2.6 Glossary

Abbreviation	Definition
γH2AX	gamma-histone 2 AX
λz	Terminal elimination rate constant
%AUCextrap	Percentage of area under the plasma concentration-time curve that is due to extrapolation from time of the last quantifiable concentration to infinity
1-NA	1-aminonaphtalene
1-OHP	1-hydroxypyrene
$1/EC_{50}$	Reciprocal of $EC_{50,}$ used as measure of cytotoxicity
11-DTX-B2	11-dehydro-thromboxane B2
2-NA	2-aminonaphthalene
3-EP	3-ethenylpyridine
3-HMPMA	3-hydroxy-1-methylpropylmercapturic acid
3-HPMA	3-hydroxypropylmercapturic acid
3-OH-B[a]P	3-hydroxybenzo(a)pyrene
3R4F	Reference cigarette produced by the University of Kentucky
4-ABP	4-aminobiphenyl
8-epi-$PGF_{2\alpha}$	8-epi-prostaglandine F2α
AA	Arachidonic acid
AAIS	Atherothrombotic acute ischemic stroke
AAMA	Acrylamide mercapturic acid
ABCA1	ATP-binding cassette transporter A1
ABI	Ankle brachial index
AC	Alternating current
ACE	Acute coronary events
ACGIH	American Conference of Governmental Industrial Hygienists
ACS	Acute coronary syndrome
ACT	Acceptance and commitment therapy
ACToR	Aggregated Computational Toxicology Resource
AD	Addictive
ADaM	Analysis Data Model
ADAM17	A disintegrin and metalloproteinase 17

(table continues)

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Abbreviation	Definition
ADL	Activities of daily living
ADME	Absorption, distribution, metabolism and excretion
AE	Adverse event
AF	Atrial fibrillation
AHA	American Heart Association
AIC	Akaike information criterion
ALA	Abuse liability assessment
ALCS	Altria Client Services LLC
ALI	Air liquid interface
ALP	Alkaline phosphatase
ALT	Alanine aminotransferase
AMI	Acute myocardial infarction
ANCOVA	Analysis of covariance
ANOVA	Analysis of variance
ANSI	American National Standards Institute
AOP	Adverse outcome pathway
AP	Alkaline phosphatase
AP-1	Activator protein 1
Apo A1	Apolipoprotein A1
Apo B	Apolipoprotein B
ARDS	Acute respiratory distress syndrome
ARIC	Atherosclerosis Risk in Communities
AQD	Actual quit date
AQL	Acceptable quality level
AS	Adult smokers
AS	Aortic stenosis
ASA	Acetylsalicylic acid
ASCVD	Atherosclerotic cardiovascular diseases
AST	Aspartate aminotransferase
AT	Analysis time
ATC	Anatomical Therapeutic and Chemical (WHO drug classification index)
ATF6	Activating transcription factor 6
ATM	Ataxia telangiectasia mutated kinase

(table continues)

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Abbreviation	Definition
ATP	Adenosine triphosphate
ATS	American Thoracic Society
ATS/ERS	American Thoracic Society/European Respiratory Society
AUC	Area under the concentration-time curve
$AUC_{(0\text{-}24\ h)}$	Area under the concentration-time curve from 0 to 24 hours
$AUC_{(0\text{-last})}$	Area under plasma concentration-time curve from start of product use to time of last quantifiable concentration
$AUC_{(0\text{-}t')}$	Partial AUC, where t' is the subject-specific time of maximum nicotine concentration
$AUC_{(0\text{-}\infty)}$	Area under plasma concentration-time curve from start of product use extrapolated to time of last quantifiable concentration to infinity
AUT	Actual Use Test Study
B[a]P	3-hydroxybenzo(a)pyrene
BA	Bronchiolar attachments
BA IMT	Brachial artery intima media thickness
BAL	Bronchoalveolar
BALF	Bronchoaveolar lavage fluid
BCD	Baseline conjugated dienes
BCF	Bioconcentration factor
bFGF	basic fibroblast growth factor
BHR	Bronchial hyperresponsiveness
BIC	Bayesian information criterion
BIF	Biological impact factor
BL	Basal level
BL(O)Q	Below the limit of quantification
BMI	Body mass index
BMS	Blend maintenance study
BoExp	Biomarker(s) of exposure
BOM	Bill of materials
BP	Blood pressure
BPM	Blood pressure medication
BR	Batch release
BRFSS	Behavioral Probability Factor Surveillance System
BRHS	British Regional Heart Study

(table continues)

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Abbreviation	Definition
BS	Behavioral support
BSA	Bovine serum albumin
BT	Blend test
BUN	Blood urea nitrogen
Bw	by weight
C	Compliance
CA	Carcinogen
CAC	Coronary artery calcification
CAD	Coronary artery disease
CAE	Coronary artery ectasia
CAF	Caffeine
CAN/CSA	Canadian Standard Association
CARDIA	Coronary Artery Probability Development in Young Adults study
CAS	Chemical Abstracts Service
CASI	Computer assisted self-interview
CASRN	Chemical Abstracts Service Registry Number
CATI	Computer-Assisted Telephone Interview
CAWI	Computer-Assisted Web Interview
C_{avg}	Weighted average concentration over 24 hours
CBI	Confidential business information
CBS	Cystathionine β synthase
CBT	Cognitive behavioral therapy
CBV	Cerebrovascular
CC	Conventional cigarette, Combustible cigarette
C_c	Current smoker
C_D	Current dual user
CDC	Centers for Disease Control and Prevention
CDI	Cognitive Debriefing Interview
CDISC	Clinical data interchange standards consortium
CDRH	Center for Devices and Radiological Health
CE	Cardiac events
CEMA	2-Cyanoethylmercapturic acid
Cess	Cessation

(table continues)

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Abbreviation	Definition
CH	Switzerland
CETP	Cholesteryl ester transfer protein
CFR	Code of Federal Regulations
CHARISMA	Clopidogrel for High Atherothrombotic Risk and Ischemic Stabilization, Management and Avoidance
CHD	Congestive heart disease
CHF	Congestive heart failure
CI	Confidence interval
CID	Compound identifier
CISPR	International Special Committee on Radio Interference
CKD	Chronic kidney disease
Cl/F	Apparent clearance
C_{last}	Last quantifiable concentration
CM	Contingency management
C_m	Maximum nicotine concentration
C_{max}	Maximum plasma concentration
CMB	Change management board
CMC	Chemistry, Manufacturing and Controls
CMF	Color material finish
C_{min}	Minimum plasma drug concentration
CMP	Change management process
CMR	Caffeine metabolic ratio
CO	Background concentration
CO	Carbon monoxide
CoA	Certificate of analysis
CoC	Certificate of conformance
CODAM	Cohort study of Diabetes and Atherosclerosis Maastricht
COex	Exhaled CO
COHb	Carboxyhemoglobin
COMb	Carboxymyoglobin
COPD	Chronic obstructive pulmonary disease
CORESTA	Cooperation Center for Scientific Research Relative to Tobacco
COT	Cotinine

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Abbreviation	Definition
COT-P	Cotinine-plasma
COV	Close out visit
COV1	Primary covariate model
COX	Cyclooxygenase
Cpd	Cigarettes per day
CPD_i	Average CC consumption
C_{peak}	Peak plasma concentration
CPP	Critical process parameter
CPS	Current Population Survey
CPS-TUS	Current Population Survey-Tobacco Use Supplements
CQA	Critical quality attributes
CQMA	Critical quality material attributes
CRA	Clinical research associate
CRE CRE	Clinical risk endpoint(s) Creatinine
CRF	Case report form
CRO	Contract research organization
CRP	C-reactive protein
CRU	Clinical research unit
CS CS	Cigarette smoke Current smoker
CSC	Cigarette smoke condensate
CSE	Cigarette smoke extract
CSF	Cerebrospinal fluid
CSR	Clinical study report
CSV	Clinical site visit
CSX	Cardiac syndrome X
CT	Cardiovascular toxicant
CTCAE	Common Terminology Criteria for Adverse Event and Common Toxicity Criteria
CTMS	Clinical trial management system
CTP	Center for tobacco products
CV (documentation)	Curriculum vitae

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Abbreviation	Definition
CV (statistics)	Coefficient of variation
CVD	Cardiovascular disease
CWRES	Conditional weighted residuals
CXCL-8	Interleukin-8 [chemokine (C-X-C motif) ligand 8]
CYP	Cytochrome P450
CYP1A2	Cytochrome P450 1A2
CYPB1B	Cytochrome P450 B1B
CYP2A6	Cytochrome P450 2A6
CZ	Climatic zone
DAMP	Damage associated molecular pattern
DBP	Diastolic blood pressure
DCFDA	Dichlorofluorescin diacetate
DD	Delivered dose
DDA1	Due diligence assessment; test battery including NRU, Ames and MLA assays
DDA3	Due diligence assessment; test battery including DDA1, and a 90-day inhalation study on rats
DDRs	DNA damage response
DE	Germany
dFMEA	Design failure mode and effect analysis
DHA	Docosahexaenoic acid
DHBMA	1, 2-di-hydroxybutyl mercapturic acid
DHE	Dihydroethidium
DHR	Dihydrorhodamine
DI	Design input
DI	Destructive index
DLCO	Diffusion capacity of lung for carbon monoxide
DLP	Data lock point
DM	Diabetes mellitus
DMP	Data management plan
DMSO	Dimethyl sulfoxide
D_n	Day n (n^{th} study day)
DNA	deoxyribonucleic acid
DoE	Design of experiment

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Abbreviation	Definition
DOE (US)	Department of energy
DQC	Dilution quality control
DS	Down's syndrome
DSBs	Double strand breaks
DSD	Droplet size distribution
DSM	Diagnostic and statistical manual of mental disorders
DSM-IV	Diagnostic and statistical manual of mental disorders- 4th edition
DSM-IV-TR	Diagnostic and statistical manual of mental disorders- 4th edition text revision
DTR	Design test report
DTS	Design test specification
DUT	Device under test
DV	Dependent variable
DV (design)	Design verification
DV (manufacturing)	Device
DVP	Design verification plan
DVR	Design verification report
DWB	Dry weight basis
E	Elastance
EA	Environmental assessment
EBC	Exhaled breath condensate
EC	Ethics committee
EC_{50}	Half maximal effective concentration, concentration of exposure that reduces the number of viable cells by 50%
ECG	Electrocardiogram
ECHA	European Chemicals Agency
ECLIPSE	Evaluation of COPD longitudinally to identify predictive surrogate endpoints
ECOSAR	Ecological structure activity relationships
eCRF	Electronic case report form
ED	Equivalent dose
EDA	Exploratory data analysis
EDC	Electronic Data Capture System

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Abbreviation	Definition
e-diary	electronic diary
EDTA	Ethylenediaminetetraacetic acid
EFSA	European Food Safety Authority
EGF	Epidermal growth factor
EGR-1	Early growth response 1
EHC	Electrically heated cigarettes
EHCSS	Electrically heated cigarette smoking system
EI	Electronic ionization
EIC	Environmental introduction concentration
ELISA	Enzyme-linked immunosorbent assay
ELS	Extended least squares
EMA	European Medicines Agency
EN	European standards for products and services by European Committee for Standardization
eNOS	Endothelial nitric oxide synthase
EOS	End of study visit
EOT	End of treatment
EPA	U.S. Environmental Protection Agency
EPIC	European Prospective Investigation into Cancer and Nutrition study
ePRO	Electronic patient reported outcomes
ER	Endoplasmic reticulum
ERKs	Extracellular signal-regulated kinases
ERM	Environmental Resources Management, Inc.
ERR	Excess relative risk
ERS	Exposure response study
ESI	Electrospray ionization
ET-1	Endothelin 1
ETS	Environmental tobacco smoke
EU	European Union
F	Effective dose for MRTP users. Where 1 is that for CC smokers and 0 that for non-smokers
Factor 1	Probability that an MRTP user will switch back to cigarettes is X times higher if the individual previously was a cigarette smoker

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Abbreviation	Definition
Factor 2	Probability that a current smoker, MRTP user, or dual user will quit is X times higher if the individual has previously quit
Factor 3	Probability that a former tobacco user will start smoking cigarettes, start using MRTP or start being a dual user is X times higher if the individual is a short-term quitter
Factor 4	Probability that an MRTP user will switch to cigarettes or dual use becomes X if the individual is a long-term continuous user of the MRTP
FAP	Full analysis population
FAS	Full analysis set
FASEB	Federation of American Societies for Experimental Biology
FCC	Federal Communications Commission
FCHL	Familial combined hyperlipidemia
FCLAA	Federal Cigarette Labeling and Advertising Act
FCTC	Framework Convention of Tobacco Control (WHO)
FD&C Act	Federal Food, Drug, and Cosmetic Act
FDA	Food and Drug Administration
FDA-18	Abbreviated FDA list of 18 HPHCs in smoke/aerosol
FDA-18 + 6	Abbreviated FDA list of 18 HPHCs in smoke/aerosol + 6 tobacco constituents
FDA-93	Established FDA list of 93 HPHCs in tobacco products and tobacco smoke
FDS	Functional design specification
FEF	Forced expiratory flow
FEV_1	Forced expiratory volume in 1 second
FF	Full Flavor
FFA	Free fatty acids
FGD	Focus group discussion
FIB	Fibrinogen
FID	Flame ionization detector
FMD	Flow mediated dilatation
FOCE	First order conditional estimation
FPG	Fasting plasma glucose
FPL	Fasting plasma lipids
FPM	Fluorescent particulate matter
FR	Functional requirement

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Abbreviation	Definition
FRC	Functional residual capacity
Frel	Bioavailability relative to THS
FRV	Forced residual volume
FS	Former smoker(s)
FSFV	First subject first visit
FSH	Follicle stimulating hormone
FSI	First subject in
FSPTCA	Family Smoking Prevention and Tobacco Control Act
FTC	Federal Trade Commission
FTND	Fagerström test for nicotine dependence
FTR	Functional testing result
FTS	Functional testing specification
FU	Follow-up
FVC	Forced vital capacity
FYTS	Florida Youth Tobacco Survey
GC	Gas chromatography
G-CSF	Granulocyte colony-stimulating factor
GCP	Good Clinical Practice
GED	General Education Development certificate
GEF	Global evaluation factor
GEP	Good Epidemiological Practice
GGT	Gamma-glutamyl transferase
GHE	General Health Education
GINA	Global Initiative for Asthma
GLP	Good Laboratory Practice
GM-CSF	Granulocyte macrophage colony stimulating factor
GOF	Goodness of fit
GOLD	Global Initiative for Chronic Obstructive Lung Disease
GR	Glutathione reductase
GRIPS	Göttingen Risk Incidence and Prevalence Study
GSD	Geometric standard deviation
GSH	Glutathione
GSSG	Glutathione disulfide

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Abbreviation	Definition
GVP	Gas vapor phase
GVP	Good pharmacovigilance practices
H	half-life for quitting, the time in years after which the excess risk in quitter is reduced to half that in continuing smokers
HAT	Hollow acetate tube
Hb	Hemoglobin
HbA1c	Hemoglobin glycosylated A1c
HBMA	3-hydroxypropyl-1-methylmercapturic acid
HbsAg	Hepatitis B surface antigen
HC	Health Canada (including Health Canada list of 44 constituents in the mainstream smoke of tobacco products)
HCAEC	Human coronary arterial endothelial cell(s)
HCI	Health Canada Intense (puffing regime)
Hct	Hematocrit
HCV	Hepatitis C virus
HD	Heart disease
HDL	High density lipoprotein
HDL-C	High density lipoprotein-C
HeatSticks	Commercial name (registered trademark) of Tobacco Sticks
HED	Human equivalent dose
HEMA	2-hydroxyethyl mercapturic acid
HF	Heart failure
HIGH	High intention to use *iQOS* system based on material
HIPAA	Health Insurance Portability and Accountability Act
HIS	Heaviness of smoking index
HIV	Human immunodeficiency virus
HM	High menthol / Menthol 2 / *Marlboro Fresh Menthol HeatSticks*
HNB	Heat-not-burn
HNE	4-hydroxy-2-trans-nonenal
HPHCs	Harmful and potentially harmful constituent(s)
HPLC	High performance liquid chromatography
HPT	Human puffing topography
HR	Heart rate
HRV	Heart rate variability

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Abbreviation	Definition
HS	Healthy smokers
hsCRP	High sensitive C-reactive protein
HST	Human smoking topography
HYP	Hypertension
Hz	Hertz
IAQ	Indoor air quality
IARC	International Agency for Research on Cancer
IB	Investigator's brochure
IC	Inspiratory capacity
ICAM-1	Intercellular adhesion molecule 1
ICD	International Classification of Diseases
ICF	Informed consent form
ICH	International Conference on Harmonization
ICS	Inhaled corticosteroid
ICSC	International chemical safety card(s)
ICSR	Individual case safety report
ID	Identification
IDC	Industrial Development Center
IDEAL	Incremental decrease in end points through aggressive lipid lowering
IDI	Individual interview(s)
IDL	Intermediate density lipoprotein
IEA	International Epidemiological Association
IEC	Independent Ethics Committee
IFCC	International Federation of Clinical Chemistry and Laboratory Medicine
IFN	Interferon
IH	Intracerebral hemorrhage
IHD	Ischemic heart disease
IIV	Inter-individual variability
ILM	Investigator laboratory manual
IM	Investigator's meeting
IMP	Investigational medicinal product
IMT	Intima-media thickness
IND	Investigational New Drug

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Abbreviation	Definition
INR	International normalized ratio
IOM	Institute of Medicine
IP	Investigational product
IPCS	International Programme on Chemical Safety
IPD_i	Average *iQOS* use
IPN	Inflammatory process network
IPRED	Individual predicted
iQOS and *IQOS*	Commercial names (both registered trademarks) of the Tobacco Heating Device
IQR	Inter-quartile range
IRB	Institutional Review Board
IS	Intermittent smokers
ISDCF	Individual safety data collection form
ISO	International Organization for Standardization
ISS	International Smoking Statistics
IT	Italy
ITT	Intent-to-treat
ITU	Intent to use
ITUQ	Intent to use questionnaire
IU	International unit
IV	Intravenous
IWGT	International Workshop on Genotoxicity Testing
IWRES	Individual weighted residuals
IWRS	Interactive web and voice response system
IXRS	Interactive voice and web response system
JNK	c-Jun N-terminal kinases
JP	Japan
KAMs	Knowledge assembly models
KB	Kicking Butts program
KCO	Rate constant of carbon monoxide
KOL	Key opinion leader
KORA	Kooperative Gesundheitsforschung in der Region Augsburg" (Cooperative Health Research in the Augsburg Region)
KR	South Korea

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Abbreviation	Definition
LA	State legal smoking age
LA-25	Legal smoking age to 25 years of age
LA-25 NS	Legal smoking age to 25 years of age - Never Smokers
LB	Last behavior
LC-MS	Liquid chromatography–mass spectrometry
LC-MS/MS	Liquid chromatography-tandem mass spectrometry
LDH	Lactic dehydrogenase
LDL	Low density lipoprotein
LDL-C	Low density lipoprotein-cholesterol
LDLR	LDL receptor
LED	Light emitting diode
LFA-1	Lymphocyte function-associated antigen
LGBQ	Lesbian, gay, bisexual, queer and questioning
LGBT	Lesbian, gay, bisexual and transexual
LIMS	Laboratory Information Management System
LIPG	Endothelial lipase
LLM	Label, labeling and marketing material
LLN	Lower limit of the normal range
LLOQ	Lower limit of quantification
LM	Low menthol / Menthol 1 / *Marlboro Smooth Menthol HeatSticks*
LOCF	Last observation carried forward
LOD	Limit of detection
LOESS	Local regression
LOGEL(s)	Lowest observable genotoxic effect level(s)
LOQ	Limit of quantitation/quantification
LPS	Lipopolysaccharide
LS	Least squares
LSLV	Last subject last visit
LSO	Last subject out
LSRO	Life Sciences Research Office
LTL	Lower tolerance limit
LTN	Low tar and nicotine
LXA4	Lipoxin A4

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Abbreviation	Definition
LXR	Liver X receptors
M-CSF	Macrophage colony-stimulating factor
M-I	Para-menthane-3,8-diol
MAD	Median absolute deviation
MAP	Mean arterial pressure
MAPK	Mitogen-activated protein kinase
mCC	Menthol conventional cigarette
mCEQ	modified Cigarette Evaluation Questionnaire
MCDA	Multiple-criteria decision analysis
MCH	Mean corpuscular hemoglobin
MCHC	Mean corpuscular hemoglobin concentration
MCL	Mean chord length
MCP-1	Monocyte chemoattractant protein-1
MCV	Mean corpuscular volume
MDA	Malondialdehyde
MedDRA	Medical Dictionary for Regulatory Activities
MEF	Mid expiratory flow
MESA	Multi-Ethnic Study of Atherosclerosis
MeSH	Medical subject headings
MF	Mutation frequency
MHBMA	Monohydroxybutenyl mercapturic acid
MHRA	Medicines and Healthcare Regulatory Agency
MI	Motivational interviewing
MI	Myocardial infarction
MIA	Menthol in aerosol
MIP-1α	Macrophage inflammatory protein 1 alpha
miRNA	Micro-ribonucleic acid
MIS	Menthol in smoke
MLA	Mouse Lymphoma Assay
MM6	Mono Mac 6
MMAD	Mass median aerodynamic diameter
MMEF	Maximal (mid) expiratory flow
MMP	Matrix metalloprotease or matrix metalloproteinase

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Abbreviation	Definition
MMP-1	Matrix metalloproteinase-1
MMRM	Mixed model for repeated measurements
MMWR	Morbidity and Mortality Weekly Report
MNVit	*In vitro* micronucleus assay
MNWS	Minnesota nicotine withdrawal scale
MNWS-R	Minnesota nicotine withdrawal scale, revised version
MONICA	MONItoring of Trends and Determinants in CArdiovascular Disease
MPF	Mouth piece filter
MPO	Myeloperoxidase
MPRL	Mini pilot recon line
MPSS	Mood and physical symptoms scale
MPV	Mean platelet volume
MR	Mean ratio
MRC	Mentholated reference cigarette
MRFIT	Multiple Risk Factor Intervention Trial
MRM	Multiple reaction monitoring
mRNA	Messenger ribonucleic acid
MRTP	Modified risk tobacco product
MRTPA	Modified risk tobacco product application
MRTP Scenario	Scenario where MRTP is introduced
MS	Main sample
MS	Mass spectrometry
MSS	Main stream smoke
MT	Manufacturing testing
MTF	Monitoring the future
MTHFR	Methylenetetrahydrofolate reductase
mTHS	Tobacco Heating System - Menthol
MT_i	Measurement time
MU	Main unit
n	number of subjects/replicates
N	Number of Values Reported
N	Total Sample Size
N(a)	Negative exponential factor for a single year

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Abbreviation	Definition
NA	Not applicable or not assessed
NADPH	nicotinamide adenine dinucleotide phosphate
NAB	N-nitrosoanabasine
NARC-1	Neural apoptosis-regulated convertase 1
NAT	Nitrosoanatabine
NATS	National Adult Tobacco Survey
NC	Not calculated
NCBI	National Center for Biotechnology Information
ND	Not detected
NDA	New Drug Application
NDIR	Non dispersive infrared sensor
NEq	Nicotine equivalents
NESARC	National Epidemiologic Survey on Alcohol and Related Conditions
NF-κB	Nuclear factor kappa B
NFDPM	Nicotine free dry particulate matter ("Tar")
NFE2L2	Nuclear factor (erythroid-derived 2)-like 2 gene
NF MI	Non-fatal myocardial infarction
NH_3	Ammonia
NHANES	National Health and Nutrition Examination Survey
NHBE	Normal human bronchial epithelial
NHBECs	Normal human bronchial epithelial cell cultures
NHIS	National Health Interview Survey
NHSDA	National Household Survey on Drug Abuse
NIC-P	Nicotine plasma
NK	Natural killer cells
NM	Not meaningful
NMR	Nuclear magnetic resonance
NNAL	4-(methylnitrosamino)-1-(3-pyridyl)-1-butanol
NNAL-glucuronides	[4-(methylnitrosamino)-1-(3-pyridyl) but-1-yl]-b-N-D-glucosiduronic acid and [4-(methylnitrosamino)-1-(3-pyridyl) but-1-yl]-b-O-D-glucosiduronic acid
NNK	4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone
NNN	N-nitrosonornicotine
NNS	Nicotine nasal spray

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Abbreviation	Definition
NO	Nitric oxide
NO	No Intention to use *iQOS* system based on material
NOT	Not on tobacco program
NOx	Nitrogen oxides
NP	No preference
NPA	Network perturbation amplitude
NPHS	Northwick Park Heart Studies
NR	Neutral Red
NRC	National Research Council
NRCan	Natural Resources Canada
NRT	Nicotine replacement therapy
NRU	Neutral Red Uptake
NS	Adult never smokers
NSAID	Nonsteroidal anti-inflammatory drugs
NSCD	Non-sudden cardiac death
NSCLC	Non-small cell lung cancer
NTP	National Toxicology Program
Null Scenario	Scenario where MRTP is not introduced
NYHA	New-York Heart Association
o-tol	o-toluidine
OC	Oral contraceptive
OECD	Organisation for Economic Co-operation and Development
OEHHA	California Office of Environmental Health Hazard Assessment
ONOO	Peroxynitrite
OR	Odds ratio
OSBP	OxS binding protein
OSHA	Occupational Safety and Health Administration
OTC	Over-the-counter
OUS	outside the United States
oxLDL	oxidized LDL
P-V loop	Pressure-Volume loop
P1	Platform 1 - Tobacco Heating System (THS)
P_{CC}	Probability of a smoker to remain a smoker (no change)

(table continues)

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Abbreviation	Definition
P_{CD}	Probability of a smoker to switch to dual use (switching)
P_{CF}	Probability of a smoker to quit tobacco use (cessation)
P_{CM}	Probability of a smoker to switch to MRTP use (switching)
P_{DC}	Probability of a dual user to switch to smoking (switching)
P_{DD}	Probability of a dual user to remain a dual user (no change)
P_{DF}	Probability of a dual user to quit tobacco use (cessation)
P_{DM}	Probability of a dual user to switch to MRTP use (switching)
P_{FC}	Probability of a former-smoker to start smoking (re-initiation)
P_{FD}	Probability of a former-smoker to start to dual use (re-initiation)
P_{FF}	Probability of a former-smoker to remain a former-smoker (no change)
P_{FM}	Probability of a former-smoker to start to use MRTP (re-initiation)
P_{MC}	Probability of an MRTP user to switch to smoking (switching)
P_{MD}	Probability of an MRTP user to switch to dual use (switching)
P_{MM}	Probability of an MRTP user to remain a MRTP user (no change)
P_{MF}	Probability of an MRTP user to quit tobacco use (cessation)
P_{NC}	Probability of a never-smoker to start to smoke (initiation)
P_{ND}	Probability of a never-smoker to start to dual use (initiation)
P_{NM}	Probability of a never-smoker to start to use MRTP (initiation)
P_{NN}	Probability of a never-smoker to remain a never-smoker (no change)
PAD	Peripheral artery disease
PAH	Polycyclic aromatic hydrocarbon(s)
PAI	Plaminogen activator inhibitor
PAT	Process analytical technology
PBA	Perception and Behavior Assessment
PBPK	Physiologically based pharmacokinetics
PBS	Phosphate buffered saline
PC	Personal computer
PCBA	Printed circuit board assembly
PD	Pharmacodynamics
PDGF	Platelet derived growth factor
PDIMS	Product Development Information Management System
PDSP	Programmable dual syringe pump
PERK	Protein kinase RNA-like ER kinase

(table continues)

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Abbreviation	Definition
PEviable	Plating efficiency
PF	Performance parameters
pFMEA	Product Failure Mode and Effect Analysis
PFT	Pulmonary function testing
PG	Plasma glucose
PH	Pulmonary hypertension
PHIM	Population Health Impact Model
PI	Principal investigator
PK	Pharmacokinetics
PK/PD	Pharmacokinetics/Pharmacodynamics
PLA	Polylactic Acid
PM2.5	Particulate matter below 2.5 microns
PM USA	Philip Morris USA
PMI	Philip Morris International, which is comprised of the following entities: (1) Philip Morris International Inc., (2) Philip Morris Products S.A., (3) Philip Morris International Management S.A., (4) Philip Morris International Research Laboratories Pte. Ltd., and (5) Philip Morris Manufacturing & Technology Bologna S.p.A
PMI-58	List of constituents and analytes defined by PMI that are quantified in the THS aerosol
PMI-S	Philip Morris International Research Laboratories Pte. Ltd
PMIM	Philip Morris International Management S.A.
PMMTB	Philip Morris Manufacturing and Technologies Bologna S.p.A.
PMP	Philip Morris Products S.A.
PMRL-G	Philip Morris Research Laboratories GmbH
PMTA	Premarket tobacco product application
PON1	Paraoxonase 1
POTW	Publicly owned treatment works
PP (material)	Polypropylene
PP or PPROT	Per protocol
PPR	Product performance range
PPT-S	Positive psychotherapy therapy for smoking cessation
PRED	Population predicted
PREP(s)	Potential reduced exposure product(s)
PRI	Perceived risk instrument
PRI-G	Perception of risk instrument - general

(table continues)

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Abbreviation	Definition
PRI-P	Perceived risk instrument - personal risk
PRO(s)	Patient reported outcome(s)
PROCAM	Prospective Cardiovascular Münster study
PRR	Pattern recognition receptor
PS	Performance specification
PSD	Particle size distribution
PSID	Panel study of income dynamics
PT	Preferred term
PT	Product testing
PT	Prothrombin time
PTR-MS	Proton transfer reaction - Mass spectrometer
PTS	Product test specification
PUFA	Polyunsaturated fatty acids
PV	Pressure volume
PWV	Pulse wave velocity
PX	Paraxanthine
QA	Quality assurance
QC	Quality control
QDP	Quantitative descriptive profile
QE_{24h}	Quantity excreted in 24 hours
QMS	Quality Management System
QQ	Quartile-quantile
QSAR	Quantitative structure activity relationships
QSU	Questionnaire of smoking urges
QSU-brief	Questionnaire of smoking urges-brief
QTc	Corrected QT interval
R	Resistance
R&D	Research and development
RADAR	Rapid approach to DNA adduct recovery (an assay for quantitative immunodetection of protein-DNA adducts)
RBC	Red blood cell (count)
RBIF	Relative biological impact factors
RC	Reference cigarette
RC	Relative change

(table continues)

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Abbreviation	Definition
RCT	Randomized controlled trial
RDT	Reproductive or developmental toxicant
REC	Reduced exposure claim
REML	Restricted maximum likelihood
REV	Revertant
REX	Reduced exposure studies
REXA	Reduced exposure studies in ambulatory settings
REXC	Reduced exposure studies in confinement settings
RH	Relative humidity
RMSSD	Root mean square of the successive differences
RNA	Ribonucleic acid
RNS	Reactive nitrogen species
ROC	Receiver operating characteristic
ROS	Reactive oxygen species
RR	Relative risk
RRC	Reduced risk claim
RRC2	Reduced risk claim 2
RRP	Reduced risk product(s)[1]
RS	Reducing sugar
RSD	Relative standard deviation
RSE	Relative standard error
RSP	Respirable suspended particle(s)
RT	Respiratory toxicant
RTD	Resistance-to-draw
RTG	Relative total growth
RV	Residual volume
S-BMA	S-benzylmercapturic acid
S-ITQ	Adult smokers with the intention to quit
S-NITQ	Adult smokers with no intention to quit
S-PMA	S-phenylmercapturic acid
S9	Aroclor-induced rat liver microsomal fraction (used as metabolic activation in in vitro assays)

(table continues)

[1] Reduced Risk Product(s), the term Philip Morris International (PMI) uses to refer to products with the potential to reduce individual risk and population harm in comparison to smoking cigarettes.

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Abbreviation	Definition
SA	Smoking abstinence
SAE	Serious adverse event
SAH	Subarachnoid hemorrhage
SAP	Statistical Analysis Plan
SAS	Statistical analysis software
SBP	Systolic blood pressure
SC	Smoking cessation
SCD	Sudden cardiac death
SCIREQ	Scientific Respiratory Equipment Inc.
SCP	Summary of Clinical Pharmacology Studies
SD	Standard deviation
SDMS	Scientific Data Management System
SDTM	Study Data Tabulation Model
SE	Standard error
(b) (4)	(b) (4)
SEM	Standard error of the mean
SEND	Or CDISC SEND: Standard for Exchange of Non-clinical Data
SERM	Selective estrogen receptor modulator
SES	Socio-economic status (questionnaire)
SG	Suspension growth
SG warnings	Surgeon general warnings
SHM	Sample handling manual
SIAM	SIDS initial assessment meeting
sICAM-1	Soluble intercellular adhesion molecule-1
SIDS	Screening Information Dataset
SIV	Site initiation visit
SLTN	Super low tar and nicotine
SMAR	Smoking article
SMP	Safety management plan
SMS	Short message service
SNUS	Moist powder tobacco, originating from SNUFF (pulverized tobacco)
SNP	Single nucleotide polymorphism
SOC	System organ class

(table continues)

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Abbreviation	Definition
Sol-PM	Solanesol
SOME	Some intention to use *iQOS* system based on material
SOP	Standard operating procedure
SP	Study plan
SPE	Solid phase extraction
SPI	Single photon ionisation
SQ	Smoking questionnaire
SR	Smoking reduction
SR	Study report
SRO	Subject report outcome
SRP	Systems response profile
SS	Symptomatic smokers
SSF	Study site file
Stk	Stick
SUSAR	Suspected unexpected serious adverse reaction
SVC	Semi Volatile organic compound
Switch	Switching
T	Time point
T_0	Time point of first product use during study day
$t_{1/2}$	Terminal half-life
TA	Total alkaloid
"Tar"	Nicotine-Free Dry Particulate Matter (NFDPM)
TC	Total cholesterol
TC	Training Center
TCD	Thermal conductivity detector
T_{dur}	Duration of zero-order absorption
TEM	Trans endothelial migration
TES	Total Exposure Study
TG	Triglycerides
TGF-α	Transforming growth factor alpha
TGF-β	Transforming growth factor beta
THBP	2,2',4,4'-Tetrahydroxybenzophenone
THD	Tobacco Heating Device (Holder and Charger)

(table continues)

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Abbreviation	Definition
THP	Tamm-Horsfall protein
THP-1	Monocyte cell line
THS	Tobacco Heating System (Tobacco Heating Device + Tobacco Sticks)
THSM	Tobacco Heating System Menthol
THSR	Tobacco Heating System Regular
TIA	Transient ischemic attack
TLA	Tobacco lot analysis
t_{last}	Time of the last quantifiable concentration
TLC	Total lung capacity
TLRs	toll-like receptors
t_{max}	Time to the maximum concentration
TNC	"Tar" (NFDPM), Nicotine, Carbon monoxide
TNFα	Tumor necrosis factor alpha
TO	Tolerance limit
TobReg	World Health Organization Study Group on Tobacco Product Regulation
TobLabNet	WHO Tobacco Laboratory Network
TOFMS	Time-of-flight mass spectrometry
t_{peak}	Time to peak concentration
TPL	Technical project lead
TPM	Total particulate matter
TPP	Target product profile
TPSAC	Tobacco Products Scientific Advisory Committee
TQD	Target quit date
TS	Tobacco Stick
TSNA	Tobacco-specific N-nitrosamines
tt-MA	Trans, trans-muconic acid
TTFC	Time to first cigarette
TTP	Tobacco transition probability
TX	Thromboxanes
TXA2	Thromboxane A2
TXB2	Thromboxane B2
UA	Unstable angina
(b) (4)	

(table continues)

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Abbreviation	Definition
UC	Usual care
UGT	Uridine diphosphate glucruronyltransferase
UHIS	National Health Interview Survey
UK	United Kingdom
UL	Safety consulting and certification company
ULN	Upper limit of the normal range
ULOQ	Upper limit of quantification
UN	The United Nations
UPLC	Ultra performance liquid chromatography
UPLIFT	Understanding Potential Long-Term Improvements in Function with Tiotropium
UPR	Unfolded protein response
UPT	Urine pregnancy test
US	United States of America
USB	Universal Serial Bus
USDHHS	US Department of Health and Human Services
USSURG	US Surgeon General
UTL	Upper tolerance limit
UV	Ultraviolet
UVPM	Ultraviolet absorbing particulate matter
V	Volt
V-IPN	Vascular inflammatory processes network
V/F	Apparent volume of distribution
VA	Alveolar volume
VAS	Visual analogue scale
VC	Vital capacity
VCAM-1	Vascular cell adhesion molecule-1
VEGF	Vascular endothelial growth factor
VLDL	Very low density lipoprotein
V*n*	Visit *n*
VOC	Volatile organic compound(s)
VPC	Visual predictive check
vs	Versus
vWF	von Willebrand factor

(table continues)

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Abbreviation	Definition
WBC	White blood cell (count)
WC	Waist circumference
WHO	World Health Organization
WHO-9	Mandated lowering WHO list of 9 toxicants
WHO-18	Initial WHO list of 18 priority toxicants
WHO-39	Non-exhaustive WHO list of 39 priority toxic contents and emissions of tobacco products
WHO-DDE	World Health Organization - Drug Dictionary Enhanced
WHR	Waist to hip ratio
WKI	Work Instruction
WMA	World Medical Association
WOCBP	Women of childbearing potential
WOT	Whole Offer Test
XMN	Xenobiotic metabolism network
YALTA	Young Adult Longitudinal Trends in Antioxidants
YRBSS	Youth Risk Behavior Surveillance System
YTS	Youth Tobacco Survey
Zero benefit simulations	Analyses intended to determine what changes in parameter values might eliminate the reduction in deaths associated with MRTP introduction

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