

# INSTITUTIONAL RESEARCH

# **Specialty Pharma**RATING CHANGE

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## **Adamis Pharmaceuticals (ADMP-NASDAQ)**

# **Upgrading to Buy - COVID19 + ZIMHI + Symjepi + Compounding = Intrinsic Value; Adamis is a Buy.**

We have revisited our assumptions for Symjepi and Naloxone with new partner US WorldMeds. We conclude that at minimum there is intrinsic value of \$1.00 in Adamis today, and as such, that justifies a Buy Rating. We also take note today of news that Adamis has announced a license to commercialize Tempol, an anti-inflammatory and antioxidant drug for COVID-19.

### **Investment Highlights**

**COVID19** – Adamis announced a worldwide license for Tempol for the treatment of all respiratory diseases, including asthma, respiratory syncytial virus, influenza, and COVID-19. In addition, the exclusive license includes the use of Tempol for reducing radiation dermatitis in patients undergoing treatment for cancer. A phase 2 radiation dermatitis clinical study has already been successfully completed, as well as discussions with the FDA regarding the design of a pivotal phase 3 study. The license was obtained from Matrix Biomed. Tempol has demonstrated anti-inflammatory, anticoagulant, and antioxidant activity. The drug appears to specifically target ARDS (which is the major cause of death in COVID-19 patients). Both inflammatory cytokines and reactive oxygent species (ROS) generated from cells of the immune system (macrophages and neutrophils) damage the lungs in ARDS patients. In animal models, Tempol has been shown to decrease proinflammatory cytokines (cytokine storm) such as TNF-α, IL-Ιβ, IL-6, IL-10, NF-kβ, ICAM-1, HIF-1a, HIF-2a, and others. Tempol has also been shown to decrease platelet aggregation and clotting, a problem observed in many COVID-19 patients.

**Novartis is Out; US WorldMeds is In.** US WorldMeds obtained U.S. rights to commercialize and distribute SYMJEPI and ZIMHI, if approved by the FDA, in exchange for an upfront payment and potential regulatory and commercial milestones totaling up to \$26 million. Additionally, after deducting the supply price and certain other deductions, including an allocation for US WorldMeds sales and distribution expenses from net sales of the products, Adamis and US WorldMeds will share equally in the net profits, as defined in the agreement. Adamis is responsible for supplying the products to US WorldMeds at a price based upon cost.

**Valuation:** We upgrade Adamis to a Buy rating and a \$1.00 price target. Our product models have been revised with peak Naloxone sales reaching \$166M (2030) and Symjepi revenues of \$104M (2030). We have not changed our compounding pharmacy revenues, and we do not yet include any revenues for Tempol. Our valuation models (and target) are derived from an equal-weighted average of free cash flow (FCFF), discounted EPS (EPS), and sum-of-the-parts (SOP) models, all discounted at our highest rate of 30% and rounded to the nearest whole number. Please see our product models.

**Risks:** Reverse stock split and additional shares authorized. Partnership risks, Commercialization risks, Financial risks, Clinical and regulatory risks, and Legal and intellectual property risk.

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| Current Price<br>Price Target                   |      |           |      |          |     | \$0.59<br>\$1.00 |  |  |
|---|------|-----------|------|----------|-----|------------------|--|--|
| Estimates                                       | F20  | 019E      | F20  | 020E     | F2  | 021E             |  |  |
| Expenses (\$000s)                               | \$   | 51,142    | \$   | 44,022   | \$  | 44,643           |  |  |
| 1Q March  | \$   | 13,843    | \$   | 11,778   | \$  | 10,268           |  |  |
| 2Q June   | \$   | 13,512    | \$   | 9,927    | \$  | 10,714           |  |  |
| 3Q September                                    | \$   | 12,608    | \$   | 10,945   | \$  | 11,607           |  |  |
| 4Q December                                     | \$   | 11,179    | \$   | 11,371   | \$  | 12,054           |  |  |
|   | F20  | 019E      | F20  | 020E     | F2  | 021E             |  |  |
| EPS (diluted)                                   | \$   | (0.57)    | \$   | (0.23)   | \$  | (0.04)           |  |  |
| 1Q March  | \$   | (0.19)    | \$   | (0.12)   | \$  | (0.02)           |  |  |
| 2Q June   | \$   | (0.17)    | \$   | (0.06)   | \$  | (0.02)           |  |  |
| 3Q September                                    | \$   | (0.12)    | \$   | 0.01     | \$  | 0.03             |  |  |
| 4Q December                                     | \$   | (0.09)    | \$   | (0.05)   | \$  | (0.03)           |  |  |
|   |      |           |      |          |     |                  |  |  |
| EBITDA/Share                                    |      | (\$0.55)  |      | (\$0.23) |     | (\$0.04)         |  |  |
| EV/EBITDA (x)                                   |      | 0.0       |      | 0.0      |     | 0.0              |  |  |
| Stock Data                                      |      |           |      |          |     |                  |  |  |
| 52-Week Range                                   |      | \$0.27    |      | -        |     | \$1.57           |  |  |
| Shares Outstanding (mil.)                       |      |           |      |          |     | 73.7             |  |  |
| Market Capitalization (mi                       | l.)  |           |      |          |     | \$44             |  |  |
| Enterprise Value (mil.)                         |      |           |      |          |     | \$37             |  |  |
| Debt to Capital                                 |      |           |      |          |     | 6%               |  |  |
| Book Value/Share                                |      |           |      |          |     | \$1.18           |  |  |
| Price/Book                                      |      |           |      |          |     | 0.5              |  |  |
| Average Three Months Tra                        | adin | g Volum   | e (  | K)       |     | 987              |  |  |
| Insider Ownership                               |      |           |      | •        |     | 2.0%             |  |  |
| Institutional Ownership                         |      |           |      |          |     | 15.3%            |  |  |
| Short interest (mil.)                           |      |           |      |          |     | 2.5%             |  |  |
| Dividend / Yield                                |      |           |      | 9        | 0.0 | 00/0.0%          |  |  |
| Adamis Pharmaceutio                             | cals | Corporati | on ( | ADMP)    |     |                  |  |  |
| Volume (Thousands) Price (USD)                  |      |           |      |          |     |                  |  |  |
| Volume — Adamis Pharmaceuticals Corporation 1.6 |      |           |      |          |     |                  |  |  |





#### We Continue to Revise Our Product Modeling Assumptions:

- 1. We base our market share estimates for Adamis' products on multiple assumptions around pricing and differentiating factors such as form factor (size and reliability) as well as marketing acumen of new partner US World. Our share assumptions are return to a rising piece of the market, assuming 3% in 2021 and rising to 16% by 2030 to an out-year peak of just over \$100M.
- 2. We now include Naloxone too. We assume Naloxone is approved and commercialized by 2022 and can achieve peak sales of \$166M.
- 3. We include \$10M in future milestone payments for Symjepi and Naloxone.
- 4. We model the pharmacy compounding business based on increased product focus and geographic expansion. We forecast its annual growth rate to reach 30% until the year 2022, where the growth rate slightly decreases to 10% up to the year 2030.
- 5. We expect APC-1000 (beclomethasone MDI), and APC-4000 (fluticasone DPI) could reach the market, but we are unsure of timing. As such, we do not include any revenues from these or any other pipeline products.

**Exhibit 1. Product Models** 

| Epinephrine Pre-filled Syringe (PFS)   |  | 2020E  | 2021E  | 2022E   | 2023E  | 2024E   | 2025E  | 2026E  | 2027E   | 2028E   | 2029E   | 2030E   |
|--|--|--|--|---|--|---|--|--|---|---|---|---|
| U.S. population  |  | 387,434,206  | 400,219,535  | 413,426,779   | 427,069,863  | 441,163,168   | 455,721,553  | 470,760,364  | 486,295,456   | 502,343,206   | 518,920,532   | 536.044.910   |
| Patients with anaphylaxis (1.6% of U.S. population)  | •  | 6,198,947  | 6,403,513  | 6,614,828   | 6,833,118  | 7,058,611   | 7,291,545  | 7,532,166  | 7,780,727   | 8,037,491   | 8,302,729   | 8,576,719   |
| Patients with insurance  |  | 80%  | 80%  | 80%   | 80%  | 80%   | 80%  | 80%  | 80%   | 80%   | 80%   | 80%   |
|  |  |  |  |   |  |   |  |  |   |   |   |   |
| Total addressable patients   |  | 4,959,158  | 5,122,810  | 5,291,863   | 5,466,494  | 5,646,889   | 5,833,236  | 6,025,733  | 6,224,582   | 6,429,993   | 6,642,183   | 6,861,375   |
| Market penetration   |  | 1.0%   | 3.0%   | 5.0%  | 7.0%   | 9.0%  | 11.0%  | 12.0%  | 13.0%   | 14.0%   | 15.0%   | 16.0%   |
| Total eligible patients  |  | 49,592   | 153,684  | 264,593   | 382,655  | 508,220   | 641,656  | 723,088  | 809,196   | 900,199   | 996,327   | 1,097,820   |
| Packs needed per patient/yr (PFS sold in 2 unit per pack)  | _  | 2  | 2_   | 2_  | 2_   | 2_  | 2_   | 2_   | 2_  | 2_  | 2_  | 2   |
| Price per pack   | ₹ \$   | 220 \$   | 209 \$   | 207 \$  | 205 \$   | 203 \$  | 201 👣  | 199 \$   | 197 \$  | 195 \$  | 193 👣   | 191   |
| Change in price  |  | -5%  | -1%  | -1%   | -1%  | -1%   | -1%  | -1%  | -1%   | -1%   | -1%   | -1%   |
| Sales (\$000)  | \$   | 10,910 \$  | 32,120 \$  | 54,747 \$   | 78,383 \$  | 103,063 \$  | 128,822 \$   | 143,719 \$   | 159,225 \$  | 175,360 \$  | 192,145 \$  | 209,601   |
| Risk adjustment  |  | 0%   | 0%   | 0%  | 0%   | 0%  | 0%   | 0%   | 0%  | 0%  | 0%  | 0%  |
| Revenue (\$000)  | \$   | 5,455 \$   | 16,060 \$  | 27,373 \$   | 39,192 \$  | 51,532 \$   | 64,411 \$  | 71,859 \$  | 79,612 \$   | 87,680 \$   | 96,073 \$   | 104,801   |
| Naloxone Pre-filled Syringe (PFS)  |  | 2020E  | 2021E  | 2022E   | 2023E  | 2024E   | 2025E  | 2026E  | 2027E   | 2028E   | 2029E   | 2030E   |
| Over-dose Population - Rescues   | 4  | 196,020  | 194,060  | 192,119   | 190,198  | 188,296   | 186,413  | 184,549  | 182,703   | 180,876   | 179,068   | 177,277   |
| Sales for Preventions  |  | 60,500   | 66,550   | 73,205  | 80,526   | 88,578  | 97,436   | 107,179  | 117,897   | 129,687   | 142,656   | 156,921   |
| Market penetration   |  | 0%   | 0%   | 1%  | 5%   | 15%   | 20%  | 21%  | 22%   | 23%   | 24%   | 25%   |
|  |  | 076  | 076  |   |  |   |  |  |   |   |   | 83,550  |
| Total eligible patients  |  | - 2  | - 2  | 2,653   | 13,536   | 41,531  | 56,770   | 61,263   | 66,132  | 71,430  | 77,214  |   |
| Packs needed per patient/yr (PFS sold in 2 unit per pack)  | s  |  | 997 \$   | 2   | 2  | 2<br>997 <b>"</b> \$  | 2  |  | 2   |   | 2   | 2   |
| Price per pack   | \$   | 997 \$   |  | 997 \$  | 997 \$   |   | 997 \$   | 997 \$   | 997 \$  | 997 \$  | 997 *\$   | 997   |
| Change in price  |  | 0%   | 0%   | 0%  | 0%   | 0%  | 0%   | 0%   | 0%  | 0%  | 0%  | 0%  |
| Cost per treatment   | \$   | 1,994 \$   | 1,994 \$   | 1,994 \$  | 1,994 \$   | 1,994 \$  | 1,994 \$   | 1,994 \$   | 1,994 \$  | 1,994 \$  | 1,994 \$  | 1,994   |
| Sales (\$000)  | \$   | - \$   | - \$   | 5,291 \$  | 26,991 \$  | 82,813 \$   | 113,199 \$   | 122,158 \$   | 131,868 \$  | 142,431 \$  | 153,964 \$  | 166,598   |
| Risk adjustment  |  | 0%   | 0%   | 0%  | 0%   | 0%  | 0%   | 0%   | 0%  | 0%  | 0%  | 0%  |
| Revenue (\$000)  | \$   | - \$   | - \$   | 5,291 \$  | 26,991 \$  | 82,813 \$   | 113,199 \$   | 122,158 \$   | 131,868 \$  | 142,431 \$  | 153,963.99 \$   | 166,597.90  |
| <u></u>  |  |  |  |   |  |   |  |  |   |   |   |   |
| APC-1000 HFA Inhaled Oral Steroid (maintenance therapy)  |  | 2020E  | 2021E  | 2022E   | 2023E  | 2024E   | 2025E  | 2026E  | 2027E   | 2028E   | 2029E   | 2030E   |
| U.S. population  |  | 387,434,206  | 400,219,535  | 413,426,779   | 427,069,863  | 441,163,168   | 455,721,553  | 470,760,364  | 486,295,456   | 502,343,206   | 518,920,532   | 536,044,910   |
| Patients with asthma (8% of U.S. population)   | •  | 30,994,736   | 32,017,563   | 33,074,142  | 34,165,589   | 35,293,053  | 36,457,724   | 37,660,829   | 38,903,636  | 40,187,457  | 41,513,643  | 42,883,593  |
| Patients with insurance  |  | 80%  | 80%  | 80%   | 80%  | 80%   | 80%  | 80%  | 80%   | 80%   | 80%   | 80%   |
| Total addressable patients   |  | 24,795,789   | 25,614,050   | 26,459,314  | 27,332,471   | 28,234,443  | 29,166,179   | 30,128,663   | 31,122,909  | 32,149,965  | 33,210,914  | 34,306,874  |
| Market penetration   |  | 0.00%  | 0.00%  | 0.00%   | 0.00%  | 0.00%   | 0.00%  | 0.00%  | 0.00%   | 0.00%   | 0.00%   | 0.00%   |
| Total eligible patients  |  |  |  |   |  |   |  |  |   |   |   |   |
| Estimate price per patient/year (\$100/month)  | <b>₹</b> \$  | 1,273 \$   | 1,299 \$   | 1,325 \$  | 1,351 \$   | 1,378 \$  | 1,406 \$   | 1,434 \$   | 1,463 \$  | 1,492 \$  | 1,522 \$  | 1,552   |
| Change in price  | a  | 1,273 \$   | 1,299 \$   | 2%  | 2%   | 1,376 \$  | 2%   | 2%   | 1,463 \$  | 1,492 \$  | 1,322 \$  | 2%  |
| Sales (\$000)  |  |  |  | - S   |  | - S   |  |  | - 'S  | - 'S  | - S   | 2%  |
|  |  |  |  |   |  |   |  |  |   |   |   |   |
|  | \$   |  |  |   |  |   |  |  |   |   |   |   |
| Risk adjustment  | \$<br>\$   | - \$<br>50%  | - \$<br>50%<br>- \$  | 50%   | 50%  | 50%   | 50%  | 50%<br>- <b>\$</b>   | 50%   | 50%<br>- <b>S</b>   | 50%   | 50%   |
| Risk adjustment Revenue (\$000)  | •  | 50%  | 50%  | 50%   | 50%  | 50%   | 50%  | 50%  | 50%   | 50%   | 50%   | -   |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)   | •  | 50%<br>- \$  | 50%<br>- \$  | 50%<br>- \$   | 50%<br>- \$  | 50%<br>- \$   | 50%<br>- \$  | 50%<br>- \$  | 50%<br>- \$   | 50%<br>- \$   | 50%<br>- \$   | 2030E   |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI) U.S. population   | •  | 50%<br>- \$<br>2020E<br>387,434,206  | 50%<br>- \$<br>2021E<br>400,219,535  | 50%<br>- \$<br>2022E<br>413,426,779   | 50%<br>- \$<br>2023E<br>427,069,863  | 50%<br>- \$<br>2024E<br>441,163,168   | 50%<br>- \$<br>2025E<br>455,721,553  | 50%<br>- \$<br>2026E<br>470,760,364  | 50%<br>- \$<br>2027E<br>486,295,456   | 50%<br>- \$<br>2028E<br>502,343,206   | 50%<br>- \$<br>2029E<br>518,920,532   | 2030E<br>536,044,910  |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)   | •  | 50%<br>- \$  | 50%<br>- \$  | 50%<br>- \$   | 50%<br>- \$  | 50%<br>- \$   | 50%<br>- \$  | 50%<br>- \$  | 50%<br>- \$   | 50%<br>- \$   | 50%<br>- \$   | 2030E   |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI) U.S. population   | •  | 50%<br>- \$<br>2020E<br>387,434,206  | 50%<br>- \$<br>2021E<br>400,219,535  | 50%<br>- \$<br>2022E<br>413,426,779   | 50%<br>- \$<br>2023E<br>427,069,863  | 50%<br>- \$<br>2024E<br>441,163,168   | 50%<br>- \$<br>2025E<br>455,721,553  | 50%<br>- \$<br>2026E<br>470,760,364  | 50%<br>- \$<br>2027E<br>486,295,456   | 50%<br>- \$<br>2028E<br>502,343,206   | 50%<br>- \$<br>2029E<br>518,920,532   | 2030E<br>536,044,910  |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with astima (8% of U.S. polulation)  | •  | 50%<br>- \$<br>2020E<br>387,434,206<br>30,994,736  | 50%<br>- \$<br>2021E<br>400,219,535<br>32,017,563<br>14,728,079  | 50%<br>- \$<br>2022E<br>413,426,779<br>33,074,142<br>15,214,105   | 50%<br>- \$<br>2023E<br>427,069,863<br>34,165,589  | 50%<br>- \$<br>2024E<br>441,163,168<br>35,293,053   | 50%<br>- \$<br>2025E<br>455,721,553<br>36,457,724  | 50%<br>- \$<br>2026E<br>470,760,364<br>37,660,829<br>17,323,981  | 50%<br>- \$<br>2027E<br>486,295,456<br>38,903,636   | 50%<br>- \$<br>2028E<br>502,343,206<br>40,187,457<br>18,486,230   | 50%<br>- \$<br>2029E<br>518,920,532<br>41,513,643   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453  |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance  | •  | 50%<br>- \$<br>2020E<br>387,434,206<br>30,994,736<br>14,257,579<br>80%   | 50%<br>- \$<br>2021E<br>400,219,535<br>32,017,563<br>14,728,079<br>80%   | 50%<br>- \$<br>2022E<br>413,426,779<br>33,074,142<br>15,214,105<br>80%  | 50%<br>- \$<br>2023E<br>427,069,863<br>34,165,589<br>15,716,171<br>80%   | 50%<br>- \$<br>2024E<br>441,163,168<br>35,293,053<br>16,234,805<br>80%  | 50%<br>- \$<br>2025E<br>455,721,553<br>36,457,724<br>16,770,553<br>80%   | 50%<br>- \$<br>2026E<br>470,760,364<br>37,660,829<br>17,323,981<br>80%   | 50%<br>- \$<br>2027E<br>486,295,456<br>38,903,636<br>17,895,673<br>80%  | 50%<br>- \$<br>2028E<br>502,343,206<br>40,187,457<br>18,486,230<br>80%  | 50%<br>- \$<br>2029E<br>518,920,532<br>41,513,643<br>19,096,276<br>80%  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%   |
| Risk adjustment Revenue (\$000)  AFC-4000 Ruticasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients  | •  | 50% - \$  2020E 387,434,206 30,994,736 14,257,579 80% 11,406,063   | 50%<br>- \$<br>2021E<br>400,219,535<br>32,017,563<br>14,728,079<br>80%<br>11,782,463   | 50% - \$  2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284  | 50% - \$  2023E 427,069,863 34,165,589 15,716,171 80% 12,572,937   | 50%<br>- \$<br>2024E<br>441,163,168<br>35,293,053<br>16,234,805<br>80%<br>12,987,844  | 50%<br>- \$<br>2025E<br>455,721,553<br>36,457,724<br>16,770,553<br>80%<br>13,416,443   | 50% - \$  2026E 470,760,364 37,660,829 17,323,981 80% 13,859,185   | 50%<br>- \$<br>2027E<br>486,295,456<br>38,903,636<br>17,895,673<br>80%<br>14,316,538  | 50%<br>- \$<br>2028E<br>502,343,206<br>40,187,457<br>18,486,230<br>80%<br>14,788,984  | 50% - \$  2029E 518,920,532 41,513,643 19,096,276 80% 15,277,020  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162   |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DP) U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration   | •  | 50%<br>- \$<br>2020E<br>387,434,206<br>30,994,736<br>14,257,579<br>80%   | 50%<br>- \$<br>2021E<br>400,219,535<br>32,017,563<br>14,728,079<br>80%   | 50%<br>- \$<br>2022E<br>413,426,779<br>33,074,142<br>15,214,105<br>80%  | 50%<br>- \$<br>2023E<br>427,069,863<br>34,165,589<br>15,716,171<br>80%   | 50%<br>- \$<br>2024E<br>441,163,168<br>35,293,053<br>16,234,805<br>80%  | 50%<br>- \$<br>2025E<br>455,721,553<br>36,457,724<br>16,770,553<br>80%   | 50%<br>- \$<br>2026E<br>470,760,364<br>37,660,829<br>17,323,981<br>80%   | 50%<br>- \$<br>2027E<br>486,295,456<br>38,903,636<br>17,895,673<br>80%  | 50%<br>- \$<br>2028E<br>502,343,206<br>40,187,457<br>18,486,230<br>80%  | 50%<br>- \$<br>2029E<br>518,920,532<br>41,513,643<br>19,096,276<br>80%  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%   |
| Risk adjustment Revenue (\$000)  AEC-4000 Bruicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with asthma (8% of U.S. pollulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total address penetration  | \$   | 50%<br>- \$<br>2020E<br>387,434,206<br>30,994,736<br>14,257,579<br>80%<br>11,406,063<br>0.00%  | 50% - \$  2021E 400,219,535 32,017,563 14,728,079 80% 11,782,463 0.00%   | 50%<br>- \$<br>2022E<br>413,426,779<br>33,074,142<br>15,214,105<br>80%<br>12,171,284<br>0.00%   | 2023E<br>427,069,863<br>34,165,589<br>15,716,171<br>80%<br>12,572,937<br>0.00%   | 2024E<br>441,163,168<br>35,293,053<br>16,234,805<br>80%<br>12,987,844<br>0.00%  | 50% - \$  2025E 455,721,553 36,457,724 16,770,553 80% 13,416,443 0.00%   | 2026E<br>470,760,364<br>476,660,829<br>17,323,981<br>80%<br>13,859,185<br>0.00%  | 2027E<br>486,295,456<br>38,903,636<br>17,895,673<br>80%<br>14,316,538<br>0.00%  | 50% - \$  2028E 502,343,206 40,187,457 18,486,230 80% 14,788,984 0.00%  | 50% - \$  2029E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0.00%  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%  |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticascene - Taper Dry Powder Inhaler (DPI) U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year   | •  | 50% - \$ 2020E 387,434,206 30,994,736 14,257,579 80% 11,406,063 0.00% - 1,433 \$   | 50% \$  2021E 400,219,535 32,017,563 14,728,079 80% 11,782,463 0.00% 1,461 \$  | 50% - \$  202E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0.00% - 1,491 \$  | 50% - \$  2023E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00%   | 50% - \$  2024E 441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% 1,551 \$   | 50% - \$  2025E 455,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,582 \$  | 50% - \$ 203E 470,760,364 37,660,829 17,323,981 80% 13,859,185 0.00% - 1,613 \$  | 50% - \$  2027E  486,295,456 38,903,636 17,895,673 80% 14,316,538 0.00% 1,646 \$  | 50% - \$  2028E 502,343,206 40,187,457 18,486,230 80% 14,788,984 0.00% 1,679 \$   | 50% - \$  2029E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0.00% 1,712 \$   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%  |
| Risk adjustment Revenue (\$000)  APC-4000 Bitulcasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with a 5thm a (8% of U.S. pollulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total aldiplish patients Estimate price per patientlyear Change in price  | \$   | 50% - \$  2020E 387,434,206 30,994,736 14,257,579 80% 11,406,063 .0.00% - 1,433 \$ 2%  | 50% - \$  2021E 400,219,535 32,017,563 14,728,079 80% 11,782,463 ,0.00% - 1,461 2%   | 50% - \$  2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 .0.00% - 1,491 2%  | 50% - \$  2023E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00% - 1,520 \$ 2%   | 50% - \$  2024E  441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% - 1,551 \$ 2%   | 50% - \$  2025E 455,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,582 \$ 2%   | 50% \$  206E  470,760,364  37,660,829  17,323,981  80%  13,859,185  0.00%  1,613 \$ 2%   | 50% - \$  2027E 486,295,456 38,903,636 17,895,673 80% 14,316,538 0,00% - 1,646 \$ 2%  | 50% \$  208E  502,343,206  40,187,457  18,486,230  80%  14,788,984  0.00%  1,679 \$  2%   | 50% - \$  2029E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0.00% - 1,712 \$ 2%  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>-<br>1,746<br>2%  |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)  U.S. population  Patients with asshma (8% of U.S. polulation)  Patients with moderate asshma (46% of asthma patient)  Patients with insurance  Total addressable patients  Market penetration  Total eligible patients  Estimate price per patient/year  Change in price  Sales (\$000)   | \$   | 50% - \$  2020E 387,434,206 30,994,736 14,257,579 80% 11,406,063 0.00% - 1,433 \$ 2%   | 50% - \$  2021E  400,219,535 32,017,563 14,728,079 80% 11,782,463 0.00% - 1,461 2%   | 50% - \$  2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0.00% - 1,491 2%   | 50% - \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00% - 1,520 \$ 2%   | 50% - \$  2024E  441,163,168 35,293,053 16,234,805 16,234,805 12,987,844 0.00% - 1,551 \$ 2% - \$   | 50% - \$  2025E 455,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,582 \$ 2% - \$  | 50% - \$  2026E 470,760,364 37,660,829 17,323,981 80% 13,859,185 0.00% - 1,613 \$ 2% - \$  | 50% - \$  2027E 486,295,456 38,903,636 17,895,673 80% 14,316,538 0.00% - 1,646 \$ 2% - \$   | 50% - \$ 2028E 502,343,206 40,187,457 18,486,230 60% 14,788,984 0.00% - 1,679 \$ 2% \$  | 50% - \$ 2029E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0.00% - 1,712 \$ 2% - \$  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>-<br>1,746<br>2%  |
| Risk adjustment Revenue (\$000)  APC-4000 Bruicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with asthma (8% of U.S. pollulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total adjusted patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment  | \$   | 50% \$ 2020E 387,434,206 30,994,736 14,257,579 80% 11,406,063 0.00% - 1,433 \$ 2% - \$ 50%   | 50% - \$  2021E 400,219,535 32,017,563 14,728,079 80% 11,782,463 ,0.00% - 1,461 2%   | 50% - \$ 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0.00%   | 50% - \$  2023E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00% - 1,520 \$ 2% - \$ 50%  | 50% - \$  2024E  441,163,168 35,293,053 16,234,805 80% 12,987,844 0.0% - 1,551 2% - \$ 50%  | 50% \$  2025E  455.721,553 36.457,724 16,770,553 80% 13,416,443 0.00% - 1,582 \$ 2% - \$ 50%   | 50% \$  206E  470,760,364 37,660,829 17,323,981 80% 13,859,185 0.00% - 1,613 \$ 2% - 50%   | 50% \$ 207E 486,295,456 38,903,636 17,895,673 80% 14,316,538 0.00% - 1,646 \$ 2% - 50%  | 50% \$  2028E  502,343,206  40,187,457  18,486,230  80%  14,788,984  0.00%  - 1,679 \$ 2%  - \$ 50%   | 50% - \$  2029E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0.00% - 1,712 \$ 2%  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>-<br>1,746<br>2%<br>-<br>50%  |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)  U.S. population  Patients with asshma (8% of U.S. polulation)  Patients with moderate asshma (46% of asthma patient)  Patients with insurance  Total addressable patients  Market penetration  Total eligible patients  Estimate price per patient/year  Change in price  Sales (\$000)   | \$   | 50% - \$  2020E 387,434,206 30,994,736 14,257,579 80% 11,406,063 0.00% - 1,433 \$ 2%   | 50% - \$  2021E  400,219,535 32,017,563 14,728,079 80% 11,782,463 0.00% - 1,461 2%   | 50% - \$  2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0.00% - 1,491 2%   | 50% - \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00% - 1,520 \$ 2%   | 50% - \$  2024E 441,163,168 35,293,053 16,234,805 16,234,805 12,987,844 0.00% - 1,551 \$ 2% - \$  | 50% - \$  2025E 455,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,582 \$ 2% - \$  | 50% - \$  2026E 470,760,364 37,660,829 17,323,981 80% 13,859,185 0.00% - 1,613 \$ 2% - \$  | 50% - \$  2027E 486,295,456 38,903,636 17,895,673 80% 14,316,538 0.00% - 1,646 \$ 2% - \$   | 50% - \$ 2028E 502,343,206 40,187,457 18,486,230 60% 14,788,984 0.00% - 1,679 \$ 2% \$  | 50% - \$ 2029E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0.00% - 1,712 \$ 2% - \$  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>-<br>1,746<br>2%  |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)  U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalalfi (Erectile Dysfunction)   | \$   | 50% \$ 2020E 387,434,206 30,994,736 14,257,579 80% 11,406,063 0.00% - 1,433 \$ 2% - \$ 50% - \$ 2020E  | 50% \$  2021E  400,219,535 32,017,563 14,728,079 80% 11,782,463 0.00% - 1,461 \$ 2% 50% 50%  | 50% \$  2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0.00% - 1,491 \$ 2% 50% 50%  | 50% \$ 2028E 427,069,863 34,165,569 15,716,171 5,716,171 5,70,00% - 1,520 \$ 2% \$ 50% - \$ \$   | 50% \$ 2024E 441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% 1,551 \$ 2% 50% 50%   | 50% \$  2025E  455,721,553 36,457,724 16,770,553 80% 13,418,443 0.00% - 1,582 \$ 2% - \$ 50% - \$ 2025E  | 50% \$  2026E  470,760,364 37,660,829 17,323,981 80% 13,859,185 0.00%  1,613 \$ 2% 5 50% 2026E   | 50% \$ 2027E 486,295,456 39,903,536 17,895,673 80% 14,316,538 0.00% - 1,646 \$ 2% 50% - \$ \$   | 50% \$ 2028E 502,343,206 40,187,457 18,486,230 80% 14,788,984 0.00%   | 50% \$ 2020E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0,00% - 1,712 \$ 2% - \$ 50% - \$ \$  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>  |
| Risk adjustment Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with ashma (8% of U.S. polulation) Patients with sahma (8% of W.S. polulation) Patients with insurance Total addressable patients Market penetration Total address sable patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalaffi (Fectile Dysfunction) U.S. male population  | \$   | 50% \$ 200E 387,434,206 30,944,738 11,406,063 0.00% 0.00% - \$ 226 - \$ 50%  | 50% 2021E 400.219.535 32.017.563 47.28.079 80% 1.782.463 0.00% - 1.461 \$ 2% - \$ 50% - \$ 2021E 168.223.044   | 50% \$  2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 2% 50% - \$  202 27 202 24,613   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% \$  2024E 441.183.188 35.293.083 16.224.805 80% 12.997.844 0.00% - \$ 50% - \$ 50%  | 50% \$ 20255 455,721,553 36,467,724 16,770,553 80% 13,416,443 0.00% - 1,582 2% - \$ 50% - \$   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% \$ 2027E 486.205.456 38.903.636 38.903.637 80% 1.316.538 0.00% - 1.646 2% - \$ 50%  | 50% \$ 200E 502,343,206 40,197,457 18,466,200 80% 14,788,984 0.00% - 1,679 \$ 2% - \$ 50% - \$  | 50% \$ 2020E 518320,532 41,513,643 19,986,276 80% 15,277,020 0.00% - 1,712 2% - \$ 50%  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>-1,746<br>2%<br>-2%<br>-1   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)  U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalalfi (Erectile Dysfunction)   | \$   | 50% \$ 2020E 387,434,206 30,994,736 14,257,579 80% 11,406,063 0.00% - 1,433 \$ 2% - \$ 50% - \$ 2020E  | 50% \$  2021E  400,219,535 32,017,563 14,728,079 80% 11,782,463 0.00% - 1,461 \$ 2% 50% 50%  | 50% \$  2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0.00% - 1,491 \$ 2% 50% 50%  | 50% \$ 2028E 427,069,863 34,165,569 15,716,171 5,716,171 5,70,00% - 1,520 \$ 2% \$ 50% - \$ \$   | 50% \$ 2024E 441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% 1,551 \$ 2% 50% 50%   | 50% \$  2025E  455,721,553 36,457,724 16,770,553 80% 13,418,443 0.00% - 1,582 \$ 2% - \$ 50% - \$ 2025E  | 50% \$  2026E  470,760,364 37,660,829 17,323,981 80% 13,859,185 0.00%  1,613 \$ 2% 5 50% 2026E   | 50% \$ 2027E 486,295,456 39,903,536 17,895,673 80% 14,316,538 0.00% - 1,646 \$ 2% 50% - \$ \$   | 50% \$ 2028E 502,343,206 40,187,457 18,486,230 80% 14,788,984 0.00%   | 50% \$ 2020E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0,00% - 1,712 \$ 2% - \$ 50% - \$ \$  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>  |
| Risk adjustment Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with ashma (8% of U.S. polulation) Patients with sahma (8% of W.S. polulation) Patients with insurance Total addressable patients Market penetration Total address sable patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalaffi (Fectile Dysfunction) U.S. male population  | \$   | 50% \$ 200E 387,434,206 30,944,738 11,406,063 0.00% 0.00% - \$ 226 - \$ 50%  | 50% 2021E 400.219.535 32.017.563 47.28.079 80% 1.782.463 0.00% - 1.461 \$ 2% - \$ 50% - \$ 2021E 168.223.044   | 50% \$  2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 2% 50% - \$  202 27 202 24,613   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% \$  2024E 441.183.188 35.293.083 16.224.805 80% 12.997.844 0.00% - \$ 50% - \$ 50%  | 50% \$ 20255 455,721,553 36,467,724 16,770,553 80% 13,416,443 0.00% - 1,582 2% - \$ 50% - \$   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% \$ 2027E 486.205.456 38.903.636 38.903.637 80% 1.316.538 0.00% - 1.646 2% - \$ 50%  | 50% \$ 200E 502,343,206 40,197,457 18,466,200 80% 14,788,984 0.00% - 1,679 \$ 2% - \$ 50% - \$  | 50% \$ 2020E 518320,532 41,513,643 19,986,276 80% 15,277,020 0.00% - 1,712 2% - \$ 50%  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>- 1,746<br>2%<br>- 50%<br>- 1   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)  U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsfif (Erectile Dysfunction) U.S. male population Patients with insurance  | \$   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% - 50% - 50% - 2021E 400.219.535 32.017.563 14.728.079 80% 11.782.463 0.00% - 1.461 - 5 50% - 5 50% - 5 2021E 168.223.044 87.475.983 80%  | 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 50% 50% 296 170,914,613 88,875,599 80%   | 50% \$  - 50% \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0,00% - 1,520 \$ 2% - \$ 50% 173,649,247 90,297,608   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% \$  2025E 455,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,582 2% - 50% - \$ 2025E 179,250,477 93,210,248 80%  | 50% \$  2026E 470,760,364 37,660,829 17,323,981 80% 13,859,185 0.00% - 1,613 2% - 50% 2026E 182,118,484 94,701,612   | 50% \$ 2027E 488.295.456 38,903,636 17,895,673 80% 14.316,538 0.00% - 1,646 \$ 2% \$ 50% \$ \$ 2027E 185,032,380 96,216,838 80%   | 50% \$ 2028E 502.943.206 40.187.487 18.486.230 80% 14.788.984 0.00% 1.679 2% - \$ 50% 97.756.307 80%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>19,726,453<br>10,00%<br>15,781,162<br>0,00%<br>1,746<br>2%<br>50%<br>194,056,797<br>100,909,535                                       |
| Risk adjustment Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patientlyear Change in price Sales (\$3000) Risk adjustment Revenue (\$000) APC-8000 Tadalsfil (Erectile Dysfunction) U.S. male population Patients with insurance Total adjusts with insurance Total adjusts with insurance Total addressable patients   | \$   | 50% \$ 2020E 387,434,206 30,944,736 14,257,579 80% 1,406,063 0,00% - 1,433 \$ 2% - 5 50% - 5 50% - 5 80,098,408  | 50% - \$  2021E 400.219.335 32.017.563 14.728.079 80% 11.782.403 0.00% - \$ 2% - \$ 50% - \$ \$  2244 87.475.983 80% 69.980.786  | 50%   | 50% - \$  2028 427,069,863 34,165,589 15,716,171 80% 12,572,937 0,00% - \$ 50% - \$ \$ 27% - \$ \$ 173,649,247 90,297,608  | 50% \$  202E 441.163.168 35.293.063 16.234.805 80% 12.997.844 0.00% - \$ 50% - \$ \$ 2% - \$ \$ 50% - \$ \$ 272.8E  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% \$ 2027E 486.205.456 38.903.635 17.895.673 80% 14.316.538 0.00% - 1.646 \$ 2% - \$ \$ 50% 50.856 2.856  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% \$ 2020E 518,920,532 415,13,643 19,096,276 80% 15,277,020 0.00% - \$ 50% - \$ \$ 50% - \$ \$ \$ 2020E 191,000,785 99,320,408 80% 79,456,226   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>- 1,746<br>2%<br>- 50%<br>2030E<br>194,056,797<br>100,909,535<br>80,727,628                             |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)  U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalaff (Frectile Dysfunction) U.S. male population Patients with insurance Total addressable patients Market penetration   | \$ \$ \$   | 50% \$ 2020E 387,434,206 30,994,736 14,257,579 1,406,063 0,00% - 1,433 \$ 2% - 5 50% - 5 50% 68,878,727  | 50% - 50% - 50% - 2021E 400.219.535 32.017.563 14.728.079 80% 11.782.463 0.00% - 1.461 - 5 50% - 5 50% - 5 2021E 168.223.044 87.475.983 80%  | 50% \$ 2022E 413,426,779 33,074,142 15,214,103 80% 12,171,284 0,00% - \$ 2% - \$ 50% - \$ \$ 226 170,914,613 88,875,599 71,100,479  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% \$  202E 441.163.168 35.293.063 16.224.805 80% 12.997.844 0.00% - 1.551 2% - \$ 50% - \$  202E 176.427.635 91.742.370 90% 73.393.896  | 50% - \$  2025 455,721,563 36,457,724 16,770,553 80% 13,416,443 0.00% - \$ 2% - \$ 50% - \$ \$ 205 479,256,477 93,210,248 80% 74,566,198   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% \$ 2027E 486.205.456 38.903.638 17.895.673 90% 14.316.538 0.00% - 1.646 \$ 2% - \$ 500% 185.032.380 96.216.838 80% 76.973.470   | 50% \$ 2028E 502.943.206 40.187.487 18.486.230 80% 14.788.984 0.00% 1.679 2% - \$ 50% 97.756.307 80%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>19,726,453<br>10,00%<br>15,781,162<br>0,00%<br>1,746<br>2%<br>50%<br>194,056,797<br>100,909,535                                       |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Change in price patient/year Change in price Sales (\$3000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsfif (Erectile Dysfunction) U.S. male population Patients with insurance Total address with price patients Market penetration Total address sable patients Market penetration Total address sable patients Market penetration Total address able patients  | \$ \$ \$   | 50% \$ 2020E 387,434,206 30,994,736 14,257,579 1,406,003 0,00% - 1,433 \$ 2% - 5 50% - 5 50% 68,878,727 0,00%  | 50% - \$  2021E 400.219.335 32.017.563 32.017.563 14.728.079 80% 11.782.403 0.00% - \$ 50% - \$ \$  22% - \$ \$ 50% - \$ \$  2021E 168,223.044 87,475.983 80% 69,980,786 0.00%   | 50% 2027E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - \$ 50% - \$ 50% 71,10,914,613 88,875,599 80% 71,100,479 0,00%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% - \$  2025 455,721,563 36,457,724 16,770,553 80% 13,416,443 0.00% - \$ 50% - \$ 50% - \$ 226 179,256,477 93,210,248 80% 74,566,198 0.00%   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% \$ 2027E 486.205.456 38.903.638 17.895.673 90% 14.316.538 0.00% - 1.646 \$ 2% - \$ \$ 50% - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$   | 50% \$ 2026E 502,343,206 40,187,457 184,66,207 184,66,207 14,788,964 0.00% - \$ 500 - \$ 500 - \$ 500 - \$ 80% - \$ 80% - \$ 80% - \$ 80% 78,205,046 0.00%  | 50%   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>-<br>1,746<br>2%<br>-<br>50%<br>230E<br>194,056,797<br>100,909,535<br>80,727,628<br>80,727,628<br>0.00% |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)  U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalaff (Frectile Dysfunction) U.S. male population Patients with insurance Total addressable patients Market penetration Total eligible patients Market penetration Total eligible patients Stimate price per patient/year   | \$   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% - 50% 2021E 400.219.535 32.017.563 14.728.079 80% 11.782.463 0.00% - 1.461 5 2% - 5 50% - 5 50% 69.980.786 0.00% - 1.273 5 80%   | 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 \$ 2%  - \$ 50% - \$ 2022E 170,914,613 88,875,599 80% 71,100,479 0,00% - 1,299 \$  | 50% \$   | 50% \$  2024E 441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% - 1,551 \$ 2% - \$ 50% 176,427,635 91,742,370 80% 73,393,896 0.00% - 1,351 \$  | 50% \$  2025E 455,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,552 \$ 2% - \$ 50% - \$ 2025E 179,250,477 93,210,248 80% 74,566,198 0.00% - 1,378 \$  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% 518,20,532 41,513,643 19,096,276 80% 15,277,020 0.00% - 1,772 \$2% 55% 50% 50% 79,456,326 0.00% - 1,482 \$8   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0,00%<br>1,746<br>2%<br>50%<br>2030E<br>194,056,797<br>100,909,535<br>80%<br>80,727,628<br>80,727,628<br>1,522   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patientlyear Change in price Sales (\$3000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsiff (Effectile Dysfunction) U.S. male population Patients with insurance Total addressable patients Market penetration Total addressable patients Market penetration Total eligible patients Estimate price per patientlyear Change in price Sales (\$1000) Retents with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patientlyear Change in price   | \$ \$ \$ \$  | 50% \$  2020E 387,434,206 30,994,738 14,257,579 80% 1,446,003 0,00% - 1,433 \$ 2% - 5 50% - 5 80% 68,878,727 0,00% - 1,248 \$ 2%   | 50% - \$  2021E 400.219.335 32.017.563 31.728.079 80% 11.782.463 0.00% - \$ 50% - \$ \$ 2041E 168,223.044 87,475,983 69,980,786 0.00% - \$ 1.273 \$ 2%   | 50%   | 50% - \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,337 0.00% - \$ 50% - \$ \$ 228 173,649,247 90,297,608 72,238,087 0.00% - \$ 1,325 2%  | 50%  202E  441.163.168 35.293.063 16.234.805 16.234.805 16.234.805 15.234 0.00% - \$  50% - \$  20% 176.427.635 91,742,370 73.393.896 0.00% - 1.351 \$ 2%   | 50% - \$  2025 455,721,563 36,457,724 16,770,553 80% 13,416,443 0.00% - \$ 50% - \$ 50% - \$ 226 179,250,477 93,210,248 80% 74,568,198 0.00% 0.00% - 1,378 2%  | 50% - \$206E 470,760,384 37,660,829 17,323,981 80% - \$00% - \$1,613 \$2% - \$ 50% - \$ 80% 75,761,290 0.00% 0.00% - \$1,406 \$2%  | 50% - \$2027E 486.295.456 38.903.638 17.895.673 80% 14.316.538 0.00% - 1.646 - \$ 50% - \$ 50% - \$ 185,032,380 96,216,838 80% 76,973,477 0.00% - 1,434 \$ 2%   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% - \$  2029E 51820,532 41512,643 19,96276 80% 15,277,020 0,00% - 1,712 \$ - \$ 50% - \$  2029E 191,000,785 99,320,408 80% 79,456,326 0,00% - 1,492 2 %   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>-<br>1,746<br>2%<br>-<br>50%<br>230E<br>194,056,797<br>100,909,535<br>80,727,628<br>80,727,628<br>0.00% |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total address able patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalaff (Frectile Dysfunction) U.S. male population Patients with insurance Total address able patients Market penetration Total eligible patients Market penetration Total eligible patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000)  | \$ \$ \$   | 2020E 387,434,206 30,994,738 14,267,579 80% 11,406,063 0,00% - 1,433 2% - 50% 200E 1655,573,862 86,098,408 80% 68,878,727 0,00% - 1,248 2% - 2%  | 50%  | 2022E 413426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 \$ 276  - \$ \$ 2022E 170,914,613 88,875,599 80% 71,100,479 0,00% - 1,299 \$ 2% - 1,299 \$ 2% \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$  | 50% \$  2023E 427,069,863 34,165,599 15,716,171 80% 12,572,937 0,00% - 1,520 \$ 2% - \$ 173,649,247 90,297,608 80% 72,238,087 0,00% - 1,1225 \$ 2%   | 50% \$  2024E 441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% - 1,551 \$  50% 50% 2024E 176,427,635 91,742,370 80% 73,393,896 0.00% - 1,351 \$  2% - \$  | 50% \$  2025E 455,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,552 \$ 2% - 50% 50% 50% 674,566,198 0.00% - 1,378 \$ 2% - 1,378 \$ 2% - 5,50% - 5 | 50% \$ 2026E 470,760,364 37,660,829 17,323,981 80% 13,859,185 0.00% - 1,613 2% 50% 50% 50% 675,761,290 0.00% - 1,406 2% - 1,406 2%   | 50% \$ 2027E 488.295,456 38,903,636 17.895,673 80% 14.316,538 0.00% - 1,646 \$ 2% - 5,50% 50% 76,973,470 0.00% - 1,434 \$ 2% - 5,50%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% 518,20,532 41,513,643 19,096,276 80% 15,277,020 0.00% - 1,772 \$2% 55% 50% 59,320,408 60% 79,456,326 0.00% - 1,492 \$2% - \$  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0,00%<br>1,746<br>2%<br>50%<br>2030E<br>194,056,797<br>100,909,535<br>80%<br>80,727,628<br>80,727,628<br>        |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patientlyear Change in price Sales (\$3000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsiff (Effectile Dysfunction) U.S. male population Patients with insurance Total addressable patients Market penetration Total addressable patients Market penetration Total eligible patients Estimate price per patientlyear Change in price Sales (\$1000) Retents with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patientlyear Change in price   | \$ \$ \$ \$  | 50% \$  2020E 387,434,206 30,994,738 14,257,579 80% 1,446,003 0,00% - 1,433 \$ 2% - 5 50% - 5 80% 68,878,727 0,00% - 1,248 \$ 2%   | 50% - \$  2021E 400.219.335 32.017.563 31.728.079 80% 11.782.463 0.00% - \$ 50% - \$ \$ 2041E 168,223.044 87,475,983 69,980,786 0.00% - \$ 1.273 \$ 2%   | 50%   | 50% - \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,337 0.00% - \$ 50% - \$ \$ 228 173,649,247 90,297,608 72,238,087 0.00% - \$ 1,325 2%  | 50%  202E  441.163.168 35.293.063 16.234.805 16.234.805 16.234.805 15.234 0.00% - \$  50% - \$  20% 176.427.635 91,742,370 73.393.896 0.00% - 1.351 \$ 2%   | 50% - \$  2025 455,721,563 36,457,724 16,770,553 80% 13,416,443 0.00% - \$ 50% - \$ 50% - \$ 226 179,250,477 93,210,248 80% 74,568,198 0.00% 0.00% - 1,378 2%  | 50% - \$206E 470,760,384 37,660,829 17,323,981 80% - \$00% - \$1,613 \$2% - \$ 50% - \$ 80% 75,761,290 0.00% 0.00% - \$1,406 \$2%  | 50% - \$2027E 486.295.456 38.903.638 17.895.673 80% 14.316.538 0.00% - 1.646 - \$ 50% - \$ 50% - \$ 185,032,380 96,216,838 80% 76,973,477 0.00% - 1,434 \$ 2%   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% - \$  2029E 51820,532 41512,643 19,96276 80% 15,277,020 0,00% - 1,712 \$ - \$ 50% - \$  2029E 191,000,785 99,320,408 80% 79,456,326 0,00% - 1,492 2 %   | 2030E<br>536.044.910<br>42.883.593<br>19,726.453<br>80%<br>15,781.162<br>0.00%<br>1,746<br>2%<br>50%<br>2030E<br>194,056,797<br>100,909,535<br>80%<br>80,727,628                          |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patientlybar Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsiff (Frectile Dysfunction) U.S. male population Patients with rerectile dysfunction (\$2% of U.S. male polulation) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patientlybar Change in price Sales (\$000) Risks adjustment Revenue (\$000)   | \$ \$ \$ \$ \$ \$  | 2020E 387,434,206 387,434,206 39,994,738 14,257,579 80% 11,446,063 0,00% - \$ 50% - \$ \$ 2020E 165,573,862 86,098,408 68,878,727 0,00% - \$ 1,248 \$ 2% - \$ 50% - \$ \$ 50% - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 50% - \$  2021E 400,219,535 32,017,563 34,728,079 80% 11,782,463 0,00% - \$ 50% - \$  2021E 168,223,044 87,475,983 69,980,786 0,00% - 1,273 5 2% - 5 50% - \$ 50%  | 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 5,50% - 5 50% 71,100,479 0,00% - 1,299 2% - 5 50% - 5 50%  | 50% - \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00% - \$  50% 50% - \$  220E 173,649,247 90,297,608 72,238,087 0.00% - \$  1,325 2% - \$ 50% 50% - \$  - \$  - \$  - \$  - \$  - \$  - \$  - \$                                     | 50% \$  2024E 441.163.168 36.293.063 16.234.805 16.234.805 16.234.805 16.234.805 16.234.805 16.234.805 16.234.805 16.234.805 17.51 \$  50% \$  2074E 176.427.635 91,742.370 17.361 \$  1.361 \$  2% \$  50% \$  50% \$  50% \$  50% \$  | 50%  - \$2025E  455,721,553 36,457,724 16,770,553 90% 13,416,443 0,00% - \$500 - \$ 500  - \$2025E  179,250,477 93,210,248  80% 74,568,198 0,00% - 1,378 2 2% - \$50% - \$50%  | 50% \$ 2026E 470,760,364 37,660,829 17,323,981 13,859,165 0,00% 13,859,165 0,00% - \$ 50% - \$ 202dE 182,118,484 94,701,612 0,00% - 1,406 2,40 - 5 50% - \$ 50%  | 50% - \$ 2027E 486,206,456 38,903,638 17,895,673 80% 14,316,538 0.00% - \$ 50% - \$ \$ 207E 185,032,380 96,216,838 76,973,470 0.00% - 1,434 2% - \$ \$ 50% - \$ \$  | 50% \$ 2028E 502,943,206 40,187,487 18,496,230 90% 14,788,994 0,00% - \$ 50% - \$ 2028E 187,992,888 97,756,307 78,205,046 0,00% - 1,463 2,% - \$ 50% - \$   | 50% - \$  2029E 518,920,532 41,513,643 19,96,276 80% 15,277,020 0,00% - \$  20% - \$  99,320,408 79,456,326 0,00% - \$  1,492 2% - \$  50% - \$  50%  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>  |
| Risk adjustment Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (BPI) U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsfil (Erectile Dysfunction) U.S. male population Patients with insurance Total addressable patients Market penetration Total eligible patients Market penetration Total eligible patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000) Risk adjustment Revenue (\$000) Risk adjustment Revenue (\$000)  | *** *** *** *** *** *** *** ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  * | 2020E 387,434,206 30,994,738 14,257,579 80% 11,406,063 0,00% - 1,433 \$ 2% - \$ \$ 50% 68,878,727 0,00% - 1,248 \$ 2% 5 50% 5 50% 68,878,727 0,00% - 5 50% 5 50% 5 50% 68,878,727 0,00% - 5 50% 5 50% 5 50%                              | 50% - 50% - 2021E 400.219.535 32.017.563 14.728.079 80% 11.782.463 0.00%   | 2022E 413426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 \$ 2% - \$ 50% - \$ 2022E 170,914,613 88,875,599 80% 71,100,479 0,00% - 1,299 \$ 2% - \$ 50% - \$ 2022E   | 50% \$ 2023E 427,069,863 34,165,599 15,716,171 80% 12,572,937 0.00%  | 50% - \$  2024E 441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% - 1,551 2% - \$ 50% - \$ 2024E 176,427,635 91,742,370 80% 73,393,896 0.00% - 1,351 2% - \$ 50% - \$ 50% - \$ 50% - \$ 50%  | 50% \$  2025E 445,721,553 36,457,724 16,770,553 80% 13,416,443 0,00% - 1,552 2% - 50% 50% 50% 74,566,198 0,00% - 1,378 2% 50% 74,566,198 0,00% - 1,378 2% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50   | 50% \$  2026E 440,760,364 37,660,829 17,323,981 80% 13,859,185 0.00% - 1,613 2% - 50% 206E 182,118,484 94,701,612 80% 75,761,290 0.00% - 1,406 2% 55% 55% 55% 2026E  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>1,746<br>2%<br>50%<br>2030E<br>194,056,797<br>100,909,535<br>80,727,628<br>80,727,628<br>50%<br>2030E   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsiff (Frectile Dysfunction) U.S. male population Patients with rerectile dysfunction (\$2% of U.S. male polulation) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  Revenue (\$000)   | ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***   | 2020E 387,434,206 387,434,206 39,994,738 11,406,063 0,00% 11,406,063 -   | 50% - \$  2021E 400,219,535 32,017,563 14,728,079 80% 11,782,463 0,00% - \$  500% - \$  2021E 168,223,044 87,475,983 69,980,786 0,00% - 1,273 5 50% - \$  2021E 16,000 \$  | 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - \$ 50% - \$ \$ 222E 170,914,613 88,875,599 71,100,479 0,00% - \$ 296 - \$ 50% - \$ \$ 222 27,373 \$  | 50% - \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00% - \$  50% - \$  220E 173,649,247 90,297,608 72,238,087 0.00% - \$  \$ 50% - \$  \$  2028E 39,192 \$   | 50% 5  202E 441,163,168 36,293,063 16,234,805 16,234,805 176,427,44 0.00% 1,551 2,50 - \$ 50% - \$ 202KE 176,427,835 91,742,370 73,393,896 0.00% - 1,351 2,% - \$ 50% - \$ \$ 202KE 51,532 \$   | 50% - \$  2025E 455,721,563 36,457,724 16,770,553 90% 13,416,403 0,00% - \$  500 - \$  2026E 179,250,477 93,210,248 60% 74,568,198 0,00% - 1,378 2 2 5 50% - \$  2026 - \$  500% - \$  2026 - \$  500% - \$  2026 - \$  500% - \$  2026 - \$  500% - \$  2026 - \$  500% - \$  2026 - \$  500% - \$  2026 - \$  500% - \$  2026 - \$  500% - \$  2026 - \$  500% - \$  2026 - \$  64,411   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% - \$  2027E 486,206,456 38,903,638 17,895,673 80% 14,316,538 0.00% - \$  50% - \$  2027E 185,032,380 96,216,838 76,973,470 0.00% - \$  2027E 185,032,380 96,216,838 76,973,470 - \$  50% - \$  2027E - \$ | 50% \$ 2028E 502.943.206 40.187.487 18.496.230 90% 14.788.994 0.00% - \$ 50% - \$ 2028E 187,992.888 97,756.307 78,205.046 0.00% - \$ 1.463 2.% - \$ 50% - \$ 2028E  | 50% - \$  2029E 518,920,532 41,513,643 19,96,276 80% 15,277,020 0,00% 1,712 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>- 1,746<br>2%<br>- 50%<br>194,056,797<br>100,909,535<br>80,727,628<br>80,727,628<br>- 1,522<br>2%<br>   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with asthma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsfil (Erectile Dysfunction) U.S. male population Patients with erectile dysfunction (52% of U.S. male polulation) Patients with erectile dysfunction (52% of U.S. male polulation) Patients with erectile dysfunction (52% of U.S. male polulation) Patients with erectile dysfunction (52% of U.S. male polulation) Patients with erectile dysfunction (52% of U.S. male polulation) Revenue (\$000) Risk adjustment Revenue (\$000)  Revenue (\$000) Revenue (\$000) Revenue (\$000)   | 1  | 2020E 387,434,206 30,994,738 14,257,579 80% 11,406,063 0,00% - 1,433 \$ 2% - \$ 50% - \$ 2020E 165,573,862 86,098,408 80% 68,878,727 0,00% - 1,248 \$ 2% - \$ 50% - \$ 200E 5,455 \$ - \$ 2020E 5,455 \$ - \$ 2020E                      | 50%  | 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 5,2% - 5,0% - \$ 2022E 170,914,613 88,875,599 80% 71,100,479 0,00% - 1,299 5,2% - 5,0% - \$ 2022E 27,373 5,5291  | 50% - \$  2023E 427,069,863 34,165,599 15,716,171 80% 12,572,937 0,00% 1,520 - \$ 50% - \$ 50% 72,238,087 0,00% 1,325 2% - \$ 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% \$  2025E 445,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - \$ 50% 50% 50% 50% 74,566,198 0.00% - \$ 1,378 \$ 2% 50% 50% 50% 50% 50% 50% 64,411 \$ 50%  | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% - \$ \$  2027E 488.295.456 38,903.636 17,895.673 80% 14.316.538 0.00% - \$ \$ 50% 5 \$  2027E 185.032,380 96.216.838 80% 76.973,470 0.00% - \$ \$ 50% 2% 25 \$ 2027E 18.508,380   | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 50% - \$  2029E 518,920,532 41,513,643 19,096,276 80% 15,277,020 0,00% - 1,772 2% - \$ 50% 50% 79,456,326 0,00% - 1,482 2% - \$ 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>1,746<br>2%<br>50%<br>2030E<br>194,056,797<br>100,909,535<br>80,727,628<br>80,727,628<br>50%<br>2030E   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penestrational Market penestrational Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalstif (Erectile Dystunction) U.S. male population Patients with rerectile dysfunction (52% of U.S. male polulation) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  Revenue (\$000) Revenue (\$000) Revenue (\$000) Naloxone Pre-filled Syringe (PFS) (\$000)   | **   | 2020E 387,434,206 387,434,206 39,994,738 11,406,063 0,00% 11,406,063 -   | 50% - \$  2021E 400,219,535 32,017,563 14,728,079 80% 11,782,463 0,00% - \$  500% - \$  2021E 168,223,044 87,475,983 69,980,786 0,00% - 1,273 5 50% - \$  2021E 16,000 \$  | 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - \$ 50% - \$ \$ 222E 170,914,613 88,875,599 71,100,479 0,00% - \$ 296 - \$ 50% - \$ \$ 222 27,373 \$  | 50% - \$  2028E 427,069,863 43,165,589 15,716,171 80% 12,572,937 0.00% - \$  50% - \$  2028E 173,649,247 90,297,608 72,238,087 0.00% - \$  \$  2038E 39,192 26,991 \$ \$ 50% - \$  | 50% 5  202E 441,163,168 36,293,063 16,234,805 16,234,805 176,427,44 0.00% 1,551 2,50 - \$ 50% - \$ 202KE 176,427,835 91,742,370 73,393,896 0.00% - 1,351 2,% - \$ 50% - \$ \$ 202KE 51,532 \$   | 50% - \$2025E - 455,721,563 - 36,457,724 - 16,770,553 - 89% - 1,582 - 9% \$ - 5% - 5% - 1,582 - 1,58       | 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%  | 50% - \$  2027E 486,206,456 38,903,638 17,895,673 80% 14,316,538 0.00% - \$  50% - \$  2027E 185,032,380 96,216,838 76,973,470 0.00% - \$  2027E 185,032,380 96,216,838 76,973,470 - \$  50% - \$  2027E - \$ | 50% \$ 2028E 502.943.206 40.187.487 18.496.230 90% 14.788.994 0.00% - \$ 50% - \$ 2028E 187,992.888 97,756.307 78,205.046 0.00% - \$ 1.463 2.% - \$ 50% - \$ 2028E  | 50% - \$  2029E 518,920,532 41,513,643 19,96,276 80% 15,277,020 0,00% 1,712 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -   | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (BPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total address able patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsfil (Frectile Dysfunction) U.S. male population Patients with recribit dysfunction (52% of U.S. male polulation) Patients with recribit dysfunction (52% of U.S. male polulation) Patients with reper patients Market penetration Total eligible patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  Revenue (\$000)  Revenue Epinephrine Pre-filled Syringe (PFS) (\$000) Naloxone Pre-filled Syringe (PFS) APC-4000 (HA) hhaled Oral Storold (maintenance therapy) APC-4000 (HA) hhaled Oral Storold (maintenance therapy)   | ***  ***  ***  ***  ***  ***  ***  | 2020E 387,434,206 30,994,738 14,267,579 80% 11,406,063 0,00% - ' \$ 50% 2% - ' \$ 2020E 1655,573,862 86,098,408 80% 68,878,727 0,00% - ' \$ 2% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50  | 50%  | 2022E 413426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 \$ 276  - \$ 50%  80% 71,100,479 0,00% - 1,299 \$ 276 50%  80% 71,100,479 0,00% - 5 50% 5 80% 71,294 80% 71,295 80% 71,297 80% 71,207   | 50% - \$  2023E 427,069,863 34,165,599 15,716,171 80% 12,572,937 0,00%   | 50% - \$  2024E 441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% - \$ 50% - \$  2024E 176,427,635 91,742,370 80% 73,393,896 0.00% 1,351 2% - \$ 50% - \$ 50% - \$ 2024E 51,532 80,813 8 8,813 8 8,813 8 8,813 8 . \$  | 50% \$  2025E 445,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,582 \$ 2% - 50% - 50% - 74,566,198 0.00% - 74,566,198 0.   | 50% - \$  2026E 470,760,364 37,660,829 17,323,981 80% 13,859,185 0,00% - \$ 50% - \$  2026E 182,118,484 94,701,612 80% 75,761,290 0,00% - \$ 50% 2% - \$ 50% 21,166 \$ 246 - \$ 55% - \$ 2026E 71,859 \$ 122,188 \$ 2, \$ 3  | 50%   | 50% - \$  2028E 502,343,206 40,187,457 18,486,230 80% 14,788,984 0,00% - \$ 50% - \$ 50% - \$ 2028E 187,992,898 97,756,307 80% 78,205,046 0,00% - \$ 50% 55% 2028E 87,680 \$ 55% 142,431 \$ 1 - \$  | 50% 518,2029E 518,202,532 41,513,643 19,096,276 80% 15,277,020 0,00% - 1,772 2% 50% 50% 60,73 80% 79,456,326 0,00% - 1,492 2% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>- 1,746<br>2%<br>- 50%<br>194,056,797<br>100,909,535<br>80,727,628<br>80,727,628<br>- 1,522<br>2%<br>   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penestrational Market penestrational Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalstif (Erectile Dystunction) U.S. male population Patients with rerectile dysfunction (52% of U.S. male polulation) Patients with rerectile dysfunction (52% of U.S. male polulation) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  Revenue  Revenue (\$000)  Revenue  Revenue (\$000)  APC-1000 Indicasone - Taper Dry Powder Inhaler (DPI) APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) APC-8000 Tadalalial (Erectile Dysfunction) | ** ** ** ** ** ** ** ** ** ** ** ** **   | 2020E 387,434,206 387,434,206 39,994,738 11,406,063 0,00% 11,406,063 -   | 50% - \$  2021E 400,219,535 32,017,563 34,728,079 80% 11,782,463 0,00% - \$  500% - \$  2021E 168,223,044 87,475,983 69,980,786 0,00% - \$  22% - \$  50% - \$  2021E 168,023,044 87,475,983 69,980,786 0,00% - \$  2021E 16,000 - \$  50% - \$  2021E | 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% 12,171,284 0,00% - \$  226 - \$  2022E 170,914,613 88,875,599 71,100,479 0,00% - \$  226 - \$  50% - \$  227,373 5,291 | 50% - \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00% - \$  50% - \$  2028E 173,649,247 90,297,608 72,238,087 0.00% - \$  \$  2038E 39,192 26,991 \$ - \$ - \$  2038E 39,192 26,991 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - | 50%  - \$  2024E  441,163,168 36,293,063 16,234,805 16,234,805 15,51 \$  50% - \$  27/4  1,551 \$  50% - \$  27/42,370  73,393,896 0,00% - \$  - \$  50% - \$  2024E  176,427,635 91,742,370 - \$  50% - \$  2024E  - \$  50% - \$  2024E - \$  50% - \$  2024E | 50%  - \$2025E  455,721,563 36,457,724 16,770,553 80% 13,416,443 0,00% - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$   | 50% 5  2026E  470,760,364 37,660,829 17,323,981 90% 13,859,165 0,00% 1,613 \$ 2% - \$ 50% - \$ 2026E  182,118,484 94,701,612 0,00% - 1,406 2% - \$ 50% - \$ 2026E 71,859 \$ 122,158 \$ \$ 2026E 71,859 \$ 122,158 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 50% - \$  2027E 486,206,456 38,903,638 17,895,673 80% 14,316,538 0.00% - \$  50% - \$  2027E 185,032,380 96,216,838 76,973,470 0.00% - \$  2027E 185,032,380 96,216,838 76,973,470 - \$  50% - \$  2027E 181,032,380 96,216,838 76,973,470 - \$  1,434 2,% - \$  50% - \$  2027E 181,032,380 96,216,838   | 50% \$  2028E 502,343,206 40,187,487 18,486,230 90% 14,788,984 0,00% 1,789,984 1,789,98 | 50% - \$  2029E 518,920,532 41,513,643 19,96,276 80% 15,277,020 0,00% - \$  200 - \$  2 | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>  |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluticasone - Taper Dry Powder Inhaler (BPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total address able patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalsfil (Frectile Dysfunction) U.S. male population Patients with recribit dysfunction (52% of U.S. male polulation) Patients with recribit dysfunction (52% of U.S. male polulation) Patients with reper patients Market penetration Total eligible patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  Revenue (\$000)  Revenue Epinephrine Pre-filled Syringe (PFS) (\$000) Naloxone Pre-filled Syringe (PFS) APC-4000 (HA) hhaled Oral Storold (maintenance therapy) APC-4000 (HA) hhaled Oral Storold (maintenance therapy)   | ***  ***  ***  ***  ***  ***  ***  | 2020E 387,434,206 30,994,738 14,267,579 80% 11,406,063 0,00% - ' \$ 50% 2% - ' \$ 2020E 1655,573,862 86,098,408 80% 68,878,727 0,00% - ' \$ 2% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50  | 50%  | 2022E 413426,779 33,074,142 15,214,105 80% 12,171,284 0,00% - 1,491 \$ 276  - \$ 50%  80% 71,100,479 0,00% - 1,299 \$ 276 50%  80% 71,100,479 0,00% - 5 50% 5 80% 71,294 80% 71,295 80% 71,297 80% 71,207   | 50% - \$  2023E 427,069,863 34,165,599 15,716,171 80% 12,572,937 0,00%   | 50% - \$  2024E 441,163,168 35,293,053 16,234,805 80% 12,987,844 0.00% - \$ 50% - \$  2024E 176,427,635 91,742,370 80% 73,393,896 0.00% 1,351 2% - \$ 50% - \$ 50% - \$ 2024E 51,532 80,813 8 8,813 8 8,813 8 8,813 8 . \$  | 50% \$  2025E 445,721,553 36,457,724 16,770,553 80% 13,416,443 0.00% - 1,582 \$ 2% - 50% - 50% - 74,566,198 0.00% - 74,566,198 0.   | 50% - \$  2026E 470,760,364 37,660,829 17,323,981 80% 13,859,185 0,00% - \$ 50% - \$  2026E 182,118,484 94,701,612 80% 75,761,290 0,00% - \$ 50% 2% - \$ 50% 21,166 \$ 246 - \$ 55% - \$ 2026E 71,859 \$ 122,188 \$ 2, \$ 3  | 50%   | 50% - \$  2028E 502,343,206 40,187,457 18,486,230 80% 14,788,984 0,00% - \$ 50% - \$ 50% - \$ 2028E 187,992,898 97,756,307 80% 78,205,046 0,00% - \$ 50% 55% 2028E 87,680 \$ 55% 142,431 \$ 1 - \$  | 50% 518,2029E 518,202,532 41,513,643 19,096,276 80% 15,277,020 0,00% - 1,772 2% 50% 50% 60,73 80% 79,456,326 0,00% - 1,492 2% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50  | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>- 1,746<br>2%<br>- 50%<br>194,056,797<br>100,909,535<br>80,727,628<br>80,727,628<br>- 1,522<br>2%<br>   |
| Risk adjustment  Revenue (\$000)  APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) U.S. population Patients with as thma (8% of U.S. polulation) Patients with moderate asthma (46% of asthma patient) Patients with insurance Total addressable patients Market penestrational Market penestrational Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  APC-8000 Tadalstif (Erectile Dystunction) U.S. male population Patients with rerectile dysfunction (52% of U.S. male polulation) Patients with rerectile dysfunction (52% of U.S. male polulation) Patients with insurance Total addressable patients Market penetration Total eligible patients Estimate price per patient/year Change in price Sales (\$000) Risk adjustment Revenue (\$000)  Revenue  Revenue (\$000)  Revenue  Revenue (\$000)  APC-1000 Indicasone - Taper Dry Powder Inhaler (DPI) APC-4000 Fluicasone - Taper Dry Powder Inhaler (DPI) APC-8000 Tadalalial (Erectile Dysfunction) | ** ** ** ** ** ** ** ** ** ** ** ** **   | 2020E 387,434,206 387,434,206 39,994,738 11,406,063 0,00% 11,406,063 -   | 50% - \$  2021E 400,219,535 32,017,563 34,728,079 80% 11,782,463 0,00% - \$  500% - \$  2021E 168,223,044 87,475,983 69,980,786 0,00% - \$  22% - \$  50% - \$  2021E 168,023,044 87,475,983 69,980,786 0,00% - \$  2021E 16,000 - \$  50% - \$  2021E | 2022E 413,426,779 33,074,142 15,214,105 80% 12,171,284 0,00% 12,171,284 0,00% - \$  226 - \$  2022E 170,914,613 88,875,599 71,100,479 0,00% - \$  226 - \$  50% - \$  227,373 5,291 | 50% - \$  2028E 427,069,863 34,165,589 15,716,171 80% 12,572,937 0.00% - \$  50% - \$  2028E 173,649,247 90,297,608 72,238,087 0.00% - \$  \$  2038E 39,192 26,991 \$ - \$ - \$  2038E 39,192 26,991 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - | 50%  - \$  2024E  441,163,168 36,293,063 16,234,805 16,234,805 15,51 \$  50% - \$  27/4  1,551 \$  50% - \$  27/42,370  73,393,896 0,00% - \$  - \$  50% - \$  2024E  176,427,635 91,742,370 - \$  50% - \$  2024E  - \$  50% - \$  2024E - \$  50% - \$  2024E | 50%  - \$2025E  455,721,563 36,457,724 16,770,553 80% 13,416,443 0,00% - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$   | 50% 5  2026E  470,760,364 37,660,829 17,323,981 90% 13,859,165 0,00% 1,613 \$ 2% - \$ 50% - \$ 2026E  182,118,484 94,701,612 0,00% - 1,406 2% - \$ 50% - \$ 2026E 71,859 \$ 122,158 \$ \$ 2026E 71,859 \$ 122,158 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | 50% - \$  2027E 486,206,456 38,903,638 17,895,673 80% 14,316,538 0.00% - \$  50% - \$  2027E 185,032,380 96,216,838 76,973,470 0.00% - \$  2027E 185,032,380 96,216,838 76,973,470 - \$  50% - \$  2027E 181,032,380 96,216,838 76,973,470 - \$  1,434 2,% - \$  50% - \$  2027E 181,032,380 96,216,838   | 50% \$  2028E 502,343,206 40,187,487 18,486,230 90% 14,788,984 0,00% 1,789,984 1,789,98 | 50% - \$  2029E 518,920,532 41,513,643 19,96,276 80% 15,277,020 0,00% - \$  200 - \$  2 | 2030E<br>536,044,910<br>42,883,593<br>19,726,453<br>80%<br>15,781,162<br>0.00%<br>  |

Source: Dawson James



Valuation: Our product models have been revised to reflect the company's new partnership. We apply assumptions for FDA product approvals, launch dates, and product attributes to estimate revenues. These estimates feed into our income statement through the year 2030. Our Symjepi estimates are based on royalties from US WorldMeds, of 50% of net sales payable to Adamis. For conservatism, we apply risk cuts to our pipeline product sales projections to allow for the development risk in pipeline products. Our price target is derived from an equal-weighted average of free cash flow (FCFF), discounted EPS (EPS), and sum-of-the-parts (SOP) models. For companies that are well established with mature products and revenues, we typically discount at a 10% rate; for companies in the early stages of product commercialization, we typically use a higher rate, 15% to 30%. For Adamis we choose to use our highest discount rate of 30% until we see revenues build as we project in our model

**Exhibit 2. Discounted Free Cash Flow Model** 

| Average      | \$<br>1.0 |
|--------------|-----------|
|              |           |
| Price Target | \$<br>0.7 |
| Year         | 2020      |
|              |           |

| DCF Valuation Using FCF (mln): |          |          |         |       |        |        |        |        |         |         |         |         |
|--------------------------------|----------|----------|---------|-------|--------|--------|--------|--------|---------|---------|---------|---------|
| units ('000)                   | 2019E    | 2020E    | 2021E   | 2022E | 2023E  | 2024E  | 2025E  | 2026E  | 2027E   | 2028E   | 2029E   | 2030E   |
| EBIT                           | (29,298) | (19,002) | (3,451) | 4,813 | 27,008 | 63,035 | 86,896 | 98,478 | 110,984 | 124,511 | 139,167 | 155,074 |
| TaxRate                        | 0%       | 0%       | 0%      | 12%   | 18%    | 20%    | 24%    | 24%    | 24%     | 28%     | 30%     | 34%     |
| EBIT(1-t)                      | (29,289) | (19,002) | (3,451) | 4,236 | 22,147 | 50,428 | 66,041 | 74,844 | 84,348  | 89,648  | 97,417  | 102,349 |
| CapEx                          |          |          |         |       |        |        |        |        |         |         |         |         |
| Depreciation                   | 2,945    | 917      | -       | -     | -      | -      | -      | -      | -       | -       | -       | -       |
| Change in NWC                  |          |          |         |       |        |        |        |        |         |         |         |         |
| FCF                            | (26,345) | (18,085) | (3,451) | 4,236 | 22,147 | 50,428 | 66,041 | 74,844 | 84,348  | 89,648  | 97,417  | 102,349 |
|                                |          |          |         |       |        |        |        |        |         |         |         |         |
| PV of FCF                      | (34,248) | (18,085) | (2,655) | 2,506 | 10,080 | 17,656 | 17,787 | 15,506 | 13,442  | 10,990  | 9,186   | 7,424   |
| B: 4B.4                        | 30%      |          |         |       |        |        |        |        |         |         |         |         |
| Discount Rate                  |          |          |         |       |        |        |        |        |         |         |         |         |
| Long Term Growth Rate          | 1%       |          |         |       |        |        |        |        |         |         |         |         |
| Terminal Cash Flow             | 356,456  |          |         |       |        |        |        |        |         |         |         |         |
| Terminal Value YE2030          | 25,857   |          |         |       |        |        |        |        |         |         |         |         |
| Terrifinal value 1E2030        | 23,637   |          |         |       |        |        |        |        |         |         |         |         |
| NPV                            | 75,447   |          |         |       |        |        |        |        |         |         |         |         |
| NPV-Debt                       | 70,747   |          |         |       |        |        |        |        |         |         |         |         |
| Shares out (thousands)         | 112,494  | 2030E    |         |       |        |        |        |        |         |         |         |         |
| NPV Per Share                  | \$ 0.7   |          |         |       |        |        |        |        |         |         |         |         |
| THE VEG CHAIR                  | • 0      |          |         |       |        |        |        |        |         |         |         |         |
|                                |          |          |         |       |        |        |        |        |         |         |         |         |

#### **Exhibit 3. EPS Model**

| Exhibit 5. El 6 Mouci |            |
|-----------------------|------------|
| Current Year          | 2020       |
| Year of EPS           | 2030       |
| Earnings Multiple     | 15         |
| Discount Factor       | 30%        |
| Selected Year EPS     | \$<br>0.91 |
| NPV                   | \$<br>1.0  |

Source: Dawson James estimates.

|                      |     | Discou  | nt Rate and Ear | nings Multiple '<br>2030 EF |        | Constant  |      |
|----------------------|-----|---------|-----------------|-----------------------------|--------|-----------|------|
|                      | 1.0 | 5%      | 10%             | 15%                         | 20%    | 25%       | 30%  |
| ⊨arnings<br>Multiple | 0   | \$0.00  | \$0.00          | \$0.00                      | \$0.00 | \$0.00 \$ |      |
|                      | 5   | \$3.00  | \$2.00          | \$1.00                      | \$1.00 | \$0.00 \$ | -    |
|                      | 10  | \$6.00  | \$4.00          | \$2.00                      | \$1.00 | \$1.00 \$ | 1.00 |
|                      | 15  | \$8.00  | \$5.00          | \$3.00                      | \$2.00 | \$1.00 \$ | 1.00 |
|                      | 20  | \$11.00 | \$7.00          | \$4.00                      | \$3.00 | \$2.00 \$ | 1.00 |
|                      | 25  | \$14.00 | \$9.00          | \$6.00                      | \$4.00 | \$2.00 \$ | 2.00 |
|                      | 30  | \$17.00 | \$11.00         | \$7.00                      | \$4.00 | \$3.00 \$ | 2.00 |
|                      | 35  | \$20.00 | \$12.00         | \$8.00                      | \$5.00 | \$3.00 \$ | 2.00 |

Exhibit 4. Sum-of-the-Parts Model

| Adamis Pharmaceuticals                                  | LT Gr | Discount Rate | Yrs. to Mkt | % Success | Peak Sales MM's | Term Val |
|---|-------|---------------|-------------|-----------|-----------------|----------|
| Symjepi   | 1%    | 30%           | 0           | 75%       | \$105           | \$361    |
| NPV   |       |               |             |           |                 | \$0.96   |
| Naloxone  | 1%    | 30%           | 1           | 75%       | \$167           | \$574    |
| NPV   |       |               |             |           |                 | \$1.18   |
| APC-1000 HFA Inhaled Oral Steroid (maintenance therapy) | 1%    | 30%           | 3           | 50%       | \$0             | \$0      |
| NPV   |       |               |             |           |                 | \$0.00   |
| APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)   | 1%    | 30%           | 3           | 50%       | \$0             | \$0      |
| NPV   |       |               |             |           |                 | \$0.00   |
| APC-8000 Tadalafil (Erectile Dysfunction)               | 1%    | 30%           | 3           | 50%       | \$0             | \$0      |
| NPV   |       |               |             |           |                 | \$0.00   |
| Compounding business                                    | 1%    | 30%           | 0           | 75%       | \$89            | \$308    |
| NPV   |       |               |             |           |                 | \$0.82   |
| Net Margin  |       |               |             |           |                 | 40%      |
| MM Shrs OS (2030E)                                      |       |               |             |           |                 | 112      |
| Total   |       |               |             |           |                 | \$2.0    |

Source: Dawson James estimates.



#### **Risk Analysis**

In addition to the typical risks associated with development stage specialty pharmaceutical companies, potential risks specific to Adamis are as follows:

**Partnership risk.** While Adamis has a partnership agreement with Sandoz to market Symjepi, such agreements are subject to disagreements and disputes. Revenue results may not materialize. The company may make agreements with partners for additional products, but there can be no assurances that the company will be able to secure favorable partnerships.

Commercial risk. There are no assurances that the company will be able to achieve significant sales, market share, or become profitable.

**Compliance Risk.** The company may reverse the stock to regain listing compliance. The company may also authorize additional shares in anticipation of raising future capital.

Clinical and regulatory risk. Lead products need to complete clinical trials. Trials may not produce the results expected from previous research or be sufficient for regulatory approval.

**Financial risk.** The company may need to raise capital in the marketplace, and there can be no assurances that the company will be able to successfully raise capital and or do so, at favorable terms.

**Legal and intellectual property risk.** The company may have to defend its patents and technical know-how, and there can be no assurances that the patents will not be infringed or will be held as valid if challenged, and or that the company may infringe on third parties patents.



#### **Exhibit 5. Income Statement**

| Adamis Pharmaceuticals Corporation: Income Statement (\$000)   |          |          |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
|--|----------|----------|----------|---------|--------|---------|----------|---------|---------|--------|---------|---------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| ADMP: YE December  | 2018A    | 2019A    | 1Q20A    | 2Q20E   | 3Q20E  | 4Q20E   | 2020E    | 1Q21E   | 2Q21E   | 3Q21E  | 4Q21E   | 2021E   | 1Q22E  | 2Q22E  | 3Q22E  | 4Q22E  | 2022E  | 2023E   | 2024E   | 2025E   | 2026E   |         | 2028E   | 2029E   | 2030E   |
| Symjepi Gross revenues (not included in total product sales)*  |          | 670      | 400      | 400     | 1,000  | 1,200   | 3,000    | 3,694   | 3,854   | 4,176  | 4,336   | 16,060  | 6,296  | 6,570  | 7,117  | 7,391  | 27,373 | 39,192  | 51,532  | 64,411  | 71,859  | 79,612  | 87,680  | 96,073  | 104,801 |
| Naloxone Gross revenues (not included in total product sales)* |          |          | 0        | 0       | 0      | 0       | 0        | 0       | 0       | 0      | 0       | 0       | 1,217  | 1,270  | 1,376  | 1,428  | 5,291  | 26,991  | 82,813  | 113,199 | 122,158 | 131,868 | 142,431 | 153,964 | 166,598 |
| APC-1000 HFA Inhaled Oral Steroid (maintenance therapy)        |          |          | 0        | 0       | 0      | 0       | 0        | 0       | 0       | 0      | 0       | 0       | 0      | 0      | 0      | 0      | 0      | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| APC-4000 Fluticasone - Taper Dry Powder Inhaler (DPI)          |          |          | 0        | 0       | 0      | 0       | -        | 0       | 0       | 0      | 0       | -       | 0      | 0      | 0      | 0      | -      | -       |         | -       |         | -       | -       | -       | -       |
| APC-8000 Tadalafil (Erectile Dysfunction)                      |          |          | 0        | 0       | 0      | 0       | -        | 0       | 0       | 0      | 0       | -       | 0      | 0      | 0      | 0      | -      | -       |         | -       |         | -       | -       | -       | -       |
| Pharmaceutical Compounding business                            | 15,087   | 22,113   | 4,463    | 5,000   | 6,000  | 6,200   | 21,663   | 6,477   | 6,759   | 7,322  | 7,604   | 28,162  | 8,420  | 8,787  | 9,519  | 9,885  | 36,610 | 45,763  | 50,339  | 55,373  | 60,911  | 67,002  | 73,702  | 81,072  | 89,179  |
| Total Product Sales *  | 15,087   | 22,783   | 4,463    | 5,400   | 7,000  | 7,400   | 24,663   | 10,171  | 10,613  | 11,498 | 11,940  | 44,222  | 15,933 | 16,626 | 18,011 | 18,704 | 69,275 | 111,946 | 184,684 | 232,983 | 254,928 | 278,482 | 303,813 | 331,109 | 360,578 |
| Royalty Revenue on Symjepi & Naloxone*                         | -        | 335      | 200      | 200     | 500    | 600     | 1,500    | 1,847   | 1,927   | 2,088  | 2,168   | 8,030   | 3,756  | 3,920  | 4,246  | 4,410  | 16,332 | 33,091  | 67,172  | 88,805  | 97,009  | 105,740 | 115,055 | 125,018 | 135,699 |
| % Royalty (slides on Commercial levels)                        |          | 50%      | 50%      | 50%     | 50%    | 50%     | 50%      | 50%     | 50%     | 50%    | 50%     | 50%     | 50%    | 50%    | 50%    | 50%    | 50%    | 50%     | 50%     | 50%     | 50%     | 50%     | 50%     | 50%     | 50%     |
| Symjepi / Naloxone Milestones                                  | -        | -        |          |         | 5,000  |         | 5,000    |         |         | 5,000  |         | 5,000   |        |        |        |        |        | -       |         |         |         |         |         |         |         |
| Product Sales & Royalties & Milestones                         | 15,087   | 22,448   | 4,663    | 5,200   | 11,500 | 6,800   | 28,163   | 8,324   | 8,686   | 14,410 | 9,772   | 41,192  | 12,177 | 12,706 | 13,765 | 14,294 | 52,942 | 78,854  | 117,512 | 144,178 | 157,920 | 172,742 | 188,757 | 206,090 | 224,879 |
| Expenses   |          |          |          |         |        |         |          |         |         |        | L       |         |        |        |        |        |        |         |         | L       |         |         |         |         |         |
| Cost of Goods Sold   | 9,798    | 15,479   | 3,687    | 1,282   | 1,580  | 1,646   | 8,195    | 1,804   | 1,882   | 2,039  | 2,118   | 7,843   | 2,420  | 2,525  | 2,736  | 2,841  | 10,521 | 13,400  | 15,161  | 17,064  | 18,821  | 20,731  | 22,809  | 25,072  | 27,535  |
| %COGS  | 65%      | 68%      | 83%      | 24%     | 23%    | 22%     | 33%      | 18%     | 18%     | 18%    | 18%     | 18%     | 15%    | 15%    | 15%    | 15%    | 15%    | 12%     | 8%      | 7%      | 7%      | 7%      | 8%      | 8%      | 8%      |
| Research and Development                                       | 18,804   | 10,376   | 2,037    | 2,515   | 2,725  | 2,830   | 10,480   | 2,531   | 2,641   | 2,861  | 2,971   | 11,004  | 2,657  | 2,773  | 3,004  | 3,120  | 11,554 | 12,132  | 12,738  | 13,375  | 13,509  | 13,644  | 13,780  | 13,918  | 14,057  |
| %R&D   | 125%     | 46%      | 46%      | 47%     | 39%    | 38%     | 42%      | 25%     | 25%     | 25%    | 25%     | 25%     | 17%    | 17%    | 17%    | 17%    | 17%    | 11%     | 7%      | 6%      | 5%      | 5%      | 5%      | 4%      | 4%      |
| General and Administrative                                     | 25,948   | 25,288   | 6,054    | 6,130   | 6,641  | 6,896   | 25,540   | 5,933   | 6,191   | 6,707  | 6,965   | 25,796  | 5,992  | 6,253  | 6,774  | 7,035  | 26,054 | 26,314  | 26,577  | 26,843  | 27,112  | 27,383  | 27,657  | 27,933  | 28,213  |
| %SG&A  | 48%      | 49%      | 51%      | 62%     | 61%    | 61%     | 58%      | 58%     | 58%     | 58%    | 58%     | 58%     | 54%    | 54%    | 54%    | 54%    | 54%    | 51%     | 49%     | 47%     | 46%     | 44%     | 43%     | 42%     | 40%     |
| Total expenses   | 54,550   | 51,142   | 11,778   | 9,927   | 10,945 | 11,371  | 44,215   | 10,268  | 10,714  | 11,607 | 12,054  | 44,643  | 11,070 | 11,551 | 12,514 | 12,995 | 48,129 | 51,846  | 54,477  | 57,282  | 59,441  | 61,758  | 64,247  | 66,923  | 69,805  |
| Operating income (Loss)  | (39,464) | (29,351) | (7,115)  | (4,727) | 555    | (4,571) | (15,859) | (1,944) | (2,028) | 2,803  | (2,282) | (3,451) | 1,107  | 1,155  | 1,252  | 1,300  | 4,813  | 27,008  | 63,035  | 86,896  | 98,478  | 110,984 | 124,511 | 139,167 | 155,074 |
| Interest expense   | (158)    | (123)    | (38)     |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Interest Income  | 245      | 176      | 23       |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Gain/Loss on extinguishment of debt                            |          | (322)    |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Change in fair value of derivitive liabilities                 |          |          |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Change in fair value of conversion feature liability           |          |          |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Change in fair value of warrants                               |          |          |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Impairment Expense   |          |          | (3,143)  |         |        |         | (3,143)  |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Total other income   | -        | (322)    | (3,143)  | -       |        | -       | (3,143)  |         |         |        | -       | -       |        |        |        | -      | -      | -       | -       | -       |         | -       | -       | -       | -       |
| Pretax Income  | (39,376) | (29,298) | (10,274) | (4,727) | 555    | (4,571) | (19,002) | (1,944) | (2,028) | 2,803  | (2,282) | (3,451) | 1,107  | 1,155  | 1,252  | 1,300  | 4,813  | 27,008  | 63,035  | 86,896  | 98,478  | 110,984 | 124,511 | 139,167 | 155,074 |
| Discontinued opeartions  |          |          |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Write down of discontinued operations receivable               |          |          |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Loss from continued operations                                 |          |          |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| Income Tax Benefit (Provision)                                 | 369      | (9)      | -        | -       |        | -       | -        |         |         | -      | - 1     | -       | 133    | 139    | 150    | 156    | 578    | 4,861   | 12,607  | 20,855  | 23,635  | 26,636  | 34,863  | 41,750  | 52,725  |
| Tax Rate   | 0%       | 0%       | 5%       | 0%      | 0%     | 0%      | 0%       | 0%      | 0%      | 0%     | 0%      | 0%      | 12%    | 12%    | 12%    | 12%    | 12%    | 18%     | 20%     | 24%     | 24%     | 24%     | 28%     | 30%     | 34%     |
| GAAP Net Income (loss)   | (39,007) | (29,307) | (10,274) | (4,727) | 555    | (4,571) | (19,002) | (1,944) | (2,028) | 2,803  | (2,282) | (3,451) | 974    | 1,017  | 1,101  | 1,144  | 4,236  | 22,147  | 50,428  | 66,041  | 74,844  | 84,348  | 89,648  | 97,417  | 102,349 |
| Deemed Dividend on Preferred Stock                             |          |          |          |         |        |         |          |         |         |        |         |         |        |        |        |        |        |         |         |         |         |         |         |         |         |
| GAAP-EPS   | (1.00)   | (0.55)   | (0.15)   | (0.07)  | 0.01   | (0.07)  | (0.29)   | (0.03)  | (0.03)  | 0.04   | (0.03)  | (0.05)  | 0.01   | 0.02   | 0.02   | 0.02   | 0.06   | 0.33    | 0.75    | 0.97    | 1.10    | 1.23    | 1.30    | 1.41    | 1.48    |
| GAAP EPS (dil)   | (1.00)   | (0.55)   | (0.12)   | (0.06)  | 0.01   | (0.05)  | (0.23)   | (0.02)  | (0.02)  | 0.03   | (0.03)  | (0.04)  | 0.01   | 0.01   | 0.01   | 0.01   | 0.05   | 0.24    | 0.54    | 0.68    | 0.75    | 0.82    | 0.85    | 0.89    | 0.91    |
| Wgtd Avg Shrs (Bas) - '000s                                    | 39,085   | 53,263   | 66,500   | 66,566  | 66,633 | 66,699  | 66,600   | 66,766  | 66,833  | 66,900 | 66,967  | 66,866  | 67,034 | 67,101 | 67,168 | 67,235 | 67,134 | 67,403  | 67,673  | 67,944  | 68,216  | 68,490  | 68,764  | 69,040  | 69,316  |
| Wgtd Avg Shrs (Dil) - '000s                                    | 39,085   | 53,304   | 82,220   | 83,042  | 83,873 | 84,711  | 83,462   | 84,711  | 85,558  | 86,414 | 87,278  | 85,991  | 87,278 | 88,151 | 89,032 | 89,923 | 88,596 | 91,281  | 94,047  | 96,896  | 99,832  | 102,857 | 105,974 | 109,185 | 112,494 |

Source: Dawson James estimates.

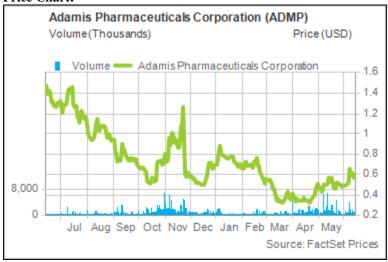


#### Companies mentioned in this report:

US WorldMeds (private)

#### **Important Disclosures:**

#### **Price Chart:**



Price target and ratings changes over the past three years:

Initiated – Buy – July 2, 2019 – Price Target \$5.00

Update – Buy – August 13, 2019 – Price Target \$4.00

Update – Buy – August 28, 2019 – Price Target \$4.00

Update – Buy – November 26, 2019 – Price Target lowered from \$4.00 to \$1.00

Rating Change – Neutral – February 27, 2020 – Rating Lowered from Buy to Neutral

Update - Neutral - April 1, 2020 - Price Target NA

Update - Neutral - May 21, 2020 - Price Target NA

Rating Change – Buy – June 15, 2020 – Price Target \$1.00

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- 1) **Buy**: The analyst believes the price of the stock will appreciate and produce a total return of at least 20% over the next 12-18 months;
- 2) **Neutral**: The analyst believes the price of the stock is fairly valued for the next 12-18 months;
- 3) **Sel**l: The analyst believes the price of the stock will decline by at least 20% over the next 12-18 months and should be sold.

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|                            | Company Co     | verage     | Investment Banking |             |  |  |  |
|----------------------------|----------------|------------|--------------------|-------------|--|--|--|
| Ratings Distribution       | # of Companies | % of Total | # of Companies     | % of Totals |  |  |  |
| Market Outperform (Buy)    | 23             | 92%        | 3                  | 13%         |  |  |  |
| Market Perform (Neutral)   | 2              | 8%         | 1                  | 50%         |  |  |  |
| Market Underperform (Sell) | 0              | 0%         | 0                  | 0%          |  |  |  |
| Total                      | 25             | 100%       | 4                  | 16%         |  |  |  |

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