Split Function

Sample to Analyse
(Case of a sample that is more dense for small values)

Sub-Sample (all sub-samples has the same no. of cases)

SortPOR
(sort from the smallest to the biggest value)

thr1 thr2 thr3

pos1 pos2 pos3

| 1 | 8585 | 17169 | ... | ... | .... | .... | .... | .... | .... | 94425 | 103009 | 111593 | 120177 | 128761 | 137375 | 145929 | 154513 | 163097 | 171670 | **PosPB** |

pos1 pos2 pos3

| 1,2,3,..,1668167 | **PosAll** |

Sub-Sample1 Sub-Sample2

SortPND
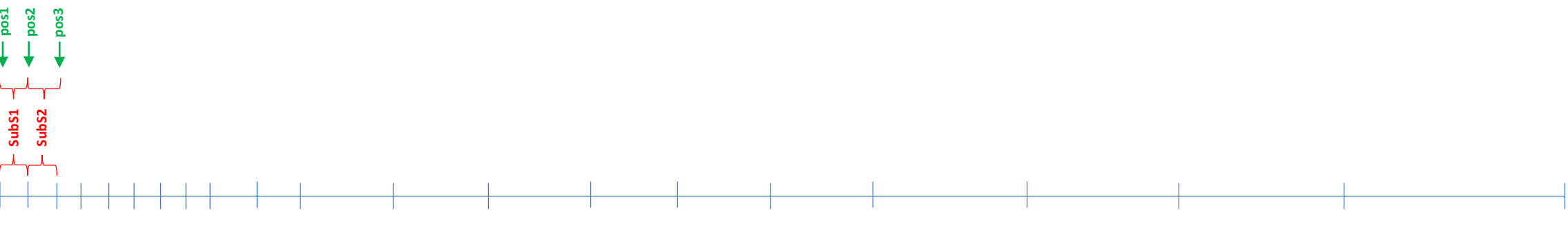*(sort from the smallest to the biggest value)*
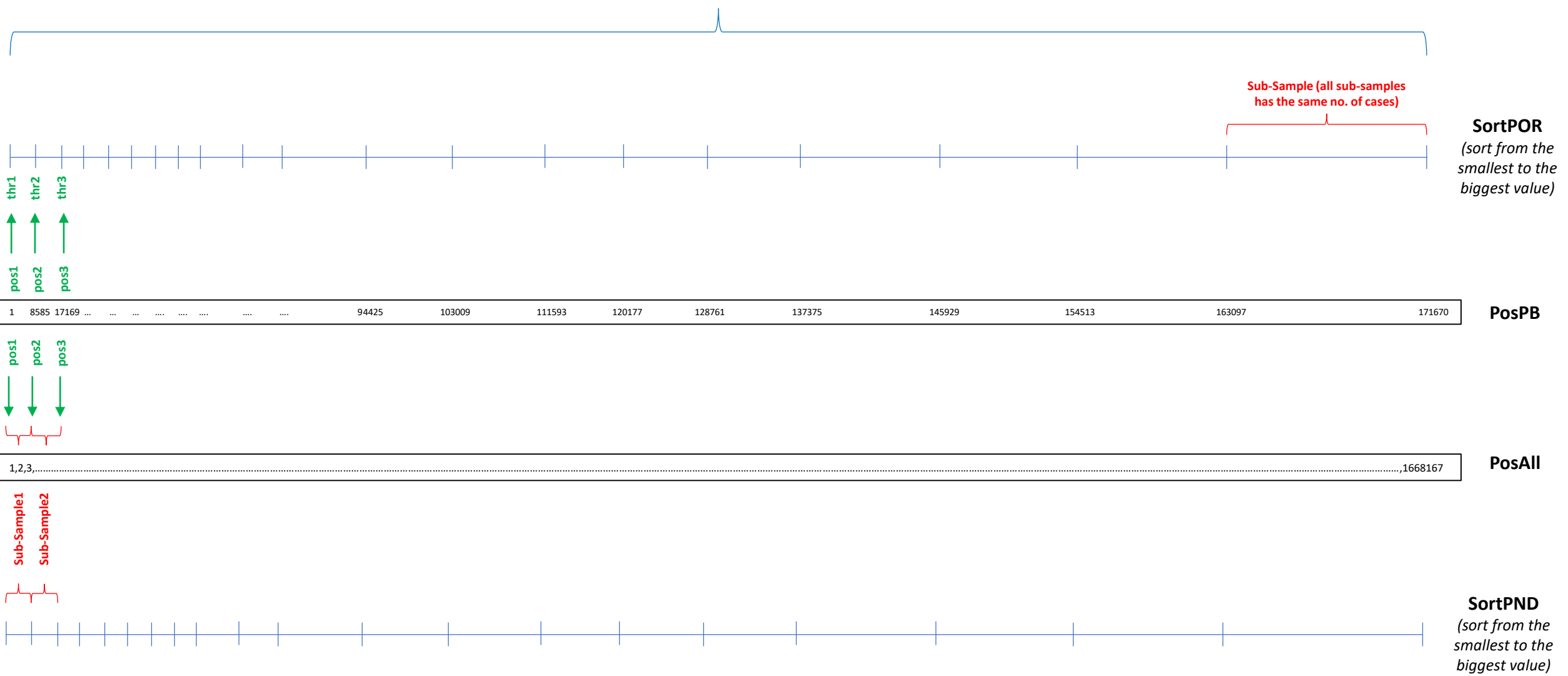
DefBP Function

Initial State

SortPOR
(sort from the smallest to the biggest value)

thr1 pos1
thr2 pos2
thr3 pos3

PosPB

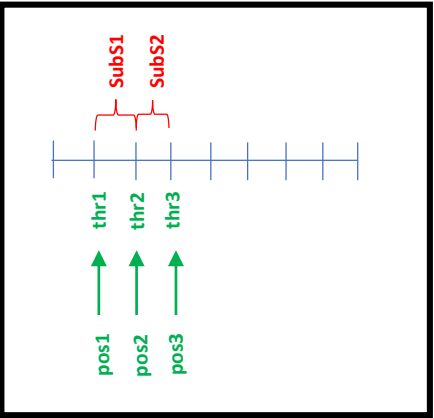| 1 | 8585 | 17169 | ... | ... | ... | .... | .... | .... | .... | .... | 94425 | 103009 | 111593 | 120177 | 128761 | 137375 | 145929 | 154513 | 163097 | 171670 |

pos1 pos2 pos3
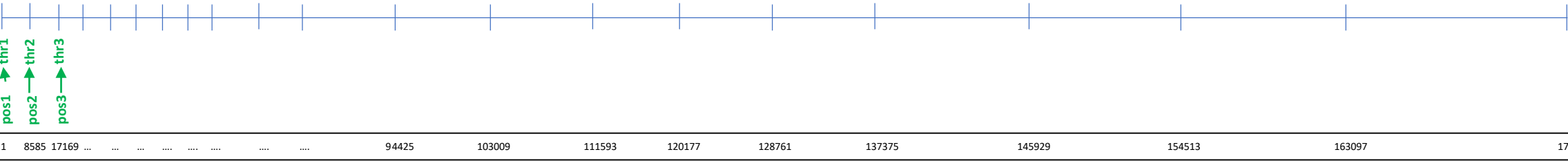
SubS1 SubS2

SortPND
(sort from the smallest to the biggest value)

K-S test

h = 1
SubS1 and SubS2 come from two different distributions

| **Save thr2** |

| **Move forward pos1, pos2, pos3** |

SubS1 SubS2

thr1 thr2 thr3

pos1 pos2 pos3

h = 0
SubS1 and SubS2 come from the same distribution

| **Do not save any threshold** |

| **Move forward only pos2, pos3; pos1 stays in the same position. Therefore, SubS1 becomes twice the size of SubS2** |

SubS1 SubS2

thr1 thr2 thr3

pos1 pos2 pos3