**Financial Analysis for AstraZeneca PLC**

**Overview**

AstraZeneca PLC, a biopharmaceutical company, focuses on the discovery, development, manufacture, and commercialization of prescription medicines. The company offers Imjudo, Datroway, Iressa, Tagrisso, Imfinzi, Lynparza, Calquence, Enhertu, Orpathys, Truqap, Zoladex, Faslodex, Farxiga, Brilinta, Crestor, Seloken, Lokelma, Roxadustat, Andexxa, Wainua, Symbicort, Fasenra, Pulmicort, Breztri/Trixeo, Saphnelo, Tezspire, Airsupra, Ultomiris, Soliris, Strensiq, Koselugo, Kanuma, Atacand, Plendil, Modip, Splendil, Munobal, Flodil, Komboglyze, Qtern, Byetta, XIGDUO, Accolate, Accoleit, Vanticon, Beyfortus, Synagis, FluMist, tixagevimab and cilgavimab, and sipavibart. It also provides Bricanyl Respules, Eklira Genuair/Tudorza/Bretaris, Bricanyl Turbuhaler, Rhinocort, Bevespi Aerosphere, Daliresp/Daxas, Oxis Turbuhaler, Breztri Aerosphere, Duaklir Genuair, Kavigale, Evusheld, Fluenz/FluMist, and Voydeya. The company offers its products for ocology, cardiovascular, renal and metabolism, respiratory & immunology, vaccines and immune, and therapies rare diseases. It serves primary and specialty care physicians through distributors and local representative offices in the United Kingdom, the United States, Europe, and Asia. It has a strategic agreement with Tempus to develop the largest multimodal foundation model in oncology. The company has a collaboration agreement with IonQ, Inc. for the development of quantum-accelerated computational chemistry workflow for healthcare, life sciences, and chemistry; a strategic research collaboration with CSPC Pharmaceutical Group Limited to advance the discovery and development of novel oral candidates, with the potential to treat diseases across multiple indications; and collaboration Revna Biosciences for lung cancer treatment. AstraZeneca PLC was formerly known as Zeneca Group PLC and changed its name to AstraZeneca PLC in April 1999. AstraZeneca PLC was incorporated in 1992 and is headquartered in Cambridge, the United Kingdom.

**Financial Ratio Analysis**

**Liquidity Ratios**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Current Ratio** | **Quick Ratio** | **Cash Ratio** |
| 2021-12-31 00:00:00 | 1.16155 | 0.763964 | 0.280119 |
| 2022-12-31 00:00:00 | 0.859278 | 0.680561 | 0.234511 |
| 2023-12-31 00:00:00 | 0.820313 | 0.642721 | 0.191212 |
| 2024-12-31 00:00:00 | 0.926828 | 0.737063 | 0.196943 |

AstraZeneca's liquidity ratios show a concerning trend. The Current Ratio has consistently been below the ideal 1.5, indicating potential challenges in covering short-term liabilities. The Quick Ratio, which excludes inventory, is also below 1, suggesting that even without inventory, the company might struggle to meet immediate obligations. The Cash Ratio, while showing a slight uptick in 2024, remains low, implying a limited pure cash position.

**Profitability Ratios**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Return on Equity (RoE)** | **Return on Assets (RoA)** | **Return on Capital Employed (RoCE)** | **Net Profit Margin** | **Operating Margin** |
| 2020-12-31 00:00:00 | nan | nan | nan | nan | nan |
| 2021-12-31 00:00:00 | 0.0028522 | 0.00106299 | 0.0122147 | 0.00299329 | -0.00371489 |
| 2022-12-31 00:00:00 | 0.0887761 | 0.0340785 | 0.0545804 | 0.0741359 | 0.101734 |
| 2023-12-31 00:00:00 | 0.152134 | 0.058891 | 0.120266 | 0.129991 | 0.190391 |
| 2024-12-31 00:00:00 | 0.172486 | 0.0676215 | 0.136184 | 0.130102 | 0.189577 |

AstraZeneca's profitability ratios demonstrate a strong upward trajectory. Return on Equity (RoE) has significantly improved, reaching 17.25% in 2024, surpassing the 15% benchmark. Return on Assets (RoA) has also shown consistent growth, indicating better asset utilization. Return on Capital Employed (RoCE) has reached 13.62% in 2024, exceeding the 12% preferred value. Both Net Profit Margin and Operating Margin have shown substantial improvement, with the Net Profit Margin reaching 13.01% and Operating Margin at 18.96% in 2024, indicating healthy profitability and cost efficiency.

**Efficiency Ratios**

|  |  |  |
| --- | --- | --- |
|  | **Asset Turnover** | **Inventory Turnover** |
| 2020-12-31 00:00:00 | nan | nan |
| 2021-12-31 00:00:00 | 0.355125 | nan |
| 2022-12-31 00:00:00 | 0.459677 | 1.81128 |
| 2023-12-31 00:00:00 | 0.45304 | 1.63351 |
| 2024-12-31 00:00:00 | 0.519758 | 1.90571 |

AstraZeneca's efficiency ratios show mixed results. The Asset Turnover Ratio has generally increased, suggesting improved effectiveness in generating sales from assets, reaching 0.52 in 2024. However, the Inventory Turnover ratio remains relatively low, hovering around 1.6 to 1.9, which could indicate slower-moving inventory or potential overstocking. It's important to note that inventory data was not available for 2020 and 2021.

**Valuation Ratios**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Price-to-Earnings (P/E)** | **Price-to-Sales (P/S)** | **Price-to-Book (P/B)** | **EV/EBIDTA** |
| 2020-12-31 00:00:00 | 29.0308 | nan | nan | nan |
| 2021-12-31 00:00:00 | 29.0308 | 4.71901 | 4.49657 | -1445.54 |
| 2022-12-31 00:00:00 | 29.0308 | 3.98123 | 4.76743 | 44.2261 |
| 2023-12-31 00:00:00 | 29.0308 | 3.85434 | 4.51093 | 22.8317 |
| 2024-12-31 00:00:00 | 29.0308 | 3.26543 | 4.32921 | 19.6271 |

AstraZeneca's valuation ratios suggest that the stock might be considered overvalued based on some metrics. The Price-to-Earnings (P/E) ratio has consistently been high at 29.03, which is above the reasonable threshold of 20. The Price-to-Sales (P/S) ratio, while decreasing, is still above 2, indicating it might be fairly to potentially overvalued. The Price-to-Book (P/B) ratio remains above 3, suggesting it is overvalued compared to its book value. The EV/EBITDA ratio, although showing a significant decrease from 2022, is still above 15 in 2024, indicating that the company might be considered expensive. The negative EV/EBITDA in 2021 is an anomaly that needs further investigation, but given the overall trend, it's likely an outlier.

**Leverage Ratios**

|  |  |  |
| --- | --- | --- |
|  | **Debt-to-Equity (D/E)** | **Interest Coverage** |
| 2020-12-31 00:00:00 | nan | nan |
| 2021-12-31 00:00:00 | 0.781501 | 0.79232 |
| 2022-12-31 00:00:00 | 0.786862 | 2.88045 |
| 2023-12-31 00:00:00 | 0.725724 | 5.34172 |
| 2024-12-31 00:00:00 | 0.738342 | 6.16706 |

AstraZeneca's leverage ratios indicate a healthy and improving debt position. The Debt-to-Equity (D/E) ratio has consistently been below 1, suggesting a low debt burden and healthy leverage. The Interest Coverage ratio has shown significant improvement, rising from 0.79 in 2021 to 6.17 in 2024, which is well above the safe threshold of 3, indicating a strong ability to cover interest expenses.

**Performance and Growth Metrics**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Revenue Growth (%)** | **EBIT Growth (%)** | **Net Profit Margin (%)** | **EPS Growth (%)** | **EPS** | **Debt-to-Equity** | **Free Cash Flow** | **FCF Growth (%)** |
| 2020-12-31 00:00:00 | nan | nan | nan | nan | nan | nan | nan | nan |
| 2021-12-31 00:00:00 | nan | nan | 0.299329 | nan | 0.072286 | 0.781501 | 3.763e+09 | nan |
| 2022-12-31 00:00:00 | 18.5317 | 278.932 | 7.41359 | 2834.96 | 2.12156 | 0.786862 | 7.237e+09 | 92.32 |
| 2023-12-31 00:00:00 | 3.29192 | 121.561 | 12.9991 | 81.0708 | 3.84153 | 0.725724 | 6.567e+09 | -9.25798 |
| 2024-12-31 00:00:00 | 18.035 | 22.2078 | 13.0102 | 18.1405 | 4.53841 | 0.738342 | 7.275e+09 | 10.7812 |

AstraZeneca's performance and growth metrics show a strong and positive trend. Revenue Growth has been robust, with significant increases in 2022 and 2024. EBIT Growth has been exceptionally strong, indicating excellent operational efficiency and profitability growth. Net Profit Margin has consistently improved, reaching a healthy 13.01% in 2024. EPS Growth has been remarkable, with substantial increases, and the EPS itself has shown consistent growth. Free Cash Flow has been positive and generally increasing, with a strong growth in 2022 and 2024, indicating healthy cash generation. The Debt-to-Equity ratio remains healthy, reinforcing financial stability.

**Analysis of Performance Ratios**

* **Liquidity Ratios:** The liquidity ratios are a concern, with the Current Ratio consistently below the ideal 1.5 and the Quick Ratio below 1. This suggests potential short-term liquidity challenges.
* **Profitability Ratios:** Profitability has shown significant improvement across all metrics, with RoE, RoA, and RoCE all demonstrating strong growth and exceeding benchmarks. Net Profit Margin and Operating Margin are also healthy and improving.
* **Efficiency Ratios:** Asset Turnover has improved, indicating better asset utilization. However, Inventory Turnover remains relatively low, which could suggest inefficiencies in inventory management.
* **Valuation Ratios:** The valuation ratios suggest that AstraZeneca's stock might be overvalued, with high P/E, P/S, and P/B ratios. The EV/EBITDA ratio, while decreasing, still indicates a potentially expensive stock.
* **Leverage Ratios:** The leverage ratios are strong, with a healthy Debt-to-Equity ratio and a significantly improved Interest Coverage ratio, indicating low debt risk.
* **Performance and Growth Metrics:** The company demonstrates strong performance and growth, with robust revenue, EBIT, and EPS growth. Net Profit Margin is healthy, and Free Cash Flow generation is strong and increasing.

**Conclusions:**

* **Is the company growing revenue and profit sustainably?** Yes, AstraZeneca is demonstrating sustainable growth in both revenue and profit. The consistent increase in revenue, EBIT, and EPS, along with improving net profit margins, indicates a healthy and growing business.
* **Is it over-leveraged or overvalued?** The company is not over-leveraged; in fact, its leverage ratios are very healthy. However, based on the valuation ratios (P/E, P/S, P/B, and EV/EBITDA), the stock appears to be overvalued at its current price.
* **Are margins stable or volatile?** Margins have shown a clear trend of improvement and appear to be stabilizing at healthy levels, particularly the Net Profit Margin and Operating Margin.
* **Is cash generation real or profit is accounting-based?** The strong and increasing Free Cash Flow, coupled with positive operating cash flow, suggests that cash generation is real and not solely accounting-based.
* **Are returns on capital adequate (>12–15%)?** Yes, the Return on Equity (RoE) and Return on Capital Employed (RoCE) have both surpassed the adequate benchmarks of 15% and 12% respectively, indicating efficient use of capital.

**Recommendation:** AstraZeneca PLC presents a compelling case for long-term investment due to its strong and sustainable growth in revenue and profitability, excellent returns on capital, and healthy leverage. The company's ability to generate significant free cash flow further reinforces its financial strength. While the current valuation ratios suggest the stock might be overvalued at present, the underlying business fundamentals are robust. Investors with a long-term horizon who are willing to overlook the current valuation premium may find AstraZeneca to be a suitable investment, given its strong growth trajectory and solid financial performance. However, potential investors should be mindful of the liquidity ratios, which indicate some short-term challenges, and consider these in their overall risk assessment.