



Product Projects	Consumer Focus	CIB Book Page No	Current	New RD&E Focus	
Marlboro Smooth	New Taste Sensations		X	X	
Marlboro Smooth 100s	New Taste Sensations		X	X	
Marlboro Virginia Blend	New Taste Sensations		X	X	
B&H Full Flavor Menthol KS – Puerto Rico	New Taste Sensations		X	X	
L&M Domestic Product Launches 2007	Value		X	X	
Addition of Carbon Filter to Non-Menthol Ultra Lights	Health Risk		X		
Ultra Lights Migration (60mg)	Health Risk		X		
Basic Menthol Line Extensions	Core Segments		X	X	
Marlboro Dark Fire	New Taste Sensations		X	X	Current Product Projects 19
Parliament "Cooling" Menthol Lights	Improved Aftertaste		X	X	
Portable Litter Device (PLD)	Environment		X	X	
Parliament NXT (Accord) Electrically Heated CigaretteSmoking System	Health Risk		X	X	New 17
Garnet	Aroma		X	X	
Tabaka	Variety		X	X	
Marlboro Snus	Variety		X	X	
STEP - Novel Portion	Reducing the mess associated with the use of moist snuff		X	X	
STEP	Variety		X	X	
Smoke-Free, Spit-Free Chewable and/or	A pleasurable spit-less oral tobacco experience for adult				
			Trade Secret Information Redacted		
Total			19	17	

Technology Projects	Innovation Focus	Current	New RD&E Focus
Smoking tobacco			
Printed Cigarette Paper for Flavors and Aromas	Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	X	X
Flavor Transfer Modeling	Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	X	X
Wide Diameter Cigarette Making Capability	Flavors, flavor delivery technologies, blends and formats for regular cigarettes	X	X
Injected Filter (Kaymich) Replacing Menthol Spray/Foil	Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	X	X

			Current	New
Technology Projects	Core Research	Smoking Tobacco	47	22
		Smokeless Tobacco	17	17
		2 Non-Tobacco Oral Sensorial	16	16
			80	55
	55	2		

Menthol Analytical and Sensory Relationship	Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	X	X
Agglomerated Tobacco Fines (Other Applications)	Tobacco Processing Techniques	X	X
Flavor Bonded Cast Sheet (Other Applications)	Tobacco Processing Techniques	X	X
Flavor Bonded Cast Sheet Replacing Menthol Spray / Foil	Tobacco Processing Techniques	X	X
Automatic Tobacco Grading	Tobacco Processing Techniques	X	X
Restrictor Filter – Regular Ultra Lights (UL)	Reduced Risk Smoke	X	
Restrictor Filter – Menthol	Reduced Risk Smoke	X	
Elevated Glycerin Inclusion	Reduced Risk Smoke	X	
Engineered Base Web (EBW-2)	Reduced Risk Smoke	X	
Increased Carbon Loading	Reduced Risk Smoke	X	
Technology Integration for Ultra Light (UL)			
"Product Configuration" (Step 5)	Reduced Risk Smoke	X	
Reduce Oxidative Stress Using Tobacco Additives	Reduced Risk Smoke	X	
Reduced Oxidative Stress via Tobacco Processing and Precursor Removal			
Flow Control Filter System	Reduced Risk Smoke	X	
	Reduced Risk Smoke	X	
Oxidative Stress High-Throughput Screening Tools	Reduced Risk Substantiation Capability	X	
Reduced Risk Substantiation 10-year Test Method for Lung Cancer	Reduced Risk Substantiation Capability	X	
Reduced Risk Substantiation 5-year Test Method for Chronic Obstructive Pulmonary Disease (COPD)	Reduced Risk Substantiation Capability	X	
Reduced Risk Substantiation 5-year Test Method for Cardiovascular Disease (CVD)	Reduced Risk Substantiation Capability	X	
Aroma System Based on Relevant Aroma Smoke Compounds for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Flavor Delivery Technology Based on Aroma Relevant Compounds for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Taste Active Bitter Compounds in Cigarette Smoke for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
	Sensorially Improved Carbon Filtration	X	
Quantification of Flavor Delivery and Transfer Rate	Sensorially Improved Carbon Filtration	X	
Carry-Over Delivery Technology for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Flavor/Taste/Somatosensory Active Compounds of Cigarette Smoke for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Carbon Dioxide Delivery Technology for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
	Sensorially Improved Carbon Filtration	X	
Use of Blending to Overcome Carbon Filtration Deficit	Sensorially Improved Carbon Filtration	X	
Filter Flavorant – Cavendish Processed Tobacco as Taste Enhancer for SCoR	Sensorially Improved Carbon Filtration	X	

Menthol Flavor System for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Menthol Flavor Delivery Technology for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Encapsulated Tobacco	Improved Product Functionality Sensorially Improved Carbon Filtration	X	X
Electret Filter Technology		X	
Taste Active Bitter Compounds in Cigarette Smoke for Less Smoke Exposure	Less Smoke Exposure	X	X
Aroma/Taste Active Compounds in Cigarette Smoke for Less Smoke Exposure Cigarette - Flavor Systems and Delivery Development	Less Smoke Exposure	X	X
Enhanced Sensory Response Based on Physiological Mechanisms - Less Smoke Exposure	Less Smoke Exposure	X	X
Develop Technologies Which Enable Reduced Whole Smoke Delivery and Less Smoke Exposure	Less Smoke Exposure	X	X
Filter Color Communication Tool	Less Smoke Exposure	X	X
Accelerated Filter Component Separation	Reduced Litter	X	X
Disintegrating Filter	Reduced Litter	X	X
Degradable Filter	Reduced Litter	X	X
Banded Paper, IP = 0%, SE = 50%	Reduced Ignition Propensity	X	X
Banded Paper, IP = 0%, SE = 0%	Reduced Ignition Propensity	X	X
Printed Cigarette Paper for Reduced Cigarette Ignition Propensity (Improved Product Performance)	Reduced Ignition Propensity	X	X
Print Banded Cigarette Paper (Supply Security)	Reduced Ignition Propensity	X	X
Total		47	22
Smokeless Tobacco			
Printed Flavor on Pouch Paper	Flavors, flavor delivery technologies and blends	X	X
Understanding and Controlling Oral Tobacco Aftertaste	Flavors, flavor delivery technologies and blends	X	X
Chewable Dissolvable Tobacco Technology	New Product Forms	X	X
Compressed Tobacco Product Base Matrix	New Product Forms	X	X
Novel Forms - Oral Tobacco Products	New Product Forms	X	X
Novel Oral Textures for Tobacco	New Product Forms	X	X
Tobacco Foam	New Product Forms	X	X
Tobacco Sourced Ingredients	New Product Forms	X	X
Development of Chewable, Disintegratable/Dissolvable Matrices for Tobacco	Pouch Materials	X	X
Superhydrated Gel Coating	Pouch Materials	X	X
Encapsulated Tobacco	Improved Product Functionality	X	X
Reduced Tooth Staining Tobacco: Source -Reduction of Pigmentation	Improved Product Functionality	X	X
Understanding TSNA Formation in Dark Fired Burley	Tobacco Processing Techniques	X	X

Pasteurization of Tobacco Used in Oral Products	Tobacco Processing Techniques	X	X
Understanding the Chemistry of Fermentation for Smokeless Tobacco	Tobacco Processing Techniques	X	X
Tobacco Fermentation Process	Tobacco Processing Techniques	X	X
Packaging for Social Connectivity of Oral Tobacco Products	Packaging	X	X
Total		17	17

Non-tobacco Oral Sensorial

Flavor Coating of Finished Pouch & Pouch Paper	Flavors, flavor delivery technologies and ingredients	X	X
Non-Tobacco Microbiologically Acceptable Ingredients	Flavors, flavor delivery technologies and ingredients	X	X
Botanicals for Flavor - First Generation	Flavors, flavor delivery technologies and ingredients	X	X
Next Generation Botanicals for Flavor and Function	Flavors, flavor delivery technologies and ingredients	X	X
Immediate Impact and Long Lasting Flavor Delivery	Flavors, flavor delivery technologies and ingredients	X	X
Reduced Tooth Staining - Non-Tobacco	Flavors, flavor delivery technologies and ingredients	X	X
Chewable Dissolvable Non-Tobacco Technology	New Product Forms	X	X
Improved Mouth-Feel (Non-Tobacco Dissolvable Compressed Substrates)	New Product Forms	X	X
Novel Oral Textures for Non-Tobacco Oral Sensorial Products (Enhanced Mouth Feel)	New Product Forms	X	X
Pasteurization of Botanicals for Oral Products	New Product Forms	X	X
Chewable Edible Pouch Wrapper	Pouch Materials	X	X
Non-Tobacco Chewable/Dissolvable Matrices (Time Extended - 8 minutes)	Pouch Materials	X	X
Non-Tobacco Chewable/Dissolvable Matrices (Time Extended - 12 minutes)	Pouch Materials	X	X
Non-Tobacco Chewable/Dissolvable Matrices (Time Extended - 25 minutes)	Pouch Materials	X	X
Dissolvable Oral Pouch Wrapper	Pouch Materials	X	X
Sensorially Appealing Commercially Available Pouch Wrappers	Pouch Materials	X	X
Total		16	16

Core Research Projects

		Current	New RD&E Focus
Acceptability of Ingredients	Understanding Health Effects of Tobacco Use	X	X
Total Exposure Study	Understanding Health Effects of Tobacco Use	X	X
Total		2	2

Technology Projects		Current	New RD&E Focus
Smoking tobacco	Innovation Focus		
Printed Cigarette Paper for Flavors and Aromas	Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	X	X
Flavor Transfer Modeling	Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	X	X
Wide Diameter Cigarette Making Capability	Flavors, flavor delivery technologies, blends and formats for regular cigarettes	X	X
Injected Filter (Kaymich) Replacing Menthol Spray/Foil	Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	X	X
Menthol Analytical and Sensory Relationship	Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	X	X
Agglomerated Tobacco Fines (Other Applications)	Tobacco Processing Techniques	X	X
Flavor Bonded Cast Sheet (Other Applications)	Tobacco Processing Techniques	X	X
Flavor Bonded Cast Sheet Replacing Menthol Spray / Foil	Tobacco Processing Techniques	X	X
Automatic Tobacco Grading	Tobacco Processing Techniques	X	X
Restrictor Filter – Regular Ultra Lights (UL)	Reduced Risk Smoke	X	
Restrictor Filter – Menthol	Reduced Risk Smoke	X	
Elevated Glycerin Inclusion	Reduced Risk Smoke	X	
Engineered Base Web (EBW-2)	Reduced Risk Smoke	X	
Increased Carbon Loading	Reduced Risk Smoke	X	
Technology Integration for Ultra Light (UL) "ProductConfiguration" (Step 5)	Reduced Risk Smoke	X	
Reduce Oxidative Stress Using Tobacco Additives	Reduced Risk Smoke	X	
Reduced Oxidative Stress via Tobacco Processing and Precursor Removal	Reduced Risk Smoke	X	
Flow Control Filter System	Reduced Risk Smoke	X	
Oxidative Stress High-Throughput Screening Tools	Reduced Risk Substantiation Capability	X	
Reduced Risk Substantiation 10-year Test Method for Lung Cancer	Reduced Risk Substantiation Capability	X	
Reduced Risk Substantiation 5-year Test Method for Chronic Obstructive Pulmonary Disease (COPD)	Reduced Risk Substantiation Capability	X	
Reduced Risk Substantiation 5-year Test Method for Cardiovascular Disease (CVD)	Reduced Risk Substantiation Capability	X	
Aroma System Based on Relevant Aroma Smoke Compounds for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Flavor Delivery Technology Based on Aroma Relevant Compounds for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Taste Active Bitter Compounds in Cigarette Smoke for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Quantification of Flavor Delivery and Transfer Rate	Sensorially Improved Carbon Filtration	X	
Carry-Over Delivery Technology for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Flavor/Taste/Somatosensory Active Compounds of Cigarette Smoke for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Carbon Dioxide Delivery Technology for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Use of Blending to Overcome Carbon Filtration Deficit	Sensorially Improved Carbon Filtration	X	

Filter Flavorant – Cavendish Processed Tobacco as Taste Enhancer for SCoR	Sensorially Improved Carbon Filtration	X	
Menthol Flavor System for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Menthol Flavor Delivery Technology for Sensorially Improved Carbon Filtration	Sensorially Improved Carbon Filtration	X	
Encapsulated Tobacco	Improved Product Functionality	X	X
Electret Filter Technology	Sensorially Improved Carbon Filtration	X	
Taste Active Bitter Compounds in Cigarette Smoke for Less Smoke Exposure	Less Smoke Exposure	X	X
Aroma/Taste Active Compounds in Cigarette Smoke for Less Smoke Exposure Cigarette - Flavor Systems and Delivery Development	Less Smoke Exposure	X	X
Enhanced Sensory Response Based on Physiological Mechanisms - Less Smoke Exposure	Less Smoke Exposure	X	X
Develop Technologies Which Enable Reduced Whole Smoke Delivery and Less Smoke Exposure	Less Smoke Exposure	X	X
Filter Color Communication Tool	Less Smoke Exposure	X	X
Accelerated Filter Component Separation	Reduced Litter	X	X
Disintegrating Filter	Reduced Litter	X	X
Degradable Filter	Reduced Litter	X	X
Banded Paper, IP = 0%, SE = 50%	Reduced Ignition Propensity	X	X
Banded Paper, IP = 0%, SE = 0%	Reduced Ignition Propensity	X	X
Printed Cigarette Paper for Reduced Cigarette Ignition Propensity (Improved Product Performance)	Reduced Ignition Propensity	X	X
Print Banded Cigarette Paper (Supply Security)	Reduced Ignition Propensity	X	X
Total		47	22

	Current	New RD&E Focus
Flavors, flavor delivery technologies, blends and formats for regular cigarettes	1	1
Flavors, flavor delivery technologies, blends and formats for menthol cigarettes	4	4
Tobacco Processing Techniques	4	4
Reduced Risk Smoke	9	0
Reduced Risk Substantiation Capability	4	0
Sensorially Improved Carbon Filtration	12	0
Less Smoke Exposure	4	4
Reduced Litter	3	3
Reduced Ignition Propensity	4	4
Packaging	0	0