

Table A1. Disease incidence and proportion of patients affected with developmental outcomes, specific disease course, age of onset, and mortality.

Disease	Category 1					Category 2					
	% of patients	Age at clinical presentation	Incremental Mortality*	Average LE (years)		% of patients	Age at clinical presentation	Incremental Mortality	Average LE (years)		
				Early Diagnosis†	Clinical Diagnosis‡				Early Diagnosis†	Clinical Diagnosis‡	
Fatty Acid β-oxidation Disorders	Carnitine Transporter Defect	50% ⁷²	3 mos – 2.5y ⁷²	0: 66% 1: 17% [‡]	25 [‡]	14 [‡]	50% ⁷²	1-7 y ⁷²	0, 33% ⁷⁷	50	35
	Carnitine Palmitoyl Transferase I deficiency	100%	8-18 mos ⁷²	0: 66% 1: 17% [‡]	25 [‡]	14 [‡]	-	-	-	-	-
	Carnitine/Acylcarnitine Translocase deficiency	86% ^{77§}	Neonatal ⁷²	0: 89% ⁷⁷ 2: 3% ⁷⁷ 3: 3% ⁷⁷	20	4	14%	yr 1 ⁷²	0, 33% ⁷⁷	25	10
	Carnitine Palmitoyl Transferase II deficiency	20% [†]	Neonatal – 2 y ⁷	0: 66% ⁷² 1: 17% ⁷²	25	14	80% [†]	15-30 y ⁷²	-	65	50
	Very Long Chain Acyl-CoA Dehydrogenase deficiency	36% ^{78**}	Neonatal ^{72,78}	1: 86% ^{††}	25 ^{††}	12 ^{††}	64% ⁷⁸	2-8 mos ⁷⁸	-	35	20
	Long-Chain Hydroxyl Acyl-CoA Dehydrogenase deficiency	100%	1 d – 21 mos ⁷²	1: 86% ⁷⁹	25	12	-	-	-	-	-
	Medium Chain Acyl-CoA Dehydrogenase deficiency	70% ^{1,6}	3-15 mos ⁷²	0: 12% ⁷² 1: 9% ⁷² 2: 4% ⁷²	65	59	-	-	-	-	-
	Glutaric Acidemia Type II	100%	Neonatal – 2 mos ⁶¹	0: 100% ^{61,74,81}	1	6 months	-	-	-	-	-
Organic Acidemias	HMG-CoA lyase deficiency	80% ⁶	1d – 15 mos ⁸²	0: 10%	70	50	-	-	-	-	-
	3-methylcrotonyl-CoA Carboxylase deficiency	80% ⁶	6 mos – 3y ⁷⁵	0: 10%	70	50	-	-	-	-	-
	Glutaric Acidemia Type I	76% ⁸³	1-7 mos ⁸⁴	0: 21% ⁸⁴	10	5	12% ^{83,85}	yr 2 ⁵⁸	-	25	10
	Isovaleric Acidemia	50% ⁷⁵	Neonatal ⁷⁵	0: 50% ⁷⁵	20	10	50% ⁷⁵	yr 1 ⁷⁵	-	25	15
	Methylmalonic Acidemia	83% ⁸⁷	Neonatal ⁸⁸	0: 17% ⁷⁴ 1: 54% ⁷⁴	10	5	17% ⁸⁷	yr 1 ⁸⁸	0, 5%	30	20
	Propionic Acidemia	100%	Neonatal ⁸⁹	0: 53% ⁷⁴ 1: 21% ⁷⁴	10	5	-	-	-	-	-

* “0: 66%, 1: 17%” means that in the first year the patient mortality rate was 66% (including normal infant mortality), and in year 1 of the patients life the mortality rate was 17% (including normal mortality for a 1 yr old). In years 2 through 100 (or until there was no probability of survival), normal mortality rates applied. “30% by yr 1, 50% by 2.5 yrs, 70% by yr 5...” means that at the end of year 1 the survival rate was 0.7 and the mortality across year 0 and year 1 was calculated so that it was equal. At the end of year 3, the survival rate was 0.5, and the incremental mortality in years 2 and 3 was equal. At the end of year 5, the survival rate was 0.3 and the incremental mortality rate for years 4 and 5 was equal. These accelerated mortality rates were used to calculate the average life expectancy of a clinically diagnosed patient. The annual incremental mortality for patients receiving and early diagnosis was calculated so that their life expectancies matched those shown in the “Early Diagnosis: Average LE (years)” column.

† Expert opinion combined with literature reports of natural history cited as sources for “Incremental Mortality”.

‡ Assume to be the same as carnitine palmitoyl transferase II deficiency (CPT II)

§ Patients included in Category 1 (86%): patients indicated as having a severe phenotype, patients with unclassified phenotype but having died within year 0, and 20 known neonatal sibling deaths (undiagnosed)

** Category 1 (36%) includes 9 infants who presented before day 2, and half (7) of the unexplained sibling deaths; Category 2 (64%) includes 14 infants who presented between 2-8 months, 5 who presented later, half (7) of the unexplained sibling deaths and 2 pre-symptomatically treated patients who never clinically presented

†† Assume to the same as long-chain hydroxyl acyl-CoA dehydrogenase deficiency (LCHADD)

Urea Cycle Disorders	Arginase Deficiency (Arginemia)	60% ⁹¹	yr 1 ⁹⁰	0: 5% 30% by yr 1 50% by 2.5 yrs	10	5	40%	Early Childhood ⁹⁰		65	40
	Arginosuccinate lyase deficiency (Arginosuccinic aciduria)	60% ⁹¹	Neonatal ⁹⁰	70% by yr 5 90% by yr 10 ⁹²	15 ^{††}	11 ^{††}	40% ⁹¹	16 mos ⁹⁰	-	30	20
	Arginosuccinate synthase deficiency (Citrullinemia)	100%	Neonatal ⁹⁰	30% by yr 1 50% by 2.5 yrs 70% by yr 5 90% by yr 10 ^{††}	15 ^{††}	11 ^{††}	-	-	-	-	-
Amino Acidemias	Hepatorenal Tyrosinemia (Tyr Type I)	77% ^{6,25}	1d – 6 mos ⁹⁴	0: 36% ⁹⁴ 1: 3% ⁹⁴	30	15	23% ^{6,25}	1d – 6 mos ⁹⁴		30	20
	Homocystinuria	43% ²	Neonatal ⁷⁰	0: 5%	35	25	57% ²	Neonatal ⁷⁰	0, 5%	45	35
	Maple Syrup Urine Disease	84% ^{9,74}	4-7 days ⁹	0: 20% ^{9,74} 6: 15% ⁷⁴	35 ^{9,74}	20	16% ^{9,74}	5 mos – 7 y	0, 20% ^{9,74} 6, 15% ⁷⁴	35	20
	PKU and variants	75%	6-18 mos	-	78	65	-	-	-	-	-

†† Assume to be the same as Arginosuccinic aciduria (ASA)

Table A2. Disease-specific information about the course of treatment, regularity of specialist appointments and developmental outcome.

Disease	Treatment	Dietician (D) and Specialist (S) Appointments (Total annual hours for infants, children and adults, respectively.)	Developmental Impairment Outcome ^{§§}	
			Early diagnosis	Clinical Diagnosis
Carnitine Transporter Defect	Low fat, high carbohydrate diet Avoidance of fasting L-carnitine supplementation	S: 7, 5, 2		
Carnitine Palmitoyl Transferase I deficiency	Low fat, high carbohydrate diet Avoidance of fasting L-carnitine supplementation Medium Chain Triglycerides	S: 7, 5, 2		
Carnitine/Acylcarnitine Translocase deficiency	Low fat, high carbohydrate diet Avoidance of fasting L-carnitine supplementation Medium Chain Triglycerides	S: 7, 5, 2		
Carnitine Palmitoyl Transferase II deficiency	Low fat, high carbohydrate diet Avoidance of fasting L-carnitine supplementation	S: 7, 5, 2		
Very Long Chain Acyl-CoA Dehydrogenase deficiency	Low fat, high carbohydrate diet Avoidance of fasting L-carnitine supplementation	S: 7, 5, 2		M: 25% S: 0%
Long-Chain Hydroxyl Acyl-CoA Dehydrogenase deficiency	Low fat, high carbohydrate diet Avoidance of fasting L-carnitine supplementation Medium Chain Triglycerides	S: 7, 5, 2		M: 25% ⁷⁹ S: 0% ⁷⁹
Medium Chain Acyl-CoA Dehydrogenase deficiency	Low fat, high carbohydrate diet Avoidance of fasting L-carnitine supplementation	S: 7, 5, 2		M: 32% ⁶⁷ S: 0% ⁶⁷
Glutaric acidemia Type II	Low-protein, low-fat diet Caloric Supplementation Riboflavin supplementation L-carnitine supplementation	D: 7, 5, 2 S: 7, 5, 2		
HMG-CoA lyase deficiency	Restricted Leucine (Protein) Intake Caloric Supplementation L-carnitine supplementation Glucose supplementation	D: 7, 5, 2 S: 7, 5, 2		S: 20% ⁸²

^{§§} M = moderate developmental delay; S = severe developmental impairment; a blank cell indicates no developmental impairment.

3-methylcrotonyl-CoA carboxylase deficiency	Restricted Leucine (Protein) Intake Caloric Supplementation L-carnitine supplementation Biotin Supplementation Glycine Supplementation	D: 7, 5, 2 S: 7, 5, 2		
Glutaric acidemia Type I	Restricted Lysine & Tryptophan (Protein) Intake Caloric Supplementation Riboflavin Supplementation L-carnitine supplementation	D: 7, 5, 2 S: 7, 5, 2	M: 0% ⁸ S: 0% ⁸	M: 36% ⁸⁴ S: 64% ⁸⁴
Isovaleric acidemia	Restricted Leucine (Protein) Intake Caloric Supplementation Glycine Supplementation L-carnitine supplementation Liver Transplant: if early diagnosis, occurs in yr 3; if clinical diagnosis occurs in yr 2	D: 7, 5, 2 S: 7, 5, 2		S: 25% ⁷⁴
Methylmalonic acidemia	Restricted Protein Intake Caloric Supplementation Cobalamin Supplementation Liver Transplant: if early diagnosis, occurs in yr 3; if clinical diagnosis occurs in yr 2	D: 7, 5, 2 S: 7, 5, 2		Unresponsive (Category 1): M: 100% ⁷⁴ Responsive (Category 2): M: 0% ⁷⁴
Propionic acidemia	Restricted Protein Intake Caloric Supplementation L-carnitine supplementation Biotin Supplementation Anti-convulsants Metronidazole Liver Transplant: if early diagnosis, occurs in yr 3; if clinical diagnosis occurs in yr 2	D: 7, 5, 2 S: 7, 5, 2		M: 40% ⁷⁴ S: 20% ⁷⁴
Arginase deficiency (Arginemia)	Restricted Arginine (Protein) Intake Caloric Supplementation Sodium benzoate	D: 7, 6, 6 S: 7, 6, 6	M: 100% S: 0% ⁹¹	M: 50% ⁷¹ S: 50% ⁷¹
Arginosuccinate lyase deficiency (Arginosuccinic aciduria)	Restricted Protein Intake Caloric Supplementation Arginine (free base) Hemodialysis Liver Transplant: if early diagnosis, occurs in yr 3; if clinical diagnosis occurs in yr 2	D: 7, 6, 6 S: 7, 6, 6	M: 100% ⁶⁹ S: 0% ⁹¹	M: 25% ⁹¹ S: 75% ⁹¹
Arginosuccinate synthase deficiency (Citrullinemia)	Restricted Protein Intake Caloric Supplementation Sodium Phenylbutyrate Arginine (free base) Hemodialysis Liver Transplant: if early diagnosis, occurs in yr 3; if clinical diagnosis occurs in yr 2	D: 7, 6, 6 S: 7, 6, 6	M: 100% ⁶⁹ S: 0% ⁹¹	M: 25% ⁹¹ S: 75% ⁹¹

Hepatorenal tyrosinemia (Type I)	Restricted Tyrosine (Protein) Intake Caloric Supplementation Ascorbic Acid NTBC Hemodialysis Liver Transplant: if early diagnosis, occurs in yr 7; if clinical diagnosis, occurs in yr 10	D: 20, 12, 9 S: 7, 6, 6		
Homocystinuria	Restricted Methionine (Protein) Intake Caloric Supplementation Pyridoxine Supplementation Cysteine supplementation Betaine	D: 20, 11, 5 S: 7, 5, 2	Unresponsive (Category 1): M: 13% ² S: 4% ² Responsive (Category 2): M: 40% ² S: 0% ²	Unresponsive (Category 1): M: 38.3% ² S: 46.6% ² Responsive (Category 2): M: 5.2% ² S: 32.7% ²
Maple Syrup Urine Disease	Restricted Leucine (Protein) Intake Caloric Supplementation Thiamine Supplementation	D: 20, 11, 5 S: 7, 5, 2	M: 0% ⁹ S: 0% ⁹	M: 65% ⁹ S: 35% ⁹
PKU and variants	Restricted Phenylalanine (Protein) Intake Caloric Supplementation	D: 20, 12, 8 S: 7, 6, 5	M: 0% ^{106, 107} S: 0% ^{106, 107}	M: 33% ^{108, 109} S: 21% ^{108, 109}

Table A3. Incremental costs and savings broken down by cost type incurred by screening for each disease when evaluated independently.

Disease	Total Incremental Cost ^{***}	Incremental Cost (no start up)	Cost and Cost Savings											
			Incremental Screening Cost	Government Health Care Expenditures	Specialist Appointments	Diagnostics	Drug Treatment	Formula & Special Foods	ER & Hospital Costs	Dialysis & Transplants	Education Costs	Adult Care Costs	Social Worker Costs	
<u>Fatty Acid β-oxidation Disorders</u>	Carnitine Transporter Defect	\$19.89	\$1.52	\$0.01	\$0.09	\$0.36	\$0.00	\$0.92	\$0.00	-\$0.02	\$0.00	\$0.08	\$0.04	\$0.04
	Carnitine Palmitoyl Transferase I deficiency	\$19.92	\$1.55	\$0.03	\$0.04	\$0.34	\$0.00	\$1.05	\$0.00	\$0.00	\$0.00	\$0.04	\$0.01	\$0.04
	Carnitine/Acylcarnitine Translocase deficiency	\$20.02	\$1.65	\$0.03	\$0.04	\$0.34	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$0.04	\$0.01	\$0.04
	Carnitine Palmitoyl Transferase II deficiency	\$19.89	\$1.52	\$0.04	\$0.05	\$0.34	\$0.00	\$1.01	\$0.00	-\$0.02	\$0.00	\$0.03	\$0.03	\$0.04
	Very Long Chain Acyl-CoA Dehydrogenase deficiency	\$19.97	\$1.60	\$0.00	\$0.09	\$0.37	\$0.00	\$0.98	\$0.00	-\$0.02	\$0.00	\$0.11	\$0.03	\$0.04
	Long-Chain Hydroxyl Acyl-CoA Dehydrogenase deficiency	\$20.00	\$1.63	\$0.02	\$0.04	\$0.34	\$0.00	\$1.19	\$0.00	\$0.00	\$0.00	\$0.02	-\$0.02	\$0.04
	Medium Chain Acyl-CoA Dehydrogenase deficiency	\$24.43	\$6.06	-\$0.16	\$0.21	\$0.60	\$0.00	\$10.16	\$0.00	-\$0.25	\$0.00	-\$1.68	-\$2.85	\$0.03
	Glutaric Acidemia Type II	\$19.09	\$0.72	\$0.04	\$0.00	\$0.34	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.04
	HMG-CoA lyase deficiency	\$19.60	\$1.23	\$0.02	\$0.05	\$0.15	\$0.00	\$0.77	\$0.55	-\$0.02	\$0.00	-\$0.11	-\$0.19	\$0.01
<u>Organic Acidemias</u>	3-methylcrotonyl-CoA Carboxylase deficiency	\$24.67	\$6.30	-\$0.01	\$0.27	\$0.24	\$0.00	\$3.45	\$2.11	-\$0.08	\$0.00	\$0.16	\$0.15	\$0.01
	Glutaric Acidemia Type I	\$21.61	\$3.24	-\$0.05	\$0.08	\$0.21	\$0.00	\$1.98	\$1.58	-\$0.03	\$0.00	-\$0.40	-\$0.15	\$0.02
	Isovaleric Acidemia	\$19.12	\$0.75	\$0.04	\$0.02	\$0.14	\$0.00	\$0.30	\$0.30	-\$0.01	\$0.01	-\$0.03	-\$0.03	\$0.01
	Methylmalonic Acidemia	\$19.40	\$1.03	\$0.01	\$0.09	\$0.17	\$0.00	\$0.20	\$0.74	-\$0.03	\$0.16	-\$0.21	-\$0.11	\$0.01
	Propionic Acidemia	\$20.11	\$1.74	-\$0.03	\$0.08	\$0.17	\$0.00	\$0.85	\$0.75	-\$0.02	\$0.17	-\$0.17	-\$0.07	\$0.01

*** Program Start Up and Base Operation Costs (whether screening for 1 or more diseases) is \$18.37 per infant

<u>Urea Cycle Disorders</u>	Arginase Deficiency (Arginemia)	\$47.75	\$29.38	\$0.08	\$0.03	\$2.23	\$4.22	\$19.09	\$3.36	-\$0.01	\$0.00	\$0.08	\$0.05	\$0.25
	Arginosuccinate lyase deficiency	\$62.89	\$44.52	\$0.02	\$0.07	\$2.25	\$4.26	\$34.17	\$3.50	-\$0.03	\$0.00	\$0.10	-\$0.07	\$0.25
	Arginosuccinate synthase deficiency	\$60.81	\$42.44	\$0.01	\$0.05	\$2.24	\$4.23	\$32.28	\$3.48	-\$0.03	-\$0.02	\$0.05	-\$0.10	\$0.25
	Hepatorenal Tyrosinemia (Tyr Type I)	\$32.51	\$14.14	\$0.17	\$0.09	\$0.38	\$0.91	\$11.52	\$0.87	-\$0.02	\$0.04	\$0.12	\$0.02	\$0.04
<u>Amino Acidemias</u>	Homocystinuria	\$20.44	\$2.07	\$0.01	\$0.02	\$0.34	\$0.64	\$0.76	\$0.55	-\$0.01	\$0.00	-\$0.16	-\$0.12	\$0.04
	Maple Syrup Urine Disease	\$19.24	\$0.87	-\$0.03	\$0.14	\$0.39	\$0.72	\$0.72	\$0.98	-\$0.04	\$0.00	-\$1.18	-\$0.87	\$0.04
	PKU and variants	\$17.41	-\$0.96	-\$0.75	\$0.01	\$0.00	\$0.01	\$0.00	\$0.03	-\$0.01	\$0.00	-\$0.10	-\$0.15	\$0.00

Table A4. Expanded sensitivity analysis.

Parameter	Base Case	Range Tested	Marginal cost effectiveness ratio of last program added to bundle (\$ per LY gained)			Average cost effectiveness ratio for PKU + 14 diseases
			PKU + 3	PKU + 7	PKU + 14	
Base Case Result for Reference			\$15,426	\$48,071	\$95,000	\$68,346
Incidence:	See Table 2	50 – 150% of Base Case	\$36,000 to \$12,200	\$61,700 to \$44,400	\$164,900 to \$79,300	\$109,900 to \$54,400
Guthrie Screening Program:						
Bacterial inhibition assay sensitivity	98.50%	90% – 99.99%	\$15,426	\$48,071	\$95,000	\$64,900 to \$68,900
Bacterial inhibition assay specificity	99.95%	90% – 99.99%	\$15,426 to \$27,800	\$48,071 to \$61,100	\$95,000 to \$103,300	cost saving to \$70,100
Cost per sample	\$0.66	\$ 0.20 – 4.00	\$15,426	\$48,071	\$95,000	\$68,900 to \$63,600
Cost of clinical diagnosis	\$4,389	\$0 – 25,000	\$16,300 to \$13,300	\$49,000 to \$42,700	\$94,800 to \$91,000	\$69,300 to \$63,600
Mass Spectroscopy Screening Program:						
Sensitivity:						
Fatty acid b-oxidation disorders	100%		\$15,426	\$48,071	\$110,700	\$70,500
Organic acidemias	100%		\$15,426	\$50,400	\$95,000	\$73,200
Urea cycle disorders (not including CPS and OTC deficiencies)	95.54%	Reduced by 10%	\$15,426	\$48,071	\$95,000	\$68,346
Amino acidemias (except B ₆ responsive homocystinuria)	100%		\$23,700	\$48,071	\$95,000	\$78,100
B ₆ responsive homocystinuria	38.70%		\$15,426	\$48,071	\$95,000	\$68,346
All disease sensitivity			\$29,700	\$64,500	\$897,800	\$221,100
Specificity:						
Fatty acid b-oxidation disorders	99.95%		\$15,426	\$68,100	\$1,402,000	\$196,800
Organic acidemias	99.98%		\$41,900	\$94,100	\$440,300	\$239,500
Urea cycle disorders	99.67%	Reduced by 1%	\$15,426	\$48,071	\$941,00	\$683,00
Amino acidemias	99.95%		\$37,000	\$62,800	\$1,441,900	\$182,500
All disease specificity			\$352,700	\$572,000	\$2,595,600	\$668,346
Costs (total test cost per infant):	\$18.37	\$10.00 – 50.00	\$15,426 to \$15,700	\$48,071 to \$48,000	\$93,900 to \$95,100	\$56,300 to \$113,500
Confirmation test costs	See Text	0% – 500%	\$15,426 to \$17,800	\$47,700 to \$48,700	\$92,400 to \$102,800	\$67,800 to \$70,400
Potential Legal Costs:						
If every false negative was reimbursed some value in yr 10	\$0	\$0 – 5,000,000	\$15,426	\$48,071	\$95,000	\$68,346 to \$63,300
If every clinical diagnosis was reimbursed for lack of earlier detection some value in yr 10	\$0	\$0 – 500,000	cost saving	cost saving	\$9,100	cost saving

Treatment, Hospitalization, Education, and Supportive Care Costs:

Hospitalizations			\$16,100 to \$14,700	\$48,400 to \$47,500	\$95,300 to \$94,100	\$69,100 to \$67,500
Recurring medical appointments			\$12,300 to \$22,300	\$44,900 to \$51,800	\$74,700 to \$115,400	\$62,400 to \$74,200
Recurring diagnostic testing			\$14,000 to \$27,800	\$48,071	\$95,000	\$67,300 to \$69,300
Non-dietary treatments (medical procedures)	See Table A2	0 – 200% of Base Case	\$15,426 to \$15,600	\$48,071	\$95,000	\$67,800 to \$68,800
Pharmaceutical treatments			\$5,400 to \$28,200	\$16,200 to \$77,300	\$36,800 to \$168,100	\$33,200 to \$103,400
Dietary treatments			\$7,900 to \$32,800	\$37,000 to \$62,800	\$95,000	\$58,300 to \$78,300
Education			\$30,400 to \$12,800	\$53,800 to \$44,000	\$92,500 to \$96,600	\$73,100 to \$63,500
Adult support care			\$29,000 to \$12,100	\$50,200 to \$42,900	\$93,500 to \$95,700	\$74,300 to \$62,400

Specific Items:

L-carnitine supplementation	See Table A2	Fully eliminated	\$13,500	\$16,200	\$63,400	\$37,000
Social worker appointments		0 - 200% of Base Case	\$14,800 to \$16,100	\$47,700 to \$48,200	\$92,000 to \$96,500	\$67,800 to \$68,900
	See Text	Both groups: 9% use annually	\$15,500	\$48,071	\$95,000	\$68,346
		Both groups: 29% use annually	\$15,500	\$48,071	\$94,100	\$68,346

Dietary treatment compliance:

(assumes no reduction in life expectancy or increased usage of medical resources)	Life long	Stopped at age 12	\$11,100	\$41,900	\$95,000	\$63,600
		Stopped at age 18	\$11,600	\$41,900	\$95,000	\$64,700

Life Expectancy:

		All reduced 25%	\$13,700	\$66,200	\$369,100	\$112,800
	See Table 2	All increased 25%	\$21,100	\$34,700	\$73,200	\$46,800
		All + 20 years (max 78 years)	\$20,600	\$33,600	\$58,600	\$41,300

Quality of life for parents during uncertain diagnosis period

(applies to all IEM cases and false positives for 3 months)	1 LY	0.99 QALY (annualized)	\$16,900	\$49,300	\$134,400	\$73,500
	1 LY	0.97 QALY (annualized)	\$20,700	\$70,100	\$694,400	\$104,000

Discount Rate:

	3%	0 – 9%	\$16,000 to \$31,400	\$43,300 to \$82,000	\$78,000 to \$255,000	\$51,400 to \$130,800
--	----	--------	----------------------	----------------------	-----------------------	-----------------------

Pessimistic Scenarios:

1.	Reduced sensitivity (10%) & reduced specificity (1%) for all diseases	\$407,600	\$539,000	\$2,610,600	\$770,100
2.	All costs increased (50%)	\$7,400	\$23,600	\$48,300	\$46,600
3.	All costs increased (50%) & reduced life expectancy (25%)	\$20,400	\$98,900	\$552,600	\$149,700
4.	Reduced sensitivity (10%), reduced specificity (1%), increased costs (50%) & reduced life expectancy (25%)	\$751,500	\$1,687,700	\$13,268,800	\$2,042,500