

AstraZeneca plc (AZN)

\$54.25 (As of 06/23/20)

Price Target (6-12 Months): **\$57.00**

Long Term: 6-12 Months

Zacks Recommendation:

Neutral

(Since: 10/23/19)

Prior Recommendation: Outperform

Short Term: 1-3 Months

Zacks Rank: (1-5)

2-Buy

Zacks Style Scores:

VGM:B

Value: B

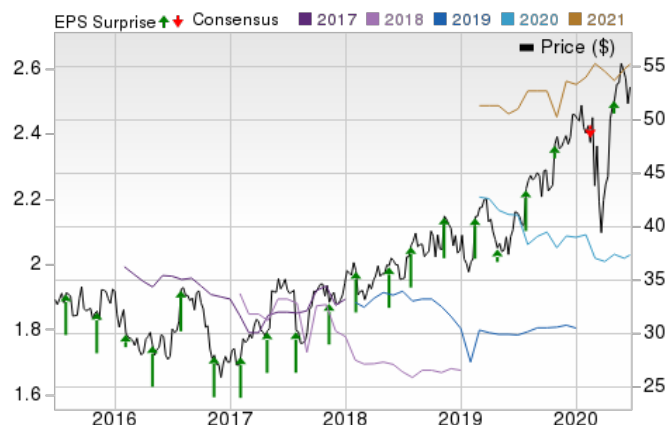
Growth: D

Momentum: A

Summary

AstraZeneca's products like Nexium, Crestor and Seroquel are facing generic competition, which is hurting sales. The diabetes franchise also faces stiff competition while pricing pressure is hurting sales in the respiratory unit. Also, the coronavirus outbreak may hurt its profits in 2020. Nonetheless, AstraZeneca's newer drugs, mainly cancer medicines Lynparza, Tagrisso and Imfinzi, should keep driving revenues in 2020. Its pipeline is strong with abundance of pipeline catalysts lined up for 2020. Several launches are underway across each of the therapeutic areas. AstraZeneca has also engaged in external acquisitions and strategic collaborations to boost its pipeline while investing in geographic areas of high growth like China. Cost-cutting efforts should drive earnings. Its shares have outperformed the industry this year so far.

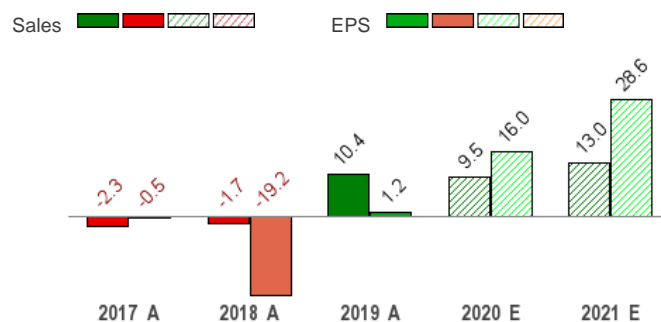
Price, Consensus & Surprise



Data Overview

52 Week High-Low	\$57.44 - \$36.15
20 Day Average Volume (sh)	5,782,697
Market Cap	\$142.4 B
YTD Price Change	8.8%
Beta	0.57
Dividend / Div Yld	\$1.86 / 3.4%
Industry	Large Cap Pharmaceuticals
Zacks Industry Rank	Top 9% (22 out of 253)

Sales and EPS Growth Rates (Y/Y %)



Last EPS Surprise	12.8%
Last Sales Surprise	9.4%
EPS F1 Est- 4 week change	0.7%
Expected Report Date	07/23/2020
Earnings ESP	-3.5%

Sales Estimates (millions of \$)

	Q1	Q2	Q3	Q4	Annual*
2021					30,162 E
2020	6,354 A	6,326 E	6,848 E	7,297 E	26,697 E
2019	5,491 A	5,823 A	6,406 A	6,664 A	24,384 A

EPS Estimates

	Q1	Q2	Q3	Q4	Annual*
2021					\$2.61 E
2020	\$0.53 A	\$0.44 E	\$0.53 E	\$0.54 E	\$2.03 E
2019	\$0.45 A	\$0.37 A	\$0.50 A	\$0.45 A	\$1.75 A

*Quarterly figures may not add up to annual.

P/E TTM	29.3
P/E F1	26.7
PEG F1	1.5
P/S TTM	5.6

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 06/23/2020. The reports text is as of 06/24/2020.

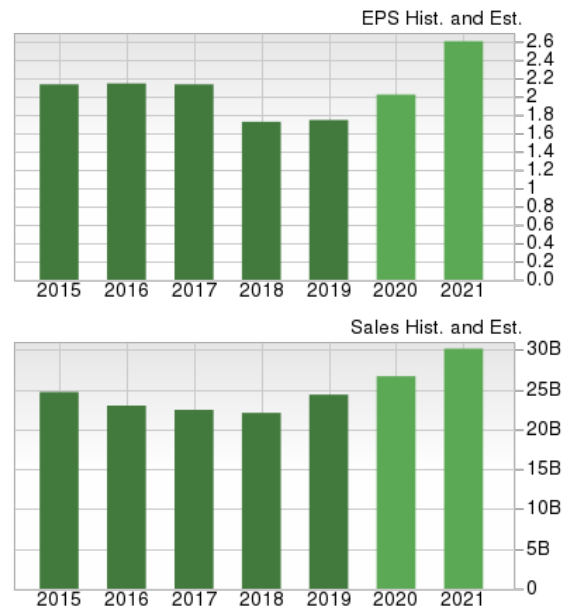
Overview

AstraZeneca plc, headquartered in London, UK, is one of the largest biopharmaceutical companies in the world. AstraZeneca was formed on Apr 6, 1999, through the merger of Sweden's Astra AB and UK's Zeneca Group plc. AstraZeneca's business can be broken down into separate lines based on therapeutic classes. These include metabolic diseases, cardiovascular, respiratory, oncology, neuroscience, infection and other.

In order to bolster its respiratory portfolio, AstraZeneca acquired rights to Allergan's branded respiratory business in the U.S. and Canada in Mar 2015. The company also acquired Takeda's core respiratory business in May 2016.

In Jun 2007, AstraZeneca acquired biotechnology company MedImmune for \$15.6 billion, which strengthened its product portfolio. In Aug 2011, AstraZeneca sold its Astra Tech business to DENTSPLY for about \$1.8 billion in cash. In a bid to add late-stage candidates to its pipeline, AstraZeneca entered into a number of deals (Almirall's respiratory franchise, Bristol-Myers' diabetes portfolio, Pearl Therapeutics and Omthera Pharmaceuticals) and struck agreements with companies such as FibroGen, Inc. In Dec 2015, AstraZeneca acquired biotech company, ZS Pharma, for about \$2.7 billion to boost its cardiovascular and metabolic disease pipeline. In Feb 2016, AstraZeneca bought a majority equity stake in privately owned biotech company, Acerta Pharma, to enhance its oncology pipeline.

In 2019, total sales rose 13% (CER) to \$24.4 billion. Its top-selling medicines are Tagrisso (14% of total product sales), Symbicort (11%), Brilinta (7%), Farxiga (7%), Nexium (6%) and Imfinzi (6%).



Reasons To Buy:

▲ **Shares Outperforming Industry:** AstraZeneca's share price has risen 8.8% this year so far against decline of 1.8% for the industry.

▲ **Strong Diversified Portfolio; New Drugs Supporting Sales:** AstraZeneca has a strong product portfolio. Newer drugs like Brilinta (cardiovascular), Lynparza (ovarian cancer), Farxiga/Forxiga (type II diabetes) and Tagrisso (lung cancer) are driving top-line growth, with AstraZeneca launching them in more markets and in an increased number of indications. Tagrisso became AstraZeneca's biggest medicine in 2019. Brilinta and Farxiga achieved blockbuster status in 2017, exceeding \$1 billion in sales. Imfinzi and Lynparza also achieved blockbuster status in 2019. This means five of its newer medicines (Tagrisso, Brilinta, Farxiga, Imfinzi and Lynparza) now have blockbuster status. AstraZeneca is looking for further label expansions for all these drugs.

AstraZeneca has a strong diversified portfolio, an expanding presence in emerging markets, ongoing cost-cutting initiatives and a robust pipeline.

AstraZeneca returned to product sales growth from the second half of 2018 on the back of its newer drugs. Patent expirations had been hurting its product sales growth since 2010. Sales of AstraZeneca's newer medicines rose 81% in 2018 and 62% in 2019 as almost every new product it has launched in the recent years has done well. The company is confident of seeing sustained growth for several years driven by sales growth of its new medicines, Tagrisso, Imfinzi, Lynparza, Farxiga and Fasenra.

▲ **Emerging Markets - A Focus Area:** AstraZeneca, which operates in multiple countries across the globe, is focusing on emerging markets. Emerging markets represents its largest market by product sales and accounted for 33% of its total product sales in 2018 and 35% in 2019. Revenues from emerging markets climbed 8% in 2017, 12% in 2018 and 24% in 2019, supported by strong growth in China. Emerging markets represent significant commercial opportunity, given factors like pricing pressure in the EU and intensifying generic competition affecting sales in large pharmaceutical markets. In late 2015, AstraZeneca struck a deal with WuXi AppTec, an operating subsidiary of China-based WuXi PharmaTech Inc., to develop innovative biologics targeting therapeutics areas such as respiratory, inflammation and autoimmunity among others. The company is looking to make additional investments in China. In fact, in Emerging Markets, countries outside China are also starting to contribute more, with sales in ex-China markets rising 12% in 2019. AstraZeneca's operations in emerging markets should place it well, going forward.

▲ **Cost Cutting Initiatives and Divestitures:** AstraZeneca has consistently made significant efforts to restructure and reshape its business to improve its long-term competitiveness. AstraZeneca is working to reduce the impact of genericization on its key products by trimming its cost structure to drive operational efficiency. Its latest restructuring efforts include centralization of global R&D footprint into three strategic centers, transformation of the IT organization, closure of a number of manufacturing facilities and other activities to simplify and streamline the organization. These restructuring initiatives are expected to be completed in 2022 and generate annualized benefits of \$1.2 billion. Streamlining of operations and focus on R&D will benefit the company in the long run. AstraZeneca expects to generate operating margin in excess of 30% from 2021.

In 2018, AstraZeneca divested several non-core products as it streamlines its portfolio to focus on its core areas of Oncology, Cardiovascular, Renal & Metabolism and Respiratory.

▲ **Acquisitions & Deals to Boost Growth:** AstraZeneca is working on bolstering its pipeline and is looking at suitable acquisitions and deals. In order to strengthen its respiratory portfolio, AstraZeneca acquired rights to Allergan's branded respiratory business in the U.S. and Canada in Mar 2015. AstraZeneca had also acquired Almirall's respiratory franchise in Oct 2014. In May 2016, AstraZeneca acquired Takeda's core respiratory business, thereby gaining global rights to Daliresp/Daxas.

In February 2014, AstraZeneca boosted its diabetes portfolio by acquiring Bristol-Myers' global diabetes business for an upfront payment of \$2.7 billion and capitalized on its strong presence in emerging markets to promote its diabetes franchise.

In December 2015, AstraZeneca acquired biotech company, ZS Pharma, for about \$2.7 billion, to boost its cardiovascular and metabolic disease pipeline. In Feb 2016, AstraZeneca also acquired a majority equity stake in privately owned biotech company, Acerta Pharma, to boost its oncology pipeline.

Meanwhile, the June 2012 acquisition of Ardea added Zurampic to AstraZeneca's gout portfolio. The Pearl Therapeutics takeover added Bevespi to AstraZeneca's respiratory portfolio. Other acquisitions include Omthera and AlphaCore, both boosting the company's cardiovascular pipeline.

In addition to acquisitions, the company is pursuing co-development deals with companies like Innate Pharma, FibroGen, Moderna and Daiichi Sankyo to boost its pipeline. AstraZeneca also has a profit-sharing deal with Merck for Lynparza and Koselugo (selumetinib). We believe that the company will continue to pursue such accretive deals and acquisitions.

▲ **Focus on Oncology:** AstraZeneca is working on strengthening its oncology product portfolio through label expansions of existing products and progressing oncology pipeline candidates. It has launched six cancer medicines since 2013. Oncology sales now comprise around 37% of total product sales for AstraZeneca and rose 50% in 2018 and 47% in 2019. The strong oncology performance was driven by new medicines such as Tagrisso, Lynparza and Imfinzi. These coupled with newly approved Calquence in leukemia and Enhertu in breast cancer are expected to drive oncology growth in 2020.

The immuno-oncology therapeutic area is presently attracting a lot of interest and represents huge commercial potential. An interesting candidate in the company's immuno-oncology pipeline is Imfinzi (durvalumab).

Imfinzi is presently approved for unresectable, stage III NSCLC and advanced bladder cancer in second-line settings. The lung cancer indication drove sales significantly in 2018 and 2019. In March 2020, Imfinzi was approved for first-line treatment of extensive-stage small cell lung cancer (ES-SCLC). Imfinzi is also being evaluated for multiple cancers, either alone or in combination with other regimens, including phase III trials in combination with tremelimumab in hepatocellular carcinoma (HCC, liver cancer), small cell lung cancer, metastatic urothelial

cancer, head and neck squamous cell carcinoma (HNSCC), in earlier settings in NSCLC, among others. In November 2017, another cancer drug Calquence (acalabrutinib) gained FDA approval for previously treated mantle cell lymphoma (MCL), the first for AstraZeneca for a type of blood cancer. In November 2019, Calquence was approved by the FDA for the larger chronic lymphocytic leukemia indication (in frontline as well as relapsed/recurrent disease setting), which has significantly expand the drug eligible patient population and is expected to drive sales in 2020.

Koselugo (selumetinib) for the treatment of pediatric patients with neurofibromatosis type 1 (NF1) related plexiform neurofibromas (PN), a rare and debilitating genetic condition, was approved by the FDA in April 2020. An important oncology candidate in AstraZeneca's pipeline is savolitinib (NSCLC - phase III). In April 2019, AstraZeneca acquired joint development and commercialization rights to an innovative antibody drug conjugate (ADC), trastuzumab deruxtecan from Japan's Daiichi Sankyo. Trastuzumab deruxtecan was approved by the FDA in third-line HER2-positive metastatic breast cancer in December 2019 and immediately launched under the brand name of Enhertu.

Lynparza, presently approved in three tumor types, ovarian, breast and pancreatic, was approved for metastatic castration-resistant prostate cancer (with HRR genetic mutations) in May 2020, which marked the drug's approval for the fourth cancer type. In May, Lynparza was also approved by the FDA in combination with Roche's Avastin as a maintenance treatment for first-line advanced ovarian cancer in women who have an HRD-positive tumor. Lynparza is also being evaluated in combination with Keytruda for NSCLC. Tagrisso is also being evaluated in earlier-line settings for lung cancer. Enhertu is being evaluated in late-stage studies for third-line gastric cancer for which regulatory applications are expected to be filed in 2020.

▲ **Non-Cancer Pipeline Progress:** The company had 17 new molecular entities in pivotal development or under regulatory review at the end of March 2020. Its R&D focus is on three main therapy areas — Oncology; Cardiovascular, Renal and Metabolism; and Respiratory. AstraZeneca has been making significant progress with its non-oncology pipeline as well.

Promising non-oncology pipeline candidates include tezepelumab (asthma – phase III), Breztri Aerosphere/PT010 (COPD – under review in the EU and U.S.), anifrolumab (systemic lupus erythematosus – phase III) and roxadustat (anemia in patients with chronic kidney disease – NDA filing by partner FibroGen in December 2019). Several label expansion studies are also ongoing on Farxiga for heart failure indications and Fasenra for eosinophil-driven diseases (EDDs) beyond severe asthma and skin diseases like atopic dermatitis, chronic, spontaneous urticaria and bullous pemphigoid.

▲ **Favorable Debt Profile:** AstraZeneca has a favorable debt profile. As of Mar 31, 2020, the company's debt-to-total capital ratio was 60.1, which increased from 55.3 at the end of 2019. A higher ratio indicates greater financial risk. However, AstraZeneca has considerable financial resources available. As of Mar 31, 2020, the company had \$8.3 billion in financial resources (cash and cash-equivalent balances + liquid fixed income securities + undrawn committed bank facilities) with only \$2.5 billion of borrowings due within one year. This implies that it does have sufficient cash to pay its short-term debt in case of insolvency. Meanwhile, its times interest earned ratio stands at 2.1, which means its operating earnings are twice the interest expenses of the company. This suggests that the company is capable to meeting its interest obligations from operating earnings.

Reasons To Sell:

- ▼ **Generics Eroding Revenues:** AstraZeneca's core products like Nexium, Seroquel XR and Crestor are facing generic competition, which are hurting earnings growth. Atacand, Toprol-XL and Merrem are also facing generic competition in the United States. The genericization of key products makes it challenging for the company to drive its top line.

Sales of products which lost exclusivity declined by more than \$13 billion between 2011 and 2018.

AstraZeneca core products are facing generic competition. The diabetes franchise also faces stiff competition while pricing pressure hurts sales of the respiratory franchise.

- ▼ **Intense Competition:** In addition to generic threats, AstraZeneca's products already face intense competition in the market from both large pharma companies as well as small and mid-sized companies. One of AstraZeneca's key focus areas, the diabetes market, is heavily crowded with a number of products present in the market. AstraZeneca's Farxiga/Forxiga belongs to the same class (SGLT2) as Johnson & Johnson's Invokana. Bydureon, a GLP-1 receptor agonist with a once weekly dosing is facing competition from Glaxo's Tanzeum and Lilly's Trulicity. The diabetes franchise is facing increased pricing pressure. Products targeting other areas, such as oncology and respiratory among others, are also facing stiff competition.

Although AstraZeneca is among the major players in immunotherapy, there are several other companies, big as well as small, looking to develop and bring immunotherapy treatments to market. Rising competition in the immuno-oncology market is a significant concern.

Loss of market share due to intense competition will severely impact AstraZeneca's top line.

- ▼ **Pipeline Setbacks:** Although AstraZeneca has several candidates in its pipeline in different stages of development, the company has had its share of pipeline setbacks. Pipeline setbacks include the discontinuation of the development of candidates like zibotentan (prostate cancer), TC-5214 (major depressive disorder), sifalimumab (lupus) and selumetinib (uveal melanoma, NSCLC, thyroid cancer). ZS-9 received a complete response letter (CRL) from the FDA twice, thus delaying the drug's entry to the market. In Jul 2017, a pivotal phase III study (MYSTIC) on Imfinzi in the 1st line NSCLC patient population failed to meet the primary endpoint of progression-free-survival. The same study failed to meet the second primary endpoint of showing statistical improvement in overall survival in the patients in November 2018. In June 2018, AstraZeneca discontinued two late-stage studies on Alzheimer's disease candidate, lanabecestat as the independent data monitoring committee (IDMC) felt they were unlikely to meet their primary endpoint.

Given the generic competition being faced by the company, the pipeline needs to deliver.

- ▼ **Soft Sales of Symbicort:** Sales of another important drug, Symbicort are declining due to challenges in both the United States and Europe. In the United States, Symbicort sales are declining due to significant pricing pressure on the ICS/LABA class from managed care as well as competition from outside the class, especially in COPD. Sales are declining in Europe due to continued pressure from both analogue competitors and branded competitors. Sales of Symbicort, which accounts for 11% of AstraZeneca's product sales, declined 6% in 2017, 9% in 2018 and were flat in 2019.

Last Earnings Report

Q1 Earnings & Sales Beat

AstraZeneca's first-quarter 2020 earnings and sales beat the Zacks Consensus Estimate. The company maintained its previously issued revenue and earnings guidance for 2020.

First-quarter 2020 core earnings of 53 cents per American depositary share beat the Zacks Consensus Estimate of 47 cents. Core earnings per share of \$1.05 rose 21% year over year at constant exchange rates ("CER") due to higher revenues.

Total revenues were up 16% (17% at CER) to \$6.35 billion in the reported quarter, driven by higher product sales. Revenues also beat the Zacks Consensus Estimate of \$5.81 billion.

All growth rates mentioned below are on a year-over-year basis and at CER.

Product Sales Rise

Product sales rose 17% at CER to \$6.31 billion driven by higher demand for its newer medicines and double-digit growth in Symbicort's sales. Sales of some medicines in the quarter benefited from stockpiling by distributors, prescription-lengthening and improved treatment-regimen adherence by patients as a result of the coronavirus pandemic. COVID-19 related benefits pulled up AstraZeneca's sales by a low-to-mid single-digit percentage, which the company mentioned will reverse in the future quarters of 2020.

Collaboration revenues were \$43 million, up 70% year over year. This included collaboration revenues of \$3 million for roxadustat and \$14 million for Enhertu.

Among AstraZeneca's various therapeutic areas, Oncology product sales were up 34%. In BioPharmaceuticals, new CVRM product sales were up 8% while Respiratory & Immunology rose 22%. However, other medicines declined 6%.

Sales of new medicines rose 49% in the quarter and represented 47% of total revenues in the quarter.

Sales in Detail

In Oncology, Lynparza sales rose 69% year over year to \$397 million on the back of expanded use in ovarian and breast cancer. Almost half of the sales growth came from outside U.S. markets, reflecting growth across all regions.

Tagrisso recorded sales of \$982 million, up 58% year over year driven by continued demand growth in the second-line setting, decent penetration in the frontline setting in the United States and regulatory approvals and reimbursements in the first-line setting in ex-U.S. markets.

Imfinzi generated sales of \$462 million in the quarter, up 57% year over year mainly driven by strong demand in lung cancer patients. The majority of Imfinzi sales came from the United States driven by the lung cancer indication. It is being launched for first-line extensive-stage small cell lung cancer indication in the United States for which approval was received in April.

Calquence generated sales of \$88 million in the quarter compared with \$1 million in the year-ago quarter, which was majorly driven by the CLL indication, launched toward the end of last year.

Iressa sales were down 41% to \$77 million. Sales of older cancer drugs, Faslodex and Casodex declined while Arimidex and Zoladex increased.

In CVRM, Brilinta/Brilique sales were \$408 million in the reported quarter, up 19% year over year driven by continued patient uptake in acute coronary syndrome and high-risk post-myocardial infarction indications. Sales also benefited from short-term inventory increases due to COVID-19.

Farxiga recorded sales of \$405 million in the quarter, up 19% year over year driven by growth in emerging markets and Europe. U.S. sales declined 14% due to increased competition and unfavorable mix of sales and managed markets. Sales in Europe rose 34% with strong volume growth driven by the DECLARE cardiovascular outcomes data. Emerging market sales increased 55%.

Crestor sales declined 9% to \$301 million. Bydureon sales declined 29% to \$100 million. Onglyza sales declined 6% to \$141 million. Seloken sales declined 18% to \$177 million. Byetta sales were down 31% to \$20 million. Atacand sales were up 36% to \$66 million.

In Respiratory & Immunology, Symbicort sales were up 36% in the quarter to \$790 million due to the launch of an authorized generic version of the LABA/LAMA inhaler by AstraZeneca's partner Prasco in the United States. U.S. sales grew 76% in the quarter. Emerging Markets sales increased 20% in the quarter driven by strong performances in China and the Middle East & Africa. In Europe, sales increased 10%.

Pulmicort sales were flat at \$380 million as higher sales in Europe made up for weaker performance in the United States and China. Sales were stable in Emerging Markets. COVID-19 related-restrictions disrupted hospital dispensations, mainly in China.

Fasenra recorded sales of \$199 million in the quarter, up 55% year over year driven by higher sales in the United States, Japan and Europe.

Bevespi, a LAMA/LABA in a pressurized metered dose inhaler, recorded sales of \$12 million in the quarter, same as in the previous quarter, amid slower-than-anticipated growth in LAMA/LABA class.

Breztri, which was launched in Japan and recently in China, recorded sales of \$4 million in the quarter. Daliresp/Daxas grew 12% to \$53 million in the quarter.

Quarter Ending 03/2020

Report Date	Apr 29, 2020
Sales Surprise	9.36%
EPS Surprise	12.77%
Quarterly EPS	0.53
Annual EPS (TTM)	1.85

In Other Medicines, Nexium sales declined 6% to \$338 million. Synagis rose 61% to \$85 million.

Regional Performance

In the United States, product sales were up 16% to \$2.09 billion. Sales in European markets grew 25% in the quarter to \$1.20 billion. Revenues from Emerging Markets were up 16% to \$2.27 billion. In Emerging Markets, sales in China rose 17% to \$1.42 billion, while in ex-China markets, sales rose 15% to \$857 million. In Established ROW market (comprising Japan, Canada and other markets), sales were up 13% to \$786 million.

Profit Discussion

AstraZeneca's core gross margin declined two percentage points (at CER) to 78.1%. Core selling, general and administrative (SG&A) expenses rose 7% to \$2.18 billion due to investment in launches of cancer medicines and expansion in China.

Core research and development (R&D) expenses rose 9% to \$1.34 billion. Core operating profit rose 16% to \$1.85 billion in the quarter. Core operating margin was stable at 29.2% in the quarter.

2020 Outlook

AstraZeneca retained its guidance for total revenues and core EPS for 2020. AstraZeneca expects total revenues to grow in a high single-digit to a low double-digit range. The company expects core EPS guidance to increase in a mid- to high-teens percentage. Currency changes are expected to have a low single-digit adverse impact on sales and core EPS in 2020.

Despite the coronavirus outbreak, the company did not see any material disruptions in its supply chain. Its manufacturing facilities in China came back on line within a few weeks of the outbreak. However, AstraZeneca warned that the economic consequences of the pandemic are uncertain. AstraZeneca said that the guidance assumes that the global impact of the COVID-19 pandemic will last for several more months. It plans to provide an updated guidance on its first-half 2020 earnings call, after gaining an insight on the actual impact of the coronavirus outbreak.

Adjusted tax rate is expected to be in the range of 18%-22%.

Recent News

AstraZeneca to Supply 400M COVID-19 Vaccine Doses in Europe – June 13

AstraZeneca announced that it will supply 400 million doses of its potential coronavirus vaccine which it is developing with Oxford University to some European countries. It has signed an agreement with Europe's Inclusive Vaccines Alliance (IVA), a group formed by Germany, France, Italy and the Netherlands, to supply these doses for which deliveries will begin by end of the year, if the vaccine is successfully developed.

Calquence Shows Promise as Coronavirus Treatment – June 5

Data published in Science Immunology, a peer-reviewed journal, on AstraZeneca's Calquence (acalabrutinib) showed that it reduced markers of inflammation and improved clinical outcomes in severe COVID-19 patients. The company is conducting global clinical studies to support the claim.

Published data showed that treatment of hospitalized COVID-19 patients with Calquence improved laboratory markers of inflammation and decreased oxygen requirements observed in most patients, over a 10-14 day treatment course. This data has been peer-reviewed but remains to be validated by clinical studies.

Based on these findings, AstraZeneca is conducting a global clinical program — CALAVI, comprising of two phase II studies — to assess the potential of Calquence for treating exaggerated immune response (cytokine storm) associated with COVID-19 infection in severely ill patients.

Signs Two New Supply Deals for COVID-19 Vaccines – June 4

AstraZeneca announced agreements worth \$750 million with Coalition for Epidemic Preparedness Innovations (CEPI) and Gavi the Vaccine Alliance to produce and supply 300 million doses of the coronavirus vaccine which it is developing with Oxford University. The two organizations are backed by Bill and Melinda Gates. It expects to begin delivery of the vaccine before the end of 2020. AstraZeneca has an agreement with Oxford University for the global development and distribution of the University's potential recombinant adenovirus vaccine, also known as AZD1222, to prevent COVID-19. AstraZeneca also reached a deal with the Serum Institute of India (SII) to supply one billion doses of the vaccine to India and other low and middle-income countries. AstraZeneca has committed to provide 400 million doses to SII before the end of the year.

AZD1222 is currently being evaluated in a phase II/III study, with around 10,000 volunteers, which Oxford University initiated recently. Last month, AstraZeneca received more than \$1billion in funding from BARDA to help produce the vaccine. AstraZeneca recently also secured agreements to supply at least 400 million doses to the United States and United Kingdom.

New Collaboration to Make RMPs for Cancer – June 4

AstraZeneca announced a collaboration with Massachusetts-based private biotech, Accent Therapeutics to discover, develop and commercialize transformative therapeutics targeting RNA-modifying proteins (RMPs) for the treatment of cancer.

FDA Approves Brilinta to Reduce Heart Risk – June 1

AstraZeneca announced that the FDA has granted approval to Brilinta for reducing the risk of a first heart attack or stroke in high-risk patients with coronary artery disease, which is the most common type of heart disease. The approval was based on data from the phase III THEMIS study. Similar label expansion applications are under review in EU, Japan and China.

CHMP Nod to Lynparza for Pancreatic Cancer – June 1

The Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) recommended marketing approval for Lynparza as a first-line maintenance treatment in germline BRCA-mutated metastatic pancreatic cancer. The recommendation was based on data from the phase III POLO study. Lynparza is already approved in the United States for this patient population based on the Phase III POLO study.

ASCO Update – May 29

At the virtual annual meeting of the American Society of Clinical Oncology (ASCO), AstraZeneca presented detailed results from phase II studies, which showed that its partnered drug Enhertu led to clinically meaningful improvement in tumor responses/survival benefit in HER2-positive metastatic gastric cancer and ER2-mutant NSCLC and HER2-positive metastatic colorectal cancer. It also presented detailed data from two combination studies on Imfinzi.

At ASCO, AstraZeneca also presented detailed results from the phase III ADAURA study evaluating Tagrisso in the adjuvant treatment of patients with early-stage EGFR-mutated NSCLC. The data showed that treatment with Tagrisso after surgery with curative intent reduced the risk of disease recurrence or death by 80%

New Collaboration with ArcherDX – May 26

AstraZeneca signed a deal with ArcherDX, a genomic analysis company, to use the latter's personalized assay to identify eligible patients for its newly launched global phase III MERMAID-1 study on Imfinzi for patients with resected, early-stage non-small cell lung cancer

Orphan Drug Status to Enhertu for Gastric Cancer – May 22

AstraZeneca announced that the FDA has granted Orphan Drug Designation (ODD) to Enhertu for gastric cancer, including gastroesophageal junction cancer. The ODD was based on data from the registration phase II DESTINY-Gastric01 study.

Gets \$1B Funding from BARDA for Coronavirus Vaccine – May 21

AstraZeneca announced that it has received more than \$1 billion in funding from BARDA to help produce the vaccine which it is developing with Oxford University. Last month, AstraZeneca entered into an agreement with Oxford University for the global development and distribution of the University's potential recombinant adenovirus vaccine, now known as AZD1222, to prevent COVID-19. AstraZeneca secured the first agreements to supply at least 400 million doses and plans to begin the first deliveries of the vaccine from September 2020. AstraZeneca has also agreed to provide the United States with up to 300 million doses. Meanwhile, AstraZeneca also said that it has the capacity to produce one billion doses if the vaccine is approved and continues to increase capacity further. AZD1222 is currently being evaluated in a phase I/II study, which began last month. Data from the study is expected to be released shortly. If the data is successful, late-stage studies with 30,000 participants are expected to begin in a number of countries.

FDA Approves Lynparza for Prostate Cancer – May 20

AstraZeneca and Merck announced that the FDA has granted approval to Lynparza for HRR gene-mutated metastatic castration-resistant prostate cancer. The approval was based on data from the phase III PROfound study. Lynparza, was until now approved in three tumor types—ovarian, breast and pancreatic and pancreatic cancer is the fourth tumor type for which Lynparza is now approved.

Bevespi Aerosphere gets Approval in China – May 18

AstraZeneca's Bevespi Aerosphere was approved in China, as a maintenance treatment to relieve symptoms in patients with chronic obstructive pulmonary disease (COPD). Bevespi Aerosphere is a fixed-dose, long-acting dual bronchodilator in a pressurized metered-dose inhaler device, which is already approved in the United States, EU and several other countries.

Breakthrough Therapy Status to Enhertu for NSCLC – May 18

AstraZeneca announced that the FDA has granted Breakthrough Therapy Designation (BTD) to Enhertu for HER2-mutant metastatic NSCLC. The BTD was based on data from the ongoing phase II ESTINY-Lung01 study. This is the third BTD for Enhertu, with the first BTD granted in 2017 for HER2-positive metastatic breast cancer. Last week, the FDA granted BTD to Enhertu for HER2-positive metastatic gastric cancer. Enhertu was approved for HER2-positive metastatic breast cancer in December 2019.

Valuation

AstraZeneca's shares are up 8.8% in the year-to-date and 31.1% over the trailing 12-month period. Stocks in the Zacks sub-industry and sector are down 1.8% and 1.0%, respectively in the year-to-date period. Over the past year, the Zacks sub-industry is up 5.9% while the sector is up 0.5%.

The S&P 500 Index is down 3.1% in the year-to-date period but up 7.0% in the past year.

The stock is currently trading at 23.51X forward 12-month earnings per share, which compares to 14.47X for the Zacks sub-industry, 22.89X for the Zacks sector and 22.37X for the S&P 500 Index.

Over the past five years, the stock has traded as high as 27.92X and as low as 11.1X, with a 5-year median of 18.85X. Our Neutral recommendation indicates that the stock will perform in-line with the market. Our \$57 price target reflects 24.7X forward 12-month earnings per

share.

The table below shows summary valuation data for AZN.

Valuation Multiples - AZN					
		Stock	Sub-Industry	Sector	S&P 500
P/E F12M	Current	23.51	14.47	22.89	22.37
	5-Year High	27.92	18.12	23.14	22.37
	5-Year Low	11.1	13.07	15.93	15.23
	5-Year Median	18.85	15.33	19.03	17.49
P/S F12M	Current	5.02	4.57	2.79	3.49
	5-Year High	5.46	4.83	3.74	3.49
	5-Year Low	2.99	3.92	2.21	2.53
	5-Year Median	3.91	4.39	2.91	3.02
P/B TTM	Current	11.66	6.17	4.29	4.26
	5-Year High	11.88	7.23	5.06	4.56
	5-Year Low	3.82	3.77	2.93	2.83
	5-Year Median	5.59	5.24	4.28	3.67

As of 6/23/2020

Industry Analysis Zacks Industry Rank: Top 9% (22 out of 253)



Top Peers

Company (Ticker)	Rec	Rank
Amgen Inc. (AMGN)	Neutral	3
BristolMyers Squibb Company (BMY)	Neutral	2
GlaxoSmithKline plc (GSK)	Neutral	3
JohnsonJohnson (JNJ)	Neutral	3
MerckCo., Inc. (MRK)	Neutral	4
Novartis AG (NVS)	Neutral	3
Pfizer Inc. (PFE)	Neutral	3
Roche Holding AG (RHHBY)	Neutral	3

Industry Comparison Industry: Large Cap Pharmaceuticals				Industry Peers		
	AZN	X Industry	S&P 500	NVS	PFE	RHHBY
Zacks Recommendation (Long Term)	Neutral	-	-	Neutral	Neutral	Neutral
Zacks Rank (Short Term)	2	-	-	3	3	3
VGM Score	B	-	-	B	A	A
Market Cap	142.37 B	143.70 B	21.86 B	207.04 B	182.03 B	307.02 B
# of Analysts	5	3	14	5	4	4
Dividend Yield	3.43%	2.61%	1.92%	2.22%	4.64%	1.60%
Value Score	B	-	-	B	A	A
Cash/Price	0.03	0.05	0.07	0.02	0.06	0.04
EV/EBITDA	22.88	13.97	12.65	14.61	8.78	13.97
PEG Ratio	1.47	2.13	2.90	1.99	2.56	3.15
Price/Book (P/B)	11.65	4.06	2.99	4.06	2.78	8.50
Price/Cash Flow (P/CF)	17.13	11.53	11.61	11.45	7.97	14.03
P/E (F1)	26.72	15.55	21.08	16.02	11.38	17.24
Price/Sales (P/S)	5.64	4.24	2.25	4.26	3.59	NA
Earnings Yield	3.74%	6.42%	4.42%	6.25%	8.79%	5.80%
Debt/Equity	1.32	0.67	0.77	0.50	0.56	0.35
Cash Flow (\$/share)	3.17	4.33	7.01	7.90	4.11	3.20
Growth Score	D	-	-	B	B	A
Hist. EPS Growth (3-5 yrs)	-2.89%	8.53%	10.84%	1.77%	8.07%	NA
Proj. EPS Growth (F1/F0)	15.89%	3.06%	-10.80%	7.75%	-2.37%	2.36%
Curr. Cash Flow Growth	2.12%	3.68%	5.46%	4.27%	-6.57%	11.61%
Hist. Cash Flow Growth (3-5 yrs)	-0.86%	7.62%	8.55%	7.11%	2.54%	9.89%
Current Ratio	0.75	1.11	1.29	0.74	1.02	1.30
Debt/Capital	56.87%	39.71%	45.14%	33.33%	35.70%	26.10%
Net Margin	5.94%	22.54%	10.53%	24.97%	31.17%	NA
Return on Equity	33.97%	32.02%	16.06%	24.39%	25.76%	NA
Sales/Assets	0.42	0.46	0.55	0.41	0.31	NA
Proj. Sales Growth (F1/F0)	9.48%	4.76%	-2.66%	4.76%	-10.65%	5.32%
Momentum Score	A	-	-	D	A	A
Daily Price Chg	1.55%	0.00%	0.04%	-0.18%	-1.03%	-0.13%
1 Week Price Chg	3.01%	3.46%	0.92%	8.00%	-0.98%	5.05%
4 Week Price Chg	2.15%	2.15%	2.71%	6.36%	-12.59%	1.59%
12 Week Price Chg	21.47%	12.86%	19.78%	9.72%	0.40%	10.50%
52 Week Price Chg	31.04%	20.65%	-6.05%	-2.07%	-25.11%	27.39%
20 Day Average Volume	5,782,697	3,095,757	2,819,961	2,036,027	35,968,204	2,100,367
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.18%	0.00%	0.00%
(F1) EPS Est 4 week change	0.70%	0.09%	0.00%	0.18%	0.82%	0.00%
(F1) EPS Est 12 week change	1.00%	-1.64%	-12.72%	-1.64%	2.95%	-2.80%
(Q1) EPS Est Mthly Chg	-1.14%	0.00%	0.00%	-0.70%	6.11%	0.00%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	B
Growth Score	D
Momentum Score	A
VGM Score	B

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

Disclosures

This report contains independent commentary to be used for informational purposes only. The analysts contributing to this report do not hold any shares of this stock. The analysts contributing to this report do not serve on the board of the company that issued this stock. The EPS and revenue forecasts are the Zacks Consensus estimates, unless indicated otherwise on the reports first page. Additionally, the analysts contributing to this report certify that the views expressed herein accurately reflect the analysts personal views as to the subject securities and issuers. ZIR certifies that no part of the analysts compensation was, is, or will be, directly or indirectly, related to the specific recommendation or views expressed by the analyst in the report.

Additional information on the securities mentioned in this report is available upon request. This report is based on data obtained from sources we believe to be reliable, but is not guaranteed as to accuracy and does not purport to be complete. Any opinions expressed herein are subject to change.

ZIR is not an investment advisor and the report should not be construed as advice designed to meet the particular investment needs of any investor. Prior to making any investment decision, you are advised to consult with your broker, investment advisor, or other appropriate tax or financial professional to determine the suitability of any investment. This report and others like it are published regularly and not in response to episodic market activity or events affecting the securities industry.

This report is not to be construed as an offer or the solicitation of an offer to buy or sell the securities herein mentioned. ZIR or its officers, employees or customers may have a position long or short in the securities mentioned and buy or sell the securities from time to time. ZIR is not a broker-dealer. ZIR may enter into arms-length agreements with broker-dealers to provide this research to their clients. Zacks and its staff are not involved in investment banking activities for the stock issuer covered in this report.

ZIR uses the following rating system for the securities it covers. **Outperform-** ZIR expects that the subject company will outperform the broader U.S. equities markets over the next six to twelve months. **Neutral-** ZIR expects that the company will perform in line with the broader U.S. equities markets over the next six to twelve months. **Underperform-** ZIR expects the company will underperform the broader U.S. equities markets over the next six to twelve months.

No part of this report can be reprinted, republished or transmitted electronically without the prior written authorization of ZIR.