

Drug Pricing Report: August 2018

- As part of our Pharma's Brave New World report series, each month
 we publish a Monthly Drug Pricing Report and in this report we review
 drug pricing data for August 2018. As we did with our previous reports,
 we have reviewed PriceRx data for August and we provide the data in
 several ways, including the top 50 price increases across all drug
 manufacturers. In addition, we provide a listing of the top price
 increases for a subset of 35 leading large cap and specialty companies.
- The month of August was a relatively quiet one in terms of drug pricing action by pharma companies. The quiet month comes after an active July, recall that July began with Pfizer increasing price on approximately 10% of its portfolio and then subsequently rolled back the increases almost two weeks later after receiving criticism from President Trump. Pfizer also publically stated at the time that it would refrain from increasing prices for the remainder of the year, which was followed by similar declarations from Novartis, Merck, AstraZeneca, Roche, and Celgene, among others. We believe August essentially shows that President Trump's criticism might be working and may have at least deterred some companies from raising price in the near-term and ahead of mid-term elections. We have highlighted this risk in our Brave New World report series a number of times.
- In August, across all drug manufacturers, we found 60 products increased in price (vs. 110 increases in July), while 48 products decreased in price (vs. 32 decreases in July). The July figures do not count Pfizer's price increases and subsequent rollbacks (decreases) in order to make the comparisons more accurate. The price increases ranged from 482% to 1.6%, with an average price increase of 53.0% and a median increase of 9.9%. We note that the largest percentage price increases are not on exceptionally low priced products, the average package price for the 50 products with the highest price increases was approximately \$741. The 48 price declines ranged from approximately -1.5% to -88%, with an average decrease of -41.3% and median decrease of -38.6%. We have included the highest 50 price increases from this data in Exhibit 1 of this report. The 48 price decreases are included in Exhibit 2. Among the subset of 35 public Specialty and Large Cap companies, according to PriceRx, there were 7 price increases in August 2018 and 21 price decreases. The price increases ranged from 186.6% to 3.0%, with an average price increase of 38.1% and a median increase of 13.8%. These price increases and decreases are included in Exhibits 3 and 4.
- Typically, the wholesaler acquisition cost (WAC) price reflects the list price. WAC price generally does not account for rebates or discounts that manufacturers provide payers and, since these discounts can be sizable, investors should not use WAC price increases as a precise size of potential sales increases. Is this a sign of high prices to consumers or bigger discounts to wholesalers, we cannot tell given the data.
- The exhibits in this report cover the August 2018 WAC price changes sorted by percentage change. We also have a sortable excel spreadsheet of the data included in this report, so please let us know if you would like a copy.

Please see page 5 for rating definitions, important disclosures and required analyst certifications. All estimates/forecasts are as of 09/05/18 unless otherwise stated. 09/04/18 22:47:21 ET

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Exhibit 1. August 2018 PriceRx Data for All Active Drugs - Top 50 WAC Increases

			•	- Top 50 WAC Increases		
Product	Name	Labeler	Effective Date	\$ Change	% Change	
FLUoxetine	HCI	ALEMBIC PHARMACEUTICALS	8/2/2018	\$180.72	482.18%	
Nitrofurantoin	Oral	NOSTRUM LABORATORIES	8/21/2018	\$1,917.57	403.91%	
Irbesartan-Hydrochlorothiazide	Oral	ALEMBIC PHARMACEUTICALS	8/2/2018	\$35.22	320.77%	
Valsartan	Oral	MACLEODS PHARMACEUTICALS	8/3/2018	\$9.17	305.67%	
Thiamine	HCI	MARLEX PHARMACEUTICALS	8/1/2018	\$24.68	274.22%	
DilTIAZem	HCI	AKORN	8/1/2018	\$7.11	186.61%	
Ondansetron	HCI	HERITAGE PHARMACEUTICALS	8/13/2018	\$0.46	100.00%	
Losartan	Potassium	ALEMBIC PHARMACEUTICALS	8/2/2018	\$101.50	95.57%	
Fosphenytoin	Sodium	FRESENIUS KABI USA	8/20/2018	\$100.40	80.58%	
Sertraline	HCI	AMERICAN HEALTH PACKAGING	8/22/2018	\$0.11	68.75%	
Irbesartan	Oral	ALEMBIC PHARMACEUTICALS	8/2/2018	\$12.74	67.48%	
LamoTRIgine	Oral	AMERICAN HEALTH PACKAGING	8/22/2018	\$0.07	58.33%	
Gialax	Oral	PHLIGHT PHARMA	8/8/2018	\$202.57	52.04%	
Anastrozole	Oral	AMERICAN HEALTH PACKAGING	8/22/2018	\$0.30	49.18%	
Nitro-Dur	Transdermal	INGENUS PHARMACEUTICALS	8/1/2018	\$128.76	49.00%	
ScarcinPad	Sheet	SA3	8/1/2018	\$250.00	47.92%	
Ibuprofen	Oral	AMERICAN HEALTH PACKAGING	8/22/2018	\$5.54	47.11%	
LETS	Kit	FAGRON	8/7/2018	\$13.65	37.55%	
Ful-Glo	Ophthalmic	AKORN	8/20/2018	\$3.60	31.58%	
Acyclovir	Oral	AMERICAN HEALTH PACKAGING	8/22/2018	\$0.16	30.77%	
Hurricaine	Mouth/Throat	BEUTLICH PHARMA	8/8/2018	\$2.01	27.76%	
Rifabutin	Oral	AMERICAN HEALTH PACKAGING	8/22/2018	\$4.11	27.29%	
Lidocaine	HCI	INTRNTL MEDICATION SYSTEM	8/24/2018	\$125.00	25.00%	
Phytonadione	Injection	INTRNTL MEDICATION SYSTEM	8/24/2018	\$45.00	25.00%	
Procainamide	HCI	NEXUS PHARMA	8/6/2018	\$100.00	16.00%	
Erv	External	PERRIGO PHARMACEUTICALS	8/7/2018	\$10.07	15.00%	
Methadone	HCI	HIKMA	8/7/2018	\$4.24	13.79%	
Clindamycin	Phosphate	FAGRON	8/7/2018	\$6.65	13.75%	
Buprenorphine	Transdermal	RHODES PHARMACEUTICAL	8/1/2018	\$32.19	11.99%	
Prandin	Oral	GEMINI LABORATORIES	8/1/2018	\$64.98	9.90%	
Pyridium	Oral	GEMINI LABORATORIES GEMINI LABORATORIES		\$36.35	9.90%	
•	Nasal/Oral	IMPAX SPECIALTY PHARMA	8/1/2018 8/1/2018	\$39.81	9.90%	
Zomig Dexedrine	Oral	AMEDRA PHARMACEUTICALS	8/1/2018	\$172.93	9.90%	
Nizatidine	Oral	GEMINI LABORATORIES		\$172.93	9.90%	
			8/1/2018	·		
Plexion	External	MISSION	8/20/2018	\$54.47	9.90%	
Albenza	Oral	AMEDRA PHARMACEUTICALS	8/1/2018	\$39.78	9.90%	
Activella	Oral	GEMINI LABORATORIES	8/1/2018	\$20.95	9.90%	
Veltassa	Oral	RELYPSA	8/1/2018	\$12.65	9.44%	
Doral	Oral	GALT PHARMACEUTICALS	8/1/2018	\$202.00	9.40%	
Hydrocortisone	Acetate	GRAXCELL PHARMACEUTICAL	8/8/2018	\$16.00	9.05%	
K-Phos	No	BEACH	8/15/2018	\$7.30	8.54%	
Beelith	Oral	BEACH	8/15/2018	\$4.70	8.54%	
K-Phos	Oral	BEACH	8/15/2018	\$17.40	8.51%	
K-Phos-Neutral	Oral	BEACH	8/15/2018	\$25.15	8.50%	
Tri-Luma	External	GALDERMA	8/1/2018	\$15.55	8.32%	
Sustol	Subcutaneous	HERON THERAPEUTICS	8/13/2018	\$247.74	7.75%	
Cotempla	XR-ODT	NEOS THERAPEUTICS BRANDS	8/7/2018	\$22.38	7.00%	
Lenvima	Oral	EISAI	8/20/2018	\$1,000.00	6.26%	
Paxil	CR	APOTEX	8/15/2018	\$9.52	5.26%	
HepaGam	В	SAOL THERAPEUTICS	8/1/2018	\$8.48	5.00%	

Source: MediSpan PriceRx

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Exhibit 2. August 2018 PriceRx Data for All Active Drugs - All WAC Decreases

Product	Name	Labeler	Effective Date	\$ Change	% Change
Nystatin-Triamcinolone	External	TELIGENT	8/1/2018	(\$43.90)	(87.98%)
Betamethasone	Dipropionate	PERRIGO PHARMACEUTICALS	8/2/2018	(\$20.89)	(84.40%)
Lidocaine	External	TELIGENT	8/1/2018	(\$125.00)	(83.33%)
Tetracaine	HCI	HUMCO	8/10/2018	(\$448.48)	(78.89%)
Econazole	Nitrate	TELIGENT	8/1/2018	(\$37.53)	(75.02%)
Clarithromycin	Oral	AUROBINDO PHARMA	8/1/2018	(\$161.02)	(74.20%)
Acyclovir	External	TARO	8/1/2018	(\$465.55)	(72.96%)
Desonide	External	PERRIGO PHARMACEUTICALS	8/2/2018	(\$184.91)	(71.97%)
Gabapentin	Oral	ZYDUS PHARMACEUTICALS (USA)	8/10/2018	(\$55.16)	(70.38%)
Atorvastatin	Calcium	DR.REDDY'S LABORATORIES, INC.	8/1/2018	(\$38.62)	(70.23%)
Cefdinir	Oral	AUROBINDO PHARMA	8/1/2018	(\$103.06)	(67.33%)
Diclofenac	Sodium	TELIGENT	8/1/2018	(\$62.50)	(62.50%)
Erythromycin	External	PERRIGO PHARMACEUTICALS	8/7/2018	(\$106.33)	(59.63%)
Multivitamin/Fluoride	Oral	H2 PHARMA	8/24/2018	(\$17.88)	(57.94%)
DULoxetine	HCI	AJANTA PHARMA LIMITED	8/20/2018	(\$22.00)	(55.00%)
Hemmorex-HC	Rectal	LASER PHARMACEUTICALS	8/24/2018	(\$72.99)	(54.88%)
Clobetasol	Propionate	TARO	8/1/2018	(\$78.60)	(54.47%)
Testosterone	Transdermal	PERRIGO PHARMACEUTICALS	8/2/2018	(\$263.65)	(51.08%)
Memantine	HCI	LUPIN PHARMACEUTICALS	8/1/2018	(\$3,056.00)	(50.00%)
Abelcet	Intravenous	LEADIANT BIOSCIENCES	8/1/2018	(\$96.50)	(49.11%)
Tenofovir	Disoproxil	STRIDES PHARMA	8/13/2018	(\$54.00)	(46.96%)
Clobetasol	Prop	TELIGENT	8/1/2018	(\$21.58)	(46.58%)
KelaRx	External	STERLING KNIGHT PHARMACEUTICAL	8/15/2018	(\$1,556.00)	(43.95%)
FluPHENAZine	Decanoate	PAR STERILE PRODUCTS	8/1/2018	(\$56.76)	(42.12%)
Neostigmine	Methylsulfate	PAR STERILE PRODUCTS	8/1/2018	(\$219.00)	(35.04%)
Ciclopirox	External	PERRIGO PHARMACEUTICALS	8/2/2018	(\$41.83)	(34.91%)
Bloxiverz	Intravenous	NOVAPLUS/AVADEL LEGACY PHARMA	8/3/2018	(\$96.80)	(34.52%)
Silipac	External	STERLING KNIGHT PHARMACEUTICAL	8/15/2018	(\$1,695.00)	(33.93%)
HYDROmorphone	HCI	PERRIGO	8/2/2018	(\$358.02)	(31.74%)
Entecavir	Oral	AUROBINDO PHARMA	8/1/2018	(\$125.00)	(31.65%)
Bumetanide	Oral	EDENBRIDGE PHARMACEUTICALS	8/17/2018	(\$291.74)	(26.49%)
Celecoxib	Oral	AUROBINDO PHARMA	8/1/2018	(\$25.00)	(23.81%)
Morphine	Sulfate	AMERICAN HEALTH PACKAGING	8/13/2018	(\$0.20)	(23.53%)
Clindamycin	Phosphate	TELIGENT	8/1/2018	(\$4.30)	(22.28%)
Haloperidol	Oral	ZYDUS PHARMACEUTICALS (USA)	8/10/2018	(\$46.18)	(20.94%)
Doxycycline	Hyclate	HIKMA	8/3/2018	(\$15.00)	(20.00%)
Phentermine	HCI	KVK TECH	8/1/2018	(\$2.45)	(19.60%)
PKU	Air20	VITAFLO	8/1/2018	(\$46.00)	(18.55%)
Methylphenidate	HCI	KVK TECH	8/3/2018	(\$27.33)	(16.24%)
Vazculep	Intravenous	AVADEL LEGACY PHARMACEUTICALS	8/3/2018	(\$7.63)	(15.00%)
Pregnitude	Oral	EXELTIS USA	8/1/2018	(\$4.00)	(13.33%)
ARIPiprazole	Oral	AJANTA PHARMA LIMITED	8/20/2018	(\$70.00)	(12.28%)
Methadone	HCI	HIKMA	8/7/2018	(\$4.24)	(12.12%)
Desoximetasone	External	TARO	8/1/2018	(\$46.00)	(10.00%)
Cefepime	HCI	APOTEX	8/6/2018	(\$0.78)	(5.23%)
Emverm	Oral	IMPAX SPECIALTY PHARMA	8/1/2018	(\$20.28)	(5.00%)
Hydrocortisone	Acetate	GRAXCELL PHARMACEUTICAL	8/8/2018	(\$15.00)	(3.71%)
RaNITidine	HCI	AVKARE	8/8/2018	(\$10.82)	(1.48%)

Source: MediSpan PriceRx

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Exhibits 3 and 4 include price changes from the following subset of companies: AbbVie, Allergan, Amphastar, AstraZeneca, Bristol-Myers, Emergent Biosolutions, Flexion, GlaxoSmithKline, Impax, Ironwood, Jazz, Endo, Lilly, Mallinckrodt, Merck, Mylan, Neos, Novartis, Pfizer, Perrigo, Roche, Sanofi, Teva, Valeant, Shire, Dr. Reddy's, OPKO, Horizon, Akorn, Pacira, Eagle, Lannett, Avadel, Teligent, Hikma, and their subsidiaries.

Exhibit 3. August 2018 PriceRx Data for Subset of Companies - All WAC Increases

Product	Name	Labeler	Effective Date	\$ Change	% Change
DilTIAZem	HCI	AKORN	8/1/2018	\$7.11	186.61%
Ful-Glo	Ophthalmic	AKORN	8/20/2018	\$3.60	31.58%
Ery	External	PERRIGO PHARMACEUTICALS	8/7/2018	\$10.07	15.00%
Methadone	HCI	HIKMA	8/7/2018	\$4.24	13.79%
Zomig	Nasal/Oral	IMPAX SPECIALTY PHARMA	8/1/2018	\$39.81	9.90%
Cotempla	XR-ODT	NEOS THERAPEUTICS BRANDS	8/7/2018	\$22.38	7.00%
Vyxeos	Intravenous	JAZZ PHARMACEUTICALS	8/8/2018	\$232.50	3.00%

Source: MediSpan PriceRx

Exhibit 4. August 2018 PriceRx Data for Subset of Companies - All WAC Decreases

Product	Name	Labeler	Effective Date	\$ Change	% Change
Nystatin-Triamcinolone	External	TELIGENT	8/1/2018	(\$43.90)	(87.98%)
Betamethasone	Dipropionate	PERRIGO PHARMACEUTICALS	8/2/2018	(\$20.89)	(84.40%)
Lidocaine	External	TELIGENT	8/1/2018	(\$125.00)	(83.33%)
Clobetasol	Propionate	TELIGENT	8/1/2018	(\$138.31)	(77.57%)
Econazole	Nitrate	TELIGENT	8/1/2018	(\$37.53)	(75.02%)
Desonide	External	PERRIGO PHARMACEUTICALS	8/2/2018	(\$184.91)	(71.97%)
Atorvastatin	Calcium	DR.REDDY'S LABORATORIES, INC.	8/1/2018	(\$38.62)	(70.23%)
Clobetasol	Propionate	TELIGENT	8/1/2018	(\$104.00)	(69.80%)
Diclofenac	Sodium	TELIGENT	8/1/2018	(\$62.50)	(62.50%)
Bloxiverz	Intravenous	AVADEL LEGACY PHARMACEUTICALS	8/3/2018	(\$27.54)	(60.00%)
Desonide	External	PERRIGO PHARMACEUTICALS	8/2/2018	(\$114.94)	(59.77%)
Erythromycin	External	PERRIGO PHARMACEUTICALS	8/7/2018	(\$106.33)	(59.63%)
Testosterone	Transdermal	PERRIGO PHARMACEUTICALS	8/2/2018	(\$263.65)	(51.08%)
Clobetasol	Prop	TELIGENT	8/1/2018	(\$43.16)	(46.58%)
Ciclopirox	External	PERRIGO PHARMACEUTICALS	8/2/2018	(\$41.83)	(34.91%)
HYDROmorphone	HCI	PERRIGO	8/2/2018	(\$358.02)	(31.74%)
Clindamycin	Phosphate	TELIGENT	8/1/2018	(\$4.30)	(22.28%)
Doxycycline	Hyclate	HIKMA	8/3/2018	(\$150.00)	(20.00%)
Vazculep	Intravenous	AVADEL LEGACY PHARMACEUTICALS	8/3/2018	(\$7.63)	(15.00%)
Methadone	HCI	HIKMA	8/7/2018	(\$4.24)	(12.12%)
Emverm	Oral	IMPAX SPECIALTY PHARMA	8/1/2018	(\$20.28)	(5.00%)

Source: MediSpan PriceRx

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