**Input files**

All files are text format. Originally, all files are in MS Excel, but then, converted to text files (currently manually). All data for the model is in (MedXir)

INV1.SAV - # vaccines, number of months in planning horizon, # cycles, number phases, platforms, # leading vaccines, vaccine demand, # in-licencing deals, % increase or decrease manufacturing capacity

INV1A2.SAV – min probability for each platform

INV1A3.SAV - max probability for each platform

INV1A4.SAV - interdependence coefficients for each platform (success > 1)

INV1A5.SAV - interdependence coefficients for each platform, failure <1

INVB1.SAV - production capacity for each platform

INV2.SAV – probabilities of success for each phase and platform.

INV4.SAV - lead vaccine (Operation Warp Speed (OWS)) vs. non-lead

INV5A.SAV – trials allocation across platforms

INV6.SAV – start phase for each candidate

INV7.SAV – number of trials per phase and platform

INV10.SAV – platform # for each vaccine

INV13.SAV- leading vaccine candidates (OWS) – numbers

INV14A.SAV – duration of a clinical trial

INV14B.SAV – accelerated duration of a clinical trial

INV16.SAV – number to start next platform (vaccine group)

INV17.SAV – number to calculate end of the group (for interdependence)

**Output files**

MSSB1.OUT – Lead approved vaccines

MSSB2.OUT - Time for approval

MSSB3.OUT - Priority vaccines numbers

MSSB4.OUT – Manufacturing allocation across platforms

MSSB5.OUT – R&D allocation across platforms

MSSB7.OUT – total approvals R&D and manufacturing

MSSB8.OUT – R&D time across platforms

MSSB9.OUT – Production dynamic, cycle, month 1-20 (current limitations)

MSSB10.OUT - Production dynamic, cycle, month 21-40

PBK FILEDEF 'MSSB10A.OUT' 41-60

PBL FILEDEF 'MSSB10B.OUT' 61-80

PBM FILEDEF 'MSSB10C.OUT' 81-100

NBS FILEDEF 'MSSB11.OUT' total approvals

NBA FILEDEF 'MSSB12.OUT'

NBB FILEDEF 'MSSB13.OUT'

NBC FILEDEF 'MSSB14.OUT' lead approvals in a given interval

NBD FILEDEF 'MSSB15.OUT' lead approvals allocation across platforms

NBE FILEDEF 'MSSB16.OUT' Max manufacturing time

INV1.SAV

160

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INV1A2.SAV

0.36

0.5375

0.57

0.3675

0.5375

0.435

0.495

0.5275

INV1A3.SAV

0.67

0.795

0.7825

0.67

0.795

0.685

0.7725

0.7525

INV1A4.SAV

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INV1A5.SAV

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INVB1.SAV

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INV2.SAV

0.522 0.531 0.423 0.405

0.711 0.729 0.585 0.558

0.648 0.729 0.585 0.504

0.522 0.531 0.423 0.405

0.711 0.729 0.585 0.558

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0.522 0.666 0.531 0.504

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INV4.SAV

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INV5A.SAV

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INV6.SAV

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INV7.SAV

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INV10.SAV

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INV13.SAV

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INV14A.SAV

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INV16.SAV

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INV17.SAV

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