Psoriasis Review Addendum

In the original analysis, an error was made in the source clinical trial data; the Etanercept dose for Gottlieb 2003 was given as 50mg rather than 25 mg. This addendum reports the results from the cost-effectiveness analysis after correcting this error. The difference in results is minor.

1.1.1.1 Results

Table 4.5.3 summarises the results of the evidence synthesis in terms of absolute response rates. The placebo arm was regarded as representing 'supportive care', i.e. the patient receives no systemic therapy. In terms of mean response rate, when response is taken as PASI 75, infliximab appears the most effective followed by methotrexate and ciclosporin, the etanercept 50 mg. Etanercept 25 mg has a higher response rate than efalizumab, which has a lower mean response rate than all other therapies except Fumaderm and supportive care. As shown by the credibile intervals (i.e. Bayesian confidence intervals) around the mean response rates, which overlap considerably, there is uncertainty around these response rates. This is also shown in terms of the relative risks of each option (compared to placebo) and their credible intervals. These findings for the PASI 75 level of response are also reflected in the results for the PASI 50 and PASI 90.

Table 4.5.3. Results of the evidence synthesis

	Probability of a Response			Relative Risks		
	Mean	2.5% CI	97.5% CI	Mean	2.5% CI	97.5% CI
Response =PASI50						
Supportive Care	**14%**	**12%**	**16%**	**1.00**	**1.00**	**1.00**
Etanercept 50mg	**76%**	**54%**	**92%**	**5.61**	**3.87**	**7.12**
Etanercept 25mg	**63%**	**43%**	**82%**	**4.67**	**3.11**	**6.20**
Efaluzimab	**55%**	**38%**	**70%**	**4.01**	**2.75**	**5.32**
Ciclosporin	**80%**	**66%**	**92%**	**5.92**	**4.62**	**7.24**
Fumaderm	**53%**	**18%**	**86%**	**3.88**	**1.33**	**6.45**
Infliximab	**93%**	**81%**	**99%**	**6.88**	**5.58**	**8.10**
Methotrexate	**82%**	**50%**	**98%**	**6.02**	**3.66**	**7.66**
Response =PASI75						
Supportive Care	**3%**	**2%**	**4%**	**1.00**	**1.00**	**1.00**
Etanercept 50mg	**50%**	**25%**	**74%**	**15.69**	**7.79**	**24.67**
Etanercept 25mg	**35%**	**17%**	**56%**	**10.98**	**5.34**	**18.24**
Efaluzimab	**27%**	**14%**	**41%**	**8.35**	**4.45**	**13.35**
Ciclosporin	**55%**	**37%**	**75%**	**17.30**	**10.74**	**25.38**
Fumaderm	**27%**	**5%**	**63%**	**8.49**	**1.49**	**20.17**
Infliximab	**79%**	**55%**	**95%**	**24.89**	**15.97**	**33.62**
Methotrexate	**59%**	**23%**	**89%**	**18.56**	**7.04**	**30.00**
Response =PASI90						
Supportive Care	**0%**	**0%**	**1%**	**1.00**	**1.00**	**1.00**
Etanercept 50mg	**22%**	**7%**	**43%**	**57.00**	**17.65**	**120.70**
Etanercept 25mg	**12%**	**4%**	**26%**	**31.39**	**10.10**	**69.10**
Efaluzimab	**8%**	**3%**	**15%**	**20.20**	**7.74**	**40.08**
Ciclosporin	**25%**	**12%**	**45%**	**66.13**	**29.66**	**124.90**
Fumaderm	**9%**	**1%**	**32%**	**23.39**	**1.71**	**83.79**
Infliximab	**52%**	**24%**	**79%**	**134.98**	**58.46**	**230.20**
Methotrexate	**31%**	**6%**	**66%**	**79.89**	**15.32**	**183.50**

1.2 Results

1.2.1 Base-case results

The base-case results relate to all patients (regardless of baseline quality of life in terms of DLQI) and assume that patients not responding to therapy are not hospitalised. The base-case analysis focuses only on etanercept, efalizumab and supportive care. The base-case results are shown in Table 6.3.1. The ICERs in the last column, relative to supportive care, indicate the ICER at which the particular therapy might enter a sequence. Under base-case assumptions, these ICERs are relatively high ranging from £65,320 (etanercept 25mg) to £118,781 (etanercept 50mg).

Table 6.3.1. Results of the base-case analysis including only etanercept, efalizumab and supportive care and related to all patients (regardless of baseline DLQI) and assuming patients not responding to therapy are not hospitalised. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	QALYs			Costs				
	Mean	2.5% CI	97.5% CI	Mean	2.5% CI	97.5% CI	ICER	ICER against Supportive Care
Supportive Care	0	0	0	0	0	0	-	-
Etanercept 25mg	0.117	0.068	0.17	7660	7438	8030	65320	65320
Efaluzimab	0.111	0.065	0.163	9326	9205	9508	Dominated	83674
Etanercept 25mg Continuous	0.117	0.068	0.17	9607	9549	9704	Dominated	81922
Etanercept 50mg	0.124	0.073	0.18	14766	14507	15281	1009359	118781

Table 6.3.2. Most cost-effective ordering of therapies for base-case results as a function of the threshold value of cost-effectiveness. Analysis includes only etanercept, efalizumab and supportive care and relates to all patients (regardless of baseline DLQI) and assuming patients not responding to therapy are not hospitalised. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	Sequence	
Threshold value of cost-effectiveness	**1st in sequence**	**2nd in sequence**
0	Supportive Care	
5000	Supportive Care	
10000	Supportive Care	
15000	Supportive Care	
20000	Supportive Care	
25000	Supportive Care	
30000	Supportive Care	
35000	Supportive Care	
40000	Supportive Care	
45000	Supportive Care	
50000	Supportive Care	
55000	Supportive Care	
60000	Supportive Care	
65000	Supportive Care	
70000	Etanercept 25mg	Supportive Care
75000	Etanercept 25mg	Supportive Care

The more informative results are shown in Table 6.3.2, which indicates the most cost-effective sequence of therapies conditional on the threshold value of cost-effectiveness. The fact that supportive care is the only form of management listed until the threshold reaches £70,000 per QALY gained indicates that, under base-case assumptions, neither biologic therapy would be sufficiently cost-effective to enter the sequence until that threshold.

Table 6.2.3 shows the results of the probabilistic sensitivity analysis for the base-case analysis. This is presented for each of the therapies conditional on the threshold value of cost-effectiveness. For each therapy, two probabilities are shown: (i) the probability of being the first treatment in the sequence; and (ii) the probability of being in the sequence at all. Only when the threshold reaches £50,000 per QALY do the biologic therapies have a non-zero probability of being first in sequence or in the sequence at all but, even at this threshold, the probability is only 0.09 for etanercept 25mg and remains zero for the other biologic therapies.

Table 6.3.3 Results of probabilistic sensitivity analysis for the base-case showing probabilities that each therapy is first in sequence and included in the sequence at all conditional on the threshold value of cost-effectiveness. Analysis includes only etanercept, efalizumab and supportive care and relates to all patients (regardless of baseline DLQI) and assumes patients not responding to therapy are not hospitalised. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

Threshold value of cost-effectiveness		Etanercept 25mg	Etanercept 50mg	Efalizumab	Etanercept 25mg Continuous	Supportive Care
20000	Probability first in sequence	0.00	0.00	0.00	0.00	1.00
30000	Probability first in sequence	0.00	0.00	0.00	0.00	1.00
50000	Probability first in sequence	0.09	0.00	0.00	0.00	0.91
20000	Probability included in sequence	0.00	0.00	0.00	0.00	1.00
30000	Probability included in sequence	0.00	0.00	0.00	0.00	1.00
50000	Probability included in sequence	0.09	0.00	0.00	0.00	1.00

Threshold value of cost-effectiveness	Etanercept 25mg	Etanercept 50mg	Efaluzimab	Supportive Care	Etanercept 25mg Continuous
20000.00Probability first in sequence	0.00	0.00	0.00	1.00	0.00
30000.00Probability first in sequence	0.00	0.00	0.00	1.00	0.00
50000.00Probability first in sequence	0.10	0.00	0.00	0.90	0.00
20000.00Probability included in sequence	0.00	0.00	0.00	1.00	0.00
30000.00Probability included in sequence	0.00	0.00	0.00	1.00	0.00
50000.00Probability included in sequence	0.10	0.00	0.00	1.00	0.00

1.2.2 Alternative Scenario I: 4th quartile DLQI at baseline

A series of alternative scenarios is run to contrast with the base-case results. In the first, patients with poor baseline quality of life (in terms of DLQI) are considered. The results of the gains in utility by PASI response categories, conditional on baseline DLQI, in Table 6.2.11, show that the utility gains are greater in patients who have

worse baseline DLQI. In this scenario, there are no hospitalisations on supportive care as in the base-case.

Table 6.3.4. Results of the Alternative Scenario I including only etanercept, efalizumab and supportive care and relating only to patients with the worst quality of life (4th quartile DLQI) at baseline, and assuming patients not responding to therapy are not hospitalised. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	QALYs			Costs				
	Mean	2.5% CI	97.5% CI	Mean	2.5% CI	97.5% CI	ICER	ICER against Supportive Care
Supportive Care	0	0	0	0	0	0		NaN
Etanercept 25mg	0.226	0.132	0.327	7660	7438	8030	33859	33859
Efaluzimab	0.215	0.126	0.312	9326	9205	9508	Dominated	43370
Etanercept 25mg Continuous	0.226	0.132	0.327	9607	9549	9704	Dominated	42465
Etanercept 50mg	0.24	0.141	0.345	14766	14507	15281	535651	61652

Table 6.3.4 shows the expected costs, QALYs and incremental cost-effectiveness of this scenario. The ICERs against supportive care are lower than in the base-case reflecting that the therapies will enter the most cost-effective sequence at lower ICER levels. Table 6.3.5 shows the most cost-effective sequence of therapies conditional on the threshold value of cost-effectiveness. It can be seen that the biologic therapies appear much earlier in these sequences than was the case under base-case assumptions. The first to appear is etanercept 25mg, which is first in the sequence at a threshold of £35,000 per QALY gained. Etanercept 25mg (continuous) and efalizumab appear in the sequence at a threshold of £45,000 and above. Etanercept 50mg appears in a cost-effective sequence at a threshold of £65,000 and above. Table 6.3.6 shows the results of the probabilistic sensitivity analysis for this scenario, and indicates that the probabilities of being first in sequence and of appearing in the sequence at all are higher than under the base-case assumptions.

Table 6.3.5. Most cost-effective ordering of therapies for base-case results as a function of the cost-effectiveness threshold. Analysis includes only etanercept, efalizumab and supportive care and relates only to patients with the worst quality of life (4th quartile DLQI) at baseline and assumes patients not responding to therapy are not hospitalised. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	Sequence				
Threshold value of cost-effectiveness	**1st in sequence**	**2nd in sequence**	**3rd in sequence**	**4th in sequence**	**5th in sequence**
0	Supportive Care				
5000	Supportive Care				
10000	Supportive Care				
15000	Supportive Care				
20000	Supportive Care				
25000	Supportive Care				
30000	Supportive Care				
35000	Etanercept 25mg	Supportive Care			
40000	Etanercept 25mg	Supportive Care			
45000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care	
50000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care	
55000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care	
60000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care	
65000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care
70000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care
75000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care

Table 6.3.6 Results of probabilistic sensitivity analysis for Alternative Scenario I showing probabilities that each therapy is first in sequence and included in the sequence at all conditional on the threshold value of cost-effectiveness. Analysis includes only etanercept, efalizumab and supportive care and relates only to patients with the worst quality of life (4th quartile DLQI) at baseline, and assumes patients not responding to therapy are not hospitalised. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

Threshold value of cost-effectiveness	Etanercept 25mg	Etanercept 50mg	Efaluzimab	Supportive Care	Etanercept 25mg Continuous
20000Probability first in sequence	0.00	0.00	0.00	1.00	0.00
30000Probability first in sequence	0.28	0.00	0.00	0.72	0.00
50000Probability first in sequence	0.91	0.00	0.02	0.07	0.00
20000Probability included in sequence	0.00	0.00	0.00	1.00	0.00
30000Probability included in sequence	0.28	0.00	0.03	1.00	0.03
50000Probability included in sequence	0.93	0.14	0.72	1.00	0.75

Table 6.3.7. Results of Alternative Scenario II including only etanercept, efalizumab and supportive care and relating to all patients (regardless of baseline DLQI) and assuming patients not responding to therapy are hospitalised for 21 days per year. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	QALYs			Costs				
	Mean	**2.5% CI**	**97.5% CI**	**Mean**	**2.5% CI**	**97.5% CI**	**ICER**	**ICER against Supportive Care**
Supportive Care	0	0	0	0	0	0		NaN
Etanercept 25mg	0.118	0.068	0.171	3268	2664	4274	27737	27737
Efaluzimab	0.112	0.065	0.162	5171	4629	5975	Dominated	46180
Etanercept 25mg Continuous	0.118	0.068	0.171	5215	4774	5948	Dominated	44258
Etanercept 50mg	0.125	0.073	0.18	10101	9589	11125	971296	80888

1.2.3 Alternative Scenario II: patients with any DLQI at baseline and 21 days annual in-patient hospitalisation when not responding to therapy

The second alternative scenario considers all patients in terms of baseline quality of life but now assumes that patients not responding to therapy spend 21 days per year as hospital in-patients. This figure is a mean length of stay for a single hospitalisaton and is based on an average of that from the Hospital Episode Statistics (2002/03) for psoriasis and two local audits (see section 6.2.4.3). The assumption is effectively that non-responding patients experience one hospitalisation per annum consisting of a 21-day stay.

Table 6.3.7 shows expected QALYs, costs and ICERs for this alternative scenario. Compared to the base-case assumptions, the ICERs against supportive care are lower indicating that the biologics would enter a sequence at lower ICERs. These ICERs are not greatly different to those in Alternative Scenario I.

Table 6.3.8. Most cost-effective ordering of therapies for Alternative Scenario II as a function of the threshold value for cost-effectiveness. Analysis includes only etanercept, efalizumab and supportive care and relates to all patients (regardless of baseline DLQI) and assumes patients not responding to therapy are hospitalised for 21 days per year. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	Sequence			
Threshold value of cost-effectiveness	**1st in sequence**	**2nd in sequence**	**3rd in sequence**	**4th in sequence**
0	Supportive Care			
5000	Supportive Care			
10000	Supportive Care			
15000	Supportive Care			
20000	Supportive Care			
25000	Supportive Care			
30000	Etanercept 25mg	Supportive Care		
35000	Etanercept 25mg	Supportive Care		
40000	Etanercept 25mg	Supportive Care		
45000	Etanercept 25mg	Etanercept 25mg Continuous	Supportive Care	
50000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care
55000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care
60000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care
65000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care
70000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care
75000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care

Table 6.3.8 shows the most cost-effective sequence of therapies conditional on the threshold value of cost-effectiveness. As for Alternative Scenario I, the biologic therapies appear much earlier in these sequences than was the case under base-case assumptions. Again, the first to appear is etanercept 25mg (at £30,000 per QALY gained). Etanercept 25mg (continuous) and efalizumab appear in the sequence at a threshold of £50,000 and above. Etanercept 50mg does not appear in a sequence based on the thresholds shown. Table 6.3.9 shows the results of the probabilistic sensitivity analysis for this scenario, and indicates that the probabilities of being first in sequence and of appearing in the sequence at all are higher than under the base-case assumptions.

Table 6.3.9. Results of probabilistic sensitivity analysis for Alternative Scenario II showing probabilities that each therapy is first in sequence and included in the sequence at all conditional on the threshold value of cost-effectiveness. Analysis includes only etanercept, efalizumab and supportive care and relates to all patients (regardless of baseline DLQI) and assumes patients not responding to therapy are hospitalised for 21 days per year. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

Threshold value of cost-effectiveness	Etanercept 25mg	Etanercept 50mg	Efaluzimab	Supportive Care	Etanercept 25mg Continuous
20000Probability first in sequence	0.09	0.00	0.00	0.91	0.00
30000Probability first in sequence	0.63	0.00	0.00	0.37	0.00
50000Probability first in sequence	0.95	0.00	0.02	0.03	0.00
20000Probability included in sequence	0.09	0.00	0.00	1.00	0.00
30000Probability included in sequence	0.63	0.00	0.02	1.00	0.03
50000Probability included in sequence	0.97	0.01	0.62	1.00	0.68

1.2.4 Alternative Scenario IIII: 4th quartile DLQI and 21 days annual in-patient hospitalisation when not responding to therapy

The third alternative scenario effectively combines the first and second by including a sub-group of patients with poor baseline quality of life (highest quartile DLQI) and high in-patient hospitalisation when not responding to therapy (21 days per year).

Table 6.3.10 shows the expected QALYs, costs and ICERs for all therapies. It can be seen that the ICERs compared to supportive care are lower than the base-case and the two previous alternative scenarios, indicating that biologic therapies will enter a cost-effective sequence at lower ICERs.

Table 6.3.11 shows the most cost-effective sequence of therapies conditional on the threshold value of cost-effectiveness. Compared to the base-case and earlier scenarios, the biologic therapies appear much earlier in these sequences. Again, the first to appear is etanercept 25mg (at £20,000 per QALY gained). Etanercept 25mg (continuous) and efalizumab appear in the sequence at a threshold of £25,000 and above. Etanercept 50mg appears in the sequence at a threshold of £45,000 per QALY gained. Table 6.3.12 shows the results of the probabilistic sensitivity analysis for this scenario, and indicates that the probabilities of being first in sequence and of appearing in the sequence at all are the highest of all the scenarios.

Table 6.3.10. Results of Alternative Scenario III including only etanercept, efalizumab and supportive care and relating to patients with the worst quality of life (4th quartile DLQI) at baseline and assuming patients not responding to therapy are hospitalised for 21 days per year. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	QALYs			Costs				
	Mean	2.5% CI	97.5% CI	Mean	2.5% CI	97.5% CI	ICER	ICER against Supportive Care
Supportive Care	0	0	0	0	0	0		NaN
Etanercept 25mg	0.226	0.129	0.33	3268	2664	4274	14461	14461
Efaluzimab	0.215	0.122	0.312	5171	4629	5975	Dominated	24073
Etanercept 25mg Continuous	0.226	0.129	0.33	5215	4774	5948	Dominated	23075
Etanercept 50mg	0.239	0.139	0.346	10101	9589	11125	514703	42211

Table 6.3.11. Most cost-effective ordering of therapies for Alternative Scenario III as a function of threshold value for cost-effectiveness. Analysis includes only etanercept, efalizumab and supportive care, relates to patients with the worst quality of life (4th quartile DLQI) at baseline and assumes patients not responding to therapy are hospitalised for 21 days per year. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	Sequence				
Threshold value of cost-effectiveness	**1st in sequence**	**2nd in sequence**	**3rd in sequence**	**4th in sequence**	**5th in sequence**
0	Supportive Care				
5000	Supportive Care				
10000	Supportive Care				
15000	Etanercept 25mg	Supportive Care			
20000	Etanercept 25mg	Supportive Care			
25000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care	
30000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care	
35000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care	
40000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Supportive Care	
45000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care
50000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care
55000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care
60000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care
65000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care
70000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care
75000	Etanercept 25mg	Etanercept 25mg Continuous	Efaluzimab	Etanercept 50mg	Supportive Care

Table 6.3.12. Results of probabilistic sensitivity analysis for Alternative Scenario III showing probabilities that each therapy is first in sequence and included in the sequence at all conditional on the threshold value of cost-effectiveness. Analysis includes only etanercept, efalizumab and supportive care and relates to patients with the worst quality of life (4th quartile DLQI) at baseline and assumes patients not responding to therapy are hospitalised for 21 days per year. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

Threshold value of cost-effectiveness	Etanercept 25mg	Etanercept 50mg	Efaluzimab	Supportive Care	Etanercept 25mg Continuous	Methotrexate	Fumaderm
20000Probability first in sequence	0.86	0.00	0.01	0.14	0.00	1.00	0.00
30000Probability first in sequence	0.96	0.00	0.02	0.02	0.00	1.00	0.00
50000Probability first in sequence	0.96	0.00	0.04	0.00	0.00	1.00	0.00
20000Probability included in sequence	0.86	0.00	0.21	1.00	0.26	1.00	0.25
30000Probability included in sequence	0.98	0.04	0.80	1.00	0.83	1.00	0.65
50000Probability included in sequence	1.00	0.76	0.99	1.00	0.99	1.00	0.96

1.2.5 Alternative Scenario IV: comparison of biologics with other systemic therapies (patients with any baseline DLQI and assumption that non-responding patients are hospitalised for 21 days per year)

The final scenario widens the basis of comparison to include all systemic therapies for which effectiveness parameters could be estimated in the evidence synthesis (see Section 4.5). As well as supportive care and therapies based on etanercept and efalizumab, this scenario includes methotrexate, ciclosporin, Fumaderm and infliximab. By way of illustration, the scenario is run for all patients (regardless of baseline DLQI) and assuming that patients not responding to therapy are hospitalised for 21 days per annum.

Table 6.3.13 shows the expected QALYs, costs and ICERs for this scenario. As a result of their higher effectiveness (compared to supportive care) and lower acquisition costs (compared to the biologics), methotrexate, ciclosporin and Fumaderm all dominate supportive care. The ICERs for etanercept-based therapies and efalizumab, compared to supportive care, are similar to those in Alternative Scenario II. The ICER of infliximab, compared to supportive care, lies between those for etanercept 25mg (continuous) and etanercept 50mg.

Table 6.3.14 show the most cost-effective treatment sequences, conditional on the threshold for cost-effectiveness, for this broader comparion. It shows that methotrexate, ciclosporin and Fumaderm would be the first three treatments in the sequence whatever threshold value is used. The first biologic to appear is etanercept 25mg (4^{th} in sequence at £30,000 per QALY gained). Etanercept 25mg (continuous) and efalizumab appear 5^{th} and 6^{th} in the sequence, respectively, at a threshold of £50,000 and above. Etanercept 50mg does not appear in any sequence at the thresholds used in the analysis. Table 6.3.15 shows the results of the probabilistic sensitivity analysis for this scenario, and indicates that the probabilities of being first in sequence and of appearing in the sequence are highest for methotrexate, ciclosporin and Fumaderm.

Table 6.3.13. Results of the base-case analysis including supportive care and full range of systemic therapies. Includes all patients (regardless of baseline DLQI) and assumes that patients not responding to therapy are hospitalised for 21 days per year. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	QALYs			Costs				
	Mean	2.5% CI	97.5% CI	Mean	2.5% CI	97.5% CI	ICER	ICER against Supporti
Methotrexate	0.126	0.072	0.183	-4268	-4619	-3363		Dominates
Ciclosporin	0.123	0.071	0.176	-507	-842	-51	Dominated	Dominates
Fumaderm	0.103	0.041	0.161	-268	-2171	2015	Dominated	Dominates
Supportive Care	0	0	0	0	0	0	Dominated	-
Etanercept 25mg	0.118	0.069	0.17	3268	2664	4274	Dominated	27698
Efaluzimab	0.112	0.065	0.163	5171	4629	5975	Dominated	46127
Etanercept 25mg Continuous	0.118	0.069	0.17	5215	4774	5948	Dominated	44196
Infliximab	0.135	0.078	0.193	6091	3689	8813	1289116	45290
Etanercept 50mg	0.125	0.073	0.18	10101	9589	11125	Dominated	80773

Table 6.3.14. Most cost-effective ordering of therapies for Alternative Scenario IV as a function of threshold value for cost-effectiveness. Analysis includes supportive care and full range of systemic therapies. Includes all patients (regardless of baseline DLQI) and assumption that patients not responding to therapy are hospitalised for 21 days per annum. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

	Sequence					
Threshold value of cost-effectiveness	**1st in sequence**	**2nd in sequence**	**3rd in sequence**	**4th in sequence**	**5th in sequence**	**6th in sequence**
0	Methotrexate	Ciclosporin	Fumaderm	Supportive Care		
5000	Methotrexate	Ciclosporin	Fumaderm	Supportive Care		
10000	Methotrexate	Ciclosporin	Fumaderm	Supportive Care		
15000	Methotrexate	Ciclosporin	Fumaderm	Supportive Care		
20000	Methotrexate	Ciclosporin	Fumaderm	Supportive Care		
25000	Methotrexate	Ciclosporin	Fumaderm	Supportive Care		
30000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Supportive Care	
35000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Supportive Care	
40000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Supportive Care	
45000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Etanercept 25mg Continuous	Supportive Care
50000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Etanercept 25mg Continuous	Infliximab
55000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Infliximab	Etanercept 25mg C
60000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Infliximab	Etanercept 25mg C
65000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Infliximab	Etanercept 25mg C
70000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Infliximab	Etanercept 25mg C
75000	Methotrexate	Ciclosporin	Fumaderm	Etanercept 25mg	Infliximab	Etanercept 25mg C

Table 6.3.15. Results of probabilistic sensitivity analysis for Alternative Scenario IV showing probabilities that each therapy is first in sequence and included in the sequence at all conditional on the threshold value of cost-effectiveness. Analysis includes supportive care and full range of systemic therapies. Includes all patients (regardless of baseline DLQI) and assumption that patients not responding to therapy are hospitalised for 21 days per annum. All etanercept therapies are intermittent unless stated and efalizumab is continuous.

Threshold value of cost-effectiveness	Etanercept 25mg	Etanercept 50mg	Efaluzimab	Supportive Care	Ciclosporin	Methotrexate	Fumaderm
20000Probability first in sequence	0.00	0.00	0.00	0.00	0.00	1.00	0.00
30000Probability first in sequence	0.00	0.00	0.00	0.00	0.00	0.99	0.00
50000Probability first in sequence	0.00	0.00	0.00	0.00	0.01	0.99	0.00
20000Probability included in sequence	0.10	0.00	0.00	1.00	1.00	1.00	0.94
30000Probability included in sequence	0.62	0.00	0.02	1.00	1.00	1.00	0.96
50000Probability included in sequence	0.96	0.00	0.63	1.00	1.00	1.00	0.98