

U.S. Pharmaceuticals

UBS Large Cap Pharmaceuticals Handbook

What's new? Refreshed Handbook

This publication consists of monthly therapeutic market models, TRX growth trends, market share & sales estimates, and monthly promotion detail tables for key products within large cap pharmaceuticals. For the first time, we have also included our Immuno-oncology market models (Figure 3 - Figure 31).

Diabetes market shares remain steady

Market share for the DPP-IV class has declined marginally since our last update in September 2017 from 11.5% to 11.3%. Over the same period the SGLT-2 class has remained at 6.1%, while the GLP-1 class' share has increased from 5.7% to 6.2%.

Eliquis continues to take share from Warfarin

Eliquis has continued to gain share, increasing from 24.2% at the end of September 2017 to 27.8% at the end of February 2018. Xarelto's share remains below Eliquis', and has grown marginally during the same period (21.5% in September to 21.6% in February) while Warfarin has continued to lose share, dropping from 50.4% of the market down to 47.2% at the end of February (vs ~70% in early 2015).

Figure 1: DPP-IV and SGLT-2 Share in the Diabetes Market

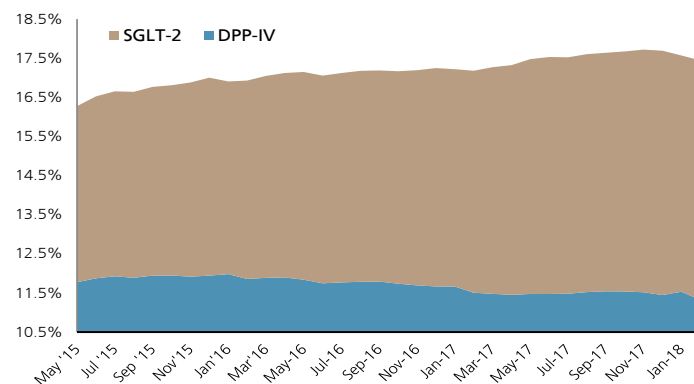
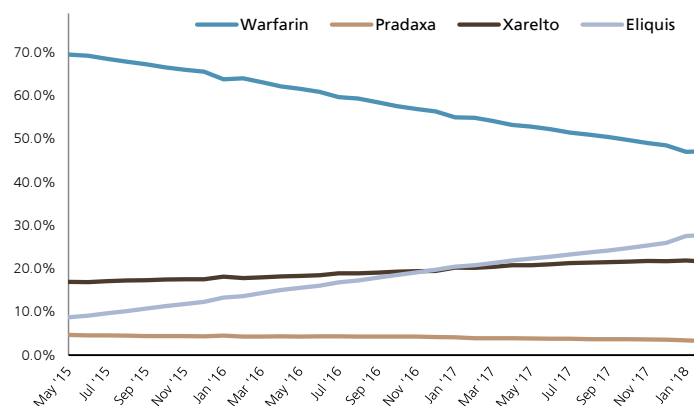


Figure 2: Novel Anticoagulant Market Share



Source: IMS Health

Figure 44: Endocrinology – Diabetes (Non-Insulin) Annual

	% of Total TRxs										Total Sales (\$ Millions)						
	2011	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E	2011	2012	2013	2014	2015	2016	2017
Total Category Trx ('000)	128,939	138,576	143,396	149,412	157,649	166,935	169,525	175,280	182,291	187,760							
Growth Rate	-0.4%	7.5%	3.5%	4.2%	5.5%	5.9%	1.6%	3.4%	4.0%	3.0%							
Total Sulfonylureas	26.5%	26.9%	26.0%	24.7%	22.9%	21.4%	20.4%	20.3%	19.6%	18.7%	\$223.7	\$227.6	\$198.4	\$167.8	\$189.7	\$155.6	\$127.7
Total Glinides	1.1%	1.0%	0.9%	0.8%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	\$216.7	\$230.1	\$212.2	\$74.4	\$41.2	\$32.3	\$28.1
Total Biguanides	45.8%	48.9%	51.0%	51.5%	51.0%	51.3%	51.3%	51.0%	51.4%	51.7%	\$323.6	\$438.6	\$513.6	\$595.6	\$1,106.9	\$1,188.6	\$704.3
Total Glitazone	9.0%	5.0%	4.0%	3.6%	3.4%	3.4%	3.4%	3.5%	3.5%	3.5%	\$2,823.0	\$1,525.5	\$141.4	\$36.7	\$28.9	\$24.7	\$21.1
Total Alpha-Glucos Inhibitors	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	\$20.0	\$20.9	\$17.4	\$14.5	\$12.3	\$9.0	\$6.1
Human GLP-1 Analogs																	
Byetta - Astra Zeneca	1.2%	0.9%	0.6%	0.4%	0.3%	0.2%	0.2%	0.1%	0.0%	0.0%	\$517.7	\$432.8	\$304.0	\$199.0	\$209.0	\$164.0	\$114.0
Bydureon - AstraZeneca	0.0%	0.2%	0.4%	0.6%	0.7%	0.7%	0.7%	0.6%	0.5%	0.4%	\$0.0	\$130.0	\$263.0	\$374.0	\$482.0	\$463.0	\$458.0
Victoza - Novo Nordisk	1.1%	1.5%	1.8%	2.0%	2.2%	2.3%	2.4%	2.5%	2.4%	2.5%	\$368.4	\$514.5	\$1,343.3	\$1,463.6	\$1,947.3	\$2,101.9	\$2,055.0
Tanzeum - GSK	0.0%	0.0%	0.0%	0.0%	0.2%	0.4%	0.2%	0.1%	0.0%	0.0%	\$0.0	\$0.0	\$0.0	\$7.3	\$89.5	\$150.0	\$108.0
Adlyxin - Sanofi Aventis	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Trulicity (Dulaglutide) - Lilly	0.0%	0.0%	0.0%	0.0%	0.2%	0.9%	1.9%	2.5%	2.8%	2.7%	\$0.0	\$0.0	\$0.0	\$10.2	\$207.8	\$698.6	\$1,609.0
Ozempic (Semaglutide) - Novo Nordisk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.6%	0.9%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Oral Semaglutide - Novo Nordisk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total GLP-1 Analog	2.3%	2.6%	2.9%	3.0%	3.6%	4.4%	5.4%	6.0%	6.4%	6.8%	\$886.1	\$1,077.3	\$1,910.3	\$2,054.1	\$2,935.6	\$3,577.5	\$4,345.0
Total GLP-1/Insulin Combo	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$38.0
DPP-4 Inhibitor, alone																	
Januvia - Merck	6.1%	6.4%	6.2%	6.1%	5.9%	5.8%	5.9%	5.8%	5.6%	5.4%	\$1,825.0	\$2,136.0	\$2,069.0	\$2,123.0	\$2,263.0	\$2,286.0	\$2,154.0
Onglyza - Astra Zeneca	1.1%	1.4%	1.3%	1.2%	0.9%	0.7%	0.5%	0.4%	0.4%	0.3%	\$278.2	\$351.0	\$396.0	\$291.6	\$242.1	\$237.4	\$219.0
Tradjenta - LLY/BI	0.1%	0.4%	0.9%	1.1%	1.4%	1.8%	1.9%	1.9%	1.8%	1.8%	\$25.7	\$107.1	\$227.7	\$260.4	\$564.8	\$775.0	\$1,044.0
Total DPP-4 Inhibitor, alone	7.3%	8.2%	8.3%	8.3%	8.4%	8.4%	8.3%	8.1%	7.8%	7.5%	\$2,128.9	\$2,594.1	\$2,697.3	\$2,686.1	\$3,090.1	\$3,319.5	\$3,430.0
SGLT-2 Inhibitor																	
Farxiga - Astra Zeneca	0.0%	0.0%	0.0%	0.5%	1.0%	1.2%	1.3%	1.5%	1.6%	1.8%	\$0.0	\$0.0	\$0.0	\$223.7	\$261.0	\$457.0	\$489.0
Invokana - J&J	0.0%	0.0%	0.3%	1.4%	2.7%	2.7%	2.4%	1.8%	1.6%	1.4%	\$0.0	\$0.0	\$133.9	\$563.3	\$1,148.8	\$1,138.2	\$838.0
Jardiance - Lilly/BI	0.0%	0.0%	0.0%	0.0%	0.4%	0.8%	1.5%	2.0%	2.3%	2.5%	\$0.0	\$0.0	\$0.0	\$19.9	\$167.7	\$405.8	\$998.0
Steglatro (Steglatro) - Merck/Pfizer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.6%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Sotagliflozin - Sanofi/Lexicon	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Remogliflozin - BHV Pharma	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total SGLT-2 Inhibitor	0.0%	0.0%	0.3%	1.9%	4.1%	4.7%	5.2%	5.4%	5.9%	6.4%	\$0.0	\$0.0	\$133.9	\$806.9	\$1,577.5	\$2,001.0	\$2,326.0
SGLT-2INHIB/Biguanide combo																	
Invokamet - J&J	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	\$0.0	\$0.0	\$0.0	\$5.7	\$89.2	\$134.8	\$105.0
Invokamet XR - J&J	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.2%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.6	\$25.0
Ertugliflozin/metformin - Merck/Pfizer	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Xigduo XR - AstraZeneca	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.3%	0.4%	0.4%	0.4%	\$0.0	\$0.0	\$0.0	\$1.2	\$60.5	\$168.5	\$232.0
Synjardy - Lilly/BI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	\$0.0	\$0.0	\$0.0	\$0.0	\$1.7	\$20.1	\$53.0
Synjardy XR - Lilly/BI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total SGLT-2INHIB/Biguanide combo	0.0%	0.0%	0.0%	0.0%	0.4%	0.6%	0.8%	0.9%	1.0%	1.1%	\$0.0	\$0.0	\$0.0	\$6.9	\$151.4	\$325.0	\$415.0
Glitazone comb	1.7%	0.9%	0.7%	0.5%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	\$474.4	\$306.8	\$117.2	\$83.8	\$65.0	\$54.5	\$31.0
DPP-4INHIB/Biguanide comb																	
Jentadueto - Lilly/BI	0.0%	0.0%	0.1%	0.2%	0.2%	0.3%	0.3%	0.2%	0.2%	0.2%	\$0.0	\$17.2	\$35.4	\$46.5	\$72.4	\$120.4	\$118.0
Janumet/XR - Merck	2.5%	2.7%	2.6%	2.6%	2.5%	2.5%	2.4%	2.3%	2.2%	2.1%	\$712.0	\$872.0	\$916.0	\$933.5	\$976.0	\$984.0	\$863.0
Kazano - Takeda	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	\$0.0	\$0.0	\$17.3	\$9.5	\$16.0	\$16.3	\$7.0
Oseni - Takeda	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	\$0.0	\$0.0	\$3.6	\$16.9	\$30.2	\$28.1	\$11.0
Kombiglyze XR - AstraZeneca	0.3%	0.6%	0.7%	0.6%	0.5%	0.4%	0.3%	0.2%	0.2%	0.2%	\$67.0	\$157.0	\$195.0	\$189.4	\$177.9	\$138.6	\$100.0
Total DPP-4INHIB/Biguanide comb	2.8%	3.4%	3.5%	3.5%	3.4%	3.2%	3.0%	2.8%	2.6%	2.5%	\$779.0	\$1,046.2	\$1,167.3	\$1,195.8	\$1,272.6	\$1,287.5	\$1,101.0
SGLT-2/DPP-IV Combo																	
Qtern (Dapagliflozin/Onglyza) - AZN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Ertugliflozin/Januvia combo - MRK/PFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Glyxambi - Lilly/BI	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	\$0.0	\$0.0	\$0.0	\$0.0	\$62.1	\$166.8	\$151.0
Total SGLT-2/DPP-IV Combo	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%	0.3%	0.4%	\$0.0	\$0.0	\$0.0	\$0.0	\$62.1	\$166.8	\$151.0
Total Glinide/Biguanide	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	\$2.2	\$1.9	\$1.9	\$1.8	\$1.7	\$0.7	\$0.0
Total Biguanide/Sulfonylurea Combos	3.1%	2.6%	2.2%	1.7%	1.3%	1.1%	0.9%	0.7%	0.4%	0.1%	\$52.2	\$38.0	\$35.8	\$30.5	\$32.6	\$33.8	\$9.0
Dopamine Receptor																	
Cycloset - Santarus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	\$12.2	\$14.4	\$16.6	\$28.4	\$14.6	\$11.6	\$9.0
Total Human Amylin analogs	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	\$103.9	\$91.6	\$68.9	\$51.5	\$37.2	\$29.8	\$24.0
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	\$8,045.9	\$7,613.0	\$7,232.1	\$7,834.7	\$10,619.4	\$12,217.9	\$12,771.0
Growth Rate											14.3%	-5.4%	-5.0%	8.3%	35.5%	15.1%	4.5%

Source: Company reports, IMS database and UBS estimates

Figure 45: Endocrinology – Diabetes (Non-Insulin) Monthly

Diabetes (Non-Insulin) TRx	2017	Jan-18	Feb-18	Mar-18E	Apr-18E	May-18E	Jun-18E	Jul-18E	Aug-18E	Sep-18E	Oct-18E	Nov-18E	Dec-18E
Total Category Rx	169,525,312	14,506,052	13,089,349	15,442,495	14,355,777	15,367,305	14,994,323	14,659,527	15,073,602	14,185,979	14,897,298	14,270,154	14,420,000
Growth rate	7.6%	0.9%	-0.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Market Share	2017	Jan-18	Feb-18	Mar-18E	Apr-18E	May-18E	Jun-18E	Jul-18E	Aug-18E	Sep-18E	Oct-18E	Nov-18E	Dec-18E
Sulfonylureas	20.4%	20.2%	20.1%	20.3%	20.3%	20.2%	20.3%	20.2%	20.2%	20.3%	20.3%	20.3%	20.3%
Total Sulfonylureas	20.4%	20.2%	20.1%	20.3%	20.3%	20.2%	20.3%	20.2%	20.2%	20.3%	20.3%	20.3%	20.3%
Glinides,alone	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Prandin - Novo Nordisk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Generic Prandin	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Starlix - Novartis	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Generic Starlix (Nateglinide)	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Biguanides, alone (Metformin)	51.3%	50.8%	50.9%	51.0%	51.0%	51.0%	51.0%	51.1%	51.1%	51.1%	51.2%	51.2%	51.2%
Glitazone,alone	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Actos - Takeda	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avandia - GlaxoSmithkline	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Glitazone, alone	3.4%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Alpha-Glucos Inhibitor, alone	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Human GLP-1 Analogs	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Byetta - AstraZeneca	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.1%
Generic Byetta - Teva	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bydureon - AstraZeneca	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.5%	0.5%
Victoza - Novo Nordisk	2.4%	2.6%	2.7%	2.6%	2.5%	2.5%	2.5%	2.5%	2.5%	2.4%	2.4%	2.4%	2.4%
Trulicity (Dulaglutide) - Lilly	1.9%	2.4%	2.5%	2.4%	2.5%	2.5%	2.6%	2.6%	2.6%	2.6%	2.7%	2.7%	2.7%
Ozempic (Semaglutide) - Novo Nordisk	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.3%	0.3%
Oral Semaglutide - Novo Nordisk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Efpeglenatide - Sanofi/Hamni	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other human GLP-1 analogs	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%
DPP-4 Inhibitor,alone	5.9%	6.0%	5.9%	5.9%	5.9%	5.8%	5.8%	5.8%	5.7%	5.7%	5.7%	5.6%	5.6%
Januvia - Merck	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%
Onglyza - AstraZeneca	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Tradjenta - LLY/BI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total DPP-4 Inhibitor	8.3%	8.4%	8.3%	8.2%	8.2%	8.2%	8.1%	8.1%	8.1%	8.0%	8.0%	7.9%	7.9%
Total SGLT-2 Inhibitor,alone	5.2%	5.3%	5.3%	5.4%	5.4%	5.4%	5.4%	5.5%	5.5%	5.5%	5.5%	5.6%	5.6%
Total SGLT-2INHIB/Biguanide combo	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%
Total Glitazone comb	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
DPP-4INHIB/Biguanide combo	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Jentadueto - BI	1.6%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%	1.5%	1.4%	1.4%	1.4%	1.4%	1.4%
Janumet - Merck	0.8%	0.9%	0.9%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%
Janumet XR - Merck	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Juvisync - Merck	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazano - Takeda	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oseni - Takeda	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kombiglyze XR - AstraZeneca	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
SGLT-2/DPP-IV Combo	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qtern (Dapagliflozin/Onglyza) -	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Steglujan (Steglatro/Januvia combo) -	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Glyxambi - Lilly/BI	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Glinide/Biguanide combo	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Prandimet - Novo Nordisk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Generic Prandimet	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Biguanide/sulfonylurea combo	0.9%	0.9%	0.8%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%
Total Human Amylin analogs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Company reports, IMS database and UBS estimates

Figure 46: Endocrinology – Diabetes (Non-Insulin) TRx Growth Rates

TRx Growth Rate	2017	Jan-18	Feb-18	Mar-18E	Apr-18E	May-18E	Jun-18E	Jul-18E	Aug-18E	Sep-18E	Oct-18E	Nov-18E
Sulfonylureas												
Total Sulfonylureas	-3.3%	-2.6%	-3.7%	2.5%	2.8%	2.8%	3.7%	3.3%	3.5%	4.4%	4.6%	4.7%
Glinides,alone												
Prandin - Novo Nordisk	-48.3%	-52.7%	-49.4%	-43.5%	-25.3%	-27.6%	-22.9%	-6.6%	-10.3%	-3.6%	-1.7%	-5.0%
Starlix - Novartis	-29.6%	-19.6%	-43.5%	-35.6%	-31.1%	-26.5%	-15.6%	-21.6%	-9.5%	-15.6%	-20.4%	-11.4%
Generic Starlix - (Nateglinide)	-8.1%	-8.7%	-9.4%	-3.8%	-2.9%	-2.3%	-0.7%	0.1%	0.7%	1.1%	0.2%	-0.5%
Total Glinides	-3.4%	-3.5%	-5.3%	-0.3%	0.3%	0.7%	0.6%	2.1%	1.5%	1.7%	0.1%	0.4%
Biguanides, alone (metformin)												
Total Biguanides	1.4%	-0.6%	-1.9%	2.6%	2.6%	3.2%	3.4%	3.5%	3.9%	4.2%	4.5%	4.8%
Glitazone,alone												
Actos - Takeda	-31.3%	-32.4%	-30.6%	-24.6%	-17.2%	-25.2%	-16.0%	-22.7%	-13.4%	-8.4%	-6.9%	-10.4%
Avandia - GSK	4.1%	-4.3%	-2.1%	1.3%	4.7%	6.1%	3.8%	9.3%	8.8%	2.8%	9.1%	1.9%
Total Glitazone,alone	2.2%	3.4%	2.0%	6.8%	7.0%	6.5%	6.6%	6.5%	6.4%	6.0%	5.4%	5.8%
Alpha-Glucos Inhibitor,alone												
Total Alpha-Glucos Inhib	-3.2%	-1.3%	-3.0%	9.6%	9.7%	8.6%	9.5%	11.7%	7.7%	-32.1%	-31.6%	-32.4%
Human GLP-1 Analogs												
Byetta - AstraZeneca	-18.9%	-20.6%	-24.9%	-45.2%	-52.4%	-61.0%	-68.7%	-75.2%	-83.2%	-86.9%	-90.7%	-95.9%
Generic Byetta - Teva	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Bydureon - AstraZeneca	5.7%	5.2%	6.7%	5.1%	4.1%	0.9%	-0.9%	-1.4%	-3.5%	-5.5%	-7.7%	-10.2%
Victoza - Novo Nordisk	7.7%	14.0%	13.5%	11.7%	10.1%	7.1%	5.4%	5.2%	2.4%	-0.4%	-3.2%	-6.9%
Trulicity (Dulaglutide) - Lilly	NM	79.9%	70.0%	61.5%	54.6%	46.8%	42.5%	38.1%	32.1%	28.4%	24.5%	21.1%
Total human GLP-1 analogs	24.2%	28.7%	26.7%	24.3%	22.7%	19.2%	17.4%	16.9%	14.0%	12.1%	9.7%	7.2%
DPP-4 Inhibitor,alone												
Januvia - Merck	2.2%	3.5%	1.5%	5.0%	4.0%	3.2%	2.5%	1.4%	0.6%	-0.5%	-0.9%	-1.1%
Tradjenta - LLY/BI	7.6%	4.3%	2.5%	8.1%	7.1%	5.6%	5.0%	3.3%	2.1%	1.8%	0.9%	0.1%
Total DPP-4 Inhibitor	1.0%	1.4%	-0.4%	3.7%	3.0%	2.3%	1.7%	0.8%	0.0%	-0.7%	-1.2%	-1.4%
Total SGLT-2 Inhibitor	12.6%	10.0%	7.9%	11.1%	10.0%	8.3%	7.6%	8.1%	7.9%	8.1%	8.0%	7.5%
Total SGLT-2INHIB/Biguanide combo	27.4%	7.9%	2.8%	15.1%	16.3%	14.7%	16.1%	20.3%	21.8%	23.3%	24.6%	23.9%
Glitazone/Biguanide comb												
Actoplus Met - Takeda	-46.2%	-37.3%	-41.4%	-32.9%	-31.3%	-17.6%	-25.0%	-20.9%	-11.0%	-20.6%	-22.4%	-13.0%
Generic Actoplus Met (Pioglit/Metformin)	-17.8%	-18.3%	-19.4%	-15.4%	-12.9%	-10.8%	-9.6%	-6.5%	-6.6%	-4.9%	-5.2%	-2.5%
Actoplus Met XR - Takeda	-21.1%	-22.2%	-22.6%	-12.3%	1.4%	13.3%	18.4%	38.6%	47.5%	55.2%	67.0%	86.8%
Avandamet - GSK	-96.0%	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Glitazone comb	-19.7%	-20.5%	-20.7%	-15.2%	-12.0%	-9.3%	-8.1%	-3.7%	-2.8%	-1.4%	-1.2%	2.4%
Total Glitazone comb	-41.8%	-47.3%	-36.1%	-12.7%	-5.9%	-3.5%	-5.1%	8.1%	25.6%	5.9%	6.4%	11.3%
DPP-4INHIB/Biguanide comb												
Jantaduetto - BI	-7.0%	-13.4%	-16.6%	-8.4%	-6.0%	-7.4%	-7.1%	-5.9%	-6.8%	-6.1%	-5.7%	-5.3%
Janumet - Merck	-7.0%	-13.4%	-16.6%	-8.4%	-6.0%	-7.4%	-7.1%	-5.9%	-6.8%	-6.1%	-5.7%	-5.3%
Janumet XR - Merck	-4.5%	-2.6%	-4.6%	-1.8%	-2.2%	-2.9%	-4.1%	-4.6%	-5.9%	-6.8%	-8.1%	-9.3%
Juvvisync - Merck	7.6%	6.6%	4.6%	8.4%	7.6%	6.4%	6.1%	5.8%	3.4%	2.2%	1.9%	0.8%
Kazano - Takeda	-100.0%	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Oseni - Takeda	-49.2%	-45.5%	-46.9%	-42.5%	-38.0%	-35.4%	-32.0%	-30.6%	-25.9%	-25.0%	-21.0%	-23.6%
Kombiglyze XR - AstraZeneca	-26.0%	-28.2%	-29.6%	-25.2%	-20.9%	-20.2%	-19.7%	-16.4%	-15.0%	-14.4%	-13.6%	-12.1%
Total DPP-4 INHIB/Biguanide	-5.4%	-4.4%	-6.3%	-2.5%	-2.0%	-2.7%	-3.3%	-3.1%	-4.4%	-5.0%	-5.6%	-6.5%
Total SGLT-2/DPP-IV Combo	-12.3%	-6.9%	-8.3%	2.2%	12.1%	16.2%	21.9%	28.3%	32.3%	37.3%	42.5%	46.1%
Glinide/Biguanide comb												
Prandimet - Novo Nordisk	-98.4%	-100.0%	-100.0%	-100.0%	NM	-100.0%	NM	NM	NM	NM	NM	NM
Generic Prandimet	-66.7%	-93.8%	-93.1%	-91.0%	-89.4%	-84.4%	-80.4%	-70.8%	-56.9%	-53.6%	-31.8%	-53.3%
Biguanide/sulfonylurea comb	-13.7%	-12.9%	-14.3%	-20.0%	-18.1%	-16.7%	-27.4%	-26.9%	-25.8%	-37.3%	-36.5%	-35.9%
Dopamine Receptor												
Cycloset - Vero Science	-21.4%	-7.2%	-3.1%	9.6%	9.6%	14.0%	13.3%	11.0%	12.3%	5.1%	7.6%	-2.0%
Total Human Amylin Analogs	-22.3%	-17.4%	-23.0%	-15.9%	-10.3%	-18.1%	-18.2%	-15.8%	-11.1%	-14.0%	-8.0%	-11.3%
Total	1.6%	0.9%	-0.4%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

Source: Company reports, IMS database and UBS estimates

Figure 47: Endocrinology – Diabetes (Non-Insulin) Promotion Details Monthly

# of Details for Tot. Category ('000s)	2016	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
Total Category	3,819	349	312	302	307	277	319	266	276	288	337	362
<i>Growth rate</i>	-8.5%	-6.0%	-4.3%	-17.8%	9.5%	-9.3%	-3.8%	-23.3%	-2.1%	-6.6%	0.1%	30.8%
Market Share	2016	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17
Sulfonylureas												
Total Sulfonylureas	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Glinides, alone												
Prandin - Novo Nordisk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Starlix - Novartis	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Biguanides, alone (Metformin)												
Total Biguanides	0.1%	0.3%	0.1%	0.7%	0.5%	0.1%	0.0%	0.1%	0.1%	0.4%	0.1%	0.1%
Actos - Takeda	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.3%
Avandia - GlaxoSmithkline	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Alpha-Glucos Inhibitors	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Byetta - AstraZeneca	0.5%	0.1%	0.8%	0.3%	0.1%	0.1%	0.2%	1.0%	0.5%	0.1%	0.3%	0.1%
Bydureon - AstraZeneca	4.8%	4.1%	3.7%	4.6%	4.7%	3.1%	3.6%	5.1%	4.2%	3.9%	5.0%	5.6%
Victoza - Novo Nordisk	5.9%	5.2%	7.7%	9.1%	4.3%	7.5%	3.8%	6.7%	6.5%	6.4%	9.2%	10.9%
Tanzeum - GSK	3.7%	0.4%	0.6%	0.6%	0.4%	0.4%	0.3%	0.5%	0.1%	0.0%	0.1%	0.1%
Trulicity (Dulaglutide) - Lilly	6.6%	6.4%	8.8%	7.1%	5.9%	7.3%	8.4%	8.8%	7.9%	6.2%	8.7%	8.0%
Other human GLP-1 analogs	10.2%	6.8%	9.4%	7.7%	6.3%	7.7%	8.7%	9.3%	8.0%	6.2%	8.7%	8.1%
DPP-4 Inhibitor, alone												
Januvia - Merck	12.3%	12.4%	18.2%	13.9%	9.5%	15.3%	14.5%	18.7%	12.0%	15.3%	14.4%	11.7%
Onglyza - AstraZeneca	2.8%	1.5%	1.7%	2.1%	1.6%	2.2%	2.1%	1.4%	2.7%	2.1%	1.1%	1.0%
Tradjenta - Lilly	6.4%	4.9%	4.9%	5.6%	3.0%	4.6%	3.3%	3.5%	4.2%	5.4%	3.8%	5.5%
SGLT-2 Inhibitor												
Farxiga - AstraZeneca	10.8%	8.1%	9.1%	12.2%	10.4%	10.6%	19.5%	12.3%	17.4%	15.0%	13.4%	11.1%
Invokana/Invokamet - J&J	19.0%	19.5%	16.2%	14.6%	22.9%	18.5%	20.4%	13.8%	13.2%	18.3%	14.1%	22.5%
Jardiance - Lilly/BI	10.0%	14.5%	15.9%	13.6%	19.8%	14.3%	12.4%	13.6%	18.2%	14.2%	16.7%	11.6%
SGLT-2INHIB/Biguanide combo												
Xigduo XR - AstraZeneca	2.2%	0.6%	2.7%	1.6%	0.9%	1.5%	1.7%	1.4%	0.7%	1.1%	1.0%	0.3%
Synjardy - Lilly/BI	0.9%	0.9%	1.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.9%
Glitazone comb	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.1%	0.0%	0.0%
DPP-4INHIB/Biguanide comb												
Jentaduetto - Lilly/BI	1.3%	3.6%	0.1%	0.4%	2.1%	0.5%	0.3%	0.5%	0.4%	1.9%	0.7%	0.4%
Kazano - Takeda	0.4%	0.2%	0.3%	0.3%	0.2%	0.1%	0.2%	0.3%	0.1%	0.0%	0.0%	0.1%
Janumet - Merck	4.7%	9.1%	3.6%	5.2%	3.0%	5.6%	3.5%	4.0%	4.6%	3.1%	3.2%	5.3%
Janumet XR - Merck	2.8%	6.7%	3.2%	4.9%	6.3%	5.5%	3.8%	5.2%	3.4%	4.6%	4.9%	2.1%
Kombiglyze XR - AstraZeneca	0.8%	0.4%	0.3%	0.5%	0.3%	0.3%	0.0%	0.4%	0.4%	0.5%	0.1%	0.7%
Total DPP-4INHIB/Biguanide	10.0%	20.0%	7.4%	11.2%	11.9%	12.0%	7.8%	10.4%	9.0%	10.1%	9.0%	8.6%
SGLT-2/DPP-IV Combo												
Glyxambi - Lilly/BI	4.2%	1.9%	1.9%	2.5%	3.9%	2.0%	1.6%	2.4%	2.9%	1.3%	2.6%	1.7%
Glinide/Biguanide comb												
Prandimet - Novo Nordisk	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Biguanide/sulfonylurea comb	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Human Amylin analogs												
Total Human Amylin analogs	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100%	100%	100%

Source: IMS database

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