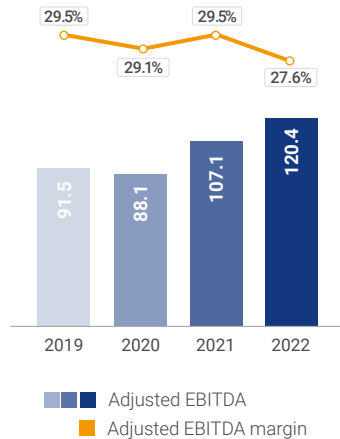
20.4% growth at reported currency (15.0% in cc¹⁾
36.9% growth in constant currency from 2019



ADJUSTED EBITDA²

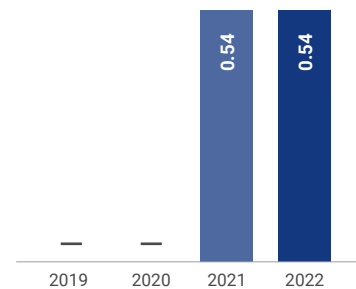
EUR 120.4M

27.6% Adjusted EBITDA margin³



DISTRIBUTION DECLARED PER SHARE⁴

CHF 0.54



¹⁾ Is calculated as the difference between the current and historical period results translated using the previous period exchange rates.

²⁾ Is calculated as EBITDA, adjusted for non-recurring items.

³⁾ Adjusted EBITDA margin, is calculated as adjusted EBITDA as a percentage of Revenue for the year.

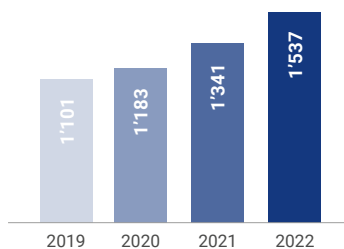
⁴⁾ Is calculated by dividing the total distribution declared equal to CHF 10.8M by the number of outstanding ordinary shares.

BUSINESS FIGURES

EMPLOYEES

1'537

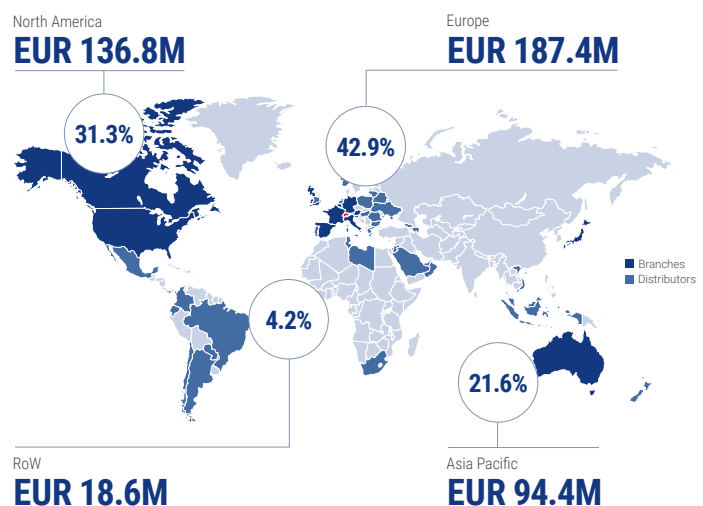
196 new jobs added in 2022



COUNTRY PRESENCE

53

8 new countries added in 2022



2022 HIGHLIGHTS*

- Medacta's 2022 revenue amounts to Euro 437.1 million, equal to 20.4% growth at reported currency, or 15.0% growth at constant currency from 2021;
- Adjusted EBITDA grew to Euro 120.4 million, corresponding to 27.6% margin (28.1% in constant currency);
- Profit for the year was equal to Euro 46.2 million, 10.6% on revenue;
- Adjusted Free Cash Flow at Euro 21.6 million;
- The Board of Directors is proposing a distribution of CHF 0.54 per share;
- Outlook FY 2023: We are targeting revenue in the range of Euro 480 million to Euro 495 million at constant currency, and Adjusted EBITDA Margin largely in line with 2022, subject to any unforeseen events.

REPORTED PERFORMANCE MEASURES

(Million Euro)	31.12.2022	31.12.2021
Revenues	437.1	363.1
Gross Profit	305.3	261.2
Profit for the year	46.2	51.5
Distribution proposal to the AGM (in million CHF)	10.8	10.7

Alternative Performance Measures:

EBITDA	113.0	99.2
Adjusted EBITDA*	120.4	107.1
Adjusted EBITDA margin*	27.6%	29.5%
Free Cash Flow	8.4	2.0
Adjusted Free Cash Flow**	21.6	33.8

(Million Euro)		
Total Assets	584.5	489.3
Total Equity	274.7	226.4
Equity Ratio	47.0%	46.3%
Number of employees	1'537	1'341

* Adjusted in 2022 for provisions on litigations (Euro 2.5 million) and for the Italian payback (Euro 3.1 million), extraordinary legal expenses (Euro 1.2 million) and extraordinary MDR transition costs (Euro 0.6 million). The reconciliation is provided in the "Alternative Performance Measures" section of the Management Report.

** Adjusted in 2022 for extraordinary legal expenses (Euro 1.2 million), for the settlement of legal claims (Euro 5.1 million), MDR transition costs (Euro 0.6 million), non-recurring investments in Rancate offices (Euro 1.2 million) and in Castel San Pietro land (Euro 4.8 million) and Levante Medica asset deal (Euro 0.2 million). Please see the "Alternative Performance Measures" section of the Management Report for the reconciliation of the "Adjusted Free Cash Flow".

**** Alternative Performance Measures:** This section and other sections of this Annual Report, contain certain financial measures of historical performance that are not defined or specified by IFRS, such as "constant currency", "EBITDA", "Adjusted EBITDA" or "CORE EBITDA", "Adjusted and Normalized EBITDA", "Free Cash Flow", "Adjusted Free Cash Flow", "Adjusted and Normalized Free Cash Flow", "Net Debt" and "Leverage". Reconciliation of these measures as well as "CORE" financial measures is provided in the "Alternative Performance Measures" (APM) section of this Annual Report on page 21. These Alternative Performance Measures (APM) should be regarded as complementary information to, and not as a substitute for the IFRS performance measures. For definitions of APM, together with reconciliations to the most directly reconcilable IFRS line items, please refer section headed "Alternative Performance Measures" of this Annual report.

SHARE INFORMATION

The registered shares of Medacta Group SA are traded on the International Reporting Standard of SIX Swiss Exchange and are part of the Swiss Performance Index.

NUMBER OF SHARES

Share capital (in CHF)	2'000'000
Number of registered shares outstanding as of December 31, 2022	19'960'143
Nominal value per registered share (in CHF)	0.10
Number of treasury shares as of December 31, 2022	39'857

2022 DATA PER SHARE

(Swiss Francs)	31.12.2022
2022 High (in CHF)	147.60
2022 Low (in CHF)	76.70
Closing price (in CHF)	103.00
Market capitalization (in CHF billion)	2.1

2022 RELATIVE SHARE PRICE DEVELOPMENT

Index base 100 calculation
Source: Refinitiv



LETTER TO SHAREHOLDERS

Dear Shareholders,

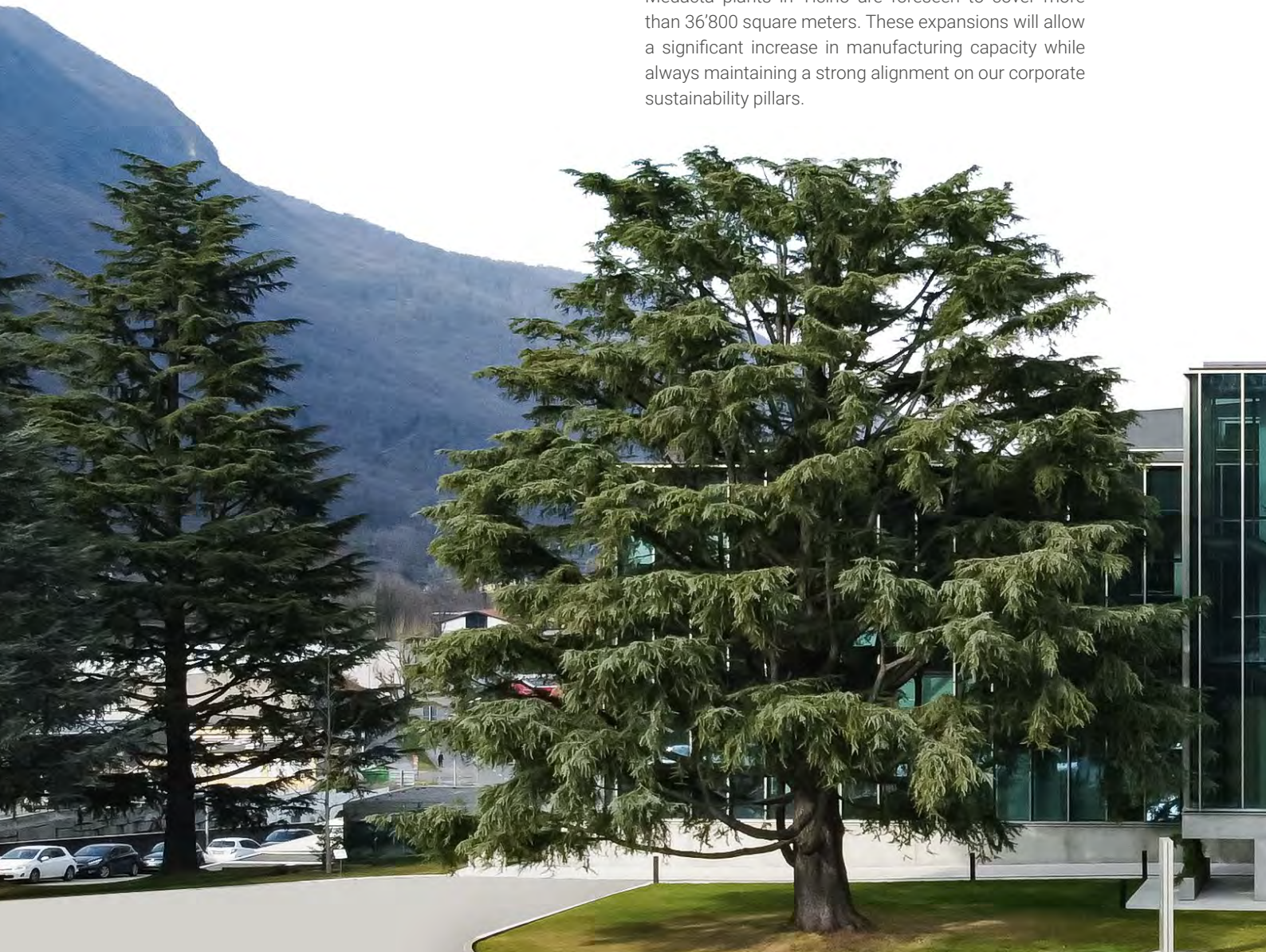
In a time where the world faces uncertainty in so many aspects of our society and global economy, Medacta has proven able to navigate these changes and adapt. In 2022 we continued gaining significant market share from our competitors, we secured our supply chain and expanded our salesforce across all geographies and business lines, supported by our Marketing and Medical Education Programs. While we expect that some macroeconomic challenges may persist in 2023, we remain positive and will continue to invest in our growth.

OUR ACHIEVEMENTS

In 2022, we celebrated an important milestone by surpassing 1'500 employees at Group level and close to 200 new jobs were added across all geographies, including significant salesforce expansion. We also made significant strategic investments on our infrastructure, in particular on May 18, 2022 we opened the doors of our new offices in Rancate.

With an expansion of 2'100 square meters supporting the creation of new jobs, the new building complements and works in complete synergy with the Castel San Pietro headquarters: two hubs of cutting-edge technology which continue to innovate responsibly for the benefit of patients, medical professionals, healthcare systems and the local community.

Management made strategic investments in strengthening our supply chain by increasing surgical instrument sets and implant stock to serve new customers, to cope with possible shortages and capture market opportunities. Also, we projected two major plant expansions at our Swiss headquarters to support our future growth. In Castel San Pietro, the production area will be expanded by about 5'300 square meters, bringing the total area to 15'300 square meters, with an increase of more than 50 percent in total area. The current 12'000 square meters in Rancate will be further expanded with a new area of about 9'500 square meters, with an increase of almost 80% in operational space. In total, Medacta plants in Ticino are foreseen to cover more than 36'800 square meters. These expansions will allow a significant increase in manufacturing capacity while always maintaining a strong alignment on our corporate sustainability pillars.



Innovation continued through all business lines. In a world where technology advances very fast, MySolutions Personalized Ecosystem embodies our vision to never stop improving the experience for patients, surgeons, and care facilities.

Within our MySolutions Personalized Ecosystem, NextAR Augmented Reality Surgical Platform has been launched globally including Japan in June 2022. In October 2022, the NextAR Spine application was awarded by the 2022 Spine Technology Award from Orthopedics This Week.

The NextAR platform is offered as a hardware system with limited capital investment and single use instrumentation at a low cost per case and offers the ability to host software for multiple applications in both joint and spine. The platform represents an optimal solution worldwide and particularly for US Ambulatory Surgery Centers (ASCs).

We continued our commitment to medical education of surgeons. Besides in-person scientific events, the M.O.R.E. Institute programs offered surgeons valuable online resources to deepen their knowledge and discover more about our solutions. We further expanded our network of reference center surgeons active worldwide across all our business lines.

STRONG GROWTH IN ALL REGIONS AND BUSINESS LINES*

In 2022, revenue increased 15.0% at constant currency and 20.4% on a reported currency over the prior year, at EUR 437.1 million, with positive contributions from all business lines and geographies. The growth was driven by significant customer acquisition, salesforce expansion, and successful new product introduction. Currency development had a positive impact with a tailwind of 5.4%, mainly due to the weakening of the Euro against the US Dollar, the Swiss Franc, and the Australian Dollar, only partially compensated by the Euro strengthening against the Japanese Yen. From 2019, revenue increased 36.9% at constant currency showing true growth beyond mere recovery.



In terms of trend by business line, revenue from our Hip products increased to EUR 203.6 million, or 9.2% on a constant currency basis; the good momentum was driven by the AMIS strategy and roll-out of new products in the revision segment. From 2019, Hip revenue grew 21.1% at constant currency. Revenue from our Knee offerings reached EUR 164.5 million, an increase of 18.4% on a constant currency basis; the growth was generated thanks to continued customer acquisition on Kinematic Alignment, Efficiency single-use instruments, the GMK Sphere platform and related MySolutions technologies. From 2019, Knee revenue increased 41.8% at constant currency. Our Extremities business line reported an increase in revenue of 38.8% on a constant currency basis to EUR 27.5 million; the growth was driven by the acquisition of new customers through the completeness of the Medacta Shoulder System, supported by MyShoulder and NextAR MySolutions technologies. From 2019, Extremities revenue increased 175.3% at constant currency. Revenue from our Spine offering grew by 19.2% on a constant currency basis to EUR 41.5 million, driven by the expansion of the MySpine Platform and NextAR Spine in the second semester. From 2019, Spine revenue increased 64.4% at constant currency. All the business lines benefitted from significant salesforce and marketing expansion.

In terms of geographic trend, revenue in Europe registered an increase of 17.6% on a constant currency basis to EUR 187.4 million. The growth was driven by customer acquisition, together with normalization of surgical activities. From 2019, revenue in Europe increased 34.4% at constant currency. Revenue in North America increased to EUR 136.8 million, or 11.5% on a constant currency basis, thanks to our customer acquisition, which was limited by the impact of Covid-19 and hospital staffing shortages, especially in the first months of the year. From 2019, revenue in North America increased 34.6% at constant currency. Revenue in Asia Pacific grew by 11.2% on a constant currency basis to EUR 94.4 million, mainly driven by the attainment of new customers in Japan. Australia was limited by significant longer than expected Covid impact, with recovery only in the last months of the year. From 2019, revenue in Asia Pacific increased 43.2% at constant currency. Revenue in RoW was EUR 18.6 million, a growth of 38.7% on a constant currency basis, mainly thanks to increased purchases from stocking distributors in Latin America. From 2019, revenue in RoW increased 48.9% at constant currency.

GROSS PROFIT PERFORMANCE *

The Gross Profit was EUR 305.3 million compared to EUR 261.2 million in the previous year. The Gross Profit margin was equal to 69.8% compared to 71.9% in 2021. This change was primarily due to temporary geographic mix effects caused by hospital staffing shortages and significant longer than expected Covid impacts that lowered the contribution of USA and Australia on total volumes. Also, we experienced negative impact from currency development and price erosion.

ADJUSTED EBITDA MARGIN*

The Adjusted EBITDA amounted to EUR 120.4 million (EUR 107.1 million in 2021), corresponding to a margin of 27.6% (28.1% in constant currency) compared to 29.5% in 2021. The change of margin reflects primarily the reduction in Gross Profit, the negative currency development and inflationary pressure on transports and travels, partially compensated by the leverage on fixed costs from higher sales volumes.

ADJUSTED EBIT MARGIN*

The Adjusted EBIT amounted to EUR 68.9 million, 15.8% on revenues, compared to EUR 66.7 million, 18.4% on revenues, in 2021. The change of margin was due to the reduction of EBITDA and higher depreciation and amortisation, primarily from investment in instruments to sustain the growth and to cope with supply chain disruption, and from material R&D projects completed in 2021.

PROFIT FOR THE YEAR

The profit for the year was EUR 46.2 million, compared to EUR 51.5 million in 2021 which benefitted from non-recurring positive effects on income taxes of approximately EUR 4.5 million and lower financial costs of EUR 3.3 million.

SOLID BALANCE SHEET

Medacta's balance sheet remains robust, with total assets increasing to EUR 584.5 million and an equity ratio of 47.0% at the end of the reporting period (46.3% in 2021). The Adjusted Free Cash Flow generated in 2022 amounted to EUR 21.6 million (EUR 33.8 million in 2021), after significant investments in new instruments and development to sustain the future growth of Medacta.

* **Alternative Performance Measures:** This section and other sections of this Annual Report, contain certain financial measures of historical performance that are not defined or specified by IFRS, such as "constant currency", "EBITDA", "Adjusted EBITDA" or "CORE EBITDA", "Adjusted and Normalized EBITDA", "Free Cash Flow", "Adjusted Free Cash Flow", "Adjusted and Normalized Free Cash Flow", "Net Debt" and "Leverage". Reconciliation of these measures as well as "CORE" financial measures is provided in the "Alternative Performance Measures" (APM) section of this Annual Report on page 21. These Alternative Performance Measures (APM) should be regarded as complementary information to, and not as a substitute for the IFRS performance measures. For definitions of APM, together with reconciliations to the most directly reconcilable IFRS line items, please refer section headed "Alternative Performance Measures" of this Annual report.



Francesco Siccardi

Dr. Alberto Siccardi

PROPOSAL OF DISTRIBUTION

The Board of Directors, after assessing the strong economic and financial results of the year, decided to reward our shareholders through a distribution. Our Board Members are proposing to the Annual General Meeting the distribution of CHF 0.54 per share, half of it to be distributed as dividend out of available earnings and half of it to be distributed out of accumulated reserves from capital contribution.

OUTLOOK

In 2023, we will continue to prioritize our future growth through a further expansion of our international salesforce. In addition, we remain committed on product innovation across all our business lines. We are targeting revenue in the range of EUR 480 million to EUR 495 million at constant currency, and Adjusted EBITDA Margin largely in line with 2022, subject to any unforeseen events.

THANKS

Our sincere thanks go to all our employees for their contribution to the success of Medacta, and to our customers, partners and shareholders, for their ongoing support and confidence in our strategy and vision.

Sincerely,

Dr. Alberto Siccardi
Chairman of the Board of Directors

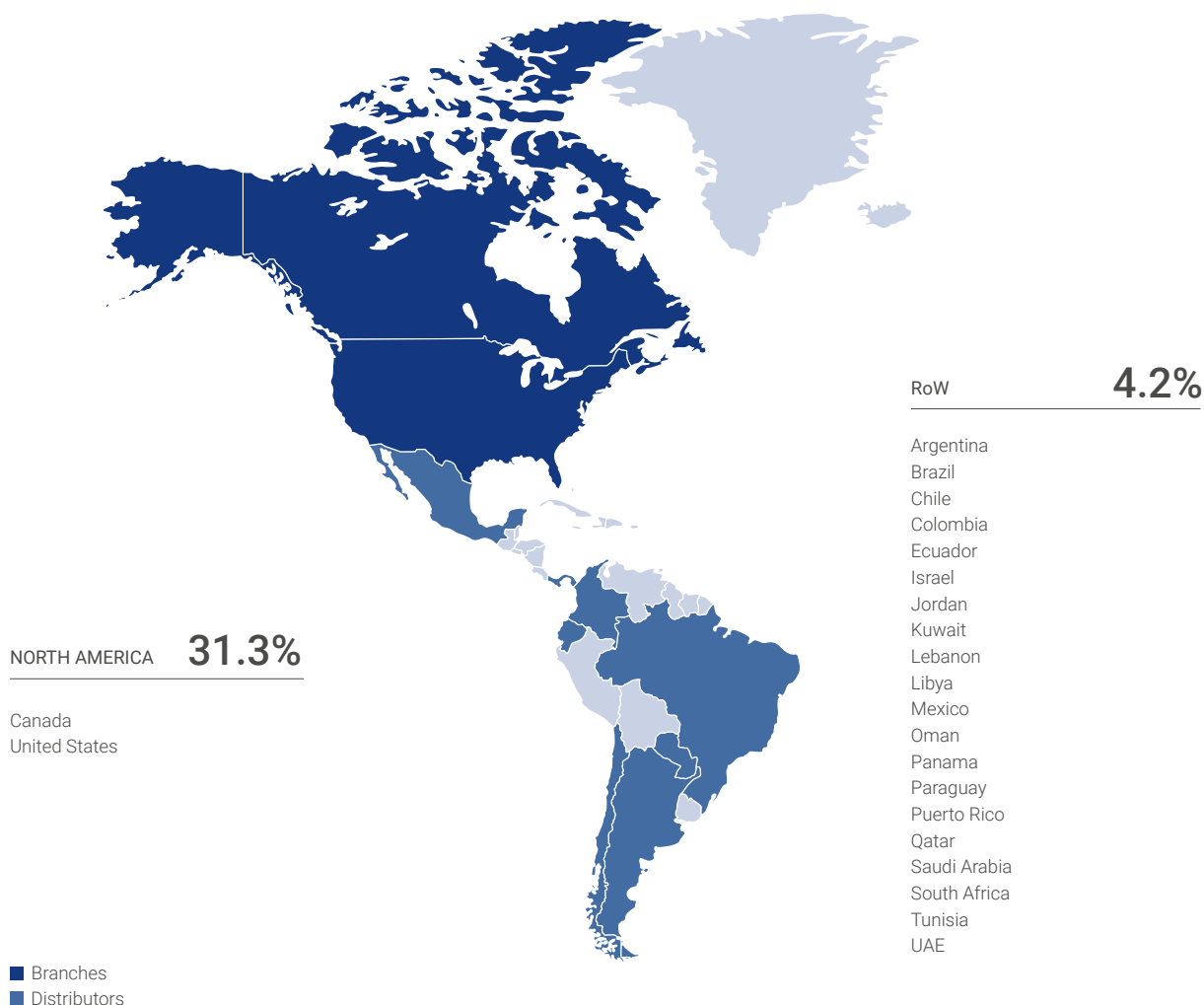
Francesco Siccardi
Chief Executive Officer

1. MANAGEMENT COMMENTARY*

CORPORATE INTRODUCTION

We are an international company specialized in the design, production and distribution of innovative orthopedic products and the development of accompanying surgical techniques for joint replacement, spine surgery, and sports medicine. Established in 1999 in Switzerland, we have grown considerably from our origins as a manufacturer of hip and knee replacement products into a global business. We are currently active in targeted regions of countries that together represent the majority of global orthopedic revenue, according to Orthoworld.

Today, our primary focus is on our high-volume Hip and Knee business lines (which generated 46.6% and 37.6%, respectively, of our reported revenue in 2022), complemented by our offerings in Shoulder, Spine and Sports Medicine ("Sportsmed") business lines. Our products and surgical techniques are supported by an extensive program of surgeon education and engagement initiatives, enabling our offerings to be used to the best advantage of both the patient and surgeon. All our products and surgical procedures are designed to improve patient well-being, facilitate the work of our surgeons and increase the sustainability of the healthcare system by improving efficiency while reducing healthcare costs. Our financial results confirm the validity of our business model and prove our success: in the year ending December 31, 2022 we achieved a 36.9% constant currency revenue growth from 2019, generating revenues amounting to Euro 437.1 million and an Adjusted EBITDA Margin of 27.6%, despite pandemic restrictions and hospital staffing shortages in some key markets.



* **Alternative Performance Measures:** This section and other sections of this Annual Report, contain certain financial measures of historical performance that are not defined or specified by IFRS, such as "constant currency", "EBITDA", "Adjusted EBITDA" or "CORE EBITDA", "Adjusted and Normalized EBITDA", "Free Cash Flow", "Adjusted Free Cash Flow", "Adjusted and Normalized Free Cash Flow", "Net Debt" and "Leverage". Reconciliation of these measures as well as "CORE" financial measures is provided in the "Alternative Performance Measures" (APM) section of this Annual Report on page 21. These Alternative Performance Measures (APM) should be regarded as complementary information to, and not as a substitute for the IFRS performance measures. For definitions of APM, together with reconciliations to the most directly reconcilable IFRS line items, please refer section headed "Alternative Performance Measures" of this Annual report.

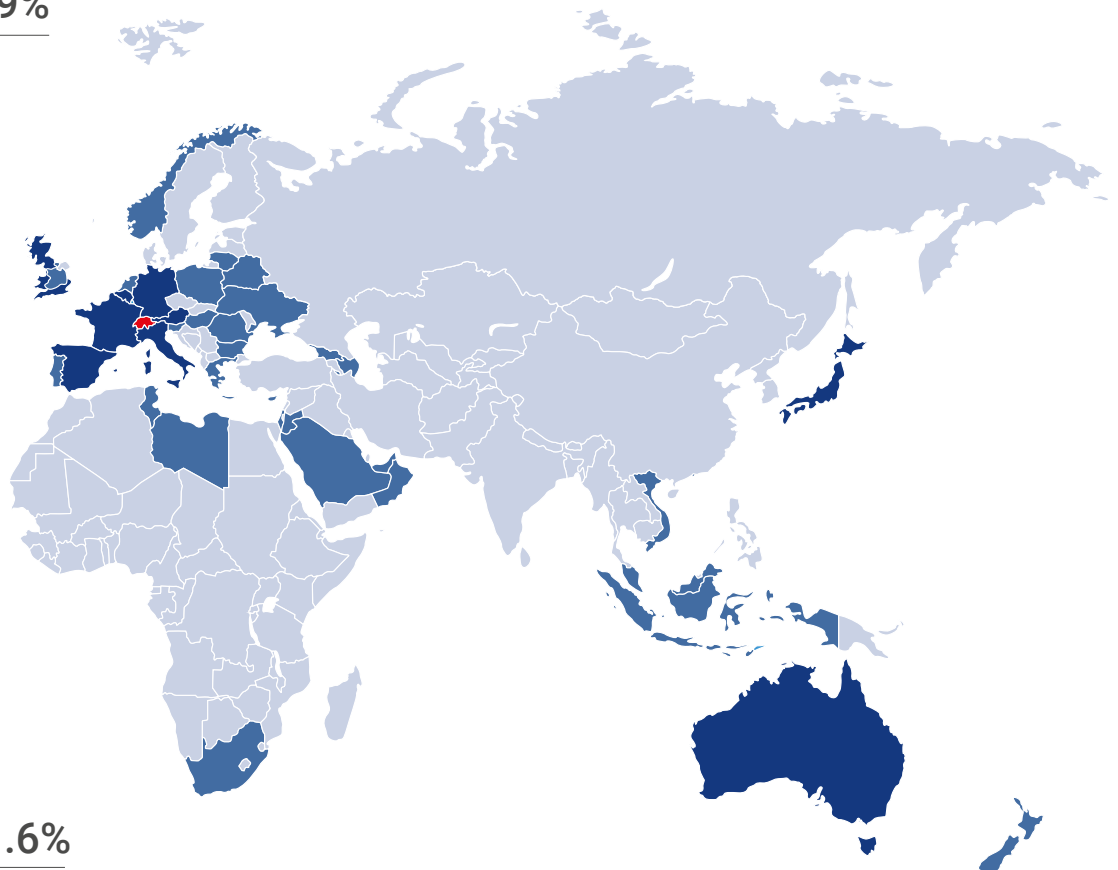
Our products and surgical techniques are characterized by innovation. We are a pioneer in developing new offerings on the basis of our minimally invasive surgical techniques, in particular our Anterior Minimally Invasive Surgery (AMIS) technique for hip replacements, which involves an anterior approach to the hip and has been carried out in over 500'000 cases worldwide since 2004.

We believe that education is an indispensable tool for transforming innovation into concrete benefits for patients, surgeons and healthcare systems. For our surgeon customers, we have introduced a range of training and technical support initiatives through our M.O.R.E. Institute. Since its founding in 2004, the M.O.R.E. Institute has become a global education platform tailored to the needs of the individual surgeon, with courses addressing each of our business lines and no limit on the number of interactions that customers can benefit from. Also, we introduced the MyPractice Development Plan to further support surgeons in their patient education efforts and improve patient understanding and experience of our products and techniques.

Our headquarters and manufacturing facilities are in Castel San Pietro and Rancate, Switzerland, where we have 837 employees in the aggregate as of December 31, 2022. Our sales organization operates in 12 countries through our local subsidiaries and we serve 41 additional countries through stocking distributors, allowing the Group to pursue its strategy in the attractive markets of Europe, North America and Asia Pacific, where we generated 42.9%, 31.3% and 21.6% of our revenue, respectively, for the year ending December 31, 2022. Our experienced salesforce enables us to achieve international adoption and deployment of our products and techniques.

EUROPE 42.9%

Austria
Azerbaijan
Belarus
Belgium
Bulgaria
Cyprus
France
Georgia
Germany
Greece
Hungary
Ireland
Italy
Lithuania
Netherlands
Norway
Poland
Portugal
Romania
Slovenia
Spain
Switzerland
Ukraine
United Kingdom



ASIA PACIFIC 21.6%

Australia
Indonesia
Japan
Malaysia
New Zealand
Taiwan
Vietnam

■ Branches
■ Distributors



BUSINESS PERFORMANCE

EXECUTIVE OVERVIEW

Our 2022 performance was impacted by the macroeconomic environment which is experiencing increased inflationary pressures in part due to global supply chain disruptions and by pandemic restrictions and hospital staffing labor shortages in some key markets. Medacta, despite the geopolitical tensions and volatile economic conditions was able to adapt, delivering a strong top-line growth and a resilient marginality level. Significant customer acquisition, salesforce expansion and successful product introduction resulted in 15.0% revenue growth at constant currency (20.4% reported) in 2022, with positive contributions from all business lines and geographies. In the first part of the year, this strong performance was limited primarily by the impact of Covid-19 and hospital staffing shortages especially in US and Australia.

Profitability was heavily affected by inflationary pressures and currency exchange rates developments. Our 2022 Adjusted EBITDA Margin decreased by 190 basis points from 29.5% in 2021 to 27.6% in 2022. The weakening of EUR against CHF and USD reduced our marginality by 50 basis points (Adjusted EBITDA Margin in constant currency was equal to 28.1%). Also, the remaining reduction in performance reflects primarily the reduction in Gross Profit due to negative price erosion and geographic mix and inflationary pressure on transportation and travel costs, all partially compensated by the leverage on fixed costs from higher sales volumes. The 2022 Adjusted Free Cash Flow amounted to Euro 21.6 million, 36.0% lower than 2021 mainly due to the material increase in investing activities on instruments to sustain the Group's growth. Based on the performance achieved in 2022, the Board of Directors decided to propose to the Annual General Meeting a distribution of CHF 0.54 per share.

Despite the ongoing challenging environment, Medacta delivered a strong performance. While some macroeconomic challenges may persist in 2023, we remain positive and will continue to invest in our people, products and cultural values to maintain this momentum of record-level results.

SALES VOLUME, PRICING AND GEOGRAPHICAL MIX

Our revenue increased by Euro 74.0 million, or 20.4%, from Euro 363.1 million in 2021 to Euro 437.1 million in 2022 on a reported currency basis (15.0% on a constant currency basis), with positive contribution from all business lines and geographies. Pricing pressure from governmental healthcare systems and geographic mix sales had a negative effect on our global selling price. In addition, our revenue growth was partially affected by a positive exchange rate tailwind equal to 5.4%. Specifically, during 2022 the EUR weakened against USD, CHF and AUD (i.e. among our largest currency exposures) positively impacting revenue translated into Euro from our operations in those countries and only partially compensated by the EUR strengthening against JPY.

We analyse sales by four geographies, Europe, North America, Asia Pacific and RoW and by the following product categories: Hip, Knee, Spine and Extremities.

(Million Euro)	31.12.2022	% of total	31.12.2021	% of total	Reported Growth	Constant Currency Growth
Hip	203.6	46.6%	179.3	49.4%	13.6%	9.2%
Knee	164.5	37.6%	131.1	36.1%	25.5%	18.4%
Extremities*	27.5	6.3%	19.0	5.2%	45.0%	38.8%
Spine	41.5	9.5%	33.8	9.3%	22.9%	19.2%
TOTAL REVENUES	437.1		363.1		20.4%	15.0%

* Extremities include Shoulder and Sportsmed revenues.

Revenue from our Hip products increased by Euro 24.3 million, or 13.6%, from Euro 179.3 million in 2021 to Euro 203.6 million in 2022 on a reported currency basis (9.2% on a constant currency basis); the growth was driven by the AMIS strategy supported by the roll-out of new products in the revision segment.

Revenue from our Knee offerings increased by Euro 33.4 million, or 25.5%, from Euro 131.1 million in 2021 to Euro 164.5 million in 2022 on a reported currency basis (18.4% on a constant currency basis). The good momentum was thanks to the continued customer acquisition on Kinematic Alignment, Efficiency single-use instruments, GMK Sphere platform and related MySolution technologies.

Our Extremities business line, which includes Shoulder and Sportsmed, reported an increase in revenue by Euro 8.5 million, or 45.0%, from Euro 19.0 million in 2021 to Euro 27.5 million in 2022 on a reported currency basis (38.8% on a constant currency basis). Extremities product offerings growth was driven by the acquisition of new customers through the completeness of the Medacta Shoulder System, supported by MyShoulder and NextAR MySolutions technologies.

Revenue from our Spine offerings increased by Euro 7.7 million, or 22.9%, from Euro 33.8 million in 2021 to Euro 41.5 million in 2022 on a reported currency basis (19.2% on a constant currency basis). Group full year Spine performance results are primarily driven by the expansion of MIS Platform and MySpine offering and in the second semester by the market introduction of NextAR Spine.

All the business lines benefitted from significant salesforce and marketing expansion.

We also monitor the development of our revenue in key geographies based on the location of our customers invoiced, as set forth in the table below.

(Million Euro)	31.12.2022	% of total	31.12.2021	% of total	Reported Growth	Constant Currency Growth
Europe	187.4	42.9%	156.4	43.1%	19.8%	17.6%
North America	136.8	31.3%	109.2	30.1%	25.2%	11.5%
Asia Pacific	94.4	21.6%	84.9	23.4%	11.1%	11.2%
RoW	18.6	4.2%	12.6	3.4%	48.1%	38.7%
TOTAL REVENUES	437.1		363.1		20.4%	15.0%

Revenue in Europe increased by Euro 30.9 million, or 19.8%, from Euro 156.4 million in 2021 to Euro 187.4 million in 2022 on a reported currency basis (positive 17.6% on a constant currency basis). The 2022 growth rate in Europe is in line with our reported Group-wide average revenue growth rate. All our European countries registered a solid growth, mostly driven by customer acquisition, together with normalization of surgical activities. As a percentage of our total revenue, sales generated in Europe were substantially in line with prior year at 42.9% in 2022 (compared to 43.1% in 2021).

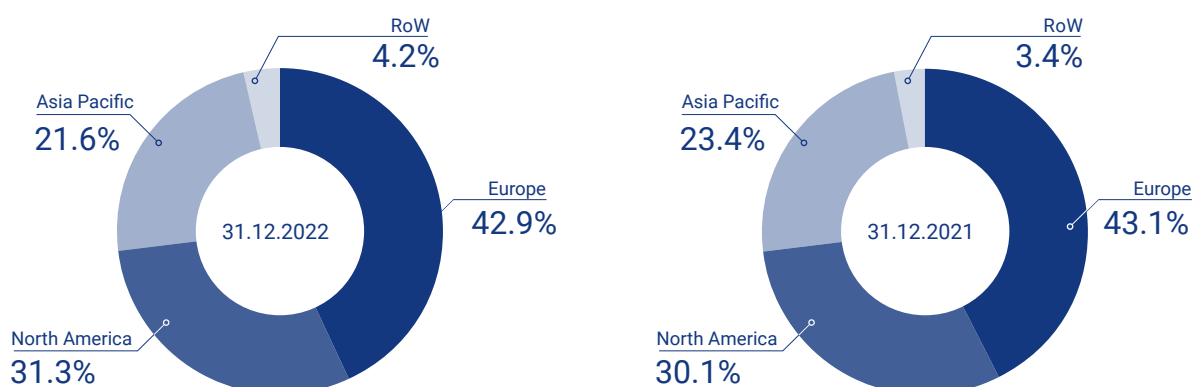
Revenue in North America increased by Euro 27.5 million, or 25.2%, from Euro 109.2 million in 2021 to Euro 136.8 million in 2022 on a reported currency basis (11.5% on a constant currency basis). The revenue generated in US, increased by Euro 27.6 million, or 25.5%, from Euro 108.5 million in 2021 to Euro 136.1 million in 2022 on a reported currency basis (11.7% on a constant currency basis). North America's performance was strong thanks to our customer acquisition strategy, limited only by hospital staffing shortages and Covid-19 restrictions, especially in the first months of the year. However, our reported revenue in North America was affected by a positive tailwind from the exchange rate. Specifically, during the course of 2022, the EUR weakened against the USD by an average of 12.4% (compared to the average 2021 exchange rate), positively impacting revenue translated into Euro. As a percentage of our total revenue, North America increased to 31.3% (compared to 30.1% in 2021).

Revenue in Asia Pacific increased by Euro 9.5 million, or 11.1%, from Euro 84.9 million in 2021 to Euro 94.4 million in 2022 on a reported currency basis (11.2% on a constant currency basis). This result was mainly driven by the attainment of new customers in Japan. Revenue growth in Australia was limited by significant longer than expected Covid impact, with recovery only in the last months of the year. Our reported revenue in Asia Pacific was partially offset by a negative headwind from the exchange rate. Specifically, in the course of 2022, the EUR strengthened against the JPY by an average 5.7% (compared to the average 2021 exchange rate), negatively impacting revenue translated into Euro from our Japanese operation. This negative translation impact was partially offset by the weakening of the EUR against the AUD by an average of 3.9% (compared to the average 2021 exchange rate). As a percentage of our total revenue, Asia Pacific decreased to 21.6% in 2022 (compared to 23.4% in 2021).

Revenue in RoW area increased by Euro 6.0 million, or 48.1%, from Euro 12.6 million in 2021 to Euro 18.6 million in 2022 on a reported currency basis (38.7% on a constant currency basis). This region is covered by third-party distributors that we engage in certain non-core markets. The strong growth in RoW is mainly sustained by the increase purchases from stocking distributors in Latin America. As a percentage of our total revenue, sales from RoW increased to 4.2% in 2022 (compared to 3.4% in 2021).

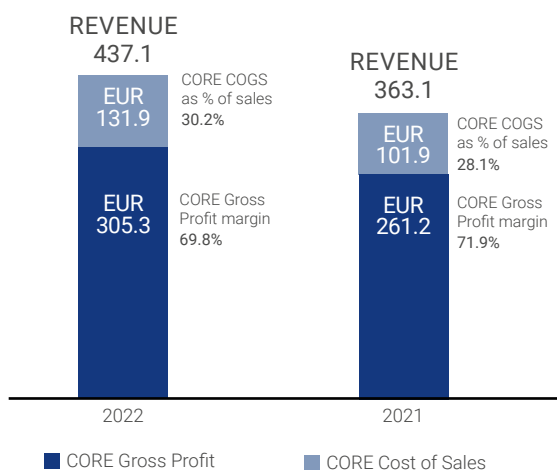


The graphics below provide an overview of our revenue by geography for the year December 31, 2022 and 2021.



COST OF SALES AND GROSS PROFIT

Our Gross Profit as a percentage of revenue decreased from 71.9% in 2021 to 69.8% in 2022. Gross Profit margin was materially affected by temporary geographic mix caused by hospital staffing shortages and significant longer than expected Covid impacts that lowered the contribution of USA and Australia on total volumes. Also, we experienced negative impact from currency development and price erosion.



CORE EBIT PERFORMANCE*

(Thousand Euro)	31.12.2022	31.12.2021	Delta	Delta %
CORE Research and Development expenses	(15'596)	(11'306)	(4'290)	37.9%
CORE Sales and Marketing expenses	(159'594)	(132'555)	(27'039)	20.4%
CORE General and Administrative expenses	(61'683)	(50'937)	(10'746)	21.1%
CORE Other income	1'570	1'536	34	2.2%
CORE Other expenses	(1'013)	(1'301)	288	-22.1%
CORE OPERATING EXPENSES (OPEX)	(236'316)	(194'563)	(41'753)	21.5%
CORE OPERATING PROFIT (EBIT)	68'940	66'684	2'256	3.4%

* For a reconciliation of our CORE results to our reported IFRS figures, please see the "Alternative Performance Measures" section of this report.

CORE Research and development expenses

Expensed research and development costs are mainly related to base research, maintenance projects, depreciation and amortisation expenses (including impairments), business expenses and other non-capitalized expenses. During 2022, we continued investing in research and development, and in particular in certain long-term research initiatives, to support our strategy of broadening our product portfolio. Our CORE research and development costs that were expensed increased by Euro 4.3 million, or 37.9%, from Euro (11.3) million in 2021 to Euro (15.6) million in 2022.

In 2022, depreciation and impairment increased by Euro 2.8 million, following the completion of key projects before the new European Medical Devices Regulation fully entered into force in the first semester 2021. Currency development had a negative impact in our operational costs by Euro 1.0 million, primarily due to CHF which strengthened by 7.6% from prior period.

CORE Sales and marketing expenses

Our CORE sales and marketing expenses increased by Euro 27.0 million, or 20.4%, from Euro (132.6) million in 2021 to Euro (159.6) million in 2022. In 2022, CORE Sales and marketing expenses as a percentage of total revenue remained stable at 36.5%.

Wages and salaries, depreciation and training costs increased but at a lower pace than revenue contributing to an increase in EBIT margin totally offset by the increased number of travels, education and congresses, inflationary impact on transportation costs and a negative contribution in currency development. In 2022, we materially invested on medical education with more than 2'600 surgeons attending educational events in 2022. We also continued our commitment on the M.O.R.E. in Touch program which offers surgeons valuable online resources to deepen their knowledge and discover more about our solutions. Currency development had a negative impact of 0.5% in our operational costs, primarily due to USD, CHF and AUD which strengthened respectively by 12.4%, 7.6% and 3.9% from prior period.

CORE General and administrative expenses

Our CORE general and administrative expenses increased by Euro 10.7 million, or 21.1%, from Euro (50.9) million in 2021 to Euro (61.7) million in 2022. CORE general and administrative expenses as a percentage of total revenue increased to 14.1% in 2022 from 14.0% in 2021. This result was primarily driven by our expansion in rentals, office equipment, travels and negative currency development partially offset by the leverage in wages and salaries, depreciation and other fixed costs. Currency development had a negative impact of 0.2% in our operational costs, primarily due to USD, CHF and AUD which strengthened respectively by 12.4%, 7.6% and 3.9% from prior period.

CORE Other income and expenses

Our CORE other income decreased by Euro 0.1 million, or 2.2%, from Euro 1.5 million in 2021 to Euro 1.6 million in 2022. CORE other income as a percentage of total revenue remained largely stable at 0.4%. Our other expenses decreased by Euro 0.3 million, from Euro (1.3) million in 2021 to Euro (1.0) million in 2022 largely as a result of lower write-offs and loss on sale of tangible assets.

FINANCIAL INCOME AND COSTS

Our financial income increased by Euro 0.5 million, or 22.2%, from Euro 2.3 million in 2021 to Euro 2.8 million in 2022, mainly due to the increase of unrealized exchange gain in the amount of Euro 0.9 million. Our financial costs increased by Euro 3.9 million, or 68.4%, from Euro 5.6 million in 2021 to Euro 9.5 million in 2022 primarily as a result of both increased exchange losses for Euro 3.6 million and increased interest and bank charges for Euro 0.4 million.

INCOME TAXES

The Group effective tax rate increased to 15.6% from 7.1% in 2021. The 2022 total reported tax is equal to Euro 8.5 million, increased by Euro 4.6 million from Euro 3.9 million in the previous year. The Group's average tax rate before deductions and one-off effects increased from 16.8% in 2021 to 19.1% in 2022, negatively affected by a change in the profit mix. This effect is the consequence of the increasing profitability of Medacta USA compared to prior period, also due to the impact of the provision accrued in 2021 on the MicroPort litigation, which resulted in a lower consolidated tax rate due to the recognition of a deferred tax asset on losses generated by the entity.

Medacta International SA benefits, since 2020, from a special tax deduction from taxable profits for qualifying profits arising from patent rights ("Patent Box deduction"), which has a positive impact in the full year 2022 amounting around Euro 1.7 million (around Euro 3.5 million as of December 31, 2021), corresponding to a positive impact on the effective tax rate for 3.2% (6.3% as of December 31, 2021).



ADJUSTED FREE CASH FLOW

The Adjusted Free Cash Flow decreased from Euro 33.8 million in 2021 to Euro 21.6 million in 2022 primarily as a result of the surge in investments in surgical instruments to sustain the Group's growth.

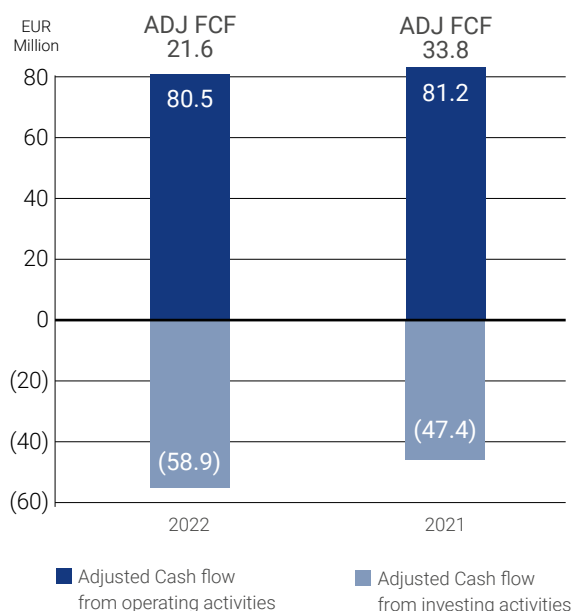
Adjusted for abnormal transactions, 2022 cash flow from operating activities was equal to around Euro 80.5 million, compared to Euro 81.2 million as of December 31, 2021. The Adjusted cash flow from operating activities is composed of the reported cash flow from operating activities equal to Euro 73.5 million, adjusted by non-recurring legal costs for Euro 1.2 million, the 2022 Conformis, RSB and Microport settlement payments of Euro 5.1 million and extraordinary MDR payment of Euro 0.6 million. The 2022 result is substantially in line with prior year mainly driven by earnings before tax only Euro 0.7 million lower than 2021.

Reported cash flow from investing activities as of December 31, 2022 amounting to Euro 65.1 million mainly reflects net investments in surgical instruments, for Euro 44.9 million and in the research and development of new implants and instruments, for Euro 6.9 million. In 2022 cash flow from investing activities has been adjusted for the investments made to finalize the new offices in our Rancate site for approximately Euro 1.2 million, for the land acquisition in Castel San Pietro for Euro 4.8 million to increase our production area by about 5'300 square meters and for the investment made to acquire Levante Medica for Euro 0.2 million. The previous year Adjusted cash flow from investing activities equal to Euro 47.4 million was adjusted by the cash paid to create new offices in our Rancate site for approximately Euro 4.6 million. The 2022 increase in Adjusted cash flow from investing activities is substantially driven by the material surge in investments on surgical instruments which increased by Euro 9.9 million.

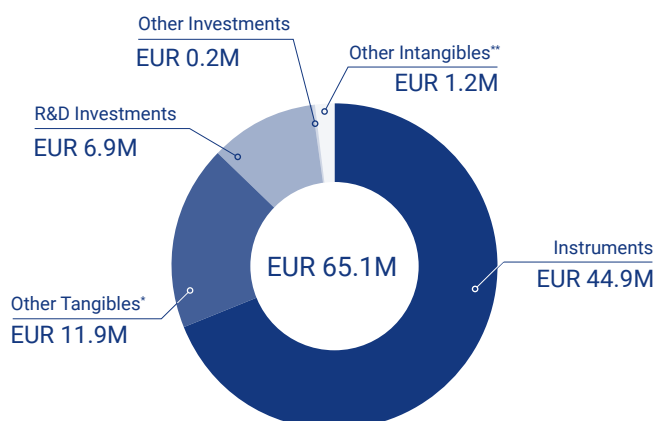
CAPITAL STRUCTURE

Group Net Debt in 2022 was equal to Euro 111.6 million, compared to Euro 93.6 million as of December 31, 2021. In 2022, the Group amended some of the credit agreements, changing the payment terms of existing bank loans and credit facilities, prolonging the payments originally due in 2022 until 2024 to a new amortisation schedule that extends the terms until 2028. This renegotiation is reflected in the classification within current or non-current financial liabilities in the Consolidated Statement of Financial Position as of December 31, 2022: Euro 7.1 million (Euro 64.5 million in 2021) current and Euro 137.6 million non-current (Euro 49.6 million in 2021).

Despite the increase in Net Debt, our 2022 leverage ratio equal to 0.93, is overall in line with prior period (0.87 in 2021) and below our management targeted ceiling of 1.0.

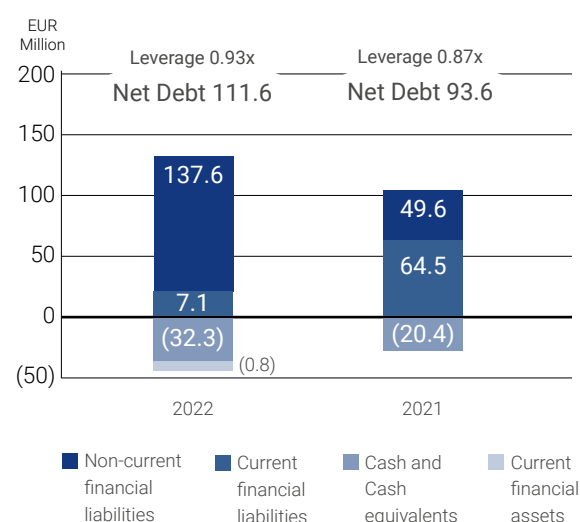


2022 CASH FLOW FROM INVESTING ACTIVITIES



* Other Tangibles includes: Land, Buildings, Plants & Machinery, Other fixture and fittings, tool and equipment and Assets under construction.

** Other Intangibles includes Customer lists, trademarks, softwares and other.



1.1 ALTERNATIVE PERFORMANCE MEASURES

The financial information provided in the selected sections of the 2022 Annual Report, including “Highlights year 2022”, “Letter to Shareholders”, “Management Commentary” and elsewhere in this document, include certain Alternative Performance Measures (APMs) which are not accounting measures defined by IFRS. The Group believes that investor understanding of Medacta's performance is enhanced by disclosing core measures of performance (i.e. CORE or Adjusted), since they exclude items which can vary significantly from year to year. Therefore, the CORE results exclude effects related, for example, to extraordinary legal expenses, release of prior-year provisions, one-time tax duty and other one-time items that may vary significantly over periods.

These APMs should not be considered as alternatives to the Group's consolidated financial results based on IFRS. These APMs may not be comparable to similarly titled measures disclosed by other companies. The definitions of the main KPI disclosed in the Annual Report are reported at the end of this section.

CORE RESULTS

The following tables provide the reconciliation of the CORE results with the Consolidated Financial Statements as of December 31, 2022 and 2021. In addition to the CORE ratios we did not identify any normalization for the December 31, 2022 results. Management assessed that due to the pervasive nature of Covid-19, it would not be appropriate to include new APMs as it might not provide reliable or useful information to the market.

2022 CORE RESULTS RECONCILIATION

December 31, 2022 (Thousand Euro)	IFRS	Provision on Litigations ¹	Legal costs ²	MDR costs ³	Italian Payback ⁴	CORE ⁵
Revenues	437'122	-	-	-	-	437'122
Cost of Sales	(131'866)	-	-	-	-	(131'866)
GROSS PROFIT	305'256	-	-	-	-	305'256
Research and Development expenses	(16'223)	-	-	627	-	(15'596)
Sales and Marketing expenses	(159'594)	-	-	-	-	(159'594)
General and Administrative expenses	(65'447)	2'540	1'224	-	-	(61'683)
Other income	1'570	-	-	-	-	1'570
Other expenses	(4'098)	-	-	-	3'085	(1'013)
OPERATING PROFIT (EBIT)	61'464	2'540	1'224	627	3'085	68'940
OPERATING PROFIT (EBIT)	61'464	2'540	1'224	627	3'085	68'940
Depreciation and Amortisation	51'510	-	-	-	-	51'510
EBITDA	112'974	2'540	1'224	627	3'085	120'450
EBITDA MARGIN	25.8%					27.6%

[1] Provision on litigations are related to the accrual for the patent matters with Conformis (Euro 2'208 thousand) and RSB (Euro 332 thousand), both settled in 2022 (see Note 6.25 "Litigations").

[2] Legal costs incurred in 2022 are related to the extraordinary expenses incurred by the Group on litigations, refer to Note 6.25 "Litigations".

[3] MDR costs in 2022 refer to the extraordinary expenses incurred by the Group on the transition to comply the new regulation, refer to Note 6.1 "Significant events and transactions" paragraph "New EU regulation on Medical Devices (MDR)".

[4] Italian Payback is related to the provision accrued in 2022 after the introduction of a payback scheme in Italy (see Note 6.25 "Litigations", paragraph "Italian payback scheme litigation").

[5] References to "Adjusted" are the equivalent to "CORE" references (i.e. Adjusted EBITDA and CORE EBITDA are interchangeable).

2021 CORE RESULTS RECONCILIATION

December 31, 2021
(Thousand Euro)

	IFRS	Provision on Litigations ¹	Legal costs ²	CORE ³
Revenues	363'126	-	-	363'126
Cost of Sales	(101'879)	-	-	(101'879)
GROSS PROFIT	261'247	-	-	261'247
Research and Development expenses	(11'306)	-	-	(11'306)
Sales and Marketing expenses	(132'555)	-	-	(132'555)
General and Administrative expenses	(58'844)	4'941	2'966	(50'937)
Other income	1'536	-	-	1'536
Other expenses	(1'301)	-	-	(1'301)
OPERATING PROFIT (EBIT)	58'777	4'941	2'966	66'684
OPERATING PROFIT (EBIT)	58'777	4'941	2'966	66'684
Depreciation and Amortisation	40'436	-	-	40'436
EBITDA	99'213	4'941	2'966	107'120
EBITDA MARGIN	27.3%			29.5%

[1] Provision on litigations are mainly related to the accrual for MicroPort.

[2] Legal costs incurred in 2021 are related to the extraordinary expenses incurred by the Group on litigations.

[3] References to "Adjusted" are the equivalent to "CORE" references (i.e. Adjusted EBITDA and CORE EBITDA are interchangeable).

ADJUSTED FREE CASH FLOW RECONCILIATION

(Thousand Euro)

	31.12.2022	31.12.2021
CASH FLOW FROM OPERATING ACTIVITIES (IFRS BASIS IN ACCORDANCE WITH IAS 7)	73'510	54'061
Adjustments for:		
Legal costs	1'224	2'966
Settlement of legal claims ¹	5'147	5'922
Incremental taxes paid in 2021 ²	-	18'254
Extraordinary MDR Costs ³	627	
ADJUSTED CASH FLOW FROM OPERATING ACTIVITIES	80'508	81'203
CASH FLOW FROM INVESTING ACTIVITIES (IFRS BASIS IN ACCORDANCE WITH IAS 7)	(65'106)	(52'042)
Adjustments for:		
Rancate investments ⁴	1'247	4'603
Levante Medica asset purchase acquisition ⁵	220	
Land acquisition for plant expansion ⁶	4'753	
ADJUSTED CASH FLOW FROM INVESTING ACTIVITIES	(58'886)	(47'439)
ADJUSTED FREE CASH FLOW	21'622	33'764

[1] Settlement of legal claims is related to the payment for the settlement agreements with MicroPort, amounting to Euro 1'901 thousand in 2022 (Euro 5'922 thousand in 2021); Conformis (Euro 2'914 thousand) and RSB (Euro 332 thousand).

[2] In 2021 Medacta International SA paid income taxes for a total amount of CHF 24'846 thousand (Euro 22'990 thousand) out of which CHF 19'728 thousand (Euro 18'254 thousand) are related to the settlement of 2017 and 2018 fiscal years.

[3] EU Medical Devices Regulation (MDR).

[4] In 2022, Medacta invested Euro 1'247 thousand (4'603 thousand in 2021) in creating new offices in our Rancate site.

[5] In 2022, Medacta paid out Euro 220 thousand for the asset acquisition of Levante Medica 2008 S.L. completed in 2021.

[6] In 2022, Medacta invested Euro 4'753 thousand for strategic purchase of a land that will be destined for Castel San Pietro manufacturing plant expansion.

KPI DEFINITIONS

CORE

In accordance with the directives of the Swiss Stock Exchange, the Group adopted the reporting of Alternative Performance Measures (APM), which facilitates the assessment of the underlying business performance but may differ from IFRS reported figures. The 'CORE' (i.e. Adjusted) figures used in this document exclude extraordinary legal expenses, legal provisions, release of prior-year provisions, one-time tax duty and other one-time items that may vary significantly over periods. A reconciliation table of the reported and CORE ratios with additional descriptions is provided on paragraph 1.1 "Alternative Performance Measures" of this report.

EBITDA

EBITDA is a non-IFRS measure that represents profit or loss for the year before finance costs, finance income, income taxes, depreciation and amortisation. EBITDA margin is defined as EBITDA divided by revenues, expressed as a percentage. We define EBITDA as profit or loss for the year before net interest expense, income taxes, depreciation and amortisation.

ADJUSTED EBITDA (I.E., CORE EBITDA)

Represents EBITDA before additional specific items that are considered to hinder comparison of the trading performance of the Group's businesses either year-on-year or with other businesses. Management considers Adjusted EBITDA to be a key measure of financial performance and believes that this measure provides additional useful information for prospective investors on performance and is consistent with how the business performance is measured internally. Adjusted EBITDA Margin is calculated as Adjusted EBITDA divided by revenue, expressed as a percentage.

CONSTANT CURRENCY

The Group has presented certain information that it refers to as "constant currency", which is a non-IFRS financial measure and represents the total change between periods excluding the effect of changes in foreign currency exchange rates. The Group believes that the reconciliations of changes in constant currency provide useful supplementary information to investors in light of fluctuations in foreign currency exchange rates. Furthermore, the Group believes that constant currency measures provide additional useful information on the Group's operational performance and is consistent with how the business performance is measured internally. In calculating constant currency figures, the current period amount is translated at the foreign currency exchange rate used for the previous period to get a more comparable amount.

OPEX

Opex include the sum of Research and Development expenses, Sales and Marketing expenses, General and Administrative expenses, Other income and expenses. In the Management Report commentary "CORE" operative expenses are adjusted for specific items (reconciled in the tables above) in order to enhance the understanding of the Group's performance.

EQUITY RATIO

The equity ratio is calculated dividing Total Equity by Total Assets.

NET TRADE WORKING CAPITAL

Net Trade Working Capital is capital invested in the Group's operating activities. The variation in Net Trade Working Capital is an indicator of the operational efficiency of the Group. Net Trade Working Capital is the sum of trade receivables, trade payables and inventory.

FREE CASH FLOW

Free Cash Flow is used to assess the Group's ability to generate the cash needed to conduct and maintain our operations. It also provides an indication of the Group's ability to generate cash to fund dividend payments, repay debt and to undertake merger and acquisition activities. Free Cash Flow (post investing activities) is calculated as IFRS cash flow from operating activities plus IFRS cash flow from investing activities. The Adjusted Free Cash Flow is calculated as Free Cash Flow adjusted for certain non-recurring items that management believes are not indicative of operational performance.

NET DEBT

Net Debt is used as a metric to indicate the overall debt situation of the Group and is measured by netting the non-current and current financial liabilities with our cash and cash equivalents and current financial assets.

LEVERAGE

Leverage ratio is used to assess our ability to meet our financial obligations and is calculated as Net Debt divided by Adjusted EBITDA.

2. MEDACTA AT A GLANCE

Medacta is an international company specializing in the design, production, and distribution of innovative orthopedic products, as well as in the development of accompanying surgical techniques. Established in 1999 in Switzerland, Medacta is active in joint replacement, spine surgery, and sports medicine. Medacta is committed to improving the care and well-being of patients and maintains a strong focus on healthcare sustainability. Medacta's innovation, forged by close collaboration with surgeon experts globally, began with minimally invasive surgical techniques and has evolved into personalized solutions for every patient. Through the M.O.R.E. Institute, Medacta supports surgeons with a comprehensive and tailored program dedicated to the advancement of medical education. Medacta is headquartered in Castel San Pietro, Switzerland, and operates in over 50 countries.

2.1 VISION

Our vision is to improve the care and well-being of orthopedic and spine surgery patients worldwide through our experience and passion. With our surgical innovations and medical education programs, we strive to enable a healthy and active lifestyle for every patient, strongly focusing on healthcare sustainability.

2.2 MISSION

Our mission is to transform the patient experience by developing advanced surgical approaches, implants, and instruments through responsible innovation. With this goal in mind, we focus on increasing our collaboration with surgeons and universities worldwide, constantly investing in medical education, innovative technologies, and personalized solutions.

3. MEDACTA'S UNIQUE HISTORY: IT IS FOUNDED BY A PATIENT

Medacta was established in 1999 by Alberto Siccaldi, our founder, chairman, and former CEO, whose own journey as a patient convinced him of the importance of pioneering a new approach to joint replacement. In 2000, we inaugurated our headquarters, manufacturing facility, and research and development site at Castel San Pietro, Switzerland. During the early years, we primarily sold total knee and total hip replacement implants in selected European markets. The first hip replacement procedure using our innovative AMIS technique was carried out in 2004, and since then it has been performed in over 500'000 cases.

In 2004, we created the M.O.R.E. Institute to educate and engage with our customer surgeons, initially focusing on optimally performing the AMIS technique. Following the initial success of our Hip business line, the first knee replacement using our GMK Primary System was performed in 2006. Subsequently, we expanded our efforts to develop personalized patient solutions, and the first knee surgery using our patient-matched MySolutions technology took place in 2009. A few years later, we launched our GMK Sphere, a total knee implant designed to deliver maximum functional stability, which has since been implanted in more than 150'000 cases, achieving ten years of successful clinical experience.

In 2009, we expanded into the spine segment of the orthopedics market. Our team of engineers collaborated with international expert surgeons to develop specific and innovative solutions for the treatment of various degenerative spine conditions and spine deformities. In 2010, the first of our spine products were implanted in

the US. To complete our portfolio, we invested in a new Sports medicine business line in 2016.

Our engineers, together with an international team of surgeons specializing in sports medicine, developed specific and innovative products for treating ligament, tendon, and muscular injuries of the knee, hip, and shoulder.

In April 2019, the year of our 20th anniversary, we became a publicly listed company, officially entering the SIX Swiss Exchange. The 9th M.O.R.E. International Symposium that we held in Lugano, Switzerland, and welcomed 1'500 attendees from all over the world, was the perfect occasion to celebrate these milestones.

In 2020, our commitment to developing highly innovative solutions led us to receive FDA-clearance for our NextAR Knee, the first FDA-cleared augmented reality surgical application for total knee replacement.

In 2022, we celebrated an important milestone by opening the doors of our new offices in Rancate. In addition, we surpassed 1'900 NextAR surgeries performed worldwide, driven by the full market release of the NextAR Shoulder application in May. In June, NextAR further enlarged its worldwide outreach with approval in Japan. Moreover, in October, the NextAR Spine application was awarded the 2022 Spine Technology Award from Orthopedics This Week, the second Medacta product to receive this prestigious honor after MySpine Platform, patient-matched technology.



MEDACTA OPENS NEW OFFICES IN RANCATE, SWITZERLAND

We celebrated an important milestone by opening the doors of our new offices in Rancate on 18 May 2022. With an expansion of 2'100 square meters supporting the creation of new jobs, the new building complements and works in complete synergy with the Castel San Pietro headquarters: two hubs of cutting-edge technology which continue to innovate responsibly for the benefit of patients, medical professionals, healthcare systems and the local community. To support our constant growth, we have also initiated a new project in Ticino that includes two major expansions. In Castel San Pietro, the production area will be expanded by about 5'300 square meters, bringing the total area to 15'300 square meters, with an increase of more than 50 percent in total area. The current 12'000 square meters in Rancate will be further expanded with a new area of about 9'500 square meters, dedicated to both offices and production, with an increase of almost 80% in operational space. In total, Medacta plants in Ticino are foreseen to cover more than 36'800 square meters. These plans will be implemented while always maintaining a strong focus on sustainability.



It is with great satisfaction that we inaugurate this new building. A new step forward to boost our growth and reinforce the recent positive results achieved despite the limitations due to the pandemic. Our strategy, based on the three pillars of innovation, medical education, and healthcare sustainability, represents the foundation of our success, and drives our plans for future expansion.

Francesco Siccardi,
CEO of Medacta



I recall with affection the first day of Medacta in 1999. Medacta was born and keeps growing in Ticino, where we plan further local investments in the future as well. Today's event marks another date to highlight in the evolution of our company's growth, locally and globally.

Dr. Alberto Siccardi,
President of the Board
of Directors of Medacta



4. MEDACTA PEOPLE AND CULTURE

HUMAN CAPITAL AT THE HEART OF OUR BUSINESS

Medacta's constantly expanding organization requires a business structure designed to provide resiliency over the years across business cycles. Therefore, one of the most important factors is our human capital, which requires a dedicated people-centered strategy. Our team, which has surpassed the milestone of 1'500 members worldwide this year, is the driving force behind our company, inspiring innovation and bringing together diverse experiences, perspectives, and ideas to improve the patient experience. Human capital in Medacta is made up of an ecosystem of talented people who build and sustain the authenticity, competitiveness, and sustainability of our company. The "Medacta people ecosystem" combines two different groups of people that operate in constant synergy with each other: "company employees" and "expert surgeons."

COMPANY EMPLOYEES

Inspired by a common vision to improve care for patients and from the value of the #beMedacta culture, our people are differentiated by high levels of commitment, ownership, and collaborative attitude in their job, whatever it is. Everyone contributes to Medacta's growth, bringing motivation, skills, enthusiasm, and experience.

The company's performance has been positively impacted by our employees willingness to engage with each other in teams and workgroups, promoting continuous multidisciplinary communication and collaboration across the organization. Medacta's employees are our competitive edge, and ensuring their engagement is essential to success. Therefore, we implemented several initiatives and maintained a constant dialogue with our employees. In 2022, the CEO periodically met our employees worldwide or on a local basis to personally discuss new ideas and assess improvement processes, working closely in conjunction with our Human Resources to ensure some of those ideas become a reality.



Our human capital, besides our employees, also includes the international new hires who join our company each year, bringing know-how, insights, and experiences from other organizations. Being one of the fastest-growing orthopedic businesses globally, we have an extremely competitive talent attraction strategy focused on creating career opportunities for the industry's talents which sets us apart from our competitors. As part of a comprehensive strategy, Medacta also leverages its increasing employer value proposition, a recruitment marketing campaign, and a strong organizational culture. To support our rapid growth, we are committed to continuously developing and retaining new talent, establishing a dynamic and flexible workplace where they can grow professionally, challenge themselves, make a difference, and prosper, always inspired by our values and encouraged by our team.



EXPERT SURGEONS

Moreover, a crucial part of our human capital is represented by our network of expert surgeons worldwide, with whom we collaborate on a regular basis and we consider an extension of our official team. This group of internationally recognized surgeons continues to grow and contributes to inspiring and guiding new surgeons in adopting our innovative solutions, technologies, and products. Each new surgeon brings experience, knowledge, and ideas that may contribute to our innovation, enabling us to evolve our solutions with the aim of improving patients' outcomes.



A STRONG IDENTITY SUSTAINED BY A SOLID CULTURE

Medacta is dedicated to securing and managing our human capital by means of a strong identity sustained by a solid culture, always being able to count on the right people with the right competencies at the right time.

MEDACTA IDENTITY

Medacta's strong identity is expressed in different elements representing the company worldwide, but what makes the company unique and different from all others in the market is its history. In fact, Medacta is the only orthopedic company founded by a patient. Our founder's passion, courage, and trust have been translated into the company's vision and culture, which help to foster a feeling of belonging and inspire each person to be committed to consistently giving their best efforts.

MEDACTA CULTURE

At Medacta, we always strive to strengthen our #beMedacta culture, a key to sustainable success, actively contributing to our growth. We want to ensure that all our employees understand and demonstrate our culture and values to build and sustain our continuous improvement process successfully. We believe it is of the utmost importance that these values are kept alive and, above all, transferred to all the people who have joined and will join our company in the coming years.



INTEGRITY

Always be honest and upright

We do all our business in an honorable manner, knowing that there is no right way to do the wrong thing



TRUST AND ACCOUNTABILITY

See it, Own it, Solve it, Do it

We believe in people, aware that they are the engine of our success



RESULTS ORIENTATION

Know your goal, focus on it

We work to exceed our goals



TEAM WORK

Leverage collective genius

Great things in business are never done by one person



LOYALTY

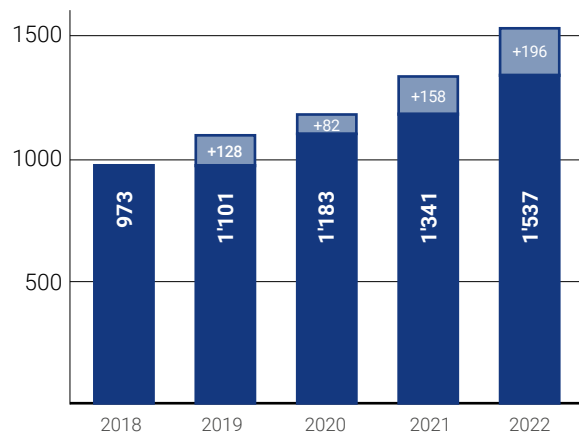
Be Medacta

We are proud to be part of Medacta

Our values and their evaluation are integrated into our talent acquisition process, as well as our onboarding activities, Code of Business Conduct and Ethics, and within our performance and talent management processes.

HUMAN RESOURCES ORGANIZATION

Our Corporate Human Resources (HR) Function is responsible for the centralized control of all global HR policy and process formulation and has developed an HR framework setting out the strategic priorities that will support the business needs today and in the future. This was necessary considering that our company is experiencing a tremendous expansion, which is also evident in the number of employees, who have increased by more than 50% over the past four years.



• EMPLOYER VALUE PROPOSITION

Developing our employer brand and values and increasing the overall employee experience that will enable us to attract and retain our people.

• TALENT ACQUISITION

Enhancing hiring processes and systems that will enable us to improve the speed, quality and effectiveness of attracting and hiring people.

• TOTAL REWARDS

Developing comprehensive & competitive compensation strategies and recognition schemes enabling us to hire and retain.

• TALENT & PERFORMANCE MANAGEMENT

Building meaningful, robust processes and tools that will manage our human capital effectively today and in the future.

• LEARNING & DEVELOPMENT

Establishing a culture of learning and growth for our people which is aligned to our employees and organizational needs.

5. MEDACTA GROWTH CAPEX MODEL

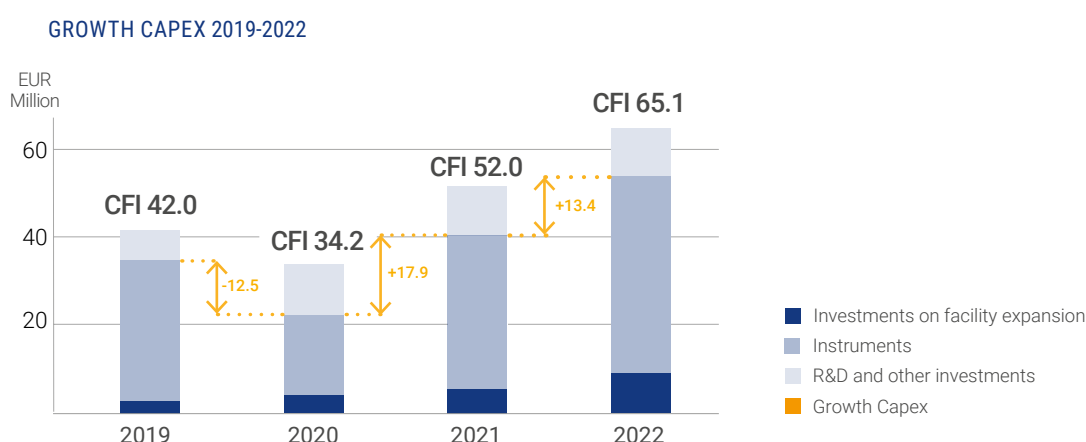
GROWTH CAPEX MODEL

Within our strategic planning process, we annually assess the amount of CAPEX needed to help foster the planned growth.

A secure and steadily improving supply chain is essential for a high level of customer service and quality performance. To facilitate this, two primary investment categories have been strategically utilized:

- **Instrument sets** – to serve new customers and achieve the planned sales volumes.
- **Plant expansions** – to increase manufacturing capacity aligned to the growth strategy.

Here below we report the cash flow for investing activities (CFI) from 2019 to 2022, broken down by facility expansions (e.g. land & buildings, plants & machinery, and assets under construction), instrument sets and R&D and other investments, showing the CAPEX change year-over-year:



INSTRUMENT SETS

Surgical instruments are key components of the orthopedic industry. They are reusable devices which represent major investments for orthopedic companies. Surgical instruments for orthopedic procedures, primarily made from medical-grade stainless steel, involve a wide array of configurations to support all clinical needs and surgeon preferences. The standard cost for an instrument set can range from Euro 30 to 50 thousand depending on the specific surgical requirements and level of procedural complexity.



The Medacta instrument distribution model is primarily a consignment program. To ensure that our instruments are optimally employed, the usage rate of each set is monitored on a monthly basis.

Our CAPEX model for instrument growth is funded by the following two elements:

- **Organic growth materially above market** - Medacta growth in volume is mostly due to a significant increase of our customer acquisition. Supplying new customers requires a flow of instrumentation that is significantly above the volumes needed to maintain the existing pipeline. On average, supplying new customers with at least one kit could require an investment ranging from Euro 30 to 50 thousand, based on the business lines involved and the specific needs of the new customers.
- **Timing difference** - from a supply chain perspective an up-front investment in instrument sets is essential to enable implant sales. The timing of the revenue generation ramp could range from 6 to 12 months, based on several factors which depend mainly on the respective surgical planning.

FACILITY EXPANSION

To increase our manufacturing capacity and strengthen our supply chain, we are steadily acquiring new equipment and projecting facility expansions to maximize our assets.

Medacta currently owns two hubs of cutting-edge technology. The first corporate headquarters and manufacturing site was established in 2000, in Castel San Pietro, Switzerland. In 2018, we acquired a new site in Rancate, Switzerland, with an initial investment of approximately Euro 25 million. Today our manufacturing facilities produce approximately 1.0 million implants per year and operate with almost 800 employees.

Historically, we have outsourced several non-proprietary production processes, including casting, forging, injection molding, ceramic molding, sterilization, and coating, together with the production of most instruments.

A recurring strategic make-or-buy analysis is performed to maximize competitive advantage while reducing production costs and capital investment. Each year we make strategic investments to increase capacity to sustain our future growth, strength our supply chain, and insource production when needed.

We have already projected our next two major plant expansions to continue enabling our steady long-term growth. In Castel San Pietro, the production area will be expanded by approximately 5'300 square meters, bringing the total area to 15'300 square meters, with an increase of production space by more than 50 percent in total area. The current 12'000 square meters in Rancate will be further expanded with a new area of about 9'500 square meters, with an increase of almost 80% in operational space. In total, the Medacta plants in Switzerland are foreseen to cover more than 36'800 square meters. These expansions will allow a significant increase in manufacturing capacity and supply chain stability.



Medacta in Castel San Pietro



Medacta in Rancate



6. MEDACTA VALUE CREATION STRATEGY

AN OVERVIEW OF THE ORTHOPEDIC MARKET

The orthopedic market is characterized by growth in procedural volumes, continuous technological advances, which lead to frequent new product introductions, and evolving industry standards resulting from innovation and scientific discoveries. Moreover, in outpatient surgery, and particularly in the US market, Ambulatory Surgery Centers (ASCs), which provide same-day surgical care, including diagnostic and preventive procedures, without hospital admission, represent a significant growth driver. This is due to their ability to provide surgical procedures at a lower cost, with shorter waiting times and potentially better outcomes (e.g., lower risk of infection and early mobilization) with benefits for patients and the whole healthcare system. Medacta is focused and committed to applying our integrated strategy in sustainable markets, ASCs, and personalized medicine since we believe these are the key vehicles of future industry growth.

A DIFFERENTIATED APPROACH

We believe Medacta makes a difference through innovative, minimally invasive, and personalized treatment options and its tailored surgeon education programs. Since our founding in 1999, we have become pioneers in developing innovative products and surgical techniques. With hundreds of patents in our portfolio, we have long-standing expertise in bringing new technologies to the market, offering a range of benefits for patients, surgeons, and healthcare systems, in particular, our Anterior Minimally Invasive Surgery (AMIS) technique for hip replacement which now counts more than 500'000 patients' procedures worldwide. We leveraged our expertise to develop our sophisticated "MySolutions" technology, which enables us to offer surgeons highly personalized preoperative planning and advanced implant placement methodologies, personalized for the unique anatomy of the patient, to further improve intraoperative precision and efficiency.

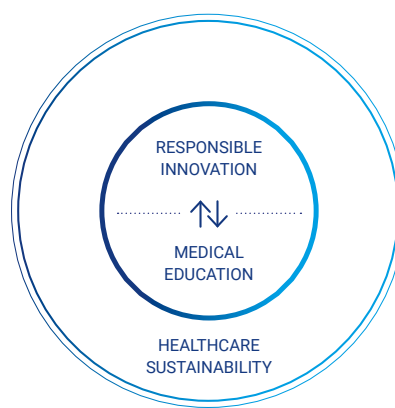


Differentiated approaches often require to undergo a learning curve. With the M.O.R.E. Institute we provide our existing and new customers with ample educational opportunities to develop and refine their skills with our innovative products, techniques, and technologies. In fact, since its founding, it has become a global medical education platform tailored to fulfill the needs of the individual surgeon, with dedicated courses addressing each of our business lines.

INTEGRATED STRATEGY

Medacta aims to develop a long-lasting relationship with surgeons, hospitals, and other healthcare providers through a strategy based on value creation, leveraging advanced technologies and patient-specific data insights to efficiently complement any of their current operations, potentially delivering better outcomes, and increasing patient satisfaction while limiting costs.

At Medacta, value generation in such a complex environment follows a holistic approach, and it is built on three fundamental assets: "responsible innovation", "medical education", and "healthcare sustainability".



• RESPONSIBLE INNOVATION

is the foundation of all our projects and the basis of our growth strategy. It began with minimally invasive techniques and has evolved into personalized solutions designed for every patient, with the aim to improve their care pathway and potentially enable better outcomes. We are convinced that innovation requires medical education.

• MEDICAL EDUCATION

is an indispensable tool for transforming our innovation into concrete benefits for patients' well-being and healthcare system efficiency. We provide our surgeons with personalized, structured, and accessible education programs on our innovative technologies and procedures, to help them fasten the learning curve to become proficient in the use of our products and solutions.

• HEALTHCARE SUSTAINABILITY

is a key element in making our innovation and training programs as accessible as possible. It guides the design of our solutions to make them more efficient, reducing costs and complementing operative workflow efficiently.

BUSINESS MODEL

Medacta is committed to creating value through a process that converts stocks of value, defined as “input capitals”, into “output capitals”, which are the concrete results that can generate sustainable value for all our stakeholders over the short, medium, and long term. The external environment, including economic conditions, technological change, and societal and environmental challenges, sets the context within which we operate. The vision, mission, and fundamental assets encompass the whole organization, identifying the complete scenario in which we operate.



INPUT CAPITALS

The input capitals comprise different areas and are in continuous interaction with each other.

HUMAN

We can count on more than 1'500 specialized and talented employees worldwide. They are motivated and share strong identity, solid culture, and ethical values. The investments in training programs allow for the continuous updating of their knowledge, competencies, and expertise.

FINANCIAL

We have a healthy balance sheet which highlights the strength of your business and its ability to weather any economic storms and fund significant investments.

MANUFACTURING

Our team fully operates in-house, in our two production sites in Castel San Pietro and Rancate, designing and producing our products, assuring excellent quality, flexibility, continuity, and efficiency. The extensive use of automation allows for a reduction in operational cost, increased control over the process, increased quality, and shortened production lead time. In addition, it frees up resources for more productive tasks and contributes to significantly less machinery downtime.

INTELLECTUAL

In the orthopedic industry, legal compliance, agreements, and intellectual property rights are essential. New techniques, products and technology handled by the R&D department, as NextAR our proprietary Augmented Reality Surgical Platform, represent intellectual capital that we are committed to protecting.

COLLABORATION

We comply with certifications and registrations in all of the countries where operate for each new product, partnering with various certification agencies, such as the Food and Drug Administration ("FDA") in the United States. We collaborate with top universities, technological districts, expert surgeons, and centers of excellence throughout the world.

OUTPUT CAPITALS

The input capitals follow a transformational process, which may lead them to generate concrete results, or output capital.

ADVANCE CARE AND PATIENT SATISFACTION

We are dedicated to improving patients' well-being by constantly evolving and innovating our products and techniques by leveraging cutting-edge technologies, and always following minimally invasive and personalized solutions.

EMPOWER SURGEONS' PRACTICES

We are completely committed to supporting surgeons in their practice by providing them with innovative solutions that enhance accuracy, efficiency, and sustainability throughout the whole patient journey, from preoperative to intraoperative to postoperative care.

EXPAND MARKET SHARE

We plan to continue expanding our market share in all of our business lines, focusing on meeting our customer's needs and investing in R&D, experienced sales force and personalized solutions.

INCREASE GEOGRAPHIC PRESENCE

As part of our growth strategy, we continue to make considerable investments to expand our geographic presence in significant markets with the goal of upscaling our operational opportunities.

CONTRIBUTE TO THE SUSTAINABLE DEVELOPMENT GOALS (ONU SDGS)

We aim for constant improvement of innovative solutions, caring for people, for the environment and for our community, according to the "SDGs" defined by the United Nations. More details are available in our sustainability report.

6.1 RESPONSIBLE INNOVATION

Innovation is of paramount importance at Medacta and is expressed in the originality of our surgical techniques, products, and technologies. It is the foundation of all our projects and the basis of our growth strategy. Our innovation began with minimally invasive techniques and has evolved into personalized solutions for every patient. This has led us to the design of an advanced network of digital solutions to improve patient outcomes and healthcare efficiency - the MySolutions Personalized Ecosystem. Moreover, we firmly believe in responsible innovation, which is guaranteed by our M.O.R.E. Excellence Clinical Program, enabling us to introduce innovative products into the market responsibly.

PILLARS

For us, innovation is based on three pillars: a strong and continued collaboration with surgeons, continuous investments in long-term and short-term Research and Development (R&D), and the adoption of cutting-edge technologies.



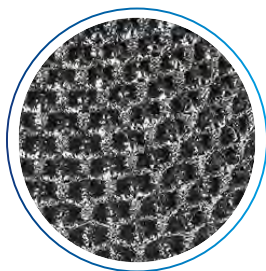
STRONG COLLABORATION WITH SURGEONS

Listening to surgeons, identifying patient requirements, and designing new solutions enables us to respond to unmet clinical needs proactively. We collaborate on a regular basis with internationally recognized surgeons, leading universities, and hospital research institutions on innovative surgical techniques and the evolution of our products and methodologies. A successful example of this collaboration is our GMK Sphere, a total knee implant designed to deliver maximum functional stability with the goal of increasing total knee arthroplasty (TKA) patient satisfaction during activities of daily living and decreasing postoperative knee pain. The development of this innovative device has been possible thanks to the knee anatomy and kinematics studies by Prof. Freeman and Prof. Pinskerova.



RESEARCH AND DEVELOPMENT

Our Research and Development (R&D) team is divided into three business units: Joint, Spine, and Sports Medicine. We have a range of research resources available in-house, including the MyBody database, advanced 3D printing capabilities, and facilities for prototype development. To reduce infection and patient remittance rates, we have expanded our Research and Development focus to surface technology with the development of antibacterial treatment for our implant portfolio. We also have developed NextAR, our proprietary Augmented Reality Surgical Platform, which provides efficiency and precision in computer-assisted surgery. R&D and in-house technology boost our innovation, allowing for high standards of quality, flexibility, continuity, and efficiency.



CUTTING-EDGE TECHNOLOGIES

Our product pipeline is being advanced by leveraging big data, cutting-edge manufacturing, smart robotics, augmented reality guidance, and surface technology. We have developed an advanced three-dimensional structure, 3D Metal, based on 3D printing technology of the proven Titanium-Aluminum-Vanadium alloy, which enables direct structural connection with the bone. The architecture of the outer surfaces consists of interconnecting pores and resembles cancellous bone. We are also further developing our manufacturing capabilities by means of 3D printing, which facilitates implant fixation and increases production speed and efficiency at lower costs.

M.O.R.E. EXCELLENCE CLINICAL PROGRAM

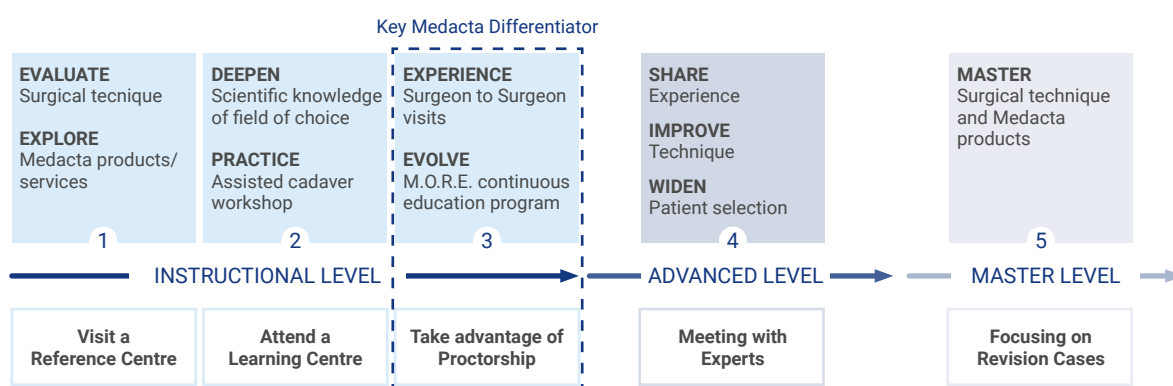
This program enables us to responsibly introduce innovative products to the marketplace by defining the applicable steps and milestones ahead of their full release. We typically release new products on a restricted basis to conduct voluntary clinical programs, following the guidelines recommended by independent organizations, such as the Orthopedic Data Evaluation Panel or the Beyond Compliance Program. After the full market release of our products, we continuously monitor and assess their performances by way of our post-market surveillance program, which channels data to an internal group of experts who assess a report to ensure the system performance is fully understood and the risks are carefully evaluated. Moreover, we sponsor and participate in clinical post-market studies conducted by leading international experts to continuously improve our knowledge and make these results available to the scientific community through peer-reviewed publications.

6.2 MEDICAL EDUCATION

We believe that education is a fundamental pillar of our long-term value-creation strategy and an indispensable tool for transforming innovation into concrete benefits for patients, surgeons, and healthcare systems. We are committed to providing continuous support to healthcare professionals worldwide to facilitate the adoption and sharing of knowledge of our innovative solutions. Since its founding in 2004, the M.O.R.E. Institute has become a global medical education platform tailored to fulfill the needs of the individual surgeon, with dedicated courses addressing each of our business lines. "With the M.O.R.E. Institute, the surgeon is never alone when discovering new technologies" is our education motto.

THE CHALLENGE OF THE LEARNING PROCESS

The introduction of innovative techniques, products, and technologies requires time to adapt and is usually associated with a learning curve. Therefore, we provide both our existing and new customers with personalized, structured, and accessible educational opportunities with the aim of improving patient outcomes through enhanced surgical proficiency. The M.O.R.E. Education path is built on "Surgeon to Surgeon" activities. Participants can visit experienced surgeons to approach our innovative portfolio, attend learning centers to practice during wet labs, and deepen their knowledge through discussions with our international surgeon experts, progressively and continuously advancing from instructional, through advanced, to master level. We value proctorship as a key element in the learning process, providing unparalleled support to surgeons during their first surgeries at their own hospital.



A PLATFORM DESIGNED TO SHARE EXPERIENCE

The M.O.R.E. Institute relies on an international network of expert surgeons to create interactive networking opportunities and a variety of educational events, facilitating the learning and sharing of experiences, including one-to-one visits, online webinars and Meet the Experts, wet labs, scientific evenings, and international symposia. The M.O.R.E. Institute also supports fellowship programs worldwide, with a strong focus on young and promising surgeons.

THE VALUE OF OUR EDUCATION PROGRAMS

In 2022, on the occasion of the celebration of passing the milestone of 500'000 patients treated with AMIS (Anterior Minimally Invasive Surgery), we interviewed some surgeons about their "AMIS Experience". They agreed on the importance of our education programs, as one of the key elements of the AMIS success over the years. It all started in 2004 when we collaborated with an international group of expert surgeons to create the unique AMIS Education Program. This program provides surgeons with a tailored and comprehensive training program and proctorship which allows for technique proficiency and encourages the sharing of knowledge and experiences, thereby reducing potential challenges in the early phase of the learning curve^{1,2}. This program has become a dynamic global platform with an education community including more than 260 AMIS Reference Centers worldwide and almost 500 AMIS Learning Centers organized to date.

A STRONG PARTNERSHIP WITH SURGEONS

Our systematic approach to customer development through education is a key factor in our success, allowing us to cultivate a strong partnership with our surgeons and facilitating the widespread adoption of our products and surgical techniques. We believe that our engagement and education initiatives significantly contribute to our surgeons' retention and loyalty. Moreover, we believe that our close partnership with surgeons benefits us in developing and refining our products and techniques. As a result of our focus on customer engagement, we remain continuously connected with surgeons and stay up-to-date with and influence the latest advancements in the orthopedic field.

EDUCATIONAL ACTIVITIES AND OPPORTUNITIES

In 2022, we continued our commitment to medical education with more than 2'600 surgeons attending educational activities. Besides the in-person scientific events, the M.O.R.E. Institute programs offer surgeons valuable online resources to deepen their knowledge and discover more about our solutions, including eLearning Classes, live surgical demonstrations, webinars, and online "Meet the Expert" exclusive events. Moreover, surgeons can access many hours of on-demand medical education through Medacta TV, our streaming platform, along with our whole education library, available 24/7 from iOS or Android-based tablets or mobile devices, both online and offline through the specially designed M.O.R.E. App.

¹ Müller DA, Zingg PO, Dora C. Anterior minimally invasive approach for total hip replacement: five-year survivorship and learning curve. Hip Int 2014.

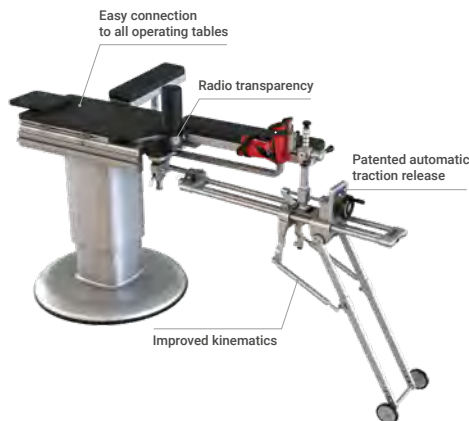
² Zing P. AMIS using Versafitcup and Quadra to overcome tissue response: 5-year results. Podium presentation at the 7th M.O.R.E. International Symposium, Lugano, Switzerland, April 11-12, 2014.

6.3 HEALTHCARE SUSTAINABILITY

Our products and surgical procedures are designed to improve patient well-being, facilitate the work of our surgeons, and increase the sustainability of the healthcare system by improving efficiency while reducing surgical costs.

AMIS

Our AMIS technique, with its dedicated instrumentation, from the AMIS Mobile Leg Positioner to the AMIS MBOOT single-use insert pad, covers every aspect of the procedure with the aim of streamlining, simplifying, and facilitating reproducibility of the anterior approach. Our AMIS offering has been further enhanced over the years with new packages that allow surgeons to take the anterior approach to the next level. Surgeons can experience AMIS within our tailored and comprehensive AMIS Educational Program, taking advantage of the support of a network of world-renowned experts, as well as of a dedicated set of instruments specifically designed to optimize and simplify the AMIS procedure.



GMK EFFICIENCY

GMK Efficiency is a complete single-use instrument set developed to optimize instrument management, providing significant clinical, logistical, and economic benefits to hospitals and, in particular, outpatient surgical centers. It does not require preoperative sterilization,

saves the use of clean water, and also has the potential to reduce infection risks because of its single-use nature and the fact that it is delivered terminally sterile. Since its market introduction, we have been offsetting the amount of CO₂ related to its lifecycle, supporting environmental sustainability projects initiated by Swiss Climate. Procedures that combine patient-specific instrumentation with single-use instrumentation have proved to save time in the OR and simplify the OR scheduling.^{3,4,5,6}



PATIENT-MATCHED TECHNOLOGY

Backed by more than 10 years of clinical evidence, patient-matched technology facilitates accurate implant positioning and operating room efficiency. This solution combines a dedicated personalized 3D preoperative planning tool, based on CT or MRI scans of the patient's anatomy, with patient-matched guides that enable the surgeon to accurately replicate intraoperatively the validated planning. Our patient-matched solutions are available for hip, knee, shoulder, and spine procedures and are regularly used by thousands of surgeons around the world and are part of our MySolutions Personalized Ecosystem.



³ Dell'Osso G, Celli F, Bottai V, Bugelli G, Citarelli C, Agostini G, Guido G, Giannotti S. Single-Use Instrumentation Technologies in Knee Arthroplasty: State of The Art, Surg Technol Int. 2016 Apr 27;XXVIII. pii: sti28/727

⁴ Attard, Andre, Gwenllian Fflur Tawy, Michiel Simons, Philip Riches, Philip Rowe, and Leela C Biant. 2019. "Health Costs and Efficiencies of Patient-Specific and Single-Use Instrumentation in Total Knee Arthroplasty: A Randomised Controlled Trial." BMJ Open Quality 8 (2): e000493.

⁵ Tawy, Gwenllian F, and Leela C Biant. 2020. "Improving Intra-Operative Efficiency of Total Knee Arthroplasty with Patient-Specific and Single-Use Instrumentation." Journal of Orthopaedic Experience & Innovation, September.

⁶ Tyler D. Goldberg, MD, John A. Maltry, MD, "Logistical and Economic Advantages of Sterile-Packed, Single-Use Instruments for Total Knee Arthroplasty", The Journal of Arthroplasty 2019.

Propel Same Day Surgery Initiatives

Propel provides resources to practitioners and administrators who seek to create a personalized outpatient program. It features various customizable tracks that allow Ambulatory Surgery Centers (ASCs) and other facilities seeking to implement outpatient options to create programs to best suit their local demands.





EMPOWER YOUR VISION EXPERIENCE NEXTAR PLATFORM

NEXTAR AUGMENTED REALITY SURGICAL PLATFORM

The NextAR Platform leverages patient-specific, unique real-time data to efficiently complement operative workflow. Through advanced 3D planning tools, a revolutionary, compact, and integrated single-use tracking system, and augmented reality, the platform enables data-driven decision-making allowing the surgeon to perform personalized adjustments based on each patient's unique anatomy and biomechanics. These valuable insights are displayed through the NextAR Smart Glasses directly onto the operative field to give the surgeon enhanced visualization and control during the procedure. The increased level of data may provide more precision and could lead to improved patient outcomes.

NextAR is the first platform to offer personalized augmented reality solutions for both joint replacement and spine procedures. In line with Medacta's philosophy of healthcare sustainability, the NextAR platform is offered as a hardware system with limited capital investment and single-use instrumentation at a low cost per case and offers the ability to host software for multiple applications. The platform represents an optimal solution worldwide, particularly for US Ambulatory Surgery Centers (ASCs).

Moreover, NextAR Spine was awarded the 2022 Spine Technology Award from Orthopedics This Week, the second Medacta product to receive this prestigious honor after MySpine Platform, patient-matched technology.



7. PERSONALIZED MEDICINE

MINIMALLY INVASIVE TECHNIQUES

Since our founding, we have recognized that minimally invasive surgery offers a range of benefits for patients, surgeons, and healthcare systems, including short hospitalization, reduced postoperative pain, immediate muscle tone preservation, and shorter rehabilitation time. Hence, we have developed new offerings based on minimally invasive techniques.

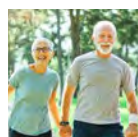
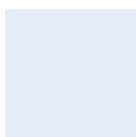
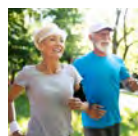
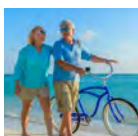
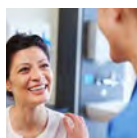
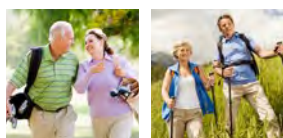
For example, in 2004, we introduced the AMIS technique for hip replacements, which – together with our range of targeted AMIS education initiatives, dedicated implants and instruments, and complementary services and tools – offers a holistic approach to hip procedures and improved patient outcomes. With over 500'000 procedures performed worldwide, AMIS represents an easily reproducible technique that delivers significant benefits to patient well-being, while optimizing costs and efficiency for the surgeon.

Moreover, MIS MySpine MC is a patient-matched 3D-printed solution for surgeries that use the midline cortical approach. It allows for posterior lumbar fusion to be carried out in a minimally invasive, muscle-sparing way, resulting in shorter operating times and a substantial reduction of both radiation exposure and cost. The goal of MIS MySpine MC is to maximize the fusion rate and the predictability of clinical outcomes, thus positively impacting patients' well-being.

PERSONALIZED SOLUTIONS

Patient's well-being is at the heart of our vision and, therefore, it is of paramount importance in our activities. Considering that each patient is different and has specific needs and expectations, it is fundamental for us to improve the entire patient experience through a personalized journey. Therefore, we have collaborated with our surgeons to develop a personalized technique for knee arthroplasty. Compared to traditional surgeries using Mechanical Alignment (MA), which intends to give every patient a straight "knee alignment", even if the patient's leg wasn't naturally straight when healthy, with Kinematic Alignment (KA), the surgeon aims to restore the natural knee shape and alignment that each patient had when their knee was still healthy - matching the knee replacement to each patient's individual anatomy. It operates by custom-positioning the knee implant to the native joint line of the knee as it was in its pre-arthritic state while preserving the surrounding tissues and ligaments. Medacta's unique solution, Kinematic Alignment Platform (MyKA), provides surgeons with the most comprehensive solution to safely and reproducibly perform Kinematic Alignment.

Moreover, leveraging the latest technological advances, we are committed to constantly developing innovative solutions to empower the surgeon's practice, enabling data-driven decisions to provide more personalized, accurate, and efficient procedures aiming at better patient satisfaction and outcomes. This has led us to design an advanced network of digital solutions to improve patient outcomes and healthcare efficiency – the MySolutions Personalized Ecosystem.



MYSOLUTIONS PERSONALIZED ECOSYSTEM

An advanced network of digital solutions designed to improve patient outcomes and healthcare efficiency

In a world where technology advances very fast, MySolutions Personalized Ecosystem embodies our vision to never stop improving the experience for patients, surgeons, and care facilities. With more than 160'000 procedures performed worldwide, this constantly evolving platform is based on cutting-edge technologies fine-tuned in collaboration with an international network of expert surgeons. MySolutions Personalized Ecosystem is designed around the patient's needs and expectations, with the aim of delivering value throughout the entire patient journey. Surgeons' advanced 3D planning is at the core of our platform, followed by highly

accurate execution tools such as patient-matched surgical guides, as well as an augmented-reality-based surgical platform and verification software. To improve the patient experience and support them during the continuum of care we set up a patient-optimized pathway tool. To let surgeons record and measure their clinical outcomes we offer a validated web-based archiving and analyzing system. Together with our comprehensive implant portfolio and surgical techniques, MySolutions Personalized Ecosystem empowers our holistic approach to personalized medicine.

PERSONALIZED
3D PLANNING

PRECISE
EXECUTION

PATIENT
ENGAGEMENT

EFFICIENT CASE
MANAGEMENT



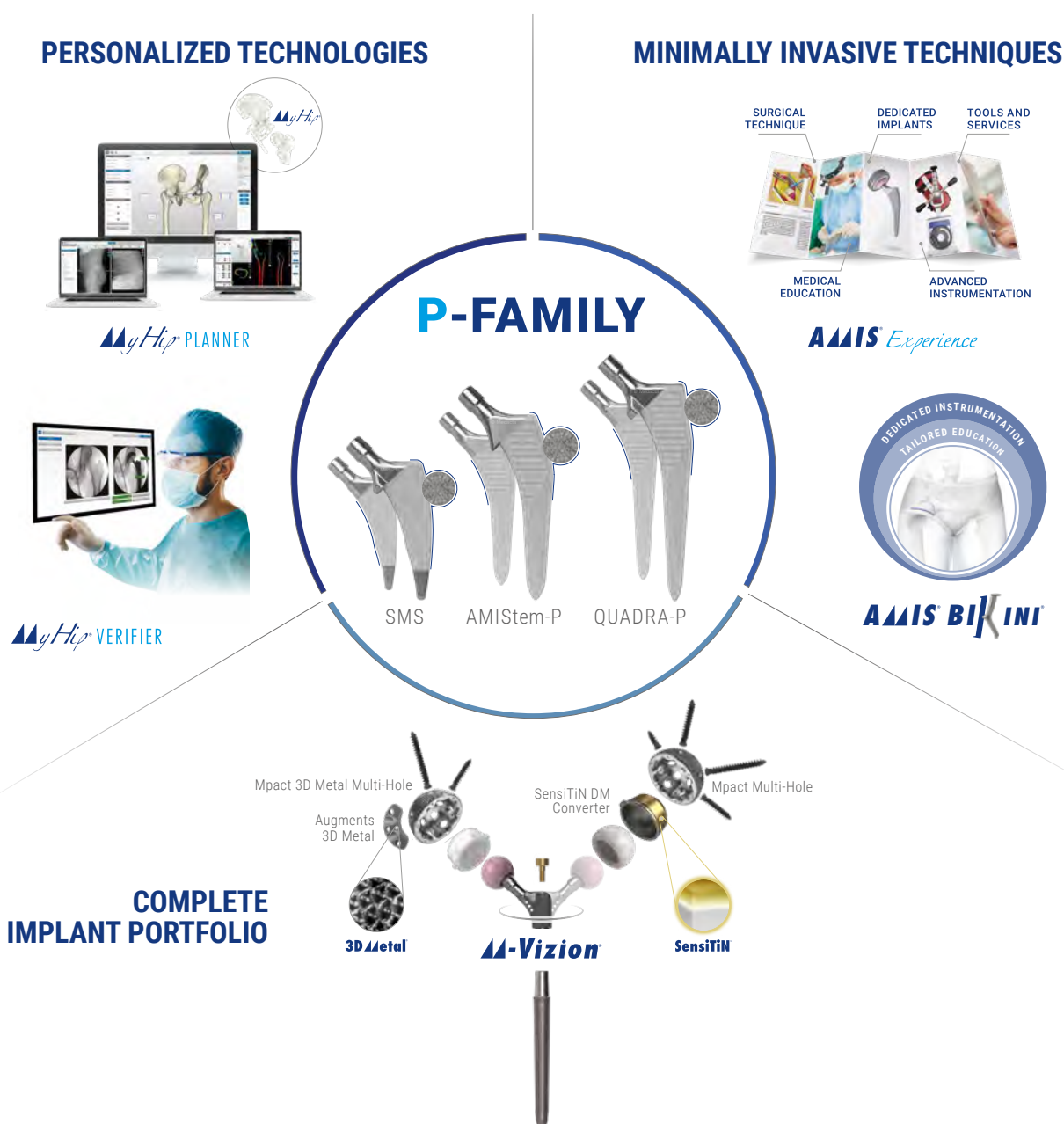
8. BUSINESS LINES

8.1 HIP

THE OVERALL HIP STRATEGY

Since our founding in 1999, we have been driven to advance the care and the satisfaction of our patients, bringing value throughout their entire orthopedic journey through minimally invasive and personalized solutions. We focused on developing new and improved products, techniques, and technologies for the hip segment of the orthopedic market. We created a comprehensive offering designed in collaboration with a network of international expert surgeons, based on three

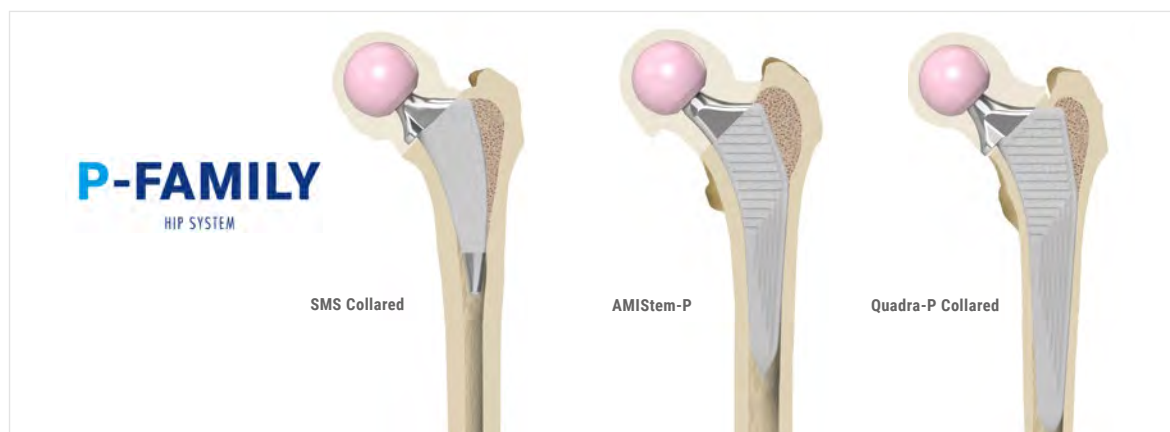
complementary assets: a complete implant portfolio that can be used for primary procedures (i.e., first-time hip replacements), as well as revision procedures (i.e., repeat hip replacements), minimally invasive techniques and personalized technologies. Our hip offering is supported by the M.O.R.E. Institute, which provides tailored high-level educational pathways through an international network of expert surgeons.



THE MEDACTA P-FAMILY HIP SYSTEM

The Medacta P-Family Hip System, the core of our hip offering, is a comprehensive set of tapered rectangular stems, which includes Quadra-P, AMISem-P, and SMS, all of which are designed to meet today's surgical challenges. While preserving the characteristics which are important to the success of existing systems, the P-Family was developed using innovative key features to bring solid clinical performance to the current landscape of total hip arthroplasty (THA). A state-of-the-art coating (MectaGrip) on the proximal portion is designed to enhance initial stability, due to its high

coefficient of friction and long-term fixation, thanks to its open and interconnected pores, which create a favorable environment for bony fixation. Progressive neck lengths, offering to the surgeon a better tool to restore the native hip joint biomechanics in a broader patient population. Different lengths and canal-filling dimensions, as well as a comprehensive size range, give surgeons the ability to match an implant to the patient's current bone morphology. The stems of the P-Family were specifically designed for easier implantation when utilizing the AMIS approach.



MINIMALLY INVASIVE TECHNIQUES

Since our founding, we have become a pioneer in developing new offerings for hip replacement patients because of our minimally invasive surgical techniques, which are supported by our extensive surgeon training and education initiatives. Even if our hip implants can be used with a variety of surgical techniques, we encourage all surgeons to use the AMIS technique, which potentially delivers several advantages for the patient.^{7,8,9,10} The AMIS technique, with over 500'000 procedures performed worldwide, is a surgical technique involving an anterior approach to the hip that has been fine-tuned to minimize soft tissue damages, pain, and recovery times, reducing the dislocation rate and provide excellent patient satisfaction scores. By following both an intermuscular and an internervous path, the AMIS technique potentially reduces the risk of damage to periarticular structures and can improve overall patient outcomes. The AMIS technique is complemented by a unique package of supporting products, including dedicated implants, specially designed instruments, and the AMIS Mobile Leg Positioner (a patented surgical table extension that allows for a simple and reproducible procedure), as well as a specifically trained sales force. We believe that the AMIS Education Program, developed with the aim of optimizing and standardizing the implementation of the AMIS technique, has contributed to making the AMIS

technique a preferential and easily reproducible hip replacement surgical method for surgeons worldwide. Our education opportunities are designed to master the AMIS approach from the simplest primary hip arthroplasties to the most complex cases.

Our AMIS offering has been further enhanced by new packages that allow surgeons to take the anterior approach to the next level, such as the comprehensive AMIS Bikini offer. The bikini incision features a short, oblique skin incision within the inguinal skin fold, resulting in an aesthetically pleasing cosmetic scar that can be narrower and lighter in color, and remains hidden when wearing a bikini.^{11,12,13,14} This technique may also help lessen wound healing concerns in obese patients or patients with a large abdomen pannus.^{11,12,13,14}

As part of the AMIS Experience platform, surgeons can experience the AMIS Bikini as an advanced technique within our tailored and comprehensive AMIS Educational Program, taking advantage of the support of a network of world-renowned experts as well as of a dedicated set of instruments specifically designed to optimize and simplify the bikini approach procedure and facilitate the soft tissue preservation.

⁷ Laude F. Total hip arthroplasty through an anterior Hueter minimally invasive approach. *Interact Surg* (2006) 1: 5-11.

⁸ Dora C. Minimalinvasive Zugänge an der Hüfte. *Orthopädie Mitteilungen* 6/07, 574-576.

⁹ Vassina PG, Rossi R, Giudice GM, Palumbi P. Hip arthroplasty through the anterior minimally invasive approach. *Sphera* 2010;6(12) – Speciale Ortopedia.

¹⁰ Jayankura M, Roty M, Potaznik A, Rooze M, Cermak K, Remy P, Gillard B, Biltiau N, Schuind F. Isokinetic and isometric muscle strength recovery after total hip arthroplasty implanted by direct anterior approach. Podium presentation at the 10th Annual Congress of the EFORT, Vienna, Austria, June 3-6, 2009.

¹¹ Menzies-Wilson, Richard & Mahalingham, Karupiah & I, Tamimi & Field, Richard. (2019) "Retrospective cohort study comparing the functional outcomes of direct anterior approach hip arthroplasty. Oblique 'bikini' vs longitudinal skin incision".

¹² Menzies-Wilson, Richard & Mahalingham, Karupiah & I, Tamimi & Field, Richard. (2019) "Functional Outcomes of direct anterior approach hip arthroplasty: Oblique 'bikini' versus longitudinal skin incision. 10.1177/2210491719890883.

¹³ Leunig, Hutmacher, Ricciardi, Impellizzeri, Rüdiger, Naal. (2018) "Skin crease 'bikini' incision for the direct anterior approach in total hip arthroplasty: a two- to four-year comparative study in 964 patients. *Bone Joint J*.

¹⁴ Manrique, MD, Paskey, BS a, Tarabichi, MD, Restrepo, MD, Foltz, PhD Hozack, MD. (2019) "Total Hip Arthroplasty Through the Direct Anterior Approach Using a Bikini Incision Can Be Safely Performed in Obese Patients". *J Arthroplasty*

PERSONALIZED TECHNOLOGIES

The hip portfolio is further enhanced by innovative technologies that deliver a personalized approach to hip replacement. As part of our MySolutions Personalized Ecosystem, MyHip provides 3D printed patient-matched guides allowing for more accurate positioning and sizing of the hip implant, MyHip Planner empowers the surgical decision-making process through a 3D preoperative planning tool with advanced analytical features, and MyHip Verifier allows for intraoperative non-invasive assessment of implant positioning.

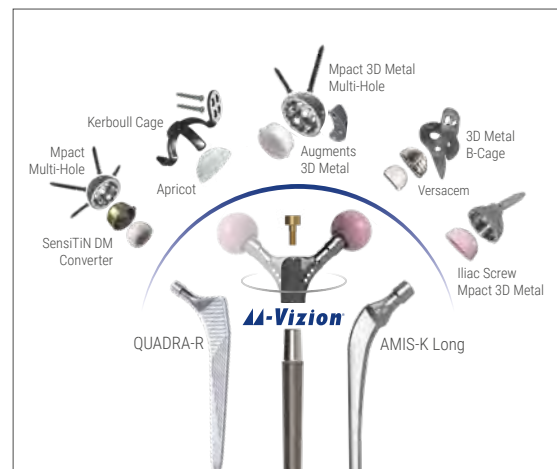
MyHip Planner is an intuitive and reliable 3D preoperative planning tool with advanced analytical features. It empowers the surgical decision-making process in defining the optimal surgical strategy for each patient. Starting from a CT scan, the MyHip Planner algorithm recreates a 3D model of the patient's anatomy. Thanks to its advanced 3D planning and functional assessment features, this software allows the surgeon to base the implant selection and position on the patient's anatomy, hip joint biomechanics, and functional performances. Surgeons could thus carry out evaluations and make accurate decisions specifically for each case, potentially helping anticipate possible complications, instability or impingement, and reduced range of motion. In 2022, we released a new MyHip Planner software version featuring spinopelvic analysis, which is a topic that has become increasingly in demand for better evaluating the relationships between hip and spine anatomical structures and optimizing mutual treatments for improving patient outcomes. In the same release, the possibility to request MyHip 3D printed patient-matched guides according to the elaborated planning has been integrated, further increasing the value of this tool. MyHip Verifier is an easy-to-use, non-invasive, fluoroscopy-based platform providing an intraoperative assessment of implant positioning. Engineered to seamlessly integrate into the surgeons' existing workflow and preserve operating room efficiency, MyHip Verifier allows for intraoperative fluoroscopy by providing a real-time numerical evaluation of the actual influence of implant positioning on the patient's anatomy.

PRIMARY IMPLANTS PORTFOLIO

Complementing the P-Family, our cementless stem portfolio includes MasterLoc and MiniMAX. With a tapered wedge femoral stem design, the MasterLoc Hip System is available in three versions (standard, lateralized, and lateralized plus), which allow for easier and more effective management of the patient's anatomy, completely independent from the leg length. This distinctive feature helps achieve good restoration of the hip joint biomechanics in nearly all patients. MiniMAX is an anatomical cementless stem engineered to provide the best fit and fill following the natural shape of the femoral canal. On the acetabular side, our solutions include among others, Versafitcup and Mpace System. Versafitcup is a complete system of elliptical cementless acetabular cups that share the same instrumentation, offering stability, as well as load and stress distribution. The Mpace System consists of hemispherical cementless acetabular cups that provide

different solutions according to the patient's needs and can be used in primary and revision hip replacements. As part of our acetabular platform, in 2022 we released the new SensiTiN Double Mobility (DM) Converter, a high-nitrogen-stainless steel completely cobalt-free modular DM device with an outer Titanium Nitride coating (SensiTiN) to improve corrosion resistance. The SensiTiN DM Converter, which is compatible with both Versafitcup and Mpace System and available for both primary and revision procedures, provides a viable solution to address instability and risk of dislocation safely, still major challenges, and significant issues in hip replacement. We also offer a comprehensive cemented portfolio with femoral and acetabular solutions.

REVISION IMPLANTS PORTFOLIO



Our hip revision platform is an innovative and comprehensive offering for both the femur and the acetabulum, with tailored solutions to individual patient needs. Across the whole acetabular revision portfolio, featuring various solutions such as Mpace Multi-Hole, Iliac Screw Mpace and B-Cage, the 3D Metal - a state-of-the-art advanced biomaterial structure engineered for the bone - is the master. 3D Metal is obtained by means of advanced 3D printing technology, which allows for engineering implants featuring maximized initial stability and enhanced connection with bone, key aspects in revision hip arthroplasty. By leveraging a single cutting-edge technology, different advanced net structures have been designed and manufactured to face most clinical cases efficiently, addressing different patient anatomies and surgical scenarios. On the femoral side, the M-Vizion Femoral Modular Revision System is the core of the Medacta Hip Revision Platform. Designed to deliver maximum stability and versatility with a simplified and streamlined procedure, M-Vizion allows surgeons to feel confident in the operating room (OR) when undertaking simple to complex femoral revision cases. The comprehensive proximal and distal product range is now further enriched with the 4° angle tapered distal stem, offering additional flexibility while reconstructing the hip joint to adapt to different patient anatomies and surgical scenarios. The Medacta Hip Revision Implant Portfolio, optimized for the AMIS technique, is supported and complemented by a complete range of dedicated instruments to facilitate the removal of failed implants and cement.



AMIS[®] Experience

MORE THAN AN ANTERIOR APPROACH

AMIS Experience is a complete platform uniquely complemented by a tailored education program and a comprehensive package of implants, instruments and digital solutions, to address the specific needs of patients, surgeons and care facilities. This minimally invasive approach has been widely embraced by the orthopedic community, and it has been chosen by surgeons to be used with more than 500'000 patients worldwide.



Not only simple surgeries, but also complex primary cases and revisions could be performed with AMIS. In the last 10 years the instrument set has become more and more efficient, and the AMIS offering has further evolved with the introduction of the Bikini platform and the no capsular release technique.

Dr. Frédéric Laude
France



The AMIS procedure completely revolutionized my surgical care for my arthritic hip patient population. Prolonged hospital stays, weight-bearing and position restrictions, and intense narcotic usage are historical remnants of antiquated surgical care. Instead, I offer patients the opportunity to go home on the same day of surgery, with no restrictions and no opioid pain medications. I have changed my technique, and my patients and I have benefited from it. It's a powerful win-win!

Tyler Goldberg, MD
United States



8.2 KNEE

THE OVERALL KNEE STRATEGY

Driven by our vision to advance the care and the satisfaction of our patients, bringing value throughout their entire orthopedic journey through personalized solutions, we focused on developing innovative products, techniques, and technologies for the knee segment of the orthopedic market. We designed a comprehensive and effective platform in collaboration with a network of international expert surgeons, based on three complementary assets: personalized techniques, advanced technologies, such as the NextAR Knee

Augmented Reality surgical application, and a complete implant portfolio that can be used for partial procedures (i.e., first-time knee replacements for only one portion of the knee) primary procedures (i.e., first-time complete knee replacements), as well as revision procedures (i.e., repeat knee replacements). The GMK Sphere is at the core of our complete knee offering. Our knee offering is supported by the M.O.R.E. Institute, which provides tailored high-level educational pathways through an international network of expert surgeons.

ADVANCED TECHNOLOGIES

PERSONALIZED TECHNIQUES



COMPLETE IMPLANT PORTFOLIO

THE GMK SPHERE

Backed by a strong educational network of over 100 international experts, and 10 years of successful clinical experience, GMK Sphere is an innovative Ball-in-Socket Knee prosthesis designed to provide maximum functional stability while also restoring natural knee motion, with the purpose of improving patient comfort during everyday activities and reducing postoperative knee pain. The orthopedic community has welcomed this innovative implant, and surgeons have chosen it for more than 150'000 patients worldwide. According to the Orthopedic Data Evaluation Panel (ODEP) rating criteria, in 2022, GMK Sphere has been awarded 7A rating based on the evaluation of data pertaining to several thousand cases, which showed cumulative survivorship well in line with the required projection of more than 90% at 10 years.

Moreover, GMK Sphere highlights synergies with advanced material options providing surgeons with the possibility of tailoring the implant choice to the patient's needs. Mectagrip is Medacta solution for cementless application. It consists of a plasma sprayed titanium coating designed to enhance initial stability and potential long-term fixation^{15,16}. E-CROSS is a highly crosslinked UHMWPE (Ultra-High Molecular Weight Polyethylene) blended with Vitamin E, a powerful antioxidant that improves oxidation resistance^{17,18}. SensiTIN is a ceramic-like coating of titanium nitride, designed to reduce the release of metal ions. GMK Sphere has shown the potential to improve functional and patient-reported outcomes also when combined with Kinematic Alignment technique.



PERSONALIZED TECHNIQUES

MyKA is Medacta's platform for Kinematic Alignment, which is a personalized technique with the goal of restoring knee function and improving patient satisfaction by tailoring the position of the implant to each individual patient. Kinematic Alignment aims to custom-position the knee implant to the native joint line of the knee as it was in its pre-arthritis state, while preserving the surrounding tissues and ligaments. We offer the most comprehensive platform for Kinematic Alignment on the market: MyKA. It features the GMK Sphere, a particularly suitable implant for this technique that is supported by dedicated instrumentation designed to improve efficiency and reproducibility. It also includes MyKnee KA, an advanced technology that utilizes web-based 3D preoperative planning to kinematically align the implant through the use of 3D printed patient-specific instruments. Moreover, the platform includes tailored surgeon training and education initiatives supported by an established network of international experts. This platform is continuously enriched with new options and tools to further streamline surgeons' operative workflow. The evidence and the interest of the market for this personalized technique are constantly growing, and Medacta is leading the way in collaboration with the biggest experts worldwide.

ADVANCED TECHNOLOGIES

Through our MySolutions Personalized Ecosystem, we offer enabling technologies that deliver a personalized approach to knee replacement, improving accuracy and efficiency, while promoting healthcare sustainability. MyKnee is a complete platform for partial, total, and revision knee replacement that combines 3D preoperative planning and 3D printed patient-matched guides to accommodate many surgical approaches, including bone referencing, ligament balancing, and muscle sparing. NextAR Knee Augmented Reality surgical application empowers the surgeon's vision with unique real-time surgical guidance superimposed onto the operative field to enhance precision and enable data-driven decision-making. Both MyKnee and NextAR offer a powerful synergy with GMK Efficiency single-use instrumentation. The GMK Efficiency system requires no additional preoperative sterilization and instrument management, optimizing logistics: the perfect solution for both large hospitals and ambulatory surgical centers. The GMK Efficiency system is also available as part of our Efficiency KneePack, which contains all the components needed to implant the GMK Sphere using a patient-specific single-use instrument set. It is delivered sterile in a single, lightweight box allowing to save time in the OR and simplify the OR scheduling.

¹⁵ Khanuja HS, Vakil JJ, Goddard MS, Mont MA. Cementless Femoral Fixation in Total Hip Arthroplasty. J Bone Joint Surg Am. 2011;93:500-9.

¹⁶ WALSH, William Robert, et al. Bone ongrowth and mechanical fixation of implants in cortical and cancellous bone. Journal of Orthopaedic Surgery and Research, 2020, 15.1: 1-10.

¹⁷ Malito L. G. et al., «Material properties of ultra-high molecular weight polyethylene: Comparison of tension, compression, nanomechanics and microstructure across clinical formulations», Journal of the Mechanical Behavior of Biomedical Materials, pp. 9-19, 2018.

¹⁸ Bracco P. et al., «Stabilisation of ultra-high molecular weight polyethylene with Vitamin E», Polymer Degradation and Stability 92, pp. 2155-2162, 2007.



PRIMARY IMPLANTS PORTFOLIO

Besides GMK Sphere for total knee arthroplasty, we offer GMK Primary, which is part of the comprehensive GMK System, ranging from GMK UNI for partial procedures to GMK Hinge for revision surgery. In particular, the system allows for a very easy transition from GMK Sphere and GMK Primary to a semi-constrained (GMK Revision) or a fully constrained (GMK Hinge) solution and allows for a combination of GMK Sphere with revision options like wedges and stems.

PARTIAL IMPLANTS PORTFOLIO

For partial knee replacement, we offer GMK UNI and MOTO Partial Knee System. Both options allow surgeons to treat osteoarthritis localized on the medial or lateral

compartment of the knee. In 2022, we added the MOTO PFJ, designed for the treatment of osteoarthritis localized in the patello-femoral compartment of the knee. With this new option, surgeons can now provide their patients with a full range of partial knee arthroplasty solutions to best treat their specific needs. The MOTO System was designed to accommodate the individual anatomy in order to achieve optimal coverage and fit and to provide correct and individualized balance and alignment at every step of the procedure with the potential of decreasing the incidence of loosening and progression of the disease. SensiTiN and E-CROSS advanced material options are available also for MOTO System, further completing Medacta partial knee replacement offering.



REVISION IMPLANTS PORTFOLIO

Our knee revision portfolio, the GMK Revision System, provides surgeons with a complete, modern, and versatile solution. It includes a semi-constrained implant, GMK Revision, and a totally constrained implant, GMK Hinge, which have been designed to preserve the joint functionality without dramatically altering its anatomy and kinematics, even in cases of severe ligament instability or severe bone loss. It features a unique-on-the-market technology for knee revisions, MyKnee R, the newest addition to our MySolutions Personalized Ecosystem. Beginning with a CT scan, our engineers create a 3D reconstruction of the patient's joint with a primary implant in situ. This reconstruction is then used to accurately plan the positioning of a new prosthesis from Medacta's comprehensive knee portfolio, ranging from a lower level of constraint to semi-constrained and fully constrained solutions. A set of 3D printed, patient-matched pin-positioning guides allows for guiding the implant removal and the positioning of the new implant.

In 2022, we announced the completion of the first revision surgeries in the United States using this game-changing solution to streamline total knee revision surgeries. The GMK Revision System also features a wide range of options with advanced materials. Indeed, we have further expanded the knee revision portfolio with SensiTiN-coated implants and the 3D Metal Cones for cavitory bone defects. 3D Metal is an advanced biomaterial structure, obtained by means of Medacta's in-house 3D printing technology, which is able to deliver maximized primary stability, as well as functional and structural connection with the bone for long-term fixation.

In 2022, the University of Bern published an interesting report of a clinical study on GMK Hinge highlighting impressive functional outcomes, particularly in terms of functionality, often perceived as the strictest limitation for a totally constrained implant¹⁹.

¹⁹Hecker, A., Pütz, H.J.A., Wangler, S. et al. Indications, clinical outcome and survival of rotating hinge total knee arthroplasty in a retrospective study of 63 primary and revision cases. Eur J Orthop Surg Traumatol (2022). <https://doi.org/10.1007/s00590-022-03349-1> Indications, clinical outcome and survival of rotating hinge total knee arthroplasty in a retrospective study of 63 primary and revision cases European Journal of Orthopaedic Surgery & Traumatology - The purpose of this study is to report and compare outcome data of both primary and revision cases using a rotating hinge knee (RHK).



DESIGNED TO IMPROVE PATIENT OUTCOMES WITH A PERSONALIZED KNEE SURGERY

NextAR Knee, Augmented Reality surgical application, empowers the surgeon's vision with unique real-time surgical guidance, during bone preparation and implant placement, superimposed onto the operative field to enhance precision and enable data-driven decision-making. NextAR Knee allows direct tracking of the collateral ligaments and a 3D analysis of soft tissue behavior throughout the whole range of motion during surgery, bringing patient-specific ligament balancing to the next level. NextAR Knee with limited capital investment and low per-case disposable cost has the potential to provide significant benefits to the healthcare system.



This innovative solution supported me in creating an accurate plan for the surgery with the 3D model of the patient's knee, and in precisely executing it in the OR. Through the NextAR Smart Glasses, I indeed have access to the plan at every step of the procedure, enriched by real-time information on the soft tissues, allowing me to tailor the position of the implant to the patient's anatomy.

Dr. Med. Philippe Alves
Switzerland



NextAR Knee allowed me to place the prosthesis extremely accurately. The NextAR Smart Glasses actually provide me with real-time information about the patient's knee, superimposed on the operative field. In a very intuitive way, I made very precise adjustments while not losing sight of the knee. The innovative soft tissue information also gave me the possibility to optimally balance the knee ligaments, which will feel more natural to the patient. After all, every knee is different in terms of ligaments: the more precise the adjustment, the better the result for the patient.

Dr. Geert Peersman
Belgium

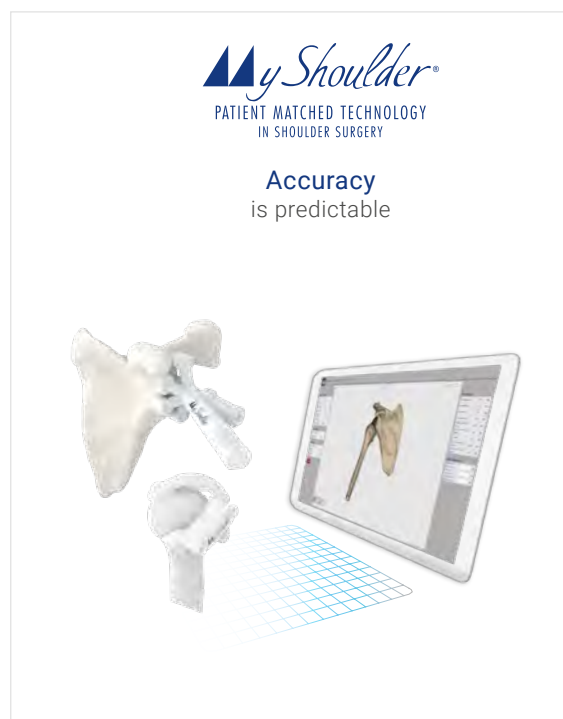
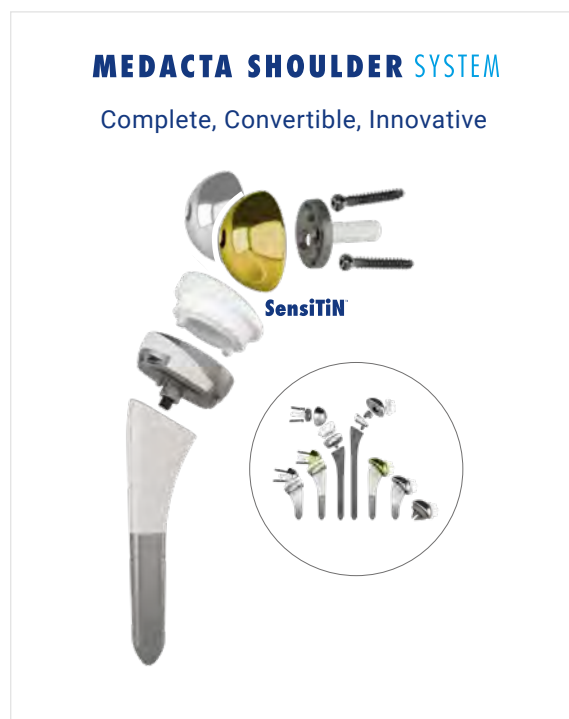


8.3 SHOULDER

THE OVERALL SHOULDER STRATEGY

The shoulder market represents a significant growing component of our success. With the collaboration of international expert surgeons, we created an innovative, complete, and personalized portfolio of implants and cutting-edge technologies designed to support

surgeons in improving patient care and satisfaction. Our shoulder offering is supported by the M.O.R.E. Institute, which provides tailored high-level educational pathways through an international network of expert surgeons.



THE MEDACTA SHOULDER SYSTEM

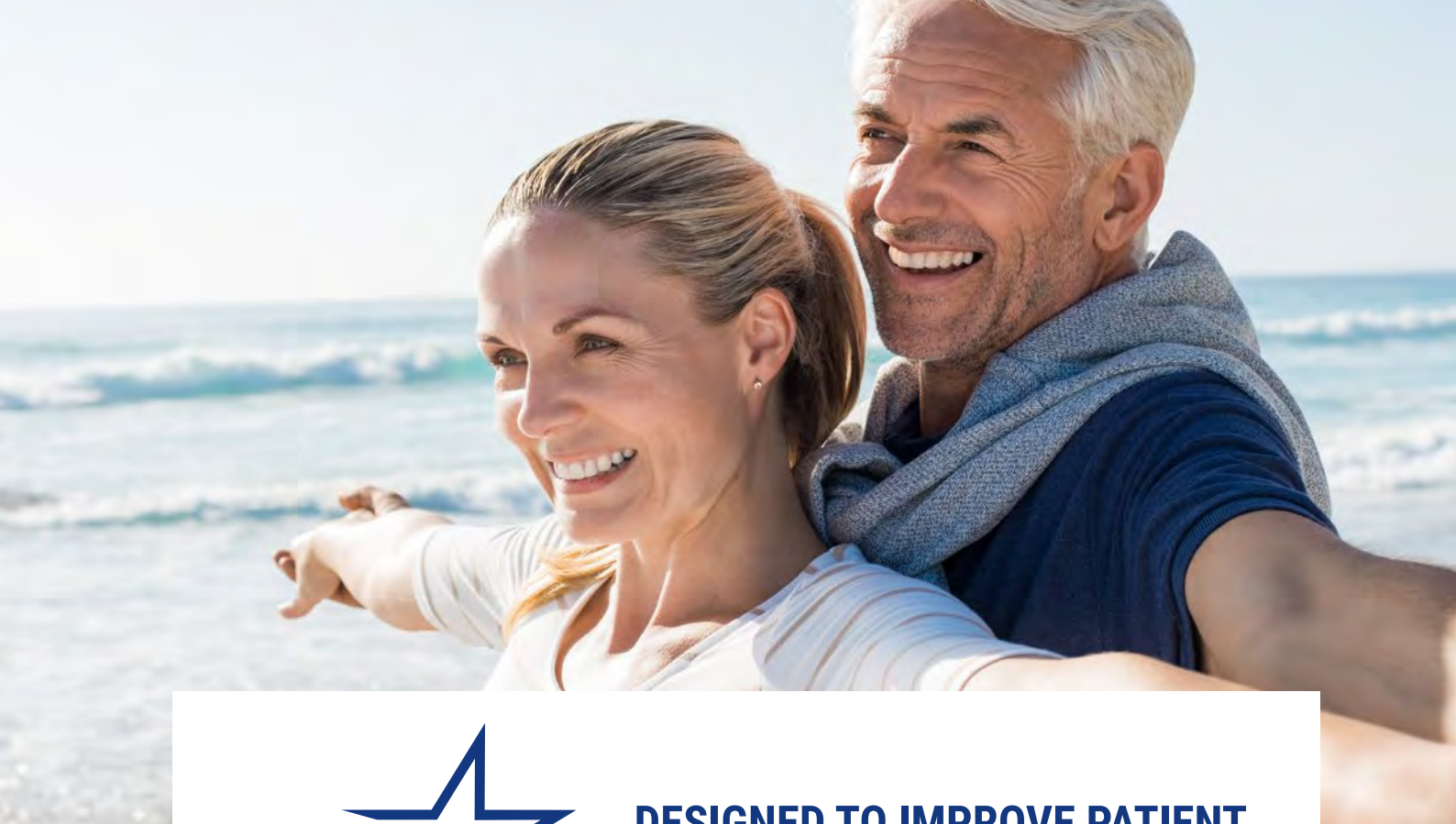
The Medacta Shoulder System represents the core of our shoulder offering. Since the first successful surgery in December 2016, performed by Prof. Dr. med Ralph Hertel, in Bern (CH), we have recently announced the milestone of 15'000 Medacta Shoulder System devices implanted worldwide.

Medacta's innovation is reflected in the Medacta Shoulder System's design. The Medacta Shoulder System is a complete and modular solution that features a broad range of options, wide-ranging sizes, adjustable offsets, and innovative designs, both in the anatomic and reverse configuration, providing surgeons with the flexibility to treat a wide range of patient anatomies and pathologies. Moreover, this modularity allows for the conversion of a total anatomic shoulder replacement into a reverse shoulder replacement without the need to revise all the components. This is aimed at avoiding full revisions of the shoulder implant if disease progression requires conversion to a reverse configuration.

The Medacta Shoulder System offers synergies with advanced material options. Proximal fixation in the standard and short stems is achieved by means of Medacta's proprietary MectaGrip technology, a plasma-sprayed titanium coating that enhances initial stability due to its high coefficient of friction and potential long-term fixation, in conjunction with hydroxyapatite. With the most recent addition of SensiTIN, a coating of titanium nitride, the Medacta Shoulder System offers a complete solution to addressing diverse patient needs.

PERSONALIZED AND ADVANCED TECHNOLOGIES

We offer surgeons enabling technologies that deliver a personalized approach to shoulder replacement, improving accuracy and efficiency while preserving healthcare sustainability. As part of our MySolutions Personalized Ecosystem, our shoulder offering includes MyShoulder, a personalized 3D preoperative planning and 3D printed patient-matched guides, and NextAR Shoulder, the first CE-marked, FDA-cleared and MHLW-approved Augmented Reality surgical application with intraoperative guidance for total shoulder replacement, fully launched in 2022.



DESIGNED TO IMPROVE PATIENT OUTCOMES WITH A PERSONALIZED SHOULDER SURGERY

NextAR Shoulder, Augmented Reality surgical application, empowers the surgeon's vision with unique real-time surgical guidance, during bone preparation and implant placement, superimposed onto the operative field to enhance precision and enable data-driven decision-making. NextAR Shoulder, with limited capital investment and low per-case disposable cost, has the potential to provide significant benefits to the healthcare system.



Technology in shoulder replacement surgery is always advancing, but never so rapidly as I have seen in recent years. I can now plan the surgery more precisely than ever before using three-dimensional CT scanning and software to make the best decisions regarding optimal implant configuration for each individual patient and their unique anatomy. The advantage of NextAR technology is in allowing me to precisely and accurately replicate my preoperative plan in real time, during surgery, without having to look away from my patient for navigation assistance. Once I have planned my optimal shoulder replacement strategy for my patient, I feel confident that NextAR will enable me to execute my plan even more accurately. Now that I have become comfortable using this technology, I can say that NextAR navigation is a real advantage for me during surgery, especially during complex cases.

John-Erik Bell, M.D.
United States



Accurate positioning of glenoid implants is still one of the most challenging steps during the procedure. The long-term survival of a reversed prosthesis is highly dependent on stable bone fixation and correct positioning of the glenoid components. Planning and virtual visualization of the positioning during the surgical procedure is already provided in the community. The step forward of this technology is the real transfer of the planning into the surgical procedure, defined as augmented reality, using intraoperative guidance. We think that NextAR Shoulder represents a great answer to this challenging next step. I am very happy to have participated in the development of this application, and even more so now that this innovative solution is also available in the complex ecosystem of shoulder arthroplasty.

Prof. Dr. med. Matthias Zumstein
Switzerland



8.4 SPINE

THE OVERALL SPINE STRATEGY

Since our introduction into the spine market in 2009, we have leveraged our expertise in both minimally invasive techniques and personalized solutions to improve patients' care and satisfaction. Designed with a team of international expert surgeons, our innovative, complete, and effective spine offering provides surgeons with implants, instruments, and enabling technologies to perform a full range of procedures, from cervical to degenerative and deformity. Since inception, we have

been providing spine implants pre-sterilized and ready for implantation. We strongly believe that pre-sterile implants can increase the efficiency of healthcare systems, reduce the risk of contamination, save time, and reduce costs. Our spine offering is supported by the M.O.R.E. Institute, which provides tailored high-level educational pathways through an international network of expert surgeons.



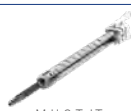
MINIMALLY INVASIVE DEGENERATIVE



MectaLIF Anterior



MectaLIF System



M.U.S.T. LT



M.U.S.T. SI



M.U.S.T. MC



MIS MySpine MC

CERVICAL



M.U.S.T. Mini



Mecta-C System



Mecta-C Stand Alone

DEFORMITY



M.U.S.T.



MySpine S2AI



MySpine Anchor



MySpine

ENABLING TECHNOLOGIES

Building on our proprietary MySolutions Personalized Ecosystem, our spine offering can improve surgeon and patient experience by leveraging our advanced and personalized intraoperative solutions, NextAR Spine Augmented Reality surgical application, and MySpine patient-matched technology. Using the most recent augmented reality advances, NextAR Spine empowers the surgeon's vision with unique real-time surgical guidance superimposed onto the operative field, thereby enhancing precision and enabling data-driven decision-making. NextAR Spine was awarded the 2022 Spine Technology Award from Orthopedics This Week, the second Medacta product to receive this prestigious honor after MySpine Platform, patient-matched technology.

MySpine provides surgeons with a complete platform of patient-matched 3D printed screw placement guides, to lead the surgeon through the critical steps of accurate pedicle screw placement whilst reducing the surgical time and intraoperative X-ray radiation reduced time and costs. The MySpine platform offers enabling solutions for cervical, thoracolumbar, and sacroiliac cases.

Both NextAR and MySpine are part of Medacta's MySolutions Personalized Ecosystem, an advanced network of digital solutions designed to improve patient outcomes, healthcare efficiency, and sustainability, representing an optimal solution worldwide, particularly for US Ambulatory Surgery Centers (ASCs).



DESIGNED TO IMPROVE PATIENT OUTCOMES WITH A PERSONALIZED SPINE SURGERY

NextAR Spine, Augmented Reality surgical application, empowers the surgeon's vision with unique real-time surgical guidance, superimposed onto the operative field to enhance precision and enable data-driven decision-making. NextAR Spine, with limited capital investment and low per-case disposable cost, has the potential to provide significant benefits to the healthcare system.



As a designer, I leveraged Augmented Reality technology to improve accuracy and efficiency in spine surgery. After successfully handling more than 60 different cases within twelve months I can claim that NextAR Spine is a streamlined, easy-to-use, and versatile solution that can improve implants positioning with great accuracy, increasing safety and clinical outcomes for my patients.

Prof. Dr. Bernhard Meyer
Germany

”



After acquiring the intraoperative images of the patient, I was surprised how fast and lean it was to set up the system; thanks to a very smart tracking system and the use of the AR glasses, I was able to successfully position the screws as planned.

Kevin J. McGuire, MD, MS
United States

”

CERVICAL PROCEDURE

The Medacta cervical platform is an end-to-end 360° solution with improved flexibility, stability, and accuracy designed for posterior fixation and anterior cervical discectomy and fusion (ACDF). The integrated platform is comprised of three components: Mecta-C Stand Alone, M.U.S.T. Mini, and MySpine Cervical.

In posterior approaches, MySpine Cervical patient-specific guide allows surgeons to refine the preoperative 3D planning based on the patient's CT images, increasing intraoperative accuracy in pedicle screw insertion, potentially providing improved clinical outcomes. The latest added Mono-lateral guides can help in better preserving the soft tissues during the surgery. MySpine Cervical operates in synergy with the M.U.S.T. Mini posterior cervical screw system, a comprehensive solution for fixation of the occipito-cervico-thoracic spine. The variety of screws, hooks, rods, and connectors allows the surgeon to tailor the construct to the specific patient anatomy and pathology to be treated. The synergy between MySpine Cervical and M.U.S.T. Mini increases safety, stability, and accuracy in screw placement with pedicle screw trajectory, while reducing metal density and radiation level, without initial capital investments.

In anterior approaches, we provide healthcare professionals with a complete platform that offers a modular and versatile option, to address specific anatomical requirements and pathologies. The surgeon can choose between a "stand-alone system" incorporating the benefits of an anterior plate and a radiolucent interbody spacer, or a "plate & cage system", offering effective load sharing, optimal biocompatibility, and biomechanical stability in situ. A dedicated anterior retractor supports both our cervical solutions.

DEFORMITY PROCEDURE

The Medacta deformity platform is a consolidated complete system designed to assist the surgeon in all the steps of the surgery. Our enabling technologies, NextAR Spine and MySpine platform ensure an accurate screw positioning in challenging anatomies, while the M.U.S.T. instruments provide several options for performing reduction and correction manoeuvres. The MectaLIF Anterior cages complete the offering for anterior cases.

After the recent introduction of the MySpine S2AI, in 2022, we extended the MySpine platform with the innovative MySpine Anchor patient-specific guides, to complete the treatment of challenging spine anatomies and reinforce the fixation, and therefore the stability, for long constructs. This solution allows surgeons to accurately implant M.U.S.T. Pedicle Screws and M.U.S.T. SI Headless Screws to anchor long constructs in complex spine cases, potentially improving the thoracolumbar fixation to help reduce lower back pain.

MINIMALLY INVASIVE DEGENERATIVE PROCEDURE

Our solutions are specifically designed with a muscle-sparing approach, potentially offering fast patient recovery after spinal fusion surgery. Our degenerative procedure is based on two different approaches: "midline-cortical", fully functional with our enabling technologies NextAR Spine and MySpine platform, and "percutaneous", completely optimized for NextAR Spine.

MIDLINE CORTICAL APPROACH

MIS MySpine MC, used in the midline cortical approach, allows posterior lumbar fusion to be carried out in a minimally invasive, muscle-sparing way, resulting in shorter operating times and a substantial reduction of radiation exposure while increasing efficiency compared to conventional free-hand or navigated lumbar fusion surgery. The goal of MIS MySpine MC is to maximize the fusion rate and the predictability of clinical outcomes, thus positively impacting patients' well-being.

M.U.S.T. MC (Midline Cortical) is a complete and flexible system which stabilizes and facilitates the fusion of the thoracolumbar spine and the sacrum. Besides MySpine MC, it features a dedicated retractor and distractor system offering superior performance in muscle tissue manipulation and vertebral distraction/compression maneuvers. This complete platform is further integrated by the cortical/cancellous screw threads, recently registered worldwide, which differentiate bone purchase, enhancing posterior fixation.



PERCUTANEOUS APPROACH

M.U.S.T. LT (Long Tab Screw System) is a minimally invasive solution for posterior spine fixation in the percutaneous approach. This versatile solution gives the surgeons freedom of choice between fast-locking screws. It is applicable in an extensive range of degenerative cases and offers an extended reduction capacity, a crucial aspect in lumbar spondylolisthesis or thoracic kyphosis restoration. The absence of Nickel, Cobalt, and Chromium makes M.U.S.T. LT a unique solution within the M.U.S.T. pedicle screw system, providing full spine fixation with 100% Titanium alloy constructs.

8.5 SPORTSMED

Our Sports Medicine business line started in 2016 with the aim of providing minimally invasive personalized procedures allowing patients to quickly return to their daily activities. Our engineers collaborated with an international team of expert surgeons to develop specific and innovative products for the treatment of ligament, tendon, and muscular injuries of the knee, hip, and shoulder. In 2022, we focused on new product development to expand our offering in the arthroscopic knee, shoulder, and hip surgery.

KNEE PORTFOLIO

The Medacta Anatomic Ribbon Surgery (M-ARS), launched in 2017, is an innovative surgical technique to reconstruct the anterior cruciate ligament (ACL). It is designed to distribute forces in a more natural, anatomical way, and is supported by specific instruments and dedicated extra-articular implants. To facilitate ACL reconstructive surgery, we are now able to offer an extensive portfolio of extra-articular (FairFix Adjustable Button, MectaFix Continuous Loop Button) and close to the joint-line fixation options (MectaScrew Interference Screw Family). We offer not only a standard instrument portfolio, but also innovative solutions for Quadriceps Tendon harvesting procedures (MectaQTH) and single-use instruments and sterile kits for standard ACL reconstruction procedures, as well as for the specific M-ARS Anatomic Ribbon repair.

In 2022, we developed new FairFix Adjustable Button configurations, aiming to cover different techniques (FairFix AM), graft types (FairFix QT) and improve tibial fixation for the M-ARS technique (FairFix PSP). These new devices are expected to obtain product registration and be ready for limited market release in 2023.

SHOULDER PORTFOLIO

Our suture anchor portfolio allows us to offer multiple solutions, according to specific indications and surgeon preferences. Different anchor sizes and materials are available, from knotted anchor designs for arthroscopic shoulder labral repair to knotless options for shoulder lateral row cuff repair. With the MectaLock Suture Anchor Family, we can provide both a non-absorbable PEEK (MectaLock PEEK) and a composite material option (MectaLock C). For surgeons who prefer soft anchor designs or are looking for solutions for the medial row repair, we offer two different knotted All-Suture Anchor designs with MectaLock All-Suture and SnugFit All-Suture. We are also able to offer Titanium anchors, either in a more traditional design (MectaLock TI) or in a unique self-rotating anchor design (MectaTap TI). To facilitate suture management in arthroscopic labral and rotator cuff repairs, the comprehensive Medacta FastShuttle Suture Passer Family is also able to supply multiple state-of-the-art single-use and reusable instruments.

In 2022 we focused on developing brand new instruments to facilitate the implantation of our suture anchors (MectaLock PEEK/C slotted aimers and MectaLock All-Suture aimers and punches) and a dedicated set of curved instruments for SnugFit All-Suture portfolio.

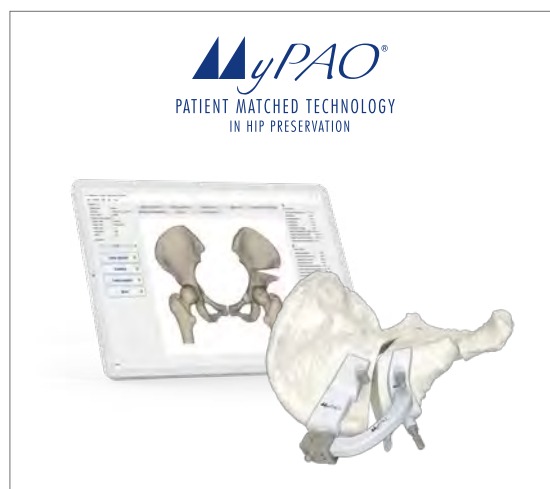
SUTURE PORTFOLIO

Within our suture portfolio, we cover multiple indications in shoulder, hip, and knee procedures. PowerSuture, our all-encompassing suture family, offers a wide variety of Ultra-High Weight Polyethylene sutures, tapes, whip-stitch loops, passing loops, and double-armed sutures featuring our Black Cobra needle (available in multiple configurations). PowerKnot High Strength Suture, a strong tensile strength suture, potentially offering an improved knot grip and a useful Running Direction Indication (RDI) feature to alleviate the challenging suture management in arthroscopic shoulder surgeries.

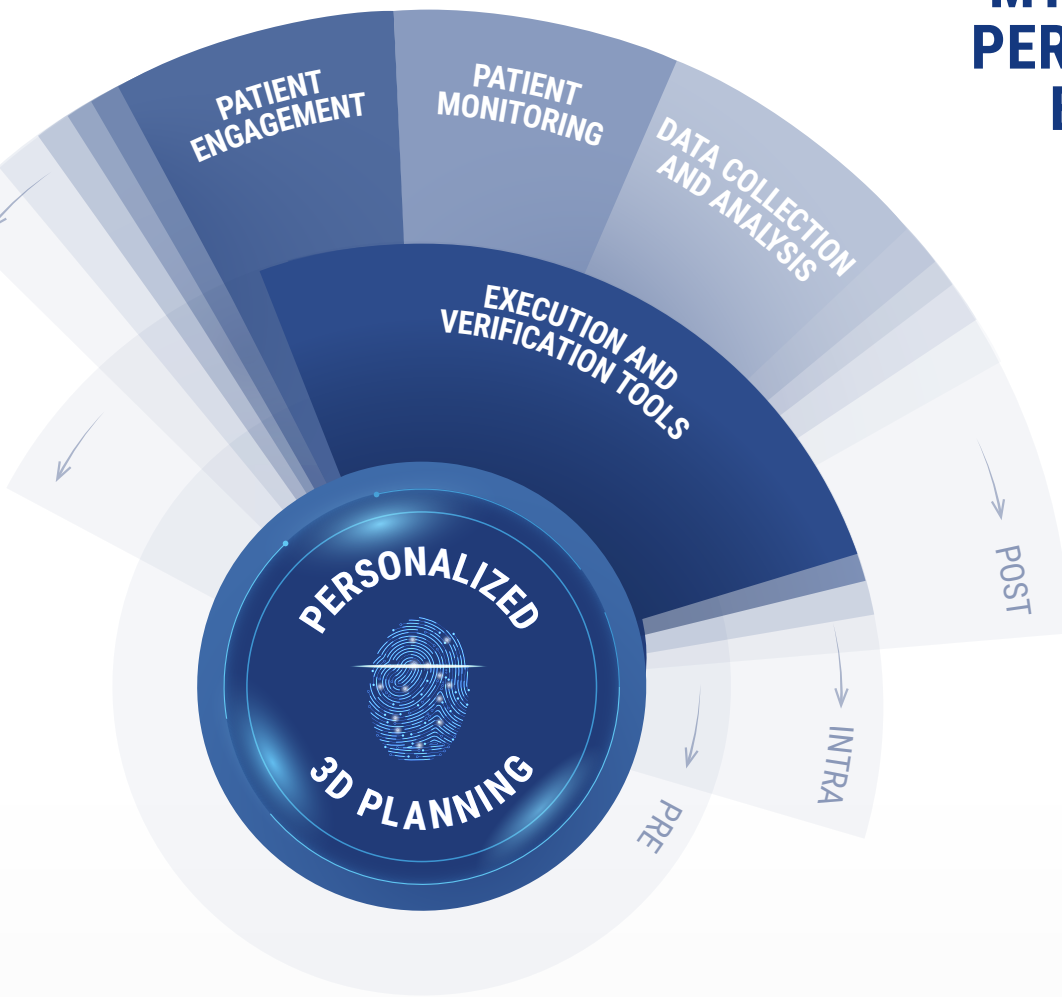
HIP PORTFOLIO

Alongside many anchors (MectaLock Suture Anchor, MectaLock All-Suture anchors) and suture management devices (FastShuttle Suture Passer Family) shared with the shoulder product line, we also offer MectaFlip, the unique-on-the-market intra articular minimal invasive expander.

This year we started the limited market release for MyPAO, a unique platform based on patient-matched technology, aiming to assist surgeons during periacetabular osteotomy procedures, allowing them to achieve the planned acetabular repositioning. MyPAO is part of our MySolutions Personalized Ecosystem, an advanced network of digital solutions designed to improve patient outcomes, healthcare efficiency, and sustainability.



MYSOLUTIONS PERSONALIZED ECOSYSTEM



PERSONALIZED
3D PLANNING

PRECISE
EXECUTION

PATIENT
ENGAGEMENT

EFFICIENT CASE
MANAGEMENT

Design the optimal surgical strategy based on each patient's unique anatomy and biomechanics. Enhance confidence and reproducibility using semi-automated 3D planning and non-invasive intraoperative assessment of implant positioning. MySolutions delivers intuitive and reliable solutions (MyKnee, MyHip, MyShoulder, MySpine, MyOsteotomy) with advanced analytical features empowering the surgical decision-making process.

