

Analysts

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Basic Information

Last Closed Price	US\$101.77
12M Target Price	US\$131.17
+/- Potential (%)	+28.9%
NYSE Ticker	ZBH
GICS Sector	Healthcare
GICS Sub-Industry	Healthcare Equipment

1Y Performance against S&P 500



Company Description

Zimmer Biomet Holdings, Inc. is a global medical technology company specializing in orthopaedic reconstructive products, including knee, hip, and S.E.T. products (sports medicine, biologics, extremities, trauma). These products address disorders and injuries affecting bones, joints, and soft tissues, serving orthopaedic surgeons, hospitals, and healthcare distributors. Founded in 1927 and headquartered in Warsaw, Indiana, the company was previously known as Zimmer Holdings, Inc. before rebranding to Zimmer Biomet Holdings, Inc. in June 2015.

Key Financials

Basic Shares O/S	210m
Free Float	99.74%
52-Wk High-Low	133.90 / 101.47
Fiscal Year End	Dec-31

(US\$ M)	FY22A	FY23A	FY24E	FY25E
Revenue	6,490	7,394	7,843	8,325
Growth	1.6%	6.5%	6.1%	6.1%
NI Margin	4.2%	13.9%	12.4%	13.1%
ROA	1.4%	4.8%	5.5%	5.9%
Gearing	0.47x	0.46x	0.44x	0.46x

Key Executives

Ivan Tornos	Chief Executive Officer
Suketu P. Upadhyay	Chief Financial Officer
Paul A. Stellato	Chief Accounting Officer

We are initiating coverage of **Zimmer Biomet Inc ("Zimmer", "ZBH")** with a **BUY** rating and a **US\$131.17 (+28.9%)** 12M price target from the current share price of US\$101.77.

Q3FY24 Earnings Highlights

- Company updated 2024 financial guidance, reducing and narrowing range for full year outlook from 4.0% - 5.0% to 3.5% - 4.0% from expected ERP headwinds.
- Third quarter net sales of \$1.824 billion increased y-o-y 4.0% and 4.1% on a constant currency basis. Net earnings for the third quarter were \$249.1 million, or \$353.2 million on an adjusted basis.
- Third quarter diluted earnings per share were \$1.23; adjusted diluted earnings per share were \$1.74

Investment Thesis

- Zimmer's introduction of new products under its S.E.T. and ROSA robotics lines has significantly enhanced its product portfolio and diversification efforts.** By targeting both emerging and established market needs, the company is ready to capitalize on its first-mover advantage and drive sustainable growth aided by its strategic shift into Ambulatory Surgery Centres (ASC).
- Zimmer's robust innovation pipeline is well-positioned to drive a recovery and regain market share in the hips and knees segment.** By addressing portfolio gaps and leveraging advanced surgical technologies, the company is positioned to regain market share and boost long-term revenue growth.
- Restructuring efforts, backed by new management, present an underappreciated opportunity to significantly reduce ZBH's cost base.** With past restructuring efforts already under way, CEO Ivan Tornos will boost these plans given his stellar track record across industry leading firms.

Catalysts

- Resolution of ERP headwinds with the successful integration of ZBH's new SAP platform.
- Launch of the new Z1 Femoral Hip System and Positive Clinical Trial data.
- Continued M&A deals to bolster growth and solidify key areas.

Valuation

Our 12M price of US\$133.11 was obtained through a blended DCF using perpetual growth and through public comparables. Our DCF price target represents an implied EV/EBITDA multiple of 13.6x and implied P/E of 26.1x.

Investment Risks

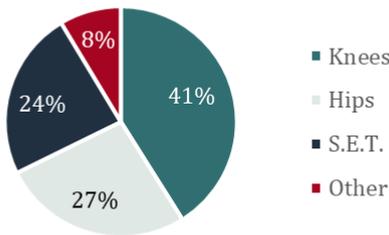
- Intensified competition from rival robotic platforms.
- Evolving FDA safety standards and post-market surveillance standards resulting in product recalls.
- Continued supply chain vulnerabilities from global disruptions and the ongoing red sea crisis.

Figure 1: Product Portfolio



Source(s): ZBH Website

Figure 2: Revenue Breakdown



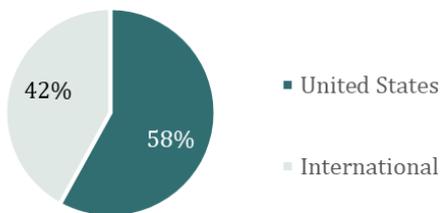
Source: Company 10-K

Figure 3: Distribution Channels



Source: Company 10-K

Figure 4: Geographic Breakdown



Source: Company 10-K

Company Overview

Zimmer Biomet Holdings, Inc. is a medical equipment company specialising in the design and manufacture of a broad-based portfolio of products to treat musculoskeletal conditions (Figure 1). The company operates in four key segments: orthopaedic reconstructive products such as knees and hips; S.E.T. including sports medicine, biologics, extremities (shoulder, elbow, wrists, ankles, hands), trauma, and Craniomaxillofacial and Thoracic products (CMFT); and other products including bone cement and its integrated suite of digital and robotic technologies (Figure 2). At the forefront of ZBH’s robotic suite is ROSA, a Robotic Surgical Assistant, which supports surgeons in performing minimally invasive procedures for the brain, knees, and hips. Its connected suite of products and technologies is marketed as the ZBEdge Platform providing healthcare institutions with data-driven insights to enhance patient care.

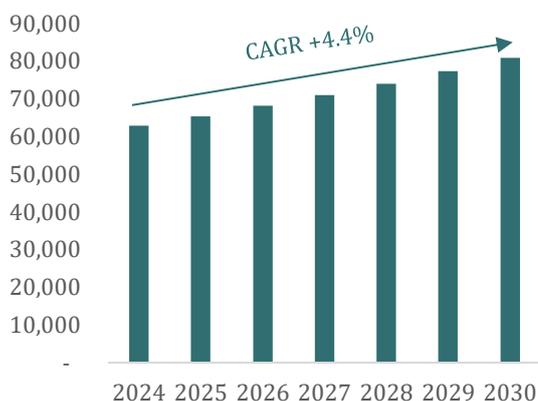
The company’s primary customers include orthopaedic surgeons, neurosurgeons, hospitals, stocking distributors, healthcare dealers, agents, and healthcare purchasing organisations. Its products are marketed and sold through two key channels: direct channel accounts (i.e. hospitals, ambulatory surgery centres) and stocking distributors and healthcare dealers. (Figure 3)

Founded in 1927, ZBH is headquartered in Warsaw, Indiana and operates globally in the US and international markets disaggregated as the Americas, EMEA, and Asia Pacific. (Figure 4)

Q2FY24 Earnings Review

- Announced plans for the broad commercial launch of the Z1™ Femoral Hip System for total hip arthroplasty at the upcoming 2024 annual meeting of the American Association of Hip and Knee Surgeons (AAHKS). The launch of the Z1 Femoral Hip System, a triple-taper femoral system, pairs with Zimmer Biomet’s industry-leading G7® Acetabular System to provide surgeons with a versatile, streamlined and efficient total hip arthroplasty solution.
- Completed the acquisition of OrthoGrid Systems Inc., a privately held medical technology company focused on artificial intelligence (AI)-driven surgical guidance systems for total hip replacement. The acquisition includes OrthoGrid’s AI-powered fluoroscopy-based surgical assistance product Hip AI®, as well as two additional orthopedic applications and over 40 patents.
- Appointed David DeMartino as Senior Vice President, Investor Relations.
- Received key recognition and awards: Zimmer Biomet was honoured with the Faith in Practice Visionary Award in recognition of the Company’s commitment to give back to global communities and people in need, including our unique, long-term partnership to prioritize continuity of care; PM360 named Zimmer Biomet President and CEO Ivan Tornos the Life Sciences Manufacturer CEO of the Year award winner.

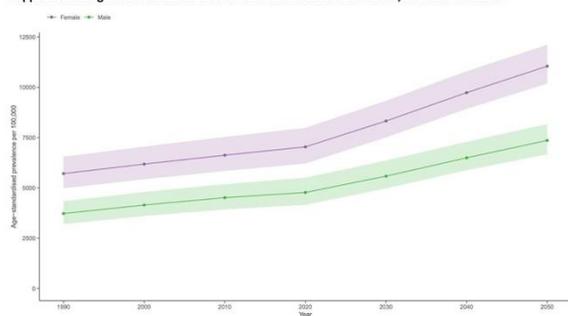
Figure 5: Orthopaedic Device Market



Source(s): Grandview Research

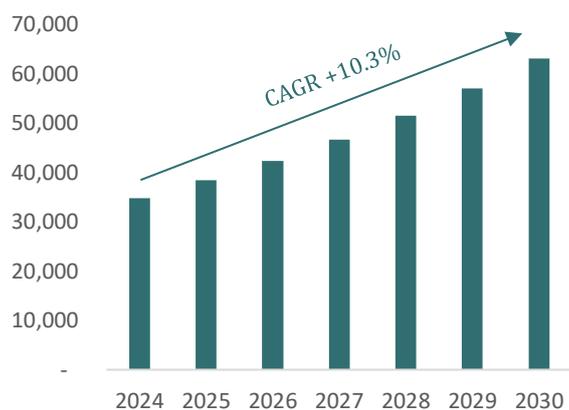
Figure 6: Global Incidence of MSK conditions to 2050

Supplemental Figure 3: Global forecast of other MSK conditions to 2050, males and females



Source(s): Lancet Rheumatology

Figure 7: Minimally Invasive Surgical Instruments market size



Source(s): Grandview Research

Orthopaedic Industry Outlook

The orthopaedic device industry comprises of medical equipment and accessories including arthroscopic devices, spinal devices, joint reconstruction, trauma fixation, accessories, braces, and orthobiologics. The industry is poised for steady growth at a CAGR of 4.4% (2024-2030), accelerated by favourable demographic changes including the incidence of musculoskeletal conditions, sports and trauma related injuries, and the aging population (Figure 5).

Incidence of Musculoskeletal Disease

Musculoskeletal diseases (MSK) are a major global health concern, impacting over 1.72 billion people. These conditions, including osteoporosis, arthritis, and tendinitis, significantly impair mobility and reduce individuals' quality of life. According to a report from *The Lancet Rheumatology*, the number of people worldwide with musculoskeletal disorders increased by 123.4% between 1990 and 2020, rising from 221 million to 494 million. Cases are expected to surge by another 115% from 2020 to 2050, reaching an estimated 1,060 million cases (Figure 6). This alarming trend underscores the growing need for advanced orthopedic interventions, ranging from joint replacements to reconstructive procedures, to mitigate the impact of these disorders on individuals and healthcare systems globally.

Rising Geriatric Population

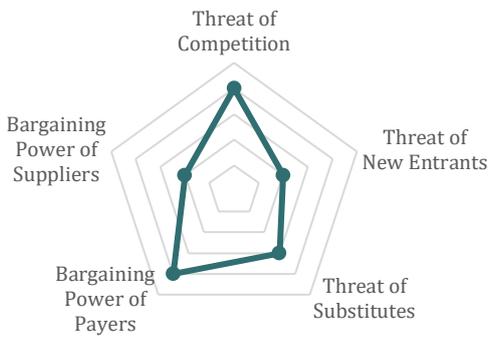
There has been a substantial surge in the occurrence of musculoskeletal diseases as Global Studies (2021) have found 21.7% of older adults live with osteoporosis (brittle bones) with the highest prevalence in the US, EU, and Asia. Characterised by low bone-to-mass density ratios, incidence of osteoporosis is exacerbated with age, placing the elderly at a higher risk of sustaining critical injuries. In 2021, they accounted for 25% of all trauma patients in the US. With a growing proportion of older people (16% in 2050), the demand for joint replacement and fracture repair will boost market growth and impels the demand for orthopedic solutions.

Trauma and Sports related injuries

In the US, more than 775,000 children under the age of 14 are treated annually for sports-related injuries, reflecting the widespread participation in high-impact activities. Additionally, vehicular accidents, workplace injuries, and recreational mishaps contribute to the growing demand for trauma care. These cases often require immediate surgical intervention, advanced implants, or reconstructive solutions, highlighting the critical role of orthopedic devices in emergency and recovery scenarios across all age groups.

Shift to minimally invasive surgeries in Ambulatory Surgery Centres (ASCs) The demand for minimally invasive surgeries (MIS) is rising rapidly and is expected to grow at a CAGR of 10.5% from 2024 to 2030 (Figure 7). MIS techniques, including robotic-assisted and laparoscopic surgeries, are increasingly performed in Ambulatory Surgery Centers (ASCs). These procedures offer significant cost advantages, reduce postoperative pain, and shorter recovery times, making them a cornerstone of modern orthopedic care for patients and healthcare providers.

Figure 8: Porters Five Forces

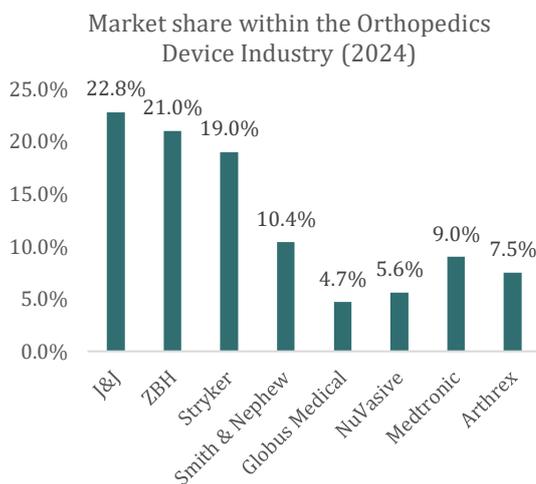


Source(s): Team estimates

Figure 9: Competitive Positioning



Figure 10: Market Share within the Orthopaedics device industry (2024)



Source(s): Grandview Research

Porter's Five Forces

Section Reference: Figure 8

Threat of Competition– High (4/5)

The orthopedic device industry is marked by intense competition, with key players like Stryker and Johnson & Johnson's DePuy Synthes vying for dominance. These competitors have robust research and development (R&D) capabilities, enabling them to consistently introduce innovative solutions (Figure 9). Pricing pressure also intensifies rivalry, particularly in mature markets. For ZBH, this competitive landscape necessitates constant innovation and strategic differentiation to maintain its leadership position at a market share of 21% (Figure 10). Despite these challenges, ZBH's diversified product portfolio and ongoing investments in robotics and advanced surgical systems position it well to navigate this high-stakes environment.

Threat of New Entrants– Low (2/5)

ZBH operates in a highly regulated industry where stringent compliance requirements act as a significant barrier to entry for new players. Regulatory standards for product safety and efficacy, combined with the necessity for extensive clinical trials, create a challenging environment for potential entrants. Furthermore, established companies like ZBH enjoy strong customer relationships and brand recognition, further reducing the threat of new competitors. This low level of entrant threat allows ZBH to focus on refining its product offerings and expanding its market share without significant disruption from new market participants

Threat of Substitutes – Moderate (3/5)

While non-invasive treatments such as physical therapy, acupuncture, and chiropractic adjustments are alternatives for managing musculoskeletal disorders (MSDs), they are not effective for severe conditions. Surgical interventions, including joint replacements and arthroscopic repairs, remain the gold standard for addressing advanced MSDs. However, the availability of substitute therapies poses a moderate threat by providing patients with less invasive options.

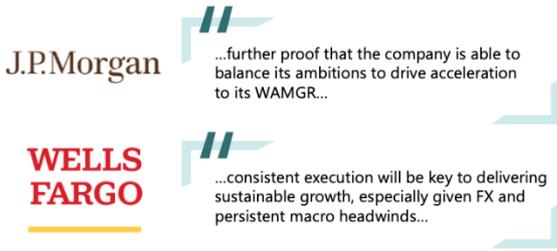
Bargaining power of Payers - High (4/5)

Healthcare institutions, including hospitals and ambulatory surgery centers (ASCs), hold significant bargaining power due to their ability to make bulk purchases. This is particularly pronounced in regions like the U.S., where insurance reimbursement policies exert additional pricing pressures. ZBH's strategic partnerships with ASCs and its ability to offer comprehensive, value-driven solutions help counterbalance this power. By aligning its offerings with customer needs and focusing on cost-efficiency, ZBH strengthens its relationships with key buyers, ensuring sustained demand

Bargaining power of suppliers – Low (2/5)

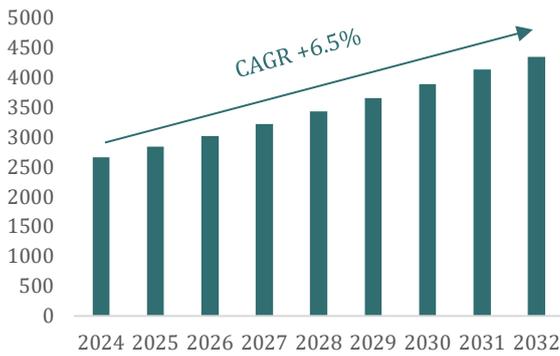
ZBH's diversified supply chain and global manufacturing footprint significantly reduce the bargaining power of its suppliers. With access to multiple sourcing options, ZBH can maintain competitive input costs and mitigate potential supply disruptions. This low supplier power enables ZBH to focus on enhancing its operational efficiency and allocating resources toward innovation and market expansion. By maintaining strong supplier relationships and leveraging its scale, ZBH ensures a steady supply of high-quality materials for its extensive product range.

Figure 11: Street view Thesis 1



Source(s): Bloomberg

Figure 12: Global Shoulder Replacement Market (2024-2032)



Source(s): Straits Research

Figure 13: ROSA Shoulder



Source(s): ZBH Website

Figure 14: Identity Shoulder System



Source(s): ZBH Website

Figure 15: Tapestry implant



Source(s): ZBH Website

Investment Thesis

1. Zimmer's introduction of new products under its S.E.T. and ROSA robotics lines has significantly enhanced its product portfolio and diversification efforts.

Street view: While the market recognizes ZBH's long-term growth potential through active portfolio management, it remains overly skeptical of ZBH's ability to execute consistently and accelerate WAMGR. (Figure 11)

Our view: ZBH is untapping the potential of emerging markets through a new execution strategy designed to capitalize on favourable insurance policy changes and diversify its revenue streams with innovative product offerings.

The Market for Shoulder Replacement Procedures

The global market for shoulder replacement procedures is experiencing robust growth, driven by the increasing prevalence of musculoskeletal conditions among the aging population. Shoulder arthroplasty replacements is projected to grow at a CAGR of 6.5%, fuelled by advancements in medical technology and a rising demand for innovative treatments (Figure 12). Zimmer Biomet Holdings (ZBH) has recognized this opportunity and positioned itself to capitalize on the expanding shoulder replacement segment.

ZBH is Poised to Benefit from First-Mover Advantage.

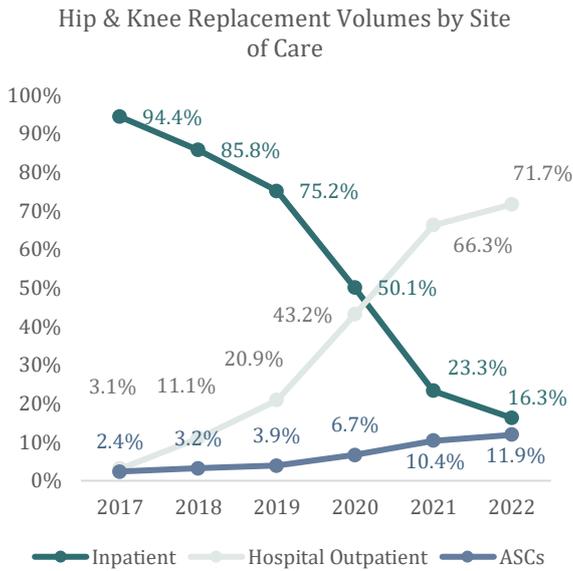
Under its S.E.T. portfolio, Zimmer offers solutions for shoulder joints replacements including sockets and fixtures. ZBH's introduction of the world's only FDA 510(K)-approved robotic shoulder treatment positions it as a trailblazer in the field of shoulder arthroplasty (Figure 13). This robotic system enhances surgical precision, reduces recovery times, and minimizes procedural defects. This first-mover advantage not only strengthens its competitive positioning but also solidifies its reputation as a leader in orthopedic innovation.

Previous Product offerings for Shoulder Arthroplasty.

Beyond its robotic shoulder system, ZBH has fortified its offerings with a suite of supporting shoulder products. The Signature One 2.0 system is a groundbreaking 3-D visualization software designed to optimize surgical planning and outcomes. The integration of this software with the ROSA robotic platform allows for enhanced anatomical precision and improved surgical efficiency.

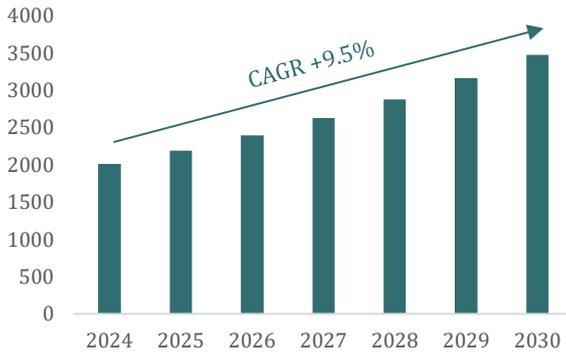
Moreover, Zimmer's broad-based portfolio offers surgeons greater choice to specialise their treatment plans improving patient outcomes per case. The Identity Shoulder System, launched in 2022, offers a highly adaptable solution for anatomical, reverse, and revision procedures (Figure 14). It features the ability to provide 5mm of additional joint space below the resection, giving surgeons greater flexibility for future revision surgeries. This adaptability helps optimize natural shoulder movement and addresses complex cases, enhancing patient outcomes. Additionally, Tapestry, a biointegrative implant, supports various procedures such as rotator cuff repairs, total shoulder replacements, and tendon repairs (Figure 15). Available in multiple sizes, Tapestry accommodates diverse patient anatomies and surgical needs, reinforcing ZBH's comprehensive approach to shoulder arthroplasty.

Figure 16: Hip & Knee Replacement Volume by Site of Care



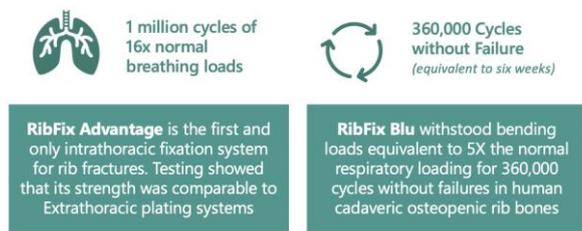
Source(s): Zimmer Biomet Holdings

Figure 17: Global Craniomaxillofacial (CMFT) Device Market (2024-2023)



Source(s): Grandview Research

Figure 18: RibFix Products Clinical Results



Source(s): ZBH Website

Figure 19: Sternal Closure Economic Benefits

Per Patient Costs	Sternalock BLU	Wire	Difference	P-value
Total Index Hospitalization Cost	\$23,437	\$20,574	\$2,863	0.1
Total Follow-up Costs	\$9,002	\$13,511	-\$4,509	0.1
Total 6M Cost	\$32,439	\$34,085	-\$1,646	0.6

Sources(s): ZBH Website

Changing Medicare Coverage presents an opportunity for ZBH's shoulder portfolio. In 2020, after Medicare coverage in outpatient and ASC settings was expanded to cover total knee and hip arthroplasty, there was a significant shift in replacement volumes in ASCs from 6.7% - 11.9% (Figure 16). In alignment with these trends, ZBH has strategically been shifting into ASCs and has made significant progress in its network with 30% of its ROSA robots installed in these facilities. Recently, Medicare revised its insurance coverage to include total shoulder arthroplasty for outpatient reimbursement. Made effective in January 2024, Medicare increased facility payment rates for ASCs by 3.1%. This presents an opportunity for ZBH to accelerate the adoption of its ROSA shoulder product line with its expanded B2B model.

This expansion will be supported by ZBH's new strategic partnerships will revamp its execution strategy. Collaborating with CBRE Group, an American commercial real estate firm, the company is expanding its distribution network to develop and outfit ASCs. This alignment with emerging healthcare trends not only diversifies ZBH's market presence but also supports the deployment of its ROSA shoulder line in outpatient settings, unlocking new revenue streams and reinforcing its market leadership.

Impact on valuation:

With positive feedback from initial use of ROSA shoulder and a full launch anticipated by the end of 2024, ZBH is expected to see meaningful growth in this segment starting in 2025. Hence, we forecast revenue above street view of 3% - 7.8%, at a revenue growth rate at 6% - 8% through the forecast period.

High-Growth Thoracic Submarkets Give Rise to Above-Market Growth.

In addition to its shoulder focus, ZBH is making strides in high-growth thoracic submarkets under its S.E.T. portfolio. Products like the RibFix Advantage and Sternalock BLU wire system highlight its expansion into the craniomaxillofacial (CMFT) device market, which is projected to grow at a CAGR of 9.5% (Figure 17). The RibFix Advantage stands out as the first and only FDA approved intrathoracic fixation system, offering unmatched durability and reliability under extensive cyclic loading. This system enhances patient comfort and healing outcomes, while enabling faster recovery compared to other surgical treatments (Figure 18). Meanwhile, the Sternalock BLU system provides a cost-effective solution, reducing hospitalization and follow-up costs by \$1,646 per patient (Figure 19). Combined clinical and economic benefits supports its ASP premium per case and Zimmer's additional share of wallet as the preferred choice by healthcare professionals.

Impact on valuation:

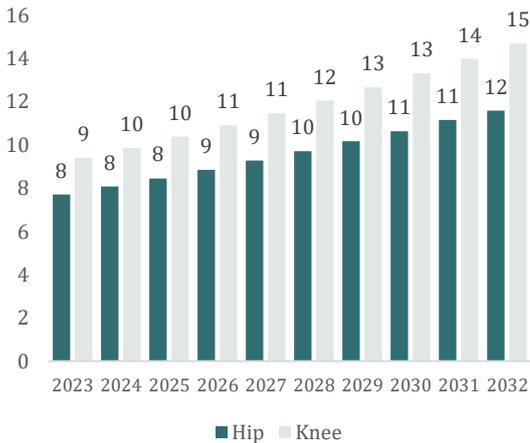
Innovations in the thoracic line enable ZBH to command premium pricing while driving above-market growth in these underpenetrated submarkets. Therefore, we forecasted a revenue growth rate for the S.E.T. segment at above the street view of 5% - 5.9% and within company estimates (200 -400bps above market), growing the revenue from knees at 5.3% - 7.3% through the forecast period.

Figure 20: Street view Thesis 2



Source(s): Bloomberg

Figure 21: Hip & Knee Replacement Market Sizing, 2023 – 2032 (USDbn)



Source(s): Fortune Business insights

Figure 22: Z1 Femoral Hip System



Source(s): ZBH Website

Figure 23: G7 Acetabular System



Source(s): ZBH Website

Figure 24: ZBH’s acquisition of OrthoGrid



2. Zimmer’s robust innovation pipeline is well-positioned to drive a recovery and regain market share in the hips and knees segment.

Street View: The market is currently sceptical of Zimmer Biomet’s (ZBH) ability to reclaim its former stronghold in the hip and knee segments.

Recent years have seen a decline in market share due to inconsistent execution, supply chain constraints, and growing competition, particularly in the direct anterior approach and surgical navigation solutions. This, combined with macroeconomic headwinds, has tempered expectations, with analysts predicting modest revenue growth of 3.0 – 4.0% (Figure 20).

Our View: Contrary to market sentiment, we see significant potential in ZBH’s robust innovation pipeline, which we believe will drive a strong recovery in the hip and knee replacement market.

Market Sizing of Hip & Knee Replacements

The 2 key operating segments of ZBH, Knees and Hips (totalling c. 67% of total revenue) is set to undergo modest market growth, growing at an average CAGR of 4.9% from 2023 through 2032 (Figure 21)

Knee Replacement Market

The **total knee replacement market** is growing rapidly due to rising cases of arthritis and osteoporosis, combined with an aging population prone to joint issues. Technological advancements like minimally invasive and robotic-assisted surgeries have improved outcomes, while better healthcare infrastructure has expanded accessibility, particularly in developing regions. These factors are driving strong and sustained market growth.

Hips Replacement Market

The **hip replacement market** is also expanding, driven by increased hip disorders such as osteoarthritis. Advances in implant materials and surgical techniques have boosted success rates, and improved diagnostics have led to earlier treatment. Favourable reimbursement policies have further enhanced affordability and access, supporting robust growth in the market.

Newest Hip System – overlooked synergistic potential?

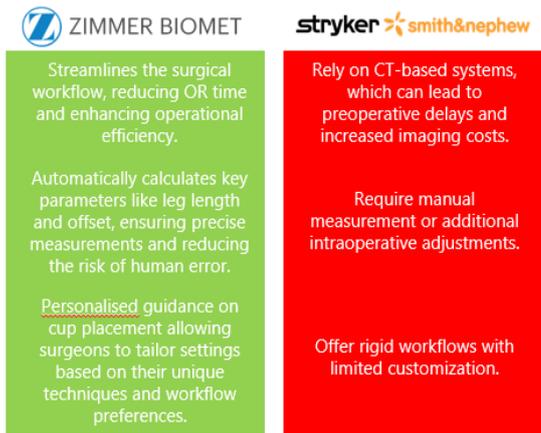
The recent launch of the **Z1 Femoral Hip System (Figure 22)** and **G7 Acetabular System (Figure 23)** represents a major innovation for Zimmer Biomet (ZBH), providing a fully integrated solution for total hip arthroplasty (THA). This new system directly addresses existing gaps in ZBH’s product offerings, such as the need for enhanced stability, precision, and adaptability across a wide range of patient anatomies. By integrating the femoral head (Z1) and acetabular components (G7), ZBH offers surgeons a seamless ball-and-socket joint replacement that mimics natural hip movement, reducing complications and improving patient recovery times.

Major Acquisition – Unlocking a new world of capabilities

Zimmer’s acquisition of OrthoGrid significantly enhances its capabilities through advanced AI surgical guidance, two FDA-cleared orthopedic applications, and around forty patents, positioning ZBH well ahead of its competitors (Figure 24). OrthoGrid’s technology streamlines surgical

Source(s): Orthogrid website

Figure 25: ZBH vs Competitors



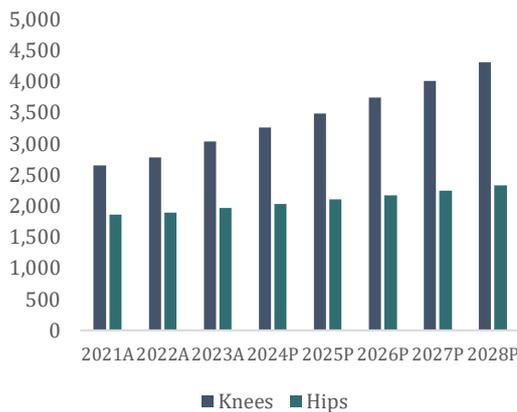
Source(s): Team analysis, ZBH, Stryker, Smith & Nephew website

Figure 26: TMINI Knee Robotic System



Source(s): ZBH, THINK Surgical website

Figure 27: ZBH's Knees and Hips Revenue Evolution 2021A – 2028P (USDm)



Source(s): ZBH 10-K, Team analysis

workflows by enabling real-time image analysis and automated measurements, reducing operating room (OR) time and increasing efficiency. The system automatically calculates key parameters like leg length and offset, minimizing the risk of human error. Furthermore, personalized guidance allows surgeons to tailor procedures, improving precision and outcomes. In contrast, key competitors like Stryker and Smith & Nephew rely on less efficient CT-based systems with manual adjustments and limited customization, making ZBH's offering more attractive (Figure 25).

Impact on Valuations

The Z1 Femoral Hip and G7 Acetabular systems, designed with input from orthopedic surgeons, enhance implant fit, bone preservation, and ease of implantation, boosting surgical outcomes and reducing revision rates. The Z1's triple-taper design offers improved femoral stability, while the G7's flexible cup placement ensures precise alignment. This integrated, customizable THA solution drives higher adoption rates due to its versatility in both primary and revision surgeries, leveraging a first-mover advantage. Additionally, its streamlined workflow reduces costs, supporting a premium pricing strategy and appealing to value-based care models, ultimately enhancing profitability and market share growth for ZBH.

The market has likely overlooked the impact of ZBH's integrated hip system, focusing instead on past execution challenges and the recent loss of market share in hip replacements. Analysts may have underappreciated the clinical and economic benefits of the Z1 and G7 launch, if ZBH's new products would follow similar adoption patterns as previous offerings. However, the early success of the Z1 and G7 systems, including positive surgeon feedback and lower revision rates, suggests a stronger-than-expected market reception. Additionally, the shift towards value-based care and the emphasis on improved surgical outcomes align well with the integrated solution's value proposition, positioning ZBH to regain market share rapidly.

Therefore, we forecasted a revenue growth rate for the Hips segment at above the street view of 1.5% - 3.5% and company estimates (50 -100bps above market), growing the revenue from hips at 4.1% - 4.2% through the forecast period.

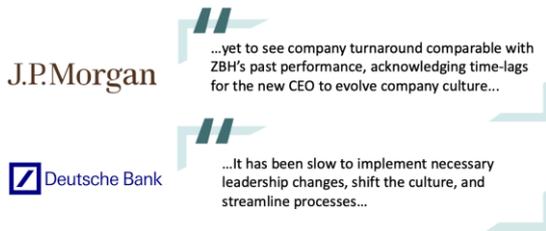
Strategic partnership – offering flexible solutions for surgeons

Zimmer's strategic partnership with THINK Surgical introduces dual-robotic systems, TMINI and ROSA, aimed at enhancing the knees segment (Figure 26). TMINI, a hand-held CT scan-based system, offers precision and surgeon flexibility, catering to diverse surgical needs, while ROSA introduces a CT scan-less, streamlined robotic system for total knee arthroplasty. This combination provides surgeons with expanded options, improves surgical workflows, and reduces preoperative delays, directly addressing previous market gaps.

Impact on Valuations

The early success and positive feedback from expanded robotic options are expected to drive adoption rates, positioning ZBH to regain market share in the highly competitive knees segment, ultimately contributing to sustained top-line growth.

Figure 28: Street View Thesis 3



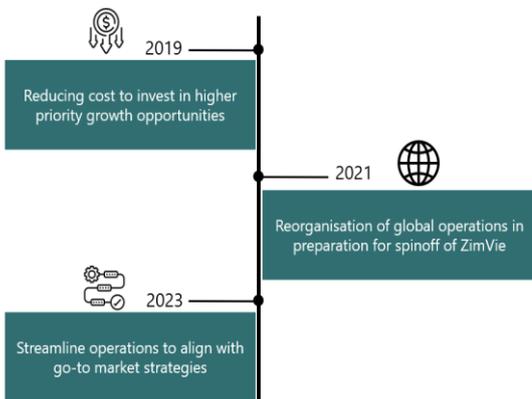
Source(s): Bloomberg

Figure 29: ZBH's CEO robust track record

Johnson & Johnson	Held overall responsibility for JNJ's Cordis and DePuy franchises across the EMEA Medical region, driving 8.5% CAGR growth in divisional profitability
Medtronic	Head Americas, ran Covidien, a broadly diversified c. USD11bn corporation operating globally. Drove bottom-line growth (America) by 23% during his short stint of ~2 years
BD	Global responsibility for BD Interventional's new Critical Care and Urology businesses, which generated US\$800mn in Revenue, up from US\$685mn for the entire segment the prior year

Source(s): J&J, Medtronic, BD's 10-K, Team Analysis

Figure 30: ZBH's Historical Restructuring efforts



Source(s): ZBH Website

Figure 31: ZBH's Historical operating margins vs competitors, 2019A - 2023A (%)



Source(s): ZBH, GMED, Boston Scientific, Smith & Nephew 10-K

Therefore, we forecasted a revenue growth rate for the Knees segment at above the street view of 5.8% - 6.6% and company estimates (100 - 150bps above market), growing the revenue from knees at 8.7% - 9.0% through the forecast period (Figure 27).

3. Restructuring efforts, backed by new management, present an underappreciated opportunity to significantly reduce ZBH's cost base.

Street View: The market remains cautious about Zimmer Biomet's restructuring efforts, with notable scepticism from major banks. J.P. Morgan has highlighted the delays in executing necessary leadership changes and streamlining processes, noting the lack of immediate turnaround results comparable to ZBH's past performance. They emphasize a time lag expected for new CEO Ivan Tornos to shift the company culture and implement effective cost-saving measures. Similarly, Deutsche Bank expressed concerns about the slow pace of restructuring, questioning whether ZBH can sustain its margin expansion amid macroeconomic headwinds and historical internal inefficiencies. (Figure 28)

Our View: We believe these market concerns are overblown, failing to appreciate the strong leadership and strategic initiatives undertaken by the new management.

Strong track record of CEO - Potentially overlooked?

We believe the street is underestimating the positive impact of the ongoing restructuring led by CEO Ivan Tornos, who has a proven track record at top firms like Johnson & Johnson, Medtronic, and BD Interventional (Figure 29). Tornos managed to achieve significant profitability growth, including an impressive 8.5% CAGR at J&J and a 23% increase in bottom-line growth at Covidien within a two-year period. Since taking the helm at ZBH in 2021, Tornos has implemented a series of decisive actions, including the strategic spin-off of ZimVie, which streamlined the business and sharpened the company's focus on core orthopaedic segments. (Figure 30)

Initial restructuring efforts bearing fruit

The restructuring has centred on reducing costs, optimizing the supply chain, and aligning operations with growth priorities. These changes have already shown results, as demonstrated by the upward trajectory in ZBH's operating and net margins compared to competitors like Smith & Nephew and Boston Scientific (Figure 31). The emphasis on cost efficiency has not only improved profitability but has also freed up capital for reinvestment in high-growth areas such as robotic systems and biologics, positioning ZBH to capitalize on emerging market opportunities. The strong leadership and targeted restructuring efforts have placed ZBH in a better position to drive margin expansion and regain market confidence.

Impact on Valuations

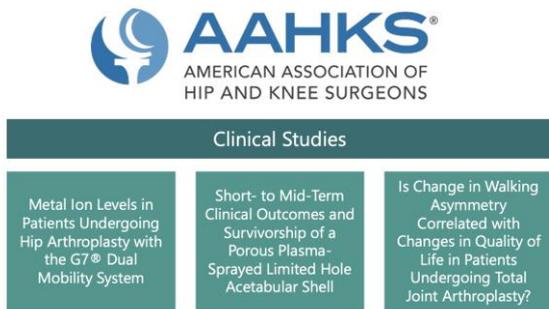
The market appears to be underestimating the positive impact of ZBH's restructuring efforts, likely due to a focus on past execution challenges. However, the margin expansion seen in recent quarters signals a successful implementation of cost-saving initiatives, which the street has not fully priced in. The streamlined operations and enhanced profitability potential position ZBH to exceed current earnings

Figure 32: Hold rating due to ERP Headwinds



Source(s): Business Insider

Figure 33: Clinical Studies Announcement at AAHKS 2024



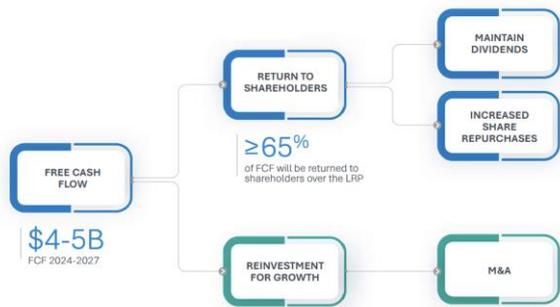
Source(s): Q3 Earnings Release

Figure 34: ZBH M&A Criteria



Source(s): ZBH Investor Day

Figure 35: Financial Flexibility



Source(s): ZBH Investor Day

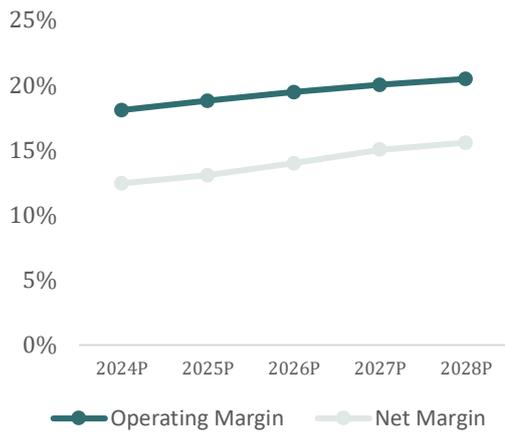
expectations. We believe this mispricing presents an opportunity, as the market has yet to recognize the long-term benefits of ZBH’s leaner cost structure and strategic focus, setting the stage for significant upside in valuations.

Incorporating this into our financial model, while the street has estimated a 2.2% - 2.7% growth in SG&A with company expectations 200 – 400bps above the market, as per our investment thesis, we have forecasted SG&A expenses to fall as a % of revenue, from 42% - 45.6% from 2021A – 2023A to 40% in the forecast period. This will lead to expanding operating margins, which we project to be rising from 18.1% in 2024P to 20.5% in 2028P.

Catalyst

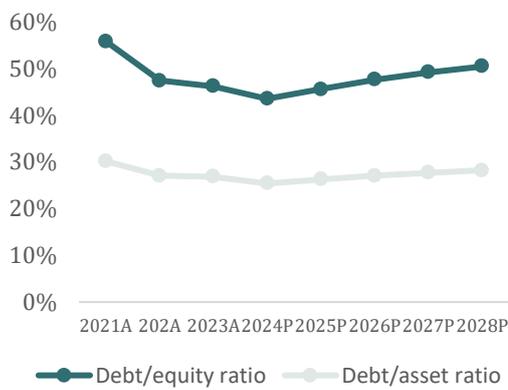
- Resolution of ERP headwinds with the successful integration of to ZBH’s new SAP platform.** In Q2, ZBH shares dropped nearly 9% after the company issued warnings of the implementation of its new enterprise resource planning (ERP) system would cause a 1% drag on revenue this year. While the system is expected to affect S.E.T. and other segments, it will not impact the company’s ROSA robotic systems. Hence, the successful transition from its legacy ERP platform to its new SAP platform will enhance long-term operational efficiency. Long-term benefits include automated reporting, streamlined operations, and real-time data access, which will support the company’s growth and scalability. In the meantime, the company has already implemented strategies to minimise revenue loss. In its Q3 earnings release, the company lowered its annual revenue forecast from 4% - 5% to 3.5% - 4%, suggest that the impact of the ERP headwind is still within tolerance. Further updates in the Q4 earnings call will provide a clearer outlook for investors. (Figure 32)
- Launch of the new Z1 Femoral Hip System and Positive Clinical Trial data.** The introduction of the Z1 Femoral Hip System at the 2024 AAHKS conference represents a significant step forward in Zimmer Biomet’s hip arthroplasty portfolio. With the launch timeline and geographic availability set to be announced at debut, the Z1 System will bolster Zimmer Biomet’s market presence in hip replacements. At the same conference, Zimmer Biomet will present findings from clinical studies that will reinforce the safety and durability of its existing hip solutions, particularly its G7 acetabular system. Positive clinical evidence will strengthen the credibility and adoption of its products. making it the preferred choice for patients and healthcare providers. It will also reaffirm Zimmer’s competitive positioning in support of its efforts to recapture the hips market. (Figure 33)
- Continued M&A deals to bolster growth and solidify key areas.** Zimmer Biomet’s disciplined approach to mergers and acquisitions (M&A) focuses on midsize transactions in high-potential areas such as extremities, sports medicine, CMFT, and ASC markets (Figure 34). With financial flexibility to allocate \$5-6 billion for deals during the long-range plan period, Zimmer Biomet is well-positioned to pursue accretive acquisitions, solidifying its growth and market leadership in these areas (Figure 35).

Figure 36: ZBH forecasted Profitability Analysis, 2024P – 2028P (%)



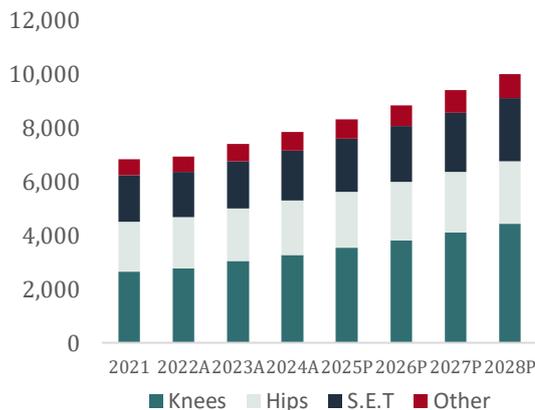
Source: ZBH 10-K, Team Analysis

Figure 37: ZBH Leverage Analysis, 2021A - 2028P (%)



Source: ZBH 10-K, Team Analysis

Figure 38: ZBH Revenue Breakdown, 2021A – 2028P (USDm)



Source: ZBH 10-K, Team Analysis

Financial Analysis

(USD m)	2022A	2023A	2024P	2025P	2026P
Revenue	6,827	6,940	7,394	7,843	8,325
% growth	1.6%	6.5%	6.1%	6.1%	6.2%
EBITDA	1,623	2,229	2,192	2,333	2,484
EBITDA margin	23.4%	30.2%	27.9%	28.0%	28.1%
Net Income	231	1,024	976	1,088	1,236
Basic EPS (USD)	1.10	4.91	4.68	5.21	5.92
ROA	1.4%	4.8%	4.4%	4.6%	4.9%
ROE	2.4%	8.2%	7.5%	7.9%	8.5%
D/E (x)	0.124x	0.128x	0.131x	0.128x	0.125x
Interest Coverage	9.85x	11.08x	10.49x	10.59x	12.35x

Profitability:

Historical Performance

From 2021 to 2023, ZBH experienced steady growth in both revenue and profitability. **Revenue** increased at a CAGR of 4.1% from 2021-2023 reflecting moderate but stable growth. **EBITDA** followed a similar pattern, rising from USD **1.80 billion** to USD **2.23 billion** over this period, indicating consistent operational efficiency. However, the company's **net income** displayed a more volatile trend, decreasing to USD **291 million** in 2022 before rebounding sharply to USD **1.03 billion** in 2023. This fluctuation suggests that 2022 may have faced one-off challenges or higher non-operating costs that impacted net profitability.

Profit margin analysis during this historical period reveals that the **gross margin** remained robust, averaging around **71%**, indicating strong control over production costs. However, the **operating margin** dipped from **12.6%** in 2021 to **10.0%** in 2022, before recovering to **17.3%** in 2023. This dip could reflect increased operating expenses or strategic investments in 2022. The **net margin** improved significantly by 2023, reaching **13.9%**, suggesting a strong recovery and efficient cost control measures (Figure 36).

Projected Performance

The projections show a strong upward trend, with the company expecting to build on its previous recovery. **Revenue** is forecasted to grow at a CAGR of 6.2%, reaching USD **9.99 billion** by 2028. **EBITDA** is projected to increase steadily as well, from USD **2.33 billion** in 2024 to USD **2.82 billion** in 2028, reflecting expectations of improved operating efficiency and scale.

In terms of margins, the **gross margin** is projected to stabilize around **70.8% to 70.9%**, suggesting continued effective cost management. The **operating margin** is expected to improve further, rising from **18.1%** in 2024 to **20.5%** by 2028, highlighting the company's focus on enhancing profitability through operational efficiencies and potential cost-cutting measures.

The **net margin** is projected to continue its upward trend, increasing from **13.1%** in 2024 to **15.6%** by 2028. This growth indicates that ZBH expects to sustain strong bottom-line performance, driven by improved net income and potentially lower non-operating expenses (Figure 36)

Figure 39: Valuations Analysis



Source(s): CapIQ, Team Analysis

Figure 40: WACC Computation

Cost of Equity (R _e)	Rate
10Y US Treasury bill yield	4.21%
5Y Regression Beta	0.87
Equity Risk Premium	4.60%
Cost of Equity (R_e)	8.19%
Cost of Debt (R _d)	Rate
Risk free rate (US 10 Year Yield)	4.21%
Credit Spread	0.75%
Tax Rate	14.2%
Post-Tax Cost of Debt (R_d)	4.26%
WACC	Rate
Debt/Capital	12.1%
Equity/Capital	87.9%
WACC	7.72%

Source(s): CapIQ, Damodaran, Team Analysis

Figure 41: Sensitivity Analysis of Implied Share price (WACC vs TGR)

	7.5%	7.6%	WACC 7.7%	7.8%	7.9%
1.3%	128.71	124.33	120.22	116.37	112.73
1.4%	130.54	126.03	121.81	117.84	114.12
1.5%	132.44	127.79	123.45	119.37	115.54
1.6%	134.40	129.61	125.13	120.94	117.01
1.7%	136.43	131.49	126.88	122.57	118.52

Source(s): CapIQ, Team Analysis

Figure 42: Sensitivity Analysis of Enterprise Value (WACC vs TGR)

	7.3%	7.5%	WACC 7.7%	7.9%	8.1%
1.3%	28,088	27,170	26,308	25,499	24,737
1.4%	28,472	27,526	26,641	25,809	25,027
1.5%	28,870	27,895	26,984	26,129	25,326
1.6%	29,281	28,276	27,338	26,459	25,634
1.7%	29,707	28,671	27,704	26,799	25,951

Source(s): CapIQ, Team Analysis

Figure 43: Sensitivity Analysis of Equity Value (WACC vs TGR)

	7.3%	7.5%	WACC 7.7%	7.9%	8.1%
1.3%	26,991	26,072	25,211	24,402	23,640
1.4%	27,375	26,429	25,543	24,712	23,930
1.5%	27,772	26,798	25,886	25,032	24,229
1.6%	28,184	27,179	26,241	25,362	24,537
1.7%	28,610	27,574	26,607	25,702	24,854

Source(s): CapIQ, Team Analysis

Leverage: ZBH's leverage ratios show a steady improvement in financial stability from 2021 to 2023, with the debt-to-equity ratio decreasing from 55.8% in 2021 to 43.5% in 2024. This reduction indicates effective debt management and a shift towards a stronger equity base. However, projections from 2025 onwards suggest a gradual increase in leverage, with the ratio rising back to 50.4% by 2028. The debt-to-asset ratio followed a similar trend, declining to 25.4% by 2024 before increasing modestly to 28.2% in 2028. Overall, ZBH appears to have improved its leverage position in the historical period but is expected to take on slightly more debt in the coming years, possibly to fund expansion and growth initiatives (Figure 37)

Valuation

Valuation Price Target: We reiterate our “buy” call rating on ZBH with a 1Y price target of US\$133.11, based on a blended valuation methodology of discounted cash flows and trading comparables (Figure 39).

Discounted Cash Flow Analysis

Our DCF valuation employs the Unlevered Free Cash Flow (UFCF) methodology to arrive at the intrinsic value of the company. Our explicit forecast period is from 2024 - 2028. We obtained a base case equity value per share of US\$123.45 in our Gordon Growth Method (GGM). This represents an implied EV/EBITDA multiple of 12.3x and an implied P/E of 26.5x. We obtained a base case equity value per share of US\$157.02 using the exit multiple method, representing an implied terminal growth rate of c.1.5%.

Revenue Projections

We forecasted revenue by segmenting it into the main business categories: “Knees,” “Hips,” “Sports Medicine, Extremities, Trauma, Craniomaxillofacial and Thoracic” (S.E.T.), and “Others.”

For each category, growth projections were primarily based on historical sales figures, management guidance, and analyst reports, with particular emphasis on our investment thesis for the knees and hips segments to reflect expected market dynamics and innovations.

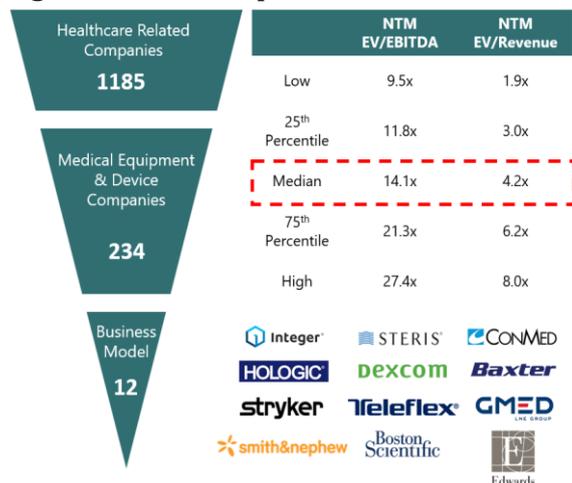
For the **Knees** segment, we further divided the forecast by geography into the United States and International markets. We projected revenue growth by incorporating our thesis on ZBH’s innovation pipeline, combined with street views and management forecasts. This led to an estimated growth rate of 7.7% for 2024P, gradually increasing to 8.0% by 2028P.

In the **Hips** segment, we used a similar bottom-up approach, factoring in Thesis 2, which focuses on ZBH’s recovery and anticipated market share gains. We forecasted a growth rate of 3.3% for 2024P, rising to 3.5% by 2028P.

For the **S.E.T. and Other** segments, limited geographical data led us to rely on historical trends. We incorporated Thesis 1, highlighting shifts to high-growth markets in CMFT and the full launch of the ROSA Shoulder. This resulted in a projected growth rate of 6% for the S.E.T. segment and 7% for the others category throughout the forecast period (Figure 38).

WACC

Figure 44: Peer Companies



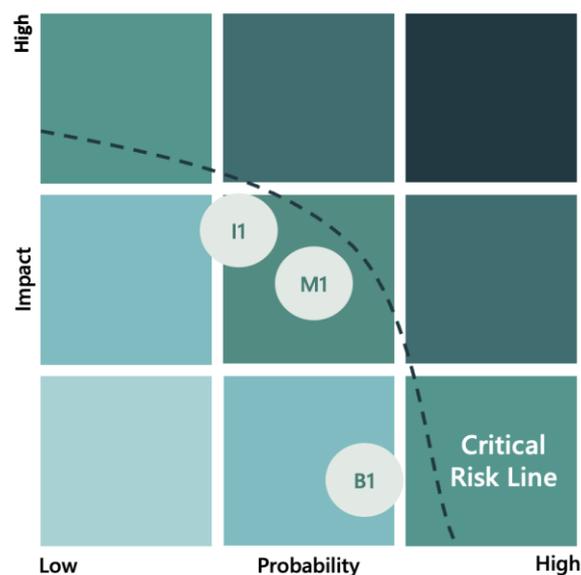
Source(s): CapIQ, Team Analysis

Figure 45: Trading Comps Multiples

Trading Comps - 75%	Median	ZBH
EV/EBITDA (LTM)	17.4x	10.5x
EV/ EBIT (LTM)	27.1x	17.3x
P/E (LTM)	41.3x	21.9x
EV/ Sales (LTM)	4.5x	3.6x
EV/EBITDA (NTM)	14.1x	10.1x
EV/ EBIT (NTM)	19.6x	12.0x
P/E (NTM)	23.5x	12.8x
EV/ Sales (NTM)	4.2x	3.4x

Source(s): CapIQ

Figure 46: Risk Assessment Matrix



Source(s): Team estimates

Cost of Equity (Re): We calculated Re using the Capital Asset Pricing Model. Our risk-free rate (R_f) of 4.21% represents the rate on the US 10Y bond yield. We used an equity risk premium of 4.60%, which represents Damodaran’s estimates for the risks in a mature market.

Beta: Our beta is derived through a combination of using ZBH’s historical beta of 0.87 and through a re-levering of ZBH peer’s beta. The median unlevered beta for its peers is 0.83x. We levered the beta through a combination of using ZBH’s current capital structure, benchmarked from the median of its peer’s debt and equity mix.

Our average Re based on an average of ZBH’s historical beta and its current capital structure is 8.19%.

Cost of Debt (Rd): We applied a synthetic rating approach to estimate ZBH’s Rd. We added a default credit spread of 0.75% on top of the R_f of 4.21% based on Damodaran’s estimate of credit risks for ZBH’s interest coverage ratio of 12.5x. This led us to a pre-tax cost of debt of 4.96%.

This gives us an average WACC of 7.72% (Figure 40).

Terminal Growth Rate and Exit Multiple

Terminal growth rate: We forecasted a healthy 1.50% terminal growth rate, which is forecasted to be the average long-term inflation rate in the United States.

Terminal Multiple: We used the median EV/ EBITDA multiple based on ZBH’s peer group and obtained an exit multiple of 14.1x.

Sensitivity Analysis

We mainly sensitised the implied share price, Enterprise Value and Equity value, together with the inputs of terminal growth and WACC for our DCF model employing the Gordon growth model and EV/EBITDA with WACC for our terminal multiple method (Figure 41-43).

Trading Comparable

1. Peer Selection

We have chosen a group of 12 key peer companies for financial comparison against Zimmer Biomet Holdings (ZBH). The selection criteria focus on companies that operate in similar core business segments, particularly those with a strong presence in hip and knee orthopaedic products. These peers include leading firms known for their extensive product portfolios, innovation in joint reconstruction, and significant market shares in the orthopaedic sector (Figure 44)

2. Relative Valuation

We obtained a median EV/EBITDA multiple for NTM of 14.1x, EV/ EBIT NTM multiple of 19.6x, P/E NTM multiple of 23.5x and EV/ Revenue NTM multiple of 4.2x (Fig 39). We obtained an average implied price of USD147.60 for a 50/50 blend of NTM EV/EBITDA and NTM EV/Revenue (Figure 45)

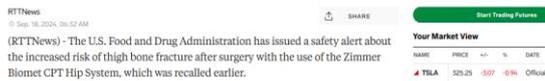
Figure 47: Stryker's Mako Total Knee 2.0



Source(s): Stryker Website

Figure 48: FDA's Alert of ZBH's Hip Replacement Device

FDA Alerts Of High Thigh Fracture Risk With Zimmer Biomet's Hip Replacement Device



Source(s): Business Insider

Investment Risks

Section Reference: Figure 46

Market Risk 1 (M1): Competition

Zimmer Biomet faces intensifying competition in the orthopedic robotics market, particularly from Stryker's Mako robotic platform. Stryker is set to expand its platform in 2024 with launches in spine and shoulder applications, alongside the recent release of Mako Total Knee 2.0 (Figure 47) and aggressive direct-to-patient marketing campaigns. These developments could challenge Zimmer Biomet's market share in key segments. However, ZBH's first-mover advantage with the ROSA robotic shoulder system and its acquisition of OrthoGrid, an AI-driven guidance system for precision surgery, positions it to remain competitive. Sustaining this edge will require consistent innovation and successful execution in the face of rapid advancements from competitors.

Industry Risk 1 (I1): Regulation

In an environment of evolving FDA post-market surveillance standards, ZBH must proactively address safety concerns and adapt its product pipeline to meet heightened regulatory expectations, minimizing potential disruptions. Regulatory challenges add to Zimmer Biomet's risks, particularly concerning product recalls and safety compliance (Figure 48). The voluntary recall of the CPT Hip System, due to a 1.4% fracture rate compared to 0.6%-1% in competing stainless-steel implants, highlights potential vulnerabilities. The recall only alerted healthcare providers to change the device's use instructions and did not require the implants to be discarded. However, this may have triggered negative market perception by customers on the reliability of their products. To mitigate this, Zimmer plans to phase out sales of the CPT hip system by December 2024 and transition customers to alternatives in its hip portfolio.

Business Risk 1 (B1): Supply chain

Zimmer Biomet also faces supply chain risks stemming from global disruptions, such as rising freight costs and inefficiencies linked to the ongoing Red Sea crisis. These challenges could impact the timely distribution of products and increase operational costs. However, the company's geographically diversified manufacturing and supplier network mitigates some of these risks, ensuring continuity in its operations. Strengthening supply chain resilience further will be crucial to maintaining competitive pricing and delivery reliability in an unpredictable global trade environment.

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Appendix A1: Cover Page



General Information

Ticker	NYSE: ZBH
Date	8/10/2024
Scenario	Base
Price as at 8/10/2024	101.77
Target Price	133.11
Upside/Downside	30.8%

Number Formats

Formula	(1,001)	-15.1%
Input	(1,001)	-15.1%
Link	(1,001)	-15.1%
Correction	(1,001)	-15.1%

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Appendix A2: Income Statement

Income Statement

All values in USDm unless otherwise stated

	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Knees	USDm	2,648	2,778	3,038	3,255	3,488	3,740	4,011	4,304
Hips	USDm	1,856	1,895	1,967	2,032	2,101	2,173	2,248	2,327
S.E.T	USDm	1,728	1,697	1,753	1,858	1,969	2,087	2,213	2,345
Other	USDm	596	570	636	681	728	779	834	892
Total revenue	USDm	6,827	6,940	7,394	7,826	8,286	8,779	9,305	9,868
Cost of goods sold	USDm	(1,960)	(2,020)	(2,084)	(2,286)	(2,419)	(2,560)	(2,711)	(2,872)
Gross income	USDm	4,867	4,920	5,310	5,539	5,868	6,219	6,594	6,996
Operating expenses									
Intangible asset amortization	USDm	(530)	(527)	(562)	(573)	(554)	(532)	(518)	(510)
Selling, general, and administrative expenses	USDm	(2,843)	(2,762)	(2,839)	(2,858)	(3,023)	(3,200)	(3,389)	(3,590)
Research and Development	USDm	(436)	(406)	(459)	(500)	(529)	(560)	(593)	(628)
Goodwill and intangible asset impairment	USDm	(16)	(293)	-	-	-	-	-	-
Restructuring and other cost reduction initiatives	USDm	(126)	(192)	(152)	(179)	(189)	(200)	(212)	(224)
Quality remediation	USDm	(53)	(34)	-	-	-	-	-	-
Acquisition, integration, divestiture and related	USDm	(3)	(11)	(22)	(14)	(15)	(16)	(17)	(18)
EBIT	USDm	860	696	1,278	1,415	1,558	1,711	1,866	2,025
(+) Depreciation and amortisation	USDm	938	926	952	773	768	761	763	773
EBITDA	USDm	1,798	1,623	2,229	2,189	2,325	2,472	2,629	2,798
Other (expense) income, net	USDm	12	(128)	(9)	(71)	(76)	(80)	(85)	(90)
Interest expense, net	USDm	(208)	(165)	(201)	(209)	(220)	(200)	(149)	(141)
Loss on early extinguishment of debt	USDm	(165)	-	-	-	-	-	-	-
Income before income taxes	USDm	499	404	1,067	1,135	1,262	1,430	1,633	1,794
Income tax provision	USDm	(54)	(112)	(42)	(161)	(179)	(203)	(232)	(255)
Net income from continuing operations	USDm	446	291	1,025	974	1,083	1,227	1,401	1,539
Less: Net earnings attributable to noncontrolling interest	USDm	(1)	(1)	(1)	-	-	-	-	-
Net Earnings from Continuing Operations of Zimmer Biomet Holdings, Inc.	USDm	445	290	1,024	974	1,083	1,227	1,401	1,539
Loss from Discontinued Operations, Net of Tax	USDm	(43)	(59)	-	-	-	-	-	-
Net Earnings of Zimmer Biomet Holdings, Inc.	USDm	402	231	1,024	974	1,083	1,227	1,401	1,539
Gross margin	%	71.3%	70.9%	71.8%	70.8%	70.8%	70.8%	70.9%	70.9%
Operating margin	%	12.6%	10.0%	17.3%	18.1%	18.8%	19.5%	20.1%	20.5%
Net margin	%	6.5%	4.2%	13.9%	12.4%	13.1%	14.0%	15.1%	15.6%
Basic shares outstanding	m	209	210	209	209	209	209	209	209
Diluted shares outstanding	m	210	210	210	210	210	210	210	210
Basic EPS	USD	1.93	1.10	4.91	4.67	5.19	5.88	6.71	7.38
Diluted EPS	USD	1.91	1.10	4.88	4.65	5.16	5.85	6.68	7.34

Appendix A3: Balance Sheet

Balance Sheet									
All values in USDm unless otherwise stated									
	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Cash and cash equivalents	USDm	378	376	416	1,829	3,173	4,233	5,387	6,559
Accounts receivable, less allowance for credit losses	USDm	1,260	1,382	1,442	1,507	1,594	1,688	1,787	1,894
Inventories	USDm	2,148	2,147	2,385	2,380	2,518	2,665	2,822	2,990
Prepaid expenses and other current assets	USDm	598	523	366	500	529	560	593	628
Current assets of discontinued operations	USDm	502	-	-	-	-	-	-	-
Total current assets	USDm	4,885	4,427	4,610	6,216	7,814	9,145	10,589	12,071
Property, plant and equipment, net	USDm	1,837	1,873	2,060	2,217	2,381	2,552	2,730	2,916
Goodwill	USDm	8,919	8,580	8,819	8,413	8,599	9,124	9,646	10,204
Intangible assets, net	USDm	5,534	5,064	4,856	4,284	3,730	3,198	2,680	2,170
Other assets	USDm	1,005	1,122	1,152	1,215	1,285	1,360	1,440	1,526
Noncurrent assets of discontinued operations	USDm	1,277	-	-	-	-	-	-	-
Total non-current assets	USDm	16,571	16,639	16,887	16,128	15,995	16,233	16,496	16,815
Total assets	USDm	23,456	21,066	21,497	22,345	23,810	25,378	27,085	28,886
Accounts payable	USDm	307	354	411	407	431	456	483	512
Income taxes payable	USDm	62	39	61	71	76	80	85	90
Other current liabilities	USDm	1,317	1,421	1,486	1,572	1,663	1,760	1,864	1,975
Current portion of long-term debt	USDm	1,605	544	900	863	1,152	552	500	-
Current liabilities of discontinued operations	USDm	177	-	-	-	-	-	-	-
Total current liabilities	USDm	3,468	2,358	2,858	2,914	3,321	2,848	2,931	2,576
Deferred income taxes, net	USDm	559	475	358	500	529	560	593	628
Long-term income tax payable	USDm	583	421	274	429	453	480	508	539
Other long-term liabilities	USDm	549	633	652	657	695	736	779	826
Long-term debt	USDm	5,464	5,152	4,888	4,798	5,078	6,291	6,964	8,099
Noncurrent liabilities of discontinued operations	USDm	168	-	-	-	-	-	-	-
Total non-current liabilities	USDm	7,322	6,681	6,151	6,385	6,756	8,067	8,845	10,092
Total liabilities	USDm	10,790	9,039	9,009	9,298	10,077	10,915	11,776	12,668
Common Stock	USDm	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2
Paid-in capital	USDm	9,315	9,504	9,846	10,122	10,405	10,697	10,996	11,304
Retained earnings	USDm	10,292	9,559	10,385	11,066	11,825	12,684	13,664	14,742
Accumulated other comprehensive loss	USDm	(232)	(179)	(191)	(212)	(171)	(173)	(170)	(187)
Treasury Stock	USDm	(6,718)	(6,867)	(7,562)	(7,940)	(8,337)	(8,754)	(9,192)	(9,652)
Total Zimmer Biomet Holdings, Inc. stockholders' equity	USDm	12,661	12,020	12,481	13,039	13,725	14,456	15,302	16,210
Noncontrolling interest	USDm	8	7	8	8	8	8	8	8
Total equity	USDm	12,669	12,027	12,489	13,047	13,733	14,464	15,310	16,218
Total liabilities and equity	USDm	23,456	21,066	21,497	22,345	23,810	25,378	27,085	28,886
Balance sheet check		TRUE							

Appendix A4: Cash Flow Statement

Cash Flow Statement							
All values in USDm unless otherwise stated							
	Units		2024P	2025P	2026P	2027P	2028P
Net income	USDm		974	1,083	1,227	1,401	1,539
Reconciliation of Depreciation and Amortisation							
Depreciation and Amortisation			773	768	761	763	773
Reconciliation of changes to working capital:							
Accounts receivable	USDm		(65)	(87)	(93)	(100)	(106)
Accounts payable	USDm		(3)	24	25	27	29
Inventory	USDm		5	(138)	(147)	(157)	(168)
Reconciliation of changes to other operational items:							
Prepaid expenses and other current assets	USDm		(134)	(29)	(31)	(33)	(35)
Current assets of discontinued operations	USDm		-	-	-	-	-
Goodwill	USDm		406	(186)	(524)	(522)	(558)
Other assets	USDm		(63)	(70)	(75)	(80)	(86)
Noncurrent assets of discontinued operations	USDm		-	-	-	-	-
Income taxes payable	USDm		10	4	4	5	5
Other current liabilities	USDm		86	91	97	104	111
Deferred income taxes, net	USDm		143	29	31	33	35
Long-term income tax payable	USDm		155	25	26	28	30
Other long-term liabilities	USDm		5	38	41	43	46
Noncurrent liabilities of discontinued operations	USDm		-	-	-	-	-
Cash flow from operating	USDm		2,292	1,551	1,343	1,512	1,616
Capital expenditure	USDm		(357)	(378)	(400)	(424)	(449)
Cash flow from investing	USDm		(357)	(378)	(400)	(424)	(449)
Current portion of long-term debt	USDm		(37)	289	(600)	(52)	(500)
Long-term debt	USDm		(69)	280	1,213	674	1,135
Common Stock	USDm		-	-	-	-	(0)
Paid-in capital	USDm		276	283	291	300	308
Accumulated other comprehensive loss	USDm		(21)	41	(2)	3	(17)
Treasury Stock	USDm		(378)	(397)	(417)	(438)	(460)
Dividends paid	USDm		(292)	(325)	(368)	(420)	(462)
Cash flow from financing	USDm		(522)	172	117	66	5
Beginning cash balance	USDm		416	1,829	3,173	4,233	5,387
Change in cash	USDm		1,413	1,344	1,060	1,154	1,172
Ending cash balance	USDm		1,829	3,173	4,233	5,387	6,559

Appendix A5: Revenue Build

Revenue Build-up									
All values in USDm unless otherwise stated									
	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Revenue	USDm	6,232	6,370	6,758	7,145	7,558	8,000	8,472	8,976
% growth	%		2.2%	6.1%	5.7%	5.8%	5.8%	5.9%	6.0%
Knees	USDm	2,648	2,778	3,038	3,255	3,488	3,740	4,011	4,304
% growth	%		4.9%	9.4%	7.1%	7.2%	7.2%	7.3%	7.3%
United States	USDm	1,488	1,615	1,771	1,930	2,104	2,293	2,499	2,724
% growth	%		8.6%	9.6%	9.0%	9.0%	9.0%	9.0%	9.0%
Bull case	%				10.0%	10.0%	10.0%	10.0%	10.0%
Base case	%				9.0%	9.0%	9.0%	9.0%	9.0%
Bear case	%				8.0%	8.0%	8.0%	8.0%	8.0%
International	USDm	1,160	1,163	1,268	1,325	1,384	1,447	1,512	1,580
% growth	%		0.3%	9.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Bull case	%				5.5%	5.5%	5.5%	5.5%	5.5%
Base case	%				4.5%	4.5%	4.5%	4.5%	4.5%
Bear case	%				3.5%	3.5%	3.5%	3.5%	3.5%
Hips	USDm	1,856	1,895	1,967	2,032	2,101	2,173	2,248	2,327
% growth	%		2.1%	3.8%	3.3%	3.4%	3.4%	3.5%	3.5%
United States	USDm	922	961	1,012	1,068	1,127	1,189	1,254	1,323
% growth	%		4.3%	5.3%	5.5%	5.5%	5.5%	5.5%	5.5%
Bull case	%				6.0%	6.0%	6.0%	6.0%	6.0%
Base case	%				5.5%	5.5%	5.5%	5.5%	5.5%
Bear case	%				4.0%	4.0%	4.0%	4.0%	4.0%
International	USDm	935	934	955	964	974	984	994	1,004
% growth	%		-0.1%	2.2%	1.0%	1.0%	1.0%	1.0%	1.0%
Bull case	%				2.0%	2.0%	2.0%	2.0%	2.0%
Base case	%				1.0%	1.0%	1.0%	1.0%	1.0%
Bear case	%				0.0%	0.0%	0.0%	0.0%	0.0%
S.E.T	USDm	1,728	1,697	1,753	1,858	1,969	2,087	2,213	2,345
% growth	%		-1.8%	3.3%	6.0%	6.0%	6.0%	6.0%	6.0%
Bull case	%				7.3%	7.3%	7.3%	7.3%	7.3%
Base case	%				6.0%	6.0%	6.0%	6.0%	6.0%
Bear case	%				5.3%	5.3%	5.3%	5.3%	5.3%
Others	USDm	596	570	636	681	728	779	834	892
% growth	%		-4.3%	11.6%	7.0%	7.0%	7.0%	7.0%	7.0%
Bull case	%				8.0%	8.0%	8.0%	8.0%	8.0%
Base case	%				7.0%	7.0%	7.0%	7.0%	7.0%
Bear case	%				6.0%	6.0%	6.0%	6.0%	6.0%

Appendix A6: Key Income Statement Assumptions

Cost Build-up									
All values in USDm unless otherwise stated									
	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Cost of goods sold	USDm	(1,960)	(2,020)	(2,084)	(2,286)	(2,419)	(2,560)	(2,711)	(2,872)
as % of revenue	%	-31.5%	-31.7%	-30.8%	-32.0%	-32.0%	-32.0%	-32.0%	-32.0%
Bull case	%				-30.0%	-30.0%	-30.0%	-30.0%	-30.0%
Base case	%				-32.0%	-32.0%	-32.0%	-32.0%	-32.0%
Bear case	%				-34.0%	-34.0%	-34.0%	-34.0%	-34.0%
SG&A expense	USDm	(2,843)	(2,762)	(2,839)	(2,858)	(3,023)	(3,200)	(3,389)	(3,590)
as % of Revenue	%	-45.6%	-43.4%	-42.0%	-40.0%	-40.0%	-40.0%	-40.0%	-40.0%
Bull case	%				-38.0%	-38.0%	-38.0%	-38.0%	-38.0%
Base case	%				-40.0%	-40.0%	-40.0%	-40.0%	-40.0%
Bear case	%				-42.0%	-42.0%	-42.0%	-42.0%	-42.0%
Research and Development	USDm	(436)	(406)	(459)	(500)	(529)	(560)	(593)	(628)
as % of revenue	%	-7.0%	-6.4%	-6.8%	-7.0%	-7.0%	-7.0%	-7.0%	-7.0%
Bull case	%				-6.0%	-6.0%	-6.0%	-6.0%	-6.0%
Base case	%				-7.0%	-7.0%	-7.0%	-7.0%	-7.0%
Bear case	%				-8.0%	-8.0%	-8.0%	-8.0%	-8.0%
Restructuring and other cost reduction initiatives	USDm	(126)	(192)	(152)	(179)	(189)	(200)	(212)	(224)
as % of revenue	%	-2.0%	-3.0%	-2.2%	-2.5%	-2.5%	-2.5%	-2.5%	-2.5%
Bull case	%				-2.0%	-2.0%	-2.0%	-2.0%	-2.0%
Base case	%				-2.5%	-2.5%	-2.5%	-2.5%	-2.5%
Bear case	%				-3.0%	-3.0%	-3.0%	-3.0%	-3.0%
Acquisition, integration, divestiture and related	USDm	(3)	(11)	(22)	(14)	(15)	(16)	(17)	(18)
as % of revenue	%	0.0%	-0.2%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Bull case	%				-0.1%	-0.1%	-0.1%	-0.1%	-0.1%
Base case	%				-0.2%	-0.2%	-0.2%	-0.2%	-0.2%
Bear case	%				-0.3%	-0.3%	-0.3%	-0.3%	-0.3%
Other (expense) income, net	USDm	12	(128)	(9)	(71)	(76)	(80)	(85)	(90)
as % of revenue	%	0.20%	-2.01%	-0.14%	-1.0%	-1.0%	-1.0%	-1.0%	-1.0%
Bull case	%				0.0%	0.0%	0.0%	0.0%	0.0%
Base case	%				-1.0%	-1.0%	-1.0%	-1.0%	-1.0%
Bear case	%				-2.0%	-2.0%	-2.0%	-2.0%	-2.0%
Pre-tax income	USDm	499	404	1,067	1,135	1,262	1,430	1,633	1,794
Income tax provision	USDm	(54)	(112)	(42)	(181)	(179)	(203)	(232)	(255)
Tax rate	%	-10.7%	-27.8%	-4.0%	-14.2%	-14.2%	-14.2%	-14.2%	-14.2%

Appendix A7: Working Capital

Working capital assumptions

All values in USDm unless otherwise stated

	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Accounts receivable, net	USDm	1,260	1,382	1,442	1,507	1,594	1,688	1,787	1,894
AR Days	Days	74	79	78	77	77	77	77	77
Bull case	Days				75	75	75	75	75
Base case	Days				77	77	77	77	77
Bear case	Days				79	79	79	79	79
Accounts payable, net	USDm	307	354	411	407	431	456	483	512
AP Days	Days	57	64	72	65	65	65	65	65
Bull case	Days				69	69	69	69	69
Base case	Days				65	65	65	65	65
Bear case	Days				61	61	61	61	61
Inventory	USDm	2,148	2,147	2,385	2,380	2,518	2,665	2,822	2,990
Inventory Days	Days	400	388	418	380	380	380	380	380
Bull case	Days				370	370	370	370	370
Base case	Days				380	380	380	380	380
Bear case	Days				390	390	390	390	390

Appendix A8: Balance Sheet Assumptions

Other balance sheet assumptions

All values in USDm unless otherwise stated

	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Assets									
Prepaid expenses and other current assets	USDm	598	523	366	500	529	560	593	628
as a % of sales	%	9.6%	8.2%	5.4%	7.0%	7.0%	7.0%	7.0%	7.0%
Bull case	%				7.0%	7.0%	7.0%	7.0%	7.0%
Base case	%				7.0%	7.0%	7.0%	7.0%	7.0%
Bear case	%				7.0%	7.0%	7.0%	7.0%	7.0%
Goodwill	USDm	8,919	8,580	8,819	8,413	8,599	9,124	9,646	10,204
as a % of sales	%	143.1%	134.7%	130.5%	135.0%	135.0%	135.0%	135.0%	135.0%
Bull case	%				135.0%	135.0%	135.0%	135.0%	135.0%
Base case	%				135.0%	135.0%	135.0%	135.0%	135.0%
Bear case	%				135.0%	135.0%	135.0%	135.0%	135.0%
Other assets	USDm	1,005	1,122	1,152	1,215	1,285	1,360	1,440	1,526
as a % of sales	%	16.1%	17.6%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%
Bull case	%				17.0%	17.0%	17.0%	17.0%	17.0%
Base case	%				17.0%	17.0%	17.0%	17.0%	17.0%
Bear case	%				17.0%	17.0%	17.0%	17.0%	17.0%
Liabilities									
Income taxes payable	USDm	62	39	61	71	76	80	85	90
as a % of sales	%	1.0%	0.6%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%
Bull case	%				1.0%	1.0%	1.0%	1.0%	1.0%
Base case	%				1.0%	1.0%	1.0%	1.0%	1.0%
Bear case	%				1.0%	1.0%	1.0%	1.0%	1.0%
Other current liabilities	USDm	1,317	1,421	1,486	1,572	1,663	1,760	1,864	1,975
as a % of sales	%	21.1%	22.3%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%
Bull case	%				22.0%	22.0%	22.0%	22.0%	22.0%
Base case	%				22.0%	22.0%	22.0%	22.0%	22.0%
Bear case	%				22.0%	22.0%	22.0%	22.0%	22.0%
Deferred income taxes, net	USDm	559	475	358	500	529	560	593	628
as a % of sales	%	9.0%	7.5%	5.3%	7.0%	7.0%	7.0%	7.0%	7.0%
Bull case	%				7.0%	7.0%	7.0%	7.0%	7.0%
Base case	%				7.0%	7.0%	7.0%	7.0%	7.0%
Bear case	%				7.0%	7.0%	7.0%	7.0%	7.0%
Long-term income tax payable	USDm	583	421	274	429	453	480	508	539
as a % of sales	%	9.4%	6.6%	4.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Bull case	%				6.0%	6.0%	6.0%	6.0%	6.0%
Base case	%				6.0%	6.0%	6.0%	6.0%	6.0%
Bear case	%				6.0%	6.0%	6.0%	6.0%	6.0%
Other long-term liabilities	USDm	549	633	652	657	695	736	779	826
as a % of sales	%	8.8%	9.9%	9.6%	9.2%	9.2%	9.2%	9.2%	9.2%
Bull case	%				9.2%	9.2%	9.2%	9.2%	9.2%
Base case	%				9.2%	9.2%	9.2%	9.2%	9.2%
Bear case	%				9.2%	9.2%	9.2%	9.2%	9.2%

Appendix A9: PPE Schedule

PP&E Schedule

	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
PP&E, net	USDm	1,837	1,873	2,060	2,060	2,381	2,552	2,730	2,916
(+) Accumulated depreciation	USDm	4,301	4,586	4,706	4,906	5,120	5,349	5,595	5,658
PP&E, at cost	USDm	6,138	6,458	6,766	6,967	7,501	7,901	8,325	8,774
PP&E, net at beginning	USDm		1,837	1,873	2,060	2,217	2,381	2,552	2,730
Capital expenditures	USDm		321	308	357	378	400	424	449
as % of revenue			5.0%	4.6%	5.0%	5.0%	5.0%	5.0%	5.0%
Depreciation for year	USDm		285	120	201	214	229	245	263
PP&E, net at end	USDm	1,837	1,873	2,060	2,217	2,381	2,552	2,730	2,916
Existing PP&E at cost									
Land	USDm	20	19	19					
Buildings and improvements	USDm	2,086	2,093	2,246					
Capitalized software cost	USDm	455	518	552					
Instruments	USDm	3,460	3,684	3,749					
Construction in progress	USDm	116	144	201					
Land	USDm		(1)	(0)					
Buildings and improvements	USDm		7	153					
Capitalized software cost	USDm		63	34					
Instruments	USDm		223	65					
Construction in progress	USDm		28	57					
Total Net additions	USDm		321	308					
% of Capex									
Land	%		-0.3%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Buildings and improvements	%		2.3%	49.5%	30.0%	30.0%	30.0%	30.0%	30.0%
Capitalized software cost	%		19.7%	11.0%	15.0%	15.0%	15.0%	15.0%	15.0%
Instruments	%		68.6%	21.2%	40.0%	40.0%	40.0%	40.0%	40.0%
Construction in progress	%		8.7%	18.4%	15.0%	15.0%	15.0%	15.0%	15.0%
Land	USDm				-	-	-	-	-
Buildings and improvements	USDm				107	113	120	127	135
Capitalized software cost	USDm				54	57	60	64	67
Instruments	USDm				143	151	160	169	180
Construction in progress	USDm				54	57	60	64	67
Total Net Addition					357	378	400	424	449

Building and improvements depreciation	USDm				47	49	52	54	57
Estimated useful life		50			2024P	2025P	2026P	2027P	2028P
					2	2	2	2	2
					2	2	2	2	2
					2	2	2	2	2
					2	2	2	2	2
					3	3	3	3	3
					3	3	3	3	3
Existing building and improvements depreciation	USDm				45	45	45	45	45
Capitalized software cost depreciation	USDm				61	67	73	81	89
Estimated useful life		10			2024P	2025P	2026P	2027P	2028P
					5	6	6	6	7
					6	6	6	6	7
					6	6	6	6	7
					6	6	6	6	7
					7	7	7	7	7
Existing capitalized software cost depreciation	USDm				55	55	55	55	55
Instruments depreciation	USDm				76	77	79	80	82
Estimated useful life		50			2024P	2025P	2026P	2027P	2028P
					1	1	1	1	1
					1	1	1	1	1
					1	1	1	1	1
					1	1	1	1	1
Existing instruments depreciation	USDm				75	75	75	75	75
Construction in progress depreciation	USDm				17	21	25	30	36
Estimated useful life		15			2024P	2025P	2026P	2027P	2028P
					4	4	4	4	4
					4	4	4	4	4
					4	4	4	4	4
					4	4	4	4	4
Existing construction in progress depreciation	USDm				13	13	13	13	13

Intangibles Schedule

	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Intangible assets, net	USDm	5,534	5,064	4,856	4,284	3,730	3,198	2,680	2,170
Amortisation Expenses (Management Estimates)					573	554	532	518	510

Appendix A10: Debt & Equity Schedule

Debt Schedule

All values in USDm unless otherwise stated

	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Current Portion of Debt	USDm	1,605	544	900	863	1,152	552	500	-
NC Current Portion of Debt	USDm	5,464	5,152	4,868	4,798	5,078	6,291	6,964	8,099
Total Debt	USDm	7,069	5,697	5,768	5,661	6,230	6,843	7,464	8,099

Debt/ EBITDA	x	8.2x	8.2x	4.5x	4.0x	4.0x	4.0x	4.0x	4.0x
Implied Debt	USDm				5,661	6,230	6,843	7,464	8,099
Total Debt Beginning Balance	USDm		7,069	5,697	5,768	5,661	6,230	6,843	7,464
(+) Borrowings	USDm				744	1,432	1,765	1,174	1,135
(-) Repayments	USDm				(850)	(863)	(1,152)	(552)	(500)
Ending Balance	USDm		7,069	5,697	5,661	6,230	6,843	7,464	8,099

		Principal	Interest Rate	Maturity					
1.450% Senior Notes due 2024	USDm	850	1.45%	2024P	850	-	-	-	-
3.550% Senior Notes due 2025	USDm	863	3.55%	2025P	-	863	-	-	-
3.050% Senior Notes due 2026	USDm	600	3.05%	2026P	-	-	600	-	-
5.350% Senior Notes due 2028	USDm	500	5.35%	2028P	-	-	-	-	500
3.550% Senior Notes due 2030	USDm	258	3.55%	2030P	-	-	-	-	-
2.600% Senior Notes due 2031	USDm	750	2.60%	2031P	-	-	-	-	-
4.250% Senior Notes due 2035	USDm	253	4.25%	2035P	-	-	-	-	-
5.750% Senior Notes due 2039	USDm	318	5.75%	2039P	-	-	-	-	-
4.450% Senior Notes due 2045	USDm	395	4.45%	2045P	-	-	-	-	-
2.425% Euro Notes due 2026	USDm	552	2.43%	2026P	-	-	552	-	-
1.164% Euro Notes due 2027	USDm	552	1.16%	2027P	-	-	-	552	-
Total Repayments	USDm				850	863	1,152	552	500

		Principal	Interest Rate	Maturity					
1.450% Senior Notes due 2024	USDm	850	1.45%	2024P	(12)	-	-	-	-
3.550% Senior Notes due 2025	USDm	863	3.55%	2025P	(31)	(31)	-	-	-
3.050% Senior Notes due 2026	USDm	600	3.05%	2026P	(18)	(18)	(18)	-	-
5.350% Senior Notes due 2028	USDm	500	5.35%	2028P	(27)	(27)	(27)	(27)	(27)
3.550% Senior Notes due 2030	USDm	258	3.55%	2030P	(9)	(9)	(9)	(9)	(9)
2.600% Senior Notes due 2031	USDm	750	2.60%	2031P	(20)	(20)	(20)	(20)	(20)
4.250% Senior Notes due 2035	USDm	253	4.25%	2035P	(11)	(11)	(11)	(11)	(11)
5.750% Senior Notes due 2039	USDm	318	5.75%	2039P	(18)	(18)	(18)	(18)	(18)
4.450% Senior Notes due 2045	USDm	395	4.45%	2045P	(18)	(18)	(18)	(18)	(18)
2.425% Euro Notes due 2026	USDm	552	2.43%	2026P	(13)	(13)	(13)	-	-
1.164% Euro Notes due 2027	USDm	552	1.16%	2027P	(6)	(6)	(6)	(6)	-
Additional Borrowing	USDm		3.42%		(25)	(49)	(60)	(40)	(39)
Total Interest	USDm				(209)	(220)	(200)	(149)	(141)

Equity Schedule

Equity Assumptions

Paid-in capital		9,315	9,504	9,846	10,122	10,405	10,697	10,996	11,304
% growth			2.0%	3.6%	2.8%	2.8%	2.8%	2.8%	2.8%
Bull case					2.8%	2.8%	2.8%	2.8%	2.8%
Base case					2.8%	2.8%	2.8%	2.8%	2.8%
Bear case					2.8%	2.8%	2.8%	2.8%	2.8%
Treasury Stock		(6,718)	(6,867)	(7,562)	(7,940)	(8,337)	(8,754)	(9,192)	(9,652)
% growth			2.2%	10.1%	5.0%	5.0%	5.0%	5.0%	5.0%
Bull case					5.0%	5.0%	5.0%	5.0%	5.0%
Base case					5.0%	5.0%	5.0%	5.0%	5.0%
Bear case					5.0%	5.0%	5.0%	5.0%	5.0%
Accumulated other comprehensive loss		(232)	(179)	(191)	(212)	(171)	(173)	(170)	(187)
% of revenue		-3.3%	-2.5%	-2.7%	-3.0%	-3.0%	-3.0%	-3.0%	-3.0%
Bull case					-3.0%	-3.0%	-3.0%	-3.0%	-3.0%
Base case					-3.0%	-3.0%	-3.0%	-3.0%	-3.0%
Bear case					-3.0%	-3.0%	-3.0%	-3.0%	-3.0%
Dividends		(200)	(201)	(200)	(292)	(325)	(368)	(420)	(462)
% of net income (Dividend payout ratio)		49.9%	87.0%	19.5%	30.0%	30.0%	30.0%	30.0%	30.0%
Bull case					30.0%	30.0%	30.0%	30.0%	30.0%
Base case					30.0%	30.0%	30.0%	30.0%	30.0%
Bear case					30.0%	30.0%	30.0%	30.0%	30.0%

Equity Assumptions

Beginning Retained Earnings					10,385	11,066	11,825	12,684	13,664
(+) Net Income					974	1,083	1,227	1,401	1,539
(-) Dividends					(292)	(325)	(368)	(420)	(462)
Ending Retained Earnings		10,292	9,559	10,385	11,066	11,825	12,684	13,664	14,742

Appendix A11: UFCF

UFCF

All values in USDm unless otherwise stated

	Units	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
Net Working Capital		3,101	3,175	3,417	3,480	3,682	3,897	4,127	4,373
EBIT	USDm		696	1,278	1,415	1,558	1,711	1,866	2,025
Tax Rate	USDm		-27.8%	-4.0%	-14.2%	-14.2%	-14.2%	-14.2%	-14.2%
NOPAT	USDm		503	1,227	1,214	1,336	1,468	1,601	1,737
(+) Depreciation and amortisation	USDm		926	952	773	768	761	763	773
(-) Capital expenditures	USDm		321	308	357	378	400	424	449
(-) Changes in net working capital	USDm		74	242	63	201	215	230	246
Unlevered free cash flow	USDm		1,035	1,629	1,567	1,525	1,614	1,711	1,816

Appendix A12: WACC

WACC

All values in USDm unless otherwise stated

Market Value of Equity (8/10/2024)	Units	21,349
Market Value of Debt	USDm	2,934
Debt/Capital	%	12.1%
Equity/Capital	%	87.9%
Tax-affected cost of debt	%	4.3%
Cost of equity	%	8.2%
Weighted average cost of capital	%	7.7%
10-year US Treasury bill yield	%	4.2% Link
5Y Beta	unit	0.87
Equity Risk Premium	%	4.6% Estimates from Damodaran
Cost of equity	%	8.2%

Market Value of Debt			
	Amount	Average Term	Average Rate
Total Debt	5,768	7.55	3.4%
Interest expense			(201)
Market Value of Debt			2,934

Cost of Debt calculation (Synthetic rating method)

	2021A	2022A	2023A	2024P	2025P	2026P	2027P	2028P
EBIT	1,798	1,623	2,229	2,189	2,325	2,472	2,629	2,798
Interest Expense	(208)	(165)	(201)	(209)	(220)	(200)	(149)	(141)
Interest Coverage Ratio	8.63	9.85	11.08	10.50	10.58	12.33	17.70	19.87
Average	12.57							
Risk Free Rate	% 4.2%							
Default Risk Spread	% 0.8% Estimates from Damodaran (See Synthetic Rating)							
Tax rate	% -14.2%							
Tax-affected Cost of Debt	% 4.3%							

Appendix A13: Beta Calculation

$$= \text{COVARIANCE.S}(D20:D1231, H20:H1231) / \text{VAR.S}(H20:H1231)$$

B	C	D	E	F	G	H
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Beta

Covariance

Beta Calculation 0.87
Source: CapIQ

Date of close	NYSE: ZBH Closing price	% change	Date of close	S&P 500 Closing Price	% change
16/10/24	105.46		16/10/24	5,842.47	
15/10/24	104.60	-0.82%	15/10/24	5,815.26	-0.47%
14/10/24	104.83	0.22%	14/10/24	5,859.85	0.77%
11/10/24	103.50	-1.27%	11/10/24	5,815.03	-0.76%
10/10/24	102.82	-0.66%	10/10/24	5,780.05	-0.60%
9/10/24	103.46	0.62%	9/10/24	5,792.04	0.21%
8/10/24	101.77	-1.63%	8/10/24	5,751.13	-0.71%
7/10/24	102.28	0.50%	7/10/24	5,695.94	-0.96%
4/10/24	104.68	2.35%	4/10/24	5,751.07	0.97%
3/10/24	104.19	-0.47%	3/10/24	5,699.94	-0.89%
2/10/24	105.69	1.44%	2/10/24	5,709.54	0.17%
1/10/24	107.34	1.56%	1/10/24	5,708.75	-0.01%
30/9/24	107.95	0.57%	30/9/24	5,762.48	0.94%
27/9/24	108.22	0.25%	27/9/24	5,738.17	-0.42%
26/9/24	107.71	-0.47%	26/9/24	5,745.37	0.13%
25/9/24	106.50	-1.12%	25/9/24	5,722.26	-0.40%
24/9/24	107.81	1.23%	24/9/24	5,732.93	0.19%

Industry Beta Comps

Company Name	5Y Levered Beta	Total Debt	Market Cap	D/E	Avg Tax Rate	Unlevered Beta
Teleflex Incorporated (NYSE:TFX)	0.88	1,845,181,000	11,182,864,839	16.50%	18.18%	0.78
Baxter International Inc. (NYSE:BAX)	1.14	13,343,000,000	18,830,655,437	70.86%	13.91%	0.71
STERIS plc (NYSE:STE)	0.44	2,484,668,000	22,505,326,920	11.04%	19.93%	0.40
DexCom, Inc. (NASDAQGS:DXCM)	1.25	2,594,300,000	27,722,281,684	9.36%	11.69%	1.15
Hologic, Inc. (NASDAQGS:HOLX)	0.79	2,559,200,000	18,958,032,968	13.50%	23.09%	0.72
Edwards Lifesciences Corporation (NYSE:EW)	1.55	693,000,000	41,945,112,000	1.65%	13.74%	1.53
Boston Scientific Corporation (NYSE:BSX)	0.91	10,936,000,000	128,928,418,119	8.48%	20.66%	0.85
Integer Holdings Corporation (NYSE:ITGR)	1.00	1,212,684,000	4,440,534,035	27.31%	12.22%	0.81
Globus Medical, Inc. (NYSE:GMED)	1.10	531,027,000	9,639,625,540	5.51%	20.36%	1.05
CONMED Corporation (NYSE:CNMD)	1.30	965,890,000	1,991,263,518	48.51%	14.35%	0.92
Smith & Nephew (LSE: SN)	0.84	3,655,000,000	10,786,040,000	33.89%	17.00%	0.66
Stryker Corporation (NYSE:SYK)	0.91	13,325,000,000	135,819,560,000	9.81%	18.40%	0.84
Zimmer Biomet Holdings, Inc. (NYSE:ZBH)	0.95	6,034,600,000	21,348,878,471	28.27%	14.40%	0.76
High	1.55	13,343,000,000	128,928,418,119	70.86%	23.09%	1.53
75th percentile	1.22	2,585,525,000	26,418,042,993	24.61%	20.25%	1.02
Median	1.05	2,164,924,500	18,894,344,203	12.27%	16.26%	0.83
Mean	1.04	3,716,495,000	28,614,411,506	21.27%	16.81%	0.89
25th percentile	0.89	1,027,588,500	10,025,435,365	8.70%	13.79%	0.73
Low	0.44	531,027,000	1,991,263,518	1.65%	11.69%	0.40

Tax Rate is a 5-Year Average.

Levered beta is based on 5-year monthly data.

Unlevered Beta = Levered Beta / (1 + (1 - Tax Rate) x Debt-to-Equity)

Levered Beta = Unlevered Beta x (1 + (1 - Tax Rate) x (Debt-to-Equity))

Industry Beta Comps Unlevered Beta

High	1.53
75th percentile	1.02
Median	0.83
Mean	0.89
25th percentile	0.73
Low	0.40
ZBH D/E	28.27%
ZBH Tax Rate	14.40%

Industry Beta Comps Levered Beta with ZBH Capital Structure & Tax rate

High	1.90
75th percentile	1.17
Median	0.83
Mean	0.89
25th percentile	0.73
Low	0.28

Beta Calculation

	Weightage	Levered Beta
Covariance	50%	0.87
Industry Beta Comps	50%	0.83
Levered Beta	100%	0.85

Appendix A14: DCF

NPV Calculator

All values in USDm unless otherwise stated

	Units	2024P	2025P	2026P	2027P	2028P
UFCF	USDm	1,560	1,519	1,609	1,707	1,814
Discount rate	%	7.7%	7.7%	7.7%	7.7%	7.7%
Year of projection	unit	1	2	3	4	5
Present value	USDm	1,448	1,309	1,287	1,268	1,251
NPV of discrete forecast period	USDm	6,564				
Gordon Growth method (selected)						
Perpetual growth rate	%	1.5%				
NPV of terminal value	USDm	20,420				
Implied enterprise value	USDm	26,984				
Total debt	USDm	2,934				
Cash	USDm	1,837				
Implied equity value	USDm	25,886				
Fully diluted shares outstanding	millions	210				
Implied share price	USD	123.45				
Implied P/E	x	26.5x				
Implied EV/EBITDA	x	12.3x				
Exit multiple method						
Target exit EV/EBITDA				x		14.1x
NPV of Terminal Value	USDm					27,461
Implied enterprise value	USDm					34,024
Total debt	USDm					2,934
Cash	USDm					1,837
Implied equity value	USDm					32,927
Fully diluted shares outstanding	millions					210
Implied share price	USD					157.02
Implied P/E	x					33.7x

Appendix A15: Sensitivity Analysis

Sensitivity analysis

Share price sensitivity to WACC and TGR

		7.5%	7.6%	7.7%	7.8%	7.9%
TGR	1.3%	128.71	124.33	120.22	116.37	112.73
	1.4%	130.54	126.03	121.81	117.84	114.12
	1.5%	132.44	127.79	123.45	119.37	115.54
	1.6%	134.40	129.61	125.13	120.94	117.01
	1.7%	136.43	131.49	126.88	122.57	118.52

EV sensitivity to WACC and TGR

		WACC				
		7.3%	7.5%	7.7%	7.9%	8.1%
TGR	1.3%	28,088	27,170	26,308	25,499	24,737
	1.4%	28,472	27,526	26,641	25,809	25,027
	1.5%	28,870	27,895	26,984	26,129	25,326
	1.6%	29,281	28,276	27,338	26,459	25,634
	1.7%	29,707	28,671	27,704	26,799	25,951

EqV sensitivity to WACC and TGR

		WACC				
		7.3%	7.5%	7.7%	7.9%	8.1%
TGR	1.3%	26,991	26,072	25,211	24,402	23,640
	1.4%	27,375	26,429	25,543	24,712	23,930
	1.5%	27,772	26,798	25,886	25,032	24,229
	1.6%	28,184	27,179	26,241	25,362	24,537
	1.7%	28,610	27,574	26,607	25,702	24,854

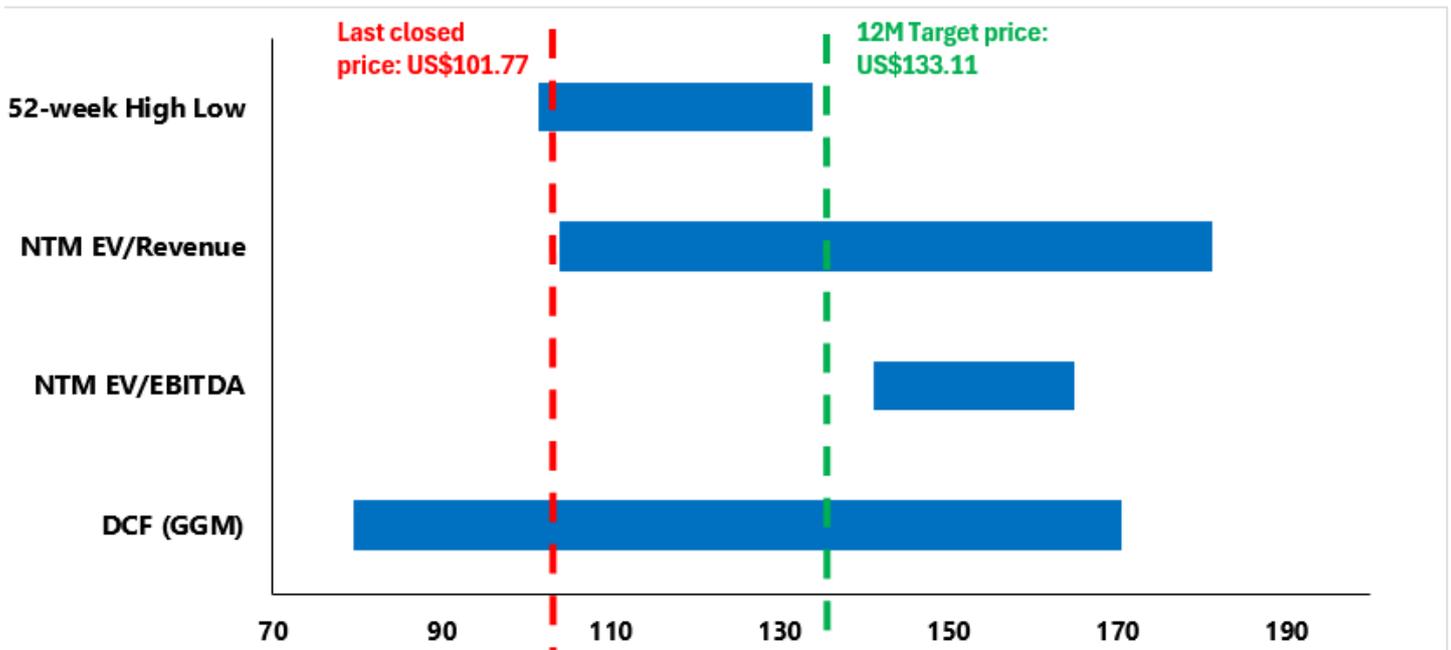
Appendix A16: Comparable Companies

Comparable Companies									
Company Name	LTM P/E	LTM EV/EBITDA	LTM EV/Revenue	LTM EV/EBIT	FY+1 PE	FY+1 EV/EBITDA	FY+1 EV/Revenue	FY+1 EV/EBIT	
Baxter International Inc. (NYSE: BAX)	7.6x	9.9x	2.0x	18.7x	12.2x	9.5x	1.9x	12.7x	
Teleflex Incorporated (NYSE: TFX)	42.7x	19.3x	4.2x	34.1x	16.1x	13.7x	4.0x	14.9x	
STERIS plc (NYSE: STE)	56.6x	17.6x	4.7x	26.9x	24.2x	15.9x	4.4x	18.8x	
DexCom, Inc. (NASDAQGS: DXCM)	42.8x	29.6x	6.9x	39.9x	37.7x	21.1x	6.4x	30.5x	
Hologic, Inc. (NASDAQGS: HOLX)	28.0x	15.0x	4.8x	20.3x	19.3x	13.8x	4.6x	14.8x	
Edwards Lifesciences Corporation (NYSE: EW)	28.6x	19.8x	6.6x	21.7x	28.5x	23.1x	7.1x	25.2x	
Boston Scientific Corporation (NYSE: BSX)	71.4x	33.9x	9.0x	50.4x	34.2x	27.4x	8.0x	29.4x	
Integer Holdings Corporation (NYSE: ITGR)	43.3x	17.2x	3.4x	27.2x	23.3x	14.5x	3.1x	24.7x	
Globus Medical, Inc. (NYSE: GMED)	234.2x	16.0x	4.3x	27.4x	23.8x	12.3x	3.8x	20.3x	
CONMED Corporation (NYSE: CNMD)	20.6x	13.1x	2.3x	20.2x	14.4x	10.3x	2.2x	13.4x	
Smith & Nephew (LSE: SN)	39.9x	13.6x	2.7x	21.1x	15.2x	10.3x	2.6x	13.7x	
Stryker Corporation (NYSE: SYK)	40.0x	25.8x	6.7x	31.5x	27.1x	22.0x	6.2x	23.7x	
Zimmer Biomet Holdings (NYSE: ZBH)	21.9x	10.5x	3.6x	17.3x	12.8x	10.1x	3.4x	12.0x	
High	234.2x	33.9x	9.0x	50.4x	37.7x	27.4x	8.0x	30.5x	
75th percentile	46.7x	21.3x	6.6x	32.2x	27.5x	21.3x	6.2x	24.8x	
Median	41.3x	17.4x	4.5x	27.1x	23.5x	14.1x	4.2x	19.6x	
Mean	54.6x	19.2x	4.8x	28.3x	23.0x	16.1x	4.5x	20.2x	
25th percentile	28.5x	14.6x	3.2x	20.9x	15.9x	11.8x	3.0x	14.6x	
Low	7.6x	9.9x	2.0x	18.7x	12.2x	9.5x	1.9x	12.7x	
Valuation									
Target TEV/EBITDA	USDm	14.1x							
FY+1 EBITDA	USDm	2,192							
Target EV	USDm	30,928							
Total debt	USDm	2,934							
Cash	USDm	1,837							
Implied equity value	USDm	29,831							
Fully diluted shares outstanding	millions	210							
Implied share price	USD	142.26							
Target TEV/Revenue	USDm	4.2x							
FY+1 Revenue	USDm	7,843							
Target EV	USDm	33,171							
Total debt	USDm	2,934							
Cash	USDm	1,837							
Implied equity value	USDm	32,074							
Fully diluted shares outstanding	millions	210							
Implied share price	USD	152.95							

Appendix A17: Football Field Analysis

Football Field Analysis

	Low	Difference	High
DCF (GGM)	\$ 79.53	\$ 90.96	\$170.49
NTM EV/EBITDA	\$141.19	\$ 23.67	\$164.86
NTM EV/Revenue	\$103.98	\$ 77.20	\$181.18
52-week High Low	\$101.47	\$ 32.43	\$133.90



Appendix A18: Output

Valuation

All values in USDm unless otherwise stated

Valuation method	Weightage	Share price
DCF (Gordon Growth)	60.0%	123.45
Comparable Trading EV/Revenue	20.0%	152.95
Comparable Trading EV/EBITDA	20.0%	142.26
Blended target price	100.0%	133.11