

Industry Data Request

Purpose: reported data will be used internally to populate patient forecasting models that are used for business planning. Business planning includes stock requirement forecasts, revenue forecasts and developing a general understanding of the market.

NOTES:

Table 1 (a) – (c)

- (1) Some AHOD sites record fixed dose combination (fdc) drugs, such as Truvada, as their individual components (Emtricitabine and Tenofovir).
- (2) Some ARVs are masked with an X in order to reduce the total number of regimens and focus on the core components observed in AHOD.
- (3) Combinations with an X component are further described by whether the X's are from the NRTI class of drugs or Other (NNRTI, Fusion and Entry Inhibitors, Trial drug) or both NRTI and Other.
- (4) Combinations marked with a P indicate a Protease Inhibitor is used in the combination.
- (5) NRTI sparing is defined as a regimen without a NRTI component class drug.

Table 7 & 8

- (1) Patient are assumed to be on Atripla FDC if the individual drug components of Atripla (Truvada + Efavirenz or Tenofovir + Emtricitabine + Efavirenz) are reported for their regimen after 1/1/2010.
- (2) Combination antiretroviral therapy (cART) regimens are defined as 3 or more antiretroviral agents initiated after 1/1/1997 and have duration of usage more than 14 days.
- (3) A patient's regimen is classified by selecting the combination antiretroviral therapy regimen with the longest duration in each calendar year. To reduce the total number of possible cART combinations and to avoid direct head-to-head comparison of individual agents, the following groupings are used.

Group Label	Antiretroviral Therapy Agents
NRTI	abacavir, combivir, didanosine, lamivudine, stavudine, trizivir, zalcitabine, zidovudine, hydroxyurea, emtricitabine, truvada, kivexa, apricitabine, adefovir, tenofovir, enfuvirtide, IL-2
NNRTI_1	efavirenz, etravirine
NNRTI_2	nevirapine, delavirdine
PI_1	atazanavir, darunavir
PI_2	kaletra, saquinavir
PI_3	amprenavir, indinavir, nelfinavir, ritonavir, tipranavir, fosamprenavir, lopinavir
II	raltegravir
OTHER	maraviroc, trial drug

Table 1(a): Most frequent ARV combinations (3+ ARVs) in 2009. 350 unique ART regimens; and a total of 2081 regimens recorded among 1858 patients on combination ART.

Combination ARV	Count	Cumulative Count (%)	Description of X		
			NRTI	Other	NRTI + Other
TRUVADA-EFAV	213	10.2			
TRUVADA-NEV	180	18.9			
TRUVADA-ATAZ-RITON	139	25.6			
KIVEXA-NEV	136	32.1			
KIVEXA-EFAV	81	36.0			
ABC-NEV-X	62	39.0	62		
TRUVADA-KALETRA	62	42.0			
CBV-NEV	52	44.4			
KIVEXA-ATAZ-RITON	50	46.9			
ATAZ-RITON-TENO-F-X	40	48.8	37	2	1
NEV-TENO-F-X	37	50.6			
TRUVADA-RALT	32	52.1			
EFAV-TENO-F-X	30	53.5			
KALETRA-TENO-F-X	29	54.9	27	2	
TRUVADA-RITON	27	56.2			
CBV-EFAV	26	57.5			
RITON-DARUN-RALT-X	26	58.7	6	11	9
ABC-EFAV-X	23	59.8			
KIVEXA-ATAZ	22	60.9			
TRIZ	21	61.9			
KIVEXA-KALETRA	19	62.8			
ABC-ATAZ-RITON-TENO-F	18	63.7			
TRUVADA-RITON-DARUN-RALT-X	17	64.5	2	11	4
ABC-ATAZ-RITON-X	16	65.3			
NEV-X	16	66.0			
TRUVADA-ATAZ	16	66.8			
TRUVADA-RITON-DARUN-RALT	16	67.6			
CBV-KALETRA	12	68.1			
TRUVADA-RITON-DARUN	12	68.7			
ABC-KALETRA-X	11	69.2			
KIVEXA-ATAZ-RITON-TENO-F	11	69.8			
RITON-DARUN-TENO-F-RALT-X	11	70.3	4	4	3
RITON-DARUN-TENO-F-X	11	70.8	9	1	1
NRTI SPARING	26	1.2			N/A

Table 1(b): Most frequent ARV combinations (3+ ARVs) in 2010. 335 unique ART regimens; and a total of 2258 regimens recorded among 1896 patients on combination ART.

Combination ARV	Count	Cumulative Count (%)	Description of X		
			NRTI	Other	NRTI + Other
ATRIP	223	9.9			
TRUVADA-EFAV	184	18.0			
TRUVADA-NEV	176	25.8			
TRUVADA-ATAZ-RITON	154	32.6			
KIVEXA-NEV	118	37.9			
KIVEXA-EFAV	74	41.1			
ABC-NEV-X	60	43.8	60		
TRUVADA-KALETRA	60	46.5			
TRUVADA-RALT	53	48.8			
CBV-NEV	52	51.1			
KIVEXA-ATAZ-RITON	46	53.1			
RITON-DARUN-RALT-X	41	55.0	11	20	10
NEV-TENOF-X	38	56.6			
ATAZ-RITON-TENOF-X	33	58.1	32	1	
EFAV-TENOF-X	32	59.5			
TRUVADA-RITON	27	60.7			
CBV-EFAV	26	61.9			
KALETRA-TENOF-X	25	63.0	23	2	
ABC-EFAV-X	24	64.0			
KIVEXA-ATAZ	23	65.1			
KIVEXA-KALETRA	19	65.9			
TRIZ	19	66.7			
TRUVADA-RITON-DARUN-RALT	19	67.6			
ABC-ATAZ-RITON-TENOF	16	68.3			
TRUVADA-RITON-DARUN-RALT-X	16	69.0	2	12	2
CBV-KALETRA	15	69.7			
TRUVADA-ATAZ	15	70.3			
ABC-ATAZ-RITON-X	14	70.9			
NEV-X	14	71.6			
RITON-DARUN-TENOF-RALT-X	14	72.2	6	3	5
TRUVADA-RALT-X	14	72.8	1	13	
KALETRA-RALT-X	13	73.4	9	2	2
KIVEXA-ATAZ-RITON-TENOF	13	74.0			
TRUVADA-RITON-DARUN	13	74.5			
RITON-DARUN-TENOF-X	12	75.1	9	2	1
ABC-KALETRA-X	11	75.6			
ATAZ-RALT-X	10	76.0	9	1	
ATAZ-RITON-RALT-X	10	76.4	8	2	
NRTI SPARING	40	1.7			N/A

Table 1(c): Most frequent ARV combinations (3+ ARVs) in 2011. 335 unique ART regimens; and a total of 1971 regimens recorded among 1735 patients on combination ART.

Combination ARV	Count	Cumulative Count (%)	Description of X		
			NRTI	Other	NRTI + Other
ATRIP	284	14.4			
TRUVADA-NEV	145	21.8			
TRUVADA-ATAZ-RITON	135	28.6			
KIVEXA-NEV	109	34.1			
TRUVADA-RALT	71	37.7			
TRUVADA-EFAV	63	40.9			
KIVEXA-EFAV	58	43.9			
ABC-NEV-X	53	46.6			
RITON-DARUN-RALT-X	43	48.8	9	22	12
CBV-NEV	42	50.9			
KIVEXA-ATAZ-RITON	40	52.9			
TRUVADA-KALETRA	37	54.8			
NEV-TENOF-X	35	56.6			
TRUVADA-RITON	28	58.0			
ATAZ-RITON-TENOF-X	26	59.3	25	1	
EFAV-TENOF-X	24	60.5			
KIVEXA-ATAZ	22	61.6			
TRUVADA-RITON-DARUN-RALT	20	62.7			
KALETRA-TENOF-X	19	63.6	18	1	
ABC-EFAV-X	17	64.5			
KIVEXA-KALETRA	17	65.3			
TRUVADA-RITON-DARUN	16	66.2			
ABC-ATAZ-RITON-TENOF	15	66.9			
TRUVADA-RALT-X	15	67.7	1	14	
RITON-RALT-X	14	68.4	9	3	2
TRUVADA-RITON-DARUN-RALT-X	14	69.1	1	12	1
CBV-EFAV	12	69.7			
ABC-ATAZ-RITON-X	11	70.3			
ATAZ-RITON-RALT-X	11	70.8	9	2	
CBV-KALETRA	11	71.4			
RITON-DARUN-TENOF-RALT-X	11	71.9	3	5	3
RITON-DARUN-TENOF-X	11	72.5	9	2	
KALETRA-RALT-X	10	73.0	1	8	1
KIVEXA-RALT	10	73.5			
TRIZ	10	74.0			
TRUVADA-ATAZ-RITON-RALT	10	74.5			
NRTI SPARING	45	2.3			N/A

Table 2: The proportion of patients treated at one time with 2 or 3+ of the “3rd” agents: nevirapine, efavirenz, etravirine, indinavir, kaletra, atazanavir, darunavir, raltegravir.

Year	% Treated with 2 “3 rd ” Agents	% Treated with 3 or more “3 rd ” Agents
2007	12.8	0.4
2008	15.6	0.9
2009	17.4	1.2
2010	17.7	1.6
2011	18.6	1.8

Table 3: The proportion of patients treated with more than 1 of the NRTI drugs: combivir, abacavir, kivexa, trizivir, truvada, atripla.

Year	% Treated with more than 1 NRTI
2007	0.69
2008	1.12
2009	1.20
2010	1.33
2011	1.29

Table 4 (a): CD4 cell count distribution of patients in follow-up over the period 2007-2011. Median CD4 cell count per calendar year was categorised into the groupings <200, 200-350, 350-500, >500 cells/ μ L.

CD4 (cells/ μ L)	2007 N (%)	2008 N (%)	2009 N (%)	2010 N (%)	2011 N (%)
<200	91 (5)	80 (4)	89 (5)	91 (4)	82 (4)
200-349	249 (14)	233 (13)	229 (12)	211 (10)	204 (10)
350-499	378 (21)	405 (22)	428 (22)	429 (21)	382 (19)
>500	934 (52)	976 (54)	1057 (54)	1110 (53)	1203 (60)
Missing	149 (8)	130 (7)	144 (7)	239 (11)	123 (6)
Total	1801	1824	1947	2080	1994

Table 4 (b): On or Off treatment* by CD4 cell count strata for patients in follow-up over the period 2007-2011.

CD4 (cells/ μ L)	2007 On/Off	2008 On/Off	2009 On/Off	2010 On/Off	2011 On/Off
<200	91/0	80/0	87/2	90/1	81/1
200-349	243/6	228/5	220/9	206/5	192/12
350-499	356/22	378/27	409/19	397/32	352/30
>500	884/50	925/51	1005/52	1050/60	1138/65
Missing	128/21	111/19	128/16	221/18	112/11
Total	1702/99	1722/102	1849/98	1964/116	1875/119

*If a patient was On and Off treatment within the same year, then the treatment status with the larger duration of time was used.

Table 5 (a): CD4 cell count distribution of patients who enrolled in AHOD after 1/1/2005 and were recorded in follow-up over the period 2007-2011. Median CD4 cell count per calendar year was categorised into the groupings <200, 200-350, 350-500, >500 cells/ μ L.

CD4 (cells/ μ L)	2007 N (%)	2008 N (%)	2009 N (%)	2010 N (%)	2011 N (%)
<200	13 (6)	9 (3)	31 (5)	39 (5)	25 (3)
200-349	41 (19)	54 (19)	93 (16)	100 (13)	94 (11)
350-499	52 (24)	81 (28)	156 (27)	201 (25)	199 (23)
>500	101 (46)	129 (44)	262 (46)	400 (51)	481 (56)
Missing	11 (5)	17 (6)	26 (5)	49 (6)	53 (6)
Total	218	290	568	789	852

Table 5 (b): On or Off treatment by CD4 cell count strata for patients who enrolled in AHOD after 1/1/2005 and were recorded in follow-up over the period 2007-2010.

CD4 (cells/ μ L)	2007 On/Off	2008 On/Off	2009 On/Off	2010 On/Off	2011 On/Off
<200	13/0	9/0	30/1	38/1	24/1
200-349	38/3	51/3	87/6	97/3	86/8
350-499	40/12	64/17	140/16	174/27	172/27
>500	79/22	104/25	232/30	354/46	428/53
Missing	7/4	10/7	18/8	39/10	44/9
Total	177/41	238/52	507/61	702/87	754/98

*If a patient was On and Off treatment within the same year, then the treatment status with the larger duration of time was used.

Table 6: The number and proportion of treatment naïve patients with a recent viral load measurement. The latest viral load from all measurement within 1/1/2011 – 31/3/2012 was used to categorise into groups 0-400, 400-10,000, >10,000 copies/ml.

Viral Load (copies/ml)	Recent Visit 2011	
	N	(%)
0-50^	22	15.3
50-400	7	4.9
400-10,000	40	27.8
>10,000	70	48.6
Missing	5	3.5

[^]It is very likely most of these patients are actually on treatment, however due to reporting errors we have not yet received treatment data.

Table 7: The total number of patients that changed regimen from Atripla to another regimen and of those switches, the regimen they switched to. Regimens components have been reclassified as per the definitions present in the table on pg1. Atripla was made available on the PBS from 1/1/2010. Data based on all treatment changes from 1/1/2010-31/3/2012.

Combination	Number of Patients
Total	56
NRTI/NNRTI_2	10
NRTI/PI_1/PI_3	8
NRTI/II	8
NRTI/NNRTI_1	7
NRTI/PI_1/PI_3/II	4
NRTI/NNRTI_1/II	2
NRTI/PI_3	2
NRTI/PI_3/PI_1	2
NRTI/PI_3/PI_1/II	2
Other Combinations	11

Table 8: The total number of patients that changed regimen to Atripla from another regimen and of those switches, the regimen they switched from. Regimens components have been reclassified as per the definitions present in the table on pg1. Data based on all treatment changes from 1/1/2010-31/3/2012.

Combination	Number of Patients
Total	193
NRTI/NNRTI_1	117
NRTI/NNRTI_2	27
NRTI/PI_3	12
NRTI/PI_2	9
NRTI/PI_1/PI_3	8
NRTI/NNRTI_1/PI_1/PI_3	4
NRTI/NNRTI_1/PI_2	3
NRTI	2
NRTI/NNRTI_2/PI_3	2
NRTI/PI_1	2
NRTI/PI_3/PI_2	2
Other Combinations	5