**Codebook :**

Supplemental File

**Document 1**： Diagnostic model data set Plasma Cell Dyscrasias & control

reserch group : plasma cell dyscrasias= 1 （Assign “1 ”stands for plasma cell dyscrasias,which includes SMM, MM, light chain MM, MGUS,POEMS, SPB,LPL）

control group : Non-plasma cell dyscrasias=0 （Assign “0”stands for Non-plasma cell dyscrasias，which includes Liver disease, kidney disease, rheumatic immune system diseases and infectious diseases）

sex female =0 (Assign “0”stands for male)

male= 1 （Assign “1 ”stands for male)

**Document 2:**Subtype classification data set

CD27 : CD27 positive “+ ”is assigned a value of “1”

CD27 negative“-” is assigned a value of“ -1”

CD27 Weakly positive “±” is assigned“ 0”

CD117 : CD117 positive “+ ”is assigned a value of “1”

CD117 negative“-” is assigned a value of“ -1”

CD117 Weakly positive “±” is assigned“ 0”

CD38 : CD38 positive “+ ”is assigned a value of “1”

CD38 negative“-” is assigned a value of“ -1”

CD138 : CD138 positive “+ ”is assigned a value of “1”

CD138 negative“-” is assigned a value of“ -1”

CD19 : CD19 positive “+ ”is assigned a value of “1”

CD19 negative“-” is assigned a value of“ -1”