OPTIONS FOR H1N1

OPTION 1. MAINTAIN CURRENT VACCINE STRAIN, A/NEW CALEDONIA/20/99

PRO MANUFACTURING IS WORKED OUT AND YIELD IS PREDICTABLE

MORE THAT 95% OF THE VIRUSES ANALYZED THIS YEAR ARE A/NEW CALEDONIA/20/99-LIKE BY ANTIGENIC CHARACTERIZATION OF THE HA AND NA

CON SOME (< 5%) OF THE VIRUSES ANALYZED THIS YEAR ARE LOW REACTORS

OPTIONS FOR H1N1

OPTION 2. CHANGE CURRENT 1999 VACCINE STRAIN TO A CONTEMPORARY H1N1 STRAIN

PRO SOME (< 5%) OF VIRUSES ANALYZED THIS YEAR ARE LOW REACTORS

CON LOW REACTORS ARE SCATTERED THOUGH THE GENETIC DENDOGRAM SUGGESTING NO COMMON MUTATION

NO BROADLY REPRESENTATIVE STRAINS HAVE BEEN IDENTIFIED AND MANUFACTURING ISSUES HAVE NOT BEEN INVESTIGATED

A NEW STRAIN MAY NOT PROVIDE SUPERIOR COVERAGE COMPARED TO CURRENT VACCINE STRAIN

OPTIONS FOR H1N1

OPTION 3. POSTPONE DECISION

PRO **NO ADVANTAGE**

CON **NO NEW DATA APPEAR FORTHCOMING**

OPTIONS FOR H3N2

OPTION 1. MAINTAIN CURRENT VACCINE STRAIN, A/PANAMA/2007/99

PRO MANUFACTURING IS WORKED OUT AND YIELD IS PREDICTABLE

MANY OF THE VIRUSES THIS YEAR ARE A/PANAMA/2007/99-LIKE BY ANTIGENIC CHARACTERIZATION OF THE HA

OPTIONS FOR H3N2

OPTION 1. MAINTAIN CURRENT VACCINE STRAIN, A/PANAMA/2007/99

CON AN INCREASING PROPORTION OF RECENT H3N2 INFLUENZA A VIRUSES ARE NOT WELL INHIBITED BY POST-INFECTION AND POST-IMMUNIZATION ANTISERA

MANY OF THESE RECENT VIRUSES HAVE CHANGES AT HEMAGGLUTININ AMINO ACIDS 155 AND 156 (ANTIGENIC SITE B)

THIS NEW H3N2 VARIANT HAS BEEN IDENTIFIED IN EUROPE (NORWAY AND THE U.K.), ASIA (CHINA, JAPAN, KOREA) AND NORTH AMERICA (UNITED STATES)

NEW STRAINS MAY SPREAD RAPIDLY IN SUSCEPTIBLE POPULATIONS

H3N2 INFLUENZA VIRUSES OFTEN CAUSE SIGNIFICANT MORBIDITY AND MORTALITY

OPTIONS FOR H3N2

OPTION 2. CHANGE CURRENT VACCINE STRAIN TO A STRAIN REPRESENTATIVE OF NEWLY CIRCULATING VIRUSES

PRO A NEW VARIANT APPEARS TO BE SPREADING GEOGRAPHICALLY AND CAUSING DISEASE

WHEN NEW STRAINS APPEAR THEY MAY SPREAD RAPIDLY IN SUSCEPTIBLE POPULATIONS

A MORE RECENT STRAIN MIGHT PROVIDE A CLOSER MATCH WITH THE HEMAGGLUTININ AND NEURAMINIDASE OF CONTEMPORARY STRAINS

H3N2 INFLUENZA VIRUSES OFTEN RESPONSIBLE FOR SIGNIFICANT MORBIDITY AND MORTALITY

OPTIONS FOR H3N2

OPTION 2. CHANGE CURRENT VACCINE STRAIN TO A STRAIN REPRESENTATIVE OF NEWLY CIRCULATING VIRUSES

CON INFORMATION ABOUT NEWEST STRAINS IS NOT YET COMPLETELY ANALYZED

NO NEW STRAINS HAVE BEEN DISTRIBUTED FOR EVALUATION FOR MANUFACTURING ISSUES

NEW STRAINS MAY CAUSE DIFFICULTIES IN MANUFACTURING UNTIL ALL PROCESS PARAMETERS CAN BE OPTIMIZED

MANUFACTURING DELAYS MAY RESULT IN REDUCED VACCINE AVAILABILITY AND USE

A NEW STRAIN MAY NOT PROVIDE SUPERIOR COVERAGE COMPARED TO CURRENT VACCINE STRAIN

OPTIONS FOR H3N2

OPTION 3. POSTPONE DECISION

PRO POSTPONING DECISION WOULD PROVIDE TIME TO FURTHER ANALYZE NEWLY COLLECTED STRAINS AND GATHER INFORMATION RELEVANT TO MANUFACTURING (AND KEEP PARALLEL PROCESSES IN U.S. AND ELSEWHERE IN THE WORLD)

A MORE RECENT STRAIN MIGHT PROVIDE A CLOSER MATCH WITH THE HEMAGGLUTININ AND NEURAMINIDASE OF CONTEMPORARY STRAINS

H3N2 INFLUENZA VIRUSES OFTEN RESPONSIBLE FOR SIGNIFICANT MORBIDITY AND MORTALITY

A FALL BACK POSITION TO MAINTAIN THE CURRENT VACCINE STRAIN A/PANAMA/2007/99 IS AVAILABLE IF NO SUITABLE NEW STRAIN CAN BE IDENTIFIED TO ENABLE IMPLEMENTATION OF A CHANGE

OPTIONS FOR H3N2

OPTION 3. POSTPONE DECISION

CON MANUFACTURING ISSUES HAVE NOT BEEN INVESTIGATED FOR ANY NEW STRAINS

MANUFACTURING DELAYS MAY RESULT IN REDUCED VACCINE AVAILABILITY AND USE

OPTIONS FOR B

OPTION 1. RETAIN THE CURRENT VACCINE STRAINS, B/HONG KONG/330/01 AND B/HONG KONG/1434/02

PRO MANUFACTURING IS WELL DEFINED AND PREDICTABLE

MOST OF THE VIRUSES THIS YEAR ARE B/HONG KONG/330/01-LIKE BY ANTIGENIC CHARACTERIZATION OF THE HA

CON MOST CURRENTLY CIRCULATING VIRUSES HAVE THE NEURAMINDASE FROM THE B/SICHUAN/379/99 HA LINEAGE VIRUSES

OPTIONS FOR B

OPTION 2. CHANGE CURRENT VACCINE STRAIN TO ANOTHER INFLUENZA B STRAIN WITH NA FROM THE SICHUAN LINEAGE

PRO VACCINES MIGHT PROVIDE BETTER COVERAGE FOR CURRENT INFLUENZA B VIRUSES

CON NEW STRAINS MAY CAUSE DIFFICULTIES IN MANUFACTURING UNTIL ALL PROCESS PARAMETERS CAN BE OPTIMIZED

MANUFACTURING DELAYS MAY RESULT IN REDUCED VACCINE AVAILABILITY AND USE

OPTIONS FOR B

OPTION 3. POSTPONE DECISION

PRO NO ADVANTAGE

CON LITTLE NEW DATA TO INFORM THE RECOMMENDATION APPEAR FORTHCOMING