Table E1: Frequencies of genetic polymorphisms

Genetic polymorphisms	Frequency	Reference
CYP2D6	4% CYP2D6*4 homozygotes, 66% non-CYP2D6*4 homozygotes, 29% CYP2D6*4/wildtype heterozygotes, and 0.2% CYP2D6*4/CYP2D6*5 heterozygotes (where wildtype refers to non-CYP2D6*4 and non-CYP2D6*5 alleles.	Brown et al, 2000. Polymorphisms of the CYP2D6 gene increase susceptibility to ankylosing spondylitis. Hum Mol Genet 9:1563-6.
PON1 L55M	LL, LM and MM genotypes of PON 55 polymorphisms showed similar frequencies in Italy (39.9, 47.0, 13.1%) and Ireland (39.5, 48.6, 11.9%) 40% homozygous wildtype, 43% heterozygous, 17% homozygous mutant. The frequency of the L allele decreased when passing from northern to southern Europe	Rea et al, 2004. Exp Gerontol 39:629-35. Paraoxonase polymorphisms PON1 192 and 55 and longevity in Italian centenarians and Irish nonagenarians. A pooled analysis. Fortunato et al, 2004. Clin Chem. 50:2012-8. Paraoxonase and superoxide dismutase gene polymorphisms and noise-induced hearing loss. Deakin et al, 2002. J. Clin. Endocrinol. Metab., Mar 2002; 87: 1268 - 1273. Paraoxonase-1 L55M Polymorphism Is Associated with an Abnormal Oral Glucose Tolerance Test and Differentiates High Risk Coronary Disease Families
PON1 Q192R	QQ homozygotes 47%, QR heterozygotes 43%, RR homozygotes 10%	Fortunato et al, 2004. Clin Chem. 50:2012-8. Paraoxonase and superoxide dismutase gene polymorphisms and noise-induced hearing loss.
GSTM1	42-60% homozygous null in Caucasians	Garte et al, 2001. Cancer Epidemiol Biomarkers Prev. 10:1239-48. Metabolic gene polymorphism frequencies in control populations.

GSTT1	homozygous null 10-20% in Caucasians (varies greatly with ethnicity).	Rebbeck TR, 1997. Cancer Epidemiol Biomarkers Prev 6:733-743. Molecular epidemiology of the human glutathione *S*-transferase genotypes *GSTM1* and *GSTT1* in cancer susceptibility.
GSTM3	70.9% GSTM3*A homozygotes, 25.8 % GSTM3*A/GSTM3*B heterozygotes and 3.4% GSTM3*B homozygotes. Allele frequencies were: GSTM3*A, 0.842; GSTM3*B, 0.158.	Inskip et al, 1995. Biochem J. 312: 713-6. Identification of polymorphism at the glutathione S-transferase, GSTM3 locus: evidence for linkage with GSTM1*A.
GSTP1 haplotype in exon 5 ($Ile_{104}Val$) and exon 6 ($Ala_{114}Val$)	For $Ile_{104}Val$: 42.9% homozygous Ile/Ile, 40.4% heterozygotes, 16.7% Val/Val For $Ala_{113}Val$ 79.9% Ala/Ala, 17.9% Ala/Val heterozygotes, 2.1% Val/Val	Kelada et al, 2003. Glutathione S-transferase M1, T1 and P1 polumorphisms and Parkinson's Disease. Neruoscience Letters 337:5-8.
NQO1C609T	10% TT	Ref 11
CYP1B1 $Val_{432}Leu$	Homozygous wildtype 36.3%, heterozygote 46.0% and homozygous mutant 17.7%	Ko et al, 2001. Cancer Res. 61(11):4398-404. Association of CYP1B1 codon 432 mutant allele in head and neck squamous cell cancer is reflected by somatic mutations of p53 in tumor tissue.
MAO-A exon 14	C 81.2% ,T 18.8%	http://www.ncbi.nlm.nih.gov/SNP/. Rs1137070 Accessed on 31st July 2006.
MAO-B intron 13	A 50%, G 50%	http://www.ncbi.nlm.nih.gov/SNP/. Rs1799836 Accessed on 31st July 2006.
SOD2 A16V	AA homozygotes 14%, AV heterozygotes 65%, VV homozygotes 21%	Fortunato et al, 2004. Clin Chem. 50:2012-8. Paraoxonase and superoxide dismutase gene polymorphisms and noise-induced hearing loss.
EPHX3 Y113H	heterozygotes 39.8%, homozygous mutant 11.7%, allele frequency 0.316 in Caucasians	Garte et al, 2001. Cancer Epidemiol Biomarkers Prev. 10:1239-48. Metabolic gene polymorphism frequencies in control populations.
EPHX4 H139R	heterozygous 35.3%, homozygous mutant 3.8%, allele frequency 0.215 in Caucasians	Garte et al, 2001. Cancer Epidemiol Biomarkers Prev. 10:1239-48. Metabolic gene polymorphism frequencies in control populations.

DAT1 $A_{1215}G$		
DRD2A	65% homozygous wildtype, 6.9% homozygous mutant 66.8% homozygous wildtype, 29.2% heterozygote, 4.0% homozygous mutant	Berlin et al, 2000. Int J Neuropsychopharmacol. 3:35-43. Dopaminergic drug response and the genotype (Taq IA polymorphism) of the dopamine D2 receptor. Costa-Mallen et al, 2000. J Neurol Neurosurg Psychiatry 69:535-537. Genetic polymorphism of dopamine D2 receptors in Parkinson's disease and interactions with cigarette smoking and MAO-B intron 13 polymorphism
DRD2B	74.5% homozygous wildtype, 23.8% heterozygote, 1.7% homozygous mutant	Costa-Mallen et al, 2000. J Neurol Neurosurg Psychiatry 69:535-537. Genetic polymorphism of dopamine D2 receptors in Parkinson's disease and interactions with cigarette smoking and MAO-B intron 13 polymorphism
NAT2	The frequencies of *NAT2* slow acetylator alleles vary greatly with ethnicity. The frequency of the slow acetylator phenotype is around 60% among Germans (*1,2*), 53% among American Caucasians (*2*), 63% among Poles (*3*), and 50% among Finns (*4*), 90% in Egypt (*5*) and only 5% among Japanese (*6*).	1. Lin H, Han C-Y, Lin BK, Hardy S. Slow acetylator mutations in the human polymorphic *N*-acetyltransferase gene in 786 Asians, Blacks, Hispanics, and Whites: application to metabolic epidemiology. Am J Hum Genet 52:827-834 (1993). 2. Cascorbi I, Drakoulis N, Brockmöller J, Maurer A, Sperling K, Roots I. Arylamine *N*-acetyltransferase (*NAT2*) mutations and their allelic linkage in unrelated Caucasian individuals: correlation with phenotypic. Am J Hum Genet 57:581-592 (1995). 3. Mrozikiewicz PM, Drakoulis N, Roots I. Polymorphic arylamine *N*-acetyltransferase (*NAT2*) genes in children with insulin-dependent diabetes mellitus. Clin Pharmacol Ther 56:626-634 (1994). 4. Hirvonen A, Pelin K, Tammilehto L, Karjalainen A, Mattson K, Linnainmaa K. Inherited *GSTM1* and *NAT2* defects as concurrent risk modifiers for asbestos-associated human malignant mesothelioma. Cancer Res 55:2981-2983 (1995). 5. Weber WW. The Acetylator Genes and Drug Response. New York:Oxford University Press,

		1987. 6. Grant DM, Hughes NC, Janezic SA, Goodfellow GH, Chen HJ, Gaedigk A, Yu VL, Grewal R. Human acetyltransferase polymorphisms. Mutat Res 376:61-70 (1997).