

SUPPLEMENTARY DATA

The Cost-Effectiveness of Maturity-Onset Diabetes of the Young Genetic Testing- Translating Genomic Advances into Practical Health Applications.

Supplementary Table 1. Cost-effectiveness analysis base case model assumptions.

Definition	Base-Case Value	References
Major hypoglycemic event requiring medical care		
Sulfonylurea	0.009	Leese 2003(1)
Insulin	0.118	Leese 2003(1)
Other assumptions		
Prevalence of foot deformity	0.37	Rith-Najarian 1992(2)
Prevalence of peripheral vascular disease	0.15	Selvin, 2004(3)
Prevalence of atrial fibrillation	Gender and age specific prevalence from Kaiser population	Go at al, 2001(4)
Complication costs (Costs adjusted to 2011 US Dollars)		
Retinopathy complication costs		
Blindness (state)	\$4814.89	O'Brien 2003(5)
Nephropathy complications costs		
Renal failure (state)	\$48360.57	O'Brien 2003(5)
Amputation complication costs		
Lower extremity amputation (event)	\$39650.39	O'Brien 2003(5)
Lower extremity amputation (state)	\$1425.14	O'Brien 2003(5)
Cardiovascular complication costs		
Acute myocardial infarction (event)	\$39663.46	O'Brien 2003(5)
Acute myocardial infarction (state)	\$2191.92	O'Brien 2003(5)
Angina (event)	\$7868.94	O'Brien 2003(5)
Angina (state)	\$2032.55	O'Brien 2003(5)
Ischemic stroke (event)	\$52523.65	O'Brien 2003(5)
Ischemic stroke (state)	\$17528.78	O'Brien 2003(5)
Treatment-related complication costs		
Major Hypoglycemic Episode	\$289.99	O'Brien 2003(5)
Utilities		
Blindness	0.53	Lung 2011(6)
End-stage renal disease	0.48	Lung 2011(6)

SUPPLEMENTARY DATA

Foot ulcer	0.60	Lung 2011(6)
Lower extremity amputation	0.56	Lung 2011(6)
Myocardial infarction or arrest	0.75	Lung 2011(6)
Stroke	0.59	Lung 2011(6)
Life with oral medications	0.77	Huang 2006(7)
Life with insulin	0.64	Huang 2006(7)

References.

1. Leese GP, Wang J, Broomhall J, Kelly P, Marsden A, Morrison W, et al. Frequency of severe hypoglycemia requiring emergency treatment in type 1 and type 2 diabetes: a population-based study of health service resource use. *Diabetes Care*. 2003 Apr;26(4):1176–80.
2. Rith-Najarian SJ, Stolusky T, Gohdes DM. Identifying diabetic patients at high risk for lower-extremity amputation in a primary health care setting. A prospective evaluation of simple screening criteria. *Diabetes Care*. 1992 Oct;15(10):1386–9.
3. Selvin E, Erlinger TP. Prevalence of and risk factors for peripheral arterial disease in the United States: results from the National Health and Nutrition Examination Survey, 1999-2000. *Circulation*. 2004 Aug 10;110(6):738–43.
4. Go AS, Hylek EM, Phillips KA, Chang Y, Henault LE, Selby JV, et al. Prevalence of diagnosed atrial fibrillation in adults: national implications for rhythm management and stroke prevention: the AnTicoagulation and Risk Factors in Atrial Fibrillation (ATRIA) Study. *JAMA*. 2001 May 9;285(18):2370–5.
5. O'Brien JA, Patrick AR, Caro J. Estimates of direct medical costs for microvascular and macrovascular complications resulting from type 2 diabetes mellitus in the United States in 2000. *Clin Ther*. 2003 Mar;25(3):1017–38.
6. Lung TWC, Hayes AJ, Hayen A, Farmer A, Clarke PM. A meta-analysis of health state valuations for people with diabetes: explaining the variation across methods and implications for economic evaluation. *Qual Life Res*. 2011 Dec;20(10):1669–78.
7. Huang ES, Shook M, Jin L, Chin MH, Meltzer DO. The impact of patient preferences on the cost-effectiveness of intensive glucose control in older patients with new-onset diabetes. *Diabetes Care*. 2006 Feb;29(2):259–64.