



Forecasting Generic Prices

Forecasting Generic Pharmaceutical Prices

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Method and explanation for non statisticians

Abstract

The purpose of this report is to introduce the development and demonstrate usage of the attached tables. These are designed to allow users to estimate future generic product prices, and to create forecasts prior to patent expiry and generic launch.

Between 2000 and 2006, WaveData spent 60,000 hours cataloguing 6 million pharmaceutical product prices as they were offered to UK chemists and doctors by wholesalers and manufacturers.

When this data had been compiled, 120 examples of generic product introduction were isolated, and the pricing of the brand before patent expiry and the generic after launch were studied in each case.

S+ statistical software was then used to analyse this data, and over the following months the patterns underlying generic decay gradually became clear. Then, using the results of this analysis, a model was developed, and the enclosed tables were condensed from this.

The key factors determining generic prices were the reimbursement price, the number of generic competitors or licence holders and the value of the brand prior to patent expiry.

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Introduction

Both generic and innovator companies have tried to understand the ways in which generic prices change once a patent has expired and a generic product launched.

Generic companies try to estimate how quickly the price might decline, and if their product has a limited profitability window, whilst innovator companies attempt to understand how well any price equalisation tactics might work.

It had long been recognised that prices paid by chemists and doctors for a generic product would decline in the weeks and months after generic launch and patent expiry, but how quickly this would happen could only be guessed at (Fig 1).

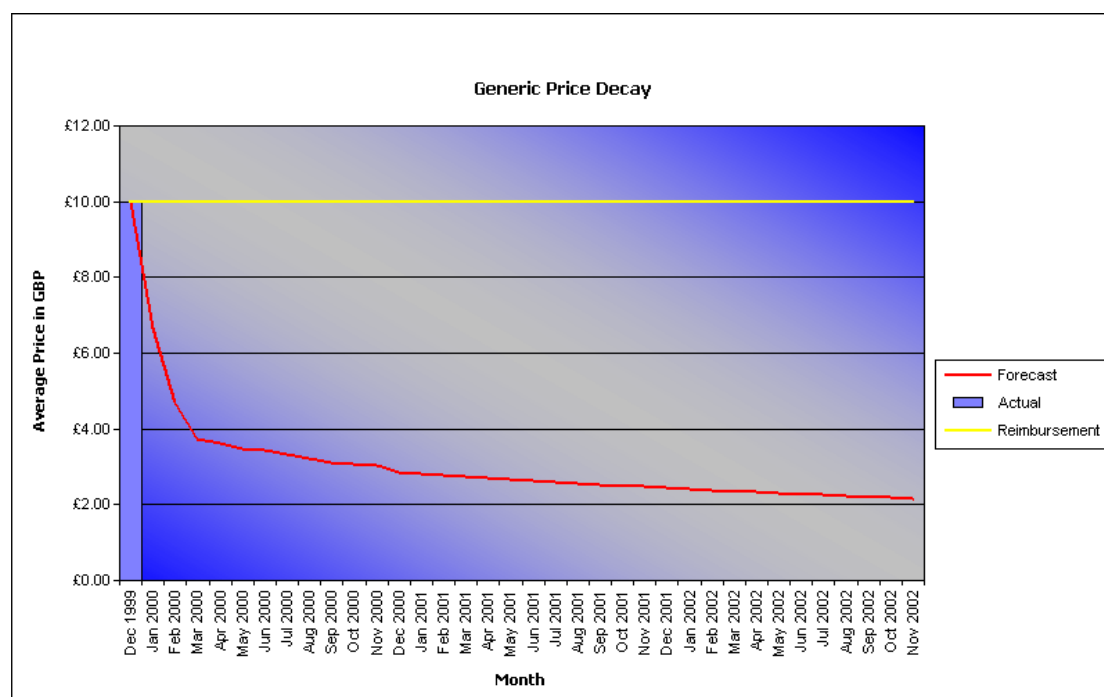


Fig 1

In some cases the decline was extremely rapid, whilst in others the decline took months or years (Fig 2). Some generic companies still use 'rules of thumb', such as 'if there are more than 3 competitors, we won't produce a product because we would expect to lose any profit in a matter of weeks'.

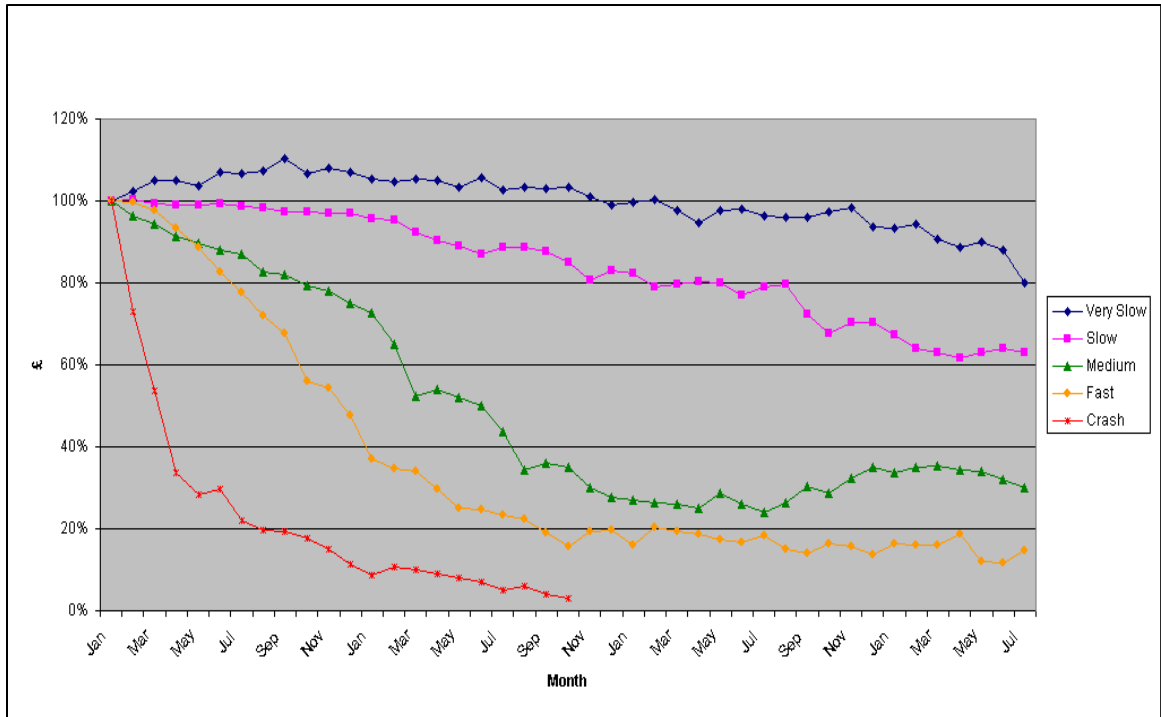


Fig 2

In countries where free market competition between generic manufacturers, licence holders, agents and wholesalers is allowed to take place, the price paid by chemists and doctors will be determined by the negotiation taking place between purchasers and sellers.

In others, where reference pricing is enforced by government, free market competition has much less effect than in countries where the only controls are licensing and reimbursement.

Mechanism

Mechanisms which are used to account for price decline in other industries differ somewhat from the way in which pharmaceuticals behave. For example, in the case of consumer electronics decrease in price is directly linked with increased numbers of purchasers buying the product ¹.

These models rely on increases in order sizes as a new product gains market share ². However, in the case of pharmaceuticals, the situation is somewhat different, as the numbers of patients taking the medicine before and after patent expiry is likely to be similar.

Some writers have discussed 'experience curves' which allow users to follow the cost–volume relationship linking sales and price ³, and others have included the limited life or sell by date of products as a part of this relationship ⁴.

However, one factor which links the pharmaceutical experience with the 'order size model' is the change from a regulated and price controlled market before the patent expires, to a post patent expiry deregulated generic market where price competition is both allowed and encouraged.

Background

The source of the pricing data used as the base material for the production of the tables included in this report were the offer price lists sent, faxed, emailed and telephoned to chemists and doctors in the UK.

This level of pricing visibility is unusual, as in many countries pricing is either tightly controlled by government or is kept hidden for commercial reasons. In the UK example, about half of the end user chemists and all dispensing doctors are able to purchase independently of any group or head office control. However, even those chemists with a centralised head office may still purchase from price lists designed for them alone or for organisations of similar size.

In the UK experience, the purchase decision is made primarily by the chemist or dispensing doctor. Thus they may open accounts with many suppliers so as to obtain the best price, delivery and availability to suit their needs and those of their patients.

Only in the case of buying groups is the product purchase decision taken out of their hands. Here many accounts join together to act as a co-operative to buy in bulk, with individual deliveries being made to separate addresses. The prices achieved for members is publicised to the group by the winning bidders, but accounts do not have to purchase from these suppliers if they do not wish to do so.

This information was entered into databases and includes prices being offered by wholesalers, buying groups and manufacturers for a wide range of pharmaceutical and other medical products.

The prices used in the production of the tables were for patent expired generic pharmaceuticals, with the prices of the branded forms of these products being used to assess the starting price for each product.

Methodology

Modelling

The statistical analysis used in the production of the attached tables (Appendix 1) was begun in June and completed in November 2006. Previous attempts by WaveData to construct a model for generic price decay had shown the need for multiple models, with the choice of model being based on factors specific to each product, pack size and strength.

When the project was begun in June 2006 it was quickly discovered that no clustering or product grouping was necessary. One general non-linear dynamic model worked well for all of the 120 products analysed. The most likely explanation of this was that almost two years had passed since the previous attempt, and during that time two additional years of detailed pricing information had been added to WaveData's databases.

This information was then added to the dataset that was analysed in 2006, making a total of 69 months available for study. Each of the products analysed was launched during this time period, and each had sufficient subsequent historical information to allow statistical analysis.

This meant that products which had been launched less than a year before the study finished were excluded from the study, due to insufficient historical information.

The resultant statistical analysis had sufficient historical foundation to allow for the construction of a model, which was required to forecast both ongoing generic prices and new launch scenarios.

Mathematically it was a dynamic model, with the current average price linked to the average price in previous months and the number of generic manufacturers. However, it was also a non-linear model, with the reimbursement price included as an explanatory variable and, regardless of some specific cases where this remained constant, it was a significant predictor.

A single equation was developed to control the model, with exactly the same coefficients being used for each product. No adjustment was needed for strength, therapeutic category or any other product grouping. The model worked as a good predictor for 99% of the drugs studied.

The issue of new-product forecasting, (meaning that the product is yet to be launched and thus there is no historical pricing data), needed to be thought through in detail before being attempted. It was soon realised that this required the setting of an initial starting price from which the forecast could be begun.

The price selected as being most useful for this purpose was the full or list price of the brand in the month prior to patent expiry. This seemed to work better as a starting

point than either the discounted local (in the UK a discount of about 12% is offered to chemists) price or the price of the parallel import.

Given the close fit of the model for virtually all of the drugs in the UK dataset, it is probable that the same model and tables can be used for forecasting in other markets.

The tables can be used for either step-ahead (month by month) forecasting or for longer term price forecasts.

Reimbursement

The drug tariff or reimbursement price was shown on analysis to reduce the average generic price. The reimbursement price was strongly correlated with the average generic price, and in the tables is assumed to be flat and unchanging.

In the case of the UK, the study period covered both before and after April 2005, the point at which the category M of the drug tariff was introduced to dramatically reduce the reimbursement prices of many products. (A government cost saving measure.)

This meant that approximately 511 of the 1954 products listed for reimbursement in the drug tariff were designated for more rapid price reduction than the remaining 1443.

At launch the reimbursement price is the same as the average product price, ie the full listed price of the brand prior to patent expiry.

Any reduction in the reimbursement price was shown to have an equal effect on the average price. Therefore if the reimbursement price decreased by 10%, the average price also decreased by 10%.

It was also noticed that in the UK this relationship worked in two directions. So that the reimbursement price affected the average product price and vice versa. It was also noted that the change in the average product price actually began a month before the change in the reimbursement price. This must be because the market has warning about the change in the reimbursement price.

Brand value

The value of the brand in the year prior to generic launch has an effect on future price. In other words the larger the value of the brand, the larger the number of generic companies competing for this new market. This means that products with high values are likely to see more generic launches than products with low values.

The brand value and the numbers of generic licence holders is each dealt with separately in the forecast calculations.

Therefore the larger value products suffer faster price reduction than smaller value products and this reduction will be additional to the reduction in value from any other factor.

When performing a forecast, it is the total brand value before generic launch which has to be used. So if doing a forecast for the 10mg 28 pack of a particular product, it is the total value of all branded forms of that product which needs to be summed, ie tablets and capsules, all strengths and all pack sizes.

In order to effectively build this into the forecast, ranges of brand value were used, and each range was designated by a D (decline) factor (Fig 3).

D Factor	Range (£ millions)
0	up to £28 million
0.05	£28 - £36 million
0.1	£36 -£43 million
0.15	£43 -£50 million
0.2	£50 - £55 million
0.25	£55 - £62 million
0.3	£62 -£67 million
0.35	£67 - £73 million
0.4	£73 -£78 million
0.45	£78 - £82 million
0.5	£82 million and above

Fig 3

This then allows the forecast to be reduced from the default (D factor zero) level (Fig 4).

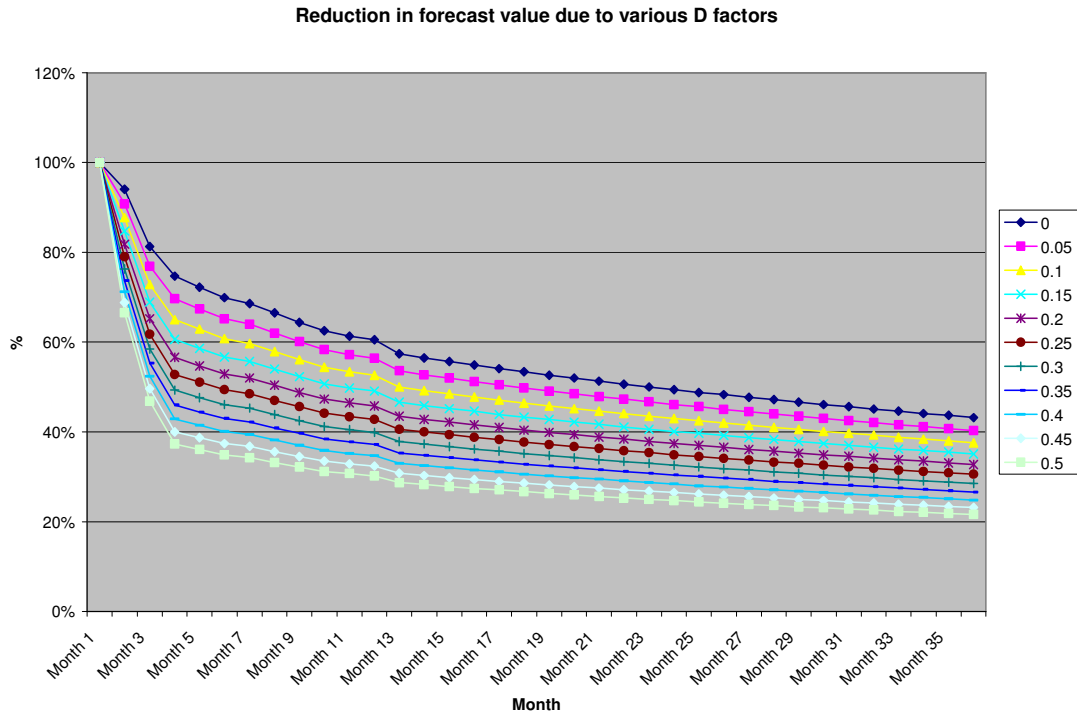


Fig 4

This calculation of the way the D factor effects forecasts was done during the analysis in 2006 and the price reductions due to the D factor are shown in the tables (Appendix 1). Therefore the D factor for any non-UK product will need to be found using currency exchange rates valid at the time (Appendix 2).

Regional factors

Whether the model could be used in markets other than the UK was unknown until it was realised that the value of both the total UK prescription market and the generic part of that market had changed significantly during the study period.

If these factors had been critical to the model's accuracy, and different models were needed for different valued countries or regions, then the model would not have worked as well as it did.

The 120 generic launches were well spaced during the study period, and no one year was over represented. In fact the value of the UK prescription market grew from £5,584 to £8,196 million between 2000 and 2006. The generic part of that market doubled from £1,143 to £2,276 million (Fig 8). (Data from the UK Prescription Pricing Authority [PPA])

	Generics (£ millions)	Total prescribed (£ millions)
1996	500.2	4,007.0
1997	624.1	4,367.5
1998	685.1	4,701.5
1999	917.1	5,291.2
2000	1,143.0	5,584.6
2001	1,035.4	6,116.6
2002	1,297.0	6,846.7
2003	1,694.6	7,510.1
2004	2,021.8	8,079.6
2005	1,978.8	7,936.6
2006	2276.5	8196.8

Fig 5

Factors specific to a county's population would also increase or decrease the value of drugs prescribed. However this and other factors such as health and rates of disease are unlikely to damage the model's effectiveness as the total market value does not appear to be important to accuracy.

However, factors such as government control through mechanisms besides reimbursement may over-ride competitive natural price decay and invalidate the model for that country. In these cases there may be elements of both natural price decay (for which the tables may be used) and government reference pricing (for which they may not).

Step by step guide

In order to perform forecasts please follow the following sequence:

1. Discover the full value of the brand in the year before generic launch
2. If necessary use the currency converter to convert the brand value into UK Pounds £
3. Use Fig 6 to determine your D factor (in Fig 6 D is 0.15)

D Factor	Range (£ millions)
0	up to £28 million
0.05	£28 - £36 million
0.1	£36 -£43 million
0.15	£43 -£50 million
0.2	£50 - £55 million
0.25	£55 - £62 million
0.3	£62 -£67 million
0.35	£67 - £73 million
0.4	£73 -£78 million
0.45	£78 - £82 million
0.5	£82 million and above

Fig 6

4. Discover the full or list price of the brand before generic launch (12.4 in this example, to distinguish it from the reimbursement price, although the two are usually the same.)
5. Discover the current reimbursement price (Fig 7)

	A	B
1	Period	Reimbursement price
2	Month 1	12.34
3	Month 2	12.34

Fig 7

6. Estimate the expected reimbursement price in each of the 36 months after generic launch (Fig 8)

	A	B	C
1	Period	Reimbursement price	
2	Month 1	12.34	
3	Month 2	12.34	
4	Month 3	12.34	
5	Month 4	12.34	
6	Month 5	12.34	
7	Month 6	12.34	
8	Month 7	9.26	
9	Month 8	9.26	
10	Month 9	9.26	
11	Month 10	9.26	
12	Month 11	9.26	
13	Month 12	9.26	
14	Month 13	6.95	
15	Month 14	6.95	
16	Month 15	6.95	
17	Month 16	6.95	
18	Month 17	6.95	
19	Month 18	6.95	
20	Month 19	6.95	
21	Month 20	6.95	
22	Month 21	6.95	
23	Month 22	6.95	
24	Month 23	6.95	
25	Month 24	6.95	
26	Month 25	6.95	
27	Month 26	6.95	
28	Month 27	6.95	
29	Month 28	6.95	
30	Month 29	6.95	
31	Month 30	6.95	
32	Month 31	6.95	
33	Month 32	6.95	
34	Month 33	6.95	
35	Month 34	6.95	
36	Month 35	6.95	
37	Month 36	6.95	
38			

Fig 8

7. Discover the number of licence holders who intend to launch their own generic versions of the brand (Fig 9)

	A	B	C
1	Period	Reimbursement price	Number of expected licence holders
2	Month 1	12.34	2

Fig 9

8. Estimate the number of active generic licence holders in each of the 36 months after generic launch (Fig 10).

	A	B	C	D
1	Period	Reimbursement price	Number of expected licence holders	
2	Month 1	12.34	2	
3	Month 2	12.34	2	
4	Month 3	12.34	2	
5	Month 4	12.34	2	
6	Month 5	12.34	2	
7	Month 6	12.34	2	
8	Month 7	9.26	2	
9	Month 8	9.26	2	
10	Month 9	9.26	2	
11	Month 10	9.26	2	
12	Month 11	9.26	2	
13	Month 12	9.26	2	
14	Month 13	6.95	3	
15	Month 14	6.95	3	
16	Month 15	6.95	3	
17	Month 16	6.95	3	
18	Month 17	6.95	3	
19	Month 18	6.95	3	
20	Month 19	6.95	4	
21	Month 20	6.95	4	
22	Month 21	6.95	4	
23	Month 22	6.95	4	
24	Month 23	6.95	4	
25	Month 24	6.95	4	
26	Month 25	6.95	5	
27	Month 26	6.95	5	
28	Month 27	6.95	5	
29	Month 28	6.95	5	
30	Month 29	6.95	5	
31	Month 30	6.95	5	
32	Month 31	6.95	5	
33	Month 32	6.95	5	
34	Month 33	6.95	5	
35	Month 34	6.95	5	
36	Month 35	6.95	5	
37	Month 36	6.95	5	
∞				

Fig 10

9. Using the number of expected generic licence holders, locate the appropriate table in Appendix 1 (Fig 11)

	A	B	C	D	E	F	G	H	I	J	K	L
1	2 generic licence holders	D Factor										
2	Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5
3	Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4	Month 1	3%	7%	10%	13%	16%	19%	21%	24%	27%	29%	32%
5	Month 2	13%	17%	22%	26%	30%	34%	37%	41%	44%	47%	50%
6	Month 3	20%	25%	30%	35%	39%	43%	47%	51%	54%	57%	60%
7	Month 4	23%	28%	33%	37%	42%	46%	49%	53%	56%	59%	62%
8	Month 5	26%	31%	35%	40%	44%	48%	51%	54%	57%	60%	63%
9	Month 6	27%	32%	37%	41%	45%	49%	52%	55%	58%	61%	64%
10	Month 7	30%	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%

Fig 11

10. If the number of licence holders is expected to change, more than one table in Appendix 1 may be needed (in this example tables for 2, 3, 4 and 5 generic licence holders are needed) (Fig 12)

2 generic licence holders		D Factor										
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	3%	7%	10%	13%	16%	19%	21%	24%	27%	29%	32%	
Month 2	13%	17%	22%	26%	30%	34%	37%	41%	44%	47%	50%	
Month 3	20%	25%	30%	35%	39%	43%	47%	51%	54%	57%	60%	
Month 4	23%	28%	33%	37%	42%	46%	49%	53%	56%	59%	62%	
Month 5	26%	31%	35%	40%	44%	48%	51%	54%	57%	60%	63%	
Month 6	27%	32%	37%	41%	45%	49%	52%	55%	58%	61%	64%	
Month 7	30%	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%	
Month 8	32%	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	
Month 9	34%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	
Month 10	36%	40%	44%	48%	51%	55%	58%	60%	63%	66%	68%	
Month 11	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	
Month 12	40%	44%	48%	51%	55%	58%	60%	63%	66%	68%	70%	
Month 13	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	
A	B	C	D	E	F	G	H	I	J	K	L	M
3 generic licence holders		D Factor										
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 12	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	
Month 13	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 14	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	
Month 15	44%	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 16	45%	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 17	45%	49%	53%	56%	59%	61%	64%	66%	69%	71%	73%	
Month 18	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	
Month 19	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	
A	B	C	D	E	F	G	H	I	J	K	L	M
4 generic licence holders		D Factor										
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 18	47%	50%	54%	57%	60%	62%	65%	67%	69%	72%	73%	
Month 19	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 20	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 21	49%	52%	56%	59%	61%	64%	66%	69%	71%	73%	74%	
Month 22	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 23	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	
Month 24	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 25	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
A	B	C	D	E	F	G	H	I	J	K	L	M
5 generic licence holders		D Factor										
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 24	51%	54%	58%	60%	63%	66%	68%	70%	72%	74%	76%	

Fig 12

11. In each table selected from appendix 1, use the D factor on the top line to find the expected value loss in each month

12. Using this method 36 monthly value reductions will need to be found (Fig

13)

	A	B	C	D	E
1	Period	Reimbursement price	Number of expected licence holders	Reduction per month	
2	Month 1	12.34	2	0%	
3	Month 2	12.34	2	13%	
4	Month 3	12.34	2	26%	
5	Month 4	12.34	2	35%	
6	Month 5	12.34	2	37%	
7	Month 6	12.34	2	40%	
8	Month 7	9.26	2	41%	
9	Month 8	9.26	2	43%	
10	Month 9	9.26	2	45%	
11	Month 10	9.26	2	47%	
12	Month 11	9.26	2	48%	
13	Month 12	9.26	2	49%	
14	Month 13	6.95	3	51%	
15	Month 14	6.95	3	54%	
16	Month 15	6.95	3	54%	
17	Month 16	6.95	3	55%	
18	Month 17	6.95	3	56%	
19	Month 18	6.95	3	56%	
20	Month 19	6.95	4	57%	
21	Month 20	6.95	4	58%	
22	Month 21	6.95	4	59%	
23	Month 22	6.95	4	59%	
24	Month 23	6.95	4	60%	
25	Month 24	6.95	4	60%	
26	Month 25	6.95	5	60%	
27	Month 26	6.95	5	61%	
28	Month 27	6.95	5	61%	
29	Month 28	6.95	5	62%	
30	Month 29	6.95	5	62%	
31	Month 30	6.95	5	63%	
32	Month 31	6.95	5	63%	
33	Month 32	6.95	5	63%	
34	Month 33	6.95	5	64%	
35	Month 34	6.95	5	64%	
36	Month 35	6.95	5	65%	
37	Month 36	6.95	5	65%	
∞					

Fig 13

13. Now use these value reductions to reduce the brand price (Fig 14)

	A	B	C	D	E	F	G	H
1	Period	Reimbursement price	Number of expected licence holders	Reduction per month	Brand price	Calculation	Forecast generic price	
2	Month 1	12.34	2	0%	12.4	= 12.4 - 0%	12.40	
3	Month 2	12.34	2	13%	12.4	= 12.4 - 13%	10.83	
4	Month 3	12.34	2	26%	12.4	= 12.4 - 26%	9.18	
5	Month 4	12.34	2	35%	12.4	= 12.4 - 35%	8.06	
6	Month 5	12.34	2	37%	12.4	= 12.4 - 37%	7.76	
7	Month 6	12.34	2	40%	12.4	= 12.4 - 40%	7.48	
8	Month 7	9.26	2	41%	12.4	= 12.4 - 41%	7.32	
9	Month 8	9.26	2	43%	12.4	= 12.4 - 43%	7.07	
10	Month 9	9.26	2	45%	12.4	= 12.4 - 45%	6.83	
11	Month 10	9.26	2	47%	12.4	= 12.4 - 47%	6.61	
12	Month 11	9.26	2	48%	12.4	= 12.4 - 48%	6.47	
13	Month 12	9.26	2	49%	12.4	= 12.4 - 49%	6.37	
14	Month 13	6.95	3	51%	12.4	= 12.4 - 51%	6.04	
15	Month 14	6.95	3	54%	12.4	= 12.4 - 54%	5.75	
16	Month 15	6.95	3	54%	12.4	= 12.4 - 55%	5.67	
17	Month 16	6.95	3	55%	12.4	= 12.4 - 55%	5.58	
18	Month 17	6.95	3	56%	12.4	= 12.4 - 56%	5.51	
19	Month 18	6.95	3	56%	12.4	= 12.4 - 56%	5.42	
20	Month 19	6.95	4	57%	12.4	= 12.4 - 57%	5.29	
21	Month 20	6.95	4	58%	12.4	= 12.4 - 58%	5.22	
22	Month 21	6.95	4	59%	12.4	= 12.4 - 59%	5.15	
23	Month 22	6.95	4	59%	12.4	= 12.4 - 59%	5.08	
24	Month 23	6.95	4	60%	12.4	= 12.4 - 60%	5.02	
25	Month 24	6.95	4	60%	12.4	= 12.4 - 60%	4.96	
26	Month 25	6.95	5	60%	12.4	= 12.4 - 60%	4.92	
27	Month 26	6.95	5	61%	12.4	= 12.4 - 61%	4.86	
28	Month 27	6.95	5	61%	12.4	= 12.4 - 61%	4.80	
29	Month 28	6.95	5	62%	12.4	= 12.4 - 62%	4.75	
30	Month 29	6.95	5	62%	12.4	= 12.4 - 62%	4.70	
31	Month 30	6.95	5	63%	12.4	= 12.4 - 63%	4.64	
32	Month 31	6.95	5	63%	12.4	= 12.4 - 63%	4.59	
33	Month 32	6.95	5	63%	12.4	= 12.4 - 63%	4.54	
34	Month 33	6.95	5	64%	12.4	= 12.4 - 64%	4.49	
35	Month 34	6.95	5	64%	12.4	= 12.4 - 64%	4.45	
36	Month 35	6.95	5	65%	12.4	= 12.4 - 65%	4.40	
37	Month 36	6.95	5	65%	12.4	= 12.4 - 65%	4.35	

Fig 14

14. Now the reimbursement price needs to be taken into account. Do this by calculating the % of the original reimbursement price in each month (Fig 15)

	A	B	C	D	E	F	G	H
1	Period	Reimbursement price	Number of expected licence holders	Reduction per month	Brand price	Calculation	Forecast generic price	% of original reimbursement price
2	Month 1	12.34	2	0%	12.4	= 12.4 - 0%	12.40	100%
3	Month 2	12.34	2	13%	12.4	= 12.4 - 13%	10.83	100%
4	Month 3	12.34	2	26%	12.4	= 12.4 - 26%	9.18	100%
5	Month 4	12.34	2	35%	12.4	= 12.4 - 35%	8.06	100%
6	Month 5	12.34	2	37%	12.4	= 12.4 - 37%	7.76	100%
7	Month 6	12.34	2	40%	12.4	= 12.4 - 40%	7.48	100%
8	Month 7	9.26	2	41%	12.4	= 12.4 - 41%	7.32	75%
9	Month 8	9.26	2	43%	12.4	= 12.4 - 43%	7.07	75%
10	Month 9	9.26	2	45%	12.4	= 12.4 - 45%	6.83	75%
11	Month 10	9.26	2	47%	12.4	= 12.4 - 47%	6.61	75%
12	Month 11	9.26	2	48%	12.4	= 12.4 - 48%	6.47	75%
13	Month 12	9.26	2	49%	12.4	= 12.4 - 49%	6.37	75%
14	Month 13	6.95	3	51%	12.4	= 12.4 - 51%	6.04	56%
15	Month 14	6.95	3	54%	12.4	= 12.4 - 54%	5.75	56%
16	Month 15	6.95	3	54%	12.4	= 12.4 - 55%	5.67	56%
17	Month 16	6.95	3	55%	12.4	= 12.4 - 55%	5.58	56%
18	Month 17	6.95	3	56%	12.4	= 12.4 - 56%	5.51	56%
19	Month 18	6.95	3	56%	12.4	= 12.4 - 56%	5.42	56%
20	Month 19	6.95	4	57%	12.4	= 12.4 - 57%	5.29	56%
21	Month 20	6.95	4	58%	12.4	= 12.4 - 58%	5.22	56%
22	Month 21	6.95	4	59%	12.4	= 12.4 - 59%	5.15	56%
23	Month 22	6.95	4	59%	12.4	= 12.4 - 59%	5.08	56%
24	Month 23	6.95	4	60%	12.4	= 12.4 - 60%	5.02	56%
25	Month 24	6.95	4	60%	12.4	= 12.4 - 60%	4.96	56%
26	Month 25	6.95	5	60%	12.4	= 12.4 - 60%	4.92	56%
27	Month 26	6.95	5	61%	12.4	= 12.4 - 61%	4.86	56%
28	Month 27	6.95	5	61%	12.4	= 12.4 - 61%	4.80	56%
29	Month 28	6.95	5	62%	12.4	= 12.4 - 62%	4.75	56%
30	Month 29	6.95	5	62%	12.4	= 12.4 - 62%	4.70	56%
31	Month 30	6.95	5	63%	12.4	= 12.4 - 63%	4.64	56%
32	Month 31	6.95	5	63%	12.4	= 12.4 - 63%	4.59	56%
33	Month 32	6.95	5	63%	12.4	= 12.4 - 63%	4.54	56%
34	Month 33	6.95	5	64%	12.4	= 12.4 - 64%	4.49	56%
35	Month 34	6.95	5	64%	12.4	= 12.4 - 64%	4.45	56%
36	Month 35	6.95	5	65%	12.4	= 12.4 - 65%	4.40	56%
37	Month 36	6.95	5	65%	12.4	= 12.4 - 65%	4.35	56%

Fig 15

15. Now multiply the original generic forecast by the % of the original reimbursement price (Fig 16)

A	B	C	D	E	F	G	H	I	
1	Period	Reimbursement price	Number of expected licence holders	Reduction per month	Brand price	Calculation	Forecast generic price	% of original reimbursement price	Final Generic forecast
2	Month 1	12.34	2	0%	12.4	= 12.4 - 0%	12.40	100%	12.40
3	Month 2	12.34	2	13%	12.4	= 12.4 - 13%	10.83	100%	10.83
4	Month 3	12.34	2	26%	12.4	= 12.4 - 26%	9.18	100%	9.18
5	Month 4	12.34	2	35%	12.4	= 12.4 - 35%	8.06	100%	8.06
6	Month 5	12.34	2	37%	12.4	= 12.4 - 37%	7.76	100%	7.76
7	Month 6	12.34	2	40%	12.4	= 12.4 - 40%	7.48	100%	7.48
8	Month 7	9.26	2	41%	12.4	= 12.4 - 41%	7.32	75%	5.49
9	Month 8	9.26	2	43%	12.4	= 12.4 - 43%	7.07	75%	5.30
10	Month 9	9.26	2	45%	12.4	= 12.4 - 45%	6.83	75%	5.13
11	Month 10	9.26	2	47%	12.4	= 12.4 - 47%	6.61	75%	4.96
12	Month 11	9.26	2	48%	12.4	= 12.4 - 48%	6.47	75%	4.86
13	Month 12	9.26	2	49%	12.4	= 12.4 - 49%	6.37	75%	4.78
14	Month 13	6.95	3	51%	12.4	= 12.4 - 51%	6.04	56%	3.40
15	Month 14	6.95	3	54%	12.4	= 12.4 - 54%	5.75	56%	3.24
16	Month 15	6.95	3	54%	12.4	= 12.4 - 55%	5.67	56%	3.19
17	Month 16	6.95	3	55%	12.4	= 12.4 - 55%	5.58	56%	3.14
18	Month 17	6.95	3	56%	12.4	= 12.4 - 56%	5.51	56%	3.10
19	Month 18	6.95	3	56%	12.4	= 12.4 - 56%	5.42	56%	3.05
20	Month 19	6.95	4	57%	12.4	= 12.4 - 57%	5.29	56%	2.98
21	Month 20	6.95	4	58%	12.4	= 12.4 - 58%	5.22	56%	2.94
22	Month 21	6.95	4	59%	12.4	= 12.4 - 59%	5.15	56%	2.90
23	Month 22	6.95	4	59%	12.4	= 12.4 - 59%	5.08	56%	2.86
24	Month 23	6.95	4	60%	12.4	= 12.4 - 60%	5.02	56%	2.83
25	Month 24	6.95	4	60%	12.4	= 12.4 - 60%	4.96	56%	2.79
26	Month 25	6.95	5	60%	12.4	= 12.4 - 60%	4.92	56%	2.77
27	Month 26	6.95	5	61%	12.4	= 12.4 - 61%	4.86	56%	2.74
28	Month 27	6.95	5	61%	12.4	= 12.4 - 61%	4.80	56%	2.70
29	Month 28	6.95	5	62%	12.4	= 12.4 - 62%	4.75	56%	2.67
30	Month 29	6.95	5	62%	12.4	= 12.4 - 62%	4.70	56%	2.65
31	Month 30	6.95	5	63%	12.4	= 12.4 - 63%	4.64	56%	2.61
32	Month 31	6.95	5	63%	12.4	= 12.4 - 63%	4.59	56%	2.58
33	Month 32	6.95	5	63%	12.4	= 12.4 - 63%	4.54	56%	2.56
34	Month 33	6.95	5	64%	12.4	= 12.4 - 64%	4.49	56%	2.53
35	Month 34	6.95	5	64%	12.4	= 12.4 - 64%	4.45	56%	2.51
36	Month 35	6.95	5	65%	12.4	= 12.4 - 65%	4.40	56%	2.48
37	Month 36	6.95	5	65%	12.4	= 12.4 - 65%	4.35	56%	2.45

Fig 16

16. Finally graphs of the expected price for the pack size and strength can be produced (Fig 17)

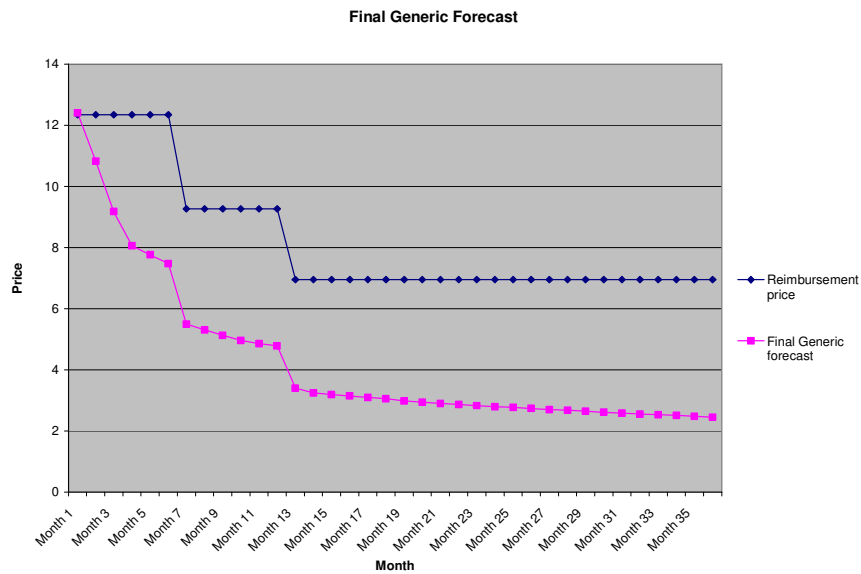


Fig 17

Conclusion

Between 2000 and 2006, 6 million generic product prices were collected and entered into databases, allowing the detailed analysis of 120 UK generic product introductions.

The mechanics of generic price decay were then studied in detail, in the light of previously developed 'order size' and 'experience' models.

120 generic product introductions were studied over a 69 month time frame and a non-linear dynamic model was constructed which needed no adjustment for strength or therapeutic category. The model worked as a good predictor for 99% of the drugs studied.

The reimbursement price was then factored in and shown to reduce the average price. The value of the brand was then used to determine the D factor which also reduced the price forecast.

The model is believed to work in other countries

As the UK market changed size between 2000 and 2006, without effecting the accuracy of the model, it is expected to work as well elsewhere as it did in the UK, provided that the price is not artificially controlled by methods other than reimbursement (for example reference pricing).

It is therefore possible to forecast future generic prices both before and after launch. Following the step by step guide will allow users to build spreadsheets and forecast product prices as required.

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Appendix 1

1 generic licence holder	D Factor										
Month after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Month 1	0%	4%	7%	10%	13%	16%	19%	22%	24%	27%	29%
Month 2	10%	15%	20%	24%	28%	32%	35%	39%	42%	45%	48%
Month 3	18%	23%	28%	33%	38%	42%	46%	49%	53%	56%	59%
Month 4	21%	26%	31%	36%	40%	44%	48%	51%	55%	58%	61%
Month 5	24%	29%	34%	38%	42%	46%	50%	53%	56%	59%	62%
Month 6	26%	31%	35%	40%	44%	48%	51%	54%	57%	60%	63%
Month 7	28%	33%	38%	42%	46%	49%	53%	56%	59%	62%	64%
Month 8	31%	35%	40%	44%	48%	51%	54%	57%	60%	63%	65%
Month 9	33%	38%	42%	46%	49%	53%	56%	59%	62%	64%	67%
Month 10	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%
Month 11	36%	40%	44%	48%	51%	55%	58%	60%	63%	66%	68%
Month 12	39%	43%	47%	51%	54%	57%	60%	63%	65%	67%	70%
Month 13	40%	44%	48%	51%	55%	58%	61%	63%	66%	68%	70%
Month 14	41%	45%	49%	52%	55%	58%	61%	64%	66%	69%	71%
Month 15	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%
Month 16	43%	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%
Month 17	44%	48%	51%	55%	58%	60%	63%	66%	68%	70%	72%
Month 18	45%	49%	52%	55%	58%	61%	64%	66%	68%	70%	72%
Month 19	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%
Month 20	46%	50%	53%	57%	59%	62%	65%	67%	69%	71%	73%
Month 21	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%
Month 22	48%	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%
Month 23	49%	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%
Month 24	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%
Month 25	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%
Month 26	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%
Month 27	51%	54%	58%	60%	63%	66%	68%	70%	72%	74%	76%
Month 28	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%
Month 29	52%	56%	59%	61%	64%	66%	69%	71%	73%	74%	76%
Month 30	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%
Month 31	53%	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%
Month 32	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%
Month 33	55%	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%
Month 34	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%
Month 35	56%	59%	61%	64%	66%	69%	71%	73%	74%	76%	78%

2 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	3%	7%	10%	13%	16%	19%	21%	24%	27%	29%	32%	
Month 2	13%	17%	22%	26%	30%	34%	37%	41%	44%	47%	50%	
Month 3	20%	25%	30%	35%	39%	43%	47%	51%	54%	57%	60%	
Month 4	23%	28%	33%	37%	42%	46%	49%	53%	56%	59%	62%	
Month 5	26%	31%	35%	40%	44%	48%	51%	54%	57%	60%	63%	
Month 6	27%	32%	37%	41%	45%	49%	52%	55%	58%	61%	64%	
Month 7	30%	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%	
Month 8	32%	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	
Month 9	34%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	
Month 10	36%	40%	44%	48%	51%	55%	58%	60%	63%	66%	68%	
Month 11	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	
Month 12	40%	44%	48%	51%	55%	58%	60%	63%	66%	68%	70%	
Month 13	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	
Month 14	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 15	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	72%	
Month 16	44%	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 17	45%	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	
Month 18	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 19	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	
Month 20	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	
Month 21	48%	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	
Month 22	49%	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	
Month 23	49%	53%	56%	59%	61%	64%	66%	69%	71%	73%	75%	
Month 24	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 25	50%	54%	57%	60%	62%	65%	67%	70%	72%	73%	75%	
Month 26	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	
Month 27	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 28	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	
Month 29	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 30	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 31	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	
Month 32	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 33	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 34	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	78%	
Month 35	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	

3 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	5%	8%	11%	14%	17%	20%	23%	26%	28%	31%	33%	
Month 2	15%	20%	24%	28%	32%	35%	39%	42%	45%	48%	51%	
Month 3	22%	27%	32%	37%	41%	45%	49%	52%	55%	58%	61%	
Month 4	25%	30%	35%	39%	43%	47%	50%	54%	57%	60%	62%	
Month 5	27%	32%	37%	41%	45%	49%	52%	55%	58%	61%	64%	
Month 6	29%	34%	38%	42%	46%	50%	53%	56%	59%	62%	64%	
Month 7	31%	36%	40%	44%	48%	51%	55%	58%	60%	63%	66%	
Month 8	33%	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	
Month 9	36%	40%	44%	48%	51%	54%	58%	60%	63%	65%	68%	
Month 10	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	
Month 11	38%	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	
Month 12	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	
Month 13	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 14	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	
Month 15	44%	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 16	45%	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 17	45%	49%	53%	56%	59%	61%	64%	66%	69%	71%	73%	
Month 18	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	
Month 19	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	
Month 20	48%	51%	54%	58%	60%	63%	65%	68%	70%	72%	74%	
Month 21	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	
Month 22	49%	52%	56%	59%	61%	64%	66%	69%	71%	73%	75%	
Month 23	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 24	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	
Month 25	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 26	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 27	52%	55%	58%	61%	64%	66%	68%	71%	72%	74%	76%	
Month 28	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 29	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 30	54%	57%	60%	62%	65%	67%	69%	72%	73%	75%	77%	
Month 31	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 32	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 33	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 34	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 35	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	

4 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	6%	9%	12%	15%	18%	21%	24%	26%	29%	31%	34%	
Month 2	17%	21%	26%	30%	33%	37%	40%	44%	47%	49%	52%	
Month 3	24%	29%	34%	38%	42%	46%	50%	53%	56%	59%	62%	
Month 4	26%	31%	36%	40%	44%	48%	51%	55%	58%	61%	63%	
Month 5	29%	34%	38%	42%	46%	50%	53%	56%	59%	62%	64%	
Month 6	30%	35%	39%	43%	47%	51%	54%	57%	60%	63%	65%	
Month 7	32%	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	
Month 8	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	
Month 9	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	
Month 10	38%	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	
Month 11	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	
Month 12	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 13	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	
Month 14	44%	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 15	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 16	45%	49%	52%	56%	59%	61%	64%	66%	69%	71%	73%	
Month 17	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 18	47%	50%	54%	57%	60%	62%	65%	67%	69%	72%	73%	
Month 19	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 20	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 21	49%	52%	56%	59%	61%	64%	66%	69%	71%	73%	74%	
Month 22	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 23	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	
Month 24	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 25	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 26	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	
Month 27	52%	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	
Month 28	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	
Month 29	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 30	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	
Month 31	55%	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 32	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 33	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 34	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 35	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	

5 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	6%	9%	12%	15%	18%	21%	24%	26%	29%	31%	34%	
Month 2	19%	23%	27%	31%	35%	38%	42%	45%	48%	50%	53%	
Month 3	25%	30%	35%	39%	43%	47%	51%	54%	57%	60%	63%	
Month 4	28%	33%	37%	41%	45%	49%	52%	56%	59%	61%	64%	
Month 5	30%	35%	39%	43%	47%	51%	54%	57%	60%	63%	65%	
Month 6	31%	36%	40%	44%	48%	52%	55%	58%	61%	63%	66%	
Month 7	34%	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	
Month 8	36%	40%	44%	48%	51%	54%	58%	60%	63%	66%	68%	
Month 9	38%	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	
Month 10	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	
Month 11	40%	44%	47%	51%	54%	57%	60%	63%	65%	68%	70%	
Month 12	43%	46%	50%	53%	57%	59%	62%	65%	67%	69%	71%	
Month 13	44%	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 14	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 15	45%	49%	52%	55%	58%	61%	64%	66%	69%	71%	73%	
Month 16	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 17	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	
Month 18	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 19	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 20	49%	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%	
Month 21	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 22	50%	53%	57%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 23	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	
Month 24	51%	54%	58%	60%	63%	66%	68%	70%	72%	74%	76%	
Month 25	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 26	52%	56%	59%	61%	64%	66%	69%	71%	73%	74%	76%	
Month 27	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 28	53%	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 29	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	
Month 30	54%	58%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 31	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 32	55%	58%	61%	64%	66%	69%	71%	73%	74%	76%	78%	
Month 33	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 34	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 35	57%	60%	62%	65%	67%	69%	72%	73%	75%	77%	78%	

6 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	6%	9%	12%	15%	18%	21%	23%	26%	29%	31%	33%	
Month 2	20%	25%	29%	32%	36%	40%	43%	46%	49%	51%	54%	
Month 3	27%	32%	36%	41%	45%	48%	52%	55%	58%	61%	63%	
Month 4	29%	34%	38%	42%	46%	50%	53%	56%	59%	62%	65%	
Month 5	31%	36%	40%	44%	48%	52%	55%	58%	61%	63%	66%	
Month 6	33%	37%	41%	45%	49%	52%	56%	59%	61%	64%	66%	
Month 7	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	
Month 8	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	
Month 9	39%	43%	46%	50%	53%	57%	59%	62%	65%	67%	69%	
Month 10	40%	44%	47%	51%	54%	57%	60%	63%	65%	68%	70%	
Month 11	40%	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	
Month 12	43%	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 13	44%	48%	51%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 14	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	73%	
Month 15	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 16	47%	50%	53%	57%	60%	62%	65%	67%	69%	71%	73%	
Month 17	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 18	48%	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 19	49%	52%	55%	58%	61%	64%	66%	68%	71%	72%	74%	
Month 20	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 21	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 22	50%	54%	57%	60%	62%	65%	67%	70%	72%	73%	75%	
Month 23	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	
Month 24	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 25	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	
Month 26	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 27	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 28	54%	57%	60%	62%	65%	67%	70%	72%	73%	75%	77%	
Month 29	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 30	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 31	55%	58%	61%	64%	66%	68%	71%	72%	74%	76%	78%	
Month 32	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 33	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	
Month 34	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 35	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	

7 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	5%	8%	11%	14%	17%	20%	23%	26%	28%	31%	33%	
Month 2	22%	26%	30%	34%	37%	41%	44%	47%	50%	52%	55%	
Month 3	28%	33%	37%	42%	46%	49%	53%	56%	59%	62%	64%	
Month 4	30%	35%	39%	43%	47%	51%	54%	57%	60%	63%	65%	
Month 5	33%	37%	41%	45%	49%	52%	56%	59%	61%	64%	66%	
Month 6	34%	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	
Month 7	36%	40%	44%	48%	51%	54%	58%	60%	63%	66%	68%	
Month 8	38%	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	
Month 9	39%	43%	47%	51%	54%	57%	60%	63%	65%	68%	70%	
Month 10	40%	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	
Month 11	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	
Month 12	44%	48%	51%	55%	58%	60%	63%	66%	68%	70%	72%	
Month 13	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	72%	
Month 14	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 15	46%	50%	53%	57%	59%	62%	65%	67%	69%	71%	73%	
Month 16	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	
Month 17	48%	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	
Month 18	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	
Month 19	49%	53%	56%	59%	61%	64%	66%	69%	71%	73%	75%	
Month 20	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 21	50%	54%	57%	60%	62%	65%	67%	69%	72%	73%	75%	
Month 22	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 23	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 24	52%	55%	58%	61%	64%	66%	68%	71%	72%	74%	76%	
Month 25	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 26	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	
Month 27	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 28	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	
Month 29	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 30	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 31	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 32	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 33	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 34	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	79%	
Month 35	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	79%	

8 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	4%	8%	11%	14%	17%	20%	22%	25%	28%	30%	32%	
Month 2	23%	27%	31%	35%	38%	42%	45%	48%	51%	53%	56%	
Month 3	29%	34%	39%	43%	47%	50%	53%	57%	59%	62%	65%	
Month 4	32%	36%	40%	44%	48%	52%	55%	58%	61%	63%	66%	
Month 5	34%	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	
Month 6	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	
Month 7	37%	41%	45%	48%	52%	55%	58%	61%	64%	66%	68%	
Month 8	38%	43%	46%	50%	53%	56%	59%	62%	65%	67%	69%	
Month 9	40%	44%	48%	51%	55%	58%	61%	63%	66%	68%	70%	
Month 10	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	
Month 11	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 12	45%	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	
Month 13	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 14	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	
Month 15	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	
Month 16	48%	51%	54%	58%	60%	63%	66%	68%	70%	72%	74%	
Month 17	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	
Month 18	49%	52%	56%	59%	61%	64%	66%	69%	71%	73%	75%	
Month 19	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 20	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	
Month 21	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 22	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 23	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	
Month 24	52%	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	
Month 25	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	
Month 26	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 27	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	
Month 28	55%	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 29	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	78%	
Month 30	55%	58%	61%	64%	66%	69%	71%	73%	74%	76%	78%	
Month 31	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 32	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 33	57%	60%	62%	65%	67%	69%	72%	73%	75%	77%	78%	
Month 34	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	
Month 35	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	

9 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	4%	7%	10%	14%	16%	19%	22%	25%	27%	30%	32%	
Month 2	24%	28%	32%	36%	39%	43%	46%	49%	51%	54%	56%	
Month 3	31%	35%	40%	44%	47%	51%	54%	57%	60%	63%	65%	
Month 4	33%	37%	41%	45%	49%	52%	56%	59%	61%	64%	66%	
Month 5	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	
Month 6	36%	40%	44%	48%	51%	54%	57%	60%	63%	65%	68%	
Month 7	37%	42%	45%	49%	53%	56%	59%	61%	64%	66%	69%	
Month 8	39%	43%	47%	51%	54%	57%	60%	63%	65%	67%	70%	
Month 9	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	70%	
Month 10	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 11	43%	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	
Month 12	45%	49%	53%	56%	59%	61%	64%	66%	69%	71%	73%	
Month 13	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	
Month 14	47%	50%	54%	57%	60%	62%	65%	67%	70%	72%	73%	
Month 15	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 16	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 17	49%	52%	56%	58%	61%	64%	66%	69%	71%	73%	74%	
Month 18	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 19	50%	53%	57%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 20	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	
Month 21	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	76%	
Month 22	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 23	52%	56%	59%	61%	64%	66%	69%	71%	73%	74%	76%	
Month 24	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 25	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 26	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	
Month 27	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 28	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 29	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	78%	
Month 30	56%	59%	62%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 31	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	
Month 32	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 33	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	
Month 34	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 35	58%	61%	63%	66%	68%	70%	72%	74%	76%	78%	79%	

10 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	4%	7%	11%	14%	17%	19%	22%	25%	27%	30%	32%	
Month 2	26%	30%	33%	37%	40%	43%	46%	49%	52%	55%	57%	
Month 3	32%	36%	40%	44%	48%	52%	55%	58%	61%	63%	66%	
Month 4	34%	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	
Month 5	36%	40%	44%	48%	51%	54%	57%	60%	63%	65%	68%	
Month 6	36%	41%	45%	48%	52%	55%	58%	61%	63%	66%	68%	
Month 7	38%	42%	46%	50%	53%	56%	59%	62%	65%	67%	69%	
Month 8	40%	44%	48%	51%	55%	58%	60%	63%	66%	68%	70%	
Month 9	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 10	43%	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	
Month 11	43%	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	
Month 12	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 13	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	
Month 14	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 15	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 16	49%	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%	
Month 17	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 18	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 19	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	
Month 20	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	
Month 21	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 22	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	
Month 23	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 24	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 25	54%	57%	60%	62%	65%	67%	69%	72%	73%	75%	77%	
Month 26	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	
Month 27	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 28	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 29	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 30	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 31	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 32	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	79%	
Month 33	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	79%	
Month 34	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 35	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	79%	

11 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	5%	8%	11%	14%	17%	20%	23%	25%	28%	30%	33%	
Month 2	27%	31%	34%	38%	41%	44%	47%	50%	53%	55%	58%	
Month 3	33%	37%	41%	45%	49%	52%	56%	59%	61%	64%	66%	
Month 4	35%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	
Month 5	36%	41%	45%	48%	52%	55%	58%	61%	63%	66%	68%	
Month 6	37%	41%	45%	49%	52%	56%	59%	61%	64%	66%	69%	
Month 7	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	
Month 8	41%	45%	48%	52%	55%	58%	61%	63%	66%	68%	70%	
Month 9	42%	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	
Month 10	43%	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	
Month 11	44%	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 12	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	
Month 13	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 14	48%	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 15	49%	52%	55%	58%	61%	64%	66%	68%	71%	72%	74%	
Month 16	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 17	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 18	50%	54%	57%	60%	62%	65%	67%	69%	72%	73%	75%	
Month 19	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	
Month 20	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 21	52%	55%	58%	61%	64%	66%	68%	71%	72%	74%	76%	
Month 22	53%	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	
Month 23	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	
Month 24	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 25	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	
Month 26	55%	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 27	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	78%	
Month 28	55%	58%	61%	64%	66%	69%	71%	73%	74%	76%	78%	
Month 29	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 30	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 31	57%	60%	62%	65%	67%	69%	72%	73%	75%	77%	78%	
Month 32	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	
Month 33	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 34	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	79%	
Month 35	58%	61%	64%	66%	69%	71%	73%	74%	76%	78%	79%	

12 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	7%	10%	13%	16%	19%	22%	24%	27%	29%	32%	34%	
Month 2	28%	31%	35%	39%	42%	45%	48%	51%	53%	56%	58%	
Month 3	34%	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	
Month 4	35%	40%	44%	48%	51%	54%	57%	60%	63%	65%	68%	
Month 5	37%	41%	45%	49%	52%	56%	59%	61%	64%	66%	69%	
Month 6	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	
Month 7	40%	44%	47%	51%	54%	57%	60%	63%	65%	68%	70%	
Month 8	41%	45%	49%	52%	56%	59%	61%	64%	66%	69%	71%	
Month 9	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	72%	
Month 10	44%	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 11	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 12	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 13	48%	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	
Month 14	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	
Month 15	49%	53%	56%	59%	61%	64%	66%	69%	71%	73%	75%	
Month 16	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 17	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	
Month 18	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 19	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 20	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	
Month 21	52%	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	
Month 22	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	
Month 23	53%	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 24	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	
Month 25	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 26	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 27	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	78%	
Month 28	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 29	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	
Month 30	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 31	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	79%	
Month 32	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 33	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 34	58%	61%	64%	66%	68%	71%	73%	74%	76%	78%	79%	
Month 35	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	79%	

13 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	10%	13%	16%	19%	21%	24%	27%	29%	32%	34%	36%	
Month 2	29%	32%	36%	39%	43%	46%	49%	51%	54%	56%	59%	
Month 3	34%	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	
Month 4	36%	40%	44%	48%	52%	55%	58%	61%	63%	66%	68%	
Month 5	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	
Month 6	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	
Month 7	40%	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	
Month 8	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 9	44%	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 10	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 11	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	73%	
Month 12	48%	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	
Month 13	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	
Month 14	49%	52%	56%	59%	61%	64%	66%	69%	71%	73%	75%	
Month 15	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 16	50%	53%	57%	60%	62%	65%	67%	69%	71%	73%	75%	
Month 17	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	
Month 18	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	76%	
Month 19	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 20	52%	56%	58%	61%	64%	66%	69%	71%	73%	74%	76%	
Month 21	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 22	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 23	54%	57%	60%	62%	65%	67%	70%	72%	73%	75%	77%	
Month 24	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 25	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 26	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 27	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 28	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 29	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 30	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	78%	
Month 31	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	79%	
Month 32	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 33	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	79%	
Month 34	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	79%	
Month 35	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	80%	

14 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	14%	17%	20%	23%	25%	28%	30%	33%	35%	37%	39%	
Month 2	29%	33%	37%	40%	43%	46%	49%	52%	55%	57%	59%	
Month 3	35%	40%	44%	47%	51%	54%	57%	60%	63%	65%	68%	
Month 4	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	
Month 5	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	
Month 6	39%	43%	47%	51%	54%	57%	60%	63%	65%	68%	70%	
Month 7	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	
Month 8	43%	46%	50%	53%	57%	59%	62%	65%	67%	69%	71%	
Month 9	44%	48%	51%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 10	45%	49%	52%	55%	58%	61%	64%	66%	68%	71%	73%	
Month 11	45%	49%	53%	56%	59%	61%	64%	66%	69%	71%	73%	
Month 12	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 13	49%	52%	55%	58%	61%	64%	66%	69%	71%	73%	74%	
Month 14	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 15	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 16	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	
Month 17	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	
Month 18	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 19	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	
Month 20	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 21	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 22	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 23	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	
Month 24	55%	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 25	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	78%	
Month 26	55%	58%	61%	64%	66%	69%	71%	73%	74%	76%	78%	
Month 27	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 28	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 29	57%	60%	62%	65%	67%	69%	72%	73%	75%	77%	78%	
Month 30	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	
Month 31	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 32	58%	61%	63%	66%	68%	70%	72%	74%	76%	78%	79%	
Month 33	58%	61%	64%	66%	69%	71%	73%	74%	76%	78%	79%	
Month 34	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	79%	
Month 35	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	80%	

15 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	20%	23%	26%	28%	31%	33%	35%	38%	40%	42%	44%	
Month 2	30%	34%	37%	41%	44%	47%	50%	52%	55%	57%	60%	
Month 3	36%	40%	44%	48%	51%	55%	58%	61%	63%	66%	68%	
Month 4	38%	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	
Month 5	39%	43%	47%	51%	54%	57%	60%	63%	65%	68%	70%	
Month 6	40%	44%	48%	51%	55%	58%	60%	63%	66%	68%	70%	
Month 7	42%	46%	49%	53%	56%	59%	61%	64%	66%	69%	71%	
Month 8	43%	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	
Month 9	45%	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	
Month 10	45%	49%	53%	56%	59%	61%	64%	66%	69%	71%	73%	
Month 11	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 12	49%	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%	
Month 13	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 14	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 15	50%	54%	57%	60%	62%	65%	67%	70%	72%	73%	75%	
Month 16	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	
Month 17	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 18	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	
Month 19	53%	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	
Month 20	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	
Month 21	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 22	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	
Month 23	54%	58%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 24	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 25	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	78%	
Month 26	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 27	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	
Month 28	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 29	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	79%	
Month 30	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	79%	
Month 31	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 32	58%	61%	64%	66%	68%	71%	72%	74%	76%	78%	79%	
Month 33	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	79%	
Month 34	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 35	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	80%	

16 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	21%	24%	27%	29%	32%	34%	36%	39%	41%	43%	45%	
Month 2	31%	35%	38%	41%	45%	48%	50%	53%	56%	58%	60%	
Month 3	37%	41%	45%	49%	52%	55%	58%	61%	64%	66%	68%	
Month 4	38%	42%	46%	50%	53%	56%	59%	62%	65%	67%	69%	
Month 5	40%	44%	48%	51%	55%	58%	60%	63%	66%	68%	70%	
Month 6	41%	45%	48%	52%	55%	58%	61%	63%	66%	68%	70%	
Month 7	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 8	44%	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 9	45%	49%	52%	56%	59%	61%	64%	66%	69%	71%	73%	
Month 10	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 11	46%	50%	53%	57%	59%	62%	65%	67%	69%	71%	73%	
Month 12	49%	53%	56%	59%	62%	64%	66%	69%	71%	73%	75%	
Month 13	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 14	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	
Month 15	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 16	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 17	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	
Month 18	52%	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	
Month 19	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 20	53%	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 21	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	
Month 22	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 23	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 24	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 25	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 26	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 27	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 28	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	78%	
Month 29	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	79%	
Month 30	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 31	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	79%	
Month 32	59%	61%	64%	66%	69%	71%	73%	74%	76%	78%	79%	
Month 33	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	79%	
Month 34	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 35	60%	62%	65%	67%	69%	72%	73%	75%	77%	78%	80%	

17 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	22%	25%	28%	30%	33%	35%	37%	40%	42%	44%	46%	
Month 2	32%	35%	39%	42%	45%	48%	51%	53%	56%	58%	61%	
Month 3	37%	42%	45%	49%	53%	56%	59%	61%	64%	66%	69%	
Month 4	39%	43%	47%	50%	54%	57%	60%	62%	65%	67%	70%	
Month 5	41%	45%	48%	52%	55%	58%	61%	63%	66%	68%	70%	
Month 6	41%	45%	49%	52%	55%	58%	61%	64%	66%	69%	71%	
Month 7	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	
Month 8	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 9	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 10	46%	50%	53%	57%	59%	62%	65%	67%	69%	71%	73%	
Month 11	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	
Month 12	50%	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	
Month 13	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	
Month 14	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 15	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	76%	
Month 16	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 17	52%	55%	58%	61%	64%	66%	69%	71%	73%	74%	76%	
Month 18	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 19	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 20	54%	57%	60%	62%	65%	67%	69%	72%	73%	75%	77%	
Month 21	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	
Month 22	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 23	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 24	56%	58%	61%	64%	66%	69%	71%	73%	74%	76%	78%	
Month 25	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 26	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 27	57%	60%	62%	65%	67%	69%	72%	73%	75%	77%	78%	
Month 28	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	
Month 29	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 30	58%	61%	63%	66%	68%	70%	72%	74%	76%	78%	79%	
Month 31	58%	61%	64%	66%	68%	71%	73%	74%	76%	78%	79%	
Month 32	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	79%	
Month 33	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 34	60%	62%	65%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 35	60%	63%	65%	67%	70%	72%	74%	75%	77%	79%	80%	

18 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	23%	26%	29%	31%	34%	36%	38%	41%	43%	45%	47%	
Month 2	32%	36%	39%	43%	46%	49%	51%	54%	56%	59%	61%	
Month 3	38%	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	
Month 4	40%	44%	47%	51%	54%	57%	60%	63%	65%	68%	70%	
Month 5	41%	45%	49%	52%	55%	58%	61%	64%	66%	69%	71%	
Month 6	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 7	43%	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	
Month 8	45%	48%	52%	55%	58%	61%	64%	66%	68%	70%	72%	
Month 9	46%	50%	53%	56%	59%	62%	65%	67%	69%	71%	73%	
Month 10	47%	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	
Month 11	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 12	50%	53%	57%	59%	62%	65%	67%	69%	71%	73%	75%	
Month 13	51%	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	
Month 14	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	
Month 15	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 16	52%	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	
Month 17	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 18	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	
Month 19	54%	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 20	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	
Month 21	54%	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 22	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 23	55%	58%	61%	64%	66%	68%	71%	73%	74%	76%	78%	
Month 24	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 25	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	
Month 26	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 27	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	79%	
Month 28	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	79%	
Month 29	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 30	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	79%	
Month 31	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	79%	
Month 32	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	80%	
Month 33	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 34	60%	62%	65%	67%	70%	72%	73%	75%	77%	78%	80%	
Month 35	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	80%	

19 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	24%	27%	30%	32%	35%	37%	39%	42%	44%	46%	48%	
Month 2	33%	37%	40%	43%	46%	49%	52%	54%	57%	59%	61%	
Month 3	39%	43%	47%	50%	53%	57%	60%	62%	65%	67%	69%	
Month 4	40%	44%	48%	51%	55%	58%	61%	63%	66%	68%	70%	
Month 5	42%	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 6	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 7	44%	48%	51%	54%	57%	60%	63%	65%	68%	70%	72%	
Month 8	45%	49%	52%	56%	59%	61%	64%	66%	69%	71%	73%	
Month 9	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	73%	
Month 10	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 11	48%	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	
Month 12	50%	54%	57%	60%	62%	65%	67%	70%	72%	73%	75%	
Month 13	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	
Month 14	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 15	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	
Month 16	53%	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	
Month 17	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	77%	
Month 18	53%	57%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 19	54%	57%	60%	63%	65%	67%	70%	72%	74%	75%	77%	
Month 20	54%	57%	60%	63%	65%	68%	70%	72%	74%	76%	77%	
Month 21	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 22	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 23	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	
Month 24	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 25	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 26	57%	60%	62%	65%	67%	70%	72%	73%	75%	77%	78%	
Month 27	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	
Month 28	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 29	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	79%	
Month 30	58%	61%	64%	66%	69%	71%	73%	74%	76%	78%	79%	
Month 31	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	79%	
Month 32	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 33	60%	62%	65%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 34	60%	63%	65%	67%	70%	72%	74%	75%	77%	79%	80%	
Month 35	60%	63%	65%	68%	70%	72%	74%	76%	77%	79%	80%	

20 generic licence holders	D Factor											
Months after Generic Launch	0	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45	0.5	
Month 0	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Month 1	25%	28%	31%	33%	36%	38%	40%	43%	45%	47%	49%	
Month 2	34%	37%	41%	44%	47%	50%	52%	55%	57%	60%	62%	
Month 3	39%	43%	47%	51%	54%	57%	60%	63%	65%	67%	70%	
Month 4	41%	45%	48%	52%	55%	58%	61%	64%	66%	68%	70%	
Month 5	42%	46%	50%	53%	56%	59%	62%	64%	67%	69%	71%	
Month 6	43%	47%	50%	54%	57%	60%	62%	65%	67%	69%	71%	
Month 7	44%	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	
Month 8	46%	49%	53%	56%	59%	62%	64%	67%	69%	71%	73%	
Month 9	47%	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	
Month 10	48%	51%	55%	58%	60%	63%	66%	68%	70%	72%	74%	
Month 11	48%	52%	55%	58%	61%	63%	66%	68%	70%	72%	74%	
Month 12	51%	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	
Month 13	51%	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	
Month 14	52%	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	
Month 15	52%	56%	59%	61%	64%	66%	69%	71%	73%	75%	76%	
Month 16	53%	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	
Month 17	53%	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	
Month 18	54%	57%	60%	62%	65%	67%	70%	72%	73%	75%	77%	
Month 19	54%	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	
Month 20	55%	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	
Month 21	55%	58%	61%	64%	66%	68%	70%	72%	74%	76%	78%	
Month 22	56%	59%	61%	64%	66%	69%	71%	73%	74%	76%	78%	
Month 23	56%	59%	62%	64%	67%	69%	71%	73%	75%	76%	78%	
Month 24	56%	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 25	57%	60%	62%	65%	67%	69%	71%	73%	75%	77%	78%	
Month 26	57%	60%	63%	65%	68%	70%	72%	74%	75%	77%	79%	
Month 27	58%	60%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 28	58%	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	
Month 29	58%	61%	64%	66%	68%	71%	73%	74%	76%	78%	79%	
Month 30	59%	61%	64%	66%	69%	71%	73%	75%	76%	78%	79%	
Month 31	59%	62%	64%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 32	59%	62%	65%	67%	69%	71%	73%	75%	77%	78%	80%	
Month 33	60%	63%	65%	67%	70%	72%	74%	75%	77%	78%	80%	
Month 34	60%	63%	65%	68%	70%	72%	74%	76%	77%	79%	80%	
Month 35	61%	63%	66%	68%	70%	72%	74%	76%	77%	79%	80%	

Appendix 2

UK Pound £ exchange rates on 1 June 2006

Currency Code	Currency Name	1 UK Pound is =
AED	UAE Dirham	6.85
ARS	Argentine Peso	5.76
ATS	Austrian Schilling	21.00
AUD	Australian Dollar	2.50
BBD	Barbados Dollar	3.73
BEF	Belgian Franc	60.96
BGL	Bulgarian Lev	2.96
BRL	Brazilian Real	4.21
CAD	Canadian Dollar	2.06
CHF	Swiss Franc	2.28
CLP	Chilean Peso	995.04
CNY	Yuan Renminbi	14.97
CYP	Cyprus Pound	0.84
CZK	Czech Koruna	41.13
DEM	Deutsche Mark	2.96
DKK	Danish Krone	10.87
DZD	Algerian Dinar	135.99
EEK	Estonian Kroon	22.79
EGP	Egyptian Pound	10.75
ESP	Spain Peseta	251.44
EUR	European Union Euro	1.46
FIM	Markka	8.99
FJD	Fiji Dollar	3.12
FRF	French Franc	9.91
HKD	Hong Kong Dollar	14.48
HRK	Croatia Kuna	10.57
HUF	Hungary Forint	382.21
IDR	Indonesia Rupiah	17417.83
IEP	Punt	1.19
ILS	New Israeli Sheqel	8.45
INR	Indian Rupee	86.23
ISK	Iceland Krona	134.26
ITL	Italian Lira	2923.31
JMD	Jamaican Dollar	122.46
JOD	Jordanian Dinar	1.32
JPY	Japan Yen	210.12
KRW	Korea (South Korea)	1769.39
KZT	Kazakhstan Tenge	239.20
LBP	Lebanese Pound	2801.93
LTL	Lithuanian Lita	5.03
LVL	Latvian Lat	1.01
MDL	Moldovan Leu	24.76
MXN	Mexican Peso	20.98
MYR	Malaysian Ringgit	6.79
NLG	Dutch Guilder	3.33
NOK	Norwegian Krone	11.34
NZD	New Zealand Dollar	2.97
PHP	Philippine Peso	98.67
PKR	Pakistan Rupee	112.36
PLN	Poland Zloty	5.72
RON	Romania Leu	55467.14
RUB	Russian Rouble	50.54
SAR	Saudi Riyal	7.00
SDD	Sudanese Dinar	437.24
SEK	Swedish Krona	13.47
SGD	Singapore Dollar	2.95
SIT	Slovenian tolar	349.05
SKK	Slovak Koruna	54.93
THB	Thailand Baht	71.14
TRY	Turkish Lira	2.88
TTD	Trinidad/Tobago Dollar	11.72
TWD	New Taiwan Dollar	59.97
UAH	Ukraine Hryvnia	9.37
USD	United States Dollar	1.87
UZS	Uzbekistan Sum	2154.87
VEB	Venezuela Bolivar	4004.22
VND	Vietnam Dong	29783.05
XCD	East Carribbean Dollar	5.04
ZAR	South Africa Rand	12.45
ZMK	Zambia Kwacha	6529.12

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